Determinants and consequences of corporate social performance: A comparison of family and non- family firms.

Atiqa Rehman

Faculty of Economics and Business, University of Groningen, Groningen, Netherlands
E-mail: a.rehman@rug.nl

Abstract

High corporate social performance of firms with strong corporate governance (less agency costs) indicates that socially responsible investments can serve both shareholder interests as well as the interests of other stakeholders. This thesis focuses on identifying the differences in corporate social performance between family and non-family firms by focusing on the role of differences in corporate governance practices of both types of firms. In particular, we focus on several firm-level as well as country-level factors that determine the governance of family vis-à-vis non-family firms and its impact on firm social and financial performance. For the research, we use two datasets. One is a large international dataset taken from standard and well-known databases such as BoardEx, Datastream, etc. The second dataset contains a new and unique hand-collected sample of Western European firms with a large set of characteristics of family ownership. Both datasets contain information for the period 2002-2019.

Introduction

Corporate social responsibility (CSR) refers to a business model that aims at committing to a broad set of stakeholders. By behaving socially responsible, companies may integrate social and environmental concerns in their business operations and interactions with their stakeholders. It has been well documented that companies differ regarding the extent to which they show corporate socially responsibility. The reasons explaining for these differences have been widely debated in the literature. One reason suggested in this literature is the existence of differences in corporate governance practices and mechanisms between countries and companies. Among other things, studies have investigated the importance of ownership, and in particular family ownership, in explaining differences in corporate social performance (CSP) between firms.

Family ownership is one of the most important types of ownership structures around the globe. Understanding the reasons for differences in CSP between family and non-family firms is important because family firms are the backbone of many economies as they create an estimated 70-90 percent of global GDP annually (Family Firm Institute, 2016). Family firms have certain unique characteristics that make them different from non-family firms, not only with respect to their ownership structure, but also when it comes to their strategic objectives. In particular, they give considerable importance to non-financial aspects. In the literature, these non-financial aspects (also referred to as affective endowments) are described by the socioemotional wealth (SEW) model, which emphasizes the importance of the preservation of family control and influence in the long-term. According to the SEW model, family firms emphasize the importance of 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 (Berrone et al., 2012). The specific ownership structure and strategic objectives of family firms have also consequences for their governance.

In this thesis, we contribute to the ongoing discussion in the literature on the determinants and consequences of CSP by focusing on different corporate governance practices and mechanisms that may explain the differences in CSP between family and non-family firms.

We focus on the following main questions. First, does family ownership create different levels of CSP relative to non-family control firms, and the relative importance of firm- and country-level characteristics in explaining the differences in CSP of family versus non-family firms.? Second, does the difference between family and non-family firms in determining CSP depend on specific family governance mechanisms associated with family ownership, such as block holding, pyramidal ownership, family management, family board members, etc.? Third, by focusing on the determinants of CSP, the thesis will also address the question does CSP affect corporate financial performance (CFP) and as to whether and what extent family ownership moderates the relationship between CSP and CFP.

Project 1: Corporate Social Performance of Family Firms: An International Evidence

In this project, we contribute to this line of research by comparing the relative importance of firm- and country-level characteristics that may create differences in socially responsible behavior of family vis-à-vis non-family owned firms.

The empirical literature documents that family firms differ from non-family firms with respect to several dimensions related to the strategic objectives and governance of firms. These dimensions include: the availability of free cash flow, risk taking (Bennedsen et al., 2007; Croci et al., 2011; Caprio et al., 2011), cash holdings (Kuan et al., 2011; Kappes & Schmid, 2013), capital expenditures (Anderson et al., 2012; Patel et al., 2014), financial structure (Croci et al., 2011), payout policy (Setia-Atmaja et al., 2009; Pindado et al., 2012; Attig et al., 2016), leverage (Setia-Atmaja et al., 2009; González et al., 2013; Chen et al., 2014; Lo et al., 2016), firm value (Anderson & Reeb, 2003; Villalonga & Amit, 2006) and the time horizon with respect to corporate decision-making (Gomez-Mejia et al., 2011). These differences with respect to firm-level characteristics may also help explaining differences regarding the extent to which family and non-family firms are involved in CSR.

Next to differences with respect to the firm-level characteristics, variations in the country-level governance characteristics may also play an important role in explaining CSP differences between family and non-family firms. These country-level governance characteristics, at least potentially, affect decision-making and the behaviour of organizations and individuals in societies. For example, Ioannou and Serafeim (2012) show that differences in legal, financial and political systems, norms, and cultures across countries affect firms' CSR. El Ghoul et al. (2016) show that the lower level of CSP of family firms relative non-family firms can be explained by the fact that family firms are associated with stronger agency concerns and that this is particularly true for firms located in countries for which investor protection is low, that is, in countries where agency problems are greater. El Ghoul et al. (2016) thus emphasize the importance of the interaction between firm-level and country-level governance characteristics in determining CSP of family and non-family firms.

We are particularly interested in country-specific governance characteristics by considering two measures for the protection of minority shareholders taken from the World Bank Doing Business database, that is, the conflict of interest regulation index and the shareholder governance index. The first measure is concerned with the protection of minority shareholders against directors' misuse of corporate assets for personal gain, while the second measures the rights of shareholders against stakeholders more generally. The idea behind this is that the difference in CSP between family and non-family firms should decrease with respect to how strong minority shareholders are protected in a country. Thus, our study is different from previous empirical studies in that it aims at disentangling the importance of firm- and country-level governance characteristics in explaining the difference in CSP between family and non-family firms, instead of looking at firm- and country-level characteristics separately and/or the interaction of the two.

We create an initial dataset consisting of 33,414 firm-year observations, of which 4,785 relate to family firms and 28,629 to non-family firms, from 46 countries for the period of 2002-2016. For such a large international sample, we rely on a strategic ownership variable being available in Thomson's Reuters DataStream. Thus, we define a firm as a family firm if the strategic shareholding of an individual or employee is 10% or higher (Mackenzie and Rees, 2011; Mackenzie et al., 2013; Rees and Rodionova, 2015). We collect our financial and CSP data also from DataStream and ASSET4 provided by Thomson's Reuters, and define CSP as the average of firm-

level scores for the social and environmental pillars, both of which cover key factors that affect the ability to generate long-term shareholder value.

We apply Propensity Score Matching (PSM) to address endogeneity concerns that relate to observable firm-specific variables in explaining CSP differences between family and non-family firms. In particular, in each sample year we match each family firm with a non-family firm based on several firm-level characteristics that may determine the variation in the level of CSP between firms. Moreover, firms are also matched in the sense that they are in the same industry, but may be located in different countries. We perform univariate analysis to investigate whether or not differences in CSP between family and non-family firms disappear between matched pairs. We also perform firm-fixed effects regressions with matched samples by incorporating combined country-year, and industry-year fixed effects to control for unobservable firm, country and industry level factors. If the difference in CSP between family and non-family firms disappears we conclude that differences in firm-level characteristics are the most important determinants of the differences in CSP between two types of firms. In contrast, in case matched firms are not similar in terms of their CSP, and differences only disappear after controlling for country differences (by including country and year fixed effects), then this supports the view that country-level variables are more important than firm-level variables in explaining the differences in CSP between family and non-family firms.

Our matched sample consists of 4,188 firm-year observations of family firms matched with non-family firms, that is, a total of 8,376 firm-year observations covering 43 countries. We find (table-1 &2) that family firms have lower CSP vis-à-vis non-family firms with similar firm-level characteristics. This suggests that, if we do not control for country-level governance differences, family firms have still lower CSP than their matched non-family firms. When we run firm fixed effect regressions controlling also for country-year fixed effects, the difference in CSP between family and non-family firms disappears (Table-3). These outcomes suggest that differences in firm-level characteristics between family firms and non-family firms cannot explain for the difference in CSP between two types of firms. Instead, country-level differences between pairs may matter when explaining differences in CSP between family and non-family firms.

We further examine the differences (or distance) in country-level governance characteristics between the country of a family firm and the country of the matched firm in explaining differences in CSP between the two firms. Our results (table-4) show that there is a negative (positive) and statistically significant association between the differences in the conflict of interest regulation index (the shareholder governance index) and the difference in CSP. These findings indicate that the difference in CSP of family firms relative to their matched non-family firms is smaller (larger) when there are larger differences with respect to the alternative proxies of minority shareholder protection between the country of the family firm and the country of the matched non-family firm. This evidence suggests that the differences in the country-level governance between countries are important in explaining differences in CSP between family and non-family firms.

We extend prior research on the relationship between CSP and ownership by investigating the relative importance of firm- and country-level characteristics in explaining the differences in CSP of family versus non-family firms. Most studies focus on either firm-level, country-level or a combination of firm- and country-level determinants to explain the difference in CSP between family and non-family firms (Ferrel et al., 2016; Labelle et al., 2015; Rees and Rodionova, 2015; Ioannou and Serafeim, 2012; El Ghoul et al., 2016). By using an international sample of firms we are able to separate the effect of firm-level and country-level characteristics to identify the determinants of CSP of similar non-family and family firms.

The analysis we perform provides important new insights about relative importance of the main determinants of CSP of family firms vis-à-vis non-family firms to judge for social responsibility of family firms. The results of this study may help market participants to determine their preferences for allocating their funds in a socially responsible way. In particular, our results shed light on the importance of taking into account country-level governance characteristics when coming to decisions about whether family firms are less or more socially responsible relative to non-family firms.

Project 2: Family governance and corporate social performance: Evidence from Western European countries

In this second project, we study the relationship between family ownership and CSR performance by considering family participation in ownership and management. More specifically, we consider the size of family shareholding, whether the CEO, CFO and/or non-executive board members are family members, the founder's involvement in management, the presence of family members on boards and management, and ownership of different family generations. We aim at contributing to the existing literature by investigating the effects of alternative family governance characteristics on CSP. Considering the evidence generated from the first project about the relationship between governance and CSP, we elaborate on our understanding of the relationship between family participation in management and ownership of firms, and CSP.

In family firms, owners or their descendants may work as managers and/or have family members on their boards. This makes family firms at least potentially different as compared to non-family firms, as family involvement may have an impact on the type of decisions boards of directors take (De Cesari et al., 2016). This also holds for decisions affecting CSP. Family members in management and/or board positions may have a strong preference for preserving family control and avoiding risk- bearing initiatives endangering the long-term stability of the firm. The relations between family CEOs and family owners are based on sentiments and emotions that may result in ineffective monitoring and disciplining of family managers and may be associated with agency problems. Particularly, family CEOs may espouse investment opportunities that are beneficial for themselves and their families. This creates conflicts between controlling family and other larger or minority shareholders. Thus, family CEOs involve in activities that align the objectives of family owners, such as developing social legitimacy and creating core business values to preserve long-term survival (Block & Wagner, 2014).

In contrast, it can be argued that family-related CEOs enhance corporate governance in family firms. These CEOs and family owners may have common goals, high trust, and shared values, leading to reduced levels of conflicting interests among controlling shareholders and managers (La Porta et al., 1999), resulting in lower levels of agency problems. Cui et al. (2017) find that when family members are present in management and/or boards, the firm is more likely to have higher CSP. If CSP is a consequence of good governance, then any significant association between family CEO and CSP will help us to identify the role of family CEOs in family governance.

Family disputes and inter-generational family conflicts may also have an effect on family firms' investment decisions regarding CSR. The importance of family governance changes with generational progress. Early generations have a stronger desire to preserve control than later generations (Berrone et al., 2012), which may increase agency problems. Family firms in which family members of later generations are involved in management may shower lower levels of CSP, because the emotional attachment of family members to business and the bond between family members of different generations may become. Thus, managers from later generations may cause more agency problems as compared to managers from earlier generations, because the transfer of ownership to next generations results in dispersed ownership among siblings and cousins, creating ownership conflicts among them. Later generations may consider CSR as less important, or even as unnecessary and wasteful activities (Breton-Miller et al., 2013).

For this project, we develop a unique hand-collected dataset based on a sample of firms from Western European countries for the period of 2002-2019. In this dataset, we focus on several measures of family governance to study the determinants of the differences in CSP of family versus non-family

firms. Our dataset is unique, because it contains detailed information on a number of family firm characteristics that are not available in other publicly available datasets such as Datastream, BoardEx, etc. The data for the size of family ownership as well as other family governance characteristics are retrieved manually from Orbis and annual financial reports. In addition, we also use various web sources to find the histories of families in order to identify whether CEO/CFO and members of board of directors are from controlling family as well as information about which family generation is involved in business. In particular, we measure family ownership as a dummy variable that takes the value 1 if a family holds 20 percent or more of all outstanding shares and 0 otherwise. We also use ownership percentage hold by a controlling family. We measure family management as a dummy variable that equals 1 if the CEO, chairman or vice chairman is a member of the controlling family and 0 otherwise. We create a measure of family involvement in the board by calculating the ratio of family directors on the board to board size. Family generational ownership is a dummy variable equal to 1 if a firm is run by the family founder or the CEO is from the first generation and 0 if the CEO from the second generation or later.

The data collection process is time consuming, which is why we limit our sample to Western European countries. We are particularly interested in investigating family involvement regarding CSP in a European context, because 70-80 percent of all firms in Europe are owned by families and many of them are run by managers who are connected to the family owners (Lewandowska & Hadryś-Nowak, 2012). We update and extend the dataset developed and used by Faccio & Lang (2002) in terms of following characteristics: (i) information on family members being part of management and/or boards; and (ii) information about different family generations being involved in family firm's management and governance. Thus, our updated and detailed dataset based on family governance characteristics is a major contribution of our project to the existing literature by providing the recent and broader picture of underlying relationship between CSP and several features of family governance. Similar to the first project, we use data on CSR performance from ASSET4.

In the analysis, we take into account the family ownership may be a random choice and there are other variables that may influence the family ownership and CSP i.e. omitted variable bias. We use firm, year and country fixed effects in the model to control the unobserved heterogeneity. Moreover, for endogeneity concerns, we use instrumental variable regressions, Heckman selection and propensity score matching. We use average of family control rights by industry and country as an instrument for family ownership (Lin et al., 2011).

Project 3: Family governance and the relationship between corporate social performance and corporate financial performance

In this project, we investigate whether CSP is associated with corporate financial performance (CFP) and focus on the question of whether this relationship is affected by family ownership. In this project, we empirically test the theoretical argument generated in the first and second project from the perspective of value generation from involving with social performance. The underlying reason for this is that the relationship we generated between governance and CSP should be reflected on financial performance of family firms.

The relationship between CSP and CFP has been examined extensively in the literature (Surroca et al., 2010), yet, there seems to be no consensus on the nature of the relationship (Scholtens, 2008). Margolis et al. (2003) conduct a meta-analysis and find inconclusive results, although most studies seem to suggest the relationship is positive. They report that out of 109 published studies, 54 find a positive association, seven find a negative association and 28 find no association. More recently, Wang et al. (2016) also carry out a meta-analysis and again report that most studies find evidence for a positive relationship between CSP and CFP. Given the contradicting results for at least a substantial part of the studies, there is room for investigating the conditions that may explain whether the association is positive or negative. One of these conditions may be family ownership. To the best of our knowledge, family ownership has hardly been used as a contextual variable in studies investigating the relationship between CSP and CFP. It is important to examine how the differences in CSP between family and non- family firms are reflected in their respective CFP.

Various theories provide a rationale for why CSP and CFP may be linked, the most important ones being agency theory, stakeholder theory and the resource-based theory. Agency theory argues that CSR activities increase agency problems between managers and shareholders, thereby negatively affecting CFP. This theory suggests that investment in CSR is a manifestation of managers' pursuit of own interests and a sign of increased agency problems. Friedman (1962) argues that the managers' only social responsibility is to generate economic profits for shareholders. In his view, investment in CSR is a waste of shareholders' resources, which should be used to create economic value for shareholders. CSR is thus seen as an agency cost that ultimately decreases the firm financial value.

However, stakeholder theory argues that firms should consider all stakeholders, and not only shareholders, when creating value for the firm. Similarly, resource-based theory considers CSR as a resource that firms can use to build trust and reputation (Porter & Kramer, 2011). Higher trust and reputation help increase firm value (Surroca et al., 2010). Thus, stakeholder theory and the resource based view of the firm support the positive relationship between CSP and CFP. Firms that are committed to creating value by taking into consideration the interests of all stakeholders ultimately increase their market value.

As discussed in the previous two projects, agency theory may be used to explain the relationship between family ownership and CSP. Agency theory argues that controlling family ownership negatively influences CSR performance, because family ownership is associated with the entrenchment of management. Consequently, CFP will be lower (Anderson & Reeb, 2003). These considerations about how family ownership may influence CSP, which may

ultimately affect CFP, give a reason for studying the impact of ownership structure on CFP by using a mediation modelling approach. In using such a model, we acknowledge that CSR activities are endogenously determined by ownership structure, which should be taken into account when investigating the relationship between CSP and CFP.

Family ownership may also affect the relationship between CSR activities and CFP, that is, ownership structure moderates the association between the two variables. The nature of the moderating effect may depend on whether family ownership increases or decreases agency problems within the firm. Some studies argue that having controlling family owners reduces agency problems through effective monitoring and alignment of interests between shareholders and managers (La Porta et al., 1999).

Assuming this is the case, family ownership may positively moderate the relationship between CSP and CFP. In contrast, if family ownership increases agency problems due to the entrenchment of management and/or increased conflicts of interests between controlling family owners and minority shareholders (Anderson & Reeb, 2003), family ownership may negatively moderate the relationship between CSP and CFP (Peng & Yang, 2014).

The dataset used to measure CSP in this project is similar to the one used for project 1, that is, we have ownership data for companies (e.g. family versus non-family ownership) around the world for the period 2002-2016. The data on CSP is taken from Datastream. We measure family ownership as a dummy variable that takes the value 1 if a family holds 20 percent or more of all outstanding shares and 0 otherwise. The data on CFP, as well as the control variables, are taken from Datastream. We use accounting and market measures of CFP such as return on assets (ROA), return on equity (ROE), and Tobin's Q ratio. Moreover, we add variables of lagged performance as control variables in the model, capturing the effect of previous years of performance on current performance, (i.e. we create a dynamic panel data model). In the analysis, we take into account that the relationship between CSP and CFP may be bi-directional, that is, we need to control for reverse causality. Therefore, we perform the Generalized Method of Moment (GMM) estimation, which helps in reducing endogeneity problems and individual heterogeneity of family firms.

References

Anderson, R. C., & Reeb, D. M. (2003). Founding-family ownership and firm performance: evidence from the S&P 500. *Journal of Finance*, 58(3), 1301-1328.

Anderson, R. C., Duru, A., & Reeb, D. M. (2012). Investment policy in family controlled firms. *Journal of Banking & Finance*, 36(6), 1744-1758.

Attig, N., Boubakri, N., El Ghoul, S., & Guedhami, O. (2016). The global financial crisis, family control, and dividend policy. *Financial Management*, 45(2), 291-313.

Bennedsen, M., Nielsen, K., Perez-Gonzalez, F., & Wolfenzon, D. (2007). Inside the family firm: The role of families in succession decisions and performance. *Quarterly Journal of Economics*, 122, 647–691.

Berrone, P., Cruz, C., & Gomez-Mejia, L.R. (2012). Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research. *Family Business Review*, 25(3), 258–279.

Block, J. H., & Wagner, M. (2014). The effect of family ownership on different dimensions of corporate social responsibility: Evidence from large US firms. *Business Strategy and the Environment*, *23*(7), 475-492.

Caprio, L., Croci, E., & Del Giudice, A. (2011). Ownership structure, family control, and acquisition decisions. *Journal of Corporate Finance*, 17(5), 1636-1657.

Chen, T. Y., Dasgupta, S., & Yu, Y. (2014). Transparency and financing choices of family firms. *Journal of Financial and Quantitative Analysis*, 49(2), 381-408.

Croci, E., Doukas, J. A., & Gonenc, H. (2011). Family control and financing decisions. *European Financial Management*, 17(5), 860-897.

Cui, V., Ding, S., Liu, M., & Wu, Z. (2017). Revisiting the Effect of Family Involvement on Corporate Social Responsibility: A Behavioral Agency Perspective. *Journal of Business Ethics*, 1- 19.

De Cesari, A., Gonenc, H., & Ozkan, N. (2016). The effects of corporate acquisitions on CEO compensation and CEO turnover of family firms. *Journal of Corporate Finance, 38*, 294-317.

El Ghoul, S., Guedhami, O., Wang, H., & Kwok, C. C. (2016). Family control and corporate social responsibility. *Journal of Banking & Finance*, 73, 131-146.

Faccio, M., & Lang, L. H. (2002). The ultimate ownership of Western European corporations. *Journal of Financial Economics*, *65*(3), 365-395.

Ferrel, A., Liang, H., & Renneboog, L. (2016). Socially responsible firms. *Journal of Financial Economics*, 122(3), 585-606.

Friedman, M. (1962). Capitalism and freedom. University of Chicago Press.

Global Data Points, FFI (2016). http://www.ffi.org/page/globaldatapoints. Mays Business School, Texas A&M University.

Gomez-Mejia, L. R., Cruz, C., Berrone, P., & De Castro, J. (2011). The bind that ties: Socioemotional wealth preservation in family firms. *Academy of Management Annals*, 5(1), 653-707.

González, M., Guzmán, A., Pombo, C., & Trujillo, M. A. (2013). Family firms and debt: Risk aversion versus risk of losing control. *Journal of Business Research*, 66(11), 2308-2320.

Ioannou, I. & Serafeim, G. (2012). What drives corporate social performance? The role of nation-level institutions. *Journal of International Business Studies*, 43, 834–864.

Kappes, I., & Schmid, T. (2013). The effect of family governance on corporate time horizons. *Corporate Governance: An International Review*, 21(6), 547-566.

Kuan, T. H., Li, C. S., & Chu, S. H. (2011). Cash holdings and corporate governance in family-controlled firms. *Journal of Business Research*, 64(7), 757-764.

Labelle, R., Hafsi, T., Francoeur, C., & Amar, W. B. (2015). Family firms' corporate social performance: a calculated quest for socioemotional wealth. *Journal of Business Ethics*, 148(3), 511-525.

Lewandowska, A., & Hadryś-Nowak, A. (2012). Socio-economic importance of family businesses in selected countries from all over the world. Unpublished document available through the followinglink:https://depot.ceon.pl/bitstream/handle/123456789/4888/2012_06_Socio-economic%20importance%20of%20family%20businesses%20in%20selected%20countries%20from%20all%20over%20the%20world_ALAH.pdf?sequence=3

La Porta, R., Lopez-de-Silanes, F., & Shleifer, A. (1999). Corporate ownership around the world. *Journal of Finance*, *54*(2), 471-517.

Le Breton-Miller, I., & Miller, D. (2013). Socioemotional wealth across the family firm life cycle: A commentary on "Family Business Survival and the Role of Boards". *Entrepreneurship Theory and Practice*, *37*(6), 1391-1397.

Lin, C., Ma, Y., Malatesta, P., & Xuan, Y. (2011). Ownership structure and the cost of corporate borrowing. *Journal of Financial Economics*, *100*(1), 1-23.

Lo, H. C., Ting, I. W. K., Kweh, Q. L., & Yang, M. J. (2016). Nonlinear association between ownership concentration and leverage: The role of family control. *International Review of Financial Analysis*, 46, 113-123.

Mackenzie, C., & Rees, W. (2011). Corporate social responsibility and the open society. Retrieved May 09, 2017 from http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1966030.

Mackenzie, C., Rees, W., & Rodionova, T. (2013). Do responsible investment indices improve corporate social responsibility? FTSE4Good's impact on environmental management. *Corporate Governance: An International Review*, 21(5), 495-512

Margolis, Joshua D., and James P. Walsh. "Misery loves companies: Rethinking social initiatives by business." *Administrative science quarterly* 48, no. 2 (2003): 268-305.

Patel, P. C., & Chrisman, J. J. (2014). Risk abatement as a strategy for R&D investments in family firms. *Strategic Management Journal*, 35(4), 617-627.

Peng, C. W., & Yang, M. L. (2014). The effect of corporate social performance on financial performance: The moderating effect of ownership concentration. *Journal of Business Ethics, 123*(1), 171-182.

Pindado, J., Requejo, I., & Torre, C. (2012). Do family firms use dividend policy as a governance mechanism? Evidence from the Euro zone. *Corporate Governance: An International Review*, 20(5), 413-431.

Porter, M. E., & Kramer, M. R. (2011). Creating shared value. *Harvard Business Review, 89*(1/2), 62 -77.

Rees, W., & Rodionova, T. (2015). The influence of family ownership on corporate social responsibility: An international analysis of publicly listed companies. *Corporate Governance: An International Review*, 23(3), 184-202.

Scholtens, B. (2008). A note on the interaction between corporate social responsibility and financial performance. *Ecological Economics*, *68*(1-2), 46-55.

Setia‐Atmaja, L., Tanewski, G. A., & Skully, M. (2009). The role of dividends, debt and board structure in the governance of family controlled firms. *Journal of Business Finance & Accounting, 36*(7-8), 863-898.

Surroca, J., Tribo, J. A., & Waddock, S. (2010). Corporate responsibility and financial performance: the role of intangible resources. *Strategic Management Journal, 31*(5), 463-490.

Villalonga, B., & Amit, R. (2006). How do family ownership, control and management affect firm value? *Journal of Financial Economics*, 80(2), 385-417.

Wang, Q., Dou, J., & Jia, S. (2016). A meta-analytic review of corporate social responsibility and corporate financial performance: The moderating effect of contextual factors. *Business & Society, 55*(8), 1083-1121.

Table 1: Comparison of the annual CSP of family and non-family twins

Years	Mean differences non family-family	Median differences Non family-family	Possible Matches	Matched Pairs	% Matched
2002	0.1044	0.2802**	68	47	69
2003	0.1437**	0.2614 **	65	40	62
2004	0.0237	0.0430	127	104	82
2005	0.0384	0.0725	169	128	76
2006	0.0427	0.0715	186	152	82
2007	-0.0166	-0.0166	171	128	75
2008	0.0062	0.0022	233	184	79
2009	0.0442	0.0737	298	249	84
2010	0.0408*	0.0818*	413	383	93
2011	0.0444**	0.0871*	454	410	90
2012	0.0415**	0.0851*	459	420	92
2013	0.0618***	0.1369***	457	413	90
2014	0.0639***	0.1657***	471	431	92
2015	0.0494***	0.0932**	533	480	90
2016	0.0410***	0.0716**	681	619	91
Fama-MacBeth	0.0456***	0.0888***	4,785	4,188	88

This table shows annual differences in CSP between family and non-family firms based on propensity-score-matching. The family control is measured by 10 percent or higher strategic shareholdings by an employee or individual investor. For the match, each year, family firms are matched with non-family firms using probit regression and nearest-neighbour match without replacement. Possible matches is the minimum of the treated or control sample indicating the maximum number of matched pairs we could have. Matched pair is the number of pairs we successfully match. * ,**, and *** indicate that the mean or median is significantly different than the non-family at 10, 5 and 1 percent levels, respectively, using a two-tailed t-test, which is conducted via (quantile) regression clustering at firm level for (medians) means. Statistical significance of Fama-MacBeth mean is computed using Newey-West standard errors controlling for one lag.

Table 2: OLS and WLS regressions

	OLS		WLS	
Family	-0.059***	-0.059***	-0.060***	-0.067***
	[0.008]	[0.008]	[0.017]	[0.018]
Cash to Assets	-0.046**	-0.042*	-0.075	-0.084*
	[0.021]	[0.022]	[0.050]	[0.051]
Free Cash Flows	0.293***	0.295***	0.389***	0.383***
	[0.033]	[0.034]	[0.080]	[0.084]
Capex to Assets	0.037	0.091*	0.191**	0.241**
	[0.047]	[0.049]	[0.096]	[0.104]
Leverage	-0.012	-0.009	0.029	0.028
	[0.013]	[0.013]	[0.029]	[0.029]
Tobin's Q	0.007***	0.008***	0.007	0.007
	[0.002]	[0.002]	[0.005]	[0.005]
Block Ownership	-0.018	-0.013	0.084***	0.087***
	[0.018]	[0.019]	[0.029]	[0.028]
Board Independence	0.097***	0.106***	0.018	0.018
	[0.012]	[0.013]	[0.020]	[0.023]
Dividend Pay-out	-0.051	-0.032	-0.007	-0.013
	[0.048]	[0.050]	[0.088]	[0.090]
Size	0.110***	0.110***	0.095***	0.094***
	[0.002]	[0.002]	[0.005]	[0.005]
Constant	-1.539***	-1.535***	-1.340***	-1.343***
	[0.074]	[0.104]	[0.104]	[0.121]
R-squared	0.492	0.518	0.514	0.566
Observations	33,414	33,414	33,414	33,414
Year fixed effects	Yes	No	Yes	No
Country fixed effects	Yes	No	Yes	No
Industry fixed effects	Yes	No	Yes	No
Country-Year	No	Yes	No	Yes
Industry-Year	No	Yes	No	Yes

This table reports estimations of OLS and WLS regressions for the effect of family control on CSP, along with firm-level control variables (Equation 1). Definitions of all variables are given in appendix 1. The family control is measured by 10 percent strategic shareholdings by an employee or individual investor. The weight for WLS is the inverse of the number of firms in a country in a year. Regressions include country, industry, year, country-year and industry-year fixed effects. Robust standard errors clustered at the firm level are in brackets. *,**,*** denote the significance at 10, 5 and 1 percent levels, respectively.

Table 3: Firm-fixed effects regressions

	Full		Matched	
Family Ownership	-0.052***	-0.044***	-0.049*	-0.027
	[0.016]	[0.015]	[0.027]	[0.028]
Cash to Assets	0.013	0.002	0.020	0.014
	[0.011]	[0.012]	[0.028]	[0.031]
Free Cash Flows	0.010	0.016	-0.027	0.011
	[0.016]	[0.016]	[0.038]	[0.043]
Capex to Assets	-0.025	-0.009	-0.045	0.016
	[0.022]	[0.023]	[0.049]	[0.054]
Leverage	0.009	-0.002	0.017	0.016
	[0.007]	[0.007]	[0.017]	[0.019]
Tobin's Q	0.000	0.001	-0.008***	-0.005
	[0.001]	[0.001]	[0.003]	[0.003]
Block Ownership	-0.001	0.005	0.047*	0.035
	[0.010]	[0.010]	[0.026]	[0.028]
Dividend Pay-out	0.020	0.040**	0.048	0.043
	[0.020]	[0.020]	[0.041]	[0.047]
Size	0.034***	0.033***	0.033***	0.029***
	[0.003]	[0.003]	[0.006]	[0.008]
Board Independence	0.025***	0.013**	0.011	-0.021
	[0.006]	[0.006]	[0.015]	[0.016]
Constant	-0.218***	0.146***	-0.222**	0.195
	[0.039]	[0.047]	[0.098]	[0.122]
R-squared	0.879	0.893	0.924	0.945
Observations	33,414	33,414	8,376	8,376
Year fixed effects	Yes	No	Yes	No
Country-Year	No	Yes	No	Yes
Industry-Year	No	Yes	No	Yes

This table reports estimations of panel regressions with firm-fixed effects for the effect of family control on CSP, along with firm-level control variables for full and matched samples. Family ownership is the percentage of strategic shareholdings by an employee or individual investors if it is 10 percent or higher. Its values are zero for non-family firms and for firms with the percentage of strategic shareholdings by an employee or individual investors being less than 10 percent. Regressions include year, country-year and industry-year fixed effects. Robust standard errors clustered at the firm level are in brackets. *,**,*** denote the significance at 10, 5 and 1 percent levels, respectively.

Table 4: The role of distances in country-level governance

DV: CSP Difference	1	2	3	4	5	6	7	8
Conflict_Interest_distance	-0.049***				-0.026***		-0.015**	-0.017***
	[0.005]				[0.006]		[0.006]	[0.006]
Shareholder_Gov_distance		0.079***				0.071***	0.069***	0.072***
		[0.006]				[0.006]	[0.006]	[0.006]
Legal_Origin_difference			0.147***		0.100***	0.134***	0.102***	0.105***
			[0.013]		[0.018]	[0.013]	[0.018]	[0.018]
WGI_distance				0.021*	0.037***	0.052***	0.048***	0.035***
				[0.011]	[0.011]	[0.011]	[0.011]	[0.011]
Cultural_distance								-0.016***
								[0.005]
Cash to Assets	-0.032	-0.027	-0.057	-0.075	-0.039	-0.013	-0.005	-0.015
	[0.065]	[0.062]	[0.066]	[0.068]	[0.065]	[0.061]	[0.061]	[0.061]
Free Cash Flows	0.070	0.057	0.117	0.065	0.096	0.094	0.084	0.068
	[0.111]	[0.105]	[0.113]	[0.116]	[0.112]	[0.105]	[0.104]	[0.107]
Capex to Assets	-0.524***	-0.503***	-0.540***	-0.582***	-0.538***	-0.497***	-0.491***	-0.521***
	[0.142]	[0.138]	[0.141]	[0.146]	[0.140]	[0.134]	[0.134]	[0.135]
Leverage	0.037	0.035	0.045	0.008	0.053	0.074*	0.074*	0.093**
	[0.041]	[0.040]	[0.041]	[0.042]	[0.041]	[0.039]	[0.039]	[0.039]
Tobin's Q	0.015**	0.017**	0.016**	0.013*	0.018***	0.022***	0.022***	0.023***
	[0.007]	[0.007]	[0.007]	[0.007]	[0.007]	[0.006]	[0.006]	[0.007]
Block Ownership	-0.181***	-0.268***	-0.204***	-0.243***	-0.198***	-0.254***	-0.242***	-0.239***
	[0.052]	[0.051]	[0.053]	[0.054]	[0.052]	[0.050]	[0.050]	[0.051]
Dividend Payout	-0.181	-0.369***	-0.195	-0.221*	-0.182	-0.331***	-0.320***	-0.284**
	[0.127]	[0.122]	[0.129]	[0.133]	[0.126]	[0.117]	[0.116]	[0.121]
Size	0.054***	0.063***	0.044***	0.066***	0.047***	0.047***	0.048***	0.047***
	[0.008]	[0.007]	[0.008]	[0.008]	[0.008]	[0.007]	[0.007]	[0.008]
Board Independence	-0.132***	-0.130***	-0.137***	-0.165***	-0.132***	-0.114***	-0.110***	-0.124***
	[0.032]	[0.032]	[0.033]	[0.033]	[0.032]	[0.032]	[0.032]	[0.034]
Constant	-0.913***	-0.975***	-0.746***	-0.997***	-0.799***	-0.776***	-0.805***	-0.745***
	[0.232]	[0.176]	[0.219]	[0.220]	[0.243]	[0.206]	[0.211]	[0.207]
R-squared	0.183	0.194	0.184	0.137	0.196	0.236	0.238	0.252
Observations	4188	4188	4188	4188	4188	4188	4188	3907

Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

This table reports estimations of OLS regressions for the effect of Investor protection and cultural distances on Corporate Social Performance (CSP) differences, along with country-level and firm-level control variables for matched family firms only. Conflict of interest regulation index distance is the difference between the conflict of interest index of home and host country of matched family firms. Shareholder governance index distance is the difference between the shareholder governance index of home and host country of matched family firms. WGI_distance is the difference between the world governance index of home and host country of matched family firms. All regressions include industry and year fixed effects. *, **, *** denote the significance at 10, 5 and 1 percent levels, respectively.