



# Family control and corporate social responsibility<sup>☆</sup>



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## ABSTRACT

We investigate the impact of family control on corporate social responsibility (CSR) performance. Using newly collected data on the ultimate ownership structure of publicly traded firms in nine East Asian economies, we find that family-controlled firms exhibit lower CSR performance, consistent with the expropriation hypothesis of family control. The negative relationship between family control and CSR is robust to alternative measures of family control, different components of CSR, as well as to endogeneity tests, subsample tests, and alternative estimation methods. We further find that CSR underperformance concentrates in family firms with greater agency problems and in countries with weaker institutions. Moreover, the underperformance of East Asian family firms holds when controlling for the effects of other large shareholders and when comparing with family firms from other countries. These findings contribute to understanding the determinants of CSR and highlight the importance of corporate governance and the institutional environment in improving CSR performance of family-controlled firms.

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## 1. Introduction

In recent years, corporate social responsibility (CSR) activities, which are firm actions that go above and beyond the interests of the firm to further the social good (McWilliams and Siegel, 2001), have become common practice. For example, a survey by KPMG (2013) reveals that 93% of Fortune Global 250 firms report investment in CSR activities, either in standalone reports or as part of their annual financial reports. Extant literature on CSR largely investigates the consequences of CSR activities, documenting the effect of CSR on firm value (e.g., Fatemi et al., 2015), abnormal stock returns (e.g., Dimson et al., 2015), idiosyncratic risk (e.g., Lee and Faff, 2009), financial distress (e.g., Goss, 2009), the cost of capital (e.g., El Ghouli et al., 2011), access to finance (e.g.,

Cheng et al., 2014), and merger performance (Deng et al., 2013). Prior studies identify only a few determinants of CSR, however, including regulations (Dawkins and Lewis, 2003) and national institutions (Ioannou and Serafeim, 2012) at the country level, and board structure (Johnson and Greening, 1999), CEO characteristics (Waldman et al., 2006), and political affiliation (Di Giuli and Kostovetsky, 2014) at the firm level. In this paper we investigate the extent to which ownership structure and, in particular, family control drives CSR performance and the role of corporate governance and country-level institutions in influencing families' incentives to invest in CSR.<sup>1</sup>

According to agency theory, family-controlled firms should have fewer agency conflicts between shareholders and managers than non-family-controlled firms (Jensen and Meckling, 1976) because the large ownership stakes of controlling families imply strong monitoring of management (Anderson and Reeb, 2003a). But family control can create agency problems between controlling

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<sup>1</sup> While an abundant literature examines the impact of family control on firms' investment decisions (Anderson et al., 2012; Masulis et al., 2011), investment-cash flow sensitivity (Pindado et al., 2011; Cucculelli and Micucci, 2008), cost of equity capital (Attig et al., 2008), cost of debt (Anderson et al., 2003), corporate disclosure (Ali et al., 2007), earnings quality (Wang, 2006), firm productivity (Barth et al., 2005), firm leverage and corporate diversification (Anderson and Reeb, 2003b), and corporate performance (Andres, 2008; Anderson and Reeb, 2003a; Villalonga and Amit, 2006; Miller et al., 2007; among others), to our knowledge there is little evidence on the impact of family control on CSR.

shareholders and minority shareholders because controlling shareholders could expropriate minority shareholders to pursue private benefits (e.g., Bae et al., 2002; Bertrand et al., 2002; DeAngelo and DeAngelo, 2000). In the context of CSR, controlling families can use their dominant voting rights to divert resources from CSR activities to other projects. The expropriation view thus suggests that CSR performance is lower for family firms than non-family firms.

However, family firms' reputation concerns and long-term horizons suggest higher CSR performance for family firms. Family firms have greater reputation concerns than non-family firms because reputation affects not only firm performance but also the family's name (Dyer and Whetten, 2006; Zellweger et al., 2011), and a favorable family name is an important socioemotional goal of family firms (Berrone et al., 2010; Deephouse and Jaskiewicz, 2013). Thus, to enhance the firm's and, in turn, the family's reputation, family firms may engage more in CSR activities. Also, because the concentrated ownership stake of family firms induces a long-term horizon (Stein, 1988), family firms are more likely to invest in long-term relationships with other stakeholders (Miller and Le Breton-Miller, 2005) through greater participation in CSR activities.

Because expropriation effects and reputation/horizon effects may operate on family firms' decisions at the same time, the net effect on CSR performance is an empirical question. Prior studies using U.S. data find a positive impact of family control on CSR performance (Berrone et al., 2010; Block and Wagner, 2014; Dyer and Whetten, 2006), in line with the reputation/horizon view. However, it is not clear that the positive relation between family control and CSR should generalize outside the U.S., where institutions are less protective of minority shareholders and hence the incentives for expropriation are stronger.<sup>2</sup>

To shed light on this question, we empirically examine the effect of family ownership on CSR performance in East Asia, which is an ideal setting for this analysis for three reasons. First, family control is the dominant ownership form in East Asia (Claessens et al., 2000), with nearly half of publicly traded firms controlled by families in 2008 (Carney and Child, 2013). Second, prior studies of the effect of family control on financial performance find opposite results for the U.S. and East Asia (Anderson and Reeb, 2003a; Claessens et al., 2002; Villalonga and Amit, 2006). Third, controlling families in East Asian family firms typically have excess control through pyramidal ownership structures or cross-holdings (Claessens et al., 2002), and thus have greater incentive and ability to expropriate minority shareholders.

We obtain information on firm ownership from Carney and Child's (2013) newly collected data set on the ultimate ownership structure of publicly traded firms in nine East Asian economies: Hong Kong, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, and Thailand. Information on firms' CSR performance comes from ASSET4 data compiled by Thomson Reuters. The resulting sample comprises 1719 firm-year observations for nine East Asian economies between 2002 and 2011. Using this sample, we first explore whether family-controlled firms have better CSR performance than other firms. We find that family firms have significantly lower CSR performance than non-family firms, supporting the expropriation hypothesis. The negative impact of family control continues to hold when we use alternative measures of family control and different components of CSR performance.

One can argue that the lower CSR performance of family firms is due to some fundamental difference between family and non-family firms. Further, it is possible that unobserved determinants of CSR performance explain the lower CSR performance of family

firms. To address these endogeneity concerns, we employ an instrumental variables (IV) approach, Heckman selection estimation procedure, and propensity score matching (PSM) procedure. The results consistently support our main finding that family firms are associated with lower CSR performance. Another concern is that the lower CSR performance of family-controlled firms is driven by a specific group of firms or a certain period. We find that our main evidence persists across different sample compositions and time periods. Moreover, our results are robust to the use of alternative estimation methods, comparisons with other large shareholders, and comparisons with family firms from other countries.

To further evaluate the expropriation hypothesis, we examine whether the CSR underperformance of family firms is more pronounced in firms that have greater potential agency problems, as indicated by proxies for firms' agency costs, ownership structure, and board structure. The results show that CSR performance is lower for family firms that have greater agency costs, less monitoring from outside shareholders, and less efficient boards. We also investigate how country-level institutions affect families' incentives to invest in CSR. We find that family firms are less likely to invest in CSR in countries with lower freedom of the press, more political connections, and weaker investor protection. Thus, while family firms have more incentives to enhance their reputation through investment in CSR activities, a weak institutional environment may reduce these incentives. Different institutional environments can also explain why family firms' CSR performance differs between the U.S. and East Asia.

This paper contributes to the literature on the determinants of CSR by showing how CSR performance is influenced by ownership type. Previous studies on the relation between ownership structure and CSR generally focus on a single country and find mixed results across settings (e.g., Barnea and Rubin, 2010; Bartkus et al., 2002; Berrone et al., 2010; Block and Wagner, 2014; Dyer and Whetten, 2006; Ghazali, 2007; Oh et al., 2011). Our study, based on Carney and Child's (2013) newly collected data on the ultimate ownership structure of publicly traded firms in nine East Asian economies, provides cross-country evidence on the relation between family ownership and CSR performance. Using a cross-country setting, we are better able to identify the influence of family control on CSR and understand the role of corporate governance and the institutional environment in improving CSR performance of family-controlled firms, hence offering an explanation for the mixed findings in previous literature.

This paper also contributes to the literature on family firms by providing evidence on how family firms' behavior affects CSR performance. Berrone et al. (2010); Dyer and Whetten (2006), and Block and Wagner (2014) document a positive impact of family control on CSR performance in the U.S., while we find a negative impact using data from nine East Asia economies. This result suggests that controlling families tend to expropriate minority shareholders in environments with greater agency conflicts and weaker institutions.

Finally, this paper contributes to a large literature on the role of country-level institutions. Previous studies document how country-level institutions impact variation in CSR performance across countries (e.g., Ioannou and Serafeim, 2012; Jackson and Apostolakou, 2010; Jamali et al., 2009). We extend this literature by showing that country-level institutions affect the relationship between family control and CSR performance.

The remainder of the paper is organized as follows. Section 2 reviews prior literature and develops our hypotheses. Section 3 discusses our data and variables, and provides descriptive statistics. Section 4 presents results of univariate tests, regression analysis, and robustness tests. Finally, Section 5 concludes the paper.

<sup>2</sup> Anderson and Reeb (2003a) and Villalonga and Amit (2006) both find that family firms in the U.S. outperform non-family firms, but Claessens et al. (2002) use data in eight East Asian economies and find a negative impact of family control on firm value.

## 2. Family control and corporate social responsibility

### 2.1. The expropriation view

According to agency theory, family-controlled firms should have fewer agency conflicts between shareholders and managers than non-family firms (Jensen and Meckling, 1976), as the large ownership stakes of controlling families imply greater incentives to monitor managers (Anderson and Reeb, 2003a). However, family control can lead to agency problems between controlling shareholders and minority shareholders because controlling shareholders have strong incentives to pursue private benefits by expropriating minority shareholders: unlike other types of large shareholders (e.g., the state, a widely held firm, or a financial institution), controlling families usually hold large ownership stakes in a single firm for several generations and a family member often serves as CEO or chairman of the board (Claessens et al., 2000; Faccio and Lang, 2002).

A large body of literature documents expropriation of minority shareholders in family firms. For instance, DeAngelo and DeAngelo (2000) report that family firms' preference for dividends leads to lower investment in physical capital and Anderson et al. (2012) show that family firms invest less in R&D. Further, Bertrand et al. (2002) and Bae et al. (2002) find direct evidence of tunneling in Indian family business groups and Korean family-controlled pyramids (chaebols), respectively. These behaviors lead to lower returns for family firms. Indeed, empirical studies show that family firms underperform non-family firms in East Asia (Claessens et al., 2002), Canada (Morck et al., 2000), and Sweden (Cronqvist and Nilsson, 2003), among others, and using a sample of 35 countries Lins et al. (2013) find that family firms underperformed during the 2008–2009 financial crisis.

With regard to CSR performance, prior work suggests that controlling shareholders are associated with lower CSR performance. For example, Bartkus et al. (2002) find that blockholders limit corporate philanthropy for a sample of 66 U.S. companies, and Ghazali (2007) shows that Malaysian companies with a high level of director ownership disclose significantly less CSR information. Using a CSR rating data set that classifies the largest 3000 U.S. corporations as socially responsible or irresponsible, Barnea and Rubin (2010) find that on average insider ownership is negatively related to a firm's CSR rating. Similarly, Oh et al. (2011) find that managerial ownership is negatively associated with a firm's CSR rating in Korean firms, and Dam and Scholtens (2013) find that ownership concentration is significantly negatively related to CSR performance in a sample of 700 European firms.

In sum, the above discussion suggests that controlling families have more incentives to divert firm resources, including investment in CSR activities, by expropriating minority shareholders, which leads to underperformance of family firms. The expropriation view thus suggests that family firms realize lower CSR performance than non-family firms. This leads to our first hypothesis:

**Hypothesis 1.** CSR performance is lower for family firms than non-family firms.

### 2.2. The reputation and long-term horizon view

While the expropriation view suggests that controlling families have incentives to divert firm resources and thereby invest less in CSR, the reputation concerns and long-term horizon of family-controlled firms suggest an alternative perspective. Firms invest in CSR activities to enhance their reputation with stakeholders (Albert and Whetten, 1985; Whetten and Mackey, 2002). Reputation is particularly important to family firms, because it affects not only firm performance but also the family's name (Dyer and Whetten,

2006; Zellweger et al., 2011). Family owners and managers who view their firm as an extension of themselves may fear that a poor firm reputation will hurt their family and themselves (Dyer and Whetten, 2006; Kets de Vries, 1994; Post, 1993; Ward, 1987). Further, because controlling families are often interested in passing the firm on to the next generation (Gómez-Mejía et al., 2007), in addition to financial goals family firms may pursue a number of non-financial goals (Zellweger et al., 2011), of which a favorable reputation is an important socioemotional goal (Berrone et al., 2010; Deephouse and Jaskiewicz, 2013; Schulze et al., 2003). This argument thus suggests that family firms are more likely than other firms to invest in CSR to increase the firm's and in turn the family's reputation.

Family firms also enjoy a longer horizon than non-family firms. While managers of widely held firms have incentives to pursue short-term performance at the expense of long-run value to enhance their reputation in the labor market (Narayanan, 1985), family-controlled firms' concentrated ownership increases incentives to monitor management, which decreases managerial myopia (Stein, 1988). Further, James (1999) suggests that the long-term horizon of family firms results in more efficient investment, as it allows firms to maximize wealth over the long run and invest in long-term relationships with stakeholders (Miller and Le Breton-Miller, 2005). This argument suggests that family firms are more likely than other firms to invest in CSR to maximize long-term value (Bénabou and Tirole, 2010; Jensen, 2002). In line with this perspective, using U.S. data Dyer and Whetten (2006) find that family firms are more socially responsible than non-family firms, Berrone et al. (2010) find that family-controlled firms have better environmental performance than non-family firms, and Block and Wagner (2014) show that while family ownership is negatively associated with community-related CSR performance, it is positively associated with diversity-, employee-, environment-, and product-related aspects of CSR.

In sum, the above discussion suggests that the reputation concerns and longer horizon of family firms lead them to invest more in CSR than non-family firms. This view thus implies higher CSR performance for family firms, which leads to our second hypothesis:

**Hypothesis 2.** CSR performance is higher for family firms than non-family firms.

## 3. Data, variables, and summary statistics

### 3.1. Sample

To construct our sample we begin by collecting data from several sources (see Appendix). We obtain ownership data for publicly traded firms in nine East Asian economies (Hong Kong, Indonesia, Japan, Malaysia, Philippines, Singapore, South Korea, Taiwan, and Thailand) from Carney and Child (2013). This data set identifies firms' ultimate controlling shareholders as well as their ultimate cash flow (ownership) and voting (control) rights as of 2008, and also provides information on the presence of multiple large shareholders (up to five) and their control stakes. We obtain CSR data from Thomson Reuters' ASSET4, which provides environmental, social, and governance information on over 3400 firms worldwide as of 2002. This information is collected from publicly available sources (e.g., annual reports, NGO websites, CSR reports) and updated biweekly. Finally, we obtain firm-level financial data from the Compustat Global database.

Next, we hand-match the ownership dataset with the financial data. We then merge the resulting dataset with the CSR data. After omitting firms with insufficient financial data to construct the



regression variables, the final sample comprises 1719 observations from nine economies over the 2002–2011 period.

### 3.2. Variables

#### 3.2.1. CSR

Following Ioannou and Serafeim (2012), we construct our primary measure of a firm's CSR performance, CSR, as the average of the firm's environmental and social performance scores. A firm's environmental performance score captures the company's impact on living and non-living natural systems, including the air, land, and water, and is based on the firm's energy use, CO<sub>2</sub> emissions, waste recycling, etc. A firm's social performance score measures the company's capacity to generate trust and loyalty with its workforce, customers, and society and is based on factors such as employee turnover, injury rate, training hours, percentage of female employees, and amount donated to charitable organizations. In robustness tests we also examine a firm's environmental performance (ENVIRONMENTAL) and social performance (SOCIAL) separately.

#### 3.2.2. Family control

To capture family control, we follow Anderson and Reeb (2003a) and use *FAM\_DUM*, which is a dummy variable equal to 1 if the largest shareholder is a family, and 0 otherwise. Carney and Child (2013) identify the largest shareholder at the 10% and 20% thresholds. We use the 10% threshold in our main analysis and the 20% threshold in robustness tests. In addition, we include two other proxies for family control, *FAM\_CONT*, which is the percentage of voting rights held by the controlling family shareholder, and *FAM\_MAN*, which is a dummy variable equal to 1 if a member of the controlling family is also the CEO, Chairman of the board, or vice chairman of the board.

Although our key test variable (*FAM\_DUM*) originates in 2008, we study the CSR behavior of family firms over the period 2002–2011 following related studies investigating the effects of ultimate ownership structure on corporate behavior (e.g., Attig et al., 2016; Faccio et al., 2001; Gopalan and Jarayaman, 2012; Haw et al., 2004; Lin et al., 2011). This analysis implicitly assumes that family control is sticky and ensures that the CSR behavior of family firms we are estimating is persistent and not transitory.<sup>3</sup>

#### 3.2.3. Firm-level control variables

We include a number of firm-level variables to control for various factors that may affect CSR performance. In particular, we control for: *SIZE*, the natural logarithm of total assets; *AGE*, firm age, measured as the fiscal year minus the year of establishment; *MTB*, the market-to-book ratio; *LEV*, the ratio of total debt to total assets; *ROA*, return on assets, measured as the ratio of net income before extraordinary items to total assets; *RDS*, the ratio of research and development expenses to total sales; *CONT\_DISP*, dispersion of control, measured as adjusted Herfindahl index of difference between the voting rights of the five largest shareholders; and *BOARD\_SIZE*, adjusted score of total number of board numbers that are in excess of ten or below eight. To mitigate the impact of outliers, we winsorize all firm-level variables at the 1% and 99% levels. In addition to these firm-level variables, we control for country, industry, and year effects in all of our regressions.

### 3.3. Summary statistics

Table 1 summarizes our sample composition by industry, country, and year. The full sample comprises 1719 observations repre-

sented 335 unique firms over the 2002–2011 period. More than one-fourth of the sample firms are family firms. Using the Fama-French (Fama and French, 1997) 12-industry classification, family firms are diversified across industries, with consumer non-durables having the highest percentage of family firms (55%) and utilities having the lowest (15.79%). Among the nine East Asian economies, family firms dominate in the Philippines (83.33%) and South Korea (57.45%), whereas only 10.48% and 15.79% of firms are family firms in Japan and Taiwan, respectively. The percentage of family firms is relatively stable over time starting in 2004; it is lower in 2002 and 2003.

Table 2 presents descriptive statistics for and correlations between key regression variables. In Panel A, we see that CSR ranges between 6.690 and 97.570, with an average of 56.044 and a standard deviation of 29.614. These results suggest that there is considerable variation in CSR performance. The mean of *FAM\_DUM* is 0.234, which implies that 23.4% of observations correspond to family firms. In Panel B, we find that consistent with Hypothesis 2, *FAM\_DUM* is negatively related to our proxies for CSR performance (CSR, ENVIRONMENTAL, and SOCIAL), implying that family-controlled firms tend to have lower CSR performance. The correlation coefficients between key variables of interest are low, indicating that multicollinearity is not likely to affect our regression results.

## 4. Empirical results

### 4.1. Univariate analysis

In Table 3, we conduct univariate tests of differences in means between family and non-family firms. The average CSR is 45.475 for family firms, compared to 59.280 for non-family firms, with the difference significant at the 1% level. Similarly, family firms have significantly lower ENVIRONMENTAL and SOCIAL than non-family firms. These results confirm the preliminary evidence in Table 2 that family firms tend to have lower CSR performance. However, this analysis does not control for other variables that could affect CSR. We thus conduct multivariate analysis next.

### 4.2. Family control and CSR: main evidence

To shed further light on the impact of family control on CSR performance, we run the following specification:

$$CSR = a_0 + a_1FAM\_DUM + a_2Controls + a_3Fixed\ Effects + \varepsilon \quad (1)$$

where CSR is a firm's CSR performance, measured as the average of a firm's environmental performance and social performance scores, *FAM\_DUM* is an indicator variable equal to 1 if the largest shareholder is a family, *Controls* is a vector that contains the firm-specific control variables (*SIZE*, *AGE*, *MTB*, *LEV*, *ROA*, *RDS*, *CONT\_DISP*, *BOARD\_SIZE*), and *Fixed effects* is a vector that includes the year, industry, and country fixed effects. In all regressions, we follow Petersen (2009) and cluster standard errors by firm and year.

The regression results for specification (1) are reported in Column 1 of Table 4. The estimated coefficient on *FAM\_DUM* is negative and significant at the 1% level, suggesting that in line with the expropriation view (Hypothesis 2), family-controlled firms underperform on CSR compared to non-family firms. This result is also economically significant: the coefficient on *FAM\_DUM* is -9.330, which together with the mean CSR of 56.044 (Table 2, Panel A) implies that on average CSR performance is 16.6% lower (from 56.044 to 46.714) for family firms than non-family firms. Turning to the control variables, the results show that firm size, age, and return on assets are positively associated with CSR performance.

Although our focus throughout the paper is on *FAM\_DUM*, in Columns 2–4 of Table 4, we consider alternative proxies for family

<sup>3</sup> We find qualitatively similar evidence when we re-estimate our main regression for three different years: 2006 (pre-crisis), 2008 (during crisis), and 2010 (post-crisis).

**Table 1**  
Sample composition.

	Firms	Family firms	Percent of family firms	Obs.	Family obs.	Percent of family obs.
Full sample	335	94	28.06%	1719	403	23.44%
By industry						
Business equipment	40	11	27.50%	199	57	28.64%
Chemicals and allied products	9	3	33.33%	46	4	8.70%
Consumer durables	18	4	22.22%	127	21	16.54%
Consumer nondurables	20	11	55.00%	86	34	39.53%
Energy	18	3	16.67%	75	6	8.00%
Finance	78	22	28.21%	369	115	31.17%
Healthcare	11	2	18.18%	80	14	17.50%
Manufacturing	33	9	27.27%	171	28	16.37%
Telephone and television transmission	22	5	22.73%	110	24	21.82%
Utilities	19	3	15.79%	120	17	14.17%
Wholesale, retail, and some services	13	4	30.77%	71	19	26.76%
Other	54	17	31.48%	265	64	24.15%
By country						
Hong Kong	36	15	41.67%	219	111	50.68%
Indonesia	17	6	35.29%	41	14	34.15%
Japan	124	13	10.48%	963	101	10.49%
Malaysia	27	12	44.44%	65	26	40.00%
Philippines	6	5	83.33%	12	10	83.33%
Singapore	25	6	24.00%	161	39	24.22%
South Korea	47	27	57.45%	130	78	60.00%
Taiwan	38	6	15.79%	87	13	14.94%
Thailand	15	4	26.67%	41	11	26.83%
By year						
2002	20	2	10.00%	20	2	10.00%
2003	21	2	9.52%	21	2	9.52%
2004	126	30	23.81%	126	30	23.81%
2005	165	35	21.21%	165	35	21.21%
2006	168	35	20.83%	168	35	20.83%
2007	183	37	20.22%	183	37	20.22%
2008	229	52	22.71%	229	52	22.71%
2009	269	69	25.65%	269	69	25.65%
2010	326	91	27.91%	326	91	27.91%
2011	212	50	23.58%	212	50	23.58%

This table presents the sample distribution by industry (Fama–French 12 industry groups), country, and year for the 1719 observations representing 335 unique firms over the period 2002–2011.

control discussed in Section 3.2.2. In Column 2, we report results based on *FAM\_CONT*, which captures the ultimate control rights of family firms. We document a negative and significant coefficient on *FAM\_CONT*. This result complements the finding in Column 1 by showing that an increase in controlling families' control rights is associated with a decrease in CSR performance. In terms of economic significance, increasing family control by one standard deviation (16.178) decreases CSR performance by 7.4% (from 56.044 to 51.870).

In Column 3 we employ our third measure of family control, *FAM\_MAN*, which is an indicator variable equal to 1 if a controlling family member is the CEO, chairman of the board, or vice chairman of the board. The impact of *FAM\_MAN* on CSR is again negative and significant. Economically, a manager that is a member of the controlling family is associated with 15.9% lower CSR performance (from 56.044 to 47.153). Thus, while a family manager may imply lower shareholder-manager conflicts (Anderson and Reeb, 2003a; Villalonga and Amit, 2006), here we see that controlling shareholder-minority shareholder conflicts arise, in line with the expropriation view.

In our main analysis, the measures of family control are based on an ownership threshold of 10%. To test the sensitivity of our results to the threshold used to define family control, we also use a 20% threshold, which means that the large shareholders' voting rights are all greater than 20%; recall that Carney and Child (2013) identify ultimate owners at the 10% and 20% thresholds. The results, reported in Column 4 of Table 4, are similar to our main

evidence: *FAM\_DUM* is significantly negatively associated with CSR performance.

In Columns 5 and 6 of Table 4, we separately examine the effect of family control on the two components of our primary measure of CSR performance, namely, environmental performance (*ENVIRONMENTAL*) and social performance (*SOCIAL*), respectively. The estimated coefficients are both negative and significant, consistent with our findings using CSR. Berrone et al. (2010) find that family-controlled firms have better environmental performance in the U.S. Our results suggest that in East Asia, family control is associated with worse environmental performance.

In sum, our multivariate analysis on the relation between family control and CSR performance shows that unlike papers that investigate family control and CSR using U.S. data (Berrone et al., 2010; Block and Wagner, 2014; Dyer and Whetten, 2006), family firms in East Asia realize lower CSR performance than non-family firms, which is in line with the negative (i.e., expropriation) view of family firms.

#### 4.3. Family control and CSR: change analysis<sup>4</sup>

Our empirical approach in the previous section consists in analyzing the impact of family control on CSR performance in levels. In this section, we extend our analysis by examining whether changes in ownership structure—the identity of ultimate owner—are related to changes in CSR performance. This analysis is possi-

<sup>4</sup> We thank an anonymous reviewer for suggesting this analysis.

**Table 2**  
Descriptive statistics and correlation matrix.

Panel A: Descriptive statistics							
	Mean	SD	Min	P25	P50	P75	Max
CSR	56.044	29.614	6.690	26.275	59.690	85.115	97.570
ENVIRONMENTAL	59.242	32.370	9.070	24.190	69.180	91.150	97.170
SOCIAL	52.845	31.189	3.380	21.880	54.540	83.780	98.260
FAM_DUM	0.234	0.424	0.000	0.000	0.000	0.000	1.000
SIZE	9.584	1.393	5.749	8.647	9.560	10.384	14.794
AGE	3.803	0.847	0.000	3.434	3.989	4.369	5.823
MTB	1.477	0.744	0.810	1.039	1.206	1.605	5.072
LEV	0.157	0.140	0.000	0.032	0.128	0.240	0.539
ROA	0.050	0.054	-0.069	0.013	0.038	0.075	0.240
RDS	0.018	0.035	0.000	0.000	0.000	0.023	0.196
CONT_DISP	11.455	17.684	0.000	0.000	3.320	15.936	100.000
BOARD_SIZE	45.279	27.833	0.000	18.630	49.850	76.140	78.120

Panel B: Correlation matrix													
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
CSR	(1)	1											
ENVIRONMENTAL	(2)	0.934***	1										
SOCIAL	(3)	0.929***	0.737***	1									
FAM_DUM	(4)	-0.198***	-0.242***	-0.124***	1								
SIZE	(5)	0.274***	0.258***	0.252***	-0.149***	1							
AGE	(6)	0.201***	0.244***	0.127***	-0.020	0.142***	1						
MTB	(7)	-0.136***	-0.169***	-0.083***	0.109***	-0.522***	-0.266***	1					
LEV	(8)	0.040	0.081***	-0.007	-0.031	0.150***	0.037	-0.230***	1				
ROA	(9)	-0.106***	-0.153***	-0.043	0.182***	-0.492***	-0.272***	0.731***	-0.288***	1			
RDS	(10)	0.221***	0.231***	0.179***	-0.105***	-0.089***	0.272***	0.025	-0.234***	0.022	1		
CONT_DISP	(11)	-0.156***	-0.234***	-0.053*	0.051*	-0.077**	-0.323***	0.056*	-0.099***	0.117***	-0.109***	1	
BOARD_SIZE	(12)	-0.024	-0.058*	0.015	0.077**	-0.153***	-0.141***	0.066**	-0.096***	0.066**	0.012	0.126***	1

This table reports descriptive statistics (Panel A) and Pearson correlation coefficients (Panel B) for the regression variables. The full sample is composed of 1719 observations representing 335 unique firms over the period 2002–2011. Definitions and data sources for the variables are provided in the [Appendix](#). The superscript asterisks \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

**Table 3**  
Univariate tests: family firms versus non-family firms.

	Family firms			Non-family firms			Difference in means
	N	Mean	SD	N	Mean	SD	t-statistic
CSR	403	45.475	30.76	1316	59.280	28.492	-8.351***
ENVIRONMENTAL	403	45.107	33.203	1316	63.571	30.853	-10.322***
SOCIAL	403	45.842	31.147	1316	54.990	30.898	-5.191***
SIZE	403	9.208	1.264	1316	9.698	1.411	-6.250***
AGE	403	3.772	0.678	1316	3.812	0.893	-0.826
MTB	403	1.623	0.942	1316	1.433	0.665	4.523***
LEV	403	0.149	0.127	1316	0.159	0.143	-1.272
ROA	403	0.067	0.058	1316	0.044	0.051	7.688***
RDS	403	0.011	0.030	1316	0.020	0.036	-4.356***
CONT_DISP	403	13.075	15.826	1316	10.959	18.192	2.105***
BOARD_SIZE	403	49.175	26.039	1316	44.086	28.262	3.220***

This table reports the results of univariate tests for differences between family firms and non-family firms. The sample is composed of 1719 firm-year observations representing 335 unique firms over the period 2002–2011. Definitions and data sources for the variables are provided in the [Appendix](#). The superscript asterisks \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

ble because ultimate ownership data for East Asian corporations are available for two years: 1996 from [Claessens et al. \(2000\)](#) and 2008 from [Carney and Child \(2013\)](#).

Using these two datasets, we identify 124 firms with a change of the ultimate owner from non-family to family or family to non-family. We then attempt to detect the exact year of ownership change based on Bureau van Dijk's Osiris dataset, which is the largest database of listed companies around the world, as well as Internet resources and company annual reports. Of the 124 firms, 81 firms' CSR data starts after 2008 and 43 firms appear to change their ultimate owner between 1996 and 2002, preventing us from using this sample to examine the impact of ownership change on

CSR.<sup>5</sup> Therefore, we end up with a small sample of eight firms with a change in the identity of the ultimate owner during the period 2002–2008 and for which CSR data are available. Seven of these firms changed from family to non-family control. Although the sample is small, we conduct a univariate analysis to compare CSR performance around ownership changes. The results, untabulated for the sake of brevity, indicate a significant reduction in CSR associated with the change from non-family to family control, and a significant increase in CSR performance for firms that changed from family to non-family control. These findings are consistent

<sup>5</sup> This is because our CSR data from ASSET4 are available starting with 2002.

**Table 4**  
Family control and CSR: main evidence.

	Basic model	Alternative measures of family firms			Components of CSR	
	(1)	Family control (2)	Family manager (3)	20% Cutoff (4)	ENVIRONMENTAL (5)	SOCIAL (6)
<i>FAM_DUM</i>	−9.330*** (−2.810)			−6.841* (−1.910)	−12.473*** (−3.383)	−6.187* (−1.849)
<i>FAM_CONT</i>		−0.258*** (−3.345)				
<i>FAM_MAN</i>			−8.891** (−2.272)			
<i>SIZE</i>	9.199*** (7.710)	8.983*** (7.451)	9.182*** (7.700)	10.037*** (8.971)	7.681*** (5.679)	10.717*** (9.012)
<i>AGE</i>	5.795*** (3.552)	5.907*** (3.569)	5.396*** (3.303)	4.549*** (3.072)	6.028*** (3.295)	5.562*** (3.196)
<i>MTB</i>	−0.231 (−0.124)	−0.473 (−0.249)	−0.542 (−0.285)	0.623 (0.338)	−2.222 (−1.099)	1.759 (0.905)
<i>LEV</i>	8.077 (0.752)	9.340 (0.866)	8.836 (0.823)	8.907 (0.889)	15.623 (1.300)	0.531 (0.047)
<i>ROA</i>	45.586** (2.186)	49.354** (2.303)	46.842** (2.186)	34.224 (1.588)	52.399** (2.108)	38.773 (1.560)
<i>RDS</i>	74.894 (1.389)	86.716 (1.593)	81.035 (1.462)	119.691*** (2.650)	53.885 (1.066)	95.904 (1.546)
<i>CONT_DISP</i>	−0.042 (−0.578)	0.013 (0.182)	−0.038 (−0.518)	−0.050 (−0.639)	−0.108 (−1.222)	0.024 (0.316)
<i>BOARD_SIZE</i>	0.042 (1.021)	0.041 (0.998)	0.043 (1.041)	0.041 (1.068)	0.027 (0.668)	0.058 (1.204)
Constant	−49.733*** (−3.137)	−49.792*** (−3.117)	−49.144*** (−2.988)	−57.810*** (−3.946)	−22.950 (−1.285)	−76.517*** (−4.722)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1719	1719	1719	2066	1719	1719
Adj. R <sup>2</sup>	0.359	0.361	0.355	0.383	0.397	0.285

This table reports regressions of CSR performance on family control variables. The sample is composed of 1719 firm-year observations representing 335 unique firms over the period 2002–2011. The dependent variable of Columns 1–4 is CSR, the overall CSR performance of a firm, equal to the average of environmental performance and social performance. The dependent variable of Columns 5 and 6 is *ENVIRONMENTAL* and *SOCIAL*, respectively. In Column 4, the controlling family is defined as having 20% or more of control rights. Definitions and data sources for the variables are provided in the Appendix. All regressions include year, industry, and country fixed effects. Robust *t*-statistics adjusted for clustering by firm and year are reported in parentheses. The superscript asterisks \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

with our evidence that family-controlled firms exhibit lower CSR performance.

#### 4.4. Endogeneity of family control

Our main evidence in Table 4 suggests that family control has a negative impact on CSR performance. However, family control and CSR performance are likely to be affected by the same firm characteristics. To the extent that firm ownership is systematically related to differences in firm characteristics, the impact of family control on CSR could result from these differences. Our research design helps mitigate concerns about omitted heterogeneity by using year, industry, and country fixed effects, but the possibility remains that some omitted variables affect both family control and CSR. It is also possible that our evidence is driven by reverse causality. For example, a family might maintain a higher stake in a socially irresponsible firm because it is less attractive to outside investors. We address these endogeneity concerns using three approaches. The results are reported in Table 5.

First, we employ an instrumental variables (IV) approach. Specifically, we consider an endogenous binary variable model estimated using a three-stage procedure following Adams et al. (2009).<sup>6</sup> In the first stage, we estimate a Probit of the determinants of family control by regressing the family dummy variable

on the full set of control variables from our main specification and an instrumental variable of family firm. Following the approach of Lin et al. (2011) and Laeven and Levine (2008), we use the average family control rights by industry and country as an instrument for family firms.<sup>7</sup> In the second stage, we regress *FAM\_DUM* on the fitted probability from the Probit regression and all explanatory variables. In the third stage, we regress CSR on the predicted *FAM\_DUM* from the second-stage and control variables. The result (Column 1 of Table 5) confirms that family firms are associated with lower CSR performance.

Second, we utilize the Heckman selection estimation procedure. The first stage of the Heckman model is a Probit model to regress the family dummy variable on all control variables and the instrumental variable. After estimating the first-stage model, we then regress CSR on the inverse Mills' ratio ( $\lambda$ ) estimated from the first stage, *FAM\_DUM*, and control variables. The results of the first stage are reported in Column 2 of Table 5, which, importantly for our purposes, indicates that *FAM\_DUM* loads negatively and significantly at the 1% level, reinforcing our main evidence.

The third approach we use is the propensity score matching (PSM) procedure proposed by Rosenbaum and Rubin (1983). We

<sup>6</sup> When the endogenous variable is a dummy, consistency of estimates from the traditional two-stage least squares model is highly sensitive to specification bias

of the first-stage regression. The three-stage procedure does not suffer from this shortcoming. See Adams et al. (2009) for more details.

<sup>7</sup> Lin et al. (2011) use the initial industry average cash-flow rights for each borrower as an instrument for the largest-owner cash-flow rights. Laeven and Levine (2008) use the average cash-flow rights of other banks in the country as an instrument for a bank's ownership structure.



**Table 5**  
Family control and CSR: endogeneity.

	IV (1)	Probit (2)	Heckman (3)	PSM (4)
<i>FAM_DUM</i>	−13.365*** (−5.858)		−12.325*** (−2.659)	−9.429*** (−2.718)
<i>SIZE</i>	9.051*** (15.706)	0.057 (1.511)	9.080*** (7.485)	6.664*** (3.883)
<i>AGE</i>	6.024*** (7.209)	0.223*** (3.018)	5.955*** (3.659)	6.184*** (3.332)
<i>MTB</i>	48.032*** (2.974)	2.000 (1.359)	46.975** (2.246)	58.507*** (2.876)
<i>LEV</i>	9.289* (1.695)	1.070*** (2.584)	8.868 (0.816)	10.874 (0.868)
<i>ROA</i>	−0.209 (−0.162)	−0.175 (−1.454)	−0.284 (−0.156)	−3.579* (−1.675)
<i>RDS</i>	73.915** (2.379)	−2.895 (−1.532)	74.537 (1.401)	67.299 (0.959)
<i>CONT_DISP</i>	−0.047 (−1.287)	−0.020*** (−5.586)	−0.049 (−0.693)	−0.318*** (−2.836)
<i>BOARD_SIZE</i>	0.045* (1.957)	0.003* (1.733)	0.044 (1.074)	0.071 (1.318)
<i>FC_AVG</i>		0.100*** (14.004)		
$\lambda$			3.205 (0.980)	
Constant	−59.348*** (−7.082)	−2.927*** (−4.082)	−59.308*** (−3.711)	3.553 (0.156)
Year FE	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes
Observations	1719	1719	1717	806
Adj. R <sup>2</sup> /Pseudo R <sup>2</sup>	0.371	0.590	0.361	0.442

This table reports results of IV regression, Heckman selection estimation procedure, and propensity score matching procedure. The sample is composed of 1719 firm-year observations representing 335 unique firms over the period 2002–2011. *FC\_AVG* is the average family control rights by industry and country.  $\lambda$  is the inverse Mills ratio produced by the Heckman model. Definitions and data sources for other variables are provided in the Appendix. Robust *t*-statistics adjusted for clustering by firm and year are reported in parentheses. The superscript asterisks \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

start by estimating propensity scores in a Probit model, where the dependent variable is *FAM\_DUM* and the explanatory variables are all control variables and the instrumental variable. We match each family firm (without replacement) with a non-family firm that has the closest score to that of the family firm. Then we conduct the regression analysis using the PSM sample (Column 4 of Table 5), we find that the impact of *FAM\_DUM* on CSR remains significantly negative. Thus, even when non-family firms have similar characteristics to family firms, family firms continue to have a negative impact on CSR performance. In sum, the results of our endogeneity tests consistently support the main results in Table 4, suggesting that endogeneity does not affect our main findings.

#### 4.5. Additional robustness checks

In Table 6 we check whether our results are influenced by sample composition and alternative methods to estimate the standard errors. In Panel A, we examine whether the CSR underperformance of family-controlled firms is driven by a specific group of firms or a certain period. In Column 1 of Panel A, we begin by exploring whether the inclusion of firms with multiple large shareholders (MLS) affects our main findings. Prior literature shows that MLS provide more effective monitoring and hence improve firm performance (Attig et al., 2009; Laeven and Levine, 2008; Maury and Papajuste, 2005). We find that the negative relation between *FAM\_DUM* and CSR remains after excluding firms without MLS.

We next examine whether the inclusion of financial firms influences our results, as financial firms' behavior is shaped by different

regulatory environments across countries. The results are reported in Column 2 of Panel A. We continue to document a negative and significant effect of family control on CSR performance. Recall from Table 1 that some countries account for nearly 30% of the sample firms (e.g., Japan), while others account for less than 5% (e.g., Philippines). Also, some years are associated with more than 15% of the sample observations (e.g., 2010) while others have only 10% (e.g., 2002 and 2003). To further assess whether sample composition is driving our main evidence, we re-estimate our models using weighted regressions, where countries and years with more observations are given less weight. The results in Column 3 of Panel A confirm our main evidence.

We also examine whether the recent financial crisis impacts our results. Prior literature suggests that family-controlled firms reduce investment more than other firms during financial crises (Lins et al., 2013) and invest more during normal business conditions (Masulis et al., 2011). To examine the effect of the financial crisis, we re-run our main analysis separately for the pre-crisis period (2002–2007), the crisis period (2008–2009), and the post-crisis period (2010–2011). The results are presented in Columns 4–6 of Panel A, respectively, and show that *FAM\_DUM* is significantly negatively related to CSR performance in all three sub-periods.

To further ensure that family control, measured in 2008, is driving CSR performance, rather than the other way around, we run our main regression for the post-2008 period. The results reported in Column 6 of Panel A indicate that *FAM\_DUM* loads negative and statistically significant at the 1% level, reinforcing our main evidence.

Lastly, we follow Demsetz and Villalonga (2001) and re-run our main regression using the average of each variable over the sample period. The results reported in Column 7 of Panel A continue to show a negative and statistically significant coefficient on *FAM\_DUM*.

In all other regressions reported in the paper, we use two-way clustering by firm and year. In Panel B of Table 6, we check the robustness of our main evidence to alternative methods of estimating the standard errors: OLS, clustering by firm, Newey-West, Generalized Least Squares (GLS), and Prais-Winsten. The coefficient on *FAM\_DUM* remains negative and significant, consistent with our main findings.

#### 4.6. Family firms and CSR: the role of corporate governance

Our main finding, namely, that family firms in East Asia are associated with lower CSR performance than non-family firms, is consistent with the expropriation view. To shed further light on this result, we examine whether the CSR underperformance of family firms is more pronounced in firms with weak corporate governance. Prior literature suggests that corporate governance is positively related to corporate social responsibility (Ferrell et al., 2015; Jo and Harjoto, 2011). We assess firm-level corporate governance using measures of firms' potential agency costs, ownership structure, and board structure.<sup>8</sup> We employ a split sample approach based on firm-level corporate governance measures capturing potential agency costs, ownership structure, and board structure. To better understand which splitting variables are actually influencing the relation between family control and CSR, we regress each splitting variable on the others and then split the sample based on the residuals from these regressions.

<sup>8</sup> Our split-sample design in Tables 7 and 8, which closely follows Chen et al. (2011) and Lins et al. (2013), benefits from avoiding multicollinearity complications stemming from high correlations between the test variables (here, *FAM\_DUM*) and its interaction terms, especially when the interactions involve a dummy variable (e.g., Lang et al., 2004; Guedhami et al., 2009). In our case, the correlations between *FAM\_DUM* and its interactions with other variables are quite high, ranging from 0.340 to 0.989.



**Table 6**  
Family control and CSR: robustness checks.

Panel A: Sample composition and period								
	Without multiple large shareholders	Without financial firms	Weighted least squares	Before crisis 2002–2007	During crisis 2008–2009	After crisis 2010–2011	Post-2008 2009–2011	Average 2002–2011
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
<i>FAM_DUM</i>	–10.958*** (–2.787)	–9.862** (–2.569)	–9.172*** (–4.391)	–13.633*** (–2.933)	–5.969** (–2.199)	–8.789*** (–4.001)	–8.355*** (–3.125)	–9.637*** (–2.822)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Constant	–26.026 (–1.551)	–47.277** (–2.390)	–31.713*** (–2.920)	–54.554*** (–5.763)	–33.499* (–1.891)	–56.374*** (–3.365)	–60.115*** (–3.606)	53.601* (1.942)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1582	1350	1719	683	498	538	807	335
Adj. R <sup>2</sup>	0.372	0.356	0.389	0.418	0.309	0.319	0.326	0.284
Panel B: Alternative estimation methods								
	OLS	Firm clustered	Newey West	GLS	Prais-Winsten			
	(1)	(2)	(3)	(4)	(5)			
<i>FAM_DUM</i>	–9.330*** (–5.698)	–9.330*** (–2.644)	–9.330*** (–4.434)	–7.848** (–2.482)	–7.918*** (–2.615)			
Controls	Yes	Yes	Yes	Yes	Yes			
Constant	–49.733*** (–4.506)	–49.733*** (–2.721)	–60.411*** (–5.723)	–64.092*** (–3.722)	–41.229*** (–3.096)			
Year FE	Yes	Yes	Yes	Yes	Yes			
Industry FE	Yes	Yes	Yes	Yes	Yes			
Country FE	Yes	Yes	Yes	Yes	Yes			
Observations	1719	1719	1719	1719	1719			
Adj. R <sup>2</sup>	0.359	0.359	0.359	0.3553	0.200			

Panel A of this table reports regression coefficients of CSR performance on family control (*FAM\_DUM*) using different sample composition and periods. Panel B reports regression coefficients of CSR performance on family control using alternative estimation methods. The full sample is composed of 1719 firm-year observations representing 335 unique firms over the period 2002–2011. The dependent variable is CSR, overall CSR performance of a firm, equal to the average of environmental performance and social performance. All regressions include *SIZE*, *AGE*, *MTB*, *LEV*, *ROA*, *RDS*, *CONT\_DISP*, *BOARD\_SIZE*, year, industry, and country fixed effects. Definitions and data sources for other variables are provided in the [Appendix](#). Robust *t*-statistics adjusted for clustering by firm and year are reported in parentheses. The superscript asterisks \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

#### 4.6.1. Agency costs

To capture firms' agency costs, we follow [Lins et al. \(2013\)](#) and use two measures: free cash flow defined as (EBITDA–Capital expenditures)/Assets and cash holdings defined as the ratio of cash to total assets. More free cash flow and cash holdings are expected to lead to higher agency costs, as they can provide controlling families more opportunity to divert resources to projects that benefit themselves at the expense of minority shareholders. Thus, if the expropriation hypothesis holds, the CSR underperformance of family firms should be more pronounced in firms with more free cash flow and cash holdings. To test this conjecture, in Columns 1–4 of [Table 7](#), we follow the standard practice of estimating regressions on subsamples sorted by agency costs (e.g., [Chen et al., 2011](#); [Lins et al., 2013](#)). Consistent with the expropriation view, we find that the coefficient on *FAM\_DUM* is significantly negative only for the subsample of firms with higher agency costs based on the split by free cash flow (*FREE\_CASH*). For the subsample with lower agency costs, the differences between family firms and other firms are not significant.

#### 4.6.2. Ownership structure

As we discuss above, prior work shows that multiple large shareholders (MLS) provide more effective monitoring ([Attig et al., 2009](#); [Laeven and Levine, 2008](#); [Maury and Pajuste, 2005](#)). The presence of MLS should thus prevent controlling families from expropriating minority shareholders and in turn improve CSR performance. To test this conjecture we employ two proxies for the monitoring role of MLS: the presence of MLS (*MLS*) and the dispersion of voting rights among the five largest shareholders (*CONT\_DISP*). *MLS* is a dummy variable equal to 1 if a firm has a

second controlling shareholder, and 0 otherwise.<sup>9</sup> *CONT\_DISP* is the adjusted Herfindahl index of the difference in voting rights between the five largest shareholders:  $((Cont1-Cont2)^2 + (Cont2-Cont3)^2 + (Cont3-Cont4)^2 + (Cont4-Cont5)^2)/100$ .<sup>10</sup> The higher the index, the higher the concentration of control. The more voting rights of other large shareholders, the lower the concentration of control, which means that MLS have more power and incentives to monitor the largest shareholder. In Columns 5–8 of [Table 7](#), we split the sample according to *MLS* and *CONT\_DISP*.<sup>11</sup> Consistent with our expectations, family firms underperform relative to other firms only in the subsample of firms with no monitoring of MLS. For the split sample based on control dispersion (*CONT\_DISP*), *FAM\_DUM* is negative and statistically significant in both subsamples. However, we note that the magnitude of the coefficient on *FAM\_DUM* is relatively large in the subsample of firms with higher control concentration (coefficient = –16.675) compared to that in the subsample of firms with low control concentration (coefficient = –9.300), with the *t*-test for the difference in CSR means for family firms across the two subsamples significant at the 1% level. These findings suggest that family firms

<sup>9</sup> For firms with dispersed ownership, *MLS* is coded as missing.

<sup>10</sup> *Cont1*, *Cont2*, *Cont3*, *Cont4*, and *Cont5*, denote the voting rights of the first, second, third, fourth, and fifth largest shareholder, respectively.

<sup>11</sup> We use other proxies for MLS, such as the voting rights of the second-largest shareholder, the ratio of the voting rights of the second-largest shareholder to the voting rights of the controlling owner, the number of MLS beyond the controlling owner, and the ratio of the voting rights of the largest four shareholders to the voting rights of the controlling owner. The results are the same as those reported above.

**Table 7**  
Family control and CSR: the role of corporate governance.

	FREE_CASH		CASH_HOLD		MLS		CONT_DISP		BOARD_SIZE		BOARD_EXPERT	
	High (1)	Low (2)	High (3)	Low (4)	Yes (5)	No (6)	High (7)	Low (8)	High (9)	Low (10)	High (11)	Low (12)
FAM_DUM	−16.832*** (−3.933)	−3.230 (−0.613)	−7.645 (−1.651)	−8.342 (−1.639)	−12.115 (−1.568)	−10.667** (−2.278)	−16.675** (−2.370)	−9.300* (−1.762)	−8.447 (−1.474)	−6.993 (−1.376)	−7.442 (−1.309)	−11.470** (−2.496)
SIZE	13.463*** (9.117)	8.934*** (2.730)	12.262*** (5.708)	10.904*** (3.624)	10.711*** (3.098)	12.494*** (4.337)	8.880*** (2.722)	12.828*** (4.594)	7.801*** (3.137)	14.266*** (6.525)	13.005*** (4.660)	7.666*** (2.872)
AGE	2.934 (0.858)	7.700*** (2.961)	6.660** (2.302)	3.495 (1.059)	8.880** (2.200)	2.127 (0.693)	6.146* (1.734)	1.520 (0.519)	0.933 (0.276)	9.162*** (3.752)	7.858*** (2.781)	1.552 (0.545)
MTB	2.829 (0.963)	6.043 (1.361)	3.535 (0.988)	4.165 (0.695)	7.809*** (2.957)	0.473 (0.092)	5.172*** (4.277)	1.686 (0.271)	0.594 (0.114)	5.366** (2.017)	8.408** (2.040)	−1.339 (−0.318)
LEV	−11.146 (−0.767)	−11.688 (−0.639)	−20.158 (−1.084)	−1.834 (−0.095)	30.626 (0.921)	−37.887** (−2.277)	10.115 (0.399)	−44.868** (−2.066)	−31.447* (−1.801)	−4.106 (−0.213)	16.129 (0.735)	−41.678*** (−2.912)
ROA	80.977* (1.949)	−15.313 (−0.239)	13.480 (0.330)	108.455** (2.369)	56.801* (1.935)	14.173 (0.283)	60.403** (2.395)	−22.828 (−0.387)	28.557 (0.439)	58.564* (1.720)	39.654 (0.576)	30.301 (0.736)
RDS	182.237** (2.591)	54.160 (0.576)	118.051 (1.353)	233.033*** (4.112)	35.938 (0.295)	100.470 (1.000)	−32.227 (−0.282)	137.583* (1.751)	67.028 (0.493)	146.584** (2.465)	176.154* (1.761)	11.350 (0.154)
CONT_DISP	−0.201** (−2.489)	−0.142 (−1.043)	−0.108 (−0.924)	−0.224 (−1.258)					−0.185 (−1.343)	−0.149 (−1.132)	−0.121 (−0.906)	−0.213 (−1.542)
BOARD_SIZE	0.020 (0.210)	0.129 (1.413)	0.108 (1.601)	0.018 (0.274)	0.091 (0.787)	0.114** (2.088)	0.024 (0.318)	0.079 (0.844)				
Constant	−78.607** (−2.112)	−39.291 (−1.044)	−91.093*** (−2.980)	−100.319*** (−3.087)	−56.875 (−1.129)	−74.274** (−2.329)	−60.308 (−1.552)	34.416 (0.663)	1.088 (0.029)	−153.291*** (−5.522)	−83.154*** (−3.274)	5.099 (0.158)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	283	283	283	283	283	283	283	283	283	283	283	283
Adj. R <sup>2</sup>	0.395	0.342	0.364	0.321	0.261	0.440	0.296	0.442	0.323	0.382	0.376	0.392

This table reports regressions of CSR performance on family firms in split samples by whether firms have high or low agency costs. The dependent variable is CSR, the overall CSR performance of a firm, equal to the average of environmental performance and social performance. Definitions and data sources for other variables are provided in the Appendix. All regressions include year, industry, and country fixed effects. Robust *t*-statistics adjusted for clustering by firm and year are reported in parentheses. The superscript asterisks \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

underperform non-family firms under weak monitoring of MLS (i.e., higher concentration of control).

#### 4.6.3. Board structure

Firms can also improve corporate governance and mitigate agency problems through an efficient board of directors. If the expropriation view holds, the CSR underperformance of family firms should be more pronounced for firms with less efficient boards. To capture board efficiency, we employ board size and board expertise.

Although larger boards can potentially offer better advice (Dalton et al., 1999), they may be less efficient because of increased communication and coordination problems (Jensen, 1993; Lipton and Lorsch, 1992). Prior work finds a negative relationship between board size and firm value (Eisenberg et al., 1998; Yermack, 1996). More recently, Coles et al. (2008) find that the optimal board size is 8 for simple firms or 12 for complex firms. Accordingly, we proxy for board size using ASSET4's *BOARD\_SIZE*, which is defined as the total number of board members in excess of ten or below eight. A lower score for *BOARD\_SIZE* reflects more board members above or below the optimal board size and therefore less board efficiency.

More financial experts on the board may also lead to better monitoring (e.g., Anderson and Reeb, 2004). To measure board financial expertise, we use ASSET4's *BOARD\_EXPERT*, which is the percentage of board members who have either an industry-specific background or a strong financial background. A higher score implies greater board effectiveness.

The results for *BOARD\_SIZE* and *BOARD\_EXPERT* are reported in Columns 9 and 12 of Table 7. For the subsample split by *BOARD\_SIZE*, the coefficient on *FAM\_DUM* is negative but statistically insignificant in both subsamples. In contrast, in Columns 11 and 12, the coefficient on *FAM\_DUM* is significantly negative only for the subsamples of firms with lower board expertise (*BOARD\_EXPERT*). Consistent with our conjecture, the CSR under-

performance of family firms is more pronounced among firms with few board members with financial expertise.

In sum, the results in Table 7 suggest that family firms tend to underperform on CSR when they have greater agency problems and less effective monitoring from either outside shareholders or board members. In contrast, family firms with better corporate governance generally do not underperform on CSR compared to non-family firms. These results are consistent with the expropriation view and support our main results.

#### 4.7. Family firms and CSR: the role of institutional environment<sup>12</sup>

While studies using U.S. data find a positive relationship between family control and CSR performance (Berrone et al., 2010; Dyer and Whetten, 2006), our results based on East Asian data find the opposite. Why does the effect of family firms on CSR performance vary across countries? One explanation could be differences in institutional environment. While family firms have stronger reputation and long-term horizon incentives to invest in CSR than other firms, the institutional environment can impact these incentives. Indeed, Ioannou and Serafeim (2012) find that country-level institutions significantly affect firms' CSR performance. In this section, we examine whether institutions influence the relationship we document above between family control and CSR performance. Following our approach in Table 7, we adopt a split-sample design based on the residuals from regressing each splitting variable on the others.

##### 4.7.1. Media freedom

Prior literature suggests that the media affect corporate governance outcomes (Dyck and Zingales, 2002, 2004) and corporate

<sup>12</sup> Following the approach in Table 7, our split sample design is based on the residuals from regressing each split sample variable on the others.

**Table 8**

Family control and CSR: the role of institutional environment.

	PRESS		POL_CONN		INV_PROT	
	High (1)	Low (2)	High (3)	Low (4)	High (5)	Low (6)
FAM_DUM	−9.614*** (−2.658)	−9.168** (−2.243)	−13.129*** (−3.523)	−7.687* (−1.916)	−8.595 (−1.618)	−9.433*** (−2.869)
SIZE	10.265*** (6.955)	8.539*** (6.064)	10.708*** (6.976)	8.391*** (5.567)	7.949*** (5.432)	10.428*** (9.369)
AGE	6.257*** (3.244)	5.511*** (3.182)	5.634*** (2.780)	6.245*** (3.313)	4.483* (1.682)	7.032*** (4.860)
MTB	0.173 (0.060)	0.101 (0.053)	0.819 (0.268)	0.395 (0.189)	−4.197 (−1.514)	2.269 (1.268)
LEV	3.292 (0.242)	10.758 (0.809)	9.751 (0.801)	3.215 (0.244)	15.423 (1.124)	−5.732 (−0.621)
ROA	16.663 (0.542)	60.549* (1.939)	19.884 (0.573)	51.019** (2.072)	56.493** (2.143)	34.037 (1.402)
RDS	48.956 (1.084)	101.772 (1.293)	3.565 (0.063)	131.367** (2.003)	90.325 (1.217)	47.524 (1.134)
CONT_DISP	0.015 (0.187)	−0.078 (−1.045)	0.020 (0.269)	−0.060 (−0.642)	−0.085 (−0.925)	−0.012 (−0.152)
BOARD_SIZE	0.024 (0.516)	0.062 (1.412)	0.016 (0.362)	0.071 (1.433)	0.022 (0.468)	0.072* (1.771)
Constant	−45.650*** (−2.912)	−17.271 (−0.694)	−59.710** (−2.194)	−47.557** (−2.059)	−33.348 (−1.472)	−43.744*** (−3.356)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes
Observations	890	829	904	815	939	780
Adj. R <sup>2</sup>	0.358	0.320	0.387	0.332	0.361	0.377

This table reports regressions of CSR performance on family firms in split samples by whether firms are located in a strong (above country median) or weak (below country median) institutional environment. The dependent variable is CSR, the overall CSR performance of a firm, equal to the average of environmental performance and social performance. Definitions and data sources for other variables are provided in the [Appendix](#). All regressions include year, industry, and country fixed effects. Robust t-statistics adjusted for clustering by firm and year are reported in parentheses. The superscript asterisks \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

fraud ([Dyck et al., 2010](#); [Miller, 2006](#)). A robust and independent media could increase the reputation and legal costs of diverting firm resources to consume private benefits ([Dyck et al., 2008](#)), and hence may deter controlling families from expropriating minority shareholders. But if the media can be easily influenced by lobbying or political pressure, controlling families are less likely to be punished for expropriation. We therefore expect family firms to invest less in CSR in countries with lower freedom of the press. To test this conjecture, we use *PRESS*, which comes from *Freedom House* and assesses the degree of print, broadcast, and internet independence. *PRESS* ranges from 0 (most free) to 100 (least free). We adjust this index so that higher scores indicate more media independence. In Columns 1 and 2 of [Table 8](#), we split sample firms by the country median *PRESS*. The results reveal that the coefficient on *FAM\_DUM* is significantly negative in the subsamples of countries with high and low media independence. However, the *t*-test for the difference in CSR means for family firms across the two subsamples suggests a significantly lower CSR performance of family firms relative to non-family firms in countries with low media independence (50.177 in the high media independence subsample versus 41.280 in the low media subsample).

#### 4.7.2. Political connections

A firm is defined as politically connected if one of the company's large shareholders or top directors is a member of parliament, a minister, or the chief of state, or is "closely related" to a top politician ([Faccio, 2006](#)). Firms can benefit from political connections through, for example, higher tariffs on competitors' products, reduced regulatory requirements, or valuable government contracts ([Goldman et al., 2009](#)). Politically connected firms are also more likely to be bailed out, to pay lower taxes, and have a lower cost of capital ([Boubakri et al., 2012](#); [Chaney et al., 2011](#); [Faccio, 2006, 2010](#)). We posit that in countries where

political connections are prevalent, family firms have less incentive to invest in CSR because they can benefit more by establishing political connections. To test this conjecture, in Columns 3 and 4 of [Table 8](#) we conduct subsample tests based on political connections. We use political connection data from [Faccio \(2006\)](#). *POL\_CONN* is defined as the percentage of firms in a country that are connected with a minister or a member of parliament, or that have a close relationship with a politician (p. 373).<sup>13</sup> For the split sample by political connections (*POL\_CONN*), we find that the coefficient on *FAM\_DUM* is negative and statistically significant at the 1% level in the subsample of firms located in countries with more political connections (Column 3 in [Table 8](#)), but negative and statistically significant at the 10% level in the subsample of firms from countries with fewer political connections (Column 4 in [Table 8](#)). Importantly, the magnitude of the coefficient of *FAM\_DUM* is relatively large in the subsample of countries with more political connections (coefficient = −13.129) compared to that in the subsample of countries with fewer political connections (coefficient = −7.687), suggesting that family firms exhibit lower CSR performance in countries with widespread political connections. The *t*-test for the difference in CSR means for family firms across the two subsamples indicates a significantly lower CSR performance for family firms located in countries with stronger political connections (47.848 in the subsample of countries with fewer political connections versus 41.637 in the widespread political connections subsample).

<sup>13</sup> Other political connection definitions (percentage of politically connected listed firms in a country, and connected firms as a percentage of market capitalization) give the same results.

**Table 9**  
Other large shareholders and CSR.

	(1)	(2)	(3)	(4)	PSM		
					Family vs. state (5)	Family vs. widely held (6)	Family vs. dispersed ownership (7)
<i>FAM_DUM</i>	−9.330*** (−2.810)			−8.140** (−2.158)	−12.758*** (−2.913)	−11.193** (−2.143)	−9.512** (−2.256)
<i>STATE</i>		5.033 (1.339)		1.497 (0.366)			
<i>WIDELY_HELD</i>			5.719 (1.442)	4.432 (1.033)			
<i>SIZE</i>	9.199*** (7.710)	9.260*** (7.551)	9.986*** (8.196)	9.504*** (7.691)	6.793*** (3.712)	7.541*** (3.354)	11.587*** (5.801)
<i>AGE</i>	5.795*** (3.552)	5.623*** (3.350)	5.416*** (3.216)	5.951*** (3.597)	5.208** (2.417)	4.019 (1.348)	7.739** (2.275)
<i>MTB</i>	−0.231 (−0.124)	−0.321 (−0.161)	−0.132 (−0.067)	−0.132 (−0.070)	0.209 (0.093)	1.177 (0.482)	−0.220 (−0.092)
<i>LEV</i>	8.077 (0.752)	5.494 (0.507)	8.153 (0.726)	10.017 (0.909)	4.879 (0.358)	−18.175 (−0.751)	−10.501 (−0.573)
<i>ROA</i>	45.586** (2.186)	40.730** (1.976)	44.808** (2.273)	48.880** (2.366)	67.322** (2.209)	−40.678 (−1.254)	10.138 (0.371)
<i>RDS</i>	74.894 (1.389)	76.050 (1.387)	81.354 (1.506)	78.106 (1.482)	25.669 (0.221)	166.231* (1.767)	−2.082 (−0.029)
<i>CONT_DISP</i>	−0.042 (−0.578)	−0.059 (−0.748)	−0.054 (−0.660)	−0.068 (−0.924)	−0.159 (−1.285)	−0.172* (−1.818)	
<i>BOARD_SIZE</i>	0.042 (1.021)	0.036 (0.867)	0.039 (0.938)	0.044 (1.051)	0.062 (0.837)	0.111 (1.528)	0.086 (1.349)
Constant	−49.733*** (−3.137)	−54.453*** (−3.371)	−60.603*** (−3.679)	−54.819*** (−3.312)	−15.467 (−0.539)	2.688 (0.096)	−42.311* (−1.717)
Year FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Observations	1719	1719	1719	1719	684	536	628
Adj. R <sup>2</sup>	0.359	0.349	0.350	0.360	0.254	0.420	0.443

This table reports regressions of CSR performance on family control variables. The sample is composed of 1719 firm-year observations representing 335 unique firms over the period 2002–2011. The dependent variable is CSR, the overall CSR performance of a firm, equal to the average of environmental performance and social performance. Definitions and data sources for other variables are provided in the [Appendix](#). All regressions include year, industry, and country fixed effects. Robust *t*-statistics adjusted for clustering by firm and year are reported in parentheses. The superscript asterisks \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

#### 4.7.3. Investor protection

In countries with relatively weak investor protection, controlling families are more likely to expropriate minority shareholders ([La Porta et al., 2000](#)). We thus expect family firms to invest less in CSR activities in countries with weak investor protection. To measure investor protection, we follow [Bae and Goyal \(2009\)](#) to employ an index (*INV\_PROT*) aggregating three indices: corruption, risk of repudiation, and risk of expropriation. This index reflects the extent to which a country's legal system and institutions protect private property and enforce all contracts. We obtain this index from International Country Risk Guide (ICRG). According to ICRG, the corruption index is “an assessment of corruption within the political system. Such corruption is a threat to foreign investment for several reasons: it distorts the economic and financial environment; it reduces the efficiency of government and business by enabling people to assume positions of power through patronage rather than ability; and, last but not least, introduces an inherent instability into the political process.” Risk of Repudiation “addresses the possibility that foreign businesses, contractors, and consultants face the risk of a modification in a contract taking the form of a repudiation, postponement, or scaling down due to an income drop, budget cutbacks, indigenization pressure, a change in government, or a change in government economic and social priorities.” Risk of Expropriation evaluates the risk of “outright confiscation and forced nationalization” of property. The results reported in Columns 5 and 6 indicate the relation between *FAM\_DUM* and CSR is significant only for the subsample of firms from countries with weak investor protection (coefficient = −9.433; *t*-statistic = −2.869).

In sum, family firms are less likely to invest in CSR in countries with more political connections and weaker investor protection. Thus, while family firms have stronger incentives to increase their reputation through CSR investment, a weak institutional environment could reduce these incentives. Differences in institutional environment may also explain why family firms perform differently on CSR in the U.S. and East Asia.

#### 4.8. Other large shareholders and CSR

The results so far indicate that family firms in East Asia have lower CSR performance than non-family firms. However, the results could be potentially driven by higher CSR performance of firms controlled by other large shareholders. For example, state-owned firms are theoretically viewed as policy tools to cure market failure and to maximize social welfare ([Sappington and Stiglitz, 1987](#)), and therefore are expected to have better CSR performance than other firms. Institutional investors may also have a positive impact on CSR performance ([Graves and Waddock, 1994](#); [Johnson and Greening, 1999](#)).

To investigate this possibility, we first examine the impacts of two other types of large shareholders: state (*STATE*) and widely held firms (*WIDELY\_HELD*). *STATE* is a dummy variable equal to 1 if the largest shareholder is a state or foreign government, while *WIDELY\_HELD* is a dummy variable equal to 1 if the largest shareholder is a widely held company or financial institution. Columns 1–3 of [Table 9](#) report results on the effect of different types of ownership on CSR performance. We find that neither *STATE* nor *WIDELY\_HELD* has a significant impact on CSR performance. In Col-



umn 4 of Table 9, we include *FAM\_DUM*, *STATE*, and *WIDELY\_HELD* in the regression simultaneously. Only family ownership loads with a significantly negative sign, which is again in line with our main results. These results imply that neither a state nor a widely held firm as the largest shareholder has a direct impact on firms' CSR performance.

To further compare family firms' CSR performance relative to other types of controlling owners, we use a PSM procedure outlined above. We first match each family firm with a state-owned firm using a PSM procedure. The propensity scores are estimated using a Probit model, where the dependent variable is a dummy variable equal to 1 if a firm is a family firm and zero if is state-owned, and the explanatory variables are those reported in Table 4. We match each family firm to a state-owned firm with the closest score. Then we conduct regression analysis using the matched sample (Column 5 of Table 9). We find that the negative impact of family firms is still significant. This result suggests that, compared to state-owned firms that have similar characteristics, family firms exhibit lower CSR performance. We repeat this procedure for family firms versus firms whose largest shareholder is a widely held firm (Column 6 of Table 9), and for family firms versus firms with dispersed ownership (Column 7 of Table 9). Family firms continue to show lower CSR performance than their counter-factual firms. All these results confirm that family firms in East Asia underperform on CSR compared with other firms and the evidence is not driven by certain types of counter-factual firms.

#### 4.9. Comparisons with family firms from other countries

Our main evidence of a negative relationship between family control and CSR performance for East Asian corporations contrasts with evidence from the U.S. One potential explanation is that the agency properties of East Asian family firms are fundamentally different from U.S. family firms due to weaker institutions in East Asia (Boubakri et al., 2010; Faccio and Lang, 2002). Consistent with this explanation, prior studies suggest that U.S. family firms are associated with superior financial performance (Anderson and Reeb, 2003a; Anderson et al., 2003; McConaughy et al., 1998; Villalonga and Amit, 2006, among others), while East Asian family firms are associated with severe agency conflicts and lower economic performance (Attig et al., 2016; Boubakri et al., 2010; Claessens et al., 2002; Cronqvist and Nilsson, 2003; Morck et al., 2000, among others). To the extent that CSR is associated with higher financial performance (see, for example, El Ghoul et al., 2016; Fatemi et al., 2015), we expect East Asian family firms to exhibit lower CSR performance compared to their counterparts from the U.S.

To address this possibility, we implement a PSM procedure to control for variation in the characteristics of East Asian and U.S. family firms. We obtain U.S. family firm data from Anderson and Reeb (2003a). We match each East Asian family firm with a U.S. family firm with similar characteristics (*SIZE*, *AGE*, *MTB*, *LEV*, *ROA*, *RDS*). We next re-estimate our main regression using the matched sample as a strategy to better control for differences in family firms' characteristic across East Asia and the U.S. The results reported in Column 1 of Table 10 suggest that East Asian family firms show significantly lower CSR performance than U.S. family firms. Based on the same underlying intuition, in Column 2 of Table 10, we repeat the same analysis to compare the CSR performance of family firms in East Asia and Western Europe. We obtain data on family firms in Western Europe from Faccio and Lang (2002). The results based on propensity score matched samples suggest a significantly lower CSR performance of East Asian family firms compared to their Western European peers.

**Table 10**

Family and CSR: comparisons with family firms from other countries.

	East Asian family firms vs. U.S. family firms (1)	East Asian family firms vs. Western European family firms (2)
<i>FAM_EA</i>	−12.452** (−2.112)	−22.085*** (−6.236)
<i>SIZE</i>	8.772*** (5.744)	9.229*** (6.591)
<i>AGE</i>	−2.221 (−0.436)	9.719 (1.403)
<i>MTB</i>	1.311 (0.538)	0.333 (0.169)
<i>LEV</i>	−0.739 (−0.050)	7.688 (0.661)
<i>ROA</i>	23.079 (0.950)	29.392 (1.500)
<i>RDS</i>	82.930 (1.517)	102.428 (1.382)
<i>BOARD_SIZE</i>	−0.003 (−0.046)	0.102 (1.555)
Constant	−55.231** (−1.977)	−50.645** (−2.382)
Year FE	Yes	Yes
Industry FE	Yes	Yes
Country FE	Yes	Yes
Observations	746	734
Adj. R <sup>2</sup>	0.366	0.390

This table reports regressions comparing the CSR performance of East Asian family firms versus family firms from the U.S. and Western Europe using propensity score matched samples. In Column 1, each East Asian family firm is matched to a U.S. family firm. In Column 2, each East Asian family firm is matched to a Western European family firm. The dependent variable is CSR, the overall CSR performance of a firm, equal to the average of environmental performance and social performance. *FAM\_EA* is a dummy variable that equals one if a firm is an East Asian family firm. Definitions and data sources for other variables are provided in the Appendix. All regressions include year, industry, and country fixed effects. Robust *t*-statistics adjusted for clustering by firm and year are reported in parentheses. The superscript asterisks \*\*\*, \*\*, and \* denote statistical significance at the 1%, 5%, and 10% levels, respectively.

## 5. Conclusion

Motivated by the scarce evidence on the CSR activities of family firms outside the U.S., this paper examines the relationship between family control and CSR by employing new ownership structure data and updated CSR data from nine East Asian economies.

A large control stake may create agency conflicts between controlling families and minority shareholders if controlling families can use their voting rights to divert firm resources from CSR projects to other projects that benefit themselves. This expropriation view suggests that family firms have lower CSR performance than non-family firms. However, family firms have greater reputation concerns than non-family firms (Dyer and Whetten, 2006; Zellweger et al., 2011), which may lead family firms to invest more in CSR activities. Family firms' longer horizon (Miller and Le Breton-Miller, 2005) may further lead family firms to invest more in CSR to help support long-term relationships with stakeholders. The reputation/long-term horizon view thus suggests that family firms have higher CSR performance than non-family firms.

In this paper, we find support for the expropriation view of family firms. In particular, we find a significantly negative impact of family control on CSR after controlling for firm, industry, and country characteristics. This negative relationship is robust to alternative measures of family control and different components of our primary CSR measure, as well as to endogeneity tests, sample composition tests, alternative estimation methods, comparisons with other large shareholders, and comparisons with family firms from other countries. In addition, we show that ownership changes from

family to non-family control (non-family to family control) are associated with a significant increase (decrease) in CSR performance, consistent with the expropriation hypothesis of family control.

To shed further light on our main finding, we first examine whether the CSR underperformance of family firms is more pronounced in firms with greater agency problems as indicated by proxies for firms' agency costs, ownership structure, and board structure. The results show that family firms underperform on CSR when they have greater agency problems, when monitoring by outside shareholders is less effective, or when monitoring by board members is less efficient. These findings are consistent with the expropriation view and support our main results. Next, we investigate whether country-level institutions affect families' incentives to invest in CSR. We find that family firms are less likely to invest in CSR in countries with low freedom of the press, more political connections, and weaker investor protection. Thus, while family firms have more incentives to augment their reputation through CSR activities, a weak institutional environment may reduce these incentives. Differences in institutional environment might also explain why family firms perform differently on CSR in the U.S. and East Asia.

Overall, this paper contributes to the literature on the determinants of CSR, the literature on the effects of family control, and the literature on the effects of country-level institutions. With respect to the first line of research, we highlight the importance of understanding ownership structure when studying the determinants of CSR. We further show that in East Asia, only the family ownership structure has a significant impact on CSR. With respect to the second line of research, we confirm prior evidence on the expropriation effects of family control in East Asia and suggest that lower CSR performance could be one consequence of expropriation. With respect to the third line of research, we show that country-level institutions may alter controlling families' incentives to invest in CSR.

## Appendix. Variable definitions and data sources

Variable	Definition	Source
Panel A: CSR variables		
CSR	The overall CSR performance is equal to the average of environmental performance and social performance.	Authors' calculation based on ASSET4
ENVIRONMENTAL	The environmental performance measures a company's impact on living and non-living natural systems, including the air, land, and water, as well as complete ecosystems.	ASSET4
SOCIAL	The social performance measures a company's capacity to generate trust and loyalty with its workforce, customers, and society through its use of best management practices.	As above
Panel B: Ownership variables		
FAM_DUM	A dummy variable equals 1 if the largest shareholder is a family, and 0 otherwise.	Authors' calculation based on Carney and Child (2013)

Variable	Definition	Source
FAM_CONT	The percentage of voting rights shares held by the controlling family.	As above
FAM_MAN	A dummy variable equals 1 if a member of the controlling family is also the CEO, the board chairman, or vice-chairman, 0 otherwise.	As above
FC_AVG	The average family control rights by industry and country.	As above
STATE	A dummy variable equals 1 if the largest shareholder is the state.	As above
WIDELY_HELD	A dummy variable equals 1 if the largest shareholder is a widely held company or a widely held financial institution.	As above
Panel C: Firm-level variables		
SIZE	The natural logarithm of total assets in millions of \$US.	Authors' calculation based on Compustat data
AGE	Fiscal year minus the year of establishment.	Authors' calculation based on Carney and Child (2013)
MTB	The ratio of market value of assets to the book value of assets. The market value of assets is total assets plus market capitalization minus book equity.	Authors' calculation based on Compustat data
LEV	The ratio of total debt to total assets.	As above
ROA	The ratio of net income before extraordinary items to total assets.	As above
RDS	Ratio of research and development expenses to total sales. Missing research and development expenses are set to zero.	As above
FREE_CASH	(EBITDA-Capital expenditures)/Assets.	As above
CASH_HOLD	The ratio of cash to total assets.	As above
MLS	A dummy variable equals 1 if a firm has a second controlling shareholder, 0 otherwise.	Authors' calculation based on Carney and Child (2013)
CONT_DISP	Dispersion of control is measured as adjusted Herfindahl index of difference between the voting rights of the five largest shareholders. $((Cont1-Cont2)^2 + (Cont2-Cont3)^2 + (Cont3-Cont4)^2 + (Cont4-Cont5)^2)/100$ where <i>Cont1</i> , <i>Cont2</i> , <i>Cont3</i> , <i>Cont4</i> , and <i>Cont5</i> denote the voting rights of the first, second, third, fourth, and fifth largest shareholders, respectively. The higher the measure, the greater the concentration of control.	As above
BOARD_SIZE	Adjusted score of total number of board numbers that are in excess of ten or below eight. A higher score reflects better efficiency of the board.	ASSET4

(continued on next page)

Variable	Definition	Source
BOARD_EXPERT	Percentage of board members who have either an industry-specific or strong financial background.	As above
Panel D: Country-level institutions		
PRESS	Adjusted score of Freedom House's Freedom of the Press index. A higher score indicates more media independence. The index assesses the degree of print, broadcast, and internet freedom.	Freedom House
POL_CONN	Percentage of firms connected with a minister or a member of parliament, or a close relationship.	Faccio (2006)
INV_PROT	An index aggregating three indices: corruption, risk of contract repudiation, and risk of expropriation.	International Country Risk Guide (ICRG)

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