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### Politician's Equity Holdings and Corporate Social Responsibility

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## Abstract

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## Keywords

politician equity holdings, corporate social responsibility., JEL M14; JEL M41; JEL D72; JEL G11

## Disciplines

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## Comments

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## **Politician's Equity Holdings and Corporate Social Responsibility**

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**This is an early draft. Please do not circulate.**

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## **Abstract**

This study examines the relationship between politician's equity holdings and the corporate social responsibility (CSR) performance of companies. Politician equity holdings reflect not only the self-interested investment activity of firms, but also a potential source of benefit to the firm as politicians naturally pursue their self-interest through pro-firm legislative and regulatory activity. These investments come at the cost, however, of increased public scrutiny and political monitoring over the firm's activities. Using politician equity holding data and CSR data for a sample of S&P 1500 firms, we find evidence that firms respond to politician equity holdings through both increased CSR strengths and concerns, suggesting that both social pressure and politician interventions are motivating firm CSR behavior. These findings are robust to the use of alternative models which account for potential endogeneity concerns.

Keywords: Politician Equity Holdings; Corporate Social Responsibility.  
JEL Codes: M14; M41; D72; G11.

## I. Introduction

This study examines the impact of politician's equity holdings on the corporate social responsibility (CSR) performance of companies with politician shareholders.<sup>1</sup> Politicians, as investors, are notable in that they have an unusually high level of power and influence over firms and their regulatory environment. Politician investments have previously been examined for their signaling effect to firms, where politician investments signal their predisposition to take positive actions on behalf of the firm. Given their economic incentives, politician equity holders may also use their political power to take pro-firm actions out of purely economic interests. Politician investments in firm equities, therefore, may lead firms to shirk on their CSR activities in order to boost accounting performance, avoiding costly compliance with regulation or costly investments in socially responsible activities. Political influence, however, comes at the cost of additional public scrutiny from public stakeholder groups. As per the Ethics in Government Act of 1978, politicians are required to regularly disclose their personal investment portfolio to both the general public and to government oversight committees and regulators. "Good government" and anti-corruption groups regularly undertake campaigns to scrutinize politician investments for perceived conflicts of interest (Ayling & Gunningham 2017). Rather than freeing up firms to shirk on their CSR investments, companies may attract additional scrutiny due to their association with the politician.<sup>2</sup> Whether one effect or the other dominates in this setting is an open empirical question.

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<sup>1</sup> Following prior research by McWilliams and Siegel (2001) and others, we define CSR as activities undertaken by firms intended to promote social causes (e.g. environmental protection, sustainability, and philanthropy among others) rather than merely comply with minimum standards of corporate behavior. We identify and define the specific areas of CSR examined in this paper beginning in Section III. See Aguinis & Glavas (2012) for a review of CSR literature.

<sup>2</sup> Note that this association does not need to be a formal connection beyond the investment position in order to attract increased public scrutiny. The mere fact that a politician has invested in a firm may be enough to lead activists to scrutinize the firm in an effort to find potential conflicts of interest.

A recent example of politician equity holders acting advancing the interest of firms in which they hold equity involves the former Republican member of the House of Representative and Secretary of Health and Human Services Tom Price. During the negotiations for the Trans-Pacific Partnership, then-Representative Price travelled to Australia to lobby on behalf of the U.S. pharmaceutical industry. Mr. Price was particularly concerned with extending protections for clinical trial data from the proposed 5 years to the industry-preferred 12 years (Faturechi 2017b). This lobbying was not merely an attempt to help random U.S. companies, however. Just prior to his trip to Australia, Mr. Price had purchased over \$90,000 worth of pharmaceutical stocks (Faturechi 2017b). This incident came on the heels of several prior incidents, reportedly being investigated by U.S. Attorney for Manhattan Preet Bharara at the time of Bharara's dismissal, in which Mr. Price bought and sold hundreds of thousands of dollars in health-related equities while sponsoring legislation designed to delay regulatory enforcement and expedite drug approvals for those same firms (Faturechi 2017a). In this way, Mr. Price was able to use his power and legislative influence to maximize the value of his personal investments. Another example of this type of financial regulatory capture can be seen in the "Halliburton Loophole" which prevents the Environmental Protection Agency from regulating fracking, a natural gas extraction technique pioneered by Halliburton (New York Times 2009). That regulatory barrier was placed during the administration of President George W. Bush at the behest of Vice President Dick Cheney, former CEO of Halliburton. Between 2004 and 2005, the value of Cheney's Halliburton stock options grew from approximately \$240,000 to more than \$8 million in 2005 (Byrne 2005). This growth in Halliburton's market valuation is attributed, in large part, to direct payments of billions of dollars in military contracts they were awarded during the Bush administration as well as to regulatory changes such as the "Halliburton Loophole."

We examine our research question using Riskmetrics KLD data on CSR performance and politician equity holding data from U.S. government Personal Finance Disclosure (PFD) files for a sample of S&P 1500 firms for the period between 2004 and 2013. Our CSR data provides information regarding CSR strengths and concerns across a range of issue areas for each firm. This information allows us to differentiate between two specific ways in which politician shareholders may influence CSR behavior: reducing concerns (i.e. limiting socially irresponsible activity) and increasing strengths (i.e. increasing socially responsible activity). Our results provide two key insights. Our first key insight, provided by our primary results, is that firms with one or more politician shareholders display both greater numbers of CSR strengths and an overall improvement in CSR performance. We then extend these primary results in several ways. First, we account for endogeneity concerns regarding the heterogeneous composition of our politician-owned and non-politician owned samples using coarsened exact matching. We also explore potential biases arising from reverse causality and correlated omitted variable using first-differenced regressions. Additionally, we control for potential selection bias using a Heckman selection model and various proxies for differential influence levels among our sample of politicians. Finally, we examine investment behavior around changes in CSR behavior to and from the worst performing group of companies. These supplemental tests lead us to our second key insight that firms with larger numbers of politician shareholders and larger (i.e. higher value) equity holdings are associated with both increased CSR strengths and concerns. By contrast, we find no significant CSR impact of the proportion of firm shares held by politicians. This suggests that the mechanism through which our observed effect occurs falls outside the realm of formal monitoring or control. Our main results also mask what appears to be an asymmetric effect of politician ownership on CSR concerns, with more influential politicians

being associated with increased CSR concerns while less influential politicians are associated with decreased CSR concerns.

Our study makes three main contributions to the academic literature. First, we contribute to the literature on corporate social responsibility by providing further insight into how political considerations influence CSR activity.<sup>3</sup> Consistent with the view that firms may be simultaneously socially responsible and irresponsible, we find that political equity holders prompt adjustments to both CSR strengths and concerns depending on what type of politician has invested in the firm. From both a methodological and conceptual standpoint, our results support the emerging view that researchers must separately consider CSR strengths and concerns rather than merely compounding strengths and concerns into a single measure of CSR performance (Strike et al. 2006). Our use of exploratory factor analysis to develop CSR factor scores also recommends a methodological contribution to the CSR literature. Second, our research adds to the literature on political connections by identifying a weak form of political connections which do not involve formal or long-term commitments. Recent studies on politician equity holdings by Tahoun (2014), Tahoun & Van Lent (2016), Baloria (2015), and Huang & Xian (2017) suggest that such holdings are an underappreciated source of economic benefits for firms. Third, we contribute to the management accounting literature on decision-making by improving our understanding of how the political environment influences firm decisions.

This rest of the paper is organized as follows. Section 2 includes a review of the relevant literature and develops hypotheses related to our research question. Section 3 provides an

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<sup>3</sup> Our results must be contrasted with those from Lin, Tan, Zhao, and Karim (2015), who find that firms increase their charitable donations when a regime change necessitates the nurturing of new political connections in order to maintain the status quo. Their study examines direct political connections (essentially a form of patronage relationship) in the Chinese context; a context where individual local politicians have relatively enormous power relative to politicians in our sample. By contrast, our study examines both socially responsible (strengths) and irresponsible (concerns) in a context where the political connection is relatively weak.



overview of our sample and research methodology. Our results are discussed in Section 4 and are followed by our concluding remarks in Section 5.

## **II. Literature Review and Hypothesis Development**

### **Politicians' Equity Holdings on Firm Operating Environment**

Prior research has focused on the conflicting economic and social motives of politicians with respect to their investments. Once politicians acquire shares of a firm, they have the same economic incentives as any other investor to maximize the benefit they receive from their investment. Unlike other investors, politicians have traditionally been both privy to value-relevant information as a result of their status as politicians and less constrained in their ability to utilize their private information for material benefit. For example, U.S politicians have not traditionally been subject to insider trading prohibitions, allowing politicians to use their knowledge and connections to develop personal wealth through targeted investments (Ziobrowski, Cheng, Boyd, & Ziobrowski 2004; Huang & Xuan 2017).<sup>4</sup> Additionally, politicians have a much greater ability to influence a firm's regulatory environment compared to other investors. Tahoun (2014) finds that politicians are likely to take explicit actions that benefit firms in which they hold equity ownership stakes. U.S. politicians, as individuals as well as within their caucus, have significant power to influence legislation and direct government resources to favored firms and industries (Goldman, Rocholl, & So 2013; Cohen & Malloy 2014). Tahoun (2014) also suggests that even relatively small politician equity positions could provide meaningful benefits to firms due to the potentially outsized influence a single politician can have

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<sup>4</sup> Congress passed the Stop Trading on Congressional Knowledge (STOCK) Act in 2012 to close this loophole in trading regulations. Huang & Xuan (2017) find that this legislation has been effective in curbing the ability of politicians to benefit from informational advantages.

on the legislative and regulatory process. Therefore, the emerged politicians' equity holdings would influence firm behavior due to their significance (Demsetz and Lehn 1985; Demsetz & Villalonga 2001).

### **Regulatory Capture Theory and Economic Incentives of Politicians**

The mechanism through which politicians may influence firm operating environments is through regulatory capture. The concept of regulatory capture (Stigler, 1971; Laffont and Tirole, 1991; Kwak 2014) suggests that companies have a vested interest in exerting influence over the regulatory process. Regulatory capture can take two forms: financial and cultural capture (Kwak 2014). These different forms of regulatory capture differ in the motivations which underlie them, with financial capture being motivated primarily by the economic self-interest of politicians and regulators while cultural capture is motivated by philosophical agreement between regulated firms and their regulators. Yadlin (2015) finds that large firms are more likely to rely on financial, rather than cultural, capture as a means of improving the regulatory environment in which they operate.

Studies have examined political connected directors, lobbying expenditures, and political contributions as potential indicators for the presence of financial capture (Faccio 2006; Faccio 2010; Duchin & Sosyura 2012; Goldman, Rocholl & So 2013). Prior research has, however, largely ignore the potential for financial capture to occur in the context of politician investments. Instead, prior literature has focused on the idea of *quid-pro-quo* financial capture where regulators and legislators undertake specific pro-firm actions with the promise of future employment as directors or advisors, among other implied rewards (Faccio 2010; Duchin & Sosyura 2012). As previously discussed in this paper, recent incidents involving prominent

members of the U.S. Congress and Executive Branch provide ample evidence of investment-motivated behavior which could be classified as financial regulatory capture.

### **Public Monitoring and the Political Incentives of Politician Equity Holdings**

In contrast to predictions of regulatory capture, prior research has established the social and political pressures faced by politicians due to their desire to be re-elected (Mayhew, 1974; Fenno, 1978). Watts (2003) suggests that voter scrutiny pushes politicians to engage in more social activities within the electoral district. While prior research finds that politicians exert greater effort on initiatives that benefit the local constituency (including local businesses) (Kroszner and Stratmann 1998; Faccio and Parsley 2009; Duchin and Sosyura 2012; Eggers and Hainmueller 2014), the need to be seen as a positive force extends beyond to district to all of their activity. This evidence suggests that politicians would have stronger incentives to aid local firms for their reelection by the tight connection.

Given the high profile and public investment disclosures of politician equity holders, it is not surprising that the increased scrutiny applied to politicians extends to the companies in which they hold equity. Representative Phil Gramm, for example, held shares in Enron as a result of his wife serving on their Board of Directors. His reputation for promoting Enron's interest around Washington was well known, as was the support of other top Republicans (Dunbar, Moore, & Sylwester 2002). Voters can force politicians to take actions which worsen the regulatory environment for firms through the use of public pressure and influence campaigns (Baloria 2015). For example, child labor issues within global supply chains, such as those faced by Nike in the 1990s and, more recently, Apple in Chinese factories, represent a specific example where voters' outcry led manufacturing businesses to accept additional regulation and oversight designed to ensure compliance with home country expectations of socially responsible behavior

(Minor & Morgan 2011; Scherer & Palazzo 2011). Climate change and sustainability activists increasingly view fossil fuel companies as being complicit in what they say is the insufficient government response to climate change (Arling & Gunningham 2017). Since voters value greater employment (Schleifer and Vishny 1994), they will be angered by job cuts and lost pensions resulting from firm dissolution.

Voters in public can identify connection between politicians and firms in a number of ways, including the media (Guay 2010), reports issued by financial analysts (Knight 2007), or watchdog groups (i.e. Center for Political Accountability). The requirement that politicians publicly disclose their individual equity holdings means that they face constant scrutiny with respect to their political connections with firms and, by extension, for the behavior of those firms. Enhancing CSR strengths could be a strategic choice which reflects the increased scrutiny which stems from politician ownership. Political considerations are important drivers of CSR activity within firms (Garriga & Miele 2004; Harjoto, Laksmana, & Lee 2014).

Rooted in electoral competition theory, voters' pressure extends not only to firm management, but also to its shareholders. For politicians holding equity positions in individual firms, such pressure can be significantly more concentrated given that every voter in their constituency is an important stakeholder for CSR. Political incentives of political equity holdings is a prevalent driver of CSR behavior in firms.

### **Hypothesis Development**

To the extent that politicians may use their own political to extract maximum wealth gains from their investments, we expect increased CSR concerns within firms with politician equity holders. Evidence exists that politicians use their influence to weaken regulatory monitoring for firms with which they are affiliated (Claessens, Feijen, & Laeven 2008; Chaney,

Faccio, & Parsley 2011; Yu & Yu 2011; Correia 2014; Fisman & Wang 2015) While politicians are not necessarily affiliated or connected to firms in which they own equity, they are nonetheless likely to exert similar influence over the regulatory environment out of rational self-interest. As such, firms may engage in socially irresponsible, but economically profitable, behavior with the expectation that politician self-interest will guide politicians to protect them from increased compliance costs. We hypothesize, therefore, that firms with politician shareholders are less likely to engage in socially responsible behaviors by virtue of the protection from regulatory monitoring and negative consequences provided by their political connections.

*Hypothesis H1a: Firms with politician shareholders exhibit weaker CSR performance compared to firms without politician shareholders.*

Given the increased likelihood of public scrutiny by voters and media which accompanies politician equity holdings, however, we also hypothesize that firms will engage in more socially responsible behavior in order to meet the demands of social monitors. This allows the economically beneficial interventions of politicians to continue, as sufficiently high levels of negative attention would likely force politicians to abandon their investment and, by extension, increase compliance costs for the firm. We therefore hypothesize that firms with politician shareholders are more likely to engage in socially responsible behaviors as a response to reelection and to stave off social punishment (i.e. boycotts and protests).

*Hypothesis H1b: Firms with politician shareholders exhibit stronger CSR performance compared to firms without politician shareholders.*

### **III. Research Methodology**

#### **Sample and Data Description**

We test out hypotheses using a sample of S&P 1500 firms for the period between 2004 and 2013. We utilize data from four distinct sources in constructing our sample. First, we gather data regarding the individual equity holding of U.S. politicians from mandated financial disclosures known as Personal Financial Disclosure (PFD) filings. Data on CSR performance is extracted from the RiskMetrics KLD Statistical Tool for Analyzing Trends in Social and Environmental Performance (KLD STATS or KLD). Financial statement and stock return data for each firm-year observation is taken from the merged Compustat/CRSP database.

Our primary independent variable of interest is the level of politician equity holdings in a firm. The Ethics in Government Act of 1978 mandates that politicians and key public officials<sup>5</sup> file annual reports detailing their financial position, including disclosures of individual equity holdings. These filings information related to family income, personal and business assets and liabilities, and significant financial transactions undertaken during the calendar year. We utilize disclosures of individual equity holdings contained in these PFD reports to match politician equity holdings with financial statement and CSR data.<sup>6</sup> We obtain digitized PFD report data from the Center for Responsive Politics.<sup>7</sup> The original data include 103,276 records of equity holdings for 876 unique individuals between 2004 through 2013. On average, an individual politician reports 25.39 different securities in a year ( $\sigma = 74.58$ ) in their equity investment portfolios.

From the original dataset, 9,525 company/security names are identified. However, significant variation in the disclosed names, along with typographic errors, exists due to the large

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<sup>5</sup> They include members of Congress, candidates for federal office, senior Congressional staff, nominees for executive branch positions, Cabinet members, the President and Vice President, and Supreme Court justices. In our main tests, politicians refer to these individuals. Subsample analyses

<sup>6</sup> Our analysis includes equity share holdings reported politicians and their immediate family (i.e. spouses and dependent children).

<sup>7</sup> A registered user can download this publicly-available data at <https://www.opensecrets.org/myos/bulk.php>.

number of people involved in compiling and preparing these reports.<sup>8</sup> These data quality issues create significant difficulty in preparing an accurate database of politician equity holdings. We address this issue by reviewing the entire list of company names disclosed in the PFD database and locating their standardized and/or legal names, stock market ticker symbols, and CUSIP numbers for use in matching firms to company identifiers contained in the Compustat/CRSP database (i.e. gvkey). We next utilized a statistical matching procedure to match as many firms as possible through automated means. Remain non-matches were hand screened and manually matched by the study authors. The final dataset contains 8,402 unique names of which 4,465 are matched to gvkeys.

The key dependent variable used in this study is CSR performance. As a reliable archival source of CSR performance data, prior literature has made extensive use of KLD STATS to examine CSR performance across a broad cross-sectional sample of firms (e.g. Dhaliwal et al. 2011). The KLD database provides CSR performance for approximately 3,000 of the largest (as measured by market capitalization) U.S. companies with respect to the CSR strengths and concerns in seven qualitative issue areas: community, corporate governance, diversity, employee relations, environment, human rights, and products.<sup>9</sup> The database evaluates annual CSR performance along multiple dimensions of performance for each qualitative issue area using binary indicators (i.e. 1 or 0). For example, Environment includes eight indicators for strengths in the area and six for concerns.<sup>10</sup> Mishra and Modi (2013) argue that the importance of

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<sup>8</sup> For example, we find “Abbot Laboratories,” “Abbot Labs,” “Abbott,” and even “Abbott Laboratorites” (apparently, a typo), are used to indicate Abbott Laboratories. “Halliburton Co” (a typo), “Halliburton Co,” and “Halliburton Co Holdings Co” are found for Halliburton Co. Castle (A M) & Co is compiled with “AM Castle & Co,” “Castle AM & Co,” and “Castle AM & Com Stock.”

<sup>9</sup> The data coverage has expanded from 650 firms in 1991 to 3,100 firms in 2003.

<sup>10</sup> Strengths include indicators for (1) Beneficial Products and Services, (2) Pollution Prevention, (3) Recycling, (4) Clean Energy, (5) Communications, (6) Property, Plant, and Equipment, (7) Management Systems, and (8) Others Strengths, while concerns include those for (1) Hazardous Waste, (2) Regulatory Problems, (3) Ozone Depleting Chemicals Substantial Emissions, (4) Agricultural Chemicals, (5) Climate Change, and (6) Other Concerns. See the

distinguishing between CSR strengths and CSR concerns due to differences in their construction. Unlike CSR strengths, CSR concerns capture a firm's irresponsible social actions which reflect opportunistic behavior and weaken firm reputation (Strike, Gao, and Bansal. 2006).

### **Descriptive Statistics and Correlations**

After combining politician equity holding and CSR data with financial statement and stock market data from the merged Compustat/CRSP database, we arrive at a panel sample comprising 1,913 uniquely identified non-financial firms and 7,406 firm-years. Table 1, Panel A reports descriptive statistics for our full sample. The mean numbers of CSR strengths and concerns reported by sample firms are 2.489 and 2.358 respectively. When netted against each other to form an aggregate measure of overall CSR performance (i.e.  $\#Total = \#Strengths - \#Concerns$ ), strengths and concerns largely offset each other and result in a mean total CSR performance of 0.131. We find a similar pattern of CSR strengths slightly outpacing CSR concerns to yield overall positive total CSR performance when we use factor analysis on each KLD issue area to generate CSR factor scores for strengths (Strengths-Factor), concerns (Concerns-Factor), and the difference between the two (Total-Factor). We identify 4,106 (55.4%) of our firm-year observations which include one or more politician shareholders. These firms are labeled as politician owned firms, or POFs. On average, there are approximately five politician shareholders in a firm-year. The average size of their investment in a firm-year amounts to \$452,208 (approximately \$90,000 per politician shareholder). The ownership proportion (0.003%) is relatively low, suggesting that politician equity holdings are unlikely to impact firm decision-making through formal corporate governance mechanisms.

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appendix for more details regarding the qualitative issue areas.



Table 1, Panel B compares POFs with non-POFs and presents simple difference tests of the mean and median values for our main variables of interest and control variables. This panel shows that both the numbers of both strengths and concerns are substantially larger in POFs as compared to non-POFs. Total CSR performance (#Total) is positive for POFs but negative for non-POFs. Factor scores yield a similar pattern of differences in CSR performance between POFs and non-POFs. POFs have an average (median) of nine (three) politician shareholders. Politician investments in POFs average \$815,649 (median = \$56,500), accounting for an average (median) of 0.006% (0.004%) of total market value of equity. When it comes to other firm characteristics, POFs are in general larger, older, more complex, more financially stable, and faster growing than non-POFs

< Insert Table 1 About Here >

Table 2 presents correlations among our variables of interest and control variables. These results identify a generally positive correlation between politician equity holdings (DPoliticians Holding, #Politicians Holding Shares, \$Politician-Held Shares) and CSR strengths, concerns, and total CSR performance. A similar relationship is not observed, however, for the proportion of total equity held by politicians (%Politician-Held Shares/MVE).

< Insert Table 2 About Here >

### **Empirical Model**

We test the hypotheses using the firm-year panel dataset. Our main research model regresses CSR performance on politicians share ownership using the following equation:

$$CSR_t = \beta_0 + \beta_1 Politicians' Holding_{t-1} + \sum \beta_i Controls_t + \varepsilon. \quad (1)$$

In this model,  $CSR_t$  refers to a set of proxies for CSR performance measured in year  $t$  at the firm-year level. These proxies include (1) a count of CSR strength indicators for all issue areas

(denoted as *Strengths*), (5) a count of CSR concern indicators for all issue areas (denoted as *Concerns*), and (6) a compound measure calculated as the count of CSR strengths minus the count of CSR concerns for all issue areas following Mishra & Modi (2013) (denoted as *Total*). *Politicians' Holding<sub>t-1</sub>* captures the effect of politicians' equity holding on CSR performance. Our primary research variable, *DPolitician Holding*, is an indicator variable equal to 1 if a firm's shares are owned by one or more politicians or government officials, and 0 otherwise.

While our main tests provide insight into the primary effect of politician equity holdings, there is substantial heterogeneity among politicians in terms of their equity positions. We provide further insight into this heterogeneity by extending our primary analysis and adopting three alternative proxies for the intensity of politician's incentives to engage in pro-firm behavior: (1) the number of politicians holding a firm's shares (*#Politicians Holding Shares*), (2) the market value of a firm's equity held by politician equity holders (*\$Politician-Held Shares*), and (3) the percentage of a firm's outstanding shares held by politician equity holders (*%Politician-Held Shares/MVE*) (Cooper et al. 2010). Also, we include a set of control variables which are known to influence CSR performance. These controls are sales (e.g., McWilliams and Siegel 2001; Prior, Surroca, and Tribo 2008), leverage (Teoh et al. 1998), R&D expenses (McWilliams and Siegel 2001), stock return volatility, annual stock returns, sales growth, the number of business segments, firm age, industry competition (Herfindahl index, HHI), and indicators for high litigation industries, new economy industries, net loss firms, and S&P 500 firms. Appendix describes the variables in further details.

## **IV. Empirical Results**

### **Main Results**

To test the effects of politicians' equity holding (i.e., whether a firm-year is a POF or not) on firms' CSR performance, Table 3 regresses the numbers (factor scores) of CSR strengths, concerns, and total on the lagged indicator variable for *DPolitician Holding* and the control variables including the respective lagged dependent. The key research variable of our interest (*DPolitician Holding*) is lagged by one year to accommodate the temporal delay between the initiation of politician equity holding and the adjustment of firm behavior to disclosure of the investment event. This lagged variable also allows us to partially address issues of reverse causality and simultaneity. Our full sample results demonstrate that CSR performance improves when there are one or more politicians holding shares in a firm. Specifically, *DPolitician Holding* is positively associated with the number of CSR strengths ( $\beta=0.092$ , p-value=0.010) and the strength factor score ( $\beta=0.038$ , p-value=0.008). By contrast, we find no evidence of an increase in CSR concerns. Overall, this yields higher overall CSR performance both in the number of strengths vs. concerns ( $\beta=0.102$ , p-value=0.030) and total CSR factor score ( $\beta=0.042$ , p-value=0.018).

< Insert Table 3 About Here >

### **Endogeneity Controls**

We acknowledge endogeneity issues in our investigation of the relationship between politician equity holdings and CSR performance. There are several types of endogeneity that may arise in our research setting. They include selection bias, reverse causality, heterogeneity of politician investment stakes, and correlated omitted variable bias. We address each of these concerns using appropriate econometric techniques.

### ***Coarsened Exact Matching***

Among the types of endogeneity, we are most concerned with the potential selection bias. As previously discussed, politicians may skew their investments toward socially responsible firms with positive CSR performance due to the attention paid to their investments by the general public and activist groups. As our first means of addressing this issue, we adopt coarsened exact matching (CEM) (Iacus et al. 2012). With CEM, POFs and Non-POFs are matched based on year, leverage, sales, R&D expense, return volatility, sales growth, HHI, and our S&P 500 indicator. Table 4, Panel A shows the matching criteria and performance. The matching substantially reduces the distance ( $\mathcal{L}_1$ ) and the mean difference in the most matching criteria (except Sales Growth and HHI) between POFs and non-POFs. The matching process results in 3,732 matched firm-year observations among which 1,952 (52.28%) firm-years are POFs (see Table 4, Panel B). We repeat our main analysis using this matched sample, controlling for any remaining imbalance in our criteria variables by including them as control variables (Blackwell et al. 2009). These results, reported in Table 4, Panel C, confirm our main finding of a positive association between politician equity holdings and CSR strengths and overall CSR performance. Again, we find no corresponding impact of politician equity holdings on CSR concerns.

< Insert Table 4 About Here >

### ***First-Differencing***

Our main results, as well as our coarsened exact matching results, lag the politician holding variable by a year and include the lagged dependent variable. The former is done to alleviate concerns regarding reverse causality, while the latter is done to help overcome any biases due to correlated omitted variables. As an alternative method of addressing the two types of endogeneity, we report first-differenced estimators in Table 5. The table reports results of regressions of the first difference in our CSR performance measures (i.e.,  $CSR_t - CSR_{t-1}$ ) on

changes in the independent variables. First, Table 5, Panel A presents the results for the changes in the transition of politician holding status (i.e., transition between POFs and non-POFs).<sup>11</sup> Our first-differenced estimation results find that both CSR strengths and concerns increase in the year following the introduction of the first politician shareholder. The indicator variable *DPolitician Holdings: 0 to 1* is positive and significant for both strengths ( $\beta=0.172$ , p-value=0.001) and concerns ( $\beta=0.127$ , p-value=0.004) in their numbers. These increases in both CSR strengths and concerns offset each other to yield an insignificant effect on overall CSR performance (Total:  $\beta=0.045$  p-value=0.487). The use of CSR factor scores instead of count data confirms these results. By contrast, we see an overall increase in overall CSR performance which accompanies the last politician shareholder leaving the firm. This effect is not driven by increased CSR strengths ( $\beta=0.100$ , p-value=0.120) but is instead driven by a significant negative association with the number of CSR concerns ( $\beta=-0.122$ , p-value=0.016). This results in the improved overall CSR performance ( $\beta=0.222$ , p-value=0.008). This result is not confirmed using factor scores, however. In sum, the table provides noteworthy evidence of an asymmetric effect of politician equity holdings on CSR performance, where gaining politician shareholders is associated with increased CSR strengths and concerns while losing all politician shareholders yields reduced CSR concerns without a corresponding decrease in CSR strengths.

< Insert Table 5 About Here >

### **Heterogeneity of Politician Equity Stakes**

Thus far, we have only considered the “mere presence” effect of whether the firm has a politician shareholder. This methodology disregards the potential impact of marginal

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<sup>11</sup> To recognize potential asymmetry, we separate the transition from non-POFs to POFs (*DPolitician Holdings: 0 to 1*) and vice versa (*Dpolitician Holdings: 1 to 0*) instead of simply using the change in the indicator variable that would have carried -1 (from 1 to 0), 0 (no change), or 1 (from 0 to 1).

increases/decreases in the investment stake of politician shareholders coinciding with changes in the number of politicians holding a firm's shares and/or the overall size and proportional ownership they hold. This is an important consideration given the increased scrutiny a firm is likely to receive when they have several politician shareholders as opposed to a one or two. Similarly, larger investments represent stronger economic incentives to engage in pro-firm behaviors (i.e. through regulatory or legislative action). The first-difference estimation allows us to not only address endogeneity but also to examine the marginal effects of the extent of political and economic interest on firms' CSR behavior. In Table 5, Panels B through D, we present the results for the changes in the number of politician shareholders (#Politicians Holding Shares), the size of politicians' holdings (\$Politician-Held Shares), and the ownership proportion of the holdings (%Politician-Held Shares/MVE).

In Table 5, Panels B and C, we see that that both the number of politicians holding a firm's equity and the size of their investments are positively associated with both CSR strengths and concerns. These results are consistent using both count data and factor scores. We do not, however, find similar results using the share of overall equity held by politicians' holdings (as reported in Table 5, Panel D).

Taken together, these findings suggest an important implication for our main results: namely that the association between the politicians' equity holdings and firms' CSR behavior does not arise from formal governance or monitoring mechanisms. This is understandable given our earlier finding that the average politician ownership stake represents only 0.006% of total equity, with a maximum level of approximately 2%. It is clear, both from their proportional ownership and from the results in Table 5, Panel D, that politicians are not in a position to exert formal control over the firms in which they invest. Thus, there appears to be some implicit

mechanism in effect such that the political and/or economic interests of politicians are associated with the CSR performance of firms they invest in.

### ***Differential Influence of Politician Equity Holders***

As noted earlier, politicians make selective investment decisions from which they expect to realize benefit. These benefits may not be limited solely to financial gains, however, but may also extend to such concerns as generating campaign contributions or post-legislative employment opportunities (i.e. board or executive positions). It is not unreasonable, however, to speculate that economically rational decision-making dominates their portfolio allocation decisions. A plausible alternative explanation for our results, therefore, may be that firms with strong CSR represent relatively sound investments from a strictly economic standpoint. This alternative explanation suggests a potential selection bias issue: the identification of firms as POF or non-POF is not random, but instead is an outcome of politicians' selection. Recognizing the material impact such bias may have on our results, we follow Heckman's two-stage method to correct for the suspected selection bias (Heckman 1979; Lennox, Francis, & Wang 2012). We first estimate the likelihood of politicians' selection (i.e., firms being POFs) in the first stage and use the estimated hazard rate or inverse Mills ratio (usually denoted with  $\lambda$ ) as a control in our second stage estimations.

Table 6 reports the first-stage estimation of the likelihood of a firms' having at least one politicians among its shareholders (i.e., POFs) using a Probit model. We include market-to-book ratio (MtB) as an instrument to meet the exclusion restriction condition for a more credible estimation in the process. Market-to-book is well recognized as a predictor for the future stock returns and firm growth (e.g., Penman 1996; Reggiani and Penman 2009; Lakonishok et al. 1994), which makes the indicator an essential input for investment decisions. Nevertheless, there

is no clear theoretical prediction or empirical evidence that the ratio influences CSR activities. In addition, we find that it has little correlation with any of our CSR indicators (see Table 2 for specific coefficient and significance values). These characteristics make MtB a plausible instrument which meets the exclusion restriction for use in our Heckman selection model. Results reported in Table 6 suggest that politicians likely invest in firms with larger market-to-book ratios, lower leverage, larger sales, larger R&D investment, lower return volatility, greater product market competition, and larger establishment (S&P 500).

< Insert Table 6 About Here >

The results of our second stage estimations are reported in Table 7. We test the marginal effects of political and economic interests on firms' CSR performance. To this end, we examine whether and how the number of politician shareholders (#Politicians Holding Shares in Panel A) and the size of their investment (\$Politician-Held Shares in Panel B) affect the number of CSR indicators of strengths, concerns, and the overall performance. Each panel is separated into three groups of columns: one group for CSR strengths, another for CSR concerns, and a third for total CSR performance. The column (1) results estimate the impact of the number of politicians holding shares in Panel A and the monetary value of their investments in Panel B. The results from both panels provide additional support for our previous findings using differenced regressions (from Table 5). Specifically, higher numbers of politician shareholders and higher politicians' investment values (in dollars) are associated with increased CSR strengths ( $\beta=0.009$ , p-value=0.001 in Panel A;  $\beta=0.037$ , p-value=0.001 in Panel B) and CSR concerns ( $\beta=0.010$ , p-value<0.001 in Panel A;  $\beta=0.033$ , p-value=0.002 in Panel B). The overall impact on total CSR performance is insignificant as these increased strengths and concerns offset each other ( $\beta=0.000$ , p-value=0.973 in Panel A;  $\beta=0.009$ , p-value=0.643 in Panel B).



We posit that increased scrutiny over politicians in their pursuit of the public's well-being drives the positive effect of politician equity holdings on CSR strengths. If this is true, we should find the positive association between the extent of interest and CSR strengths is strongest for politicians who both attract greater attention from the public and the media and who are able to exert their influence to the benefit of firms in which they invest. On the other hand, we also argue that politicians can earn economic or financial gains as far as they can exercise their influence to favor the firms of their investment (in legally viable manners, for sure). Firms may opportunistically exploit the politicians' rational self-interest by increasing their CSR concerns with the expectation that influential politician shareholders will act to protect their own investment (i.e., the firms themselves) from the potential negative consequences of such actions.

To capture the confluence of public scrutiny and exercisable political influence, we explore four empirical proxies which distinguish more and less influential (or powerful) politicians from each other. First, we consider the members of federal congress both in the Senate and the House of Representatives as being subject to the heightened public attention and politically more influential over firm-specific affairs than executive branch officials and other politicians in State congresses. Second, we study the federal congresspersons' political affiliation and consider differences in political considerations between the two largest parties (i.e., Democratic and Republican). Third, the knowledge of the federal congresspersons' party membership allows us to distinguish the investments of congresspersons from the governing party from those of the out-of-power party.<sup>12</sup> Fourth, we investigate the committee assignments of federal legislators and consider those who sit on committees that regulate firms in which they

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<sup>12</sup> During the sample period from 2004 to 2013, there is a single presidential transition from George W. Bush (Republican) to Barack Obama (Democrat) in 2009.

are invested as being relatively more powerful from the perspective of the firm.<sup>13</sup> We use the Fama-French 48 industry classification system to identify industries that are within the purview of each committee and match them against (1) a firm's primary industry and (2) all industries that a firm and its segments belong to.

Column (2) of each grouping tests the impact of congressperson shareholders on CSR performance. In Panel A, we find that a larger number of congresspersons holding shares is associated with more CSR strengths ( $\beta=0.007$ ,  $p\text{-value}=0.005$ ), while the number of the other types of politicians (thus considered less influential) has no association with the number of CSR strengths ( $\beta=0.048$ ,  $p\text{-value}=0.227$ ). For CSR concerns, this panel shows that more concerns are observed when more congresspersons hold a firm's shares ( $\beta=0.013$ ,  $p\text{-value}<0.001$ ). In contrast, a firm exhibits less concerns when more non-congressperson politicians hold shares, ( $\beta=-0.083$ ,  $p\text{-value}=0.002$ ). In total, while the overall CSR performance does not change with the number of congresspersons ( $\beta=-0.004$ ,  $p\text{-value}=0.180$ ), it improves with the number of non-congressperson politicians ( $\beta=0.135$ ,  $p\text{-value}=0.006$ ).

< Insert Table 7 About Here >

Columns (3) through (6) of Table 7 provide mixed results for the differential impact of influential politicians on CSR strengths, but consistent results for CSR concerns and the overall CSR performance measure. First, we find some evidence that politicians who are more influential and, as such, subject to greater public scrutiny stimulate improved CSR strengths (i.e., Congresspersons in Column (2), Influential Committee (S) in Column (6) ( $\beta=0.012$ ,  $p\text{-value}<0.001$ )). Consistent with prior literature on differences in CSR focus between U.S.

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<sup>13</sup> A politician is considered relatively more powerful, for example, if they own shares in an oil company and sit on an environmental or energy committee, since such committees help develop laws and regulations for the oil industry. By contrast, a firm with a politician shareholder who sat on the Health and Human Services committee, would not expect that politician to be able to exert much influence on their behalf through their committee work.

political parties (Rubin 2008; DiGiuli & Kostovesky 2014), Democrat (one of the two major parties) congressional shareholders are also associated with more CSR strengths ( $\beta=0.018$ ,  $p$ -value=0.022). The positive association between the number of influential politicians holding shares and CSR strengths is in contrast with the coinciding absence of association for the less influential politicians in Columns (2), (3), and (6). Results for the impact of influential politicians on CSR concerns, by contrast, show a consistent and significant positive association between more influential politicians and increased CSR concerns. By contrast, the holdings of less influential politicians are either negatively or insignificantly associated with CSR concerns. Accordingly, we find that the overall CSR performance improves with the number of less influential politicians. The holdings of more influential politicians, however, lead to, at best, no change in overall CSR performance (columns (1) through (3) and (6)) and, at worst, an overall deterioration in CSR performance (in Columns (4) and (5)) for firms.

Our findings in Panel B, where the total value of politician shareholdings is used in place of the number of politician shareholders, largely replicate the pattern of results observed in Panel A. We find that the total value of investment is associated with greater CSR strengths regardless of politician influence (in all columns from (2) to (6)). Consistent with the findings in Panel A, the number of CSR concerns is larger in firms where influential politicians have larger investments. Despite inconsistency in the CSR concerns and the investment of less influential politicians, the overall CSR performance is not affected by the size of influential politicians' holdings (in all columns), but it increases with the size of less influential politicians' holdings (in Columns (2), (3), and (4) under #Total).

### ***Divestment Incentives and Politicians' Investment Behavior***

In order for firms to exploit the power and influence of politician shareholders, firms must be confident that politicians will not divest their shares in the firm when CSR concerns arise. This is due to the elimination of incentive alignment which occurs when politicians sell out of their shares in the firm. We therefore examine politician investment behavior across various levels (particularly at lower levels) of CSR performance to determine whether or not politician investments persist for weak CSR firms.

Table 8 shows the distribution of politicians' shareholdings across the overall CSR performance in deciles. The CSR performance deciles are constructed by one-digit SIC for each year. Table 8 shows that the number of politician equity holders is concentrated among firms at the 10<sup>th</sup> decile (i.e. with relatively strong CSR performance). Despite this, there are clearly clusters of politician shareholders at all deciles of CSR performance. Politician ownership levels trend upward (though not linearly) from the lowest decile through the highest decile of CSR performance. As shown graphically in Figure 1, the size of holdings (\$Holdings) follows the similar pattern as in the number of politician holders, while the ownership proportion (%Holdings) lacks any pattern. Notably, the number of owners and the value of politicians' holdings are not the smallest in the poorest CSR firms. Despite their slight increases in CSR deciles, we find little evidence that politicians' holding of the poorest CSR firms differs from that of the other firms with relatively better CSR performance both in the number of politician shareholders and the size of politician holdings.

< Insert Table 8 About Here >

< Insert Figure 1 About Here >

Table 9 illustrates how the politicians respond to the changes in poor CSR performance. We regress politician shareholdings by politician types on the one-year lagged changes in the

CSR measures. Unlike the typical tabular presentation, each row represents a regression where the dependent is listed in rows and the independent variables are listed in columns.<sup>14</sup> To accommodate the evident off-track behavior (i.e., a jump in the holdings of firms with the poorest CSR performance) and likely asymmetry in the behavior, we include the dummies for *Into Poorest CSR Decile* and *From Poorest CSR Decile*. The former indicates the decile change is made into the 1st decile in the total CSR measure which represents the poorest CSR performance, while the latter indicates the change is made out of the worst CSR performance decile. The table does not reveal any systematic evidence that politicians shy away from poor CSR firms or remove them from their investment portfolio. However, results from these regressions provide relatively strong support for the contention that politicians shed their investments when CSR performance falls to within the lowest decile of CSR performance. This is reasonable as politicians investing in extremely poor CSR firms would face substantial political pressure from relevant stakeholder groups and/or the general public such that the political costs may exceed any financial benefits from the investment and exercise of their influence. It does not appear that moving from the poorest CSR decile into a higher decile is sufficient, however, to bring politician shareholders back to the firm. To the contrary, this result is not reflected in the overall value of politician equity holdings where only non-influential politicians exhibit significant reactions to switches to or from the poorest CSR decile.

< Insert Table 9 About Here >

## **V. Conclusion**

This study examines the relationship between politician's equity holdings and the corporate social responsibility (CSR) performance of companies. We discuss two distinct

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<sup>14</sup> The full set of control variables is included in each regression, but are not reported in order to preserve space.

incentives arising from politicians' shareholdings: political and economic incentives. The publicly available personal finance information of politicians' holdings invites the public's or the relevant stakeholders' demand for the politicians' influence for the good. To the contrary, politicians' economic incentive for personal wealth increase allows poor CSR firms to exploit the politicians' predisposition toward them. Our results from a battery of tests provide evidence supporting the conjecture. Firms with political shareholders engage in both more socially responsible behaviors (i.e. increase the number of CSR strengths) and more socially irresponsible behaviors (i.e. increase the number of CSR concerns). These results appear to be driven by the number of politicians holding a firm's stock and the size of politicians' total investment in a firm which are presumably associated with intensity of political and economic incentives that politicians encounter. As politicians scarcely hold significant or controlling shares of a firm, we find no evidence of similar effects of politicians' ownership stake. Further, we adopt multiple measures to address potential endogeneity issues to check the robustness of the findings and confirm that the relationship is causal.

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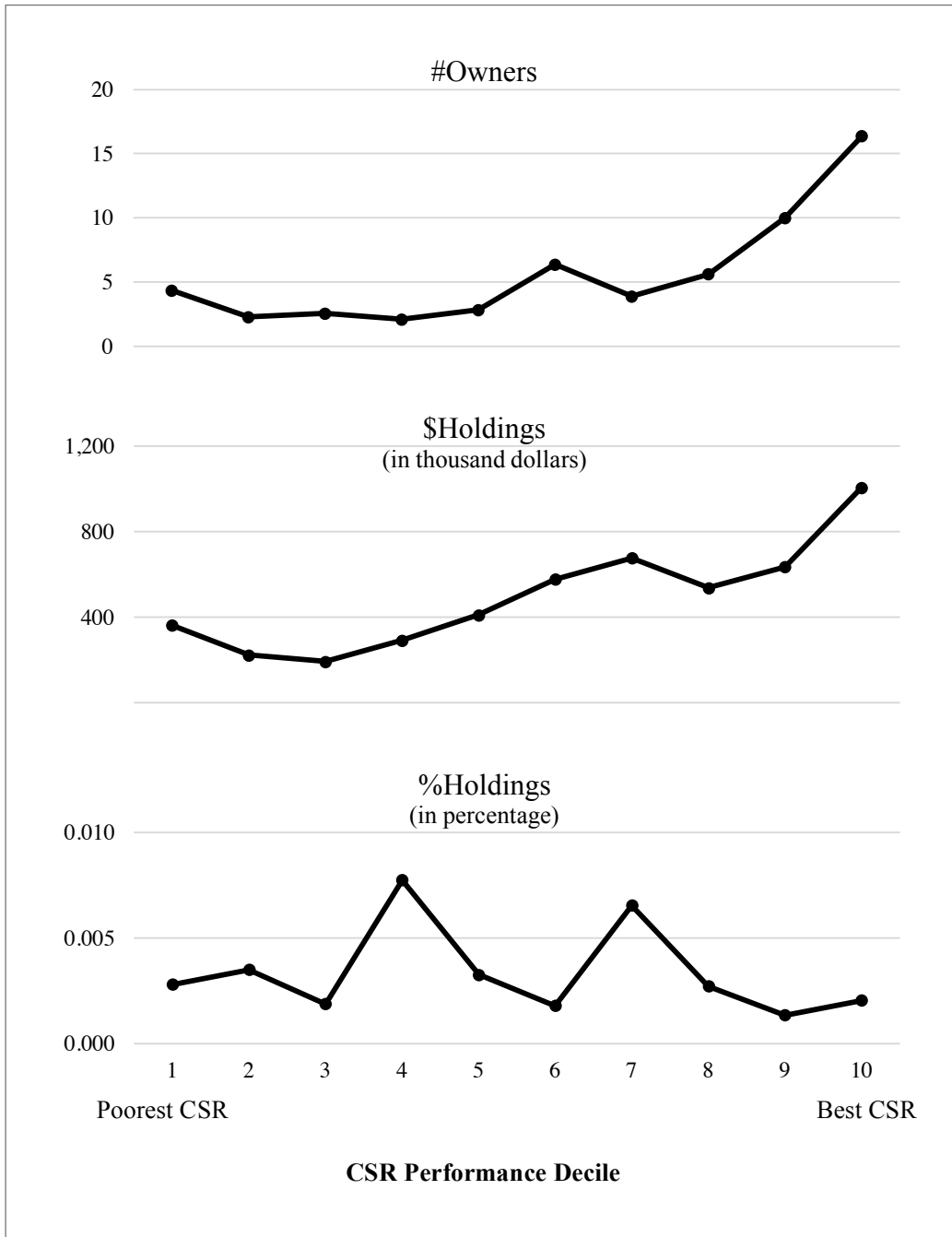


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**Figure 1: CSR Performance Deciles and Politician Holdings**



This figure plots the politicians' shareholdings in the number (#), the dollar value (\$), and the ownership proportion (%) on the deciles of the overall CSR performance. The deciles are computed by one-digit SIC every year.

**Table 1: Descriptive Statistics**

Panel A: Full Sample (N=7,406)

<b>VARIABLES</b>	<b>Mean</b>	<b>SD</b>	<b>Min</b>	<b>Median</b>	<b>Max</b>
#Strengths	2.489	3.360	0.000	1.000	22.000
#Concerns	2.358	2.268	0.000	2.000	18.000
#Total	0.131	3.295	-11.000	0.000	19.000
Strengths - Factor	1.014	1.389	0.000	0.440	9.503
Concerns - Factor	0.621	0.994	-0.221	0.333	6.834
Total - Factor	0.295	1.374	-4.052	0.000	8.435
DPolitician Holding	0.554	0.497	0.000	1.000	1.000
#Politicians Holding Shares	5.027	13.329	0.000	1.000	176.000
\$Politician-Held Shares	452,208	3,385,744	0	7,034	168,000,000
%Politician-Held Shares/MVE	0.003	0.039	0.000	0.000	1.806
Leverage	0.178	0.148	0.000	0.168	0.806
Ln(Sale)	7.869	1.499	1.085	7.740	13.070
R&D Exp	216.392	861.222	0.000	2.803	10,991.000
Return Volatility	0.024	0.011	0.006	0.021	0.108
Annual Return	1.271	4.110	0.034	1.090	245.562
Sales Growth	1.126	5.055	0.186	1.035	435.738
#Business Segments	6.989	5.678	0.000	6.000	30.000
#Geographical Segments	8.752	7.884	0.000	6.000	83.000
#Operating Segments	2.166	5.580	0.000	0.000	41.000
Firm Age	26.640	16.656	0.000	22.000	64.000
HHI	0.184	0.176	0.029	0.130	1.000
High Litigation Industries	0.308	0.462	0.000	0.000	1.000
New Economy Firms	0.149	0.356	0.000	0.000	1.000
Loss	0.107	0.309	0.000	0.000	1.000
S&P500	0.398	0.490	0.000	0.000	1.000

Panel B: Firms Held by Politicians vs. Not Held

VARIABLES	Politician Owned Firms (POFs) (N=4,106)			Non-POFs (N=3,300)			Difference	
	Mean	Median	SD	Mean	Median	SD	Mean	Median
#Strengths	3.472	2.000	3.863	1.266	1.000	2.017	-2.207***	-1.000***
#Concerns	2.743	2.000	2.636	1.879	2.000	1.578	-0.864***	0.000***
#Total	0.729	0.000	3.747	-0.614	-1.000	2.428	-1.343***	-1.000***
Strengths - Factor	1.419	0.835	1.591	0.509	0.000	0.848	-0.910***	-0.835***
Concerns - Factor	0.849	0.407	1.161	0.337	0.000	0.631	-0.512***	-0.407***
Total - Factor	0.579	0.212	1.563	-0.059	-0.208	0.985	-0.638***	-0.420***
#Politicians Holding Shares	9.067	3.000	16.847	-	-	-	-	-
\$Politician-Held Shares	815K	56.5K	4,514K	-	-	-	-	-
%Politician-Held Shares/MVE	0.006	0.0004	0.052	-	-	-	-	-
Leverage	0.181	0.173	0.139	0.174	0.158	0.158	-0.007*	-0.016***
Ln(Sale)	8.420	8.381	1.504	7.184	7.125	1.175	-1.236***	-1.257***
R&D Exp	358.413	10.200	1,131.192	39.683	0.000	127.585	-318.730***	-10.200***
Return Volatility	0.021	0.019	0.010	0.026	0.024	0.012	0.005***	0.005***
Annual Return	1.277	1.091	4.567	1.264	1.089	3.460	-0.012	-0.002
Sales Growth	1.184	1.050	6.786	1.054	1.013	0.190	-0.130	-0.037***
#Business Segments	7.209	6.000	6.034	6.715	6.000	5.190	-0.494***	0.000
#Geographical Segments	9.205	7.000	8.206	8.190	6.000	7.426	-1.015***	-1.000***
#Operating Segments	2.609	0.000	6.157	1.614	0.000	4.708	-0.995***	0.000***
Firm Age	29.209	25.000	17.763	23.443	19.000	14.548	-5.766***	-6.000***
HHI	0.180	0.127	0.176	0.187	0.135	0.176	0.007*	0.008***
High Litigation Industries	0.311	0.000	0.463	0.304	0.000	0.460	-0.007	0.000
New Economy Firms	0.151	0.000	0.358	0.146	0.000	0.354	-0.005	0.000
Loss	0.078	0.000	0.268	0.142	0.000	0.349	0.064***	0.000***
S&P500	0.594	1.000	0.491	0.155	0.000	0.362	-0.439***	-1.000***

This table presents the descriptive statistics of the sample (Panel A) and compares politician owned firms (POFs) and the others (Non-POFs) (Panel B). \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10% levels respectively.

**Table 2: Correlations**

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	
	#Strengths	#Concerns	Total	D Politician Holding	#Politicians Holding Shares	\$ Politician-Held Shares	% Politician-Held Shares/MVE	MtB	Leverage	Ln(Sale)	R&D Exp	Return Volatility	Annual Return	Sales Growth	#Business Segments	#Geographical Segments	#Operating Segments	Firm Age	HHI	High Litigation Industries	New Economy Firms	Loss	S&P500	
[2]	0.366***																							
[3]	0.768***	-0.315***																						
[4]	0.326***	0.189***	0.203***																					
[5]	0.535***	0.407***	0.265***	0.338***																				
[6]	0.139***	0.110***	0.066***	0.120***	0.284***																			
[7]	-0.017	-0.018	-0.005	0.074***	0.012	0.603***																		
[8]	0.007	-0.009	0.013	0.023*	-0.013	-0.004	-0.007																	
[9]	0.073***	0.087***	0.015	0.023	-0.012	-0.009	-0.001	0.106***																
[10]	0.598***	0.510***	0.259***	0.410***	0.522***	0.146***	-0.023*	-0.008	0.196***															
[11]	0.489***	0.243***	0.332***	0.184***	0.621***	0.170***	-0.001	-0.002	-0.039***	0.347***														
[12]	-0.237***	-0.012	-0.234***	-0.231***	-0.206***	-0.054***	0.016	0.054***	-0.031**	-0.297***	-0.123***													
[13]	-0.018	-0.026*	-0.000	0.001	-0.008	-0.004	-0.005	0.008	0.007	0.002	-0.010	0.005												
[14]	-0.010	0.043***	-0.040***	0.013	-0.003	-0.001	-0.001	0.001	-0.016	0.009	-0.002	0.003	0.074***											
[15]	0.086***	0.106***	0.015	0.043***	0.101***	0.064***	0.023*	-0.049***	0.047***	0.151***	0.134***	-0.062***	0.008	0.016										
[16]	0.128***	0.117***	0.050***	0.064***	0.114***	0.045***	0.000	-0.025*	-0.115***	0.087***	0.162***	0.026*	-0.017	0.014	0.159***									
[17]	0.174***	0.225***	0.023*	0.089***	0.114***	0.021	-0.016	0.013	0.106***	0.225***	0.002	-0.033**	-0.006	-0.005	-0.448***	0.034**								
[18]	0.377***	0.287***	0.187***	0.172***	0.248***	0.076***	-0.005	-0.061***	0.146***	0.444***	0.190***	-0.239***	-0.055***	-0.022	0.246***	0.084***	0.117***							
[19]	-0.027*	0.044***	-0.058***	-0.019	-0.051***	0.052***	0.051***	0.022	0.001	0.116***	-0.102***	0.000	0.019	0.017	0.052***	-0.060***	0.040***	0.060***						
[20]	0.053***	-0.080***	0.109***	0.007	0.073***	0.043***	0.012	0.039***	-0.237***	-0.071***	0.188***	0.066***	-0.010	-0.006	-0.146***	0.005	-0.153***	-0.196***	-0.202***					
[21]	0.035***	-0.112***	0.114***	0.007	0.073***	-0.009	-0.014	0.047***	-0.187***	-0.155***	0.145***	0.065***	-0.011	-0.002	-0.062***	0.077***	-0.123***	-0.215***	-0.272***	0.522***				
[22]	-0.072***	0.009	-0.079***	-0.103***	-0.084***	-0.024*	0.021	0.006	0.113***	-0.121***	-0.037**	0.342***	-0.011	-0.011	-0.020	-0.011	0.016	-0.055***	-0.022	0.011	0.020			
[23]	0.566***	0.386***	0.311***	0.445***	0.386***	0.111***	-0.012	0.040***	0.119***	0.687***	0.268***	-0.246***	0.004	-0.008	0.069***	0.124***	0.160***	0.329***	-0.016	0.024*	-0.001	-0.101***		

This table presents pairwise Pearson correlations among the research variables. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10% levels respectively.

**Table 3: Panel Regressions on an Indicator of Politicians' Equity Holding**

VARIABLES	In Numbers			In Factor Scores		
	Strengths	Concerns	Total	Strengths	Concerns	Total
DPolitician Holding	0.092 <sup>***</sup> (0.035)	-0.005 (0.028)	0.102 <sup>**</sup> (0.047)	0.038 <sup>***</sup> (0.014)	-0.003 (0.010)	0.042 <sup>**</sup> (0.018)
Lagged Dependent	0.789 <sup>***</sup> (0.011)	0.765 <sup>***</sup> (0.014)	0.773 <sup>***</sup> (0.010)	0.796 <sup>***</sup> (0.010)	0.781 <sup>***</sup> (0.013)	0.781 <sup>***</sup> (0.013)
Leverage	-0.041 (0.111)	-0.184 <sup>**</sup> (0.088)	0.130 (0.142)	0.007 (0.045)	-0.039 (0.033)	0.062 (0.055)
Ln(Sale)	0.181 <sup>***</sup> (0.019)	0.124 <sup>***</sup> (0.017)	0.073 <sup>***</sup> (0.025)	0.072 <sup>***</sup> (0.008)	0.062 <sup>***</sup> (0.007)	0.041 <sup>***</sup> (0.010)
R&D Exp	0.000 <sup>***</sup> (0.000)	0.000 (0.000)	0.000 <sup>***</sup> (0.000)	0.000 <sup>**</sup> (0.000)	0.000 (0.000)	0.000 <sup>***</sup> (0.000)
Return Volatility	-2.733 (1.717)	3.718 <sup>***</sup> (1.405)	-6.452 <sup>***</sup> (2.208)	-1.277 <sup>*</sup> (0.694)	0.985 <sup>*</sup> (0.565)	-2.272 <sup>***</sup> (0.854)
Annual Return	-0.001 (0.003)	-0.008 <sup>*</sup> (0.005)	0.007 (0.007)	-0.001 (0.001)	-0.002 <sup>*</sup> (0.001)	0.002 (0.003)
Sales Growth	-0.001 <sup>**</sup> (0.000)	0.023 <sup>***</sup> (0.000)	-0.024 <sup>***</sup> (0.001)	-0.000 <sup>*</sup> (0.000)	0.009 <sup>***</sup> (0.000)	-0.006 <sup>***</sup> (0.000)
#Business Segments	0.000 (0.004)	0.003 (0.003)	-0.003 (0.005)	-0.000 (0.001)	0.001 (0.001)	-0.001 (0.002)
#Geographical Segments	0.002 (0.002)	-0.000 (0.002)	0.002 (0.003)	0.000 (0.001)	0.001 (0.001)	-0.000 (0.001)
#Operating Segments	0.010 <sup>**</sup> (0.004)	0.010 <sup>***</sup> (0.004)	0.001 (0.005)	0.004 <sup>**</sup> (0.002)	0.004 <sup>***</sup> (0.001)	0.001 (0.002)
Firm Age	0.002 <sup>*</sup> (0.001)	0.000 (0.001)	0.003 (0.002)	0.001 (0.001)	0.001 (0.000)	0.001 (0.001)
HHI	-0.121 (0.103)	0.079 (0.077)	-0.205 (0.129)	-0.053 (0.040)	0.028 (0.029)	-0.077 (0.050)
High Litigation Industries	0.068 (0.046)	0.028 (0.040)	0.046 (0.059)	0.026 (0.019)	0.019 (0.015)	0.022 (0.022)
New Economy Firms	0.165 <sup>***</sup> (0.062)	0.003 (0.045)	0.168 <sup>**</sup> (0.075)	0.070 <sup>***</sup> (0.025)	-0.012 (0.018)	0.075 <sup>***</sup> (0.029)
Loss	0.038 (0.051)	0.060 (0.040)	-0.017 (0.067)	0.015 (0.021)	0.021 (0.014)	-0.001 (0.025)
S&P500	0.482 <sup>***</sup> (0.051)	-0.016 (0.040)	0.522 <sup>***</sup> (0.062)	0.197 <sup>***</sup> (0.021)	0.012 (0.015)	0.216 <sup>***</sup> (0.025)
Constant	-1.220 <sup>***</sup> (0.141)	-0.287 <sup>**</sup> (0.130)	-1.038 <sup>***</sup> (0.184)	-0.483 <sup>***</sup> (0.058)	-0.383 <sup>***</sup> (0.050)	-0.420 <sup>***</sup> (0.073)
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj. R-squared	0.810	0.776	0.693	0.817	0.821	0.730

N=7,406. This table presents the regressions of the number (factor score) of strength, concern, and total. The indicator of POFs, or DPolitician Holding, is lagged by a year (measured at year  $t-1$ ), while the other variables are contemporaneous (measured at year  $t$ ). Standard errors are clustered by firm and year. In parentheses robust standard errors are shown. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10% levels respectively.



**Table 4: Analysis of Coarsened Exact Matching Sample**

Panel A: Matching Criteria and Performance

	Before Matching		After Matching		Bias Reduction	
Multivariate $\mathcal{L}_1$	0.996		0.992			
Univariable	Distance ( $\mathcal{L}_1$ )	Difference in Means	Distance ( $\mathcal{L}_1$ )	Difference in Means	In $\mathcal{L}_1$	(%)
Leverage	0.180	0.022	0.122	0.014	-0.058	-32.04%
Ln(Sale)	0.501	1.584	0.403	1.074	-0.098	-19.50%
R&D Exp	0.220	343.530	0.216	104.820	-0.004	-1.88%
Return Volatility	0.279	-0.006	0.232	-0.005	-0.048	-17.03%
Sales Growth	0.096	-0.001	0.102	0.009	0.006	5.77%
HHI	0.089	-0.007	0.106	-0.023	0.017	19.30%
S&P500	0.517	0.517	0.483	0.483	-0.034	-6.56%

Panel B: Matched Sample

Treatment	Frequency	(%)
Non-POFs	1,781	47.72%
POFs	1,951	52.28%
Total	3,732	100.00%

Panel C: Panel Regressions with the Coarsened Exact Matching Sample

VARIABLES	In Numbers			In Factor Scores		
	Strengths	Concerns	Total	Strengths	Concerns	Total
DPolitician Holding	0.272 <sup>***</sup> (0.069)	-0.067 (0.055)	0.377 <sup>***</sup> (0.090)	0.126 <sup>***</sup> (0.028)	-0.018 (0.021)	0.130 <sup>***</sup> (0.035)
Lagged Dependent	0.678 <sup>***</sup> (0.013)	0.511 <sup>***</sup> (0.015)	0.646 <sup>***</sup> (0.014)	0.677 <sup>***</sup> (0.013)	0.579 <sup>***</sup> (0.014)	0.686 <sup>***</sup> (0.014)
Leverage	-0.524 <sup>**</sup> (0.262)	-0.058 (0.209)	-0.474 (0.345)	-0.146 (0.108)	0.143 <sup>*</sup> (0.082)	-0.121 (0.134)
Ln(Sale)	0.164 <sup>**</sup> (0.042)	0.359 <sup>***</sup> (0.035)	-0.097 <sup>*</sup> (0.055)	0.061 <sup>***</sup> (0.017)	0.152 <sup>**</sup> (0.014)	-0.019 (0.021)
R&D Exp	0.000 (0.000)	-0.001 <sup>***</sup> (0.000)	0.001 <sup>***</sup> (0.000)	0.000 (0.000)	-0.000 (0.000)	0.000 <sup>**</sup> (0.000)
Return Volatility	-3.009 (4.576)	7.047 <sup>*</sup> (3.655)	-8.053 (6.019)	-1.107 (1.881)	2.325 (1.434)	-3.374 (2.335)
Annual Return	-0.010 (0.049)	-0.018 (0.039)	0.008 (0.064)	-0.001 (0.020)	0.004 (0.015)	-0.006 (0.025)
Sales Growth	-0.596 <sup>***</sup> (0.205)	0.081 (0.163)	-0.771 <sup>***</sup> (0.269)	-0.260 <sup>***</sup> (0.084)	-0.015 (0.064)	-0.372 <sup>***</sup> (0.104)
#Business Segments	-0.025 <sup>***</sup> (0.007)	0.017 <sup>***</sup> (0.006)	-0.040 <sup>***</sup> (0.010)	-0.011 <sup>***</sup> (0.003)	0.008 <sup>***</sup> (0.002)	-0.018 <sup>***</sup> (0.004)
#Geographical Segments	0.012 <sup>**</sup> (0.005)	0.011 <sup>**</sup> (0.004)	0.001 (0.006)	0.004 <sup>**</sup> (0.002)	0.008 <sup>***</sup> (0.002)	0.000 (0.002)
#Operating Segments	0.007 (0.007)	0.020 <sup>***</sup> (0.006)	-0.008 (0.009)	0.002 (0.003)	0.008 <sup>***</sup> (0.002)	-0.004 (0.004)
Firm Age	0.010 <sup>***</sup> (0.002)	-0.004 <sup>**</sup> (0.002)	0.016 <sup>***</sup> (0.003)	0.004 <sup>***</sup> (0.001)	-0.000 (0.001)	0.006 <sup>***</sup> (0.001)
HHI	0.720 <sup>**</sup> (0.327)	-0.214 (0.262)	0.890 <sup>**</sup> (0.431)	0.278 <sup>**</sup> (0.135)	0.214 <sup>**</sup> (0.103)	0.233 (0.167)
High Litigation Industries	0.024 (0.098)	0.372 <sup>***</sup> (0.078)	-0.342 <sup>***</sup> (0.129)	0.009 (0.040)	0.184 <sup>***</sup> (0.031)	-0.090 <sup>*</sup> (0.050)
New Economy Firms	0.357 <sup>***</sup> (0.121)	-0.179 <sup>*</sup> (0.096)	0.516 <sup>***</sup> (0.159)	0.136 <sup>***</sup> (0.050)	-0.136 <sup>***</sup> (0.038)	0.216 <sup>***</sup> (0.062)
Loss	0.228 <sup>**</sup> (0.112)	-0.199 <sup>**</sup> (0.089)	0.438 <sup>***</sup> (0.147)	0.108 <sup>**</sup> (0.046)	-0.089 <sup>**</sup> (0.035)	0.145 <sup>**</sup> (0.057)
S&P500	0.647 <sup>***</sup> (0.091)	0.038 (0.071)	0.688 <sup>***</sup> (0.118)	0.271 <sup>***</sup> (0.037)	0.010 (0.028)	0.318 <sup>***</sup> (0.046)
Constant	0.234 (1.168)	2.316 <sup>**</sup> (0.933)	-1.856 (1.538)	0.293 (0.480)	0.589 (0.366)	-0.040 (0.597)
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj. R-squared	0.662	0.545	.558	0.669	0.620	0.596

This table reports the results of coarsened exact matching, and presents the regressions of the number (factor score) of strength, concern, and total using the CEM matched sample (N=3,235). The indicator of POFs, or DPolitician Holding, is lagged by a year (measured at year  $t-1$ ), while the other variables are contemporaneous (measured at year  $t$ ). Standard errors are clustered by firm and year. In parentheses robust standard errors are shown. <sup>\*\*\*</sup>, <sup>\*\*</sup>, and <sup>\*</sup> represent statistical significance at 1%, 5%, and 10% levels respectively.

**Table 5: Differenced Regressions**

Panel A: Regressions on Change in an Indicator of Politicians' Holding (N=7,025)

Changes in VARIABLES	In Numbers			In Factor Scores		
	Strengths	Concerns	Total	Strengths	Concerns	Total
DPolitician Holdings: 0 to 1	0.172 <sup>***</sup> (0.050)	0.127 <sup>***</sup> (0.044)	0.045 (0.065)	0.057 <sup>***</sup> (0.020)	0.068 <sup>***</sup> (0.015)	-0.011 (0.025)
DPolitician Holdings: 1 to 0	0.100 (0.064)	-0.122 <sup>**</sup> (0.051)	0.222 <sup>***</sup> (0.083)	0.032 (0.027)	0.018 (0.017)	0.048 (0.033)
Leverage	-0.104 (0.261)	0.029 (0.221)	-0.133 (0.345)	-0.016 (0.105)	0.078 (0.075)	0.025 (0.127)
Ln(Sale)	0.097 (0.094)	0.325 <sup>***</sup> (0.078)	-0.228 <sup>*</sup> (0.125)	0.044 (0.038)	0.029 (0.030)	-0.054 (0.050)
R&D Exp	0.000 <sup>**</sup> (0.000)	0.000 (0.000)	0.000 <sup>**</sup> (0.000)	0.000 <sup>**</sup> (0.000)	0.000 (0.000)	0.000 <sup>**</sup> (0.000)
Return Volatility	-6.543 <sup>***</sup> (1.695)	11.281 <sup>***</sup> (1.482)	-17.824 <sup>***</sup> (2.322)	-2.727 <sup>***</sup> (0.703)	4.349 <sup>***</sup> (0.532)	-4.713 <sup>***</sup> (0.872)
Annual Return	-0.002 (0.003)	-0.008 <sup>***</sup> (0.002)	0.006 <sup>*</sup> (0.003)	-0.001 (0.001)	0.000 (0.001)	0.001 (0.001)
Sales Growth	0.001 <sup>***</sup> (0.000)	0.001 <sup>***</sup> (0.000)	-0.000 (0.000)	0.000 <sup>**</sup> (0.000)	0.002 <sup>***</sup> (0.000)	0.000 <sup>***</sup> (0.000)
#Business Segments	-0.035 <sup>**</sup> (0.016)	-0.040 <sup>***</sup> (0.011)	0.005 (0.019)	-0.022 <sup>***</sup> (0.006)	-0.002 (0.004)	-0.010 (0.007)
#Geographical Segments	0.015 <sup>*</sup> (0.009)	0.012 (0.008)	0.004 (0.011)	0.000 (0.004)	0.006 <sup>**</sup> (0.003)	-0.005 (0.004)
#Operating Segments	0.020 (0.017)	0.021 (0.014)	-0.001 (0.021)	0.002 (0.007)	0.017 <sup>***</sup> (0.005)	-0.008 (0.008)
HHI	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)	0.000 (0.000)
High Litigation Industries	0.106 (0.271)	0.203 (0.295)	-0.097 (0.385)	0.069 (0.111)	0.196 <sup>*</sup> (0.112)	-0.016 (0.145)
New Economy Firms	-0.119 (0.161)	-0.405 (0.275)	0.286 (0.318)	-0.112 (0.104)	-0.080 (0.119)	-0.034 (0.107)
Loss	0.258 (0.256)	-0.307 (0.449)	0.565 (0.645)	0.161 (0.135)	-0.127 (0.283)	0.430 (0.391)
S&P500	0.034 (0.057)	0.010 (0.047)	0.024 (0.077)	0.009 (0.023)	0.030 <sup>**</sup> (0.015)	-0.006 (0.028)
Constant	0.237 (0.220)	-0.005 (0.046)	0.242 (0.262)	0.120 (0.108)	0.019 (0.032)	0.118 (0.119)
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj. R-squared	0.007	0.015	0.010	0.008	0.020	0.008

Panel B: Regressions on Change in the Number of Politicians Holding Shares (N=6,252)

Changes in VARIABLES	In Numbers			In Factor Scores		
	Strengths	Concerns	Total	Strengths	Concerns	Total
#Politicians Holding Shares	0.009** (0.003)	0.009*** (0.002)	-0.001 (0.004)	0.003* (0.001)	0.003** (0.001)	0.000 (0.002)
Control Variables	included	included	included	included	included	included
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj. R-squared	0.007	0.019	0.012	0.008	0.022	0.009

Panel C: Regressions on Change in the Size of Politicians' Holdings (N=6,252)

Changes in VARIABLES	In Numbers			In Factor Scores		
	Strengths	Concerns	Total	Strengths	Concerns	Total
Ln(\$Politician-Held Shares+1)	0.010** (0.004)	0.015*** (0.003)	-0.005 (0.005)	0.003** (0.002)	0.004*** (0.001)	-0.002 (0.001)
Control Variables	included	included	included	included	included	included
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj. R-squared	0.007	0.019	0.012	0.008	0.022	0.009

Panel D: Regressions on Change in the Share of Politicians' Holdings (N=6,252)

Changes in VARIABLES	In Numbers			In Factor Scores		
	Strengths	Concerns	Total	Strengths	Concerns	Total
Ln(%Politician-Held Shares+1/MVE)	0.341 (0.216)	-0.052 (0.050)	0.393 (0.173)	0.097 (0.107)	0.031 (0.050)	-0.033 (0.101)
Control Variables	included	included	included	included	included	included
Industry FE	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES
Adj. R-squared	0.006	0.016	0.012	0.007	0.021	0.009

This table presents the regressions of the changes in number (factor score) of strength, concern, and total on the changes in the independent variables. The politician holding measures (DPolitician Holding, \$Politician-Held Shares, and %Politician-Held Share/MVE) are lagged by a year (measured at year  $t-1$ ), while the other variables are contemporaneous (measured at year  $t$ ). In parentheses robust standard errors are shown. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10% levels respectively.

**Table 6: Heckman First Stage Selection Model**

<b>VARIABLES</b>	<b>MtB</b>	<b>Leverage</b>	<b>Ln(Sale)</b>	<b>R&amp;D Exp</b>	<b>Return Volatility</b>	<b>Sales Growth</b>	<b>HHI</b>	<b>S&amp;P500</b>	<b>Constant</b>
Coefficient	0.001 **	-0.500 ***	0.202 ***	0.000 ***	-14.280 ***	0.133	-0.245 **	0.640 ***	-1.457 ***
(Standard error)	(0.001)	(0.117)	(0.017)	(0.000)	(1.618)	(0.086)	(0.098)	(0.046)	(0.165)

This table presents the first-stage selection model in the Heckman Selection-Bias Correction. It estimates the likelihood of politician owned firms using a Probit regression on the above-listed selection-inducing variables and fixed effects for firms and years. The estimation is based on 6,566 observations, and its Wald-Chi<sup>2</sup> is 8,028 (p-value<0.001). In parentheses robust standard errors are shown. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10% levels respectively.

**Table 7: Heckman Second Stage Estimation**

Panel A: The Number of Politician Owners with Differential Influence

VARIABLES	#Strengths						#Concerns						#Total					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
#Politicians	0.009***						0.010***						0.000					
Holding Shares	(0.003)						(0.002)						(0.003)					
#Congresspersons		0.007***						0.013***						-0.004				
		(0.003)						(0.002)						(0.003)				
#Democrat			0.018**						0.015***						0.006			
Congresspersons			(0.008)						(0.005)						(0.010)			
#Republican			-0.000						0.011***						-0.011			
Congresspersons			(0.006)						(0.004)						(0.007)			
#Ruling Party				0.005						0.025***							-0.020***	
Congresspersons				(0.005)						(0.004)							(0.006)	
#Influential					-0.006						0.017***							-0.023***
Committee (F) <sup>a</sup>					(0.006)						(0.004)							(0.008)
#Influential						0.012***						0.011***						0.002
Committee (S) <sup>a</sup>						(0.003)						(0.002)						(0.004)
#Other Politicians		0.048	0.070	0.013**	0.024***	-0.019		-0.083***	-0.088***	-0.007*	0.003	0.001		0.135***	0.162***	0.022***	0.023***	-0.017
Holding Shares		(0.048)	(0.043)	(0.006)	(0.007)	(0.014)		(0.027)	(0.029)	(0.004)	(0.004)	(0.010)		(0.049)	(0.053)	(0.007)	(0.008)	(0.017)
Lagged Dependent	0.800***	0.799***	0.798***	0.799***	0.797***	0.801***	0.752***	0.751***	0.751***	0.751***	0.751***	0.752***	0.779***	0.778***	0.778***	0.776***	0.776***	0.779***
	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)	(0.011)
Lambda( $\lambda$ )	-1.063***	-1.066***	-1.041***	-1.074***	-1.051***	-1.050***	0.083	0.059	0.078	0.081	0.064	0.081	-1.098***	-1.074***	-1.065***	-1.109***	-1.067***	-1.080***
	(0.320)	(0.320)	(0.320)	(0.320)	(0.320)	(0.320)	(0.227)	(0.226)	(0.227)	(0.226)	(0.227)	(0.227)	(0.397)	(0.396)	(0.396)	(0.396)	(0.396)	(0.397)
Constant	1.630**	1.649**	1.614**	1.655**	1.583**	1.592**	0.296	0.288	0.252	0.235	0.330	0.290	1.243	1.259	1.257	1.327	1.153	1.201
	(0.790)	(0.788)	(0.788)	(0.789)	(0.788)	(0.788)	(0.554)	(0.551)	(0.552)	(0.550)	(0.552)	(0.552)	(0.975)	(0.972)	(0.972)	(0.972)	(0.971)	(0.973)
Control Variables	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
Observations	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566
Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Wald-Chi2	8,028	8,038	8,073	8,030	8,066	8,063	10,773	10,861	10,856	10,901	10,824	10,813	6,881	6,913	6,928	6,908	6,922	6,892
p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Panel B: The Size of Holdings of Politicians with Differential Influence

VARIABLES <sup>b</sup>	#Strengths						#Concerns						#Total					
	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)	(1)	(2)	(3)	(4)	(5)	(6)
\$Politician- Held Shares+1	0.037** (0.015)						0.033*** (0.011)						0.009 (0.018)					
\$Congresspersons		0.032*** (0.012)						0.025*** (0.009)						0.010 (0.015)				
\$Democrat Congresspersons			0.015** (0.021)						0.013*** (0.005)						0.004 (0.008)			
\$Republican Congresspersons			0.020*** (0.008)						0.011** (0.005)						0.011 (0.009)			
\$Ruling Party Congresspersons				0.014** (0.007)						0.010** (0.005)						0.007 (0.008)		
\$Influential Committee (F) <sup>a</sup>					0.012* (0.007)						0.013** (0.005)						0.001 (0.009)	
\$Influential Committee (S) <sup>a</sup>						0.018* (0.010)						0.009 (0.007)						0.012 (0.012)
\$Other Politicians Holding Shares		0.023*** (0.008)	0.018** (0.008)	0.022*** (0.007)	0.025*** (0.007)	0.018*** (0.007)		-0.006 (0.006)	-0.007 (0.006)	0.015*** (0.005)	0.007 (0.005)	0.012** (0.005)		0.030*** (0.010)	0.026*** (0.010)	0.010 (0.009)	0.020** (0.008)	0.008 (0.008)
Lagged Dependent	0.803*** (0.011)	0.801*** (0.011)	0.799*** (0.011)	0.800*** (0.011)	0.800*** (0.011)	0.801*** (0.011)	0.760*** (0.011)	0.762*** (0.011)	0.760*** (0.011)	0.760*** (0.011)	0.761*** (0.011)	0.760*** (0.011)	0.779*** (0.011)	0.778*** (0.011)	0.777*** (0.011)	0.778*** (0.011)	0.778*** (0.011)	0.778*** (0.011)
Lambda( $\lambda$ )	-0.940*** (0.318)	-0.953*** (0.317)	-0.938*** (0.317)	-0.931*** (0.318)	-0.943*** (0.317)	-0.956*** (0.318)	0.211 (0.227)	0.206 (0.227)	0.217 (0.227)	0.219 (0.227)	0.215 (0.227)	0.201 (0.227)	-1.098*** (0.394)	-1.113*** (0.393)	-1.107*** (0.393)	-1.098*** (0.394)	-1.109*** (0.394)	-1.108*** (0.394)
Constant	0.920 (0.243)	1.087 (0.166)	1.248 (0.109)	1.161 (0.136)	1.152 (0.139)	1.192 (0.128)	-0.426 (0.444)	-0.365 (0.510)	-0.214 (0.698)	-0.200 (0.717)	-0.193 (0.726)	-0.161 (0.771)	1.171 (0.229)	1.312 (0.176)	1.335 (0.165)	1.221 (0.204)	1.210 (0.209)	1.208 (0.212)
Control Variables	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.	Incl.
Observations	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566	6,566
Industry FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Year FE	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Wald-Chi2	8,116	8,143	8,153	8,138	8,144	8,113	10,638	10,637	10,644	10,637	10,627	10,633	6,882	6,904	6,903	6,885	6,897	6,881
p-value	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

This table presents the regressions of the number of strength, concern, and total on the politician holdings in different classifications. All the politician holding measures (both in #Politicians Holding Shares and \$Politician-Held Shares) are lagged by a year (measured at year  $t-1$ ), while the other variables are contemporaneous (measured at year  $t$ ). All the control variables are not displayed in the interest of space. In parentheses robust standard errors are shown. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10% levels respectively. a. 'F' is for firms, while 'S' is for segment. b. The values of investment (\$holdings) are natural log transformed.

**Table 8: CSR Performance and Politician Holdings**

CSR Total Deciles	Freq.	CSR Total	#Owners	\$Holdings	%Holdings
<b>1 : Poorest</b>	<b>1,071</b>	<b>-3.965</b>	<b>4.343</b>	<b>363,254</b>	<b>0.003</b>
2	1,068	-2.131	2.281	223,524	0.004
3	1,021	-1.106	2.544	193,787	0.002
4	278	-1.029	2.083	291,902	0.008
5	1,245	-0.092	2.836	411,160	0.003
6	205	0.741	6.366	578,389	0.002
7	819	1.015	3.882	677,185	0.007
8	401	2.167	5.601	538,430	0.003
9	714	3.577	10.007	635,401	0.001
10: Best	584	7.904	16.372	1,006,191	0.002
<b>Total</b>	<b>7,406</b>	<b>0.131</b>	<b>5.027</b>	<b>452,208</b>	<b>0.003</b>
[0] Poorest CSR Decile	1,071	-3.965	4.343	363,254	0.003
[1] The other nine deciles	6,335	0.824	5.143	467,247	0.003
[2] The others excluding the top decile	5,751		4.002	412,519	0.003
<b><u>t-statistics for Mean Difference Tests</u></b>					
[0] vs. All the others [1]			1.817**	0.930	0.382
[0] vs. The others excluding the top decile [2]			-0.909	0.431	0.459

This table presents the CSR performance in their deciles. The deciles are computed by one-digit SIC every year. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10% levels respectively.



**Table 9: Politician Holding Changes Following Poorest CSR Performance**

VARIABLES		Dependent in #Politicians Holding Shares			Dependent in Ln(\$Politician-Held Shares+1)		
		Into Poorest CSR Decile	From Poorest CSR Decile	Deciles on Total	Into Poorest CSR Decile	From Poorest CSR Decile	Deciles on Total
(↓Dependent)	(Independent→)						
All Politicians		<b>-0.799</b> <sup>***</sup> (0.258)	-0.398 (0.268)	0.024 (0.038)	0.456 (0.322)	-0.293 (0.283)	-0.058 (0.036)
Congresspersons		<b>-0.906</b> <sup>***</sup> (0.285)	-0.441 (0.296)	0.032 (0.042)	0.493 (0.320)	-0.399 (0.282)	<b>-0.063</b> <sup>*</sup> (0.035)
Others		<b>-0.064</b> <sup>**</sup> (0.025)	-0.053 (0.033)	-0.003 (0.005)	<b>-0.335</b> <sup>**</sup> (0.154)	-0.180 (0.176)	-0.019 (0.027)
Democrat Congresspersons		-0.269 (0.168)	-0.185 (0.129)	0.032 (0.021)	-0.175 (0.255)	-0.251 (0.243)	-0.011 (0.032)
Republican Congresspersons		<b>-0.609</b> <sup>***</sup> (0.172)	0.084 (0.216)	0.042 (0.030)	0.363 (0.286)	-0.156 (0.265)	<b>-0.063</b> <sup>*</sup> (0.034)
Others		<b>-0.096</b> <sup>*</sup> (0.049)	<b>-0.378</b> <sup>***</sup> (0.083)	<b>-0.044</b> <sup>***</sup> (0.015)	<b>-0.428</b> <sup>***</sup> (0.159)	0.093 (0.202)	<b>-0.046</b> <sup>*</sup> (0.026)
Ruling Party Congresspersons		<b>-0.294</b> <sup>*</sup> (0.157)	-0.224 (0.138)	0.024 (0.022)	-0.019 (0.279)	-0.356 (0.255)	-0.012 (0.032)
Others		<b>-0.680</b> <sup>***</sup> (0.205)	-0.255 (0.217)	0.005 (0.032)	0.245 (0.288)	0.014 (0.263)	-0.036 (0.035)
Congresspersons Sitting on Influential Committees (Firm)		<b>-0.729</b> <sup>***</sup> (0.196)	-0.083 (0.175)	<b>0.065</b> <sup>**</sup> (0.026)	-0.221 (0.269)	0.060 (0.265)	-0.016 (0.032)
Others		<b>-0.245</b> <sup>*</sup> (0.148)	<b>-0.396</b> <sup>**</sup> (0.190)	-0.036 (0.029)	<b>0.510</b> <sup>*</sup> (0.299)	-0.124 (0.276)	-0.060 (0.037)
Congresspersons Sitting on Influential Committees (Segment)		<b>-0.808</b> <sup>***</sup> (0.253)	<b>-0.448</b> <sup>*</sup> (0.259)	0.028 (0.038)	0.345 (0.309)	-0.323 (0.282)	<b>-0.101</b> <sup>***</sup> (0.036)
Others		<b>-0.166</b> <sup>*</sup> (0.091)	-0.031 (0.095)	0.002 (0.015)	-0.221 (0.224)	<b>0.525</b> <sup>**</sup> (0.254)	<b>0.066</b> <sup>**</sup> (0.033)

This table presents the regressions of the changes in politicians' holdings (the number of politician owners and the size of holdings) on the changes in the overall CSR performance. Politicians are divided into (1) Federal Congresspersons and the others, (2) Democrat and Republican Congresspersons and the others, (3) Ruling Party Congresspersons and the others, and (4) Congresspersons sitting on Influential Committees and the others. The key independent variables (i.e., Into/From Poorest CSR Decile and the Deciles on Total) are lagged by a year (measured at year  $t-1$ ), while the other variables are contemporaneous (measured at year  $t$ ). All the control variables are not displayed in the interest of space. In parentheses robust standard errors are shown. \*\*\*, \*\*, and \* represent statistical significance at 1%, 5%, and 10% levels respectively.

## Appendix: Variable Descriptions

Variable	Definition
<b><i>Corporate Social Responsibility (CSR)</i></b>	
#Strengths	The number of KLD strengths. The sum of all counts in strength indicators reported in KLD's six sections: Environment, Community, Human Rights, Employee Relations, Diversity, Product, and Corporate Governance. Thus, it is computed as $\sum \text{Strengths} = \Sigma(\text{ENV-str}) + \Sigma(\text{COM-str}) + \Sigma(\text{HUM-str}) + \Sigma(\text{EMP-str}) + \Sigma(\text{DIV-str}) + \Sigma(\text{PRO-str}) + \Sigma(\text{CGOV-str})$ .
Strengths - Factor	A factor score on the number of strengths is constructed as the product sum of factor loadings and the number of strengths.
#Concerns	The number of KLD concerns. The sum of all counts in concern indicators reported in KLD's six sections: Environment, Community, Human Rights, Employee Relations, Diversity, Product, and Corporate Governance. Thus, it is computed as $\sum \text{Concerns} = \Sigma(\text{ENV-con}) + \Sigma(\text{COM-con}) + \Sigma(\text{HUM-con}) + \Sigma(\text{EMP-con}) + \Sigma(\text{DIV-con}) + \Sigma(\text{PRO-con}) + \Sigma(\text{CGOV-con})$ .
Concerns - Factor	A factor score on the number of concerns is constructed as the product sum of factor loadings and the number of concerns.
#Total	$\sum \text{Strengths} - \sum \text{Concerns}$ (Mishra and Modi 2013).
Total - Factor	A factor score on Total is constructed as the product sum of factor loadings and Total.
<b><i>Independent</i></b>	
DPolitician Holding	An indicator for a firm's shares being held by one or more politicians.
DPolitician Holding: 0 to 1	An indicator for DPolitician Holding being changed from 0 to 1.
DPolitician Holding: 1 to 0	An indicator for DPolitician Holding being changed from 1 to 0.
#Politicians Holding Shares	The number of politicians holding a firm's shares.
\$Politician-Held Shares	The reported dollar value of the politicians' total holdings of a firm-year. The PFD file reports either the range of assets invested in a security or the exact size of the investment. We use the exact investment size wherever is available or the mean of the minimum and the maximum of the range.
%Politician-Held Shares/MVE	\$Politician-Held Shares divided by the market value of equity (MVE) at the end of calendar year. Presented in percentage (%).
<b><i>Controls</i></b>	
MtB	Market-to-Book ratio, computed as market value of equity divided by book value of equity as of a fiscal year-end.
Leverage	Leverage ratio, computed as total debt divided by total assets.
Ln(Sale)	Natural log of net sales.
R&D Expenses	R&D Expenses in million USD.
Return Volatility	Stock return volatility for one year ending at a fiscal year-end.
Annual Return	Stock return for one year ending at a fiscal year-end.
Sales Growth	Sales growth, computed as net sales at year t divided by net sales at year t-1.
#Business Segments	The number of business segments.
#Geographical Segments	The number of geographical segments.

#Operating Segments	The number of operating segments.
Firm Age	A firm's age, computed as the number of years since its initial public offering.
HHI	A Herfindahl index for a three-digit SIC.
High Litigation Industries	An indicator for a firm's primary industry belonging to high litigation industries: SICs of 2833–2836, 3570–3577, 3600–3674, 5200–5961, and 7370–7374.
New Economy Firms	An indicator for a firm's primary industry belonging to new economy industries: SICs of 3570–3572, 3576–3577, 3661, 3674, 4812–4813, 5045, 5961, 7370–7373.
Loss	An indicator for a net loss.
S&P500	An indicator for a firm's belonging to S&P 500.