Political Investments and the Price of Credit Risk: Evidence from Credit Default Swaps¹

Paul Hanouna Villanova School of Business Alexei V. Ovtchinnikov HEC Paris

Saumya Prabhat Indian School of Business

February 27, 2014

¹Preliminary. The authors may be reached at: Paul Hanouna, paul.hanouna@villanova.edu, Alexei V. Ovtchinnikov, ovtchinnikov@hec.fr, and Saumya Prabhat, saumyaprabhat@isb.edu.

Abstract

We show that political investments, defined as political contributions and lobbying expenditure, have a large impact on the firm's credit risk. Firms that invest in politics, on average, have significantly and economically lower CDS spreads. We address endogeneity issues by utilizing a quasi-natural experiment and an instrumental variable approach to obtain exogenous variations in political investments, and find that political investments reduce the price of credit risk. The reduction in spreads is greater for firms that are more sensitive to government policies. In addition, and consistent with agency conflicts, political investments by weakly governed firms are relatively less effective at reducing the market price of credit risk.

Key words Political Contributions, Political Connections, Lobbying, Credit Risk, CDS, Corporate Governance

1 Introduction

A large and growing literature in economics and finance examines the relationship between political investments by corporations and the value of financial claims. Certainly, government policies and regulations have important and lasting consequences on the corporate landscape. As such, it is not surprising that corporations would attempt to participate in and shape government policies through costly political involvement. This may include lobbying efforts, campaign financing, and developing political connections. The benefits of such involvement include, but are not limited to, obtaining favorable government contracts, limiting obstructive regulations or antitrust actions, protection from foreign trade, maintaining open international markets, or even in extreme cases receiving a bailout. Prior work has focused on political investments and ties from the perspective of equity holders (Fisman, 2001; Jayachandran, 2006; Faccio, 2006; Goldman et al., 2009; Cooper et al., 2010), but has paid relatively little attention to the impact of such investments on debtholders.

Debtholders are important claimants on firm value¹ and while political investments may be value enhancing for shareholders, the value of these investments to debtholders is unclear. On one hand, debtholders stand to benefit from political investments because higher firm value implies a lower probability of default (Merton, 1974). Moreover, if political investments increase the likelihood of receiving a government bailout in times of financial distress (Faccio et al., 2006), debtholders will benefit through lower default risk or higher recovery rates in default. On the other hand, political investments could encourage risk taking (Igan et al., 2010; Kostovetsky, 2012), keep management entrenched (Bebchuk and Jackson, 2010), result from managers enjoying private benefits of control (Aggarwal et al., 2012), and/or reduce the quality of

 $^{^1\}mathrm{U.S.}$ corporations issued a total of \$4.6 trillion in corporate bonds, compared to \$1.5 trillion in equity raised through public common stock offerings in the period 1997 to 2006

accounting information (Faccio and Parsley, 2009).

Thus, whether and how credit markets value political investments is an empirical question we address in this paper. Specifically, we examine the impact of political investments on CDS spreads. CDS spreads are the required periodic payment for providing insurance against default by the underlying firm. Theoretically, CDS spreads capture the risk of default (Duffie, 1999). We focus on CDS for the following reasons. First, as compared to bond spreads, CDS trade more frequently and lead price discovery (Blanco et al., 2005). Also, CDS spreads are less susceptible to liquidity and tax effects than corporate bond spreads (see Elton et al. (2001) for non-default risk determinants of bond spreads). Second, as compared to loan spreads, CDS spreads are also determined in the context of banking relationships, which can be related to the firm's political clout.

We start our analysis with a sample of 6,774 quarterly CDS spreads over the period 2001-2010, consisting of 380 unique firms. We then examine the conditional correlation between CDS spreads and a measure of political investments, which include federal campaign contributions, lobbying expenditures, and contributions to 527 organizations. In the regressions, we control for other determinants of credit risk, such as the probability of default estimated from the Merton (1974) model and financial ratios that measure distress (Altman, 1968; Blume et al., 1998). We find that the coefficient between political investments and CDS spreads is negative and statistically significant. A 1% increase in political investments is associated with a 3.04% to 3.46% decrease in the CDS spreads. The results are robust to the inclusion of firm-level fixed effects, Fama-French 48 industry fixed effects, calendar year-quarter fixed effects, clustering of standard errors by firm and calendar year-quarter, the inclusion of corporate governance measures, different sample periods, and alternative definitions of political investments. Overall, the results suggest that, on average, firms that spend more on politics have lower CDS spreads, and an increase in a firm's political investments is associated with a decrease in the firm's CDS spreads.

One major concern in our study is endogeneity. Our interpretation of the results is that political investments reduce CDS spreads. However, an alternative interpretation of the results is that high CDS spreads (poor financial health) directly curtails the firm from making political investments, or that financial or economic distress drives both political investments and CDS spreads. We believe this is unlikely to be driving our results as Adelino and Dinc (2013) show that economically distressed firms are more, not less, likely to lobby. However, to address the endogeneity issue further we exploit the *McConnell v. FEC* Supreme Court decision of 2003 to obtain exogenous variations in political investments. Congress passed the Bipartisan Campaign Reform Act (BCRA) in 2002 to reduce the influence of corporations and unions in shaping public policy. The major provisions of the act were to ban soft money contributions (unregulated contributions to the national political parties) and to regulate electioneering communications (political advertisements). In the *McConnell v. FEC* decision of 2003, the Supreme Court upheld the main provisions of the BCRA. Most observers of the case were not sure which direction the Supreme Court would go (Ansolabehere et al., 2004). Ansolabehere and Snyder, the consultants for each side of the case, report that each expected the Court to overturn the BCRA. Most journalists also expected the Court to overturn the BCRA, suggesting that the Supreme Court's decision was a surprise. We treat the Supreme Court decision as exogenous since judges are lifetime appointees and do not receive political contributions. Our results show that the ban on soft money increases the CDS spreads on the firms that contributed soft money, suggesting that political investments reduce the credit risk of firms that invest in politics.

We also use an instrumental variables approach using the proximity to Washington, DC and lagged values of political action committees (PAC) Receipts as instruments. Proximity to Washington, DC affects lobbying costs and is thus correlated with lobbying expenditures, and lagged PAC Receipts are correlated with political contributions. We argue that conditional on the presence of political investments and other controls employed, the instruments do not have an independent effect on CDS spreads. The instruments also pass the validity tests. Again, our results suggest that exogenous variations in political investments reduce the credit risk of the firms that invest in politics.

Next, we examine mechanisms by which political investments affect CDS spreads. We find that there is a greater reduction in CDS spreads for firms that are more sensitive to government policies (i.e., regulated firms, firms in the defense industry, firms with government contracts). Regulated and defense industries are important for the economy and government is likely to intervene and prevent large-scale failures in such industries. Even within these industries, government is more likely to support or bail out politically connected firms (Duchin and Sosyura, 2012).

We also examine the effect of political investments on CDS spreads for firms with government contracts. Since for these firms the government is an important customer, we expect political investments to have a stronger effect on credit risk as government spending can be timed to reduce the sensitivity of the firm's cash flows to economic shocks. Supporting this argument, we find that the sensitivity of CDS spreads to changes in political investments is greater for firm's with government contracts.

Additionally, relative to political investments by strongly governed firms, political investments by weakly governed firms are not as effective at reducing the market price of credit risk. The results are consistent with the argument that political investments

by the managers of these firms represent private benefits of control (Aggarwal et al., 2012).

Our primary contribution to the literature is to show that political investments affect debtholders' interests by reducing credit risk. In this sense, our study is related to Faccio et al. (2006); Duchin and Sosyura (2012); Adelino and Dinc (2013), who show that politically connected firms are more likely to be bailed out, receive stimulus funds in the form of grants, loans, and procurement contracts, or have a higher leverage. In contrast to these studies, we focus on the market price of credit risk and estimate the causal impact of political investments on such risk. Furthermore, our study finds evidence consistent with the agency hypothesis (Bebchuk and Jackson, 2010; Yu and Yu, 2012; Aggarwal et al., 2012).

Our findings are related to a growing body of research on politics and finance that shows that political investments and ties affect stakeholders' claims and corporate policies (Cooper et al., 2010; Faccio, 2006; Jayachandran, 2006; Goldman et al., 2009; Yu and Yu, 2012). Finally, our findings are related to the large body of political economy research that argues that politicians have the power to affect corporate wealth (Stigler, 1971; Peltzman, 1976; Stratmann, 1991; Morck et al., 1996), and corporations influence those policies by lobbying and making campaign contributions (Stratmann, 1991; Morck et al., 1996; Bebchuk and Jackson, 2010; Grossman and Helpman, 1994, 2002).

The remainder of the paper proceeds as follows. Section 2 describes hypothesis development. Section 3 provides institutional background and describes the *McConnell v. FEC* Supreme Court decision of 2003. Section 4 describes the data and variable constructions. Section 5 reports the results of the baseline analysis, addresses endogeneity issues, and describes potential mechanisms that drive the main results. Section 6 describes robustness tests and Section 7 concludes.

2 Hypothesis Development

We motivate our empirical analysis by focusing on the theoretical and empirical studies that examine whether and how political investments affect corporate policies and firm value. The studies fall under three broad categories.

The first category is that government support comes as a *quid pro quo* for political investments and ties. This literature argues that political connections increase the firm's likelihood of obtaining government support, where the support can be in the form of grants, contracts, financial investments, and favorable policies (e.g., subsidies, import protection, etc). For example, Faccio et al. (2006) show that the government is more likely to bail out politically connected firms compared to similar non-connected firms and that politically connected firms have higher leverage. The evidence in their paper suggests that lenders are willing to lend more to connected borrowers, however they do not rule out the possibility that lenders face political pressure to do so and/or receive benefits in other forms. Furthermore, they are not able to determine whether the ultimate beneficiaries of bailouts are borrowers, lenders, or the government. In related studies, Duchin and Sosyura (2012) show that politically connected banks are more likely to be TARP recipients. Similarly, Adelino and Dinc (2013) show that economically distressed firms are more likely to lobby, and that firms that lobby are more likely to receive stimulus funds in the form of grants, loans and procurement contracts. Overall, this literature suggests that political spending is a positive NPV project for the firm. In the Merton (1974) framework, increases in firm value decrease the probability of default and increase the expected recovery rate in case of default. These arguments motivate our first hypothesis that political investments are negatively correlated with CDS spreads.

The second category is that government support creates a moral hazard problem. If firms make political investments in the expectation of government support during times of distress, they might take on excess risk. Throughout the financial crisis, moral hazard was one of the main concerns confronting policy-makers in deciding whether to rescue financial institutions. Kostovetsky (2012) argues that the history of bailouts in the United States goes back to Continental Illinois in 1984, and the Savings & Loan and Long Term Capital Management rescues of the 1980s and 1990s, and that political connections generated risk-taking incentives in the connected banks. Similarly, Igan et al. (2010) look at micro-level lending data and find that financial institutions with lobbying activities engaged in riskier lending practices prior to the financial crisis. Economic theory suggests that rational managers acting in the best interest of the shareholders would adopt riskier corporate policies in response to possibilities of government support in times of distress. Again, following the Merton (1974) framework, increases in firm risk increases the probability of default and reduces the expected recovery rate in case of default. Thus, the moral hazard theory motivates our alternative hypothesis that CDS spreads are positively correlated for firms that invest in politics.

The third category is agency costs. Bebchuk and Jackson (2010) argue that managers' spend corporate money on politics for personal gain, which reduces firm value. For instance, managers could spend corporate resources to help their politician friends, to further their own political ambitions, or to support their personal ideology. Thus, political spending could represent private benefits of control. Aggarwal et al. (2012) argue that corporate political investments reduce firm value and are a manifestation of agency problems in the firm. Therefore, to the extent this rent extraction reduces cash flows available to stockholders, CDS spreads will be higher for firms that invest in politics. Bebchuk and Jackson (2010) also argue that management may use corporate resources to lobby against expansion of shareholder rights and keep management entrenched. Entrenched management can threaten debtholder interests in a variety of ways. For example, entrenched managers may wish to increase the size of assets under their control and/or increase default risk (see Chava et al., 2010). However, entrenched managers are not necessarily detrimental to debtholders as they tend to keep lower leverage ratios (Berger et al., 1997). Also, entrenched managers may resist heavily debt-financed takeovers that increase default risk. Therefore, to the extent that managers use their acquired political clout to remain entrenched, political investments may benefit debtholders. Taking both agency cost arguments together, the correlation between CDS spreads and political investments is unclear.

3 Institutional Background on Political Investments

Some of the different types of political investments that corporations undertake include campaign contributions and lobbying.

3.1 Campaign Contributions

The Federal Election Commission (FEC) defines contributions as anything of value given to influence federal elections. The definition of contributions includes not only monetary contributions but also contributions in kind, such as goods and services offered free or below normal charge, outstanding loans, and guarantees of loan. A corporation cannot contribute directly to federal candidates and political parties, but can contribute indirectly by establishing a political action committee (PAC). Up until 2002, however, a corporation could make direct contributions from its revenues (treasury funds) to the "non-federal accounts" of federal political parties, and such contributions are called soft money contributions. A PAC can also contribute to PACs established by other organizations.

Corporations, labor unions, and incorporated membership organizations are not allowed to make direct contribution's to candidates in U.S. federal elections. However, these organizations can establish a separate segregated funds committee (SSF) to finance federal election campaigns. PAC is the more commonly used name for an SSF. The internal mechanism for a SSF works by soliciting donations from a limited class of individuals. The SSF can contribute the solicited money to federal candidates, political party committees, and other PACs. The SSF can also spend the solicited money for sponsoring political advertisements. An organization that establishes or controls the SSF is the "sponsor" of that SSF. The sponsor (e.g., a corporation) can choose to bear the cost of establishing, operating, and soliciting funds for the SSF, allowing greater availability of money for financing federal elections. If the sponsor pays directly for administrative costs, then the SSF is not required to disclose administrative expenses. However, if the SSF does pay for administrative costs, then the SSF is required to disclose such expenses. In this paper, we define total expenditures of a corporate PAC as PAC contributions.

A SSF established by a corporation with capital stock can solicit contributions from the corporation's shareholders, executives, administrative personal, and their families. It can also solicit contributions from executives and administrative personal of the subsidiaries, affiliates, and their families. Similarly, a SSF established by a labor union can solicit contributions from its members, executives, administrative personal, and their families. These organizations cannot solicit, but may accept voluntary, contributions from the public. SSFs cannot legally utilize job discrimination, force or the threat of force, dues or fees (including refundable ones), employment, or commercial transactions to seek contributions. Additionally, SSFs cannot legally pay donors through bonuses or any other forms of direct or indirect compensation in exchange for a donation. Contributions by foreign nationals, and contributions by individuals or organizations in the name of other individuals and organizations are also prohibited. The law imposes responsibility of a violation on the officers of the SSF. If an officer of a company or that of a union gives consent to make a prohibited contribution, then the law considers the violation as if the officer personally violated it.

The amounts that SSFs can contribute to and accept from others are constrained by legal limits. A SSF can receive contributions of up to \$5,000 from one individual each year, and can contribute up to \$5,000 per candidate, per election. SSFs can also contribute up to \$15,000 to each national political party committee, per election. If the contribution is over \$100 taken together, it has to be by check. The law also requires that all contributions over \$200, taken together, be reported to the Federal Election Commission (FEC). The law allows anonymous contributions only for amounts less than \$50. The restrictive features of the campaign finance laws aim to curb "influence" of large donors on federal policies and on outcome of federal elections. The BCRA did not change contribution limits for multi-candidate SSFs (typically, a corporate PAC would qualify as a multi-candidate SSF). Multi-candidate SSFs are those that: (a) have more than fifty contributors; (b) have been registered with the FEC for more than six months; and, (c) have made contributions to five or more federal candidates.

The BCRA, however, increased contribution limits for individuals (i.e., public) and non-multi-candidate committees. Before, individuals and non-multi-candidate committees could contribute up to \$1,000 per candidate, per election. However, the BCRA increased the contribution limits per candidate to \$2,000 per election. The law also increased the contribution limits to each national political party committee from \$20,000 to \$25,000 per election. The increased contribution limits allow CEOs, managers, employees of corporations, and the public to contribute more.

Affiliated PACs, such as a PACs established by the parent company and subsidiary company, share the same contribution limits. Therefore, establishing more subsidiaries does not increase the ability of a firm to contribute more. To the extent, it is harder to identify subsidiaries of a parent company, having more subsidiaries makes it harder to track total campaign contributions of the company.

According to the FEC, 527-organizations are entities organized under section 527 of the tax code. The primary purpose of these organizations is to influence federal, state, or local public office elections. All organizations that report to the FEC are 527-organizations but not all 527-organizations report to the FEC. The FEC requires a 527 group to report to the FEC only if the group is a political party or political action committee (PAC) that makes federal contributions or spends money on independent expenditures and electioneering communications. Otherwise, the 527 files disclosure reports to the Internal Revenue Service (IRS). For the purpose of this study, we define 527-organization as those organizations that file contribution reports to the Internal Revenue Service (IRS). Before the BCRA, 527s could spend corporate and union treasury money to sponsor electioneering communications, voter mobilization efforts, and "issue advocacy advertisements". After the BCRA, 527s can still directly receive contributions from corporations and unions but can no longer use those contributions to sponsor electioneering communications. A 527 can still use direct contributions from corporations and unions to fund "issue advocacy advertisements", voter mobilizations efforts, and to finance non-federal elections (depending on respective state laws). In this study, "527 contributions" are the contributions given directly by corporations to 527s.

The federal election laws allow political parties to spend as much as they wish on party building activities. Party building activities include expenditures incurred on "get-out-the-vote" campaigns, voter registration efforts, and "issue advertisements." Before the BCRA, corporations, unions, and wealthy individuals could directly donate unregulated, legally unlimited amount of money to the "non-federal accounts" of federal political party committees if the donors desired to do so. These contributions are also known as soft money contributions. Under federal campaign finance laws, political parties could use these contributions only for party building activities and not for supporting federal candidates.

Things changed in 1995, when the Republican National Committee argued that television advertisements focused on party themes is a party building activity even if the advertisements mention names of federal candidates. Once the FEC consented with this argument, major political parties carefully constructed political advertisements funded by soft money to help specific federal candidates. This led to an increase in soft money spending, and the amount of soft money tripled from \$85.9 million in the 1992 election cycle to \$261.9 million in the 1996 election cycle. In 2002, the BCRA banned soft money contributions.

3.2 Lobbying

Lobbying is similar to, but different from, campaign contributions. Campaign contributions can influence outcomes of federal elections while, lobbying can influence specific legislations. Lobbying refers to meetings between representatives of an organization and policymakers, where the former tries to persuade the latter that its preferred policies also serve the interest of the policymakers and that of the public (see Grossman and Helpman (1994) for further details). A firm does federal lobbying if it makes any oral or written communication to executives and legislators regarding a federal legislation, federal rule or regulation, or administration of a federal program or policy. Lobbying includes contact with "covered federal officials", as well as preparation, planning, research, and background work for such contacts. There are no legal limits on how much money can be spend on lobbying. However, if the amount spent on lobbying is greater than or equal to \$20,000 then the federal law requires its disclosure. If an organization spends time and effort in studying a law but makes no contact with executives or legislative officials, then the organization is not required to report expenditures on such activities. In this study, lobbying refers to a firm's total spending on federal lobbying activities.

3.3 McConnell v. FEC Supreme Court Decision

In the years leading up to the passage of the Bipartisan Campaign Reform Act (BCRA), some interest groups took advantage of campaign finance regulation by contributing unregulated "soft money" to national party committees, and by sponsoring issue advertisements that were functionally equivalent to independent expenditures (i.e., electioneering communications). Many public interest groups and the press advocated against large soft money donors, such as tobacco, pharmaceutical, and oil companies. The U.S. Senate Committee on Commerce conducted a hearing in 1998, where corporate executives and legislators testified that soft money donations helped donors gain valuable government contracts. In other cases, donors feared that if they did not contribute, their companies would lose competitive advantages through regulations (see Ansolabehere et al., 2004).

Advocates pushed many versions of the BCRA in the 1990s (see www.govtrack.us for a list of all the related bills) but none became law. Sen. McCain [R-AZ] introduced versions of the BCRA five times from 1995 to 2000, but the bill was defeated five times in six years with virtually no change in voting pattern. A dramatic set of events led to the next generation of "reforms." The November 2000 elections evenly split the U.S. Senate (50 Republican and 50 Democratic senators). On January 22, 2001, Sen. John McCain introduced the BCRA to the Senate. The major provisions of the bill were to ban soft money contributions and to limit the use of corporate and unions' treasury money for funding issue advertisements that depict a candidate near the election period.

Beginning March 19, 2001, senators debated the bill. After major setbacks to the Republicans, Sen. Wellstone [D-MN] proposed the highly controversial "Wellstone amendment." The amendment extended the ban on the use of soft money to fund electioneering communications to nonprofit organizations. The Senate accepted the amendment at 6:46 pm on March 26, 2001, with 51 votes for and 46 vote against the amendment.

At 1:18 pm on March 27, 2001, the Senate rejected the Hagel amendment that proposed a limit to, but not a ban on soft money contributions. The Hagel amendment was important. It had the backing of the President, and was a major challenge to the BCRA. The defeat of the amendment increased the possibility that the Senate would pass the BCRA. Some Republicans then pushed for "killer amendments" to block the passage of the bill. At 3:43 pm, March 29, 2001, the Senate rejected a proposal that would have nullified the whole bill, if the Court were to overturn any provision of the BCRA. The defeat of the amendment signaled that the BCRA had enough votes in its favor, and even if the Supreme Court were to overturn greater regulations on electioneering communications, the ban on soft money could remain intact. Finally, after intense debate, the Senate passed the BCRA on April 2, 2001, with the majority of republicans opposing the bill.

The battle then moved on to the House. Rep. Shays [R-CT] introduced the

BCRA to the House. A series of accounting and political scandals also hit the market in 2001 and 2002. These scandals increased the possibility that the House and the President would pass the BCRA. The House passed the Democratic-supported BCRA on February 14, 2002. The Senate passed the House version of the bill on March 20, 2002. On March 27, 2002, President Bush signed the bill into law amid concerns he may veto it. As soon as President Bush signed the law, opponents of the BCRA filed numerous lawsuits in the Court.

The Supreme Court heard the oral arguments for the consolidated lawsuits (Mc-Connell v. FEC) in a special session on September 8, 2003. The argument failed to provide an indication on whether the Court would overturn or uphold the law. Chief Justice Rehnquist, a swing vote, indicated that he was against the BCRA. However, Justice O'Connor, another swing vote, did not give any indication on whether she supported or opposed the BCRA. After the argument, four judges appeared supportive of the BCRA, while four judges appeared against it. Thus, the judgment crucially hinged on Justice O'Connor's vote. On December 10, 2003 at 10:02 am, in a surprise announcement, the Supreme Court upheld the key provisions of the BCRA with 5-4 majority. The soft money ban further prohibited state parties from using such soft money in connection with federal elections.

4 Data Sources and Variable Construction

4.1 CDS

We obtain a list of all the dollar denominated CDS securities with spreads available on Bloomberg. We obtain average spreads of 5 years maturity CDS contracts at the end of each month over the period 2001 to 2010. We use 5-year CDS contracts as they are the most liquid contracts (Das et al., 2009). We merge the CDS dataset with the COMPUSTAT/CRSP, thereby eliminating all non-publicly traded entities and non-US firms. After matching, our sample consists of 6,774 quarterly CDS spreads from 2001Q3 to 2010Q1. The sample consists of 380 unique firms after excluding all financial firms.

4.2 Political Investments

We construct comprehensive political data by obtaining information on federal lobbying expenditures and federal campaign contributions of all publicly traded firms for the years 1998 to 2009 from the OpenSecrets website and the Federal Election Commission's (FEC) website, respectively. We supplement this data with the data on 527 contributions available at the Internal Revenue Service's (IRS) website. The Federal Election Commission does not regulate 527 committees that do not coordinate or contribute to federal candidates or federal political party committees. Such committees file report only to the IRS. We also obtain information on individual political contributions of CEOs, managers and employees of all publicly traded firms for the period 1998 to 2009. In case of individuals, campaign finance laws require disclosure of donors' name, address, job title, and employer. We use job title's to infer whether the donor is a CEO, a manager, or a regular employee.

We merge the political dataset to COMPUSTAT/CRSP using firm name as identifier. The appendix describes the construction of political variables and table 1 reports summary statistics. All explanatory variables are winsorized at 1%. Figure 1 plots average political investments from 1998 to 2009, where political investments are defined as federal campaign contributions plus lobbying expenditures plus contributions to 527s. On average, political investments of the sample firms have increased after the onset of the global financial crisis (2007). In contrast, R&D and capital expenditures have decreased in that same period.

4.3 Corporate Governance

Lucian Bebchuk's website provides data on the Entrenchment Index (E-index), and IRRC provides data on corporate governance and board structure. Institutional holding data are obtained from Thompson Reuters 13Fs. "CEO is the chair" dummy measures whether the CEO is also the chair of the board. If the CEO is also the chair, then the CEO presumably has greater power over the board and controls the board's agenda. "E-index" is the entrenchment index, which measures whether the firm is less subject to the discipline imposed by the external market for corporate control. "Busy Board" measures whether 50% or more of the firm's directors have three or more outside directorship. If the board is busy, then there is less monitoring by the board, and managers have greater opportunities to enjoy private benefits of control. "Institutional ownership" measures the fraction of shares held by the top five institutional investors. If institutional ownership is high, then there is greater monitoring by shareholders and the firm is presumed to have stronger shareholder governance.

4.4 Accounting and Macroeconomic Data

We use the risk-free rate r estimated as the 3-month treasury constant maturity rate. Since periods of low interest rates are usually during economic downturns, we expect a negative relation between the risk-free rate and CDS spreads. We also include the trailing 12-month returns on the S&P 500, and the prior year returns on the Fama and French 48 (FF48) industry group that the firm belongs to. We expect a negative coefficient on the S&P 500 and industry returns as low market returns are associated with higher probabilities of default. We use the Bharath and Shumway (2008) implementation of the Merton (1974) model to estimate the probability of default and the asset volatility. We expect the probability of default and the asset volatility to be positively correlated with CDS spreads. We construct accountingbased variables based on Altman (1968) and Blume et al. (1998). The accounting data are from the annual industrial COMPUSTAT files. ROA is constructed as EBITDA scaled by total assets. Net income growth is calculated as net income minus the previous quarter's net income divided by total assets. Interest coverage is calculated as pretax income plus interest expense divided by interest expense. The quick ratio is constructed as current assets minus inventories over current liabilities, and cash to asset ratio is cash and equivalents over total assets. Quarterly sales growth is Sales divided by the previous quarter sales minus one, and leverage is total debt over total assets.

Our final sample consists of all publicly listed firms in COMPUSTAT/CRSP for the period 1998 to 2009 for which we have the required CDS, financial, macroeconomic and political data available. We also drop all firms with negative book value of assets. Our final sample consists of 4,739 observations for which all the required accounting and market data are available.

5 Results

5.1 Do Political Investments Reduce CDS Spreads?

To examine the conditional correlation between CDS spreads and political investments, we estimate variations of the following model, where we run regressions of logged values of CDS spreads on logged values of political investments and control variables.

$$log(CDS_{it}) = \alpha + \beta \times log(Political investments_{it}) + controls + \epsilon_{it}$$
(1)

 $log (CDS_{it})$ is the natural log of the CDS spread one month after the end of quarter t for firm i. The control variables are from Das et al. (2009). The appendix defines the variables, and model I through IV of Table 2 report the pooled OLS regression results. The sign and economic significance of the coefficients on the control variables are similar to that documented in the literature. The correlation between political investments and CDS spreads is negative and statistically significant at 1% confidence level. A 1% increase in political investments is associated with 3.04% to 3.46% decrease in the CDS spreads.

OLS standard errors are consistent as long as the regression residuals are uncorrelated across both firms and time. However, one may argue that the assumption may not hold in this panel. Market-wide shocks could induce correlations between firms at a moment in time, and persistent firm-specific shocks could induce correlations across time. To address the issues, we use alternative model specifications and the results are robust. Model II clusters standard errors by firm. Model III clusters standard errors by firm and calendar year-quarter. Model IV controls for firm fixed effects and calendar year-quarter fixed effects. All standard errors are robust.

Overall, the results suggest that on average, firms that spend more on politics have lower CDS spreads, and an increase in a firm's political investments is associated with a decrease in the firm's CDS spreads. Since the results are robust to firm fixed effects and industry fixed effects, any time invariant firm characteristics and industry characteristics do not explain the negative correlation between CDS spreads and political investments. The results are also robust to time fixed effects, thus common market shocks that affect all firms in the year-quarter equally do not explain the correlations either.

5.2 Endogeneity

Roberts and Whited (2012) argue that the most important and pervasive issue confronting empirical corporate finance studies is endogeneity. Endogeneity leads to biased and inconsistent parameter estimates, making reliable inferences virtually impossible. In many cases, endogeneity is so severe that it can reverse qualitative inference. So far, we have shown that the correlation between political investments and CDS spreads is negative. However, political investments and CDS spreads are endogenously determined. The two are endogenous because on one hand, political investments could affect CDS spreads of the investing firms, but on the other hand, firm performance and probability of default could determine the amount a firm could invest for political purposes. Therefore, a positive or negative correlation between CDS spreads and political spending does not imply a causal relationship. Moreover, because political investments are also a proxy for political ties, the correlation between the investments and CDS spreads could also be a manifestation of the impact of political ties on CDS spreads. Specifically, one may argue that firms spend less on political investments when they are economically distressed and CDS spreads are higher in such times. This may explain the negative correlation between the spreads and political investments we document in this study. However, Adelino and Dinc (2013) show that economically distressed firms are not less but more likely to lobby. Figure 1 shows that in contrast to capital expenditures and R&D expenditures, political expenditures have increased during the financial crisis. Taken together, these findings suggest that the conjecture that firms spend less on political investments in bad times may not explain our results. To better address the endogeneity concerns, we use two approaches to obtain exogenous variations in political investments. First, we use a quasi-natural experiment approach centered around the McConnell v. FECsupreme court ruling. Second, we use an instrumental variable approach.

5.2.1 Quasi-natural Experiment: McConnell v. FEC

On December 10, 2003, in a surprise announcement, the Supreme Court upheld the ban on soft money contributions. We utilize the Supreme Court decision to obtain exogenous variations in political contributions (soft money contribution), and establish a causal relation between political contributions and CDS spreads. Specifically, we exploit prior firm-level differences in soft money contributions and use a difference-in-differences (DD) research design to recover the effects stemming from sharp changes in the firms' abilities to contribute politically (Roberts and Whited, 2012). The quasi-natural experiment also addresses the concerns on whether it is the money spent or ties to politicians that affect CDS spreads. Table 3 presents the results of our difference-in-difference analysis. The post period is the period after the Supreme Court decision and the interval around the event date is (+/-) 3 months. Model I shows that the coefficients on the interaction term between post dummy and soft dummy (dummy to indicate whether the firm contributed soft money in 2002) is positive and statistically significant. In Model II we use the logged value of soft money and post dummy as an alternative measure and find similar results. The evidence shows that the ban on soft money increased the CDS spreads, suggesting that soft money contributions reduce the CDS spreads of firms that contribute the money. More broadly, the results suggest that political investments reduce CDS spreads of the firms that invest in politics.

5.2.2 Instrumental Variables

In our instrumental variables approach we use the proximity of the firm's headquarters to Washington, DC and lagged value of PAC receipts as instruments. Proximity to Washington, DC affects the cost of lobbying and thus, is correlated with lobbying expenditures, but conditional on the presence of political investments and other controls employed, does not have an independent effect on CDS spreads. Lagged Value of PAC receipts (money solicited primarily from employees) affects current and subsequent political contributions, but conditional on the presence of political investments and other controls employed, does not have an independent effect on CDS spreads.

Table 4 presents the results of the instrumental variables approach. In Model I we use as IV's proximity to Washington, DC and lagged and current logged values of PAC receipts. Model I does not include fixed effects. The instruments pass the validity tests and one can reject the null that the instruments are weak. The model shows that the coefficient on political investments is negative and statistically significant at the 1% confidence level.

In Model II, we use lagged and current values of PAC receipts as instruments as we include year-quarter and firm fixed effects in the model. Again, the model shows a negative relationship between CDS spreads and political investments at the 1% confidence level.

5.3 How do Political Investments affect CDS spreads?

To examine some of the potential channels through which political investments affect CDS spreads, we run regressions of logged values of CDS spreads on the interaction of logged values of political investments with the hypothesized channel and controls.

5.3.1 Regulations

Table 5 reports the coefficient on the interaction term between political investments and firms more sensitive to regulations. We define regulated firms as belonging to industries with an SIC code of 4011, 4210, 4213, 4512, 4812, 4813, or between 4900 and 4939.

The table shows that the coefficient on the interaction term is negative and statistically significant. Overall, the results suggest that political investments are associated with a greater decrease in CDS spreads for firms more sensitive to regulations.

5.3.2 Government Contracts

Table 6 reports the coefficient on the interaction term between political investments and firms with government contracts. Model I shows that the coefficient on the interaction term between political investments and the defense industry is negative and statistically significant at the 1% level. Model II shows that the coefficient on the interaction terms between political investments and firms with government contracts is negative and statistically significant at 1% level. However, the coefficient on the interaction terms between political investments and percentage sales to government is negative but insignificant. Overall, we interpret the results as suggesting that political investments are associated with a decrease in CDS spreads for firms with government contracts. Higher government spending resulting in greater procurement contract awards to the connected firms in times of economic distress reduces the sensitivity of cash flows to economic shocks, thereby reducing CDS spreads.

5.3.3 Agency Conflicts

Table 7 reports the coefficient on the interaction term between political investments and corporate governance measures. Model I defines firms where CEO is also the chair as firms with weaker governance. The model shows that the coefficient on the interaction term between political investments and CEO is the chair dummy is positive and statistically significant. Model II defines firms with low institutional ownership as firms with weaker governance. Model III defines firms with a busy board as firms with weaker governance, and Model IV defines firms with a higher entrenchment index as firms with weaker governance. Overall, the results suggest that political investments are associated with an increase (lower decrease) in CDS spreads for firms with weaker corporate governance relative to firms with stronger corporate governance.

The results are consistent with the idea that politically connected firms extract rents from the firm, and make political investments to keep management entrenched (Bebchuk and Jackson, 2010).

6 Robustness

6.1 Corporate Governance

Aggarwal et al. (2012) argue that political investments are a manifestation of agency problems in the firm. To the extent that politically investing firms are those with governance issues, and corporate governance affects CDS spreads, our results are potentially biased. Therefore, we also include corporate governance measures in our empirical specification. We find that the results are robust to the inclusion of these measures (see Table 8).

6.2 Different Definitions of Political Investments

To ensure that the definition of political investments is not driving the results, we conduct additional tests by varying the definition of political investments. We find that the results are robust to alternative definitions of political investments (see Table 9).

6.3 Pre-Crisis vs. Crisis

To address the criticism that the choice of the sample period could be driving the results, we partition the sample into pre financial crisis period and the financial crisis period. Table 10 shows that the results are robust to the choice of the sample period. Dropping observations after the financial crisis (after 2007) does not change inferences.

7 Conclusions

This study empirically evaluates the impact of political investments on the price of credit risk. Overall, we show that firms that make political investments have lower CDS spreads. This result is robust to the inclusion of firm and time fixed-effects as well as the inclusion of controls that are known to determine CDS spreads and measures of governance quality. We also use alternative definitions of political investments and different sample periods and continue finding the main result.

We address endogeneity issues, we exploit the McConnell v. FEC Supreme Court decision of 2003 to obtain exogenous variations in political investments, and show that the ban on soft money contributions increased the CDS spreads of contributing firms. We also use an instrumental variables approach with the proximity to Washington, DC, and lagged value of PAC receipts as instruments. We find that these instruments pass the validity test and continue to find that political investments reduce CDS spreads.

We also investigate potential channels by which political investments reduce credit risk.

We find that the negative effect of political investments on CDS spreads is stronger for firms that are more sensitive to government policies (i.e., regulated firms and firms with government contracts). This evidence suggest government support in times of economic distress reduces the the default risk of politically investing firms.

Finally, we find evidence that political investments are associated with an increase in CDS spreads for firms with weaker corporate governance relative to firms with stronger corporate governance. These results are consistent with the argument that while political investments are overall beneficial to debtholders, they are relatively less beneficial in firms where such investments could be the consequence of managers enjoying private benefits of control.

References

- Adelino, M. and S. Dinc (2013). Corporate distress and lobbying evidence from the stimulus act. *Working Paper, Rutgers*.
- Aggarwal, R., F. Meschke, and T. Wang (2012). Corporate political contributions: Investment or agency? Business and Politics 14(1).
- Altman, E. I. (1968). Financial ratios, discriminant analysis and the prediction of corporate bankruptcy. *The Journal of Finance* 23(4), 589–609.
- Ansolabehere, S., J. Figueiredo, and J. Snyder (2004). Why is there so little money in u.s. politics? *Journal of Economic Perspectives* 17, 105–130.
- Ansolabehere, S., J. Snyder, and M. Ueda (2004). Did firms profit from soft money? Election Law Journal 3(2), 193–198.
- Bebchuk, L. and R. Jackson (2010). Corporate political speech: Who decides? Harvard Law Review 124, 83–117.
- Berger, P. G., E. Ofek, and D. L. Yermack (1997). Managerial entrenchment and capital structure decisions. *The Journal of Finance* 52, 1411–1438.
- Bharath, S. and T. Shumway (2008). Forecasting default with the merton distance to default model. *Review of Financial Studies* 21(3), 1339–1369.
- Blanco, R., S. Brennan, and I. W. Marsh (2005). An empirical analysis of the dynamic relation between investment-grade bonds and credit default swaps. *The Journal of Finance 60*, 2255–2281.
- Blume, M. E., F. Lim, and A. C. Mackinlay (1998). The declining credit quality of u.s. corporate debt: Myth or reality? *The Journal of Finance* 53(4), 1389–1413.
- Chava, S., K. Praveen, and W. Arthur (2010). Managerial agency and bond covenants. *Review of Financial Studies* 23, 1120 – 1148.

- Cooper, M., H. Gulen, and A. Ovtchinnikov (2010). Corporate political contributions and stock returns. *Journal of Finance* 65(2), 687–724.
- Das, S., P. Hanouna, and A. Sarin (2009). Accounting-based versus market-based cross-sectional models of cds spreads. *Journal of Banking and Finance 33*, 719730.
- Duchin, R. and D. Sosyura (2012). The politics of government investment. *Journal* of Financial Economics 106(1), 24–48.
- Duffie, D. (1999). Credit swap valuation. Financial Analysts Journal, 7387.
- Elton, E. J., M. J. Gruber, D. Agrawal, and C. Mann (2001). Explaining the rate spread on corporate bonds. *Journal of Finance 56*, 247277.
- Faccio, M. (2006). Politically connected firms. American Economic Review 96(1), 269–386.
- Faccio, M., R. Masulis, and J. McConnell (2006). Politically connections and corporate bailouts. *Journal of Finance* 61(6), 2597–2635.
- Faccio, M. and D. Parsley (2009). Sudden deaths: Taking stock of geographic ties. Journal of Financial and Qualitative Analysis 44, 683–718.
- Fisman, R. (2001). Estimating the value of political connections. American Economic Review 91(4), 1095–1102.
- Goldman, E., J. Rocholl, and J. So (2009). Do politically connected boards affect firm value? *Review of Financial Studies* 22(6), 2331–2360.
- Grossman, G. and E. Helpman (1994). Protection for sale. American Economic Review 84, 833–850.
- Grossman, G. and E. Helpman (2002). Special Interest Politics. MIT Press.
- Igan, D., P. Mishra, and T. Tressel (2010). A fistful of dollars: Lobbying and the financial crisis. *Working Paper. IMF.*.

- Jayachandran, S. (2006). The jeffords effect. Journal of Law and Economics 49(2), 397-425.
- Kostovetsky, L. (2012). Political capital and moral hazard. Working Paper. Simon School of Business, University of Rochester.
- Merton, R. C. (1974). On the pricing of corporate debt: The risk structure of interest rates. *The Journal of Finance* 29(2), 449–470.
- Morck, R., S. Lenway, and B. Yeung (1996). Rent seeking, innovation and protectionism and the american steel industry: An empirical study. *Economic Journal* 106(435), 410–421.
- Peltzman, S. (1976). Towards a more general theory of regulation. Journal of Law and Economics 19(2), 211–240.
- Roberts, M. R. and T. Whited (2012). Endogeneity in empirical corporate finance. Simon School Working Paper No. FR 11-29.
- Stigler, G. (1971). The theory of economic regulation. Bell Journal of Economics 2(1), 3–21.
- Stratmann, T. (1991). What do campaign contributions buy? deciphering causal effects of money and votes. *Southern Economic Journal* 57(2), 606–620.
- Yu, F. and X. Yu (2012). Corporate lobbying and fraud detection. Journal of Financial and Quantitative Analysis.

Figure 1: Times Trends in Political Investments, Capital Expenditure and R&D

The figure plots total political investments, capital expenditure and R&D Expenses of top 1500 firms sorted by descending order of market value of equity from 1998 to 2009. Capital expenditure and R&D expenditure declined during the crisis but political investments did not.



Table 1: Summary Statistics

The table presents the summary statistics. Our final sample consists of all publicly listed firms in COMPUSTAT/CRSP for the period 1998 to 2009 for which we have the required CDS, financial, macroeconomic and political data available. We also drop all firms with negative book value of assets and financial firms. Our final sample consists of 4,739 observations. The appendix describes the variables.

Variable	Mean	Median	St. Dev.
Log (Spread)	4.4585	4.2788	1.1268
Political Measures			
Federal Spending/Assets	0.0711	0.0401	0.0906
Political investments/Assets	0.0727	0.0406	0.0932
Log (Federal Spending)	5.5938	6.3656	2.87
Log (Political investments)	5.6267	6.4118	2.861
Accounting Measures			
Log (Book Value of Assets)	9.6193	9.574	1.0233
Leverage	0.304	0.2854	0.1455
Net worth/AT	0.3547	0.3668	0.1563
EBITDA/AT	0.0105	0.0115	0.0235
Net Income Growth	0.0003	0.0005	0.0285
Interest Coverage	5.8644	3.5581	10.145
Quick Ratio	1.0142	0.9444	0.4832
Inventory/Asset	0.1093	0.0729	0.1304
Sales Growth	0.0235	0.0174	0.1635
Cash/Assets	0.0728	0.0464	0.0762
Market-based Measures			
Market to Book	1.4935	1.2908	0.6463
3-month T-bill Return	2.0605	1.66	1.7526
S&P 500 Return	-0.0224	0.0443	0.1986
FF48 Industry Return	0.1083	0.1055	0.3818
Asset Volatility	0.3023	0.2634	0.1514
Probability of Default	0.0447	0	0.1569
Sensitivity to Government Policies			
Regulated Industry	0.1869	0	0.3899
Environmentally Sensitive Industry	0.0306	0	0.1723
Defense Industry	0.0272	0	0.1628
Government Contract dummy	0.072	0	0.2585
Sales to Government/Net Sales	0.0286	0	0.1283
~ ~ ~			
Corporate Governance		_	
CEO Chair	0.1279	0	0.334
Busy Board	0.0398	0	0.1954
Institutional Ownership	0.2399	0.2409	0.1246
Entrenchment Index	2.3981	2	1.3292

Table 2: CDS Spreads and Political investments The table reports regressions of log of CDS spread on political investments. The analysis does not include financial firms. The appendix describes the explanatory variables. Standard errors (SE) are robust SE unless specified as clustered by firm or year-quarter.

	Model I	Model II	Model III	Model IV
Log (Political investments)	-0.0304***	-0.0304**	-0.0304**	-0.0346**
	(0.00)	(0.04)	(0.04)	(0.02)
Log (Book Value of Assets)	-0.2121***	-0.2121***	-0.2121***	-0.1138
	(0.00)	(0.00)	(0.00)	(0.29)
Market to Book	-0.4924***	-0.4924***	-0.4924***	-0.3759***
	(0.00)	(0.00)	(0.00)	(0.00)
Leverage	1.5036^{***}	1.5036^{***}	1.5036***	0.5382
-	(0.00)	(0.00)	(0.00)	(0.26)
Net worth/AT	-0.5758***	-0.5758	-0.5758*	-1.4271***
,	(0.00)	(0.11)	(0.10)	(0.00)
EBITDA/AT	-8.3253***	-8.3253***	-8.3253***	-2.8388***
,	(0.00)	(0.00)	(0.00)	(0.01)
Asset Volatility	1.3839***	1.3839***	1.3839***	0.4760**
v	(0.00)	(0.00)	(0.00)	(0.02)
Probability of Default	0.8020***	0.8020***	0.8020***	0.4770***
v	(0.00)	(0.00)	(0.00)	(0.00)
Net Income Growth	1.4206***	1.4206**	1.4206	0.9651***
	(0.00)	(0.01)	(0.16)	(0.00)
Interest Coverage	0.0092***	0.0092*	0.0092**	0.0023
	(0.00)	(0.05)	(0.04)	(0.51)
Quick Ratio	-0.0835***	-0.0835	-0.0835	-0.04
	(0.01)	(0.34)	(0.34)	(0.48)
Inventory/Asset	-0.0556	-0.0556	-0.0556	-0.0374
57	(0.68)	(0.89)	(0.89)	(0.96)
Sales Growth	0.0313	0.0313	0.0313	-0.1270***
	(0.64)	(0.56)	(0.79)	(0.00)
Cash/Assets	2.3849***	2.3849***	2.3849***	-0.2502
	(0.00)	(0.00)	(0.00)	(0.57)
3-month T-bill Return	-0.0825***	-0.0825***	-0.0825***	(0.01)
	(0.00)	(0.00)	(0.00)	
S&P 500 Return	-0.3452***	-0.3452**	-0.3452	
	(0.00)	(0.03)	(0.36)	
FF48 Industry Return	-0.2705***	-0.2705***	-0.2705	-0.0952*
11 to industry tootain	(0,00)	(0,00)	(0.11)	(0.05)
Constant	6 8372***	6 8372***	6 8372***	7 0224***
Constant	(0,00)	(0,00)	(0,00)	(0,00)
Firm Fixed Effects	<u>(0.00)</u>	<u>(0.00)</u>	<u>(0.00)</u>	Ves
Year-quarter Fixed Effects	No	No	No	Ves
SE Clustered by Firm	No	Ves	Ves	No
SE Clustered by Vear-Quarter	No	No	Ves	No
N	4739	4739	4739	4739
$Adi-B^2$	0 5731	0 5731	0 5731	0 6636
1100 10	0.0101	0.0101	0.0101	0.0000

Table 3: CDS Spreads and Political investments -McConnell v. FEC, A Quasi-natural experiment

The table reports the diff-in-diff analysis of the McConnell decision. Post dummy starts from January 2004 to March 2004, and pre period is from October 2003 to December 2003. Soft is equal to 1 if the firm contributed soft money contributions in 2002, and 0 otherwise. Log (Soft Contribution) is the logged value of 1 plus soft money contributions in 2002. The analysis does not include financial firms, and the appendix describes the explanatory variables. Standard errors (SE) are robust SE.

	Model I	Model II
Soft x Post	0.0549***	
	(0.01)	
Log (Soft Contribution) x Post		0.0122^{***}
		(0.00)
Constant	4.0200^{***}	4.1219^{***}
	(0.00)	(0.00)
Firm Fixed Effects	Yes	Yes
Year-month Fixed Effects	Yes	Yes
Ν	1134	1134
Adj - R^2	0.117	0.1177

Table 4: CDS Spreads and Political investments -IV Estimation

The table reports instrumental variable (IV) regressions of logged values of CDS spread on political investments. The instruments are logged values of PAC receipts in the prior year and closeness to Washington DC. The analysis does not include financial firms, and the appendix describes the explanatory variables. Model I reports pooled OLS regression results. Model II controls for firm fixed effects and calendar year-quarter fixed effects. Standard errors (SE) are robust SE.

	Model I	Model II
Log (Political investments)	-0.0421***	-0.1811***
	(0.00)	(0.00)
Log (Book Value of Assets)	-0.1774^{***}	-0.0744
	(0.00)	(0.11)
Market to Book	-0.4889***	-0.3644***
	(0.00)	(0.00)
Leverage	1.4433***	0.3749^{*}
	(0.00)	(0.09)
Net worth/AT	-0.5799^{***}	-1.4819***
	(0.00)	(0.00)
EBITDA/AT	-7.9361***	-3.1256^{***}
	(0.00)	(0.00)
Asset Volatility	1.3604***	0.4355***
	(0.00)	(0.00)
Probability of Default	0.7813***	0.5038***
-	(0.00)	-0.0001
Net Income Growth	1.5161**	1.0545^{***}
	(0.01)	(0.00)
Interest Coverage	0.0073***	0.00
	(0.00)	(0.17)
Quick Ratio	-0.0879***	-0.0057
-	(0.01)	(0.87)
Inventory/Asset	-0.0529	0.0253
	(0.71)	(0.95)
Sales Growth	0.0078	-0.1337***
	(0.91)	(0.00)
Cash/Assets	2.5879^{***}	-0.331
	(0.00)	(0.18)
FF48 Industry Return	-0.2458***	-0.1277***
	(0.00)	(0.00)
Constant	6.5839***	6.1272***
	(0.00)	0.00
Firm Fixed Effects	No	Yes
Year-quarter Fixed Effects	No	Yes
N	4517	4711
$\operatorname{Adj-}R^2$	0.5668	0.8582
Test for instrument validity		
Kleibergen-Paap LM	664.5917	79.8948
P-value	(0.00)	(0.00)
Hansen Stats	2.3829	0.5668
P-value	(0.12)	(0.45)
Shea Partial R^2	0.2237	0.0291
Kleibergen-Paap Wald	442.2562	43.4155
P-value	(0.00)	(0.00)
	\ /	<u>\/</u>

Table 5: Regulations

The table examines the channels through which political investments affects CDS Spreads. Specifically, the table reports the coefficient on the interaction term between political investments and sensitivity to regulations. The dependent variable is logged values of CDS Spreads, and the appendix describes the explanatory variables. The model controls for firm fixed effects and calendar year quarter fixed effects. Standard errors (SE) are robust SE.

	Model
Log (Political investments)	-0.0252***
	(0.00)
Regulated Industry x Log (Political investments)	-0.0548^{***}
	(0.01)
Constant	6.0698^{***}
	(0.00)
Firm Level Controls	Yes
Firm Fixed Effects	Yes
Year-quarter Fixed Effects	Yes
N	4739
$\operatorname{Adj-}R^2$	0.8724

Table 6: Government Contracts The table examines the channels through which political investments affects CDS Spreads. Specifically, the table reports the coefficient on the interaction term between political investments and defense industry, that on the interaction term between political investments and government contractor dummy, and that on the interaction term between political investments and fraction of sales to government. The dependent variable is logged values of CDS Spreads, and the appendix describes the explanatory variables. Model I, II, and III control for firm fixed effects and calendar year quarter fixed effects. Standard errors (SE) are robust SE.

.....

.

.

	Model I	Model II	Model III
Log (Political investments)	-0.0346***	-0.0341***	-0.0347***
	(0.00)	(0.00)	(0.00)
Defense industry	2.1139^{***}		
	(0.00)		
Defense industry x Log (Political investments)	-0.4162^{***}		
	(0.00)		
Government Contract dummy		0.5066^{**}	
		(0.01)	
Government Contract dummy x Log (Political investments)		-0.0751^{***}	
		(0.01)	
Sales to Government/Net Sales			-0.2678
			(0.74)
Sales to Government/Net Sales x Log (Political investments)			-0.0124
			(0.90)
Constant	6.5106^{***}	6.0725^{***}	6.0609^{***}
	(0.00)	(0.00)	(0.00)
Firm Level Controls	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes
Year-quarter Fixed Effects	Yes	Yes	Yes
N	4739	4739	4739
Adj - R^2	0.8714	0.8714	0.8715

Table 7: Agency Costs

The table examines the channels through which political investments affects CDS Spreads. Specifically, the table reports the coefficient on the interaction of political investments and measures of corporate governance. The dependent variable is logged values of CDS Spreads, and the appendix describes the explanatory variables. The models control for firm fixed effects and calendar year quarter fixed effects. Standard errors (SE) are robust SE.

	Model I	Model II	Model III	Model IV
Log (Political investments)	-0.0435***	-0.0402***	-0.0366***	-0.0686***
	(0.00)	(0.00)	(0.00)	(0.00)
CEO is Chair	-0.4268^{***}			
	(0.00)			
CEO is Chair x Log (Political investments)	0.0687***			
	(0.00)			
Low Institutional Ownership		-0.1091*		
-		(0.06)		
Low Institutional Ownership x Log (Political investments)		0.0206**		
		(0.02)		
Busy Board			-0.5733***	
			(0.00)	
Busy Board x Log (Political investments)			0.0588^{**}	
			(0.03)	
E Index				-0.0128
				(0.80)
E Index x Log (Political investments)				0.0143**
				(0.02)
Constant	6.2498^{***}	5.9647^{***}	6.1670^{***}	7.7710***
	(0.00)	(0.00)	(0.00)	(0.00)
Firm Level Controls	Yes	Yes	Yes	Yes
Firm Fixed Effects	Yes	Yes	Yes	Yes
Year-quarter Fixed Effects	Yes	Yes	Yes	Yes
N	3936	4739	3936	3992
Adj - R^2	0.8566	0.8714	0.8556	0.8708

Table 8: Robustness: Controlling for Corporate GovernanceThe table examines whether the regression of log of CDS spread on political investments (Table 3) is robust to the inclusion of corporate governance measures. The analysis does not include financial firms. The dependent variable is logged values of CDS Spreads, and the appendix describes the explanatory variables. The models control for firm fixed effects and calendar year quarter fixed effects. Standard errors (SE) are robust SE.

	Model I	Model II	Model III	Model IV
Log (Political investments)	-0.0341***	-0.0313***	-0.0333***	-0.0340***
	(0.00)	(0.00)	(0.00)	(0.00)
Log (Book Value of Assets)	-0.1677***	-0.1370**	-0.1304**	-0.0991**
	(0.00)	(0.01)	(0.02)	(0.03)
Market to Book	-0.4145***	-0.4620***	-0.4621***	-0.3610***
	(0.00)	(0.00)	(0.00)	(0.00)
Leverage	0.2947	0.1489	0.152	0.5217^{**}
	(0.23)	(0.54)	(0.53)	(0.02)
Net worth/AT	-1.5361^{***}	-1.5274^{***}	-1.5076^{***}	-1.3933^{***}
	(0.00)	(0.00)	(0.00)	(0.00)
EBITDA/AT	-2.3039***	-2.2624^{***}	-2.2937***	-2.6527^{***}
	(0.00)	(0.00)	(0.00)	(0.00)
Asset Volatility	0.5230^{***}	0.5455^{***}	0.5140^{***}	0.4971^{***}
	(0.00)	(0.00)	(0.00)	(0.00)
Probability of Default	0.4317^{***}	0.4354^{***}	0.4284^{***}	0.4864^{***}
	(0.00)	(0.00)	(0.00)	(0.00)
Net Income Growth	0.8923^{***}	0.9621^{***}	0.9243^{***}	0.9232^{***}
	(0.01)	(0.01)	(0.01)	(0.00)
Interest Coverage	0.0013	0.0011	0.0015	0.0022
	(0.44)	(0.56)	(0.41)	(0.20)
Quick Ratio	-0.0405	-0.028	-0.0301	-0.0458
	(0.29)	(0.47)	(0.43)	(0.18)
Inventory/Asset	0.8504^{**}	1.2350^{***}	1.3397^{***}	-0.0693
	(0.03)	(0.00)	(0.00)	(0.88)
Sales Growth	-0.1410***	-0.1447^{***}	-0.1474^{***}	-0.1285^{***}
	(0.00)	(0.00)	(0.00)	(0.00)
Cash/Assets	0.0726	0.0847	0.1565	-0.2224
	(0.77)	(0.74)	(0.54)	(0.36)
FF48 Industry Return	-0.0728^{**}	-0.0731**	-0.0780**	-0.0898***
	(0.04)	(0.04)	(0.03)	(0.01)
E-Index	0.0866^{***}			
	(0.00)			
CEO chair		0.0266		
		(0.39)		
Busy Board			-0.1751^{***}	
			(0.00)	
Institutional Ownership				0.6027^{***}
				(0.00)
Constant	6.4842^{***}	6.2166^{***}	6.1245^{***}	5.7162^{***}
	(0.00)	(0.00)	(0.00)	(0.00)
Firm Fixed Effects	Yes	Yes	Yes	Yes
Year-quarter Fixed Effects	Yes	Yes	Yes	Yes
N	3992	3936	3936	4739
$\operatorname{Adj} R^2$	0.8706	0.8545	0.8553	0.8721

(SE) are robust SE.									
	Model I	Model II	Model III	Model IV	Model V	Model VI	Model VII	Model VIII	
Political investments/Assets	-1.0290^{***} (0.00)								
Log (Political investments)	~	-0.0349^{***} (0.00)							
Federal Spending/Assets		~	-0.9990^{***}						
Log (Federal Spending)			~	-0.0326^{***} (0.00)					
Political Contribution/Assets				~	-8.9832^{***} (0.00)				
Federal Contribution/Assets					~	-6.7838^{***} (0.00)			
Log (Political Contribution)						~	-0.0542^{***} (0.00)		
Log (Federal Contribution)							~	-0.0435^{***} (0.00)	
Firm Level Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Firm Fixed Effects	\mathbf{Yes}	$\mathbf{Y}_{\mathbf{es}}$	\mathbf{Yes}	$\mathbf{Y}_{\mathbf{es}}$	\mathbf{Yes}	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$	Yes	
Year-quarter Fixed Effects	\mathbf{Yes}	Yes	\mathbf{Yes}	$\mathbf{Y}_{\mathbf{es}}$	\mathbf{Yes}	$\mathbf{Y}_{\mathbf{es}}$	$\mathbf{Y}_{\mathbf{es}}$	Yes	
N	4739	4739	4739	4739	4739	4739	4731	4731	
$\operatorname{Adj-}R^2$	0.8727	0.8722	0.8726	0.8721	0.8728	0.872	0.8723	0.8718	

Table9:Robustness:PoliticalInvestmentsMeasures ThetableexamineswhethertheregressionoflogofCDSspreadonpoliticalinvestmentsisrobusttothedefinitionofpolitical investments. The analysis does not include financial firms. The dependent variable is logged values of CDS Spreads, and the appendix describes the explanatory variables. All the models control for firm fixed effects, and calendar year quarter fixed effects. Standard

errors

Table 10: Robustness: Sample Period

The table examines whether the regression of log of CDS spread on political investments is robust to the choice of sample period. In these tests, we drop all the data after 2007. The analysis does not include financial firms. The dependent variable is logged values of CDS Spreads, and the main explanatory variables are logged values of political investments (model I) and political investments scaled by book value of assets (model II). The appendix describes the explanatory variables. Standard errors (SE) are robust SE.

	Model I	Model II
Log (Political investments)	-0.0462**	
	(0.02)	
Political investments/Assets		-1.1677^{**}
		(0.03)
Log (Book Value of Assets)	-0.3485^{***}	-0.3943***
	(0.00)	(0.00)
Market to Book	-0.4342***	-0.4157^{***}
	(0.00)	(0.00)
Leverage	0.5784	0.5862
	(0.32)	(0.30)
Net worth/AT	-1.4496^{**}	-1.4211^{**}
	(0.02)	(0.02)
EBITDA/AT	-3.3957*	-3.4408^{*}
	(0.06)	(0.06)
Asset Volatility	0.3653	0.3911
	(0.21)	(0.19)
Probability of Default	1.3947^{***}	1.3124^{***}
	(0.00)	(0.00)
Net Income Growth	0.4431	0.455
	(0.47)	(0.45)
Interest Coverage	0.0046	0.0045
-	(0.31)	(0.35)
Quick Ratio	0.0114	-0.0037
	(0.90)	(0.97)
Inventory/Asset	-1.0309	-1.0263
	(0.31)	(0.30)
Sales Growth	-0.0512	-0.049
	(0.27)	(0.29)
Cash/Assets	-1.2140**	-1.1301**
	(0.04)	(0.05)
FF48 Industry Return	-0.0916	-0.0983
~	(0.21)	(0.18)
Constant	9.4571***	9.6852***
	(0.00)	(0.00)
Firm Fixed Effects	Yes	Yes
Year-quarter Fixed Effects	Yes	Yes
N	2648	2648
$\operatorname{Adj-}R^2$	0.5479	0.547
-		

Appendix

Variable	Definitions
Political investments/AT	Federal campaign contributions plus Lobbying plus Contributions to 527s di- vided by book value of assets
Federal Spending/AT	Federal campaign contributions plus Lobbying divided by book value of assets
Log (Political investments)	Log (1+Federal campaign contributions plus Lobbying plus Contributions to $527s$)
Log (Federal Spending)	Log (1+Federal campaign contributions plus Lobbying)
Political Contribution/AT	Federal campaign contributions plus Contributions to 527s divided by book value of assets
Federal Contribution/AT	Federal campaign contributions divided by book value of assets
Log (Political Contribution)	Log (1+Federal campaign contributions plus Contributions to 527s)
Log (Federal Contribution)	Log (1+Federal campaign contributions)
Log (Book Value of Assets)	Log of book value of assets
Market to Book	Market value of Assets scaled by book value of assets
Leverage	Short term Debt plus Long term Debt scaled by book value of assets
Net worth/AT	Net worth of the company scaled by book value of assets
EBITDA/AT	Income before extraordinary item scaled by book value of assets
Asset Volatility	Asset Volatility from KMV model (Bharath and Shumway, 2008)
Probability of Default	Probability of default from Bharath and Shumway (2008)
Net Income Growth	Net income minus the previous quarters net income divided by total assets
Interest Coverage	Pretax income plus interest expense divided by interest expense
Quick Ratio	Current assets minus inventories over current liabilities
Inventory/Asset	Inventories divided by Assets
Sales Growth	Sales divided by the previous quarter sales minus one
Cash/Assets	Cash and equivalents scaled by book value of assets
3-month T-bill Return	3-month treasury rate
S&P 500 Return	Prior year (trailing 12-month) return on the S&P 500
FF48 Industry Return	Prior year return on the Fama and French 48 industry group
Closeness to Washington DC	1/ Distance of the firm's headquarter from Washington DC
PAC Receipts	Amount raised by the firms' PAC
Distance to Washington DC	Distance of the firm's headquarter from Washington DC
Regulated Industry	Sich eq 4011 or sich eq 4210 or sich eq 4213 or sich eq 4512 or sich eq 4812 or sich eq 4813 or (sich ge 4900 and sich le 4939)
Environmentally Sensitive Industry	Environmentally Sensitive Industries as in Hong and Kostovetsky (2010)
Defense Industry	Firms in the defense industry
Government contract dummy	If government is one of the top 5 customer of the firm
Sales to government/Net Sales	Equal to Sales to government divided by Net Sales for firms having government as one of the top 5 customers, or 0 otherwise
Governance index (E-Index)	Entrenchment index
CEO is Chair	Dummy to indicate whether CEO is also the chairman of the board
Institutional Ownership	Percentage Ownership by the top 5 institutional investors in the company
Low Institutional Ownership	If ownership by the top 5 institutional investors in the company is in the bottom quartile of the pooled sample
Busy Board	Dummy to indicate whether 50% or more of the independent board members hold 3 or more board seats