

ESSAYS ON POLITICALLY CONNECTED FIRMS

by

Yi Duo

B.S. in Business Administration, American University, Washington, DC, 2010

M.S. in Accounting, American University, Washington, DC, 2011

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Abstract

This thesis explores a number of issues related to politically connected firms in two separate chapters. I follow Goldman et al. (2009), defining politically connected firms as those with at least one former politician serving as member of its board of directors, and construct a sample containing the S&P 500 firms between 2004 and 2013. The first chapter explores why firms seek these political connections, and how they benefit from two direct value extraction channels: government procurement and subsidies. I find that firms that aim for government contracts seek executive branch connections, while those that face heavy regulations target congressional connections. Next, I show that politically connected firms do get more government contracts and subsidies. Firm performance (using accounting based measures) suffers with government contracts and subsidies, and political connections fail to increase or decrease this negative relation, which suggests effective safeguards against overpricing and cronyism. However, politically connected firms do seem to enjoy a temporary increase in future ROA, when government contracts are taken into consideration. The second chapter asks if politically connected firms pay higher audit fees, and explores the underlying reasons. Prior studies have mixed implications on how risky these clients are for auditors. On the one hand, some studies suggest politically connected firms have lower accounting quality and face higher political risk, hence incur higher audit fees. On the other hand, less investor pressure and lower litigation and bankruptcy risks would decrease audit fees for firms with political connections. I find that politically connected firms do pay higher audit fees, and the effect is stronger for those with executive branch connections. Neither lower accounting quality nor higher political risk is found to be the underlying reason. The fact that many politically connected firms are government contractors, who are subject to additional regulations and government audit, is found to be the main factor for this difference in audit fee.

Lay Summary

This thesis examines how corporate political connections in the United States are associated with firms' business operations and audit fees, and how they differ from those of their peers. I find that if the goal is to obtain government contracts, firms seek connections to the executive branch; if the goal is to manage and to influence regulations, they seek connections to the legislative branch. Politically connected firms do receive more government contracts and subsidies. After taking the negative effect of government contracts on accounting performance into consideration, politically connected firms enjoy temporarily higher future profits. Meanwhile, auditors charge higher fees to audit politically connected firms. This increase in audit fees is likely a result of these firms' involvement in government contracts, which is subject to increased audit risks due to additional regulations and government audit.

Preface

My committee members provided helpful discussions on prior and existing research in various fields. Both chapters are my own work.

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Introduction

Why do firms seek political connections? How do connections affect firms and other stakeholders? This thesis examines multiple research questions regarding politically connected firms in the United States in separate chapters. There are various ways of measuring and identifying political connections in the United States: lobbying expenses (Hill et al., 2014), corporate political campaign contributions (Claessens et al., 2008), politician equity ownership (Baloria, 2014; Tahoun, 2014), and former politicians as board members (Goldman et al., 2009). There are advantages and disadvantages to each measure. Although former politicians on the board are not as influential as sitting public servants, I choose the politically connected board of director because it is easily identified¹ and this relationship is clearly bilateral – not only does a firm want to establish connections, but also the former politician is willing to be on the board.

In the first chapter, I examine whether firms seek political connections according to their specific needs. Two possible reasons are identified: obtaining government contracts, and managing regulatory risk. If obtaining government contract is the goal, firms should target connections to the executive branch; if influencing regulation and law making is the goal, then firms should seek connections to the legislative branch. Next, I hypothesize two channels where a politically connected board can contribute to a firm's operation, namely government contracts and subsidies. I find that politically connected firms do receive more government contracts and subsidies, and establish a directional link between political connections and government contracts. At the end of the first chapter, I analyze current and future accounting performances of politically connected firms, especially in the presence of government contracts and subsidies. The results suggest that

¹ Available from public proxy statement filings from the Securities and Exchange Commission, almost annually.

politically connected firms have some temporary advantage in future accounting performance, in the presence of government contracts.

In the second chapter, I examine a two-part research question: do politically connected firms pay higher or lower audit fees, and why? Existing literature on political connections is not clear as to which direction the relation between political connections and audit fees will go. Some researchers find politically connected firms have lower financial reporting quality (Chaney et al., 2011) and are more aggressive in their accounting (Baloria, 2014; Kim and Zhang, 2016). In this case, auditors should charge higher audit fees because of higher risk. On the other hand, other researchers find politically connected firms face less pressure from shareholders (Cooper et al., 2010; Goldman et al., 2009), creditors (Houston et al., 2014), and regulators (Correia, 2014); all these factors help decrease audit risk, thus lowering audit fees. Empirical results indicate that politically connected firms do have higher audit fees, suggesting an increase in audit risk. However, upon closer investigation, lower accounting quality suggested by prior literature does not seem to be the reason behind this difference in audit fees. Neither does political risk (political and policy uncertainty) seem to be the reason. Instead, my findings suggest government contract involvement of politically connected firms is the main driver behind the higher audit fees. Government contractors are subject to additional regulations like Federal Acquisition Regulation (FAR) aside from Generally Accepted Accounting Principles (GAAP). Pressure from politically connected board members to protect their reputation and the possibility of government audits both increase audit risk for external auditors. Hence, politically connected firms pay higher audit fees.

This thesis sheds light on the existence and effects of corporate political connections in the United States. By hiring former politicians, firms are actively adapting and influencing the competitive environment in which they operate. The results do not support the assertion that

political connections are associated with collusion and nefarious motives. It is definitely not suggesting that the current system is perfect. However, it reminds us to stay hopeful that, with checks and balances, the system can perform as intended and safeguard against corruption and collusion.

Chapter 1: Political Connections, Government Procurements, and Subsidies

1.1 Introduction

Every election brings an end to the public service career of many government officials. Where do these former politicians go after public office? According to the findings of Palmer and Schneer (2015), approximately half of former congressional members will get a seat on the board of at least one publically traded firm. As the authors point out, a board directorship “allows a public servant to cash out on political connections and credentials” through helping their companies “enter the political arena, navigate regulations and bureaucracies, and improve governmental relations and engagement”.

But do firms target political connections specifically according to their own needs or seek whatever connections that are available? Are these connections effective in their intended purposes and do they ultimately contribute to firm value? This paper seeks to shed light on these questions. First, I identify two main reasons why firms want to be politically connected: obtaining government contracts and managing regulations. To obtain government contracts, connections to the executive branch of government is vital, as government agencies, like the Department of Defense, Department of Energy, and Department of Health and Human Services, award the most in government procurement to outside contractors. Meanwhile, the US Constitution grants Congress the authority to make laws. Firms that intend to manage regulations and exert influence in changes of laws, which is identified by how much they lobby, should look for political connections with legislative branch experience.

Next, to assess whether political connections are effective for their intended purposes, I identify two channels to which these connections can contribute: government contracts and subsidies. The first channel is a directly observable result of an intended purpose mentioned

above. Government procurement is an important source of revenue for many public firms. For example, big contractors like Boeing Co. and Lockheed Martin Corp. received \$4.68 and \$13.5 billion in total awarded obligation respectively during the 2013 Federal Fiscal Year². These two companies' annual revenues were \$86.82 and \$45.36 billion for fiscal year 2013, respectively. This means government procurements account for roughly 5% and 30% of their annual revenue. To win the bids of these procurements, firms need to go through the bidding process, be aware of government product standards, navigate bureaucracies, and comply with expense disclosure and reporting requirements of government contractors. Having political connections helps in gaining an information advantage in all of these aspects, and even possibly discovering potential bidding opportunities before they are publically announced.

The second channel, government subsidy, is an indirect result of managing regulation but also affects firm value. Not all regulation changes result in subsidies, but subsidies are proposed and written into laws by Congress, typically to relieve economic burden or to promote economic vitality. Subsidies are commonly given in the form of tax credits, government loans, and government grants, which lower firms' taxes as well as operating expenses. In their research, Duchin and Sosyura (2012) find politically connected firms are more likely to be funded under the Troubled Asset Relief Program (TARP), which can be seen as a government subsidies to those with "toxic assets" during the subprime mortgage crisis. According to Mattera and Tarczyska (2015), firms like Goldman Sachs, JPMorgan Chase, Dow Chemical, NRG Energy, Sempra Energy, Solar City, and United Technologies are among the top recipients of state and federal subsidies. These firms are in highly regulated industries, where political connections can

² Information from <http://www.insidegov.com/>

help them weather the political landscape and government policies, and hopefully promote law changes that affect competition and the vitality of the industry.

A major concern among economists is that government procurements and subsidies are assigned inefficiently, and collusion between politicians and corporations will make it worse. In that case, having political connections effectively turns these two channels into ways of extracting public funds for private gains. Recent research from other countries like China (Li et al., 2008) , Korea (Schoenherr, 2015), and Malaysia (Johnson and Mitton, 2003) provides empirical evidence that such cases exist, and that the economic magnitude, at least in government procurement rent, is significant. According to Schoenherr (2015), the inefficiency in government contract allocations result in a cost of 0.21-0.32% of the Korean annual GDP. However, most of these countries are known for being relation-focused and their legal systems are not considered the most stringent. For politicians in the United States, the collusion may not be as easy as one thinks, when both firms and politicians are facing public scrutiny and risking reputations and litigations.

In this paper, using a detailed hand collected sample of the S&P 500 firms' politically connected board information between 2004 and 2013, I find that firms do seek political connections according to specific needs. They establish connections with former executive branch politicians if obtaining government contracts is the goal, measured as the ratio of government contracts to annual sales. When regulatory risk management is the goal, measured using the ratio of lobbying expense to annual sales, firms hire former congressional members as directors.

Next, I explore whether there are differences in the amount of government contracts and government subsidies that politically connected firms receive compared to their non-connected

peers. As expected, politically connected firms do receive more in government contracts; they also have more access to total subsidies in general. However, political connections do not seem to help firms to receive more government loans nor tax credits.

To address endogeneity, I explore the difference in importance of Democratic and Republican political connections pre- and post- the 2006 midterm election and 2008 Presidential election. In the 2006 midterm election, the Republican Party lost their majority to the Democratic Party in both houses of Congress. Nevertheless, the White House was still under Republican President George W. Bush. If indeed executive branch connections are more important for procurement allocation, there should not be a significant change in the influence of Democratic connections to the executive branch. In the 2008 Presidential election, the Democratic Party took over the White House while maintaining their majority in both houses of Congress. With all major government agencies and departments changing leadership, government procurement influence of the Democratic connection should increase post-2008 election. The result suggests that, indeed, the winning party connections (those with the Democratic Party) are more important in obtaining government procurement only after the Presidential election, rather than the midterm election. These findings indicate that political connections do increase the government contracts that firms obtain. I also use the election setting to test the impact of political connections on government subsidies, but there is little evidence found in both elections.

In the end, current and future accounting performance are analyzed. Though political connections may help firms to obtain these benefits from the public sector, they do not necessarily translate into higher profitability. I find that politically connected firms do not enjoy any particular advantage in general. Meanwhile, the two value extraction channels, government contracts and subsidies, are negatively associated with firm performance. However, when

government contracts are taken into consideration, politically connected firms are found to have higher return on assets 3 and 4 years in the future. This finding is interesting as it is consistent with the assertion that government contractors benefit from investments made to enable production to satisfy procurement contracts turning into productive assets in the future.

This paper contributes to the literature in a number of ways. To begin with, this paper is the first to show that firms indeed seek different political connections for different purposes. Prior research does not detail the backgrounds of the politically connected board members that this paper uncovers. This study enables us to see that firms do indeed target specific political connections for their own needs.

Second, instead of a positive association, by exploiting the difference between 2006 midterm and 2008 presidential elections, this paper links political connections with increased government procurements. Being politically connected to a winning party does increase the amount of government contracts that a firm obtains after the 2008 presidential election, when the heads of major departments and government agencies were replaced. However, the same cannot be said for the 2006 midterm election, because government procurement processes are mostly controlled by the executive branch and their agencies, not Congress.

Last but not least, this paper casts a different light on the profitability impact of having political connections. While prior research in many other countries indicates that government contracts and subsidies are ways to extract political rents from the public sector to the private sector, my findings suggest this may not apply to cases in the United States. Although care should be taken in extrapolating to other jurisdictions, these results caution us against holding a negative bias towards the role of political connections in all countries.

The rest of this chapter is organized in the following way: I review the existing related literature and develop my hypotheses in Section 1.2; Section 1.3 is on research design; sample selection and data are described in Section 1.4; Section 1.5 provides test results and interpretation; and Section 1.6 ends the paper with a brief conclusion.

1.2 Literature review and hypotheses development

A growing number of papers discuss the economic effects of political connections. Shaffer (1995) summarizes that corporate political activities, such as seeking and establishing political connections, is a firm's response to how public policies and regulations affect the competitive environment of the firm. Meanwhile, in Faccio (2006), perhaps one of the most cited papers on corporate political connections, the author points out the clustering of politically connected firms in more corrupted countries where political and economic rents can be easily extracted. Using the same sample, follow-up papers find that politically connected firms are more likely to be bailed out during financial hardship (Faccio et al., 2006), have higher leverage (Faccio, 2010), and lower financial information quality (Chaney et al., 2011). But cross-country studies have been criticized by many, as the lack of control for country-specific effects may drive the results.

Some researchers do a more in-depth analysis on a specific country, where legal institution and political environment are relatively homogenous. Most of these studies have been done on developing countries, where rent is easily extracted through corruption and cronyism. For example, Fishman (2001) estimates the value of political connection in Indonesia. Johnson and Mitton (2003) find that it pays off to have political connections in Malaysia, especially in the aftermath of the Asian financial crisis. Brazilian firms who contribute to important elections are shown in Claessens et al. (2008) to have better access to financing through banks.

Recently, more researchers have turned their interests to functioning democracies like the United States, where the benefits of political connections may be more ambiguous, and arguably more interesting. Cooper et al. (2010) find firms that contribute to U.S. political campaigns have higher future stock returns. Goldman et al. (2009) find that politically connected boards are associated with positive returns. Duchin and Sosyura, (2012) show that when applying for TARP, politically connected firms are more likely to be funded, consistent with the story in Faccio et al. (2006). Following Faccio (2010)'s idea of easy access to credit, Houston et al. (2014) also find the cost of bank loans is lower for politically connected firms in the United States, and identify this as a possible value extraction channel. Nevertheless, there is a lack of systematic research in the composition of politically connected boards and how else a politically connected board may contribute to firm value.

But perhaps the research most relevant to this paper is Goldman et al. (2013). In their paper, the authors take advantage of the change in control of both houses of the US Congress from the Democratic Party to the Republican Party following the 1994 midterm election in the United States, and find that firms with winning (losing) party connections experienced an increase (decrease) in government procurement contracts. Yet, there are concerns with their setting and research design.

I argue that instead of midterm elections, Presidential elections, which can change the executive branch leadership, should be the one that matters. Although the legislative branch controls the overall budget, it does not control the procurement allocation process. Interestingly, the sample period of Goldman et al. (2013) falls in a period where executive branch leadership change took place (i.e. the 1992 Presidential election) and then significant budgetary changes happened (i.e. after the 1994 midterm election). As shown in Figure 1.1, after the 1994 midterm

election, the federal government's discretionary spending³ was dramatically decreased. The authors use a stationary connection identifier in 1994 as independent variable, and the 4-year difference before and after the 1994 election in government contracts as the dependent variable (i.e. sum of contract value from 1995 to 1998 minus sum of contract value from 1990 to 1993). This sample period and research design may have had unintended consequence on reliability of the empirical finding. Overall, I believe the authors looked at the wrong election.

In this paper, I argue that the majority of government procurement allocations are not directly controlled by the US Congress. Instead, connections to the executive branch are more important in obtaining government contracts. The US Constitution sets up a system where the legislative branch can constrain the executive branch through legislations and budget appropriations. Yet the majority of the appropriations are actually spent by the executive branch through different government agencies. Government agencies, like the Department of Defense, Department of Education, Department of Health and Human Services, are essential parts of the executive branch, and enjoy freedom and authority to designate specific contractors and specify contract requirements. As a result, if firms want to obtain government contracts, they should seek executive branch connections. I use the weight of government contracts in a firm's revenue to proxy for its need to obtain government contracts.

At the same time, corporations are not only competing for government contracts. Government legislation means that, for some firms, political and regulatory risks run high in their operation. Managing legislative risk is then crucial to the vitality – even the existence – of the industry. In this case I assume that firms facing high regulatory risk spend more in lobbying

³ Discretionary spending is where government procurement dollars mostly come from. It includes various spending items like national defense, education, transportation, etc.

in hopes of managing regulatory environment and policy issues that the firms are interested in. These firms with a need to manage regulatory risk will seek related political connections in order to exert their influence in law-making, such that they are granted favorable treatment.

Hypothesis 1.1 *When obtaining government contracts is the goal, a firm seeks executive branch political connection; when managing regulatory risk is the goal, a firm seeks legislative branch political connection.*

Next, I identify two possible channels through which political connections can exert influence to contribute to firm value: government contracts and subsidies. As mentioned, obtaining government contracts is a direct result of the first part of Hypothesis 1. Because government contracts are part of revenues, this is also a straight-forward channel through which political connections can contribute to firm value. Receiving government subsidies is an indirect benefit from managing regulatory risk. However, not all regulatory changes are about subsidies. Subsidies are authorized by Congress, and their funding comes from the annual budgets, which is also controlled by the legislative branch. For example, right after the recession of 2010, lawmakers looked for ways to cut the budget. The 2012 fiscal year budget proposed a 22% cut to farm subsidies, including \$5 billion direct payment program to farmers, whereas Congress allowed the Deepwater Royalty Waiver Program to stay, permitting oil companies to drill on Federal property without paying royalties. It is easy to see that these subsidies help improve firms' bottom lines by directly paying in, or lowering operation expenses.

The first set of tests examines the link between political connections and these two channels. Because government contracts and subsidies contribute positively to profits, the

relation between political connections and these two channels should also be positive. As a result, I phrase the second hypothesis as followed.

Hypothesis 1.2 *Firms with political connections receive more government contracts compared with their non-connected peers; they also receive more government subsidies compared with their non-connected peers.*

In order to address endogeneity, I employ a different set of tests. If Hypothesis 1 is true, that firms seek specific types of political connections according to their needs, then the connection's power to influence target benefits should be affected only after political control changes in the target government branch. This means, post-2006 midterm election, when the control of both houses of the US Congress changed from the Republican Party to the Democratic Party, the ability of Democratic connections to influence subsidies should have increased as their influence in legislation increased. Yet the executive branch did not change leadership, so we should not expect a significant change in political connections' influence on government contracts regardless of which party firms are connected to.

A change in executive branch leadership can lead to a change in the effectiveness of political connections in obtaining information advantage. After the 2008 presidential election, leadership of the executive branch changed hands. This means that Democratic connections can exert more influence in government procurement allocations, as the executive branch has autonomy in deciding the specifics of the government contracts they award – project requirements, project size, and how a bid should be structured. Although a large proportion of government contracts are multi-year, new contracts are more likely to be granted to firms that have a closer connection to the current administration. Firms may also seek to establish new

political connections with the winning party who controls the executive branch. In summary, this means that when there is a change in control of the White House, it should have a pronounced impact on the government procurement allocation from the winning political party's connections.

It is worth noting that the argument above does not imply that, following a change in political control, Congress has no impact on the amount of government contracts that firms can obtain. After all, Congress controls the total government spending through their authority to adjust the budget and appropriations. Nevertheless, it is after an executive branch leadership change that the ability of the winning party's connections in obtaining government contracts changes. In this case, a differentiation between the midterm election and presidential election is useful, and the 2006, 2008 elections are settings to test the aforementioned theory.

The third hypothesis examines the profitability difference between politically connected firms and their non-connected counterparts. This problem is particularly interesting. Firstly, politically connected firms should enjoy higher profitability than non-connected firms, if simply having political connections is valuable as former politicians provide their seals of approval as reputation guarantee. Secondly, if government contracts and subsidies are means to extract political rent, then higher profitability should be associated with these two channels. In that case, as political connections are able to improve bottom lines through these two channels, firms with political connections who are receiving government contracts or subsidies should see an additional advantage in profit. Profitability of government contracts is a direct channel to increase firm value. Prior literature has found some theoretical as well as empirical evidence, from countries like China, Malaysia, and Korea, that government contracts are highly profitable to firms with cost shifting, and are considered *quid pro quo* between politicians and corporations (McGowan and Vendrzyk, 2002; Li et al., 2008; Hung et al., 2012; Schoenherr, 2015). Both

reasons can help us better understand why the market values political connections, as documented by studies like Cooper et al., (2010) and Goldman et al. (2009). I thus state the third hypothesis accordingly.

Hypothesis 1.3 *Politically connected firms have better accounting performance than their non-connected counterparts.*

On the other hand, if government contracts and subsidies are handed to firms with lower profitability to begin with, as subsidies in particular are intended for, even when political connections help to secure these government benefits, profitability will not be higher. To address this issue, firms that receive at least one form of these government benefits should be compared. In this case, there should be a negative correlation between profitability and these government benefits, and profitability's association to political connection is unknown.

1.3 Research design

1.3.1 Research method

There are various ways of measuring and identifying corporate political connections in the United States: lobbying expenses (Hill et al., 2014), corporate political campaign contributions (Claessens et al., 2008), politician equity ownership (Baloria, 2014), and former politicians as board members (Goldman et al., 2009). However, not all measures are suited for this study. Lobbying expenses, which are usually issue and industry specific, are not a good identification because an industry association may lobby on behalf of the member firms, and lobbyists do lobby both political parties without public disclosure of specifics. Corporate political campaign contribution to some extent measures which political party a firm wants to be associated with more, yet most firms donate to both parties with similar amounts. Recent decades also witnessed an increase in popularity of utilizing Political Action Committees (PACs). Since

2010's *Citizens United v. Federal Election Commission*, the use of Super PACs has made it almost impossible to identify the donors of political campaigns. Lastly, on politician equity ownership, I argue that it is a matter of politicians selecting their own stock holdings, rather than firms selecting political connections.

In this paper, I follow Goldman et al., (2009)'s definition and classify politically connected firms as those with at least one politically connected board member.⁴ This measure is taken at the beginning of every fiscal year. Comparatively, this is a clear measure of political connection when it comes to identifying which political party and what government branches firms are targeting. Having a politically connected board member is not only a signal that the firm is seeking political connection, but also that it is successful in doing so, as the politician needs to agree to be on the board of directors, and have his/her name associated with the firm when filing for public disclosure.

To test Hypothesis 1.1, I use two proxies for a firm's intent of seeking political connections. The first one is the amount of government contracts scaled by sales, which measures how important government procurement is to a firm's operation ($GOV_SALE_{i,t}$). A higher ratio indicates greater importance of obtaining government contracts. It proxies for a firm's need to obtain government contracts. The second measure is the amount of lobbying expense scaled by sales ($LOB_SALE_{i,t}$), which measures how important lobbying is to a firm's operation. Similar to the former proxy, a higher ratio indicates greater importance of managing

⁴ A company is classified as politically connected if it has at least one board member with one of the following former positions: President, presidential (vice-presidential) candidate, senator, member of the House of Representatives, secretary, assistant secretary, deputy secretary, deputy assistant secretary, undersecretary, director, associate director, deputy director, commissioner of any federal government department or federal government agency (including CIA, FEMA, CIA, OMB, IRS, NRC, SSA, CRC, FDA, and SEC), governor, mayor, treasury of the city, representative to the UN, trade representative for the US, ambassador, staff (White House, president, presidential campaign), chairman of the party caucus, and chairman or staff of the presidential election campaign.

regulatory risk. So it proxies how much regulatory risk a firm faces. I then regress the target political connection type one period ahead on these two variables measuring the importance of government contracts and the need to manage regulatory risk, respectively. The regression has the following structure:

$$\begin{aligned} \Pr(\textit{Connection Type}_{i,t+1}) \\ = \alpha_0 + \alpha_1 \textit{GOV_SALE}_{i,t} + \alpha_2 \textit{LOB_SALE}_{i,t} + \alpha_3 \textit{SIZE}_{i,t} + \alpha_4 \textit{GROWTH}_{i,t} \\ + \alpha_5 \textit{HHI}_{i,t} + \alpha_6 \textit{ROA}_{i,t} + \alpha_7 \textit{LOSS}_{i,t} \end{aligned} \quad (1.1)$$

where $\textit{Connection Type}_{i,t+1}$ is an indicator of whether the one period ahead politically connected board has legislative branch experience ($\textit{LEGISLATIVE}_{t+1}$) or executive branch experience ($\textit{EXECUTIVE}_{t+1}$). This test applies to both a sample limited to those with political connection, such that the ability to get political connection is constant, and to the full sample with both connected and non-connected firms. As mentioned, the variables of interest are $\textit{GOV_SALE}_{i,t}$ and $\textit{LOB_SALE}_{i,t}$, each measures a different reason why a firm wants to seek political connections. I also replace $\textit{GOV_SALE}_{i,t}$ and $\textit{LOB_SALE}_{i,t}$ to indicator variables $\textit{GC}_{i,t}$ and $\textit{REGULATE}_{i,t}$, which indicates when government contract need is high (over 10% of sales) or when regulatory risk is high (lobbying is over 0.03% of sales, which means approximately 10% of the observations are considered to face high regulatory risk). These cut-off points are somewhat arbitrary, but I believe they provide good approximations of which firms face higher pressure on either front. I control for market capitalization ($\textit{SIZE}_{i,t}$) and sales growth ($\textit{GROWTH}_{i,t}$) as larger firms and growth firms tend to attract more attention, and have more resources and ability to recruit a board of directors. I include industry competition, measured as the Herfindahl Index ($\textit{HHI}_{i,t}$) calculated using the 2-digit SIC industry in COMPUSTAT, as the

level of competition affects incentives to seek political connections. Control of firm performance using return on assets ($ROA_{i,t}$) and a loss indicator ($LOSS_{i,t}$) is also included, as high profitability of a firm can make it easier to attract politicians as board members. To address for selection issues, I also include a Heckman two-step model, where the selection model includes the aforementioned control variables of firm characteristics and industry. Following the argument in Hypothesis 1.1, when the dependent variable is $EXECUTIVE_{t+1}$, α_1 should be positive and significant; when the dependent variable is $LEGISLATIVE_{t+1}$, α_2 should be positive and significant.

To test Hypothesis 1.2, I employ the following regression:

$$\begin{aligned} \ln(Benefits_{i,t+1}) &= \beta_0 + \beta_1 Political\ Connection_{i,t} + \beta_2 SIZE_{i,t+1} + \beta_3 MB_{i,t+1} + \beta_4 HHI_{i,t+1} \\ &+ \beta_5 ROA_{i,t+1} + \beta_6 LOSS_{i,t+1} + \beta_7 LNAGE_{i,t+1} + \beta_8 GROWTH_{i,t+1} \\ &+ \beta_9 COGS_{i,t+1} + \beta_{10} CAPEX_{i,t+1} \end{aligned} \quad (1.2.1)$$

where $Benefits_{i,t+1}$ can be total government contract amount or subsidy amount for a firm in a year. As mentioned, variables of political connection are measured at the beginning of a fiscal year. Political connection measures include indicator variable PCB , which takes on the value of 1 when at least one member of the board is politically connected, percentage variable $PPCB$, which is the proportion of politically connected board members, and log number of political connections LN_NPC . Equation (1.2.1) controls for a firm's current year market capitalization ($SIZE_{i,t+1}$), market-to-book ratio ($MB_{i,t+1}$), and industry competition ($HHI_{i,t+1}$) in order to capture the general characteristics of the firm. To control for profitability of the firm, two additional variables are included: return on assets ($ROA_{i,t+1}$) and a loss indicator ($LOSS_{i,t+1}$).

Age of the firm ($LNAGE_{i,t+1}$) and sales growth ($GROWTH_{i,t+1}$) are controls of the business cycle. $COGS_{i,t+1}$ is the ratio of cost of goods sold to sale, which captures the cost structure of the firm, and a measure of cost efficiency. This could be an important factor when competing for contract assignments and subsidies. The last control is the ratio of capital expenditure to sales ($CAPEX_{i,t+1}$), which controls for possible investment into increase production, especially in expectation of government contract needs. Hypothesis 2 predicts β_1 to be positive and significant.

To examine Hypothesis 1.3, I first regress current accounting performance measures on political connections, government contracts, subsidies, and lobbying, and the interaction terms between political connection and the latter three measures, in order to assess the impact of political connection on current firm performance. Next I regress future accounting performance, ranging from 1 to 5 years ahead, in the same format in order to assess the impact of political connection on future firm performance.

Accounting Performance_t

$$\begin{aligned}
&= \gamma_0 + \gamma_1 PCB_{t-1} + \gamma_2 LN_{GC_{t-1}} + \gamma_3 LN_{SUBSIDIES_{t-1}} + \gamma_4 PCB_{t-1} \times LN_{GC_{t-1}} \\
&+ \gamma_5 PCB_{t-1} \times LN_{SUBSIDIES_{t-1}} + \gamma_6 SIZE_{t-1} + \gamma_7 LNAGE_{t-1} + \gamma_8 GROWTH_{t-1} \\
&+ \gamma_9 MB_{t-1} + \gamma_{10} HHI_{t-1} + \gamma_{11} LOSS_{t-1}
\end{aligned} \tag{1.3}$$

Equation (1.3) regresses current period accounting performance measures, namely return on assets (ROA) and profit margin (PM) on last period's PCB , LN_{GC} , $LN_{SUBSIDIES}$, and their interactions, when controlling for other firm characteristics. In this regression, γ_1 should pick up the general profitability difference between politically connected firms and their non-connected counterparts; γ_2 and γ_3 are general association between firm performance and government contract and subsidy; γ_4 and γ_5 represent the marginal effects of having political connection on

top of having possible value extraction channels and lobbying. According to Hypothesis 1.3, the predicted sign for γ_1 should be positive. If indeed, government contracts and lobbying are channels to extract political rents, then γ_2 and γ_3 are expected to be positive and significant as well. If having political connection does help to improve firm profitability when there are government contracts and subsidies, then γ_4 , and γ_5 should be positive.

1.3.2 The 2006 and 2008 Elections

As noted above, this paper explores the difference between 2006 midterm and 2008 presidential elections in order to address endogeneity. Endogeneity arises from reverse causality – firms that want certain benefits will seek political connections, and those connections help them obtain these benefits. In this case, I look to the 2006 and 2008 election outcomes as shocks that have an impact on the ability of political connections to obtain government benefits, when it does not directly affect a firm's ability to have certain political connections.

The 2006 midterm election is the first time that the Democratic Party regained control of the US Congress since 1994. The Republican Party lost both houses of Congress and the majority of state governorships. The Democratic Party takeover was a complete reversal of the 1994 election, partly due to the declining public image of George W. Bush. This election is comparable to the 1994 election in that in both midterm elections, both houses of the Congress changed control. The incumbent political party's defeat was complete and clear. Nevertheless, the midterm election did not alter the color of the White House. In this case, all of the executive branch government departments remained under the control of the Republican Party. Therefore, the 2006 midterm election serves as a bench mark, where Democratic connections should not have an increased influence in government allocation, even though they control the federal budget.

The 2008 presidential election brought Democrats back to power, with Barack Obama winning the largest percentage of the popular vote for a Democrat since 1964. As Obama nominated members of his own cabinet, the Democratic Party effectively took control of all the government departments, like the Department of Defense, the Department of Commerce, and the Department of Energy, where government procurements are common and substantial. Because of the aforementioned argument, political connections with the Democratic Party should be able to exert more influence after the 2008 election.

I utilize these two elections in my sample period, and rewrite Equation (1.2.1) into the following format:

$$\begin{aligned}
\ln(Benefits_{i,t+1}) &= \delta_0 + \delta_1 Democratic\ Connection_{i,t} + \delta_2 Republican\ Connection_{i,t} \\
&+ \delta_3 Election\ Indicator \\
&+ \delta_4 Democratic\ Connection_{i,t} \times Election\ Indicator \\
&+ \delta_5 Republican\ Connection_{i,t} \times Election\ Indicator \\
&+ \delta_6 Controls
\end{aligned} \tag{1.2.2}$$

where the dependent variable is again either LN_GC or $LN_SUBSIDIES$, $Election\ Indicator$ is the two years following the 2006 midterm election (fiscal years 2007 and 2008) or 2008 Presidential election (fiscal years 2009 and 2010). $Democratic\ Connection_{i,t}$ and $Republican\ Connection_{i,t}$ take one of three forms: binary indicators ($DDEM$, $DREP$), log number of connections (LN_DEM , LN_REP), or ratio of connections to board size ($PDEM$, $PREP$). In this regression, δ_3 picks up the budgetary difference before and after election. Meanwhile, because Republican Connection and Democratic Connection are available each year,

subject to a firm's decision of adding or dropping connections, the measure of influence of different political connections on benefits will be represented by δ_4 and δ_5 . When government contract is the dependent variable, the expected sign for δ_4 (δ_5) is positive (negative) if the *Election Indicator* is for the 2008 presidential election. When government subsidy is the dependent variable, the expected sign for δ_4 (δ_5) is positive (negative) if the *Election Indicator* is for the 2006 mid-term election. Controls of this regression include post-election indicators⁵, in order to separate the change of pre- and post- election periods, in addition to variables included in Equation (1.2.1).

1.4 Sample and data

I start my sample with the Monthly S&P Constituents from CRSP from 2004 to 2013. Information on politically connected boards is collected from each firm's annual proxy statement (DEF 14A) from EDGAR on the website of the Securities and Exchange Commission (SEC).⁶ At the beginning of the fiscal year, approximately 9-11 months before the issuance of the annual report, a firm usually files a proxy statement to nominate and confirm the board of directors, and to disclose additional information such as last fiscal year's committee meetings attendance. For each nominated director, a short description of prior experience is included. I manually read through this part of the proxy statements in order to identify former politicians who are sitting on the board. My classification of politically connected board members mostly follows Goldman et al. (2009). Note that for this paper, those who have worked for or are related to the judicial branch of government, Federal Reserve System, and those who only have military rankings are

⁵ For 2006 election, post-election indicator equals to 1 for fiscal years 2008 to 2013; for 2008 election, post-election indicator equals to 1 for fiscal years of 2011, 2012, and 2013.

⁶ <http://www.sec.gov/edgar/searchedgar/companysearch.html>

not classified as politically connected. Also, those whose description mentioned a qualifying position but did not serve on the position (e.g. “served as a senior advisor to the Secretary of US Department of Defense”) are not considered political connections. For firm-years without proxy statements, I use information from the subsequent proxy statements for up to two years. If neither of the subsequent year information is available, then the observation is dropped. The result is a sample of 5,012 firm-year observations. The resulting sample is as shown in Table 1.1. Approximately 32% of the sample firm-years are politically connected firms, which is very similar to Goldman et al. (2009)’s sample of 31%, but considerably lower than Houston et al. (2014)’s 43%. As shown in Figure 3, the proportion of political connected firms amongst the S&P 500 is fairly stable over the sample period.

Summary of industries in the sample, according to the 2-digit SIC code, is presented in Table 1.2. We see that there are indeed industry clusters of politically connected firms in the sample. Most noticeably industries like oil and gas, chemical and allied products, electric, gas, and sanitary services, insurance, and business services have the most politically connected observations. However, the proportion of political connected observations are all under 50%.

If a politically connected board member is identified, then I performed a Google search on this person to identify his or her political party affiliation. Republicans and Democrats are classified accordingly, and any other political party association is classified as other. If this information is not readily available, then I look into the period when that person held office, and identify them as being part of the same party as the then-serving President of the United States. Because most of the positions, especially those that belong to the executive branch of government, are appointed directly by the United States President, I believe assuming that person’s political connection is from the same party as the President is reasonable. If, however,

that person served under both Democratic and Republican Presidents, then they are classified as other. For those who served in either house of the United States Congress, they are classified as legislatives; those who served under the executive branch are classified as executive. Politicians who are female or racial minorities are coded according to their names, pictures, and other online information⁷.

For government contract information, I use the Federal Procurements Data System-Next Generation (FPDS-NG), and search each firm-year's specific government contract information. The FPDS-NG has all federal procurements whose estimated value is \$3,000 or more. The search is performed in the following way: for each firm, I search the main part of the firm name for a firm's specific fiscal year, matching the fiscal year-end date. If there is more than one entity in the resulting list, I only include those that are confirmed to be wholly-owned subsidiaries, or venture businesses. The total dollar amount of action obligations⁸ and the total number of actions are collected. The resulting government contract amount is downward biased, as the amount omits contracts signed by the subsidiaries of the sample firms, whose names do not include the parent companies at all. This biases my sample towards not finding any results for politically connected firms.

For lobbying expenses, I downloaded federal lobbying data provided by OpenSecrets.org.⁹ For all lobbying transactions that are required to be publically disclosed (even if the actual amount is zero) since 1998 to 2014, the transaction year, amount, registrant (lobbyist), and client names, and client parent name (interest groups, firms, and individuals) are recorded in the lobbying spreadsheet provided by OpenSecrets.org. I manually match these

⁷ The information sources are the proxy statements, official government websites, Wikipedia.org, and nndb.com.

⁸ Action obligation represents the value of the contract.

⁹ For non-registered users, the source is <http://data.influenceexplorer.com/bulk/>.

transactions using client name and year into my own sample¹⁰, and generate the sum of lobbying expenses for each firm-year.

Government subsidies information is compiled by and obtained from Good Jobs First, a policy resource center on subsidy data¹¹. Good Jobs First's Subsidy Tracker maintains entries for grants, loans, and other subsidies distributed by the federal, state, and local government as early as 1976. However, more comprehensive data is available since 2000. For each subsidy award entry, the Subsidy Tracker records the company as well as its parent firm (if applicable). If the parent firm belongs to one of the 2,782 parent companies covered, then a unique parent identification number (*PARENT_ID*) is given. Using this unique *PARENT_ID*, for each year, I calculate how many total subsidies and loans were granted by all levels of government, and then manually match this information to my sample. This means, when a subsidiary and a parent firm are both in my sample, the subsidies-related information is only for the parent firm. This creates issues for the accuracy of the matched information. However, it should only bias the sample in not finding statistical differences, as the amount of variation in government subsidies between firms dramatically decreased. Because subsidies can be in many different forms, I also look into some sub-categories of subsidies in the forms of government loans (separately listed in the dataset obtained from Good Jobs First), and tax credits (classified when subsidy type is listed as "federal allocated tax credit" or "tax credit/rebate").

¹⁰ I would like to thank Ting Xu for sharing his Stata name matching score code with me. With this program, I can generate a score between 0 and 1 for each of the name matches between the client parent names listed in the lobbying spreadsheet and firm names in my own sample, where 1 is a non-case sensitive perfect match. I then assume that matches with a score higher than 0.9 are all successful matches, and anything below 0.6 is an unsuccessful match. For those between 0.6 and 0.9, I conducted a manual check to ensure the match is correct.

¹¹ <http://www.goodjobsfirst.org/>

Financial statement and market variables for each observation are collected from COMPUSTAT and CRSP. The summary statistics are as shown in Table 1.3. All variables are defined in the Appendix. I exclude financial firms (i.e., those with SIC 6000-6999) for all tests; however, other than firm performance comparisons, all results remain unchanged when financial industries are included. For hypothesis 1.3, tests for a sample that only includes observations receiving at least one form of government benefits are run but not tabulated, as the results remain essentially the same. Continuous variables are all winsorized at 1%. All standard errors are corrected for heteroscedasticity and are clustered by firm.

1.5 Results and interpretations

Hypothesis 1.1 tests the validity of my assumption that firms target specific types of political connections according to their needs. The logit regression results are presented in Table 1.4. Panel A presents the results with the conditional subsample, where Panel B presents the results with full sample and the Heckman two-step model. In Panel A, the loading on government contract is positive and significant when the one period ahead connection type is with the executive branch, whether using a dummy variable *GC* or continuous proportion variable *GOVT_SALE*. Current regulation need is an important predictor for the one period ahead legislative branch connection, whether measured as a binary variable *REGULATE* or a continuous proportion variable *LOB_SALE*. In Panel B, with the full sample, we see the coefficient of *GOVT_SALE* is positive for prediction models regarding executive connection. However, in Heckman two-step model, coefficient on *LOB_SALE* is also positive and significant, though the magnitude is significantly less. Whereas the full sample for legislative connection, both *GOVT_SALE* and *LOB_SALE*'s coefficients are not statistically different from zero. This can be because the number of firms with legislative connection is a lot less than those

with executive connections. We also see that for the legislative connection models in Panel B, both pseudo R-square and Wald Chi-square are relatively small, compared to all the other models. Overall, the evidence is somewhat consistent with the prediction of Hypothesis 1.1. When obtaining government contracts is the goal, firms seek connections to the executive branch of government. However, when managing regulatory risks is the goal, they look for former congressional members to help them navigate the legislative landscape.

Table 1.5 and 1.6 present the general correlations between different political connections and the two value extraction channels: government procurement and subsidies. In Table 1.5, we see a positive and significant association between various measures of political connections and government contracts in columns (1)-(3). In particular, the coefficient of the binary variable of *PCB* is 0.735 in column (1), which suggests a 208% difference in total contract amount between firms with and without political connection.¹² This translates to an economic magnitude of approximately \$72 million raw dollar amount in government contracts, as the sample has an average \$36.27 million in government contracts. In column (4)-(5), I compare whether having connections in different political parties makes a difference. Even though, for all columns, Republican connections are loading positively and significantly, an F-test reveals that there is no significant difference between the loadings on Republican connections and Democratic connections. Column (6) examines whether political connections in different government branches have a different impact on government contracts. As expected, the coefficient on *EXECUTIVE* is positive and significant, suggesting that connections with the executive branch

¹² The amount is calculated as $e^{0.735} = 2.085$.

can influence the amount of government contracts a firm obtains. Taken as a whole, there is a positive relationship between political connections and government contracts.

As for government subsidies, the results are tabulated in Table 1.6. For total subsidies, as shown in Panel A columns (1)-(3), the coefficients on political connection measures are all positive and significant. The 0.989 coefficient in Column (1) suggests that on average, politically connected firms get over 2.69 times in total subsidies compared to their non-connected peers¹³. This difference is both statistically and economically significant, as the sample average in total subsidies is around \$17 million, which translates to a difference of over \$45 million. The dataset also clearly classifies the indirect subsidy types, most commonly in the form of government loans and tax credits, I decide to take a deeper look into these two forms in Panel B and C. As shown in Panel B and C, even though most of the coefficients of political connection variables are positive, few of them are statistically significant. Column (4) in all panels tests whether connections to executive and legislative branch have a different impact on subsidies. Only government loans are shown to be statistically significant, yet the useful political connection is from the executive branch. Columns (5)-(7) in all panels are various regressions testing whether connections with a different political party have a different impact on subsidies. Positive and significant coefficients are found for firms with Democratic connections when it comes to total subsidies, yet the difference between Democratic and Republican connections are not statistically significant. Political party line does not seem to matter when it comes to loans and tax credits granted. Overall, there is a generally positive association between political connection and total subsidies.

¹³ The amount is calculated as $e^{0.989} = 2.689$.

Table 1.7 tabulates the influence of different political connections on government procurement using the two elections within my sample period. In Panel A, Equation (1.2.2) is run for each election individually. This way, it is easier to see the difference in influence between the political party connections. As we see, the interaction between the post 2008 election indicator and Democratic connection always loads positively and significantly. This piece of evidence suggests that after the 2008 election, we see an increase in influence from Democratic connections on the allocation of government procurements. However, this same result does not present itself in the post 2006 election. In fact, there is no significant difference in changes of influence between the Democratic connections and the Republican connections.

In Table 1.7 Panel B, I include both post-election indicators, and tested the changes of influence for the Democratic connections between the two elections. As shown in the table, only the 2008 election results in positive and significant changes for the Democratic connections in their influence of government contract allocations, and this difference is significantly higher than that of the 2006 election.

Table 1.8 presents the same regressions run on subsidies. Panel A, B and C present results with total subsidies, total loan, and total government credit as the dependent variable, respectively. The positive and significant coefficients are for Democratic connections interacting with the 2006 election indicator. However, there is a lack of evidence that the 2006 election made any significant difference for firms with Democratic connections in their power to influence subsidies in general. In Panel B, however, government loans are found to have increased for firms with Democratic political connections, even though the F-test reveals that the difference is not statically different from those with Republican connections. Overall, the two

elections did not seem to significantly impact the different political connections differently when it comes to government subsidies.

Hypothesis 1.3 focuses on the firm performance of politically connected firms, whether indeed political rent extraction exists in the form of inefficient government procurement allocations and subsidies granting, and how political connection affects them on the margin. Table 1.9 presents the results of using current return on assets (*ROA*) and profit margin (*PM*) as profitability measures. There are some interesting findings that cast doubt on prior perception that politically connected firms are more profitable. In fact, when it comes to profit margin, I find that politically connected firms perform worse than their non-connected counterparts. Also, government contracts and subsidies do not, by themselves, seem to increase a firm's accounting performance. The association between accounting performance and these two channels is negative and significant in general. This means that firms that are government contractors and subsidies receivers tend to do worse in accounting performance in general. This is consistent with the expectation that subsidies receivers are usually at a competitive disadvantage. But it can also be a result of firms receiving government contracts tend to have excess capacity, which translates to a lower current accounting performance. When political connection is added into the mix, interacting with other variables, it does not seem to increase or decrease the effect of the negative association between firm performance and the two channels. Results using return on equity (*ROE*) are not tabulated in the table, but they are essentially the same as using *ROA* as dependent variable.

Table 1.10 presents results on future performance with each independent variable on its own, with industry and year fixed effects. Results are similar to that of Table 1.9. Coefficients on

government contracts and subsidies remain negative for all future *ROA*, which seem to imply that government benefits are awarded to firms with lower profitability.

Table 1.11 presents results on both short term and long term future performance, focusing on 1 to 5 years ahead *ROA* as dependent variables. Panel A includes one value extraction channel at a time, whereas Panel B includes both channels together. I find that politically connected firms do enjoy a 3% advantage 3-4 years into the future in terms of *ROA*, when government contracts are taken into consideration. However, this advantage disappears in the 5th year. Overall, the data points to future benefits of politically connected firms, considering government contracts. This is possibly because current investment made to satisfy government contracts turns into productive assets later on. Table 1.11 also shows that neither interaction terms between *PCB* and the value extraction channels has positive correlation with future *ROA*. This suggests that on the margin, having political connections does not significantly improve firms' profitability, when firms receive government contracts and subsidies. As mentioned, the same set of tests are performed for a subsample that includes observations receiving at least one form of the two government benefits, and the results remain the same. In this case, I argue the evidence implies that the government contract bidding process and subsidy granting is still efficient, and the stricter legal system in the United States makes it difficult to extract political rent. Overall, I find that politically connected firms are not outperforming their non-connected peers.

1.6 Conclusion

This paper examines the existence and effects of corporate political connections, namely using politically connected boards. First, I examine if firms target different political connections by considering different needs. I find evidence that government contractors seek to connect with

the executive branch, where the majority of contracts are from, and firms that need to manage regulatory risks align themselves with former congressional members.

Next, I identify two direct channels where political connections can contribute to firm value: government contracts and subsidies. I find that politically connected firms do receive more government contracts and subsidies. To address endogeneity, I explore the effects of political connections on government procurements and subsidies before and after the 2006 and 2008 elections. Results demonstrate that the 2008 Presidential election affected firms with different political connections differently in regards to the amount of government contracts they receive. In particular, firms with winning party connections saw an increase in the amount of government contracts after the 2008 general election, but not the 2006 mid-term election.

Lastly, this paper examines current and future firm performance in relation to political connections. Overall, the findings cast doubt on prior research's conclusions based on evidence from other countries, as I failed to find evidence that politically connected firms enjoy higher profits. Meanwhile, the two value extraction channels that political connections can contribute to do not benefit firm profitability. In my sample, government contracts and subsidies are shown to negatively correlate with accounting performances, and having political connections does not decrease this negative impact. Interestingly, in 3-4 years, firms with political connections seem to have higher *ROA* temporarily when their involvement in government contracting is taken into consideration. This is consistent with the assertion that government contractors can benefit in the future from current investments, possibly to fulfill the demand for current government contracts. Overall, my findings suggest that, at least in the United States, the government contract bidding process and legal system are effective in safeguarding contract overpricing and political cronyism.

Figure 1.1 Discretionary Spending of Federal Government for 1990 – 1998 (in Billion \$)

This graph plots annual discretionary spending of the United States Federal Government for the period of 1990-1998.

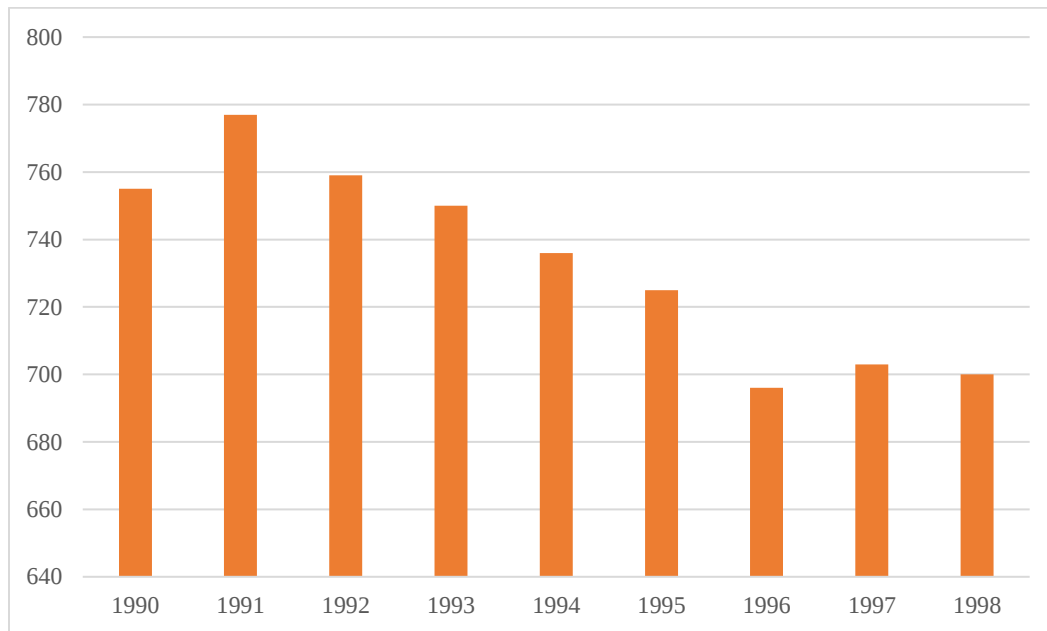


Figure 1.2 Timeline of Political Power in Control of the United States Government.

This figure demonstrates the time line of the political party that controls the United States White House and both houses of the United States Congress. The 2006 midterm election saw both houses changes from a Republican majority to a Democratic majority. During the 2008 presidential election, not only did the Democratic Party maintain control of both houses of Congress, but also Democrat Barack Obama was elected the 44th President of the United States, replacing Republican George W. Bush.

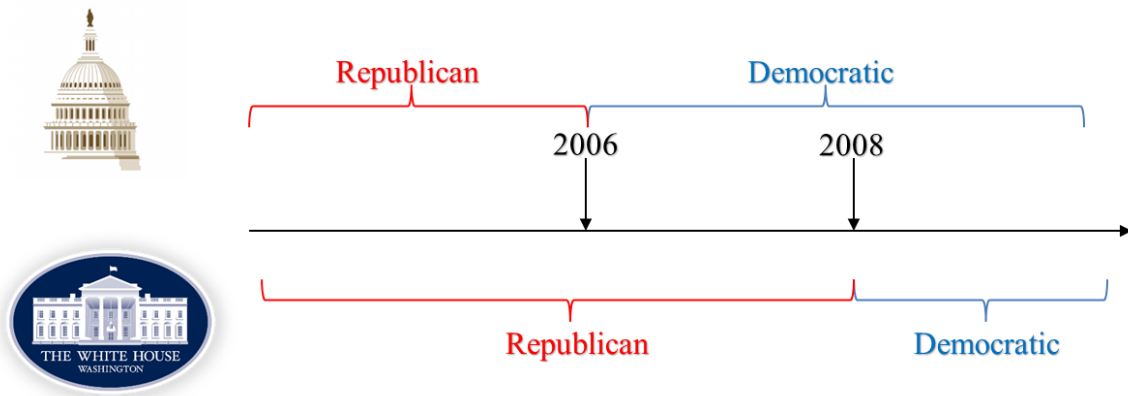


Figure 1.3 Number of Politically Connected Firms by Year.

Figure 1.3 is a graphic demonstration of the breakdown of politically connected firms ($PCB=1$) and non-connected firms ($PCB=0$) in the sample by year.

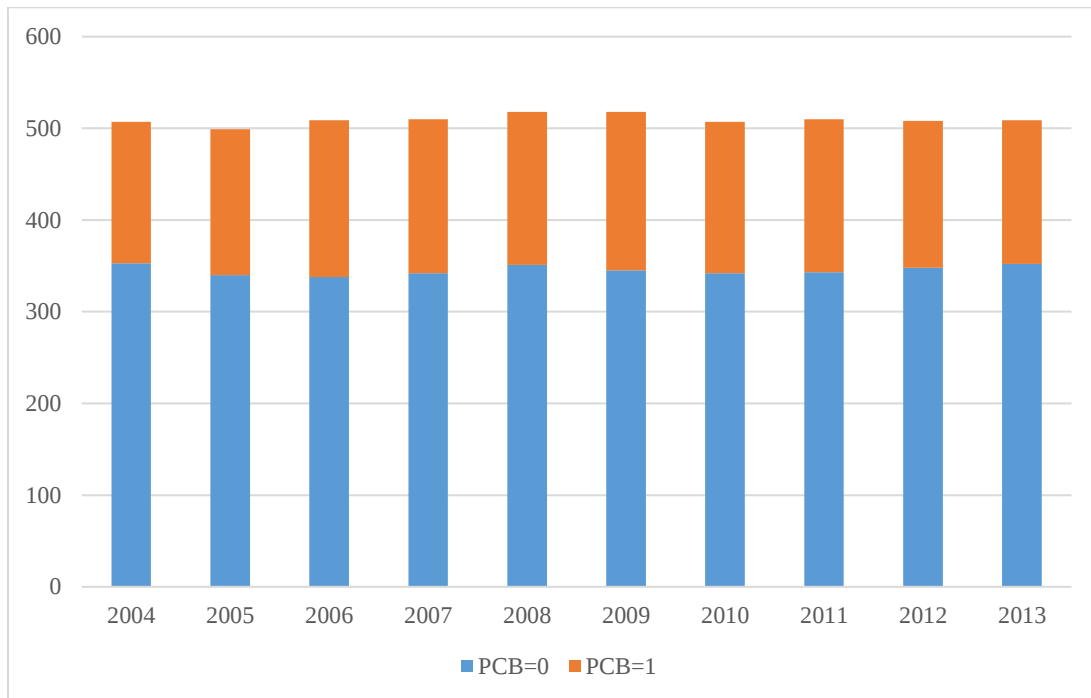


Table 1.1 Number of Politically Connected Firms by Year.

This table presents the number of observations in the sample by year, and lists a breakdown of politically connected firms ($PCB=1$) and non-connected firms ($PCB=0$) in the sample by year.

Year	PCB		Total
	0	1	
2004	339	154	493
2005	329	158	487
2006	322	171	493
2007	336	168	504
2008	340	168	508
2009	339	172	511
2010	334	167	501
2011	337	169	506
2012	341	160	501
2013	348	160	508
Total	3365	1647	5012

Table 1.2 Industry Composition

This table presents the breakdown of industry according to 2-digit SIC in the S&P 500 index from 2004 to 2013.

2-digit SIC	Industry	Full Sample		PCB=1	Percentage of PCB=1
		Frequency	Percentage	Frequency	
1	Agricultural Production - Crops	10	0.20%	10	100.00%
10	Metal, Mining	25	0.49%	11	44.00%
12	Coal Mining	21	0.41%	8	38.10%
13	Oil & Gas Extraction	225	4.43%	90	40.00%
14	Nonmetallic Minerals, Except Fuels	10	0.20%	7	70.00%
15	General Building Contractors	39	0.77%	8	20.51%
16	Heavy Construction, Except Building	17	0.33%	15	88.24%
17	Special Trade Contractors	5	0.10%	0	0.00%
20	Food & Kindred Products	229	4.51%	60	26.20%
21	Tobacco Products	36	0.71%	19	52.78%
22	Textile Mill Products	1	0.02%	0	0.00%
23	Apparel & Other Textile Products	40	0.79%	14	35.00%
24	Lumber & Wood Products	23	0.45%	4	17.39%
25	Furniture & Fixtures	20	0.39%	0	0.00%
26	Paper & Allied Products	75	1.48%	31	41.33%
27	Printing & Publishing	41	0.81%	19	46.34%
28	Chemical & Allied Products	401	7.90%	118	29.43%
29	Petroleum & Coal Products	69	1.36%	32	46.38%
30	Rubber & Miscellaneous Plastics Products	31	0.61%	18	58.06%
31	Leather & Leather Products	10	0.20%	0	0.00%
32	Stone, Clay, & Glass Products	5	0.10%	0	0.00%
33	Primary Metal Industries	56	1.10%	24	42.86%
34	Fabricated Metal Products	42	0.83%	10	23.81%
35	Industrial Machinery & Equipment	279	5.49%	77	27.60%
36	Electronic & Other Electric Equipment	345	6.79%	77	22.32%
37	Transportation Equipment	124	2.44%	63	50.81%
38	Instruments & Related Products	238	4.69%	77	32.35%
39	Miscellaneous Manufacturing Industries	30	0.59%	0	0.00%
40	Railroad Transportation	37	0.73%	24	64.86%
42	Trucking & Warehousing	10	0.20%	10	100.00%
44	Water Transportation	10	0.20%	6	60.00%
45	Transportation by Air	22	0.43%	14	63.64%
47	Transportation Services	21	0.41%	0	0.00%
48	Communications	176	3.47%	68	38.64%
49	Electric, Gas, & Sanitary Services	391	7.70%	165	42.20%
50	Wholesale Trade - Durable Goods	36	0.71%	5	13.89%
51	Wholesale Trade - Nondurable Goods	45	0.89%	10	22.22%

2-digit SIC	Industry	Full Sample		PCB=1	Percentage of PCB=1
		Frequency	Percentage	Frequency	
52	Building Materials & Gardening Supplies	26	0.51%	8	30.77%
53	General Merchandise Stores	105	2.07%	27	25.71%
54	Food Stores	40	0.79%	6	15.00%
55	Automotive Dealers & Service Stations	29	0.57%	5	17.24%
56	Apparel & Accessory Stores	56	1.10%	4	7.14%
57	Furniture & Home Furnishings Stores	39	0.77%	4	10.26%
58	Eating & Drinking Places	47	0.93%	28	59.57%
59	Miscellaneous Retail	81	1.60%	11	13.58%
60	Depository Institutions	256	5.04%	40	15.63%
61	Non-Depository Institutions	66	1.30%	44	66.67%
62	Security & Commodity Brokers	153	3.01%	44	28.76%
63	Insurance Carriers	255	5.02%	117	45.88%
64	Insurance Agents, Brokers, & Service	20	0.39%	10	50.00%
65	Real Estate	15	0.30%	8	53.33%
67	Holding & Other Investment Offices	133	2.62%	19	14.29%
70	Hotels & Other Lodging Places	23	0.45%	20	86.96%
72	Personal Services	10	0.20%	6	60.00%
73	Business Services	392	7.72%	94	23.98%
75	Auto Repair, Services, & Parking	13	0.26%	8	61.54%
78	Motion Pictures	4	0.08%	0	0.00%
79	Amusement & Recreation Services	20	0.39%	16	80.00%
80	Health Services	45	0.89%	18	40.00%
82	Educational Services	21	0.41%	3	14.29%
87	Engineering & Management Services	20	0.39%	0	0.00%
99	Non-Classifiable Establishments	14	0.28%	10	71.43%
	Total	5,078	100%	1,646	32.41%

Table 1.3 Summary Statistics

This table presents the summary statistics for different variables in the sample. Detailed variable definitions are in Appendix A.1. Panel A tabulates the summary statistics of political connections. Panel B presents the summary statistics for other variables used in all tests in non-politically connected observations ($PCB=0$), politically connected observations ($PCB=1$), and the full sample.

Panel A: Summary Statistics for Political Connections

	N	mean	standard deviation	p25	p50	p75
PCB	5012	0.329	0.470	0	0	1
NUM_PCB	5012	0.446	0.744	0	0	1
PPCB	5012	0.040	0.067	0	0	0.083
LN_NPC	5012	0.271	0.411	0	0	0.693
DREP	5012	0.197	0.398	0	0	0
DDEM	5012	0.186	0.389	0	0	0
LN_DEM	5012	0.128	0.287	0	0	0
LN_REP	5012	0.141	0.307	0	0	0
PREP	5012	0.020	0.046	0	0	0
PDEM	5012	0.018	0.041	0	0	0
LEGISLATIVE	5012	0.124	0.330	0	0	0
EXECUTIVE	5012	0.269	0.444	0	0	1

Panel B: Summary Statistics for Other Variables

PCB=0

	N	mean	standard deviation	p25	p50	p75
LN_GC	2081	14.728	3.291	12.267	15.025	17.107
GOVT_SALE	3363	0.005	0.027	0	0.000	0.001
LN_SUBSIDIES	3365	8.128	7.113	0	11.484	14.473
LN_LOAN	3365	1.646	5.118	0	0	0
LN_TAX_CREDIT	3365	4.389	6.356	0	0	11.753
LOB_SALE	3363	0.134	0.432	0.000	0.028	0.132
COGS	3363	0.560	0.224	0.405	0.583	0.729
CAPEX	3363	0.075	0.140	0.020	0.036	0.065
HHI	3363	0.226	0.200	0.084	0.169	0.296
ROA	2707	0.055	0.064	0.018	0.050	0.090
SIZE	3359	9.236	0.995	8.560	9.165	9.793
LNAGE	3347	3.262	0.752	2.789	3.391	3.773
GROWTH	3362	0.080	0.172	-0.002	0.068	0.150
MB	3359	3.047	3.304	1.549	2.457	3.864
LOSS	3365	0.091	0.287	0	0	0

PCB=1

	N	mean	standard deviation	p25	p50	p75
LN_GC	1146	16.395	3.600	14.183	16.548	18.683
GOVT_SALE	1646	0.026	0.113	0	0.000	0.003
LN_SUBSIDIES	1647	10.137	7.152	0	13.355	15.763
LN_LOAN	1647	2.614	6.351	0	0	0
LN_TAX_CREDIT	1647	5.222	6.818	0	0	13.007
LOB_SALE	1646	0.188	0.254	0.016	0.099	0.249
COGS	1646	0.620	0.333	0.453	0.672	0.783
CAPEX	1646	0.075	0.122	0.019	0.038	0.081
HHI	1646	0.239	0.206	0.092	0.189	0.312
ROA	1399	0.054	0.064	0.022	0.046	0.087
SIZE	1645	9.770	1.141	8.961	9.716	10.496
LNAGE	1643	3.442	0.787	2.914	3.607	4.110
GROWTH	1646	0.067	0.167	-0.015	0.059	0.126
MB	1645	3.527	4.314	1.559	2.424	4.147
LOSS	1647	0.090	0.287	0	0	0

Full Sample

	N	mean	standard deviation	p25	p50	p75
LN_GC	3227	15.320	3.496	12.806	15.603	17.609
GOVT_SALE	5009	0.012	0.069	0	0.000	0.002
LN_SUBSIDIES	5012	8.788	7.187	0	12.247	14.926
LN_LOAN	5012	1.964	5.571	0	0	0
LN_TAX_CREDIT	5012	4.663	6.522	0	0	12.136
LOB_SALE	5009	0.151	0.384	0	0.049	0.174
COGS	5009	0.580	0.266	0.416	0.608	0.748
CAPEX	5009	0.075	0.134	0.020	0.036	0.070
HHI	5009	0.230	0.202	0.085	0.178	0.303
ROA	4106	0.055	0.064	0.019	0.048	0.089
SIZE	5004	9.411	1.075	8.676	9.323	10.034
LNAGE	4990	3.321	0.768	2.820	3.500	3.851
GROWTH	5008	0.076	0.170	-0.007	0.065	0.140
MB	5004	3.205	3.673	1.553	2.450	3.913
LOSS	5012	0.091	0.287	0	0	0

Table 1.4 Choices of Political Connections

This table examines whether a politically connected firm targets political connection according to various needs. Panel A presents the logit regression results with the sample contains only firms with political connections ($PCB=1$). Panel B presents the logit regression and the Heckman two-step results with the full sample. Political connection variables are measured at the beginning of the year. Dependent variables are one period ahead of the executive branch connection indicator for the first two columns, and one period ahead of the legislative branch connection indicator for the latter two columns. *EXECUTIVE* (*LEGISLATIVE*) is equal to 1 when a firm has at least one politically connected board member that was identified to have executive (legislative) branch experience. *GOVT_SALE* is the ratio of government contracts to sales, whereas *LOB_SALE* is 1000 times the ratio of lobbying expense to sales, *GC* and *REGULATE* are dummy variables, which is equal to 1 when *GOVT_SALE* is greater or equal to 0.1 and *LOB_SALE* is greater or equal to 0.3, respectively. Control variables are return on assets (*ROA*), Herfindahl index (*HHI*), market size (*SIZE*), firm age (*LNAGE*), sales growth (*GROWTH*), and loss indicator (*LOSS*). In the Heckman model, these control variables and industry fixed effects are included in the selection model. Detailed variable definitions are in Appendix A.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A.

	EXECUTIVE _{t+1}		LEGISLATIVE _{t+1}	
GOVT_SALE	11.811*** (4.407)		-3.028 (4.026)	
LOB_SALE	0.029 (0.710)		1.142* (0.679)	
GC		1.806* (0.935)		-1.328 (1.345)
REGULATE		0.088 (0.415)		0.826** (0.382)
ROA	0.400 (2.999)	0.300 (2.992)	-2.539 (3.099)	-2.811 (3.132)
SIZE	0.408*** (0.157)	0.420*** (0.154)	0.166 (0.190)	0.161 (0.192)
GROWTH	-0.258 (0.480)	-0.283 (0.481)	0.942* (0.497)	0.952* (0.502)
HHI	2.633** (1.294)	2.859** (1.277)	-2.080 (1.956)	-2.059 (1.988)
LOSS	-0.101 (0.427)	-0.167 (0.433)	0.201 (0.434)	0.126 (0.433)
Industry Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes
N	1116	1116	960	960
pseudo R-sq	0.139	0.133	0.153	0.159

Panel B.

	EXECUTIVE _{t+1}		LEGISLATIVE _{t+1}	
GOVT_SALE	9.790*** (2.517)	1.797*** (0.184)	0.801 (3.271)	0.202 (0.130)
LOB_SALE	0.020 (0.208)	0.069*** (0.024)	0.216 (0.222)	0.020 (0.017)
ROA	-2.019 (1.653)		-2.337 (2.176)	
SIZE	0.467*** (0.092)		0.280** (0.123)	
GROWTH	-0.441 (0.281)		0.080 (0.349)	
HHI	0.656 (0.523)		-0.631 (0.784)	
LOSS	-0.109 (0.247)		0.475 (0.298)	
Industry Fixed Effects	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	No	Yes	No
N	3343	4118	3103	4118
pseudo R-sq	0.112		0.087	
Wald Chi-sq		109.92		4.22

Table 1.5 Government Contracts and Political Connections

This table examines the relation between government contracts and political connections. The dependent variable is *LN_GC*, which is the natural log of government contract amount. Political connection variables are measured at the beginning of the year. *PCB* is an indicator of political connection, which takes on the value 1 when at least one board member of the firm-year is identified as politically connected. *PPCB* is the proportion of politically connected board, which is calculated by the number of politically connected board members over the size of the board. *LN_NPC* is the log number of politically connected board members. *PREP (PDEM)* are percentage of directors that are identified as being connected to the Republican (Democratic) Party. *LN_REP (LN_DEM)* is log number of political connections that are identified as being connected to the Republican (Democratic) Party. *LEGISLATIVE (EXECUTIVE)* are indicators of having at least one political connection with legislative (executive) branch experience in the United States government. Detailed variable definitions are in Appendix A.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	Expected Sign	LN_GC				
		(1)	(2)	(3)	(4)	(5)
PCB	+	0.735*** (0.282)				
PPCB	+		5.024*** (1.914)			
LN_NPC	+			0.937*** (0.317)		
PREP					7.110*** (2.665)	
PDEM					1.499 (2.751)	
LN_REP						1.143*** (0.390)
LN_DEM						0.374 (0.409)
LEGISLATIVE						0.177 (0.406)
EXECUTIVE	+					0.834*** (0.292)
COGS		3.806*** (1.000)	3.789*** (0.985)	3.784*** (0.988)	3.768*** (0.989)	3.742*** (0.987)
CAPEX		-1.099 (1.351)	-1.069 (1.358)	-1.001 (1.351)	-1.118 (1.346)	-1.039 (1.346)
HHI		-0.373 (0.970)	-0.505 (0.968)	-0.459 (0.963)	-0.531 (0.962)	-0.509 (0.957)
ROA		-3.521 (2.527)	-3.716 (2.555)	-3.510 (2.543)	-3.688 (2.614)	-3.414 (2.574)
SIZE		0.942*** (0.157)	0.956*** (0.156)	0.924*** (0.157)	0.966*** (0.157)	0.935*** (0.157)
LNAGE		0.589*** (0.206)	0.605*** (0.209)	0.582*** (0.207)	0.613*** (0.209)	0.598*** (0.208)
GROWTH		-1.129** (0.489)	-1.171** (0.493)	-1.137** (0.490)	-1.225** (0.498)	-1.199** (0.496)
MB		-0.034 (0.024)	-0.034 (0.024)	-0.034 (0.024)	-0.034 (0.024)	-0.034 (0.024)
LOSS		-0.805** (0.354)	-0.830** (0.354)	-0.824** (0.354)	-0.804** (0.362)	-0.804** (0.359)
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	Yes	Yes	Yes
N		2230	2230	2230	2230	2230
adj. R-sq		0.475	0.476	0.478	0.477	0.478
Dem = Rep					2.15	1.92
Legislative = Executive						1.59

Table 1.6 Government Subsidies and Political Connections

This table presents the relation between government subsidies and political connections. Panel A presents the relation between total government subsidies and political connections. The dependent variable is *LN_SUBSIDIES*, which is the natural log of the amount of government subsidies (includes government loans, tax credits, government grants, tax rebates, and other forms of subsidies) of a firm year at the end of the year. Panel B and C presents the same relation in the sub-category of subsidies, government loan, and tax credit. In Panel B, dependent variable is *LN_LOAN*, which is the log amount of government loans granted to a firm at the end of the year. In Panel C, dependent variable is *LN_TAX_CREDIT*, the log amount of total tax credits available to the firm at the end of the year. Political connection variables are measured at the beginning of the year. *PCB* is an indicator of political connection, which takes on the value 1 when at least one board member of the firm-year is identified as politically connected. *PPCB* is the proportion of politically connected board, which is calculated by the number of politically connected board members over size of the board. *LN_NPC* is the log number of politically connected board members. *PREP* (*PDEM*) are percentage of directors that are identified as being connected to the Republican (Democratic) Party. *LN_REP* (*LN_DEM*) is the log number of political connections that are identified as being connected to the Republican (Democratic) Party. *LEGISLATIVE* (*EXECUTIVE*) are indicators of having at least one political connection with legislative (executive) branch experience in the United States government. Control variables are cost of goods sold (*COGS*), capital expenditure (*CAPEX*), Herfindahl index (*HHI*), return on assets (*ROA*), market size (*SIZE*), firm age (*LNAGE*), sales growth (*GROWTH*), market-to-book ratio (*MB*), and loss indicator (*LOSS*). Details on the variable definitions are provided in Appendix A.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Total Subsidies	Expected	LN_SUBSIDIES						
	Sign	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PCB	+	0.989** (0.475)						
PPCB	+		7.887*** (2.972)					
LN_NPC	+			1.307** (0.533)				
LEGISLATIVE	+				-0.384 (0.530)			
EXECUTIVE					0.662 (0.458)			
DDEM						1.173** (0.576)		
DREP						0.514 (0.528)		
PDEM							12.926*** (4.932)	
PREP							4.386 (4.111)	
LN_DEM								1.710** (0.761)
LN_REP								0.742 (0.645)
Controls		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes	Yes
N		3265	3265	3265	3265	3265	3265	3265
adj. R-sq		0.326	0.327	0.327	0.323	0.326	0.328	0.327
Legislative=Executive					1.92			
Dem = Rep						0.69	1.60	0.92

Panel B. Loans	Expected	LN_LOAN						
	Sign	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PCB	+	0.489* (0.266)						
PPCB	+		2.341 (1.938)					
LN_NPC	+			0.516 (0.328)				
LEGISLATIVE	+				-0.455 (0.357)			
EXECUTIVE					0.532* (0.271)			
DDEM						0.365 (0.365)		
DREP						0.509 (0.345)		
PDEM							2.010 (3.407)	
PREP							3.603 (2.862)	
LN_DEM								0.446 (0.505)
LN_REP								0.670 (0.449)
Controls		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes	Yes
N		3265	3265	3265	3265	3265	3265	3265
adj. R-sq		0.202	0.201	0.201	0.202	0.202	0.201	0.202
Legislative=Executive					4.09**			
Dem = Rep						0.07	0.12	0.10

Panel C. Tax Credits	Expected	LN_TAX_CREDIT						
	Sign	(1)	(2)	(3)	(4)	(5)	(6)	(7)
PCB	+	0.053 (0.359)						
PPCB	+		0.184 (2.439)					
LN_NPC	+			-0.012 (0.414)				
LEGISLATIVE	+				-0.384 (0.462)			
EXECUTIVE					0.360 (0.370)			
DDEM						-0.165 (0.464)		
DREP						0.288 (0.393)		
PDEM							-0.052 (4.343)	
PREP							0.871 (3.022)	
LN_DEM								-0.193 (0.633)
LN_REP								0.173 (0.482)
Controls		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes	Yes
N		3265	3265	3265	3265	3265	3265	3265
adj. R-sq		0.335	0.335	0.335	0.335	0.335	0.335	0.335
Legislative=Executive					1.33			
Dem = Rep						0.59	0.03	0.22

Table 1.7 Government Procurement Post 2006 and 2008 Election

This table presents the results of how the 2006 and 2008 elections affected firms with different political connections' ability to obtain government contracts. Panel A presents the results for each election separately. Panel B presents results with two elections together. The dependent variable is *LN_GC*, which is the log amount of government contracts a firm gets for a year. Control variables include appropriate Democratic connection measures (*DDEM*, *PDEM*, *LN_DEM*), matching Republican connection measures (*DREP*, *PREP*, *LN_REP*), and 2006 and 2008 election indicators. Other controls include cost of goods sold (*COGS*), capital expenditure (*CAPEX*), Herfindahl index (*HHI*), return on assets (*ROA*), market size (*SIZE*), firm age (*LNAGE*), sales growth (*GROWTH*), market-to-book ratio (*MB*), and loss indicator (*LOSS*). Details on the variable definitions are provided in Appendix A.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Individual
Elections

LN_GC

	Expected Sign	2008 Election			2006 Election		
08 ELECTION×DDEM	+	0.786*** (0.302)					
08 ELECTION×DREP		-0.186 (0.315)					
08 ELECTION×LN_DEM	+		1.013** (0.419)				
08 ELECTION×LN_REP			-0.294 (0.342)				
08 ELECTION×PDEM	+			7.512** (2.967)			
08 ELECTION×PREP				-1.816 (2.057)			
06 ELECTION×DDEM	?				0.031 (0.279)		
06 ELECTION×DREP					-0.283 (0.260)		
06 ELECTION×LN_DEM	?					0.067 (0.351)	
06 ELECTION×LN_REP						-0.436 (0.306)	
06 ELECTION×PDEM	?						0.538 (2.364)
06 ELECTION×PREP							-3.251* (1.946)
Election×Dem = Election×Rep		4.54**	5.35**	5.95**	0.61	1.08	1.34
Controls		Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects		No	No	No	No	No	No
N		2230	2230	2230	2230	2230	2230
adj. R-sq		0.474	0.475	0.474	0.473	0.475	0.473

Panel B. Both Elections

	Expected Sign	LN_GC		
08 ELECTION×DDEM	+	0.791**		
		(0.341)		
08 ELECTION×DREP		-0.296		
		(0.372)		
06 ELECTION×DDEM	?	0.035		
		(0.279)		
06 ELECTION×DREP		-0.286		
		(0.260)		
08 ELECTION×LN_DEM	+	1.033**		
		(0.473)		
08 ELECTION×LN_REP		-0.465		
		(0.410)		
06 ELECTION×LN_DEM	?	0.070		
		(0.351)		
06 ELECTION×LN_REP		-0.441		
		(0.306)		
08 ELECTION×PDEM	+		7.699**	
			(3.430)	
08 ELECTION×PREP			-3.088	
			(2.487)	
06 ELECTION×PDEM	?		0.564	
			(2.366)	
06 ELECTION×PREP			-3.287*	
			(1.953)	
08 Election×Dem = 06 Election×Dem		5.73**	5.31**	6.46**
Controls		Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes
Year Fixed Effects		No	No	No
N		2230	2230	2230
adj. R-sq		0.474	0.476	0.474

Table 1.8 Government Subsidies Post 2006 and 2008 Election

This table presents the results of how the 2006 and 2008 elections affected firms with different political connections' ability in receiving government subsidies. Panel A presents the results for total subsidies, where the dependent variable is the log amount of total subsidies (*LN_SUBSIDIES*). Panel B and C present results for loan and tax credits, where the dependent variable is the log amount of government loan (*LN_LOAN*) and the log amount of tax credit (*LN_TAX_CREDIT*), respectively. Control variables include appropriate Democratic connection measures (*DDEM*, *PDEM*, *LN_DEM*), matching Republican connection measures (*DREP*, *PREP*, *LN_REP*), and 2006 and 2008 election indicators. Other controls include cost of goods sold (*COGS*), capital expenditure (*CAPEX*), Herfindahl index (*HHI*), return on assets (*ROA*), market size (*SIZE*), firm age (*LNAGE*), sales growth (*GROWTH*), market-to-book ratio (*MB*), and loss indicator (*LOSS*). Details on the variable definitions are provided in Appendix A.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A. Total Subsidies		LN_SUBSIDIES					
	Expected Sign	2006 Election			2008 Election		
DDEM×2006 ELECTION	+	-0.026 (0.836)					
DREP×2006 ELECTION		-0.831 (0.697)					
LN_DEM×2006 ELECTION	+		0.177 (1.075)				
LN_REP×2006 ELECTION			-1.208 (0.908)				
PDEM×2006 ELECTION	+			1.287 (6.950)			
PREP×2006 ELECTION				-7.188 (6.420)			
DDEM×2008 ELECTION	?				0.886 (0.747)		
DREP×2008 ELECTION					0.324 (0.698)		
LN_DEM×2008 ELECTION	?					1.197 (0.999)	
LN_REP×2008 ELECTION						0.345 (0.856)	
PDEM×2008 ELECTION	?						7.323 (6.614)
PREP×2008 ELECTION							2.070 (5.288)
Election×Dem =							
Election×Rep		0.1	0.00	0.01	0.04	0.05	0.05
Controls		Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects		No	No	No	No	No	No
N		3265	3265	3265	3265	3265	3265
adj. R-sq		0.322	0.323	0.324	0.309	0.310	0.311

Panel B. Loan				LN_LOAN		
	2006 Election			2008 Election		
DDEM×2006 ELECTION	0.721					
	(0.789)					
DREP×2006 ELECTION	0.561					
	(0.831)					
LN_DEM×2006 ELECTION		1.190				
		(1.087)				
LN_REP×2006 ELECTION		0.793				
		(0.980)				
PDEM×2006 ELECTION			6.825			
			(6.718)			
PREP×2006 ELECTION			4.215			
			(6.239)			
DDEM×2008 ELECTION				1.612**		
				(0.734)		
DREP×2008 ELECTION				0.635		
				(0.720)		
LN_DEM×2008 ELECTION					1.730*	
					(1.000)	
LN_REP×2008 ELECTION					0.781	
					(0.911)	
PDEM×2008 ELECTION						10.553
						(7.142)
PREP×2008 ELECTION						3.205
						(5.793)
Election×Dem = Election×Rep	0.00	0.07	0.15	0.80	0.41	0.44
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	No	No	No	No	No	No
N	3265	3265	3265	3265	3265	3265
adj. R-sq	0.202	0.202	0.200	0.177	0.176	0.174

Panel C. Tax Credit		LN_TAX_CREDIT					
		2006 Election			2008 Election		
DDEM×2006 ELECTION	-0.316 (0.647)						
DREP×2006 ELECTION	0.154 (0.691)						
LN_DEM×2006 ELECTION		-0.183 (0.882)					
LN_REP×2006 ELECTION		-0.133 (0.871)					
PDEM×2006 ELECTION			-0.141 (6.215)				
PREP×2006 ELECTION			-1.390 (5.575)				
DDEM×2008 ELECTION				0.936 (0.687)			
DREP×2008 ELECTION				0.167 (0.674)			
LN_DEM×2008 ELECTION					0.969 (0.978)		
LN_REP×2008 ELECTION					-0.015 (0.792)		
PDEM×2008 ELECTION						2.105 (7.164)	
PREP×2008 ELECTION						-2.446 (4.856)	
Election×Dem = Election×Rep	1.28	0.58	0.15	0.69	0.99	0.79	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	
Year Fixed Effects	No	No	No	No	No	No	
N	3265	3265	3265	3265	3265	3265	
adj. R-sq	0.331	0.331	0.330	0.306	0.306	0.305	

Table 1.9 Current Firm Performance

This table examines the current accounting performance of politically connected firms. Dependent variables for column (1)-(6) are current return on assets (*ROA*); for column (7)-(14) are current profit margin (*PM*). *PCB* is an indicator for political connections, *LN_GC* is the log amount of total government contracts received by the firm in the year, *LN_SUBSIDIES* is the log amount of total subsidies received by the firm. Control variables include market size (*SIZE*), firm age (*LNAGE*), sales growth (*GROWTH*), market-to-book ratio (*MB*), Herfindahl index (*HHI*), and loss indicator (*LOSS*). Details on the variable definitions are provided in Appendix A.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	Expected Sign	ROA _t						PM _t					
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
PCB _{t-1}	+	-0.002 (0.004)			0.010 (0.022)	0.001 (0.007)	0.008 (0.022)	-0.011** (0.005)			0.020 (0.029)	0.001 (0.009)	0.017 (0.028)
LN_GC _{t-1}			-0.002*** (0.001)		-0.002** (0.001)		-0.002** (0.001)		-0.005*** (0.001)		-0.004*** (0.001)		-0.004*** (0.001)
LN_SUBSIDIES _{t-1}				-0.001*** (0.000)		-0.001* (0.000)	-0.001*** (0.000)			-0.002*** (0.000)		-0.001*** (0.000)	-0.001** (0.000)
PCB _{t-1} ×LN_GC _{t-1}	+				-0.001 (0.001)		-0.001 (0.001)				-0.001 (0.002)		-0.001 (0.002)
PCB _{t-1} ×LN_SUBSIDIES _{t-1}	+					-0.000 (0.000)	-0.000 (0.001)					-0.001* (0.001)	-0.000 (0.001)
Controls		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N		2801	1972	2815	1969	2801	1969	3532	2445	3577	2428	3532	2428
adj. R-sq		0.304	0.329	0.314	0.328	0.307	0.333	0.257	0.303	0.260	0.306	0.264	0.311

Table 1.10 Future Firm Performance – Single Factor

This table presents the analysis on future accounting performance of politically connected firms with a single factor. Dependent variables are one-year-ahead ROA (*FROA*) for column (1)-(3), two-year-ahead ROA (*FROA2*) for column (4)-(6), three-year-ahead ROA (*FROA3*) for column (7)-(9), four-year-ahead ROA (*FROA4*) for column (10)-(12), and five-year-ahead ROA (*FROA5*) for column (13)-(15). Control variables include market size (*SIZE*), firm age (*LNAGE*), sales growth (*GROWTH*), market-to-book ratio (*MB*), and Herfindahl index (*HHI*). Details on the variable definitions are provided in Appendix A.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	FROA			FROA2			FROA3		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
PCB	-0.005 (0.004)			-0.003 (0.004)			-0.001 (0.004)		
LN_GC		-0.002*** (0.001)			-0.002** (0.001)			-0.002* (0.001)	
LN_SUBSIDIES			-0.001*** (0.000)			-0.001*** (0.000)			-0.001** (0.000)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	4003	2727	4052	3494	2424	3536	3016	2117	3052
adj. R-sq	0.271	0.288	0.277	0.239	0.244	0.245	0.220	0.210	0.222

	FROA4			FROA5		
	(10)	(11)	(12)	(13)	(14)	(15)
PCB	-0.001 (0.004)			0.002 (0.004)		
LN_GC		-0.002** (0.001)			-0.002** (0.001)	
LN_SUBSIDIES			-0.001* (0.000)			-0.001** (0.000)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes
N	2567	1826	2599	2137	1536	2165
adj. R-sq	0.208	0.210	0.209	0.240	0.259	0.245

Table 1.11 Future Firm Performance – With Interactions

This table presents the results from regression analyses of future firm performance, with interaction terms. Dependent variables are one-year-ahead roa (*FROA*), two-year-ahead roa (*FROA2*), three-year-ahead roa (*FROA3*), four-year-ahead roa (*FROA4*), and five-year-ahead roa (*FROA5*). Panel A presents the results with *LN_GC* and *LN_SUBSIDIES* as independent variables separately, and includes these variables' interaction with political connection indicators (*PCB*). Panel B presents the results with both *LN_GC* and *LN_SUBSIDIES* in the regression as independent variables, and interact with *PCB*. Control variables include market size (*SIZE*), firm age (*LNAGE*), sales growth (*GROWTH*), market-to-book ratio (*MB*), and Herfindahl index (*HHI*). Details on the variable definitions are provided in Appendix A.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A.	FROA		FROA2		FROA3		FROA4		FROA5	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
PCB	0.010 (0.020)	-0.003 (0.006)	0.021 (0.019)	-0.001 (0.007)	0.037* (0.021)	0.003 (0.008)	0.039* (0.022)	0.001 (0.008)	0.028 (0.021)	0.002 (0.007)
LN_GC	-0.002** (0.001)		-0.001 (0.001)		-0.001 (0.001)		-0.001 (0.001)		-0.001 (0.001)	
LN_SUBSIDIES		-0.001*** (0.000)		-0.001*** (0.000)		-0.001 (0.000)		-0.001 (0.000)		-0.001* (0.000)
PCB×LN_GC	-0.001 (0.001)		-0.001 (0.001)		-0.002* (0.001)		-0.002* (0.001)		-0.002 (0.001)	
PCB×LN_SUBSIDIES		-0.000 (0.000)		-0.000 (0.000)		-0.000 (0.001)		-0.000 (0.001)		0.000 (0.001)
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	2708	4003	2409	3494	2105	3016	1816	2567	1527	2137
adj. R-sq	0.291	0.275	0.250	0.244	0.219	0.222	0.217	0.210	0.260	0.243

Panel B.	FROA	FROA2	FROA3	FROA4	FROA5
PCB	0.008 (0.020)	0.020 (0.019)	0.037* (0.021)	0.037* (0.022)	0.025 (0.021)
LN_GC	-0.002** (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
LN_SUBSIDIES	-0.001*** (0.000)	-0.001*** (0.000)	-0.000 (0.000)	-0.001 (0.000)	-0.001** (0.000)
PCB×LN_GC	-0.001 (0.001)	-0.001 (0.001)	-0.002 (0.001)	-0.002 (0.001)	-0.002 (0.001)
PCB×LN_SUBSIDIES	-0.000 (0.001)	-0.000 (0.001)	-0.001 (0.001)	-0.000 (0.001)	0.000 (0.001)
Controls	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects	Yes	Yes	Yes	Yes	Yes
N	2708	2409	2105	1816	1527
adj. R-sq	0.297	0.257	0.222	0.220	0.265

Chapter 2: Audit Fees of Politically Connected Firms

We weaken those ties when we allow our political dialogue to become so corrosive that people of good character aren't even willing to enter into public service; [...] when we write off the whole system as inevitably corrupt...

— President Barack Obama's Farewell Address, 2017

2.1 Introduction

Do politically connected firms pay higher or lower audit fees, and why? This paper seeks to answer this seemingly straight-forward two-part research question. Although there are studies that hint at the audit risk of politically connected firms, the relation between audit fees and political connections in the United States is an empirical question that has yet to be answered. Existing research suggests that political connections are associated with bad financial reporting. For example, Chaney et al. (2011) find that political connections are associated with lower accounting quality using a sample of firms in 19 countries; Baloria (2014) and Kim and Zhang (2016) find that U.S. firms with political connections are more aggressive in their accounting and tax planning. One may also argue that politically connected firms are self-selected to seek out political connections because they face higher political risk, thus higher audit risk. As a result, many believe that political connections are associated with higher audit fees due to low reporting quality and a more opaque audit environment, in addition to increased political risks. Indeed, Gul (2006) finds that auditors charge politically connected companies in Malaysia higher audit fees as compensation for bearing higher litigation risk due to political cronyism, and the audit fee gap increased during the 1997 Asian Financial Crisis.

On the other hand, the results may not hold for politically connected firms in the United States, which enjoy a lower corruption rate as well as a superior regulation environment. In fact, one can argue that politically connected firms are considered safer clients. For instance, Faccio et

al. (2006) find that firms with political connections are more likely to be bailed out when they are in trouble; Correia (2014) suggests that politically connected firms are less likely to be involved in SEC enforcement actions, and when they are, they face lower penalties. If investors value political connections (Goldman et al., 2009; Cooper et al., 2010), creditors are willing to lend at a lower rate (Houston et al., 2014), and regulators provide more lenient oversight, then the audit risk of politically connected firms will be lower.

This paper examines the empirical relation between audit fees and political connections, and identifies the reasons for the relation. Using hand-collected data of S&P 500 firms between 2004 and 2013, I find that politically connected firms pay higher audit fees than their non-connected counterparts. This result is stronger for firms with former politicians who worked for the executive branch.

To investigate the cause of this difference in audit fees, I explore several channels. First, following the prevailing view in current research that politically connected firms have poor financial reporting, I compare various measures of financial reporting quality between politically connected firms and non-connected ones. I find no significant difference in my sample, suggesting that the audit fee gap found is not the result of lower reporting quality.

Next, I explore whether having a higher risk of being affected by political and policy changes, which is labeled “political risk”, contributes to higher audit fees for politically connected firms. Politically connected firms, I assume, are more likely to be involved in industries that are sensitive to political risk. During election years, they face higher uncertainty, hence higher audit risk. This effect should be stronger when control of one or more government branches changes hands between political parties. Using all of the election years available during my sample period, especially with the 2006 and 2008 elections, when Congress and the White

House respectively changed hands, I employ the difference-in-difference method and find no significant changes in the audit fee gap during election years. This suggests that the different exposure to political risk is unlikely to be the main reason for the audit fee gap.

Finally, I hypothesize and find that because politically connected firms – many of whom are government contractors in my sample – pay higher audit fees because government contractors are subject to additional regulations, which increases audit risk. Federal government contractors must comply with the Federal Acquisition Regulations (FAR). FAR governs not only the “acquisition process”, which is how contractors are selected for different projects, but also how contracts are carried out. To ensure compliance, all federal government contractors are subject to government audits. Government auditors like the Defense Contract Audit Agency (DCAA) and the Government Accountability Office (GAO) perform audits on behalf of the government or government agencies. This means firms that are federal government contractors have to adhere to additional disclosure requirements and are subject to additional government auditor inspections which do not apply to other companies. As a result, when an audit client is a government contractor, the auditor needs to gather additional evidence, bear higher risk, or even alter the normal audit procedure to cater to the client,¹⁴ thus increasing audit fees. As a result, the audit fee gap between politically connected firms and their non-connected counterparts is a manifestation of the demand for higher audit quality or additional audit evidence associated with being in the government contract business.

This paper makes several contributions to the literature. This is the first paper to empirically document the relation between political connections and audit fees in the United

¹⁴ Information is from my private conversation with auditors involved in auditing hospitals contracted by Veteran Affairs.

States. Existing literature has provided mixed arguments regarding this issue. This paper documents that politically connected firms pay higher audit fees in the United States. More importantly, it sheds light on the reason behind the audit fee gap. I put to test several channels through which such an audit fee gap can be explained.

Most of the existing literature paints firms with political connections in an unfavorable light, with lower accounting quality and higher incentive to manipulate records. As a result, it is believed that auditors charge these firms higher fees to cover litigation risks. My findings do not support this argument in the U.S. Next, I find no evidence for the political risk hypothesis. Politically connected firms may be in more political and policy-sensitive environments, but political uncertainty, most acute during election years, is not associated with higher audit fees.

In the end, this paper demonstrates that the additional compliance requirements and audit demands of being government contractors are the main reasons why audit fees are higher for politically connected firms. In spite of findings in prior literature, and in spite of the cynical tones regarding corporate political connections that some politicians and many political pundits hold, this paper finds nothing nefarious. My evidence shows that the higher audit fees paid by politically connected firms are driven by the higher audit demands of being a government contractor. To my knowledge, this is the first paper to study and draw connections between politically connected boards, government contracts, and audit fees using U.S. data.

In addition, this paper adds to the current literature on how board characteristics affect audit fees. Existing literature finds a positive relation between board independence and audit fees. For example, Carcello et al. (2002) argue that independent board members demand higher audit quality, which results in higher audit fees. They point out that independent board members, being separated from firm management, seek to protect their reputations as experts by

monitoring, and have strong incentive to protect against damage to shareholder wealth. My paper identifies a specific subset of outside board members, namely former politicians, and finds that they demand higher audit quality not only because of their own self-interest. Their demand for higher audit quality is warranted as part of the effort to bid for government contracts, and likewise if firms already hold such contracts.

The rest of this paper is organized as followed. Section 2.2 reviews related existing literature and develops hypotheses, followed by research design in Section 2.3. I discuss my sample and data selection in Section 2.4. The results and interpretation are presented in Section 2.5. Section 2.6 includes some additional analyses, which is followed by a brief conclusion in Section 2.7.

2.2 Literature review and hypothesis development

There is a rich literature in audit fee determinants. Starting with the seminal work of Simunic (1980), the past few decades have seen an increasing number of studies into what drives audit fees. Some researchers study supply side factors like auditor size, industry expertise or auditor brand name, and audit market competition (Palmrose, 1986; Maher et al., 1992; Ferguson et al., 2003; Maher et al., 1992). However, many more studies focus on demand factors, which are client firm characteristics such as business risk (Bell et al., 2001; Lyon and Maher, 2005), corporate governance (Carcello et al., 2002; Gul et al., 2003; Larcker and Richardson, 2004), and litigation risk (Choi et al., 2009; Abbott et al., 2012). The main findings on the demand side literature are that audit fees are a function of client firms' size, complexity, inherent risks, and leverage (Hay et al., 2006). This chapter is more relevant to the latter stream of audit fee research. Closely related to my paper is Carcello et al. (2002), who find that board independence,

diligence, and expertise are associated with increased audit fees, because of a higher demand for accounting and audit quality from the board.

Parallel to the long and extensive audit fee literature, there is a new and growing stream of research on corporate political connections in accounting and finance. Most of the existing literature paints politically connected firms' accounting practices in an unfavorable light. Specifically, Chaney et al. (2011) find that politically connected firms have higher abnormal accruals; Kim and Zhang (2016) find that they are more tax aggressive; and Baloria (2014) finds that they are less conservative. These papers' findings suggest that audit fees should be higher for politically connected firms.

However, politically connected firms are found to be favored by their stakeholders. Faccio et al., (2006) find that political connections help firms get bailouts in financial distress; Claessens et al. (2008) find that banks are willing to lend to them at a better interest rate; Cooper et al. (2010) and Goldman et al. (2009) both find that the market values political connections; Correia (2014) finds that the SEC is less likely to litigate politically connected firms, who pay less penalty even when litigated. These findings suggest that it is safer to audit politically connected firms, resulting in lower audit fees.

It is unclear which of these two forces dominates. Therefore, the relation between political connection and audit fee is an empirical question. A paper worth noting here is Gul (2006), which finds that politically connected firms in Malaysia are charged higher audit fees. Using the 1997 Asian Financial Crisis as an exogenous shock, the author comes to the conclusion that such an audit fee gap is in response to auditors bearing higher audit risk when their clients benefit from political cronyism. However, this finding is based on a Malaysian sample, where political cronyism and corruption is more common. Whether the same applies to

politically connected firms in the U.S. remains unclear. Following Gul (2006)'s observation, I phrase Hypothesis 2.1 as the following.

Hypothesis 2.1 *Audit fees of politically connected firms are higher than audit fees of non-connected firms.*

Prior research such as Chaney et al. (2011), Baloria (2014), Tahoun, (2014), and Kim and Zhang (2016) suggests that corporate political connections are signals of bad accounting quality. In order to examine whether lower financial reporting quality contributes to the difference in audit fees paid by politically connected firms, as most current literature suggests, I compare several measures of accounting quality. As such, I state the second hypothesis accordingly.

Hypothesis 2.2 *Politically connected firms are associated with lower financial reporting quality compared with non-connected firms.*

Aside from substandard reporting quality, there are other factors that contribute to higher audit fees paid by politically connected firms. One reason is that firms are self-selected to be politically connected because they face higher political risk. Shaffer (1995) summarizes that firm-level responses include strategic adaptation and attempts to influence public policy. Having political connections is a good example of such a response. Hillman (2005) finds firms in heavily regulated industries have more politician directors. In this case, politically connected firms are self-selected because they face significant regulation or are sensitive to government policy changes. I call this heavy exposure to regulations and sensitivity to policy changes “political risk”, which increases audit risk from an auditor's perspective, resulting in a higher audit fee charged. This effect should be stronger during election years when political uncertainty is higher, and most acute when the election result is a change in political control in government branches, as favorable policies and regulations may not remain in place and unfavorable changes may be

enacted. This increases audit risk as profitability of the firm is sensitive to these changes. Thus, I posit the next hypothesis accordingly.

Hypothesis 2.3 *Higher audit fees for politically connected firms are due to higher political risk faced by these firms.*

Another reason for politically connected firms having higher audit fees may be due to higher demands for audit services. This increase in demand of audit service can be a consequence of government contracting, which politically connected firms are often associated with (Goldman et al., 2008; Tahoun 2014).

After securing government contracts, firms must also comply with additional reporting and audit standards while carrying out these contracts. Federal government contractors are regulated under the Federal Acquisition Regulation (FAR) and are often subject to government audits. In order to limit wasteful spending and ensure the quality of government contract executions, the Defense Contract Audit Agency (DCAA) and Government Accountability Office (GAO) audit government contractors on behalf of the U.S. Government as well as its agencies. Such audits are done based on a contract basis, are not mandatory periodically, and are usually performed upon the request of the government branches. However, big government contractors, like Boeing Co. or Lockheed Martin Corp., who are awarded a great amount of money from government procurement, can reasonably expect regular attention from government auditors. Knowing this additional compliance need, external auditors for these government contractors are more inclined to perform services catered to their clients in order to facilitate a smoother government audit. Such catered services require altered audit procedures, and are thus more likely to result in higher audit fees. Therefore, my last hypothesis is as follows.

Hypothesis 2.4 *Higher audit fees for politically connected firms are due to their involvement in government contracts.*

2.3 Research design

There are various ways to measure and to identify corporate political connections: lobbying expenses (Hill et al., 2014), corporate political campaign contributions (Claessens et al., 2008), politician equity ownership (Baloria, 2014; Tahoun, 2014), and having former politicians as board members (Goldman et al., 2009). However, not all measures are suited for this study. Lobbying expenses, which are usually issue- and industry-specific, are not a good identification strategy because firms may lobby through industry associations, and lobbyists target both political parties without public disclosure of specifics. Corporate political campaign contributions to some extent measure which political party a firm wants to be associated with more, yet most firms donate similar amounts to both major parties. Recent decades have also witnessed an increased popularity in Political Action Committees (PACs). Since 2010's *Citizens United v. Federal Election Commission*, the use of Super PACs has made it almost impossible to identify the donors to political campaigns. Lastly, when it comes to politician equity ownership, I argue that this is a measure of politicians selecting their own stock holdings, rather than firms selecting political connections.

In this paper, I follow Goldman et al. (2009)'s definition and classify politically connected firms as those with at least one politically connected board members. This variable is measured at the beginning of every fiscal year. Comparatively, this is a clear measure of political connection when it comes to identifying which political party and what government branches firms are targeting. Having a politically connected board member is not only a signal that the firm is seeking political connections, but also that it is successful in doing so, as the politician

needs to agree to be on the board of directors and have his/her name associated with the firm when filing for public disclosure.

To test the empirical relation between audit fee and political connections, I analyze audit fees with a standard audit fee model used in the literature (Carcello et al., 2002; Lyon and Maher, 2005). The following specification is used to test Hypothesis 2.1.

$$\begin{aligned} \text{Ln}(\text{Audit Fee}_{i,t}) &= \alpha_0 + \alpha_1 \text{Political Connections}_{i,t-1} + \alpha_2 \text{LNAT}_{i,t} + \alpha_3 \text{RECINV}_{i,t} + \alpha_4 \text{CATA}_{i,t} \\ &+ \alpha_5 \text{QUICK}_{i,t} + \alpha_6 \text{MB}_{i,t} + \alpha_7 \text{ROA}_{i,t} + \alpha_8 \text{LOSS}_{i,t} + \alpha_9 \text{LTD}_{i,t} + \alpha_{10} \text{LNSEG}_{i,t} \\ &+ \alpha_{11} \text{RESTATEMENT}_{i,t} + \alpha_{12} \text{GOING_CONCERN}_{i,t} + \alpha_{13} \text{BIG4}_{i,t} \end{aligned} \quad (2.1)$$

In Equation 2.1, the variable of interest is Political Connections, which can take one of three forms. The first is *PCB*, an indicator variable that takes on the value 1 when there is at least one board member who is politically connected. The second, *PPCB*, is the percentage of board members that are politically connected. The third is *LN_NPC*, the natural log of the number of politically connected board members. I also replace the political connection indicator with different measures of political connection characteristics, such as political party associations and various government branch experiences, to examine the impacts of various types of political connections.

The remaining variables in Equation 2.1 are from the standard audit fee model. Log number of client's total assets, *LNAT*, measures the size of audit engagement and audit workload. To control for demand side factors like inherent risk, profitability, and complexity, I include *RECINV*, which is the ratio of accounts receivables and inventory scaled by total assets, *CATA*, which is the percentage of current assets to total assets, *QUICK*, which is quick ratio, *ROA* and *LOSS* indicator, *LTD*, which is long-term debt scaled by total assets, *LNSEG*, which is the log

number of business segments. *RESTATEMENT* and *GOING_CONCERN* are indicators when a firm-year observation has restatement or the auditors have issued going concern qualifications, which are associated with high audit risk. *BIG4* is a Big 4 auditor indicator, as these auditors are associated with the audit fee premium.

Hypothesis 2.1 predicts α_1 to load positively, which indicates politically connected firms pay higher audit fees. When *Political Connections* measures are *PCB*, *PPCB* and *LN_NPC*, a positive α_1 suggests that the audit fee increases with the existence or strength of political connections. When the *Political Connections* is replaced with indicators of different government branch experiences (e.g. legislative and executive), the coefficient difference between executive branch connections and legislative connections indicates whether or not having different types of political connections matters. I expect having legislative branch connections may help firms decrease legislative risk, thus lowering audit fees; whereas having executive branch connections help firms obtain government contracts, thus increasing audit fees. The latter is consistent with Hypothesis 2.4.

To test Hypothesis 2.2, I use Equation 2.2 below. The dependent variable is different measures of financial reporting quality, and *Political Connections* is the variable of interest.

Financial Reporting Quality

$$= \beta_0 + \beta_1 \textit{Political Connections} + \beta_2 \textit{ROA} + \beta_3 \textit{LOSS} + \beta_4 \textit{SIZE} + \beta_5 \textit{LTD} \\ + \beta_6 \textit{GROWTH} + \beta_7 \textit{CAPEX} \quad (2.2)$$

I use five variables to measure financial reporting quality: C score (*C_SCORE*) from Khan and Watts (2009), Modified Jones Model's discretionary accruals (*DACC*) from Dechow et al. (1995), discretionary accruals (*DDACCR*) from Dechow and Dichev (2002), Accounting and Auditing Enforcement Releases (*AAER*) issued by the SEC, and whether there is a restatement of

the financial statement (*RESTATEMENT*). I discuss the choice of these accounting measures in detail in the sample and data section.

Hypothesis 2.3 is tested using a difference-in-difference variation of Equation 2.1. Specifically, I use Equation 2.3 to assess whether election years, when political risk is higher, have any marginal impact on the audit fees paid by politically connected firms. Moreover, the sample period includes both the 2006 and 2008 elections, when the controls of U.S. Congress and the executive branch changed hands respectively. Political risk would be more acute during these two elections, so I test these two elections separately using the same structure of Equation 2.3.

$$\begin{aligned}
 \text{Ln}(\text{Audit Fee}) &= \gamma_0 + \gamma_1 \text{Political Connections} + \gamma_2 \text{Election Year Indicator} \\
 &+ \gamma_3 \text{Political Connections} \times \text{Election Year Indicator} \\
 &+ \sum \gamma_i \text{Controls}
 \end{aligned} \tag{2.3}$$

I use three variations of this regression: separating Democratic and Republican connections, using an indicator of political connections (*PCB*) and an election year indicator (*ELECTION*), and interacting the political party identifier with an indicator for election years when political control changed. The first variation of separating political connections along party lines will find whether connections to a specific party are more sensitive towards political risks. The second and third variations are the difference-in-difference tests. Hypothesis 3 predicts γ_3 to be positive and significant. The result should diverge in variation 3, as the election year indicator is replaced with power-changing election years. Given that in the 2006 and 2008 elections, the Democratic Party took control of both houses of Congress and the White House respectively, the interaction of these election indicators and the Democratic connections should be negative and significant

due to lower political risk, whereas the interaction of these election indicators and the Republican connections should be positive and significant as political risk increases. I also included lobbying expense as it may also measure the political sensitivity of the firm.

Testing Hypothesis 2.4 requires path analysis, which I execute in two ways. First, I add in the amount of annual government contracts (*LN_GC*) as a control variable in the audit fee model. Hypothesis 2.4 indicates that the significance level of the political connections variable should decrease (or disappear) when government procurement information is added into the regression.

Next, though orthogonality is not required for independent variables, to try and see the effect of stand-alone government contracts, I utilize another method to demonstrate the isolated effect of government contracts on audit fees. In the first regression, I use government contract information to predict political connection value. The expected political connection value then contains all the information of having government contracts, whereas the residual value of this regression contains the variation in political connections orthogonal to government contracts. The audit fee model is the second regression, with both predicted political connection and residual political connection information as independent variables. In the second step, any effect that the political connection has on audit fees through the government procurement channel is captured in the coefficient of the expected political connection conditional on government contracts. Any additional impact that political connections have on audit fees that are orthogonal to government contracts is reflected in the coefficient on the residual political connection variable. Hypothesis 4 predicts that, in the second stage regression, the coefficient of the predicted political connection should be positive and significant.

2.4 Sample and data

2.4.1 Sources of data

I begin my sample construction using information from CRSP to identify firms in the S&P 500 from 2004 through 2013. Information on politically connected boards are collected from each firm's annual proxy statement (DEF 14A) from EDGAR on SEC's website¹⁵. Each year, approximately 9 months before the issuance of the annual report, a firm usually provides a proxy statement to nominate the board of director, and to disclose additional information such as the past fiscal year's committee meetings and audit fees. For each nominated director, a short description of his/her prior experience is included. I manually read through this part of the proxy statements in order to identify former politicians who are sitting on the board. My classification of politically connected board members follows Goldman et al. (2009),¹⁶ with the exception that I do not count as politically connected those who have worked for or are related to the judicial branch of government, Federal Reserve System, and those who only have military rankings are not included. Also, those whose description mentioned a qualifying position but the individual did not serve on the position (e.g. "served as a senior advisor to the Secretary of US Department of Defense") are not considered political connections. If there is no proxy statement for a specific year, I try to infer it from both the prior and the following year's proxy statement. If inference is not possible, then I assume that the missing year's information is the same as the year prior. If

¹⁵ <http://www.sec.gov/edgar/searchedgar/companysearch.html>

¹⁶ A company is classified as politically connected if it has at least one board member with one of the following former positions: President, presidential (vice-presidential) candidate, senator, member of the House of Representatives, secretary, assistant secretary, deputy secretary, deputy assistant secretary, undersecretary, director, associate director, deputy director, commissioner of any federal government department or federal government agency (including CIA, FEMA, CIA, OMB, IRS, NRC, SSA, CRC, FDA, and SEC), governor, mayor, treasury of the city, representative to the UN, trade representative for the US, ambassador, staff (White House, president, presidential campaign), chairman of the party caucus, and chairman or staff of the presidential election campaign.

neither is possible, then the observation is dropped. The resulting sample is as shown in Table 2.1. Approximately 32.9% of the sample firm-years are politically connected firms, which is very similar to Goldman et al.(2009)'s sample of 31%, but lower than Houston et al. (2014)'s sample of 43%, which is likely because their sample was machine-read. The proportion of politically connected firms relative to the sample is stable across years, as shown in Figure 2.1.

Table 2.2 shows the industry composition of my sample. As shown in Table 2.2, there is a good range of industries within my sample. There are few industries where political connections are extremely high (over 95%) or low (below 5%), and the number of firms involved is small. This shows that seeking political connection is not a special phenomenon that only exists in specific industries, but a wide-spread, common practice across firms in various industries. We see the sample has some representation in finance industries. Following prior research, I exclude companies with SIC codes between 6000 and 6999 from all my tests. However, the results remain the same even after including these observations.

Once a politically connected board member is identified, then a Google search is performed on this person to identify his/her political party affiliation. Republicans and Democrats are classified accordingly, and any other political party association is classified as other. If this information is not readily available, then I look into the period when that person held office, and identify them as being part of the same party as the then-serving President of the United States. Because most of the positions, especially those that belong to the executive branch of government, are appointed directly by the President, assuming that a person's political connection is from the same party as the President is reasonable. If, however, that person served under both Democratic and Republican Presidents, then they are classified as other. For those who served in either house of Congress, they are classified as legislatives; those who served

under the executive branch are classified as such. Politicians who are female or racial minorities are identified according to their names, pictures, and other online information¹⁷. For firm-years without proxy statements, I use information from the subsequent proxy statements for up to two years. For example, if a firm is missing the 2004 proxy, then I assume the board information to be the same as 2005. If its information is also missing for 2005, then I assume that it is the same as 2006. If neither 2005 nor 2006 information is available, then the observation is dropped. The details of political connections are summarized in Table 2.3 Panel A. As Goldman et al.(2009) suggest, there are more Republican connections than Democratic ones, though not by much. I end up with a sample of 5,012 firm-year observations.

For government contract information, I use the Federal Procurements Data System-Next Generation (FPDS-NG)¹⁸, and search for each firm-year's specific government contract information. The FPDS-NG is a government-run public source that contains all federal procurements whose estimated value is \$3,000 or more. Modifications to any of the reported contracts, regardless of dollar value, will also be reported to FPDS-NG. A search is done in the "Adhoc Report" section, by adding the main part of the firm name (e.g. "Boeing" is searched instead of "Boeing Co") as a selected filter. Duration of the "Adhoc Report" is then selected to match exactly the beginning and end date of the reported fiscal period for each firm-year observation. When multiple entities are listed in the Adhoc Report, an additional search on Google is performed to include those that are confirmed to be subsidiaries, or venture businesses. Total dollar amount of action obligations in the report is then collected. This means there is a downward bias in government contract information, as I omit contracts awarded to subsidiaries

¹⁷ The information sources are the proxy statements, official government websites, Business week, Forbes, and nndb.com.

¹⁸ Information available at <https://www.fpds.gov/fpdsng/cms/index.php/en/>.

whose name do not contain the name of the parent firm. This biases my sample towards not finding result for Hypothesis 2.4.

Lobbying expenses are included as a control variable in some tests, and they are sourced from the Center for Responsive Politics¹⁹. Information required to be publically disclosed (even if the actual amount is zero) since 1998 for all lobbying transactions is available in the lobbying spreadsheet provided by the website. I manually match these transactions using client name and year to my sample, and generate the sum of lobbying expenses for each firm-year. Lobbying is added as a control variable in the audit fee models in tests for Hypothesis 2.3 and 2.4 in order to control for political sensitivity and political influence.

Financial statement variables are collected and calculated from COMPUSTAT. Audit fees, audit filing dates, restatement, SOX302 material weakness, and audit opinion variables are from Audit Analytics. AAER firms are identified when the firm is involved in an SEC enforcement action²⁰. A firm is identified to be in the AAER if the firm has been litigated by the SEC in at least one case within the current fiscal year. Financial information data as well as control variables are summarized in Panel B and C of Table 2.3. Continuous variables are winsorized at 1%. All variables are as defined in Appendix 2.

2.4.2 Choice of accounting quality measures

The literature provides many different measures of accounting quality. In this paper, I use five measures for this purpose. First, I construct the *C_SCORE*, a measure of conservatism,

¹⁹ Information available from <http://www.opensecrets.org/>. For non-registered users, the source is <http://data.influenceexplorer.com/bulk/>.

²⁰ Dechow et al., (2011) has collected most of the data needed for my sample years. This information is publically available on SEC's Accounting and Auditing Enforcement Releases: <http://www.sec.gov/divisions/enforce/friactions.shtml>. I thank Weili Ge for sharing most of her collected data with me.

following Khan and Watts (2009). Using data from CRSP and COMPUSTAT universe, I estimate the following cross-sectional regression:

$$\begin{aligned}
X_i = & \beta_1 + \beta_2 D_i + R_i(\mu_1 + \mu_2 Size_i + \mu_3 M/B_i + \mu_4 Lev_i) \\
& + D_i R_i(\lambda_1 + \lambda_2 Size_i + \lambda_3 M/B_i + \lambda_4 Lev_i) \\
& + (\delta_1 Size_i + \delta_2 M/B_i + \delta_3 Lev_i + \delta_4 D_i Size_i + \delta_5 D_i M/B_i + \delta_6 D_i Lev_i) \\
& + \epsilon_i
\end{aligned} \tag{2.4}$$

I then calculate $C_Score_{it} = \lambda_1 + \lambda_2 Size_{it} + \lambda_3 M/B_{it} + \lambda_4 Lev_{it}$.

C_SCORE is constructed as a firm-year measure to capture the timely recognition of losses, instead of requiring estimation of a time series. It is a more appropriate measure for my sample in order to examine the claims found in Baloria (2014) that politically connected firms (measured as whether congressional member have equity holdings) are less conservative in their financial reporting applies to my sample. A negative and significant coefficient on political connection measure is expected if the finding is consistent with Hypothesis 2.2, which suggests that politically connected firms have lower accounting conservatism.

The second and third measures are discretionary accruals from the Modified Jones Model from Dechow et al. (1995) and from Dechow and Dichev (2002). Both are residuals from accrual models that regress accounting accruals on their economic drivers²¹. They are commonly used measures for earnings management in the accounting literature to capture management discretion or manipulation. While the first measure is signed, the second one is not, which may be a better measure when we do not expect a specific direction of earnings management. Chaney et al.

²¹ Modified Jones Model uses the difference in growth of revenues and credit sales and property, plants and equipment as economic factors for total accruals, and produces a signed residual as discretionary accruals. Dechow and Dichev (2002) regress the change of working capital on prior, current, and future cash flow from operations, and use the absolute value of the residual as accrual management.

(2011) found that accounting accrual quality is lower for politically connected firms in their cross-country sample; I examine whether this association is also present in my sample. If politically connected firms are managing earnings more than other firms, then we should have positive and significant coefficients on political connections.

The fourth measure is whether the firm is identified by the SEC in the Accounting and Auditing Enforcement Release (AAER) that year and the fifth is whether the firm-year observation has a subsequent financial reporting restatement. These are both subsequent event measures of poor reporting quality, rather than statistical predictions of poor quality . They help explore whether politically connected firms in my sample are more frequently identified as having violated reporting standards by the regulator or other stakeholders. Because of the binary nature of these dependent variables, logit models are used for these two tests. Results from Correia (2014) suggest that the loading on political connections of the AAER regression should be negative. Hypothesis 2.2 predicts that the coefficients of political connections should be positive and significant for both of these measures.

2.5 Results and interpretations

All standard errors of the results (in parenthesis) are estimated using robust regressions and clustered by firm, and statistical significance is calculated based on two-tail tests. Industry fixed effects based on two-digit SIC code and year fixed effects are added where appropriate. Table 2.4 presents the result for Hypothesis 2.1, which predicts a positive relation between political connections and audit fees. We see that for politically connected firms, there is an audit fee premium associated with the political connected board (measured by *PCB*). This result persists when the strength of the political connections (measured by *PPCB*, and *LN_NPC*) increases. Moreover, we see that audit fee is positively associated with executive branch

connections, whereas the association with legislative branch connections is slightly negative and insignificant. This result suggests those with executive branch experiences are contributing to higher audit fees paid.

To explore whether the accounting quality difference is behind the audit fee premium paid by politically connected firms, I proceed to test Hypothesis 2.2, and the results are presented in Table 2.5. Control variables in each regression include financial performance (measured as ROA), loss indicator, firm size (measured as market capitalization), leverage, sales growth, and capital expenditure. Overall, across the five measures, there is little significant difference in accounting quality between politically connected and unconnected firms. Only Modified Jones Model's discretionary accruals are marginally associated with the dichotomous *PCB* variable at the 10% significance level. Nevertheless, this relation disappears when I use the continuous measures of political connection strength in the next two columns. Interestingly, there is an opposite result coming from the AAER columns. Though it is only significant at 10%, it shows that the likelihood of a firm being the subject of AAER decreases as the strength of the political connection increases. This is consistent with the findings in Correia (2014), and politically connected firms are less likely to be litigated by the SEC. Taken as a whole, results in Table 2.5 suggest that, at least in my sample, accounting quality difference does not seem to be the main reason for politically connected firms being charged higher audit fees.

Table 2.6 presents results of the tests performed for Hypothesis 2.3. As indicated before, I use a difference-in-difference setting in this analysis, where elections years are treatments with higher political risk. In the first two columns, I find no evidence that the political risk of being associated with different parties impacts audit fees. While the coefficients of Democratic Party connections are positive and significant in both column (1) and (2), the magnitude of the

coefficients (0.092 and 0.139) are not dramatically different from those of the Republican Party connection (0.072 and 0.089). F-test also finds that the coefficients on a Democratic Party connection are not statistically different from the coefficients on a Republican Party connection. In the third column, all election years (2004, 2006, 2008, 2010, and 2012) are indicated with an election year indicator, and the variable of interest is on the interaction of *PCB* and Election, which is not significantly different from zero. This is to address the concern that politically connected firms are facing political risk during every election ex ante, without knowing the outcome of the election of which party wins. Columns (4) to (6) pay special attention to the 2006 and 2008 elections, when political risk should be most acute due to a change in party controls in the U.S. Congress and the White House respectively. However, most of the interaction terms are insignificantly different from zero, except in columns (5) and (6) where the coefficient of *DREP*×*2006 ELECTION* is positive and significant at 10%. Overall, these results do not support political risk as the reason for higher audit fees paid by politically connected firms.

Table 2.7 presents the first test in a simple path analysis to examine Hypothesis 2.4. In this table, I estimate the normal audit fee model with additional measures for the amount of government contracts (*LN_GC*) and lobbying expenses (*LN_LOB*). Lobbying expenses are included to control for regulation risk. Column (1) shows audit fees are positively associated with the amount of government contracts a firm receives. Column (2)'s coefficient on *PCB* is no longer statistically different from zero, and it drops from 0.127 in Table 2.4 to 0.08. Columns (3) to (4) show that after controlling for government contracts, audit fees still have a marginally positive association with the strength of political connections. But overall, the coefficients of political connection strength measures also decrease, compared to those in Table 2.4 when government contracts are added into the regression. This shows that the audit fee premium found

in Table 2.4 is from firms with government contracts. It also is consistent with findings in the last column of Table 2.4, where connections to the executive branch are driving the result. Being politically connected, especially with the executive branch, is useful for winning government contracts, as most government contracts are awarded and controlled by the executive branch (e.g. Department of Defense, Department of Energy). Being government contractors also means additional compliance requirements, hence auditing government contractors may take more work and expertise.

Table 2.8 shows the second approach for testing Hypothesis 2.4, which isolates the effect of government contracts on political connections. The first step is to isolate the impact of government contracts by calculating the expected political connection value conditional on government contracts (*EX_PCB*, etc.). The second stage is to include both expected political connection and residual political connection (*RES_PCB*, etc.) in the audit fee model. The loading on predicted political connection value reflects how much of the original association of political connection with audit fee is due to government contracts, while the coefficient on residual political connections shows the association of audit fees with the portion of political connections orthogonal to government contracts. In the first stage, shown in Panel A, I regress political connection on government contract information as well as other firm characteristics. Whether with or without control variables and fixed effects, political connections are associated with the amount of government contracts received by a company. Second stage regresses audit fees against the expected political connections and the residuals of political connections from the prediction model. Table 8 Panel B shows the results of the second stage regressions, where again the expected values of political connection in columns (2), (4), and (6) are calculated using the pure effect of government contracts. All coefficients on predicted political connections are

positive and significant, whereas the residuals are shown to be marginally significant or not significant. Table 2.8 also reveals that government contracts explain approximately 30% of the impact of political connections on audit fees. Together with results from Table 2.7, I conclude that the higher audit fees paid by politically connected firms are driven by their involvements in government contracts. All in all, the results show strong support for Hypothesis 2.4.

2.6 Additional analyses

As an attempt to see whether there is any sign of additional audit effort, I also perform a test on audit report lag, the length of time needed for auditors to complete their audit. Knechel and Payne (2001) show that audit report lag is highly correlated with audit hours, and has been used as an indirect measure of audit effort in the literature. As shown in Table 2.9, there is no difference in audit report lag (or audit effort) between politically connected firms and the non-connected firms. This suggests that auditing government contractors may be more likely to involve catering services and additional expertise rather than just additional work.

I also perform a marginal test to see if having better internal control system helps to reduce the audit fees paid by politically connected firms. A better internal control system may help decrease the audit work load needed for a government contractor, as the processing of information becomes more efficient and reliable. Better internal controls also ensure better compliance with laws and regulations, including compliance with FAR, thus lowering demands of auditors for this aspect as a result. Empirically measuring the quality of internal control is difficult. So instead of measuring how good a firm's internal system is, I look at whether there are material weaknesses identified for a firm's internal control system, *MATERIAL_WEAKNESS*, the number of identified material weaknesses, *COUNT_WEAK*, and the log transformation of the number of identified material weaknesses, $LN(COUNT_WEAK)$. These measures are internal

control deficiencies. I assume that fewer deficiencies proxies for better the internal control system. Table 2.10 presents the results and shows that with better internal control systems, politically connected firms can decrease their audit fees.

2.7 Conclusion

In this paper, I document a positive and significant positive relation between political connections and audit fees. This relationship is stronger for firms with connections who previously worked in the executive branch of the government. To explore the reasons behind such difference in audit fees, three distinct hypotheses are put to the test. The first hypothesis posits the prevailing view that politically connected firms are bad financial reporters. Yet in my sample, I fail to find any significant difference in financial reporting qualities between politically connected firms and their non-connected counterparts. Next, a hypothesis regarding political risk is examined through a difference-in-difference analysis. I exploit higher political uncertainty during elections, especially when political controls of legislative and executive branch change hands, but fail to find any impact on the audit fee gap. Although politically connected firms may be more sensitive to political risk, this does not seem to be the reason for higher audit fees.

Finally, through path analysis, I find that politically connected firms may be charged with higher audit fees because of politically connected firms' involvement in government contracts. Because government contractors are subject to additional regulations in their financial reporting, like FAR, ensuring compliance increases audit risk. Meanwhile, the former politicians, especially those who help firms obtaining government contracts, have strong incentive to protect their reputations, thus putting more pressure on auditors. The evidence also suggests that by improving the internal control system, politically connected firms can lower this risk, thus decreasing audit fees.

This paper demonstrates that higher audit fees paid by politically connected firms do not signal nefarious practices. Rather, this difference in audit fees is a manifestation of increased audit demands of government contractors in order to comply with government requirements. This is therefore the nature of being involved in government contracts, and a legitimate practice.

I also acknowledge the shortcomings of this paper. This paper cannot directly examine whether audits for government contractors do involve more audit efforts or different audit procedures. The audit production function may be different when auditing government contractors, due to compliance needed for FAR in addition to GAAP. Moreover, the external validity of my results for Hypothesis 2 and 3 is unknown. Even though I fail to reject the null hypotheses in both cases, one should not conclude the same result applies for another sample.

Taken as a whole, this paper sheds new light on the effects of corporate political connections. Specifically, how audit fees may be different for those with political connections and why that is the case. We should not automatically assume corporate political connections as synonymous with corruption and corporation manipulation. At the very least, this paper shows that auditors, at least in the United States, are guarding financial reporting qualities and ensuring their clients' compliance with laws and regulations in addition to GAAP.

Figure 2.1 Politically Connected Firms by Year

Figure 2.1 is a graphic demonstration of the breakdown of politically connected firms ($PCB=1$) and non-connected firms ($PCB=0$) in the sample by year.

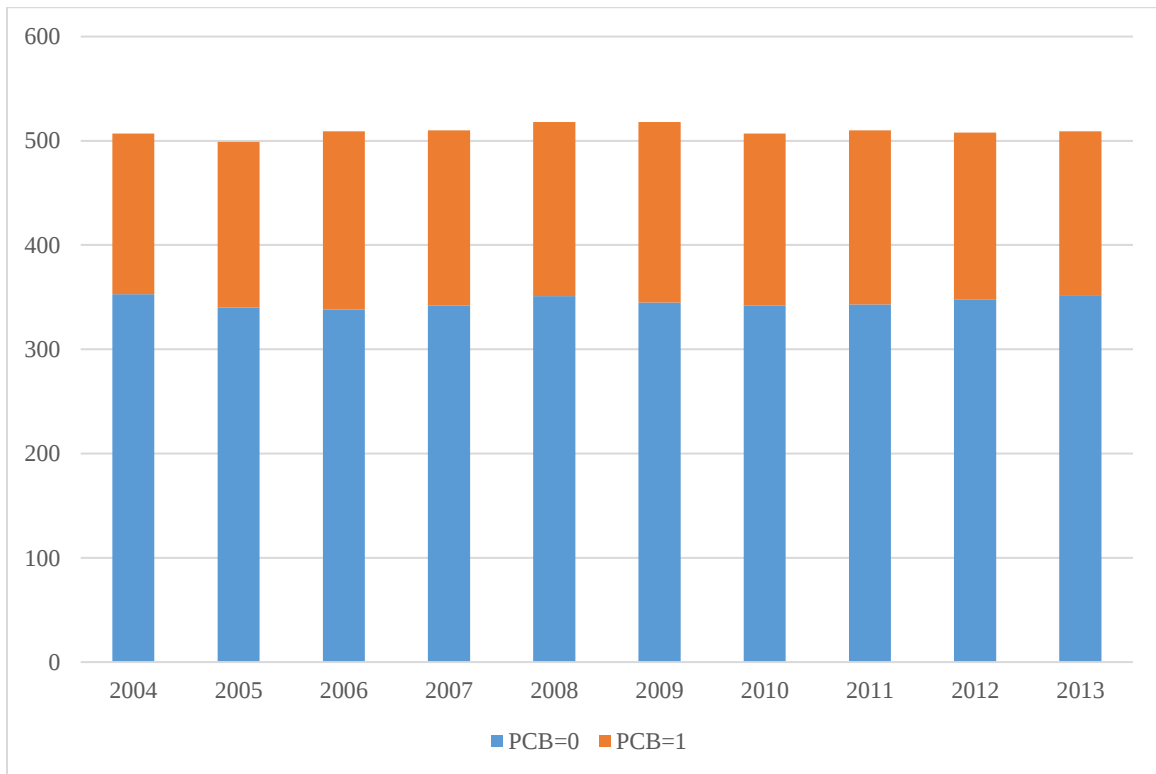


Table 2.1 Number of Politically Connected Firms by Year

Table 2.1 presents the breakdown of politically connected firms ($PCB=1$) and non-connected firms ($PCB=0$) in the sample by year.

Year	PCB		Total
	0	1	
2004	339	154	493
2005	329	158	487
2006	322	171	493
2007	336	168	504
2008	340	168	508
2009	339	172	511
2010	334	167	501
2011	337	169	506
2012	341	160	501
2013	348	160	508
Total	3365	1647	5012

Table 2.2 Summary of Industries

This table presents the industry composition of my sample, based on 2-digit SIC.

2-digit SIC	Industry	Full Sample		PCB=1	Percentage of PCB=1
		Frequency	Percentage	Frequency	
1	Agricultural Production - Crops	10	0.20%	10	100.00%
10	Metal, Mining	25	0.49%	11	44.00%
12	Coal Mining	21	0.41%	8	38.10%
13	Oil & Gas Extraction	225	4.43%	90	40.00%
14	Nonmetallic Minerals, Except Fuels	10	0.20%	7	70.00%
15	General Building Contractors	39	0.77%	8	20.51%
16	Heavy Construction, Except Building	17	0.33%	15	88.24%
17	Special Trade Contractors	5	0.10%	0	0.00%
20	Food & Kindred Products	229	4.51%	60	26.20%
21	Tobacco Products	36	0.71%	19	52.78%
22	Textile Mill Products	1	0.02%	0	0.00%
23	Apparel & Other Textile Products	40	0.79%	14	35.00%
24	Lumber & Wood Products	23	0.45%	4	17.39%
25	Furniture & Fixtures	20	0.39%	0	0.00%
26	Paper & Allied Products	75	1.48%	31	41.33%
27	Printing & Publishing	41	0.81%	19	46.34%
28	Chemical & Allied Products	401	7.90%	118	29.43%
29	Petroleum & Coal Products	69	1.36%	32	46.38%
30	Rubber & Miscellaneous Plastics Products	31	0.61%	18	58.06%
31	Leather & Leather Products	10	0.20%	0	0.00%
32	Stone, Clay, & Glass Products	5	0.10%	0	0.00%
33	Primary Metal Industries	56	1.10%	24	42.86%
34	Fabricated Metal Products	42	0.83%	10	23.81%
35	Industrial Machinery & Equipment	279	5.49%	77	27.60%
36	Electronic & Other Electric Equipment	345	6.79%	77	22.32%
37	Transportation Equipment	124	2.44%	63	50.81%
38	Instruments & Related Products	238	4.69%	77	32.35%
39	Miscellaneous Manufacturing Industries	30	0.59%	0	0.00%
40	Railroad Transportation	37	0.73%	24	64.86%
42	Trucking & Warehousing	10	0.20%	10	100.00%
44	Water Transportation	10	0.20%	6	60.00%
45	Transportation by Air	22	0.43%	14	63.64%
47	Transportation Services	21	0.41%	0	0.00%
48	Communications	176	3.47%	68	38.64%
49	Electric, Gas, & Sanitary Services	391	7.70%	165	42.20%
50	Wholesale Trade - Durable Goods	36	0.71%	5	13.89%

2-digit SIC	Industry	Full Sample		PCB=1	Percentage of PCB=1
		Frequency	Percentage	Frequency	
51	Wholesale Trade - Nondurable Goods	45	0.89%	10	22.22%
52	Building Materials & Gardening Supplies	26	0.51%	8	30.77%
53	General Merchandise Stores	105	2.07%	27	25.71%
54	Food Stores	40	0.79%	6	15.00%
55	Automotive Dealers & Service Stations	29	0.57%	5	17.24%
56	Apparel & Accessory Stores	56	1.10%	4	7.14%
57	Furniture & Home Furnishings Stores	39	0.77%	4	10.26%
58	Eating & Drinking Places	47	0.93%	28	59.57%
59	Miscellaneous Retail	81	1.60%	11	13.58%
60	Depository Institutions	256	5.04%	40	15.63%
61	Non-Depository Institutions	66	1.30%	44	66.67%
62	Security & Commodity Brokers	153	3.01%	44	28.76%
63	Insurance Carriers	255	5.02%	117	45.88%
64	Insurance Agents, Brokers, & Service	20	0.39%	10	50.00%
65	Real Estate	15	0.30%	8	53.33%
67	Holding & Other Investment Offices	133	2.62%	19	14.29%
70	Hotels & Other Lodging Places	23	0.45%	20	86.96%
72	Personal Services	10	0.20%	6	60.00%
73	Business Services	392	7.72%	94	23.98%
75	Auto Repair, Services, & Parking	13	0.26%	8	61.54%
78	Motion Pictures	4	0.08%	0	0.00%
79	Amusement & Recreation Services	20	0.39%	16	80.00%
80	Health Services	45	0.89%	18	40.00%
82	Educational Services	21	0.41%	3	14.29%
87	Engineering & Management Services	20	0.39%	0	0.00%
99	Non-Classifiable Establishments	14	0.28%	10	71.43%
	Total	5,078	100%	1,646	32.41%

Table 2.3 Summary Statistics

Table 2.3 presents the summary statistics of different variables. Please refer to appendix for variable definitions. Panel A presents summary statistics of political connections. Panel B and C present summary statistics for variables used for audit fee tests and other tests by separating them into politically connected firms ($PCB=1$) and non-connected firms ($PCB=0$).

	N	mean	standard deviation	p25	p50	p75
PCB	5012	0.329	0.470	0	0	1
PPCB	5012	0.040	0.067	0	0	0.083
LN_NPC	5012	0.271	0.411	0	0	0.693
DREP	5012	0.197	0.398	0	0	0
DDEM	5012	0.186	0.389	0	0	0
LN_DEM	5012	0.128	0.287	0	0	0
LN_REP	5012	0.141	0.307	0	0	0
PREP	5012	0.020	0.046	0	0	0
PDEM	5012	0.018	0.041	0	0	0
LEGISLATIVE	5012	0.124	0.330	0	0	0
EXECUTIVE	5012	0.269	0.444	0	0	1

Panel B: Summary Statistics for Audit Fees Regression Variables

PCB=0

	N	mean	standard deviation	p25	p50	p75
AF	2711	15.301	0.850	14.679	15.299	15.793
LNAT	2711	9.439	1.355	8.440	9.232	10.218
RECINV	2618	0.235	0.192	0.084	0.187	0.320
ROA	2707	0.055	0.064	0.018	0.050	0.090
CATA	2155	0.385	0.208	0.204	0.374	0.540
QUICK	2115	1.532	1.042	0.853	1.220	1.842
LOSS	3365	0.091	0.287	0	0	0
MB	3359	3.047	3.304	1.549	2.457	3.864
BIG4	3365	0.799	0.401	1	1	1
LTD	2690	0.202	0.154	0.085	0.176	0.294
LNSEG	2158	0.987	0.569	0.693	0.693	1.386
RESTATEMENT	3365	0.081	0.273	0	0	0
GOING CONCERN	3365	0.000	0.017	0	0	0

PCB=1

	N	mean	standard deviation	p25	p50	p75
AF	1400	15.867	0.916	15.149	15.857	16.510
LNAT	1400	10.094	1.354	9.100	10.092	10.765
RECINV	1378	0.207	0.165	0.080	0.168	0.270
ROA	1399	0.054	0.064	0.022	0.046	0.087
CATA	1165	0.325	0.174	0.180	0.318	0.428
QUICK	1159	1.252	0.769	0.810	1.068	1.437
LOSS	1647	0.090	0.287	0	0	0
MB	1645	3.527	4.314	1.559	2.424	4.147
BIG4	1647	0.846	0.361	1	1	1
LTD	1398	0.214	0.142	0.102	0.194	0.306
LNSEG	1075	1.230	0.643	0.693	1.386	1.609
RESTATEMENT	1647	0.090	0.287	0	0	0
GOING CONCERN	1647	0.001	0.025	0	0	0

Panel C: Summary Statistics for Other Regression Variables

PCB=0

	N	mean	standard deviation	p25	p50	p75
C_SCORE	3338	-0.208	1.079	-0.600	-0.184	0.448
DACC	2668	-0.148	1.059	-0.071	-0.006	0.054
DDACCR	2803	0.029	0.031	0.008	0.018	0.037
AAER	3365	0.019	0.137	0	0	0
RESTATEMENT	3365	0.081	0.273	0	0	0
SIZE	3359	9.236	0.995	8.560	9.165	9.793
GROWTH	3362	0.080	0.172	-0.002	0.068	0.150
CAPEX	3363	0.075	0.140	0.020	0.036	0.065
LN_GC	2081	14.728	3.291	12.267	15.025	17.107
LN_LOB	3365	8.512	6.641	0	12.206	14.057
ARL	2708	4.637	0.555	4.344	4.489	4.644
MATERIAL_WEAKNESS	3365	0.004	0.064	0	0	0
COUNT_WEAK	3365	0.027	0.648	0	0	0

PCB=1

	N	mean	standard deviation	p25	p50	p75
C_SCORE	1644	-0.287	1.294	-0.774	-0.241	0.445
DACC	1303	-0.129	0.967	-0.061	-0.005	0.042
DDACCR	1464	0.028	0.031	0.007	0.018	0.037
AAER	1647	0.023	0.150	0	0	0
RESTATEMENT	1647	0.090	0.287	0	0	0
SIZE	1645	9.770	1.141	8.961	9.716	10.496
GROWTH	1646	0.067	0.167	-0.015	0.059	0.126
CAPEX	1646	0.075	0.122	0.019	0.038	0.081
LN_GC	1146	16.395	3.600	14.183	16.548	18.683
LN_LOB	1647	11.534	6.001	11.695	14.228	15.305
ARL	1399	4.621	0.559	4.317	4.466	4.615
MATERIAL_WEAKNESS	1647	0.004	0.060	0	0	0
COUNT_WEAK	1647	0.012	0.266	0	0	0

Table 2.4 Political Connections and Audit Fees

Table 2.4 presents the results for the relation between audit fees and political connections. The dependent variable is the log of audit fee (*AF*). *PCB* is an indicator of political connection, which takes on the value 1 when at least one board member of the firm-year is identified as politically connected. *PPCB* is the proportion of politically connected board, which is calculated by the number of politically connected board members over the size of the board. *LN_NPC* is the log number of politically connected board members. *LEGISLATIVE* (*EXECUTIVE*) is indicator of having at least one political connection with the legislative (executive) branch experience in the United States government. Detailed variable definitions are in Appendix B.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	Expected Sign	(1)	(2)	(3)	(4)
PCB		0.127*** (0.045)			
PPCB			0.734** (0.294)		
LN_NPC				0.165*** (0.051)	
LEGISLATIVE					-0.076 (0.060)
EXECUTIVE					0.197*** (0.046)
LNAT	+	0.615*** (0.023)	0.620*** (0.023)	0.613*** (0.023)	0.615*** (0.023)
RECINV	+	1.827*** (0.324)	1.845*** (0.323)	1.839*** (0.322)	1.851*** (0.318)
ROA	-	-1.068*** (0.303)	-1.065*** (0.307)	-1.090*** (0.305)	-1.100*** (0.304)
CATA	-	0.141 (0.168)	0.132 (0.168)	0.136 (0.168)	0.107 (0.169)
QUICK	-	-0.046*** (0.017)	-0.045*** (0.017)	-0.045*** (0.017)	-0.046*** (0.017)
LOSS	+	0.049 (0.055)	0.053 (0.055)	0.047 (0.056)	0.066 (0.053)
MB	+	0.004 (0.003)	0.005 (0.003)	0.004 (0.003)	0.003 (0.003)
BIG4	+	0.216 (0.217)	0.213 (0.225)	0.215 (0.219)	0.160 (0.239)
LTD	+	0.399*** (0.154)	0.399*** (0.154)	0.403*** (0.154)	0.412*** (0.154)
LNSEG	+	0.098** (0.042)	0.100** (0.042)	0.094** (0.042)	0.080* (0.042)
RESTATEMENT	+	0.084** (0.038)	0.081** (0.039)	0.083** (0.038)	0.087** (0.036)
GOING_CONCERN	+	0.645*** (0.101)	0.655*** (0.107)	0.662*** (0.100)	0.605*** (0.089)
Year Fixed Effects		Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes
N		2545	2545	2545	2545
adj. R-sq		0.775	0.773	0.776	0.779

Table 2.5 Accounting Quality and Political Connections

Table 2.5 presents the results for the relation between accounting quality and political connections. The dependent variables are *C_SCORE* (Khan and Watts, 2009), *DACC* calculated as discretionary accruals from Modified Jone's Model (Dechow et al. 1995), *DDACCR* calculated as discretionary accruals from Dechow and Dichev (2002), *AAER* which is an indicator that is equal to 1 when the firm-year observation is named in the Accounting and Audit Enforcement Release, and *RESTATEMENT*, also indicator that is equal to 1 when the firm-year observation has a restatement. Control variables include return on assets (*ROA*), loss indicator (*LOSS*), market capitalization (*SIZE*), long term debt (*LTD*), sales growth (*GROWTH*), and capital expenditure (*CAPEX*). Detailed variable definitions are in Appendix B.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	C_SCORE			DACC			DDACCR			AAER			RESTATEMENT		
PCB	0.030			0.054*			0.001			-0.421			-0.081		
	(0.021)			(0.029)			(0.002)			(0.413)			(0.219)		
PPCB	0.149			0.060			0.017			-5.133*			0.454		
	(0.171)			(0.188)			(0.015)			(3.059)			(1.403)		
LN_NPC		0.026			0.040			0.002			-0.808*			-0.022	
		(0.022)			(0.030)			(0.002)			(0.465)			(0.257)	
Controls	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Industry fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	3259	3259	3259	3021	3021	3021	2959	2959	2959	2335	2335	2335	2978	2978	2978
adj. R-sq	0.682	0.682	0.682	0.196	0.196	0.196	0.183	0.184	0.184						
pseudo R-sq										0.150	0.156	0.156	0.068	0.068	0.068

Table 2.6 Audit Fees and Political Risk

Table 2.6 presents the results for testing whether political risk affects the relation between political connection and audit fee. Columns (1) and (2) test whether different political party affiliations affect the relationship differently. Columns (3) - (6) employ the difference-in-difference approach to test whether increased political risk after major elections (when political control of government branches changed from one party to another) affects the relation between political connection and audit fee. The dependent variable is the log of audit fee (*AF*). Control variables are the log of assets (*LNAT*), receivable and inventory (*RECINV*), return on assets (*ROA*), current assets (*CATA*), quick ratio (*QUICK*), loss indicator (*LOSS*), market-to-book ratio (*MB*), Big4 auditor indicator (*BIG4*), long-term debt (*LTD*), log of number of segments (*LNSEG*), restatement indicator (*RESTATEMENT*), and going concern indicator (*GOING_CONCERN*). Detailed variable definitions are in Appendix B.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	Expected Sign	(1)	(2)	(3)	(4)	(5)	(6)
DDEM		0.092* (0.051)			0.079 (0.064)	0.087 (0.079)	0.086 (0.079)
DREP		0.072 (0.045)			0.070 (0.053)	0.026 (0.067)	0.025 (0.067)
LN_DEM			0.139** (0.068)				
LN_REP			0.089 (0.056)				
PCB	+			0.123*** (0.044)			
ELECTION				0.030*** (0.011)			
ELECTION×PCB	+			-0.028 (0.017)			
2008 ELECTION					-0.025 (0.028)		0.002 (0.024)
DDEM×2008 ELECTION	-				-0.013 (0.054)		-0.020 (0.040)
DREP×2008 ELECTION	+				-0.010 (0.052)		-0.026 (0.040)

	Expected Sign	(1)	(2)	(3)	(4)	(5)	(6)
2006 ELECTION						0.015 (0.028)	0.015 (0.028)
DDEM×2006 ELECTION	-					-0.034 (0.063)	-0.033 (0.063)
DREP×2006 ELECTION	+					0.109* (0.063)	0.109* (0.063)
POST08					-0.107*** (0.029)		-0.081*** (0.028)
DEM×POST08					0.031 (0.060)		0.024 (0.054)
REP×POST08					-0.000 (0.058)		-0.016 (0.057)
POST06						-0.084** (0.033)	-0.030 (0.031)
DEM×POST06						0.012 (0.073)	-0.001 (0.067)
REP×POST06						0.045 (0.074)	0.060 (0.077)
LN_LOB	+	0.002 (0.003)	0.001 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)	0.002 (0.003)
Controls		Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	No	No	No	No
N		2545	2545	2685	2545	2545	2545
adj. R-sq		0.773	0.773	0.760	0.767	0.766	0.767
dem = rep F-stat		0.09	0.35				
Prob > F		0.759	0.553				

Table 2.7 Audit Fees Path Analysis

Table 2.7 presents the path analysis results of how government contracts affects the relation between political connection and audit fee. The dependent variable is the log of audit fee. Control variables are the log of assets (*LNAT*), receivable and inventory (*RECINV*), return on assets (*ROA*), current assets (*CATA*), quick ratio (*QUICK*), loss indicator (*LOSS*), market-to-book ratio (*MB*), Big4 auditor indicator (*BIG4*), long-term debt (*LTD*), log of number of segments (*LNSEG*), restatement indicator (*RESTATEMENT*), and going concern indicator (*GOING_CONCERN*). Detailed variable definitions are in Appendix B.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	Expected Sign	(1)	(2)	(3)	(4)	(5)
PCB			0.080 (0.050)			0.350* (0.195)
PPCB				0.585* (0.329)		
LN_NPC					0.123** (0.056)	
LN_GC	+	0.034*** (0.008)	0.032*** (0.008)	0.032*** (0.008)	0.032*** (0.008)	0.040*** (0.010)
LN_LOB	-	0.000 (0.004)	-0.000 (0.004)	-0.000 (0.004)	-0.000 (0.004)	-0.003 (0.004)
PCB×LN_GC						-0.024* (0.012)
PCB×LN_LOB						0.009 (0.007)
Controls		Yes	Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes
N		1763	1760	1760	1760	1760
adj. R-sq		0.793	0.793	0.794	0.795	0.794

Table 2.8 Audit Fees and Paths Analysis: Isolate Government Contract

Table 2.8 presents the results of how government contracts affect the relation between political connection and audit fee. Panel A presents the first regression. The dependent variables in the first stage are all political connection variables (*PCB*, *PPCB*, and *LN_NPC*), where expected political connections are then estimated based on the amount of government contracts and other basic firm characteristics. Panel B presents the results for the second regression, where effects of expected political connections (variables that start with “*EX_*”), which incorporate the government contract information, and the residual information in actual political connections (variables that start with “*RES_*”) on audit fees are tested. The dependent variable for second step is the log of audit fee. Control variables are the log of assets (*LNAT*), receivable and inventory (*RECINV*), return on assets (*ROA*), current assets (*CATA*), quick ratio (*QUICK*), loss indicator (*LOSS*), market-to-book ratio (*MB*), Big4 auditor indicator (*BIG4*), long-term debt (*LTD*), log of number of segments (*LNSEG*), restatement indicator (*RESTATEMENT*), and going concern indicator (*GOING_CONCERN*). Detailed variable definitions are in Appendix B.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

Panel A. First Step

	PCB		PPCB		LN_NPC	
LN_GC	0.024*** (0.008)	0.032*** (0.006)	0.004*** (0.001)	0.004*** (0.001)	0.024*** (0.007)	0.031*** (0.006)
ROA	-0.476 (0.465)		-0.027 (0.084)		-0.376 (0.448)	
MB	0.011*** (0.004)		0.002*** (0.001)		0.009*** (0.003)	
SIZE	0.111*** (0.024)		0.013*** (0.004)		0.102*** (0.023)	
HHI	-0.049 (0.129)		0.019 (0.022)		0.059 (0.122)	
GROWTH	-0.174** (0.081)		-0.015 (0.011)		-0.124* (0.067)	
CAPEX	-0.521** (0.208)		-0.083** (0.038)		-0.509** (0.209)	
LOSS	0.037 (0.072)		0.010 (0.012)		0.051 (0.069)	
Industry FE	Yes	No	Yes	No	Yes	No
Year FE	Yes	No	Yes	No	Yes	No
N	2232	2769	2232	2769	2232	2769
adj. R-sq	0.219	0.055	0.210	0.051	0.248	0.065

Panel B. Second Step							
	Expected Sign	(1)	(2)	(3)	(4)	(5)	(6)
EX_PCB	+	0.880*** (0.239)					
RES_PCB	?	0.084* (0.048)					
EX_PCB2	+		1.084*** (0.249)				
RES_PCB2	?		0.085* (0.049)				
EX_PPCB	+			6.905*** (1.668)			
RES_PPCB	?			0.077 (0.048)			
EX_PPCB2	+				7.221*** (1.778)		
RES_PPCB2	?				0.085* (0.049)		
EX_LN_NPC	+					1.015*** (0.255)	
RES_LN_NPC	?					0.081* (0.048)	
EX_LN_NPC2	+						1.127*** (0.260)
RES_LN_NPC2	?						0.085* (0.049)
Controls		Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effects		Yes	Yes	Yes	Yes	Yes	Yes
N		1760	1760	1760	1760	1760	1760
adj. R-sq		0.792	0.795	0.795	0.795	0.793	0.795

Table 2.9 Audit Report Lag

Table 2.9 presents the results of testing the relationship between political connection and audit report lag. The dependent variable is the log of audit report lag (*ARL*). *PCB* is an indicator of political connection, which takes on the value 1 when at least one board member of the firm-year is identified as politically connected. *PPCB* is the proportion of politically connected board, which is calculated by the number of politically connected board members over the size of the board. *LN_NPC* is the log number of politically connected board members. *PREP* (*PDEM*) are percentage of directors that are identified as being connected to the Republican (Democratic) Party. *LN_REP* (*LN_DEM*) is log number of political connections that are identified as being connected to the Republican (Democratic) Party. *LEGISLATIVE* (*EXECUTIVE*) are indicators of having at least one political connection with legislative (executive) branch experience in the United States government. Detailed variable definitions are in Appendix B.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PCB	-0.036 (0.034)							
PPCB		-0.158 (0.216)						
DDEM			-0.039 (0.053)			-0.028 (0.060)		
DREP			-0.001 (0.056)			-0.003 (0.062)		
LN_DEM				-0.043 (0.071)			-0.037 (0.082)	
LN_REP				0.023 (0.074)			0.016 (0.081)	
PDEM					-0.056 (0.451)			-0.052 (0.551)
PREP					0.355 (0.495)			0.231 (0.508)
2008 ELECTION			-0.108*** (0.028)	-0.100*** (0.029)	-0.093*** (0.028)			
2006 ELECTION						0.019 (0.034)	0.014 (0.034)	0.008 (0.033)
DDEM×2008 ELECTION			0.088 (0.072)					
DREP×2008 ELECTION			-0.007 (0.060)					
DDEM×2006 ELECTION						-0.029 (0.068)		
DREP×2006 ELECTION						0.002 (0.063)		
LN_DEM×2008 ELECTION				0.083 (0.098)				
LN_REP×2008 ELECTION				-0.025 (0.076)				
LN_DEM×2006 ELECTION							-0.016 (0.096)	
LN_REP×2006 ELECTION							0.015 (0.082)	
PDEM×2008 ELECTION					0.340 (0.705)			

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
PREP×2008 ELECTION					-0.303 (0.487)			
PDEM×2006 ELECTION								-0.038 (0.668)
PREP×2006 ELECTION								0.297 (0.615)
LNAT	-0.024* (0.014)	-0.026* (0.015)	-0.026* (0.015)	-0.026* (0.015)	-0.028* (0.015)	-0.025* (0.015)	-0.026* (0.015)	-0.027* (0.015)
RECINV	-0.244* (0.132)	-0.249* (0.132)	-0.248* (0.132)	-0.245* (0.132)	-0.245* (0.132)	-0.245* (0.132)	-0.242* (0.132)	-0.241* (0.132)
ROA	-0.354* (0.186)	-0.358* (0.187)	-0.361* (0.187)	-0.366* (0.189)	-0.382** (0.192)	-0.356* (0.187)	-0.360* (0.188)	-0.377** (0.192)
LOSS	-0.028 (0.044)	-0.029 (0.044)	-0.032 (0.043)	-0.032 (0.044)	-0.033 (0.044)	-0.034 (0.043)	-0.033 (0.044)	-0.035 (0.044)
BIG4	-0.028 (0.056)	-0.028 (0.055)	-0.030 (0.058)	-0.031 (0.058)	-0.031 (0.057)	-0.030 (0.058)	-0.031 (0.058)	-0.032 (0.057)
GOING_CONCERN	0.484 (0.670)	0.481 (0.665)	0.473 (0.658)	0.467 (0.653)	0.465 (0.646)	0.480 (0.660)	0.475 (0.656)	0.475 (0.652)
COUNT_WEAK	0.106*** (0.019)	0.107*** (0.019)	0.106*** (0.019)	0.107*** (0.019)	0.107*** (0.019)	0.107*** (0.019)	0.107*** (0.019)	0.107*** (0.019)
Post-election Controls	No	No	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effect	Yes	Yes	No	No	No	No	No	No
N	3218	3218	3218	3218	3218	3218	3218	3218
adj. R-sq	0.077	0.076	0.077	0.077	0.077	0.076	0.076	0.076

Table 2.10 Internal Control System

This table presents the results of how internal control system affects the relation between political connection and audit fee. The dependent variable is the log of audit fee (*AF*). *PCB* is an indicator of political connection, which takes on the value 1 when at least one board member of the firm-year is identified as politically connected. *PPCB* is the proportion of politically connected board, which is calculated by the number of politically connected board members over the size of the board. Control variables are the log of assets (*LNAT*), receivable and inventory (*RECINV*), return on assets (*ROA*), current assets (*CATA*), quick ratio (*QUICK*), loss indicator (*LOSS*), market-to-book ratio (*MB*), Big4 auditor indicator (*BIG4*), long-term debt (*LTD*), log of number of segments (*LNSEG*), restatement indicator (*RESTATEMENT*), and going concern indicator (*GOING_CONCERN*). Detailed variable definitions are in Appendix B.1. Standard errors are corrected for heteroscedasticity and clustered at firm level. *, **, and *** denote significance at the 10%, 5%, and 1% levels, respectively.

	(1)	(2)	(3)	(4)	(5)	(6)
PCB	0.125*** (0.044)	0.124*** (0.044)	0.124*** (0.044)			
PPCB				0.717** (0.290)	0.710** (0.290)	0.711** (0.290)
MATERIAL_WEAKNESS	0.143 (0.257)			0.120 (0.259)		
COUNT_WEAK		-0.013 (0.026)			-0.014 (0.026)	
LN(COUNT_WEAK)			-0.040 (0.154)			-0.048 (0.153)
PCB×MATERIAL_WEAKNESS	0.713** (0.307)					
PCB×COUNT_WEAK		0.239*** (0.036)				
PCB×LN(COUNT_WEAK)			0.640*** (0.154)			
PPCB×MATERIAL_WEAKNESS				4.937*** (1.531)		
PPCB×COUNT_WEAK					1.319*** (0.210)	
PPCB×LN(COUNT_WEAK)						3.677*** (0.901)
Controls	Yes	Yes	Yes	Yes	Yes	Yes
Industry Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
Year Fixed Effect	Yes	Yes	Yes	Yes	Yes	Yes
N	2545	2545	2545	2545	2545	2545
adj. R-sq	0.775	0.775	0.775	0.774	0.774	0.774

Conclusion

This thesis examines research questions regarding politically connected firms in the United States. Political connections are established to satisfy different needs of firms: when the goal is to obtain government contracts, they seek connections to the executive branch; when the goal is to manage regulations and law-making, they seek connections to the legislative branch. In particular, empirical data shows that the right political connections do help firms to obtain more government contracts, which is beneficial for a firm's future performance but not its current performance. On the other hand, though political connection is positively associated with government subsidies, but research design cannot identify causality in the relations.

I find that auditors charge higher audit fees to politically connected firms. This finding is not likely due to lower financial reporting quality, as prior literature has suggested, nor is it due to higher exposure to political risk. Instead, the results are consistent with the hypothesis that higher audit fees are due to politically connected firms' involvement in government contracts. Being a government contractor means that in addition to compliance with US GAAP, a firm's financial report needs to comply with additional regulations such as FAR, which are subject to additional audits from government auditors like DCAA and GAO. This additional compliance significantly increase politically connected firms' audit risk, resulting in higher audit fees.

Overall, I fail to find any indication that such relation leads to the extraction of political rent in my sample of U.S. firms. This study shows that some of the cynical views toward corporate political connections, supported by research using international data, may not apply to cases in the United States.

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Appendices

Appendix A Appendix for Chapter 1

A.1 Variable Definitions

Political connection variables	
<i>PCB</i>	Indicator of political connections in the board. It takes on the value of 1 when at least one of the board members is identified as politically connected according to Goldman et al (2009), measured at the beginning of the fiscal year.
<i>PPCB</i>	Percentage of the board that is politically connected, calculated as the total number of politically connected board members scaled by the size of board.
<i>DDEM</i>	Indicator of Democratic connected board. It takes on the value of 1 when at least one of the politically connected board member is identified as associated with the Democratic Party.
<i>DREP</i>	Indicator of Republican connected board. It takes on the value of 1 when at least one of the politically connected board member is identified as associated with the Republican Party.
<i>LN_DEM</i>	Log number of Democratic connected board members, calculated as the natural log of 1 plus the number of Democratic connected board members.
<i>LN_REP</i>	Log number of Republican connected board members, calculated as the natural log of 1 plus the number of Republican connected board members.
<i>PDEM</i>	Percentage of Democratic connected board members, calculated as the total number of Democratic connected board members scaled by the size of the board.
<i>PREP</i>	Percentage of Republican connected board members, calculated as the total number of Republican connected board members scaled by the size of the board.
<i>LEGISLATIVE</i>	Indicator of political connections with the legislative branch of the United States of America.
<i>EXECUTIVE</i>	Indicator of political connections with the executive branch of the United States of America.
Firm Performance Variables	
<i>ROA</i>	Return on assets, calculated as income before extraordinary item over total assets.

<i>FROA</i>	One-year-ahead return on assets.
<i>FROA2</i>	Two-year-ahead return on assets.
<i>FROA3</i>	Three-year-ahead return on assets.
<i>FROA4</i>	Four-year-ahead return on assets.
<i>FROA5</i>	Five-year-ahead return on assets.
<i>PM</i>	Profit margin, calculated as net income scaled by sales.
<i>FPM</i>	One-year-ahead profit margin.
<i>FPM2</i>	Two-year-ahead profit margin.
<i>FPM3</i>	Three-year-ahead profit margin.
<i>FPM4</i>	Four-year-ahead profit margin.
<i>FPM5</i>	Five-year-ahead profit margin.

Government benefit variables

<i>LN_GC</i>	Log number of government contract amount for a firm in a specific fiscal year
<i>LN_SUBSIDIES</i>	Log number of 1 plus total subsidies amount for a firm in a specific fiscal year.
<i>LN_LOAN</i>	Log number of 1 plus total government loan for a firm in a specific fiscal year.
<i>LN_TAX_CREDIT</i>	Log number of 1 plus total tax credit, indicated by subsidy types as "tax credit/rebate" or "federal allocated tax credit" for a firm in a specific fiscal year.

Other variables

<i>GOVT_SALE</i>	Measures the importance of government contracting. Calculated as the ratio of government contract to sales at the end of the year.
<i>LOB_SALE</i>	Measures regulatory risk. Calculated as 1000 times the ratio of lobbying to sales at the end of the year.
<i>GC</i>	Indicator of high government contract dependence, which takes on the value of 1 when <i>GOVT_SALE</i> ≥ 0.1.
<i>REGULATE</i>	Indicator of firms with high regulatory risk, which takes on the value of 1 when <i>LOB_SALE</i> ≥ 0.3.
<i>2006 ELECTION</i>	Indicator of post 2006 midterm election effects, which takes on the value of 1 for firm's fiscal year 2007 and 2008.
<i>2008 ELECTION</i>	Indicator of post 2008 presidential election effects, which takes on the value of 1 for firm's fiscal year 2009 and 2010.
<i>COGS</i>	Cost of goods sold, scaled by sales.
<i>CAPEX</i>	Capital expenditure, scaled by sales.
<i>HHI</i>	The Herfindahl index. Calculated using the 2-digit SIC industry classification in COMPUSTAT universe of the year.

<i>SIZE</i>	Natural log of market capital.
<i>LNAGE</i>	Natural log of firm's age, measured from the first date that the firm show up on CRSP.
<i>GROWTH</i>	Sales growth.
<i>MB</i>	Market-to-book ratio.
<i>LOSS</i>	Loss indicator, which takes on the value of 1 when net income is less than 0.

Appendix B Appendix for Chapter 2

B.1 Variable Definitions

Political connection variables	
<i>PCB</i>	Politically connected board indicator, which takes up the value of 1 when at least one of the board of directors is defined as a politician.
<i>PPCB</i>	Percentage of politically connected board, calculated as the number of politicians on the board divided by the total number of directors.
<i>LN_NPC</i>	The natural log number of 1 plus politically connected board members.
<i>DREP</i>	Republican indicator, which takes up the value of 1 when at least one of the politician is identified as a Republican.
<i>DDEM</i>	Democrat indicator, which takes up the value of 1 when at least one of the politicians is identified as a Democrat.
<i>LN_REP</i>	The natural log number of 1 plus politically connected board members who is identified as a Republican.
<i>LN_DEM</i>	The natural log number of 1 plus politically connected board members who is identified as a Democrat.
<i>LEGISLATIVE</i>	Congressman indicator, which takes up the value of 1 when the politician served in the United States Congress.
<i>EXECUTIVE</i>	Executive branch indicator, which takes up the value of 1 when the politician served in the executive branch of the federal government.
Audit fee variables	
<i>AF</i>	Natural log of audit fee.
<i>LNAT</i>	Natural log of total assets of the firm, calculated as $\ln(\text{Compustat at})$.
<i>LNSEG</i>	Natural log of a firm's operating segments.
<i>CATA</i>	Current assets scaled by total assets.
<i>MB</i>	Market-to-book ratio, calculated as the market value of equity divided by book value of equity (Compustat ceq).
<i>LTD</i>	Leverage, calculated as total long term debt (Compustat dltd) over total assets (Compustat at).
<i>RECINV</i>	The sum of receivables (Compustat rect) and inventories (Compustat invt) over total assets (Compustat at).
<i>LNSEG</i>	Natural log of total number of business segments.
<i>GOING_CONCERN</i>	Indicator of a going-concern opinion from auditors.

<i>ROA</i>	Return on assets, calculated as income before extraordinary items (Compustat ib) over total assets (Compustat at).
<i>LOSS</i>	Loss indicator, which takes up the value of 1 when a firm has negative net income (Compustat ni).
<i>QUICK</i>	Quick ratio.
<i>BIG4</i>	Big four auditor indicator.
Accounting quality variables	
<i>C_SCORE</i>	A firm-year conservatism measure, calculated following Khan and Watts (2009), and truncated at 1% of the COMPUSTAT population after 1999.
<i>DACC</i>	Discretionary accruals, calculated following modified Jone's model, and truncated at 1% of the COMPUSTAT population after 1999.
<i>DDACCR</i>	Dichow and Dechow (2002) discretionary accruals.
<i>AAER</i>	Indicator for AAER firms, which takes on the value of 1 if there is at least one AAER litigation during that year.
<i>RESTATEMENT</i>	Indicator of restatement, which takes on the value of 1 if there is at least one restatement during that year.
<i>MATERIAL_WEAKNESS</i>	Indicator of material weakness according to SOX 302.
<i>COUNT_WEAK</i>	Number of material weakness.
Other variables	
<i>LN_GC</i>	Log amount of government contracts for a firm in a specific fiscal year.
<i>LN_LOB</i>	Log number of total lobbying expenditure plus 1 for a firm in a specific fiscal year.
<i>SIZE</i>	Market capital of the firm in a specific fiscal year.
<i>GROWTH</i>	Sales growth compared to last year.
<i>CAPEX</i>	Capital expenditure over sales.
<i>ARL</i>	Log number of length of time auditors need to complete the audit. Calculated as the difference between the file date and a firm's fiscal year end date.