Political Connections and the
Allocation of Procurement Contracts

Eitan Goldman*◆   Jörg Rocholl*   Jongil So*

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Abstract

This paper analyzes whether political connections of public corporations in the United States affect the allocation of government procurement contracts. The paper classifies the political affiliation of S&P 500 companies using hand-collected data that detail the past political position of each of their board members. Using this classification, the study focuses on the change in control of both House and Senate following the 1994 midterm election and on the change in the Presidency following the 2000 election. An analysis of the change in the value of the procurement contracts awarded to these companies before and after 1994 and 2000, respectively, indicates that companies that are connected to the winning (losing) party are significantly more likely to experience an increase (decrease) in procurement contracts. The results remain significant after controlling for industry classifications as well as for several firm characteristics. In total, these findings suggest that the allocation of procurement contracts is influenced, at least in part, by political connections. Thus, our study provides one of the first pieces of evidence showing a direct avenue through which political connections add value to U.S. companies.

*Contact details: Goldman is from Indiana University, Rocholl and So are from the University of North Carolina at Chapel Hill. Goldman can be contacted at email: eigoldma@indiana.edu, Rocholl at email: jorg_rocholl@unc.edu, and So at email: jongil_so@unc.edu.

◆Corresponding author

1. Introduction

A growing body of recent research finds that political connections add value to the corporation. Studies such as Roberts (1990), Fisman (2001), Faccio (2006), and Goldman, Rocholl, and So (2006) use stock market data to demonstrate that the value of politically connected companies is affected by changes in the political landscape. However, while these studies point to the value of having political connections, they remain silent about the exact source of this value.

The present study attempts to shed light on this issue by analyzing the allocation of government procurement contracts across the largest U.S. publicly traded companies. Government procurement contracts total more than 3.1 trillion dollars over the sample period between 1990 and 2004, and thus the allocation of these contracts is perhaps the most direct way in which political connections may influence company values.[1]

The following quote from the Wall Street Journal features an anecdotal story that highlights the general question that is analyzed in this study.

"The tale of Bajagua's success in getting the contract involves, among other things, well-timed campaign contributions to local members of Congress and other political figures. The firm also enlisted people with crucial connections..."

WSJ January 29, 2007.

If, as suggested by the quote above, connections influence contract awards, then companies that are connected to a political party will receive more government contracts during periods in which that political party has greater control relative to periods in which that party has less control. In contrast, during the same time, companies that are connected to the opposing party will receive fewer contracts.

To provide a specific example, consider the case of two companies in the S&P500 that receive government procurement contracts during the 1990s. The two companies, Phillips Petroleum and Occidental Petroleum, are both in the Petroleum and Natural Gas industry (based

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[1] Studies by Khwaja and Mian (2005) and Faccio, Masulis, and McConnell (2006) also study how politicians generate firm value. These studies, discussed below, look at companies in countries in which there is a high level of corruption and focus on the impact of politicians on a company's loans.

on the Fama-French industry classification). Phillips Petroleum has several former Republicans on its board of directors and no former Democrats while Occidental Petroleum has several former Democrats on its board and no former Republicans (see Table 1 for a detailed description of these companies and their politically connected board members). For example, Phillips Petroleum has on its board James Edwards who was the Energy Secretary under President Reagan between 1981 and 1982. Occidental Petroleum has on its board Albert Gore who was a Tennessee Senator with the Democratic Party until 1971. For our study, Philips Petroleum is defined as a Republican company and Occidental Petroleum as a Democratic company.

What happens then to the government contracts that these companies receive once there is a change in the political landscape? In this example, we focus on the 1994 midterm election in which control of the House and Senate changes from the Democratic to the Republican Party. As our analysis indicates, both companies experience big changes in their government contracts around this time. Philips Petroleum's government procurement contracts increase from a total of $120 million during the 1990 to 1993 period to a total of $289.3 million in the period between 1995 and 1998. In contrast, Occidental Petroleum experiences a decrease in contracts from $169.5 million in the 1990 to 1993 period to $143.7 million in the period between 1995 and 1998. Thus, while both companies operate in the same industry and have seemingly similar characteristics, the company with a Republican (Democratic) board experiences an increase (decrease) in its government contracts following the 1994 midterm election. This anecdotal case study demonstrates what we analyze more rigorously in the remainder of the paper.

More generally, the paper focuses on a sample of all companies that are in the S&P500 in the years 1994 and 2000. The choice of 1994 and 2000 as the two focal points is based on the fact that there is a shift in political control in both the 1994 midterm election and the 2000 presidential election. The 1994 midterm election results in a shift of control in both the House and the Senate from being majority controlled by Democrats to being majority controlled by Republicans. The 2000 presidential election results in a shift of control of the presidency from Democratic to Republican. These changes imply that the influence over the allocation of procurement contracts is likely to switch from the Democrats to the Republicans.[2]

For each company, the study first identifies the political party to which the company is connected, as measured by the political background of the individuals on the board of directors.

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[2] See below for a more elaborate discussion of how procurement contracts are awarded.

The study then calculates the change in the value of each company's procurement contracts surrounding the 1994 and the 2000 election. Specifically, companies in the S&P500 in 1994 and in 2000 are classified into one of the following three categories: (1) Those that are connected to the Republicans, (2) those that are connected to the Democrats, and (3) others.[3] The classification of political connections is based on hand-collected data detailing the past political positions held by each of the board members of S&P500 companies in 1994 and 2000. A company is classified as being Republican (Democratic) if it has at least one director with a past political position with the Republicans (Democrats) and if the company has no other director with any past political position with the Democrats (Republicans).

Given the above classification, for each company in the 1994 sample (2000 sample) we compare the total value of procurement contracts that it receives between 1990 and 1993 (1996 and 1999) with the total value of these contracts that it receives between 1995 and 1998 (2001 and 2004). The procurement contracts that are considered include all contracts awarded to the company itself and to any of its subsidiaries.

The main findings for the 1994 sample are that a company connected to the Republicans is more likely to experience an increase in the value of its procurement contracts following the 1994 change in the political landscape. The paper also finds that a company connected to the Democrats is more likely to experience a decrease in the value of its procurement contracts following the 1994 change. These results are both economically and statistically significant and remain significant after controlling for several company characteristics such as size, book-to-market ratio, and capital expenditure.

The results for the 2000 sample are qualitatively the same as for the 1994 sample. In this case, again, companies that are connected to the Republicans are more likely to experience an increase in contracts while companies that are connected to the Democrats are more likely to experience a decrease in contracts following the 2000 presidential election. The only difference in the results here is that the decrease in contracts of the Democratic companies is not statistically significant.

One potential concern is that Republican companies and Democratic companies are concentrated in completely different industries. In this case, our analysis would be picking up the

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[3] Others include companies without any political connection and companies with political connections to both parties.

fact that each of the two political parties may wish to allocate more resources to different industries rather than to connected companies. To address this issue, the paper controls for the industry distribution of the sample companies and considers the possibility that Republican (Democratic) companies happen to be in industries that are naturally favored by Republicans (Democrats). An analysis of the industry distribution shows that Republican and Democratic companies tend to be relatively evenly distributed across the Fama-French 30 industries (see Figure 1). More importantly, the distribution of Republican companies is not statistically different from that of Democratic companies. Finally, the results remain significant after controlling directly for an industry effect with industry dummies in general as well as with dummies for those specific industries in which there is a larger concentration of politically connected companies.

In sum, the paper shows that companies that are connected to the winning party experience an increase in their contracts upon a change in control of the House and Senate or upon a change in control of the administration, while those connected to the losing party suffer a decrease in their procurement contracts following these changes. The results remain significant after controlling for the industry of the company as well as for other company characteristics. The paper thus highlights one crucial way in which political connections can have a direct influence on company value.

The process by which politicians can influence the awarding of contracts to specific companies is by its nature not a transparent one. For this reason, our paper looks at both an event in which the political power changes within the legislative branch and an event in which the political power changes within the administration.

From a formal standpoint, the process of awarding government contracts begins when an agency of the federal government identifies a need for a purchase of a good or service. Each agency has a contracting officer who posts a solicitation on the Federal Business Opportunities website. Companies then submit their offers for review by agency personnel who evaluate the alternative offers and make the final decision.[4]

In practice, there are many ways in which connected companies can influence the design and award of contracts. For example, according to the Federal Acquisition Regulation (FAR), the government encourages bidding companies to interact with government agencies prior to the

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[4] For more details on this process see Halchin (2006).

agency putting out its Request For Proposal (RFP). The purpose of this is to help the government in defining its needs. This, however, allows connected companies to help shape the RFP and thus increase the chances that they would win the contract. In addition to this, contractors can approach different Congressional Committees with requests to increase funding for goods and services that they provide. Finally, lawmakers often write letters of recommendations on behalf of contractors (albeit for the most part generic ones).[5] Thus, as both legislators and administration officials have some capacity to influence contract awards, the goal of this paper is to see whether or not there is empirical evidence that connected companies benefit in this dimension.

Our paper relates to the growing literature that demonstrates the importance of political connections for companies. As mentioned earlier, Roberts (1990), Fisman (2001), Faccio (2006), Jayachandran (2006), and Goldman, Rocholl, and So (2006) all use event studies to demonstrate that the change in the strength of the political connection of a company (either due to a company event or a market wide political event) is followed by a corresponding change in the company's stock price.[6]

Establishing political connections for the purpose of receiving favorable government treatment can be viewed (in the extreme case) as one form of corruption. Several authors analyzed the theoretical causes and consequences of corruption. For example, Shleifer and Vishny (1993) show how corruption affects government resource allocation and economic development. Banerjee (1997) argues that it is optimal to define an activity as being corrupt (illegal) in cases where the government has a role in solving a market failure. Ades and Di Tella (1999) analyze the incentive to engage in corrupt activity as a function of the competitiveness of the bribing firm's market and the magnitude of the resulting industry rents. Finally, Acemoglu and Verdier (2000) demonstrate that corruption can arise as part of the second best equilibrium exactly in those markets in which the government attempts to intervene and solve socially inefficient market failures.

Most closely related to this paper are studies by Khwaja and Mian (2005) and Faccio, Masulis, and McConnell (2006) who show several direct ways in which companies benefit from

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[5] See Palmer (2005).

[6] Fisman, Fisman, Galef, and Khurana (2007) demonstrate that this is not the case for companies that are connected to Vice President Dick Cheney. Kroszner and Stratmann (1988) provide indirect evidence that politics matter in the US by looking at the competition among interest groups and how they donate to political institutions.

having political connections. [7] In particular, Khwaja and Mian (2005) demonstrate that companies in Pakistan with political connections receive more loans and default on these loans at a much higher rate relative to non-connected companies, suggesting that these loans are granted based on political considerations. Similarly, Faccio, Masulis, and McConnell (2006) look at a cross-country sample of bankrupt companies that are politically connected and show that these companies are much more likely to get bailed out. While our study complements the above two papers, it differs from them in two key ways. First, this study focuses on the value created by political connections in the U.S. which is a country with a strong legal system and relatively low levels of corruption. Second, our study considers a different and perhaps more direct source of political rents: government contracts.

Finally, Karpoff, Lee, and Vendrzyk (1999) provide evidence on the treatment of companies who receive government defense procurement contracts and then commit fraud in an attempt to deceive the government. They show that the penalty incurred by these companies is much less severe if the company is in the group of the top 100 government contractors. While their paper suggests that having large government contracts provides the company with preferential treatment, our paper finds that the source of the preferential treatment might be the company's board connections which result in large contracts.

The rest of the paper is organized as follow. In Section 2 we describe the data in more detail and specify the empirical methodology. In Section 3 we highlight the key findings of the paper and discuss their interpretation. Section 4 concludes.

2. Data description

The analyses in this paper utilize two event periods and two types of data. The first event period spans the time around the 1994 midterm election, while the second event period covers the time around the 2000 presidential election. The first data set comprises information on all U.S. government procurement contracts in the sample period between 1990 and 2004. The second data set consists of original data containing information regarding the political affiliation of each board member of all companies in the S&P500 at the end of 1994 and at the end of 2000.

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[7] Shleifer and Vishny (1994) analyze theoretically the opposite case in which politicians use their connections to a company in order to further their political objectives while Bertrand, Kramarz, Schoar, and Thesmar (2006) show empirically that politically connected companies can help their politicians.

Both data sets are described in more detail below. In addition, we hand-collect information regarding the subsidiaries of all S&P500 companies in 1994 and 2000 and obtain CRSP and COMPUSTAT data as well as Fama-French industry classification data. Finally, the SDC Platinum database by Thompson Financial is used for checking merger and acquisition activities or divestitures by S&P500 companies in the sample period.

2.1. Procurement data

Procurement contract data on the company level are available from the Federal Procurement Data System – Next Generation (FPDS-NG).[8] The FPDS-NG, which is operated and maintained by Global Computer Enterprises, replaced the Federal Procurement Data Center (FPDC).[9] The FPDS-NG contains all procurement contracts that are awarded by the U.S. Government and that exceed an individual transaction value of $2,500.[10] The largest exceptions to this reporting requirement are the U.S. Postal Service and several legislative and judicial branch organizations.[11] FPDS-NG reports procurement contracts for each company that is a separate legal entity, independent of the ultimate owner of that company. This means that procurement contracts for subsidiaries of companies are not aggregated on the parent company level, which aggravates the use of these data for the purpose of academic research. The exact matching procedure used in this paper is described in detail in sections 2.3 and 2.4.

Table 2 shows the aggregate value and number of procurement contracts over the sample period between 1990 and 2004. The yearly value increases substantially over the sample period from $158 billion in 1990 to $351 billion in 2004. In particular, it increases greatly after 2001 as a result of the increased spending following the events of September 11, 2001. Similarly, the number of procurement contracts increases from 371,514 in 1990 to 2,843,212 in 2004. The total

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[8] A "procurement contract" is any of a number of documented legal interactions between the government and a contractor including a "contract award" (the basic terms and conditions of the contract including the goods and services to be provided), a "modification" (which may be an exercise of an option to modify the contract), or an "order" (for example an order against a government-wide contract).

[9] FPDC, implemented under Public Law 93-400, provides data for Congress, the Executive branch, the private sector, and the public. FPDC was a part of the U.S. General Services Administration and operated and maintained the original Federal Procurement Data System. FPDS-NG is the central repository of statistical information on federal contracting.

[10] The reporting threshold for individual transactions was $25,000 before 2004.

[11] US Census Bureau reports total procurement amount annually in the Consolidated Federal Funds Report (CFFR) but no detailed data on the company level are available. The total procurement amount in FPDS-NG covers more than 85% of the total amount in CFFR over the sample period.

number of procurement contracts in the sample period exceeds 11.5 million and the aggregate value is more than \$3.1 trillion. Table 2 also shows which departments award the major share of these procurement contracts. The defense department is by far the largest contractor with an average share of 65% of the awarded value, followed by the Energy Department with an average share of 10% and NASA with an average share of 5%. Note that defense-related spending is broadly defined and can include contracts with many non-defense companies such as IBM and Compaq. Other departments comprise the remaining 20% share. The figures in Table 2 suggest that the share of the Defense Department is relatively stable over time, with a maximum of 68.9% in 2004 and a minimum of 58.8% in 1993; this is the year when NASA is awarded its highest relative share in any of the sample years.

2.2. Board data

Board connections are derived by considering the composition of the board of directors of all S&P500 companies at the end of 1994 and 2000, respectively, and analyzing the background of each board member. Section 14 of the Securities and Exchange Commission (SEC) Act requires companies to file a definite proxy statement (submission type Def 14a), containing information about their board members. These filings, which are hand-collected from the EDGAR database of the SEC, contain a brief description of each board member's career background. Based on these data, it is possible to identify whether board members are connected to the Republicans, to the Democrats, or to neither. A board member is defined as being politically connected if he or she at any time prior to 1994 and 2000, respectively, held a position such as Senator, Member of the House of Representatives, Member of the Administration, or was a Director of an organization such as the CIA, SEC, or FDA. A full list of these positions is provided in Table 3.

2.3. Subsidiary data

Many companies receive a substantial share of their procurement contracts through their subsidiaries. As an example, Halliburton receives aggregate procurement contracts of \$7 million in 1998, while its subsidiary KBR receives procurement contracts of \$43 million in the same

year. For this reason, we collect information on all subsidiaries of S&P500 companies from Exhibit 21 (Subsidiaries of the Registrant) of their annual 10-K reports. These are available in the EDGAR database of the SEC. S&P 500 companies and their subsidiaries are then matched with the list of companies in the FPDS-NG database.[12] The procurement contracts of S&P500 companies and their subsidiaries are finally summed up to obtain the aggregate value of procurement contracts for each S&P500 company and for each year over the sample period.

2.4. Resulting sample

This procedure results in a total sample of 411 S&P500 companies that receive procurement contracts in the period between 1990 and 1998 and a total of 412 companies that receive procurement contracts in the period between 1996 and 2004. For the first event period, 17 of the 411 companies have procurement contracts of less than one million dollars in aggregate throughout the 1990-1998 period and are therefore excluded from the sample. Furthermore, a number of companies are involved in substantial merger and acquisition activities or divestitures over the sample period. To ensure consistency and comparability of the procurement contracts of these companies over time, their procurement contracts are adjusted in the following way. First, 22 companies in the S&P500 are acquired by other companies in the S&P500 during the sample period. In this case, the procurement contracts of the target company are added to those of the acquiring company before the merger and are thus comparable to the procurement contracts of the combined entity after the merger.[13] Second, 45 companies in the S&P500 are acquired by non-S&P500 companies and are thus excluded from the sample. Third, over the sample period 8 S&P500 companies sell units or divisions in which the transaction value exceeds one billion dollars. To ensure the comparability of the awarded government contracts, these companies are excluded as well. The final sample for the first event period thus consists of 319 companies.

For the second event period, the same criteria are applied. Out of the 412 sample companies, 47 are excluded as they are awarded procurement contracts of less than one million dollar in the event period. Another 12 companies merge with other S&P500 companies, and thus the procurement contracts of these target companies are added to those of the acquiring

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[12] The procurement data used in this paper are based on the September 2006 status of FPDS-NG.
[13] For these companies, the accounting variables such as sales, assets, EBITD, capital expenditure, and book-to-market ratio are adjusted in the same way.

companies. An additional 15 companies are further excluded; 8 companies merge with non-S&P500 companies, and 7 companies sell units or divisions with a transaction value of more than one billion dollars. After excluding these companies, the final sample results in a total of 338 companies.

Panel a) of Table 3 shows the descriptive statistics for the 319 sample companies used in the analysis of the 1994 midterm election. According to the definition used in this paper, 81 of the 319 companies are connected to the Republican Party as they have at least one board member with a former political position with the Republicans, but no board member with a former position with the Democratic Party. Similarly, 35 companies are defined as being connected to the Democratic Party as they have at least one board member connected to the Democrats, but no board member connected to the Republicans. The remaining 203 companies are connected either to both parties (29 companies) or to neither (174 companies). The descriptive statistics in Panel a) show that, on average, companies that are connected to the Republicans tend to be larger than those that are connected to the Democrats.

Panel b) of Table 3 presents the descriptive statistics for the 338 sample companies used in the analysis of the 2000 presidential election. While 55 companies are connected only to the Republicans, 34 companies are connected only to the Democrats. The remaining 249 sample companies are either connected to both parties (23 companies) or to neither (226 companies). Panel b) also confirms the evidence from Panel a) that companies that are connected to the Republicans tend to be larger than companies that are connected to the Democrats.

Table 4 reports the value of the procurement contracts for the sample companies for the two event periods. The figures in the left column of Panel a) show that S&P500 companies receive procurement contracts totaling more than $475 billion between 1990 and 1998. This represents a substantial share of the $1,552 billion of total procurement contracts in FPDS-NG over that period. The highest share of the contracts goes to Republican companies even though there are only 81 Republican companies as compared to 203 companies classified as others.

The column on the right hand side of the table reports average numbers. These figures suggest that the mean value of procurement contracts to Republican companies is substantially higher than that to Democratic companies, which is itself higher than that for the rest of the companies. The average value of procurement contracts for the three groups over the sample period amounts to $3,692 million, $1,398 million, and $629 million, respectively. These figures

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suggest the existence of a positive correlation between the political connections of a company and the value of its government procurement contracts.

While the average value of procurement contracts in the pre-election period between 1990 and 1993 is about $589 million, it increases to $732 million in the post-election period between 1995 and 1998. However, there is a remarkable difference between Republican and Democratic companies. While the average Republican company experiences an increase of $491 million in procurement contracts, the average Democratic company suffers a decrease of $73 million. Other companies see an average increase of $42 million.

Panel b) of Table 4 presents the statistics for the second event period between 1996 and 2004. The numbers exhibit similar patterns as in Panel a). The highest value of procurement contracts is awarded again to Republican companies. They receive on average $3,837 million over the sample period. While companies with Republican boards receive on average $1,468 million worth of procurement contracts between 1996 and 1999, this number increases by 35.0% to $1,982 million between 2001 and 2004. This growth rate is much higher than the 10.9% growth rate for Democratic companies. A seemingly surprising result can be found for the third group, which comprises the companies that are connected either to both parties or to neither. These companies experience the largest average increase of 56.7% in their procurement contracts.

A further examination of this group shows that this last figure is almost entirely due to three companies, which are connected to both parties: Boeing, Northrop Grumman, and Raytheon. They receive more than $280 billion worth of procurement contracts between 1996 and 2004. Excluding these companies from the third group leads to a decrease in the value of procurement contracts from $520 billion to $238 billion and a drop in the growth rate from 56.7% to 18.7%. This last growth rate is substantially lower than the growth rate for Republican companies. The fact that a small number of companies may have a substantial impact on the overall averages is of crucial importance in the design and specification of an appropriate empirical test. This will be described in the next section.

Overall, these figures provide the first piece of evidence suggesting that political connections of companies may influence how procurement contracts are allocated.

3. Empirical Results

The purpose of the empirical analysis is to determine whether the political connections of the board influence the value of procurement contracts that companies receive a) before and after the change in majority in House and Senate following the 1994 midterm election and b) before and after the change in Presidency following the 2000 presidential election. The analysis proceeds in two steps. First, we show univariate results. Second, we present multivariate analyses that control for other variables.

3.1. Univariate Results

The two variables of interest are the change in the value of procurement contracts a) between the four-year period before and the four-year period after the 1994 midterm election and b) between the four-year period before and the four-year period after the 2000 presidential election. To minimize the impact of outliers in a specific year and to take into account the long-term nature of public procurement contracts, the procurement contracts for each sample company are aggregated over the two four-year periods and then compared to each other. The first variable of interest, the change in the value of the sum of procurement contracts between the two periods around the 1994 midterm election, is defined as

$$\Delta C_i = \sum_{t=1995}^{1998} C_{i,t} - \sum_{t=1990}^{1993} C_{i,t}$$

where $C_{i,t}$ represents the dollar value of procurement contracts for company i in year t.

Equivalently, the second variable of interest for the two periods around the 2000 presidential election is defined as

$$\Delta C_i = \sum_{t=2001}^{2004} C_{i,t} - \sum_{t=1996}^{1999} C_{i,t}$$

As mentioned earlier, this variable turns out to have an uneven distribution across the sample companies with some extreme negative and positive values. As an example, the highest negative difference for the first event period is found for Perkin Elmer, which loses $6.6 billion in government procurement contracts; the highest positive difference is found for Lockheed Martin, which gains $29.2 billion in these contracts. More formally, we test whether the two

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variables of interest are normally distributed using the Shapiro-Wilk and the Shapiro-Francia test. The tests reject this null hypothesis at the 1% level for either of the sample periods. The variables exhibit significant levels of skewness and kurtosis which need to be taken into account in the design of the empirical specification. To deal with these extreme values in the statistical estimations, the sample is thus divided into five groups with the same number of companies in each group. Companies are sorted into these five groups based on the value of ΔC_i. For example, Group 1 comprises those companies with the lowest ΔC_i implying that companies in this group have experienced the lowest increase or the highest decrease in the value of their contracts.

Panel a) of Table 5 shows that for the 1994 event the average difference for the companies in Group 1 is indeed negative, i.e. they receive less procurement contracts after the midterm election relative to before the election. As Panel a) further indicates, the same is true for Group 2 although here the difference is obviously less negative than that for the first group. Group 3 contains those companies that do not experience a major change in the value of their procurement contracts in the pre- and post-election period. Finally, companies in Group 4 and Group 5 receive substantially more procurement contracts after the election than before the election.

Panel a) also shows the distribution of Republican and Democratic companies across the five groups. The number of Democratic companies monotonically decreases from 11 in the first group to 4 in the fifth group. This suggests that Democratic companies are overrepresented among those companies that lose procurement contracts. By contrast, the highest number of Republican companies can be found in the two winning groups while the lowest number can be found in the second-lowest group. This suggests that Republican companies are overrepresented among those companies that receive more government procurement contracts following the election.

Panel b) of Table 5 shows the respective figures for the 2000 event period. In line with the results for the first event period, the average difference is negative for companies in Group 1 and Group 2, it becomes slightly positive for companies in Group 3, and it is substantially positive for companies in Group 4 and in particular in Group 5. While there are slightly more Democratic than Republican companies in Group 1 and Group 2, the number of Republican companies significantly outweighs the number of Democratic companies in Group 4 and Group

5. This means that Republican companies are also overrepresented among those companies that gain procurement contracts after the 2000 presidential election.

In the following section, we consider the statistical significance of these changes by controlling for other variables.

3.2. Multivariate results

We use an ordered logit model for the statistical analysis of the impact of companies' political connections on the value of their procurement contracts before and after the 1994 (2000) midterm election (presidential election). The dependent variable in Table 6 and Table 7 is a categorical variable that takes a value of 1 to 5 based on a company's classification into one of the five ΔC_i groups for the respective event period. The independent variables of interest are two dummy variables: dRep takes a value of one if a company has at least one board member connected to the Republicans, but no board member connected to the Democrats and a value of zero otherwise; dDem takes a value of one if a company has at least one board member connected to the Democrats, but no board member connected to the Republicans and a value of zero otherwise.

In addition, the paper uses a number of control variables. The first variable is lnCap, which captures the log of the size of the company. The second variable, BM, represents the company's book-to-market ratio. The Herfindahl index is included in order to take into account the intensity of competition in the industry in which the company operates. This index is calculated based on the sales of all competitors with the same 2-digit SIC code. In order to control for the investment level, the profitability, and the cost structure of the company, three accounting ratios are included as further independent variables. These are the ratios of capital expenditure to sales, EBITD to assets, and cost of goods sold to sales, respectively. More formally, we have that:

$$G(\Delta C_i) = \alpha + \beta_1 \log(Cap)_i + \beta_2 BM_i + \beta_3 HF\_Index_i + \beta_4 (CAPEX / Sales)_i$$
$$+ \beta_5 (EBITD / Asset)_i + \beta_6 (CostG / Sales)_i + \beta_7 dRep_i + \beta_8 dDem_i + \varepsilon_i$$

where $G(\Delta C_i)$ takes a value between 1 and 5 depending on the value of ΔC_i.

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Table 6 reports the results of the ordered logit estimation for the 1994 midterm election. Model 1 and Model 2 include the Republican and Democratic dummy variable, respectively, as well as two control variables. The coefficient for the Republican dummy variable is positive and significant at the 5% level, while it is negative and significant at the 5% level for the Democratic dummy variable. This suggests that Republican companies are more likely to experience an increase in government contracts in the post-election period, while Democratic companies are more likely to experience a decrease in government contracts in this period. Model 3 includes both political dummy variables at the same time, and they both stay significant, although at the 10% level.[14]

Models 4 to 10 include several additional control variables with no significant impact on the main results. Both the Republican and the Democratic dummy variable remain significant at the 5% level when tested separately, and they remain significant at the 10% level when tested jointly. This means that even the inclusion of further control variables does not change the main statement that Republican companies are more likely to increase the value of their procurement contracts after the 1994 midterm election, while Democratic companies are more likely to lose contracts. The coefficient for the Herfindahl index is positive and significant throughout the different models. This suggests that the lower is the level of competition in the industry in which a company operates; the more likely the company is to gain more government contracts. Thus, it is easier for a company to gain market shares for government contracts in a less competitive industry.

Table 7 reports the results for the ordered logit estimation for the second event period, which captures the time before and after the 2000 presidential election. The results suggest that Republican companies significantly increase their government procurement contracts after the election. The coefficient for the Republican dummy variable is significant at the 5% level for any of the specifications and thus tends to be even slightly stronger than in the results in Table 6. At the same time, the coefficient for the Democratic companies, while negative, fails to be statistically significant.

In addition to controlling for the variables used in Table 6 and Table 7, it is also important to rule out the possibility that Republican and Democratic companies happen to be in

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[14] Note that these two variables are negatively correlated with a correlation coefficient of -0.2048 (p-value = 0.0002) such that the significance of the coefficients decreases.

certain industries that benefit from an increase or suffer from a decrease in government spending. In this case, the observed pattern would not be due to a company's political affiliation, but simply due to the industry in which it operates.

Figure 1 shows the distribution of Republican and Democratic companies across the Fama-French 30 industries for 1994 and 2000. The upper panel of Figure 1 shows that the maximum number of Republican companies in any given industry in 1994 is equal to 11 and can be found in industry 29 (Banking, Insurance, Real Estate, Trading), which is followed by industry 1 (Food Products) and industry 19 (Petroleum and Natural Gas) with eight Republican companies. This means that the maximum number of Republican companies in any given industry represents less than 14% of the total number of Republican sample companies. The other industries with above-average representation of Republican companies are industry 20 (Utilities) with six companies followed by industry 8 (Healthcare, Medical Equipment, Pharmaceutical Products) and industry 24 (Business Supplies and Shipping Containers) with five companies each. Similarly, the maximum number of Democratic companies in one of the 30 industries amounts to four and can be found in industry 5 (Printing and Publishing), which is followed by industries 13 (Fabricated Products and Machinery), 19 (Petroleum and Natural Gas), 23 (Business Equipment), and 29 (Banking, Insurance, Real Estate, Trading) with three companies each. The maximum number of Democratic companies in any given industry thus represents less than 12% of the total number of Democratic sample companies.

The lower panel of Figure 1 illustrates the industry distribution of politically connected companies in the S&P500 in 2000. It shows that industries with the highest number of politically connected companies in 1994 are also among the industries with the highest number of politically connected companies in 2000. As an example, there are 11 politically connected companies both in industry 29 (Banking, Insurance, Real Estate, Trading) and in industry 20 (Utilities). Republicans are most heavily represented in industry 1 (Food Products) and industry 8 (Healthcare, Medical Equipment, Pharmaceutical Products) with six companies each. Democratic companies are particularly present in industry 29 (Banking, Insurance, Real Estate, Trading) with seven companies and in industry 20 (Utilities) with six companies. Thus, no industry comprises more than 20% of the politically connected companies for either the Republicans or the Democrats.

More formally, a chi-square test is performed to test for the difference in industry distribution between Republican and Democratic companies in 1994 and 2000. The chi-square value for the 1994 industry distribution amounts to 15.83 and is far from being significant with a p-value of 0.9197. The respective chi-square value for the 2000 industry distribution amounts to 27.04 and is again insignificant with a p-value of 0.5695. So, at least at first sight, there is no indication that the results in this study might be driven by certain industries.

To address this aspect more rigorously, the estimations in Table 6 and Table 7 are repeated in Table 8 and Table 9 to include industry controls as additional explanatory variables. In estimations (1) to (3) of Table 8, dummy variables are included for each Fama-French 30 industry.[15] In estimations (4) to (10), dummy variables are included for companies only in those industries in which Republican companies appear to be overrepresented in 1994 based on the Fama-French 30-industry-classification shown in Figure 1: 1 (Food Products), 8 (Healthcare, Medical Equipment, Pharmaceutical Products), 19 (Petroleum and Natural Gas), 20 (Utilities), 24 (Business Supplies and Shipping Containers), and 29 (Banking, Insurance, Real Estate, Trading). The results reported in Table 8 show that the main findings in Table 6 remain true even after controlling for an industry effect. The coefficients for the Republican and Democratic dummy variables are again significant at the 5% level when tested separately in estimations (1) and (2), and they are significant at least at the 10% level when tested jointly in estimation (3). The Republican and Democratic dummy variables are tested jointly in estimations (4) to (10) in which industry dummy variables are only employed for those industries in which Republican companies appear to be overrepresented according to the Fama-French 30-industry-classification. The results show that the coefficients for both political dummy variables are significant at the 10% level in any of the seven specifications.[16] This suggests that the results for the 1994 midterm election are not driven by the change in government spending in the specific industry that happens to comprise companies with a particular political preference.

Using the same methodology as for the analysis in Table 8, the analysis in Table 9 comprises industry controls for the event of the 2000 presidential election. The results show that the Republican dummy variable is still significant at the 5% level in each specification, while the Democratic dummy variable is negative, but fails to be significant. None of the chosen industry

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[15] To be precise, 29 dummy variables are included in order to avoid redundancy.
[16] While not reported here, we find that the Republican and Democratic dummy variables are significant at least at the 5% level when only one of the two dummy variables is included.

control variables proves to be significant, which suggests that the results are not driven by specific industries.

Overall, the empirical results suggest that companies that are connected to the Republican Party benefit from the Republican win in the 1994 midterm election as well as the Republican win in the 2000 presidential election. They receive more government contracts following the two respective elections. By contrast, companies connected to the Democratic Party lose government contracts after the elections. These results are robust to a number of control factors that capture both company- and industry-specific characteristics. In particular, the results are robust to industry controls and seem to be driven by political affiliations rather than changes in procurement contracts across industries.

4. Conclusion

As government intervention in economic activity can result in a significant reallocation of resources, some companies have the incentive to become politically connected. In previous studies, these connections have been shown to result in an increase in shareholder value as measured by changes in company stock prices around political events.

This paper takes a first step in disentangling the source of this value by identifying one direct way in which political connections affect the value of the largest U.S. publicly traded companies. Based on the analysis of the individuals who serve on the board of directors of all S&P500 companies, the paper classifies these companies into those that are connected to the Democrats and those that are connected to the Republicans. The paper asks whether political connections affect the allocation of procurement contracts awarded to these companies following the 1994 midterm election in which majority control in House and Senate shifts from the Democratic to the Republican Party and following the 2000 presidential election in which the Presidency shifts from the Democratic to the Republican Party.

The main findings are that following the 1994 midterm election and the 2000 presidential election Republican companies are more likely to experience an increase in the total value of their procurement contracts while Democratic companies are more likely to experience a respective decrease. These results remain statistically significant after controlling for company characteristics as well as for the industry in which the company operates.

The results suggest that, even within the confine of the strong legal system of the U.S., political connections have a significant impact on the allocation of government resources.

References

Acemoglu, Daron, and Thierry Verdier, 2000, "The choice between market failures and corruption", *American Economic Review* 90, 194-211.

Ades, Alberto, and Rafael Di Tella, 1999, "Competition and corruption", *American Economic Review* 89(4), 982-94.

Agrawal, Anup, and Charles Knoeber, 2001, "Do some outside directors play a political role?" *Journal of Law and Economics* 44, 179-198.

Banerjee, Abijit, 1997, "A theory of misgovernance", *Quarterly Journal of Economics* 112(4), 1289-1332.

Bertrand, Marianne, Francis Kramarz, Antoinette Schoar, and David Thesmar, 2006, "Politicians, firms and the political business cycle: Evidence from France", *Working Paper*.

Faccio, Mara, 2006, "Politically connected firms", *American Economic Review* 96, 369-386.

Faccio, Mara, Ronald W. Masulis, John J. McConnell, 2006, "Political connections and corporate bailouts", *Journal of Finance* 61, 2597-2635.

Faccio, Mara, and David Parsley, 2006, "Sudden Death: Taking stock of political connections", *Working Paper*.

Fisman, Raymond, 2001, "Estimating the value of political connections", *American Economic Review* 91(4), 1095-1102.

Fisman, David, Raymond Fisman, Julia Galef, and Rakesh Khurana, 2007, "Estimating the value of connections to Vice-President Cheney", *Working Paper*.

Goldman, Eitan, Jörg Rocholl, and Jongil So, 2006 "Do politically connected boards affect firm value", *Working Paper*.

Halchin, L. Elaine, 2006, "Overview of the federal procurement process and resources", *Congressional Research Service, The Library of Congress*.

Jayachandran, Seema, 2006, "The Jeffords effect", *Journal of Law and Economics* 49, 397-425.

Karpoff, Jonathan, Scott Lee, and Valaria Vendrzyk, 1999, "Defense procurement fraud, penalties, and contractor influence", *Journal of Political Economy* 107(4), 809-842.

Khwaja, Asim I., and Atif, Mian, 2005, "Do lenders favor politically connected firms? Rent provision in an emerging financial market", *Quarterly Journal of Economics* 120(4), 1371-1411.

Knight, Brian, 2006, "Are policy platforms capitalized into equity prices? Evidence from the Bush/Gore 2000 Presidential Election", *Journal of Public Economics* 90, 751-773.

Kroszner, Randall, and Thomas Stratmann, 1998, "Interest-group competition and the organization of congress: Theory and evidence from Financial Services' Political Action Committees", *American Economic Review* 88(5), 1163-1187.

Palmer, Kimberly, 2005, "Schmooze or lose", *Government Executive Journal*.

Roberts, Brian, 1990, "A dead Senator tells no lies: Seniority and the distribution of federal benefits", *American Journal of Political Science* 34, 31-58.

Shleifer, Andrei, and Robert W. Vishny, 1993, "Corruption", *Quarterly Journal of Economics* 108(3), 599-617.

Shleifer, Andrei, and Robert W. Vishny, 1994, "Politicians and firms", *Quarterly Journal of Economics* 109(4), 995-1025.

Table 1: Procurement awards of two sample companies

Table 1 shows descriptive statistics for two of our sample companies that receive procurement awards during the period surrounding the 1994 midterm election. Both companies are classified to the "petroleum and natural gas" industry based on the Fama-French 30 industry classification. The value of procurement contracts awarded by the U.S. government between 1990 and 1998 is found using information provided by FPDS-NG (Federal Procurement Data System – Next Generation). Accounting variables are from Compustat and are based on values at the end of 1994. The listed board members are those with a former political affiliation. For each board member with a former political position we provide information on his/her former position.

	Phillips Petroleum	Occidental Petroleum
Procurement ($million): 1990~1993(A)	120.0	169.5
Procurement ($million): 1995~1998(B)	289.3	143.7
Difference (B – A)	169.3	-25.8
Growth rate (%)	141.1	-15.2
Market Cap ($million)	8,568.7	6,099.4
Asset ($million)	11,436.0	17,989.0
Sales ($million)	12,211.0	9,236.0
EBITD ($million)	1,752.0	1,539.0
CAPEX ($million)	1,216.0	1,103.0
Book-to-market	0.66	0.93
Connected Board member (Nomination year)	James B. Edwards (1983) Lawrence S. Eagleburger (1993) Norman R. Augustine (1989)	Albert Gore (1972) Ray R. Irani (1984)
Connected Party	Republican	Democratic

The political career of connected board members

Board member	Year(s) of service	Position	Connected party
James B. Edwards	1981-82	Secretary of Energy Dept.	Republican
Lawrence E. Eagleburger	1989-93	Secretary of State Dept.	Republican
Norman R. Augustine	1977	Under Secretary of Defense Dept.	Republican
Albert A. Gore	1953-71	Senator in Tennessee	Democratic
Ray R. Irani	1994	Member of President (Clinton)'s Export Council	Democratic

Table 2: Procurement awards in the United States between 1990 and 2004

Table 2 presents the value and number of procurement contracts awarded by the U.S. government between 1990 and 2004. It shows the total value of procurement contracts (in $ million), the number of contracts, and the share of the value awarded by the Defense Department, the Energy Department, and NASA. All procurement data are from FPDS-NG (Federal Procurement Data System – Next Generation).

Year	Value of Contracts (in $ million)	Number of Contracts	Share by Department (in % of value)			
			Defense	Energy	NASA	Others
1990	158,150	371,514	66.6	13.4	6.7	13.3
1991	169,079	422,275	62.5	14.3	8.6	14.6
1992	159,277	506,592	63.4	13.0	6.2	17.4
1993	165,534	450,340	58.8	12.0	12.9	16.3
1994	170,680	459,692	63.6	12.4	5.7	18.3
1995	165,275	527,085	65.5	11.1	4.4	19.0
1996	201,876	592,985	63.5	9.4	11.2	16.0
1997	177,945	537,696	66.0	10.5	3.4	20.0
1998	183,793	537,246	64.7	10.1	4.1	21.0
1999	189,312	567,669	64.8	10.7	3.6	20.9
2000	208,208	613,655	66.5	8.3	2.8	22.3
2001	213,840	691,568	66.2	9.4	2.5	21.9
2002	281,240	902,218	67.3	8.0	2.0	22.7
2003	335,237	1,503,145	65.6	8.9	4.2	21.3
2004	351,107	2,843,212	68.9	6.1	4.4	20.7
Mean	208,704	768,459	65.3	10.0	5.2	19.5
Sum	3,130,553	11,526,892				

Table 3: Summary statistics for the sample companies

Table 3 panel a) presents descriptive statistics for the 319 S&P500 companies that obtain government procurement contracts of more than $1 million during the 1990 to 1998 period. Panel b) presents descriptive statistics for the 338 S&P500 companies that obtain government procurement contracts of more than $1 million during the 1996 to 2004 period. These companies are sorted based on the political connections of their board members in 1994(panel a) and 2000(panel b). The reported values for Market Cap, Assets, Sales, Earning before income tax and depreciation, Capital Expenditure and Book-to-Market Equity Ratio are measured as of the end of 1994 (Panel a) and 2000(Panel b). A company is classified as politically connected if it has at least one board member with the following former position: President, Presidential (Vice-Presidential) Candidate, Senator, Member of the House of Representatives, Governor, Mayor, (Assistant) Secretary, Deputy Secretary, Deputy Assistant Secretary, Under Secretary, Director (CIA, FEMA), Deputy Director (CIA, OMB), Commissioner (IRS, NRC, SSA, CRC, FDA, SEC), Representative to the United Nations, Ambassador, Staff (White House, President, Presidential campaign), Chairman of the Party Caucus, Chairman or Staff of the Presidential Election campaign, and Chairman or member of the President's Committee/Council.). A company is classified as Rep (Dem) if it has only Republican (Democratic) affiliated board members.

a)   1994 Midterm election

Variable	Full Sample		Rep		Dem	
	Mean	Median	Mean	Median	Mean	Median
Market Cap ($Million)	7,534	3,711	10,981	6,718	5,825	2,995
Asset ($Million)	14,514	4,886	21,514	8,747	13,047	5,056
Sales ($Million)	8,268	4,507	12,860	8,087	8,195	4,819
EBITD ($Million)	1,420	623	2,069	1,125	1,163	477
CAPEX ($Million)	553	220	827	359	501	222
Book-to-market	0.56	0.50	0.59	0.50	0.54	0.50
No. of companies	319		81		35	

b)   2000 Presidential election

Variable	Full Sample		Rep		Dem	
	Mean	Median	Mean	Median	Mean	Median
Market Cap ($ million)	29,842	8,998	40,461	13,661	22,725	9,387
Asset ($ million)	33,405	10,052	25,708	13,769	75,603	19,469
Sales ($ million)	14,755	7,162	18,525	10,157	20,270	9,129
EBITD ($ million)	3,078	1,301	3,600	2,084	4,527	1,878
CAPEX ($ million)	1,203	411	1,205	618	1,716	836
Book-to-market	0.52	0.38	0.55	0.50	0.51	0.39
No. of companies	338		55		34	

Table 4: Value of procurement contracts for sample companies

Table 4 panel a) summarizes the value of procurement contracts (in $million) for the sample of 319 S&P500 companies between 1990 and 1998. Panel b) summarizes the value of procurement contracts (in $million) for the sample of 338 S&P500 companies between 1996 and 2004. A company is classified as Rep (Dem) if it has only Republican (Democratic) affiliated board members. Based on the political connections of their board members, the sample companies are sorted into three groups: Republican, Democratic, and Others. The left columns report the sum of the procurement contracts for all companies, while the right columns report the average of the procurement contracts.

a)   1994 Midterm election

Year	Sum of procurement contracts ($ million)				Mean of procurement contracts ($ million)			
	Full Sample	Rep	Dem	Others	Full Sample	Rep	Dem	Others
1990~1998	475,632	299,038	48,933	127,662	1,491.0	3,691.8	1,398.1	628.9
1990~1993 (A)	187,826	113,632	22,883	51,311	588.8	1,402.9	653.8	252.8
1995~1998 (B)	233,598	153,413	20,322	59,863	732.3	1,894.0	580.6	294.9
Difference (B-A)	45,772	39,781	-2,561	8,552	143.5	491.1	-73.2	42.1
Growth rate (%)	24.4	35.0	-11.2	16.7	24.4	35.0	-11.2	16.7
No. of companies	319	81	35	203	319	81	35	203

b)   2000 Presidential election

Year	Sum of procurement contracts ($ million)				Mean of procurement contracts ($ million)			
	Full Sample	Rep	Dem	Others	Full Sample	Rep	Dem	Others
1996~2004	757,774	211,052	27,117	519,604	2,241.9	3,837.3	797.6	2,086.8
1996~1999 (A)	271,657	80,735	10,867	180,055	803.7	1,467.9	319.6	723.1
2001~2004 (B)	403,253	108,999	12,053	282,201	1,193.1	1,981.8	354.5	1,133.3
Difference (B-A)	131,596	28,265	1,186	102,145	389.3	513.9	34.9	410.2
Growth rate (%)	48.4	35.0	10.9	56.7	48.4	35.0	10.9	56.7
No. of companies	338	55	34	249	338	55	34	249

Table 5: Summary statistics for the sample companies by categories

The 319 sample companies in panel a) are classified into one of five groups based on the difference in the amount of procurement contracts that they receive in the four-year period before 1994 and the four-year period after 1994. The 338 sample companies in panel b) are classified into one of five groups based on the difference in the amount of procurement contracts that they receive in the four-year period before 2000 and the four-year period after 2000. Each of the five groups comprises the same number of companies (with the exception of group 1 in the 1994 sample and groups 1, 2 in the 2000 sample), with group 1 comprising the companies with the lowest dollar difference and group 5 comprising the companies with the highest dollar difference in procurement contracts across the two time periods.

a)   **1994 Midterm election**

Group	Number of companies				Mean of difference amount ($1,000)			
	Rep	Dem	Others	Sum	Rep	Dem	Others	Total
1	16	11	36	63	-202,302	-695,255	-136,728	-250,902
2	7	9	48	64	-8,556	-7,543	-8,025	-8,015
3	14	5	45	64	809	602	326	453
4	22	6	36	64	14,488	21,272	13,488	14,562
5	22	4	38	64	1,943,093	1,246,389	351,570	954,582
Full sample	81	35	203	319	491,128	-74,271	42,130	143,368

b)   **2000 Presidential election**

Group	Number of companies				Mean of difference amount($1,000)			
	Rep	Dem	Others	Sum	Rep	Dem	Others	Total
1	8	10	49	67	-61,217	-346,954	-325,887	-297,429
2	5	7	55	67	-3,246	-4,141	-2,538	-2,758
3	9	7	52	68	2,223	2,765	2,636	2,595
4	20	3	45	68	22,228	46,554	24,116	24,550
5	13	7	48	68	2,177,392	646,535	2,438,144	2,203,864
Full Sample	55	34	249	338	513,903	34,889	410,222	389,338

Table 6: Ordered logit model for the change in procurement contracts of 1994 sample firms

The 319 sample companies are classified into one of five groups based on the difference in the amount of procurement contracts that they receive in the four-year period before 1994 and the four-year period after 1994. Each of the five groups comprises the same number of companies (with the exception of group 1), with group 1 comprising the companies with the lowest dollar difference and group 5 comprising the companies with the highest dollar difference in procurement contracts across the two time periods. This categorical variable is the dependent variable. The explanatory variables are as follows. lnCap is the log of the company's market capitalization. BM is the ratio of the book value of equity to the market value of equity. Hf_index is the Herfindahl index, which is based on the sales amount in the 2-digit SIC industry in which a company operates. CAPEX/Sales is the ratio of capital expenditure to sales, EBITD/Asset is the ratio of the earnings before income tax and depreciation to total assets, and CostG/Sales is the ratio of cost of goods sold to sales. All control variables are from COMPUSTAT and are measured at the end of 1994. dRep is a dummy variable that takes a value of one if a company is politically connected only to the Republicans and a value of zero otherwise. dDem is a dummy variable that takes a value of one if a company is politically connected only to the Democrats and a value of zero otherwise. All models are adjusted for heteroskedasticity. The t-values are in parentheses. The symbols $, *, and ** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Model	1	2	3	4	5	6	7	8	9
lnCap	0.066	0.118	0.077	0.065	0.117	0.076	0.072	0.130	0.084
	(0.61)	(1.13)	(0.72)	(0.60)	(1.11)	(0.70)	(0.65)	(1.22)	(0.75)
BM	0.287	0.298	0.283	0.337	0.340	0.329	0.320	0.276	0.289
	(1.12)	(1.17)	(1.15)	(1.14)	(1.17)	(1.15)	(0.94)	(0.99)	(0.96)
Hf_index				4.370*	4.167*	4.279*	4.307*	4.127*	4.273*
				(2.55)	(2.23)	(2.35)	(2.51)	(2.23)	(2.35)
CAPEX/Sales				2.076	2.172	2.041	2.097	2.318$	2.146
				(1.50)	(1.61)	(1.45)	(1.46)	(1.68)	(1.47)
EBITD/Asset							-0.057	-0.650	-0.444
							(0.03)	(0.43)	(0.28)
CostG/Sales							0.129	0.159	0.058
							(0.22)	(0.27)	(0.10)
dRep	0.529*		0.441$	0.535*		0.451$	0.527*		0.439$
	(2.10)		(1.71)	(2.07)		(1.71)	(2.03)		(1.65)
dDem		-0.712*	-0.596$		-0.668*	-0.550$		-0.681*	-0.564$
		(2.20)	(1.80)		(2.16)	(1.73)		(2.18)	(1.75)
Log *L*	-509.3	-509.3	-507.6	-505.6	-505.8	-504.2	-505.6	-505.7	-504.1
Wald test (p-value)	0.0725	0.0632	0.0374	0.0110	0.0067	0.0046	0.0313	0.0135	0.0115
Observations	319	319	319	319	319	319	319	319	319

Table 7: Ordered logit model for the change in procurement contracts of 2000 sample firms

The 338 sample companies are classified into one of five groups based on the difference in the amount of procurement contracts that they receive in the four-year period before 2000 and the four-year period after 2000. Each of the five groups comprises the same number of companies (with the exception of groups 1, 2), with group 1 comprising the companies with the lowest dollar difference and group 5 comprising the companies with the highest dollar difference in procurement contracts across the two time periods. This categorical variable is the dependent variable. The explanatory variables are as follows. lnCap is the log of the company's market capitalization. BM is the ratio of the book value of equity to the market value of equity. Hf_index is the Herfindahl index, which is based on the sales amount in the 2-digit SIC industry in which a company operates. CAPEX/Sales is the ratio of capital expenditure to sales, EBITD/Asset is the ratio of the earnings before income tax and depreciation to total assets, and CostG/Sales is the ratio of cost of goods sold to sales. All control variables are from COMPUSTAT and are measured at the end of 2000. dRep is a dummy variable that takes a value of one if a company is politically connected only to the Republicans and a value of zero otherwise. dDem is a dummy variable that takes a value of one if a company is politically connected only to the Democrats and a value of zero otherwise. All models are adjusted for heteroskedasticity. The t-values are in parentheses. The symbols $, *, and ** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Model	1	2	3	4	5	6	7	8	9
lnCap	-0.043	-0.016	-0.039	-0.001	0.025	0.001	-0.006	0.024	-0.004
	(0.51)	(0.18)	(0.45)	(0.01)	(0.27)	(0.01)	(0.06)	(0.25)	(0.04)
BM	-0.956**	-0.929**	-0.934**	-0.849**	-0.830**	-0.840**	-0.863**	-0.843**	-0.858**
	(3.76)	(3.61)	(3.61)	(3.33)	(3.22)	(3.24)	(2.90)	(2.85)	(2.87)
Hf_index				-0.535	-0.631	-0.561	-0.413	-0.603	-0.445
				(0.31)	(0.36)	(0.33)	(0.23)	(0.33)	(0.25)
CAPEX/Sales				-2.928	-3.133	-2.905	-2.967	-3.140	-2.942
				(1.61)	(1.57)	(1.57)	(1.63)	(1.57)	(1.58)
EBITD/Asset							-0.361	-0.157	-0.373
							(0.30)	(0.13)	(0.32)
CostG/Sales							-0.122	-0.014	-0.109
							(0.23)	(0.02)	(0.20)
dRep	0.596*		0.577*	0.537*		0.530*	0.546*		0.539*
	(2.35)		(2.26)	(2.09)		(2.05)	(2.10)		(2.06)
dDem		-0.274	-0.170		-0.162	-0.070		-0.164	-0.069
		(0.74)	(0.45)		(0.42)	(0.18)		(0.42)	(0.17)
Log L	-533.2	-535.5	-533.1	-530.3	-532.3	-530.3	-530.3	-532.3	-530.3
Wald test (p-value)	0.0000	0.0003	0.0001	0.0000	0.0003	0.0001	0.0001	0.0014	0.0003
Observations	338	338	338	338	338	338	338	338	338

Table 8: Ordered logit model for the change in procurement contracts of 1994 sample with industry dummies

The 319 sample companies are classified into one of five groups based on the difference in the amount of procurement contracts that they receive in the four-year period before 1994 and the four-year period after 1994. Each of the five groups comprises the same number of companies (with the exception of group 1), with group 1 comprising the companies with the lowest dollar difference and group 5 comprising the companies with the highest dollar difference in procurement contracts across the two time periods. This categorical variable is the dependent variable. lnCap is the log of the company's market capitalization. BM is the ratio of the book value of equity to the market value of equity. Hf_index is the Herfindahl index, which is based on the sales amount in the 2-digit SIC industry in which a company operates. CAPEX/Sales is the ratio of capital expenditure to sales. All control variables are from COMPUSTAT and are measured at the end of 1994. dFin, dFood, dOil, dUtil, dHlth, and dPaper are dummy variables that take a value of 1 if a company operates in industry 29, 1, 19, 20, 8, and 24, respectively, according to the Fama-French 30 industry-classification and a value of zero otherwise. FF30 industry includes dummy variables for each industry according to the Fama-French 30 industry-classification. dRep is a dummy variable that takes a value of one if a company is politically connected only to the Republicans and a value of zero otherwise. dDem is a dummy variable that takes a value of one if a company is politically connected only to the Democrats and a value of zero otherwise. All models are adjusted for heteroskedasticity. The t-values are in parentheses. The symbols $, * and ** denote statistical significance at the 10%, 5% and 1% levels, respectively.

Model	1	2	3	4	5	6	7	8	9	10
lnCap	-0.080	-0.018	-0.061	0.052	0.064	0.082	0.080	0.090	0.076	0.059
	(0.72)	(0.16)	(0.55)	(0.54)	(0.66)	(0.85)	(0.83)	(0.95)	(0.80)	(0.60)
BM	0.362	0.405	0.376	0.270	0.364	0.323	0.402	0.271	0.331	0.279
	(1.39)	(1.56)	(1.45)	(1.14)	(1.46)	(1.33)	(1.41)	(1.14)	(1.36)	(1.03)
Hf_index	5.261*	4.942*	5.110*	4.586*	4.494*	4.210*	4.064*	3.989*	4.284*	4.420*
	(2.40)	(2.21)	(2.30)	(2.48)	(2.43)	(2.29)	(2.18)	(2.17)	(2.34)	(2.30)
CAPEX/Sales	0.201	0.370	0.125	2.250	2.302	1.896	2.270	2.015	2.062	2.468
	(0.10)	(0.19)	(0.06)	(1.36)	(1.39)	(1.13)	(1.35)	(1.23)	(1.25)	(1.40)
dFin				0.633						0.642
				(1.64)						(1.60)
dFood					0.925					0.955
					(1.55)					(1.58)
dOil					0.199					0.222
					(0.44)					(0.48)
dUtil						-0.259				-0.096
						(0.59)				(0.21)
dHlth								-0.707		-0.574
								(1.58)		(1.27)
dPaper									0.086	0.155
									(0.18)	(0.31)
dRep	0.681**		0.580*	0.422$	0.418$	0.443$	0.439$	0.470$	0.448$	0.383
	(2.67)		(2.22)	(1.71)	(1.69)	(1.79)	(1.78)	(1.89)	(1.81)	(1.52)
dDem		-0.802*	-0.642$	-0.562$	-0.566$	-0.564$	-0.562$	-0.547$	-0.558$	-0.611$
		(2.37)	(1.85)	(1.72)	(1.73)	(1.72)	(1.72)	(1.68)	(1.70)	(1.83)
FF30 Industry	Yes	Yes	Yes	No	No	No	No	No	No	No
Log *L*	-483.3	-484.0	-481.6	-502.8	-502.9	-504.1	-504.0	-502.9	-504.2	-500.3
Wald test (p-value)	0.0036	0.0053	0.0021	0.0035	0.0039	0.0093	0.0087	0.0037	0.0099	0.0100
Observations	319	319	319	319	319	319	319	319	319	319

Table 9: Ordered logit model for the change in procurement contracts of 2000 sample with industry dummies

The 338 sample companies are classified into one of five groups based on the difference in the amount of procurement contracts that they receive in the four-year period before 2000 and the four-year period after 2000. Each of the five groups comprises the same number of companies (with the exception of groups 1, 2), with group 1 comprising the companies with the lowest dollar difference and group 5 comprising the companies with the highest dollar difference in procurement contracts across the two time periods. This categorical variable is the dependent variable. lnCap is the log of the company's market capitalization. BM is the ratio of the book value of equity to the market value of equity. Hf_index is the Herfindahl index, which is based on the sales amount in the 2-digit SIC industry in which a company operates. CAPEX/Sales is the ratio of capital expenditure to sales. All control variables are from COMPUSTAT and are measured at the end of 2000. dFin, dFood, dOil, dUtil, dHlth, and dPaper are dummy variables that take a value of 1 if a company operates in industry 29, 1, 19, 20, 8, and 24, respectively, according to the Fama-French 30 industry-classification and a value of zero otherwise. FF30 industry includes dummy variables for each industry according to the Fama-French 30 industry-classification. dRep is a dummy variable that takes a value of one if a company is politically connected only to the Republicans and a value of zero otherwise. dDem is a dummy variable that takes a value of one if a company is politically connected only to the Democrats and a value of zero otherwise. All models are adjusted for heteroskedasticity. The t-values are in parentheses. The symbols $, * and ** denote statistical significance at the 10%, 5% and 1% levels, respectively.

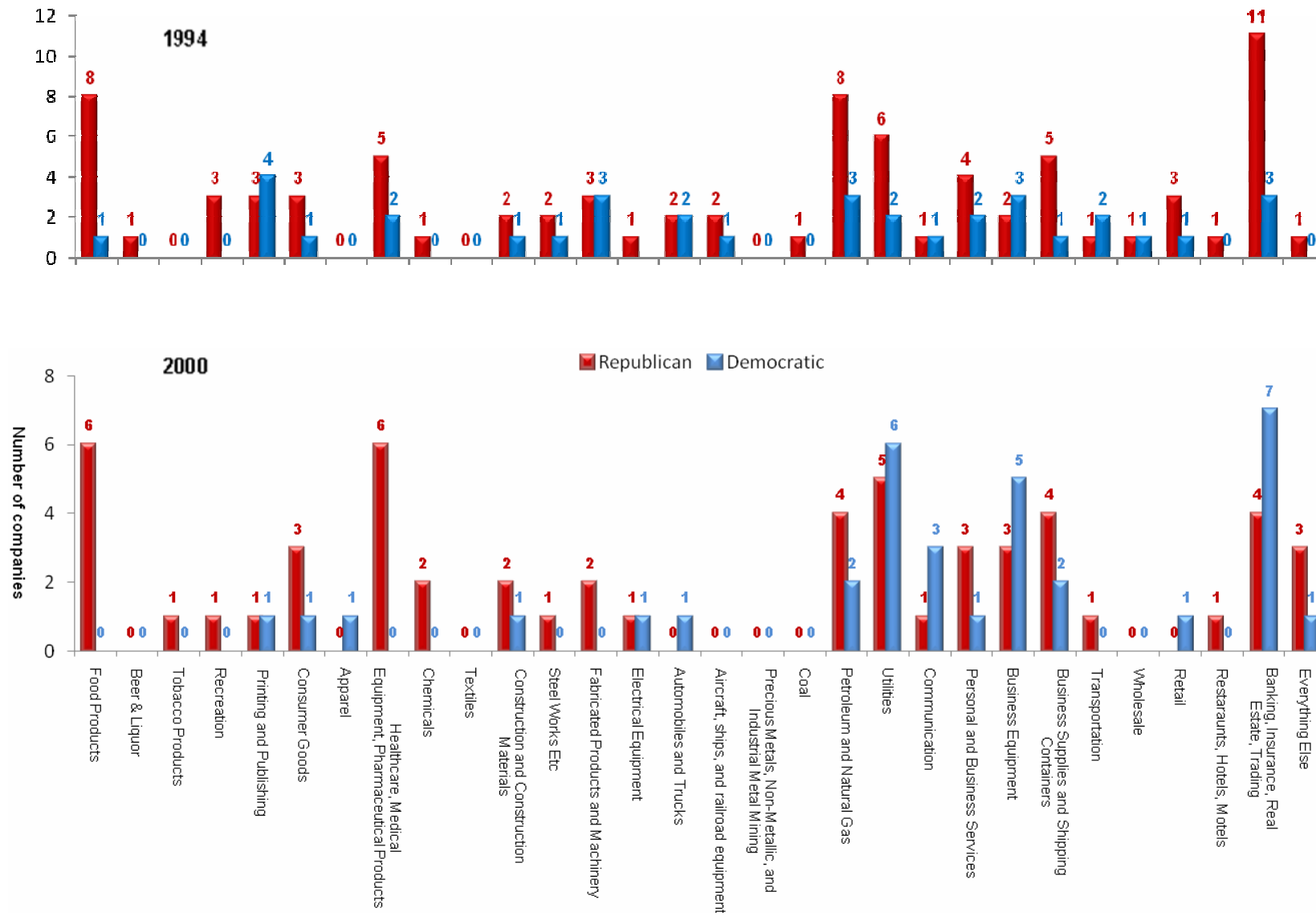| Model	1	2	3	4	5	6	7	8	9	10
lnCap	0.042	0.082	0.043	0.022	0.000	0.002	0.005	-0.011	-0.007	0.020
	(0.37)	(0.72)	(0.37)	(0.23)	(0.00)	(0.02)	(0.06)	(0.12)	(0.08)	(0.20)
BM	-0.574$	-0.562$	-0.568$	-0.813**	-0.843**	-0.838**	-0.710**	-0.811**	-0.817**	-0.642*
	(1.75)	(1.73)	(1.71)	(3.11)	(3.24)	(3.24)	(2.71)	(3.13)	(3.18)	(2.40)
Hf_index	-1.746	-1.413	-1.765	-0.728	-0.593	-0.596	-1.387	-0.270	-0.277	-1.558
	(0.64)	(0.56)	(0.64)	(0.42)	(0.35)	(0.35)	(0.79)	(0.15)	(0.16)	(0.86)
CAPEX/Sales	-1.765	-2.162	-1.743	-3.131	-2.926	-3.006	-2.436	-2.866	-2.884	-2.691
	(1.23)	(1.38)	(1.17)	(1.61)	(1.57)	(1.56)	(1.57)	(1.56)	(1.55)	(1.53)
dFin				-0.397						-0.479$
				(1.51)						(1.70)
dFood					-0.118					-0.222
					(0.18)					(0.34)
dOil						0.145				-0.039
						(0.21)				(0.05)
dUtil							-0.760$			-0.857$
							(1.71)			(1.84)
dHlth								0.372		0.219
								(1.38)		(0.76)
dPaper									0.335	-0.413
									(0.89)	(1.35)
dRep	0.714*		0.709*	0.516*	0.541*	0.523*	0.568*	0.531*	0.563*	0.602*
	(2.49)		(2.44)	(2.01)	(1.99)	(1.99)	(2.18)	(2.04)	(2.16)	(2.15)
dDem		-0.174	-0.048	-0.023	-0.072	-0.071	-0.051	-0.037	-0.053	0.053
		(0.40)	(0.11)	(0.06)	(0.18)	(0.18)	(0.13)	(0.09)	(0.14)	(0.14)
FF30 Industry	Yes	Yes	Yes	No	No	No	No	No	No	No
Log L	-508.1	-511.1	-508.0	-529.5	-530.3	-530.3	-528.5	-529.7	-529.7	-526.7
Wald test (p-value)	0.0000	0.0000	0.0000	0.0001	0.0002	0.0002	0.0000	0.0000	0.0001	0.0001
Observations	338	338	338	338	338	338	338	338	338	338

Figure 1: Distribution of politically connected companies across the Fama-French 30 industries