



Its a Sweetheart of a Deal: Political Connections and Corporate-Federal Contracting

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3 **It's A Sweetheart of a Deal:**
4 **Political Connections and Corporate- Federal Contracting**
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48 Southern Finance Association Annual meeting. We also thank the Center for Responsive
49 Politics for providing the data on PAC contributions.
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3 **It's A Sweetheart of a Deal:**
4 **Political Connections and Corporate- Federal Contracting**
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7 **Abstract**
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11 We examine whether political connections measured by political contributions influence the
12 choice of terms included in government contracts awarded to firms. We construct an index of
13 four “sweetheart” contract terms and find that firms making larger political contributions more
14 frequently have these favorable terms included in their contracts. We also find that political
15 contributions have explanatory power for contract design after controlling for lobbying,
16 negotiation power, and the employment of former government employees. These results are
17 robust to alternative model specifications, different estimation techniques, various variable
18 measurements, and adjustments for possible endogeneity.
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25 *Keywords:* contracting; political connections

26 *JEL Codes:* G32; GT34; G38
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It's A Sweetheart of a Deal: Political Connections and Corporate- Federal Contracting

A sweetheart deal or sweetheart contract is an abnormally favorable contractual arrangement.

-----Wikipedia

1. Introduction

A growing literature in finance and economics examines the role of political connections on business behavior and value. Political connectedness can improve access to government resources and consequently benefit the firm. Existing research shows that political connections influence corporate acquisition activity (Ferris, Houston, and Javakhadze, 2016), litigation process and outcomes (Abdulmanova, 2016), SEC enforcement (Correia, 2013), access to capital and loan pricing (Claessens, Feijen, and Laeven, 2008; Infante and Piazza, 2014), and stock returns (Cooper, Gulen, and Ovtchinnikov, 2010). Alternatively, the intense competition for government contracts can produce an equilibrium where the government receives financial gains, aggravates agency problems within a firm, and reduces long-term corporate performance (e.g., Dixit, Grossman, and Helpman, 1997; Fan, Wong, and Zhang, 2007).

In this study, we expand the contracting literature by investigating the potential impact of political connections on federal contracting. More specifically, we examine whether the presence of political connections extends beyond influencing the award of government contracts as reported by Goldman, Rocholl, and So (2013) and affects the contract terms themselves. That is, we explore whether a firm's political connections result in the inclusion of contract terms that are highly favorable to the firm and less apparently so for the government. To undertake our analysis, we construct an index of four contract terms that we believe are highly favorable to the firm, but not obviously advantageous to the government. We refer to this index as the Sweetheart

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3 index since it reflects the extent to which the contract is a “sweetheart” deal. We then examine
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5 the extent to which a firm’s political connections influence the level of this index.
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8 Our empirical analysis uncovers a number of important relations between political
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10 connections and contracting activity. We confirm that politically connected firms receive more
11
12 government contracts. More importantly, we find that the likelihood of “sweetheart” provisions
13
14 in federal contracts is increasing in political contributions. We further show that campaign
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16 contributions continue to possess explanatory power after controlling for other political activities
17
18 such as lobbying and the employment of former government employees. Our results suggest that
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20 PAC (Political Action Committee) donations provide a unique channel for social connections
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22 and the mutual exchange of favors between a firm and government officials. Our findings are
23
24 robust to various model specifications, estimation techniques, and alternative measurements of
25
26 key variables.
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31 We use several strategies to overcome possible endogeneity challenges. First, we follow
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33 Akey (2015) and examine the effects of donations made to winning and losing politicians in
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35 close elections. Second, following Cohen, Coval, and Malloy (2011) we examine changes in
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37 powerful committee chairmanships and conduct a set of difference-in-difference estimations.
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39 Third, we use a change specification in political contributions. Finally, we address the
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41 measurement error issues in our main explanatory variable by estimating Errors-In-Variables
42
43 regressions using the High-Order-Moments method of Erickson and Whited (2000; 2002). Our
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45 results are robust to these estimations and conclude that endogeneity does not account for our
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47 findings,
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51 Our findings contribute to the literature in two ways. First, this study complements prior
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53 research examining the implications of political connectedness on various firm outcomes (e.g.,
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Francis, Hasan, and Sun, 2009; You and Du, 2012; Lu, Pan and Zhang, 2016). Second, our findings add to the fledgling, though rapidly growing, research that investigates the efficiency of federal contracting. Tahoun (2014) documents that stock ownership by politicians helps firms to obtain more government contracts with the financial gains from these contracts being economically large. Goldman et al. (2013) examine whether the political connections of boards of directors of publicly traded companies in the United States affect the allocation of government contracts. Canayaz, Martine, and Ozsoylev (2016) find that firms hire former government officials in an effort to win government contracts. Brogaard, Denes, and Duchin (2016) show that firms with political influence win more contracts, are awarded larger contracts, and benefit from looser oversight. Our evidence suggests that firms making larger political contributions more frequently enjoy “sweetheart” terms included in their contracts, which illustrates the importance of these provisions for non-contractible quid pro quo relationships between the government and the contracting firm.

2. The government contracting process, contract provisions and the sweetheart index

2.1 Contracting process

The federal acquisition process begins when an agency identifies a requirement and develops a plan on how best to secure the particular good or service. If the agency’s contracting officer determines that the appropriate method for procuring the goods or services is a contract, and the contract amount is greater than \$25,000 then the agency posts a solicitation on the Federal Business Opportunities (FedBizOpps) Website. At a minimum, a solicitation identifies what an agency wants to buy, provides instructions to would-be suppliers, identifies the source selection method that will be used to evaluate offers, and includes a deadline for the submission of bids or proposals. Agencies can also post solicitations on their own websites and, in exceptional

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3 circumstances, might post solicitations on their websites instead of on FedBizOpps. Following
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5 the deadline for companies to submit their offers, agency personnel evaluate the suppliers'
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7 submissions by using the methods and criteria described in the original solicitation.
8
9

10 *2.2 Sweetheart provisions*

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12 As noted above, federal contracting can be extremely complex with numerous provisions,
13
14 clauses, and terms. Based upon a review of the Federal Acquisition Regulation and the
15
16 contracting literature, we identify four provisions that are: (a) not uncommon in contract design,
17
18 (b) clearly beneficial to the contracting firm, and (c) not obviously beneficial to the government.
19
20 These four provisions are described below and serve as the focus of our analysis of whether
21
22 politically connected firms receive more favorable contract terms. For the purposes of this study,
23
24 favorable contracting occurs when at least one of these four terms are present in a contract. One
25
26 might argue that other terms should be included as "sweetheart terms". Our restriction to these
27
28 four terms reflects a conservative approach to index construction and imparts no bias to our
29
30 results. If anything, our limitation to four terms simply understates the extent and magnitude of
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32 sweetheart contracting with the federal government.
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38 A no-bid contract is a popular phrase for what is officially known as a "sole source contract".
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40 This means that there is only one person or firm that can provide the required contractual
41
42 services needed. Thus, any attempt to obtain bids would only result in that person or firm
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44 submitting a bid. The corporate advantage of such a contract term occurs from the firm's status
45
46 as a monopolist supplier and its ability to become entrenched in that product or service market.
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50 A cost-plus contract, also termed a cost reimbursement contract, is a contract where a
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52 contractor is paid for all of its allowed expenses up to a set limit plus additional payment to allow
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54 for a profit. Such a contract guarantees the firm a profit and provides it with insulation from price
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3 shocks or other unanticipated changes to its cost structure. The attractiveness of this provision is
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5 that it allows the firm to earn a pre-determined profit regardless of its expenses or the costs it
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7 ultimately incurs.
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10 A multiyear contract refers to a contract for the purchase of supplies or services for more
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12 than 1, but less than 5 years. The benefits to the contracting firm with this provision are many
13
14 and include predictable revenue streams, an ability to forecast production volumes and supply
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16 requirements, insulation from competition in that product or service market, and a capacity to
17
18 amortize capital expenditures over a longer horizon.
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21 Our final “sweetheart” provision is whether the contracting firm is exempt from providing
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23 cost and/or pricing data. Cost and pricing data refers to the set of facts known at the time of the
24
25 contract that can reasonably be expected to affect price negotiations. This data is more than
26
27 historical accounting information and represents all the facts that contribute to the formation of
28
29 future cost estimates. Exemption from this requirement is advantageous to the contracting firm
30
31 for several reasons. First, the firm avoids the time and expense associated with the preparation of
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33 this material. Presentation of this data also narrows the channel in which price negotiation
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35 between the firm and the government occurs. Finally, exemption from this requirement can
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37 remove explicit benchmarks when negotiating future prices, discussing current expenses, or
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39 explaining cost over-runs.
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44 *2.3 Sweetheart index*

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46 We measure the attractiveness of terms in a federal contractor with an index we refer to as
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48 the Sweetheart Index. Consistent with a number of other researchers in the corporate finance and
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50 governance literatures (e.g., Gompers, Ishii, and Metrick, 2003; Bebchuk and Cohen, 2005;
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52 Aggarwal, Erel, Stulz and Williamson, 2010) we use an additive index to assess the
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3 favorableness of contract terms to the winning firm. The Sweetheart Index increases by one for
4 each of the four provisions that are included in a given contract. The range therefore extends
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6 from zero to four. We calculate the Sweetheart Index as:
7

$$8 \quad \textit{Sweetheart Index} = \textit{Nobid} + \textit{Costplus} + \textit{Multiyear} + \textit{Nodata} \quad (1)$$

11
12 Hence, higher values of the contract indicate a more favorable contract from the view of the
13 winning firm.
14

15
16 Data for each of the four contracting terms that constitute the Sweetheart Index, is provided
17 by the Federal Procurement Data System. *Nobid* is a binary variable indicating whether the
18 contractor faces competition in the award of the contract. If the winning firm is the only business
19 competing for the contract, then *Nobid* equals 1, otherwise 0. *Costplus* is another binary variable
20 and indicates whether a contractor is paid using a cost-plus method or not. If cost-plus pricing is
21 used, then *Costplus* equals 1, otherwise 0. *Multiyear* is a binary variable that indicates whether
22 the firm receives a contract which that is expected to expire in more than a year from its start
23 date. If the contract exceeds a year in length, then *multiyear* equals 1, otherwise 0. *Nodata* is a
24 binary variable that measures whether the contractor is exempt from providing cost or pricing
25 data. If the contract exempts the contractor from providing cost or pricing data, then *Nodata*
26 equals 1, otherwise 0.
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43 **3. Data, variable measurement, and sample construction**

44 *3.1 Data*

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46 We use the CRSP and Compustat datasets to obtain our required financial and accounting
47 data. Share price and related data is drawn from the CRSP dataset. Accounting information is
48 taken from the Compustat dataset.
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3 Our data on government contractors comes from the Federal Procurement Data System
4 (FPDS). The FDPS Federal Procurement Data System contains information on all government
5 contracts and contract modifications beginning with fiscal year 2004 and continuing onward.¹
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7 The data includes information on firms that receive a contract, a DUNS number as an identifier,
8 the contract characteristics, the contract signing dates, the agency providing the contract, and
9
10 demographic information concerning the contract recipient. We match contract DUNS numbers
11 to firms using the BECRS dataset provided by Capital IQ. The BECRS dataset contains both
12 DUNS numbers and GVKEYs of publicly traded firms in the Compustat database.
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16 To account for contracts received by the subsidiaries of our sample firms, we create a
17 hierarchy that matches the DUNS numbers of wholly owned subsidiaries to their ultimate parent.
18
19 For example, if IBM owns the entire equity stake of Rational Software Corporation, contracts
20 received by any Rational Software Corp. location are recorded as contracts received by IBM. If
21 Rational Software Corp. is noted as having acquired a company, like Attol Testware, we then
22 match Attol Testware's DUNS numbers to IBM.² We extend this hierarchy of firm ownership to
23 the eighth degree to match as many DUNS numbers with our sample firms.
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27 Several other databases are accessed to complete our data collection. We also use data from
28 the Department of Justice Public Integrity Section to estimate a corruption index. Using data
29 from individual firm proxy statements obtained from the Securities and Exchange Commission's
30 EDGAR database, we construct a dummy variable indicating whether the firm has a former
31 politician or industry regulator on its board or management team. Lobbying data is obtained from
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51 ¹ The start date of the federal government's fiscal year is October 1st of the prior calendar year.

52 ² We use SDC data to control for historical mergers and acquisitions. The BECRS dataset is a snapshot of the firm's
53 equity ownership as of December, 2015. We create an annual hierarchy using SDC data on mergers and
54 acquisitions to control for possible survival bias. If a parent company acquires a subsidiary after year t-1, then the
55 subsidiary's DUNS numbers are not assigned to the parent company in year t.
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3 the Center for Responsive Politics. We obtain education, employment, and social networks data
4 from the BoardEx database provided by Management Diagnostic Limited.
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7 8 *3.2 Measuring political connections* 9

10 We assess a firm's political connections by measuring its level of political contributions. We
11 obtain Political Action Committee (PAC) contribution data from the Federal Election
12 Commission through the Center for Responsive Politics (CRP). A PAC connected to a publicly
13 traded firm only accepts contributions from the firm's managers, directors, shareholders, and
14 employees. The PAC will then contribute to politicians, political parties, or other PACs on the
15 donors' behalf. We match these PACs to our sample firms based upon series of fuzzy matching
16 procedures and then manually verified the quality of the match.
17
18

19 We use this data to construct four measures of a firm's political connections. Our first
20 measure, PC1, is the total PAC contribution made during year t-1 to candidates, political parties,
21 and other PACs. PC2 is the total dollar value of contributions made to the party in year t -1 that
22 holds the Presidency. PC3 is the total of all PAC contributions made to Senate candidates. PC4
23 is the total of all PAC contributions made to Congressional candidates. We restrict firm-year
24 observations to those that make at least \$1 of PAC contributions during year t. We define the
25 remaining variables and controls in the Appendix.
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28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 *3.3 Sample description* 43

44 Our sample includes all S&P 1500 firms listed in Compustat from 2006 to 2013. We match
45 each firm to share data contained on the Center for Research in Security Prices (CRSP) database.
46
47 In Table 1 we provide comparative descriptive statistics for our sample firms.
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50 We compare the financial/accounting profile of contributing and non-contributing firms
51 relative to two benchmarks in the panels of Table 1. In Panel A we compare firms that make at
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3 least one dollar in contributions to those do not contribute. We find that the contributing firms
4 are significantly larger in size, regardless whether we measure size by total assets, sales, or
5 equity market capitalization. We further observe that contributing firms make more capital
6 expenditures, but spend less in research and development. Finally, we note that contributing
7 firms report a higher level of accounting profitability.
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14 In Panel B we separate contributing firms into high and low subsamples. The low subset are
15 those firms whose contributions are below the median while those in the high subsample
16 contribute an above median amount. We observe comparable results with a few differences. We
17 find that the level of capital expenditures is statistically the same across the subsamples. Also,
18 we discover that the above-median contributors invest more in research and development than do
19 the less generous contributors.
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28 Overall, we conclude that there are two consistent differences between firms that make
29 political contributions and those that do not or make only limited contributions. Specifically,
30 contributing firms are larger in size, regardless of how we measure size. These contributing firms
31 are also more profitable.
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38 **4. Political connections on government contracting – univariate analysis data**

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41 In this section, we provide our initial analysis of the effect that political connections have on
42 corporate contracting activity.
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45 *4.1 Contract activity and political connections*

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48 In Panel A of Table 2 we investigate the extent to which political connections are related to
49 the number and value of federal contracts that a firm receives. We examine the effect of total
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3 political contributions³ (PC1) by stratifying our sample firms into high and low subsamples
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5 relative to the median value of total contributions. We begin with an analysis of the dollar value
6
7 of all federal contracts received by firms based on their contribution level. We find that larger
8
9 political contributors report a total value of federal contracts that averages 28 times more than
10
11 the below median contributors. In dollar terms, the above median contributors are awarded
12
13 nearly \$540 million more in federal contracts than firms in the below median subsample
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17 (Column 1).
18

19 Our next analysis is a comparison of total federal contracts as a percent of the firm's total
20
21 sales. That is, how important are federal contracts to these firms? We find that federal contracts
22
23 are consistently a larger percentage of total sales for more politically connected firms. Federal
24
25 contracts relative to total sales are about 2.9 times more important to above median contributors
26
27 as they are for the below median firms (Column 2).
28
29

30 We also examine the number of contracts received by firms in each subsample. We find that
31
32 regardless of the measure of political connections, the better-connected firms receive more
33
34 contracts. The differences between the two groups are consistently large, with above median
35
36 contributors receiving 8 times more contracts than firms making below median contributions
37
38 (Column 3). We present our results for the average size of federal contracts and political
39
40 contributions in Column (4). We discover that the larger contributors receive larger contracts, on
41
42 average, than firms who make smaller political contributions. The difference between groups in
43
44 average contract size is approximately \$1.8 million. The average contract for the above median
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46 contributors is about five times larger than that of the below median contributors.
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55 ³ We note that our results are qualitatively similar for the other three political contributions measures. Thus, in our
56 empirical analysis we use only PC1.
57

4.2 *Sweetheart index and political connections*

Political connections might offer the firm advantages beyond the simple award of a government contract. The contract might contain more favorable provisions than would otherwise be included. That is, the contracts of politically connected firms might be more advantageous than those of firms not politically connected. We test for such a possibility by comparing the mean Sweetheart Index between firms with political connections and those without. We present an annual comparison of these difference in Panel B of Table 2.

We observe that contract terms are consistently more favorable for firms with stronger political connections. The overall average sweetheart index is 1.12 for firms making below median political contributions. The corresponding value for firms making above median contributions is 1.43. The difference in these index values is statistically significant. We further find that this pattern of more politically connected firms receiving favorable contracting terms holds with equivalent significance across each of our sample years.

4.3 *Specific contract terms*

In this section, we more closely examine the specific terms that politically Connected firms receive in their contracts. In particular, we compare the distribution of no-bid, cost-plus, multiyear, and no-cost/pricing data contracts across corporate political contribution levels. We present our findings in Panel C of Table 2.

4.3.1 *No-bid contract*

Because a no-bid contract means that there is only one person or organization that can provide the contractual services needed, the supplying firm has no competitors. Thus, designing a contract as no bid essentially guarantees its award to the sole source firm. Such a contract term is of great value to the firm. Our results presented in Column (1) shows that there is a tendency

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3 for politically connected firms to receive a higher proportion of their total contracts as no-bid
4 contracts. The difference between the groups, however, is not statistically significant.
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7 8 *4.3.2 Cost-plus contract* 9

10 A cost-plus contract guarantees a profit to a contracting firm since all allowable expenses are
11 covered. Such a contract is advantageous to a firm since profit uncertainty due to unanticipated
12 expenses is eliminated. Column (2) shows that cost plus contracts are more commonly awarded
13 to firms making above-median political contributions. On average, 17.7% of the contracts
14 awarded to the larger contributors are cost-plus while only 12% of the contracts to the smaller
15 contributors are cost-plus. These differences are statistically significant.
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24 *4.3.3 Multiyear contract* 25

26 A multiyear contract is clearly advantageous to the contracting firm since it provides
27 guaranteed sales for a number of years. Such contracts help to ensure corporate sales stability
28 and thus allows the firm to better plan for its future. We find that more politically connected
29 firms report a greater incidence of multiyear contracts. This difference is statistically significant.
30
31 Thus, it appears that politically connected firms are better able to secure long-term federal
32 contracts that contribute to their sales and profit stability.
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40 *4.3.4 Cost and pricing data requirement* 41

42 Exemption from the cost and pricing data requirement is a benefit for the contracting firm.
43 Beyond avoiding the costs associated with its preparation, presentation of this data can narrow
44 the range of price negotiations between the firm and the government. Finally, exemption from
45 this requirement removes explicit benchmarks that can affect negotiations about future prices,
46 discussions regarding current expenses, or explanations about cost over-runs. We find that firms
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3 making more political contributions are less often required to provide cost-price data. These
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5 differences are statistically significant.
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7 8 *4.3.5 Sweetheart index* 9

10 We conclude our univariate analysis of contract terms and corporate political connections by
11 examining how the Sweetheart Index compares between above and below median contributors.
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13 We present our findings in Column (5). We observe that large contributors enjoy higher index
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15 values for their contracts than do below-median contributors, with the difference being
16
17 statistically significant.
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23 **5. The effect of political connections on government contracting – multivariate analysis** 24

25 *5.1 Likelihood of receiving a contract* 26

27 If political contributions are useful in directing federal contracts to a firm as these initial
28 results suggest, then we should observe a positive relation between a firm's political connections
29 and the likelihood of a contract award. In Table 3, Column (1) we present our findings from a
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31 probit regression analysis where the dependent variable is a binary indicator variable that
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33 assumes a value of one if the firm receives a federal contract and zero otherwise.
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39 Consistent with the prior literature regarding government contracts (e.g., Goldman et al.,
40 2013; Tahoun, 2014), we introduce a number of control variables into our model. Total assets
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42 accounts for firm size, since larger firms manufacture a wider variety of products and are more
43
44 capable of producing the volume levels that government contracts often require. The book-to-
45
46 market ratio captures the growth opportunities of the firm and reflects the ability of the firm to
47
48 expand production. Goldman et al. (2013) note that capital expenditures standardized by sales
49
50 accounts for the possibility that a firm that has recently invested in its facilities and is expected to
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52 increase its production. Standardized R&D expenses are included to control for the firm's
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3 innovation level since firms with new products or services might be more likely to receive
4 government contracts. The Herfindahl index is included to control for the intensity of
5 competition in the firm's industry and by implication, the firm's cost efficiency. We also control
6 for profitability using the return on assets (ROA).
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11 We observe that our main measure of political connection is statistically significant and
12 positively related to the receipt of a federal contract⁴. That is, firms having made political
13 connections in year t are significantly more likely to be awarded a government contract in the
14 following year. The results are also economically significant. For a one unit change in the
15 political contributions measure, the probability of receiving a government contracts increases by
16 36.7 percentage points⁵. We further observe that the coefficient estimate for the various control
17 variables are largely consistent with prior literature⁶.
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28 *5.2 The effect of political connections on contract terms*

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30 In this section, we estimate a multivariate probit model where the dependent variable is a set
31 of binary indicator variables capturing the presence or absence of the four "sweetheart" contract
32 provisions. This approach also allows us to introduce a number of control variables that might
33 influence the likelihood that a given provision is present in the contract. We also provide an
34 aggregate analysis by using the contract's overall Sweetheart Index value as the dependent
35 variable. The results are presented in Columns (2) through (6) of Table 3.
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44 In Column (2), we examine the effect of political connections on the likelihood that a federal
45 contract contains a no-bid provision. Our findings show a consistently positive relation between
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51 ⁴ We note that the results are robust to using the other three measures of political connections, although the
52 magnitude of the effect is the greatest for political contributions made to Senate candidates. This might reflect the
53 greater state or national connections that such individuals have relative to Congressional candidates.

54 ⁵ The average marginal effect of PC1 is 0.367.

55 ⁶ For example, consistent with Tahoun (2014), we find that the coefficient estimate of size is positive, and the
56 coefficient estimates of the BM ratio, Herfindahl index, and CAPX are negative.
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3 the level of political connections and the likelihood that a contract contains a no-bid provision⁷.

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5 We investigate whether political connections influence the likelihood of cost-plus
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7 contracting in Colum (3). We find that coefficients for political contributions are statistically
8
9 significant and positively related to the likelihood that a contract contains a cost-plus provision.⁸
10
11 Columns (4) and (5) contain our findings for a multiyear and no-cost /pricing data contracts. The
12
13 results are inconsistent with the political connections effect for these specific provisions. The
14
15 coefficients for the political contribution measure is statistically insignificant. These results seem
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17 to suggest that political influence is transitory, with limited ability to affect more distance
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19 horizons that can exceed a politician's projected term in office.
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24 We conclude our analysis of contract terms and a firm's level of political contributions by
25
26 examining the sweetheart index. We conjecture that a firm's political contributions should
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28 positively influence the contract's Sweetheart index value. That is, a more politically connected
29
30 firm receives more favorable contracting terms. Our findings in Column (6) are consistent with
31
32 such a view. Unlike the other columns, these findings are estimated using an OLS regression.
33
34 The coefficient estimate of political contributions measure is significantly positive. That is,
35
36 increased political contributions are associated with an increase in contract attractiveness as
37
38 measured by our Sweetheart Index. In term of economic significance, a one standard deviation
39
40 increase in PC1 results in a 16% increase in the Sweetheart Index relative to its cross-sectional
41
42 mean⁹.
43
44
45

46 *5.3 Political connections, lobbying, and employment of former government officials*

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48
49 ⁷ This relation holds across all other three measures of political contributions, although the coefficient for Senate
50 contributions is noticeably larger than the others. We conjecture that this might due to the greater influence of
51 Senators given their longer term in office and their extensive state and federal networks.

52 ⁸ Again, the largest coefficient appears on the variable measuring the contributions made to Senate candidates.

53 ⁹ To estimate economic significance, we first multiply standard deviation of PC1 (0.395) by its coefficient estimate
54 (0.458). This gives increase in the dependent variable associated with one standard deviation increase of the
55 independent variable. Then we compare this increase in sweetheart index to its cross-sectional mean of 1.131. Thus,
56 the economic significance is equal to $0.395 \times 0.458 / 1.131 = 0.16$
57

1
2
3 Firms could engage in a variety of activities to develop and foster political connectedness. In
4 this sub-section we examine other methods of obtaining access or influence over the government
5 contracting process. More specifically, we look at engaging the services of professional lobbyists
6 and the hiring of former government employees. Akey (2015) shows that firms spend significant
7 money on these activities and observes that these actions are less legally constrained than
8 campaign contributions. Consequently, we check whether the effect of PAC contributions on
9 government contract terms remains significant after controlling for lobbying expenditures and
10 the hiring of former politicians or government employees.
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21 We present the results of this analysis in Table 4. We include *Lobby*, a dummy variable that
22 equals 1 for firms spending money on professional lobbyists (Panel A), and *Employ*, a dummy
23 variable that equals 1 if a firm has a former politician or industry regulator on its board or
24 management team (Panel B)¹⁰. We then re-estimate our main regressions. The dependent
25 variables in Columns (1) through (6) are: (1) an indicator variable that equals one if the firm
26 receives at least one federal government contract and zero otherwise, (2) an indicator variable
27 capturing whether the contract in question is a no-bid contract, (3) an indicator variable
28 reflecting whether a contract is cost-plus or not, (4) an indicator variable representing whether
29 the contract is a multiyear contract or not, (5) an indicator variable for whether the contract
30 exempts the firm from providing cost or pricing data, and (6) the Sweetheart Index.
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44 We find that the effects of PAC contributions remain significantly positive when the
45 lobbying variable is included. This suggests that PAC contributions matter for individual
46 “sweetheart” provisions beyond lobbying activities. When an indicator variable capturing
47 whether former politicians or industry regulators serve on the board or management team of the
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55 ¹⁰ We include in our model a corruption index estimated as the per capita federal corruption convictions to control
56 for other ways by which favors might be exchanged between firms and government agents.
57

1
2
3 firm is included, the results become mixed. The effect of PAC contributions on several
4
5 “sweetheart” provisions is partially absorbed by the employment effect. PAC contributions,
6
7 however, continue to retain their explanatory power when the aggregate Sweetheart index is the
8
9 dependent variable. In total, these results are consistent with our main proposition that PAC
10
11 contributions are valuable, even for firms that hire former government employee or incur
12
13 lobbying expenses¹¹.
14
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18 **6. Robustness analysis**

19
20 In the preceding sections we establish that political connections as measured by political
21
22 contributions influences the “sweetheart” terms included in government contracts awarded to
23
24 firms. In this section, we test the robustness of our results by examining a number of alternative
25
26 model specifications and control variables.
27
28

29
30 More specifically, we address the concern that the relation between political contributions
31
32 and various government-contracting outcomes is spurious. There are two possible reasons why
33
34 our results might be spurious. First, firms might be able to obtain government contracts with
35
36 sweetheart provisions because of strong negotiation skills and the power of their managerial
37
38 team. Second, because contributing firms receive more contracts, it might be that our results
39
40 depict a “more contracts” rather than a “sweetheart” effect.
41
42

43
44 First, we address the concern that “sweetheart” contractual terms might not really be the
45
46 result of a firm’s political connections but the outcome of the management team’s strong
47
48 negotiation skills or power. We test this possibility by introducing in our regressions a
49
50 Qualification Index which proxies for the negotiation skill and experience of the firm’s
51
52
53

54 ¹¹ Regarding the components of PAC contributions, the largest coefficient is on the contributions made to Senate
55 candidates (PC3). This suggests that neither lobbying expenditures or the employment of former politicians absorbs
56 the effects of donations to Senate candidates.
57

1
2
3 management. We contend that well-trained, networked, and experienced executives will be able
4
5 to negotiate federal contracts more effectively than executives not so advantaged.
6

7
8 We estimate this Index as the sum of the following six dummy variables: (1) a dummy
9
10 variable that takes the value of 1 if a director/executive has legal experience and zero otherwise;
11
12 (2) a dummy variable that takes the value of 1 if a director/executive has finance experience and
13
14 zero otherwise; (3) a dummy variable that takes the value of 1 if a director/executive has political
15
16 experience and zero otherwise; (4) a dummy variable that takes the value of 1 if a
17
18 director/executive has military experience zero otherwise; (5) a dummy variable that takes the
19
20 value of 1 if a director/executive has academic degree from elite college and zero otherwise; (6)
21
22 a dummy variable that takes the value of 1 if a director/executive has a Ph.D.
23
24

25
26 We also use $\ln(SC)$, the natural logarithm of 1 plus number of individuals with whom
27
28 directors/executives of a given firm are connected to via educational, employment, or other
29
30 social links in the BoardEx universe of firms. This is another control for negotiation power. The
31
32 intuition behind this measure is that a well-connected executive team is an effective negotiator
33
34 due to informational and other benefits resulting from a social network.
35
36

37
38 Second, since politically contributing firms are awarded more contracts than non-contributors
39
40 are, it might be that our analysis is sensitive to this a “more contracts” rather than a “sweetheart”
41
42 effect. We address this possibility by including the following three control variables: (1)
43
44 $NAllContracts$, the number of contracts awarded that contain these four provisions, (2) $VAward$
45
46 which is the mean contract size, and (3) $NAward$ which is the number of contracts awarded.
47
48

49
50 We also employ a 2-stage procedure to test the robustness of our main findings. In the first
51
52 stage, we estimate the probability of obtaining a government contract in a given year. In the
53
54 second stage, we use the presence of various “sweetheart” provisions as the dependent variable
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3 and include the first-stage predicted probabilities as an additional control. We further control for
4 Tobin's Q (instead of the book-to-market ratio) and leverage. We also use an ordered logit
5 regression as an alternative estimation technique for the multivariate analysis of our Sweetheart
6 Index.
7
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11
12 Table 5 shows the results of these robustness tests. In Column (1), the dependent variable is
13 the likelihood of receiving a government contract¹². In Columns (2) through (5), the dependent
14 variable is: (1) an indicator variable capturing whether the contract in question is a no-bid
15 contract, (2) an indicator variable for a cost-plus contract, (3) an indicator variable representing
16 whether the contract is a multiyear contract, and (4) an indicator variable for whether the contract
17 exempts the firm from providing cost or pricing data. In Columns (6) and (7), our dependent
18 variable is the Sweetheart Index. We conclude from the analysis presented in Table 5 that
19 political connections indeed matter for the award of favorable contract terms.¹³
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31 **7. Controlling for possible endogeneity**

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33 The decision to make campaign donations might be endogenous. Although in previous
34 section we address the specific form of omitted variable bias, there might exist unobserved
35 heterogeneity that could drive the decision to make political contributions as well as the observed
36 differences in contracting outcomes. We address this endogeneity in several different ways.
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43 First, we follow Akey (2015) and examine the effects of donations made to winning and
44 losing politicians in close elections¹⁴. This approach is useful for identification because there is
45 some randomness that determines the outcomes of close elections. Specifically, we compute for
46 each firm-election cycle-candidate combination:
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49
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53
54 ¹² We note that contract-level controls are included in our contract-level analysis (Columns 2 through 7).

55 ¹³ Our results are also robust to the inclusion of dummy variables for the agencies awarding the contracts.

56 ¹⁴ This design captures the weighted average treatment effects.
57

$$Won(Lost) = \sum Donated * Election Outcome \quad (2)$$

where *Donated* equals 1 if a firm's PAC donated to candidate in cycle t and zero otherwise.

Election Outcome equals 1 if a politician won (lost) the close election cycle t and zero otherwise.

Table 6 shows that results of this analysis. We find that "sweetheart" terms in government contracts are positively associated with winning connections and negatively with losing connections.

Based on Cohen et al. (2011) we examine changes in influential committee chairmanships and conduct a set of difference-in-difference estimations to further examine the relation between contract terms and political contributions. We define a dummy variable (*Donate*) that equals 1 for a firm donating to a senator or representative in t-1 who becomes chairman of an influential legislative committee. The list of the most influential committees is drawn from Edwards and Stewart (2006). Next, we define an indicator variable, *After*, that equals 1 for the year of the committee chair's appointment and zero otherwise. Table 7 reports the results of this analysis. We find that firms donating to chairpersons of important committees (before their appointment), significantly increase their chances of obtaining contracts containing "Sweetheart" provisions after these politicians assume their new positions¹⁵.

Finally, we examine whether changes in a firm's level of political connections are related to the terms they receive when awarded a federal contract. As firms change their political contributions, their level of political influence and access is also likely to change. As a firm becomes more generous with its political contributions, it can expect that politicians will show increased interest in accommodating them. Thus, we look at how changes in political

¹⁵ We note that the same results hold for a propensity score-matched sample. Specifically, we match every donating firm with a non-donating firm using a propensity score, matching without replacement, with maximum caliper distance allowed to be 0.01 in year t-1.

1
2
3 contributions produce changes in the sweetheart index for contracts received one, two, and three
4 years in the future. We conduct a multivariate analysis of the effect that changes in political
5 contributions can exert on contract terms. We use the same model as that in section 5 that
6 examines the determinants of contract award. We modify this model, however, to use changes in
7 the control variables rather than their level. More specifically, we regress changes in the dollar-
8 weighted value of the Sweetheart Index against changes in our main measure of political
9 contributions.

10
11 We present our empirical findings in Table 8. We find that the coefficient estimate of
12 political contribution is significantly positive. Changes in political connections have a direct and
13 positive effect on changes in the Sweetheart Index, confirming our univariate analysis that
14 contract terms are influenced by a firm's political connections. Models (2) and (3) examine the
15 effect of these changes in political contribution on contract terms two and three years into the
16 future. Again, we find a significantly positive effect of political connections on the design of
17 contract terms. With this analysis, we conclude that there is a persistence in the ability of
18 political connections to affect the choice of contract terms provided to a contractor¹⁶.

38 **8. Conclusion**

39
40 This study is an analysis of the effect of political connections on a firm's federal
41 contracting activity. Consistent with the limited research in this area, we confirm that political
42 connections are associated with greater contracting activity by the connected firm. In particular,
43 we find that connected firms are more likely be awarded a government contract. Further, their
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53 ¹⁶ We also address the measurement error issue in our main explanatory variable by using Errors-In-Variables
54 regressions with the High-Order-Moments method of Erickson and Whited (2000; 2002). This method is designed
55 for models with one mis-measured regressor, but multiple perfectly measured regressors. The results, unreported for
56 manuscript brevity, continue to support our major conjectures.

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3 contracts are larger in size and represent a higher portion of their total sales. This result is robust
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5 across all four of our measures of political connections.
6

7
8 The most important contribution of this study, however, is its examination of the terms
9
10 included in the contracts won by connected firms. We find that the effect of a firm's political
11
12 connections goes beyond mere contract award, but includes the contract terms as well. This study
13
14 focuses on four "sweetheart" terms that are clearly beneficial to the firm, but not so obviously
15
16 advantageous to the government. We aggregate the presence or absence of a no-bid, cost-plus,
17
18 multi-year and cost/pricing data exclusion terms into a Sweetheart Index.
19
20

21
22 We find that firms with stronger political connections more frequently have these terms
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24 included in their contracts. This is reflected with higher values of the Sweetheart Index for these
25
26 connected firms. We also find that increases in political contributions are associated with an
27
28 increase in the Sweetheart Index for contracts awarded to these firms. Overall, these results are
29
30 consistent with the premise that there is a political influence on both the contract award decision
31
32 and the choice of specific terms contained in the awarded contract.
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36 Our findings have important implications for the literature on government contracting. First,
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38 it suggests that the true advantage of political connections for firms negotiating federal contracts
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40 might be understated. Second, given that the government spends vast amounts on its contracts, a
41
42 more complete understanding of how quid pro quo relations influence that process is necessary.
43
44 Our findings suggest that PAC contributions provide a unique mechanism of political
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46 connectedness beyond lobbying and the employment of former government officials. Finally,
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48 since the government does not obviously benefit from the inclusion of these "sweetheart"
49
50 contract provisions, it suggests areas for reform or revision in federal acquisition regulations.
51
52
53

54 APPENDIX

1
2
3 **Costplus:** This is a binary variable identifying whether the contract is cost-plus or fixed fee. If
4 the contractor is paid using cost-plus pricing, then COSTPLUS=1. We defined cost-plus
5 contracts as those where the compensation method is 'Cost Plus Award Fee', 'Cost No Fee', 'Cost
6 Plus Fixed Fee', or 'Cost Plus Incentive Fee'. If the contractor is paid using fixed fee pricing,
7 then COSTPLUS=0.
8
9

10 **Nobid:** This is a binary variable. If the contract is a no-bid contract, then NOBID=1. We define
11 a contract as no-bid if the "EXTENTCOMPETED" noted in the FPDS is "Not Available for
12 Competition", "Not Competed", "Not Competed under SAP", or a "Non-Competitive Delivery
13 Order". If the contract is available for open competition, then NOBID=0.
14
15

16 **Multiyear:** This is a binary variable. If the contract is defined as a multi-year contract in the
17 Federal Procurement Data System, then MULTIYEAR=1. If the contract is not defined as a
18 multi-year contract in the Federal Procurement Data System, then MULTIYEAR=0.
19

20 **Nodata:** This is a binary variable indicating whether the contractor is required to provide cost or
21 pricing data to the government as a result of winning the contract. If the contractor is not
22 required to submit cost or pricing data, then NODATA =1; Otherwise, NODATA =0.
23
24

25 **Sweetheart Index:** The Sweetheart Index is an index which counts the number of sweetheart
26 terms included in a contract. The index takes a value between zero and four.
27

28 **Obligated Amount:** Amount reported in the Federal Procurement Data System as the value
29 received by the firm for each award or modification to an award.
30
31

32 **Total Contract Value Amount:** Sum of all cash flows received by the firm from the contract.
33

34 **Value Weighted Sweetheart Index:** The Value-weighted Sweetheart Index is the Sweetheart
35 Index of the firm weighted based upon the sum of all funds received by each contract.
36
37

38 **Ln(AT):** Natural log of total assets.
39

40 **Ln(MCAP):** Natural log of total market capitalization.
41

42 **Ln(SALE):** Natural log of total sales
43

44 **BM:** Book-to-market ratio.
45
46

47 **Capx/Sales:** Capital expenditure divided by total sales.
48

49 **R&D/Sales:** Research and development expenditures / total sales. If this number is a blank,
50 indicating the firm has no research and development expenditure, we set this number equal to
51 zero.
52
53

54 **HHI Index:** Herfindahl index for the firm's primary two-digit SIC code during the year. We
55 calculate the sum of the (percentage of industry sales)² for each firm during the year. We
56
57

1
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3 define industry sales as sales by firms whose primary 2-digit SIC code is the same during the
4 year.
5

6 **ROA:** Firm return on assets.
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Table 1: Descriptive Statistics

This table provides comparative statistics for our sample firms based on PAC contributions. In Panel A, we provide descriptive statistics for all sample firms. Panel B contains descriptive statistics for firms divided into subsamples based on the median of total PAC contributions. PC1 is the total PAC contributions made by a firm during year t-1 to all candidates, political parties, and other PACs. All variables are winsorized at the 1% and 99% levels. *t*-tests are used to examine the difference in means between each sample. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels.

<i>Panel A: Aggregate Sample</i>						
	No PAC in year <i>t</i>		At least \$1 in PAC in year <i>t</i>		t-stat	p-value
	N	Mean	N	Mean		
Ln(TA)	6621	7.44	3225	9.24	-56.11***	(<.0001)
Ln(MCAP)	6621	7.31	3225	8.77	-47.66***	(<.0001)
Ln(SALE)	6621	7.07	3225	8.68	-55.17***	(<.0001)
BM	6621	0.60	3225	0.60	0.08	(0.9347)
Capx/Sale	6621	0.06	3225	0.09	-10.86***	(<.0001)
Rd/Sale	6621	0.04	3225	0.02	11.27***	(<.0001)
HHI Index	6621	0.07	3225	0.08	-1.60	(0.1097)
ROA	6621	0.04	3225	0.05	-2.69***	(0.0071)

<i>Panel B: Above and Below Median Subsamples</i>						
	PC1 <=Median		PC1 >Median		t-stat	p-value
	N	Mean	N	Mean		
Ln(TA)	1617	8.45	1608	10.04	-33.46***	(<.0001)
Ln(MCAP)	1617	7.95	1608	9.60	-37.34***	(<.0001)
Ln(SALE)	1617	7.88	1608	9.48	-39.57***	(<.0001)
BM	1617	0.62	1608	0.58	2.59***	(0.0097)
Capx/Sale	1617	0.09	1608	0.08	0.93	(0.3401)
Rd/Sale	1617	0.02	1608	0.03	-3.70***	(0.0002)
HHI Index	1617	0.08	1608	0.08	-0.15	(0.881)
ROA	1617	0.04	1608	0.05	-4.08***	(<.0001)

Table 2: Political Connections on Government Contracting – Univariate Analysis

Panel A of this table compares total contract value (Column 1), percent contract value (Column 2), number of contracts (Column 3), and contract size (Column 4) between subsamples based on the median PAC contributions made during year $t-1$ to candidates, political parties, and other PACs (PC1). We restrict firm-year observations to those which make at least \$1 of PAC contributions during year t ($PC1 > 0$). Panel B of this table reports the annual mean value of the Sweetheart Index for subsamples based on the median PC1. Panel C of this table compares the difference in the percentage of: no-bid contracts (value-weighted) per firm as a percentage of all contracts received by each firm in year t (Column 1), cost-plus contracts (value-weighted) per firm as a percentage of all contracts received by each firm in year t (Column 2), multiyear contracts (value-weighted) per firm as a percentage of all contracts received by each firm in year t (Column 3), and contracts requiring cost or pricing data (value-weighted) per firm as a percentage of all contracts received by each firm in year t (Column 4) between subsamples based on the median PC1 contributions. Column (5) compares the difference in Sweetheart Index between subsamples based on the median PC1 contributions. We restrict these observations to only observations which include the NOBID, COSTPLUS, MULTIYEAR, and NODATA variables. We further restrict our sample to observations where PC1 is greater than 0. A contract is ascribed to the year in which the agreement was signed. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively.

<i>Panel A: Contract Activity and Political Connections</i>					
	(1)	(2)	(3)	(4)	
PC1 Level	Total Contract Value	Contract Value % of Total Sales	# of Contracts Awarded	Average Size of Contracts	
High	561,523,447.7	2.97	1,186.28	2,267,638.39	
Low	20,295,480.3	1.00	149.09	422,258.65	
t-stat	-8.16***	-6.08***	-6.21***	-3.30***	
p-value	(<0.001)	(<0.001)	(<0.001)	(0.001)	
Num. of Obs.	3225	3225	3225	3225	
<i>Panel B: Annual Distribution of the Sweetheart Index</i>					
Year	Num. of Obs.	Low PC1	High PC1	t-statistic	p-value
2007	85891	1.1	1.33	-64.37***	(<0.001)
2008	66857	1.1	1.34	-58.19***	(<0.001)
2009	58969	1.21	1.34	-30.73***	(<0.001)
2010	52316	1.11	1.57	-117.07***	(<0.001)
2011	54785	1.11	1.6	-126.16***	(<0.001)
2012	50680	1.1	1.48	-95.87***	(<0.001)
2013	48943	1.12	1.33	-52.23***	(<0.001)
Average	418441	1.12	1.43	-191.77***	(<0.001)
<i>Panel C: Contract Terms and Political Connections</i>					
	(1)	(2)	(3)	(4)	(5)
PC1 Level	No-Bid Contracts	Cost-plus Contracts	Multi-year Contracts	No-Cost/Price Data Contracts	Sweetheart Index
High	50.55%	17.70%	8.57%	84.96%	1.58
Low	46.78%	11.93%	5.52%	81.28%	1.49
t-test	-1.33	-2.86***	-2.14**	-1.81*	-2.55**
p-value	(0.184)	(0.004)	(0.033)	(0.071)	(0.011)
Num. of Obs.	919	919	919	919	919

Table 3: Political Connections and Government Contracting - Multivariate Analysis

This table reports the results of regressions of an indicator variable representing the award of a government contract and indicator variables representing the presence or absence of a specific Sweetheart contract term, on political connections, control variables, and fixed effects. Sweetheart terms include no bid, cost plus, multiyear, or cost/price data exemption. In Column (1) the dependent variable equals one if the firm receives at least one federal government contract and is zero otherwise. In Columns (2) through (5) the dependent variables are an indicator variable capturing whether the contract in question is a no-bid contract, an indicator variable for a cost plus contract, an indicator variable representing whether the contract is a multiyear contract, and an indicator variable for whether the contract exempts the firm from providing cost or pricing data, respectively. In Column (6) the dependent variable is the Sweetheart Index. Columns (1) through (5) estimate probit regressions, while Column (6) presents OLS estimates. The control variables are drawn from Goldman, Rocholl, and So (2013). PAC contribution variables measured in millions of dollars are used to improve the interpretability of the results. PC1 is the total PAC contributions made during year t-1 to candidates, political parties, and other PACs. All control variables are winsorized at the 1% and 99% levels. All models include year and industry fixed effects. P-values based on robust standard errors adjusted for heteroscedasticity and clustered at the firm level are reported below the coefficients. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels.

	(1)	(2)	(3)	(4)	(5)	(6)
	Probability of Contract Award	No-bid Contracts	Cost-plus Contracts	Multi-year Contracts	No-Cost/Price Data Contracts	Sweetheart Index
PC1 _{t-1}	1.358** (0.0158)	0.748*** (0.0008)	0.852** (0.0214)	-0.119 (0.4716)	-0.113 (0.4440)	0.458*** (0.0000)
Ln(TA) _{t-1}	0.208*** (0.0000)	-0.230*** (0.0001)	-0.169** (0.0433)	-0.033 (0.3786)	0.237*** (0.0000)	-0.163*** (0.0000)
BM _{t-1}	-0.077 (0.4755)	0.189 (0.2377)	-0.002 (0.9947)	-0.259 (0.1739)	-0.227 (0.1080)	0.109 (0.1620)
Capx/Sale _{t-1}	-0.752 (0.2300)	-0.111 (0.9372)	-3.583 (0.4386)	-0.110 (0.8787)	0.9080 (0.5030)	-0.359 (0.5307)
RD/Sales _{t-1}	-2.269** (0.0333)	1.645 (0.1459)	-7.310* (0.0706)	-0.264 (0.8706)	-7.1365*** (0.0000)	0.862 (0.2132)
HHI Index _{t-1}	4.085** (0.0382)	-0.383 (0.8913)	4.624 (0.2661)	1.928 (0.6635)	-3.1327 (0.3580)	0.737 (0.5930)
ROA _{t-1}	1.054* (0.0816)	3.324** (0.0105)	3.899* (0.0526)	0.379 (0.6784)	-1.8259** (0.0390)	2.214*** (0.0005)
Intercept	-3.417*** (0.0000)	-3.486* (0.0637)	-4.757*** (0.0063)	-4.795*** (0.0022)	-3.062*** (0.001)	1.767*** (0.0011)
Pseudo R-sq	0.242	0.276	0.188	0.121	0.222	
Adj. R-sq						0.491
N	3105	16216	14762	15999	15384	16257

Table 4: Political Connections, Lobbying, and Employment of Former Government Officials

This table reports the results of regressions of an indicator variable representing the award of a government contract and indicator variables representing the presence or absence of a specific Sweetheart contract term, on political connections, control variables, and fixed effects. Sweetheart terms include no bid, cost plus, multiyear, or cost/price data exemption. In Column (1) the dependent variable equals one if the firm receives at least one federal government contract and is zero otherwise. In Columns (2) through (5) the dependent variable are an indicator variable capturing whether the contract in question is a no-bid contract, an indicator variable for a cost plus contract, an indicator variable representing whether the contract is a multiyear contract, an indicator variable for whether the contract exempts the firm from providing cost or pricing data, respectively. In Column (6) the dependent variable is the Sweetheart Index. Columns (1) through (5) estimate probit regressions, while Column (6) presents OLS estimates. *Lobby* is a dummy variable that equals 1 for firms spending money on professional lobbyists. *Employ* is a dummy variable that equals 1 if a firm has a former politician or industry regulator on its board or management team. *Corr. Index* is per capita federal public corruption convictions ($\times 10^6$). All models include baseline control variables ($\ln(TA)_{t-1}$, BM_{t-1} , $Capx/Sale_{t-1}$, $RD/Sales_{t-1}$, $HHI\ Index_{t-1}$, ROA_{t-1}) drawn from Goldman, Rocholl, and So (2013), as well as industry and year fixed effect. All control variables are winsorized at the 1% and 99% levels. P-values based on robust standard errors adjusted for heteroscedasticity and clustered at the firm level are reported below the coefficients. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels.

<i>Panel A: Lobbying</i>						
	(1)	(2)	(3)	(4)	(5)	(6)
	Probability of Contract Award	No-bid Contracts	Cost-plus Contracts	Multi-year Contracts	No-Cost/Price Data Contracts	Sweetheart Index
PC1 _{t-1}	1.263** (0.0223)	0.740*** (0.0029)	0.706** (0.0413)	0.049 (0.7763)	-0.351 (0.1022)	0.466*** (0.0000)
Lobby	0.120 (0.3545)	-0.191 (0.4060)	1.421*** (0.0000)	-0.031 (0.9166)	0.235 (0.6832)	0.039 (0.6710)
Corr. Index	-0.004 (0.7646)	0.023 (0.1070)	0.053* (0.0512)	-0.009 (0.4698)	0.002 (0.9427)	0.012 (0.1823)
Pseudo R-sq	0.247	0.284	0.204	0.130	0.228	
Adj. R-sq						0.511
N	3028	14182	13052	13978	13453	14219
<i>Panel B: Employment of Former Government Officials</i>						
	(1)	(2)	(3)	(4)	(5)	(6)
	Probability of Contract Award	No-bid Contracts	Cost-plus Contracts	Multi-year Contracts	No-Cost/Price Data Contracts	Sweetheart Index
PC1 _{t-1}	0.643 (0.3416)	0.882** (0.0132)	0.392 (0.3102)	0.221 (0.4680)	-0.504 (0.1222)	0.528*** (0.0057)
Employ	0.125 (0.4496)	-0.189 (0.2083)	0.567 (0.1283)	-0.194 (0.3267)	0.881*** (0.0000)	-0.027 (0.7445)
Corr. Index	0.011 (0.6295)	0.021 (0.3828)	0.030 (0.4538)	-0.065** (0.0104)	-0.087*** (0.0020)	0.014 (0.1974)
Pseudo R-sq	0.264	0.340	0.331	0.124	0.198	
Adj. R-sq						0.54
N	957	8051	7856	7570	7967	8076

Table 5: Additional Robustness Checks

This table report results of regressions of an indicator variable for award of a government contract and indicator variables representing the presence or absence of a specific Sweetheart contract terms on a on political connections, control variables, and fixed effects. Sweetheart terms include no bid, cost plus, multiyear, or cost/price data exemption. In Column (1) the dependent variable equals one if the firm receives at least one federal government contract and is zero otherwise. In Columns (2) through (5) the dependent variable are an indicator variable capturing whether the contract in question is a no-bid contract, an indicator variable for a cost plus contract, an indicator variable representing whether the contract is a multiyear contract, an indicator variable for whether the contract exempts the firm from providing cost or pricing data, respectively. In Columns (6) and (7) the dependent variable is the Sweetheart Index. Columns (1) through (5) estimate probit regressions, while Columns (6) and (7) present OLS and Ordered Logit estimates, respectively. *Tobin's Q* is the market value of equity plus the book value of assets minus the book value of equity, all divided by book assets. *Debt/TA* is ratio of total debt to total assets, *Qualification Index* is the sum of the following dummy variables per firm: a dummy variable that takes the value of 1 if a director/executive has legal experience and zero otherwise, a dummy variable that takes the value of 1 if a director/executive has finance experience and zero otherwise, a dummy variable that takes the value of 1 if a director/executive has political experience and zero otherwise, and a dummy variable that takes the value of 1 if a director/executive has military experience zero otherwise, a dummy variable that takes the value of 1 if a director/executive has academic degree from elite college and zero otherwise, and a dummy variable that takes the value of 1 if a director/executive has a Ph.D, *Ln(SC)* is the natural logarithm of 1 plus number of individuals with whom the firm is connected via its directors/executives' educational, employment, or other social links in BoardEx universe. *NAllContracts* is a number of contracts earned with the four provisions. *VAward* is mean contract size. *NAward* is the number of contracts. *Prob(Contract)* equals the probability of having a contract in a fiscal year. All models include baseline control variables ($\ln(TA)_{t-1}$, $Capx/Sale_{t-1}$, $RD/Sales_{t-1}$, $HHI\ Index_{t-1}$, ROA_{t-1}) drawn from Goldman, Rocholl, and So (2013), as well as industry and year fixed effect. All control variables are winsorized at the 1% and 99% levels. P-values based on robust standard errors adjusted for heteroscedasticity and clustered at the firm level are reported below the coefficients. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Probability of Contract Award	No-Bid Contracts	Cost-plus Contracts	Multi-year Contracts	No-Cost/Price Data Contracts	Sweetheart Index	Sweetheart Index
PC1 _{t-1}	0.933* (0.0610)	0.112* (0.0575)	0.180*** (0.0059)	-0.017 (0.8954)	0.187* (0.0835)	0.056** (0.0316)	0.227*** (0.0095)
Tobin's Q	-0.015 (0.7322)	0.013 (0.4796)	-0.046** (0.0346)	0.028 (0.4797)	-0.183*** (0.0000)	0.024*** (0.0031)	0.084*** (0.0028)
Debt/TA	-0.681* (0.0963)	-0.738*** (0.0005)	-0.796*** (0.0053)	-0.250 (0.6780)	-1.344*** (0.0053)	-0.271*** (0.0024)	-0.919*** (0.0033)
NAllContracts		0.001** (0.0232)	0.002*** (0.0000)	-0.000 (0.7280)	0.008*** (0.0000)	-0.001*** (0.0000)	-0.003*** (0.0000)
VAward		-0.000 (0.7205)	0.000 (0.1039)	-0.000 (0.2853)	0.000 (0.5875)	0.000 (0.5997)	0.000 (0.6393)
NAward		-0.000**	-0.001***	-0.000	-0.001***	-0.000***	-0.000***

		(0.0169)	(0.0000)	(0.5476)	(0.0000)	(0.0005)	(0.0000)
Qualification Index	0.030***	-0.027***	0.025***	0.007	0.024***	-0.006***	-0.023***
	(0.0053)	(0.0000)	(0.0000)	(0.4333)	(0.0010)	(0.0007)	(0.0001)
Ln(SC)	0.232*	-0.001	0.640***	0.102	0.653***	0.030	0.113
	(0.0867)	(0.9857)	(0.0000)	(0.4659)	(0.0000)	(0.2555)	(0.2242)
Prob(Contract)		0.784*	0.606	1.824*	-1.112	0.670***	2.470***
		(0.0506)	(0.2506)	(0.0596)	(0.2084)	(0.0001)	(0.0000)
Pseudo R-sq	0.260	0.048	0.124	0.118	0.113		0.057
Adj. R-sq						0.081	
N	2886	8496	8020	8922	8387	9148	9148

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Table 6: Close Election Analysis

This table presents coefficient estimates from regressions of Sweetheart terms on various measures of political connections in close elections. In Column (1)-(2), the dependent variable is an indicator variable capturing whether the contract in question is a no-bid contract. In Columns (3)-(4), the dependent variable is an indicator variable for a cost-plus contract. In Columns (5)-(6) the dependent variable is an indicator variable representing whether the contract is a multiyear contract. In Column (7)-(8) our dependent variable is an indicator variable for whether the contract exempts the firm from providing cost or pricing data. In Column (9)-(10) our dependent variable is the Sweetheart Index. Following Akey (2015), $Won(Lost) = \sum Donated * Election Outcome$ where Donated equals 1 if a firm’s PAC donated to candidate in a cycle t and zero otherwise. Election Outcome equals 1 if politician won (lost) the close election cycle t and zero otherwise. Total captures a firm’s net political connection portfolio (Won-Lost). P-values based on robust standard errors adjusted for heteroscedasticity and clustered at the firm level are reported below the coefficients. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
	No-bid Contracts		Cost-plus Contracts		Multi-year Contracts		No-Cost/Price Data	Contracts	Sweetheart Index	
Won	0.087***		0.054***		0.042***		0.092***		0.082***	
	(0.0000)		(0.0000)		(0.0000)		(0.0000)		(0.0000)	
Lost	-0.158***		-0.058***		-0.073***		-0.212***		-0.155***	
	(0.0000)		(0.0000)		(0.0000)		(0.0000)		(0.0000)	
Total		0.088***		0.054***		0.038***		0.107***		0.087***
		(0.0000)		(0.0000)		(0.0000)		(0.0000)		(0.0000)
Intercept	-0.146***	-0.362***	-1.012***	-1.026***	-1.985***	-2.071***	0.682***	0.281***	1.376***	1.142***
	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)	(0.0000)
Pseudo R-sq	0.057	0.028	0.014	0.014	0.016	0.009	0.112	0.036		
Adj. R-sq									0.189	0.092
N	16257	16257	16257	16257	16257	16257	16257	16257	16257	16257

Table 7: Changes in Committee Chairmanships

This table reports results of difference-in-difference analysis. *Donate* is a dummy variable that equals 1 for firms with PAC contributions made during t-1 to politicians who became chairmen of powerful committees in the Senate and House and 0 otherwise. *After* is a dummy variable that equals 1 for the year of powerful committee chair appointment and zero otherwise. Models in Panel A are estimated using main sample. In Panel B every donating firm is matched with a non-donating firm using propensity score (matching without replacement, with maximum caliper distance allowed 0.01) in year t-1. We use the Edwards and Stewart (2006) ranking of committees to identify the most powerful committees. The control variables are drawn from Goldman, Rocholl, and So (2013). All control variables are winsorized at the 1% and 99% levels. All models are estimated with year fixed effects. P-values based on robust standard errors adjusted for heteroscedasticity and clustered at the firm level are reported below the coefficients. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels. Probability of

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	Prob. of Contract Award		No-Bid Contracts		Cost-Plus Contracts		Multi-Year Contracts		No-Cost/Price Data Contracts		Sweetheart Index	
Donate*After	0.261** (0.0237)	0.218* (0.0667)	0.997** (0.0112)	0.413** (0.0337)	0.098* (0.0815)	0.0100 (0.4124)	0.199 (0.4321)	-0.063 (0.7434)	4.277*** (0.0000)	4.224*** (0.0000)	0.787** (0.0175)	0.206*** (0.0075)
Donate	0.260 (0.4085)	0.302 (0.3258)	-0.701 (0.1488)	0.012 (0.9340)	0.117 (0.0535)	0.185*** (0.0000)	-1.111*** (0.0000)	-0.818*** (0.0000)	-5.304*** (0.0000)	-5.133*** (0.0000)	-0.777** (0.0336)	-0.122** (0.0301)
After	-0.186* (0.0991)	-0.206 (0.1310)	-0.333** (0.0163)	-0.826*** (0.0001)	0.000*** (0.0000)	0.079*** (0.000)	-0.071 (0.7194)	-0.399* (0.0709)	-3.627*** (0.0000)	-4.428*** (0.0000)	-0.193*** (0.0029)	-0.355*** (0.0000)
Ln(TA) _{t-1}		0.092*** (0.0015)		-0.094** (0.0434)		0.038 (0.5289)		-0.038 (0.1981)		-0.199*** (0.0000)		-0.079*** (0.0005)
BM _{t-1}		-0.427*** (0.0000)		-0.401 (0.1463)		-0.553* (0.0982)		-0.049 (0.7591)		0.721*** (0.0042)		-0.094 (0.4550)
Capx/Sale _{t-1}		-0.432 (0.2756)		1.660 (0.1005)		-8.347** (0.0273)		1.883*** (0.0042)		5.630*** (0.0036)		0.863* (0.0653)
RD/Sales _{t-1}		1.205 (0.2305)		1.318 (0.4484)		-5.918** (0.0388)		-0.437 (0.7471)		2.491 (0.1958)		-0.019 (0.9821)
HHI Index _{t-1}		-1.393** (0.0231)		-0.767 (0.5500)		-0.029 (0.9883)		1.089 (0.1788)		1.381 (0.3308)		0.045 (0.9566)
ROA _{t-1}		1.108* (0.0734)		4.069** (0.0116)		6.205** (0.0144)		0.664 (0.4487)		2.872** (0.0137)		3.254*** (0.0001)
Intercept	0.140 (0.6524)	-0.407 (0.3302)	0.064 (0.8358)	0.951** (0.0454)	0.000*** (0.0000)	0.061 (0.5985)	-1.026*** (0.0000)	-0.812*** (0.0093)	5.318*** (0.0000)	7.089*** (0.0000)	1.678*** (0.0000)	1.911*** (0.0000)
Pseudo R-sq	0.002	0.042	0.048	0.190	0.020	0.120	0.016	0.075	0.048	0.200		
Adj. R-sq											0.129	0.431
N	3225	3225	16257	16257	16132	16132	16257	16257	16257	16257	16257	16257

Table 8: Changes in PAC Contributions on Contract Terms - Multivariate Analysis

This table regresses the change in the dollar-weighted Sweetheart Index on the change in PAC contributions, control variables, and year and firm fixed effects. In Column (1) our dependent variable is the change in the Sweetheart Index from the year of the contract to one-year post contract (i.e., (t-12 to t-1) to (t to t+11)). In models 5 through 8 our dependent variable is the change in Sweetheart Index from the year of the contract to the second year post contract (i.e., (t-12 to t-1) to (t+12 to t+23)). In models 9 through 2 our dependent variable is the change in Sweetheart Index from the year of the contract to the third year post contract (i.e., (t-12 to t-1) to (t+24 to t+35)). The dependent variable is multiplied by 100 and PAC contributions are divided by \$1,000,000 for easier interpretation. PC1 is the total PAC contributions made during year t-1 to candidates, political parties, and other PACs. PC2 is the total dollar value of contributions to the party in the White House in year t-1. PC3 is the total PAC contributions made to Senate candidates. PC4 is the total PAC contributions made to Congressional candidates. All control variables are Winsorized at the 1% and 99% levels. *, **, and *** indicate statistical significance at the 10%, 5%, and 1% levels, respectively. P-values are reported below the coefficients.

	(1)	(2)	(3)
	<i>1st Year Post</i>	<i>2nd Year Post</i>	<i>3rd Year Post</i>
	<i>Increase</i>	<i>Increase</i>	<i>Increase</i>
$\Delta PC1_{(t-24 \text{ to } t-13) \text{ to } (t-12 \text{ to } t-1)}$	6.80*** (<0.001)	8.46*** (<0.001)	6.76*** (0.001)
$\Delta \text{Ln}(\text{TA})_{(t-1 \text{ to } t)}$	3.36*** (0.002)	3.30*** (0.008)	4.55*** (0.001)
$\Delta \text{BM}_{(t-1 \text{ to } t)}$	0.02 (0.962)	1.48** (0.011)	1.02* (0.091)
$\Delta \text{Capx/Sales}_{(t-1 \text{ to } t)}$	1.11 (0.73)	-4.96 (0.174)	-15.81*** (<.0001)
$\Delta \text{RD/ Sales}_{(t-1 \text{ to } t)}$	-55.55** (0.014)	7.52 (0.769)	-16.98 (0.524)
$\Delta \text{HHI Index}_{(t-1 \text{ to } t)}$	23.29* (0.074)	53.81*** (0.000)	8.99 (0.559)
$\Delta \text{ROA}_{(t-1 \text{ to } t)}$	-3.43 (0.173)	-10.03*** (0.000)	-10.66*** (0.000)
Intercept	-0.23 (0.962)	-0.72 (0.895)	-0.73 (0.898)
R-sq	0.14	0.3	0.458
Num. of Obs.	18,408	18,408	18,408