Campaign Contributions, Access and Government Contracting

Abstract

It is clear that corporations seek to use campaign contributions to gain government contracts, but despite anecdotes, whether they succeed has been largely ignored in academic studies. In this article I discuss how campaign contributions may influence contracting, and consider the relationship between the donation of campaign contributions and the receipt of government contracts for a sample of firms politically active between 1979 and 2006. The analysis shows that even after controlling for past contracts and other factors, companies that contributed more money to federal candidates subsequently received more contracts. In the conclusion I discuss the implications of this finding for future research and for reforming the contracting process.
It is clear that corporations seek to use their campaign contributions to gain access to politicians and influence the awarding of government contracts, but whether they are successful is unclear. Using both principal-agent and principal-steward perspectives commonly found in the contracting literature, I argue that firm political connections can sometimes lead to direct political interference into contracting by politicians, but more often political access will influence contracting by public managers simply anticipating the likely political repercussions of their decisions. These considerations are balanced against technical program needs and managers’ desire to maintain mutually beneficial relationships with contractors. I then demonstrate the importance of these factors and highlight the different causal mechanisms of political influence in two brief case studies that inform the statistical analysis of the awarding of contracts to a sample of firms active between 1979 and 2006. I find that firm reputation and past contracting relationships are important determinants of contracting awards, but even controlling for these factors there is a significant relationship between contributions and the receipt of future contracts.

Why particular contractors are chosen, and the role that “politics” plays in this process is an important question. Contracting is often advocated for on technical and efficiency grounds but it is also true that “politics is inherently a part of the privatization and contracting process” (Van Slyke 2003, 308). There are several possible negative consequences of firms receiving contracts on the basis of their political connections, such as higher costs, a greater likelihood of poor monitoring and the expansion of contracting out where it is unlikely to succeed, serious problems plaguing contracting (Sclar 2000; Van Slyke 2003; Romzek and Johnson 2005; Warner and Hefetz 2002). Of course, it also raises questions about the ethics of the actors involved in the process.
I begin by placing my question into the large contracting literature. I then develop my arguments with a discussion of the previous literature on interactions between politicians, contractors and public managers from principal-agent and principal-steward perspectives. These perspectives show that political considerations are an important inherent part of the contracting decision-making environment, but that the means by which political considerations influence decision-making varies. These different mechanisms of political influence and the complex manner by which politics influences decision-making are explored in two brief case studies of alleged politically motivated contracting. The aggregate implications of my arguments are then explored in the statistical analysis of contract awards to a large number of firms over many years. I conclude with thoughts for future research and reform implications.

**Politics and Government Contracting Decision-making**

Brown, Potoski and Van Slyke (2006) divide the process of contracting out into three phases: 1) the decision of whether to contract out 2) how to structure and execute the contract, and 3) management of the contract. The authors realize that these are more conceptual distinctions than empirical since these decisions are not independent and contracting processes may move back and forth between the stages (Hefetz and Warner 2004). The decision of whether to contract out has been studied often, and it is clearly highly political involving both interest group conflict and ideological disagreements (Brown, Potoski and Van Slyke 2006; Wallin 1997). We can assume that politics does not end here, but the politics of the next stages are very different. Rather than highly ideological battles, firms use their resources to build relationships with politicians and public managers in order to influence whether they are chosen to receive contracts.
Stories of politically connected firms receiving contracts despite their dubious qualifications are a staple of news media (O’Harrow 2007; Savage 2008). These stories imply that a politics-administration dichotomy exists in contracting where contracts are either awarded for technical considerations or there is unwarranted political interference into decision-making. It is clear to scholars, however, that such a dichotomy does not exist (Montjoy and Watson 1995), and contracting is inherently political (Kelleher and Yackee 2009; Van Slyke 2007; Wallin 1997). For example, Hunt (1984, 251) states that, “ostensibly rational economic decisions become politicized” in defense contracting, an argument more recently echoed by Markusen (2003). Though scholars recognize that contracting is highly political, we have a limited understanding of how political factors influence contract awards relative to other important factors that influence such decisions. Though there is often an apparent correlation between campaign contributions and contracts, the micro-foundations of the argument that campaign contributions influence the awarding of contracts are weak simply because public managers do not benefit in any direct sense from campaign contributions and therefore have no clear incentive to award contracts in exchange for them. Yet, using insights from principal-agent and principal-steward theory, I argue that the access which can be purchased with campaign contributions can influence the decision-making of public managers, though other factors which I also discuss below are likely to be more important.

Firms and Politicians

Firms seek to influence the awarding of government contracts via political means and target their donations toward politicians overseeing important contracting agencies (Munger 1989) at the times when key contracting decisions are made (Zullo 2006). Most
researchers agree that contributions do not influence decision-making via any quid pro quo (e.g. Witko 2006), but there is a consensus that they help organized interests gain access to and develop friendly relations with Congress members, which sometimes brings tangible benefits (Clawson, Neustadtl and Weller 1998). Thus, firms donating more money have a greater ability to form relationships and, perhaps, receive more contracts.

While lobbying is an important corporate political activity, in this article I focus on the influence of campaign contributions since accurate data is available for many years, whereas lobbying data is available for less than a decade. Of course these two forms of behavior are closely related. Tripathi, Ansolabehere and Snyder (2002) found that “groups that have both a lobbyist and a PAC account for 70 percent of all interest group expenditures and 86 percent of all PAC contributions.” And as Munger (1989, 818) notes, “PAC contributions are empirically accessible, and are likely to be correlated with more pervasive but less easily measured forms of interest group pressure.”

Though there may be disagreements over whether to contract out in the first place, once the decision is made politicians will want their corporate allies to receive contracts. Also, even if it is clear to experts which firms are most capable, politicians lack this level of expertise, so political considerations are reasonable criteria to use in contracting. In some cases, Congress can bypass the bureaucracy in awarding contracts, and in these instances political considerations are by definition important (Fleisher 1993; Leonnig 2009). Most contracts, however, involve the bureaucracy so it is necessary to consider the relationships between public managers, politicians and firms.

**Political Access and Public Manager Decision-making**

Contracting rules have developed over time to limit the influence of political
factors in agency contracting decisions (General Services Administration 2009; Thai 2001), but by the late 1980’s many critics felt that these rules were hampering flexibility and the government streamlined the process (General Services Administration 2009; Kettl 2000). These changes left more discretion to public managers and thus a larger number of contracts have not gone through the “normal” contracting process requiring competitive bidding or competitive negotiation. According to a study by the House Oversight and Government Reform Committee the volume of “no-bid” contracts tripled to approximately 207 billion between 2000 and 2007 (O’Harrow 2007) and as of 2005 approximately 40% of contracts were awarded without full competition (Committee on Government Reform 2005). Frederickson and Frederickson (2007) argue that the flexibility of current contracting arrangements has been used to, “build networks of political contributors and claimants for more and more government contracts.” If these contributors have become more adept at winning contracts just as public managers have gained more discretion in the awarding of contracts, it is necessary to consider how the political access that contributions buy may influence bureaucratic decision-making. Using principal-agent and principal-steward theories that have previously applied to contracting, we can understand the potential mechanisms of political influence.

Principal-agent theory is frequently applied to interactions between elected officials and bureaucratic agencies (Waterman and Meier 1998) and agencies and contractors (Van Slyke 2007). So we can view contracting as a series of principal-agent relationships. The principal-agent model assumes that there is goal conflict between principals and agents and this model fits well with the image of politicized contracting implicit in much media coverage. In a recent example, Senator Richard Shelby (R-AL)
placed a hold on all of President Obama’s executive branch nominees to express his displeasure with contract specifications that he believed hurt a home-state contractor (Friedman and Scully 2010). In this scenario, politician and contractor share goals, but each of these actors have conflict with public managers, who are both principals (relative to contractor) and agents (relative to politicians). In this situation, political interference is necessary to move the outcome toward that preferred by contractor and politician.

During these episodes of conflict between politicians and public managers, politicians can influence decisions because they control bureaucratic resources and careers (Niskanen 1971; Downs 1967). Indeed, the timing and targets of campaign contributions demonstrates that contractors seek access to politicians with oversight of contracting (Munger 1989; Zullo 2006), and interviews with contractors reveal that they seem to think this access helps (Palmer 2005). Politicians usually deny intervening in these decisions and the public administration literature highlights that managers are often motivated to serve the public good (DiIulio 1994), perhaps immunizing them from political pressures. Even if politicians do not actively intervene in agency decision-making and managers are concerned with the public good, a firm’s political connections may still influence decision-making. According to Gordon and Hafer (2005) campaign contributions act as a “signal” that opposing a firm will be costly to the agency, since politically active firms use their resources to make appeals requiring a large investment of agency resources, which public managers view as a distraction and waste of resources (Palmer 2006, 38). Thus, somewhat perversely, the desire to serve the public may lead managers to favor politically powerful firms to prevent future political interference, though these considerations would clearly only matter at the margin.
The principal-agent perspective highlights the potential conflict between contractors, politicians and public managers and the possibility that political intervention or its threat is the mechanism of political influence on public manager decision-making. 

Waterman and Meier (1998) argue, however, that goal conflict should be viewed as a variable (see also Johnson 1993). Based on a rich set of interviews with public managers, Van Slyke (2007) argues convincingly that relationships between government agencies and contractors often more closely resemble principal-steward relationships, where goal congruence is assumed and relationships of mutual trust and benefit exist. Van Slyke (2007) reports that public managers indicate that trust is not necessarily a starting point of contracting relationships, as pure stewardship theory predicts, but rather something that develops over time as program goals are met. And meeting these program goals is important because public managers ultimately want their program to succeed and serve the public good (DiIulio 1994; Van Slyke 2007). Though Van Slyke’s (2007) research is based on in-depth interviews regarding social service contracting in New York State, these insights seem applicable to federal contracting with firms which is often typified by long-term relationships between agencies and contractors.

If the contractors in these relationships are also politically connected then there may be goal convergence among managers, firms and politicians and these contracting arrangements will resemble the iron triangles which have been studied in the regulatory literature for decades (Lowi 1969). In these situations, there is no need for direct political interference and contracting may appear relatively apolitical. But it is partly because these relationships are also beneficial to powerful politicians that they are beneficial for public managers to preserve. In other words, the political access of the firms involved is
part of what constitutes a public managers’ definition of a mutually beneficial contracting arrangement. For, if current contracting arrangements were vehemently opposed by elected officials, they would be unlikely to be viewed as beneficial for the public managers involved. Furthermore, because managers are aware of the benefit that current arrangements have for politicians, this will make it more difficult to change the status quo (i.e. terminate or alter contracts), even if there is a potentially good reason to do so because managers will anticipate negative political reaction of the type discussed above.

In these situations a critical determinant of future contracts will be past contracts. The perception that the contractor can meet technical program needs is also important, however. Thus, firm reputation will also influence contracting, since the perpetuation of mutual benefit is dependent on the perception that contractors are fulfilling program needs well (Van Slyke 2007). But firms with political access should be more likely to be in such relationships in the first place and political access helps maintain such relationships. Determining whether political connections or other factors were the most important determinant is neither possible nor advisable since these decisions are highly “over-determined.” That is, political considerations, past relationships and reputation are highly correlated with one another and all lead public managers to favor certain firms.

Neither the principal-agent, nor principal-steward perspectives adequately describes all contracting relationships and as we will see, many contracts contain elements of both. From either perspective, however, firms with access to powerful politicians should receive more contracts. From a principal-agent perspective, political interference or the threat of interference can potentially change the decisions of public managers. From the principal-steward perspective, direct political interference is never
needed but firm political access shapes the perception of mutual benefit among public managers and the anticipation of negative political reactions helps preserve relationships. Thus, the common charge that political access determined the awarding of a contract instead of technical considerations or the independent judgment of public managers is rarely accurate. Firm political access is part of the decision-making environment that public managers will often consider, however. As Hefetz and Warner (2002, 174) explain, “politics is part of public management, and good managers do not just make technical decisions,” but “balance technical and political concerns to secure public value” (Hefetz and Warner (2002, 187). To more clearly understand these causal mechanisms and the complex decision-making task that public managers have in balancing existing relationships, program needs and political considerations, I present two brief case studies.

**Two Cases of Politically Motivated Contracting**

These two contract awards were alleged to be politically motivated, but are quite different so they provide an understanding of alternative causal mechanisms of political influence. Neither case is a clear cut principal-agent or principal-steward situation, but in the first case we see that political appointees intervened to ensure a contract award to a firm with close links to their appointers over the objections of career civil servants. In the second case, there was initially political intervention, but the public managers actually made decisions in conflict with some of this intervention to award a contract to a well-connected firm with which they already had a strong relationship. To the extent politics drove this outcome, it was in a very subtle manner and the managers were probably anticipating political repercussions rather than responding to direct pressure.

**Restoring the Iraqi Oil Infrastructure**
This section examines a no-bid contract to restore the Iraqi oil infrastructure awarded to Halliburton/Kellogg, Brown and Root, the company that Vice President Cheney once led and which has a great deal of access to elected officials of both parties.²

Here we see elements of both principal-steward and principal-agent relationships between managers and contractors. Political appointees shared goals with and trusted the contractor, resulting in the desire to award a contract without competition and minimal oversight. In contrast, some career civil servants did not demonstrate such high levels of trust and thought the contract should be awarded and structured differently. Such conflict between appointees and civil servants is a common source of conflict within the bureaucracy (Pfiffner 1987). Ultimately, the political appointees shifted outcomes away from those preferred by some of the career public managers involved.

Van Slyke (2007) notes that in principal-steward relationships contractors are involved in earlier stages of the contracting process and this company was initially awarded a no-bid contract to prepare a plan for putting out fires and rebuilding the oil infrastructure after the U.S. invasion. This request was made by Michael Mobbs, a special assistant to Undersecretary of Defense Feith, a political appointee (Miller 2004). Halliburton representatives were then allowed to sit in on a meeting with the Army Corps of Engineers discussing the contract resulting from this study. Allowing the company to bid on this project after they produced the study and designed the contract would have violated the Federal Acquisition Regulation but this did not matter since the $7 billion dollar contract was awarded without competitive bidding (Miller 2004).

The appointees apparently trusted Halliburton a great deal, but civil servants in the Army Corps of Engineers, notably whistleblower Bunnatine Greenhouse, had major
reservations about this award process. From the initial meeting where Halliburton unveiled its study she raised objections to the company’s involvement in agency deliberations and at her request, the initial contract was limited to one year (Chatterjee 2009). After this year, for Halliburton to continue work without competitive bidding, a waiver was needed, which Greenhouse refused to sign it. Her superiors waited until she was out sick and had another employee sign the waiver, which was improperly denied a tracking number and not entered into the computer tracking system (Chatterjee 2009).

The awarding of this contract was defended by the fact that Halliburton had successfully done similar work before for the agency, and that they could be trusted with the sensitive nature of the planning, and even Greenhouse did not directly question the capabilities of the company. So this track record was critical to the outcome. But the manner in which Halliburton was awarded the contract was highly suspect, the political appointees overruled the judgment of important career civil servants, and they subsequently attempted to obscure their involvement (Miller 2004). Furthermore, despite arguments made by political appointees, it seems possible that some competition for the contract was possible, especially after the initial phase, since other companies had done similar work during the previous Gulf War (Chatterjee 2009, 88).

When it became public, this contract was heavily criticized, but some observers doubted the role of politics. Steven Kelman, a former administrator of the Office of Federal Procurement Policy for President Clinton, wrote that it was unlikely that these contracts were awarded on the basis of political factors since civil servants are unlikely to care about political connections (Kelman 2003). Greenhouse’s efforts to prevent these abuses demonstrate that he is often correct, but appointees were able to circumvent her.
In any event, it would be completely mistaken to conclude that public managers did not consider the political aspects of the decision. Indeed, Greenhouse was keenly aware of the political dynamics (the appearance of political cronyism was a major concern to her, Chatterjee (2009)), and there is no doubt that her life would have been easier if she had gone along with the will of the political appointees. She also had a clear sense of professionalism and ethics and weighed these criteria more heavily than pleasing the political appointees and their bosses, however. There is no evidence that Bush or Cheney directly interfered in the contracting process, and it is simplistic to think that there was any type of quid pro quo. But a less heroic manager might initially have gone along with the political appointees, and in any case these appointees were able to circumvent the objections of important career public managers and award the contract as they desired. Why the political appointees preferred this company is impossible to say for certain since their decision was clearly over-determined. Firm reputation, past contracting history and political connections with their appointers all would have led to the same decision, and the all plausibly played some role in the preference for this firm.

**Hurricane Katrina Trailer Maintenance and Deactivation**

The next case highlights the complex manner by which political factors influence the decision-making of public managers. We see aspects of a principal-steward relationship where public managers appear to share the same goals and interests as the contractor. Unlike the last example, there did not seem to be obvious divisions between political appointees and career civil servants. We also see that members of Congress directly intervened into the contracting process, so public managers necessarily considered the political goals of their principals during the awarding of the contract. Yet,
the contract award actually favored a firm that was not an intended beneficiary of this political intervention. Though controversial, this decision balanced the desires for good execution of the contract and to maintain existing contracting relationships with the intention to please political principals and minimize future political interference.

While Hurricane Katrina approached the Gulf Coast in 2005, the Federal Emergency Management Agency (FEMA) awarded large, no-bid contracts for clean-up to four companies (Bechtel, Fluor, the Shaw Group and CH2M Hill) (Government Accountability Office 2007). These companies, three of which are included in the statistical sample (Fluor, Bechtel and the Shaw Group) are all extremely politically active and critics charged that their access played a key role in these contracts. For example, Congressman Pickering (R-MS) stated, “federal agencies know the large, national corporations -- people who have access. The smaller, local companies do not have that access” (Witte, Merle and Willis 2005). In response to criticism FEMA rebid portions of these contracts, including the maintenance/deactivation of refugee housing trailers.

The trailer work was divided into 36 separate “task orders” covering different jobs and geographic areas (Department of Homeland Security Office of Inspector General 2007). The rebidding process was designed to favor small, local businesses by giving them a 30% cost advantage; i.e. small business bids up to 30% larger were treated as lower (Department of Homeland Security Office of the Inspector General 2007). In order to win contracts within this new process, a subsidiary of Fluor Corporation (a politically well-connected firm awarded an initial no-bid contract) partnered with a small business and ended up receiving four contracts worth up to $100 million, of 36 available. Two of these were for work in Mississippi and two for work in Louisiana (Varney 2006).
There were questionable decisions made by the public managers involved which had the effect of benefitting the Fluor. First, neither Fluor, nor its subsidiary, nor the business it partnered with is headquartered in or near the Gulf. According to the contract specialist overseeing bidding for the Department of Homeland Security (DHS), FEMA had no formal criteria for determining contractor location (Department of Homeland Security Office of Inspector General 2007, 6). This decision was important because if the companies were not deemed local the bid would have been treated as 30% higher. The DHS Office of Inspector General reported that due to the low bid price FEMA officials would have awarded these four contracts to the partnership anyway. But this is questionable for at least the two Mississippi contracts since a subsequent GAO report states that the five lowest Mississippi bids were rejected (Government Accountability Office 2007, 15), indicating that this partnership did not submit one of the lowest bids.

There are often good reasons to reject the lowest bid, of course, and FEMA officials claimed that the low bidders could not have adequately performed the job (Varney 2006). The Government Accountability Office (GAO) (2007, 15) reported, however, that “prior to awarding the contracts, FEMA determined that each of these five companies [that submitted the lowest bids] did in fact have the technical ability” to complete the work and concluded that, “FEMA did not establish procedures for the most cost-efficient distribution of work.” The DHS Office of Inspector General also concluded that, “FEMA officials did not design the solicitation to maximize preference to local businesses” (DHS Office of Inspector General 2007, 7). Thus, the importance of both cost and the location of business, which were supposed to be the major criteria used to judge firms, were minimized resulting in the awarding of 4 of the 36 trailer contracts to
this partnership despite the fact that hundreds of companies submitted bids. A consultant that helped prepare bids argued that it is unusual for one company to win such a proportion of contracts with so many firms competing and one spurned contractor stated, “someone has connections to someone in the right place” (Varney 2006).

It seems clear that Fluor was favored in the process, but the question remains, why? Given that this rebidding was done as a response to direct political interference, it is impossible that public managers were not aware of the political implications of their decisions. Yet, FEMA actually awarded contracts to a company that was not an intended beneficiary of this intervention. Perceptions of firm capabilities and existing contracting relationships were likely important. FEMA was not supposed to consider current performance when comparing bids (DHS Office of Inspector General 2007), but it would be difficult for managers that have worked with this company repeatedly not to since they knew the company was capable. It is possible to conclude then, that FEMA managers made these decisions to preserve a mutually beneficial relationship in disregard of the larger politics of the situation. But, most of the 36 contracts were in fact awarded to small local businesses suggesting that FEMA managers balanced the competing demands of the political principals with technical needs and a desire to maintain beneficial contracting relationships. Furthermore, the political incentives did not all point in one direction, since FEMA managers actually had multiple principals with clearly conflicting goals. While Gulf Coast representatives and Democrats hoping for political advantage were highly critical of the initial no-bid contracts, the companies that received them like Fluor also have many friends in Congress and the Executive Branch. There was a potential danger that if the Fluor partnership was entirely shut out the firm would object
prompting intervention by its political allies, which would further erode perceptions of agency competence. Arguably, the public managers involved did a very good job of balancing competing political demands with technical program needs.

These cases were alleged to be instances of politically motivated contracting, but even these cases show that political connections are but one factor that plausibly influenced decision-making. The first case is perhaps most stereotypical, where politicians (or in this case, their appointees) intervene to shift outcomes away from those favored by ethical public managers. Even in both of these allegedly political cases the firms in question had good reputations for performing the types of work required and it was also clear that past relationships were of critical importance. It is impossible to decisively “prove” that political considerations influenced any single case, and in many cases there is no reason to even attempt this since the decision is highly over-determined. Yet, the aggregate empirical expectations following from my arguments and these brief case studies are clear. I expect that past relationships, political access purchased by campaign contributions, and firm reputation all influence some contract award decisions. If it is simply that contractors have many resources which can be used to build political relationships but that these relationships have no independent effect on the receipt of future contracts, after controlling for past relationships and reputation contributions should not be a significant determinant of the receipt of contracts at the firm level.

Analysis

In this section I examine the relationship between contributions and contracts for a large sample of firms active between 1979 and 2006. I also extend the model to analyze differences across the defense and non-defense sectors and for any differences
before and after the contracting reforms of the 1990’s.

The Sample of Corporations

Since it is essential to control for the receipt of past contracts, it was necessary to identify a sample of corporations that actively contributed to politicians over several years. It is illegal for corporations to contribute directly from their treasuries to candidates, so corporations must form political action committees (PACs) to contribute. I examine the activities of all 367 corporate PACs that were in continuous existence (i.e. registered each cycle) between the election cycles of 1979-80 and 2005-06. This sample has firms of varying sizes (income from approximately $5.8 million to over $4 billion in 2003, for example) in a variety of industries, publicly (275) and privately owned (92).

These corporations and their PACS are certainly atypical in terms of their longevity since the majority of the 1,321 PACs that were registered in 1979-80 are no longer in existence. And in this respect, we must be careful about the conclusions we reach based on this sample. It may be that for whatever reason, this sample of corporate PACs is better at using their political resources to secure contracts than others. This does not diminish the significance of any findings, however, since many of the firms in my sample are consistently among the largest contractors (a list of the largest contractors can be found at www.fpds.gov). Also, alternative sample-selection procedures would have their drawbacks. Selecting only government contractors would constitute selecting on the dependent variable which is not appropriate given my question here. A random sample of corporations would produce too few corporations receiving contracts. Thus, my approach permits a good test of the relationships of interest and is superior to alternatives.

The unit of analysis is the PAC-cycle. I use two year election cycles because the
campaign contribution records are collected in this manner. My sample extends from 1979-80 to 2005-06 so there are 5,138 total observations (367 PACs by 14 cycles). Due to the use of lagged explanatory variables the sample size is in the models is 4,771.

**Variables and Model Estimation**

The dependent variable is the number of contracts awarded, collected from the Federal Procurement Data System (www.fpds.gov), a database that is searchable by date range, firm name, etc. extending back to the 1970’s. Just as useful, would be the contract amounts, but determining this would require searching each individual contract in the database for the nearly 700,000 contracts in this dataset, which was prohibitive. Of course, the number of contracts and value of those contracts are positively correlated.

Since the dependent variable is a highly over-dispersed (i.e. variance is much greater than the mean) count with numerous zeros (since many firms do not contract) the most appropriate estimation procedure is zero-inflated negative binomial regression. This approach models whether a corporation receives any contracts using a set of predictors and a logit equation, then estimates a negative binomial count model of the number of contracts using a separate set of predictors. I adjusted standard errors for clustering on the firm to correct for the fact that idiosyncratic firm level factors may cause companies to receive either more or fewer contracts than would otherwise be expected and thus errors will be correlated over time within panels. In the inflation portion of the model, in order to predict which firms will receive any contracts (i.e. which are 0s and 1s in the logit portion of the model) I use a dummy variable indicating receipt of contracts at t-1 and a dummy indicating whether the firm is in the defense industry. Since most firms that receive a contract in time 1 also receive a contract in time 2, this is
a very good predictor of whether a firm should be expected to receive any contracts.

The PAC contribution variable measures contributions to all federal candidates, but given the small number of presidential candidates and the desire for access, the bulk of the money contributed is to incumbents in Congress, with a relatively small amount to challengers and open-seat candidates and an even smaller amount to presidential candidates. The average PAC in my sample gave $93,466 during per election cycle and, as expected, contractors are more active contributors ($126,340 per cycle vs. $74,013). Whether the number of contracts is related to the magnitude of contributions after controlling for other factors will be determined. A potential problem is that profit from contracts may influence contributions, as well as the reverse, but I use a lagged contribution variable to avoid this possibility and conducted a Granger type causality test to ensure that the direction of causality went from contributions to contracts.4

There are a number of other factors that will influence the awarding of contracts and some of these may be more important than money. In one model I include a number of controls that are of substantive interest, and in other models I use firm fixed effects. In all models I include contributions, an indicator of firm reputation and lagged contracts, since past are so important to contracting decisions. If it is simply the case that firms that receive many contracts happen to also contribute a lot of money to politicians but it is really the existing contracting relationships driving contract awards, then the coefficient for the campaign contribution variable should not be significant when we control for past contracts. While it is important to include this lagged dependent variable in the models for theoretical reasons, Cameron and Trivedi (1998, 294) recommend this approach when the depending variable and its lag are highly correlated, as is true here (Pearson’s $r=0.83$).
While past relationships are important, a firm that has a bad image or reputation is unlikely to receive as many contracts (Van Slyke 2007). Though measuring reputation is difficult since the federal database that records contractor performance is not accessible to the public, I use an approach that has been used in previous research, which is a search of newspapers for information on contractor misconduct or poor performance (Karpoff, Lee and Vendrzyk 1999). For each company in each cycle I performed a Lexis-Nexis search of “major newspapers” using the word “contract” and the company name as subject terms. This procedure produced many stories unrelated to government contracting (e.g. labor contract renegotiations), but it also cast a wider net using terms like “scandal”, etc. The stories with relevant headlines were then examined to determine if there were allegations of contracting abuse or poor performance by the government, whistleblowers or independent groups. For each story where such allegations are present the company was scored a 1. Since companies with more contracts will have more problems even holding quality constant, the number of such stories was divided by the total number of contracts to create the bad reputation measure for each cycle.

In the pooled model I was also able to include variables of substantive interest but which do not vary much if at all over time. First I control for industry fixed effects since certain industries by definition have a greater capacity to perform tasks and provide goods demanded by the government, most notably those in the defense sector. By virtue of their diversified business structure and some firms are capable of meeting a wider range of government needs, and thus I also measure the total number of industries that a corporation is involved in, using the number of NAICS/SIC codes they are classified under. This variable is related to firm size, but it is probably not simply a proxy for firm
size. For example, in 2003-04 this variable’s correlation with firm income was 0.19. I also further test the effect of political connections using a variable indicating whether a PAC is headquartered in Washington, which can be viewed as indicating the attempts to maintain access and should positively affect contracts. I also include a dummy variable indicating whether the firm is foreign, since some anecdotal evidence indicates political resistance to the awarding of contracts to foreign companies, and foreign companies lack some of the access to politicians afforded by the constituency status of domestic firms (though, of course, these foreign firms generally have extensive operations in the U.S). These variables do not change over time or change very slowly and therefore are not included in the fixed effects models because the procedure used to eliminate firm-specific effects eliminates them from the model. I do include cycle fixed effects in all models since the average number of contracts varies greatly over time.

Results

Before turning to the results it is useful to consider the patterns in the data to get a sense of how contracting has changed over time and determine whether this sample reflects broader trends in government contracting. In this sample of corporations contracting activity has increased as we should expect (Minicucci and Donahue 2004), fluctuating quite a bit until the mid 1990’s when the number of contracts given to the companies began to increase steadily and indeed, dramatically. This trend can be seen in Figure 1. Interestingly, the number of corporations receiving contracts did not increase nearly as much, perhaps indicative of the importance of existing relationships.

Insert Figure 1 About Here

Another change in government contracting in the last several years was the
expansion of government contracting beyond the traditional defense sector (Minicucci and Donahue 2004), and we see this here as well. In 1980 the traditional defense firms in the sample (e.g. Boeing, Northrop, etc.) averaged 625.8 contracts and non-defense firms averaged 22.9 contracts, a ratio of 27 to 1. In 2006 the same ratio was approximately 5 to 1 (2278.9 to 453.6), so the growth rate for non-defense firms was much larger. Though the firms are not entirely representative, the trends in this data are familiar.

The initial multivariate results are presented in Table 1. Both models include cycle dummy variables, and the pooled model includes industry dummy variables. These are not included in the table in the interest of space but do perform as expected (e.g. defense company variable coefficient was positive and significant while media was negative and significant). The bottom of the table presents the inflation portion of the model with the coefficients indicating the likelihood that a firm would receive zero contracts. We can see that firms that received government contracts in the past cycle are unlikely to receive zero this cycle. The defense industry dummy variable is negative as expected, but is only significant in the fixed effects model. The results of the count model are at the top of Table 1. In both model specifications, coefficients for past contracts, reputation and campaign contribution variables are all significant determinants of the acquisition of contracts in the expected direction. That is, firms with more contracts and more campaign contributions last period receive more contracts and companies with a poorer reputation receive fewer contracts. In the pooled model, the total NAICS variable has a significant coefficient, indicating that involvement in more industries leads to more current contracts. The other variables are not significant. Again, the full set of controls is not in the fixed effects models since they change little over time.
It is also important to consider the substantive importance of these variables. Since these variables are on very different scales, incidence rate ratios can be somewhat misleading. Thus, I present the number of additional contracts expected with a one unit change in the explanatory variable while holding other variables in the model constant at their mean, adjusted for the variable’s standard deviation to produce a more comparable effect size across variables. Expressed in terms of this standardized effect, past contracts have the largest substantive impact on future contracts, nearly 5 times the size of campaign contributions. Reputation has a much smaller effect than either of the other variables, but given that large contractors can have many allegations of poor contracting, a firm’s reputation can also have an important influence on contract award decisions. Contributions can also have an important influence on contract awards, however. In these standardized effect terms, an additional $201,220 dollars (the contract variable’s standard deviation) would be expected to increase the number of contracts by 107.13 contracts. Translating these 107 contracts into a “typical” dollar amount is difficult since there is such variation in contract size, but according to the FPDS website in 2006 the amount of the average government contract was $49,800, so 107 contracts would on average produce approximately $5,300,000 in revenue. Thus, campaign contributions can have an important influence on both contract award decisions and firm profits.

Extending the Model

We can extend the model to gain insight into some important questions raised in the literature- the effect of recent changes in contracting regulations and the difference between the defense sector and other sectors. As the rules governing contracting have
been changed to increase flexibility in recent years, some have argued that political connections have become more important. This proposition can be tested but identifying precisely the time period when flexibility increased and thus political connections potentially became more important is difficult since this was really an ongoing process. The major action followed the election of Bill Clinton in 1992, however, so I divide the sample between 1980-1992 and 1994-2006 and re-estimate the models. In another extension of the model, I explore differences between the defense and non-defense sectors, since most critics have focused on the defense sector. The results of these analyses are presented in Table 2. I again estimated both pooled and firm fixed effects model specifications, but only present the latter models in the interests of space.

*Insert Table 2 About Here*

The first two columns present the findings for the analysis of the pre and post-“reform” eras. There is no evidence that contributions were more important in the latter period since the coefficients are significant in both models and the magnitudes are statistically indistinguishable using a Wald test. The third and fourth columns of results present the findings for two models that examine defense and non-defense firms separately. Since most defense firms have some government contracts in any given year a simple negative binomial regression model was used for this equation. We see that past campaign contributions are significant at the 0.01 level for non-defense firms. While the coefficient is larger in the defense firms equation it is not significant at the 0.05 level (p=0.10) and using the size of the coefficient in the pooled model results (which had a lower p-value), a Wald test revealed that the contribution coefficient in the defense model was not significantly larger. Based on this analysis, there is certainly no evidence that
defense contracting is unusually politicized; indeed it seems that if anything the opposite may be the case. It is also notable that the coefficient for the reputation variable was not a significant determinant of contract awards for and that past contracting relationships variable has a larger coefficient for defense firms. These results perhaps reflect the complexity of many defense contracts, where some poor performance is almost inevitable, and the fact that once defense systems are integrated into the defense structure it is very difficult to switch to a different contractor or discontinue a program altogether, making past relationships even more important.

**Conclusion**

This study shows that firms that contribute more money receive a larger number of contracts, but that firm reputation and past contracting relationships are important determinant of contract award decisions. Indeed, past contracting relationships are the most important determinant of contract awards in this study. In many ways, the results of this analysis confirm what many public administration scholars argue in studies of different aspects of public manager decision-making – that managers balance political and technical considerations in an attempt to fashion programs that serve the public good. Asking whether contracts are awarded on the basis of political or other factors is misguided, since all of these factors play a role in the awarding of many contracts.

The strengths of this study are that I developed a model of how campaign contributions could influence the decision-making of public managers that do not benefit in any direct sense from campaign contributions, and I used systematic data from a large sample of corporations active over many years to test arguments that are often made on the basis of selective anecdotes. One limitation of this study is that the sample of
corporations is somewhat atypical since they have been very politically active for many years. Whether newer firms would have such success in the absence of many years of forging relationships is unclear but is something that future researchers should consider.

What does it mean for the goals of contracting when firm political access influences the awarding of contracts? Does the political influence of contractors undermine the quality and efficiency of government programs? We see that political considerations do not entirely crowd out other considerations but that public managers balance these factors with others in their decisions, so political considerations and technical program needs are not necessarily in conflict. On the other hand, arguably the favoring of certain contractors for partly political reasons did lead to inflated costs in both Iraq and the Gulf Coast, which reduces the efficiency of government programs. And efficiency a salient criterion by which to judge government contracting since contracting is often justified with reference to the greater efficiency of the private sector (Kettl 2000).

With the highly publicized contracting abuses of recent years, this issue does have the attention of policy makers and various contracting reforms have been proposed (Silva 2009). Many critics argue that more competition for contracts is needed but even this unobjectionable change will not entirely eliminate the importance of political factors because of the subtle way that political considerations usually influence decision-making. These reforms will also undoubtedly have unintended consequences. More competition for contracts may reduce the influence of politics, but may exacerbate monitoring problems (Romzek and Johnson 2005). Contracting is inherently political, and the influence of politics is extremely complex and variable across different contracting decisions, and any reforms must recognize this complexity.
Notes

1. This contract was rebid because after losing to a Northrop Grumman/EADS (a large European airplane manufacturer) partnership, Boeing won an appeal to the GAO.
2. Halliburton is included in the sample of firms in the statistical analysis. Donations were $152,441 per cycle during the period of this study. In the 2003-04 election cycle (when they were awarded these contracts) Halliburton spent $1.3 million on lobbying, and between 1999 and 2002 donated over $2 million dollars in soft money to Republicans (and none to Democrats) according to the Center for Responsive Politics (Center for Responsive Politics 2009). Soft money was given to party committees and used for “party building activities.” Contributing soft money did not become common until the early 1990’s and was made illegal by the Bipartisan Campaign Finance Reform Act. 
3. On average, between 1979-80 and 2005-06 these three companies in my sample contributed $323,902 to federal candidates per cycle, representing relationships with dozens of members of Congress for each company. Critics charged that political connections influenced the process. Between 1979-80 and 2005-06 Fluor Corporation averaged $323,900 in donations per cycle to candidates, again representing relationships with dozens of politicians. Fluor also spent approximately $900,000 on lobbying in the 2005-06 election cycle, when the contract was awarded (The Center for Responsive Politics 2009).
4. The Granger test was developed in the context of standard time series analysis, but I use the same basic procedure in this panel data, which involved regressions of each variable on its own lags and lags of the other variable. After controlling for its own past values, contributions were a statistically significant influence on contracts, but the opposite was not true.
5. Companies were categorized by primary NAICS/SIC code. For information on NAICS/SIC codes see http://www.census.gov/eos/www/naics/. These codes were obtained using Hoover’s company profiles, supplemented by other sources such as Standard and Poor’s company profiles and company home pages where necessary.
6. Since estimating count models with hundreds of dummy variables can create problems with model convergence (and did in this case), I estimate the fixed-effects models by essentially removing the firm-specific mean from each of the variables in the equation. This approach, discussed by Cameron and Trivedi (1998, 294-99) removes the panel (firm) specific mean from the dependent variable and independent variables and adds a constant to the dependent variable to assure only non-negative integers for the dependent variable and its lags. Given this procedure any of the variables that do not change will appear as zeros for the entire time period and thus they drop out of the model.
7. This figure was computed by subtracting one from the incidence rate ratio estimated from the pooled model and multiplying it by the explanatory variable’s standard deviation, then multiplying this quantity by the average number of contracts per contractor in the database (363.4).
8. In 2006 there were 8,342,764 contract actions worth $415,466,073, 469.
9. Here I use the first two NAICS codes to determine defense industry involvement.
References


Pfiffner, James P. 1987. “Political Appointees and Career Executives: The Democracy-


Figure 1. The Number of Firms Awarded Contracts and Contracts Per Awardee
Table 1. The Determinants of Corporate Contracts, 1979-2006

<table>
<thead>
<tr>
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<th>Pooled Model</th>
<th>Fixed Effects Model</th>
<th>Standardized Contract Effect (Mean = 363.4)</th>
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<td>D.C. Headquarter</td>
<td>0.207518 (0.199697)</td>
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<td>Foreign Firm</td>
<td>-0.474044 (0.336962)</td>
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<td>-0.533 (0.363)</td>
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<tr>
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<td>1103.85**</td>
<td>42.85**</td>
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Standard errors corrected for clustering on the PAC in parentheses in the pooled model.

**p<0.01, *p<0.05.
Table 2. Extensions of the Model: The Determinants of Corporate Contracts by Era and Sector

<table>
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<td>0.000002**</td>
<td>0.000008^</td>
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<td>(0.000001)</td>
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<td>(0.033)</td>
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<td>(0.141)</td>
<td>(0.145)</td>
<td>(1.122)</td>
<td>(0.122)</td>
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<td>Defense Firm</td>
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<td>-----</td>
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<td>(0.267)</td>
<td>(0.228)</td>
<td>(0.267)</td>
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<td>(0.088)</td>
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<td>69.64**</td>
<td>164.22**</td>
<td>37.79**</td>
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</table>

**p<0.01, *p<0.05, ^p<0.10. Since almost all defense firms have government contracts in each cycle a zero-inflated model was not necessary for the defense firms equation.