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Abstract

Objective: To understand how changes in the partisan control of the institutions of government may condition the effect of corporate political activities on bureaucratic decision-making.

Methods: I examine the variation in the effectiveness of corporate political expenditures in reducing workplace safety (OSHA) violations across partisan contexts between 1981 and 2006 for a large number of corporations.

Results: Corporate expenditures have a greater suppressant effect on workplace safety violations (but not inspections) when the Republicans control the Congress or Presidency.

Conclusions: Corporations are able to influence bureaucratic decision-making, but bureaucrats balance the demands of corporations against those of other party constituencies and their political principals. Thus, the partisan control of government importantly conditions corporate influence in the bureaucracy.

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Introduction

Dramatic events like the recent BP oil spill in the Gulf Coast raise questions about the relationships between corporations and government agencies. Scholars have begun to demonstrate that businesses are capable of influencing bureaucratic decision-making (Drope and Hansen 2004; Gordon and Hafer 2005; Yackee 2006), but we know very little about how corporate influence in the bureaucracy varies over time and across decisions. In today’s polarized environment, political principals from the two major parties vary
greatly in their preferences regarding government intervention into business affairs, with Republicans favoring much less. Since public managers must be responsive to their political principals (Meier and O’Toole 2006), when the Republicans control more institutions of government, corporate political resources may be more effective in securing benefits from the bureaucracy. Thus, I consider how business resources may influence workplace safety (OSHA) regulation across different configurations of the partisan control of the institutions of government for hundreds of firms active between 1981 and 2006. The results of this firm-level analysis indicate that when the Republicans control the institutions of government (and especially the Congress) greater business political expenditures are associated with fewer OSHA violations. Expenditures appear to have no relationship with OSHA inspections, however, indicating that corporate influence also varies depending on the type of bureaucratic decision in question.

For decades, business has been the best represented organized interest in Washington D.C. (Schlozman 1984) and corporations spend millions donating to politicians and lobbying. What firms get for these efforts is very much in question, however. There is accumulating evidence that public managers can be influenced by corporate political resources (Drope and Hansen 2004; Gordon and Hafer 2005; Witko 2011; Yackee 2006), but compared to the legislative process we know little about how business influence in the bureaucracy varies over time and across decisions. Since political principals of the two major parties vary greatly in their preferences regarding government involvement in business affairs, it seems likely that business influence over bureaucratic decision-making will vary depending on the partisan control of government. Yet, very little research has systematically considered this question. Therefore in this article, I consider how the partisan control of government may condition corporate
influence in the bureaucracy. I also examine two different types of regulatory decisions and thus I am also able to consider how business influence may vary across decisions. I examine OSHA enforcement because this agency provides a good context in which to examine this question as it has been a highly partisan issue for most of its history. The Republicans prefer weaker rules, and weaker enforcement of OSHA rules. In contrast, due to their relationships with labor and greater favorability toward government intervention into business affairs more generally, most Democrats prefer more stringent OSHA regulation. Consequently, I expect that corporate political resources should be more effective in securing lax regulation when the Republicans are in control of government and find evidence to support this in the analysis. I also argue that the effect of business resources may vary across different regulatory decisions (whether to inspect or issue violations) due to differing amounts of bureaucratic discretion.

**Divergent Party Preferences and Business Influence in the Bureaucracy**

Most studies of business influence focus on the Congress, but much of what business wants from government is private goods provided (or not provided) by the bureaucracy (Hansen, Mitchell and Drope 2005). It appears based on recent studies that corporations are successful at influencing a number of bureaucratic decisions (Drope and Hansen 2004; Gordon and Hafer 2005; Witko 2011; Yackee 2006; Yackee and Yackee 2006). Campaign contributions and lobbying can influence the behavior of politicians because they rely on individuals and organized interests to raise money for their campaigns, and lobbying contains information that can influence their substantive views or political calculations about an issue (Drope and Hansen 2004; Hall and Miller 2008). Unlike politicians, however, public managers do not benefit directly from these corporate resources. Nevertheless, there are both direct and indirect means by which corporations can influence bureaucratic decision-making (Yackee 2006).
The indirect route posits that politicians might interfere in bureaucratic decisions on behalf of corporations. If politicians favor a particular corporation then this can influence decisions because bureaucrats must respond to politicians to achieve their own goals (e.g. Downs 1967). In one innovative study, Hall and Miller (2008) find that members of Congress who were heavily lobbied on pollution regulation were more likely to intervene in EPA decisions. This type of intervention is not limited to Congress. If the President and Vice President are influenced by corporations, then this can also potentially influence bureaucratic decision-making either by their own involvement in decisions, or via their political appointees who share the preferences of their appointers.

Corporate political action can also more directly influence bureaucratic decision-making. Gordon and Hafer (2005), argue that lobbying and campaign contributions “signal” an abundance of political resources that may potentially be used to oppose any unfavorable agency decisions via formal administrative or informal political means. Even public spirited bureaucrats are susceptible to this type of influence because they will not wish to waste agency resources in the pursuit of ultimately futile battles against powerful firms willing to use their resources to oppose bureaucratic decisions.

Corporations can also influence the substance of bureaucratic decision-making by directly making arguments and providing information to public managers. This can take place in a variety of formal and informal processes, such as during rule-making (West 2004; Yackee 2006). While all interests can participate in rule-making, Yackee and Yackee (2006) find that comments provided by business interests had a stronger influence on final rules than those provided by other types of interests. Regarding OSHA regulation, research demonstrates that businesses can importantly shape regulations even if they cannot always defeat them (Shapiro 2007, 694). Thus, business can potentially
influence the decision-making of public managers via direct or indirect methods. Even if firms directly influence agency decision-making, public managers do not react to business influence attempts in isolation because they must also respond to their political principals (Meier and O’Toole 2006; Scholz, Twombly and Headrick 1991; Wood and Waterman 1991). There is little doubt that corporations wield tremendous influence within both parties (Wright 2000) and this may have led to near convergence on certain issues, such as financial regulation (Hacker and Pierson 2010). Nonetheless, Democratic voters, allied interests and politicians have differing preferences from Republicans on questions of government intervention into corporate activities. In practice, the influence of individual citizens in bureaucratic decision-making may be limited because participating in these processes requires substantial resources (Reenock and Gerber 2008; Yackee and Yackee 2006), so organized interests play an important role representing public views in bureaucratic processes. Importantly, almost all of the strong countervailing interests that oppose business currently have close relationships with the Democratic Party and little influence within the Republican Party. For example, though the Republicans historically advanced environmental laws, environmental groups now have little influence in the party. In addition, more Republican politicians actually have backgrounds in business before entering politics (Witko and Friedman 2008). Business supports both parties to maintain access to party leaders, but business prefers Republicans to be in control of government (Brunell 2005). These preferences and party-interest group alliances both cause and reflect divergence between the parties on business matters. Table 1 presents the Congressional ratings or scorecards from a number of business groups and “countervailing interests” for one recent Congress included in my analysis (the 108th). These scores reflect the percentage of times that
members of Congress voted with the interest on what it viewed as the most important votes. Clearly, from the standpoint of business, Republicans “vote right” more often than Democrats, and we see the opposite pattern for the countervailing interests (labor and environmental groups here) that typically oppose business in the policy process.\footnote{1}

Presidents of both parties seek friendly relationships with the business community, but Democratic Presidents also have close relationships with countervailing interests, which recent Republican presidents have generally lacked. This is important because presidential preferences often influence bureaucratic action (Eshbaugh-Soha 2008).

It is well-established that the changing partisan control of government leads to changes in bureaucratic activities affecting businesses (e.g. Wood and Waterman 1991) and outputs will be more favorable to business when the Republicans control government. There is, of course, little new in this statement. Yet, the implications of this fact for understanding the effectiveness of business attempts to influence the bureaucracy have been underappreciated, and political responsiveness and corporate influence have been treated largely separately in the literature. Since there are such different views toward business demands between the two parties, it seems likely that business influence in the bureaucracy depends to some extent on party control of government.

As noted, corporations can influence the bureaucracy either directly or indirectly. Considering indirect business influence, it is clear that when the Republican Party is in control of government businesses will generally have greater ease in motivating important governmental decision-makers to intervene in agency decision-making on their behalf. If this intervention sometimes influences bureaucrats, at the margin business resources will be more effective when Republicans control institutions of government.

Corporate political action can also directly influence the public managers’ decisions via
the signaling process or direct lobbying/persuasion as discussed above. The signaling mechanism outlined by Gordon and Hafer (2005) may become more potent when Republicans control government because it is less likely that aggressive action against firms will be vigorously supported by Republican Presidents or Congressional leaders. In other words, if corporate political resources affect public managers by entering into their calculations about the ultimate success of corporate appeals of bureaucratic decisions, then having Republicans in charge of government may strengthen this signal. Similarly, in the rule-making process Republican control of government may heighten attention to business arguments since the President and agency political appointees will be favorably disposed toward such corporate preferences.

In practice, these diverse mechanisms of influence may all be taking place at once and, due to data limitations, determining which mechanism is at work is difficult. Overall though, corporate resources are likely more effective in securing benefits from the bureaucracy when Republicans control more institutions of government. This should not be taken as implying that corporate political resources will be dominant. Changes in party control may have a larger effect, and bureaucratic decision-making, especially the further one gets down the chain of implementation, is constrained by regulations, norms and values (DiIulio 1994). But, if the above is correct, the effectiveness of corporate resources is greater when the Republicans control more institutions of government.

An alternative possibility is that Democrats are actually more responsive to business influence attempts. For it may be that Republicans cut enforcement to such an extent that political responsiveness to firms is not even necessary. Democrats may increase business regulation, but increase it less for firms with a large political footprint. There is no question that enforcement is cut when Republicans control the institutions of
government, thus the average regulatory intensity is lessened when Republicans control
government. But rhetoric notwithstanding, the Republican Party has not succeeded in
completely eliminating or defunding OSHA, even in the years that they have had unified
control of government. Indeed, Gordon and Hafer (2007) argue that even pro-industry
parties have an incentive to maintain some regulation precisely to attract firm
contributions intended to lessen their regulatory scrutiny. Furthermore, on some issues
(and most likely OSHA) Democratic relationships with countervailing interests place a
constraint its ability to be too responsive to business demands. Given this, I expect that
firm political expenditures will be more effective under Republicans, but the analysis will
allow us to determine whether this or the opposite is true.

**Corporate Influence and OSHA Regulation**

OSHA regulation is an ideal policy context for examining my arguments because
the distribution of firm-specific benefits in the form of weak enforcement of OSHA rules
is favored by business and the Republican Party and resisted more by Democrats and
labor (Huber 2007; Sholz et al. 1991). Indeed, the Occupational Safety and Health Act of
1970, passed under a Democratic Congress and grudgingly signed by President Nixon,
spurred increasing business political activism in the 1970’s and contributed to the
business support for Reagan in 1980 (Vogel 1989). The Act established the Occupational
Safety and Health Administration (OSHA), which has the authority to inspect workplaces
to enforce rules regulating workplace safety and health (Huber 2007). Though OSHA has
been criticized by some members of both parties, the Republicans have been much more
hostile toward it (Hedge and Johnson 2002; Shapiro 2007).

OSHA is housed within the Department of Labor and the inspection apparatus is a
series of offices located within defined regulatory regions (Huber 2007, 52). Given its
broad mandate, OSHA cannot possibly inspect a large proportion of the dangerous or
unhealthy workplaces in the country, so decisions by central administrators about where to focus resources are very important. Huber (2007) states that to depoliticize OSHA operations, central administrators focus inspections on large companies in dangerous industries with poor safety records. Given this, business resources may have little effect on OSHA inspection decisions. However, OSHA’s regulatory process provides opportunities for businesses to affect decisions after inspections take place when choices about final violations are being made. Following a field inspection, area managers can reduce violations and penalties after communications with more senior OSHA administrators. Huber (2007, 57) writes that managers do sometimes reduce penalties in this phase “because many cases that are formally contested are litigated over many years and ultimately settled anyway, or are dropped altogether because of insufficient resources to prosecute them.” It is, of course, doubtful whether street-level bureaucrats at OSHA are routinely aware of or responsive to firm political activities. But administrators higher up the bureaucratic chain can influence the decisions of street-level bureaucrats, and many are highly attuned to political considerations (Huber 2007).

Corporate activity takes place within a broader context involving many other determinants of OSHA regulation. Factors that vary over time (such as the enforcement budget), and factors that vary across states (such as congressional representation, state labor union density, etc.) may also influence inspection decisions, though there is some disagreement on the latter point in the literature (Curington 1988; Headrick, Serra and Twombly 2002; Huber 2007; Kim 2008; Scholz 1991; Scholz, Twombly and Headrick 1991). It is necessary to account for these factors, but since they are not of central concern here and have been examined in great detail in many other studies, the analysis simply controls for the amount of OSHA “regulatory effort” in a given state in a given
year. This measure, other control variables and the analytic plan are explained next.

**Analysis**

OSHA regulation is analyzed from 1981-2006, which provides for the necessary variation in partisan control of government: 1981-86 (Democratic House, Republican Senate and President); 1987-92 (Democratic House and Senate, Republican President); 1993-94 (unified Democratic); 1995-2000 (Republican House and Senate, Democratic President); 2001-02 (Republican House and President with a Democratic Senate) and 2003-2006 (unified Republican).

Data for the 1979-80 was also collected, but due to the use of lagged variables, regulation is not actually examined in these years.

**The Sample of Corporations**

To most clearly isolate the changing effectiveness of political resources (rather than the varying effectiveness of different firms) across partisan contexts it was necessary to sample firms that were continuously politically active across these partisan periods. But to test the argument significant variation in the investment in political activities from different firms was needed. Therefore, all corporations sponsoring a political action committee (PAC) that was registered continuously with the FEC between the election cycles of 1979-80 and 2005-06 were examined. While clearly not intended to be representative, this sample of 367 corporations contained the needed variation in expenditures and regulation (discussed below). The sample includes public (275) and privately held (92) firms of varying sizes (2003 income from $5.8 million to over $ 4 billion) in a wide range of industries. Since the partisan control of the institutions of government is determined every two years and contribution patterns change across two year election cycles, the two-year corporate PAC-cycle is the unit of analysis.

**Variables**

Much previous research examines OSHA inspections, but Huber (2007) noted that OSHA managers have little discretion over inspections and somewhat more discretion in
issuing violations. If this is correct, corporate resources should have a greater effect on violation decisions rather than inspections, so both are examined here. Inspection and violation data were obtained from the OSHA establishment search page (http://www.osha.gov/pls/imis/establishment.html). The page was searched using common variations in company name (e.g. Coca Cola Company, Coke, etc.) to avoid missing violations, though undoubtedly some inspections were missed given the number of possible abbreviations, misspellings, etc. Fortunately, there was significant variation in OSHA inspections and violations in this sample. For example, 27 companies had zero inspections during the entire time period, while 4 percent of the sample had over 100 violations in a single two year cycle. The mean inspections per cycle was 9.5 (sd=25.4) and the mean violations per firm with at least one inspection was 27.7 (sd=65.4).

Measuring corporate political resources is not entirely straightforward since firms can spend money on lobbying, campaign contributions, legal services to resist regulation in administrative or judicial venues, and many other things. Given the long time period examined in my analysis and the fact that many of these expenditures do not have to be disclosed, it is impossible to collect data for all of these expenditures. Lobbying expenditures are available, but only for about the last decade. In contrast, campaign contributions have been reported since the 1970’s and can be viewed as a reasonable proxy for lobbying since virtually all companies that donate also lobby (Ansolabehere, de Figuereido and Snyder 2003; Gordon and Hafer 2005; Munger 1989; Witko 2006). It also seems clear that corporations seek to use their campaign contributions to influence regulatory processes (Regens, Gaddie and Elliott 1988). Thus, campaign contributions are used as a measure of political resources. Contributions are measured in constant 2006 dollars ($10,000s), obtained from the Federal Election Committee (FEC) detailed data.
files webpage (http://www.fec.gov/finance/disclosure/ftpdet.shtml). This figure includes contributions to all federal candidates, most of which (81%) are to incumbent members of Congress. Though all companies in this sample sponsored a PAC, there is still substantial variation in contributing behavior. Campaign contributions in this sample of firms ranged from $0 to over $4 million in a single election cycle.\(^4\)

In order to avoid simultaneity bias (i.e. more OSHA violations might cause more contributions), contribution variables were lagged by one period and past OSHA regulation is controlled for (discussed below). Since larger companies are more likely to be inspected and cited for violations and donate more, if my approach does not adequately address this possible problem, contributions would be expected to have a positive, significant influence on violations, but this result is not obtained.

There will be fewer OSHA inspections/violations when the Republicans control the Congress or Presidency, and I examine this by including two dummy variables for a Republican President or a Republican Congress. But the critical part of my arguments is that corporate political resources will be more effective in reducing OSHA violations when Republicans control these institutions. This conditional hypothesis can easily be tested using interaction terms (Brambor et al. 2005). Therefore, I use an interaction term between the party control and contribution variables. If I am correct, the coefficient for the campaign contribution variable may not be statistically different from zero, but one or both interaction terms should be negative and significant, indicating that as the Republicans gain control of institutions corporate resources result in less regulation.

Since the data is longitudinal, it is possible to control for what is probably the best predictor of a company’s current regulatory scrutiny, its own past level of regulation. Because firms are targeted by OSHA based on their size, industry and safety record, a firm’s history of OSHA regulation contains information on all of these factors, which are
otherwise difficult to control for, particularly for privately held companies. Lagged OSHA violations are controlled for in both models, since if a company had many inspections but few violations it would subsequently receive less regulatory scrutiny (Huber 2007). The number of inspections is also controlled for in my analysis of OSHA violations. Companies that are more frequently inspected are more likely to have numerous violations and, this “exposure” to OSHA inspections is controlled for in some models by including an exposure term, which is the number of OSHA inspections with a coefficient constrained to equal 1. Since companies without inspections cannot have violations, the violation analysis is restricted to only those firms with at least one OSHA inspection in a given cycle. This resulted in the elimination of 26 companies from the effective sample because they did not have a single inspection during the study period. These restrictions result in a still very large sample size of 2,349 in the violation model.

In the analysis of inspections all firms are included and the sample size is over 4,700. There is also temporal and spatial variation in OSHA regulation that must be controlled for. For example, in certain years the OSHA regulatory budget is higher and OSHA regulations also changes over time. Similarly, there are state-specific factors that may influence the level of regulation of a given firm, as noted above. Since the corporation rather than the facility is the unit of analysis and many large corporations have facilities in numerous states, these local factors may be less important in this analysis. Nonetheless, it is probably wise to control for state-specific factors for the corporate headquarter state. One approach would be to include cycle and state fixed effects dummy variables, but the inclusion of this many dummy variables makes model convergence problematic. Therefore, the level of regulation of other corporations in my sample in the same state in a given cycle is controlled for. For example, for a company
headquartered in Michigan in 1982 this variable would measure the mean number of OSHA violations or inspections (depending on the analysis) for all other sampled corporations headquartered in Michigan in 1982. Thus, this variable simultaneously and simply controls for both time and state-specific variation in the overall level of OSHA regulatory stringency. There will still be variation across industries, however, and thus industry fixed effects dummies were created using the two digit SIC/NAICS codes. In addition to this pooled model specification, where I pool the firm observations and attempt to control for past variation in OSHA firm-level stringency of regulation, I also estimate a model with firm-specific fixed effects because there may be unobserved factors that lead firms to attract either more or less regulatory scrutiny that may not be entirely captured in the controls. Since estimating count models with hundreds of dummy variables can create problems with model convergence (and did here), I estimate these models by removing the firm-specific mean from the dependent variable (and the lag) in the equation. This approach, discussed by Cameron and Trivedi (1998, 294-99) removes the firm specific mean from the equation but requires rounding and adding a constant to the dependent variable to assure only positive integers for the dependent variable and its lags (see also Witko 2011). Because the firm-specific mean in the dependent variable is removed eliminating much of the variation due to firm size, more or less scrutiny, etc. it is not necessary to include an exposure term in the firm-specific violations model. As a further robustness check I also estimated models including cycle fixed effects and these results (not reported) are consistent with those reported here.

Model Estimation

The outcome variables are over-dispersed counts, with a panel or time-series cross-sectional structure making a standard negative binomial model inappropriate, because it is likely that the errors will be correlated over time for the observations of a
particular corporation. The general estimating equations (GEE) approach is useful in this context because it can provide reliable standard errors even in the presence of correlated errors within these corporate clusters (Liang and Zeger 1986; Zorn 2001). Consequently, estimates were obtained using cross-sectional time-series GEEs with a negative binomial link function with standard errors adjusted for clustering on the corporation.

There are good theoretical reasons to include the lagged outcome variable (or a variable closely related to it in the inspection model) as explained above, and in the linear context it is common to do so since it often eliminates autocorrelation in the residuals (Beck and Katz 1995; Keele and Kelly 2006). There is less research into this in the context of count data, but Cameron and Trivedi (1998, 294) note that the lagged outcome variable approach can be useful when the lag is highly correlated, as it is here (lagged violations is correlated with violations at r=0.78, and with inspections at r=0.76). And in an illustration of the GEE approach, Zorn also (2001) estimates Poisson models including the lagged outcome variable. Nevertheless, Brandt et al. (2001) correctly note that even after including the lagged outcome variable as a predictor, autocorrelation in the residuals can persist, producing biased standard errors. A Breusch-Godfrey test recommended by Cameron and Trivedi (1998, 228) indicated that there was not statistically significant autocorrelation.6 Another potential problem with any time series data is the presence of a unit root, but testing indicated that this is not a concern with these outcome variables.7

**The Varying Effect of Corporate Resources on OSHA Regulation**

Before turning to the results, it is worth noting that the trends in regulation for this sample of firms are consistent with what is reported for overall OSHA regulation (e.g. Huber 2007). Specifically, after Reagan entered office there was a decline in regulation, which increased after the Democrats regained control of the Senate, before declining in the 1990’s, particularly after the Republican takeover of Congress in 1995.
Table 2 presents the results of the multivariate analysis. The first two columns contain the inspection results beginning with the firm fixed effects specification, and the second two columns have the similar models for the violations results. Industry dummy variables are not presented in the interest of space and because they are not of much theoretical interest. We can see in the first two columns that the company’s past violations has a positive and significant influence on current OSHA inspections. We also see that time and state-specific OSHA regulatory “effort” (i.e. the mean number of OSHA inspections of other companies headquartered in the same state in the same cycle) has a positive and significant influence on the number of OSHA inspections a company has. Thus, if a company is headquartered in a state where OSHA regulatory activity is higher during a cycle when OSHA regulatory activity is higher, it will have more inspections. Regarding the party variables we see that the number of OSHA inspections is significantly lower when the Republicans control Congress. Republican control of the White House has negative coefficient in the fixed effects model but actually has a positive coefficient in the pooled model. Neither is statistically significant, however. Of most interest to my argument is the effect of corporate political resources across these different partisan contexts. We see in the inspection models that in both model specifications neither the coefficients for the expenditure variable nor the interaction terms are statistically significant, and their signs are inconsistent across specifications. The results of the analysis of OSHA violations for the firms that received at least one OSHA inspection are seen in the third and fourth columns. As expected, we see from these results that the theory and model clearly fits the violations data better than the inspection decisions. In the pooled model the number of inspections is controlled for in
the exposure term, which is not presented because the coefficient is constrained to equal 1. We see in both model specifications that the past level of regulation has a positive and significant influence on the number of OSHA violations a company receives ($p=0.045$, one-tailed given theoretical expectations). We also see that, as in the previous models, the number of violations issued in a given year to other companies headquartered in the same state is positively related to the number of OSHA violations a company receives. Similarly, when Republicans control Congress there are significantly fewer violations issued. In both specifications, a Republican President is associated with fewer OSHA violations, but the coefficient is only significant in the pooled model.

The precise results are not entirely consistent across model specifications, but we also observe in both specifications that corporate political resources influence OSHA activity in the expected manner. In the pooled model the expenditure variable has a negative coefficient, but it is not statistically significant. In the firm fixed-effects model the expenditure variable actually has a positive coefficient, but nor is it statistically significant. In both model specifications, the coefficient for the interaction term between expenditures and Republican control of Congress is negatively signed and statistically significant. However, the results for the interaction term for the Republican control of the Presidency depend on the model specification. In the pooled model, the interaction has a negative coefficient and a p-value of 0.03 (one tailed tests were appropriately used given theoretical expectations). In the firm fixed effects model, however, the coefficient is actually positive, though it is not statistically significant.

The interaction terms, particularly for Congress, indicate that when the Republicans control institutions more political expenditures are associated with fewer violations. But the total effect of contributions on violations is reflected in the combined
effect of the expenditure variable and its interactions with the Republican control variables. In the pooled specification, both interaction terms and the expenditure variable had a combined negative, significant effect (p<0.01). In the firm fixed effects model, however, only the combined expenditure and Congress interaction was negative and significant (p=0.02). The combined effect of expenditures and the Presidential interaction variable was actually positive, though not statistically significant (p>0.10). Based on both specifications, we can conclude that firms making greater expenditures have significantly fewer violations when the Republicans control Congress, but not necessarily when they control the Presidency, since the results varied depending on model specification. The differences across specifications may simply reflect that the procedure used to eliminate firm fixed effects does introduce some artificial variation into the dependent variable, but the fixed effects specification is probably more conservative.

Assuming that this observed institutional interaction difference is genuine, the differential conditioning effect of the Congress and the Presidency may reflect that this sample of firms contributes a great deal of money to members of Congress and members of Congress raise a large proportion of their money from corporations. In contrast, Presidential candidates rely mostly on individuals, and (until recently) public financing.

Considering that Republicans reduce OSHA regulation when they take office, one might reasonably expect that firms would disinvest somewhat in politics or regulatory compliance when the Republicans control government. The contribution data, however, show that firm contributions actually increase when the Republicans control government. For instance, for firms with at least one OSHA violation, the mean contribution amount (in 2006 inflation adjusted dollars) when Republicans control the Congress is $151,520 and when the Republicans do not control Congress it is $93,284. This suggests that
rather than retreating from politics secure in the thought that the Republican Party will ensure lenient regulation, firms may actually increase their investment in politics because there is a greater return. This data cannot show whether firms disinvest from regulatory compliance, but since the number of violations decreases significantly when Republicans control government, it seems that firms probably do not disinvest in regulatory compliance too dramatically, otherwise on net there might be little overall reduction.

It is also important to consider the results’ substantive importance. Incidence rate ratios are one way to interpret negative binomial coefficients but since these variables are on very different scales, incidence rate ratios can be somewhat misleading. Thus, the last column shows the number of additional violations expected with a one unit change in significant explanatory variables while holding other variables in the model constant at their mean, and adjusted for the variable’s standard deviation to produce a more comparable effect size across variables. In order to get a sense of how the effect of contributions may vary across different Presidential administrations and because the addition of a constant to the firm-demeaned dependent variable in the fixed-effects model makes interpreting the “real” effect more difficult, I use the estimates from the pooled model. But keep in mind that in the fixed effects model I did not observe any significant interaction between expenditures and Republican control of the Presidency. We see that the OSHA “effort” (i.e. the violations in a given year in a firm’s state) has the largest substantive impact on the dependent variable. The next largest effects are for partisan control of the institutions of government, and these effects are probably understated since these variables also have indirect effects via the OSHA effort variable. Given that public managers must be responsive to their political principals and that these principals also shape the broader regulatory environment, enforcement budget, etc., the fact that these
variables have a larger effect than corporate political resources is not surprising. The results also show that with the Republicans in control of the Congress and Presidency a company spending an additional standard deviation above the mean could expect to see approximately two fewer OSHA violations (25 instead of 27). Considering that one standard deviation is approximately $231,000, this is perhaps a relatively small return on investment. But given the size of some penalties, which can range into the millions of dollars, two fewer violations could be very helpful. Also, corporate campaign contributions may help to elect Republicans and therefore have an indirect effect on violations by reducing the total number of inspections, since the results in Table 2 demonstrate such an effect and the number of inspections affects the number of violations. Finally, OSHA regulation is just one thing that concerns firms, and their expenditures may simultaneously result in a variety of other benefits from government.

Conclusion

How all of the resources that corporations invest in politics affect political and policy outcomes is an important question. We know much more about this in the context of the legislative process, but a number of recent studies demonstrate that corporations can influence administrative processes, as well. Though public managers must be responsive to their political principals they are also responsive to organized interests. Since the principals of the two major parties on average currently have very different preferences relative to those of business, the bureaucracy may be more responsive to corporations when the Republicans are in control of the institutions of government. The analysis of OSHA violations confirmed this possibility. Corporate resources significantly reduce OSHA violations, but mostly when the Republicans control the Congress or Executive (and this effect was more consistent regarding control of the Congress). These effects are modest, but this is not entirely surprising considering that
corporate resources are only likely to matter at the margin of decision-making. When companies have a poor safety record they are more likely than other companies to receive future inspections and violations, and political activism is not going to prevent this entirely. Nonetheless, this study provides more evidence that corporations can influence bureaucratic outputs. More importantly, this study shows that the increasing polarization of the parties has important implications for the success of interest groups in influencing the bureaucracy. At least on some issues, how successful corporations are at influencing the bureaucracy is conditioned by the partisan control of government.

Notes

1. Judging by AFL-CIO scorecards, in 2008 Nelson (NE) was the Democratic Senator least supportive of labor and Snow (ME) was the Republican most supportive, and they received a 74% and 48%, respectively. In the House, Democrat Taylor (MS) was least supportive in his party and received a 57% rating, while Republican McHugh (NY) was the most supportive of labor and received a 51% rating (see http://www.aflcio.org/issues/legislativealert/votes/upload/senate_final_2008.pdf
2. Jim Jeffords announced his switch from Republican to independent in mid-2001 giving the Democrats a 50-49 majority in the Senate during much of 2001 and all of 2002.
3. A list of sampled firms and all data used in this study is available from the author.
4. Not contributing to politicians at all indicates that the political action committee registered with the FEC but did not contribute money to any candidates that cycle. In almost half of the observations (48.1%), companies contributed less than $50,000, while 26.3% of the observed companies contributed more than $200,000 and 8.7% of the observed companies contributed over $1 million. Thus, there is substantial variation in the contributions from these corporations, which is important given my arguments.
5. These codes were collected from Hoover’s Company Profiles, and other sources if necessary (e.g. Standard and Poor’s Company Profiles). North American Industry Classification (NAICS) codes have replaced Standard Industrial Classification (SIC) codes as the means that the U.S. government uses to classify different industries. More information on these can be found on the Census Bureau’s website at http://www.census.gov/epcd/www/naics.html
6. With panel or cross-sectional time series count data Cameron and Trivedi (1998) recommend the use of a Breusch-Godfrey test which regresses the residuals from the
model on lagged residuals and the exogenous predictors in the model. For the violations model the test statistic was 1.84 (chi², 3 df) and for the inspections model the test statistic was 1.74 (chi², 3 df), with degrees of freedom equal to number of lags included, neither of which was statistically significant.

7. Using an Im-Pesaran-Shin test (ipshin in Stata 10.0) on the outcome variable I could reject the null hypothesis of non-stationarity (p=0.000).

8. This figure was computed by subtracting one from the incidence rate ratio estimated and multiplying it by the explanatory variable’s standard deviation, then multiplying this figure by the average number of OSHA violations per firm of those firms with at least one OSHA inspection (27.76).

References


Witko, Christopher. 2006. “PACs, Issue Context and Congressional Decision
-making.” Political Research Quarterly

Table 1. Average Business and Opposing Interest Group Ratings by Party, 108th Congress

<table>
<thead>
<tr>
<th>Group</th>
<th>Average Democrat Rating</th>
<th>Average Republican Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chamber of Commerce</td>
<td>38.9</td>
<td>93.5</td>
</tr>
<tr>
<td>Business-Industry Political Action Committee</td>
<td>13.2</td>
<td>92.6</td>
</tr>
<tr>
<td>The National Federation of Independent Businesses</td>
<td>19.1</td>
<td>96.3</td>
</tr>
<tr>
<td>The National Association of Manufacturers</td>
<td>21.1</td>
<td>90.9</td>
</tr>
<tr>
<td>AFL-CIO (Labor)</td>
<td>91.8</td>
<td>16.5</td>
</tr>
<tr>
<td>League of Conservation Voters</td>
<td>83.6</td>
<td>13.1</td>
</tr>
</tbody>
</table>

Data compiled by the author.
Table 2. The Effect of Corporate Political Resources on OSHA Inspections and Violations

<table>
<thead>
<tr>
<th>Independent Variable</th>
<th>Inspections (Firm Fixed Effects)</th>
<th>Inspections (Firm Fixed Effects)</th>
<th>Violations (Firm Fixed Effects)</th>
<th>Violations Standardized Effect Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>OSHA Violations_{t-1}</td>
<td>0.0011** (0.0002)</td>
<td>0.0039** (0.0007)</td>
<td>0.0007** (0.0001)</td>
<td>0.0005* (0.0003)</td>
</tr>
<tr>
<td>OSHA Effort</td>
<td>0.0002* (0.0001)</td>
<td>0.0392** (0.0040)</td>
<td>0.0001* (0.0000)</td>
<td>0.0090** (0.0013)</td>
</tr>
<tr>
<td>Republican President</td>
<td>-0.0004 (0.0028)</td>
<td>0.0841 (0.0632)</td>
<td>-0.0031 (0.0024)</td>
<td>-0.1161** (0.0491)</td>
</tr>
<tr>
<td>Republican Congress</td>
<td>-0.0134** (0.0045)</td>
<td>-0.1808* (0.0849)</td>
<td>-0.0131** (0.0037)</td>
<td>-0.0999* (0.0547)</td>
</tr>
<tr>
<td>Expenditures_{t-1}</td>
<td>-0.0001 (0.0003)</td>
<td>0.0102 (0.0071)</td>
<td>0.0002 (0.0002)</td>
<td>-0.0017 (0.0013)</td>
</tr>
<tr>
<td>Exp_{t-1}*Rep. President</td>
<td>0.0004 (0.0003)</td>
<td>-0.0003 (0.0039)</td>
<td>0.0000 (0.0001)</td>
<td>-0.0019* (0.0010)</td>
</tr>
<tr>
<td>Exp_{t-1}*Rep. Congress</td>
<td>0.0001 (0.0003)</td>
<td>-0.0016 (0.0024)</td>
<td>-0.0005** (0.0001)</td>
<td>-0.0020* (0.0012)</td>
</tr>
<tr>
<td>Constant</td>
<td>4.2101** (0.0817)</td>
<td>-0.8908** (0.2598)</td>
<td>5.8233** (0.0324)</td>
<td>0.1334 (0.1773)</td>
</tr>
<tr>
<td>N</td>
<td>4771</td>
<td>4771</td>
<td>3045</td>
<td>3045</td>
</tr>
<tr>
<td>----</td>
<td>------</td>
<td>------</td>
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<td>------</td>
</tr>
<tr>
<td>Wald Chi$^2$</td>
<td>247.51**</td>
<td>756.52**</td>
<td>171.97**</td>
<td>294.64**</td>
</tr>
</tbody>
</table>

**p≤0.01, *p≤0.05 (one-tailed)