#### **Corporate Lobbying of Bureaucrats**

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### Abstract

We find that 80% of companies that lobby Congress also lobby executive agencies. Although executive agencies are not beholden to companies for campaign contributions, the agencies are nevertheless influenced by lobbying: companies' lobbying leads to more favorable rules, more special exemptions, more government contracts, and more favorable decisions on enforcement actions. Agencies' bestowment of favors appears to be motivated by opportunities within the private sector: lobbying is significantly greater among agencies that have stronger revolving door relations with the private sector. Following a negative exogenous shock to agency power, the Supreme Court's Chevron decision, firms engaged in agency lobbying experienced negative abnormal returns, underscoring the strategic value of lobbying agencies.

Keywords: lobbying, rulemaking, Chevron decision, regulations, revolving door

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#### 1. Introduction

The government is arguably the most influential actor in the US economy, and its actions affect all firms. It follows that many companies expend resources aimed at swaying the government's actions. A key form of such expenditures is lobbying. Lobbying includes both an information channel and an influence channel: companies seek to provide relevant information to government agents, and they seek to obtain favors from government agents.

Prior literature in this area either broadly analyzes all lobbying dollars or focuses on lobbying toward Congress. The objective of this paper is to understand companies' lobbying of executive agencies. Executive agencies have substantial power within the US, for example writing rules that specify how the legislation is enacted, overseeing investigations and enforcement actions, and granting government contracts. Unlike Congress, key personnel within executive agencies do not face re-election pressures or solicit campaign contributions.

Consequently, it is unclear whether the quid pro quo dynamics that heavily influence

Congressional lobbying are also influential in agency lobbying. If firms lobby executive agencies to obtain company-specific advantages, rather than pursuing a more general goal of providing policy-relevant information, then the influence of certain companies over government actions is even greater than previously recognized.

To empirically examine these issues, we build a unique dataset. First, we obtain the total lobbying dollars of each company and the specific issue(s) on which each company lobbied, over the 1999 – 2023 period. Because lobbying is concentrated among large firms, we focus on the largest 500 publicly traded firms. Second, we obtain details on the part(s) of the federal government that each company lobbied, each year. This includes both houses of Congress as well as each executive agency. Third, we obtain key actions of each government agency, including

rulemaking, contract grants, and enforcement activity.

Our data highlight the extent to which companies spread their lobbying dollars broadly. Across the 500 largest companies between 1999 and 2023, 66% engaged in lobbying. Of those companies, 80% lobbied at least one executive agency in addition to Congress. The average (median) company lobbied five (three) different agencies, and the company at the 75<sup>th</sup> percentile lobbied seven different agencies. Consistent with the importance of trade and tax policy for nearly every company, the Department of Commerce and the Department of the Treasury are the most lobbied agencies. However, there is also considerable heterogeneity across firms, with companies lobbying the agencies that have jurisdiction over their industries. For example, Exxon Mobil lobbies the Department of Energy and the Environmental Protection Agency every year within our sample. In contrast, Pfizer rarely lobbies either of these agencies but consistently lobbies the Department of Health and Human Services.

Our empirical analysis of both the determinants of agency lobbying and the benefits that companies obtain from such lobbying is structured around two hypotheses. Our null hypothesis, the *Information hypothesis*, is that the lobbying of executive agencies is motivated solely by information provision, for example to enable agencies to enact more informed rules. As overviewed by Grossman and Helpman (2001) and Gregor (2011), a large theoretical literature shows that one of the main channels through which lobbying can add value is information provision, as policy makers suffer from a lack of expertise and a lack of time. Under our null hypothesis, the influence channel of lobbying does not play a role because executive agencies are staffed by career government employees. Employees within executive agencies do not seek campaign contributions or votes, which are frequently stated as factors that motivate companies' means of gaining influence from Congress. Many agency employees are relatively insensitive to

political cycles, as evidenced by their long tenures. Finally, even among the subset of these employees who are sensitive to political cycles, their job prospects depend upon appointments by politicians in power, meaning they are less beholden to companies.

The alternative hypothesis, *the Influence hypothesis*, is that companies' lobbying of executive agencies is motivated at least partially by influence seeking. First, there may be quid pro quo dynamics, which enable companies to influence agencies. For example, companies can offer agency employees future employment opportunities if these employees act favorably to the company, what is commonly referred to as the revolving door. Second, agency employees may be convinced by the arguments of lobbying companies, in what is commonly referred to as regulatory capture (Stigler, 1971; Peltzman, 1976). Such effects are particularly likely if agency employees do not hear opposing arguments, for example from non-lobbying companies.

Our empirical analysis includes three sets of tests. First, we examine the relation between company lobbying and multiple dimensions of government agency activity: rulemaking across the universe of government agencies, special waivers that agencies grant to specific companies, agency investigations and enforcement actions, and agency contract grants. Second, we examine whether these relations between company lobbying and agency actions are concentrated within agencies that have a tighter revolving door with the private sector. Third, we examine changes in the valuation of companies as a function of their lobbying behavior, around a shock that decreased the power of agencies, that is, around the Chevron decision.

First, we find that companies' lobbying of executive agencies is motivated by the types of activities the agency is engaged in. We begin by analyzing agency rulemaking: government agencies publish between 5,000 and 8,000 rules per year, and these rules can severely affect firm operations by lowering growth, profitability, and productivity (Kalmenovitz, Lowry, & Volkova,

2024). However, we know little about firms' efforts to influence the rule-making process. We find that a one standard deviation increase in company-related rulemaking by an agency is associated with a 10 - 14% increase in company lobbying with that agency.

As motivated by our two hypotheses, companies' heightened lobbying of agencies around rulemaking periods might be motivated solely by an effort to provide information on the issue at hand, as stated by the *Information hypothesis*. Alternatively, it might be additionally motivated by an effort to influence the rules to their own advantage, as stated by the *Influence hypothesis*. We conduct additional analyses to differentiate between these competing explanations. First, we examine agency waivers, which represent cases in which agencies grant a specific company an exemption from a particular rule. The *Influence hypothesis* predicts that companies would lobby to obtain such waivers, and this is what we find: agency waivers are associated with an 11–19% increase in lobbying by that company. Second, we examine abnormal returns around announcement dates of new rules. Consistent with the *Influence hypothesis*, we find that among companies affected by the new rule, those that recently lobbied the rulemaking agency outperform the non-lobbying companies in the days surrounding these announcements.

Companies' lobbying of agencies is also related to other agency activities, including for example agency investigations and agency contract grants.<sup>2</sup> In economic terms, the first \$1 million a company receives in contracts from an agency coincides with a 42% greater propensity to lobby that agency. An agency's opening of an investigation against a company is similarly impactful, corresponding to a 24% increase in lobbying propensity. Finally, we find that among

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<sup>&</sup>lt;sup>1</sup> These waivers also include eligibility for certain programs.

<sup>&</sup>lt;sup>2</sup> We conduct additional analyses to mitigate concerns arising from data constraints. First, because we only observe the company who won the contract, we examine the 30% of contracts in which there is only one bidder; results are qualitatively similar. Second, because we only observe companies subject to enforcement actions (but not companies who were investigated but not faced with enforcement), we submit FOIA requests to obtain data on all investigations (irrespective of whether there was an enforcement) from the Securities and Exchange Commission (SEC) and the Wage and Hour Division within the Department of Labor (DOL); results are qualitatively similar.

companies that were subject to enforcement actions, those that lobbied have announcement returns that are on average 1.0% higher. In aggregate, these findings provide further evidence in support of the *Influence hypothesis*.

The documented relations between agency activities and a company's propensity to lobby appear to be causal. First, all specifications include stringent sets of fixed effects, which net out company-specific shocks, agency-specific shocks, and a company's average propensity to lobby with an agency. Second, company lobbying is elevated in the years preceding (but not following) agency final rule announcements, agency waivers, and agency contract grants. In contrast, company lobbying is significantly higher in the years following (but not preceding) agency proposed rule announcements and the onset of agency investigations. Third, placebo tests demonstrate that the documented relations are specific to each agency (e.g., the agency writing the company-related rule, conducting the investigation, etc.), and similar relations are not found with other randomly selected agencies.

In our second set of tests, we consider the motivations for agencies to provide the aforementioned benefits to lobbying companies. As noted above, executive agencies are less incentivized than Congress to provide favors to companies, because these agencies do not rely on campaign contributions. There is, however, one benefit that companies can provide to agency staff: private sector opportunities. This leads to the prediction that agency lobbying will be strongest within agencies with a stronger revolving door.<sup>3</sup>

We classify agencies as high revolving door agencies, i.e., agencies with the highest rates of agency staff moving between the private sector, using the classification of Duchin and Wang

<sup>&</sup>lt;sup>3</sup> This prediction is based on two fundamentals: companies will concentrate their lobbying within agencies where they obtain the greatest benefits, and agencies will grant the biggest favors when they are getting greater benefits in return, i.e., a stronger quid pro quo.

(2024). Consistent with predictions, we find that a company's propensity to lobby an agency that is engaged in company-specific activities – including, for example, rulemaking, waivers, investigations, and contracts – is significantly greater among top revolving door agencies.

In our third and final set of tests, we examine changes in the valuation of companies as a function of their lobbying behavior, around an event that decreased the power of agencies, that is, around the Chevron decision. This 2024 Supreme Court decision effectively weakened the power of agencies. Consistent with companies influencing government agencies to their benefit through lobbying, we find that companies that engaged in such lobbying had significantly lower abnormal returns around the Chevron decision.

We contribute to several bodies of literature. First, we contribute to literature on political influence through lobbying of the executive branch. McKay (2011) finds that lobbyists target both Congress and executive agencies, and You (2017) shows that nearly half of lobbying activity focuses on bills that Congress has already passed. However, neither of these papers analyzes the company-specific motivations behind these lobbying efforts or the benefits companies obtain from such lobbying. Yackee and Yackee (2006) find that comment letters to executive agencies only influence rule-making if the letters are written by businesses.

More generally, we contribute to the literature on lobbying. Firms lobby to influence the enactment of favorable policies (Kang, 2016), to increase contract awards (Agca and Igan, 2022; Cox, 2023), to obtain stimulus funds (Duchin and Sosyura, 2012; Adelino and Dinc, 2014), to obtain trade protection (Tovar, 2011), to decrease fraud detection (Yu and Yu, 2011), in support of more H1-B visas (Kerr, Lincoln and Mishra, 2014), and, in the most general sense, to increase firm value (Borisov et al., 2015). However, nearly all these papers examine total

lobbying expenditures irrespective of where these expenditures are directed.<sup>4</sup> In contrast, we focus on companies' choice of where to allocate their lobbying dollars and the benefits they obtain through this allocation.

#### 2. Data

Our sample consists of the 500 largest publicly traded companies each year, from 1999 to 2023. We limit the sample to this subset of companies because lobbying is highly concentrated within the largest firms. In total the sample covers 1,346 unique companies. We rely on CRSP and Compustat for stock price and accounting data. Additional data sources are described below.

#### 2.1. Lobbying data

Firms are required to publicly disclose all lobbying activity via LD2 forms, which are filed with the Senate Office of Public Records (SOPR). These forms were filed semi-annually through 2007, and quarterly since then. Each LD-2 form provides the name of the company paying for the lobbying, the name of the lobbying firm that the company hired, and the total dollars spent lobbying by that company via that lobbying firm during that time period. The LD2 also provides the government entity toward which the lobbying is directed, for example US Senate, US House of Representatives, Department of Commerce, Department of Defense, etc.

Finally, the LD-2 form also provides two fields that describe the issue(s) on which the company is lobbying. First, line 15 of the LD2 form provides a unique code, out of a total universe of 79 potential codes, which denotes the broad category of the lobbying, for example, tax, energy, environment, trade, etc. Many LD-2 forms include lobbying on multiple issues.

Second, line 16 of the LD2 provides a description of the lobbying, including the bill number(s)

<sup>4</sup> One exception is Duchin and Sosyura (2011), who examine lobbying on one issue, allocation of TARP funds, toward one set of agencies, banking regulators.

where relevant.

We use the company name field to identify each company engaging in lobbying, and we manually match companies to the 500 largest firms in CRSP and Compustat data. In aggregate, companies in our sample expend more than \$1 billion per year in the recent years in our sample, which is similar in magnitude to numbers reported in Kwon, Lowry and Verardo (2024).

We extract the names of lobbied agencies and, to ensure consistency in our analysis, we match subagencies at the parent agency level. For example, the National Institutes of Health (NIH) and the Food and Drug Administration (FDA) are both matched to the Department of Health and Human Services (DHHS). We limit our sample to the 43 most lobbied agencies; the remaining agencies appear in less than 4% of LD-2 forms. Appendix Table A1 lists all agencies used in our analysis, and it indicates whether each agency writes rules, issues enforcement actions, and/or awards contracts.

Table 1 provides descriptive statistics at the firm-year level. On average, firms in our sample spend 2.0 million dollars lobbying each year, they lobby 2.4 different agencies. Finally, they lobby on 6.9 different issues (as listed in line 15 of the LD2 form).

Table 2 provides descriptive statistics at the firm-agency-year level. Across all possible firm-agency-year combinations, 5.6% have positive lobbying expenditures.

# 2.2. Federal Register Data

To obtain data on agency rulemaking and agency issuances of waivers, we rely on data from The Federal Register. The Federal Register represents the comprehensive agenda of the US government. It is published every day, excluding government holidays, and it includes four types of documents: notices, proposed rules, rules, and executive orders. We exclude executive orders, as they are issued by the president and thus less relevant in our setting. The other three types of

documents are published by government agencies. Approximately 80% of documents are published by a single agency, and the remaining 20% are co-authored by two (or in rare cases more than two) agencies. Notices represent the broadest category, and they include material related to the early stages of rulemaking and also post-rule activity such as exemptions granted to specific companies. Proposed rules and rules are each less common than notices, but they also tend to be substantially lengthier than notices. During our sample period, government agencies published a total of 705,821 notices, 72,087 proposed rules, and 111,872 final rules. As shown in Internet Appendix Figure IA1, there is a slight decline in the numbers of each of these types of documents. In contrast, the total number of words in each of these types of documents has remained constant or even increased slightly.

We develop measures that capture each agency's activities and the extent to which these activities are related to each company's operations. We rely on the 10K as a measure of each company's annual operations, and we calculate the cosine similarity between the firm-year 10K and Federal Register rules (or proposed rules) published by the agency-year. For each of these measures, we average the cosine similarities across all observations within the firm-agency-year. We refer to these measures are as *Relatedness\_Rules* and *Relatedness\_Proposed Rules*, respectively, each of which is at the firm×agency×year level. Table 2 shows the distributions of these two relatedness measures. Both have a mean of approximately 0.22, with an interquartile range of 0.18 to 0.25.

# 2.3 Agency Waivers

We use Federal Register notices to identify waivers issued by agencies to specific firms.

"Waivers" is a broad term for documents that provide regulatory relief or grant exemptions to companies. Appendix Figure A1 provides two examples. The first example (Panel A) is a waiver

issued by the Department of Labor to Ford Motor Company, granting the company greater flexibility in managing retirement benefits. The second example (Panel B) shows a blanket approval granted by the Federal Energy Regulatory Commission (FERC) for specific wholesale electric power transactions involving Georgia-Pacific Corporation. To identify these waivers, we first download all notices from the Federal Register, and we then search for company names within the text of the notice. We manually verify the results. We also proofread a substantial subsample of selected notices to ensure we accurately capture actions potentially benefiting the mentioned companies.

As shown in Table 1, the average company receives 1.6 waivers per year, however the distribution is highly skewed, as evidenced by the fact that the median company receives 0 waivers. Looking at Table 2, which shows statistics at the firm-agency-year level, the average observation has 0.04 waivers, and even the 75<sup>th</sup> percentile observation equals zero. In sum, each agency grants waivers to a relatively small number of companies each year.

# 2.4 Investigations

We obtain data on all investigations conducted by both the Securities and Exchange Commission (SEC) and the Wage and Hour Division within Department of Labor (DOL). The SEC investigations include investigations initiated through 2021 and closed as of July, 2024. SEC investigations that were closed between January 1, 2000 and August 2, 2017 are from FOIA requests submitted by Blackburne et al. (2021), and data subsequent to this point are obtained through a separate FOIA request.<sup>5</sup> For DOL investigations, our focus on the Wage and Hour Division is motivated by two factors. First, it is one of the more active investigating divisions

<sup>5</sup> We thank Dan Taylor for sharing these data.

within DOL, but it does not systematically investigate every company every period. Second, it does not disproportionately focus on certain industries (as for example the Division of Mine Safety and Health (MSHA) or even the Occupational Safety and Health Administration (OHSA)). For conciseness, we refer to these Wage and Hour Division data simply as DOL investigations going forward. We obtain these data through FOIA requests, and they include investigations initiated through 2022 and closed as of July, 2024. Both SEC and DOL investigations include the matter name (which generally represents the company name), the opening date of the investigation, and the closing date.

Across our sample of 11,000 firm-years between 2000 and 2021, there are 1,003 firm-years with an SEC investigation, across 391 unique firms. There are 376 firm-years with a DOL investigation between 2000 and 2022, across 278 unique firms. As shown in Internet Appendix Figure IA2, both SEC and DOL investigations have fluctuated over time, but there is no strong time trend. SEC investigations are concentrated within larger firms, whereas DOL investigations are spread more equally across firms of different sizes.

### 2.5 Enforcement actions

From Violation Tracker, we obtain all enforcement actions across all government agencies. These data include government agency, company name and CIK, a description of the violation, the date on which a penalty was levied, and the dollar amount of the penalty. In Internet Appendix Figure IA3, we describe the distribution of these enforcement actions across agencies, over time, across industry, and by company size. The DOL has the highest number of enforcement actions, followed by EPA, Transportation and SEC. Similar to both the SEC and DOL investigations, the number of enforcement actions (across all agencies) has varied over time, but exhibits no strong time trend. Similar to the SEC investigations data, the number of

enforcement actions (across all agencies) is positively correlated with firm size: firms in the largest size quartile experience approximately 2500 enforcements in aggregate across our sample period, compared to slightly less than 1000 among firms in the smallest quartile. Finally, the number of enforcement actions also varies across industries, with firms in the manufacturing, retail and finance industries experiencing higher rates, and firms in the business equipment, telecommunications, and consumer durables industries experiencing lower rates.

As shown in Table 1, the average company pays \$19,000 in penalties, but similar to other variables, this distribution is highly skewed, with the median company paying zero penalties. On average, each company-year observation incurs 0.5 enforcement actions. As shown in Table 2, the average number of violations issued by an agency to a company within a given year is 0.01.

#### 2.6 Contracts

We obtain data from USASpending.gov on all government procurement contracts.

Procurement contracts represent over 75% of gross government investment (Broggard et al., 2021). We match these data to our sample companies. Across the 43 government parent agencies in our sample, 30 grant contracts. As shown in Internet Appendix Figure IA4, the Department of Defense is the agency that grants the most contracts. There is an upward trend in contracts from 2000 through 2008, and it has remained relatively constant since then. Contract grant dollars are positively related to firm size, and they are also greater in certain industries, including, for example, the business equipment, manufacturing, and health industries.

Looking at Tables 1 and 2, contract grants are also highly skewed. The average firm-year has \$19 million dollars in contract grants, but the median firm obtains none and even the firm at the 75<sup>th</sup> percentile obtains only \$5.3 million. At the firm-agency-year level, average contract

grants are \$0.4 million, and even the 75<sup>th</sup> percentile observation has zero dollars in grants.

#### 3. Lobbying of Executive Branch Agencies

We begin by describing companies' allocation of lobbying dollars. For each company-year, we first ascertain whether or not the company lobbied on any issue. Among the subset of firm-years with lobbying, we determine whether the company: lobbied only Congress, lobbied Congress and executive branch agency(ies), or lobbied only executive branch agency(ies). Panel A of Figure 1 shows the distribution of these different cases within our 1999 – 2023 sample. Companies engaged in lobbying in 66.1% of company-years. Strikingly, there are only 13.3% of firm-years in which the company only lobbied Congress, compared to 52.8% of firm-years in which the company lobbied both Congress and executive agencies. The remaining 33.9% of firm-years have no lobbying.

For each year of our sample, Panel B of Figure 1 shows aggregate dollars spent lobbying across our entire sample of 500 companies, and the average number of agencies lobbied per company within this same sample. On average during a year, a company lobbies slightly more than four agencies, a rate that has remained relatively constant over time. Aggregate dollars spent on lobbying increased between 2000 and 2009 to nearly \$1 billion, but they have remained relatively constant or even decreased slightly since then. As discussed by Kwon et al. (2024), this leveling out in expenditures coincides with the passage of the 2007 Honest Leadership and Open Government Act, which instituted various restrictions on lobbying.

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<sup>&</sup>lt;sup>6</sup> This average of four agencies is calculated across companies that lobby agencies and those that don't lobby agencies. Among companies that lobby agencies, the average company lobbies approximately 7.6 agencies.

Figure 2 shows a histogram of the number of agencies lobbied, across all company-years within our sample with non-zero lobbying expenditures. In approximately 17.5% of company-years, zero agencies are lobbied. Across the remaining cases, the most common scenario is for one agency to be lobbied, at 14.0%. Similarly common is for the company to lobby two, three, or four agencies, with rates of 11.1%, 10.0%, and 7.7% respectively. Finally, the distribution is highly skewed, with 10% of companies lobbying 13 or more agencies.

Figure 3, Panel A shows a histogram of the most lobbied agencies. Consistent with trade and taxes being of paramount importance for every large company, Department of Commerce and Department of the Treasury are the most heavily lobbied agencies. This is followed by Department of Health and Human Services, Department of State, and the Office of Management and Budget.

Figure 3, Panel B illustrates the lobbying behavior of two large companies, ExxonMobil and Pfizer, across a selected subsample of agencies. Both firms lobby Congress and at least one agency each year. However, their choice of agencies is strategic. ExxonMobil consistently lobbies the Department of Energy (DoE) and the Environmental Protection Agency (EPA). In contrast, Pfizer rarely lobbies these two agencies, instead focusing on the Department of Health and Human Services. Additionally, some agencies, such as the Department of Defense and the Department of Transportation, receive lobbying from both firms only in certain years.

In sum, descriptive evidence highlights the extent to which companies actively lobby government agencies. This suggests that both companies and government agencies obtain benefits from this lobbying. Subsequent sections seek to examine these benefits.

# 4. Determinants of companies' lobbying of executive agencies

This section focuses on testing our main hypotheses: the *Information hypothesis* versus the *Influence hypothesis*. Our empirical tests focus around four forms of government activity that companies may lobby on: agency rulemaking, agency waivers and exemptions, agency investigations and enforcement actions, and agency contract grants.

### 4.1 Agency rulemaking

Having established the prevalence of companies lobbying government agencies, we next seek to understand the motivation for such lobbying. We begin by examining the rulemaking activities of government agencies. Both the *Information hypothesis* and the *Influence hypothesis* predict that companies lobby executive agencies when these agencies are engaged in rulemaking that has a high potential to affect their business. We examine this prediction in section 4.4.1. We then examine agencies' issuance of company-specific exemptions to existing rules to differentiate between these hypotheses. In section 4.4.2 we conduct a returns analysis, which additionally contributes to differentiating between the hypotheses.

### 4.1.1 Relation between agency rulemaking-related activities and company lobbying

We begin by empirically examining whether companies' lobbying of executive agencies is influenced by the rulemaking activities of these agencies. We focus on agency proposed rules and agency rules, using the relatedness measures defined in Section 2.2. We additionally investigate agency waivers, as described in Section 2.3.

To capture companies' lobbying around these agency activities, we regress company lobbying by firm f, of agency a, in year t ( $lobby_{f,a,t}$ ) on each of measure of agency rulemaking-related activity:  $Relatedness_{proposed\ rules}$ ,  $Relatedness_{rules}$ , an  $Agency\ waiver$  dummy variable, or

#Agency waivers. We additionally include a stringent set of fixed effects. First, we include company×year fixed effects, which capture company-specific shocks that potentially affect a company's overall lobbying activity, for example a change in the company's financial position, a change in its reliance on government funds, its sensitivity to government regulation, or its overall lobbying expertise and effectiveness. Second, we include agency×year fixed effects, which capture agency-specific shocks that potentially affect all companies' decisions to lobby that agency, for example increased funds to disburse or increased rule-making activity. Third, we include company×agency fixed effects, which capture time-invariant dynamics that affect a company's decision to lobby a particular agency.

We predict that companies will increase their lobbying of an agency when that agency is engaged in rulemaking-related activity that is relevant to the company. This lobbying may be driven by an effort to provide relevant information to time-constrained regulators (as posited by the *Information hypothesis*) and/or by an effort to sway regulatory policies in the company's favor (as posited by the *Influence hypothesis*). We begin by estimating regressions, in which both the dependent variable and the key independent variables variable are measured in year *t*. We later examine time-series patterns, in which we examine lobbying prior to and following these agency actions.

Our first set of results is shown in Table 3. Looking first at columns 1 and 2, we find that companies actively re-allocate their lobbying dollars across agencies, as a function of the rules and proposed rules on which the agency is focusing in that year. In economic terms, a one standard deviation increase in agency rules related to the firm corresponds to a 0.59 percentage point increase in agency lobbying. Relative to a firm's average propensity to lobby an agency of

5.7%, this represents a 10.3% increase. Analogous effects for proposed rules are even greater, at 14.0%.

Looking at columns 3 and 4, companies also have a higher propensity to lobby in the year they receive agency waivers. In economic terms, when a company receives any waivers, it increases its lobbying propensity by 1.1 percentage point (coefficient in column 3), which corresponds to a 19% increase in the average propensity to lobby. Results in column 4 show that each additional waiver increases lobbying propensity by 10%.

The stringent set of fixed effects mitigates many endogeneity concerns. Nevertheless, to further mitigate endogeneity concerns, we estimate placebo tests, which are depicted in Figure 4. We estimate a series of simulations, similar to those in Kalmenovitz et al. (2024). We substitute the actual agency lobbied by a company with a placebo agency, while keeping all other company-year characteristics fixed. We estimate 1,000 simulations, in which lobbying of the placebo agency at time *t* is regressed on *Relatednessproposed rules* (Panel A of Figure 4), *Relatednessrules* (Panel B), *Agency waiver dummy* (Panel C), or #*Agency waivers* (Panel D). In all cases, the independent variable is measured in year *t*, and we include the same set of fixed effects used previously. We plot the distribution of t-statistics from these 1,000 simulations: the blue bars show the distribution of t-statistics across all agencies, and the red line shows the t-statistic from our actual specification (from Table 3). If our main regression specifications capture company decisions to more actively lobby the agency(ies) that are engaged in company-relevant rulemaking, then the coefficients on these measures of placebo agency activity will be insignificant. That is precisely what we find. In the *proposed rules* (*final rules*) specifications,

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<sup>&</sup>lt;sup>7</sup> To account for actual patterns in lobbying, within each simulation we replace the actual agency with the same placebo agency throughout the sample period. In other words, if SEC lobbying is replaced with EPA lobbying in year t, then SEC lobbying is replaced with EPA lobbying in all other years and all other companies as well.

the t-statistic from our actual specification (as shown in column 4 of Table 3) exceeds the t-statistic of the placebo test in 1000 (997) out of 1000 simulations. In a similar vein, the t-statistic from our actual specifications exceeds that in the placebo test in 994 (992) of the specifications of *Agency waiver dummy* (#*Agency waivers*).

In Figure 5, we examine in more depth the time-series characteristics of these relations. Specifically, we regress *lobby<sub>f,a,t</sub>* on each agency rulemaking-related activity, measured at times t-3 through t+3, plus fixed effects included in Table 3 specifications. Coefficients from each of these regressions are reported in Panels A – D of Figure 5. Looking first at Panel A, companies increase their lobbying of an agency a full three years ahead of that agency issuing a company-related rule, but after the final rule has been issued, company lobbying of that agency decreases to its long-term mean (which is captured through the fixed effects). In Panel B, we see that proposed rule lobbying is most pronounced in the year the proposed rule is released, and it remains elevated for one additional year.<sup>8</sup> Panels C and D of Figure 5 show that companies' lobbying of an agency is also significantly elevated in the years preceding agency waivers, and it becomes insignificant in the years following granting of such waivers.

### 4.1.2 Abnormal returns around publication of proposed rules and final rules

Results regarding agency waivers suggest that at least a portion of companies' rule-related lobbying is driven by an effort to sway agency decision makers, as suggested by the *Influence hypothesis*. In this subsection, we examine the extent to which company lobbying around agency rulemaking is similarly driven by influence-related motivations.

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<sup>&</sup>lt;sup>8</sup> Only a fraction of proposed rules is ultimately formalized into final rules. The duration of lobbying following a proposed rule will be longer for the subset of proposed rules that continue to be debated, compared to those that are dropped more quickly.

We examine company abnormal returns around publication of proposed rules and of final rules. Agencies write 5,000 to 8,000 proposed/final rules per year, many of which are relatively minor and are thus unlikely to cause a significant stock reaction. To focus on the most impactful rules, we restrict the sample to rules that are classified as significant, according to the criteria laid out by President Clinton's executive order 12866 in 1993. This executive order required a costbenefit analysis for any new 'economically significant' regulation, where economically significant is defined as: having an annual economic effect of at least \$100 million; adversely affecting the economy, a specific sector, productivity, competition, or jobs in a material way; or, being inconsistent with another existing law. Proposed and final rules that are deemed economically significant undergo additional review by the Office of Information and Regulatory Affairs (OIRA) before publication, which can result in substantial delays (Kerwin and Furlong, 2018). As a result, the publication date can be viewed as more exogenous. We obtain the list of significant regulations from the OIRA website. We calculate abnormal returns for each company in our sample, between days -1 and +1 and between days -2 and +2, where day 0 is defined as publication of the proposed rule or final rule. Abnormal returns are calculated as a difference between stock returns and S&P500 returns.

For the analysis of proposed rules, we regress these abnormal returns on Relatedness\_proposed rules, PastLobbying<sub>f, a, t-1</sub>, and the interaction between the two.

PastLobbying<sub>f, a, t-1</sub>, is defined as a dummy variable equal to one if company *f* lobbied agency *a* in years *t-1*, *t-2* or *t-3*, zero otherwise. For the analysis of final rules, variables are defined analogously. We additionally include the same set of stringent fixed effects used in Table 3.

Results are shown in Table 4. Columns 1 and 2 focus on abnormal returns around publication of rules, and columns 3 and 4 on proposed rules. Across all specifications, the

coefficients on the interaction term *Relatedness* × *PastLobbying* are significantly positive, indicating that companies who are affected by agency rulemaking and who had previously lobbied that agency earn significantly higher returns, relative to companies that did not lobby that agency.

In economic terms, our findings indicate that for the median company in the S&P500, the benefits to lobbying on a related significant rule are \$24 - \$32 million. Companies typically lobby on multiple related proposed and final rules each year, suggesting an annual benefit that is much higher. This contrasts with annual lobbying expenditures for the median (mean) lobbying company, which are much lower, at \$1.5 million (\$3.1 million). The conclusion that the benefits to lobbying exceed the costs is consistent with the findings in prior literature, which focuses on lobbying to Congress or firms' political expenditures more broadly (See, e.g., Tullock, 1972; Ansolabehere et al., 2003).

Our findings on abnormal returns build on prior literature that shows gains to total lobbying expenditures or gains to lobbying Congress, including for example Neretina (2024), Kang (2016), and Borisov et al. (2011). While prior literature often characterizes lobbying in a quid pro quo framework between companies and politicians seeking campaign contributions, our results show that companies' ability to influence the government agenda extends beyond

<sup>&</sup>lt;sup>9</sup> For final rules, economic significance is calculated as the coefficient on the interaction term (0.341) \* average value of the interaction term (average relatedness of 0.23 \* lobbying dummy equal to 1), times the median market capitalization of a S&P500 index company (\$31 billion). This equals \$24 million. A similar calculation around proposed rules generates an estimated \$32 million based on CARs over the (-1,+1) window. CARs over the (-2,+2) window generate similar estimates.

 $<sup>^{10}</sup>$  A comparison of economic magnitudes with these prior papers is challenging, due to both longer measurement windows (most measure abnormal returns over longer horizons) or a focus on a single large magnitude event (e.g., the Jack Abramoff conviction). Neretina's specification is closest to ours and thus offers the best basis of comparison. Focusing on lobbying of Congress, she finds that over the 5-day period surrounding passage of Congressional bills, non-lobbying firms' CARs are approximately 0.15% lower when they face high-lobbying rival firms. In contrast, we find that firms lobbying an executive agency earn 0.27 - 0.55% higher abnormal returns than firms not lobbying these agencies, when the agency is issuing a company-related rule.

Congress, into executive agencies. Executive agencies affect a significant portion of aggregate government resources and play a direct role in drafting regulatory details and issuing waivers.

Our results support the idea that companies lobby regulators strategically.

### 4.2 Agency investigations and enforcement actions

In addition to rulemaking, a key function of many government agencies is investigating companies for possible wrongdoing and, where appropriate, bringing enforcement actions.

Because data on investigations across all government agencies are not readily available, we proceed in two steps. First, we employ detailed data from the SEC and from the Wage and Hour Division of DOL on all investigations, irrespective of whether the investigation resulted in an enforcement action or not. Second, we employ broader data on enforcement actions undertaken across all agencies.

We begin with the discussion of the SEC and DOL investigations, which are shown in Table 6. We estimate regressions similar to those in Table 3, where lobbying is the dependent variable, and both lobbying and investigations are measured in year t. Because this analysis is limited to either the SEC (column 1) or DOL (column 2), the dependent variable equals *Lobbying*<sub>f, SEC, t</sub>. or *Lobbying*<sub>f, DOL, t</sub>, respectively. The key independent variable in column 1 is *Investigation*<sub>f, SEC, t</sub>, which equals one in the year the SEC initiates an investigation of the firm, zero otherwise. In column 2, the key independent variable is *Investigation*<sub>f, DOL, t</sub>, which is defined analogously. The mean duration of an SEC (DOL) investigation is 3.00 years (1.47 years), and the median is 2.14 years (1.99 years). We include firm fixed effects, year fixed

<sup>11</sup> The interquartile range of SEC (DOL) investigations is 1.17 to 4.04 years (0.68 to 2.00 years).

effects, and time-varying firm controls that potentially relate to lobbying (firm size, leverage, and capital expenditures).

Results show that the initiation of either an SEC investigation or an DOL investigation significantly affects a firm's propensity to lobby the SEC. In economic terms, an SEC investigation increases the probability of lobbying this agency by 55%, from 5.1% to 7.9%. The economic impact of a DOL investigation on firms' propensity to lobby the agency is a similar 40% increase, from 8.0% to 11.2%.

Figure 6 illustrates the time-series dynamics of this lobbying. Consistent with economic intuition, companies' lobbying of an agency begins in the year the investigation is initiated, and it remains elevated for one to two years. In contrast, we find no evidence of increased lobbying in the years prior to the investigation.

The SEC and DOL data have the advantage of including all companies who face an investigation, irrespective of whether this investigation resulted in an enforcement action.

However, as noted above, these data are not available across all agencies. To examine the effects of investigations on lobbying more broadly, we take advantage of data on agency enforcement actions, which are available across all government agencies.

We regress  $Lobbying_{f,a,t}$  on Estimated Investigation  $Start_{f,a,t}$ , which is an indicator equal to one in the (approximate) year the agency initiates an investigation against the firm. Relative to the more precise specification in Table 6, there are two differences. First, because we do not have the actual investigation start date, we form a proxy. Based on the fact that approximately 75% of

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<sup>&</sup>lt;sup>12</sup> The unconditional probability of lobbying the SEC is 0.051. An SEC investigation increases the firm's propensity to lobby the SEC by 0.028 (coefficient on SEC Investigation in col 1), which equates to a 40% increase. The unconditional probability of lobbying the DOL is 0.08 and a DOL investigation increases a firm's propensity to lobby by 0.032 (coefficient on DOL Investigation in col 2), which equates to a 40% increase.

both SEC and DOL investigations were started at least one year prior to the enforcement date, we define *Estimated Investigation start* as being one year prior to the Enforcement date. Second, the coefficient on *Estimated Investigation Start* captures whether companies with enforcement actions engage in more lobbying, compared to both non-investigated companies and investigated but not enforced companies. Because the 'investigated by not enforced' companies are included in the control group, the coefficient on *Estimated Investigation Start* should be understated, relative to the coefficient on *Investigation* (as shown in Table 6). Fixed effects similar to those in prior regressions are included, thus enabling us to isolate the effects of agency enforcement actions on changes in companies' allocation of lobbying dollars, across government agencies.

Results in Table 7 show that company lobbying of an agency is significantly higher in the year that agency begins investigating the company. Moreover, columns 2-5 indicate that this elevated lobbying is concentrated in larger cases, defined as cases in which the ultimate penalty is in the top tercile.

Additional analyses provide further insight into the ways companies manage their lobbying of agencies that are investigating them, and also the benefits that companies obtain through this lobbying. First, Figure 7 shows that lobbying spikes one year after the investigation start date, and it is not significantly elevated in any year prior to this start date. Second, Figure 8 presents a placebo analysis, similar to that in Figure 4. Companies facing an agency investigation may face many other challenges, which plausibly cause them to lobby Congress and/or other agencies. While our stringent set of fixed effects capture many sources of endogeneity, our placebo test provides added confidence that we are capturing the effects of lobbying the investigating agency per se. The t-statistics across all randomly selected agencies are centered close to zero, and the actual t-statistic is greater than nearly all the placebo t-statistics. In sum,

results indicate that companies lobby the investigating agency specifically, not the government more generally.

If companies successfully employ lobbying to influence the enforcement process to their benefit, then lobbying should lead to a less strict enforcement action. This would be reflected in a more positive (or analogously less negative) abnormal return around announcement of the enforcement action. We examine this prediction through a series of regressions shown in Table 7. Similar to analyses of abnormal returns around publication of proposed rules and final rules, we calculate abnormal returns over the three and five days surrounding the public announcement of the enforcement action. The announcements of these actions include details regarding the violation as well as the dollar amount of the penalty. We regress these abnormal returns on *PastLobbying*<sub>f,a,t</sub>, which equals one if the company lobbied the agency in the past three years. We additionally include the same stringent set of fixed effects used in prior regressions.

The sample includes all violations, which are at the company-agency-year level. Thus, the coefficient on *PastLobbying<sub>f,a,t</sub>* captures the difference between companies that lobbied and those that didn't lobby, conditional on having a violation. We find that companies that previously lobbied the enforcement agency earn significantly higher abnormal returns around the announcement of the violation, compared to companies that didn't lobby. In economic terms, across all violations these companies' abnormal returns are 0.65 - 1.01 percentage points higher. In the last three columns, we divide the sample of violations into those with small, medium, and large penalties (defined in terms of terciles). We find that lobbying firms' higher returns are concentrated within the large penalty cases, where abnormal returns to lobbying firms are 1.5% higher than those of their non-lobbying counterparts.

Our findings in this subsection build upon prior work related to lobbying and government enforcement activity. Relative to this prior work, we capture the extent to which enforcement activity across a broad set of government agencies influences companies' decisions to lobby these specific agencies. Lambert (2019) focuses more narrowly on one industry, banks. Prior work by Borisov et al. (2015) and by Yu and Yu (2011) examine the relation between enforcement actions and total firm lobbying dollars, irrespective of the agency toward which these lobbying dollars are directed. Importantly, firms subject to enforcement actions frequently face many challenges simultaneously, including for example financial distress or increased political risk, which may affect total lobbying expenditures. In aggregate, results in this subsection provide further evidence in favor of the *Influence hypothesis*. Firms strategically select when and which agencies to lobby, and this lobbying enables them to influence regulatory outcomes to their benefit.

#### 4.4 Agency contract grants

The final agency activity we examine is contract grants. Across our sample of 43 agencies, 30 issue contracts. Agencies that do not issue government contracts include the Office of Management and Budget, Postal Services, and Office of Homeland Security, to name a few. The median (mean) agency issues 235 (1,995) contracts per year, with an interquartile range of 44 to 2,149. There is considerable dispersion in the size of these contracts. While the median contract is only \$1,412, the mean is \$244,750, and the contract at the 95th percentile is \$182,000. Among government agencies, the Department of Defense issues both the highest number of contracts—more than a million per year—and the highest dollar amount. In 2008 alone, it awarded almost \$200 billion in contracts to the firms in our sample. The second and third agencies issuing the highest dollar amounts of contracts are the Department of Veterans Affairs

and the Department of Energy. The firms receiving the highest number of contracts are Lockheed Martin Corp, Boeing Co, and General Dynamics Corporation; they receive the highest dollar amount in contracts in almost all years of our sample.

We analyze the relationship between lobbying and contract grants using a sample of procurement grants, which represent over 75% of all government grants (Broggard et al., 2021). We predict that companies will increase their lobbying of an agency when there is a contract up for bid. While we do not have detailed data on the universe of companies that submitted bids, we do have data on both the company that won the contract, the dollar value of the contract, and the number of companies that bid on the contract.

We estimate regressions similar to those in earlier tables, where the dependent variable in *Lobbying<sub>f,a,t</sub>*, and the stringent set of fixed effects are included. These fixed effects soak up many of the sources of endogeneity that have been highlighted in prior literature (Cox, 2003; de Figueiredo and Silverman, 2006). For example, company×year fixed effects control for the possibility that companies that are more likely to win contracts are more likely to lobby, for example due to a firm's lobbying effectiveness. The independent variable of interest is dollar value of contracts received by company *f*, from agency *a*, in year *t*, *ContractDollars<sub>f,a,t</sub>*. Results provide further evidence consistent with the *Influence hypothesis*. It seems unlikely that information-related lobbying would lead a company to increase lobbying expenditures in the year of a contract grant. Our findings regarding the relation between contract grants and lobbying is consistent with Cox (2003). Relative to Cox, our inclusion of company×year fixed effects enables us to identify the extent to which companies re-allocate lobbying dollars across agencies, as a function of contract opportunities. Figure 9 shows the time-series dynamics of these relations: the largest spike in lobbying occurs within the year of the contract grant.

One shortcoming of the contract data is that we only observe the identity of companies that win a contract grant, and not the companies with unsuccessful bids. To mitigate concerns that this might somehow bias our analyses, in column 2 of Table 8, we re-estimate our regressions on the subsample of contracts with only one bidder. That is, for each firm×agency×year observation, we calculate the total dollar value of contracts that had exactly one bidder. Results are qualitatively similar.

In columns 3 – 5, we examine whether the extent of lobbying is related to the size of the contract grant. Gantchev, Goldman and Zhang (2024) show that a large portion of contracts are for trivially small dollar amounts. In column 3, we focus on all contracts (within each firmagency-year observation) greater than \$10,000 (coding all contracts less than this as zero). In columns 4 and 5, we focus on contracts greater than \$100,000 and contracts greater than \$1 million, respectively. Consistent with expectations, we find that lobbying is greatest among larger contracts. Among contract grants, \$1 million is the median dollar value. In economic terms, the first \$1 million a company receives in contracts from an agency coincides with a 42% greater propensity to lobby that agency.<sup>13</sup>

These results add to our understanding of the ways in which company lobbying affects the government's dispersal of funds. Lobbying leads to increased TARP funds (Duchin and Sosyura, 2012), higher stimulus funds in the wake of the Financial Crisis (Adelino and Dinc, 2014), more defense contracts (Agca and Igan, 2022), and increased contract awards. Relative to these prior papers, our results highlight the extent to which firms change not only the total

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<sup>&</sup>lt;sup>13</sup> The unconditional probability of a company lobbying an agency that has not awarded it any contracts is 4.8%. The first \$1 million in government contracts increases this propensity by 0.001 (coefficient from models 3-5) multiplied by 13.8 (natural logarithm of 1 million). That corresponds to an increase of 2.0 percentage points or a relative increase of 42%.

dollars spent lobbying, but also the allocation of these dollars across sectors of the government.

They precisely tailor their lobbying to the agency(ies) from which they are more likely to obtain funds, for example in the form of contract grants.

# 5. Mechanisms underlying firms' lobbying of agencies

Results throughout section 4 provide support for the *Influence hypothesis*. Firms increase their lobbying of an agency when that agency is engaged in company-related rulemaking, issues company waivers, initiates company investigations, and issues contract grants to the company. Companies benefit from these outcomes: compared to companies not lobbying an executive agency, the lobbying firm earns higher abnormal returns upon an agency's issuance of company-related rules, they obtain larger contract grants, and they appear to receive less stringent enforcement actions.

These findings raise the question of what motivates agencies to provide these benefits to companies. Prior literature focusing on lobbying of Congress highlights the benefits that Congressional members obtain from companies, in particular campaign contributions. In contrast, agency staff do not rely on campaign contributions.

One benefit that companies can provide to agency staff is private sector opportunities, what is commonly referred to as the revolving door. If agency staff are motivated by private sector opportunities, then these staff will be incentivized to provide benefits to companies that can offer such opportunities. That is, the quid pro quo effects will be strongest among agencies with strong private sector connections, and company lobbying should be concentrated within these agencies.

To empirically test this prediction, we utilize the data from Duchin and Wang (2024). They categorize agencies based on the percent of regulators that worked in the private sector for at least six consecutive months prior to and following their regulator position. <sup>14</sup> They identify the ten agencies with the highest portion of revolving door regulators, and we refer to these agencies as *Revolving door agency*. We estimate regressions similar to those found in prior tables, in which the dependent variable is *Lobbying*<sub>f,a,t</sub>. The key independent variables include the agency actions examined in prior tables, and each of these variables interacted with *Revolving door agency*. The same set of saturated fixed effects used in earlier tables are also included. Results are shown in Table 9.

We begin in column 1, with an examination of company lobbying as a function of the rulemaking of each agency. We defined *Relatedness<sub>f,a,t</sub>* similar to before, but we calculate the cosine similarity between the firm-year 10K and the agency's total rulemaking activity, i.e., both proposed rules and rules. Lobbying on company-related rulemaking is potentially driven by both an information channel and an influence channel. While the influence channel should be concentrated within agencies with stronger revolving doors, the information channel should apply across all agencies. Findings in column 1 indicate that both these channels play a role in the rulemaking context. First, companies are significantly more likely to lobby any agency that is engaged in company-related rulemaking, as evidenced by the significantly positive coefficient on *Relatedness*. Second, this tendency to lobby rulemaking agencies is significantly higher if that agency has a stronger revolving door relation with the private sector, as evidenced by the

<sup>&</sup>lt;sup>14</sup> The ten agencies with the highest rate of 'revolving door regulators' include: Department of Energy, Federal Communications Commission, Securities and Exchange Commission, Federal Aviation Administration, Bureau of Industry and Security, National Highway Traffic Safety Administration, Commodity Futures Trading Commission, Federal Energy Regulatory Commission, Federal Trade Commission, and Internal Revenue Service.

significantly positive coefficient on the interaction term *Relatedness* × *Revolving door agency*. In economic terms, a one standard increase in agency rules related to the firm corresponds to a 14% increase in lobbying that agency if the agency does not have a strong revolving door; in comparison, the analogous effect is 40% if that agency does have a strong revolving door.

In subsequent columns, we focus on cases in which lobbying is more likely driven by the influence channel: agency waivers, agency investigations, and agency contracts. As shown in columns 2 and 3, for both agency waivers and agency investigations, we find that companies' propensities to lobby the agency are entirely concentrated within agencies with stronger revolving doors. Neither *Agency waiver* nor *Investigation start* are significant at conventional levels. In contrast the interaction terms *Agency waiver* × *Revolving door agency* and *Investigation Start* × *Revolving door agency* are significant at the 5 and 1% levels, respectively.

Finally, in columns 4 and 5, we find that companies are significantly more likely to lobby an agency in the year that the agency grants a contract to that agency. Among larger contracts, defined as contracts over \$100,000, we find some evidence that this propensity is significantly greater among revolving door agencies.

In aggregate, results in Tables 3 – 8 provide support for the *Influence Hypothesis*, and Table 9 sheds light on the underlying mechanisms. Companies lobby executive agencies both to provide information and to seek influence, and this influence seeking is concentrated among agencies with stronger revolving door relations with the private sector.

# 6. A shock to the power of agencies

On June 28, 2024, the Supreme Court overturned what is commonly known as the Chevron doctrine. The Chevron doctrine was initially determined by a 1984 decision in Chevron v. Natural Resources Defense Council, and it gave executive agencies considerable power. Specifically, it required courts to evaluate issues following a two-step process. First, if Congress had clearly addressed the issue in the past, then Congress's intent must be followed. Second, if Congress had not clearly addressed the issue but an executive agency had issued guidance, then as long as this guidance is 'reasonable', the agency's interpretation must be followed. The rationale behind Chevron was that agencies have considerable expertise, and this expertise should be respected even if another body (e.g., a court) might prefer a different outcome.

In overturning Chevron, the Supreme Court effectively decreased the power of agencies, as agency decisions can now be overturned by future court rulings. The implication is that the overturning of Chevron decreases the benefits of lobbying executive agencies. Any benefits that companies obtain through lobbying have a higher probability of being reversed.

The overturning of Chevron represents a negative shock to firms that have relied on lobbying of executive agencies in the past. As demonstrated throughout the paper, such lobbying contributed to economically significant gains for firms, and at least a portion of these gains are characterized by greater uncertainty in the post-Chevron world.

We take advantage of this natural shock by examining company abnormal returns around the Chevron decision, as a function of firms' past lobbying. We define abnormal returns on each day, over the interval of days -5, +5. We regress these ARs on a dummy equal to one if the firm lobbied at least one executive agency in the past year, the log of dollars spent lobbying over the

past ear, a dummy equal to one if the firm lobbied Congress in the past year, and log of firm size. There is one observation per firm. Results are shown in Table 10.<sup>15</sup> The dependent variable is AR's on day -5 in column 1, on day -4 in column 2, ..., and on day +5 in column 11.

Results indicate that companies that lobbied at least one executive agency over the past year had significantly lower abnormal returns on both day 0 and day +1, with coefficients of -0.523 and -0.476. There is a slight reversion on day +2, as indicated by the coefficient of 0.375. Coefficients on other days are mostly insignificant (the only exception is day +5, which is significant only at the 10% level). Over the three-day interval [0, +2], the cumulative abnormal return is approximately -0.6%, which is in line or greater than other papers' findings regarding the value of lobbying (see, e.g., Borisov et al. and Neretina). For a company with a market value of \$31 billion (the median for an S&P500 company), abnormal returns over these three days equate to a decrease in value of nearly \$186 million.

These findings complement those of Brown and Huang (2015) and Borisov et al. (2011), who both find that a decrease in political access is associated with significantly negative abnormal returns, among the subsample of firms that previously benefited most from such access. While both these papers focus generally on political access, including access to politically elected officials who rely on companies for campaign contributions, we show that the value of such access extends to executive agencies. As such, our findings contribute to the literature on regulatory capture.

<sup>&</sup>lt;sup>15</sup> We obtain returns data from Refinitiv, because CRSP data for 2024 is not yet available. Refinitiv data is available for 490 of the 500 companies in our sample.

<sup>&</sup>lt;sup>16</sup> In a regression where the dependent variable equals abnormal returns over days 0,-2 (not tabulated), the coefficient on executive agency lobbying is -0.631, significant at the 5% level.

#### 6. Conclusion

This paper analyzes the lobbying activities of U.S. public firms between 1999 and 2023. We show that public firms tend to lobby bureaucratic agencies in addition to Congress. We test two hypotheses to explain why firms lobby government agencies: the *Information Hypothesis* and the *Influence Hypothesis*. Under the *Information Hypothesis*, companies lobby agencies to provide potentially valuable information, for example about the regulated industry. Under the *Influence Hypothesis*, companies lobby agencies to extract potential benefits. To empirically test these hypotheses, we examine four key forms of agency activity: rulemaking, waivers and special exemptions, investigations and enforcement, and the issuance of government contracts. Across all our tests, we find consistent support for the *Influence Hypothesis*.

We use the Supreme Court's Chevron decision as a shock to the power of government agencies. The date of the decision can be viewed as exogenous. We find that around this exogenous shock, companies who relied on lobbying executive agencies experienced a significant drop in value.

Lobbying is frequently characterized as quid pro quo: companies provide favours in return for granting favours. In the world of Congressional lobbying, the favours granted to government officials represent campaign contributions and the potential for higher re-election likelihoods. These types of favours are less relevant when lobbying bureaucrats. Our results suggest that there is nevertheless a quid pro quo relation between lobbying firms and bureaucrats, where the benefit offered by firms represents potential jobs in the private sector, what is commonly referred to as the revolving door.

The ability of firms to extract benefits from government bureaucrats, in addition to any benefits extracted from Congress, suggests that companies' influence over government actions is even greater than previously recognized.

#### References

Adelino, M., & Dinc, I. S. (2014). Corporate distress and lobbying: Evidence from the Stimulus Act. *Journal of Financial Economics*, *114*(2), 256-272.

Ağca, Ş., & Igan, D. (2023). The lion's share: Evidence from federal contracts on the value of political connections. *The Journal of Law and Economics*, 66(3), 609-638.

Blackburne, T., Kepler, J. D., Quinn, P. J., & Taylor, D. (2021). Undisclosed SEC investigations. *Management Science*, 67(6), 3403-3418.

Borisov, A., Goldman, E., & Gupta, N. (2016). The corporate value of (corrupt) lobbying. *The Review of Financial Studies*, 29(4), 1039-1071.

Brogaard, J., Denes, M., & Duchin, R. (2021). Political influence and the renegotiation of government contracts. *The Review of Financial Studies*, *34*(6), 3095-3137.

Brown, J., Huang, J., 2020. All the president's friends: political access and firm value. *Journal of Financial Economics* 138, 415 – 431.

Cox, C. (2023). Lobbying for government appropriations. *The RAND Journal of Economics*, 54(3), 443-483.

De Figueiredo, J., & Silverman, B. (2006) Academic earmarks and the returns to lobbying. The *Journal of Law & Economics*, 49, 597-625.

Duchin, R., & Sosyura, D. (2012). The politics of government investment. *Journal of Financial Economics*, 106(1), 24-48.

Gregor, M. 2011. Corporate lobbying: A review of the recent literature, Working Paper, IES.

Grossman, G. M., and E. Helpman. 2001. Special Interest Politics. Cambridge, MA: MIT Press.

Kang, K. (2016). Policy influence and private returns from lobbying in the energy sector. *The Review of Economic Studies*, 83(1), 269-305.

Kalmenovitz, J., Lowry, M., & Volkova, E. (2024). Regulatory Fragmentation. *The Journal of Finance*, Forthcoming

Kerwin, C. M., & Furlong, S. R. (2018). Rulemaking: How government agencies write law and make policy. Cq Press.

Gantchev, N., Goldman, J., & Zhang, S. (2024). The Role of Social Value in Contracting. SSRN Working Paper

Kerr, W. R., Lincoln, W. F., & Mishra, P. (2014). The dynamics of firm lobbying. *American Economic Journal: Economic Policy*, 6(4), 343-379.

Kwon, S., Lowry, M., & Verardo, M. (2023). Firms' transition to green: Innovation versus lobbying. *European Corporate Governance Institute–Finance Working Paper*, (921).

Lambert, T. (2019). Lobbying on regulatory enforcement actions: Evidence from US commercial and savings banks. *Management Science*, 65(6), 2545-2572.

Leippold, M., Sautner, Z., Yu, T., 2024. Corporate climate lobbying. Working paper.

Lowry, M. (2024). The questions being asked: Academic research, the media, and regulators. *Financial Review*.

Neretina, E., 2024. Corporate lobbying and returns to non-lobbying industry competitors. *Working paper.* 

McKay, A. M. (2011). The decision to lobby bureaucrats. *Public choice*, 147, 123-138.

Peltzman S (1976) Towards a more general theory of regulation. J. Law Econom. 19(2):211–240.

Stigler G (1971) The theory of economic regulation. *Bell J. Econom. Management Sci.* 2(1):3–21.

Tovar, P. (2011). Lobbying costs and trade policy. *Journal of International Economics*, 83(2), 126-136.

Yackee, J. W., & Yackee, S. W. (2006). A bias towards business? Assessing interest group influence on the US bureaucracy. *The Journal of Politics*, 68(1), 128-139.

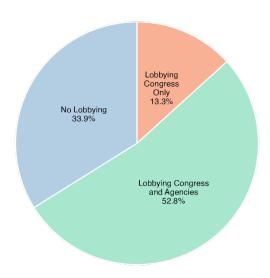
You, H. Y. (2017). Ex post lobbying. The Journal of Politics, 79(4), 1162-1176.

Yu, F., and X. Yu. 2011. Corporate lobbying and fraud detection. *Journal of Financial and Quantitative Analysis* 46:1865–91.

# Figure 1: Time-Series of Lobbying Activities

The sample consists of the 500 largest companies in the CRSP-Compustat universe for each year between 1999 and 2023. Panel A presents a pie chart showing the percentage of company-year observations where companies did not lobby, lobbied only Congress or both Congress and executive agencies. Panel B shows the total lobbying dollars spent by companies, on average each year, as depicted by the pink bars and labelled on the right-hand y-axis. It also shows the average number of agencies lobbied, as depicted by the purple line and labelled on the left-hand y-axis.

Panel A: Companies' propensity to lobby Congress and executive agencies



Panel B: Aggregate lobbying dollars and average number of agencies lobbied (per company)

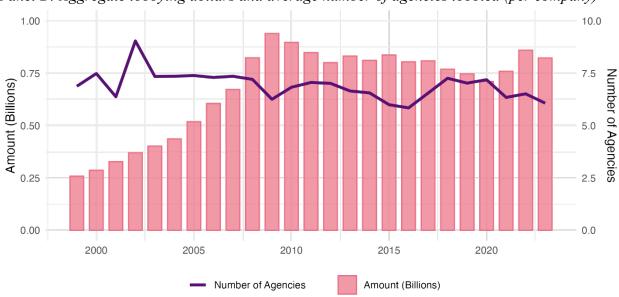
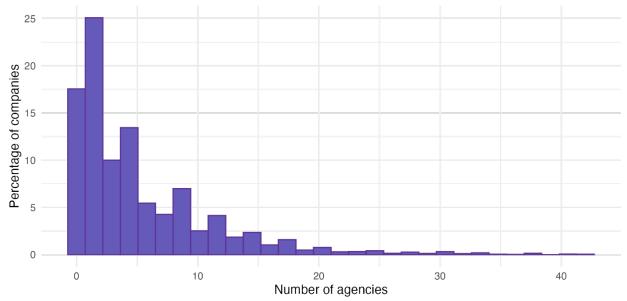


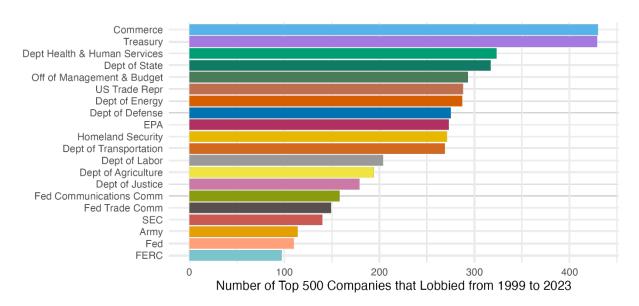
Figure 2: Distribution of the Number of Agencies that Companies Lobby

The sample consists of the 500 largest companies in the CRSP-Compustat universe for each year between 1999 and 2023. The figure shows the total number of agencies lobbied by each firm during the sample years. The list of agencies is limited to the 43 most common agencies and is consolidated at the parent agency level.

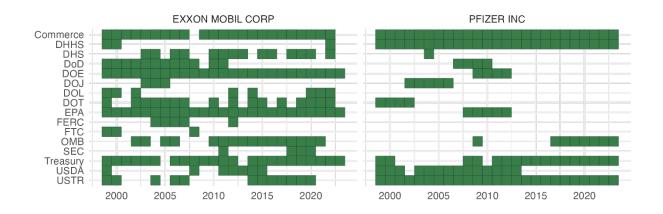


# Figure 3: Distribution of Agencies Most Frequently Lobbied

The sample consists of the 500 largest companies in the CRSP-Compustat universe for each year between 1999 and 2023. The figure in Panel A shows the most frequently lobbied agencies, with the bars representing the total number of companies that lobbied each agency during the sample years. Panel B show the lobbying trends for two selected companies: Exxon Mobil and Pfizer for selective agencies across the years. Table A1 in Appendix provides a list of full agency names. *Panel A. Most Common Agencies* 



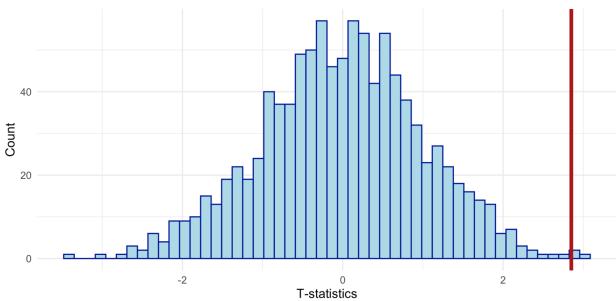
Panel B. Lobbying Consistency for Exxon Mobil and Pfizer



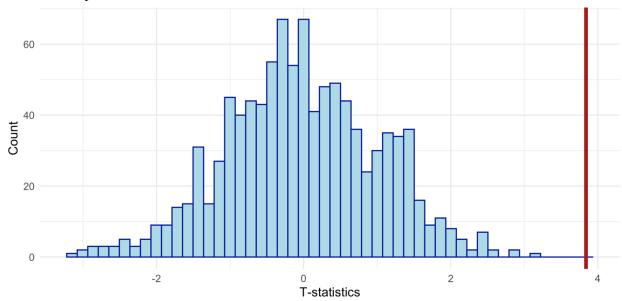
# Figure 4: Placebo Analysis, Agency Rulemaking

This figure examines the strength of the relationship between lobbying and rulemaking using placebo simulations. The simulations are generated as follows: we take the company-agency-year panel and replace agency names with placebo agency names by randomly reshuffling them without repetition. The reshuffling is consistent across observations, meaning that if, in one observation, the SEC is replaced with the DHHS, it is replaced in the same way for all observations. This procedure is repeated 1,000 times. We then re-estimate model 1 from Table 3. The blue bars represent the t-statistics from the simulations, while the red bar represents the actual t-statistic. Panel B (Panel C, Panel D) repeats the same procedure for model 2 (model 3, model 4) from Table 3.

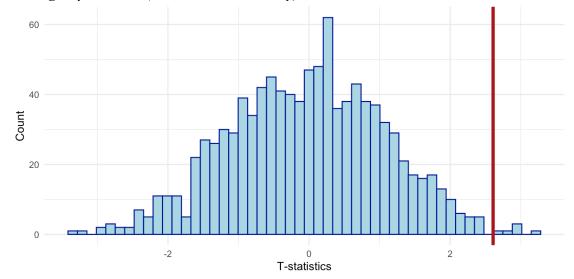
Panel A: Final Rules



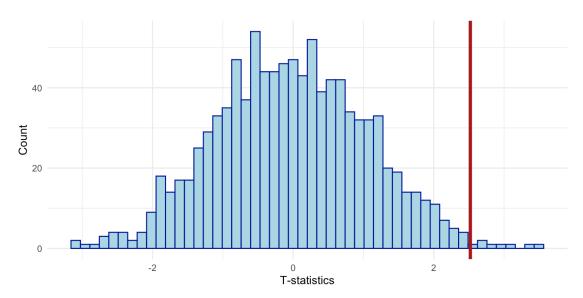
Panel B: Proposed Rules



Panel C: Agency Waivers (measured as a dummy)



Panel D: Number of Agency Waivers



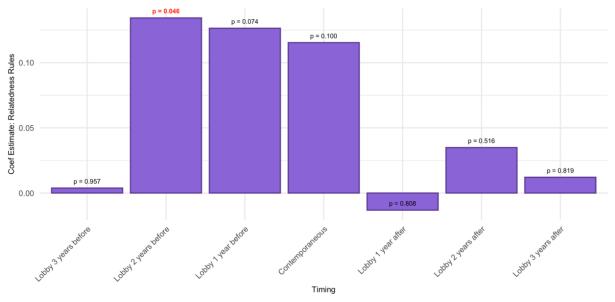
# Figure 5: Timing, Agency Rulemaking

This figure illustrates the timing dynamics of the correlation between agency lobbying and its determinants from Table 3. It presents results from a company-agency-year panel regression, where lobbying is regressed on leads and lags of the determinants, controlling for company-year, agency-year, and agency-company fixed effects. The regression equation is:

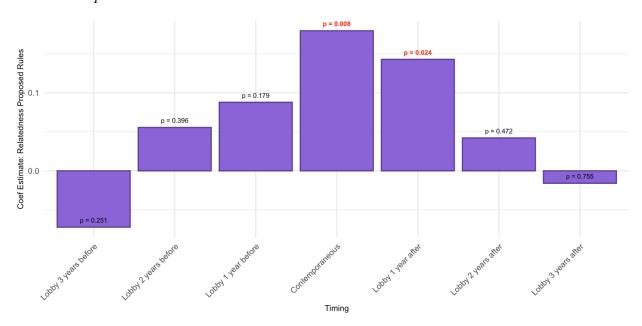
$$Lobby_{f,a,t} = \sum_{i=-3}^{+3} var_{f,a,t-i} + \gamma_{f,a} + \kappa_{f,t} + \zeta_{a,t}$$

where  $Lobby_{f,a,t}$  indicates whether firm f lobbied agency a in year t,  $var_{f,a,t-i}$  is a rule-related variable measured i years before or after year t, and  $\gamma_{f,a}$ ,  $\kappa_{f,t}$ ,  $\zeta_{a,t}$  are fixed effects. The coefficients are shown in reverse order; for example, in Panel A, the first bar represents the coefficient for the variable measured three years after year t. Panels B, C and D report different variables: relatedness to proposed rules, waivers as a dummy, and the number of waivers, respectively. The bars denote coefficients, and p-values are displayed above each bar.

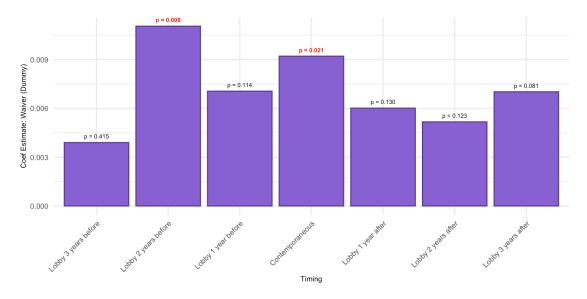
Panel A: Rules



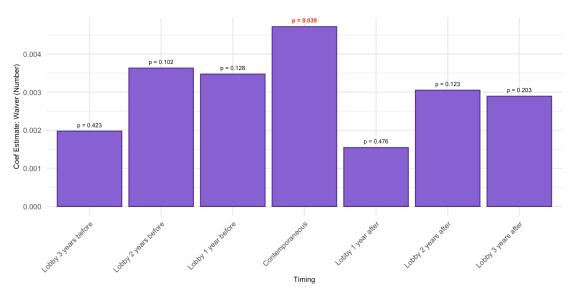
Panel B: Proposed Rules



Panel C: Agency Waivers (measured as a dummy)



Panel D: Number of Agency Waivers

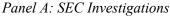


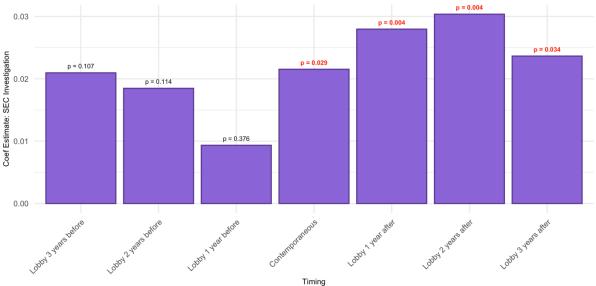
### Figure 6: Timing, Agency Investigations

This figure illustrates the timing dynamics of the correlation between agency lobbying and SEC (DoL) investigations from Table 5. Specifically, it estimates the following regression:

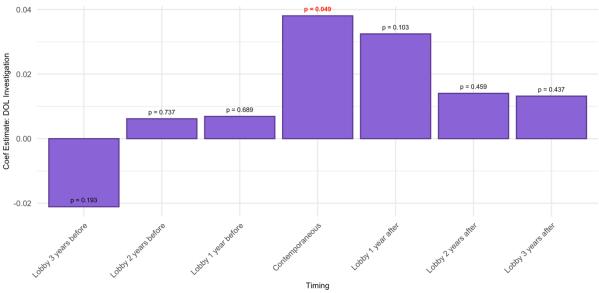
$$Lobby_{f,t} = \sum_{i=-3}^{+3} Investigation_{f,t-i} + \delta_f + \vartheta_t$$

where  $Lobby_{f,t}$  indicates whether firm f lobbied agency SEC (DoL) agency in year t,  $var_{f,t-i}$  is a dummy. Variable that indicates where SEC (DoL) initiated firm investigation in i years before or after year t, and  $\delta_f$ ,  $\vartheta_t$  are fixed effects. The coefficients are shown in reverse order; for example, in Panel A, the first bar represents the coefficient for the SEC investigation measured three years after year t. Panel B repeats analysis from Panel for the DoL investigations. The bars denote coefficients, and p-values are displayed above each bar.





Panel B: DoL Investigations

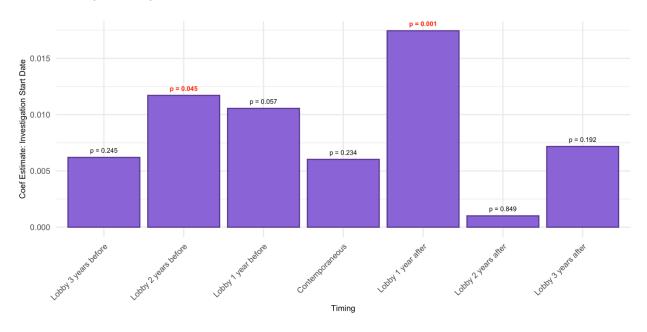


# **Figure 7: Timing, Enforcement Actions**

This figure illustrates the timing dynamics of the correlation between agency lobbying and its determinants from Table 6. It presents results from a company-agency-year panel regression, where lobbying is regressed on leads and lags of the determinants, controlling for company-year, agency-year, and agency-company fixed effects. The regression equation is:

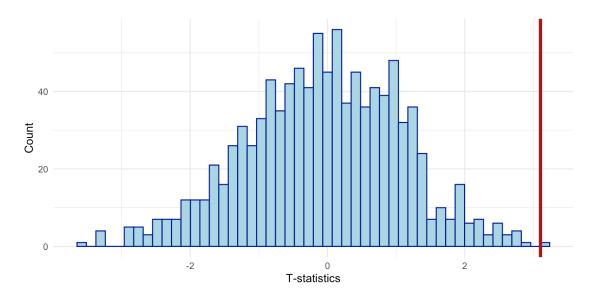
Lobby<sub>f,a,t</sub> = 
$$\sum_{i=-3}^{+3} Investigation Start_{f,a,t-i} + \gamma_{f,a} + \kappa_{f,t} + \zeta_{a,t}$$

where  $Lobby_{f,a,t}$  indicates whether firm f lobbied agency a in year t,  $Investigation\ Start_{f,a,t-i}$  is measured i years before or after year t, where year t is defined as one year prior to the enforcement action date.  $\gamma_{f,a}$ ,  $\kappa_{f,t}$ ,  $\zeta_{a,t}$  are fixed effects. The coefficients are shown in reverse order; for example, the first bar represents the coefficient for the variable measured three years after year t.



# Figure 8 Placebo analysis, Agency Enforcement Actions

This figure examines the strength of the relationship between lobbying and agency enforcement actions using placebo simulations. The simulations are generated as follows: we take the company-agency-year panel and replace agency names with placebo agency names by randomly reshuffling them without repetition. The reshuffling is consistent across observations, meaning that if, in one observation, the SEC is replaced with the DHHS, it is replaced in the same way for all observations. This procedure is repeated 1,000 times. We then re-estimate model 1 from Table 6. The blue bars represent the t-statistics from the simulations, while the red bar represents the actual t-statistic.

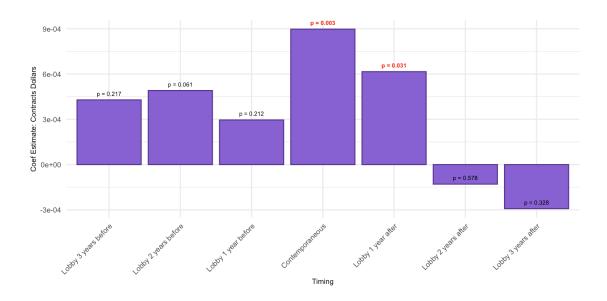


# Figure 9: Timing, Government Contracts

This figure illustrates the timing dynamics of the correlation between agency lobbying and its determinants from Table 8. It presents results from a company-agency-year panel regression, where lobbying is regressed on leads and lags of the determinants, controlling for company-year, agency-year, and agency-company fixed effects. The regression equation is:

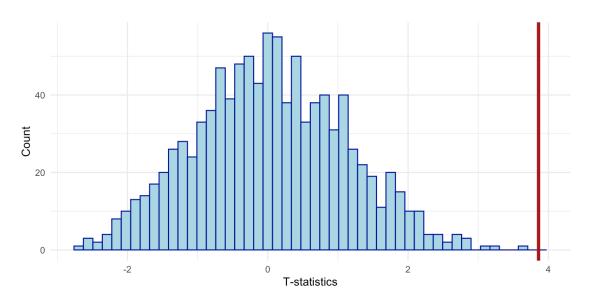
Lobby<sub>f,a,t</sub> = 
$$\sum_{i=-3}^{+3} contract_{f,a,t-i} + \gamma_{f,a} + \kappa_{f,t} + \zeta_{a,t}$$

where  $Lobby_{f,a,t}$  indicates whether firm f lobbied agency a in year t,  $contract_{f,a,t-i}$  is a logarithm of the total dollar amount of contracts awarded in year t-i to firm by agency, and  $\gamma_{f,a}$ ,  $\kappa_{f,t}$ ,  $\zeta_{a,t}$  are fixed effects. The coefficients are shown in reverse order; for example, in Panel A, the first bar represents the coefficient for the variable measured three years after year t.



# Figure 10: Placebo analysis, Contract grants

This figure examines the strength of the relationship between lobbying and contract grants using placebo simulations. The simulations are generated as follows: we take the company-agency-year panel and replace agency names with placebo agency names by randomly reshuffling them without repetition. The reshuffling is consistent across observations, meaning that if, in one observation, the SEC is replaced with the DHHS, it is replaced in the same way for all observations. This procedure is repeated 1,000 times. We then re-estimate model 1 from Table 8. The blue bars represent the t-statistics from the simulations, while the red bar represents the actual t-statistic.



# Table 1: Descriptive Statistics at the firm-year level

The sample consists of the top 500 largest companies in the CRSP-Compustat universe each year between 1999 and 2023. The table shows firm-year summary statistics. *Firm size* is measured as total assets in millions. *Lobby dollars* represents the total amount of firm lobbying expenses obtained from LD-2 forms, measured in millions. *# Agencies lobbied* is the number of agencies lobbied in a year. *# Issues lobbied* indicates the total number of issues the company lobbied on. *Enforcement penalty dollars* is the total amount of fines paid by the firm as a result of enforcement actions (summed across agencies), measured in millions. *# Enforcements* is the number of enforcements actions issued to the company. *Contract dollars* is the total amount of contracts a firm received from all agencies, measured in millions. *Waivers received* represents the total number of agency waivers a firm received in a given year. All variables are defined in Table A2.

Variable	Mean	Q1	Median	Q3
Firm size	53,414	5,344	13,813	36,832
Lobbying dollars	2.004	0	0.620	2.123
# Agencies lobbied	2.446	0	1.000	4.000
# Issues lobbied	6.866	3.000	6.000	10.000
Enforcement penalty dollars	0.019	0	0	0.019
#Enforcements	0.496	0	0	1.000
Contract dollars	21.272	0	0	5.802
Waivers received	1.589	0	0	2.000

# **Table 2. Summary Statistics of Firm-Agency Outcome Variables**

The table presents firm-agency-year statistics for outcome variables for the top 500 companies in the CRSP-Compustat universe between 1999 and 2023. *Lobbying* variable equals to one if a firm lobbied an agency it engaged in lobbying activities with that agency in a given year. The variables *Relatedness*<sub>proposed\_rules</sub> and *Relatedness*<sub>rules</sub> measure the cosine similarity between the text of the firm's annual report and the proposed rules or final rules issued by the agency, respectively. *Waivers received* denotes the number of waivers granted by the agency to a firm in a given year. # *Enforcements* represents the total number of enforcement actions imposed by a given agency on a given firm. *Contract dollars* is the monetary value, in millions, of contracts awarded by a given agency to firms. All variables are defined in Table A2.

Variable	Mean	Q1	Median	Q3
Lobbying	0.056	0	0	0
Relatedness <sub>proposed</sub> rules	0.222	0.187	0.220	0.254
Relatedness <sub>rules</sub>	0.216	0.182	0.216	0.250
Waivers received	0.043	0	0	0
# Enforcements	0.011	0	0	0
Contract dollars	0.488	0	0	0

# Table 3: The Influence of Agency Rulemaking on Firm Lobbying

	Dependent variable: Lobbying <sub>f,a,t</sub>					
	(1)	(2)	(3)	(4)		
Relatedness_rules <sub>f,a,t</sub>	0.111*** (0.036)					
Relatedness_proposed rules <sub>f,a,t</sub>	,	0.155***				
Agency Waiver <sub>f,a,t</sub>		(0.037)	0.011***			
# Agency Waivers <sub>f,a,t</sub>			(0.004)	0.006*** (0.002)		
Num.Obs.	410,499	383,715	462,000	462,000		
R2	0.600	0.603	0.578	0.578		
R2 Adj.	0.531	0.530	0.510	0.510		
FE: company×year	Yes	Yes	Yes	Yes		
FE: company×agency	Yes	Yes	Yes	Yes		
FE: agency×year	Yes	Yes	Yes	Yes		

# Table 4. Abnormal Returns Around Publication of Significant Rules and Proposed Rules

This table examines the abnormal stock returns around the publication dates of significant rules and proposed rules. The sample of significant rules and proposed rules is obtained from the Office of Information and Regulatory Affairs (OIRA). We estimate the relatedness between each rule (and analogously each proposed rule) and a firm using cosine similarity (*Relatednessf,a,t*). The variable *PastLobbyingf,a,t* equals one if a firm lobbied the given agency during the three years prior to the publication of the rule or proposed rule. The dependent variables are cumulative abnormal returns over 3-day and 5-day windows around the publication date. Abnormal returns are calculated as the difference between the firm's stock returns and the S&P 500 returns. All regressions include rule level, company×year, firm×agency, and agency×year fixed effects. Standard errors are clustered at the firm level. All variables are defined in Table A2.

Sample:	Significa	nt Rules	Significant P	roposed Rules
	CAR[-1,1]	CAR[-2,2]	CAR[-1,1]	CAR[-2,2]
$Relatedness_{f,a,t} \times PastLobbying_{f,a,t}$	0.341**	0.332*	0.443***	0.459***
	(0.148)	(0.179)	(0.137)	(0.177)
$Relatedness_{f,a,t}$	0.039	0.213	-0.030	-0.262
	(0.146)	(0.192)	(0.152)	(0.193)
$PastLobbying_{f,a,t}$	-0.062*	-0.058	-0.089**	-0.082*
	(0.036)	(0.044)	(0.035)	(0.047)
Num.Obs.	1,296,260	1,296,260	1,148,621	1,148,621
R2	0.066	0.076	0.064	0.073
R2 Adj.	0.040	0.050	0.034	0.043
FE: rule	Yes	Yes	Yes	Yes
FE: company×year	Yes	Yes	Yes	Yes
FE: company×agency	Yes	Yes	Yes	Yes
FE: agency×year	Yes	Yes	Yes	Yes

# Table 5: The Influence of SEC Investigations on Company Lobbying

This table explores lobbying activity around SEC investigations. The dependent variable in column 1 (column 2) is  $Lobbying_{f,SEC,t}$  ( $Lobbying_{f,DoL,t}$ ), defined as a dummy variable equal to one if firm f lobbied the SEC (DOL) in year t. SEC Investigation (DOL Investigation) is a dummy variable equal to one if firm f was under an SEC (DOL) investigation in year t. Firm size is measured as the logarithm of the firm's total assets; Leverage is measured as (dltt + dlc)/at, where dltt, dlc, and at denote Compustat items. Capex is measured as capx/at, where capx and at are Compustat items. All regressions include company and year fixed effects, and standard errors are clustered at the firm level. All variables are defined in Table A2.

	Dependent variable: Lobbyin				
	(1)	(2)			
SEC Investigation <sub>f,t</sub>	0.028**				
_ ,	(0.012)				
DOL Investigation <sub>f,t</sub>		0.032**			
		(0.014)			
Firm Size <sub>f,t</sub>	0.008	0.021*			
·	(0.010)	(0.013)			
Leverage <sub>f,t</sub>	-0.042	0.017			
- •	(0.036)	(0.038)			
$Capex_{f,t}$	0.215*	0.058			
	(0.124)	(0.158)			
Num.Obs.	11,000	11,500			
R2	0.452	0.444			
R2 Adj.	0.384	0.377			
FE: company	Yes	Yes			
FE: year	Yes	Yes			

# Table 6: The Relation between Agency Enforcement Actions and Company Lobbying

This table investigates the relation between agency enforcement actions and company lobbying. Enforcement action data are obtained from the Violation Tracker database. The dependent variable  $Lobbying_{f,a,t}$  is a dummy variable equal to one if firm f lobbied agency a in year t. The main independent variable in Model 1 is  $Investigation\ Start_{f,a,t}$ , which approximates the start of an investigation; it is a dummy variable equal to one for firm f, agency a, year t, if the firm received a violation fine from that agency in the following year. Models 2 (3 and 4) regress  $Lobbying_{f,a,t}$  on  $Small\ Investigation\ Start_{f,a,t}$  ( $Medium\ Investigation\ Start_{f,a,t}$ ) or  $Large\ Investigation\ Start_{f,a,t}$ ), which is a dummy variable equals to one if firm f received a penalty in the first (second or third) tercile in the following year (i.e., in year t+1). All regressions include company×year, firm×agency, and agency×year fixed effects. Standard errors are clustered at the firm level. All variables are defined in Table A2.

	Dependent variable: Lobbying <sub>f,a,t</sub>					
	(1)	(2)	(3)	(4)	(5)	
Investigation Start <sub>f,a,t</sub>	0.018***		. /		. ,	
	(0.006)					
Small Investigation Start <sub>f,a,t</sub>		-0.011			-0.007	
		(0.007)			(0.007)	
Medium Investigation Startf,a,t			0.012		0.013	
			(0.010)		(0.010)	
Large Investigation Start <sub>f,a,t</sub>				0.014**	0.015**	
				(0.007)	(0.007)	
Num.Obs.	262,500	273,000	273,000	273,000	273,000	
R2	0.597	0.596	0.596	0.596	0.596	
R2 Adj.	0.521	0.521	0.521	0.521	0.521	
FE: company×year	Yes	Yes	Yes	Yes	Yes	
FE: company×agency	Yes	Yes	Yes	Yes	Yes	
FE: agency×year	Yes	Yes	Yes	Yes	Yes	
FE: company×year	Yes	Yes	Yes	Yes	Yes	

#### **Table 7: Abnormal Returns Around Enforcement Actions**

This table examines the abnormal stock returns around agency enforcement actions. The list of enforcement actions is obtained from the Violation Tracker database. The variable  $PastLobbying_{f,a,t}$  equals one if firm f lobbied agency a during the three years prior to the publication of the rule or proposed rule. The dependent variables are cumulative abnormal returns over 3-day (in Model 1) and 5-day (in Models 2-5) windows around the publication date. Abnormal returns are calculated as the difference between the firm's stock returns and the S&P 500 returns. Model 1 and Model 2 estimate the stock reaction to the announcement of all violations. Models 3 (4 or 5) focus on the violations with a dollar amount of fine in the first (second or third) tercile. All regressions include company×year, firm×agency, and agency×year fixed effects. Standard errors are clustered at the firm level. All variables are defined in Table A2.

	All Penalties	All Penalties	Small Penalties	Medium Penalties	Large Penalties
	<b>CAR[-1,1]</b>	<b>CAR[-2,2]</b>	<b>CAR[-2,2]</b>	<b>CAR[-2,2]</b>	<b>CAR[-2,2]</b>
PastLobbying	0.650***	1.006***	1.298	0.788	1.461**
	(0.227)	(0.269)	(0.831)	(0.863)	(0.613)
Num.Obs.	24115	24109	8177	8068	7848
R2	0.472	0.455	0.542	0.572	0.591
R2 Adj.	0.266	0.243	0.311	0.329	-0.152
FE: company×year	Yes	Yes	Yes	Yes	Yes
FE: company×agency	Yes	Yes	Yes	Yes	Yes
FE: agency×year	Yes	Yes	Yes	Yes	Yes

### **Table 8: Agency Contract Grants**

This table explores the relation between firm decisions to lobby an agency and the agency's contract awards to the firms. The independent variable,  $Lobbying_{f,a,t}$ , is a dummy variable equal to one if firm f lobbied agency a in year t. The variable  $Contract\ Grant\ Dollars_{f,a,t}$  represents the natural logarithm of the cumulative dollar value of contracts awarded by agency a to firm f in year t. In model 2, the independent variable  $Contract\ Grant\ Dollars_{f,a,t}$ :  $1\ bid$  is defined similarly, but only includes the value of contracts with exactly one bid. In models a -

	Dependent variable: Lobbying <sub>f,a,t</sub>				
	(1)	(2)	(3)	(4)	(5)
Contract Grant Dollars <sub>f,a,t</sub>	0.002*** (0.000)				
Contract Grant Dollars <sub>f,a,t</sub> :1 bid	,	0.002*** (0.000)			
Contract Grant Dollars <sub>f,a,t</sub> : $> 10k$		(0.000)	0.002*** (0.000)		
Contract Grant Dollars <sub>f,a,t</sub> : > 100k			(0.000)	0.002*** (0.000)	
Contract Grant Dollars $_{f,a,t}$ : $>= 1m$				(0.000)	0.003*** (0.001)
Num.Obs.	390,000	390,000	390,000	390,000	390,000
R2	0.586	0.586	0.586	0.586	0.586
R2 Adj.	0.519	0.519	0.519	0.519	0.519
FE: company×year	Yes	Yes	Yes	Yes	Yes
FE: company×agency	Yes	Yes	Yes	Yes	Yes
FE: agency×year	Yes	Yes	Yes	Yes	Yes

### Table 9: Agency Lobbying and Revolving Door

This table examines how agency-specific incentives influence lobbying efforts directed at the agency. Specifically, we compare lobbying activity toward agencies with a higher proportion of employees transitioning between the private sector ("revolving door" agencies) against other agencies. *Revolving door agencya* is a dummy variable equal to one for the ten agencies with the highest revolving door rates, as listed in Figure 3 of Duchin and Wang (2024). Model 1 assesses the relatedness between a firm's annual report and both proposed and final rules, Model 2 focuses on agency waivers, Model 3 uses approximate investigation start dates from Violation Tracker data, and Models 4-5 estimate the natural logarithm of contractual dollars received from contracts. All regressions include company×year, firm×agency, and agency×year fixed effects. Standard errors are clustered at the firm level, and all variables are defined in Table A2.

		Depende	ent variable: L	obbying <sub>f,a,t</sub>	
	(1)	(2)	(3)	(4)	(5)
$Relatedness_{f,a,t}$	0.081*** (0.027)				
$Relatedness_{f,a,t} \times Revolving door agency_a$	0.153** (0.049)				
Agency Waiver <sub>f,a,t</sub>		0.002 (0.005)			
Agency Waiver <sub>f,a,t</sub> × Revolving door agency <sub>a</sub>		0.018** (0.008)			
Investigation Start <sub>f,a,t</sub>		,	0.006 (0.006)		
Investigation $Start_{f,a,t} \times Revolving door agency_a$			0.038*** (0.011)		
Contract $\$_{f,a,t}$ : 1 bid			` ,	0.001*** (0.000)	
Contract $\$_{f,a,t}$ : 1 bid × Revolving door agency <sub>a</sub>				0.001 (0.001)	
Contract $\$_{f,a,t}$ : $> 100k$				, ,	0.001*** (0.000)
Contract $\$_{f,a,t}$ : $> 100k \times Revolving door agency_a$					0.002* (0.001)
Num.Obs.	377,610	462,000	262,500	390,000	390,000
R2	0.604	0.578	0.597	0.586	0.586
R2 Adj.	0.532	0.510	0.523	0.519	0.519
FE: company×year	Yes	Yes	Yes	Yes	Yes
FE: company×agency	Yes	Yes	Yes	Yes	Yes
FE: agency×year	Yes	Yes	Yes	Yes	Yes

#### **Table 10: Abnormal Returns Around Chevron Decision**

This table estimates firms' stock market reactions around the Chevron Decision on June 24, 2024. The dependent variable is the abnormal stock return, defined as the difference between a firm's stock return and the S&P 500 return, on various dates before or after the decision date. Lobby Agency is a dummy variable equal to one if a firm lobbied at least one agency in 2023, while Lobby Amount is the logarithm of the total amount spent on lobbying in 2023. Lobby Congress is a dummy variable equal to one if a firm lobbied Congress in 2023. Firm Size is the logarithm of the firm's total assets in 2023. The analysis includes Fama-French 48 industry fixed effects, and standard errors are clustered at the Fama-French 48 industry level. All variables are defined in Table A2.

	-5	-4	-3	-2	-1	ırn on day 0	1	2	3	4	5
	-5	-4	-3	-2	-1	U	1	2	3	4	3
Lobby	-0.021	0.316	0.135	-0.114	-0.033	-0.521***	-0.476**	0.376**	0.199	-0.026	0.305*
Agency	(0.132)	(0.290)	(0.155)	(0.557)	(0.383)	(0.191)	(0.193)	(0.175)	(0.143)	(0.168)	(0.166)
Lobby	0.011	0.025	-0.033	-0.024	0.039	0.096**	0.056	-0.175***	-0.069	-0.023	0.031
Amount	(0.046)	(0.069)	(0.053)	(0.102)	(0.074)	(0.046)	(0.065)	(0.047)	(0.061)	(0.054)	(0.042)
Lobby	-0.279	-0.534	0.572	0.259	-1.016	-0.927*	-0.165	2.072***	0.694	0.305	-0.436
Congress	(0.583)	(0.825)	(0.603)	(1.200)	(0.704)	(0.541)	(0.771)	(0.588)	(0.905)	(0.783)	(0.637)
Firm Size	-0.078	-0.270*	0.178**	0.091	0.048	-0.071	0.175***	0.230**	0.066	0.341***	-0.191***
	(0.068)	(0.144)	(0.078)	(0.069)	(0.055)	(0.087)	(0.061)	(0.101)	(0.094)	(0.064)	(0.064)
Num.Obs.	490	490	490	490	490	490	490	490	490	490	490
R2	0.161	0.176	0.209	0.090	0.131	0.300	0.264	0.209	0.218	0.341	0.207
R2 Adj.	0.076	0.093	0.129	-0.002	0.043	0.229	0.189	0.128	0.138	0.274	0.127
FE: Ind	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

### **Appendix**

### Figure A1 Waiver Examples

Panel A provides an example of a waiver granted to Ford Motor Company by the Department of Labor, giving the company greater flexibility in managing retirement benefits. Panel B shows an example of the Federal Energy Regulatory Commission's (FERC) blanket approval for certain wholesale electric power transactions by Georgia-Pacific Corporation.

Panel A Department of Labor Waiver to Ford Motor

https://www.federalregister.gov/documents/2009/06/26/E9-15159/notice-of-proposed-exemptions

# Ford Motor Corporation and Its Affiliates (Collectively, Ford) Located in Detroit, MI

# **Proposed Exemption**

The Department is considering granting an exemption under the authority of section 408(a) of the Act and in accordance with the procedures set forth in 29 CFR part 2570, subpart B (55 FR 32836, 32847, August 10, 1990).

#### **Section I. Covered Transactions**

If the exemption is granted, the restrictions of sections 406(a)(1)(B), 406(a)(1)(D), 406(b)(1), and 406(b) (2) of the Act shall not apply, effective July 13, 2006, to: (1) Monthly cash advances to Ford by the Independent Health Care Trust for UAW Retirees of Ford Motor Company (the DC VEBA), as defined in section III(f), below, of this exemption, to reimburse Ford for the estimated mitigation of certain health care expenses (the Mitigation), as defined in section III(h), below, of this exemption, and during the period from July 14, 2006 through February 28, 2007, for the payment of dental expenses incurred by participants in the DC VEBA; and (2) an annual "true-up" of the Mitigation payments and dental expenses against the actual expenses incurred, with the result that: (a) if Ford has been underpaid by the DC VEBA, Ford receives the balance outstanding from the DC VEBA with interest, or (b) if the DC VEBA has overpaid Ford, Ford reimburses the DC VEBA for the amount overpaid, with interest.

#### DOCUMENT HEADINGS

Department of Energy
Federal Energy Regulatory Commission
[Docket No. ER00-3604-000 and ER00-3604-001]

December 12, 2000.

Georgia-Pacific Corporation (Georgia-Pacific) submitted for filing a rate schedule under which Georgia-Pacific will engage in wholesale electric power and energy transactions at market-based rates. Georgia-Pacific also requested waiver of various Commission regulations. In particular, Georgia-Pacific requested that the Commission grant blanket approval under 18 CFR Part 34 of all future issuances of securities and assumptions of liability by Georgia-Pacific.

On December 8, 2000, pursuant to delegated authority, the Director, Division of Corporate Applications, Office of Markets, Tariffs and Rates, granted requests for blanket approval under Part 34, subject to the following:

Within thirty days of the date of the order, any person desiring to be heard or to protest the blanket approval of issuances of securities or assumptions of liability by Georgia-Pacific should file a motion to intervene or protest with the Federal Energy Regulatory Commission, 888 First Street, NE., Washington, DC 20426, in accordance with Rules 211 and 214 of the Commission's Rules of Practice and Procedure (18 CFR 385.211 and 385.214).

Absent a request for hearing within this period, Georgia-Pacific is authorized to issue securities and assume obligations or liabilities as a guarantor, indorser, surety, or otherwise in respect of any security of another person; provided that such issuance or assumption is for some lawful object within the corporate purposes of the applicant, and compatible with the public interest, and is reasonably necessary or appropriate for such purposes.

The Commission reserves the right to require a further showing that neither public nor private interests will be adversely affected by continued approval of Georgia-Pacific's issuances of securities or assumptions of liability.

Notice is hereby given that the deadline for filing motions to intervene or protests, as set forth above, is January 8, 2001.

# **Appendix**

# **Table A1: List of Agencies.**

This table lists all agencies used in the analysis. The second column shows their abbreviations, while the third and fourth columns indicate where agencies write rules and notices, respectively. The fifth column shows whether an agency had at least one enforcement action (Violation Tracker), and the last column indicates whether an agency issues government contracts (usaspending.gov).

Agency	Abbreviation	Rules	Notices	Enforcements	Contracts
Agency For International Development	USAID	Yes	Yes	No	Yes
Central Intelligence Agency	CIA	No	No	No	No
Commodity Futures Trading Commission	CFTC	Yes	Yes	Yes	Yes
Department of Agriculture	USDA	Yes	Yes	Yes	Yes
Department of Air Force	USAF	No	Yes	No	No
Department of Army	Army	Yes	Yes	No	No
Department of Commerce	Commerce	Yes	Yes	Yes	Yes
Department of Defense	DOD	Yes	Yes	No	Yes
Department of Education	DOEdu	Yes	Yes	Yes	Yes
Department of Energy	DOE	Yes	Yes	Yes	Yes
Department of Health and Human Services	HHS	Yes	Yes	Yes	Yes
Department of Housing and Urban Development	HUD	Yes	Yes	Yes	Yes
Department of Justice	DOJ	Yes	Yes	Yes	Yes
Department of Labor	DOL	Yes	Yes	Yes	No
Department of Navy	Navy	No	Yes	No	No
Department of State	DOS	Yes	Yes	No	Yes
Department of Transportation	Transportation	Yes	Yes	Yes	Yes
Department of Treasury	Treasury	Yes	Yes	Yes	Yes
Department of Veteran Affairs	VA	Yes	Yes	No	Yes
Environmental Protection Agency	EPA	Yes	Yes	Yes	Yes
Export-Import Bank	EXIM	Yes	Yes	No	Yes
Federal Communications Commission	FCC	Yes	Yes	Yes	Yes
Federal Deposit Insurance Corporation	FDIC	Yes	Yes	Yes	No
Federal Emergency Management Agency	FEMA	Yes	Yes	No	Yes
Federal Energy Regulatory Commission	FERC	No	Yes	Yes	No
Federal Maritime Commission	FMC	Yes	Yes	Yes	Yes
Federal Reserve System	Fed	Yes	Yes	Yes	No
Federal Trade Commission	FTC	Yes	Yes	Yes	Yes
General Services Administration	GSA	Yes	Yes	No	Yes
Government Accountability Office	GAO	Yes	Yes	No	Yes
International Trade Commission	ITC	Yes	Yes	Yes	Yes
Library Of Congress	LOC	Yes	Yes	No	No
National Aeronautics and Space Administration	NASA	Yes	Yes	No	Yes
National Science Foundation	NSF	Yes	Yes	No	Yes
National Transportation Safety Board	NTSB	Yes	Yes	No	Yes
Nuclear Regulatory Commission	NRC	Yes	Yes	Yes	Yes
Office Of Homeland Security	OHS	Yes	Yes	No	Yes
Office Of Management and Budget	OMB	Yes	Yes	No	No
Office Of United States Trade Representative	USTR	Yes	Yes	No	No
Pension Benefit Guaranty Corporation	PBGC	Yes	Yes	No	No
Postal Service	USPS	Yes	Yes	No	No
Securities and Exchange Commission	SEC	Yes	Yes	Yes	Yes
Small Business Administration	SBA	Yes	Yes	No	Yes

Table A2A: Variable Definitions.

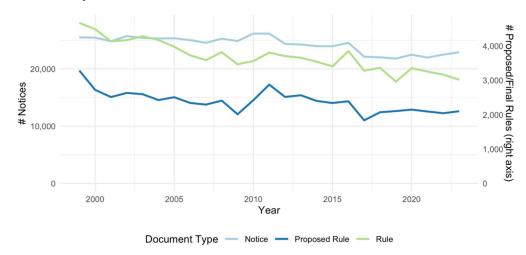
Name	Description	Level	Data Source
Lobbying	Dummy variable that equals to one when company $f$ lobbied agency $a$ in year $t$	Company×agency×year	LD-2 Forms/SOPR
PastLobbying	Dummy variable that equals to one when company <i>f</i> lobbied agency <i>a</i> at least once during years <i>t-3</i> , <i>t-2</i> , or <i>t-1</i>	Company×agency×year	LD-2 Forms/SOPR
Relatednessproposed rules	Cosine similarity between the text of firm f annual report in year t and texts of all proposed rules published by agency a in year t	Company×agency×year	Federal Register, SEC EDGAR
Relatedness <sub>rules</sub>	Cosine similarity between the text of firm f annual report in year t and texts of all final rules published by agency a in year t	Company×agency×year	Federal Register, SEC EDGAR
Relatedness	Cosine similarity between the text of selected proposed/final rule and the text of annual report of firm <i>f</i> in the corresponding year	Company×document	Federal Register, SEC EDGAR
Investigation	Dummy variable that equals to one when firm $f$ is under the SEC investigation in year $t$	Company×year	FOIA requests, Blackburne et al. (2021)
Enforcement	Dummy variable that equals to one if a firm $f$ received an enforcement penalty from agency $a$ in year $t$	Company×agency×year	Violation Tracker
Waiver	Dummy variable that equals to one if a firm <i>f</i> received a regulatory waiver from agency <i>a</i> in year <i>t</i> . We collect regulatory waiver information from Federal Register notice documents by checking the notices that mention firms.	Company×agency×year	Federal Register
Contract dollars	Logarithm of the total dollar amount of contracts received by firm f in year t from agency a	Company×agency×year	USAspending
Abnormal Return	Abnormal return is calculated as difference between daily stock return (in %) and S&P500 daily return (in %).	Company×year	CRSP before 2024 Refinitiv in 2024
Firm Size Leverage	Logarithm of total assets = (dlc+ dltt)/ at where dlc corresponds to debt in current liabilities, dltt to the long-term debt and at to total assets	Company×year Company×year	Compustat Compustat
	=capx/at where capx corresponds to CAPEX and at to total assets	Company×year	Compustat
Lobbying dollars	The total lobbying expenses of firm $f$ in year $t$	Company×year	LD-2 Forms/SOPR
# Agencies lobbied	The total number of agencies lobbied by firm $f$ in year $t$	Company×year	LD-2 Forms/SOPR
# Issues lobbied	The total number of issues firm $f$ lobbied in year $t$	Company×year	LD-2 Forms/SOPR
Lobby Agency	Dummy that equals to one if firm $f$ lobbied at least one agency in year $t$	Company×year	LD-2 Forms/SOPR
Lobby Amount Lobby Congress	Logarithm of <i>Lobbying dollars</i> variable Dummy variable that equals to one when firm <i>f</i> lobbied Congress in year <i>t</i>	Company×year Company×year	LD-2 Forms/SOPR LD-2 Forms/SOPR

#### **Internet Appendix**

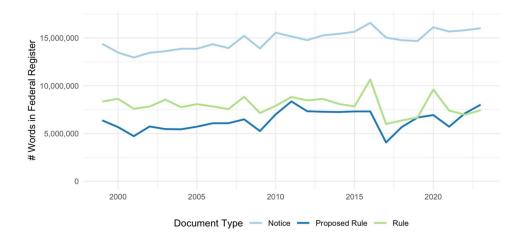
# Figure IA1. Rulemaking in Federal Register

Panel A displays the number of documents in the Federal Register, categorized as notices, proposed rules, and final rules. The number of notices is shown on the left axis, while the number of rules is shown on the right axis. Panel B presents the total number of words for each document type across the sample years.

Panel A. Number of Documents



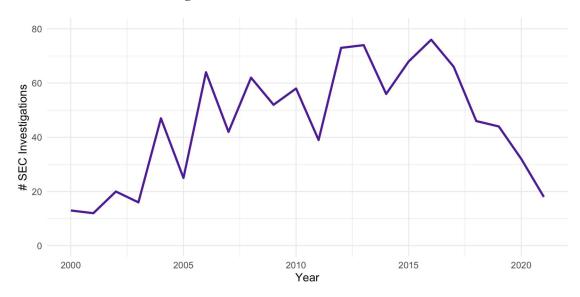
Panel B. Total Number of Words in Documents



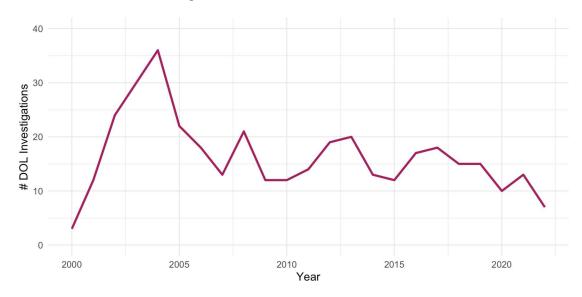
# Figure IA2. SEC/DOL Investigations

This figure illustrates trends in SEC and DOL investigations. Panels A1 and A2 show the number of investigations initiated each year. Panels B1 and B2 display the number of investigations by firm size quartile, while Panels C1 and C2 depict the distribution of investigations across Fama-French 12 industries.

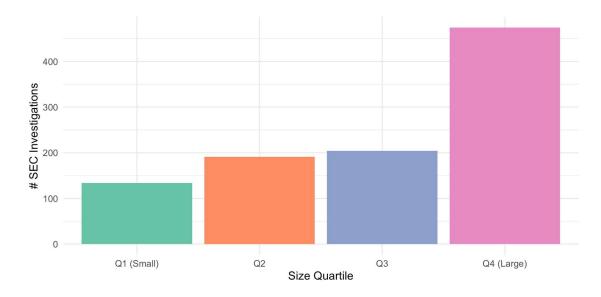
Panel A1. Trends in SEC Investigations



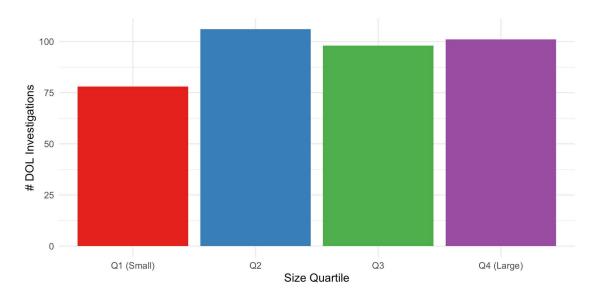
Panel A2. Trends in DOL Investigations



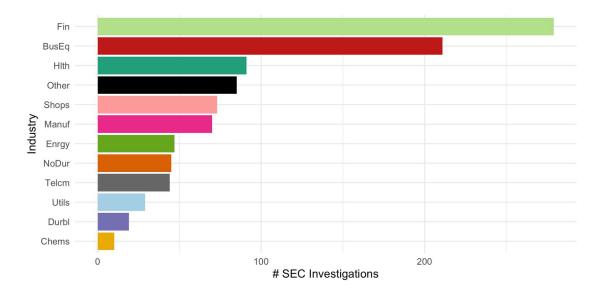
Panel B1. Distribution of SEC Investigation by Firm Size



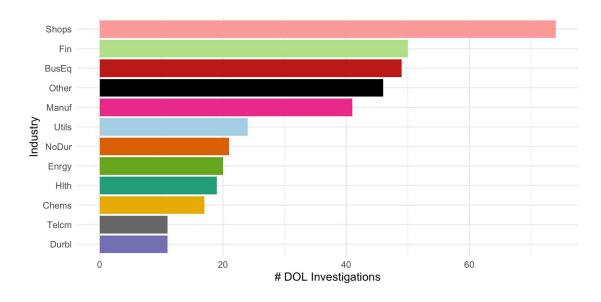
Panel B2. Distribution of DOL Investigation by Firm Size



Panel C1. Distribution of SEC Investigation by Industry



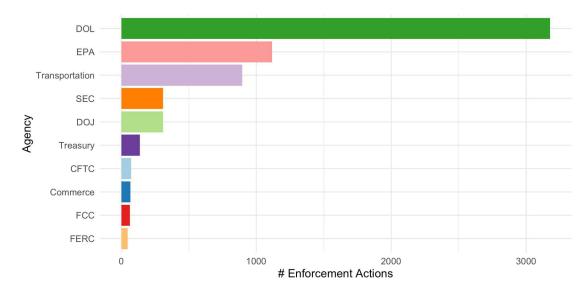
Panel C2. Distribution of DOL Investigation by Industry



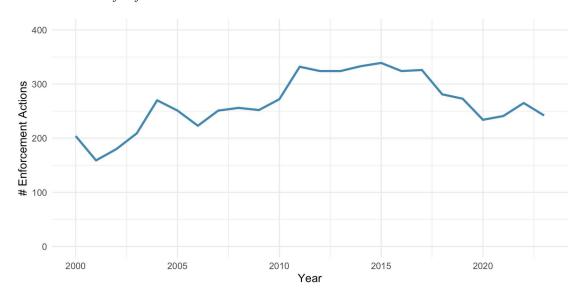
# Figure IA3. Enforcement Actions

This figure presents statistics for enforcement actions sourced from Violation Tracker data. Panel A displays the top 10 agencies with the highest number of enforcement actions. Panel B plots trends in enforcement actions over time. Panel C shows the number of enforcement actions by firm size quartile, while Panel D depicts the distribution across Fama-French 12 industries.

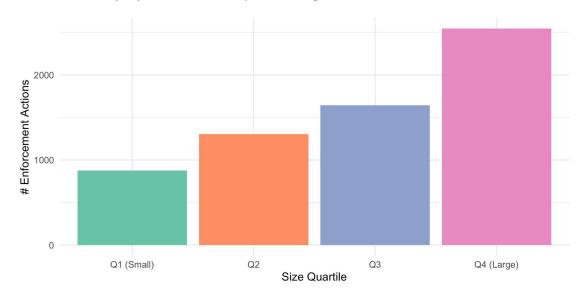
Panel A. Top 10 Agencies by Number of Enforcement Actions



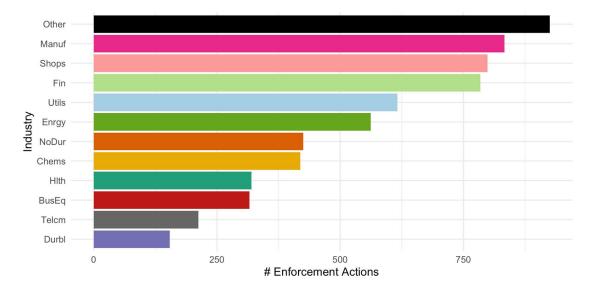
Panel B. Number of Enforcement Actions over Time



Panel C. Number of Enforcement Actions by Firm Size Quartile



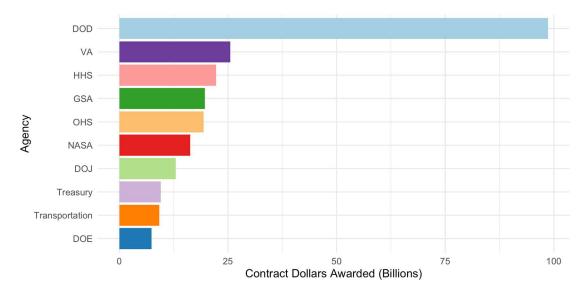
Panel D. Number of Enforcement Actions by Industry



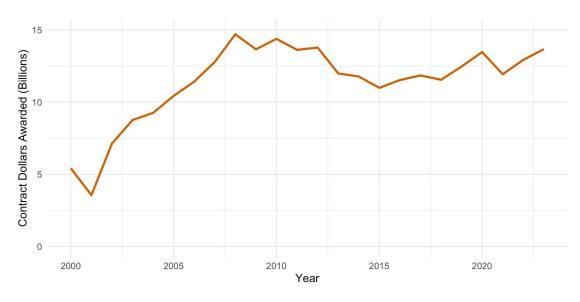
# **Figure IA4 Government Contracts.**

This figure presents statistics for government contract awards based on the data from usaspending.gov. Panel A displays the top 10 agencies that awards the highest amount in contracts. Panel B plots trends in contract awards over time. Panel C shows contract awards by firm size quartile, while Panel D depicts the distribution across Fama-French 12 industries.

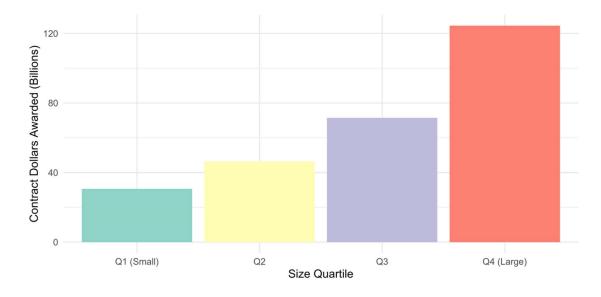
Panel A. Top 10 Agencies that Awards Government Contracts



Panel B. Trend in Government Contracts.



Panel C. Total Amount of Government Contracts by Firm Size



Panel D. Total Amount of Government Contracts by Firm Industry

