The Role of Institutional Investors in Corporate Lobbying

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Abstract

This study investigates whether and how institutional investors affect corporate lobbying of firms in their portfolios. I find that firms' lobbying activities are positively associated with ownership by institutional investors who also lobby. The effect is stronger for the firms that face more constraints to lobbying. I use the Russell index reconstitution to establish causality. I further document three plausible channels. First, institutional investors support firms' lobbying by pushing for the same congressional bills. Second, institutional investors share political resources such as lobbyists with firms. Third, institutional investors protect firms' private information by voting against proposals on additional lobbying disclosure. Overall, the study shows that institutional investors can alleviate the constraints and costs in corporate lobbying.

JEL codes: D22, D72, G23, G38, P16 Keywords: Corporate lobbying, Institutional investors, Constraints to lobbying

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1. Introduction

"I think everybody should have a voice, whether it's conversation with regulators or public politicians."¹ – Larry Fink, BlackRock CEO

Institutional investors play an important role in monitoring and affecting corporate decisions (e.g. Bushee (1998); Hartzell and Starks (2003); Aghion, Van Reenen, and Zingales (2013)). Corporate lobbying decisions are significant firm decisions that institutional investors can also influence. Interestingly, some institutional investors actively engage in lobbying and take advantage of the political information generated through the process (e.g. Gao and Huang (2017); Jiao and Kong (2019)). Given institutional investors' experience and preference for lobbying, can they affect the lobbying behaviors of firms in their portfolios?

My motivation to study the role of institutional investors in corporate lobbying is twofold. On the one hand, institutional investors have incentives to encourage firms' lobbying activities. As the shareholders of firms, institutional investors will induce managers' efforts to increase shareholder value. Lobbying brings firms various political privileges (e.g. Richter, Samphantharak, and Timmons (2009); Yu and Yu (2011); Adelino and Dinc (2014)) which motivate institutional investors to urge firms to lobby. Some institutional investors express their strong preference in lobbying. For example, Larry Fink, the CEO of BlackRock, spoke at 2016 Davos that lobbying is good to maximize shareholder value and everyone should have a political voice.

On the other hand, corporate lobbying activities can be motivated by institutional investors' political influence. Firms face economic constraints that prevent them from lobbying, which institutional investors can help to overcome. Economists have documented two sources of

¹ <u>https://promarket.org/unusual-debate-at-davos-lobbying-maximizing-shareholders-value-and-the-duty-of-ceos/</u>

lobbying constraints, namely barriers to entry (Kerr, Lincoln, and Mishra (2014)) and economic frictions (Neretina (2019)). Barriers to entry refer to upfront costs and returns to experience. The upfront costs of lobbying are usually high in the first several years.² As firms accumulate experience in conveying their political appeals and build up relationships with policymakers, they become more effective in pursuing their interests. Such a process, however, requires managers to have a long-term perspective, in contrary to the well-documented managerial myopia phenomenon. Economic frictions are related to non-lobbying firms' voting power in the electoral campaigns being insufficient to reward politicians for altering a regulation in their favor. In turn, the unfavorable lobbying outcomes lower these firms' likelihood to lobby. Institutional investors with lobbying experience can provide guidance to firms on how to lobby effectively, such as setting up a comprehensive agenda, hiring the best-fit lobbyists, and developing a long-term strategy. At the same time, institutional investors can push for the same congressional bills to increase the likelihood of better lobbying outcomes for the firm. Furthermore, institutional investors are sophisticated investors who typically serve a monitoring role in reducing the pressure for managerial short-termism (e.g. Bushee (1998)).

To examine the impacts of institutional investors on corporate lobbying, I start with a sample of firms in the Russell 3000 index with their institutional holdings information from Thomson-Reuters S34 data between 1998 and 2017. I define lobbying institutional investors and lobbying firms as those who lobby in a given year. I show a robust and positive relation between corporate lobbying and ownership by lobbying institutional investors after controlling for firm and year fixed effects. The relation between corporate lobbying and ownership by non-lobbying institutional

 $^{^{2}}$ Upfront costs can include (1) the initial costs of searching for and hiring the right lobbyists, (2) educating lobbyists about the details of the firm's interests, (3) developing a lobbying agenda, (4) researching what potential allies and opponents are lobbying for, and (5) investing in how to best affect the political process.

investors is slightly negative. One standard deviation increase in the ownership by lobbying institutions increases the average firm's likelihood to lobby by 80 bps. To examine whether the relation is causal, I use the Russell 1000/2000 index reconstitution as a source of exogenous variation in shareholder structure, following Appel, Gormley, and Keim (2018) and Schmidt and Fahlenbrach (2017). The results suggest a causal effect of ownership by lobbying institutions on corporate lobbying.

The impact of lobbying institutional investors on corporate lobbying is likely stronger for firms facing greater constraints to lobbying. To test this hypothesis, I identify three scenarios where firms are more likely to be constrained. First, firms located far away from Capitol Hill are more likely to be constrained as the supply of lobbying service concentrates around the DC. Second, a lower portion of lobbying firms within industries suggests more lobbying constraints for firms in these industries. Third, lobbying might be impeded in firms with greater managerial myopic concerns. In all the three cases, I find that firms with these lobbying constraints are associated with less lobbying activities. I also find that the impacts of ownership by lobbying institutional investors on corporate lobbying are more pronounced in the subsamples of these constrained firms. These results confirm the finding that lobbying institutional investors promote corporate lobbying.

Next, I identify several channels through which lobbying institutional investors can affect corporate lobbying. First, institutional investors support firms' lobbying by pushing for the same congressional bills. I search congressional bills information from GovTrack.us between 1998 and 2017, covering 58,400 bills lobbied by any interested groups. I then examine the passage rate of bills by different categories of lobbying entities. Comparing bills lobbied by individuals, non-profit organizations, and other associations (6.1%), bills lobbied by corporate firms have a higher passage rate (6.9%), consisting with Kang (2015) and Neretina (2019). I further find that bills

lobbied by institutional investors have an even greater passage rate (7.1%). Moreover, the passage rate is the greatest when bills are lobbied by both firms and institutional investors (12.9%). Next, I examine whether firms and lobbying institutional investors are more likely to lobby for the same bill if 1) the institutional investor has a greater stake in the firm; 2) the firm is more constrained to lobby. "Greater stake" can be defined in two ways: first, that the institutional investor is ranked among the top quantile of all shareholders by shares held; and second, that the firm is ranked among the top quantile in the institutional investor's portfolio by dollar amount. Using both definitions, I find that a greater stake in the firm is associated with a higher likelihood that the institutional investors and the firm lobby for the same bills. Using the above mentioned ways of defining lobbying constraints, I find that lobbying institutional investors are more likely to lobby for the same bills with firms that face greater lobbying constraints. These results are robust after controlling for institution, firm, and year fixed effects.

Second, institutional investors share political resources with firms, which can help mitigate the barriers to entry and provide an easier access to lobbying resources. Specifically, I examine whether institutional investors share lobbyists with firms in their portfolios. In the overall sample, I find some evidence that institutional investors and firms are more likely to share common lobbyists when the institutional investor has a greater stake in the firm. As institutional investors themselves are financial firms, not surprisingly, they lobby more often for regulations concerning the financial sector. Given that lobbyists have their own practices, it is plausible that the lobbyists used by institutional investors are more helpful to financial firms. Likewise, I find a stronger effect for the subsample of firms operating in the financial industry.

Third, institutional investors protect firms' lobbying-related private information by voting against proposals on additional lobbying disclosure. Lobbying is costly, as is the disclosure of

lobbying activities. Lobbying disclosures may reveal the political and operating strategies of firms. Other firms can use such information to compete for preferential government policies. As a result, firms cannot fully reap the benefits of their private information and their political comparative advantage diminishes. A 2017 Public Citizen article reports that institutional investors such as Vanguard and BlackRock chose not to support disclosure resolutions related to lobbying.³ The opposition of these institutional investors to additional lobbying disclosure implies that they could respect the informational advantages from lobbying for shareholders' interests and help avoid costs from trivial offenses. I collect the full sample of shareholder proposal data from the Institutional Shareholder Services (ISS) between 2013 and 2017. The sample period is chosen because the "Political Lobbying Disclosure" resolution is first available in the 2013 proxy season. Using a proposal-year sample, I find that lobbying disclosure proposals are less likely to pass than other types of proposals when firms have a greater ownership by lobbying institutional investors.

This study makes two contributions. First, I contribute to the literature on corporate political influence (e.g. Stigler (1971); Shleifer and Vishny (1994); Duchin and Sosyura (2012); Hill et al. (2013); Faccio and Zingales (2017); Bertrand et al. (2018); Neretina (2019)). The empirical corporate lobbying literature concentrates on discovering the preferential treatments of lobbying firms (e.g. Richter, Samphantharak, and Timmons (2009); Yu and Yu (2011); Adelino and Dinc (2014); Kang (2015)). Adding to these studies, my paper is the first to identify the influence of institutional investors in corporate lobbying decisions. Not only do institutional investors lobby themselves, they also facilitate and assist corporate lobbying of firms in their portfolios.

³ <u>https://corporatereformcoalition.org/wp-content/uploads/2017/05/Majority-Report-2017.pdf</u> Vanguard voted against or abstained from voting on all political spending disclosure proposals examined in this report. If Vanguard alone had changed its proxy votes to support them, overall support for the proposals would have increased from 2.48% to 13.68%. In a comment aimed at these actions by institutional investors, Bradley Smith, the chairman of the Institute for Free Speech, said "A lot of people who are pushing for increased political activity disclosure are not interested in the welfare of the corporation and returning value to the shareholders. They want to boycott companies or harass officers."

Second, my results contribute to the growing literature on the effects of institutional ownership on corporate decisions (e.g. Bushee (1998); Grinstein and Michaely (2005); Cronqvist and Fahlenbrach (2009); Aghion, Van Reenen, and Zingales (2013); Boone and White (2015); Crane, Michenaud, and Weston (2016); Agarwal, Vashishtha, and Venkatachalam (2018)). I show that lobbying institutional investors promote firms' lobbying activities via three channels to alleviate their constraints to lobbying. These findings add new evidence to help understand the influence of institutional monitoring. Moreover, institutional investors are not homogenous because they have differential preferences and influence on corporate policies.

The rest of the paper is organized as follows. In Section 2, I describe the data sets and constructed samples. In Section 3, I present the baseline models along with causality tests to examine the effect of institutional ownership on corporate lobbying. In Section 4, I show the impacts of lobbying constraints. In Section 5, I identify three channels through which institutional investors affect corporate lobbying. Then Section 6 concludes.

2. Data and sample overview

I get data sets from various sources. Lobbying data is from the Center for Responsive Politics (CRP). Russell index data is from the Russell Investments. Institutional holdings information is from the Thomson Reuters database. Corporate variables are from the Compustat Annual and the Center for Research in Security Prices (CRSP). Shareholder proposals data is from the Institutional Shareholder Services (ISS). I describe the details in the following sections.

2.1. Lobbying data

Lobbying data is collected from the CRP for the year from 1998 to 2017. The Lobbying Disclosure Act (LDA) of 1995 and the Honest Leadership and Open Government Act (HLOGA)

of 2007 require the disclosure from lobbyists who attempt to affect U.S. government policies. The lobbying disclosure reports help identify the lobbying activities of both firms and institutional investors. The information includes which lobbyists they work with, which government agencies they lobby to, which bills they lobby for, and how much they spend on lobbying.

2.2. Russell 1000/2000 index

I obtain all firms in Russell 1000 and 2000 index from 1998 to 2017. The data is collected from the Russell Investments database. Russell Investments ranks all U.S. stocks according to their raw market capitalization at the end of May each year using a proprietary measure. The largest 1000 firms by raw market capitalization are members of the Russell 1000 index, whereas the Russell 2000 index consists of firms with a rank between 1001 and 3000. Index reconstitution takes place once a year.

I merge the data from Russell with the lobbying data from CRP, market data from CRSP, and accounting data from Compustat to construct a panel data at the firm-year level. The CRP database does not have unique identifiers for clients but provides clients' historical names. I use an R script to match the names in CRP database to historical company names provided in CRSP database to find the PERMNO identifier. In this matched firm-year sample, I construct two measures for corporate lobbying activity. The first one, D(Lobbying), is a dummy variable equal to one if a company lobbies in a given year, and zero otherwise. The second one, Log(Lobbying Expense), is the logarithm of the total lobbying expense incurred by a company in a given year. I calculate the total lobbying expenditures by aggregating the lobbying amount across all lobbyists for a company in a specific year.

Following Appel, Gormley, and Keim (2018), I use inclusion in the Russell 2000, $R2000_{i,t}$, as an instrument for the ownership by lobbying institutional investors (lobbying IO) with a robust

set of controls for stocks' end-of-May market capitalization. Following Schmidt and Fahlenbrach (2017), I also construct the instrumental variables for the change in lobbying IO. Specifically, $I_{1000,i,t-1} \rightarrow I_{2000,i,t}$ is an indicator variable equal to one if a company switches from the Russell 1000 to the Russell 2000; $I_{2000,i,t-1} \rightarrow I_{1000,i,t}$ is an indicator variable equal to one if a company switches from the Russell 2000 to the Russell 1000; $\Delta RANK_{i,t}$ is the difference in ranks based on the raw market capitalization of the company in year *t* and year *t* – 1.

2.3. Institutional holdings data

I obtain the institutional holdings information from Thomson-Reuters S34 database between 1998 and 2017. The database provides quarterly shareholder ownership information filed by institutional managers with \$100 million or more in assets under management.

I search institutional investors' lobbying information from the lobbying database. I rank the institutional investors by the total dollar holdings in the fourth quarter of each year and select the top 1000 ones, which covers more than 95% of the entire institutional holdings. I collect the names of these institutional investors and manually identify them in the lobbying database. I merge the fourth-quarter institutional holdings data with the lobbying data to construct institution-year level panel data. I find the information about whether institutional investors lobby, for which bills they lobby, and with which lobbyists they work, and how much they spend on lobbying. I define lobbying institutional investors as those who lobby in a given year and non-lobbying investors as those who do not lobby in a given year. I further categorize lobbying institutional investors into active lobbying and non-active lobbying groups depending on whether they continuously lobby in three years between t - 2 and t.

To construct the sample of institutional ownership for firms, I aggregate the institutional holdings of each firm-year by different types of institutional investors. I define the types of institutional ownership mentioned as *Total IO*, *Lobbying IO*, *Non-lobbying IO*, *Active lobbying IO*, and *Non-active lobbying IO* respectively. Figure 1 shows the average institutional ownership by the lobbying types of firms as well as the average number of lobbying institutional investors among the top 10 holders. The average non-lobbying IO steadily declines from 40% in 1998 to 32% in 2016. The average lobbying IO, however, keeps increasing from 15% to 30% within the same time period. The average number of lobbying firms. The patterns of movement for both groups are similar, but this number in the lobbying sample is persistently more than that in the non-lobbying sample.

I also compile the lobbying information of institutional investors and firms to construct an institution-firm-year level sample. In this sample, I define dummy variables, *Common Bills* and *Common Lobbyist*, indicating if a company and an institutional investor lobby for same bills / share common lobbyists in a given year. I also obtain information on the weights of holdings in institutional investors/firms' portfolio.

2.4. Shareholder proposals data

The shareholder proposal data is collected from ISS Voting Analytics, which covers the vote results for Russell 3000 firms from 2013 to 2017. ISS categorizes shareholder proposals into various resolutions. In the 2013 proxy season, ISS added the new S0808 (Political Lobbying Disclosure) code to separate corporate lobbying related proposals from other political proposals.

I merge the final firm-year sample with institutional ownership with the shareholder proposal data. I define a dummy variable, *Lobbying Disclosure*, indicating a political lobbying disclosure

related shareholder proposal. I also define the indicator outcomes of shareholder proposals as *Omitted, Withdrawn, Voted, or Passed.*

2.5. Summary statistics

Table 1 presents the descriptive statistics of lobbying activities of firms by year and by Fama-French 12-industry. Both the number and the proportion of lobbying firms that lobby increased over the sample period. Average lobbying expenditure steadily increased, peaked in 2010, and became stable afterward. Different industries exhibit substantial variations in terms of lobbying behavior. Utilities is the industry with the highest proportion of lobbying firms. Finance is the industry with the highest total lobbying expenditure. Telecommunications is the industry with the highest average lobbying expenditure. Energy industry also exhibits high intensity of lobbying in these dimensions.

Table 2 presents the descriptive statistics of lobbying activities of institutional investors by year. The number of institutional investors dramatically increased in the sample period. The top 1000 institutional investors covered about 95% of the entire institutional holdings. Both the number of lobbying institutional investors and their average lobbying expenditure steadily increased, peaked in 2011, and become stable afterward. The average lobbying expenditures of institutional investors are more than those of firms shown in Table 1.

Table 3 presents the summary statistics for constructed samples.⁴ The final firm-year sample contains 36,410 observations. The proportion that a firm lobbies is 30%. Institutional investors hold on average 61% of shares outstanding. Lobbying IO and non-lobbying IO are on average 25%

 $^{^{4}}$ I exclude financial firms (SIC code 6000 – 6999) in all samples because many institutional investors are publicly traded financial firms. They also hold shares of their own stocks. Excluding financial firms helps avoid any ambiguities when analyzing the impacts of institutional investors in corporate lobbying.

and 36% respectively. Active lobbying IO weights 21% of shares outstanding compared with 4% for non-active lobbying IO. Among the top 10 institutional holders of firms, there are more than four of them lobby. The final institution-firm-year sample contains 2,388,299 observations under the condition that institutional investors have ever lobbied between 1998 and 2016. For around 3% of observations (73,483), the company and the institutional investor lobby for the same bills; for more than 8 basis points of observations (1,794), the two parties share a common lobby ist. I define High (Low) Holdings as a dummy variable equal to one if the firm is ranked among the top (bottom) quantile in the institutional investor's portfolio by dollar amount. I also define Block (Small) Holdings as a dummy variable equal to one if the institutional investor is ranked among the top (bottom) quantile of all shareholders by shares held. There are on average 66%, 45%, and 52% of firms with geographical, managerial myopic, and industrial constraints for lobbying respectively in the institution-firm-year sample. The proposal-year sample contains 3,913 observations. Lobbying disclosure related resolutions account for 5% of all shareholder proposals. In this sample, the average chance of a shareholder proposal to be omitted, withdrawn, voted, or passed are 14%, 22%, 58%, and 12%.

3. Corporate lobbying and institutional ownership

In this section, I examine the relation between corporate lobbying and institutional ownership. Institutional investors with lobbying practices have a motivation to promote corporate lobbying of firms in their portfolio. As they gain valuable experience and resources over the time, institutional investors are also more capable to benefit corporate lobbying. Therefore, firms with greater ownership by lobbying institutional investors are expected to engage more in lobbying. I start with the baseline model and results in Section 3.1. In Section 3.2, I provide further evidence of causality tests using Russell index reconstitution.

3.1. Baseline models

I employ a panel regression to analyze the effect of institutional ownership on corporate lobbying activities. Specifically, I estimate the following empirical model:

$$Lobbying_{i,t+1} = \alpha_i + \alpha_t + \beta_1 \cdot Lobbying IO_{i,t} + \beta_2 \cdot Non - Lobbying IO_{i,t} + \gamma \cdot Control_{i,t} + \varepsilon_{i,t}.$$
(1)

In equation (1), *i* and *t* are subscripts for firm and year, respectively. The dependent variable *Lobbying*_{*i*,*t*+1} measures firms' lobbying activity at year *t*+1. I use two different measures. The first one, D(Lobbying), is a dummy variable equals to one if a firm lobby in a given year, and zero otherwise. The second one, Log(Lobbying Expense) is the logarithm of the total lobbying expense incurred by a company in a given year. The key variables of interest, $Lobbying IO_{i,t}$ and $Non - Lobbying IO_{i,t}$, are the lobbying and non-lobbying IOs of firm *i* at year *t*. I further include firm fixed effect, α_i , to control for time-invariant firm characteristics, and year fixed effect, α_t . In some model specifications, I include year-industry fixed effect to allow for different industry effects in a specific year. In such specifications, I exclude year fixed effect because it is subsumed by the year-industry fixed effect. Finally, $Control_{i,t}$ is a vector of control variables, including firm size, market-to-book ratio, return on assets, book leverage, and capital expenditure, stock return, and the logarithm of total lobbying expenses of institutional investors. Standard errors are clustered at the firm level to account for time-series correlations in firms' lobbying decision.

Table 4, Panel A, reports the results. Column (1) – (3) provide results with $D(Lobbying)_{i,t+1}$ as the measure for corporate lobbying with different combinations of control variables and fixed effects. Column (4) – (6) provide results using $Log(Lobbying Expense)_{i,t+1}$ as the dependent variable. The estimated coefficients on $Lobbying IO_{i,t}$ are all positive and

statistically significant across different model specifications, whereas the coefficients on $Non - Lobbying IO_{i,t}$ are all negative. The results suggest that firms with greater ownership by lobbying institutional investors are more likely to lobby. One standard deviation increase in the lobbying IO of a company increases its likelihood to lobby by 80 basis points, which is 2.7% at the mean of lobbying activity (30%).

I then implement additional tests using alternative measure of lobbying IO. First, I split the lobbying IO into active versus non-active parts depending on whether institutional investors continuously lobby in three years between t - 2 and t. This helps distinguish institutional investors with different lobbying experience. The active lobbying institutional investors are more experienced in lobbying than the non-active lobbying ones are to help on corporate lobbying. They could also have stronger preference to lobby, which motivate them to promote corporate lobbying of firms in their portfolios. Thus, firms with greater active lobbying IO are expected to lobby more. Second, I use the difference between the lobbying IO and non-lobbying IO and control for the total institutional ownership. This measure helps rule out the possibility that the results are driven by the trend effect of increasing institutional holdings. Third, I proxy for the lobbying IO using the number of institutional investors with lobbying activities among the top 10 holders of a company. The greater the number is the greater lobbying IO a company is expected to have.

Table 4, Panel B, reports the results. Column (1) – (3) provide results with $D(Lobbying)_{i,t+1}$ as the measure for corporate lobbying with different combinations of control variables and fixed effects. Column (4) – (6) provide results using $Log(Lobbying Expense)_{i,t+1}$ as the dependent variable. The estimated coefficients on *Active* – *Lobbying IO*_{*i*,*t*} are all positive and statistically significant across different model specifications. No significant results are found for *Non* – *active lobbying IO*_{*i*,*t*}. One standard deviation increase in the active lobbying IO of a

company increases its likelihood to lobby by 87 basis points, which is 2.9% at the mean of lobbying activity (30%). The coefficients on $Diff(Lobbying - Nonlobbying)_{i,t}$ and # of Lobbying Institutions_{i,t} are also all positive statistically significant. The results further support that greater ownership by experienced lobbying institutional investors is associated with a greater likelihood and magnitude in corporate lobbying.

3.2. Causality tests using Russell index reconstitution

The consistency of results in the previous section provides support for the view that the corporate lobbying activities are potentially affected by the lobbying IO. However, it is possible that lobbying institutional investors would be more willing to hold firms with increasing lobbying engagements. One of the contributions of this paper is therefore to use – in addition to the standard ordinary least squares (OLS) approach – plausibly exogenous changes in a company's shareholder structure. The exogenous change is driven by the annual reconstitution of the Russell 1000 and the Russell 2000 indexes.

The Russell 1000 is a value-weighted index of the largest 1,000 U.S. stocks. The Russell 2000 is a value-weighted index of the subsequent 2,000 stocks. The two indexes are reconstituted last Friday of June each year by Russell Investments. A stock moving from the bottom in the Russell 1000 index to the top of the Russell 2000 index will become much more important to an index-tracking institution. There are several widely-used empirical methods using the Russell 1000/2000 cutoff to exploit variation in institutional ownership.⁵ In this paper, I use two popular methods

⁵ The tradeoffs of the different methodologies used in this identification setting are discussed in Appel, Gormley, and Keim (2019).

following Appel, Gormley, and Keim (2018) and Schmidt and Fahlenbrach (2017) to examine the causal effects of ownership by lobbying institutional investors on corporate lobbying activities.

First, I use an instrumental variable strategy to identify the effect of lobbying IO on corporate lobbying following Appel, Gormley, and Keim (2018):

$$Lobbying_{it+1} = \alpha + \beta Lobbying IO_{it} + \sum_{n=1}^{N} \theta_n (Ln(Mktcap_{it})^n + \gamma FloatAdj_{it} + \mu_1 band_{it} + \mu_2 R2000_{it-1} + \mu_3 (band_{it} \times R2000_{it-1}) + \delta_t + \varepsilon_{it}, \qquad (2)$$

where $Lobbying_{i,t+1}$ indicates measures of corporate lobbying activity if company *i* at year *t*+1; *Lobbying IO*_{*it*} is the lobbying IO of company *i* at the end of year *t*. I use inclusion in the Russell 2000 as an instrument for lobbying IO in the first stage estimation:

$$Lobbying IO_{it} = \eta + \lambda R2000_{it} + \sum_{n=1}^{N} \chi_n (Ln(Mktcap_{it})^n + \sigma FloatAdj_{it} + \phi_1 band_{it} + \phi_2 R2000_{it-1} + \phi_3 (band_{it} \times R2000_{it-1}) + \delta_t + u_{it}, \quad (3)$$

where $R2000_{it}$ is an indicator of inclusion in the Russell 2000 index for company *i* at year *t*; *Mktcap_{it}* is the end-of-May CRSP market capitalization of stock *i* in year *t*; *FloatAdj_{it}* is a proxy for the float adjustment by Russell, computed as the difference between the rank implied by the May 31st market capitalization and the actual rank assigned by Russell in June; *band_{it}* is an indicator for having an end-of-May market capitalization that ensures company *i* will not switch indexes in reconstitution year *t* because the distance between its market cap and the Russell 1000/2000 cutoff is less than 2.5% of the Russell 3000E Index cumulative market cap; *R*2000_{*it*-1} is an indicator for being in the Russell 2000 last reconstitution year *t*-*1*; and *band_{it}* × *R*2000_{*it*-1} is the interaction of these two indicators. These last three controls capture the additional criteria used in Russell's banding policy beginning in 2007.

This IV approach relies on the assumption that, after conditioning on stocks' market capitalization, the inclusion in the Russell 2000 index leads an increase in the lobbying IO (relevance condition) but does not directly affect the corporate lobbying activity except through the change of lobbying IO (exclusion restriction). The relevance condition is verified in the first-stage estimation and the exclusion restriction seems reasonable because firms' lobbying decisions would not be directly related to Russel index switch. Furthermore, since firm size is a key determinant of lobbying activity, the inclusion of the Russell 2000 may potentially suggest a reduction on corporate lobbying. If this is the case, the results of our analysis will be downward instead of upward biased. To control for firms' market capitalization, the sample is restricted to include firms within a bandwidth of 500 stocks around the Russell 1000/2000 threshold.

Table 5, Panel A, shows the results of IV regressions of the corporate lobbying activities on lobbying IO. Column (1) and (2) exhibit the first stage results for instruments on non-lobbying and lobbying institutional ownerships. The relevance condition is valid for lobbying IO as the estimated coefficient on lobbying IO is positive and statistically significant. However, no significant results are found for non-lobbying IO. Column (3) and (4) show the second stage estimations using estimated lobbying IO and two measures of corporate lobbying. Consistent with the baseline models, the results of the IV regressions suggest that higher lobbying IO leads to more corporate lobbying. Due to the change of banding policy of Russell Investments in 2007, I use a subsample from 2008 to 2016 and recheck the findings. Column (5) – (8) show that the results remain in this subsample.

3.2.2. Method 2 - SF(2017)

Second, I analyze the effects of changes in institutional ownership on corporate lobbying in a panel OLS framework with first difference following Schmidt and Fahlenbrach (2017):

$$\Delta \log(Lobbying \ expense)_{i,t+1} = \alpha_t + \theta_i + \beta \cdot \Delta IO_{i,t} + \gamma \cdot \Delta Control_{i,t} + \varepsilon_{i,t}, \tag{4}$$

where $\Delta \log(Lobbying expense)_{i,t+1}$ is the change in lobbying expenditures from t to t+1, α_t indicate year-fixed effects, θ_j indicate industry-fixed effects, $\Delta Control_{i,t}$ are changes in firm characteristics used in the main model, and $\Delta IO_{i,t}$ are changes in the different types of institutional ownership. Using first differences removes any firm-specific time-invariant unobservable variables, but it cannot address the reverse causality or omitted time-varying variables issues. Following Schmidt and Fahlenbrach (2017), I use an IV approach and estimate it in a standard two-stage least squares (2SLS) framework. The first stage estimation is a regression of changes in institutional ownership on a set of instruments:

$$\Delta IO_{i,t} = \alpha_t + \theta_j + \beta_1 \cdot I_{1000,i,t-1} \rightarrow I_{2000,i,t} + \beta_2 \cdot I_{2000,i,t-1} \rightarrow I_{1000,i,t} + \delta \cdot \Delta RANK_{i,t}$$
$$+\gamma \cdot \Delta Control_{i,t} + u_{i,t}$$
(5)

where α_t indicate year-fixed effects, θ_j indicate industry-fixed effects, and $\Delta Control_{i,t}$ are changes in firm characteristics included in the second stage. The instruments for institutional investors are an indicator variable equal to one if a firm switches from the Russell 1000 to the Russell 2000, $I_{1000,i,t-1} \rightarrow I_{2000,i,t}$, an indicator variable equal to one if a firm switches from the Russell 2000 to the Russell 1000, $I_{2000,i,t-1} \rightarrow I_{1000,i,t}$, as well as the difference in ranks based on the raw market capitalization of the firm in year t and year t - 1, $\Delta RANK_{i,t}$. To control for firms' market capitalization, the sample is restricted to include firms within a bandwidth of 500 stocks around the Russell 1000/2000 threshold. Table 5, Panel B, shows the results of IV regressions of the changes in corporate lobbying activities on changes in institutional ownership. Column (1) and (2) exhibit the first stage results for instruments on the changes of non-lobbying and lobbying institutional ownerships. The relevance condition is valid for the change in lobbying IO as the estimated coefficients on lobbying IO are statistically significant. However, no significant results are found for the change in non-lobbying IO. Column (3) and (4) show the second stage estimations using estimated change in lobbying IO and two measures of change in corporate lobbying. The results show that an increase in lobbying IO leads to an increase in the corporate lobbying activities.

Collectively, the results of causality tests using Russell index reconstitution are robust and consistent with the primary findings that greater ownership by lobbying institutional investors causes more corporate lobbying activities.

4. Lobbying constraints and institutional investors

I further investigate whether the constraints preventing firms from lobbying have impacts on the relation between corporate lobbying and institutional investors. Prior studies document the huge political privileges that lobbying brings to corporations. Given these benefits, the fact that only 20% of all publicly listed firms lobby is perplexing. The existence of lobbying constraints help shed light on this issue.

Firms face barriers to entry in lobbying. Kerr, Lincoln, and Mishra (2014) show that upfront costs and returns to experience are two sources of barrier to entry in corporate lobbying. To achieve their lobbying goals, firms incur costs in (1) searching for and hiring the right lobbyists, (2) educating lobbyists, (3) developing a lobbying agenda, (4) researching on potential allies and opponents, and (5) investing in how to best affect the political process. The cost is usually high especially during the first several years. As firms lobby over time, they become more effective and

experienced in lobbying process. However, maintaining the sustainable relationships with policymakers also require significant time and efforts from managers. Some economic frictions also block firms' way to lobby. Neretina (2019) argues that the voting power of the non-lobbying firms in the electoral campaigns is insufficient to reward politicians for making changes to legislation in favor of them. As a result, if these firms choose to lobby, they should spend more to raise their voting power in elections or expect a worse outcome than when there is not frictions. Taken together, lobbying constraints will incur higher costs to lobby and/or worse lobbying outcomes to firms.

I then argue that institutional investors promote corporate lobbying activities more for firms with lobbying constraints. The effects of lobbying IO on corporate lobbying are expected to be stronger for these constrained firms. I identify three types of lobbying constraints: (1) geographical constraint; (2) managerial myopia constraint; (3) industrial constraint for subsample analysis.

First, I use the distance between firms' headquarters and the Washington DC as a proxy for the cost of lobbying (Igan, Mishra, and Tressel, 2011). I classify firms with headquarters located outside of a radius of 300 miles from Washington DC as geographical constrained firms. The supply of federal political resources and lobbying services concentrate closely on Capitol Hill. As the distance to Washington DC increase, the cost of lobbying increases. Second, I use the R&D expenses of firms as a measure of managerial myopia. I classify firms with R&D expenses less than the median value in the sample as managerial myopic constrained firms. Lobbying incurs high upfront costs and requires time and efforts from managers. Managerial myopic firms are less motivated to lobby. Third, I calculate the average lobbying participation rate for each 2-digit SIC code in each year and use it as a measure of barriers to entry in lobbying. I classify firms in industries with lobbying participation rate lower than the median value in the sample as industrial constrained firms. As shown in Panel B of Table 1, lobbying engagement is heterogeneous within industry. More lobbying constraints could lead to lower participation rate in some industries.

Table 6 shows the results of the subsample analysis by each type of lobbying constraints. Panel A, B, and C exhibit the results for geographical, managerial myopic, and industrial constraint respectively. Column (1) and (4) in each panel show that the coefficients on the dummy variables of lobbying constrained firms are all negative and statistically significant. The results confirm that firms with lobbying constraints engage less in corporate lobbying. Column (2) and (5) show the results for the subsample of lobbying constrained firms; Column (3) and (6) show the results for the subsample of non-constrained firms. The effects of lobbying IO on corporate lobbying activities remains and are stronger in the subsamples with constrained firms, the effects fade away. The results suggest that institutional investors promote corporate lobbying by alleviating the lobbying constraints.

5. Channels

The challenge to identify the channels through which lobbying institutional investors promote corporate lobbying is that institutional investors' actions on corporate lobbying are not commonly observed. Institutional investors do not directly state the goal and attitude of lobbying policy toward the firms they hold. One of the contributions of this study is thus to shed the light on the possible mechanisms to support a likely causal impact of institutional investors on corporate lobbying of firms in their portfolio.

I uncover three plausible channels. First, institutional investors support firms' lobbying by pushing for the same congressional bills. Second, institutional investors share political resources such as lobbyists with firms. Third, institutional investors protect firms' private information by voting against proposals on additional lobbying disclosure. Overall, the study shows that institutional investors can alleviate the constraints and costs in corporate lobbying.

5.1. Common bills by institutional investors and firms

I collect all congressional bills available in the lobbying database between 1998 and 2017. I scrap information of these bills from GovTrack.us covering 58,400 introduced bills. The information includes the introduction date, the dates that the bills passed by each chamber, the enact date if the bills become laws, and the names of bill sponsors. Among these 58,400 bills, 19,233 bills are targeted by firms and 10,348 bills are targeted by institutional investors.

I examine whether the involvement of institutional investors associates with a higher probability of bills to pass. I identify whether bills are passed by both chambers, the House and the Senate, and whether bills are signed by the President to become laws. I implement the following empirical model to estimate the effects of institutional investors on the passage of bills:

Passage of
$$Bills_m = \alpha_c + \alpha_s + \beta_1 \cdot D(Institution)_m + \beta_2 \cdot D(Company)_m + \gamma \cdot \# of Times Lobbied_m + \varepsilon_m,$$
 (6)

where *Passage of Bills* is one of the two measures of passage of the bill m; $D(Institution)_m$ is an indicator of whether the bill m is lobbied by institutional investors, $D(Company)_m$ is an indicator of whether the bill m is lobbied by firms; $\# of Times \ Lobbied_m$ is the number of time the bill m is found in lobbying reports as a control variable; α_c and α_s are Congress fixed effects and bill sponsor fixed effects.

Table 7 reports the results. Column (1) - (3) shows the results using the indicator of the bill is passed by both chambers as the dependent variable; Column (4) - (6) shows the results using the indicator of the bill becomes a law as the dependent variable. The coefficients on

 $D(Institution)_m$ are positive and statistically significant, which suggests that bills lobbied by institutional investors are more likely to pass. Column (3) and (6) show the results adding the interaction term between $D(Institution)_m$ and $D(Company)_m$. The results suggest that the possibility of a bill to pass is even higher if the bill is lobbied by both institutional investors and firms.

Given that institutional investors can improve the lobbying outcome, I then exploit whether institutional investors support corporate lobbying of firms they hold by lobbying together with them. Institutional investors have a great number of stocks in their portfolios. It is difficult for them to exert influence to all firms. I argue that institutional investors are more likely to lobby together with firms that are more important to them and/or more influenced by them. I also argue that institutional investors are more likely to lobby together with firms with lobbying constraints. I estimate the following empirical model using the institution-firm-year sample:

$$Common Bills_{i,j,t+1} = \alpha_i + \alpha_j + \alpha_t + \beta \cdot Target_{i,j,t} + \gamma_1 \cdot Control_{i,t} + \gamma_2 \cdot Control_{j,t} + \varepsilon_{i,j,t},$$
(7)

In equation (7), *i*, *j*, and *t* are subscripts for company, institutional investor, and year respectively. The dependent variable *Common Bills*_{*i*,*j*,*t*+1} is a dummy variable equal to one if the company *i* and the institutional investor *j* lobby for the same congressional bills at *t*+1. *Target*_{*i*,*j*,*t*} can be two types of firms that institutional investors are more likely to lobby together. First type depends on holdings. *High Holdings* (> 75 *pctls*)_{*i*,*j*,*t*} is a dummy variable equal to one if the firm is ranked among the top quantile in the institutional investor's portfolio by dollar amount. *Low Holdings* (< 25 *pctls*)_{*i*,*j*,*t*} is a dummy variable equal to one if the firm is ranked among the bottom quantile in the institutional investor's portfolio by dollar amount.

75 pctls)_{*i*,*j*,*t*} is a dummy variable equal to one if the institutional investor is ranked among the top quantile of all shareholders by shares held. Small Holdings (< 25 pctls)_{*i*,*i*,*t*} is a dummy variable equal to one if the institutional investor is ranked among the bottom quantile of all shareholders held. Second depends by shares type on lobbying constraints. $D(Geographical Constraint)_{i,j,t}$ is a dummy variable equal to one if a company's headquarter locates outside of a radius of 300 miles from Washington DC. $D(Myopia Constraint)_{i,j,t}$ is a dummy variable equal to one if a company's R&D expenses at year t is less than the median value in the sample. $D(Industrial Constraint)_{i,i,t}$ is a dummy variable equal to one if a company is in an industry with lobbying participation rate with less than the median value in the sample. $Control_{i,t}$ is a vector of firm control variables, including firm size, market-to-book ratio, return on assets, book leverage, capital expenditure, stock return, and logarithm of the company's total lobbying expense. $Control_{i,t}$ is a vector of institutional investor control variables, including the logarithm of total holdings and logarithm of the institutional investor's total lobbying expense. Finally, α_i , α_j , and α_t represent firm, institutional, and year fixed effects respectively. The coefficient of key interest is thus β .

Table 8, Panel A, exhibits the results for the first type of targeted firms. The coefficients on *High Holdings* (> 75 *pctls*)_{*i*,*j*,*t*}, *Block Holdings* (> 75 *pctls*)_{*i*,*j*,*t*}, and *High x Block*_{*i*,*j*,*t*} are all positive and statistically significant. However, the coefficients on *Low Holdings* (< 25 *pctls*)_{*i*,*j*,*t*}, *Small Holdings* (< 25 *pctls*)_{*i*,*j*,*t*}, are all negative and significant. The results suggests that institutional investors are more likely to support the corporate lobbying outcome for firms they hold more in their portfolios and/or they have block holdings. Moreover, institutional investors are less likely to support the lobbying outcome for firms they hold more in their portfolios and/or they have block holdings.

for the second type of targeted firms. The coefficients on all interested variables are positive and statistically significant except for on $D(Geographical Constraint)_{i,j,t}$. The results suggest that institutional investors are more likely to support the corporate lobbying outcome for firms with lobbying constraints.

Taken together, the findings provide supporting evidence that institutional investors support firms' lobbying by pushing for the same congressional bills. Institutional investors care especially more about firms they have high and block holdings and those with lobbying constraints.

5.2. Common lobbying firm by institutional investors and firms

Lobbing institutional investors could also share their accumulated political experience and resources with firms in their portfolios. I estimate the effects of institutional holdings on the likelihood to have common lobbyists by a company and an institution using a similar setting as in Section 5.1.

Table 9, Panel A, shows that institutional investors are more likely to share lobbyists with firms they have both high and block holdings. No other significant results are found. This weak finding can be attributed to two reasons. First, institutional investors may focus more on financial market and they hire lobbyists specialized in finance-related issues. Their experience could be more beneficial for financial firms instead of non-financial ones. Second, the observations of common lobbyists by firms and institutional investors are very few. This could also cause the lack of explanatory power in the model estimation. To mitigate these problems, I re-implement the estimation using the sample of financial firms. Table 9, Panel B, shows that the coefficients on *High Holdings* (> 75 *pctls*)_{*i,j,t*}, *Block Holdings* (> 75 *pctls*)_{*i,j,t*}, and *High x Block* _{*i,j,t*} are all positive and statistically significant. The results support my argument that institutional investors

are more likely to share lobbyists to firms they have high and block holdings, especially in the financial industry.

One potential limitation of using financial firms is that institutional investors are also financial firms and they hold shares of their own stocks. The misclassification of firms themselves as institutional investors could lead biased results. Taken together, the findings provide suggestive evidence that institutional investors directly facilitate corporate lobbying of firms in their portfolios by sharing with firms the valuable lobbying resources such as lobbyists.

5.3. Shareholder proposals requesting additional lobbying disclosure

Besides directly promoting corporate lobbying of firms in their portfolios, institutional investors can voice their opinions on corporate lobbying policies through their proxy voting. In this way, institutional investors protect firms from additional lobbying disclosure.

The requests for lobbying spending disclosure have been increasing and become one of the most common shareholder proposal issues in 2018. However, additional lobbying disclosure may destroy shareholder value. "Disclosure is a tool employed by activist investors to generate information about a company's lobbying and political activities that can then be used by those same activist investors to harass and pressure the company into disengaging form political debates," U.S. Chamber of Commerce spokeswoman Blair Holmes said, "We don't think this is good for businesses or, ultimately, the millions of investors who do not share the activists' extreme and narrowly focused political agenda." Corporate lobbying decisions are related to firms' business strategies, which may contain private information. For example, Uber boosts its lobbying spending in cities it plans to conquer to fight city regulation. Lobbying disclosure reveals these information and their political comparative advantages diminish.

Institutional investors, who are main investors of firms and prioritize in maximizing shareholder value, help avoid costs from trivial offenses on lobbying disclosure. BlackRock reveals its view on political activity proposals in 2019, which say that it accepts that boards and management should determine the proper amount of disclosure and will not support "overly prescriptive" proposals.

I therefore examine the effects of lobbying IO on the passage of shareholder proposals related to lobbying disclosure using the proposal-year sample from 2012 to 2016. I first analyze the outcome of being a lobbying disclosure proposal using following specification:

$$Y_{i,t+1} = \alpha_i + \alpha_t + \beta \cdot Lobbying \ Disclosure + \gamma \cdot Control_{i,t} + \varepsilon_{i,t}, \tag{8}$$

where $Y_{i,t+1}$ is equal to one of the outcomes of shareholder proposals including *Omitted*, *Withdrawn*, *Voted*, *and Passed*; *Lobbying Disclosure* is a dummy variable equal to one if a proposal is related to lobbying disclosure; *Control*_{*i*,*t*} is a vector of control variables used in the baseline models; α_i and α_t represent year and firm fixed effects respectively.

Table 10, Panel A, shows that a lobbying disclosure proposal is more likely to be voted and less likely to be omitted than other types of proposals. Under the condition that a proposal is voted, a lobbying disclosure proposal is less likely to pass compared with other types of proposals.

I then investigate whether the low possibility of passage for lobbying disclosure proposals is driven by institutional ownership. I include the interaction terms *Lobbying Disclosure* × *Lobbying IO*_{*i*,*t*} and *Lobbying Disclosure* × *Non* – *lobbying IO*_{*i*,*t*} in the equation (8). Column (4) of Table 10 shows that the coefficient on *Lobbying Disclosure* × *Lobbying IO*_{*i*,*t*} is negative and significant. The result suggests that lobbying institutional investors protect firms from additional lobbying disclosures, which safeguards firms' private information.

6. Conclusion

In this paper, I study the role of institutional investors in corporate lobbying of firms in their portfolios. Using information on institutional holdings and lobbying disclosure, I find that a positive relation between firms' lobbying activities and ownership by institutional investors who also lobby. The effect is stronger for the firms facing more constraints to lobbying. Furthermore, I uncover mechanisms through which institutional investors can influence firms' lobbying behavior. First, institutional investors support firms' lobbying by pushing for the same congressional bills, which potentially improve the passage rate. Second, institutional investors share political resources such as lobbyists and lobbying experiences with firms. Third, institutional investors protect firms' private information by voting against proposals on additional lobbying disclosure.

This paper contributes to the understanding of the impacts of institutional investors on one important aspect of corporate policies - corporate political activities. It demonstrates that not only do some institutional investors lobby, they also promote corporate lobbying of firms in their portfolios. The findings also have valuable policy implications for the political influence of financial institutions.

Variables	Definition
	a. Firm-year sample
D(Lobbying)	Indicator variable equal to one if a firm lobbies in a given year
⊿D(Lobbying)	The change of D(Lobbying) between t and t-1
Log(Lobbying Expense)	The logarithm of total lobbying expenditure incurred by a company in a
	given year
Δ Log(Lobbying Expense)	The change of Log(Lobbying Expense) between t and t-1
Total IO	The ratio of total institutional ownership in 13F divided by total shares
Lobbying IO	Outstanding of firms
	shares outstanding where lobbying institutional investors are defined as
	those that lobby in a given year
Nonlobbying IO	The ratio of ownership by non-lobbying institutional investors divided by
	shares outstanding, where non-lobbying institutional investors are defined
	as those that do not lobby in a given year
Active Lobbying IO	The ratio of ownership by active lobbying institutional investors divided
	by shares outstanding, where active lobbying institutional investors are defined as these that continuously lobby for three years between t and t 2
Non-active Lobbying IO	The ratio of ownership by active lobbying institutional investors divided
Non-active Lobbying 10	by shares outstanding, where non-active lobbying institutional investors
	are defined as those belong to lobbying institutions but not to active
	lobbying institutions
# of Lobbying Institutions	The number of lobbying institutional investors among the Top 10 holders
11000 10000	for a firm in a given year
11000 - 12000	Indicator variable equal to one if a firm was included in Russell 1000
12000 - 11000	Indicator variable equal to one if a firm was included in Russell 2000
12000 11000	index in t-1 and in Russell 1000 index in t
⊿Rank	The change in rank of index constituents based on raw market
	capitalization in May t
⊿Lobbying IO	The change in lobbying institutional ownership
Δ Non-lobbying IO	The change in non-lobbying institutional ownership
Log(Total Assets)	The logarithm of total assets
Market-to-Book	Market value of total assets divided by the book value of total assets
Return-on-Assets	Income before extraordinary items divided by total assets
Book Leverage	Total debt divided by total assets
Capx-to-Assets	Capital expenditure divided by total assets
Stock Return	Monthly CRSP return aggregated over calendar year
Log(Institutional Lobbying Expense)	The logarithm of total lobbying expenditure incurred by an institutional
	h Institution firm year sample
D(Common Bills)	Indicator variable cavel to one if a firm and an institutional investor labby
D(Common Bills)	for the same hills
D(Common Lobbyist) (in bps)	Indicator variable equal to one if a firm and an institutional investor share
	a common lobbyist
Log(Total Holdings of Institution)	The logarithm of an institutional investor's total holdings of all firms it
	holds
High Holdings (>75 pctls)	Indicator variable equal to one if the holding of a company by an
	institutional investor is more than the amount of 75 percentile in the institutional investor's portfolio
	institutional investors portiono

Appendix A.	Variable	definition	and	description

Block Holdings (>75 pctls)	Indicator variable equal to one if the holding of a company by an institutional investor is more than the amount of 75 percentile among institutional holdings of the company
Low Holdings (< 25 pctls)	Indicator variable equal to one if the holding of a company by an institutional investor is less than the amount of 25 percentile in the institutional investor's portfolio
Small Holdings (< 25 pctls)	Indicator variable equal to one if the holding of a company by an institutional investor is less than the amount of 25 percentile among institutional holdings of the company
High imes Block	The interaction term between High Holdings and Block Holdings
$Low \times Small$	The interaction term between Low Holdings and Small Holdings
Weight in Institution's Portfolio	The ratio of holdings of a firm by an institutional investor to the institutional investor's total holdings
Weight in Company's Portfolio	The ratio of holdings of a firm by an institutional investor to the company's total shares outstanding
D(Geographical Constraint)	Indicator variable equal to one if a company's headquarter locates outside of a radius of 300 miles from Washington DC
D(Mypoia Constraint)	Indicator variable equal to one if a company's R&D expenses at year t is less than the median value in the sample
D(Industrial Constraint)	Indicator variable equal to one if a company is in an industry with lobbying participation rate with less than the median value in the sample
# of Constraints	Number of lobbying constraints a company has
	c. Proposal-year sample
Lobbying Disclosure	Indicator variable equal to one if a shareholder proposal is related to lobbying disclosure
Omitted	Indicator variable equal to one if a shareholder proposal is omitted
Withdrawn	Indicator variable equal to one if a shareholder proposal is withdrawn
Voted	Indicator variable equal to one if a shareholder proposal is voted
Passed	Indicator variable equal to one if a shareholder proposal is passed

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Figure 1 Lobbying institutional investors

Panel A shows the average institutional ownership by lobbying types. Panel B shows the average number of lobbying institutional investors among the top 10 holders for firms.



Panel B:



Lobbying activities of firms

This table reports the summary statistics on the corporate lobbying activity of firms from 1998 to 2016. Panel A presents the lobbying expenses of firms by year. Panel B presents the lobbying expenses of firms by Fama-French 12 industry grouping. The table reports the number of firms, the number of lobbying firms, the percentage of lobbying firms, as well as the mean, median, and total sum of lobbying expenses using the lobbying sample.

Panel A: Corporate lobbyi	ng by year					
	Total # of	# of lobbying	% of	Lob	bying expe	enses (\$)
	firms	firms	lobbying	Mean	Median	Total
1000	2 107	402	firms	001 020	107 500	422.964.070
1998	2,107	492	23.4%	881,838	197,500	433,864,079
1999	2,119	514	24.3%	810,591	200,000	416,643,768
2000	2,063	485	23.5%	858,857	230,000	416,545,749
2001	2,369	536	22.6%	790,764	200,000	423,849,606
2002	2,508	571	22.8%	792,077	220,000	452,275,829
2003	2,559	647	25.3%	815,366	200,000	527,541,526
2004	2,519	659	26.2%	817,557	210,500	538,770,280
2005	2,432	673	27.7%	909,381	240,000	612,013,445
2006	2,400	664	27.7%	1,036,273	275,000	688,085,461
2007	2,400	701	29.2%	1,088,983	280,000	763,377,337
2008	2,541	748	29.4%	1,225,240	310,096	916,479,334
2009	2,608	789	30.3%	1,287,358	313,500	1,015,725,629
2010	2,564	763	29.8%	1,381,874	320,000	1,054,369,639
2011	2,586	769	29.7%	1,310,968	320,000	1,008,134,228
2012	2,577	753	29.2%	1,312,975	325,000	988,670,527
2013	2,562	751	29.3%	1,302,821	340,000	978,418,858
2014	2,502	743	29.7%	1,301,667	320,000	967,138,466
2015	2,491	734	29.5%	1,311,159	350,000	962,390,361
2016	2,526	710	28.1%	1,235,857	350,000	877,458,184
Panel B: Corporate lobbyi	ng by industry					
	Total # of	# of firms that	% of firms	Lob	bying expe	enses (\$)
	firms	lobby	that lobby	Mean	Median	Total
Consumer non-durables	2,267	679	30.0%	1,169,877	300,000	794,346,791
Consumer durables	1,065	297	27.9%	970,059	180,000	288,107,455
Manufacturing	4,727	1,405	29.7%	1,138,219	249,000	1,599,198,256
Energy	1,816	540	29.7%	1,839,746	480,000	993,462,902
Chemicals	1,164	513	44.1%	813,172	250,000	417,157,106
Business equipment	7,600	1,825	24.0%	966,804	220,000	1,764,416,740
Telecommunications	1,300	470	36.2%	2,286,123	394,535	1,074,477,592
Utilities	1,681	1,060	63.1%	1,259,209	500,000	1,334,761,527
Shops	4,481	809	18.1%	699,811	220,000	566,147,452
Healthcare	4.313	1,546	35.8%	1,038,432	240,000	1,605,415,926
Finance	10,023	1,725	17.2%	1,127.347	394.072	1,944,673.576
Others	5,996	1,833	30.6%	905,394	220,000	1,659,586,983

Lobbying activities of institutional investors

This table reports the summary statistics on the lobbying activity of institutional investors from 1998 to 2016. I rank the institutional investors by their dollar holdings and select the top 1000 ones in each year. I collect the names of institutional investors in this sample and manually search them in the lobbying database to identify the lobbying institutional investors in each year. The table reports the total number of institutional investors, the ownership coverage of top 1000 investors, the number of lobbying institutional investors among the selected investors, as well as the mean, median, and total sum of lobbying expenses using the lobbying sample.

	Total # of	Coverage of top	# of lobbying	Lol	Lobbying expenses (\$)	
	institutions	1000 institutions	institutions	Mean	Median	Total
1998	1,746	98.33%	160	1,313,647	360,000	210,183,542
1999	1,881	98.15%	165	1,075,844	380,000	177,514,232
2000	2,052	97.99%	156	1,336,583	440,000	208,506,980
2001	2,027	98.16%	161	1,156,503	500,000	186,196,905
2002	2,123	98.01%	163	1,226,322	420,000	199,890,444
2003	2,209	97.69%	186	1,305,380	380,000	242,800,762
2004	2,385	97.44%	175	1,204,492	400,000	210,786,134
2005	2,586	97.06%	175	1,247,721	335,000	218,351,109
2006	2,828	96.82%	166	1,521,832	445,610	252,624,139
2007	3,082	96.52%	192	1,592,690	320,000	305,796,524
2008	3,140	96.75%	196	1,757,995	560,000	344,566,959
2009	3,090	96.44%	218	1,650,543	390,000	359,818,317
2010	3,147	96.08%	215	1,844,211	452,000	396,505,311
2011	3,401	95.60%	221	2,014,461	808,000	445,195,891
2012	3,587	95.31%	213	1,948,026	850,000	414,929,632
2013	3,879	94.98%	211	1,833,595	810,000	386,888,568
2014	4,215	94.72%	209	1,677,006	640,000	350,494,188
2015	4,356	94.77%	205	1,705,308	605,000	349,588,128
2016	4,476	94.79%	202	1,597,458	862,500	322,686,421

Summary statistics for constructed samples

This table reports the means, medians, standard deviations, number of observations, first quartile, and third quartile of key variables. The variables are grouped by three samples: firm-year, institution-firm-year, and proposal-year. The firm-year sample and institution-firm-year sample span from 1998 to 2016. The proposal-year sample spans from 2012 to 2016 because lobbying disclosure related proposal resolution becomes available in 2012. All variables are winsorized at 1%. The variable definitions and data sources are given in Appendix 1.

Variable	Mean	SD	p25	p50	p75	Ν
Firm-year sample						
D(Lobbying)	0.30	0.46	0.00	0.00	1.00	36410
Log(Lobbying Expense)	3.80	5.84	0.00	0.00	11.00	36410
Total IO	0.61	0.30	0.43	0.70	0.85	36410
Lobbying IO	0.25	0.15	0.14	0.27	0.37	36410
Non-lobbying IO	0.36	0.19	0.24	0.39	0.50	36410
Active Lobbying IO	0.21	0.15	0.07	0.22	0.33	36410
Non-active Lobbying IO	0.04	0.06	0.00	0.02	0.06	36410
# of Lobbying Institutions	4.22	2.09	3.00	4.00	6.00	36410
Log(Total Assets)	7.14	1.59	5.95	6.99	8.16	36410
Market-to-Book	2.10	1.47	1.21	1.59	2.37	36410
Return-on-Assets	0.01	0.16	0.00	0.04	0.08	36410
Book Leverage	0.23	0.21	0.03	0.21	0.36	36410
Capx-to-Assets	0.05	0.06	0.02	0.04	0.07	36410
Stock Return	0.14	0.53	-0.18	0.08	0.35	36410
Log(Institutional Lobbying Expense)	18.14	0.71	17.79	18.26	18.61	36410
Institution-firm-year sample						
D(Common Bills)	0.03	0.17	0.00	0.00	0.00	2388299
D(Common Lobbyist) (in bps)	0.08	2.74	0.00	0.00	0.00	2388299
Log(Corporate Lobbying Expense)	5.66	6.58	0.00	0.00	12.68	2388299
Log(Institutional Lobbying Expense)	8.07	6.78	0.00	11.98	14.06	2388299
Log(Total Holdings of Institution)	23.62	1.79	22.40	23.73	24.86	2388299
High Holdings (>75 pctls)	0.25	0.43	0.00	0.00	1.00	2388299
Block Holdings (>75 pctls)	0.25	0.43	0.00	0.00	0.00	2388299
Low Holdings (< 25 pctls)	0.25	0.43	0.00	0.00	0.00	2388299
Small Holdings (< 25 pctls)	0.26	0.44	0.00	0.00	1.00	2388299
$High \times Block$	0.13	0.33	0.00	0.00	0.00	2388299
$Low \times Small$	0.14	0.34	0.00	0.00	0.00	2388299
Weight in Institution's Portfolio	0.00	0.00	0.00	0.00	0.00	2388299
Weight in Company's Portfolio	0.01	0.01	0.00	0.00	0.00	2388299
D(Geographical Constraint)	0.66	0.47	0.00	1.00	1.00	2348324
D(Mypoia Constraint)	0.45	0.50	0.00	0.00	1.00	1468838
D(Industrial Constraint)	0.52	0.50	0.00	1.00	1.00	2388299
# of Constraints	1.63	0.93	1.00	2.00	2.00	1439893
Proposal-year sample						
Lobbying Disclosure	0.05	0.21	0.00	0.00	0.00	3913
Omitted	0.14	0.35	0.00	0.00	0.00	3913
Withdrawn	0.22	0.41	0.00	0.00	0.00	3913
Voted	0.58	0.49	0.00	1.00	1.00	3913
Passed	0.12	0.32	0.00	0.00	0.00	3913

Corporate lobbying and lobbying institutional ownership

This table presents the results examining the effects of lobbying institutional ownership on corporate lobbying activity. Panel A shows the effects of lobbying and non-lobbying institutional ownership on corporate lobbying activity. An institutional investor is defined as a lobbying institutional investor if it lobbies in a given year. Lobbying IO indicates the institutional ownership of lobbying investors; and Non-lobbying IO indicates the institutional ownership of non-lobbying investors. Panel B shows the results using additional measures of institutional lobbying. I classify lobbying institutions into active or non-active lobbying group. An institutional investor is actively lobbying if it continuously lobbies in three years (t-2, t-1, and t). Active Lobbying IO indicates the institutional ownership of active lobbying investors. Diff(Lobbying-Non-lobbying) is the subtraction of Lobbying IO to Non-lobbying IO. # of Lobbying Institutions is the number of lobbying institutions among the Top 10 holders as a proxy for lobbying institutional ownership. The model is estimated over the 1998–2016 period. Standard errors, ε , are clustered at the firm level and reported in parentheses. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Dependent Variable		D(Lobbying)		L	og(Lobbying Expens	se)
-	(1)	(2)	(3)	(4)	(5)	(6)
Lobbying IO	0.0596*	0.0532**	0.0518**	0.8220*	0.6240**	0.6200**
	(1.66)	(2.30)	(2.25)	(1.83)	(2.27)	(2.28)
Non-lobbying IO	-0.0161	-0.0287*	-0.026	-0.2993	-0.3253*	-0.2864
	(-0.64)	(-1.77)	(-1.62)	(-0.97)	(-1.70)	(-1.51)
Log(Total Assets)	0.1410***	0.0911***	0.0905***	2.0455***	1.2263***	1.2059***
	(30.12)	(11.38)	(11.46)	(31.58)	(12.29)	(12.46)
Market-to-Book	0.0243***	0.0058*	0.0056*	0.3588***	0.0764**	0.0742**
	(6.41)	(1.90)	(1.80)	(7.42)	(2.05)	(1.97)
Return-on-Assets	-0.1112***	-0.0359*	-0.0261	-1.5427***	-0.3731*	-0.2535
	(-4.00)	(-1.90)	(-1.37)	(-4.47)	(-1.68)	(-1.14)
Book Leverage	-0.0802***	-0.0392	-0.0469*	-1.4385***	-0.5323*	-0.6482**
	(-3.01)	(-1.62)	(-1.93)	(-4.27)	(-1.81)	(-2.20)
Capx-to-Assets	0.07	-0.0271	-0.0113	0.8558	-0.3424	-0.123
	(0.76)	(-0.39)	(-0.16)	(0.74)	(-0.41)	(-0.15)
Stock Return	-0.0115**	-0.0009	-0.0006	-0.1919***	-0.024	-0.0213
	(-2.36)	(-0.25)	(-0.18)	(-3.22)	(-0.59)	(-0.50)
Log(Institutional Lobbying Expense)	0.0292***	0.0176**	0.0173**	0.2557**	0.1381	0.1372
	(3.28)	(2.42)	(2.36)	(2.26)	(1.52)	(1.52)
Fixed Effects	Industry,	Firm,	Firm,	Industry,	Firm,	Firm,
	Year	Year	Industry-Year	Year	Year	Industry-Year
N	36410	35636	35636	36410	35636	35636
Adj. K-sq	0.26	0.69	0.69	0.31	0.74	0.74

Dependent Variable		D(Lobbying)		La	g(Lobbying Exper	nse)
	(1)	(2)	(3)	(4)	(5)	(6)
Active Lobbying IO	0.0578**			0.7446**		
	(2.29)			(2.48)		
Non-active Lobbying IO	0.0307			-0.0287		
	(0.63)			(-0.05)		
Non-lobbying IO	-0.0297*			-0.3473*		
	(-1.80)			(-1.79)		
Diff(Lobbying – Non-lobbying)		0.0423** (2.34)			0.4919** (2.30)	
# of Lobbying Institutions			0.0033** (2.19)			0.0412** (2.26)
Total IO		0.0121	-0.0091		0.1489	-0.1074
		(1.32)	(-0.87)		(1.38)	(-0.86)
Log(Total Assets)	0.0911***	0.0911***	0.0910***	1.2252***	1.2261***	1.2248***
	(11.37)	(11.38)	(11.37)	(12.28)	(12.29)	(12.28)
Market-to-Book	0.0058*	0.0058*	0.0058*	0.0775**	0.0763**	0.0764**
	(1.91)	(1.90)	(1.90)	(2.08)	(2.05)	(2.05)
Return-on-Assets	-0.0360*	-0.0359*	-0.0353*	-0.3740*	-0.3729*	-0.3648*
	(-1.90)	(-1.90)	(-1.87)	(-1.69)	(-1.68)	(-1.65)
Book Leverage	-0.0391	-0.0392	-0.0387	-0.5302*	-0.5319*	-0.5257*
	(-1.62)	(-1.62)	(-1.61)	(-1.80)	(-1.80)	(-1.79)
Capx-to-Assets	-0.0274	-0.02/1	-0.0281	-0.3505	-0.3418	-0.3523
Stock Poturn	(-0.39)	(-0.39)	(-0.40)	(-0.42)	(-0.41)	(-0.42)
Stock Return	-0.0009	-0.0009	-0.0009	-0.0238	-0.0238	-0.0237
Log(Institutional Lobbying Expanse)	(-0.23)	(-0.23)	0.0200***	(-0.38)	(-0.38)	(-0.38)
Log(institutional Loboying Expense)	(2.43)	(2.43)	(2.76)	(1.56)	(1.53)	(1.84)
Fixed Effects	Firm, Year	Firm, Year	Firm, Year	Firm, Year	Firm, Year	Firm, Year
Ν	35636	35636	35636	35636	35636	35636
Adj. R-sq	0.69	0.69	0.69	0.74	0.74	0.74

Panel B: Alternative measures

Causality tests: Russell 1000/2000 index switches

This table presents results of causality tests using Russell 1000/2000 index reconstitution. Two popular methods are used to ensure the robustness of results. Panel A shows the results following Appel, Gormley, and Keim (2018). In this model, I use inclusion in the Russell 2000, R2000, as instrument for lobbying institutional ownership. Column (1) - (4) exhibit results using the entire sample between 1998 and 2016. Column (5) - (8) exhibit results using sample after 2007, from which Russell Investments implemented the banding policy. All regressions include year fixed effects. Panel B shows the results following Schmidt and Fahlenbrach (2017). In this model, I use stock switches from the Russell 1000 to the Russell 2000, 11000 - 12000, the Russell 2000 to Russell 1000, I2000 - 11000, and the difference in ranks based on the raw market capitalization as instrumental variables for the change in lobbying institutional ownership. All regressions include Fama-French 12 industry dummies and year-fixed effects. The model is estimated over the 1998–2016 period. Standard errors, ε , are clustered at the firm level and reported in parentheses. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Pallel A: Method I - A	IGK (2016)								
		Sample Peri	od: 1998 - 2016		Sample Period: 2008 - 2016				
	1st S	tage]	IV	1st S	stage]	[V	
	Non- lobbying IO	Lobbying IO	D(Lobbying)	Log(Lobbying Expense)	Non- lobbying IO	Lobbying IO	D(Lobbying)	Log(Lobbying Expense)	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
Lobbying IO*			2.4061**	31.0819**			2.1105*	26.9640**	
			(2.30)	(2.43)			(1.92)	(1.99)	
R2000	-0.0057	0.0214***			-0.0324*	0.0421***			
	(-0.63)	(3.22)			(-1.74)	(2.66)			
Log(Market Cap)	-0.4453**	-0.006	0.3848	3.6241	-0.046	0.1527	-0.5318	-7.2618	
	(-2.27)	(-0.04)	(0.80)	(0.62)	(-0.18)	(0.70)	(-0.85)	(-0.94)	
Log(Market Cap) ^ 2	0.0164**	0.0021	-0.013	-0.122	0.0023	-0.0032	0.0192	0.2606	
	(2.43)	(0.39)	(-0.77)	(-0.59)	(0.27)	(-0.43)	(0.90)	(0.99)	
Float	0.0002***	0.0001***	-0.0001	-0.0018	0.0001***	0.0002***	-0.0001	-0.0017	
	(11.98)	(14.57)	(-0.99)	(-1.13)	(3.11)	(8.44)	(-0.67)	(-0.80)	
Band	-0.001	-0.0146***	0.0163	0.1693	-0.0197	-0.0180*	0.0537	0.6211	
	(-0.13)	(-2.66)	(0.67)	(0.56)	(-1.61)	(-1.83)	(1.21)	(1.13)	
R2000 t-1	0.0082	-0.0076	-0.0529**	-0.7185**	0.0167	-0.0103	-0.0407	-0.6069	
	(1.02)	(-1.30)	(-2.33)	(-2.54)	(1.21)	(-0.97)	(-1.36)	(-1.63)	
Band \times R2000 t-1	0.0039	0.0143**	-0.0189	-0.2138	0.0043	0.0064	-0.0344	-0.4166	
	(0.41)	(2.07)	(-0.65)	(-0.60)	(0.24)	(0.44)	(-0.69)	(-0.68)	
Fixed Effect	Year	Year	Year	Year	Year	Year	Year	Year	
Ν	12708	12708	12708	12708	6048	6048	6048	6048	
Adj. R-sq	0.06	0.11	0.04	0.04	0.03	0.05	0.03	0.03	

	1st Sta	age	IV	
	⊿Non-lobbying IO	⊿Lobbying IO	⊿Dummy(Lobbying)	⊿Lobbying IO
	(1)	(2)	(3)	(4)
ΔIO			0.6013*	7.5255**
			(1.87)	(2.14)
I1000 - I2000	-0.0057	0.0084***		
	(-1.45)	(2.70)		
I2000 - I1000	-0.001	-0.0066**		
	(-0.29)	(-2.41)		
⊿Rank	-0.0003	-0.0039***		
	(-0.82)	(-11.66)		
⊿Log(Total Assets)	0.0154***	0.0029	0.0268*	0.3254**
	(3.46)	(0.79)	(1.87)	(2.08)
⊿Market-to-Book	0.0019	0.0038***	-0.006	-0.0683
	(1.58)	(4.23)	(-1.38)	(-1.45)
⊿Return on Assets	0.0287***	0.0183**	0.0106	0.1597
	(2.84)	(2.32)	(0.32)	(0.45)
⊿Book Leverage	-0.0072	-0.0113	-0.0229	-0.2708
	(-0.68)	(-1.34)	(-0.62)	(-0.66)
⊿Capx-to-Assets	-0.0139	-0.0271	0.0098	0.2275
	(-0.54)	(-1.25)	(0.11)	(0.24)
⊿Stock Return	0.0065***	0.0087***	0.0048	0.0428
	(4.33)	(7.08)	(1.07)	(0.88)
Fixed Effects	Industry, Year	Industry, Year	Industry, Year	Industry, Year
Ν	12747	12747	12747	12747
Adj. R-sq	0.19	0.26	0.00	0.00

Panel B: Method 2 - SF (2017)

Effects of lobbying constraints

This table presents the results examining the relation between corporate lobbying and lobbying institutional ownership in different subsamples with lobbying constraints. The dependent variables are the dummy variable equal to one if a firm lobby at t+1 or the log transformation of total lobbying expense at t+1. I identify three types of lobbying constraints: (1) Geographical Constraint; (2) Managerial Myopic Constraint; (3) Industrial Constraint. Firms with headquarters out of a radius of 300 miles from Washington DC are considered with geographical constraint to obtain lobbying service. I use the R&D expenses of firms as a measure of managerial myopia. Firms with R&D expenses less than the median value in the sample are considered with industrial constraint. Column (1) and (4) in each panel show the results examining the effects of lobbying constraints on corporate lobbying activity. Column (2) and (5) show the results of subsample of constrained firms. Column (3) and (6) show the results of subsample of non-constrained firms. The model is estimated over the 1998–2016 period. The variable definitions and data sources are given in Appendix 1. Standard errors, ε , are clustered at the firm level and reported in parentheses. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Dependent Variable		D(Lobbying)		I	Log(Lobbying Expen	se)
-	All Sample	Constrained Sample	Non-Constrained Sample	All Sample	Constrained Sample	Non-Constrained Sample
	(1)	(2)	(3)	(4)	(5)	(6)
Geographical Constraint	-0.0293**			-0.3793**		
	(-2.16)			(-2.18)		
Lobbying IO	0.0792**	0.0547*	0.0289	1.0917**	0.6208*	0.3949
	(2.11)	(1.96)	(0.68)	(2.32)	(1.88)	(0.78)
Non-lobbying IO	-0.0465*	-0.0287	-0.0131	-0.6932**	-0.2771	-0.2385
	(-1.79)	(-1.47)	(-0.43)	(-2.14)	(-1.22)	(-0.66)
Log(Total Assets)	0.1389***	0.0810***	0.1061***	2.0178***	1.0848***	1.4156***
	(28.54)	(8.15)	(7.56)	(29.73)	(8.88)	(8.04)
Market-to-Book	0.0327***	0.0041	0.0073	0.4767***	0.0578	0.0953
	(8.85)	(1.17)	(1.29)	(10.04)	(1.37)	(1.34)
Return-on-Assets	-0.2053***	-0.0306	-0.0518	-2.8182***	-0.3229	-0.4834
	(-7.79)	(-1.41)	(-1.39)	(-8.64)	(-1.26)	(-1.11)
Book Leverage	-0.0469*	0.0065	-0.1332***	-1.0316***	0.047	-1.7142***
	(-1.72)	(0.23)	(-3.04)	(-2.98)	(0.13)	(-3.26)
Capx-to-Assets	-0.1473*	-0.0679	0.1719	-1.9025*	-0.8237	1.9395
	(-1.80)	(-0.88)	(0.98)	(-1.83)	(-0.90)	(0.92)
Stock Return	-0.0154***	-0.002	0.0033	-0.2468***	-0.0348	0.016
	(-3.17)	(-0.45)	(0.52)	(-4.11)	(-0.70)	(0.21)
Log(Institutional Lobbying Expense)	0.0311***	0.0209**	0.0107	0.2755**	0.1839*	0.066
	(3.14)	(2.38)	(0.82)	(2.21)	(1.78)	(0.40)
Fixed Effects	Firm, Year	Firm, Year	Firm, Year	Firm, Year	Firm, Year	Firm, Year
Ν	35670	23332	11594	35670	23332	11594
Adj. R-sq	0.23	0.68	0.69	0.28	0.73	0.74

Dependent Variable		D(Lobbying)		Lo	og(Lobbying Expen	se)
	All Sample	Constrained Sample	Non- Constrained Sample	All Sample	Constrained Sample	Non- Constrained Sample
	(1)	(2)	(3)	(4)	(5)	(6)
Myopia Constraint	-0.0467***			-0.5576***		
	(-2.97)			(-2.82)		
Lobbying IO	0.0726	0.0975***	0.0229	0.8975	1.0498**	0.3429
	(1.55)	(2.64)	(0.51)	(1.53)	(2.42)	(0.64)
Non-lobbying IO	-0.0746**	-0.0507**	-0.0426	-1.0049***	-0.5256*	-0.5564
	(-2.40)	(-2.05)	(-1.26)	(-2.60)	(-1.78)	(-1.40)
Log(Total Assets)	0.1394***	0.1049***	0.0950***	2.0501***	1.3307***	1.3912***
	(22.48)	(5.84)	(6.77)	(23.51)	(5.97)	(7.93)
Market-to-Book	0.0297***	-0.0005	0.0085*	0.4376***	0.0016	0.1160*
	(7.53)	(-0.10)	(1.72)	(8.60)	(0.03)	(1.89)
Return-on-Assets	-0.1521***	-0.0630*	0.0017	-2.2008***	-0.7353*	-0.0368
	(-4.84)	(-1.89)	(0.06)	(-5.64)	(-1.91)	(-0.10)
Book Leverage	0.0085	-0.1244***	0.0086	-0.343	-1.4161**	0.0501
	(0.25)	(-2.66)	(0.20)	(-0.79)	(-2.53)	(0.10)
Capx-to-Assets	-0.2376*	0.0558	0.2377	-3.3940**	0.2028	3.7046
	(-1.89)	(0.48)	(1.15)	(-2.14)	(0.15)	(1.46)
Stock Return	-0.0139**	0.0034	0	-0.2304***	0.0295	-0.0191
	(-2.29)	(0.57)	(-0.00)	(-3.07)	(0.43)	(-0.24)
Log(Institutional Lobbying Expense)	-0.0033	-0.0066	0.0371***	-0.1966	-0.1539	0.3878**
	(-0.28)	(-0.42)	(2.77)	(-1.27)	(-0.82)	(2.23)
Fixed Effects	Year	Firm, Year	Firm, Year	Year	Firm, Year	Firm, Year
Ν	21850	10398	10697	21850	10398	10697
Adj. R-sq	0.24	0.65	0.70	0.29	0.68	0.76

Panel B: Managerial myopia constraint

Panel C: Industrial constraint

Dependent Variable		D(Lobbying)		Lo	Log(Lobbying Expense)		
-	All Sample	Constrained Sample	Non- Constrained Sample	All Sample	Constrained Sample	Non- Constrained Sample	
	(1)	(2)	(3)	(4)	(5)	(6)	
Industrial Constraint	-0.1634***			-2.1228***			
	(-13.17)			(-13.49)			
Lobbying IO	0.0700*	0.0724***	0.0329	0.9585**	0.8536***	0.4051	
	(1.95)	(2.80)	(0.80)	(2.13)	(2.87)	(0.81)	
Non-lobbying IO	-0.0289	-0.0462**	-0.0171	-0.4619	-0.4713**	-0.3126	
	(-1.16)	(-2.55)	(-0.58)	(-1.50)	(-2.22)	(-0.90)	
Log(Total Assets)	0.1358***	0.0734***	0.1134***	1.9745***	0.9614***	1.5493***	
	(30.13)	(7.29)	(9.04)	(31.55)	(7.74)	(9.92)	
Market-to-Book	0.0285***	0.0037	0.007	0.4205***	0.0424	0.0978*	
	(7.82)	(0.97)	(1.58)	(8.95)	(0.92)	(1.81)	
Return-on-Assets	-0.1541***	-0.0526**	-0.0202	-2.1657***	-0.6118**	-0.1414	
	(-5.90)	(-2.35)	(-0.63)	(-6.72)	(-2.32)	(-0.38)	
Book Leverage	-0.1088***	-0.0639**	-0.0186	-1.8343***	-0.7973**	-0.3246	
	(-4.16)	(-1.98)	(-0.53)	(-5.53)	(-2.08)	(-0.75)	
Capx-to-Assets	-0.1076	-0.0341	-0.0444	-1.3924	-0.2218	-0.9766	
	(-1.42)	(-0.45)	(-0.34)	(-1.45)	(-0.25)	(-0.62)	
Stock Return	-0.0145***	0.0028	-0.0054	-0.2325***	0.0273	-0.09	
	(-3.07)	(0.65)	(-0.95)	(-4.00)	(0.56)	(-1.35)	
Log(Institutional Lobbying Expense)	0.0266***	0.0136	0.0238**	0.2253**	0.1253	0.1696	
	(3.08)	(1.46)	(2.06)	(2.05)	(1.14)	(1.16)	
Fixed Effects	Year	Firm, Year	Firm, Year	Year	Firm, Year	Firm, Year	
Ν	36410	19644	15941	36410	19644	15941	
Adj. R-sq	0.26	0.67	0.68	0.31	0.71	0.74	

Congressional bills passage and institutional investors

This table presents the results examining the effects of institutional investors on the passage of congressional bills. The dependent variables are the dummy variable equal to one if a bill is passed by both chambers in Column (1) - (3) and the dummy variable equal to one if a bill becomes a law in Column (4) - (6). D(Institution) is a dummy variable equal to one if a bill is lobbied by at least one institutional investor. D(Company) is a dummy variable equal to one if a bill is lobbied by at least one company. # of Times Lobbied is the number of times a bill is lobbied by all interest groups. The model is estimated over the 1998–2016 period. The variable definitions and data sources are given in Appendix 1. Standard errors, ε , are clustered at the firm level and reported in parentheses. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Dependent Variable	D(Passed by Both Chambers)			I	D(Become a Law)			
	(1)	(2)	(3)	(4)	(5)	(6)		
D(Institution) × D(Company)			0.0186**			0.0180**		
			(2.51)			(2.42)		
D(Institution)	0.0105***	0.0107***	-0.0028	0.0097***	0.0104***	-0.0027		
	(2.90)	(3.14)	(-0.44)	(2.69)	(3.04)	(-0.42)		
D(Company)	0.0004	-0.0015	-0.0041	-0.0013	-0.0026	-0.0051*		
	(0.14)	(-0.57)	(-1.43)	(-0.47)	(-0.96)	(-1.76)		
# of Times Lobbied	0.0010***	0.0008***	0.0008***	0.0009***	0.0007***	0.0007***		
	(30.43)	(24.54)	(23.84)	(27.48)	(21.04)	(20.40)		
Fixed Effects	Congress,	Congress,	Congress,	Congress,	Congress,	Congress,		
	Sponsor	Sponsor	Sponsor	Sponsor	Sponsor	Sponsor		
Ν	58400	58373	58373	58400	58373	58373		
Adj. R-sq	0.02	0.17	0.17	0.02	0.16	0.16		

Common bills and institutional investors

This table presents the results examining the channel that institutional investors lobby the same bills with the firms they hold. The dependent variable is an indicator variable on whether two parties lobby for the same bills in t+1. Panel A examines the effects of institutional holdings. The variables of interest are High Holdings (>75 pctls), Low Holdings (<25 pctls), Block Holdings (>75 pctls), Small Holdings (<25 pctls), High × Block, and Low × Small, respectively. Panel B examine the effects of lobbying constraints. The variables of interest are D(Geographical Constraint), D(Myopic Constraint), D(Industrial Constraint), and # of Constraints, respectively. The variable definitions and data sources are given in Appendix 1. All regressions include institution, firm, and year fixed effects. The model is estimated over the 1998–2016 period. Standard errors, ε , are clustered at the firm level and reported in parentheses. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Effects of institutional holdings						
	(1)	(2)	(3)	(4)	(5)	(6)
Target=	High Holdings	Low Holdings	Block Holdings	Small Holdings	$High \times Block$	$\text{Low} \times \text{Small}$
Target	0.0125***	-0.0013***	0.0171***	-0.0026***	0.0222***	-0.0009***
	(15.74)	(-3.53)	(17.83)	(-8.22)	(17.50)	(-2.89)
Log(Total Holdings of Institution)	-0.0048***	-0.0044***	-0.0064***	-0.0047***	-0.0056***	-0.0044***
	(-14.68)	(-14.24)	(-16.31)	(-14.55)	(-15.15)	(-14.27)
Log(Institutional Lobbying Expense)	0.0020***	0.0020***	0.0020***	0.0020***	0.0020***	0.0020***
	(20.22)	(20.20)	(20.21)	(20.20)	(20.21)	(20.20)
Log(Corporate Lobbying Expense)	0.0017***	0.0017***	0.0017***	0.0017***	0.0017***	0.0017***
	(8.67)	(8.69)	(8.66)	(8.68)	(8.65)	(8.68)
Log(Total Assets)	0.0012	0.0028	0.0024	0.0029	0.0015	0.0029
	(0.61)	(1.41)	(1.22)	(1.46)	(0.74)	(1.47)
Market-to-Book	-0.0011	-0.0007	-0.0007	-0.0006	-0.001	-0.0006
	(-1.14)	(-0.64)	(-0.73)	(-0.62)	(-1.02)	(-0.61)
Return-on-Assets	0.0153**	0.0164**	0.0163**	0.0167**	0.0154**	0.0167**
	(2.15)	(2.30)	(2.29)	(2.34)	(2.16)	(2.34)
Book Leverage	-0.005	-0.0064	-0.0061	-0.0065	-0.0052	-0.0065
	(-0.70)	(-0.90)	(-0.86)	(-0.91)	(-0.73)	(-0.91)
Capx-to-Assets	0.0864***	0.0885***	0.0879***	0.0887***	0.0868***	0.0887***
	(3.67)	(3.74)	(3.72)	(3.75)	(3.67)	(3.75)
Stock Return	0.0007	0.0011	0.0012	0.0012	0.0009	0.0011
	(0.68)	(1.00)	(1.12)	(1.08)	(0.81)	(1.06)
Fixed Effects	Institution,	Institution,	Institution,	Institution,	Institution,	Institution,
	Firm,	Firm,	Firm,	Firm,	Firm,	Firm,
	Year	Year	Year	Year	Year	Year
Ν	2388287	2388287	2388287	2388287	2388287	2388287
Adj. R-sq	0.206	0.205	0.206	0.205	0.207	0.205

Panel B: Effects of lobbying constraints				
Target=	(1) D(Geographical Constraint)	(2) D(Myopic Constraint)	(3) D(Industrial Constraint)	(4) # of Constraints
Target	0.0289	0.0202***	0.0094**	0.0177***
	(1.06)	(6.84)	(2.00)	(6.55)
Weight in Institution's Portfolio	0.7721***	0.7648***	0.7558***	0.7865***
C .	(3.57)	(2.71)	(3.54)	(2.72)
Weight in Company's Portfolio	0.2385***	0.2155***	0.2395***	0.2114***
	(12.16)	(9.35)	(12.33)	(9.07)
Log(Total Holdings of Institution)	-0.0050***	-0.0055***	-0.0050***	-0.0054***
	(-14.36)	(-11.88)	(-14.66)	(-11.52)
Log(Institutional Lobbying Expense)	0.0020***	0.0019***	0.0020***	0.0019***
	(19.90)	(15.16)	(20.18)	(14.82)
Log(Corporate Lobbying Expense)	0.0018***	0.0014***	0.0017***	0.0014***
	(8.92)	(6.09)	(8.65)	(6.13)
Log(Total Assets)	0.0027	0.0073***	0.0027	0.0070***
	(1.39)	(2.71)	(1.36)	(2.58)
Market-to-Book	-0.0005	-0.001	-0.0007	-0.0008
	(-0.55)	(-0.91)	(-0.74)	(-0.74)
Return-on-Assets	0.0171**	0.0183**	0.0168**	0.0191**
	(2.37)	(2.18)	(2.35)	(2.25)
Book Leverage	-0.0067	-0.0003	-0.0061	-0.0009
	(-0.94)	(-0.03)	(-0.86)	(-0.10)
Capx-to-Assets	0.0900***	0.0779**	0.0884***	0.0759**
	(3.75)	(2.58)	(3.75)	(2.50)
Stock Return	0.001	0.0006	0.0011	0.0006
	(0.93)	(0.48)	(1.01)	(0.43)
Fixed Effects	Institution,	Institution.	Institution.	Institution,
	Firm,	Firm,	Firm,	Firm,
	Year	Year	Year	Year
Ν	2348312	1468828	2388287	1439883
Adj. R-sq	0.206	0.202	0.206	0.202

Panel B: Effects of lobbying constraints

Common lobbyist and institutional investors

This table presents the results examining the channel that institutional investors share lobbyists with the firms they hold. The dependent variable is an indicator variable on whether two parties lobby for the same bills in t+1. The variables of interest are High Holdings (>75 pctls), Low Holdings (<25 pctls), Block Holdings (>75 pctls), Small Holdings (<25 pctls), High × Block, and Low × Small, respectively. Panel A shows the results using the sample excluding firms in financial industry. Panel B shows the results using the sample with only financial firms. All regressions include institution, firm, and year fixed effects. The model is estimated over the 1998–2016 period. The variable definitions and data sources are given in Appendix 1. Standard errors, ε , are clustered at the firm level and reported in parentheses. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

Panel A: Non-Financial Sample						
	(1)	(2)	(3)	(4)	(5)	(6)
Target=	High Holdings	Low Holdings	Block Holdings	Small Holdings	High × Block	Low × Small
Target	0	0	0	0	0.0002*	0.0001
	(0.60)	(-0.54)	(0.18)	(0.41)	(1.90)	(1.11)
Log(Total Holdings of Institution)	-0.0001***	-0.0001***	-0.0001***	-0.0001***	-0.0001***	-0.0001***
	(-3.44)	(-3.40)	(-3.43)	(-3.19)	(-3.75)	(-3.28)
Log(Institutional Lobbying Expense)	0.0001***	0.0001***	0.0001***	0.0001***	0.0001***	0.0001***
	(8.89)	(8.90)	(8.90)	(8.90)	(8.91)	(8.90)
Log(Corporate Lobbying Expense)	0.0001***	0.0001***	0.0001***	0.0001***	0.0001***	0.0001***
	(5.87)	(5.87)	(5.87)	(5.87)	(5.86)	(5.87)
Log(Total Assets)	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002
	(1.41)	(1.42)	(1.47)	(1.48)	(1.35)	(1.49)
Market-to-Book	0.0001*	0.0001*	0.0001*	0.0001*	0.0001*	0.0001*
	(1.83)	(1.85)	(1.87)	(1.87)	(1.77)	(1.89)
Return-on-Assets	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001	-0.0001
	(-0.18)	(-0.19)	(-0.17)	(-0.17)	(-0.20)	(-0.16)
Book Leverage	0.0004	0.0004	0.0004	0.0004	0.0005	0.0004
	(1.34)	(1.34)	(1.33)	(1.33)	(1.37)	(1.32)
Capx-to-Assets	0.0013	0.0013	0.0013	0.0013	0.0013	0.0013
	(1.09)	(1.09)	(1.10)	(1.10)	(1.08)	(1.10)
Stock Return	0	0	0	0	0	0
	(0.31)	(0.30)	(0.33)	(0.33)	(0.29)	(0.35)
Eined Effects	Institution	Institution	Institution	Institution	Institution	Institution
FIXed Effects	Firm	Firm	Eirm	Firm	Firm	Firm
	Voor	Ver	Veer	Vear	Voor	Vor
Ν	2388287	2388287	2388287	2388287	2388287	2388287
Adi P sa	0.000	0.000	0.000	0.000	0.000	0.000
Auj. K-sy	0.009	0.009	0.009	0.009	0.009	0.009

Panel B: Financial Sample						
	(1)	(2)	(3)	(4)	(5)	(6)
Target=	High Holdings	Low Holdings	Block Holdings	Small Holdings	High imes Block	$Low \times Small$
High Holdings (>75 pctls)	0.0011***	-0.0001	0.0024***	-0.0006***	0.0033***	0
	(3.51)	(-0.47)	(3.65)	(-2.66)	(4.17)	(-0.24)
Log(Total Holdings of Institution)	-0.0003**	-0.0002*	-0.0005***	-0.0003**	-0.0004**	-0.0002*
	(-1.99)	(-1.72)	(-2.72)	(-2.15)	(-2.56)	(-1.73)
Log(Institutional Lobbying Expense)	0.0001***	0.0001***	0.0001***	0.0001***	0.0001***	0.0001***
	(4.76)	(4.76)	(4.79)	(4.75)	(4.83)	(4.76)
Log(Corporate Lobbying Expense)	0.0002***	0.0002***	0.0002***	0.0002***	0.0002***	0.0002***
	(2.65)	(2.63)	(2.63)	(2.63)	(2.66)	(2.63)
Log(Total Assets)	0.0003	0.0004	0.0004	0.0004	0.0002	0.0005
	(0.72)	(1.03)	(0.88)	(1.01)	(0.57)	(1.05)
Market-to-Book	0.0003	0.0004	0.0003	0.0004	0.0003	0.0004
	(1.31)	(1.55)	(1.45)	(1.54)	(1.20)	(1.56)
Return-on-Assets	0.0054**	0.0057**	0.0056**	0.0057**	0.0052**	0.0057**
	(2.12)	(2.25)	(2.22)	(2.25)	(2.06)	(2.26)
Book Leverage	-0.0008	-0.0009	-0.0009	-0.0009	-0.0008	-0.0009
	(-0.58)	(-0.63)	(-0.63)	(-0.63)	(-0.56)	(-0.63)
Capx-to-Assets	0.011	0.011	0.0109	0.0109	0.0111	0.011
	(1.40)	(1.39)	(1.38)	(1.39)	(1.39)	(1.39)
Stock Return	-0.0005**	-0.0005**	-0.0005*	-0.0005*	-0.0005**	-0.0005*
	(-2.15)	(-1.97)	(-1.93)	(-1.94)	(-2.17)	(-1.95)
Fixed Effects	Institution,	Institution,	Institution,	Institution,	Institution,	Institution,
	Firm,	Firm,	Firm,	Firm,	Firm,	Firm,
	Year	Year	Year	Year	Year	Year
Ν	622241	622241	622241	622241	622241	622241
Adj. R-sq	0.012	0.012	0.012	0.012	0.013	0.012

Shareholder proposals on lobbying disclosure and institutional ownership

This table presents results of the outcomes of lobbying disclosure proposals compared to those of other type proposals on the institutional ownership. The dependent variables are indicators of whether the proposal is omitted, withdrawn, voted, and passed. Column (1) - (4) examine the outcomes of being a lobbying disclosure related shareholder proposal. Column (5) shows the result of the effect of institutional ownership on the passage of shareholder proposals. All regressions include firm-fixed as well as year-fixed effects. The model is estimated over the 2012–2016 period because lobbying disclosure related proposal started available in 2012. The variable definitions and data sources are given in Appendix 1. Standard errors, ε , are clustered at the firm level and reported in parentheses. The symbols *, **, and *** indicate significance at the 10%, 5%, and 1% levels, respectively.

	Omitted	Withdrawn	Voted	Passed	Passed
	(1)	(2)	(3)	(4)	(5)
Lobbying Disclosure x Lobbying IO					-0.4258*
					(-1.77)
Lobbying Disclosure x Non-lobbying IO					(0.13)
					(-0.66)
Lobbying Disclosure	-0.1485***	0.03	0.1666***	-0.0648***	0.14
	(-8.25)	(0.85)	(4.85)	(-3.31)	(1.36)
Lobbying IO	0.04	-0.3343**	0.3126*	0.11	0.13
	(0.31)	(-2.19)	(1.80)	(0.54)	(0.63)
Non-lobbying IO	(0.09)	0.09	0.01	0.09	0.09
	(-0.71)	(0.72)	(0.04)	(0.50)	(0.50)
Log(Total Assets)	0.00	(0.03)	0.06	(0.05)	(0.06)
	(0.12)	(-0.61)	(1.15)	(-0.99)	(-1.11)
Market-to-Book	0.00	(0.01)	0.01	(0.04)	(0.04)
	(0.08)	(-0.68)	(0.57)	(-1.62)	(-1.64)
Return-on-Assets	0.2635**	0.02	(0.25)	0.5133***	0.5206***
	(2.07)	(0.13)	(-1.20)	(2.96)	(2.99)
Book Leverage	(0.08)	(0.13)	0.12	0.02	0.02
	(-0.83)	(-0.92)	(0.73)	(0.12)	(0.15)
Capx-to-Assets	0.20	0.24	(0.43)	(0.50)	(0.52)
	(0.60)	(0.47)	(-0.66)	(-0.83)	(-0.85)
Stock Return	(0.02)	0.02	0.03	0.02	0.02
	(-0.64)	(0.46)	(0.83)	(0.43)	(0.45)
Log(Institutional Lobbying Expense)	0.01	0.0141***	-0.0208***	(0.01)	(0.01)
	(1.58)	(4.14)	(-2.91)	(-1.43)	(-1.39)
Fixed Effects	Firm, Year				
Ν	3698	3698	3698	2073	2073
adj. R-sq	0.091	0.106	0.106	0.409	0.409