The Partisan Ties of Lobbying Firms

Alexander C. Furnas
University of Michigan
zfurnas@umich.edu

Michael T. Heaney
University of Glasgow and University of Michigan
michaeltheaney@gmail.com

Timothy M. LaPira
James Madison University
lapiratm@jmu.edu

December 11, 2018

Abstract: While recent scholarship has given considerable attention to how political parties and interest groups in the United States work cooperatively, the question of how this cooperation depends on political institutions outside the electoral context has been neglected. We assess how institutional differences between the chambers in Congress affect the lobbying process. Considering differences in staff resources, decision rules, and the length of terms in office, we hypothesize that ties by lobbying firms to the majority party in the House are expected to be more influential than ties by lobbying firms to the majority party in the Senate. We test this contingent-benefits hypothesis using data from lobbying disclosure reports from 1998 to 2016, as well as original data compiled on the lobbying firms that filed the reports. We estimate panel linear regression models for the full time period, and difference-in-difference models when party control switches, to examine the effects of partisan ties on the revenues of lobbying firms. We show that firms earn revenue windfalls when they are aligned with the majority party in the House, but not the Senate. Our evidence is stronger in the post-2008 period, when the nature of the data changed following modifications in the lobbying law.

Keywords: political parties, interest groups, lobbying firms, Congress, House, Senate

Scholars have traditionally viewed political parties and interest groups as competing forms of political organization in the United States. The first citizens lobbying groups were formed in response to frustrations by many people that their interests were not represented well by the party system (Clemens 1997). Rather than continuing to try to modify party platforms, these groups formed permanent organizations in state capitals to promote their interests on a year-round basis. These groups were usually small in comparison to political parties; they focused on issues that were not salient enough to create significant cleavages during general elections (Schattschneider 1960). Nonetheless, lobbying organizations brought forth valuable and reliable information that legislators could not otherwise obtain from partisan sources (Hansen 1991). As a result, lobbying grew considerably over the decades (Leech et al. 2005).

In recent years, scholars have placed a greater emphasis on understanding the complementary nature of political parties and interest groups. At the root of this nascent perspective lies a view of political parties as consisting of coalitions that encompass interest groups and other types of supporting organizations, such as think tanks (Bawn et al. 2012; Cohen et al. 2008; Fraussen and Halpin 2018; Herrnson 2009). Political parties benefit from the fundraising, advocacy, and grassroots mobilization undertaken by interest groups, while interest groups benefit from policy gains when their allied party takes the reins of government.

The shift to viewing groups and parties as complementary rather than competitive owes partially to changes in political reality (Krimmel 2017). Partisan polarization has fostered an increased alignment between organized interests and the two major political parties. For example, Koger and Victor (2009) found that among

1

lobbyists who made 5 or more campaign contributions, approximately 86 percent of these lobbyists gave 95 percent or more of their money exclusively to one political party. Likewise, in a study of national party convention delegates in 2008, Heaney et al. (2012) reported that over 97 percent of network ties among allied advocacy organizations were within the same party. Rather than presenting organizations as in one another's crosshairs, these studies suggest that parties and organized interests often work in tandem with one another to achieve common political goals.

Given the growing recognition of party-group cooperation, research has increasingly examined what makes that cooperation possible and/or desirable. Karol (2009) explains that when a political party seeks to include an interest group in its party coalition, it may be willing to change its position on established issues, thus providing an avenue for lobbying to influence policy outcomes. Hacker and Pierson (2005, pp. 142-3) recount how some Republican leaders and their lobbyist allies worked to convince the lobbying community to become more loyal to the Republican Party and supportive of its agenda through "The K Street Project" (see also Loomis 2007). Ragusa and Gaspar (2016) showed how grassroots Tea Party lobbying was able to facilitate the shift of many Republican members of Congress to adopt more conservative positions (see also Bailey, Mummolo, and Noel 2012). Heaney (2006) revealed that interest groups could garner reputations for lobbying influence by developing a bias in their lobbying ties with respect to one political party over the other, as well as by curating positions as brokers between the two parties in communication and coalition networks (see also Heaney and Leifeld 2018).

A significant element that is missing from this conversation is whether and how these cooperative efforts depend on existing political institutions outside the electoral context. Prior research demonstrates that political institutions play an important role in helping to structure politicians' motivations, strategies, and preferences (Moe 2005). Could it be that party-group cooperation is facilitated more readily through some institutions than others? Is it possible that politicians benefit more from joining party-group alignments within one institution than within another? This type of analysis is critical for a theory of party-group cooperation because it grapples with the potential benefits of cooperation from the perspective of elected officials, rather than only from the perspective of external political actors.

A likely setting for institutional differences in party-group beneifts is the United States Congress. As a bicameral institution, its two houses are organized differently and behave differently (Baker 2008). The House of Representatives and the Senate differ in their size, rules, resources, and terms of office. It is reasonable to expect, therefore, that party-group cooperation may have different effects in the two chambers.

This article explores possible differences in the effects of party-group cooperation in the House and Senate by examining lobbying firms as an arena where this cooperation often takes place. While some lobbying firms are founded on a bipartisan basis, other lobbying firms are founded by lobbyists who are exclusively aligned with one political party. These firms may be led by former members of Congress, executive branch officials, or legislative staff members who have well-known partisan identities. In these cases, there are opportunities for firms to profit from their connections to a party, much as organizers of the K Street Project proposed (Hacker and Pierson 2005; Loomis

2007). Yet, these connections may be of different value in the House and Senate, conditional on members' and staffers' need to rely on experienced lobbyists' superior policy expertise and political intelligence.

We offer a theory conditioned on how members of the House and Senate may vary in their susceptibility to lobbying influence. We leverage original data that we compiled about the characteristics of lobbying firms and link it to lobbying revenue reports from 1998 to 2016. By drawing on new data about lobbying firms' partisan ties, we are able to reveal how links to House and Senate majorities differentially affects lobbying fortunes. We report the results of standard panel linear models over the full time span. We turn to difference-in-difference analysis in an attempt to ascertain the causal effects of changes in partisan control of the House and Senate.

This study makes numerous contributions to what is known about lobbying, Congress, and the nature of party-group cooperation. In contrast to the extant literature, which usually treats lobbying firms as politically neutral or analytically inconsequential, our research demonstrates how their behavior helps to illuminate significant relationships between political parties and organized interests. This study is also among the first to identify lobbying differences between the House and Senate. In contrast to extant scholarship, which usually theorizes lobbying uniformly across the chambers, our article presents evidence that the benefits of lobbying are perceived as greater in the House than in the Senate. Finally, our analysis adds nuance to theories of party-group cooperation by expounding on the roles played by different types of actors in making cooperation happen.

The Contingent Benefits of Partisan Ties

Washington, DC has witnessed a tremendous growth in lobbying over the past several decades (Holyoke 2015; Leech et al. 2005). This growth has been fueled in no small part by the considerable incomes that can be earned in this profession (Birnbaum 2005; LaPira and Thomas 2017). As a prominent lobbyist told us

> once it became lucrative, every staffer – not just Member – every staffer
>
> on [Capitol] Hill who had two or three years of experience went out and
>
> hung up a shingle (anonymous interview[1]).

While this lobbyist's statement is somewhat hyperbolic, it nonetheless reflects the eagerness and energy with which many people have moved from government positions to lobbying in recent years.

With the rush of former government employees to become lobbyists, lobbying firms play a crucial role in transforming ambition into business. Lobbying firms assemble teams of lobbyists with particular areas of political, policy, and/or legal expertise. They help to build clientele using the reputations of the founding members. The principal founding partners of a firm play an enormous role in establishing its identity. For example, The Livingston Group, founded by former House Appropriations Committee Chairman and Speaker-designate Bob Livingston (R-LA), has become well known for appropriations lobbying. The McManus Group, founded by former House

---

[1] The interviews were collected as part of the 2017 Congressional Capacity Survey (CCS), James Madison University IRB Protocol #17-0333, which was generously funded by the Hewlett Foundation Madison Initiative. Transcripts were edited to maintain strict confidentiality.

Ways and Means Committee Republican staff director John McManus – who was a key participant in writing the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 – has become known with a niche for health policy lobbying. Indeed, the potential for forming niches is quite extensive, as firm identities could be based on multiple dimensions, such as targeted government institution, policy area, geography, gender, client type, or political party (Heaney 2004).

We focus on partisan ties as a significant aspect of a lobbying firm's identity. In doing so, we do not deny that other dimensions – such as policy expertise and geography – can be quite important. Rather, we maintain that partisan ties are readily observable, easily understandable, and likely consequential in this age of intense partisan polarization and competition (Poole and Rosenthal 2000; Lee 2009). Lobbying firms' prospective clients can observe the partisan ties of the founders and use them as a meaningful heuristic to discern if the firm is likely to serve the client's interests well.

Many firms may seek to brand themselves as either partisan or bipartisan. For example, The Podesta Group, founded by brothers John and Tony Podesta, was known as a major Democratic lobbying firm before its demise associated with foreign lobbying client scandals. Both brothers had worked for a variety of Democratic politicians, with John Podesta having held prominent positions in the administrations of presidents Bill Clinton and Barack Obama, as well as presidential candidate Hillary Clinton. Representation by the Podesta Group promised access to Democratic politicians and credibility on liberal issues.

The benefits of partisan ties are presumed to emanate from the ability of partisan lobbyists to establish trusting relationships with legislators of the same party. Interest

groups that want to influence a party may be convinced that they are more effective in doing so by hiring lobbying firms with ties to that party. As the founder of a major Republican firm told us:

> . . . when I started – certainly during the [George W.] Bush years – it was a pretty lucrative business for Republicans. For us, under Obama, he hated lobbyists. He ran against lobbyists – except for his [party's] lobbyists. If you're one of his lobbyists, you still did very well. I'll just refer you to [Democratic lobbyist] Tony Podesta. You can take a look at his growth. Ours did not. Ours went down like that [motioning a sharp decline] (anonymous interview).

The benefits of partisan ties are likely to be greater when lobbying firms can facilitate greater access to legislators who have influence over policy outcomes. We hypothesize that this expected influence is greater when a lobbying firm is aligned with party leadership in the House than with party leadership in the Senate. Some prior scholarship supports this contingent-benefits hypothesis. Baker (2008, pp. 144-151) interviewed 12 lobbyists and asked them about their perceptions of differences in lobbying the House and Senate. Respondents perceived Senators as being harder to lobby than House members because they viewed Senators as more cross-pressured by their diverse constituencies, as more concerned with broad national interests, and as less attentive to the technical details of legislation. In contrast, respondents perceived House members as more attentive to the narrow constituencies of their districts and more willing to work with lobbyists on the technical aspects of legislation. However,

7

given that Baker's study is based on only 12 interviews, it would be valuable to obtain additional evidence to evaluate the contingent-benefits hypothesis.

We consider three possible reasons for why lobbyists may be advantaged in working with the House over the Senate. First, lower per-member legislative staff capacity in the House may lead its members to place a higher value on lobbying than do members of the Senate. Second, majority rule in the House may be more advantageous to lobbyists than are the supermajoritarian processes that are common in the Senate, such as the filibuster. Third, biennial elections for the members of the House may be more advantageous to lobbyists than elections on a six-year cycle in the Senate. We consider these explanations in turn.

Legislative Staff Capacity

Hall and Deardoff (2006; see also Bauer, Pool, and Dexter 1963) explain that members of Congress are more likely to work on an issue if lobbyists provide them with valuable and reliable information on the issue. In that sense, lobbying may provide a subsidy for congressional attention to an issue; members of Congress are steered toward working more on issues on which they are lobbied. It follows that the value of these subsidies depends, in part, on the congressional demand for externally produced information: When members and committees have low levels of expertise and, consequently, greater demand for external information, the value of the subsidy is higher; when the demand for information is lower, the value of the subsidy is lower.

We expect that the congressional demand for external information depends heavily on the experience and expertise of internal staff (Salisbury and Shepsle 1981).

8

Members of Congress use their staff to produce, sort through, and evaluate information (Whiteman 1995). Having more experienced and knowledgeable staff means having more internally generated information. Conversely, institutions with less experienced and expert staff may value of information provided by external sources, such as party-aligned lobbyists, more highly.

Differences between the member offices of the House and Senate are considerable and may have consequences for their receptivity to lobbying (LaPira and Thomas 2017, p. 13). Although the two chambers have comparable staff resources for their committees and party leadership in the aggregate, the staff-to-member ratio in Senate committees is much higher, since there are fewer Senators than House members. Between 1999 and 2015, the average of House committee staff-to-members ratio was 2.9; the same ratio in the Senate was 9.4 (Brookings 2018).[2] The average House personal office has between 13 and 14 staffers, which they split between the district and Washington, DC. In contrast, the average Senator employs 39 staffers (Brookings 2018). In addition to higher levels of staffing, Senators often have more experienced staffers. According to the Congressional Research Service, average tenure for legislative correspondents, legislative assistants, and legislative directors is longer in Senate offices (1.3, 2.1, 2.9 years, respectively) than in House offices (1.1, 1.7, 2.3 years, respectively) (Peterson and Eckman 2016a; 2016b). Based on these

---

[2] Data for the number of committee staff are not available for 1998 and 2016 to coincide with our time frame. For 1999 to 2015, the ratios reflect the House mean number of committee staff, 1242 / 435 = 2.9, and Senate mean committee staff, 936 / 100 = 9.4.

differences, we expect that members of the House benefit more from being lobbied than do members of the Senate. Lobbyists may help members of the House to make up the information deficit relative to the Senate created by their relative staff shortage and inexperience.

Majority Rule versus Supermajoritarian Rules

The rules of the House of Representatives place a premium on decision-making by majority rule. For example, a procedure known as a "discharge petition" allows a majority of members to force a vote on a measure that is stuck in committee (Pearson and Schickler 2009). In contrast, the rules of the Senate place a premium on procedures that require support from a supermajority of members. For example, the cloture rule requires the support of 60 (out of 100) Senators in order for most (but not all) measures to come to a vote (Koger 2010).

Majority rule makes it comparatively easy for the public, interest groups, and other stakeholders to identify who is responsible for decisions in the House. In contrast, supermajority rules make it comparatively harder for observers to identify who is responsible for decisions in the Senate. In the House, members may be forced to take a position on controversial issues. In the Senate, however, a minority of Senators may be able to prevent difficult issues from coming up for a formal vote. Moosbrugger (2012) argues that variation in identifiability may affect the ability of interest groups to influence legislators. She explains that when decisions are more identifiable, lobbyists have more capacity to effectively pressure legislators, while they have less capacity to

exert pressure when decisions are less identifiable. On this basis, we expect members of the House to be more vulnerable to lobbying than Senators.

Regularity of Elections

Every member of the House of Representatives stands for election at least every two years. As a result, any decision that they make can be readily used against them in the next campaign (Canes-Wrone, Brady, and Cogan 2002). In contrast, members of the Senate stand for election at least every six years. As a result, if Senators make unpopular decisions early in their terms, they may have some time before they have to face the scrutiny of campaigns (Amacher and Boyes 1978).

With the greater the regularity of elections comes more accountability to outside constituencies. Thus, we expect greater accountability from members of the House than from Senators. Moosbrugger (2012) argues that variation in accountability may affect the ability of interest groups to influence legislators. She explains that when legislators are more accountable, lobbyists have more capacity to effectively pressure legislators, while they have less capacity to exert pressure when legislators are less accountable. On this basis, we also expect to the House to be more vulnerable to lobbying than the Senate.

Vulnerability to Lobbying

All of the arguments presented in this section suggest that members of the House are more readily influenced by lobbyists than are members of the Senate. Moosbrugger (2012) describes this tendency as an "institutional vulnerability" to

lobbying. In the following section, we describe a research design based on revenues

reported by lobbying firms that allows us to test the contingent-benefits hypothesis that

the House is perceived as a better venue for lobbying than the Senate. Our design

does not allow us to distinguish between different reasons for vulnerability (e.g.,

identifiability versus accountability), as all our explanations point in the same direction

for expected lobbying revenues.

Research Design

In 1995, Congress passed, and President Bill Clinton signed, the LDA, Public

Law 104-65. The LDA was intended to increase transparency in the practice of

lobbying by clarifying the rules as to what constitutes lobbying and how it should be

disclosed to the public. It required lobbyists to register and report their lobbying

activities and payments received on a semiannual basis to Clerk of the House of

Representatives and/or the Secretary of the Senate, unless those activities constitute

less than 20 percent of time spent providing services to the client over a six-month

period. The Senate began making these reports electronically available to the public in

1998. The Center for Responsive Politics (2017) collects these reports and formats

them for data analysis, which yields the core data that we analyze in this article.

The goal of our analysis is to evaluate the determinants of variation in the

revenues of lobbying firms. These revenues indicate the amount that organized

interests paid to retain the services of that firm during that period. We model *Revenue*

per Lobbyist in real dollars*,* which reflects the aggregate income each lobbying firm earned from all clients in a period.[3]

Our focal independent variables are *Firm Aligned with House Leadership* and *Firm Aligned with Senate Leadership*. We do not consider bipartisan firms or those without clear partisan identifications to be aligned with either chamber. These variables were measured through original research on the partisan affiliations of the firms' founders. Research assistants were instructed to look at the professional histories of founders' prior employment on legislative staff, campaigns, or in the administrations of partisan officials. For example, working for a Republican senator would earn a founder a Republican label. If no partisan work history was found, research assistants turned to campaign finance data. We leverage the pattern of highly partisan giving among individual lobbyists (see Koger and Victor 2009), to establish the partisan affiliation of firm founders. If a founder gave over 90 percent of their donations to a particular party, then they were labeled as affiliated with that party. Founders that did not meet either of these criteria were categorized as not having established a partisan reputation. It is important to note that we do not suggest that these firms are *nonpartisan*, only that their partisanship has not become publicly and widely known.

We collected data on several control variables intended to account for alternative explanations for why firms may generate revenue. First, we drew *Number of Clients* directly from the lobbying reports. This variable accounts for the fact that larger firms are better known, more prestigious, and thus more capable of demanding higher

---

[3] We adjust for inflation using the Consumer Price Index for All Urban Consumers: All Items (FRED 2017).

payments for their services than are firms with fewer clients (Schiff et al. 2015;

Whitesell, Schiff, and Lowery 2018), as well as for the possibility that there are

economies of scale in managing clients (Koshal 1972).

Second, we calculated *Client Diversity* based on the distribution of the firm's

reported lobbying activity across issues and industries. We include a measure of

diversification because of the long-standing expectation in economics that diverse

investment portfolios perform better than more homogenous portfolios because diversity

helps to spread risk across the portfolio (Markowitz 1959). It is calculated using

Simpson's Reciprocal Index (Simpson 1949):

$$\left[\sum_{i=1}^{k} \left(\frac{n_i}{N}\right)^2\right]^{-1}$$

Where n_i is the total dollars reported with that industry or issue for the firm in a given

period and N is all dollars on reported by the firm in a period. Thus, n_i/N is the

proportional abundance of contract dollars for a particular industry or issue in a given

period for a firm. It can be understood as weighted degree in the firm-industry or firm-

issue bipartite networks (Newman 2001). This measure is similar to "effective number

of parties" estimates commonly used in comparative electoral research (Laakso and

Taagepera 1979).

For our purposes, Simpson's Reciprocal Index is preferable to alternative

measures of diversity, such as the Herfindal Index (Herfindahl 1950) or Shannon's H

(Shannon 1948), because it is more intuitively interpretable. The minimum value is 1,

when all of the firm's lobbying clients and activities are concentrated in a single industry

and issue, and the maximum value is equal to the number of industries or issues when

all activity is distributed equally across all possible industries or issues. We add an issue-diversity measure to an industry-diversity measure to obtain a single measure of *Client Diversity*.[4]

Third, we used firms' web pages to collect information on a variety of characteristics of firms. These variables are intended to account for variations in firm structure, prestige, and economies of scale for client-recruitment that may correspond with a firm's revenue-earning potential. *Law Firm* takes the value of one if a lobbying firm is a law firm, zero otherwise. *International Office* takes the value of one if a lobbying firm has an affiliated international office, zero otherwise. *Number of Domestic Offices* is a count of the number of domestic office locations listed on the firm's website. *Firm Age* is the number of years since the firm's founding.[5]

---

[4] We considered specifying our models using separate measures of issue diversity and industry diversity. These separate estimates had a Cronbach's α of 0.803, which suggested that they measured the same underlying concept (Cronbach 1951). Hence, we determined that using a client-diversity index that combined these measures is preferable.

[5] Research assistants were instructed to look for the year in which a firm was founded in the "About," "Firm History," or similar section of firms' websites. An age variable was calculated by subtracting this founding year from the year of the panel observation. In instances where no founding year was identified, we used the first year that the firm appears in lobbying disclosure data since 1998 (the first year of data available). If the first year the firm appeared was 1998 – indicating that its founding may have preceded the first public disclosures – it was left as missing.

Some readers may wonder if we should also include a direct measure of lobbying firm prestige in the model. In investigating this possibility, we found that the most commonly referenced measures of lobbying firm prestige are based strictly on firm revenue (see, for example, Center for Responsive Politics 2017; Staff 2012; Bloomberg Government 2015). Hence, by relying on revenue for our dependent variable, we have implicitly incorporated prestige considerations into our analysis. Further, we believe that our independent variables on *Client Diversity, Number of Clients,* and *Firm Age* capture important aspects of prestige. Further, the time-invariant component of firm prestige is captured by the fixed-effects, random-effects, and first-differences specifications, described below, all of which are ways to account for unobserved heterogeneity across firms. As a result, we have not opted to include a separate variable for prestige in our analysis.

In 2007, Congress passed and President George W. Bush signed the Honest Leadership and Open Government Act (HLOGA), Public Law 110-81. HLOGA amended the LDA with the purpose of closing some of the loopholes embedded in the LDA. Among other things, it placed new restrictions on lobbying by former government employees in the form of a "cooling off" period, increased the frequency of reporting from semi-annually to quarterly, and expanded the types of entities required to report to include those that coordinate coalition activities. The provisions of HLOGA took effect in January 2008.

The enactment of HLOGA created significant changes in the nature of the lobbying data generated by the LDA. By placing restrictions on who could serve as a lobbyist, it disincentivized registration for individuals who might be interested in moving

through the revolving door between lobbying and government. Since the LDA imposed very little cost on lobbying, individuals had an incentive to register if the need to register might be in doubt. By imposing potential opportunity costs on registration, HLOGA has led to reductions in lobbyist registrations (LaPira 2016; Thomas and LaPira 2017). A study by Auble (2013) presented evidence that HLOGA led approximately 3,400 lobbyists to deactivate their registrations – even though most of these people remained employed by the same organization in 2011 and 2012. This process has consequences for our analysis. The new incentive structure on disclosure, along with quarterly reporting requirements and reporting by new entities, make data generated since the enforcement of HLOGA not directly comparable with data generated earlier.

Consequently, this article divides our analysis into two parts: pre-HLOGA and post-HLOGA. We lead with the post-HLOGA analyses because that data set is more complete, and the 2011 change in party control of the House provides the cleanest test of the contingent-benefits hypothesis. We subsequently turn attention to the post-HLOGA analysis to make our tests as comprehensive and transparent as possible, though we note with caution that the data are considerably noisier as an artifact of the data-collection process. For both data sets, we present results first from tests with a variety of panel linear models and, second, from tests of difference-in-difference designs. The difference-in-difference analysis allows us to examine the potential causal effects of changes in partisan control of the House and Senate.

Analysis

In the post-HLOGA period, we analyze quarterly data reported by an unbalanced panel of 1,603 lobbying firms from the first quarter of 2008 through the third quarter of 2016. To be included in the panel, registrants were taken from lobbying activity reports where the registrant and the client differed – indicating that the registrant was a multi-client contract lobbyist or firm hired by a client.[6] To count as a firm, a registrant had to list two or more lobbyists as active in the same quarter at least once, and have at least two quarters in which it reported activity valued at more than zero dollars.

The data collected in this research allow us to report the partisan distribution of firms and their revenues over time. Figure 1 shows the partisan distribution of firms. We could discern the partisan identities of 27.8 percent of the 1,603 firms in our panel. Of those, only 34 (7.6 percent) identified explicitly as bipartisan. We found 201 (45.1 percent) Democratic firms and 211 (47.3 percent) Republican firms.

[INSERT FIGURE 1 HERE]

Despite the fact that bipartisan firms are less numerous than partisan-leaning firms, Figure 2 indicates that bipartisan firms consistently earn greater payments than do their partisan-leaning competitors. Republican and Democratic firms are roughly at parity with one another over time. However, a marginal advantage trades back and forth that appears to correspond with control of Congress. Democratic firms earned higher average revenue when Democrats held congressional majorities from 2008 to 2010. On the other hand, Republican firms earned more when Republicans reclaimed

---

[6] This distinction is made clear in the data provided by the Center for Responsive Politics. We rely on their coding.

congressional control, from 2011 through 2016. Firms without clearly identifiable partisan identities – not shown in Figure 2 – earn consistently lower marginal payments than those received by partisan and bipartisan firms. The data suggest that firms with partisan ties occupy a peculiar niche in the lobbying community that has not yet been recognized as relevant in prior studies of lobbying.

[INSERT FIGURE 2 HERE]

Panel Linear Regression Models

In order to explain the variation in the quarterly revenues of lobbying firms, we first turn to a multiple-regression framework. Categorizing lobbying firms in panels that align with the majority party in the House and Senate over time gives us the opportunity to test the contingent-benfits hypothesis directly, while also controlling for alternative explanations unrelated to our main expectation. In Model 1, we estimate a regression of *Revenue per Lobbyist* on *Firm Aligned with House Leadership*, *Firm Aligned with Senate Leadership*, *Number of Clients*, and *Client Diversity*. These are the variables for which we have complete data. We estimate Model 1 using a panel linear model with two-way fixed effects (Wooldridge 2002; Croissant and Millo 2008). The firm-level fixed effects account for time-invariant unobserved heterogeneity, while the year fixed effects account for temporal variation in the dependent variable. This approach leverages within-firm variation in the dependent variable while accounting for aggregate temporal trends. We report HC3 Arellano standard errors (clustered by firm) that are robust to heteroskedasticity and serial autocorrelation (Arellano 1987). The results of Model 1 are reported in Table 1.

[INSERT TABLE 1 HERE]

The estimates of Model 1 demonstrate a financial advantage of having partisan ties aligned with the leadership of the House, but not the Senate. Being aligned with the House leadership corresponds with a higher revenue of about $6,000 per lobbyist per quarter. That is, lobbyists at partisan firms earn a bonus of about $24,000 per year when their firm's party controls the House, a non-trivial benefit for even six-figure-salary lobbyists. Average revenues are not significantly higher when a firm is aligned with the Senate leadership. Thus, these results support the contingent-benefits hypothesis: firms benefit more financially by being aligned with the House majority than the Senate majority.

With respect to the control variables in Model 1, *Number of Clients* has a positive, significant relationship with *Revenue per Lobbyist*, which indicates that larger and more prestigious firms tend to have higher revenues per lobbyist, other things equal. Also, *Client Diversity* corresponds positively and significantly with *Revenue per Lobbyist*, which reveals that lobbying firms experience the typical economic benefits associated with diversification (Markowitz 1959).

In Model 2, we estimate a panel linear regression model that includes the same variables as Model 1, while also including variables on firm characteristics: *Law Firm*, *International Office*, *Number of Domestic Offices*, and *Firm Age*. Each of these variables contains significant missing data, which we impute using multiple imputation (King et al. 2001). This model is estimated using random effects for firms and fixed effects for years because two-way fixed effects cannot be computed with the inclusion

20

of the new time-invariant control variables. We follow the same procedures for estimating standard errors as we do in Model 1.

Despite the inclusion of new variables, the results of Model 2 are consistent with those of Model 1. *Firm Aligned with House Leadership*, *Number of Clients,* and *Client Diversity* have positive, significant coefficients, while *Firm Aligned with Senate Leadership* is insignificant. These results further support the contingent-benefits hypothesis.

The added variables in Model 2 yield further insights on the correlates of *Revenue per Lobbyist*. The coefficient on *Law Firm* is significant and negative. This result may stem from the fact that law firms use their lobbyists to serve a wider variety of clients than do other lobbying firms, such that some clients demand lobbying and others require other kinds of services (e.g., legal representation, government contract business development, comments on proposed regulatory rules). *Number of Domestic Offices* is significant and negative. This result likely reflects that fact that firms with multiple domestic offices tend to turn their attention away from Washington, DC at the margins and toward other types of business. *International Office* and *Firm Age* are not statistically significant.

In Model 3, we estimate a panel linear model using a *first-differences* specification of the regression. Change in *Revenue per Lobbyist* is regressed on change in each of the independent variables in Model 1. The advantage of estimating a first-differences model is "it removes the latent heterogeneity from the model whether the fixed or random effects model is appropriate" (Greene 2012, p. 356). However, the first-differences approach also removes time-invariant, firm-level independent variables

from the model (*Law Firm*, *International Office*, *Number of Domestic Offices*), since these variables have $\Delta X = 0$ in all cases, as well as *Firm Age*, since $\Delta X = 1$, yielding a constant. We follow the same procedures for estimating standard errors as in Models 1 and 2.

This analysis yields the same pattern of support for our hypothesis, while tempering concerns that latent heterogeneity may be an explanation for our findings. Of particular note is the finding that when a firm becomes newly aligned with the House, it benefits from a boost in revenue; on the other hand, a firm that de-aligns with the House majority party suffers a drop in revenue. The one notable difference between the results in Model 3 and those in Models 1 and 2 is that *Client Diversity* is no longer statistically significant in Model 3; that is, changes in client diversity do not correspond significantly with changes in revenue.

The evidence presented in Table 1 (Models 1 to 3) demonstrates that there is a robust, positive association between a lobbying firm's alignment with the House majority party and its revenues. These results establish a clear correlation between lobbying revenue and control of the House in the post-HLOGA period.

We re-estimate the firm-fixed-effects and first-differences models on an unbalanced panel 1,562 firms and 20 biannual pre-HLOGA periods from 1998-2007. It is important to note that the data used to estimate this model are considerably less complete. Because firm partisanship was gathered by a team of research assistants identifying founders of contract lobbying firms from their websites, any firms which were no longer operational or maintaining active web presences at the time data were collected in 2015 could not have been coded as partisan firms. This problem becomes

more pronounced as we move further back in the lobbying panel, making missingness in our primary independent variable more likely in the pre-HLOGA period. We should expect this missingness to attenuate any potential findings. Because of the higher rates of missingness in the hand-collected firm covariates we do not estimate the random-effects model with additional covariates for the pre-HLOGA period, instead relying on the fixed-effects and first-difference specifications to absorb any time-invariant firm characteristics. We estimate a simple pooled-panel-regression model that leverages cross-sectional, rather than within-firm, variation. The results of these models are reported in Table 2.

[TABLE 2 HERE]

Given these caveats regarding data collection artifacts, in both Models 4 and 5, there is no significant relationship in Table 2 between party control of either chamber of Congress and revenue per lobbyist among partisan-aligned firms. There are a variety of reasons this may be true among which these data cannot adjudicate. Both model specifications rely on within-firm changes in alignment (as chamber control switches) for identification purposes, however, we interpret the results to reflect the fact that the specifications themselves may be asking too much of the relatively little variation in alignment during this period. We adjust our estimation assumptions with this in mind in Model 6, which pools the data across firms to maximize cross-sectional variation. Though we lose some explanatory power by eliminating changes over time in this specification, Model 6 reveals a significant effect for partisan alignment with the House and no effect for the Senate, as expected. In summary, we find mixed support for the

contingent-benefits hypothesis in the pre-HLOGA period, and strong support in the post-HLOGA period.

Difference-in-Difference Designs for Party Takeover "Treatments"

Our panel linear model results lend support to our expectations about the conditional benefits of partisan ties by lobbying firms, but we remain cautious to about interpreting the findings as establishing causation. Does alignment with the House *cause* a lobbying firm's revenue to rise and dealignment *cause* it to fall? In order to address this question, we need to subject our data to a harder test. There are any number of endogenous reasons to expect that partisan firms will earn more revenues when their parties take control of the House. If partisan efforts – or some other unobserved endogenous process – caused partisan firms' revenues to increase, then it is not likely that they occur immediately after a new majority takes over the House. Starting new House majority party-aligned firms immediately after a takeover occurs is costly. We think it is more plausible that any year-over-year changes in party-aligned firms' revenues can be attributed to the immediately perceived value in an in-party-aligned firm. Just as voters use party labels as heuristics, so too do influence-seeking interest groups in the lobbying firm marketplace.

We try to address causation by exploiting exogenous changes in House and Senate party leadership as temporal interventions. We use a *weighted difference-in-differences estimator* to test temporal causality in both institutions, which occurred as a result of separate electoral cycles. Specifically, we exploit the exogenous shocks created by the changing control of the House in 2011 (from Democratic to Republican)

and the Senate in 2015 (from Democratic to Republican). Blanes i Vidal et al. (2012) and de Figueiredo and Richter (2014) recommend the difference-in-differences approach when dealing with panel datasets on lobbying because it effectively addresses persistence issues that commonly affect these data.

Identification with a difference-in-differences estimator relies on a parallel-trends assumption. That is, identification assumes that the average change in the potential outcomes between the treatment and control units between two time periods would be the same, and the difference in the change across the two groups can be attributable to the intervention on the treatment units (Ashenfelter and Card 1985).

In this article, we estimate the causal effect of the partisan ties of a lobbying firm gaining control over a chamber of Congress. In this case, a firm is "treated" when the party it is aligned with gains control of a chamber. These firms are compared to the newly ousted-party firms. Lobbying firms do not appear to exhibit clearly parallel trends, however, as their fortunes are tied to numerous other factors, such as issue and industry portfolios, as well as interactions with the legislative agenda. Abadie (2005) showed that the parallel trends identifying assumption may be implausible when there are imbalances in pre-treatment covariates that might be associated with outcomes. To address this irregularity, we use a kernel-weighting procedure developed by Hazlett (2016) that allows for consistent, non-biased estimation of the Average Treatment Effect on the Treated (ATT) under these conditions.

In the pre-HLOGA years, we estimate a kernel-weighted difference-in-difference estimator for Republican and Democratic firms for 2001 and 2002-2003, when the Senate switched from Republican to Democratic control and back by narrow margins

because of Senator Jim Jeffords (VT) choosing to caucus with the Democrats. We do not expect to see significant changes in firm revenue per lobbyist following majority control, especially given the power of the minority control of the filibuster pivot in the Senate. We test the effects of the change between Republican and Democratic firms' revenue per lobbyist when control of both chambers of Congress flips from 2006-2007. In each case, Republican firms are considered the "treated" units and the Democratic firms are weighted to make them as comparable to Republican firms as possible.

We follow the same procedure on chamber control changes in the post-HLOGA period. We estimate the difference-in-differences estimator between Republican and Democratic firms for 2010-2011 and 2014-2015, when chambers changed partisan control, as well as years when no takeover occurs to provide baselines for comparison. All told in our observation period, there are five "takeover treatment" events; one in the House only, one that occurs simultaneously in the House and Senate, and three in the Senate exclusively.

[INSERT TABLE 3 HERE]

The results of difference-in-differences estimates are reported in Table 3. We do not find significant changes in baseline years, as expected.[7] Likewise, we find no statistically significant effects in four of the five takeover treatments. We do, however, uncover a positive effect of the treatment on *Revenue per Lobbyist* when the Tea Party movement helped Republicans regain control of the House majority after 2010-2011. This takeover, which disrupted Democrats' brief unified government in Obama's first

---

[7] Results for baseline years where no takeover occurred in either chamber are not reported.

term, is the only instance that tests our hypothesis without the presence of a simultaneous, confounding event.

[INSERT FIGURE 3 HERE]

Figure 3 plots the values for the 2010-2011 takeover treatment effects. Lobbyists at Republican-aligned firms gain an estimated windfall of just over $10,000 per year. Lobbyists at ousted-Democratic firms lost more than $25,000 in revenues, despite still holding on to the majority in the Senate. Though it rhetorically billed itself as an outsider, populist movement intended to pressure the Republican party mainstream, our evidence suggests that the Tea Party instead boosted the fortunes of well-established Republican lobbying elites.

As our hypothesis predicts, we observe no effects for the Senate party takeovers in 2001, 2003, or 2015. In all three of these treatment events, the party that took over majority control of the Senate fell well short of the 60-vote filibuster pivot threshold. Though the majority party still has significant positive and negative agenda power without gaining the authority to unilaterally thwart minority party obstruction (Gailmard and Jenkins 2007), the pivotal vote on most controversial, majority party agenda priorities tends to be a minority party member.

The remaining takeover treatment event in our period of observation is 2006-2007, when Democrats simultaneously gained control of both the House and the Senate during the midterm election in Bush's second term. The estimates we report in Table 3 reveal no statistically significant windfall for Democratic party-aligned firms. We cannot reject the null hypothesis that a party takeover gives firms tied with a new House majority an immediate increase in revenue.

Figure 3B shows the predicted values from the 2006-2007 treatment. Unlike in the Senate-only results, the Democrats appear to earn nominally larger revenues than their GOP counterparts. Our difference-in-differences calculation predicts that Republican firms lost an estimated $40,000 in revenue and Democratic firms gained roughly $11,000 (coefficient = $51,003), though the standard error of nearly $29,000 is sufficiently large that we cannot reject the null, $p = 0.078$. Although this case cannot be counted as support for our hypothesis, it also does not make sense to count it as strong evidence against our hypothesis, given the close statistical margin.

Discussion

Our analysis is divided into the pre- and post-HLOGA periods, with 2008 serving as the dividing point between the two eras. HLOGA changed the nature of the data-reporting requirements for lobbyists and, hence, the nature of the data generated. Further, data on the partisan ties of lobbying firms is more readily available post-HLOGA than pre-HLOGA. Consequently, we have more confidence in our analysis of the post-HLOGA data than of the pre-HLOGA data. However, we think it unwise to simply ignore the data from the earlier period; we believe that something important can be learned from comparison.

Analysis of the post-HLOGA data cleanly support the contingent-benefits hypothesis. There are benefits to a lobbying firm of having partisan ties, but those benefits are contingent on being aligned with the party leadership of the House. Alignment with the party leadership of the Senate does not yield a statistically significant benefit. We find this pattern consistently in the estimates of our panel linear models.

Difference-in-difference analysis reinforces this conclusion while subjecting the data to a more stringent test. The results establish a clear payoff to Republican firms after the Republican takeover of the House in 2010, but not after the Republican takeover of the Senate in 2014.

We must add the caveat that these results show that lobbying firms with Republican ties benefited financially from their alignment with the House Republican leadership. That is, organized interests gave more money to Republican lobbying firms, other things equal, as a result of the switch. The most logical inference from this finding is that decision-makers in organized interests believed that Republican lobbying firms were more likely to exercise influence in the House once the Republicans took control. However, the findings *do not* show that Republican lobbying firms *actually exerted* such influence. Demonstrating the belief that influence was *likely* is the closest that the data allow us to get to the question of influence.

Analysis of the pre-HLOGA data yields less consistent results. We find evidence of contingent benefits to partisan ties in our pooling panel linear model, but not in our standard panel linear model or first-differences model. Our difference-in-differences analysis is consistent with the contingent-benefits model in two of three cases. We do not find a benefit from the changes in Senate control that occurred in 2001 or 2002, as expected. Democratic lobbying firm revenues rose when the Democrats reclaimed the House in 2006, but this effect falls just short of conventional levels of significance. These findings reduce our confidence in the contingent-benefits hypothesis.

The recent Democratic victories in the 2018 congressional midterm elections provides a new opportunity to test the contingent-benefits hypothesis, once lobbying

data for 2018-2019 become available. We expect that the results will show financial

gains to lobbying firms with ties to the Democratic Party as a result of the change in

partisan control.

Conclusion

Prior studies of lobbying have given substantial attention to the activities of

lobbyists and interest groups, but they have neglected the role of lobbying firms as

important actors in the lobbying arena. Lobbying firms bring together teams of lobbyists

with the intention of marketing their expertise to other political actors who seek to

instigate or impede change. Not all lobbying firms have a partisan tilt to them. Yet

those that do may use their partisan ties to their advantage, at least under certain

conditions. This outcome is what the Republicans leading the K Street Project hoped to

accomplish during the Presidency of George W. Bush. Thus, we think that is unwise for

scholars of parties and groups to ignore the potential involvement of lobbying firms in

party coalitions. The leaders of at least some lobbying firms have been, and are likely

to be, instrumental in the operation of party networks.

Beyond the role of lobbying firms per se, this study points to previously

underexamined differences in lobbying the United States House and Senate. Previous

scholars may have neglected these differences, in part, due to a paucity data that

clearly identify which institution is being targeted by lobbyists. The LDA lobbying

revenue data give us this needed leverage. We believe that there is more to learn

about House-Senate distinctions in lobbying from the lobbying reports. For example,

30

attention to lobbying on bills specified in these reports may provide additional insights

on how lobbying strategies diverge and converge between the chambers.

Our article fuels the growing movement that sees parties and groups as closely

connected to one another. Party and groups are wise to recognize that while

institutions (such as party organizations and citizens associations) draw *formal*

boundaries between partisan and non-partisan activities, the individuals that serve

these institutions move back and forth *informally* with the ebb and flow of opportunity.

They are continually looking for new ways to use existing organizations to serve their

interests, or to forge new organizations to do so. Continued research in this area

promises to reveal extensively intertwined networks, strategies, and partisan actors.

References

Abadie, Alberto. 2005. "Semiparametric Difference-in-Differences Estimators." *Review of Economics and Statistics* 72 (1): 1-19.

Amacher, Ryan C., and William J. Boyes. 1978. "Cycles in senatorial voting behavior: Implications for the optimal frequency of elections." *Public Choice* 33 (3): 5-13.

Arellano, Manuel. 1987. "Computing robust standard errors for within-groups estimators." *Oxford Bulletin of Economics and Statistics* 49 (4): 431-434.

Ashenfelter, Orley, and David Card. 1985. "Using the Longitudinal Structure of Earnings to Estimate the Effects of Training Programs." *Review of Economics and Statistics* 67 (3): 648-660.

Auble, Dan. 2013. *Lobbyists 2012: Out of the Game or Under the Radar?* Washington, DC: Center for Responsive Politics.

https://www.progressinpolitics.com/images/uploads/misc/Lobbyists_2012.pdf

(accessed July 13, 2017).

Bailey, Michael A., Jonathan Mummolo, and Hans Noel. 2012. "Tea Party Influence: A

Story of Activists and Elites". *American Politics Research* 40 (5): 769-804.

Baker, Ross K. 2008. *House & Senate*. 4th ed. New York: W.W. Norton & Company.

Bauer, Raymond A., Ithiel de Sola Pool, and Lewis Anthony Dexter. 1963. *American

Business and Public Policy: The Politics of Foreign Trade*. New York: Atherton

Bawn, Kathleen, Martin Cohen, David Karol, Seth Masket, Hans Noel, and John Zaller.

2012. "A Theory of Political Parties: Groups, Policy Demands and Nominations

in American Politics." *Perspectives on Politics* 10 (3): 571–97

Birnbaum, Jeffrey H. 2005. "The Road to Riches Is Called K Street: Lobbying Firms

Hire More, Pay More, Charge More to Influence Government." *Washington Post*.

June 22. http://www.washingtonpost.com/wp-

dyn/content/article/2005/06/21/AR2005062101632.html (accessed July 10,

2017).

Blanes i Vidal, Jordi, Mirko Draca, and Christian Fons-Rosen. 2012. "Revolving door

lobbyists." *American Economic Review* 102 (7): 3731-3748.

Bloomberg Government. 2015. *2015 Top Lobbying Firms*.

https://www.bbhub.io/bgov/sites/12/2016/03/2015-Top-Lobbying-Firms.pdf

(accessed, July 18, 2017).

Brookings. 2018. *Vital Statistics on Congress*. https://www.brookings.edu/multi-

chapter-report/vital-statistics-on-congress/ (accessed November 29, 2018).

Canes-Wrone, Brandice, David W. Brady, and John F. Cogan. 2002. "Out of Step, Out of Office: Electoral Accountability and House Members' Voting." *American Political Science Review* 96 (1): 127-140.

Center for Responsive Politics. 2017. *OpenSecrets.org*. https://www.opensecrets.org/lobby/index.php (accessed July 6, 2017).

Clemens, Elisabeth S. 1997. *The People's Lobby: Organizational Innovation and the Rise of Interest Group Politics in the United States, 1890-1925*. Chicago: University of Chicago Press.

Cohen, Marty, David Karol, Hans Noel, and John Zaller. 2008. *The Party Decides: Presidential Nominations Before and After Reform*. Chicago: University of Chicago Press.

Cronbach, Lee J. 1951. "Coefficient alpha and the internal structure of tests." *Psychometrika* 16 (3): 297-334.

Croissant, Yves, and Giovanni Millo. 2008. "Panel data econometrics in R: The plm package." *Journal of Statistical Software* 27 (2): 1-43.

de Figueiredo, John M., and Brian Kelleher Richter. 2014. "Advancing the Empirical Research on Lobbying." *Annual Review of Political Science* 17: 163-85.

Fraussen, Bert, and Darren R. Halpin. 2018. "Political Parties and Interest Organizations at the Crossroads." *Political Studies Review* 16 (1): 25-37.

FRED. 2017. *Consumer Price Index for All Urban Consumers: All Items (CPIAUCSL)*. St. Louis: Federal Reserve Bank of St. Louis. https://fred.stlouisfed.org/series/CPIAUCSL (accessed July 16, 2017).

Gailmard, Sean, and Jeffrey Jenkins. 2007. "Negative Agenda Control in the Senate and House of Representatives: Fingerprints of Majority Party Power." *Journal of Politics* 69(3): 689-700

Greene, William H. 2012. *Econometric Analysis*. 7th ed. Upper Saddle River, NJ: Prentice Hall.

Hacker, Jacob S., and Paul Pierson. 2005. *Off Center: The Republican Revolution and the Erosion of American Democracy*. New Haven: Yale University Press.

Hall, Richard L., and Alan V. Deardorff. 2006. "Lobbying as legislative subsidy." *American Political Science Review* 100 (1): 69-84.

Hazlett, Chad. 2016. "Kernel Balancing: A flexible non-parametric weighting procedure for estimating causal effects." Unpublished manuscript. https://arxiv.org/pdf/1605.00155.pdf (accessed July 21, 2017).

Hansen, John Mark. 1991. *Gaining Access: Congress and the Farm Lobby, 1919-1981*. Chicago: University of Chicago Press.

Heaney, Michael T. 2004. "Outside the Issue Niche: The multidimensionality of interest group identity." *American Politics Research* 32 (6): 611-651.

Heaney, Michael T. 2006. "Brokering Health Policy: Coalitions, Parties, and Interest Group Influence." *Journal of Health Politics, Policy & Law* 31 (5): 887-944.

Heaney, Michael T., and Philip Leifeld. 2018. "Contributions by Interest Groups to Lobbying Coalitions." *Journal of Politics* 80 (2): 494-509.

Heaney, Michael T., Seth E. Masket, Joanne M. Miller, and Dara Z. Strolovitch. 2012. "Polarized Networks: The Organizational Affiliations of National Party Convention Delegates." *American Behavioral Scientist* 56 (12): 1654-1676.

Herfindahl, Orris C. 1950. "Concentration in the steel industry." Ph.D. diss., Columbia University.

Herrnson, Paul S. 2009. "The Roles of Party Organizations, Party-Connected Committees, and Party Allies in Elections." *Journal of Politics* 71(4): 1207-1224.

Holyoke, Thomas T. 2015. *The Ethical Lobbyist: Reforming Washington's Influence Industry*. Washington, DC: Georgetown University Press.

Karol, David. 2009. *Party Position Change in American Politics: Coalition Management*. New York: Cambridge University Press.

King, Gary, James Honaker, Anne Joseph, and Kenneth Scheve. 2001. "Analyzing incomplete political science data: An alternative algorithm for multiple imputation." *American Political Science Review* 95 (1): 49-69.

Koger, Gregory. 2010. *Filibustering: A Political History of Obstruction in the House and Senate*. Chicago: University of Chicago Press.

Koger, Gregory, and Jennifer Nicoll Victor. 2009. "Polarized agents: Campaign contributions by lobbyists." *PS: Political Science and Politics* 42 (3): 485-488.

Koshal, Rajindar K. 1972. "Economies of Scale." *Journal of Transport Economics and Policy* 6 (2): 147-153.

Krimmel, Katherine. 2017. "The Efficiencies and Pathologies of Special Interest Partisanship." *Studies in American Political Development* 31 (2): 149-169.

Laakso, Markku, and Rein Taagepera. 1979. " 'Effective' Number of Parties: A Measure with Application to West Europe." *Comparative Political Studies* 12 (1): 3-27.

LaPira, Timothy M. 2016. "Lobbying in the Shadows: How Private Interests Hide from Public Scrutiny, and Why That Matters." In Allan J. Cigler, Burdett A. Loomis,

and Anthony J. Nownes, eds., *Interest Group Politics*. 9th ed. Washington DC: CQ Press, 224-248.

LaPira, Timothy M., and Herschel F. Thomas. 2017. *Revolving Door Lobbying: Public Service, Private Influence, and the Unequal Representation of Interests*. Lawrence: University of Kansas Press.

Lee, Frances E. 2009. *Beyond Ideology: Politics, Principles and Partisanship in the U.S. Senate*. Chicago: University of Chicago Press.

Leech, Beth L., Frank R. Baumgartner, Timothy M. LaPira, and Nicholas A. Semanko. 2005. "Drawing lobbyists to Washington: Government activity and the demand for advocacy." *Political Research Quarterly* 58 (1): 19-30.

Loomis, Burdett A. 2007. "Does K Street run through Capitol Hill? Lobbying Congress in the Republican era." In Alan J. Cigler and Burdett A. Loomis*, eds., *Interest Group Politics*. 7th ed. Washington DC: Congressional Quarterly Press, 412-430.

Markowitz, Harry M. 1959. *Portfolio Selection: Efficient Diversification of Investments*. New York: John Wiley and Sons.

Moe, Terry M. 2005. "Power and Political Institutions." *Perspectives on Politics* 3 (2): 215-233.

Moosbrugger, Lorelei K. 2012. *The Vulnerability Thesis: Interest Group Influence and Institutional Design*. New Haven: Yale University Press.

Newman, M.E.J. 2001. "Scientific collaboration networks. II. Shortest paths, weighted networks, and centrality." *Physical Review E* 64 (1): 1-7.

Pearson, Kathryn, and Eric Schickler. 2009. "Discharge Petitions, Agenda Control, and

the Congressional Committee System, 1929–76." *Journal of Politics* 71 (4):

1238-1256.

Petersen, R. Eric, and Sarah J. Eckman. 2016a. *Staff Tenure in Selected Positions in

House Members' Offices, 2006-2016*. CRS Report No. R44682. November 9.

Washington, DC: Congressional Research Service.

https://fas.org/sgp/crs/misc/R44682.pdf (accessed November 29, 2018).

Petersen, R. Eric, and Sarah J. Eckman. 2016b. *Staff Tenure in Selected Positions in

Senators' Offices, 2006-201*6. CRS Report No. R44684. November 9.

Washington, DC: Congressional Research Service.

https://fas.org/sgp/crs/misc/R44684.pdf (accessed November 29, 2018).

Poole, Keith T., and Howard Rosenthal. 2000. *Congress: A Political-Economic History

of Roll Call Voting*. New York: Oxford University Press.

Ragusa, Jordan M., and Anthony Gaspar. 2016. "Where's the Tea Party? An

Examination of the Tea Party's Behavior in the House of Representatives."

Political Research Quarterly 69 (2): 361-372.

Salisbury, Robert H., and Shepsle, Kenneth A. 1981. "US Congressman as Enterprise."

Legislative Studies Quarterly 6 (4): 559-576.

Schattschneider, E. E. 1960. *The Semisovereign People: A Realist's View of

Democracy in America*. New York: Holt, Rinehart, and Winston.

Schiff, Eleanor L., Kim Seufer, Anne Whitesell, and David Lowery. 2015. "Agency

Problems and Interest Representation: An Empirical Analysis of the Costs of

Lobbying." *Interest Groups & Advocacy* 4: 225–48.

Shannon, Claude E. 1948. "A Mathematical Theory of Communication." *Bell System Technical Journal* 27 (3): 379-423.

Simpson, E. H. 1949. "Measurement of Diversity." *Nature* 163: 688-688.

Staff. 2012. "The 10 Lobbying Firms That Rake In The Most Money." *Business Insider*. http://www.businessinsider.com/the-10-top-lobbying-firms-2012-8#brownstein-hyatt-farber-and-schreck-raked-in-142820000-1 (accessed July 18, 2017).

Thomas, Herschel F., and Timothy M. LaPira. 2017. "How many lobbyists are in Washington? Shadow lobbying and the gray market for policy advocacy." *Interest Groups & Advocacy* 6 (3): 199-214.

Whiteman, David. 1995. *Communication in Congress: Members, Staff, and the Search for Information.* Lawrence: University Press of Kansas.

Whitesell, Anne, Eleanor Schiff, and David Lowery. 2018. "Agency issues with small lobby firms: a test of competing hypotheses." *Interest Groups & Advocacy* 7 (1): 82-103.

Williamson, Oliver E. 1981. "The economics of organization: The transaction cost approach." *American Journal of Sociology* 87 (3): 548-577.

Wooldridge, Jeffrey M. 2002. *Econometric Analysis of Cross–Section and Panel Data*. Cambridge, MA: MIT Press.

Table 1. Determinants of Firm Revenue Post-HLOGA – Panel Linear Models

Variable	Model 1 *Revenue per Lobbyist*	Model 2 *Revenue per Lobbyist*	Model 3 *Change in Revenue per Lobbyist*[+]
		Coefficient (Std. Err.)	
Aligned with House Leadership	5982*	6226*	4079*
	(2181)	(2164)	(2022)
Aligned with Senate Leadership	574	637	1083
	(1804)	(1781)	(1600)
Number of Clients	1820*	1643*	3118*
	(253)	(248)	(316)
Client Diversity	1135	1334	-658
	(331)	(323)	(395)
Law Firm		-7927*	
		(2436)	
International Office		-1017	
		(2608)	
Number of Domestic Offices		-842*	
		(391)	
Firm Age		-35	
		(30)	
Constant		51203*	180*
		(2776)	(68)
N	33,243	33,243	31,640
Firms	1,603	1,603	1,603
T	2 to 35	2 to 35	2 to 35
F-statistic	566	305	381
F degrees of Freedom	5, 31601	5, 31634	42, 33200
Method	panel linear model with two-way fixed effects	panel linear model with firm random effects, temporal fixed effects	panel linear model with first differences, i.e., ΔY on ΔX

Note: * $p \leq 0.05$.
[+] Independent variables in Model 3 are first differences, ΔX.

Table 2. Determinants of Firm Revenue Pre-HLOGA – Panel Linear Models

Variable	Model 4 *Revenue per Lobbyist*	Model 5 *Change in Revenue per Lobbyist* [+]	Model 6 *Revenue per Lobbyist*
		Coefficient (Std. Err.)	
Aligned with House Leadership	809 (7473)	6712 (12709)	25621* (12474)
Aligned with Senate Leadership	8396 (5972)	-53.49 (6105)	-3347 (9939)
Number of Clients	2392* (562.7)	6289* (758.4)	482 (585)
Client Diversity	1082 (665.9)	2132 (1144)	6989* (2099)
N	16,792	16,792	16,792
Firms	1,562	1,562	1,562
T	2 to 20	2 to 20	2 to 20
F-statistic	81.4*	108*	552*
F degrees of Freedom	4, 15207	3, 15226	4,16787
Method	panel linear model with two-way fixed effects	panel linear model with first differences, i.e., ΔY on ΔX	Pooling panel linear model

Note: * $p \leq 0.05$.
[+]Independent variables in Model 5 are first differences, ΔX.

Table 3. Difference-in-Differences Estimates for Change in Chamber Majority

Year	House Only		House and Senate		Senate Only	
	Treatment	Coefficient (Std. Err.)	Treatment	Coefficient (Std. Err.)	Treatment	Coefficient (Std. Err.)
2001					R to D	32,960 (33,270)
2002-2003					D to R	12,636 (42,507)
2006-2007			R to D	51,003[†] (28,974)		
2010-2011	D to R	37,213* (16,523)				
2014-2015					D to R	15,020 (24,967)

Note: *Year* denotes the calendar year-over-year period in which a majority party takeover occurs following an election. Lobbying disclosures are aggregated at the calendar-year level. For instance, the treatment in 2000-2001 estimates difference-in-difference between calendar 2000 when Republicans held the majority and 2001 when Democrats took control of the majority in the Senate.
* $p \leq 0.05$.
[†] Not significant at conventional levels, $p = 0.78$.

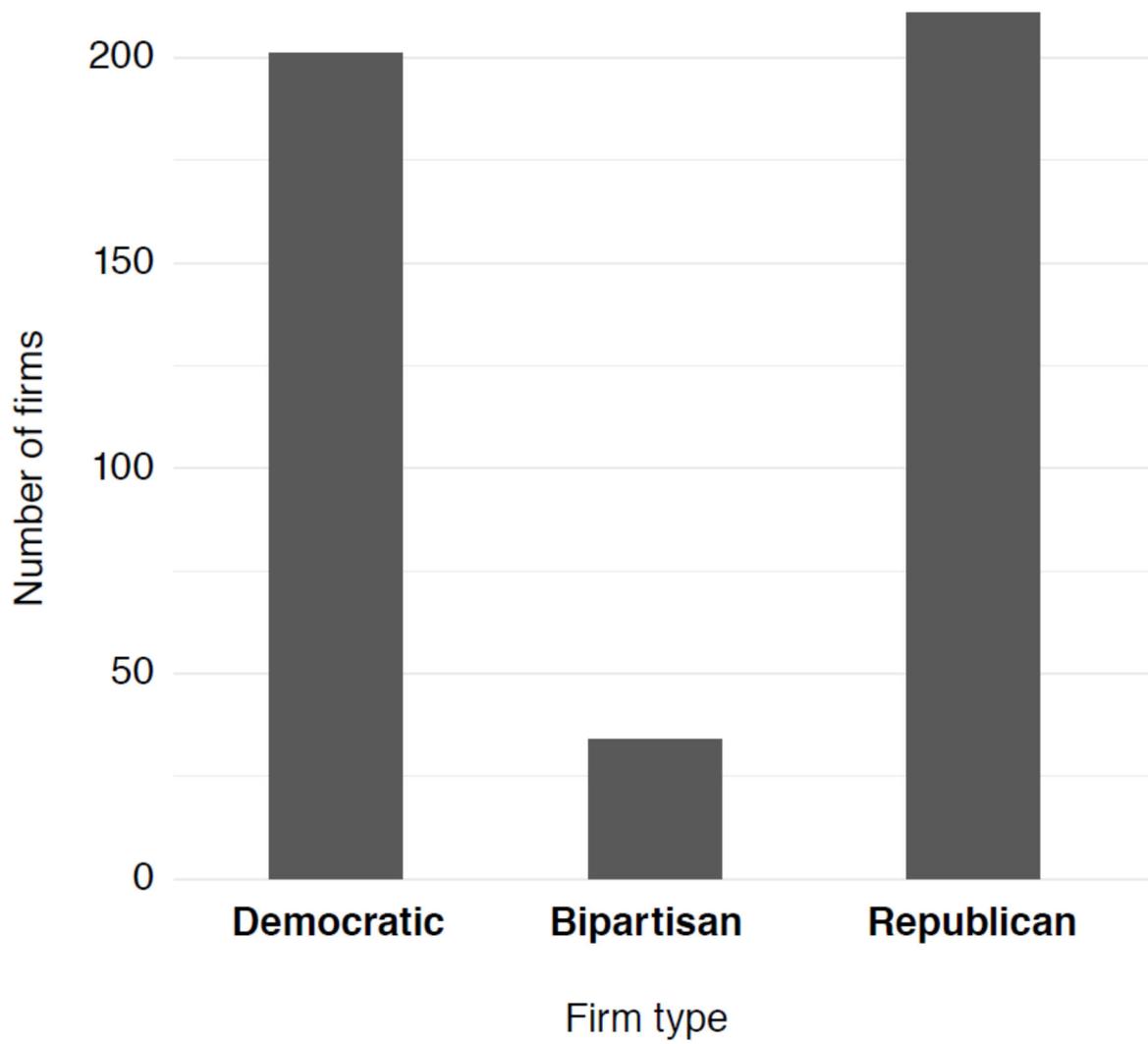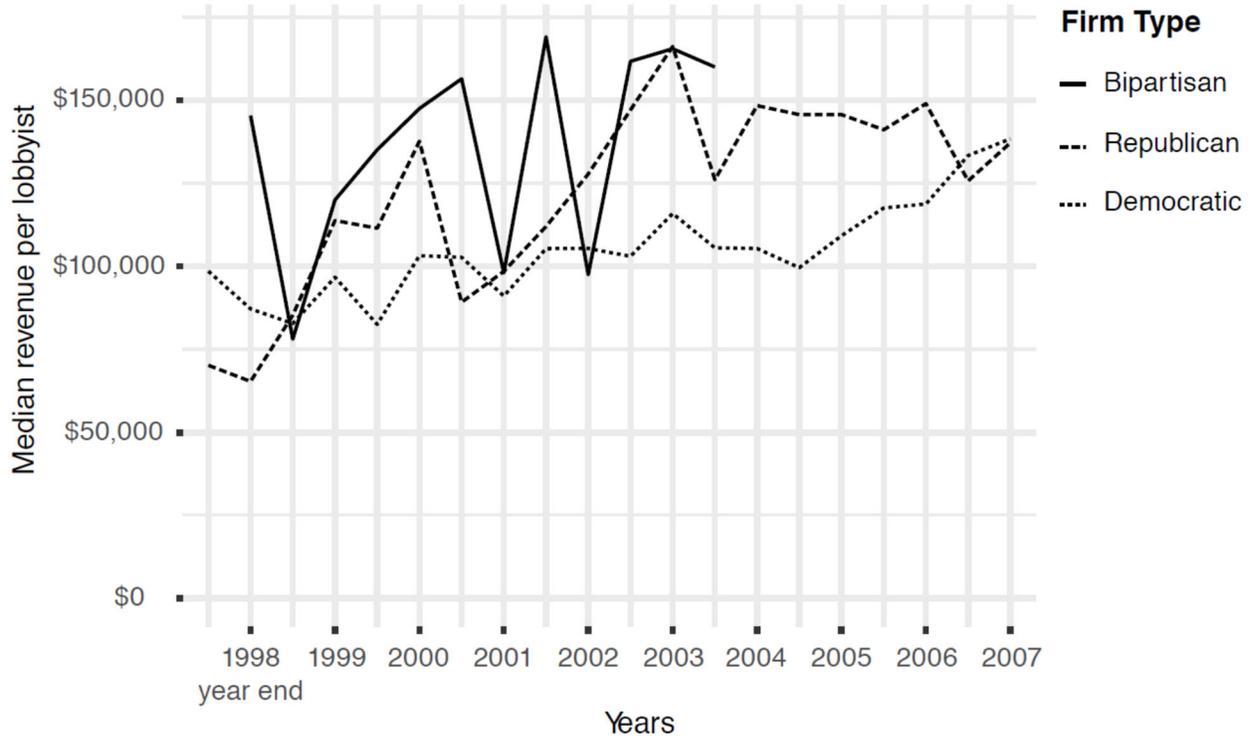**Figure 1. Distribution of Lobbying Firms by Partisan Ties**

Figure 2. Trends in Reviews for Partisan and Bipartisan Lobbying Firms

2A. Pre-HLOGA (1998-2007)
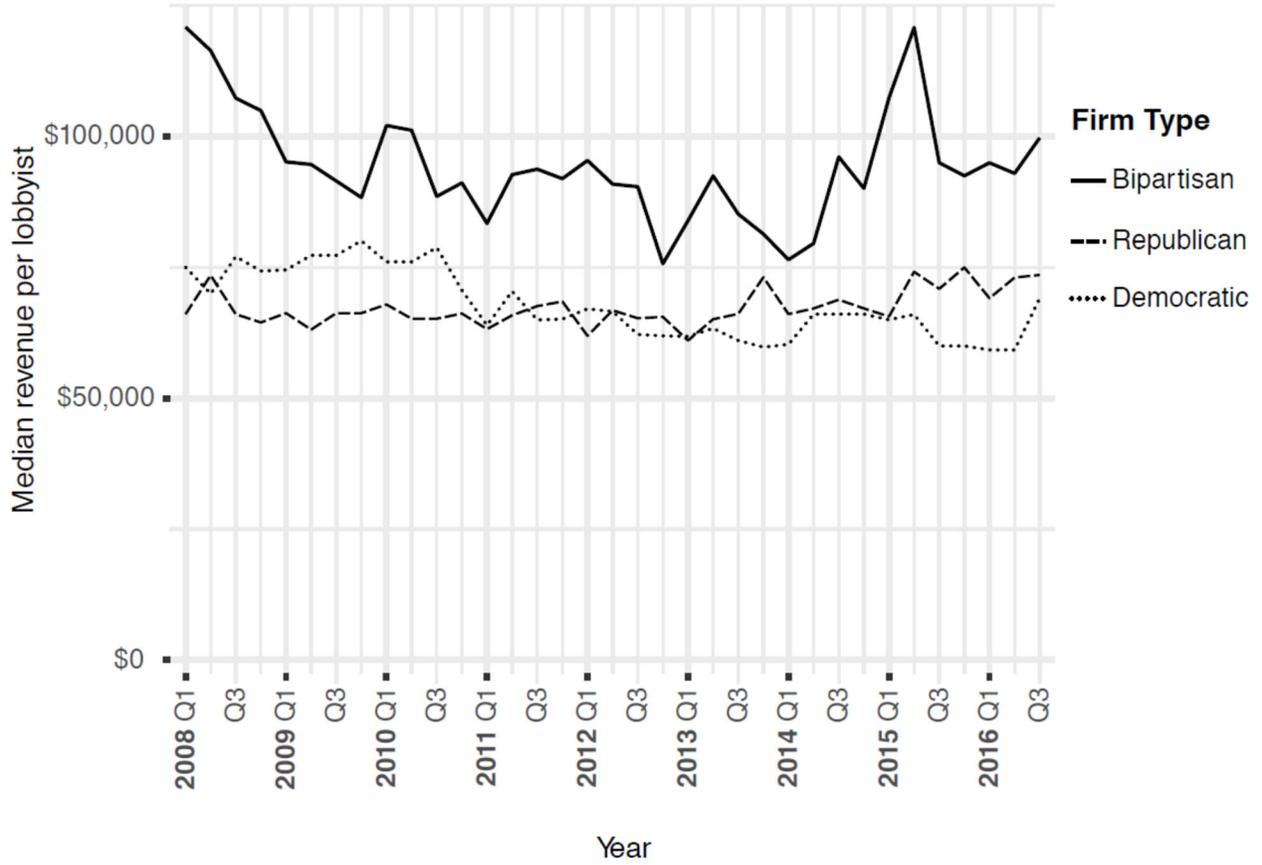
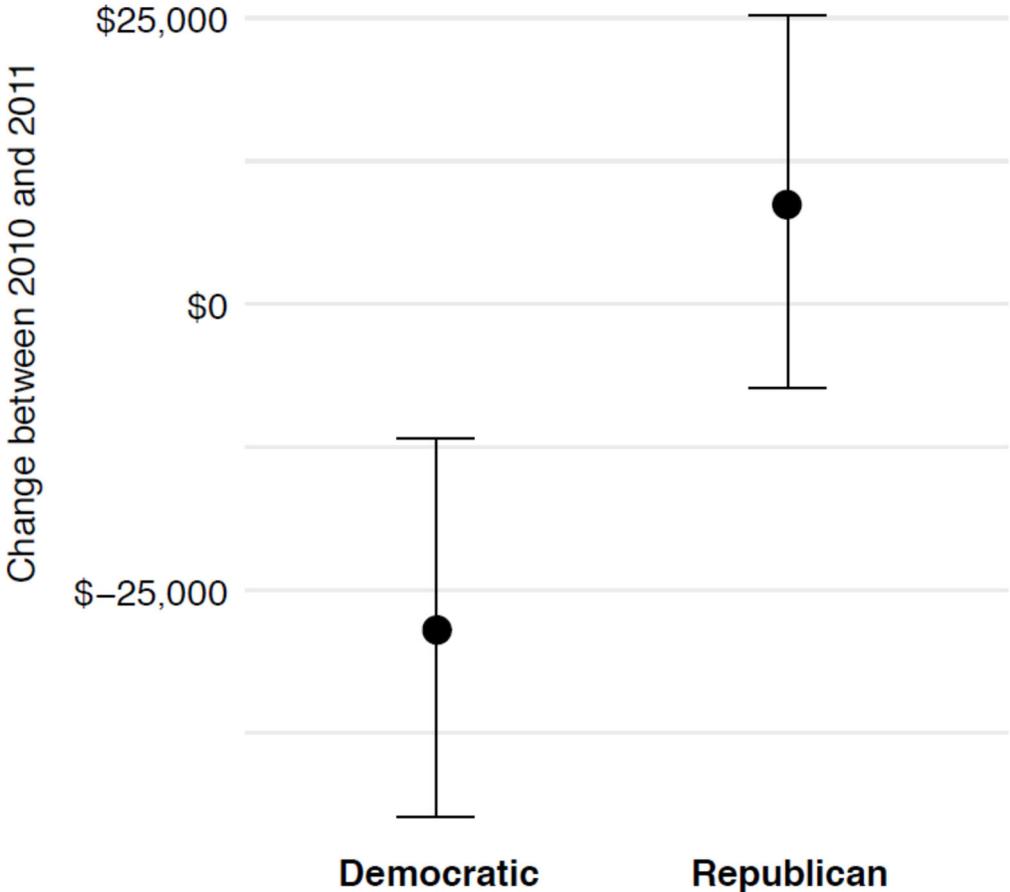## 2B. Post-HLOGA (2008-2016)

Figure 3. Select Predicted Difference-in-Difference Treatment Effects in Revenue

3A. Revenue per Lobbyist Difference in Differences for 2010 to 2011

3B. Revenue per Lobbyist Difference in Differences for 2006 to 2007