Delegating Representation: The Influence of Lobbyists on Client Legislative Behavior *

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Abstract

What influence do lobbyists have on the behavior of interest groups? When representing multiple clients, lobbyists must balance time and credibility constraints with the need to adequately represent each client. We argue that lobbyists resolve these competing incentives by targeting policies that benefit large subsets of their clients, at the cost of a more individualized legislative strategy. We test our theory using an original dataset of intergovernmental lobbying in California. We find high levels of similarity in lobbying behavior among municipalities represented by the same lobbying firm, even when accounting for differences in municipalities' demographic, fiscal, and geographic characteristics. Using a stacked difference-in-differences design, we find that when these governments change lobbying firms, the structure of their lobbying behavior changes as well. Our findings highlight the role of lobbyists in structuring their clients' actions and the principal-agent problems inherent in contract lobbying.

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1 Introduction

What role do lobbyists have in shaping the political agenda of their clients? Interest groups hire lobbyists to advocate for their policy preferences (Kersh 2000). Professional lobbyists are hired for their expertise and personal relationships (Blanes i Vidal, Draca and Fons-Rosen 2012; Bertrand, Bombardini and Trebbi 2014), for their ability to efficiently monitor legislative and regulatory activity (Drutman and Hopkins 2013; Leech et al. 2013), and for their strategic advice on how best to exert influence over the policymaking process (Drutman 2015; Kersh 2000). Due to this expertise, lobbyists are often delegated substantial autonomy in determining the lobbying behavior of their clients (Kersh 2000; Drutman 2015; Tyllström and Murray 2021).

Lobbyists, however, are unlikely to perfectly represent the interests of their clients. Interest groups regularly hire external, contract lobbyists to advocate on their behalf. Furthermore, clients are unlikely to perfectly monitor lobbyist activity (Stephenson and Jackson 2010; Lowery and Marchetti 2012). Lobbyists face distinct profit, credibility, and policy incentives (Kersh 2000; Hirsch et al. 2023; Ellis and Groll 2024). These incentives create the potential for agency problems between client-principals and lobbyist-agents. Lobbyists' expertise and discretion over lobbying actions may distort policy outcomes away from what clients would prefer given perfect compliance.

These potential problems can be amplified when lobbyists represent multiple interest groups. Many lobbying firms represent multiple clients both within and across industries (Drutman 2015; Strickland 2020). When these external lobbyists represent multiple clients, this delegation turns into a common agency problem (Bernheim and Whinston 1986). Due to time and credibility constraints, lobbyists are limited in the number of distinct actions they can take. Additionally, lobbyists may try to avoid taking actions that pit their clients interests against one another.

In this paper, we explore the implications of multi-client lobbying on interest group behavior. We argue that lobbyists solve this common agency problem by pushing their clients to lobby similar sets of actions. This strategy avoids conflicts between clients and allows lobbyists to advocate for multiple clients with a single action. We explore the empirical implications of this lobbying strategy on the behavior of clients. First, we predict high levels of homogeneity in lobbying behavior among clients represented by the same lobbyist and low levels of similarity between clients represented by different lobbyists. Next, we expect that when clients change lobbyists, their behavior should change as well. In particular, their lobbying actions should look less like clients represented by their old lobbyist and more like those represented by their new lobbyist.

We test these predictions using an original data set of lobbying actions taken by municipalities in California. Municipalities provide a useful test case for the theory. First, municipalities engage in a substantial amount of lobbying and often outspend other interest group sectors in lobbying at the state level (Payson 2020*a*). Second, these actors provide a bounded and broadly comparable set of clients for which lobbying contracts and data on underlying characteristics are readily available.

To confirm whether expectations about the informational advantage and influence of lobbyists from the existing literature apply to our sample of municipal government clients, we collected a sample of 174 contracts between California municipalities and the lobbying firms they hired in 2023. These contracts confirmed that lobbyists are often hired for their informational value—monitoring legislative and administrative processes and alerting clients to the legislation that warrants their attention. Moreover, many contracts specified that lobbyists are expected to help clients better understand their *own* policy needs and to develop a legislative agenda on which lobbying actions will be based.

Next, using disclosure reports, we constructed a dataset of both the lobbying firms representing California municipalities and the state legislation these municipalities lobbied between 2003 and 2022. Our data captures more than 250 municipalities represented by more than 100 distinct lobbying firms. Using these reports, we construct a bill-municipality-level data set consisting of over 70,000 lobbying actions.

We use this data to test predictions from our theory. First, we find that municipalities that share a lobbying firm lobby on a more similar set of bills than do those represented by different firms. This relationship persists even when we account for differences in underlying demographic, fiscal, political, and geographic characteristics. Next, we explore how firm-level characteristics affect selection of lobbying firms. We find that neither firm-level nor municipality-level characteristics can fully explain the selection of municipalities into lobbying firms.

We then explore how behavior changes when municipalities' representation changes. Using a stacked difference-in-differences design, we find that when a municipality changes lobbying firms, the municipality's behavior becomes less similar to that of clients represented by their previous lobbying firm and more similar to that of the clients represented by their new lobbying firm.

Our findings highlight the potential agency costs associated with delegating representation to lobbyists. Lobbyists informational advantage and substantive expertise enables them to shape client behavior in subtle ways that may align with their own credibility and profit incentives. This delegation may still benefit clients overall. In the absence of a lobbyist, clients would need to commit substantial resources to effectively monitor and target legislation; however, these findings highlight that lobbyists are not simply "transmission belts" for their clients' interests (Kersh 2000).

2 Lobbyists as Imperfect Agents

Professional lobbyists serve as an intermediary between legislators and clients. For legislators, lobbyists provide an important screening function—signaling the viability of policies or the credibility of interest groups to legislators (Ainsworth and Sened 1993; Hirsch et al. 2023). Often the value ascribed to lobbyists corresponds to these relationship with legislators. An empirical literature exploring the characteristics of individual lobbyists highlights the role of their personal connections to legislators and expertise in explaining variation in lobbyist revenue (Bertrand, Bombardini and Trebbi 2014; Blanes i Vidal, Draca and Fons-Rosen 2012; McCrain 2018).

An equally important relationship is the one between lobbyists and their clients. Clients hire lobbyists because they often prove valuable in influencing government policymaking (Baumgartner et al. 2009, p. 208). Lobbyists serve as a crucial source of information for these clients. A key role of lobbyists is to monitor legislative and administrative processes for issues or opportunities that may affect their clients' interests (Drutman and Hopkins 2013; Leech et al. 2013). Although clients can engage in monitoring themselves, doing so is costly. Lobbyists' specialization in these tasks can make them more efficient information gatherers (Stephenson and Jackson 2010). Furthermore, lobbyists provide their clients with strategic advice on how to present and advocate for their interests in the policymaking process, for example whom to lobby and what testimony to present (Drutman 2015; Kersh 2000).

Due to this significant informational advantage, lobbyists are often delegated substantial autonomy in determining the lobbying actions and strategies of their clients (Kersh 2000; Drutman 2015). Although clients may sometimes hire lobbyists to help advance particular legislation, external lobbyists are more commonly tasked with advocating for broad interests, such as opposing new regulation of a particular industry (Espinosa 2021). In representing broad client interest, lobbyists have substantial discretion to identify which policies will affect their clients and to determine which issues to prioritize and which lobbying actions to take (Kersh 2000, pp. 240-245).[1] Lobbyists, therefore, have significant influence over the options presented to their clients and thus over the actions that are subsequently lobbied.

The incentives of professional lobbyists and their clients, however, may not always align. Lobbyists face profit, credibility, and policy incentives that may differ from those of their clients (Kersh 2000; Hirsch et al. 2023; Ellis and Groll 2024). Lobbyists may also have ideological interests that influence the advice they give to clients (Stephenson and Jackson

[1]See also Tyllström and Murray (2021) for evidence that public affairs consultants similarly influence the political agendas of their clients.

2010). Lobbying firms often maintain partisan ties (Furnas, Heaney and LaPira 2019), and their actions may be constrained by their long term need to maintain these ties.

The informational advantage, discretion, and incentives of professional lobbyists produce a potential agency problem between client-principals and the lobbyist-agents to which they delegate their representation (Lowery and Marchetti 2012). Incentive misalignments can manifest in the level of effort a lobbyist exerts in advocating on behalf of their client (Stephenson and Jackson 2010). Additionally, the lobbying options presented to and effort taken on behalf of a client may not perfectly correspond to the actions a client would take themselves if fully informed. Competing interests can sometimes lead lobbyists to take positions at odds with the interests of their clients (Holyoke 2022). As clients face difficulty monitoring and evaluating the success (or lack there of) of a lobbyist's efforts, these problems can persist despite the potential costs to a lobbyist's reputation (Lowery and Marchetti 2012).

These problems are amplified when the lobbyist represents multiple clients. Professional lobbyists often represent multiple clients within the same general industry (Drutman 2015; Strickland 2020). These within-lobbyist coalitions can be beneficial. Coalitions that represent a diverse set of interests can be more effective at getting items on the legislative agenda (Lorenz 2020). Similarly, larger coalitions can lead to higher levels of success (Heaney and Lorenz 2013). However, when coalition members are represented by the same lobbyist, new delegation problems emerge. When a lobbyist represents multiple clients, a common agency problem emerges (Bernheim and Whinston 1986). Here the lobbyist serves as the agent to multiple client-principals (Ainsworth and Sened 1993; Groll and Ellis 2014). Although these actors may share a broad set of goals, specific interests may vary between clients.

Lobbyists face constraints in their ability to effectively represent multiple clients. First, lobbyists have limited resources and time with which to represent their clients. Access to legislators is both costly and limited (i Vidal, Draca and Fons-Rosen 2012). Even when firms employ multiple lobbyists, lobbyists are often limited in the number of actions they can take.

Lobbyists must be selective in who they represent in order to be valuable to legislators (Hirsch et al. 2023; Groll and Ellis 2014). This constrains which actions a lobbyist can credibly take.

Second, lobbyists that represent multiple clients may try to avoid pursing actions that divide their client-base. When a lobbyist represents multiple clients, the set of possible actions becomes constrained. Lobbyists face both formal and informal prohibitions against pursuing interests that benefit one client while harming another.[2] The risk of shirking can make clients wary to hire a lobbyist who represents an opposing interests (Strickland and Chakravadhanula 2024). Consequently, lobbyists are often limited to actions that either benefit all clients or that are neutral with respect to other clients.

These constraints can affect how lobbyists represent their clients' interests. We theorize that when lobbyists represent multiple clients within a similar industry, they can resolve these difficulties by pushing clients to lobby on similar sets of actions. First, bills that benefit all clients avoid conflicts between clients with differing interests. By focusing on the issues that clients agree on, a lobbyist can prevent situations where they are forced to represent both sides of an issue. Targeting the shared set allows lobbyists to maintain their credibility while representing multiple clients.

Second, this strategy allows lobbyists to satisfy multiple client-principals with a single action—helping them overcome resource constraints. Targeting these multi-client policies takes up less of the lobbyist's bandwidth than pursing individual policies for each client. Lobbyists can then represent more clients than they would otherwise be able to given individualized lobbying—potentially increasing their revenue. Third, targeting bills that benefit multiple clients has the potential to make each lobbying effort more effective. Large lobbying coalitions can be more successful (Nelson and Yackee 2012). If a lobbyist is able demonstrate that multiple clients support an action, it can increase the probability that the bill passes.

[2]Lobbyists do sometimes represent clients on competing sides of an issue (Strickland and Crosson 2022; Goldstein and Bearman 1996). However, some lobbying contracts specify that a firm may not represent clients with divergent interests. For example, Long Beach, California, was represented by the lobbying firm Arc Strategies in 2023. The contract between these two entities reads that "The Legislative Representative(s) [Arc Strategies] shall not have other clients with competing interests with the City, including any cities, agencies, or special authorities in southern California" (p. 20).

In turn, the lobbyist appears more effective and more attractive to potential clients.

This strategy serves the lobbyist, but, it can also distort the representation of a client. The lobbyist is not shirking their duties as they still advocate on behalf of all of their clients (Lowery and Marchetti 2012); however, this advocacy may shift clients away from their "ideal" set of policies. The policies that benefit all clients may be different than the policies that best serve an individual client. If clients are not in direct cooperation with one another, it can be difficult for them to hold the lobbyist accountable (Dixit, Grossman and Helpman 1997; Gailmard 2009). This can shift a client's behavior away from the actions they would individually take to maximize their utility.

While this multi-client lobbying creates the the potential for principal-agent problems, this representation is not inherently bad for the clients. There are benefits to lobbying in a coalition. Bills that are imperfect but more likely to pass may be more useful than those that perfectly match a clients underlying interests. When clients are lobbying together, they avoid the risk of lobbying against one another (Holyoke 2009).

Similarly, clients may be aware of the distortion hiring a contract lobbyist creates and leverage it to procure lobbying services for a lower cost—enabling representation when they might not have otherwise been able to. If the representation clients get from their lobbyist is better than what they could achieve on their own, this relationship can still be beneficial. Instead, our theory highlights the role of the lobbyist in structuring what the client lobbies and how this might differ from the client's ideal.

2.1 Empirical Implications

This lobbying strategy has two primary observable implications for the lobbying behavior of the clients. First, we should observe higher levels of similarity among clients represented by the same lobbying firm compared to clients represented by different firms. As the lobbyist targets policies that benefit large subsets of her clients, similarity in lobbying behavior within firm should be high. Conversely, when clients are represented by different lobbying firms, the similarity in the bills they lobby should be relatively low. As the clients of each lobbyist are different, the bills they target will be as well. Within-lobbyist similarity should be much higher than across-lobbyist similarity.

Second, when clients switch lobbying firms, their behavior should look less like the clients represented by their old lobbyist and more like the clients represented by their new lobbyist. Lobbyists' strategies are dependent on the composition of their portfolio. While a single client influences the lobbyist's behavior, which policies the lobbyist pursues depends on the other members of the portfolio. When a client changes lobbyists, they become part of a new coalition. As the lobbyist's strategy is portfolio dependent *and* the portfolios between the new and old lobbyist differ, the switcher's lobbying behavior will change.

Our focus thus far has been on the influence that lobbyists have on the actions of their clients; however, similar observed behavior could arise if instead clients were sorting into lobbying firms based on their interests. This process could take two forms. First, a group of clients could conclude that they have shared interests and that hiring the same lobbyist would be beneficial. These clients could then seek representation from a lobbying firm as a formal or informal coalition. Any future overlap in behavior could then be explained by the initial shared interests of the clients. Second, similarity in behavior could result from clients choosing which lobbying firm they want to employ based on the other clients the firm represents. Similarity in behavior then results from selection into portfolios. Likewise, lobbyists might screen clients to ensure they only represent clients with similar interests. If all clients want the same thing, managing a portfolio is easier. This could also lead to high within-lobbyist similarity.

However, under each of the above mechanisms, we should not observe drops in similarity when clients change firms. If the interests of a client are constant and the client selects into firms based on these interests, similarity with other clients in those firms should not depend on who their lobbyist is. Likewise, if a lobbyist selects clients based on their interests but not does not shape their behavior, a client should exhibit the same behavior under a different lobbyist.[3] By contrast, if the lobbyist is central to the behavior of the client, similarity should be highest when two clients are represented by the same firm. Additionally, if clients select lobbying firms based on shared interests, we should expect the choice of lobbying firm to depend on the interests of the clients. Clients with similar underlying characteristics should choose the same firm.

2.2 Scope

What types of lobbying do we expect this to dynamic to apply to? First, our theory only applies to lobbyists that represent multiple, distinct clients. In-house lobbyists do not face the same pressures to balance multiple interests, so the principal-agent problem we describe should not be present. Our theory most directly applies to contract lobbyists where a lobbyists has distinct relationships with each client.

Second, we expect lobbyists to be able to employ this strategy only when there is overlap in the interests of a lobbyists' clients. While interest diversity can be beneficial (Dwidar 2022*a*), if clients have drastically different interests, it is more difficult for the lobbyist to find policies that benefits multiple clients. A lobbyist's full portfolio does not have to consist entirely of clients with overlapping interests for our theory to apply. Instead, we could observe this behavior among the subset of clients who have shared interests.

Third, for lobbyists to shape the behavior of their clients, they need to be granted substantial discretion to determine how to represent their clients. If a lobbyist is hired only for their connections or if clients are well-informed and have specific goals in mind, the lobbyist may lack the necessary discretion to shape behavior. Instead, if a lobbyist possess an informational advantage over the client or is explicitly tasked with shaping legislative behavior, they have a greater opportunity to affect the lobbying strategy of the client.

Finally, the policies targeted by the clients must not be zero-sum. Groups with narrow interests are less likely to join coalitions (Hojnacki 1997). If one client's benefit comes directly

[3] If switching is accompanied by or a result of a change in interests, we could observe changes associated with switching. We discuss this possibility in the analysis.

at another's expense, the lobbyist will be unable to provide for multiple clients with a single action. Whether the policies are zero-sum will differ with respect to the issues and actors targeted by lobbying. For example, legislative policy can be flexible enough for multiple clients to benefit—even if no client gets their ideal. By contrast, client-specific policy such as grants or regulatory exemptions might only allow a single client to benefit. In these areas, there still could be room for the lobbyist to advocate for multiple clients. Policies that benefit a class of clients can be zero-sum relative to all policies but not zero-sum within clients. For our theory to apply, the policies pursued must allow more than one client to benefit from a single action.

3 Local governments as lobbying clients

We think our theory best applies to contract-based, legislative lobbying. In this lobbying environment, a lobbyist represents multiple clients and the policies targeted can benefit more than one client. To test the predictions from our theory, we focus on lobbying of the California legislature by municipalities in the state. Local governments offer a readily identifiable universe of lobbying clients affected by similar legislation. Moreover, the underlying characteristics of these municipalities are easily observed from publicly available data, allowing us to proxy for local interests that might otherwise explain similarities in lobbying behavior across clients. Documents detailing the selection and contracting process between local governments and their lobbyists are also often publicly available, providing additional insight rare among corporate clients (e.g., Drutman and Hopkins 2013).

A growing body of work seeks to explain intergovernmental lobbying. This work suggests that local governments often seek to secure funds and maintain legal autonomy from state legislatures (Weir, Wolman and Swanstrom 2005; Gamm and Kousser 2013) and that the decision to lobby is often predicted by fiscal need and preference incongruence between levels of government (Goldstein and You 2017; Gordon 2019; Payson 2020*b*). In a majority of states, at least a quarter of cities lobby their state government (Payson 2022, p. 24). This lobbying activity provides a robust sample with which to test our claim. This is particularly true in California where local governments often outspend other interest group industries on lobbying (Payson 2022, p. 13) and where granular lobbying data is readily accessible.[4] In a given legislative session in California, local governments lobby between a quarter and a third of all bills introduced.

This case satisfies our scope conditions. Among California municipalities, most lobbying is performed by contract, as opposed to in-house, lobbyists. Additionally, legislators and legislation tend to be the primary targets of lobbying efforts by cities (Payson 2020*a*). Municipalities are a well-defined class of interests with overlapping policy goals. Finally, as we will demonstrate shortly, municipalities hire lobbyists for their informational value and grant them significant discretion in structuring a municipality's legislative strategy. Consequently, this case serves as an ideal fit to test our theory.

4 Data

4.1 Lobbying contracts

Our sample of local governments includes incorporated places with populations greater than 1,000—including cities and towns and excluding counties and special districts.[5] As a first step, we turn to qualitative evidence from contracts between municipalities and their lobbyists. We collected contracts between California municipalities and their lobbying firms pertaining to services rendered in 2023. These contracts are particularly valuable as they often outline why a lobbying firm has been retained and the specific tasks that lobbying firms have been hired to provide.

[4] Intergovernmental advocacy in California is similar in magnitude to that observed in other states, such as Arizona, Florida, and Washington (Payson 2022).

[5] We use the terms municipality and local government interchangeably. Counties are not included as part of our sample, an exception being San Francisco which is a consolidated city-county.

We were able to obtain 207 out of 243 contracts for lobbyist-client pairs registered in 2023 using municipalities' public websites or through public records requests.[6] We then manually classified each of the specific tasks assigned to a lobbying firm in the "scope of services" or "scope of work" sections of these contracts to identify the key services provided by lobbyists. Of the contracts collected, 174 (84%) contracts contained sufficient detail to classify distinct lobbying services.[7]

We use these contracts to better understand the types of information lobbyists provide to their clients and the discretion that these agents have in structuring clients' lobbying behavior. First, the contracts confirmed that lobbyists are often retained by municipalities for their informational expertise. Eighty-nine percent of contracts included monitoring of legislative, administrative, and/or executive processes as a key task assigned to lobbyists. This information gathering often went beyond specific policies identified by the client as being of interest. For example, the City of Belmont's lobbying contract assigned their lobbyist to "raise, discuss, and recommend any affirmative legislative action that may benefit the City, and identify any potential or actual legislative or agency action that may impact the City and region."[8] Lobbyists can exert subtle influence over the choice set of their clients by determining which bill introductions or regulatory proposals to highlight and which actions to recommend to clients.

Second, the contracts highlight that these lobbyists have substantial discretion over the set of potential lobbying actions presented to these clients. Over 40% of contracts outlined a specific role for lobbyists to identify the needs and interests of clients and translate these interests into a specific legislative agenda on which subsequent lobbying actions would be based. These examples suggest that lobbyists have substantial autonomy in determining

[6] For the remaining cases, repeated efforts to obtain these records from local governments went unanswered or local officials indicated that they could not find corresponding records.

[7] See Appendix D for more detail on this classification process and additional details about the lobbying contracts.

[8] See, "A resolution of the City Council of the City of Belmont authorizing the City Manager to enter into an agreement with Renne Public Policy Group to provide state legislative advocacy and consulting services," p. 3.

how to translate clients' broad or latent interests into concrete lobbying actions—providing the needed discretion for lobbyists to shape the interests of their clients.

4.2 Bill-level lobbying data

The contracts provide evidence that clients are willing to delegate some authority to their lobbyist. To understand how this delegation can affect their clients' decisions, we turn to the legislation targeted by municipalities. In California, interest groups that hire lobbyists are required to submit quarterly disclosure reports detailing their lobbying activity.[9] These reports provide information about who the group employed to lobby on their behalf and what activity they engaged in.[10] In particular, these reports list the bills lobbied by municipalities in each legislative session. Using these reports, we construct an original dataset of legislation lobbied by municipalities in California between 2003 and 2022. As mentioned previously, legislators, rather than executive officials or bureaucrats, are the primary target of lobbying by municipalities in California (Payson 2020*a*), so our focus on bills allows us to identify the bulk of each local governments lobbying behavior.

For each legislative session, here a two-year period, we use these reports to identify all bills lobbied by a local government through their contracted lobbyist. We limit the sample to local governments that employed an external lobbyist.[11] Our resulting data set consists of over 70,000 actions taken by 288 unique local governments on over 13,600 bills. Figure 1 plots some descriptive statistics on our data. In a given legislative session, on average 53 lobbying firms represent municipalities in some capacity. On average, just under 170 municipalities lobby the California legislature each session.

[9]Note that these reports are different from the contracts between lobbyists and their clients.

[10]Lobbying disclosure reports do not specify which lobbyist in a firm represented a particular client. Consequently, our analysis is at the firm, as opposed to lobbyist, level.

[11]Contract lobbyists are those for whom we expect agency problems to be the greatest. Furthermore, direct lobbying by local governments absent the presence of a contract lobbyist is more difficult to observe. If a municipality spends less than $5,000, they are not required to submit a disclosure report about which actions they lobbied. While we observe some cases of cities relying only on in-house advocates, the sample is incomplete. Consequently, we focus on contract lobbyists as we observe all cases. In Table B1, we replicate our main analysis and include the handful of cases where we observe in-house lobbying. Our primary results

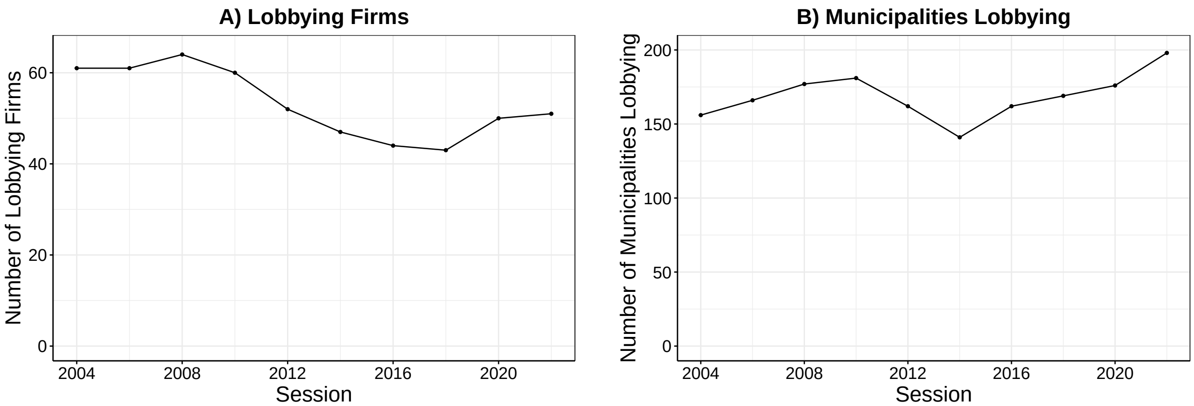

Figure 1: (A) The number of lobbying firms that represent at least one municipality by legislative session. (B) The number of local governments that employ an outside lobbyist by legislative session.

When a municipality is represented by more than one firm, their disclosure reports do not specify which firm lobbied on which bill. For our analyses, we require lobbying actions to be tied to specific firms. Therefore, we define a municipality's *primary lobbying firm* as the firm paid the most money to represent a local government in a given legislative session.[12] For each legislative session between 2003 and 2022, our final dataset consists of bill-municipality pairs for each bill lobbied by a municipality in a legislative session. Each municipality is linked to their primary lobbying firm for that legislative session. We classify local governments as employing the same lobbying firm if they share the same primary lobbying firm.[13]

Focusing solely on these primary lobbying firms, Figure 2 plots the share of local governments represented by three of the top lobbying firms over time. A significant portion of municipal lobbying was conducted by these three firms, and the share of local governments

are unchanged.

[12]The vast majority of municipalities (85%) employ a single firm and, thus, are unaffected by this simplification. Furthermore, when a local government employs more than one firm, the primary lobbying firm, as defined above, is paid on average three times as much as the second highest paid firm. Primary lobbying firms constitute the vast majority of spending on lobbying.

[13]Lobbying firms are also required to submit reports outlining the actions that they lobbied on behalf of their clients. In theory, these reports can be matched to clients to assign lobbying actions to firms even when clients employed multiple firms; however, matching actions in these reports to a specific client is imperfect. Errors in matching lobbying behavior to firms have the potential to increase the perceived similarity in behavior, biasing our results toward finding an effect. By contrast, assigning all lobbying behavior to a single firm should bias us against finding an effect. In Table B1, we repeat our initial analyses excluding local governments that employ multiple lobbying firms. Results are robust to the exclusion of these firms.

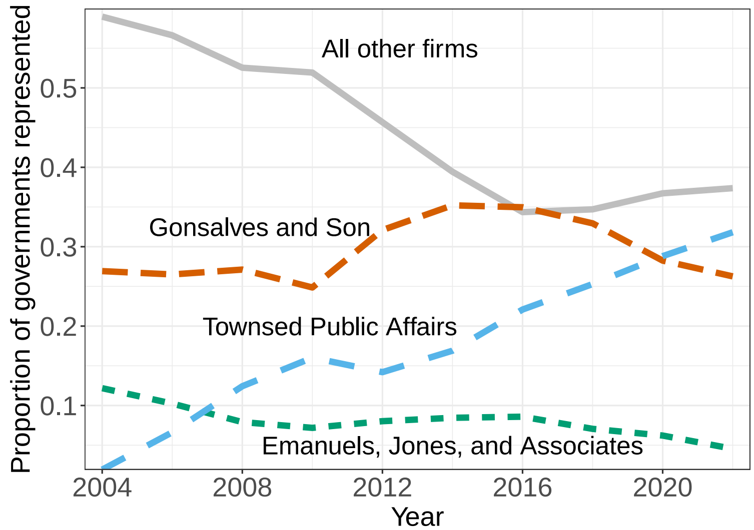

Figure 2: The proportion of municipalities represented by a lobbying firm over time. The figure plots the share of municipalities represented by three of the top firms (as of 2022) and all other firms combined. Since 2010, these three firms have accounted for over 50 percent of lobbying representation.

employing these large volume firms has increased over time. From 2010 onward, these three firms represented over 50% of all local governments that employed an outside lobbyist. Most contract lobbying on behalf of this industry is done by firms representing many clients.[14] For these large volume firms, perfectly representing each individual government's interest may be difficult. The need to represent multiple clients, therefore, shapes the actions that these lobbying firms are able to take.

5 Analysis

How similar is the lobbying behavior of local governments? Each session, municipalities in our sample lobby over 1,000 different bills. To capture overlap in which bills are lobbied, we use cosine similarity.[15] This measure operates as follows. Assume that there are two local

[14]Note that many lobbying firms also represent clients that are not municipalities. In Appendix B, we provide descriptive information on the composition of lobbyist portfolios.

[15]Within political science, cosine similarity has been used to compare various types of documents, such as government reports, political speech, court opinions, and Supreme Court opinions (See Hager and Hilbig (2020); Hazelton, Hinkle and Spriggs (2019)).

governments, A and B, that lobbied in a given year. For government i, let x^i be a vector of length N, where N is the number of unique bills lobbied by all governments in that year. Let $x^i_j = 1$ if government i lobbied bill j, and 0 otherwise. The cosine similarity between governments A and B is then:

$$\text{Cosine Similarity}(A, B) = \frac{x^A \cdot x^B}{||x^A||\ ||x^B||}$$

Higher values of cosine similarity correspond to greater overlap in the bills lobbied. The cosine similarity for a pair of local governments is 1 if they lobbied exactly the same set of bills. By contrast, a cosine similarity of 0 implies no overlap in the set of bills lobbied. For each legislative session, we calculate the cosine similarity between every pair of municipalities that lobbied on at least one bill.

The left panel of Figure 3 plots the density of values of cosine similarity for all pairs of municipalities. Similarity in the lobbying behavior of municipalities is relatively low. The mean level of cosine similarity is only 0.19. The right panel of Figure 3 plots the distribution of cosine similarity distinguishing pairs of municipalities represented by the same firm from pairs represented by different firms. When local governments are represented by different lobbying firms, their average cosine similarity is 0.12. By contrast, the average similarity among pairs represented by the same firm is 0.58—almost five times higher. This difference is statistically significant.[16]

What is the substantive size of this effect? Assume that both municipalities lobby the median number of bills, 29. A cosine similarity of 0.12 means that the two municipalities lobbied 3 of the same bills. By contrast, a cosine similarity of 0.58 means that the two municipalities lobbied 17 of the same bills—a significant increase in the overlap of their lobbying behavior. Similarity is significantly higher among municipalities that are represented by the same lobbying firm compared to municipalities represented by different firms.

[16]Table A1 presents results from models estimating the relationship between similarity and whether two local governments are represented by the same firm.

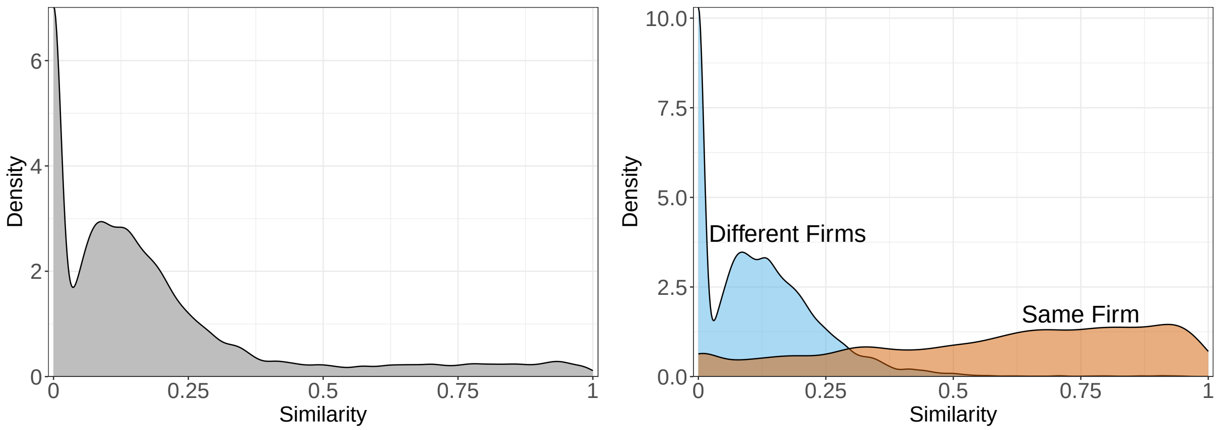

Figure 3: The left panel plots the density of similarity in lobbying behavior between local governments in a given legislative session. The right panel plots the density, distinguishing between pairs municipalities represented by the same firm and pairs represented by different firms. Larger values indicate higher observed similarity.

In Appendix B, we replicate the above results using different approaches. First, we use which committees the bills are assigned to separate between budget and policy bills. There are over five times as many non-budget bills lobbied as budget bills. We separately calculate cosine similarity among bills in each issue area. The effect of sharing a lobbyist is larger among budget bills, though it is also statistically significant for policy bills. Next, we explore the "non-bill" actions taken by each municipality. Relying on text of lobbying reports, we find that within-lobbyist similarity is far higher than across-lobbyist similarity.

Our results are also robust to approaches that do not rely on cosine similarity or city-dyads. We use techniques from network analysis to estimate the importance of lobbying firms to observed behavior. While these methods are similar to those above, they utilize bills lobbied to construct links between local governments. Using this alternative approach, we find similar results: who represents a municipality is central to what they lobby.

5.1 Selecting into lobbying firms

The above analysis demonstrates that municipalities represented by the same lobbying firm lobby a more similar set of bills than municipalities represented by different firms. Local governments, however, do not choose lobbying firms at random. Firms may have specialties or reputations that make them attractive to certain types of municipalities. If local governments with similar underlying interests select into the same lobbying firm, we could observe similarity in lobbying behavior among the clients of a given lobbying firm absent any influence of the lobbying firm itself.

To proxy for underlying interests that might explain similarity in lobbying behavior, we collected a variety of characteristics for the local governments in our sample. These characteristics include the following: population, poverty rate, median income, home ownership, estimated ideology, presidential vote share, percentage white, charter status, and type of government (i.e., strong mayor, council manager). We also collected geographic information including the county in which a municipality is located, whether the local government is or is not coastal, and a measure of which region of California a local government belongs to.[17]

We estimate the effect of being represented by the same lobbying firm on lobbying behavior, accounting for differences in the interests of these local governments. For characteristics with continuous values, we take the absolute value of the difference between the two municipalities. For binary and categorical variables, we assign a value of 1 if the values are equal and 0 otherwise. Table 1 displays results from these models. Even when interests are accounted for, municipalities represented by the same firm still have a higher degree of similarity than municipalities represented by different firms.[18]

The interests of local governments, however, may interact in ways that are not captured by a regression analysis. Local governments may select into lobbying firms based on combinations of these observed characteristics. For example, liberal cities with high poverty

[17] Detailed descriptions of these measures can be found in the Appendix C. Ideology estimates come from Tausanovitch and Warshaw (2013).

[18] Table B1, we present several robustness checks for this finding. The results hold if we exclude clients who are the only municipality represented by their firm or exclude clients represented by the two largest firms: Townsend Public Affairs and Gonsalves and Son. We also explore whether the party of municipal leaders matters for similarity. For the subset of cities with a population above 50,000, we are utilize estimates of the party of the mayor or the proportion of the city council members that are Democrats from the American Local Government Elections Database (de Benedictis-Kessner et al. 2023). The inclusion of either of these variables does not change our results, and neither have a significant effect on similarity.

	Dependent variable:		
	Similarity		
	(1)	(2)	(3)
Same Firm	0.46*	0.35*	0.45*
	(0.02)	(0.03)	(0.02)
Difference in Poverty Rate			−0.12*
			(0.06)
Difference in Ideology			−0.05*
			(0.02)
Same County			0.03*
			(0.01)
Year F.E.	✓	✓	✓
Dyad F.E.		✓	
Local Government Characteristics			✓
Geographic Characteristics			✓
R^2	0.54	0.79	0.55
N	112337	112337	105878
Note:			$^*p < 0.05$

Table 1: OLS estimation of the effect of being represented by the same lobbying firm on similarity in lobbying behavior. Standard errors are calculated via dyad-cluster robust multiway decomposition as described in Aronow, Samii and Assenova (2015) and implemented by Bisbee and Rodriguez (2024). The table displays the three characteristics with the largest estimated effects. Local government characteristics include population, percentage white, poverty rate, ideology, Democratic presidential candidate vote share, percentage owner occupied housing, median household income, charter city status, and government type. Geographic characteristics include county, California region, and coastal status. Full results can be found in Appendix A.

may choose different lobbyists than liberal cities with low poverty and conservative cities with high poverty. To account for interactions between local government characteristics, we train a random forest regression to predict similarity in lobbying behavior between local governments.

We train two separate random forests. The first includes the same characteristics as Model 3 in Table 1, except that it excludes information about whether two local governments are represented by the same lobbying firm. Using only the characteristics of these municipalities, we train the random forest to predict similarity in lobbying behavior. The

	MSE	R^2
No Firm	0.037	0.32
Firm	0.019	0.66

Table 2: Estimation errors for random forest regression. The first row uses only municipal characteristics to estimate model. The second row adds information about whether the local governments are represented by the same lobbying firm.

second model keeps these characteristics but adds a binary variable indicating whether the two local governments are represented by the same lobbying firm.[19]

Table 2 reports differences in performance between the two models. Adding information about whether two municipalities are represented by the same firm reduces the mean squared error by half and doubles the R^2. Allowing for non-linear interactions between the characteristics of municipalities does not diminish the importance of firm identity in explaining similarity in lobbying behavior.[20]

To more directly get at the question of whether local governments are selecting into firms based on their interests, we explore which factors lead municipalities to share a lobbying firm. Using the same set of characteristics as above, we change our dependent variable from the cosine similarity between two municipalities to whether the two municipalities are represented by the same lobbying firm. Similar to above, we train a random forest classifier to predict whether two local governments are represented by the same lobbying firm in a given year.[21]

Table 4 presents the resulting confusion matrix from the prediction. The diagonal entries correspond to cases that are correctly predicted. The recall of the model is very low. Only a fifth of pairs where local governments share the same lobbying firm were correctly predicted. The F^* of the model, which combines the precision and recall, is under 0.25. Excluding pairs

[19] Models are trained using 10-fold cross validation. We choose hyper-parameters to minimize the error of the model without information on lobbying firms.

[20] We repeat the analysis with the subset of municipalities for which we have estimates about the partisan composition of city councils. Results are robust to the inclusion of this variable. See Table B2.

[21] We choose hyper-parameters to maximize the F-score of the model. The model is tested using 10-fold cross validation.

		Actual Value	
		Same Firm	Different Firms
Predicted	Same Firm	3,050	372
Value	Different Firms	14,078	88,378

Figure 4: Confusion matrix of prediction of shared lobbying firm. The results present the actual and predicted values of whether two municipalities employ the same lobbying firm.

correctly classified as having different lobbyists, only a quarter of predictions are correct.[22] The characteristics of local governments do a poor job of predicting whether they employ the same lobbying firm.[23]

Next, we directly model the selection of lobbyist and explore how firm-level characteristics predict the likelihood that a municipality selects into a firm. First, we subset to municipality-sessions where a local government joined a new firm. Let t denote the period when a municipality joins a new lobbying firm. We include cases where a municipality switched firms between periods $t-1$ and t and cases where a municipality did not lobby in period $t-1$. We are interested in estimating whether characteristics of a firm's municipal clients in period $t-1$ can predict selection into that firm in period t. Consequently, we subset to firms that represented at least one municipality in period $t-1$. This leaves us with 199 cases of a municipality joining a new firm.

We define the set of potential firms that a municipality can join as the set of firms that accepted new municipal clients in period t. We focus on this subset, as opposed to all firms, as we know these firms are taking on new clients during this period.[24] For each potential firm, we collect information about both the firm's clients in period $t-1$ and the amount of revenue the firm earned in $t-1$. We calculate firm-level averages for a variety of measures of

[22] F^* is a transformation of the standard F-Score where $F^* = \frac{F}{2-F}$.(Hand, Christen and Kirielle 2021). The F-score of our model is 0.39

[23] In Appendix B, we perform the same test using OLS regression. The model can only explain 5% of the variation in lobbyist selection. Like above, we also run the analysis with variables that capture the party of the mayor or the partisan composition of the city council. Neither improves the classification. Additionally, we do not find strong evidence that the lobbying environment we study is dominated by strictly partisan firms. Figure B5 plots distributions of the partisan make up of firms. We also do not find evidence that firms specialize in particular municipal issues. See Appendix B.7 for more on the specialization of firms.

[24] The number of potential firms ranges between 4 and 12 in our sample.

municipal characteristics to capture the firm's "typical client." For each potential firm, we take the difference in these firm-level averages with the corresponding client characteristic. Table 3 presents results from a linear regression estimating selection into firms.

Looking first at firm characteristics, one of the best predictors that a client will join a firm is the percentage of a firm's existing clients that are municipalities. Firms with high proportions of local government clients attract more municipalities. Looking at differences between firm-level and municipal characteristics, we find some evidence of selection. Income and population differences make a client less likely to join a firm; however, the predictive power of these characteristics is relatively low.[25] While some interest-based selection into firms may occur, local governments are not choosing which firm to join solely based on the composition of the firm's existing client-base.

5.2 Switching representation

There may be some unobserved factors that structure which lobbying firms local governments choose in ways previous analyses cannot account for. If local governments are sorting into lobbying firms based on some unobserved characteristic, our analysis would attribute similarity in behavior to a shared firm as opposed to this unobserved trait. To minimize the potential effect of selection into firms, we focus on changes in the similarity of lobbying behavior when local governments change which lobbying firm represents them.

We illustrate the logic underlying the analysis with a brief example. Assume there are two lobbying firms: A and B. Denote the local government that switches firms by S. In period t, S is represented by firm A, while in period $t+1$ they are represented by firm B. First, we compare the behavior of S with municipalities represented by firm A in both periods. We estimate how similarity between S and the other local governments represented by firm A changes between t, the period prior to the switch in representation, and $t+1$, the period immediately following this switch. We refer to this change as the effect of switching *out of a*

[25]In Appendix B.8, we repeat the analysis using a conditional logit model and Random Forest Classification. Results are similar to the above. The F^* from our random forest classification is under 0.25.

	Dependent variable:	
	Lobbying Firm Selection	
	(1)	(2)
Lobbyist Revenue (Tens of millions)	-0.19^{*}	0.25
	(0.09)	(0.17)
% Government Clients	0.15^{*}	0.29^{*}
	(0.03)	(0.11)
Number of clients (10s)	0.04^{*}	0.03
	(0.01)	(0.02)
Difference in Poverty Rate	−0.07	2.16
	(0.41)	(1.40)
Difference in Ideology	0.16	−0.11
	(0.13)	(0.34)
Difference in Population (100k)	-0.01^{*}	−0.02
	(0.00)	(0.01)
Difference in % White	−0.14	0.33
	(0.09)	(0.29)
Difference in % Owner Occupied	−0.25	−0.56
	(0.16)	(0.55)
Difference in Household Income ($100k)	-0.16^{*}	−0.38
	(0.06)	(0.32)
Difference in Dem. Pres. Vote	−0.22	−0.12
	(0.17)	(0.44)
Difference in Charter Status	-0.06^{*}	−0.06
	(0.03)	(0.07)
Difference in Coastal Status	−0.03	0.13
	(0.03)	(0.09)
Difference in City Manager Status	0.09	−0.06
	(0.05)	(0.13)
Difference in City Council % Dem		−0.19
		(0.13)
Municipality-Year F.E.	✓	✓
R^2	0.13	0.20
N.	1393	252

$^{*}p < 0.05$

Table 3: Standard errors are clustered at the municipality-year level.

firm. Our theory predicts that when municipalities switch out of a firm, the similarity in the behavior between S and other clients of firm A should decrease. Similarly, we can estimate the change in similarity between S and other clients of their new firm B between periods t and $t+1$. We refer to this change as the effect of switching *into a firm*. Our theory predicts that when municipalities switch into a firm, the similarity in the behavior between S and the other clients of firm B should increase.

As noted above, municipalities sometimes employ more than one lobbying firm. If we focus exclusively on changes in a municipality's primary lobbyist, we could mistakenly classify cases as switching where the firms representing a municipality do not change, only their relative payment does. Consequently, we employ the following three criteria to identify clear cases of municipalities that switch representation.

1. The primary lobbying firm at t is different than the primary lobbying firm at $t+1$.
2. The primary lobbying firm at $t+1$ did not represent the local government in any capacity at t.
3. The primary lobbying firm at t does not represent the local government in any capacity at $t+1$.

Applying these criteria leaves us with 56 instances of a local government switching lobbying firms.[26] Switching lobbying firms is relatively rare. When local governments lobby in consecutive legislative sessions, they tend to stay with the same lobbying firm.[27]

Figure 5 looks at differences in cosine similarity before and after a local government switches lobbying representation. In line with expectations, when local governments switch

[26]If we relax the second and third conditions, we observe 142 instances of switching.

[27]In a quarter of our cases, the firm in period t is out of business in period $t+1$. In another 4 cases, one of the lobbyists in firm t switches to firm $t+1$, though we have no way of verifying that the local government followed the lobbyist. The number of switches that occur in a year varies between 2 in 2008 and 12 in 2018, with the median number of switches being 5. The two largest firms are involved in just under half of all switching cases. These firms are much more likely to be switched into than switched out of. In general, municipalities are only observed switching once in our data. Seven local governments switch twice and only one switches three times. Excluding these 8 multi-switchers does not change our results.

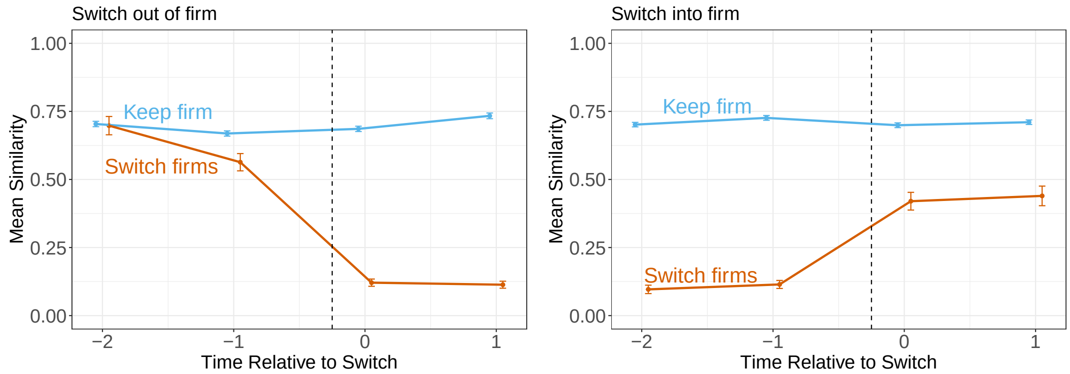

Figure 5: Trends in cosine similarity among municipalities that switch firms and those that remain in the same firm. Among municipalities switching out of firms, there is a significant decrease in similarity from period $t-2$ to $t-1$ relative to those that remain in the same firm. Among municipalities that switch into a firm, there is no difference in pre-trends between treated and untreated units.

lobbying firms their lobby behavior changes. First, we look at the effect of switching out of a firm on the cosine similarity between the municipality that switched and municipalities that remained in the firm. We note that in the period before the switch, the cosine similarity decreases between the municipality that will switch and other municipalities represented by the firm. We do not observe a corresponding decrease among pairs of municipalities that both remain in the firm. This initial decrease in similarity may be indicative of a mismatch in the interests of a municipality and the actions taken by the lobbying firm.

After the municipality leaves the firm, we observe a substantial decrease in similarity. In period $t-1$ when the municipalities are represented the same firm, the mean cosine similarity is 0.56; however, after the municipality switches to a different firm, the mean cosine similarity in lobbying behavior with these same municipalities drops to 0.12. What is the substantive size of this effect? Again, assume that each municipality lobbies 29 bills. In the pre-switch period, there is an overlap of 16 out of 29 bills. This drops to only 3 out of 29 bills in the post-switch period.

Next, we look at the effect of switching into a firm—looking at similarity in behavior between the switcher and clients of the post-switch firm. In contrast to the switch out of case, we do not observe any changes in cosine similarity in the session before the switch takes place. The similarity between the switcher and clients in the firm they will switch into does not change between periods $t-2$ and $t-1$; however, after the switch takes place, we observe a significant increase in similarity. In period $t-1$, the mean cosine similarity in lobbying behavior between this municipality and clients of its future lobbying firm is 0.12. In period t when these local governments are represented by the same firm, the mean similarity in lobbying behavior increases to 0.42. If both municipalities lobbied 29 bills, they would have an overlap of 3 bills in the pre-switch period and 12 bills in the post-switch period. Even among municipalities that either will share a firm or previously shared a firm with the switcher, similarity in lobbying behavior is highest when the local governments are represented by the same firm.

To more accurately estimate this effect, we use a stacked difference-in-differences analysis. We compare pairs of local governments where neither firms switched lobbyists with pairs where one of the local governments switched firms. As before, we distinguish between the effect of switching away from a firm and the effect of switching into a firm. We subset to firm-periods where at least one local government switched and weight observations to correct for bias (Wing, Freedman and Hollingsworth 2024). Table 4 presents results from this analysis.

The first three columns of the table estimate the effect of switching out of a firm on similarity in lobbying behavior. When a local government switches away from a firm, the similarity in their lobbying behavior to that of other municipalities represented by the pre-switch firm decreases relative to pairs of municipalities represented by the pre-switch firm in both periods. We also find a significant effect of switching into a firm. When a local government switches into a firm, the similarity in their lobbying behavior to that of other municipalities represented by the post-switch firm increases relative to pairs of municipalities represented by the post-switch firm in both periods. This effect persists even when we account for a host of local-level characteristics. When local governments switch into a firm, their lobbying behavior becomes more similar to that of the firm's existing clients. When

	Dependent variable:					
	Similarity					
	Switch-Out			Switch-Into		
	(1)	(2)	(3)	(4)	(5)	(6)
Switch Pair	-0.14^{*}	-0.15^{*}	-0.13^{*}	-0.51^{*}	-0.48^{*}	-0.48^{*}
	(0.01)	(0.01)	(0.02)	(0.01)	(0.01)	(0.01)
Post-Switch	0.02^{*}	-0.01	-0.01	0.04^{*}	0.02	0.01
	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)	(0.01)
Switch-Pair*Post-Switch	-0.43^{*}	-0.40^{*}	-0.37^{*}	0.17^{*}	0.19^{*}	0.21^{*}
	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)	(0.02)
Corrective Weights		✓	✓		✓	✓
Local Government Characteristics			✓			✓
R^2	0.18	0.18	0.28	0.27	0.23	0.33
N	6642	6642	6612	4598	4598	4541
Note:						$^{*}p < 0.05$

Table 4: Stacked difference-in-differences estimate of the effect of switching firms on the similarity in lobbying behavior with other local governments represented by the firm. First three columns estimate the effect of switching out of a firm. Last three columns estimate the effect of switching into a firm. Robust standard errors are in parentheses. Weighted estimates use the procedure outlined in Wing, Freedman and Hollingsworth (2024). Full results can be found in Appendix A.

local governments switch out of a firm, their lobbying behavior becomes less similar to that of the firm's remaining clients. These results are supportive of our theory that lobbyists face incentives to push clients toward more similar lobbying behavior.

We acknowledge that the decision to switch lobbying firms is non-random. Local governments may change representation because of an incongruence between their interests and the actions the firm undertakes. If a client's interests are not being well represented, changing firms and gaining more faithful representation should lead to changes in lobbying behavior. Similarly, a local government may choose a new firm based on a desire for the to mimic the lobbying behavior of the firms other clients. This could lead to a increase in lobbying similarity once a client joins a firm. Underlying interests that affect both the decision to switch firms and what municipalities lobby could lead to the switching effect we observe.

We attempt to capture changes in interests by looking differences in the characteristics of switching and non-switching firms. With the exception of population, we do not observe any significant differences in either the characteristics of these municipalities or how they change around the switching period.[28] We cannot guarantee that changes in interests play no role; however, among the characteristics we can observe, we find little evidence that switching is the result of changes in municipal characteristics.

6 Discussion and Conclusion

Our findings demonstrate the influence lobbyists have on the political behavior of their clients. In line with our predictions, we find evidence that which legislation a client lobbies is heavily dependent on who their lobbyist is—a behavior that may be driven by lobbyists' desire to avoid potential conflicts between clients and deliver for multiple clients with a single action. This strategy increases the similarity of lobbying behavior among clients represented by the same lobbyist and reduces the uniqueness of an individual client's lobbying behavior.

[28] See Appendix B for more details. Municipalities that switch firms are roughly double in size. Between two years before switching and two years after, they grow by around 4,000 more citizens. We find no evidence that changes in the partisanship of city leadership is central to the decision to switch firms.

Our analysis of municipalities that change lobbying firms suggests that a shift into shared representation increases similarity in the lobbying behavior of clients. Among municipalities that either will share a lobbying firm or previously shared a lobbying firm, similarity is highest in the period when two local governments are represented by the same firm. This behavior is consistent with our theory and inconsistent with a purely client-driven theory

What are the implications of our findings on the principal-agent relationship between clients and lobbyists? First, we argue that delegating representation to a lobbyist may have costs for municipal governments. Lobbying behavior appears less personalized when local governments are one of several clients represented by a lobbyist. However, delegating to a lobbyist may also provide clients with significant benefits. Lobbyists possess expertise and connections that magnify their clients' influence, a value reinforced by evidence from lobbying contracts. Additionally, lobbyists representing multiple clients likely spread monitoring costs across clients, instead of each client individually investing in monitoring capacity. For many clients, lobbying at the scale observed in our data would not occur without the advocacy provided by a contracted lobbyist. Consequently, while this delegation may have legitimate costs, the overall utility to clients may still be positive.

Although our evidence is restricted to lobbying by a specific type of public entity and their efforts to influence state legislation, we believe that our results apply to a broader set of interest groups and lobbying actions. Like local governments, other interest groups face imperfect information about legislative actions that may affect them—information that lobbyists are well placed to provide. However, these same dynamics are likely to affect other types of interests for which government regulation is consequential and among which there is variation in resources and capacity. For our theory to apply, the policies targeted by these interests must not be zero-sum and must have some broad appeal.

Our results suggest several avenues for future research. Interest group efforts to exert influence on the policy making process often occur through coalition lobbying, or coordinated efforts by interest groups to advance shared aims (Hula 1999; Drutman 2015). Although a growing body of literature explores the conditions under which lobbying coalitions are effective advocacy tools (Nelson and Yackee 2012; Mahoney and Baumgartner 2015; Lorenz 2020; Dwidar 2022*b*), we know much less about how these coalitions come about and when interests choose to lobby individually or collectively (but see, De Figueiredo and Tiller 2001; Bombardini and Trebbi 2012). If lobbyists play an important role in structuring the lobbying actions of their clients, then lobbyists may also facilitate the creation of and structure the coalitions of interests that seek to influence state and federal policy. Future work should more rigorously explore the role of lobbyists in the formation of lobbying coalitions.

Another avenue for future work concerns the selection of lobbyists by clients and of clients by lobbyists. If clients delegate decision making to their lobbyists, then understanding how these relationships emerge is central to understanding interest group influence over policymaking. In particular, the other clients represented by a lobbyist may affect the quality of representation received. Lobbyists likely face profit and credibility incentives in constructing portfolios of clients (Strickland and Crosson 2022; Lowery and Marchetti 2012). Future work should examine how these portfolios develop and their representational consequences.

Lobbyists are ever present in modern U.S. politics. We demonstrate that lobbyists are active intermediaries in the lobbying process. Lobbyists structure their clients' decision making environments and translate their clients' interests into political behavior. These actors play a crucial role in shaping policy across levels of government.

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