



Lobbying venue selection under separation of powers and resource constraints

LaGina Gause¹ · Geoffrey M. Lorenz²

Accepted: 13 February 2024
© The Author(s) 2024

Abstract

Prior work examines how organization resources and types shape venue selection strategies. Both Congress and executive branch agencies can change policy, so interest groups must consider which of these venues to lobby on a given issue. We argue that factors in the political environment—venues' issue priorities and the power of groups' allies in a venue—influence how groups with different resource constraints select lobbying venues. Examining over one million issue-level lobbying disclosures filed between 2008 and 2016, we find that low-resource groups strategically lobby the venue(s) controlled by partisan allies and respond to the government's and public's issue priorities. Meanwhile, high-resource groups more often lobby all venues relevant to their issues regardless of the political environment, especially on issues gaining significant attention within government but not in the public. Our findings suggest that separation of powers provides high-resource groups more venues to lobby for favored policies. Conversely, low-resource groups strategically only lobby venues they have the potential to influence.

Keywords Interest groups · Lobbying · Venue selection · Inequality · Public policy

Interest groups seeking to defend or challenge a status quo policy must decide not just how but *where* to lobby. At the US federal level, the constitutional separation of powers ensures that the policy status quo is the product of many different governmental actors. For example, Congress might authorize a new program only to see it implemented minimally by executive branch bureaucrats. Even within a single branch, differences between congressional committees or executive branch agencies can make them more or less attractive for particular interest groups' lobbying. Thus, to attain and maintain their desired policy outcomes, organized interest groups may

✉ LaGina Gause
lgause@ucsd.edu

¹ Political Science, University of California San Diego, 9500 Gilman Drive #0521, La Jolla, CA, 92093, USA

² Political Science, University of Nebraska-Lincoln, Oldfather 511, Lincoln, NE 68588, USA



need to target different venues at different times and across different issues. How do organized interest groups decide where to lobby?

Venues vary widely in the interests they prioritize, even when ideologically similar policymakers control them and are located in the same branch of government (Talbert et al. 1995). Moreover, policymakers and organized interests opposed to a group's interests may dominate some venues more than others (Holyoke et al. 2012; Constantelos 2010). These differences across venues can give groups alternatives to lobbying venues dominated by opposing interests (Holyoke 2003) and give them much to gain from identifying and targeting friendly venues. Even though groups might want to lobby all relevant venues all the time, they often do not. Organizational factors often constrain venue strategies (Pralle 2003), especially groups' resources available for lobbying (McKay 2011; Boehmke et al. 2013). While disparities in group resources are often criticized for allowing groups to hire more lobbyists and lobby on more issues (Schlozman et al. 2018; Hojnacki et al. 2015), separation of powers gives higher-resource groups more lobbying targets on any given issue. Nevertheless, it is unclear how much resources constrain venue selection decisions (e.g., McKay 2011; Boehmke et al. 2013), nor is it clear how the larger political environment affects the attractiveness of different venues for lobbying. By extension, how these internal and environmental factors interact to influence venue selection decisions also remains unclear.

This article examines how internal and environmental factors interact to shape interest groups' venue strategies—decisions to lobby the legislative or executive branch, or both,¹ within an issue area.² We theorize that groups target the venue(s) that are most likely to (1) change policy and (2) be receptive to the group's lobbying. To discern these, groups rely on early indicators of potential policymaking within a venue as well as public attention, policymaking capacity, and control of venues by allied policymakers. Further, groups' lobbying resources moderate these factors' influence, as resource-constrained groups *must* select a single lobbying target, while high-resource groups *may* lobby all relevant venues.

We test these expectations with data from over one million issue-level quarterly US federal lobbying disclosures filed between 2008 and 2016. First, we use lobbyist numbers as a proxy for interest groups' resource capacity since groups with more financial resources are capable of hiring more lobbyists, and more importantly, as financial resources decrease, so does the number and value of lobbyists a group can employ (LaPira and Thomas 2017; McKay 2011; Baumgartner et al. 2009;

¹ We only address the decision to lobby Congress, generally, versus the executive branch, generally. However, venue selection decisions are not exclusive to executive versus legislative lobbying. Indeed, groups often have access to judicial processes (Hansford 2004), state and local governments (Holyoke et al. 2012), and even multinational governments (Bouwen and McCown 2007) as alternative venues. Our focus on US federal legislative versus executive lobbying is partly a product of data limitations. However, in the conclusion, we return to how this analysis may generalize to venue decisions featuring the judiciary.

² By "issue," we mean broad issue domains, like "health care," "defense," or "education," rather than specific bills or policy problems. Thus, one limitation of our analysis is that it does not predict differences in a group's strategy between bills in the same issue domain.



Schlozman et al. 2018; Drutman 2015). After controlling for resources and other variables, we find that lobbying Congress is *strongly negatively* associated with lobbying federal agencies, qualifying previous findings that lobbying one branch often entails lobbying the other (e.g., Boehmke et al. 2013). Second, group-level factors shape their default strategies. High-resource groups—those that allocated more lobbyists to an issue area in a period—often lobby both venues, while contract lobbying firms tend to be Congress-focused. Third, groups shift lobbying toward venue(s) controlled by policymakers with similar preferences and away from Congress in periods of divided control.

Finally, group resources appear to shape their response to issue salience. High-resource groups respond to salience in any venue by lobbying both venues more. However, when high-resource groups' issues become publicly salient, they refocus on lobbying Congress. Conversely, low-resource groups appear less sensitive to venue-specific salience and avoid Congress on publicly salient issues. More broadly, our findings show that the separation of powers system itself creates opportunities for lobbying that high- and low-resource groups are differentially able to leverage. We conclude by considering how these findings may be affected by endogeneity between lobbying and issue salience, the absence of judicial lobbying from our models, and discussing this research's implications for reforms intended to mitigate wealthy interests' disproportionate influence.

Venue selection, lobbying resources, and policy agendas

Lobbying can target any or all of the multiple policymaking venues created by the US separation of powers system. In this system, statutes passed by Congress and regulations promulgated by executive agencies both carry the force of law and are, therefore, potential lobbying targets. Moreover, which venue makes policy affects which interests are prioritized in policy outcomes (Talbert et al. 1995), even when venue options are within the same branch and co-partisans control them. Thus, selecting which venue(s) to target is essential to lobbying strategy.

Because many venues can affect the policies relevant to a group, groups might, in principle, lobby all relevant venues. Nonetheless, many groups confine their lobbying to a single venue. This tendency partly reflects their members' expectations about how the group should operate and the relationships groups build with specific policymakers whom they lobby repeatedly over time (Pralle 2003). External factors can also encourage groups to confine their lobbying to a single venue. For example, collective action groups among interests drive higher-resource groups to lobby *ex ante* for legislative change, while lower-resource groups lobby *ex post* on bureaucratic implementation (You 2017). More broadly, groups are less likely to lobby venues controlled by government officials (Constantelos 2010; McQuide 2007; Boehmke et al. 2005) or dominated by organized interests (Holyoke 2003) hostile to their goals. Thus, even if groups wanted to lobby all relevant venues, various internal and environmental factors can dissuade them from doing so.

Among important internal factors shaping venue selection decisions are group resources. Generally, groups bring different levels and types of resources to bear on



lobbying efforts. For example, business and professional groups may have copious financial resources and professional staff, while citizen groups, trade associations, and advocacy groups may possess broad and active membership bases and depend more on unpaid volunteers (Gerber 1999; Dahl 1961; Yackee and Yackee 2006). While the impact of such resource disparities on group *success* is hotly debated,³ it is clear that such differences in group resources lead to differences in group *tactics*. In particular, resource disparities between interest groups produce differences the number and value of lobbyists they employ (LaPira and Thomas 2017; McKay 2011; Baumgartner et al. 2009; Schlozman et al. 2018; Drutman 2015), how they allocate lobbyists across issues (LaPira et al. 2014), and the advocacy tactics preferred or expected by their stakeholders (Kollman 1998; Victor 2007; Walker 1991). As a lobbying tactic, venue selection is no different. That is, groups that spend more money lobbying are more likely to lobby both Congress and the Executive (Boehmke et al. 2013; McKay 2011). And so, resource disparities between groups constrain the ability of lower-resource groups to lobby all the venues that may be relevant to their interests. Conversely wealthier groups may lobby more venues on more issues. Thus, even if wealthy interests enjoy little advantage on individual policy issues, they may be able to lobby on more issues and potentially shape more outcomes. They need not win with greater *probability* to win with greater *frequency*.

The observation that many groups lobby only one venue and that resources constrain venue selection decisions suggests that rational groups will strategically select venues to maximize the impact of the resources they do bring to bear. This raises the question: When groups are *forced*, e.g., by resource constraints, to lobby only one venue, who do they target? One potential explanation arises from the fact that while many venues *can* change policy in a given issue area, some are more likely than others at any given time. Different venues pay attention to different issues at different times, attracting lobbying to issue areas high on the legislative and executive agendas (Leech et al. 2005; Baumgartner et al. 2011; Kimball et al. 2012). While this may reflect some groups' ability to "buy" policymakers' attention (Hall and Wayman 1990; Esterling 2007; Yackee and Yackee 2006; Witko and Morgan 2021), lobbying influence on governmental agendas often operates at the aggregate level, with agenda-setters weighing the numbers (Grossmann and Pyle 2013; Box-Steffensmeier et al. 2019), resources (Mahoney and Baumgartner 2015; Nelson and Yackee 2012), and electoral appeal (Lorenz 2020) of lobbying "sides" or coalitions against one another rather than responding to individual organizations. Thus, most individual interest groups are more likely to respond to the legislative or executive issue agendas than to change them (LaPira and Thomas 2017; Holyoke et al. 2012).

³ On the one hand, individual legislators are biased toward wealthy interests in how they allocate time and attention across issues (Kalla and Broockman 2015; Hertel-Fernandez et al. 2019; Miler 2010; Hall and Wayman 1990; Witko and Morgan 2021). However, groups' lobbying resources are an inconsistent (Hojnacki et al. 2012) and indirect (Baumgartner et al. 2009; Mahoney and Baumgartner 2015; McKay 2012) source of influence on policy outcomes, and resource expenditures are not necessarily more impactful than other advocacy strategies (Lorenz 2020; Dwidar 2022; Gause 2022; Furnas et al. 2022) or other factors that influence legislator behavior, e.g., partisanship (Lax et al. 2019; Wawro 2001).



Nevertheless, how groups react to differential issue salience across venues remains unclear, as does whether groups vary systematically in how they respond.

We make multiple contributions to this scholarship. First, much work on venue selection uses data from a single issue to demonstrate the plausibility of a theoretical model (e.g., You 2017; Boehmke et al. 2005; Pralle 2003) or covers a limited period. Evaluating an extended timeframe and across the range of issues reported in lobbying disclosures allows us to account for variation in issue context (Grossmann 2013) and party control of venues. Moreover, it enables analyses of how these factors interact with group resources and policy preferences in shaping venue selection strategies. Second, existing analyses often assume (theoretically or methodologically) the independence of the decisions to lobby each venue. Relaxing this assumption allows us to assess whether resource constraints impose trade-offs on venue-targeting decisions. This is important under the separation of powers. For example, while the federal bureaucracy is responsive to lawmakers' casework requests and regulatory comments (Ban and You 2019; Ritchie and You 2019), lawmakers lack the resources to engage all agencies on all issues. Interest groups can subsidize this oversight (Hall and Miler 2008), but the implications for venue selection are unknown. Consequently, it is unclear whether groups respond to salience in one venue by lobbying that venue or respond to activity in one venue by lobbying the (potentially separate) venue(s) where they have the most allies.

A theory of interest group venue selection

From straightforward assumptions, we develop expectations for how organizational and environmental factors interact to influence an interest group's venue selection strategy within an issue domain. These assumptions imply that resource constraints motivate groups to respond to early signs of policymaking activity within government, public issue attention, Congress's policymaking capacity, and the group's beliefs about the likely success of their lobbying efforts.

We begin with two basic assumptions. First, lobbying is policy-motivated. That is, groups wish to bring or keep policy as close to their own preferences as possible and lobby governmental venues to change or defend policy generated by those venues. Thus, lobbying may either encourage or limit a policy change produced by a governmental actor. In either case, groups expect that lobbying a venue will result in a policy outcome weakly closer to their policy preferences than not lobbying.

Second, we assume that lobbying a venue⁴ on an issue requires resources.⁵ Expending these resources is non-fungible, requiring groups to make strategic choices about where and how to lobby. For example, because legislators and agency

⁴ For expository clarity, we discuss venues as unitary actors (Boehmke et al. 2005). In practice, lobbyists target relevant individuals within a venue.

⁵ In the empirical analysis, we measure lobbying resources using the number of lobbyists. But conceptually, lobbying resources could relate to specialized policy expertise, relationships with key policy actors, and capital for media appeals, campaign contributions, and other tactics.



bureaucrats have different constituencies and informational needs (You 2017; Heaney and Lorenz 2013), tactics adopted to lobby one branch do not neatly transfer to the other. Thus, once a group spends time lobbying Congress on issue A, the group cannot spend that same time lobbying Congress on issue B or the bureaucracy on issue A. Moreover, it is weakly costlier (i.e., requires more resources) to lobby both venues than to lobby either alone. These assumptions suggest that venue-targeting decisions depend on one another; a sufficiently resource-constrained group may be unable to lobby a second venue even if they would benefit from doing so. Thus, we expect the following:

Substitutive Lobbying Hypothesis: A group lobbying one venue is less likely to lobby the other as well.

If a group chooses not to lobby a venue, the venue may produce policy further from the group's preferences than if it had lobbied that venue. So, groups prefer to lobby both venues. However, the marginal cost of lobbying the second venue may exceed a group's resource capacity. Higher-resource groups are more capable of paying these marginal costs than lower-resource groups, so we expect them to be more likely to lobby both venues.

Unconstrained Resources Hypothesis: As a group's lobbying resources increase, it is more likely to simultaneously lobby Congress and the executive.

For lower-resource groups, lobbying one venue on an issue precludes lobbying another. So, they target venues strategically. To maximize efficiency, groups want to direct scarce lobbying resources to the venue(s) they believe will soon change policy (LaPira and Thomas 2017). We assume, however, that groups make these assessments with substantial uncertainty, as issue attention tends to be non-simultaneous and sporadic across policy venues (Jones and Baumgartner 2005). Groups reduce this uncertainty by relying on venues' preliminary policymaking activities, including congressional committee hearings and executive orders that spur agency rule-making. Such activities indicate a shift in a venue's agenda.⁶ These shifts, in turn, encourage interest groups working on an issue to direct lobbying resources to venues, indicating they may generate policy on that issue. Accordingly, a group trying to allocate resources efficiently prefers to lobby the venue(s) undertaking preliminary policymaking activities on a relevant issue area. This means they will be less likely to target the other venue exclusively.

⁶ In some cases, interest groups may encourage increased policymaking activity in a venue because they have electorally relevant resources (Witko and Morgan 2021; Esterling 2007) or through their participation in lobbying coalitions (Lorenz 2020; Potter 2019). Our theory does not address this possibility, but we return to it in the conclusion.



Venue-Specific Salience Hypothesis: The more preliminary policymaking activities a venue takes on a group's issue, a low-resource group is less likely to target the other venue exclusively.

Broader public attention to an issue may also affect low-resource groups' lobbying strategies. For example, whether (Smith 2000) and how (Witko 2006) legislators respond to business lobbying on an issue depend on the general public's issue salience. Venues may respond to publicly salient policy problems by initiating preliminary policymaking activities. Indeed, the majority party often exercises its institutional prerogatives to legislate more on publicly salient issues (Maltzman 1997). Recognizing lawmakers' susceptibility to public pressure, groups might pair Congressional lobbying with "outside lobbying" (c.f. Gause 2022; Kollman 1998) to make their issues appear salient. Conversely, while presidents can make issues publicly salient by "going public" (c.f. Kernell 2006; Canes-Wrone 2001), there is less evidence that public salience drives action throughout the executive branch (Brehm and Gates 1999). Consequently, public salience may help low-resource groups anticipate policymaking activities on issues Congress will pursue.

Public Salience Hypothesis: As the public salience of a group's issue increases, a low-resource group is more likely to target Congress exclusively.

Regardless of venues' issue attention, venues may have unequal policymaking capacity. Where Congress has facilitated the development of policymaking capacity and discretion in the executive branch (Huber and Shipan 2002), Congress has rarely invested as much capacity in itself and, at times, has *reduced* policymaking staff (LaPira et al. 2020; Crosson et al. 2021). Moreover, bicameralism affects Congress's policymaking capacity. Policy change is less likely if different parties control each congressional chamber than if congressional control is unified (Howell et al. 2000; Clinton and Lapinski 2006). Thus, while presidential prioritization of an issue is likely to produce policy change, the certainty with which congressional attention predicts policy change is lower. To the extent divided Congresses have lower policymaking capacity, groups seeking to influence policy outcomes will be less likely to adopt Congress-only venue strategies and more likely to adopt executive-only venue strategies during a divided Congress than a unified Congress.

Divided Congress Hypothesis: Compared to when Congress has unified party control, a group facing a divided Congress is more likely to lobby the Executive exclusively and less likely to lobby Congress exclusively.

Finally, while venues capable of enacting policy change may attract lobbying, venues are not equally receptive to lobbying from all groups. Groups may anticipate a venue's receptiveness to their lobbying based on the policy preferences of the actors who control that venue. Lobbyists often target allied policymakers (Hojnacki and Kimball 1998; Newmark and Nownes 2022) because allies are more likely to accept the information and legislative subsidies lobbyists offer to help advance shared objectives (Hall and Deardorff 2006; Schnakenberg 2017). Thus, we expect a



group's influence in a venue to be greater to the extent that its policy preferences are similar to those of the policymakers controlling that venue. Such "preference-proximate" venues make more attractive lobbying targets than more "preference-distant" venues.

Proximity Hypothesis: As a group's preferences are more similar to those of one venue than the other, the group is more likely to lobby that venue and less likely to lobby the other.

Data and methods

We test these expectations using data from lobbying registrations filed under the Lobbying Disclosure Act of 1995 (LDA), as amended by the Honest Leadership and Open Government Act (HLOGA) of 2007. Scholars frequently use these data to study lobbying activity (LaPira and Thomas 2020), including venue selection (e.g., You 2017; McKay 2011; Boehmke et al. 2013). We use the version of these data analyzed by You (2017), covering each quarter from 2008 through 2016. Following LaPira and Thomas (2020), we drop reports of no activity, those subsequently amended (while keeping the amendments), and those not reporting the venues targeted on an issue. After these exclusions, 541,987 unique filings remain, representing the lobbying activities of 7900 unique registrants on behalf of 31,615 unique clients (53,771 unique client–registrant pairs).

These data have several valuable features for our purposes. First, LDA/HLOGA registrants report lobbying expenditures, the venues targeted, lobbyists allocated, and topics discussed across several dozen issue areas. This detail allows us to assess factors influencing venue strategy within issue areas while holding constant factors at the registrant–client–period level, e.g., lobbying resources. Second, LDA/HLOGA requires separate reporting by lobbying clients and any others (typically contract lobbying firms) lobbying on their behalf, which allows us to examine registrant-level factors (e.g., issues lobbied and resources) while holding constant client- and client-period-level factors (e.g., usually, ideological proximity to different legislators). Thus, each observation in our analysis is a registrant's (r) lobbying on behalf of a client (c) in an issue area (i) in a quarterly period (p), or the registrant–client–issue–period ($N_{rcip} = 1,099,597$).

However, the LDA/HLOGA data have several limitations. First, LDA/HLOGA reporting requirements are weakly enforced and not required for organizations whose lobbying expenditures are below a certain quarterly threshold (as of 2023, \$14,000 for clients and \$3000 for lobbying firms that register on behalf of clients). This has produced a market of "shadow lobbyists" (i.e., who lobby on behalf of clients but do not register) that is estimated to rival the size of registered clients and lobbyists and overrepresent advocates who do not focus on Congress or come from a legislative background (Thomas and LaPira 2017). Consequently, our results are biased to the extent that these "shadow lobbyists" focus exclusively on lobbying agencies or weigh venue selection factors differently than registered lobbyists.



Second, even for groups who do report, standards for the content and quality of reports are lax. For example, no standardized form of agency names is required.⁷ However, we must only distinguish whether a given venue is in the legislative or executive branch. Even with some remaining variation in agency names, this task is straightforward. While the LDA data are imperfect, their limitations are at least well understood and outweighed by their advantages.

Measures

LDA/HLOGA registrants report the government entities contacted on each issue in a quarter. We aggregate each congressional chamber or agency into a “lobbied Congress” indicator and any executive agencies (including the White House and its internal offices) into a “lobbied the executive” indicator. In our data, 76% of registrants report lobbying Congress in a given issue quarter, 40% report lobbying an executive branch agency, and 16% report lobbying both executive and legislative branch targets. Because we use a bivariate probit model (see below), lobbying each branch is modeled in a separate equation. So, the outcome variables are dichotomous indicators of having *Lobbied Congress* and *Lobbied the Executive*.

To operationalize registrants’ resource capacity, we use the *Number of Lobbyists for Registrant on Issue (Logged)*. This measure reflects the allocation of limited resources (i.e., lobbyists with limited hours). It is also estimated at the correct level of analysis because lobbyist allocations are reported for each issue area. Consequently, the number of lobbyists working for the registrant (r) lobbying on behalf of a client (c) on issue (i) in period (p) is an appropriate proxy for the resources allocated to that effort.⁸ We assume diminishing marginal returns on additional lobbyists and, accordingly, use the natural log.

We use expressions of issue priorities in policy processes and public surveys to assess the salience of each issue area. To do so, we adopt the Comparative Agendas Project’s (CAP) categorizations (Jones et al. 2023) of congressional hearings (for congressional salience), executive orders (for executive salience), and Gallup’s Most Important Problem (MIP) responses (for public salience) into major issue topics. We then employ an LDA issue code to CAP Major Topic crosswalk (see Online Supporting Information A, p. S-3) similar to those created by Curry (2015) and Potter (2019) to join the salience data with the LDA/HLOGA data. For each registrant–client–issue quarter, we recorded the *Number of Congressional Hearings* and the *Number of Executive Orders* in that issue quarter, and the proportion of Gallup

⁷ You (2017) reconciled many variations of agency names.

⁸ LDA/HLOGA registrants also report total lobbying expenditures in \$10,000 increments over \$10,000 for the registrant–client–period. This measure varies at the wrong level, the registrant–client–period rather than the registrant–client–issue–period. Addressing that problem—e.g., allocating some fraction of the total lobbying spending to each issue area—requires arbitrary assumptions. Moreover, for clients with multiple registrants, total client spending *includes* the total spent by all registrants on their behalf, necessitating further arbitrary assumptions in assigning expenditures to issue areas across registrants. Thus, lobbying expenditures are an inappropriate measure here.



respondents citing a problem in that issue area as the *Most Important Problem* in that year (i.e., the level at which MIP is reported).

To test the *Proximity Hypothesis*, we use Crosson et al. (2020)'s IGScores to estimate the ideal point of each interest group, legislator, and president active during our period. For interest groups, we matched registrants in the LDA/HLOGA data as closely as possible to organizations with IGScores. Indeed, some registrant or client names appear identically across LDA/HLOGA filings and the public positions from which IGScores are estimated. We matched organizations by name first to the registrant (503 unique registrants matches), then the client (706 additional matches), and then the client's parent organization (104 more matches). These direct name matches account for about 14% of issue-level LDA reports in our dataset.

We impute the IGScore for other LDA/HLOGA registrants using those of organizations representing similar interests. Usefully, both datasets classify each organization according to the OpenSecrets interest group taxonomy.⁹ This taxonomy classifies organizations into over 400 interest categories, each classified into one of 100 industries and, by industry, into one of 13 sectors. Because IGScores are estimated for organizations in nearly all categories, it is possible to compute mean IGScores for each category, industry, and sector. Accordingly, for each LDA/HLOGA client not matched by name, we impute its IGScore as the mean of organizations in its category (21,490 clients, accounting for about 75% of issue-level observations). For organizations whose category lacks a mean IGScore, usually because they are placed into miscellaneous or "other" categories within an industry or sector, we instead take the mean of their industry (1860 clients, accounting for 6% of issue-level reports) or, failing that, sector (327 clients, accounting for less than one percent of issue-level reports).¹⁰ Consequently, the IGScore used to identify each organization's government allies is the "best matched" IGScore by, in decreasing order of preference, registrant, client, client parent, category, industry, or sector.

Our IGScore distance measure compares these organization IGScores to those of principals controlling each branch. For the executive branch, we take the president's IGScore. For Congress, our theory expects that groups target the chamber controlled by their closest allies. So, we compare each chamber's majority party mean IGScore. We then take as "Congress's" IGScore the chamber majority mean most proximate to the organization's IGScore. We construct the final measure by calculating the following:

$$\text{Relative IGScore Proximity}_{\text{reip}} = \frac{|\text{Distance to Closest Congressional Chamber Majority Mean}|}{|\text{Distance to President}|}$$

As this measure increases, the group moves further from Congress relative to its distance to the president. Accordingly, at higher values of IGScore Proximity, we

⁹ <https://www.opensecrets.org/industries/slist.php>. Accessed July 19, 2023.

¹⁰ All results reported below are robust to excluding observations where clients were matched only by industry or sector.



expect the group to become less likely to lobby Congress and more likely to lobby the executive, all else equal.

Finally, we include two indicator variables. To test our *Divided Congress Hypothesis*, we include an indicator of whether the same party does *not* control the two chambers in a period. Also, we control for whether the *Registrant is a Lobbying Firm*, indicating whether the text strings containing the registrant and client names differ. Lobbying firms often employ lobbyists who are former legislators and staff (LaPira and Thomas 2017). Thus, we expect lobbying firm registrants to lobby Congress more often than the bureaucracy.

Standardization

We standardize all continuous variables discussed above: log lobbyists, IGScore proximity, hearings, executive orders, and Most Important Problem proportion. Specifically, we mean-center each variable and then divide by *two times* its standard deviation; a one-unit shift in each standardized variable represents a two-standard deviation shift in the original variable. Standardization enables comparison of effects across variables at different scales. Even better, standardization to two standard deviations facilitates comparisons of the effects of continuous predictors to those of dichotomous predictors—in this case, divided Congress and lobbying firm registrants (Gelman et al. 2020). This is particularly important because our sample size is large; thus, even tiny coefficients are precisely estimated. Therefore, accurately interpreting our coefficient estimates requires examining whether the coefficients are statistically significant *and* whether the associated effects are large enough to make a substantively meaningful difference in venue strategies. Standardization contextualizes estimated effect sizes.

Empirical models

We test our hypotheses by estimating a bivariate probit model, an adaptation of seemingly unrelated regression (SUR) to two dichotomous outcomes (in this case, indicators of lobbying each venue). Bivariate probits simultaneously estimate two equations:

$$\begin{aligned} y_1^* &= x_1' \beta_1 + \varepsilon_1, y_1 = 1 \text{ if } y_1^* > 0, 0 \text{ otherwise,} \\ y_2^* &= x_2' \beta_2 + \varepsilon_2, y_2 = 1 \text{ if } y_2^* > 0, 0 \text{ otherwise, with} \\ E[\varepsilon_1 | x_1, x_2] &= E[\varepsilon_2 | x_1, x_2] = 0, \\ \text{Var}[\varepsilon_1 | x_1, x_2] &= \text{Var}[\varepsilon_2 | x_1, x_2] = 1, \text{ and} \\ \text{Cov}[\varepsilon_1, \varepsilon_2 | x_1, x_2] &= \rho \end{aligned}$$

The bivariate probit allows us to simultaneously estimate whether lobbying of the executive branch (y_1) and Congress (y_2) is associated with the set of factors (x_1, x_2) identified in our hypotheses. Because many of our hypotheses hold that some factor will simultaneously make a group lobby one venue more and the other less, we keep the set of covariates in each equation the same. That is, $x_1 = x_2$. As in SUR, in the bivariate probit model, the estimated parameter ρ indicates the covariance between the error terms of



these estimated equations and the extent to which these venue-targeting decisions depend on one another, conditional on predictors. This is useful because our *Substitutive Lobbying Hypothesis* predicts that, conditional on other factors, a group lobbying one venue is less likely to also lobby the other. If the hypothesis is correct, the estimate of ρ will be negative.

To assess the *Unconstrained Resources*, *Venue-Specific Salience*, and *Public Salience Hypotheses*, the model includes interactions between the standardized logged number of lobbyists and each salience measure (standardized logged number of lobbyists x standardized hearings, standardized logged number of lobbyists x standardized orders, and standardized logged number of lobbyists x standardized MIP proportion) as well as each interaction's constituent terms. Further, our measures of issue salience (hearings, executive orders) are assigned at the level of the issue quarter; thus, we cluster standard errors by PAP major topic and quarter.¹¹ Finally, issue areas have distinct interest group politics and vary in how much they are executive- vs. legislative-dominated (Grossmann 2013), so we include PAP major topic code fixed effects.

Results

Table 1 reports the results of the bivariate probit model described above. Because we standardized the continuous covariates, the coefficients represent the change in the probit index associated with a two-standard deviation change in each continuous variable. Moreover, because each continuous variable is mean-shifted, each coefficient for a constituent term of an interaction effect represents the change associated with a two-standard deviation shift in that variable when all variables it is interacted with are at their means. The estimated ρ statistic is the correlation between the error terms of the equations corresponding to whether the registrant lobbied the executive and legislative branches, conditional on covariates. The estimated ρ approaches -1, consistent with the *Substitutive Lobbying Hypothesis*: conditional on the model's covariates, registrants mostly lobby Congress or the executive branch.

To examine the implications of our model estimates for our hypotheses, we rely on average marginal effects (AME) plots. AME plots are valuable for several reasons. First, the implications of bivariate probit coefficients, like probits generally, for changes in the probability of each outcome depend on the values of the other covariates and the starting value of the variable of interest. Second, AME plots facilitate the interpretation of complex interaction effects like those we estimate here (Brambor et al. 2006). Thus, we focus on Figs. 1 and 2 to draw inferences for our theory from the results. Furthermore, although the bivariate probit model estimates coefficients for each probit equation on the decision to lobby each venue, our hypotheses are about the *combination* of venue choices—*Congress-Only*, *Executive-Only*, or

¹¹ In Table B.1 in the Supporting information, we show models clustering by client–registrant (McKay 2011), Congress, issue and year, and client–registrant and Congress, matching the levels at which other key variables are assigned.



Table 1 Bivariate probit model of lobbying each branch

| | Lobbied executive branch | Lobbied legislative branch |
|--|--------------------------|----------------------------|
| Std log lobbyists | 0.266*** (0.00612) | 0.914*** (0.0102) |
| Std # Exec. Orders | 0.00192 (0.00796) | 0.0221** (0.00679) |
| Std # Hearings | 0.0123 (0.00824) | 0.0239** (0.00801) |
| Std Most Imp. Prob | 0.105*** (0.0160) | - 0.142*** (0.0152) |
| Std log lobbyists x Std # Hearings | 0.0483** (0.0180) | 0.103*** (0.0228) |
| Std log lobbyists x Std # Exec. Orders | 0.0128 (0.0208) | 0.0790** (0.0248) |
| Std log lobbyists x Std Most Imp. Prob | - 0.0591*** (0.0117) | - 0.103*** (0.0132) |
| Divided Congress | 0.0653*** (0.00571) | - 0.0501*** (0.00490) |
| Lobbying firm registrant | - 0.610*** (0.00711) | 0.787*** (0.00664) |
| Std IGScore Cong–Prez distance | 0.151*** (0.00543) | - 0.127*** (0.00426) |
| Constant | - 0.229*** (0.0254) | 0.714*** (0.0263) |
| Issue area FE | Yes | Yes |
| Observations | 1,099,597 | |
| ρ | - 1.000*** | |
| Log likelihood | - 908858.8 | |
| Wald $\chi^2(1)$ Leg and Exec models independent | 1070.3 | |

Standard errors clustered by issue period in parentheses * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Both-Venues. Thus, the AMEs we report in Figs. 1 and 2 are the difference in probability of each overall venue strategy—i.e., the combined results of the two estimated equations in the bivariate probit model—associated with two-standard deviation (or zero to one) increases in the value of our covariates.

As reported in Fig. 1, interest groups' venue strategies are associated with group-level and macro-political factors in ways largely anticipated by our theory. The figure displays the overall AME (with 95% confidence intervals) on the probability of each venue strategy of four explanatory variables for which our theory does not predict a moderated effect: standardized logged lobbyists, a divided Congress, standardized relative proximity IGScore distance, and lobbying firm registrant.



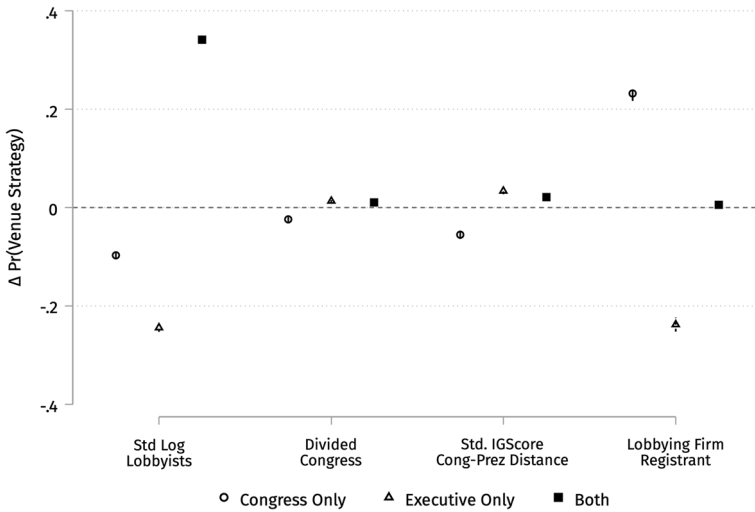


Fig. 1 AMEs of group and macropolitical factors on venue strategy

Consistent with the *Unconstrained Resources Hypothesis*, the probability of a *Both-Venues Strategy* increases, and the probability of lobbying either branch alone decreases, as the number of lobbyists lobbying on behalf of a registrant increases. A two-standard deviation increase in log lobbyists is associated with an over 30 percentage point (ppt) increase in the probability of lobbying both branches. These results are consistent with the *Unconstrained Resources* and *Substitutive Lobbying* hypotheses and the theory that resources shape the venue strategies available to interest groups. High-resource groups usually lobby both venues, while low-resource groups appear forced to choose which venue to lobby on issues of their interest.

The *Divided Congress Hypothesis* holds that because divided Congresses are less likely to produce substantial policy changes, groups will be less likely to choose congressional lobbying exclusively in periods with a divided Congress. The model estimates are consistent with a small shift in venue strategy during divided Congresses. A divided Congress is associated with a 2.3 ppt decrease in *Congress-Only* strategies. Meanwhile, the probability of an *Executive-Only Strategy* increases by about 1.3 ppts, and the probability of a *Both-Venues Strategy* increases by about 1 ppt. While not a large effect relative to other factors, this suggests that, on the margin, groups respond to changes in the likelihood that Congress can undertake substantial policy initiatives.¹²

The results also comport with the expectation of our *Proximity Hypothesis* that interest groups, on the margin, prefer targeting venues controlled by their ideological allies. That is, a two-standard deviation increase in relative IGScore distance (Congress–Executive) is associated with an average 5.5 ppt decrease in the probability of

¹² This is also consistent with the possibility that overall congressional capacity for policy change is not affected by being in a period of divided party control (Curry and Lee 2019).



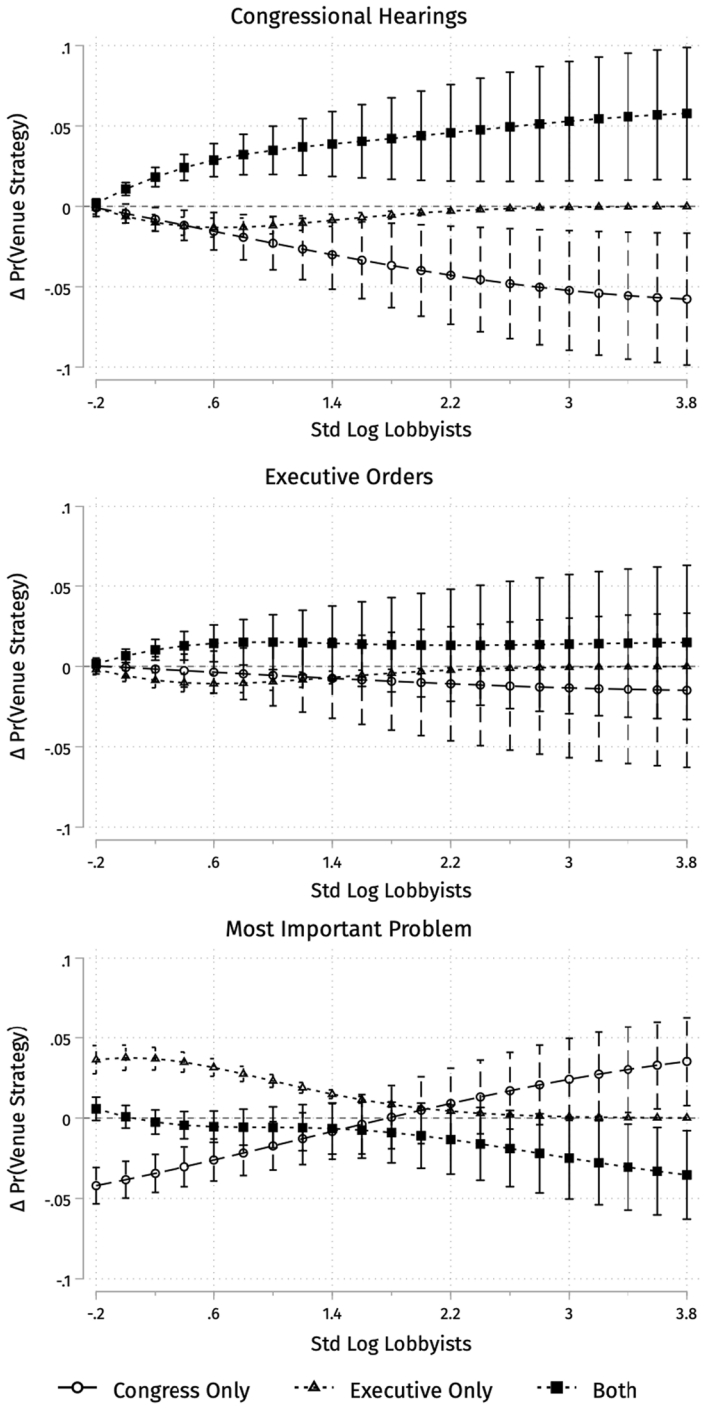


Fig. 2 AME of venue-specific and public salience measures on venue strategies, across levels of lobbyists assigned to issue



lobbying Congress alone, with a 3.4 ppt increase in the probability of lobbying the executive alone and a 2.1 ppt increase in lobbying both venues.

Estimates in Fig. 1 also suggest that contract lobbying firms usually lobby Congress. Lobbying firm registrants are over 20 ppts more likely to lobby Congress alone and are less likely to lobby the executive alone by about the same amount as self-registrants. We did not theorize differences between in-house and contract lobbyists, so we consider this result exploratory. However, future work might examine whether revolving door lobbyists who are former legislators or congressional staffers are more likely to work as contract lobbyists than in-house lobbyists. A preference for lobbying Congress among lobbying firms might reflect their reliance on professional allies that remain in Congress (LaPira and Thomas 2017). Such a preference for lobbying personal allies would resemble the logic of the *Proximity Hypothesis*.

Contrary to theoretical expectations, the results (Fig. 2) suggest a complex relationship between resources, salience, and venue strategies. At the lowest numbers of lobbyists, increases in congressional hearings in an issue area have statistically indiscernible effects on the probability of any particular strategy. As lobbyist numbers increase, venue strategies become more responsive to hearings, with groups less likely to lobby either venue individually and more likely to lobby both together. At just above the average number of lobbyists, a two-standard deviation increase in hearings is associated with a statistically discernible 0.8 percentage point (ppt) decrease in the probability of a *Congress-Only Strategy*, a 1 ppt decrease in the probability of an *Executive-Only Strategy*, and a 1.8 ppt increase in the probability of lobbying both venues. As resources increase further, the AMEs for *Congress-Only Strategies* and lobbying both venues become larger (corresponding to a 5.8 ppt decrease in *Congress-Only Strategies* and a corresponding increase in lobbying both venues). Meanwhile, the AME of hearings on *Executive-Only Strategies* moves toward zero at the highest resource levels.

Groups exhibit similar patterns of responsiveness to executive orders, albeit with some notable differences in both *Congress-Only* lobbying and broader implications for our theory. Executive orders have no discernible effect on *Congress-Only* lobbying at any number of lobbyists. This suggests that registrants who lobby Congress alone do not change that approach when the president begins issuing executive orders in the issue areas in which they lobby. Otherwise, groups react to executive orders in the same way they respond to congressional hearings. At just about the average number of lobbyists, a two-standard deviation increase in executive orders is associated with a statistically discernible 0.9 ppt decrease in the probability of lobbying the executive branch alone and a 1 ppt increase in the probability of lobbying both venues. As lobbyist numbers increase further, the AME of executive orders on *Executive-Only Strategies* moves toward zero. Meanwhile, the AME on lobbying *Both Venues* increases rapidly to 1.4 ppts and remains near that magnitude.

The venue-specific salience findings suggest that low-resource groups systematically prefer to lobby venues active in their issue areas but do not exclude the other venue to do so. That is not the same as saying venue-specific policymaking activities do not influence venue-targeting strategies; it is just that our theory has mistaken assumptions about *how* salience influences strategies for low-resource groups. One potential explanation is that issues become salient among elites in general, resulting



in simultaneous attention from Congress and the executive. However, issue attention is sporadic and non-simultaneous across policy venues and issue networks (Jones and Baumgartner 2005); the correlation between hearings and executive orders (by issue quarter) is weak (Spearman's $\rho = 0.20$). These findings suggest that interest groups aware of agenda-setting processes in both venues would not assume that salience in one venue would induce salience in the other.

Another explanation revisits how groups respond to venue-specific salience. Legislative lobbying is being added to some *Executive-Only Strategies* at lower levels of lobbyists, where there is also a decline in *Executive-Only Strategies* in response to congressional or executive salience. Perhaps, then, the results suggest that active government venues prompt interest groups to bring that activity to the attention of the other venue. Indeed, executive branch agencies are responsive to legislators (Lowande and Potter 2021; Lowande et al. 2019; Ritchie and You 2019), and interest groups can subsidize legislators' bureaucratic engagement (Hall and Miler 2008). Accordingly, groups' best response to an active bureaucracy may be to subsidize congressional oversight, while the best response to preliminary lawmaking might be to bring the executive's attention to an issue. Rather than focusing lobbying efforts on active venues, groups that do respond to venue-specific salience may do so by moving from a single-venue strategy (*Executive-Only* or, more often, *Congress-Only*) to a strategy of targeting both venues. When groups observe policymaking in either branch, they mobilize to push their case to all relevant policymakers.

Future work could examine whether this response is different between groups that are challenging the status quo (and thus need to clear several veto points in the policy process) or defending it (and therefore need only succeed in one venue) (Baumgartner et al. 2009). If so, the better inference may be that salience in one venue prompts groups to lobby any venues whose cooperation is necessary for the group to achieve its desired policy outcome. Regardless, these results do not contradict the *Substitutive Lobbying Hypothesis*. We expect and find plenty of observations of low-resource registrants lobbying both venues, even if, on average and conditional on covariates, venue-targeting decisions are substitutes.

Finally, as public issue salience increases, groups at different resource levels focus on different venues. At the lowest number of lobbyists, a two-standard deviation increase in MIP proportion is associated with a 4.2 ppt decrease in the probability of a *Congress-Only Strategy*, a 3.6 ppt increase in the probability of lobbying the executive branch alone, and a statistically indiscernible effect on the probability of lobbying both venues. This suggests that low-resource registrants switch from lobbying only Congress to lobbying only the executive on publicly salient issues. As lobbyists increase, the probability of an *Executive-Only Strategy* continues to increase, but while remaining statistically discernible, it is not substantively meaningful at the highest levels. The *alternative*, however, changes. As lobbyist numbers increase, the effects of MIP proportion on *Executive-Only* and *Both-Venues* strategies decrease while the effects on *Congress-Only Strategies* increase. The effects on *Congress-Only* and *Both-Venues* strategies eventually switch signs, such that at the highest number of lobbyists, a two-standard deviation increase in MIP proportion is associated with a 3.5 ppt increase in the probability of lobbying Congress alone and an equivalent decrease in the probability of lobbying both venues. Thus, when



an issue becomes publicly salient, high-resource groups are less likely to lobby the executive branch and focus just on Congress. Nevertheless, our theory does not anticipate our findings with respect to how low-resource groups respond to issue salience—in either government or the public.

A potential explanation for our findings on public salience lies in how *legislators* respond to publicly salient issues. Issue salience makes individual lobbying less effective at persuading lawmakers to adopt a position contrary to the preferences of the lawmakers, their constituents, or the many other advocates active on such issues (Mahoney 2007). Moreover, indirect “outside lobbying” works by increasing the public salience of an issue (Kollman 1998) and can be especially effective for the low-resource groups for whom such activities represent costly protests (Gause 2022). Thus, we might expect lower-resource organizations to prefer outside lobbying of Congress over inside lobbying on salient issues. Conversely, higher-resource organizations can afford to intensify their congressional lobbying efforts to maintain influence in the face of a more attentive public.

Discussion and conclusion

Despite widespread criticism of the outsized role of moneyed interests in US politics, empirical evidence of wealthy interests’ influence on policymaking is inconsistent. However, even if wealthy interests do not attain their policy preferences with greater probability in any given issue, they may influence policy with greater frequency if their resources enable them to take advantage of more opportunities for influence. This article focuses on how resources, issue salience, and macro-political factors interact to shape interest groups’ lobbying venue selection strategies. Because both Congress and the federal bureaucracy can move the policy status quo, an interest group can pursue its objectives by lobbying either venue or both. In this context, resources may allow groups to lobby both venues and also change their calculus in responding to environmental factors.

Analyzing over one million quarterly issue-level lobbying disclosures, we find that higher resources allow groups to lobby both venues. Nonetheless, groups direct lobbying efforts to venues controlled by policy-aligned policymakers and de-emphasize lobbying Congress during periods of divided party control. Moreover, groups at different resource levels adopt different venue strategies when their issues become salient within the government or the public. For example, high-resource groups target Congress on publicly salient issues while low-resource groups lobby the executive branch. When either Congress or the president takes up an issue, high-resource groups lobby both venues. Thus, our findings suggest that both high- and low-resource groups try to lobby efficiently, but their different starting points mean they respond differently to environmental factors.

One limitation of this analysis is potential reverse causation. In particular, perhaps lobbying changes venues’ issue priorities. We think this is unlikely to introduce significant endogeneity bias into our results. Congress’s policy agenda is constructed to address institutional demands, majority party priorities, exogenous shocks, and legislator entrepreneurship (Adler and Wilkerson 2012; Maltzman 1997). While



groups may subsidize legislative entrepreneurship, their influence on policy agendas usually arises from their participation in advocacy coalitions (Mahoney and Baumgartner 2015; Phinney 2016; Lorenz 2020; Dwidar 2022). Thus, rarely would one group's lobbying produce committee hearings, executive orders, or swings in public priorities.

Furthermore, groups often want government venues *not* to take up their issues. Indeed, many groups lobby for status quo policies (Baumgartner et al. 2009). Insofar as an issue gaining attention in government indicates that policy change is being considered, status quo-defending groups are *losing*, or, at least, their interests are threatened. If so, the relationship between status quo-defending interest groups' venue strategies and venue issue salience would appear null or negative. Thus, it is unclear on theoretical grounds that endogeneity bias resulting from interest groups' agenda-setting influence would remit to a stronger positive association between an individual registrant's lobbying and venue-specific salience. It is also unclear how our results would reflect endogeneity bias. As mentioned above, the groups with the most resources usually lobby both venues. Yet, venues continue to vary in how much they address the issues that are the focus of high-resource groups' lobbying. Thus, while our research design cannot rule out reverse causation, there are reasons to suspect it introduces minimal bias into our results.

Another limitation is that this analysis ignores judicial lobbying. We cannot evaluate whether our argument would apply to a decision by a group to advocate at the court versus (or in addition to) other venues. In principle, the judiciary could simply present a third lobbying venue. In this case, we would expect the effects of resource differences to be greater when accounting for the decision to lobby among three venues rather than two. Indeed, prior work on the decision to file amicus briefs before the court suggests that decision is also a product of similar internal and environmental factors (Hansford 2004; Solowiej and Collins Jr 2009; Bouwen and McCown 2007)—however, several unique aspects of the federal judiciary present complexities that demand consideration. In particular, courts have the unique agenda-setting feature where cases almost always move through several levels of the federal judiciary over several years before any ultimate decision by the Supreme Court, which is not guaranteed. Thus, whether the quarterly timescale we use is appropriate for judicial lobbying is unclear.

There are also practical obstacles. In particular, groups are not required to report judicial advocacy in lobbying disclosure filings. In fact, no disclosure filing in our data mentions any court. While data on the authorship of amicus filings are available (Box-Steffensmeier et al. 2013), amicus briefs are only one means by which groups advocate in the courts (e.g., they can also be plaintiffs). Regardless, no crosswalk between these data and the lobbying disclosure data we use is available.

These limitations notwithstanding, it remains plausible that all interest groups would prefer to behave as political observers fear: lobby every policymaker on every issue to exert as much influence as possible. Our findings demonstrate that this is not achievable for most groups. This study demonstrates that group venue strategies account for both venues' likely policymaking activity and receptiveness to the groups' lobbying. Moreover, this research provides evidence that how these factors influence venue selection decisions varies with group resources. Both high- and



low-resource interest groups are strategic agents in their efforts to influence the behaviors of legislators and bureaucrats.

Our findings suggest that the attention paid to high-resource interest groups is well deserved. Nevertheless, we should not ignore the decision-making of more resource-constrained groups. Such groups respond strategically to their political environment and appear to lobby where they will maximize their impact. Understanding these strategic choices can further critical analyses of lobbying influence by focusing scholars' attention on when and where to look for effective lobbying efforts. It can also clarify how wealthy interests exert undue interest in policymaking.

Supplementary Information The online version contains supplementary material available at <https://doi.org/10.1057/s41309-024-00202-0>.

Declarations

Conflict of interest On behalf of all authors, the corresponding author states that there is no conflict of interest.

Open Access This article is licensed under a Creative Commons Attribution 4.0 International License, which permits use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons licence, and indicate if changes were made. The images or other third party material in this article are included in the article's Creative Commons licence, unless indicated otherwise in a credit line to the material. If material is not included in the article's Creative Commons licence and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder. To view a copy of this licence, visit <http://creativecommons.org/licenses/by/4.0/>.

References

- Adler, E. Scott., and John D. Wilkerson. 2012. *Congress and the politics of problem solving*. New York: Cambridge University Press.
- Ban, Pamela, and Hye Young You. 2019. Presence and influence in lobbying: Evidence from Dodd-Frank. *Business and Politics* 21 (2): 267–295.
- Baumgartner, Frank R., Heather A. Larsen-Price, Beth L. Leech, and Paul Rutledge. 2011. Congressional and presidential effects on the demand for lobbying. *Political Research Quarterly* 64 (1): 3–16.
- Baumgartner, Frank R., Jeffrey M. Berry, Marie Hojnacki, David C. Kimball, and Beth L. Leech. 2009. *Lobbying and policy change: Who wins, who loses, and why*. Chicago: University of Chicago Press.
- Boehmke, Frederick J., Sean Gailmard, and John W. Patty. 2013. Business as usual: Interest group access and representation across policy-making venues. *Journal of Public Policy* 33 (1): 3–33.
- Boehmke, Frederick, Sean Gailmard, and John Patty. 2005. Whose ear to bend? Information sources and venue choice in policy making. *Quarterly Journal of Political Science* 1 (2): 139–169.
- Bouwen, Pieter, and Margaret McCown. 2007. Lobbying versus litigation: Political and legal strategies of interest representation in the European Union. *Journal of European Public Policy* 14 (3): 422–443.
- Box-Steffensmeier, Janet M., Dino P. Christenson, and Alison W. Craig. 2019. Cue-taking in congress: Interest group signals from Dear Colleague letters. *American Journal of Political Science* 63 (1): 163–180.
- Box-Steffensmeier, Janet M., Dino P. Christenson, and Matthew P. Hitt. 2013. Quality over quantity: Amici influence and judicial decision making. *American Political Science Review* 107 (3): 446–460.
- Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. Understanding interaction models: Improving empirical analyses. *Political Analysis* 14 (1): 63–82.



- Brehm, John, and Scott Gates. 1999. *Working, shirking, and sabotage: Bureaucratic response to a democratic public*. Ann Arbor: University of Michigan Press.
- Canes-Wrone, Brandice. 2001. The president's legislative influence from public appeals. *American Journal of Political Science* 45 (2): 313–329.
- Clinton, Joshua D., and John S. Lapinski. 2006. Measuring legislative accomplishment, 1877–1994. *American Journal of Political Science* 50 (1): 232–249.
- Constantelos, John. 2010. Playing the field: Federalism and the politics of venue shopping in the United States and Canada. *Publius The Journal of Federalism* 40 (3): 460–483.
- Crosson, Jesse M., Alexander C. Furnas, and Geoffrey M. Lorenz. 2020. Polarized pluralism: Organizational preferences and biases in the American pressure system. *American Political Science Review* 114 (4): 1117–1137.
- Crosson, Jesse M., Alexander C. Furnas, Timothy Lapira, and Casey Burgat. 2021. Partisan competition and the decline in legislative capacity among congressional offices. *Legislative Studies Quarterly* 46 (3): 745–789.
- Curry, James M. 2015. *Legislating in the dark: Information and power in the house of representatives*. Chicago: University of Chicago Press.
- Curry, James M., and Frances E. Lee. 2019. Non-party government: Bipartisan lawmaking and party power in Congress. *Perspectives on Politics* 17 (1): 47–65.
- Dahl, Robert A. 1961. *Who governs?: Democracy and power in an American city*. New Haven: Yale University Press.
- Drutman, Lee. 2015. *The business of America is lobbying: How corporations became politicized and politics became more corporate*. Oxford: Oxford University Press.
- Dwidar, Maraam A. 2022. Diverse lobbying coalitions and influence in notice-and-comment rulemaking. *Policy Studies Journal* 50 (1): 199–240.
- Esterling, Kevin M. 2007. Buying expertise: Campaign contributions and attention to policy analysis in congressional committees. *American Political Science Review* 101 (1): 93–109.
- Furnas, Alexander C., Timothy M LaPira, Alexander Hertel-Fernandez, Lee Drutman, Kevin Kosar. 2022. More than mere access: An experiment on moneyed interests, information provision, and legislative action in Congress. *Political Research Quarterly* 1–17.
- Gause, LaGina. 2022. The advantage of disadvantage: Costly protest and political representation for marginalized groups. In: *Cambridge studies in contentious politics* Cambridge, Cambridge: Cambridge University Press.
- Gelman, Andrew, Jennifer Hill, and Aki Vehtari. 2020. *Regression and other stories*. Cambridge: Cambridge University Press.
- Gerber, Elisabeth. 1999. *The populist paradox: Interest group influence and the promise of direct legislation*. Princeton: Princeton University Press.
- Grossmann, Matt. 2013. The variable politics of the policy process: Issue-area differences and comparative networks. *The Journal of Politics* 75 (1): 65–79.
- Grossmann, Matt, and Kurt Pyle. 2013. Lobbying and congressional bill advancement. *Interest Groups and Advocacy* 2 (1): 91–111.
- Hall, Richard L., and Alan V. Deardorff. 2006. Lobbying as legislative subsidy. *American Political Science Review* 100 (01): 69–84.
- Hall, Richard L., and Frank W. Wayman. 1990. Buying time: Moneyed interests and the mobilization of bias in congressional committees. *American Political Science Review* 84 (3): 797–820.
- Hall, Richard L., and Kristina C. Miler. 2008. What happens after the alarm? Interest group subsidies to legislative overseers. *The Journal of Politics* 70 (4): 990–1005.
- Hansford, Thomas G. 2004. Information provision, organizational constraints, and the decision to submit an amicus curiae brief in a US Supreme Court case. *Political Research Quarterly* 57: 219–30.
- Heaney, Michael T., and Geoffrey M. Lorenz. 2013. Coalition portfolios and interest group influence over the policy process. *Interest Groups and Advocacy* 2 (3): 251–77.
- Hertel-Fernandez, Alexander, Matto Mildenerger, and Leah C. Stokes. 2019. Legislative staff and representation in Congress. *American Political Science Review* 113 (1): 1–18.
- Hojnacki, Marie, and David C. Kimball. 1998. Organized interests and the decision of whom to lobby in Congress. *American Political Science Review* 92 (4): 775–790.
- Hojnacki, Marie, David C. Kimball, Frank R. Baumgartner, Jeffrey M. Berry, and Beth L. Leech. 2012. Studying organizational advocacy and influence: Reexamining interest group research. *Annual Review of Political Science* 15: 379–99.



- Hojnacki, Marie, Kathleen M. Marchetti, Frank R. Baumgartner, Jeffrey M. Berry, David C. Kimball, and Beth L. Leech. 2015. Assessing business advantage in Washington lobbying. *Int Groups & Advocacy* 4 (3): 205–224.
- Holyoke, Thomas T. 2003. Choosing battlegrounds: Interest group lobbying across multiple venues. *Political Research Quarterly* 56 (3): 325–336.
- Holyoke, Thomas T., Heath Brown, and Jeffrey R. Henig. 2012. Shopping in the political arena: Strategic state and local venue selection by advocates. *State and Local Government Review* 44 (1): 9–20.
- Howell, William., Scott Adler, Charles Cameron, Charles Riemann. 2000. Divided government and the legislative productivity of Congress, 1945–94. *Legislative Studies Quarterly* 285–312.
- Huber, John D., and Charles R. Shipan. 2002. *Deliberate discretion?: The institutional foundations of bureaucratic autonomy*. Cambridge: Cambridge University Press.
- Jones, Bryan D., and Frank R. Baumgartner. 2005. *The politics of attention: How government prioritizes problems*. Chicago: University of Chicago Press.
- Kalla, Joshua., David Broockman. 2015. Campaign contributions facilitate access to congressional officials: A randomized field experiment. *American Journal of Political Science*.
- Kernell, Samuel. 2006. *Going public: New strategies of presidential leadership*. Washington: CQ Press.
- Kimball, David C., Frank R. Baumgartner, Jeffrey M. Berry, Marie Hojnacki, Beth L. Leech, and Bryce Summary. 2012. Who cares about the lobbying agenda. *Interest Groups and Advocacy* 1 (1): 5–25.
- Kollman, Ken. 1998. *Outside lobbying: Public opinion and interest group strategies*. Princeton: Princeton University Press.
- LaPira, Tim, Trey Thomas, and Frank R. Baumgartner. 2014. The two worlds of lobbying: Washington lobbyists in the core and on the periphery. *Interest Groups and Advocacy* 3 (3): 219–45.
- LaPira, Timothy M., and Herschel F. Thomas. 2017. *Revolving door lobbying: Public service, private influence, and the unequal representation of interests*. Lawrence: University Press of Kansas.
- LaPira, Timothy M., and Herschel F. Thomas. 2020. The Lobbying Disclosure Act at 25: Challenges and opportunities for analysis. *Interest Groups & Advocacy* 9 (3): 257–271.
- LaPira, Timothy M., Lee Drutman, and Kevin R. Kosar. 2020. *Congress overwhelmed: The decline in congressional capacity and prospects for reform*. Chicago: University of Chicago Press.
- Lax, Jeffrey R., Justin H. Phillips, and Adam Zelizer. 2019. The party or the purse? Unequal representation in the US Senate. *American Political Science Review* 113 (4): 917–940.
- Leech, Beth L., Frank R. Baumgartner, Timothy La Pira, and Nicholas A. Semanko. 2005. Drawing Lobbyists to Washington: Government Activity and Interest Group Mobilization. *Political Research Quarterly* 58 (1): 19–30.
- Lorenz, Geoffrey Miles. 2020. Prioritized interests: Diverse lobbying coalitions and congressional committee agenda setting. *Journal of Politics* 82 (1): 225–240.
- Lowande, Kenneth, Melinda Ritchie, and Erinn Lauterbach. 2019. Descriptive and substantive representation in Congress: Evidence from 80,000 congressional inquiries. *American Journal of Political Science* 63 (3): 644–659.
- Lowande, Kenneth, and Rachel Augustine Potter. 2021. Congressional oversight revisited: Politics and procedure in agency rulemaking. *The Journal of Politics* 83 (1): 401–408.
- Mahoney, Christine. 2007. Lobbying success in the United States and the European Union. *Journal of Public Policy* 27 (1): 35–56.
- Mahoney, Christine, and Frank R. Baumgartner. 2015. Partners in advocacy: Lobbyists and government officials in Washington. *The Journal of Politics* 77 (1): 202–215.
- Maltzman, Forrest. 1997. *Competing principals: Committees, parties, and the organization of Congress*. Ann Arbor: University of Michigan Press.
- McKay, Amy. 2012. Buying policy? The effects of lobbyists' resources on their policy success. *Political Research Quarterly* 65 (4): 908–923.
- McKay, Amy M. 2011. The decision to lobby bureaucrats. *Public Choice* 147 (1): 123–138.
- McQuide, Bryan S. 2007. Interest groups, institutions and divided government: does party control matter in choice of institutional lobbying strategies? Paper presented at the annual meeting of the Southern Political Science Association, New Orleans.
- Miler, Kristina C. 2010. *Constituency representation in Congress: The view from Capitol Hill*. Cambridge: Cambridge University Press.
- Nelson, David, and Susan Webb Yackee. 2012. Lobbying coalitions and government policy change: An analysis of federal agency rulemaking. *The Journal of Politics* 74 (02): 339–353.
- Newmark, Adam., Anthony J Nownes. 2022. All of the above: Lobbying allied, undecided, and opposing lawmakers in committee and on the floor. *Political Research Quarterly* .



- Phinney, Robin. 2016. *Strange bedfellows: Interest group coalitions, diverse partners, and influence in American social policy*. Cambridge: Cambridge University Press.
- Potter, Rachel Augustine. 2019. *Bending the rules*. Chicago: University of Chicago Press.
- Pralle, Sarah B. 2003. Venue shopping, political strategy, and policy change: The internationalization of Canadian forest advocacy. *Journal of Public Policy* 23 (3): 233–260.
- Ritchie, Melinda N., and Hye Young You. 2019. Legislators as lobbyists. *Legislative Studies Quarterly* 44 (1): 65–95.
- Schlozman, Kay Lehman, Henry E. Brady, and Sidney Verba. 2018. *Unequal and unrepresented*. Princeton: Princeton University Press.
- Schnakenberg, Keith E. 2017. Informational lobbying and legislative voting. *American Journal of Political Science* 61 (1): 129–145.
- Smith, Mark A. 2000. *American business and political power: Public opinion, elections, and democracy*. Chicago: University of Chicago Press.
- Solowiej, Lisa A., and Paul M. Collins Jr. 2009. Counteractive lobbying in the US Supreme Court. *American Politics Research* 37 (4): 670–699.
- Talbert, Jeffery C., Bryan D. Jones, and Frank R. Baumgartner. 1995. Nonlegislative hearings and policy change in Congress. *American Journal of Political Science* 39: 383–405.
- Jones, Bryan D., Frank R. Baumgartner, Sean M. Theriault, Derek A. Epp, Cheyenne Lee, Miranda E. Sullivan. 2023. Policy Agendas Project: Codebook. Hearings, executive orders, most important problem. www.comparativeagendas.net
- 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.
- Victor, Jennifer Nicoll. 2007. Strategic lobbying: Demonstrating how legislative context affects interest groups' lobbying tactics. *American Politics Research* 35 (6): 826–845.
- Walker, Jack L. 1991. *Mobilizing interest groups in America: Patrons, professions, and social movements*. Ann Arbor: University of Michigan Press.
- Wawro, Gregory. 2001. A panel probit analysis of campaign contributions and roll call votes. *American Journal of Political Science* 45: 563–79.
- Witko, Christopher. 2006. PACs, issue context, and congressional decisionmaking. *Political Research Quarterly* 59 (2): 283–295.
- Witko, Christopher, Jana Morgan, Nathan J. Kelly, and Peter K. Enns. 2021. *Hijacking the agenda: Economic power and political influence*. New York: Russell Sage Foundation.
- Yackee, Jason, and Susan Webb Yackee. 2006. A bias towards business? Assessing interest group influence on the U.S. bureaucracy. *Journal of Politics* 61 (1): 128–139.
- You, Hye Young. 2017. Ex post lobbying. *The Journal of Politics* 79 (4): 1162–1176.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.

