

Access to Proposers and Influence in Collective Policy Making

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What are the consequences of access, and what is its role in interest group influence? I analyze a model in which interest groups with targeted access can potentially lobby policy proposals by certain politicians. A key result is that access can shape policy outcomes on its own, independently of any lobbying effort. By increasing the potential for lobbying, access leads other politicians to expect that the target's proposals are more likely to favor the group, which changes their own value from bargaining and, in turn, their voting and proposal behavior. These effects of access can benefit the group, but they can also hurt it and potentially even outweigh its gain from better lobbying prospects. For example, moderate groups crave access to relatively extreme politicians but avoid access to a range of more centrist politicians. The results also provide empirical implications for various political expenditures related to access and influence.

A majority of Americans worry that money has too much influence on US politics, with a chief concern being that interest groups use their resources to skew policy. One of the primary ways an interest group can influence policy is by lobbying, but doing so typically requires *access*—opportunities to engage with policy makers (Wright 1996). Since access appears to facilitate outside influence, it is a central topic for scholars of interest groups (e.g., Baumgartner et al. 2009; Schlozman and Tierney 1986).

Despite a growing understanding of how interest groups can acquire access and who they target, we know relatively little about the effects of access and the role it plays in outside influence.¹ A key challenge is that access occurs in a wider political context with highly strategic actors (Baumgartner 2010; Leech 2010).² One way to address this obstacle is by refining

our theoretical understanding of access and influence in such contexts.³ That is the goal of this article.

Classic theories of access study how key factors, such as ideological alignment, affect an interest group's desire for access to an isolated politician (e.g., Austen-Smith 1995; Hall and Deardorff 2006; Lohmann 1995). To study access in a broader political context, recent theories incorporate multiple strategic politicians in collective bodies.⁴ In this vein, scholars have analyzed untargeted access that facilitates lobbying to shape proposals (Levy and Razin 2013), as well as targeted access that facilitates lobbying on votes over a fixed proposal (Awad 2020; Schnakenberg 2017).

I address an important gap in our understanding of access by studying targeted access that facilitates lobbying to shape proposals in collective policy making. Shaping bills as they are

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1. On how groups get access, see, e.g., Bertrand, Bombardini, and Trebbi (2014), Blanes i Vidal, Draca, and Fons-Rosen (2012), Fourinaies and Hall (2018), Kalla and Broockman (2015), and McCrain (2018). On who they target, see, e.g., Fourinaies (2018), Liu (2022), Miller (2022), and Powell and Grimmer (2016). For a recent overview of empirical studies of access, see Miller (2021).

2. Miller (2022, 179) notes that “organized interests recognize the importance of legislative procedure and agenda setters,” and “studies of their targeting choices, and of their lobbying activity more broadly, must consider how procedural context conditions their behavior.”

3. As summarized by Finger (2019), “current approaches to the study of interest groups suffer from theoretical incoherence with regard to how interest groups seek to achieve influence and a lack of consensus around how to operationalize these behaviors” (853). More broadly, Miller (2021) notes that “though the theoretical linkages between access and other quantities of interest are sometimes unclear, formal theory can help researchers elucidate expectations and guide empirical tests” (297).

4. Hall and Deardorff (2006) encourage future work to account for the “degree of agreement over specific policies” and explore potential trade-offs between “a legislator’s proximity to their group’s ideal policies and the legislator’s institutional or partisan ability to get things done” (80).

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written in committee is widely seen as the most effective form of lobbying (Hall and Wayman 1990; Kroeger 2021; Schattschneider 1960), and, in order to do so, groups typically must have targeted access, that is, strong connections with individual politicians (Miller 2022; Powell 2014). Specifically, I study two questions. First, what are the consequences of access that may provide chances to lobby the targeted politicians as they draft proposals? Second, which politicians do interest groups want to target?

To do so, I analyze a game-theoretic model of collective policy making with interest groups. The model has three key features. First, access is targeted and solely provides potential opportunities to exert influence by lobbying—reflecting the standard conceptual distinction between access and lobbying (Wright 1989). Second, lobbying directly influences policy proposals—capturing the prominent form of lobbying that entails shaping proposals in committee before they are voted on. Third, multiple politicians bargain, potentially for a while, to set policy—reflecting that access does not occur in a vacuum, as other actors may anticipate a group's potential influence over its target today or in the future.

A primary contribution is to expand our understanding of the consequences of targeted access to proposers and its role in interest group influence. Broadly, I show how such access can affect a variety of behaviors on its own and, moreover, that the political context shapes the nature of these effects.

First, I find that an interest group can influence policy outcomes merely by having access, independent of any lobbying effort. That is, I show how access can be sufficient for influence even if it merely creates the possibility of effective lobbying. This finding contrasts with the standard view that access is a critical prerequisite for influence but does not influence behavior on its own (Hansen 1991).⁵

Second, by unpacking the preceding finding, I show how such access can influence (i) which policies would pass if proposed, (ii) the target's policy proposal even when the group does not lobby, (iii) policy proposals by nontargets to whom the group has no access and thus cannot lobby, as well as (iv) the group's lobbying expenditures when it does lobby. Additionally, I show how the direction of these effects and their size can depend on the relative extremism of the group and its target, as well as broader factors such as the distributions of ideology and proposal power among the politicians who are bargaining.

A core aspect of the strategic logic for these findings is that access has anticipation effects in equilibrium. Since access

creates and increases the potential for lobbying, everyone anticipates the possibility of the target skewing her proposal toward the group. That anticipation alone can change every politician's value of continued bargaining and, in turn, potentially changes how they vote on certain proposals. Essentially, the logic highlights how access can affect behavior via the *law of anticipated reactions* (Friedrich 1937) and thereby enable interest groups to have influence without actively lobbying, that is, through the *second face of power* (Bachrach and Baratz 1962). Although classic studies of influence recognized the importance of anticipation effects (e.g., Simon 1953) and recent work has sought to account for them in other contexts, such as presidential vetoes (Cameron 2009), they are absent from theories of access, and their role in interest group influence has been overlooked.⁶

Another contribution is to refine our understanding of interest group preferences for access. Once an interest group has access to a legislator it cannot commit to forgo chances to lobby if they arise, and, for some ideological compositions of legislators, this expectation can result in other legislators proposing policies that are worse for the interest group than those they would propose without the expectation. This indirect effect of access can be good or bad for the group, potentially even negating the beneficial direct effect of making lobbying more likely. I find that the natural intuition of "more access is better" need not be true, even without access costs or budgets, but in other cases access is even more appealing than previously understood. Specifically, I show how a group's desire for access can depend on its policy preferences relative to the target politician. For example, centrist groups benefit from access to more extreme politicians, but they can be worse off from access to more centrist politicians.

I also make a technical contribution by providing a tractable way to incorporate targeted access and lobbying into a rich legislative bargaining framework. The modeling approach (i) distinguishes latent interest group access from actual lobbying, which is observed only when the opportunity arises, and (ii) allows expectations about possible future behavior to shape legislative behavior today. These features are fundamental to the article's main substantive insights, as well as the anticipation effects in the key strategic mechanism.

The results have several implications for empirical studies of interest groups and access. First, they suggest that empirical studies of influence should expand their scope beyond observed lobbying, as well as account for potential spillover effects on other politicians and activities. Second, they suggest potential relationships between lobbying expenditures and various access-seeking expenditures (e.g., campaign contributions,

5. For example, Kalla and Broockman (2015, 545) summarize this view clearly, stating that "access to powerful officials is often necessary for influencing policy, even if it is not sufficient."

6. For more discussion on these points, see Lowery (2013).

revolving door hiring). Third, they shed new light on *Tullock's puzzle*—the long-standing empirical regularity that many interest groups are less aggressive than expected in using campaign contributions to pursue access (Ansola-behere, de Figueiredo, and Snyder 2003; Tullock 1972). Finally, they speak to several other empirical findings that groups often (i) lobby their allies (Ainsworth 1997; Hojnacki and Kimball 1998, 1999; Kollman 1997) and (ii) seek access to legislators with substantial agenda power (Fourinaies 2018; Powell and Grimmer 2016) and that (iii) contributing groups are overwhelmingly centrist (Bonica 2013, 301).

RELATED LITERATURE

The closest papers are Awad (2020) and Schnakenberg (2017), who also study targeted access in a collective body. Like this article, they find that (i) targeted access can indirectly affect how nontargeted politicians behave, and (ii) interest groups have a strategic incentive to target ally legislators for access. Despite these broad similarities, there are several important differences.

A fundamental difference is that I study lobbying to shape proposals whereas they study lobbying to affect votes. More precisely, they focus on lobbying that provides information to affect final votes between two exogenous proposals. In contrast, I focus on lobbying that provides resources to shape policy proposals during an interaction that can continue after failed proposals.

By studying a different form of lobbying, the aforementioned similar findings arise from different mechanisms, which then produce distinct additional findings.⁷ One distinct finding is whether the interest group can influence behavior without lobbying. In Awad (2020) and Schnakenberg (2017), they cannot—access affects behavior only if the group subsequently lobbies. In this article, they can—access causes everyone to anticipate the potential for future lobbying, and that anticipation can affect votes and proposals today even without lobbying by the interest group.

A second distinct finding is in which allies interest groups want to access. In Awad (2020) and Schnakenberg (2017), groups weakly favor access to moderates because using them as intermediaries can expand what passes, that is, get policies passed that would have failed if the group had instead lobbied the legislature directly.⁸ I find a preference for targeting more

extreme allies rather than weakly favoring more centrist allies. By incorporating strategic proposals, I highlight how interest groups can suffer from access that expands what would pass and instead want access that will narrow what can pass.

In order to make these substantive contributions, I also contribute to a theoretical literature incorporating lobbying into legislative bargaining models with strategic proposals and votes. Among various differences, extant literature typically studies untargeted access (e.g., Levy and Razin 2013) or does not emphasize access (e.g., Baron 2019).⁹ Specifically, I extend the legislative interaction in Cho and Duggan (2003) to include ideological interest groups who can potentially transfer resources to influence proposals. I extend their equilibrium concept to account for lobbying, prove existence, and show that equilibrium behavior has a clear connection to their characterization—the distribution of equilibrium proposals with lobbying is equivalent to a slightly modified version of the model without lobbying. Moreover, I show that lobbying does not introduce delay in this setting, which extends well-known *no-delay* results (i.e., bargaining always ends immediately) in similar legislative settings without lobbying (e.g., Banks and Duggan 2006a).

MODEL

Players

The key players are an interest group, denoted g , and a politician, ℓ . Additionally, there are three other politicians: a left partisan L , a moderate M , and a right partisan R .

Timing

Politicians bargain to set policy in the interval $X \subseteq \mathbb{R}$, which is closed and nonempty. Bargaining occurs over an infinite horizon, with periods discrete and indexed $t \in \{1, 2, \dots\}$.¹⁰ A status quo policy $q \in X$ persists until policy passes. Thereafter, the strategic interaction ends and the passed policy remains forever. During each period t before some proposal passes, bargaining proceeds in the following two stages (see fig. 1).

Proposal stage. First, the period- t proposer i_t is drawn from probability distribution $\rho = (\rho_\ell, \rho_L, \rho_M, \rho_R)$, where

more moderate, can then provide a public cheap-talk message that convinces a majority of legislators under broader conditions.

9. In addition to his different focus, Baron (2019) studies lobbying directed at votes during bargaining over distributive policy that can continue after passage with endogenous status quo. Closer to this article, Grossman and Helpman (2002) discuss a model in which lobbying can affect a take-it-or-leave-it proposal and the subsequent votes, but their relatively informal analysis does not discuss access, and considerations about future bargaining do not play a role.

10. As usual, this game can alternatively be viewed as having an unknown finite horizon with a constant probability of termination each period.

7. Future work can study how the effects highlighted here interact with the informational effects they emphasize. See Grossman and Helpman (2002) for an extensive overview of canonical informational lobbying models.

8. In Schnakenberg (2017), groups seek access to allies since they are relatively willing to forward favorable unverifiable information to the other politicians, reducing the cost of persuading a majority. In Awad (2020), groups target verifiable information at moderate allies who, precisely because they are

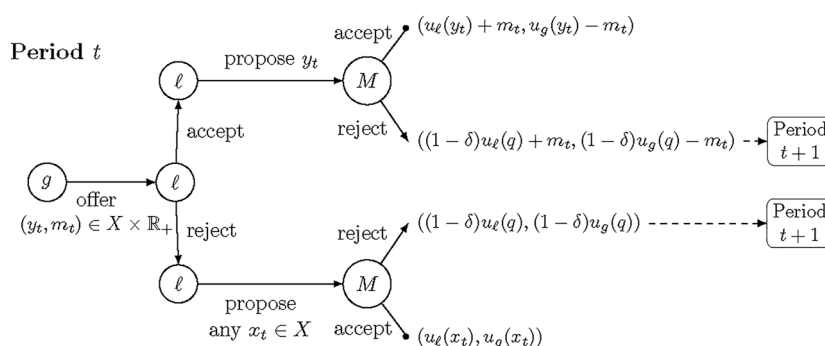


Figure 1. Within-period interaction if ℓ is recognized and g can lobby. It includes period payoffs following rejection and cumulative stage payoffs following acceptance. If ℓ is not recognized or g cannot lobby, the within-period interaction is analogous after ℓ rejects g 's offer.

$\rho_j > 0$ is politician j 's recognition probability. If $i_t \neq \ell$, then g is not active and i_t proposes any $x_t \in X$. If $i_t = \ell$, then g can lobby with probability $\alpha \in [0, 1]$, which parameterizes g 's access. If g is unable to lobby, then ℓ simply proposes any $x_t \in X$. Otherwise, g offers ℓ a binding contract (y_t, m_t) consisting of policy $y_t \in X$ and transfer $m_t \geq 0$.¹¹ After observing g 's offer, ℓ decides whether to accept or reject it. If ℓ accepts, then she proposes $x_t = y_t$ and receives m_t from g . If ℓ rejects, then she can propose any $x_t \in X$ and g keeps m_t .

Voting stage. Next, M decides whether to accept the policy proposal.¹² If M accepts, then bargaining ends with x_t enacted in t and all subsequent periods. If M rejects, then q persists and active bargaining continues in $t + 1$.

Information

All features are common knowledge.

Payoffs

Cumulative dynamic payoffs are the sum of streams of discounted per-period payoffs, with all players sharing the common discount factor $\delta \in (0, 1)$. Player i 's per-period policy utility from $x \in X$ is $(1 - \delta)u_i(x_t)$, where $(1 - \delta)$ is a normalization for convenience and $u_i(x) = -(\hat{x}_i - x)^2$ with \hat{x}_i denoting i 's ideal point.

If lobbying occurs, ℓ accepts g 's offer (y_t, m_t) , and x_t is the period- t policy, then g 's period- t payoff is $(1 - \delta)u_g(x_t) - m_t$ and ℓ 's period- t payoff is $(1 - \delta)u_\ell(x_t) + m_t$.¹³ Thereafter, m_t

does not enter per-period payoffs. For complete expressions of dynamic payoffs, see appendix B.

To sharpen key trade-offs, I maintain several additional assumptions that are not essential. First, I assume $\hat{x}_M = 0 \in X$, which is a normalization. Additionally, to model L and R as staunchly ideological and opposing partisans, I assume $x_L, x_R \in X$, with $\hat{x}_L < 0 < \hat{x}_R$ and $|q| < \min\{|\hat{x}_L|, \hat{x}_R\}$.

Equilibrium concept

I study a refinement of stationary subgame perfect Nash equilibrium that builds on standard equilibrium concepts in the legislative bargaining literature (e.g., Banks and Duggan 2006a). Informally, a *stationary legislative lobbying equilibrium* satisfies four conditions.¹⁴ First, M passes a proposal if and only if she weakly prefers to do so rather than reject and continue bargaining. Second, if left to their own devices, each politician proposes policy satisfying M and cannot profitably deviate to any other proposal. Third, politician ℓ accepts a lobby offer if and only if she weakly prefers it over the alternative of making her own proposal. Fourth, g offers a policy that will pass, and g cannot profitably deviate to any other offer. By stationarity, (i) M 's voting decision depends only on the current proposal; (ii) politicians other than ℓ propose independently of preceding play; (iii) ℓ accepts or rejects g 's offers based only on the current terms, and ℓ 's proposals in lieu of acceptance are independent of preceding play; and (iv) g 's offers are independent of preceding play. Although players use strategies that are relatively straightforward behavioral rules, no player can profitably deviate to any other strategy.

Before proceeding, I note three conditions on strategies that are without loss of generality and streamline the analysis: (i) M passes proposals when indifferent, (ii) ℓ accepts g 's offer when indifferent, and (iii) players use no-delay proposal strategies; that is, each politician proposes passable policy and g offers

11. Assuming that g lobbies whenever possible is without loss of generality, as g can always effectively forgo lobbying by offering ℓ 's default proposal without payment.

12. This stage distills the essence of majoritarian voting in a larger interaction where M is a median voter (Banks and Duggan 2006b). In the appendix, I show that the median is decisive in such a setting and prove the main results.

13. If y_t passes, then $x_t = y_t$. Otherwise, $x_t = q$.

14. See app. B for a formal definition.

passable policy. In the appendix, I define *stationary mixed strategy legislative lobbying equilibrium* and show that every such equilibrium is equivalent in outcome distribution to a no-delay stationary pure strategy legislative lobbying equilibrium in which politicians (i) vote in favor of proposals when indifferent and (ii) accept lobby offers when indifferent.¹⁵

Model commentary

The model captures a core aspect of access—it weakly increases opportunities to exert influence—since access determines the probability that the group can lobby. Additionally, the model can easily be modified to capture a second potential aspect of access—it weakly increases the effectiveness of lobbying when such opportunities arise—by, for example, allowing access to increase ℓ 's value of transfers from g . Combining these aspects of access does not add substantial insight to the main results because the direct consequence of access is qualitatively the same—it shifts the target's expected proposal toward the group—and thus the indirect effects are also qualitatively analogous.

The key aspect of lobbying that the model captures is the ability to influence proposals. Groups often lobby in committee to shape the language of bills (Kroeger 2021; Schlozman and Tierney 1986), and the policy-for-transfer lobbying technology used here provides a tractable reduced-form representation of various ways that such influence could occur (Powell 2014). The exact interpretation the lobbying technology in this article is not central, but the model accommodates two prominent forms.¹⁶ First, there is an *exchange* interpretation that can more broadly reflect the group drafting language (Schattschneider 1960) or writing a model bill (Kroeger 2021) to save politicians time or in exchange for various forms of assistance such as future employment opportunities (Diermeier, Keane, and Merlo 2005) and targeted charitable donations (Bertrand, Fisman, and Trebbi 2020). Second, there is also a *legislative subsidy* interpretation in which the group's lobbying helps a like-minded politician influence her peers on a particular subcommittee whenever it is tasked with writing legislation (Hall and Deardorff 2006). To streamline discussion, I use the exchange interpretation throughout the analysis.

15. Standard arguments (Banks and Duggan 2006b) imply that proposal strategies must be no delay. Although related, the no-delay property for interest groups is original to this article. Essentially, lobbying for delay is always too expensive to be worthwhile in equilibrium. Appendix C provides the technical details.

16. The lobbying technology is similar to, e.g., Bils, Duggan, and Judd (2021), Martimort and Semenov (2008), and an extension in Açemoglu, Egorov, and Sonin (2013). See Grossman and Helpman (2002) for an extensive overview and discussion about interpretation. Also see, e.g., Baron (2019), Großer, Reuben, and Tymula (2013), and Powell (2014).

I do not model lobbying that directly influences how politicians vote on proposals. Thus, I isolate the effects of access that facilitates lobbying over policy content. The main analysis complements standard models of vote buying, which typically study exogenous or take-it-or-leave-it proposals (e.g., Dekel, Jackson, and Wolinsky 2009; Snyder 1991), by analyzing a setting where politicians make strategic proposals and bargaining continues after failed proposals. In practice, influencing policy content is particularly appealing for interest groups because it is less visible and more intimate. In contrast, consequential vote buying is relatively difficult because, legality aside, it may require groups to coordinate with several politicians, which is like “herding cats” (Milyo, Primo, and Groseclose 2000). I discuss vote-buying incentives in the conclusion, and in appendix E I show that the main results are robust to them.

Finally, in the baseline model, access is targeted at one politician and remains constant throughout bargaining. These assumptions streamline the analysis and can be relaxed somewhat. First, I prove in the appendix that the main results extend to a model allowing more politicians and multiple interest groups that can have access to multiple politicians. Second, stationary access is an analytically convenient way to capture the prevalent view that access is essentially fixed once active policy making begins (Powell 2014; Powell and Grimmer 2016). Of course, access could potentially vary over time, so studying the finer dynamics of access throughout the policy-making process is an interesting avenue for future work.

ANALYSIS OF EQUILIBRIUM LEGISLATING AND LOBBYING

To begin the analysis, I characterize equilibrium behavior in order to introduce how access can affect the strategic calculus for different actors. First, I highlight that equilibrium voting and proposing by politicians has fundamental similarities to related models without lobbying. Then, I characterize equilibrium lobbying and show how it depends on conjectures about voting and nonlobbied proposals. Finally, I combine the preceding qualitative insights in order to sharpen the characterization and more precisely describe how voting, proposing, and lobbying affect each other in equilibrium. Crucially, the characterization explicitly reveals how access—by determining how strongly players anticipate lobbying—will affect voting, proposing, and lobbying.

Since bargaining continues after rejected proposals, there is a feedback between proposals and legislative voting in equilibrium (as in, e.g., Banks and Duggan 2006a). Optimal policy proposals are shaped by anticipating what M will accept, which depends on M 's expectations about future policy making, which are consistent with proposal strategies in equilibrium. A key step in the analysis shows how access influences M 's

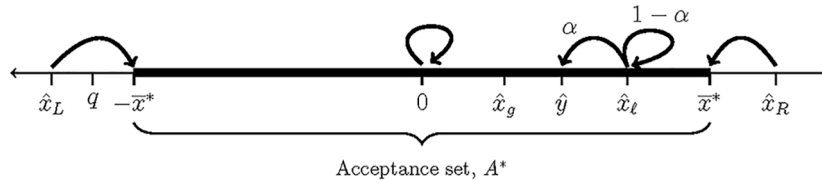


Figure 2. Equilibrium proposals for a hypothetical legislature. Arrows point from politician ideal points to proposals. The bold interval is the acceptance set, A^* . If ℓ is recognized, then with probability α she is lobbied to propose y^* , the policy in A^* closest to $\hat{y} = (\hat{x}_g + \hat{x}_\ell)/2$, and otherwise she proposes z^* , the policy in A^* closest to \hat{x}_ℓ . In the depicted legislature, $y^* = \hat{y}$ and $z^* = \hat{x}_\ell$.

expectations and thus the acceptance set, thereby affecting proposals that are constrained by the limits of what M will pass.

More precisely, M will pass a proposal if and only if it exceeds her *reservation value* of keeping q for another period and continuing active bargaining. Formally, M 's reservation value is $(1 - \delta)u_M(q) + \delta V_M^*$, where V_M^* denotes M 's equilibrium continuation value immediately after rejecting a proposal.¹⁷ By stationarity, V_M^* is the same each period, so M 's reservation value is constant and thus her voting behavior is the same each period. Specifically, the *acceptance set* is $A^* = [-\bar{x}^*, \bar{x}^*]$, where \bar{x}^* is the positive solution to $u_M(x) = (1 - \delta)u_M(q) + \delta V_M^*$.

Anticipating what M will pass, each politician (whenever recognized) proposes her favorite policy in A^* (also analogous to Banks and Duggan 2006a). Clearly, M will simply propose her ideal point, 0. The partisans are constrained by A^* in equilibrium, so L proposes $-\bar{x}^*$ and R proposes \bar{x}^* .¹⁸ Finally, if ℓ rejects g 's offer or g cannot lobby, then ℓ proposes the policy in A^* closest to \hat{x}_ℓ , denoted z^* .

Finally, the interest group, g , wants to shift ℓ 's proposal as far toward \hat{x}_g as is worth paying for. This strategic calculus depends on its conjectures about voting and nonlobbied proposals. First, shifting ℓ 's proposal requires that g compensate her for not instead rejecting and proposing z^* . In equilibrium, g will always make an offer that ℓ accepts, since it can always do weakly better than the trivial acceptable offer of z^* without payment. More precisely, since g knows ℓ 's payoff from proposing z^* , it will compensate her exactly and extract all of the surplus. Stationarity implies that the acceptance set A^* does not depend on today's proposal, so from g 's perspective there is a cost of $u_\ell(z^*) - u_\ell(y)$ associated with each policy $y \in A^*$.

Additionally, in principle g could potentially benefit from lobbying for policy outside of A^* if tomorrow's proposer is likely to be an ideological ally who will pass favorable policy for free. Yet, ℓ shares those expectations about future play and therefore must be compensated accordingly in order to pro-

pose any policy outside A^* . In equilibrium, the cost of buying delay is never worthwhile for g , and it never lobbies for proposals that will be rejected.¹⁹

In sum, g offers the policy in A^* that provides the best policy payoff given the associated cost. Formally, (y^*, m^*) consists of the policy $y^* = \arg \max_{y \in A^*} u_g(y) + u_\ell(y) - u_\ell(z^*)$ and transfer $m^* = u_\ell(z^*) - u_\ell(y^*)$.²⁰ Thus, g successfully lobbies ℓ to propose the $y \in A^*$ that maximizes their cumulative policy utility, which is the policy closest to $\hat{y} = (\hat{x}_\ell + \hat{x}_g)/2$ since they both have quadratic policy utility.

The characterization of equilibrium lobbying implies that the model can be reinterpreted as a one-dimensional bargaining environment in which ℓ has recognition probability $(1 - \alpha)\rho_\ell$ and there is an additional politician at \hat{y} who has recognition probability $\alpha\rho_\ell$. After modifying the legislature to include this additional proposer representing the effect of g 's lobbying, politicians propose acceptable bills closest to their ideal point. Applying insights from Cho and Duggan (2003) to this fictitious enlarged legislature implies that this class of equilibria has a unique distribution of equilibrium policies.

Proposition 1 establishes that a stationary legislative lobbying equilibrium exists and all such equilibria have the same outcome distribution. Henceforth, I drop qualifiers and say *equilibrium*. Moreover, it collects the preceding observations to characterize a variety of equilibrium behavior: which policies pass and which will be rejected, which policies various politicians will propose, and which policies the interest group will lobby for and how much it will pay. Figure 2 illustrates a hypothetical equilibrium acceptance set and proposals.

Proposition 1. A stationary legislative lobbying equilibrium exists, and every such equilibrium has the same outcome distribution. In equilibrium,

- i) the acceptance set is $A^* = [-\bar{x}^*, \bar{x}^*]$, where $0 < \bar{x}^* < |q|$;

17. Appendix B contains explicit expressions of continuation values.

18. This property follows from $|q| < \min\{|\hat{x}_\ell|, \hat{x}_R\}$ because standard arguments imply $\bar{x}^* < |q|$.

19. See app. C for technical details.

20. Uniqueness of y^* follows because $u_g + u_\ell$ is strictly concave and A^* is a nonempty closed interval.

- ii) M proposes 0, R proposes \bar{x}^* , and L proposes $-\bar{x}^*$;
- iii) if ℓ is not lobbied, she proposes the policy $z^* \in A^*$ closest to \hat{x}_ℓ ;
- iv) if g can lobby, then it successfully lobbies ℓ to propose the policy $y^* \in A^*$ closest to $\hat{y} = (\hat{x}_\ell + \hat{x}_g)/2$ using the payment $m^* = u_\ell(z^*) - u_\ell(y^*)$.

Proposition 1 implies that M 's equilibrium continuation value is simply the weighted sum of her policy utility from equilibrium proposals, weighted by their probabilities:

$$V_M^* = \rho_M u_M(0) + \rho_L u_M(-\bar{x}^*) + \rho_R u_M(\bar{x}^*) + \rho_\ell(\alpha u_M(y^*) + (1 - \alpha)u_M(z^*)). \quad (1)$$

Substituting (1) into M 's indifference condition that defines the boundaries of A^* yields corollary 1, which sharpens our characterization of \bar{x}^* .

Corollary 1. In equilibrium, the boundaries of $A^* = [-\bar{x}^*, \bar{x}^*]$ are characterized by

$$\bar{x}^* = \left(-\frac{(1 - \delta)u_M(q) + \delta\rho_\ell(\alpha u_M(y^*) + (1 - \alpha)u_M(z^*))}{1 - \delta(\rho_L + \rho_R)} \right)^{1/2}. \quad (2)$$

Corollary 1 implies that the equilibrium acceptance set, A^* , expands if the status quo (q) shifts away from M , patience (δ) decreases, or total partisan recognition probability ($\rho_L + \rho_R$) increases. These effects are familiar from related models without lobbying (e.g., Banks and Duggan 2006a). The effects of access, α , are new. Intuitively, greater access causes M to put more weight on the possibility that g might lobby ℓ in the future if today's proposal fails. If lobbying would make ℓ 's proposal worse for M , then A^* expands because she is less inclined to keep bargaining and vice versa. Specifically, (2) reveals that A^* expands if y^* is farther than z^* from M and vice versa. Thus, the effect of α on A^* depends critically on how extreme g is relative to ℓ .

Although the effect of access on A^* is original to this article, it falls under the umbrella of a more general relationship that is familiar from related work without lobbying—the acceptance set expands as the distribution of equilibrium proposals shifts away from M . To be more precise about this general relationship, I next define a notion of changes in *legislative extremism* as a function of α and ρ . The definition compares distributions of unconstrained ideal proposals using first-order stochastic dominance, a standard partial order for probability distributions.

Definition 1. For any pair (ρ, α) , let $\Lambda(\rho, \alpha)$ be a lottery that puts probability $\alpha\rho_\ell$ on $|\hat{y}|$, probability

$(1 - \alpha)\rho_\ell$ on $|\hat{x}_\ell|$, and probability ρ_j on $|\hat{x}_j|$ for each politician $j \neq \ell$. Say that legislative extremism increases if changing (ρ, α) to (ρ', α') is such that (i) for all $x \in X$ the lottery $\Lambda(\rho', \alpha')$ puts weakly greater probability on x' such that $|x'| \geq |x|$ and (ii) for some $x \in X$ the lottery $\Lambda(\rho', \alpha')$ puts strictly greater probability on x' such that $|x'| > |x|$.

Equivalently, legislative extremism increases if $\Lambda(\rho', \alpha')$ first-order stochastically dominates $\Lambda(\rho, \alpha)$. Two distinct special cases in which legislative extremism increases are (i) transferring recognition probability from M to other politicians or (ii) increasing α if \hat{y} is farther than \hat{x}_ℓ from M .

Taking stock, and generalizing our earlier observation, A^* expands as legislative extremism increases, δ decreases, or q shifts away from M . By changing the acceptance set, any of these changes will also shift proposals on the boundaries of A^* . Thus, they always affect what L and R will propose. Moreover, they can also shift y^* or z^* if either is constrained by A^* . If so, these changes can also affect g 's equilibrium lobby transfer, $m^* = u_\ell(z^*) - u_\ell(y^*)$.

Notably, changes in A^* are the only channel through which m^* can vary, since y^* is either \hat{y} or a boundary of A^* , and analogously for z^* . Building on this observation, lemma 1 establishes that m^* weakly increases as legislative extremism increases, δ decreases, or q shifts away from M .

Lemma 1. The interest group's equilibrium payment, m^* , increases as A^* expands.

Expanding A^* can increase m^* in two distinct ways. First, if y^* is constrained by A^* , then (i) g gets more slack to shift ℓ 's proposal farther and (ii) g is willing to pay more to do so. Second, if z^* is constrained by A^* , then (i) ℓ gets more slack to pass more favorable policy if she rejects g 's offer and is therefore more inclined to reject any lobby offer, but (ii) g is willing to pay the additional amount required for ℓ to accept.

Next, proposition 2 builds on the preceding observations to characterize how equilibrium voting, proposals, and expenditures each depend on legislative extremism (α, ρ), the status quo (q), and patience (δ).

Proposition 2. If (i) legislative extremism increases, (ii) the status quo policy becomes more extreme, or (iii) patience decreases, then:

1. the acceptance set, A^* , expands;
2. proposals constrained by A^* become more extreme; and
3. the lobby payment, m^* , weakly increases.

Consequences of access

Since access (α) affects legislative extremism, proposition 2 reveals that it can have a variety of effects in equilibrium. Broadly, the direct effect of α on g 's lobbying chances can affect ℓ 's expected proposal, which can then affect what will pass, what will be proposed, and how many resources will be devoted to lobbying.

Crucially, however, α does not have any effects if subsequent lobbying by g will not shift ℓ 's proposal, that is, if $y^* = z^*$. Such inconsequential lobbying requires that either (i) $\hat{x}_\ell = \hat{x}_g$ or (ii) \hat{x}_ℓ and \hat{y} are outside the acceptance set in the same direction. To focus on the interesting case, henceforth I assume $\hat{x}_\ell \neq \hat{x}_g$. In case ii, the acceptance set is $A^* = [-\bar{x}, \bar{x}]$, where

$$\bar{x} = \left(-\frac{(1-\delta)u_M(q)}{1-\delta(\rho_L + \rho_R + \rho_\ell)} \right)^{1/2}. \quad (3)$$

Although \bar{x} resembles (2), it is defined in terms of primitives and, crucially, does not depend on \hat{x}_ℓ , \hat{x}_g , or α . Thus, (3) reveals that case ii arises if and only if $\max\{\hat{x}_\ell, \hat{y}\} \leq -\bar{x}$ or $\bar{x} \leq \min\{\hat{x}_\ell, \hat{y}\}$. Using this observation, lemma 2 characterizes the conditions under which access is consequential. Let $\underline{\mathcal{X}}(\hat{x}_g) = \min\{-\bar{x}, -2\bar{x} - \hat{x}_g\}$ and $\bar{\mathcal{X}}(\hat{x}_g) = \max\{\bar{x}, 2\bar{x} - \hat{x}_g\}$, which always satisfy $\underline{\mathcal{X}}(\hat{x}_g) \leq -\bar{x} < \bar{x} \leq \bar{\mathcal{X}}(\hat{x}_g)$.

Lemma 2. Lobbying affects ℓ 's proposal (i.e., $y^* \neq z^*$), if and only if $\hat{x}_\ell \in (\underline{\mathcal{X}}(\hat{x}_g), \bar{\mathcal{X}}(\hat{x}_g))$.

Lemma 2 has two key implications. First, access has no effect if and only if ℓ leans far enough in either direction—fixing \hat{x}_g , we have $y^* = z^* = \bar{x}$ if \hat{x}_ℓ leans sufficiently rightward, and $y^* = z^* = -\bar{x}$ if \hat{x}_ℓ leans sufficiently leftward. Second, if ℓ is not sufficiently extreme, then access will shift ℓ 's expected proposal and thereby affect the distribution of equilibrium proposals, that is, alter legislative extremism.

Combining the second implication of lemma 2 with proposition 2 yields corollary 2, which catalogs the potential consequences of access and shows how they depend on whether lobbying would make ℓ 's proposal more or less extreme.

Corollary 2 (Effects of Access). Suppose $\hat{x}_\ell \in (\underline{\mathcal{X}}(\hat{x}_g), \bar{\mathcal{X}}(\hat{x}_g))$. If $|\hat{y}| > |\hat{x}_\ell|$, then as α increases:

- i) **target proposal effect**— ℓ is more likely to propose y^* and less likely to propose z^* ;
- ii) **voting effect**—the acceptance set, A^* , expands;
- iii) **extreme proposal effect**—proposals constrained by A^* become more extreme; and

- iv) **lobbying expenditure effect**—the lobby payment, m^* , weakly increases.

If $|\hat{y}| < |\hat{x}_\ell|$, then effect i is analogous, but effects ii–iv are reversed.

The nature of the indirect effects, ii–iv, depends on how extreme g is relative to ℓ , as that determines whether legislative extremism will increase or decrease in α . For example, if $0 < \hat{x}_\ell < \hat{x}_g$, then increasing α will increase legislative extremism so the acceptance set will expand, constrained proposals will shift farther outward, and lobbying expenditures will weakly increase.

The extreme proposal effect is not limited to the partisans, L and R , as it can also change either the lobby proposal, y^* , or ℓ 's nonlobbied proposal, z^* . It cannot, however, alter both y^* and z^* simultaneously because that would require both y^* and z^* to be constrained. In that case, M would be indifferent between them, so the target proposal effect would not affect M 's reservation value. Thus, there would be no voting effect and, in turn, no extreme proposal effect on y^* and z^* .

Whom to access?

Thus far, I have shown how (i) access can affect several behaviors by various actors and (ii) the direction of those effects depends on the relative extremism of the group and its target. Since groups appear to have various tools to increase their access, such as campaign contributions or revolving door hiring, I now study whom they want to target.

To isolate policy considerations, I allow g to freely choose access.²¹ The key insights can be conveyed by studying a one-time choice of access before bargaining. Substantively, this captures the possibility that interest groups “may make contributions in anticipation that they may need access to a legislator during a legislative term, rather than when the necessity to purchase influence arises” (Powell and Grimmer 2016, 978). Specifically, I analyze how α affects g 's equilibrium value:

$$\rho_M u_g(0) + \rho_R u_g(\bar{x}^*) + \rho_L u_g(-\bar{x}^*) + \rho_\ell [\alpha(u_g(y^*) + u_\ell(y^*) - u_\ell(z^*)) + (1-\alpha)u_g(z^*)]. \quad (4)$$

Although (4) is similar to (1), it sums over g 's policy utility and also accounts for g 's equilibrium lobbying expenditure, $m^* = u_\ell(z^*) - u_\ell(y^*)$.

I begin with a relatively straightforward observation: the group will not pay for access if ℓ is sufficiently extreme.

21. The core insights are unchanged by including standard convex cost functions for access.

Essentially, g 's lobbying would not shift ℓ 's proposal, so access is inconsequential for g . To sharpen this observation, proposition 3 uses lemma 2 to characterize a necessary condition for buying access: lobbying must be consequential.

Proposition 3. The interest group strictly prefers nonzero access only if $\hat{x}_\ell \in (\underline{\mathcal{X}}(\hat{x}_g), \overline{\mathcal{X}}(\hat{x}_g))$.

Since $\underline{\mathcal{X}}(\hat{x}_g) < -\bar{x} < \bar{x} < \overline{\mathcal{X}}(\hat{x}_g)$ always holds, proposition 3 implies that any group may want access to ℓ if $\hat{x}_\ell \in (-\bar{x}, \bar{x})$. In that case, sufficiently low α guarantees that ℓ is unconstrained when proposing, regardless of \hat{x}_g , so lobbying would change her proposal and is thus consequential to g .

If lobbying is consequential (i.e., $\hat{x}_\ell \in (\underline{\mathcal{X}}(\hat{x}_g), \overline{\mathcal{X}}(\hat{x}_g))$), then inspecting (4) reveals how α can affect g 's welfare. First, it affects g 's expected lobbying gain when ℓ is recognized, $\alpha[u_g(y^*) + u_\ell(y^*) - u_\ell(z^*) - u_g(z^*)]$, by changing g 's lobbying probability and (potentially) its lobbying surplus. The lobbying surplus changes through (i) the target proposal effect, which can change $u_g(y^*) - u_g(z^*)$, and (ii) the lobbying expenditure effect, which can change m^* . Notably, g 's lobbying surplus always weakly increases in α —if g is more centrist than ℓ , then g pays weakly less for the same policy; if g is more extreme than ℓ , then g can pass weakly more extreme policy and will do so if that increases its lobbying surplus.

Second, α can also change g 's expected policy payoff when a partisan is recognized, $\rho_R u_g(\bar{x}^*) + \rho_L u_g(-\bar{x}^*)$. This effect flows entirely through the extreme proposal effect. It can be good or bad for g , depending on how extreme g is relative to ℓ and potentially also partisan recognition probability, ρ_L and ρ_R . If both extreme proposals shift toward \hat{x}_g , then g benefits. If both shift away, then g is worse off. Finally, if one shifts closer while the other shifts away, then whether g benefits will depend on the relative magnitude of ρ_L and ρ_R .

These two channels may work in opposite directions or together in g 's favor. For an example in which they work together, consider $0 < \hat{x}_g < \hat{x}_\ell < \bar{x}^*$. Then, increasing α shifts extreme proposals inward toward g from both sides, so g clearly wants access. More broadly, this holds whenever (i) $\hat{x}_g \in \text{int}A^*$ and (ii) A^* shrinks in α ; that is, y^* is more centrist than z^* . Thus, beyond the example above, g also benefits from increasing α if ℓ is in an intermediate range on the opposite side of M .

To see them oppose each other, consider $0 < \hat{x}_\ell < \hat{x}_g < \bar{x}^*$. Then, the extreme proposal effect discourages access because both partisan proposals shift outward away from g .

In the two preceding examples, the extreme proposal effect is unambiguous because \hat{x}_g is strictly inside A^* . In that case, varying α either shifts both partisan proposals away from g or shifts both toward g .

In contrast, if \hat{x}_g is not strictly inside A^* , then the extreme proposal effect depends on proposal power. Specifically, varying α makes one partisan's proposal more favorable for g but also makes the other partisan's proposal less favorable, so the overall extreme proposal effect depends on the relative recognition probability of L and R .

To distinguish these possibilities in terms of primitives, I show that the extreme proposal effect can be unambiguous if and only if \hat{x}_g lies in an interval around M . Notably, the boundaries of this interval are defined by \bar{x} , introduced earlier in (3). Thus, I first use it to define useful terminology.

Definition 2. Player j is *moderate* if $\hat{x}_j \in (-\bar{x}, \bar{x})$. Otherwise, j is *extremist*.

Lemma 3 shows that moderate groups can be strictly inside the acceptance set, but extremist groups cannot.

Lemma 3. If g is moderate, then there exists $\tilde{x} < |\hat{x}_g|$ such that $\hat{x}_\ell \notin (-\tilde{x}, \tilde{x})$ implies $\hat{x}_g \in \text{int}A^*$ for sufficiently small α . If g is extremist, then $\hat{x}_g \notin \text{int}A^*$ for all \hat{x}_ℓ and all α .

The next two sections leverage the distinction highlighted in lemma 3 to flesh out a key insight of this analysis: g 's incentives to acquire access depend on (i) its own extremism and (ii) its extremism relative to ℓ .

Whom do moderate groups want to access?

A key implication of lemma 3 is that increasing α from 0 has an unambiguous extreme proposal effect for moderate groups if ℓ is not too centrist. In turn, we can make two broad observations. First, a moderate g wants access to a range of relatively more extreme politicians on its side of the spectrum, since every effect is beneficial. In contrast, access to slightly more centrist politicians has harmful indirect effects that counteract g 's direct benefit from the target proposal effect.

Refining these observations, proposition 4 shows that moderate groups want to access a range of more extreme politicians and an intermediate range of politicians opposite M but will forgo access to politicians in a relatively more centrist range. Throughout this section, I analyze $\hat{x}_g > 0$ without loss of generality.

Proposition 4. If $\hat{x}_g \in (0, \bar{x})$, then there are cut points satisfying $-\hat{x}_g < x' < x'' < \hat{x}_g$ such that g forgoes access if $\hat{x}_\ell \in (x'', \hat{x}_g)$ but wants access if $\hat{x}_\ell \in (\underline{\mathcal{X}}(\hat{x}_g), x') \cup (\hat{x}_g, \overline{\mathcal{X}}(\hat{x}_g))$.

First, g wants access to ℓ if (i) they are on the same side of M and (ii) ℓ is more extreme but not too extreme, that is,

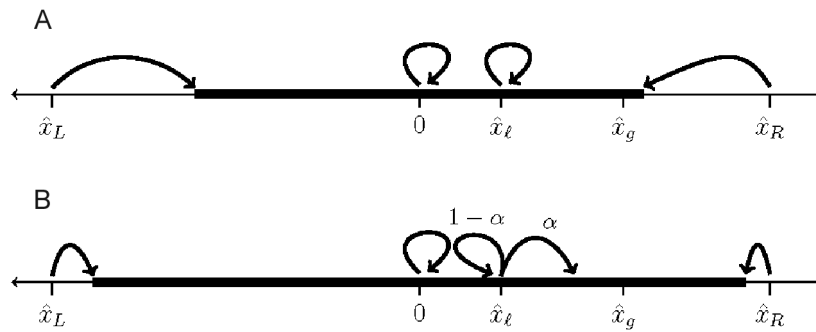


Figure 3. Forgoing access to more centrist legislators. Illustrates why a moderate group, g , forgoes access ($\alpha = 0$) if $\hat{x}_\ell \in (x'', \hat{x}_g)$. A, Equilibrium behavior for $\alpha = 0$; B, $\alpha > 0$. Bold intervals are the acceptance set. Increasing α makes lobbying more likely, which worsens M 's expectations and expands the acceptance set, as shown in B. Thus, partisan proposals are more extreme. If \hat{x}_g and \hat{x}_ℓ are close, then the loss from more extreme partisan proposals dominates and g prefers $\alpha = 0$.

if $\hat{x}_\ell \in (\hat{x}_g, \bar{\mathcal{X}}(\hat{x}_g))$. In this case, g benefits from every effect of increasing α . If it lobbies, then it will pay weakly less for the same policy. And even if it does not lobby, M 's reservation value will increase and thereby shrink A^* , with the resulting partisan proposal effect always benefiting g because $\hat{x}_g \in A^*$ for all α in this case.

Additionally, g wants access if ℓ is in an intermediate interval on the opposite side of M . Specifically, if $\hat{x}_\ell \in (\mathcal{X}(\hat{x}_g), -\hat{x}_g]$, then g is strictly inside A^* at $\alpha = 0$. Since A^* will shrink as α increases, again every effect of increasing α from 0 will benefit g . And even if ℓ is slightly more centrist (i.e., $\hat{x}_\ell \in (-\hat{x}_g, x')$), then g 's expected gain from the target proposal effect outweighs any expected loss from the other effects.

Next, g forgoes access if ℓ is on the same side of M and slightly more centrist; that is, $\hat{x}_\ell \in (x'', \hat{x}_g)$. In this case, g will be strictly inside A^* at $\alpha = 0$ and therefore dislike the extreme proposal effect, which shifts partisan proposals outward as depicted in figure 3. Crucially, if ℓ and g are close enough, then this negative extreme proposal effect dominates the other effects of access.

Intuitively, lobbying will not shift ℓ 's proposal very much and g 's payoff is not very sensitive to those changes, so the direct benefit is small. Meanwhile, M is more sensitive to those changes, and the acceptance set expands enough that the negative extreme proposal effect is relatively larger.²² Notably, this

case exists for any distribution of proposal power in which L or R is recognized with positive probability. Thus, nonzero partisan proposal power is crucial for g to forgo access, but the magnitude and relative recognition probability of L and R only affect the size of this range.

Finally, in general g 's preference for access is unclear if ℓ is in a centrist range; that is, $\hat{x}_\ell \in (x', x'')$. In this case, the effects of access conflict, as in the previous case, but the overall effect now depends on partisan recognition probability, specifically either their total or relative magnitude. A stark example is when g is not in A^* at $\alpha = 0$. Then, the extreme proposal effect of increasing α from 0 depends on the relative magnitude of ρ_L and ρ_R , since one partisan proposal becomes less favorable for g and the other more favorable.

Whom do extreme groups want to access?

Like moderate groups, extreme groups have clear preferences over access if ℓ is aligned with them and extremist. Unlike moderate groups, however, extreme groups never want access in that case because lobbying will not change ℓ 's proposal. Formally, $\hat{x}_g \geq \bar{x}$ implies $\bar{\mathcal{X}}(\hat{x}_g) = \bar{x}$ in lemma 3, and analogously $\hat{x}_g \leq -\underline{x}$ implies $\underline{\mathcal{X}}(\hat{x}_g) = -\bar{x}$.

A key difference is that, since extreme groups are always outside A^* , the direction of the extreme proposal effect always depends on the relative magnitude of ρ_L and ρ_R , regardless of \hat{x}_ℓ . To overcome this difficulty and shed some light on who extreme groups want to access, proposition 5 focuses on cases in which one partisan is sufficiently weak. Substantively, this could reflect partisan gatekeeping in which extremists on one

22. The indirect effects of access on voting and proposals in this article have connections with spatial models of dynamic bargaining (Baron 1996; Buisseret and Bernhardt 2017; Zápal 2020). There, the policy in place at the end of today becomes the status quo tomorrow, so proposers weigh how today's proposal can affect what can pass tomorrow when someone else might have proposal rights. In equilibrium, politicians pass more centrist policies today in order to make centrist veto players less inclined to pass policy in the future, thus constraining the scale of policy changes by potential future proposers on the other end of the spectrum. In this article, policy making ends once a proposal passes, so a group con-

sidering access weighs (i) how it will affect the target's proposal if she is recognized and (ii) how it will affect what happens if the target is not recognized. Since access can indirectly influence which policies pass in equilibrium, incentives to increase or forgo access are affected by a similar desire to constrain potentially extreme proposers.

side of the spectrum are largely excluded from writing policy. Again, I focus on $\hat{x}_g > 0$ without loss of generality.

Proposition 5. Suppose $\hat{x}_g > \bar{x}$.

- i) If ρ_L is small enough, there exists $x' < 0$ such that g wants access if $\hat{x}_\ell \in (x', \bar{x})$.
- ii) If ρ_R is small enough, there exists $x'' \geq -\bar{x}$ such that g wants access if $\hat{x}_\ell \in (\underline{X}(\hat{x}_g), x'')$.
- iii) If $\hat{x}_\ell \geq \bar{x}$, then g does not want access.

In i, g 's opposing partisan is unlikely to propose, so g wants access to a range of moderate politicians including all right-leaning moderates and sufficiently centrist opponents. As long as ℓ does not lean too far leftward, increasing access will worsen M 's expectations about future policy and thus expand A^* . Although L 's proposal gets worse for g , she is unlikely to propose, so that downside is outweighed by the prospect of better proposals by ℓ and R .

In ii, g 's aligned partisan is unlikely to propose, and it wants access to opponents (except those extreme enough to make lobbying trivial) and, if the lobbying surplus is large enough, potentially also to sufficiently centrist-aligned moderates. The logic is symmetric to the previous case.

Proposal power and the value of access

Thus far, I have focused primarily on how ideology affects g 's incentives to acquire access to ℓ , while noting how partisan proposal power can play a role in those incentives. In this section, I focus on the effects of the target's proposal power. Specifically, I study how ℓ 's recognition probability (ρ_ℓ) affects g 's *willingness to pay* (WTP) for access, that is, the marginal effect of α on g 's equilibrium value in (4).

Empirical evidence suggests that interest groups prioritize access to legislators who have more proposal power, and it is typically taken for granted that greater proposal power makes access more valuable.²³ Yet, the preceding analysis highlights a potentially important subtlety. Although ρ_ℓ increases g 's expected lobbying benefit from access, it also amplifies the (possibly negative) extreme proposal effect. Proposition 6 establishes that, despite these potentially competing effects, the standard intuition holds in this article—if g wants access to ℓ , then g 's WTP for access weakly increases with ρ_ℓ .

Proposition 6. All else equal, the interest group is willing to pay more for access if the target politician has higher recognition probability.

Proposition 6 is a stark result, reflecting the robustness of the empirical finding that groups prioritize politicians with greater proposal power. It does not depend on the policy preferences of ℓ or g , partisan proposal power, patience, or the status quo. Although these other factors can cause ρ_ℓ to have competing effects, the overall effect is always proportional to ρ_ℓ whenever g 's WTP is strictly positive. Since proposition 6 effectively conditions on g wanting access to ℓ , g 's WTP either increases in ρ_ℓ or remains at 0. If g happened to have access to ℓ that it did not want and could act to decrease it, then higher ρ_ℓ increases g 's WTP to reduce α_ℓ . Regardless, higher ρ_ℓ increases g 's marginal value of changing α_ℓ in g 's preferred direction, whether that is more access or less.²⁴

DISCUSSION

Several of the main findings have implications for empirical studies of access. Broadly, they suggest that a more complete empirical picture of outside influence requires (i) measuring access in addition to lobbying, (ii) accounting for spillover effects that targeted access can have on other actors and behaviors, and (iii) carefully examining empirical relationships between lobbying expenditures and access targeting.

A key finding is that interest groups can influence behavior merely by having access that could lead to lobbying. That is, no lobbying does not imply no influence. This counters the widespread view that access has no influence by itself (e.g., Wright 1989). Moreover, it reinforces recent critiques emphasizing that empirical relationships between political outcomes and lobbying activity may not provide valid estimates of interest group influence without accounting for influence that does not flow through active lobbying (Finger 2019; Lowery 2013; Powell 2014).

Three additional findings flesh out this point and suggest potential ways that access data can supplement lobbying data to provide a more complete picture of influence. First, I find that targeted access can also influence behavior by nontargeted politicians. Thus, attempts to recover causal effects of access must be especially clear about their estimand and how they can convincingly estimate it with their data. Even if access can be randomized, my analysis highlights how equilibrium effects can (i) prevent expectations about future proposals from being held constant by such randomization and (ii) generate spillover

23. This is one of the most prominent stylized facts about outside influence and is supported by two robust empirical regularities: (i) legislators on important committees, especially committee chairmen, attract more contributions (Berry and Fowler 2018; Fourniaies 2018), and (ii) lobbyists connected to those legislators command a premium (Blanes i Vidal et al. 2012).

24. I thank an anonymous reviewer for encouraging discussion of this point.

effects that would violate the stable unit treatment value assumption (see, e.g., Imbens and Rubin 2015). Although some scholars have informally noted potential spillovers, I formally derive and trace a channel that flows entirely through legislative considerations.²⁵

Second, by analyzing that channel, I find that access can affect not only policy proposals and votes on those proposals but also lobbying expenditures. Parsing this effect has implications for observed measures of access and lobbying expenditures, as well as how potential regulations might “only redirect the flow of money into politics without greatly lessening it” (Powell 2014, 90). Notably, empirical relationships between measures of access and average lobbying expenditures (across group-legislator pairs) can be misleading if they do not account for relative extremism. For groups connecting to more extreme politicians, my analysis suggests (i) a negative correlation between lobbying expenditures and access and (ii) that regulating access will redirect money to increase spending on lobbying. For groups connecting to centrists, my analysis suggests (i) a positive correlation between lobbying expenditures and access and (ii) that regulating access will also decrease lobbying expenditures. Finally, this finding also highlights how a group’s lobbying spending can change without any change in its lobbyist’s effectiveness at shifting policy.

Third, by accounting for these various effects of access, I find that interest groups may crave access to some politicians but be wary of access to others. This finding has implications for Tullock’s puzzle, the empirical regularity that groups do not spend that aggressively for access (Ansolabehere et al. 2003; Tullock 1972). Given evidence that groups can increase access in various ways and the standard intuition that groups want more influence, why do they not spend more? I provide a new logic that emphasizes legislative considerations, unlike existing explanations that emphasize costs or competition (e.g., Chamon and Kaplan 2013). A key consideration is that increasing your potential for influence can affect what happens if that potential is not realized—an unfavorable effect discourages access, whereas a favorable effect increases the bang for the buck. Either way, these effects suggest that groups may spend less on access-seeking behaviors than expected and that they may not spend anything to target slightly more centrist politicians.

CONCLUSION

I analyze a model of legislative policy making in which access provides interest groups with opportunities to lobby policy proposals. The equilibrium analysis sheds new light on the consequences of this prominent form of access by

showing how it can endogenously affect voting, proposals, and lobbying. It does so by changing each legislator’s expectations about policy making and thereby changing which policies can pass in equilibrium. Essentially, the potential for future lobbying can influence today’s proposal and lobbying expenditures.

The analysis also sheds light on how much access interest groups want to particular legislators who may be involved in writing policy. Moderate groups forgo access to a range of more centrist legislators since such connections endogenously increase policy extremism enough to outweigh the perk of better lobbying prospects. Yet, these groups crave access to more extreme legislators because it facilitates lobbying and also reduces policy extremism.

By developing our theoretical expectations for the consequences of a link between access and lobbying proposals, I highlight how such a link can affect policy and shape observed data. The analysis here emphasizes how such access can have indirect effects because of legislative considerations, that is, what other politicians will vote for and what they will propose if given the opportunity. Although the channel I emphasize is prominent, other important channels are likely present in various situations. Whenever we cannot disentangle multiple channels empirically, we need to be aware that they may oppose or complement each other. To understand these relationships and potentially suggest avenues to disentangle various influence tactics, future work should study how the legislative forces highlighted here interact with other channels of outside influence such as vote buying, informational lobbying, and efforts to influence who gets elected.

For example, consider lobbying to influence votes, or “vote buying.” Although I abstract from it in order to isolate lobbying over policy details, the analysis can inform how access to proposers strengthens or weakens incentives to buy key votes. First, however, note that groups may not want vote-buying capabilities *ex ante*, for reasons analogous to those encouraging strategic delegation in spatial settings (e.g., Gailmard and Hammond 2011; Klumpp 2007)—forgoing vote buying can constrain some potential proposers in a way that benefits the group. Then, the analysis here can apply directly. Second, access to a potential proposer affects how willing veto players are to reject proposals and therefore changes the cost of influencing votes. For example, accessing a slightly more centrist politician increases the group’s cost of shifting the opposite end of the acceptance set inward, but it also decreases the cost of shifting the closer end outward. Yet, as in the main analysis, *ex ante* a moderate group wants to constrain extremists on both ends. I show in appendix E that proposition 4 extends to a setting with lobbying over votes. Future work should more fully analyze lobbying votes, lobbying policy, and incentives for access.

25. For example, Kalla and Broockman (2015) suggest that other politicians might act differently with the hope of attracting donations from the group as well.

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