Lobbyists as Gatekeepers: Theory and Evidence*

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Abstract

Lobbyists are omnipresent in the lobbying process, but the value that they bring to both clients and politicians remains poorly understood. We develop a model in which a lobbyist’s value derives from his ability to selectively screen which clients he brings to a politician, thereby earning the politician’s trust and preferential treatment for his clients. Lobbyists face a dilemma, as their ability to screen also increases their value to special interests, and the prices they can charge. A lobbyist’s profit motive undermines his ability to solve this dilemma, but an interest in policy outcomes—due either to a political ideology or a personal connection—enhances it, which paradoxically increases his profits. Using a unique dataset from reports mandated by the Foreign Agents Registration Act, we find that lobbyists become more selective when they are more ideologically aligned with politicians, consistent with our prediction.

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“If a firm had a client with demands which went against your philosophy, do you feel you could still work hard for that client?”
“I couldn’t do it for all the money in the world.”
“Then as far as I’m concerned, you’re hired!”

—Capitol Punishment, by Jack Abramoff (2011)

1 Introduction

Since at least the mid-18th century, professional lobbyists have been a constant and much vilified feature of the American political landscape. Walt Whitman colorfully described them as “crawling, serpentine men” (Allard 2008). Echoing this common view, former President Obama decried “the lobbyists... and special interests who’ve turned our government into a game that only they can afford to play.”\(^1\)

The contemporary academic literature is divided between this popular *quid pro quo* view of lobbying (Snyder 1991, Grossman and Helpman 1994) and a more sanguine *informational* view, which posits that lobbying is a process through which better informed but biased interest groups communicate policy-relevant information to less-informed politicians (Potters and van Winden 1992, Austen-Smith 1995, Cotton 2012, Schnakenberg 2017).\(^2\) Closely related to this informational view is an influential theory that lobbying is predominantly a “legislative subsidy” intended to reduce a legislator’s staff costs of promoting a particular policy (Hall and Deadorff 2006, Ellis and Groll 2020, Baumgartner et al. 2009).

Notably absent from most prominent theories, however, are the *lobbyists themselves* – who are usually treated as passive participants in the process, when they are considered at all.\(^3\) This is peculiar given that interest groups spend significantly more money paying lobbyists than on campaign donations (de Figueiredo and Richter 2014), which belies the common belief that lobbyists simply facilitate *quid pro quo* exchanges between politicians and interest groups. In contrast, a recent empirical literature on the lobbying industry


\(^{2}\)Some works combine these perspectives, e.g. Schnakenberg and Turner (2019).

\(^{3}\)Some informational theories model lobbyists as anonymous repositories for “burnt money” that increases the credibility of an interest group’s “signal” (Lohmann 1995, Gordon and Hafer 2005).
has uncovered two striking empirical regularities. First, there is considerable variation in the wages of individual lobbyists that can be partially explained by their personal and professional connections (Blanes i Vidal, Draca and Fons-Rosen 2012, Bertrand, Bombardini and Trebbi 2014). Second, like most participants in the policy process lobbyists appear to be highly ideological – at least as reflected by their campaign giving patterns (Koger and Victor 2009) and personal employment histories (Kingdon 1989).

In this paper we propose a new theory of lobbyists that explains their role in the process, is consistent with these empirical regularities, and generates new testable predictions. Our starting point is that what politicians predominantly lack is not expertise, but time – the time to investigate, and confidently determine, whether fulfilling a policy request by a special interest group (SIG hereafter) is in their political or ideological interests (Levine 2008). Because politicians are busy and understaffed (Baumgartner and Jones 2015, Curry 2015), lobbyists can potentially “subsidize” them by selling their own time and expertise to make this determination. In other words, a lobbyist can vet an SIG’s policy request on the politician’s behalf, and then sell his certification of its merits to the SIG. However, even disgraced-former-lobbyist Jack Abramoff understood that a lobbyist is of little use to a politician, or his clients, unless his claims can be believed. Thus, he cannot be precisely the sort of “hired gun” that popular accounts of lobbying describe. Instead, his ability to gain and sell access must be predicated on his ability to, at least sometimes, resist the temptation to represent a client whose request would not be in the politician’s interest to fulfill.

We capture these ideas in a model as follows. A SIG seeks a policy favor from a politician, but the politician initially doesn’t know the favor’s exact political merits – i.e., the extent to which granting it is in her own political or ideological interests. The SIG can undertake costly lobbying to try and “signal” these merits to the politician – or, it can hire a lobbyist

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4 See Martin and Peskowitz (2018) for similar work using campaign consultants.
5 For a review of the large literature on paid certification, see Dranove and Jin (2010). Three features of our model jointly distinguish it from previous works. First, both the principal and the third party lack commitment power. Second, the third party cares about both their wages and the outcome. Third, we combine a certifier with an principal that may audit recommendations.
to do so on its behalf. In exchange the lobbyist demands a fee, which may depend on the merits. The politician then makes a decision about the favor, either by relying on what she has learned from lobbying (or its absence), or by investigating the merits on her own.⁶

In the model a credible signal of merit can benefit the SIG in two ways – by influencing how often the politician investigates its request, and by inducing her to sometimes grant it even absent an investigation. A professional lobbyist can thus bring value by acting as a conduit through which the SIG can more accurately signal the merits of its request. However, this means that the lobbyist’s ability to make money depends on his ability to be selective. Absent this ability he cannot gain the politician’s trust, absent trust he cannot obtain preferential treatment for his client, and absent preferential treatment he has nothing to sell. Conversely, the extent of his selectivity determines whether he can develop access, how frequently he employs his access, and the profits he enjoys from doing so.

What, then, determines a lobbyist’s ability to be selective and gain a politician’s trust? Lobbyists themselves assert that “a lobbyist is only as good as his reputation,”⁷ but this simply begs the question by asserting that politicians trust lobbyists whom they deem to be trustworthy. That is, what traits help some lobbyists, and not others, develop reputations and gain the trust of a particular politician? Inspired by the empirical literature, we consider the personal connections that lobbyists form with politicians through prior relationships, and the personal ideologies that they bring to their work. The central insight of our model is that a lobbyist’s personal connection to or ideological alignment with a politician facilitates his ability to be selective by reducing his temptation to trade on his credibility. The empirical implications are that such traits should be positively associated with the both presence of relationships and the fees commanded from exploiting them, but negatively associated with the frequency with which these relationships are actually exploited on behalf of clients.

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⁶In this feature our model is related to a large literature in which a principal can employ costly auditing to verify an agent’s actions or information; political science applications include arms control (Avenhaus, Von Stengel and Zamir 2002), legislative oversight (Banks 1989, Strayhorn, Carrubba and Giles 2016), imperial governance (Gailmard 2019), and the judicial hierarchy (Kastellec 2017).

To test the model we construct a unique dataset from reports mandated by the Foreign Agents Registration Act (FARA), which governs lobbying by foreign interests. Although access has been a central issue in the lobbying literature (Wright 1990, Hojnacki and Kimball 1998, Schnakenberg 2017, Judd 2018), the dearth of information about direct contacts has been a key empirical challenge (de Figueiredo and Richter 2014). A unique advantage of FARA reports is that they contain detailed contact data, in contrast to reports mandated by Lobbying Disclosure Act (the counterpart statute for domestic lobbying); each contact record specifies the name of the contacted individual, the method by which the individual was contacted, and the issues discussed. Our dataset thus captures both which lobbyists access which politicians, and the extent to which they actually utilize that access.

Our resulting database contains over 7,000 contacts made to members of Congress and their staffers by 223 unique lobbyists on behalf of foreign governments during the 110th and 111th Congresses. We augment this data with information on the lobbyists’ career histories, party affiliations, and campaign contributions to develop three measures of a lobbyist-politician pair’s ideological alignment – their difference in party affiliations, CF scores based on campaign contributions (Bonica 2016), and DW NOMINATE scores (for politicians- or staffers-turned-lobbyists). We find that by all three measures, the more aligned is a lobbyist-politician pair, the more likely is the pair to have at least one contact (or be active) during the period of study. Moreover, there is a fee premium for contacting an ideologically-aligned politician – while one additional contact listed in a report is associated with a 0.3–0.4% increase in the reported lobbying fee, an ideologically aligned contact brings an additional 0.5–0.6% fee increase. Both findings are consistent with our theory’s predictions that ideological alignment facilitates access and generates profit, but do not speak directly to the mechanism through which it does so. Crucially, however, we also find that among active lobbyist-politician pairs, the more ideologically aligned is a pair, the fewer clients the lobbyist brings to a politician. In other words, ideological alignment indeed appears to facilitate access and generate profit by inducing lobbyists to be more selective. Interestingly, we also
find lobbyists who have prior government experience (for example, as a member of Congress or a staffer) are also substantially more selective than those who do not.

Overall, our paper contributes to both the theoretical and empirical literatures on lobbying. Theoretically, we develop a model in which lobbyists act as independent intermediaries between politicians and SIGs, and use it to generate predictions about how lobbyists’ traits influence their access, contact patterns, and fees. These features distinguish our model from Groll and Ellis (2014; 2017) – where lobbyists also act as paid certifiers but are undifferentiated in their traits – and by Awad (Forthcoming) – where legislators (rather than lobbyists) act as (unpaid) intermediaries. Empirically, we provide the first systematic evidence on the allocation of politicians’ access by creating a large database of lobbying contacts, and find that this evidence is consistent with our theory. Overall, our findings run counter to the popular notion of lobbyists as exploiting their access, and instead support the supposition that lobbyists’ ability to be selective plays a key role in the service that they provide.

2 A Theory of Lobbying as Certification

2.1 The Model

There are three players: a politician $P$ (“she”), a special interest group (SIG) $S$ (“it”), and a lobbyist $L$ (“he”). The SIG seeks a policy favor from the politician, whose final action $A$ may be either to grant the favor ($A = G$) or not to ($A = NG$). In the game, the SIG will have the opportunity to either solicit the politician for the favor directly or transmit its request through the lobbyist on a fee-for-service basis.

Should the favor be granted, the SIG earns a fixed and commonly known benefit $\pi$. However, the exact payoff consequences of granting the policy favor for the politician and the lobbyist depend on a state of the world $\omega \in R$ that is initially unknown to the politician. She (or her staff), however, have the capacity to investigate at some cost and learn the state’s true value, a property to which we later return.

Intuitively, $\omega$ captures the extent to which granting the favor to the SIG also benefits
the politician. For example, the favor may be a reduction in a tariff, and a higher \( \omega \) means that that more manufacturers in the politician’s district are able to import inputs at a lower costs and become more competitive. Or, the favor may be an intervention with a regulator to prevent an environmental rule affecting the SIG’s production, with \( \omega \) capturing the number of district jobs that will be lost if the rule is implemented. The state may also reflect the political consequences of granting the favor; for example, the favor may be a public statement of support for the SIG, with \( \omega \) capturing how favorably the politician’s constituency will respond.

**Preferences of the Politician** The politician seeks to make the correct policy decision while minimizing her investigation costs. Her utility takes the form \( \delta_P U_P(A; \omega) + t \), where \( t \) captures her costs of investigating, and \( \delta_P \) reflects the strength of her desire to make a “correct” policy decision relative to minimizing investigation costs. Her policy utility \( U_P(A; \omega) \) over actions and states takes the form,

\[
U_P(A; \omega) = \begin{cases} 
\frac{\omega-P}{2} & \text{if grant}, \\
\frac{P-\omega}{2} & \text{if not grant}.
\end{cases}
\]

The higher the state is, the better off is the politician granting the favor, and (in an abuse of notation) \( P \) denotes her *threshold* for preferring to do so. We term a SIG whose case is above the politician’s threshold \( (\omega \geq P) \) as *worthy*, and one whose case is below the politician’s threshold \( (\omega < P) \) as *unworthy*. The politician’s net benefit for making the correct policy decision (granting the favor to the SIG if and only if it is worthy) is \( \delta_P \cdot |P - \omega| \), so the further is the state from her threshold the more she benefits from choosing correctly. Lower values of the threshold \( P \) imply that the politician is more permissive of the SIG – in the sense that \( \omega \) does not need to be as high for her to be willing to grant the favor – while higher values of \( P \) imply that she is more demanding. These policy preferences could reflect the politician’s personal ideology, relationship with other actors, the parameters of the favor, and/or publicly available information about the SIG and its request.
Preferences of the Lobbyist  As in standard models of intermediaries, the lobbyist values profit (see for example Lizzeri (1999), Bolton, Freixas and Shapiro (2012)). This consists of the payment he receives to lobby net of the cost of access, and is denoted by $t$. Distinct from previous models, however, the lobbyist is also policy-motivated, in the sense that he also intrinsically cares about the policy outcome. This portion of his utility is denoted $U_L (A; \omega)$, and takes the same form as $U_P (\cdot)$ except that the lobbyist has his own distinct threshold $L$ for preferring the favor to be granted. The lobbyist’s overall utility from both profit and policy is $\delta_L \cdot U_L (A; \omega) + t$, where $\delta_L \geq 0$ reflects the strength of his policy motivations relative to profit. A lobbyist with $\delta_L = 0$ is purely profit-motivated.

The lobbyist’s intrinsic policy-motivations could arise from a variety of sources. In our analysis we focus on two in particular. The first is a personal connection to the politician, which leads the lobbyist to care (at least in part) that policy outcomes serve her interests. A stronger personal connection to the politician would manifest in the model as both a lobbyist threshold $L$ closer to the politician’s threshold $P$, and a larger weight $\delta_L$ on policy outcomes relative to profits. The second source is a political ideology, which could result in a lobbyist threshold $L$ that is both more demanding of ($L > P$) or more permissive of ($L < P$) the SIG than the politician. In either case, more ideologically-aligned lobbyists and politicians will have closer thresholds, and a more ideologically-motivated lobbyist will have a higher $\delta_L$.

2.1.1 Sequence of Play

At the start of the game, nature chooses whether the lobbyist is “open for business”—that is, available to work with the SIG—with an exogenous probability $\lambda \in (0, 1)$. Nature next
draws \( \omega \) from a uniform distribution over \([0, \bar{\omega}]\) where \( \bar{\omega} \geq 1 \), and reveals it to the SIG and the lobbyist, but not the politician. The assumption that both the lobbyist and SIG know the state is made to abstract away from potential aspects of a lobbyist’s services—such as information provision to the SIG—other than “screening for hire.” We further assume that the ex-ante expectation of the state, \( \frac{\bar{\omega}}{2} \), is below the politician’s threshold \( P \) for granting the favor, implying that the politician prefers to deny the favor based on her priors alone. The game then proceeds in two stages.

Representation Stage  At the representation stage, the lobbyist first posts a fee \( F \geq 0 \) to lobby on behalf of the SIG. The posted fee is a take-it-or-leave-it offer; if the SIG accepts then the lobbyist is obligated to represent it by paying an exogenous access cost \( k \) to contact the politician, and if the SIG declines then the lobbyist is obligated not to. If the SIG declines representation, or if the lobbyist was unavailable, the SIG may lobby directly (also at cost \( k \)) or do nothing. We have assumed that the SIG and lobbyist have the same cost of access, again to abstract away other aspects of a lobbyist’s services than screening-for-hire.

Decision Stage  At the decision stage, the politician decides both whether to conduct her own investigation into the SIG’s case and learn the state’s true value, and whether to grant the policy favor or not. At the time the politician makes both decisions she observes whether she was lobbied and by whom, but not the details of the representation contract offered and potentially accepted. The politician’s cost of conducting her own investigation \( c_P \) is uniformly distributed over \([0, \bar{c}_P]\); this cost is revealed to \( P \) when she decides whether to investigate, but is unknown to the other players. Whether or not the politician conducts an investigation, she then makes a final decision \( A \in \{G, NG\} \) over whether to grant the policy favor and the game ends.

2.2  Form of Equilibrium

Since the full strategy space is complex, we first describe the simplified form of strategy profiles we consider. After doing so we explain our justification.
Remark 1. We consider strategy profiles described by (1) a posture $\phi_p$ and review threshold $\phi_p$ for each $c \in \{\ell, d, \emptyset\}$ for the politician, (2) a type-dependent willingness to pay for representation $F^T$ with $T \in \{U, W\}$ and direct-lobbying threshold $\omega_d \in (0, \bar{\omega})$ for the SIG, and (3) a representation threshold $\omega_\ell \in [0, \bar{\omega}]$ for the lobbyist.

1. The politician sees if she was contacted by the lobbyist ($c = \ell$), lobbied directly ($c = d$), or not lobbied ($c = \emptyset$). After observing this channel of contact $c$ she reviews the SIG if $c_p \leq \phi_p$, and otherwise grants the favor with probability $\alpha_p$.

2. The SIG accepts an offer of representation with price up to $F^U$ if it is unworthy ($\omega < P$) and $F^W$ if it is worthy ($\omega \geq P$). If it declines representation it lobbies directly if and only if $\omega \geq \omega_d$.

3. The lobbyist charges the SIG’s (type-contingent) willingness to pay if $\omega \geq \omega_\ell$, and some strictly higher price otherwise.

The form of the strategies is depicted in Figure 1. The x-axis describes the state $\omega$. The y-axis describes whether the lobbyist is available (with probability $\lambda$) or busy (with probability $1 - \lambda$). For the purpose of visualization, the y-axis can be thought of as depicting the realization of a random variable uniformly distributed on $[0, 1]$ that determines whether the lobbyist is available (if it is below $\lambda$) or busy (if it is above $\lambda$). The area of the rectangle where a given sequence of events occurs thus visually depicts the probability of that event.

We now describe each component in turn.

Politician When called to play, the politician bases her decisions on her own realized costs of review $c_p$ (intuitively, how busy she is at that moment), and on whether she observed lobbying mediated by the lobbyist, direct lobbying, or no lobbying at all. We refer to these as the three possible channels of contact, and denote them as $c \in \{\ell, d, \emptyset\}$ respectively. (We sometimes call no lobbying the null channel.) For each potential channel of contact and realized cost of review $c_p$, the politician makes two decisions – first, whether to review to
learn the true value $\omega$, and second, whether to grant the policy favor (based on the true value of $\omega$ if she reviewed it, and on her inference from the contact channel if she did not).

In equilibrium, the probability the politician grants the favor on each channel $c$ if she does not review does not depend on $c_P$. We thus denote this probability $\alpha_P^c \in [0, 1]$ and term it the politician’s posture toward channel $c$. If $\alpha_P^c = 1$ (she will grant the favor absent a review) we call her posture fully favorable toward channel $c$. If $\alpha_P^c \in (0, 1)$ (she will sometimes grant the favor absent a review) we call it somewhat favorable. If $\alpha_P^c = 0$ (she will deny the favor absent a review), we call it adversarial. Intuitively, the politician’s posture toward a channel reflects how likely she believes that a SIG who contacted her on that channel is worthy.

Next, the politician’s initial review decisions on each channel $c$ are described by a threshold $\phi_P^c$; the politician reviews, learns the true value of $\omega$, and decides accordingly if and only if her realized review costs $c_P$ are below this threshold. From the perspective of the other players (who don’t know how busy the politician is at any given moment), the probability the politician will conduct her own review after contact on channel $c$ is $\phi_P^c/c_P$. The equilibrium value of these thresholds reflects the politician’s uncertainty about whether her default pos-
ture is correct; the more uncertain she is, the greater is the benefit to learning the state and the higher is the threshold.

SIG When called to play the SIG either finds the lobbyist available, or too busy to take its case. If the lobbyist is available and names a price $F$, the SIG must decide whether to accept it; if it declines, it must also decide whether to instead lobby directly or not (“stay home”). Alternatively, if the SIG found the lobbyist initially unavailable, then it must only decide whether or not to lobby directly.

The politician’s review and posture strategies $(\phi^c_P, \alpha^c_P)$, combined with whether the SIG’s case is worthy ($\omega \geq P$) or unworthy ($\omega < P$), jointly determine the probability that pursuing each channel will yield the favor, and hence each channel’s value. The value of the lobbyist’s representation is thus the difference between the value of the lobbyist channel and the maximum of the direct and null channels. Because the lobbyist makes a take-it-or-leave-it offer, equilibrium requires that the SIG accept any offer weakly below its value. We denote this value $F^U$ for an unworthy SIG, and $F^W$ for a worthy SIG. Lastly, should the SIG find itself without representation (either because it rejected the lobbyist’s offer, or because the lobbyist was too busy), it will lobby directly if and only if $\omega \geq \omega_d$ and otherwise stay home.

Lobbyist When called to play, the lobbyist names a price $F$ to represent the SIG as a function of the state $\omega$. Because the lobbyist makes a take-it-or-leave-it offer, the price he charges an SIG type represented in equilibrium must exactly equal that type’s maximum (type-dependent) willingness to pay $(F^W, F^U)$. We further consider equilibria in which the types of SIGs represented by the lobbyist is described by a representation threshold $\omega_e$; that is, when the SIG’s case is above this threshold the lobbyist demand its maximum willingness to pay (which is accepted), and when it is below this threshold the lobbyist charges a strictly higher price (which is rejected).

The representation threshold $\omega_e$ reflects the lobbyist’s selectivity in representing the SIG; a higher $\omega_e$ implies a more selective lobbyist. The lobbyist’s selectivity, in turn, determines his credibility with the politician. Specifically, it determines how strongly his representation
signals that the client is worthy, which in turn both improves the politician’s posture $\alpha^\ell_P$ toward his client (how likely she is to grant the favor outright absent a review) and decreases the probability $\frac{\phi^l_P}{\bar{\epsilon}_P}$ the politician will subject the client to review. These quantities then determine how likely the lobbyist is to secure the favor for the client, and thus the value of his services, $(F^W, F^U)$.

**Assumptions** Our strategy profiles incorporate three assumptions that are not without loss of generality (see Appendix for details). The first is that whether or not the SIG lobbies directly absent representation does not depend on exactly how it found itself without representation – i.e., whether the lobbyist was unavailable or charged too much. This assumption eliminates equilibria in which the lobbyist’s representation (or the lack thereof) is artificially sustained by manipulating the SIG’s off-path direct lobbying strategy. The second is that the SIG’s direct lobbying strategy is described by a threshold $\omega_d$ – the justification is that we have assumed the SIG to have state-independent preferences for simplicity, but were it to place any weight on $\omega$ its strategy would take this form. The third is that the lobbyist’s strategy is described by a threshold $\omega_\ell$. The justification is that this property holds in any equilibrium with the following natural feature: that using the lobbyist strictly increases the odds of acquiring the favor for an SIG who would otherwise lobby directly.

### 2.3 Profit-Motivated Lobbyists

We first discuss equilibrium when the lobbyist is purely profit-motivated.

**Proposition 1.** When the lobbyist is purely profit-motivated ($\delta_L = 0$),

- $\omega_\ell = \omega_d = 2P - \bar{\omega}$,

- $\phi_P^0 = \alpha_P^0 = 0$, $\phi_P^d = \alpha_P^d = \frac{\bar{\omega} - \bar{\epsilon}_P}{4}$ and $\alpha^\ell_P = \alpha_P^d = \left(\frac{k}{\bar{\omega}}\right) / \left(1 - \frac{\phi_P^\ell}{\bar{\epsilon}_P}\right)$,

- $F^U = F^W = k$.

In equilibrium, the lobbyist and the SIG use identical lobbying thresholds (which are strictly below the politician’s ideal threshold $P$) to decide whether to contact the politician.
The absence of lobbying is thus a perfect signal that the favor should be rejected, and after this the politician neither reviews nor grants. When lobbied, the politician’s review behavior and posture are identical regardless of how she is lobbied, so there is zero value to the lobbyist’s representation. Thus, when the lobbyist represents a client in equilibrium, he only charges the cost of lobbying $k$ and makes no profit. Two key properties of the model drive this equilibrium.

The first is that a version of the game without the lobbyist is a standard costly signaling game. Thus, direct lobbying can communicate information even without the lobbyist’s help, but it cannot be too effective at securing the favor. Equilibrium specifically requires that an unworthy SIG ($\omega < P$) be indifferent between lobbying directly and staying home so that such types partially separate. This is accomplished by having an unrepresented SIG lobby directly if and only if $\omega_d \geq 2P - \bar{\omega}$, which makes the politician indifferent between granting and denying the favor absent review, and allows her to adjust her posture $\alpha^d_P$ to be just favorable enough to make an unworthy SIG indifferent over lobbying directly.

The second is that the lobbyist cannot lobby more selectively on behalf of the SIG than the SIG lobbies on its own. If he did, then an unworthy SIG would be strictly more likely to acquire the favor via the lobbyist than via direct lobbying, and the lobbyist would extract strictly positive profits from representing it. But if this were so, then the lobbyist—being purely profit motivated—would be unable to resist the temptation to always represent an unworthy client, losing all his credibility and influence with the politician. Equilibrium thus requires that he make no profit representing an unworthy client, which further implies that he cannot lobby more selectively than the SIG does on its own, is no more likely to secure the favor for the SIG than the SIG is on its own, and cannot charge above cost for his services.

### 2.4 Policy-Motivated Lobbyists

We next present equilibrium with a policy-motivated lobbyist ($\delta_L > 0$).

**Proposition 2.** Suppose $\delta_L > 0$. If $L \notin \left[2P - \bar{\omega}, \bar{\omega} + \frac{\pi}{\delta_L}\right]$, then the lobbyist never represents the SIG. Otherwise, $\omega_L = \max \left\{ L - \frac{\pi}{\delta_L}, 2P - \bar{\omega} \right\}$ and:
1. $\omega_d = P - \sqrt{(1 - \lambda)(\bar{\omega} - P)^2 + \lambda(P - \omega_d)^2}$, which is in $[2P - \bar{\omega}, P]$.

2. $\phi_P^\emptyset = 0$, $\phi_P^\ell = \frac{(\max\{P - \omega_d, 0\})^2}{2(\bar{\omega} - \omega_d)}$, and $\phi_P^d = \frac{\lambda(\max\{\omega_d - P, 0\})^2 + (1 - \lambda)(\bar{\omega} - P)^2}{2(\lambda(\bar{\omega} - \omega_d) + (1 - \lambda)(\bar{\omega} - \omega_d))}$.

3. $\alpha_P^\emptyset = 0$, $\alpha_P^\ell = \min\left\{\frac{k}{\delta_L \max\{2(2P - \bar{\omega} - \bar{\omega} - \frac{\pi}{\delta_L}), 0\}} / \left(1 - \frac{\phi_P^\ell}{c_P}\right), 1\right\}$, and $\alpha_P^d = \left(\frac{k}{\delta_L}\right) / \left(1 - \frac{\phi_P^d}{c_P}\right)$.

4. $F_U = \alpha_P^\ell \left(1 - \frac{\phi_P^\ell}{c_P}\right) \pi$ and $F_W = \alpha_P^\ell \left(1 - \frac{\phi_P^d}{c_P}\right) \pi$.

2.4.1 Representation Decisions

Which lobbyists contact which politicians, and how often? To answer these questions we examine both the “extensive margin” and the “intensive margin” of representation. “Extensive margin” refers to whether a lobbyist operates as an intermediary by at least sometimes offering representation. When this is the case we say that the lobbyist is active. The extensive margin provides insight into which pairs of lobbyists and politicians will have an active relationship. “Intensive margin” refers to the likelihood of representation conditional on the lobbyist being active. The intensive margin provides insight into how often the lobbyist will communicate with a particular politician when they have an active relationship.

The “Extensive Margin” Proposition 2 provides a simple prediction about the extensive margin – the lobbyist will be active if and only if his personal threshold $L$ is sufficiently close to the politician’s threshold $P$, i.e. $L \in \left[2P - \bar{\omega}, \bar{\omega} + \frac{\pi}{\delta_L}\right]$.

An immediate implication is that a lobbyist whose policy motivations derive solely from his personal connection to the politician, or whose political ideology exactly matches the politician’s, is always active ($L = P$).\(^9\) In contrast, for a lobbyist with a distinct political ideology ($L \neq P$) to be active requires that his ideology be sufficiently similar to the politician’s. If he is too opposed to the SIG relative to the politician ($L > \bar{\omega} + \frac{\pi}{\delta_L} > P$) then he will be unwilling to help the SIG on ideological grounds even if he can extract the favor’s full value and the SIG’s case is favorable. Alternatively, if he is too aligned with the SIG

\(^9\)Note, however, that this result partially depends on the assumption that the lobbyist and SIG have equal access costs. When the lobbyist has a cost advantage, his temptation to profit from it may cause the lobbying relationship to break down if his threshold matches the politician.
relative to the politician \((L < 2P - \bar{\omega})\), then his representation will be insufficiently credible to have influence.

**The “Intensive Margin”**  The intensive margin is determined by the exact threshold \(\omega_\ell\) that the lobbyist uses for representation when he is active. Specifically, the higher is \(\omega_\ell\), the more selective is the lobbyist, and so the lower is the probability that he will represent the SIG to the politician. The lobbyist’s calculus when deciding whether to represent the SIG is potentially complex – it depends on the SIG’s case \(\omega\), the influence of his representation with the politician, the politician’s treatment of a SIG that lobbies directly, and what the SIG will do absent representation. Despite this potential complexity, in equilibrium an active lobbyist’s representation threshold is just equal to \(\omega_\ell = \max \left\{ L - \frac{\pi}{\delta_L}, 2P - \bar{\omega} \right\}\).

The reason is as follows. In equilibrium, the lobbyist’s impact on the likelihood that the SIG receives the favor has a proportional effect on both the *price* he can charge and the *policy benefits* (or costs) he experiences.\(^{10}\) Thus, to the lobbyist it is as if his representation is “pivotal” for whether the SIG secures the favor or not. He thus calculates the monetary profit from representation as \(\pi\) (the full value of the favor to the SIG) and the net policy benefit as \(\delta_L(\omega - L)\) (his utility change when the politician goes from denying to granting the favor). He will therefore offer an acceptable contract to the SIG if and only if \(\pi + \delta_L(\omega - L) \geq 0\), and is indifferent over doing so when \(\omega = L - \frac{\pi}{\delta_L}\). An equilibrium with an active lobbyist further requires that the lobbyist be at least minimally selective (\(\omega_\ell \geq 2P - \omega\)); otherwise, the politician will adopt an adversarial posture toward him, and he will be unable to ever acquire the favor for an unworthy client. Thus, an active lobbyist \((L \geq 2P - \bar{\omega})\) with threshold \(L < (2P - \bar{\omega}) + \frac{\pi}{\delta_L}\) must communicate with a politician who has only a somewhat-favorable posture toward her client \((\alpha_P^\ell < 1)\) in order to incentivize her to turn away unworthy clients with \(\omega \in \left[ L - \frac{\pi}{\delta_L}, 2P - \bar{\omega} \right]\).

Figures 2(a) and 2(b) depict the lobbyist’s representation threshold \(\omega_\ell\). The left panel

\(^{10}\)See Appendix for details. This simplification requires the lobbyist and SIG to have identical access costs. Absent this, the basic equilibrium construction would remain the same, but the derivation of equilibrium quantities would be more complex.
shows a lobbyist whose policy motivations arise only from a personal connection, or equivalently, whose ideology matches the politician’s \((L = P)\). The x-axis varies the strength of his policy-motivations \(\delta_L\), which (implicitly) depend on both the strength of his political ideology and his personal connection to the politician. The right panel shows a policy-motivated lobbyist \((\delta_L > 0)\) with a distinct political ideology from the politician \((L \neq P)\) and varies his threshold \(L\). We observe the following.

First, greater policy motivations (higher \(\delta_L\)) make the lobbyist more selective, regardless of the source of those motivations. The model thus predicts somewhat counterintuitively that a more strongly-connected lobbyist will bring the politician fewer clients (provided he has no personal ideology, or one intrinsically more permissive of the SIG than the politician). It similarly predicts that a more ideologically-motivated lobbyist will bring fewer clients. The logic is as follows. Because the lobbyist profits from representation, the marginal client (that is, the one with a case exactly at \(w_\ell\)) is one whom the lobbyist finds distasteful on policy grounds, but who pays just enough to make up for it. Making the lobbyist weigh policy outcomes more (regardless of his exact threshold) thus causes him to reject this distasteful client and be more selective.

Second, the lobbyist becomes more selective as his personal ideology leads him to be
more demanding of the SIG (higher $L$). Without additional assumptions, the model does not generate a simple prediction about whether a lobbyist who is more ideologically distant from the politician will be more or less selective; the answer depends on whether the lobbyist begins more permissive of ($L < P$) or more demanding of ($L > P$) of the SIG. However, to the extent that $\omega$ captures the consequences of granting the favor to the politician, it may be supposed that a lobbyist who is more ideologically distant from the politician in a left-right sense will be less concerned about these consequences, and therefore less opposed to the favor ceteris paribus ($L < P$). We revisit this assumption in the empirical analysis.

2.4.2 Prices

As previously shown, the lobbyist’s personal characteristics ($L, \delta_L$) determine his representation threshold $\omega_r$. In equilibrium, this threshold also determines an unrepresented SIG’s direct lobbying threshold $\omega_d$, by influencing how strongly a lack of representation signals that the SIG is unworthy. These lobbying behaviors in turn determine what the politician infers about an SIG who pursues each channel $c \in \{\ell, d, \emptyset\}$, her posture and investigation behavior toward each channel $(\alpha'_c, \phi'_c)$, and thus the prices $(F^U, F^W)$ he charges to an unworthy and worthy client. We conclude the theoretical analysis by discussing the equilibrium relationship between the lobbyist’s personal characteristics ($L, \delta_L$) and these prices.

Figures 3(a) and 3(b) depict the price that an unworthy (worthy) SIG pays with the solid red (dashed blue) line. The left panel considers a lobbyist who is more demanding of the SIG than the politician ($L > P$), and varies the strength of his policy-motivations $\delta_L$. The right panel varies the lobbyist’s threshold $L$.

**Price for an Unworthy SIG** The price that a represented unworthy SIG pays is $F^U = \alpha'_P \left(1 - \frac{\phi'_P}{\epsilon_P}\right) \pi$. This is just the probability $\alpha'_P \left(1 - \frac{\phi'_P}{\epsilon_P}\right)$ that an unworthy SIG secures the favor via the lobbyist—since it will only do so when the politician fails to review and still grants the favor—times the favor’s value. Although the marginal unworthy SIG will lobby directly absent representation, its willingness to pay for representation omits the value of

---

11The more available the lobbyist is (higher $\lambda$) the stronger is this effect; see Appendix.
Figure 3: Prices as a Function of $(\delta, L)$

\[ \text{Prices as a Function of } \delta \text{ (L > P)} \]

\[ \text{Prices as a Function of } L \text{ (} \delta L > 0 \text{)} \]

direct lobbying because equilibrium requires that this value be 0 – otherwise an unrepresented SIG would not partially separate. It is thus as if an unworthy SIG has no alternative to hiring the lobbyist.

The price that an unworthy SIG pays thus varies in the probability that an unworthy SIG secures the favor via the lobbyist. This probability, in turn, is strictly increasing in $\delta$ and $L$ unless the lobbyist never represents an unworthy SIG in equilibrium ($\omega = L - \frac{\pi}{\delta L} > P$), in which case it is constant and equal to the full value of the favor $\pi$. The reason is that increasing either $\delta$ or $L$ makes the lobbyist wish to be more selective, which induces the politician to treat his client more favorably. This can happen in two ways. First, if the lobbyist is active ($L > 2P - \bar{w}$) but $L - \frac{\pi}{\delta L} < 2P - \bar{w}$, then he represents the largest set of types consistent with an active relationship ($\omega = 2P - \bar{w}$). In this case, increasing $L - \frac{\pi}{\delta L}$ does not change the lobbyist’s threshold $\omega$ or the politician’s review behavior $\phi$, but allows the politician to improve her posture $\phi$ towards the lobbyist’s client while maintaining the lobbyist’s ability to screen. Second, if the lobbyist is already turning away a client at $2P - \bar{w}$ (so $L - \frac{\pi}{\delta L} = \omega > 2P - \bar{w}$), then the politician holds a fully favorable posture ($\phi = 1$); further increases in the lobbyist’s threshold $\omega = L - \frac{\pi}{\delta L}$ then enhance how much representation signals worthiness, which reduces the politician’s review threshold $\phi$, and
increases the probability that an unworthy SIG secures the favor via the lobbyist.

**Price for a Worthy SIG** The price that a represented worthy SIG pays is 

\[ F^W = \alpha_p \left(1 - \frac{\delta_L}{\omega_d}\right) \pi. \]

This is subtly different from the price that an unworthy SIG pays because it is decreasing in the probability \( \frac{\delta_L}{\omega_d} \) that the politician reviews a SIG who lobbies directly, rather than one who is represented by the lobbyist. The reason is that reviews are advantageous for a worthy SIG, who in the course of a review will be discovered to be worthy. A higher probability of review in response to direct lobbying thus improves a worthy SIG’s “outside option,” which in turn decreases its willingness to pay for representation. (Recall that an unworthy SIG, in contrast, is indifferent in equilibrium between lobbying directly and staying home). The price obeys the following comparative statics.

First, when the lobbyist is active but no more selective than an SIG who lobbies directly \((L \geq 2P - \tilde{\omega} \text{ but } L - \frac{\tilde{\delta}_L}{\tilde{\omega}} < 2P - \tilde{\omega}; \text{ so } \omega_d = \omega_d = 2P - \tilde{\omega}),\) then he charges the same price to a worthy and unworthy client. The reason is that the politician is no more likely to review an SIG who lobbies directly than one who is represented, which in turn implies that the lobbyist’s “value added” is the same regardless of the SIG’s worthiness. In this region, the price charged to a worthy SIG obeys the previously-described comparative statics – increasing in \( \delta_L \) and \( L \).

Next, when the lobbyist is active but more selective than an SIG who lobbies directly \((L - \frac{\tilde{\delta}_L}{\tilde{\omega}} = \omega_e > \omega_d > 2P - \tilde{\omega}),\) he charges a strictly lower price to a worthy client than an unworthy one. The reason is that the absence of representation partially signals that the SIG is unworthy, which induces the politician to review more often when the SIG lobbies directly vs. through the lobbyist, which in turn makes the outside option of direct lobbying better for a worthy SIG than an unworthy one. In this region, comparative statics in \((\delta_L, L)\) are straightforward for lobbyists whose policy motivations arise solely from personal connections \((L = P)\) or who are more permissive of the SIG than the politician \((L \in [2P - \tilde{\omega}, P])\). In either case, a lobbyist who is more policy-motivated (higher \(\delta_L\)) or more ideologically aligned with the politician (lower \(|L - P|\)) is more selective (higher \(\omega_e\)). This makes the absence
of representation a stronger signal that the SIG is unworthy, which reduces the politician’s willingness to review for evidence that an SIG who lobbies directly is worthy, and in turn increases a worthy SIG’s willingness to pay for representation.

Effects are slightly more complex when the lobbyist is more demanding of the SIG than the politician ($L > P$), as depicted in Figure 3(a). In this case, higher $\delta_L$ or $L$ first increases and then decreases the lobbyist’s price. The reason is that eventually, the lobbyist becomes too selective (from the politician’s perspective) and begins to reject the SIG even when it is worthy. This excessive selectivity makes the absence of representation again become a weaker signal that the SIG is unworthy, increasing the politician’s willingness to review an SIG who lobbies directly and reducing a worthy SIG’s willingness to pay for representation.

3 Data

3.1 Institutional Background and Scope of Study

The Foreign Agents Registration Act (FARA) mandates that lobbyists who represent foreign interests be registered and submit semiannual disclosure reports. The Justice Department has made these reports available as online image files. Our data is drawn from reports that list contact with Congress during the 110th and 111th Congresses (2007–2010).\footnote{After Congress passed the LDA in 1995, foreign businesses with subsidiaries in the US have been allowed to report their lobbying activities via the LDA. As a result, most of the foreign entities that submitted reports under FARA since 1995 are foreign governments.} Crucially for our analysis, FARA reports provide detailed contact information; each contact record specifies (i) the name of the contacted individual, (ii) the method by which the individual was contacted (phone call, email, in-person meeting, etc.), and (iii) the issues discussed with the contact (see Figure A2 in the Appendix for an example of a lobbying report). This contrasts with the requirements of the Lobbying Disclosure Act (LDA), which requires only that lobbyists disclose the names of the government bodies that they contact.

Extracting large scale contact data from FARA reports across lobbying firms and over time is challenging because each firm uses its own style to describe specific contacts in the
reports. At the time of our study, ProPublica and the Sunlight Foundation had transcribed reports from August 2007 through December 2010.\textsuperscript{13} We complemented their dataset by adding all reports submitted between January 2007 through July 2007, as well as some missing reports. We manually extracted all contact records from the image files, and for each contact, identified the contacted individuals and the lobbying issues based on the written description by the contact.

In our data, foreign embassies and consulates in the US are the most frequent foreign government clients, and hire lobbying firms to contact members of Congress and/or their staff via phone call or in-person meeting. We therefore restrict attention to reports that include such contacts.\textsuperscript{14} Direct contacts to Congress by foreign embassies or consulates are rare, as are contacts by in-house lobbyists (5.7 percent of lobbying contacts to Congress).\textsuperscript{15} Following these criteria, we find 440 reports of lobbying activities submitted by 108 lobbying firms on behalf of 88 foreign governments. In total we retrieved 13,146 contacts made to members of Congress and their staffers from the 440 reports. Frequent lobbying issues included trade issues, especially regarding a variety of tariff and trade pacts; security or military-related issues, such as US military deployments; and foreign aid.

Although our data is restricted to foreign lobbying, there is reason to believe our results have implications for the US lobbying industry. First, out of 108 lobbying firms that represented foreign governments in our data, a large fraction (72 firms) also represented domestic clients.\textsuperscript{16} Second, 56% of lobbying contacts that indicate specific lobbying issues in our data relate to trade policies, which are also commonly lobbied domestically (Grossman

\textsuperscript{13}The lobbying reports can be found at http://www.fara.gov; the FARA data project by ProPublica and the Sunlight Foundation is currently discontinued.


\textsuperscript{15}Although we explicitly model direct lobbying, in our model this action may be equivalently interpreted as using a profit-motivated lobbyist who screens no better than the SIG themselves (perhaps for reasons external to the model such as legal compliance).

\textsuperscript{16}Table A1 in the Appendix shows that (as compared to firms registered by FARA only), firms registered by both the LDA and FARA have larger yearly revenues and more foreign clients, contact a larger set of politicians, and employ both more total lobbyists and more revolving-door lobbyists.
While FARA reports provide the most systematic data on contacts to date, we note that there is a concern about non-compliance such as missing reports or false statements on reports (Benner 2019), and some loopholes in the FARA have drawn criticism.\footnote{A similar concern is raised for lobbying under the LDA (LaPira and Thomas 2017).} However, non-compliance is punished more stringently by FARA than by LDA: while a violation of the LDA is considered a civil offense, violations of the FARA are criminal, and penalties for noncompliance are up to five years of imprisonment and a $5,000-$10,000 fine (Atieh 2010).

### 3.2 Lobbyists in Our Data

Among the 13,246 total contacts in our data, 7,046 had information on the lobbyist who made the contact.\footnote{Table A2 in the Appendix shows firms that provided lobbyist-level contact information are similar to those that did not in terms of size, revenue, and foreign lobbying experience.} We identified 223 unique lobbyists who appeared in the records of these 7,046 contacts. We used Lobbyists.info from Columbia Books and our own internet search to collect information on each lobbyist’s political ideology and career history, focusing on their government experience as a member of Congress, congressional staffer, or bureaucrat in the executive branch.

To capture a lobbyist’s political ideology we consider three distinct measures: (1) party affiliation; (2) CF scores based on campaign contributions made during the 2006 and 2008 election cycles from the DIME database (Bonica 2016); and (3) DW-NOMINATE score for politicians-turned-lobbyists and staffers-turned-lobbyists.\footnote{For staffers-turned-lobbyists we use the average DW-NOMINATE score of the lobbyists’ ex-employers in Congress; for politicians-turned-lobbyists we use the DW-NOMINATE score in their last term in Congress.} Although these measures are based on different observed activities of a lobbyist—party registration, campaign contributions, and congressional career—we find that they are highly correlated (Figure A1 in the Appendix).\footnote{Figure A1(a) presents histograms of the CF scores for lobbyists identified as Democrats and Republicans, respectively; figure A1(b) provides similar histograms for DW-NOMINATE scores. The figures demonstrate that all three measures of the lobbyists’ ideology are consistent.} This is consistent with the literature showing that lobbyists follow partisan lines when donating (Drutman 2010, Koger and Victor 2009), give to politicians they consider
a “friend” (Leech 2013), and that congressional staffers tend to work for members of their party who share similar policy views (Kingdon 1989). We acknowledge that a large literature argues that campaign contributions are predominantly used to “buy access” (Langbein 1986, Hansen 1991, Austen-Smith 1995, Kalla and Broockman 2016), and in Section 4.4 discuss this possibility further in light of our results.

Table 1 shows that among the 180 lobbyists whose party affiliation was identified, 50% are Democrats. Most lobbyists (68%) have government experience. On average, each lobbyist made 31.59 contacts to 12.98 members’ offices, among which 9.40 contacts were made directly to 5.81 members. The average number of clients on behalf of whom a lobbyist makes a congressional contact is 1.17 per year; this reduces to 0.53 if we focus on direct contacts to members. The lobbyists in our data are associated with 214 FARA reports, each of which reports a single firm’s entire lobbying activities over six months on behalf of a single client.
The average lobbying fee per six months is $217,600, and a single report lists on average 33 contacts to Congress, 1.6 contacts to media, and 5.3 contacts to the executive branch.

4 Empirical Findings

Our theory makes predictions about the conditions under which a lobbyist-politician pair have an active relationship (the extensive margin), the criteria for a lobbyist with an active relationship with a politician to represent a special interest group to her (the intensive margin), and lobbying fees. To derive empirical analogues to our theoretical predictions we make three auxiliary assumptions.

First, our theory models the relationship between a particular lobbyist and politician vis-a-vis a single client. To extrapolate to a large set of potential clients, we assume that each lobbyist-politician pair randomly draws a large number of potential clients, and that the actions of a lobbyist-politician pair do not affect other pairs.

Second, in the model a lobbyist’s threshold vis-a-vis a particular SIG may diverge from a politician’s threshold both because she is more permissive toward the SIG ($L \leq P$) or more demanding ($L > P$). However, these distinct possibilities cannot be separately identified with our data because doing so requires knowledge of how the particulars of an SIG’s request map onto left-right ideology. To address this issue, we simply assume that only the former configuration prevails in our data. This assumption conforms with the conventional wisdom that lobbyists are more aligned with clients than the politicians whom they contact. More importantly, it generates a novel prediction that is inconsistent with the popular notion of lobbyists as hired guns cashing in on political connections — that a lobbyist’s selectivity vis-à-vis a particular politician is increasing in his ideological alignment with that politician.

Third, we assume that differences between the thresholds of a lobbyist and a politician $|P - L|$ vis-à-vis a particular SIG can be noisily measured using differences in party affiliation, CF scores, and DW-NOMINATE scores. Existing research shows that roll-call voting on trade policies (the most common issue in our data) is highly correlated with roll-call voting on other policies (Feigenbaum and Hall (2015) finds that this correlation is 0.89). Further
research documents that congressional roll-call votes on other foreign economic policy issues such as foreign aid are strongly shaped by ideological factors (Milner and Tingley 2011).

Using these assumptions we derive two empirical predictions (see Appendix for formal derivations and a more detailed discussion).

(E1) The probability that a lobbyist-politician pair is active (i.e., has at least one contact during the period of study) is decreasing in their ideological difference.

(E2) Conditional on an active relationship, the expected number of clients that a lobbyist brings to a politician is nondecreasing in their ideological difference.

4.1 Extensive Margins: Ideology and Access

Figure 4(a) shows the proportion of lobbyist-member pairs with at least one contact for each decile of CF score difference, separated by party of the contacted member. Using this as a measure of the probability that a lobbyist-member pair have any contact, we find that the probability of contact decreases as the difference in the CF scores increases, consistent with our prediction (E1). This relationship holds regardless a contacted member’s party.

Column (1) of Table 2 shows that this negative correlation persists controlling for politician fixed effects, lobbyists’ government experience, and attributes of the lobbyist’s firm; a
one-standard deviation increase in CF score difference (0.75) decreases the probability of having any contact by $0.022 \times 0.75 = 0.0165$. This effect is substantively large at more than half the contact rate among all possible pairs in the data ($2,785/124,274 = 2.33\%$). Columns (3) and (5) show that results are robust to using party affiliation and DW-NOMINATE scores as alternative measures of ideological distance, and columns (2), (4), and (6) show that results are consistent when we measure access using direct contact to a member rather than to the member’s office.

4.2 Intensive Margins: Ideology and Screening of Clients

To study the intensive margins, we focus on lobbyist-politician pairs with at least one contact during the study period. Figure 4(b) shows the average yearly number of clients on behalf of whom a lobbyist contacted a politician at each decile of CF score differences. The figure shows that conditional on an active relationship, a lobbyist brings more clients to a politician the greater is the ideological distance between them—that is, he becomes less selective. This is consistent with our prediction (E2).

However, this relationship only holds until the difference in ideologies becomes very large (greater than the 90th percentile in differences), at which point it abruptly reverses. To interpret this pattern, two features of the data are worth noting. First, only 12.7% of contacts occur between lobbyists and politicians whose ideological difference is greater than 1. Second, although less than 5% of contacts below the 80th percentile of CF score differences are cross-party, this proportion abruptly rises to 90% between the 80th and 90th percentile, and to 97% above the 90th percentile. Thus, it may be that the considerations facilitating rare and distant cross-party contacts are quite different than the screening considerations captured by our theory.\(^{21}\)

Columns (1) and (2) of Table 3 show regression results confirming a positive correlation between a lobbyist-politician pair’s ideological distance and the number of clients that the

\[^{21}\text{In addition, the validity of the assumption that } L < P \text{ in the data may break down among these very distant contacts, rendering them incomparable to closer contacts.}\]
Table 2: To Which Lobbyists do Politicians Give Access?

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Any (1)</th>
<th>Direct (2)</th>
<th>Any (3)</th>
<th>Direct (4)</th>
<th>Any (5)</th>
<th>Direct (6)</th>
</tr>
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<tbody>
<tr>
<td><strong>Ideological differences in:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>CF Score</td>
<td>-0.022***</td>
<td>-0.010***</td>
<td>(0.0010)</td>
<td>(0.0006)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Party</td>
<td></td>
<td></td>
<td>-0.023***</td>
<td>-0.010***</td>
<td>(0.0012)</td>
<td>(0.0007)</td>
</tr>
<tr>
<td>DW-NOMINATE</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-0.034***</td>
<td>-0.016***</td>
</tr>
<tr>
<td>Politician FE</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Lobbyist’s experience</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Firm attributes</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Mean Dependent Var.</td>
<td>0.021</td>
<td>0.008</td>
<td>0.025</td>
<td>0.012</td>
<td>0.019</td>
<td>0.008</td>
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<tr>
<td>Number of observations</td>
<td>78,762</td>
<td>78,762</td>
<td>96,020</td>
<td>96,020</td>
<td>63,508</td>
<td>63,508</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.023</td>
<td>0.016</td>
<td>0.031</td>
<td>0.022</td>
<td>0.029</td>
<td>0.024</td>
</tr>
</tbody>
</table>

Notes: The unit of observation is politician × lobbyist; standard errors clustered at the politician level are in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01. Lobbying firm attributes: number of lobbyist, (number of lobbyist)^2, the year of the FARA registration; lobbyists’ experience variables: the indicators for having served as a member of Congress, a Congressional staffer, or a staffer in the executive branch. The dependent variables are indicators for any (direct) lobbying contacts: Any (Direct).

Table 3: Which Lobbyists do Politicians Meet More Frequently?

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
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<th></th>
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</thead>
<tbody>
<tr>
<td>Log(CF Score difference)</td>
<td>0.017*** (0.004)</td>
<td>0.008** (0.004)</td>
<td>0.022*** (0.006)</td>
<td>0.014** (0.006)</td>
<td>0.031*** (0.011)</td>
<td>0.016 (0.011)</td>
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<tr>
<td>Member of Congress</td>
<td>-0.105*** (0.011)</td>
<td>-0.082*** (0.016)</td>
<td>-0.165*** (0.025)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Congressional staff</td>
<td>-0.042*** (0.013)</td>
<td>-0.053*** (0.019)</td>
<td>-0.155*** (0.028)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Executive staff</td>
<td>-0.136*** (0.012)</td>
<td>-0.157*** (0.018)</td>
<td>-0.249*** (0.030)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Politician FE</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Firm attributes</td>
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<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Average of dependent var.</td>
<td>0.507</td>
<td>0.507</td>
<td>0.364</td>
<td>0.364</td>
<td>0.747</td>
<td>0.747</td>
</tr>
<tr>
<td>Number of observations</td>
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<td>2,032</td>
<td>2,032</td>
<td>2,032</td>
<td>2,032</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>0.110</td>
<td>0.253</td>
<td>0.222</td>
<td>0.286</td>
<td>0.142</td>
<td>0.215</td>
</tr>
</tbody>
</table>

Notes: The unit of observation is politician × lobbyist; standard errors clustered at the politician level are in parentheses. * p < 0.10, ** p < 0.05, *** p < 0.01. The dependent variables are: the logarithm of the average annual number of the clients on behalf of which the lobbyist contacted the politician, plus one; the average annual fraction of the clients with a contact among all active clients of the lobbyist’s firm; the logarithm of the average annual number of lobbying contacts, plus one. The same firm attributes as Table 2 are used.
lobbyist bring in to the politician (controlling for politician fixed effects and attributes of the lobbyist’s firm). The results are robust to controlling for the size of the client base of the lobbyist’s firm over the study period (Columns (3) and (4)). In Columns (5) and (6) we use the number of contacts as the dependent variable rather than the number of clients, and still find a positive correlation with ideological distance.

Interestingly, we also find that prior government experience makes lobbyists substantially more selective (see Columns (2), (4), and (6)). Government experience may contribute to or correlate with attributes that generate selectivity in our theory (personal connections), or correlate with attributes that generate selectivity through mechanisms outside our theory (such as reputation). In either case, this finding runs counter to the popular notion that lobbyists simply exploit existing connections to gain access and maximize revenues.

4.3 Lobbying Fees

To conclude our empirical analysis, Table 4 shows results from regressing the logarithm of semi-annual fees in each FARA report on characteristics of the lobbyists and member offices associated with each contact in the report (controlling for lobbying firm attributes). We categorize a lobbying contact as ideologically aligned if the difference between the lobbyist and the contacted member’s CF scores is less than the median among all lobbyist-politician pairs with an active relationships (0.37).

Columns (1) and (2) show that one additional contact to Congress in a report is associated with a 0.3–0.4% increase in lobbying fees, but that there is an additional 0.5–0.6% premium associated with an ideologically aligned contact. This result is consistent with our theory, which posits that the greater selectivity of ideologically-aligned lobbyists magnifies their credibility, thereby increasing the value of their services.22 To the extent that personal connections directly increase selectivity or proxy for ideological alignment, our findings are also consistent with a prior literature showing a fee premium for lobbyists with personal

---

22 We do not label this result a direct test of the theory because it only generates unambiguously monotone predictions on unobservable type-specific fees ($F_U,F_W$) rather than observed average fees.
Table 4: What Determines Lobbying Fees?

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Log of lobbying fee in USD (1)</th>
<th>Log of lobbying fee in USD (2)</th>
<th>Log of lobbying fee in USD (3)</th>
<th>Log of lobbying fee in USD (4)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Any</td>
<td>0.004*** (0.0009)</td>
<td>0.003* (0.0017)</td>
<td>0.004*** (0.0009)</td>
</tr>
<tr>
<td></td>
<td>Ideologically aligned</td>
<td>0.005** (0.0022)</td>
<td>0.006* (0.0031)</td>
<td>0.004* (0.0024)</td>
</tr>
<tr>
<td></td>
<td>On behalf of autocracy</td>
<td>0.002 (0.00031)</td>
<td></td>
<td>0.004 (0.00034)</td>
</tr>
<tr>
<td></td>
<td>Ideologically aligned × Autocracy</td>
<td>0.022*** (0.0078)</td>
<td>0.022*** (0.0076)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Any media contacts</td>
<td>0.024** (0.0101)</td>
<td>0.017* (0.0092)</td>
<td>0.023** (0.0099)</td>
</tr>
<tr>
<td></td>
<td>Any executive contacts</td>
<td>0.006 (0.0083)</td>
<td>0.007 (0.0062)</td>
<td>0.006 (0.0078)</td>
</tr>
<tr>
<td></td>
<td>Autocracy as a client</td>
<td>0.101 (0.0083)</td>
<td>-0.150 (0.241)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Registered in LDA</td>
<td>-0.581 (0.421)</td>
<td>-0.596 (0.452)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Year of FARA registration</td>
<td>-0.022 (0.0137)</td>
<td>-0.023* (0.0134)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of lobbyists</td>
<td>0.089*** (0.0272)</td>
<td>0.089*** (0.0283)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of lobbyists squared</td>
<td>-0.003*** (0.0008)</td>
<td>-0.003*** (0.0008)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Number of observations</td>
<td>214</td>
<td>214</td>
<td>214</td>
</tr>
<tr>
<td></td>
<td>Adjusted $R^2$</td>
<td>0.113</td>
<td>0.184</td>
<td>0.140</td>
</tr>
</tbody>
</table>

Notes: The unit of observation is a six-month contract between a lobbying firm and its foreign client; standard errors clustered at the lobbying firm level are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$.

connections in Congress (Blanes i Vidal, Draca and Fons-Rosen 2012, Bertrand, Bombardini and Trebbi 2014). However, our result is identified with detailed contact data rather than a general assumption that lobbyists use their existing Congressional connections.

In Columns (3) and (4) of Table 4 we extend our analysis to include characteristics of the lobbying client – specifically, whether or not the client’s country is an autocracy as measured by a weakly negative 2005 Polity IV score (Marshall, Jaggers and Gurr 2010). Interestingly, we find that the fee premium for ideologically-aligned contacts is more pronounced for autocratic clients. One possible explanation consistent with our theory is that greater ex-ante
skepticism of the client by the contacted politician enhances the value of screening by an ideologically-aligned lobbyist.

4.4 Discussion

The empirical findings presented here are consistent with our theory that lobbyists provide a screening service whose credibility to a politician, and thus value to a client, depends jointly on the characteristics of the client, lobbyist, and politician. We focus in particular on ideological alignment between lobbyists and politicians. We now briefly examine alternative explanations for our empirical findings.

First, ideological alignment may proxy for other determinants of lobbying not considered in the model. For example, a lobbyist who is more aligned with a politician according to our measures may also be more likely to specialize in the politician’s favored policy issues. If specialists also tend to have a narrower set of clients than generalists, then we would also expect to find that ideologically-aligned lobbyists are more selective. However, we do not find evidence that lobbyists narrow their lobbying issues when contacting ideologically-aligned politicians (Table A3 in Appendix).

Second, ideological alignment as measured by similarity in CF scores may mechanically result from lobbyists’ strategic efforts to buy access to politicians via campaign contributions. If this alternative hypothesis were true, it would be natural to expect our “extensive margin” finding that lobbyists and politicians with more similar CF scores are more likely to have a relationship. However, it is not obvious how to rationalize our “intensive margin” finding that lobbyists and politicians with more similar CF scores have less contact conditional on an active relationship.

Third, our findings may be driven by the effect of relationships between ex-staffers and their former bosses. Such effects are consistent with our theory’s predictions about how personal connections influence lobbying, but our empirical analysis could be inappropriately attributing them to ideological alignment; both because lobbyists-turned-staffers may give more to ex-bosses (mechanically reducing their CF score difference), and because we have
directly imputed members’ DW-Nominate scores onto ex-staffers. While a substantial proportion of the lobbyists in our data do have ex-bosses in Congress during the study period (64/223 = 29%), somewhat surprisingly, there is rarely contact between them; out of the 2,896 lobbyist-politician pairs with any contact, only 14 pairs have such a relationship. Our results about ideological alignment therefore cannot be driven by these relationships, and are indeed robust to controlling for them. Moreover, the relative rarity of contact between ex-staffers and their former bosses may suggest that the fee premium for connected lobbyists found in previous work could be resulting from attributes or behaviors correlated with their connections, rather than direct exploitation of them.

5 Conclusion

In this paper we present a theory and empirical evidence of lobbyists as gatekeepers, in which a lobbyist is paid to screen out interest groups whose requests are not in a politician’s interest to fulfill. Our analysis highlights a dilemma faced by lobbyists who aim to credibly “certify” special interest groups seeking policy favors. As a solution to the dilemma, we suggest lobbyists’ policy preferences, derived from connections to politicians or their own ideologies, as a means of generating credible commitment. Using a unique dataset on contacts between politicians and lobbyists from lobbying reports mandated by the Foreign Agents Registration Act, we provide empirical evidence for the model’s theoretical predictions. By incorporating personal characteristics of lobbyists into the analysis of pricing and profits as well as their decisions to represent clients before politicians, our paper contributes to making a tighter connection between theoretical and empirical work on lobbying.

With a decline in the number of staff and civil servants supporting legislative research (Baumgartner and Jones 2015) and an increase in legislators’ workloads and fundraising pressures (Curry 2015, Lee 2016), the opportunities for outside interests to influence legislation have increased. Our model can speak to when, and to whose benefit, these opportunities will be exploited. It can also be used to assess how both the influence of policy-motivated lobbyists and the lobbying fees they charge may vary across politicians with different legislative
resources and agenda-setting power.

While we have focused on bilateral lobbying relationships, another important area of inquiry is the organization of lobbying firms and the lobbying industry. Large firms often consist of multiple lobbyists with access to different politicians, sometimes across the aisle. These firms may create a set of individual “markets” inside the firm, in which a politician is “matched” to a lobbyist with the appropriate ideological and personal characteristics to serve as a credible intermediary. Furthermore, lobbyists and lobbying firms may compete to attract more clients and to get more access to politicians. We believe these are fruitful areas for further research.

References


**URL:** [http://dx.doi.org/10.1146/annurev-polisci-100711-135308](http://dx.doi.org/10.1146/annurev-polisci-100711-135308)


A Preliminary Analysis of Model

A.1 The politician’s calculus

The politician seeks to grant the favor to a worthy SIG ($\omega \geq P$) and decline the favor to an unworthy one ($\omega < P$) while minimizing review costs. She can’t observe the details of the prior contact between the SIG and the lobbyist (or prices), and so bases her decisions only on the observed channel of contact $c \in \{\ell, d, \emptyset\}$. The CDF of the politician’s interim beliefs about the SIG’s case $\omega$ given the strategies of the other players is denoted $H^c(\omega)$. For each observed channel and realized cost of review $r$, the politician makes two decisions – whether or not to review to learn $\omega$ (and decide accordingly), and if she does not review, whether or not to grant the favor.

We first characterize the probability $\alpha^c \in [0, 1]$ that the politician grants the favor absent a review for each channel $c$ (her posture). Because the politician’s preferences are linear, her posture depends only on whether the interim expectation $E^c[\omega]$ about the state $\omega$ is above or below her threshold $P$. Specifically, if $E^c[\omega] > P$ then she must always grant ($\alpha^c = 1$), if $E^c[\omega] < P$ she must always deny ($\alpha^c = 0$), and if $E^c[\omega] = P$ any $\alpha^c$ is optimal.

We next characterize the politician’s review threshold. Her value of review given each channel $c$ derives from the possibility that a review might alter her default decision. In a best response she will review if and only if her realized cost $r$ is below this value, which is therefore $\phi^c$. When $E^c[\omega] \geq P$ and the politician weakly prefers to grant absent additional information, a review is only pivotal for changing her decision when it reveals negative evidence that the SIG is unworthy, which she believes will occur with probability $H^c(P)$. In this event, the expected net benefit of changing her decision from granting to denying the favor is $P - E^c[\omega|\omega < P]$, and the overall value of review is thus $\phi^- = H^c(P) \cdot (P - E^c[\omega|\omega < P])$. Similarly, when $E^c[\omega] \leq P$ and the politician weakly prefers to deny the favor absent additional information, a review is only pivotal for changing her decision when it reveals positive evidence that the SIG is worthy. The value of review is thus $\phi^+ = (1 - H^c(P)) \cdot (E^c[\omega|\omega > P] - P)$. Collecting the above observations yields the politician’s best-response behavior.

**Observation A.1.** Let $H^c(\omega)$ denote the CDF of the politician’s beliefs after channel $c$. The politician’s strategy is a best response i.f.f she reviews when $r \leq \phi^c$ and absent a review grants with probability $\alpha^c$, where

- $\alpha^c = 1$ and $\phi^c = \phi^- = H^c(P) \cdot (P - E^c[\omega|\omega < P])$ if $E^c[\omega] > P$
- $\alpha^c = 0$ and $\phi^c = \phi^+ = (1 - H^c(P)) \cdot (E^c[\omega|\omega > P] - P)$ if $E^c[\omega] < P$
- $\alpha^c \in [0, 1]$ and $\phi^c = \phi^- = \phi^+$ if $E^c[\omega] = P$
A.2 The SIG’s calculus

The probability the SIG expects the favor from pursuing channel \( c \in \{ \ell, d, \emptyset \} \) depends on the politician’s strategy and its type, and is equal to \( \Delta^c_\omega = (1 - \phi^c_\omega) \alpha^c + 1_{\omega \geq P} \phi^c_\omega \). The favor is granted with probability equal to the politician’s posture \( \alpha^c \) when she fails to investigate, and if and only if the SIG is worthy when she does.

The SIG will weakly prefer pursuing the direct channel to the null channel if and only if \( \Delta^d_\omega - k \geq \Delta^\emptyset_\omega \) \( \iff \) \( (\Delta^d_\omega - \Delta^\emptyset_\omega) \pi \geq k \); if the lobbyist is unavailable it will be willing to lobby directly if and only if this inequality is satisfied. If it finds the lobbyist available, it will be willing to pay up to \( F_\omega = \Delta^\ell_\omega \pi - \max \{ \Delta^d_\omega \pi - k, \Delta^\emptyset_\omega \pi \} \) for the lobbyist’s representation. Collecting the above yields the following.

Observation A.2. The SIG’s strategy is a best response i.f.f.

- it always (never) accepts a representation offer that is \( < (>\) \( F_\omega \)
- following a history \( h \) that resulted in a lack of representation, it always (never) lobbies directly when \( (\Delta^d_\omega - \Delta^\emptyset_\omega) \pi > (<\) \( k \)

A.3 Equilibrium without the lobbyist (as a player)

To both aid in the analysis of the full model and clarify implications of the preceding best response behavior, we first characterize the unique cutpoint equilibrium of a variant of the model without the lobbyist. We consider a general atomless prior over \([0, \bar{\omega}]\) with CDF \( H(\omega) \) that satisfies \( H(P) \in (0, 1) \) (with a strictly positive probability the SIG is both unworthy or worthy) and \( E[\omega] < P \) (absent more information the politician prefers to deny the favor). The rationale for restricting attention to a cutpoint strategy for direct lobbying decisions is that the assumption of state-independent preferences for the SIG is simplifying rather than substantive – were the SIG to have even slightly state-dependent preferences matching the form of the other players, then the cutpoint equilibrium would be unique.

To define the equilibrium, let \( \hat{\omega}^d \) denote the unique cutpoint \( < P \) satisfying \( E[\omega|\omega \geq \hat{\omega}^d] = P \), and further let

\[
\phi_-(\omega) = \left( \frac{H(P) - H(\omega)}{1 - H(\omega)} \right) \cdot (P - E[\omega|\omega \in [\omega, P]]) .
\]

\( \hat{\omega}^d \) is the unique direct lobbying cutpoint above which the politician will have a strictly favorable posture in a best response, and below which she will have a strictly adversarial one. \( \phi_-(\omega) \) is the value of reviewing for negative evidence after the politician update his priors with the information that \( \omega \geq \omega \), and is decreasing in \( \omega \). Observe that in the two player game, the value of reviewing for negative evidence \( \phi_d^d \) after direct lobbying when the
SIG employs a cutpoint strategy $\omega^d \in [\tilde{\omega}^d, P]$ is exactly equal to $\phi^\omega(\omega^d)$. These quantities yield the following.

**Lemma A.1.** In the game without the lobbyist there is a unique cutpoint equilibrium.

- If $1 - \frac{\phi^\omega(\omega^d)}{\bar{p}} > \frac{k}{\bar{p}}$ then $\omega^d = \tilde{\omega}^d$; otherwise $\omega^d$ satisfies $1 - \frac{\phi^\omega(\omega^d)}{\bar{p}} = \frac{k}{\bar{p}}$

- $\phi^d = \phi^\omega(\omega^d)$, $\Delta^d_U = \alpha^d \left(1 - \frac{\phi^d}{\bar{p}}\right) = \frac{k}{\bar{p}}$, and $\alpha^\emptyset = \phi^\emptyset = \Delta^\emptyset \omega = 0$

The unique cutpoint equilibrium has a simple structure; all worthy SIGs lobby alongside a strictly positive measure of the “best” unworthy SIGs. The unique cutpoint generates sufficiently unfavorable treatment by the politician (either through more reviews, or a lower posture) to make all unworthy SIGs indifferent to lobbying, while all worthy SIGs strictly prefer to lobby.

**B Equilibrium with the lobbyist**

We now consider the model when the lobbyist is present ($\lambda \in (0, 1)$), and characterize equilibria in which the lobbyist represents the SIG with strictly positive probability.

**B.1 Form of Equilibria**

We begin by justifying attention to the form of strategy profiles described in Remark 1. The first step is to impose a key substantive assumption.

**Assumption B.1.** The probability that a SIG of type $\omega$ lobbies directly absent representation does not depend on the history that led to a lack of representation.

Assumption B.1 states that an unrepresented SIGs direct lobbying decision is invariant to exactly how it found itself unrepresented – that is, whether it was after finding the lobbyist busy, whether it was after finding the lobbyist available and rejecting his price, and if the latter the exact price he rejected. The rationale for the assumption is to rule out an indifferent unrepresented SIG conditioning its direct lobbying decision on a payoff-irrelevant history. Absent it, it is possible to artificially sustain equilibria of a variety of forms by exploiting a combination of an unworthy SIGs’ indifference to lobbying directly off the equilibrium path and the lobbyist’s policy motivations.

Imposing history independence on the SIG’s direct lobbying strategy allows us further simplify the space of strategy profiles considered as follows.

**Lemma B.1.** Given Assumption B.1 the following restrictions are w.l.o.g.

- the lobbyist proposes the SIG’s willingness to pay $F_\omega$ with probability $\rho^L_\omega$, and a price $F_\omega + \varepsilon$ strictly above with probability $1 - \rho^L_\omega$
the SIG always accepts (rejects) offers of representation \( \leq (>) F_\omega \). Absent representation, it lobbies directly with probability \( \rho_\omega^S \).

In the simplified strategy profiles the lobbyist mixes over at most two prices for each \( \omega \) – one at the SIG’s maximum willingness to pay \( F_\omega \) – that is always accepted – and one strictly above – that is always rejected. We thus term charging the SIG’s willingness to pay “accepting the SIG” and charging above “rejecting it.” In these profiles an interior probability that a SIG of type \( \omega \) acquires representation can be achieved only via the lobbyist mixing between accepting and rejecting the SIG.

We next restrict attention to cutpoint direct lobbying strategies for the SIG based on the justification in Section [[X.XX]].

**Assumption B.2.** The probability that a SIG of type \( \omega \) lobbies directly absent representation is \( \rho_\omega^S = 1_{\omega > \omega^d} \) for some \( \omega^d \).

Assuming that the SIG’s direct lobbying strategy is both history-independent and follows a cutpoint allows us to connect equilibrium of the three player game to the equilibrium of the two player game characterized in Lemma A.1 as follows.

**Observation B.1.** In an equilibrium strategy profile satisfying Assumptions B.1-B.2 and the restrictions in Lemma B.1, \( \omega^d \) and \((\phi^c, \alpha^c) \forall c \in \{0, d\} \) must be the unique cutpoint equilibrium strategies of the two-player game with a prior \( H(\omega) \) equal to the politician’s posterior \( H^\ell(\omega) \) after observing a lack of representation.

In words, equilibrium requires “leftover” SIG’s lacking representation to sort themselves between direct lobbying and staying home as if it is a game absent the lobbyist, but with a distribution over the SIG’s case equal to the politician’s posterior after observing only a lack of representation. Consequently, the equilibrium that would prevail after the lobbyist has “taken” his desired share of the market determines the value of the SIGs “outside options” (direct lobbying and staying home) if she rejects the lobbyist, pinning down both the price the lobbyist can charge and his beliefs about what the SIG will do absent representation.

Our final assumption further restricts attention to strategy profiles in which the lobbyist’s representation strategy can also be described by a cutpoint.

**Assumption B.3.** The probability that the lobbyist offers an acceptable price to a SIG of type \( \omega \) is \( \rho_\omega^L = 1_{\omega > \omega^\ell} \) for some \( \omega^\ell \).

The justification for restricting attention to a cutpoint strategy for the lobbyist is somewhat weaker than for restricting attention to a cutpoint strategy for the SIG.
Lemma B.2. If \( \Delta^d_\omega > \Delta^d_\omega \forall \omega \), then the lobbyist’s behavior is described by a cutpoint.

That the lobbyist would strictly help SIGs who otherwise lobby directly is a natural property, and one that holds in all of the equilibria described in the main text with representation. However, it is not one that applies to all equilibria with representation, or even equilibria with representation in which some clients are strictly helped. We do not fully characterize the set of representation equilibria that do not have a cutpoint structure, and the set may be potentially large.\(^{23}\)

We now characterize the equilibria in the main text (as well as some others). To do so we subdivide the class into three cases, and characterize conditions under which an equilibrium in each case holds: **Case A** \((\omega^f > (2P - \bar{\omega}, \tilde{\omega}))\) involves representation with a fully favorable posture. **Case B** \((\omega^f = 2P - \bar{\omega})\) involves representation with a weakly favorable posture. **Case C** \((\omega^f < 2P - \bar{\omega})\) involves representation with an adversarial posture, and we show that such equilibria cannot exist.

### B.2 Preliminary Properties of Equilibria

We first describe some equilibrium properties in each case.

#### Properties of the Lobbyist Channel

**Case A:** \((\omega^f > (2P - \bar{\omega}, \tilde{\omega}))\): This implies \(E^f[\omega] > P\), which then requires \(\phi^f = \phi^f_\perp\) and \(\alpha^f = 1\). Applying that \(H(\cdot)\) is uniform we have that \(\phi^f_\perp = \frac{(P - \omega^f)^2}{2(\bar{\omega} - \omega^f)}\). These jointly imply that \(\Delta^f_U = 1 - \left(\frac{1}{r}\right) \frac{(P - \omega^f)^2}{2(\bar{\omega} - \omega^f)}\) and \(\Delta^f_W = 1\).

**Case B:** \((\omega^f = 2P - \bar{\omega})\): This implies \(E^f[\omega] = P\), so then \(\phi^f_\perp = \phi^f_\perp = \frac{\bar{\omega} - P}{4}\) and any \(\alpha^f \in [0,1]\) is a best-response, so \(\Delta^f_U = \alpha^f \left(1 - \left(\frac{1}{r}\right) \frac{\bar{\omega} - P}{4}\right)\) and \(\Delta^f_W = \Delta^f_U + \left(\frac{1}{r}\right) \frac{\bar{\omega} - P}{4}\).

**Case C:** \((\omega^f < 2P - \bar{\omega})\): This implies \(E^f[\omega] < P\), so then \(\phi^f = \phi^f_\perp\) and \(\alpha^f = 0\). Applying that \(H(\cdot)\) is uniform we have that \(\phi^f_\perp = \frac{(\bar{\omega} - P)^2}{2(\bar{\omega} - \omega^f)}\). These jointly imply that \(\Delta^f_U = 0\) and \(\Delta^f_W = \left(\frac{1}{r}\right) \frac{(\bar{\omega} - P)^2}{2(\bar{\omega} - \omega^f)}\).

#### Properties of the Direct and Null Channel

As previously described, the direct lobbying cutpoint and politician strategies toward \(\{d, \emptyset\}\) when the SIG’s direct lobbying strategy satisfies Assumption B.1 must be an equilibrium of the two player game when \(H(\omega) = H^{-d}(\omega)\). Next observe that a cutpoint strategy by the lobbyist implies that \(E^{-d}[\omega] < P\), so by Lemma A.1 for each \(\omega^f < \bar{\omega}\) there is a unique cutpoint equilibrium of the two player game that pins down the direct lobbying cutpoint and politician strategies toward \(\{d, \emptyset\}\).

We now apply Lemma A.1 to derive properties of the direct and null channels as a function of \(\omega^f\) in each of the three cases (A,B,C). Immediately we have that \(\omega^d \in (0, P)\),

---

\(^{23}\)Contact authors for example of a non-cutpoint equilibrium in which representation strictly increases the chance that some but not all clients get the favor.
\( \phi^d = \phi^d_\ell, \Delta^d_U = \frac{k}{\pi}, \Delta^d_W = \frac{k}{\pi} + \phi^d_\ell, \) and \( \alpha^0 = \Delta^0_\omega = 0. \) Next we derive the precise values of \( \omega^d \) and \( \phi^d_\ell \) for each \( \omega < \bar{\omega}. \)

(Case A: \( \omega^\ell \in (2P - \bar{\omega}, \bar{\omega}) \)): Using the equilibrium characterization in Lemma A.1, we first derive the unique cutpoint \( \hat{\omega}^d \) satisfying \( E[\omega | \omega \geq \hat{\omega}^d] = P. \) It is straightforward that we must have \( \hat{\omega}^d < \omega^\ell \) for the equality to be satisfied. Next, observe that since the prior over \( \omega \) is uniform over \([0, \bar{\omega}],\) for \( \omega^d < \omega^\ell \) we have that

\[
E[\omega | \omega \geq \omega^d] = \left( \frac{(\omega^\ell - \omega^d)}{(\omega^\ell - \omega^d) + (1 - \lambda)(\bar{\omega} - \omega^\ell)} \right) \left( \frac{\omega^d + \omega^\ell}{2} \right) + \left( \frac{(1 - \lambda)(\bar{\omega} - \omega^d)}{(\omega^\ell - \omega^d) + (1 - \lambda)(\bar{\omega} - \omega^\ell)} \right) \left( \frac{\omega^\ell + \bar{\omega}}{2} \right).
\]

Algebraic manipulation then yields that \( \hat{\omega}^d \) uniquely satisfies the equality:

\[
(P - \hat{\omega}^d)^2 = (1 - \lambda)(\bar{\omega} - P)^2 + \lambda(P - \omega^\ell)^2
\]

which yields \( \hat{\omega}^d = P - \sqrt{(1 - \lambda)(\bar{\omega} - P)^2 + \lambda(P - \omega^\ell)^2} \) which is \( \in (2P - \bar{\omega}, \min \{\omega^\ell, P\}) \) unless \( \omega^\ell = 2P - \bar{\omega} \) or \( \omega^\ell = \bar{\omega} \) in which case \( \hat{\omega}^d = 2P - \bar{\omega} \) and \( \phi^d = \phi_\ell^d = \frac{\bar{\omega} - P}{2}. \) Further, observe that \( \omega^d \) is only affected by \( \omega^\ell \) via its distance \( (P - \omega^\ell)^2 \) from \( P. \) Thus, two representation cutpoints \( \omega^\ell \) and \( \hat{\omega}^d = 2P - \omega^\ell \) yield the same \( \hat{\omega}^d. \) Next, the following lemma is proved in Appendix C.

Lemma B.3. If \( \omega^\ell \in (2P - \bar{\omega}, \bar{\omega}) \) and \( \omega^d = \hat{\omega}^d \) then \( \frac{\bar{\omega} - P}{4} > \phi_\ell^d. \)

Finally Lemma B.3 implies that \( 1 - \phi_\ell^d > 1 - \frac{\bar{\omega} - P}{4} > \frac{k}{\pi}, \) so that by Lemma A.1 the equilibrium cutpoint on the direct channel \( \omega^d \) is indeed equal to \( \hat{\omega}^d. \)

To derive the explicit expression for \( \phi_\ell^d \) in this case, recall from Observation A.1 that when \( \omega^d = \hat{\omega}^d \) we have \( \phi_\ell^d = \phi_\ell^d_+ \) by definition, and we may thus employ either expression. The expression for \( \phi_\ell^d \) is simpler to write when \( \omega^\ell \leq P, \) and the expression for \( \phi_\ell^d_+ \) is simpler to write when \( \omega^\ell > P. \) For \( \omega^\ell \leq P \) we have

\[
\phi_\ell^d = \left( \frac{(1 - \lambda)(\bar{\omega} - P)}{\lambda(\omega^\ell - \omega^d) + (1 - \lambda)(\bar{\omega} - \omega^\ell)} \right) \left( \frac{P + \bar{\omega}}{2} - P \right) = \frac{1}{2} \left( \frac{(1 - \lambda)(\bar{\omega} - P)^2}{\lambda(\omega^\ell - \omega^d) + (1 - \lambda)(\bar{\omega} - \omega^\ell)} \right),
\]

where the denominator of the second term is the unconditional probability of direct lobbying. For \( \omega^\ell > P \) we have

\[
\phi_\ell^d = \left( \frac{P - \hat{\omega}^d}{\lambda(\omega^\ell - \omega^d) + (1 - \lambda)(\bar{\omega} - \omega^\ell)} \right) \left( \frac{P - \hat{\omega}^d + P}{2} \right) = \frac{1}{2} \left( \frac{(P - \hat{\omega}^d)^2}{\lambda(\omega^\ell - \omega^d) + (1 - \lambda)(\bar{\omega} - \omega^\ell)} \right).
\]
Now using that \((P - \hat{\omega}^d)^2 = (1 - \lambda) (\bar{\omega} - P)^2 + \lambda (\omega^d - P)^2\), \(\phi^d_+ = \phi^d_-\) at \(\hat{\omega}^d\), and combining yields that for any \(\omega^f \in (2P - \bar{\omega}, \bar{\omega})\) we have
\[
\phi^d_- = \frac{1}{2} \left(\frac{(1 - \lambda) (\bar{\omega} - P)^2 + \lambda \max \left\{ \omega^f - P, 0 \right\}^2}{\lambda (\omega^d - \hat{\omega}^d) + (1 - \lambda) (\bar{\omega} - \hat{\omega}^d)}\right).
\]

**(Cases B and C: \(\omega^f \leq 2P - \bar{\omega}\)):** We have that \(\omega^d = 2P - \bar{\omega}\) and \(\phi^d_- = \frac{\bar{\omega} - P}{2}\), and the only SIGs who lobby directly are those that found the lobbyist unavailable.

**The Lobbyist’s Incentives**

If the lobbyist accepts the SIG, he expects it to acquire the favor with probability \(\Delta^\omega\), while if he rejects it he expects it to acquire the favor with probability \(1_{\omega > \bar{\omega}^d} \cdot \Delta^\omega + (1 - 1_{\omega > \bar{\omega}^d}) \Delta^0\) (the probability the rejected SIG lobbies directly times the probability direct lobbying yields the favor, plus the probability it stays home times the probability staying home yields the favor). The net benefit to the lobbyist of accepting the SIG is thus:
\[
(F_\omega - k) + (\Delta^\omega - (1_{\omega > \bar{\omega}^d} \cdot \Delta^d + (1 - 1_{\omega > \bar{\omega}^d}) \Delta^0)) \cdot \delta (\omega - L)
\]
\[\text{(1)}\]
\(F_\omega - k\) is the net profit from representation at the SIG’s maximum willingness to pay, \(\Delta^\omega - (1_{\omega > \bar{\omega}^d} \cdot \Delta^d + (1 - 1_{\omega > \bar{\omega}^d}) \Delta^0)\) is the net change in the probability the SIG acquires the favor, and \(\delta (\omega - L)\) is the net policy benefit to the lobbyist of the SIG going from being denied to being granted the favor.

Now, equilibrium on the direct and null channels imply that all types of SIGs weakly prefer lobbying directly to staying home, so \(\forall \omega\) we have \(F_\omega = (\Delta^\ell - \Delta^0) \pi + k\). Further, unworthy SIGs are indifferent to lobbying directly and staying home, so \(F_U = (\Delta^\ell - \Delta^0) \pi + k = \Delta^\ell \pi\). Applying these properties to the net benefit expression and rearranging yields the following best response behavior.

**Observation B.2.** Among strategy profiles of the form in Remark ??, the lobbyist’s strategy is a best response i.f.f. \((\Delta^\ell - \Delta^0) (\pi + \delta (\omega - L)) + 1_{\omega < \bar{\omega}^d} \cdot \Delta^d \delta (\omega - L) > (\leq) 0\) implies that \(\omega > (\leq) \hat{\omega}^f\).

**B.3 Representation Equilibria**

We now characterize the three classes of equilibria with representation. Observe that \(\pi + \delta (\omega - L)\) is the net benefit of representation if the lobbyist is pivotal for the favor being granted, and let \(\hat{\omega}^f (L) = L - \frac{\pi}{\delta}\) denote the unique value of \(\omega\) s.t. this is \(= 0\). This quantity will be crucial in the equilibrium characterization that follows.

**Case A: Representation with a fully-favorable posture**

When \(\omega^f \in (2P - \bar{\omega}, \bar{\omega})\), the remaining strategies are pinned down to unique values as characterized above. We argue that such a \(\omega^f\) is an equilibrium i.f.f. \(\omega^f = \hat{\omega}^f (L)\), and thus such equilibria exist \(\iff \hat{\omega}^f (L) \in (2P - \bar{\omega}, \bar{\omega})\).
We begin by arguing that $\Delta_\ell^\ell - \Delta_\ell^d > 0$ $\forall \omega$. For $\omega < P$ we have that $\Delta_\omega^\ell = 1 - \frac{\phi^d}{\pi} = 1 - \frac{(P-\omega)^2}{2(\omega-\omega)^2} > 1 - \frac{\omega-P}{4\pi} > \frac{k}{\pi} = \Delta_\omega^d$. For $\omega > P$ we have $\Delta_\omega^d = \frac{k}{\pi} + \phi^d$, which has already been shown to be $< 1 = \Delta_\omega$. 

Now recall that $\omega^d < \omega^T$ when $\omega^T \in (2P - \bar{\omega}, \bar{\omega})$. Thus, for $\omega \geq \omega^d$ (SIGs who would lobby directly absent representation) eqn. B.2 is $> (\leq) 0 \iff \pi + \delta (\omega - L) > (\leq) 0$. A necessary condition for $\omega^T$ to be a best response for the lobbyist is thus $\omega^T = \omega^T(L)$. To argue that this is also sufficient and therefore an equilibrium we must also show the lobbyist would not wish to represent SIGs who would not lobby directly absent representation, i.e. $\omega < \omega^d$. But this is straightforward since $\omega < \omega^d < \omega^T \rightarrow \pi + \delta (\omega - L) < 0 \rightarrow \delta (\omega - L) < 0$.

**Case B: Representation with a partially-favorable posture**

When $\omega^T = 2P - \bar{\omega}$, all remaining strategies except the politician’s posture $\alpha^T$ toward the lobbyist’s client are pinned down. We derive conditions under which $\omega^T = 2P - \bar{\omega}$ for some value(s) of $\alpha^T$. From the preceding analysis we have that $\omega^d = \omega^T = 2P - \bar{\omega}$ and $\phi^d = \phi^T = \frac{\omega-P}{4\pi}$, which further implies that $\Delta_\ell^\ell - \Delta_\ell^d = \Delta_U^\ell - \frac{k}{\pi} = \Delta_W^\ell - \Delta_W^d$, where $\Delta_U^\ell = \alpha^T(1 - \frac{\omega-P}{4\pi})$ may take any value in $[0, 1 - \frac{\omega-P}{4\pi}]$ and has a one to one relationship with implied $\alpha^T \in [0, 1]$.

Now using eqn. B.2 and exploiting the preceding observations, for this behavior to be a best response for the lobbyist the following two conditions are necessary and sufficient; (i) she prefers to decline unworthy SIGs $\omega \in [0, 2P - \bar{\omega}]$ who would otherwise stay home, i.e. $\Delta_U^\ell (\pi + \delta (\omega - L)) \leq k \forall \omega \in [0, 2P - \bar{\omega}]$ (ii) she prefers to represent SIGs $\omega \geq 2P - \bar{\omega}$ who would otherwise lobby directly (which is a mixture of worthy and unworthy clients), i.e. $(\Delta_U^\ell - \frac{k}{\pi}) (\pi + \delta (\omega - L)) \geq 0 \forall \omega \geq 2P - \bar{\omega}\text{ Condition (i) may be checked only at } \omega = 2P - \bar{\omega} \text{ since the l.h.s is strictly increasing in } \omega \text{ when } \Delta_U^\ell > 0\text{. Thus to be satisfied it is necessary and sufficient that either } \omega^T(L) \geq 2P - \bar{\omega} \text{ or } \omega^T(L) < 2P - \bar{\omega} \text{ and }$

$$\Delta_U^\ell \leq \tilde{\Delta}_U^\ell (L) = \frac{k}{\pi + \delta((2P - \bar{\omega}) - L)},$$

where $\tilde{\Delta}_U^\ell (L)$ is a strictly increasing function that $\rightarrow \infty$ as $\omega^T(L) \rightarrow 2P - \bar{\omega}$.

With conditions (i) and (ii), we walk through when $\omega^T = 2P - \bar{\omega}$ is an equilibrium for all possible values of $\omega^T(L) = L - \frac{\pi}{\delta} \in (-\infty, \infty)$. There are three subcases.

**(Subcase B.1: $\omega^T(L) \leq 2P - \bar{\omega}$):** Condition (i) is satisfied i.f.f. $\Delta_U^\ell \leq \tilde{\Delta}_U^\ell (L)$. Now since $\pi + \delta (\omega - L) > 0 \forall \omega > 2P - \bar{\omega}$, condition (ii) is satisfied $\iff \Delta_U^\ell \geq \frac{k}{\pi}$. Thus, this is an equilibrium i.f.f. $\Delta_U^\ell \in \left[\frac{k}{\pi}, \min \left\{ \tilde{\Delta}_U^\ell (L), \frac{\omega - P}{4\pi} \right\} \right]$.

This set is nonempty i.f.f. $L \geq 2P - \bar{\omega}$; when it is empty ($L < 2P - \bar{\omega}$) we later argue that an equilibrium with lobbyist exit will prevail.
(Subcase B.2: \(\hat{\omega}^f(L) \in (2P - \bar{\omega}, \bar{\omega})\)): Condition (i) is always satisfied. Since \(\hat{\omega}^f(L)\) is interior to \((2P - \bar{\omega})\), condition (ii) is satisfied i.f.f. \(\Delta_U^f = \frac{k}{\pi}\).

(Subcase B.3: \(\hat{\omega}^f(L) \geq \bar{\omega}\)): Condition (i) is always satisfied. Since \(\pi + \delta(\omega - L) < 0\) \(\forall \omega < \bar{\omega}\), condition (ii) is satisfied i.f.f. representation weakly hurts the chances that a SIG who would otherwise lobby directly gets the favor, i.e. \(\Delta_U^f \in [0, \frac{k}{\pi}]\).

We assume that equilibria in subcase (B.1) prevail when \(\hat{\omega}^f(L) \leq 2P - \bar{\omega}\), which is precisely when Case A equilibria with a fully favorable posture \((\omega^f > 2P - \bar{\omega})\) do not exist. We further assume that the equilibrium lobbyist exit on the extensive margin will prevail when \(L < 2P - \bar{\omega}\) and neither equilibria in subcase (B.1) nor any other case with representation exist.

Equilibria in subcase (B.2) co-exist exactly with Case A equilibria \(\omega_f \in (2P - \bar{\omega})\) with a fully favorable posture. We assume that in this case, the equilibrium with a fully favorable posture will prevail, as opposed to subcase (B.2) equilibrium with a somewhat favorable posture that are sustained by a knife-edge condition that the lobbyist is exactly no better at securing the favor than the SIG is on her own.

Subcase (B.3) equilibria prevail under conditions that we state the main text will lead to an equilibrium with lobbyist exit because she is too ideologically opposed to the SIG, i.e. \(\hat{\omega}^f(L) \geq \bar{\omega}\). In these equilibria, a policy-motivated lobbyist wishes to harm the SIG’s ability to acquire the favor regardless of the value of \(\omega\), and is willing to take a loss on lobbying in order to do it. She thus charges a price below the mutual cost of access, and the SIG accepts because it is willing to have its prospects harmed in exchange for a reduced cost of access. We consider these equilibria empirically implausible and omit their consideration from the main text.

Case C: Representation with an adversarial posture

We argue that equilibria of the form in Remark ?? with \(\omega^f < 2P - \bar{\omega}\) (so the politician’s posture toward the lobbyist is adversarial) do not exist.

From the preceding observe \(\omega^f < 2P - \bar{\omega} = \omega^d\) and \(\Delta_U^f = 0\). Thus, the net benefit of representing a SIG \(\omega < \omega^d\) who would not lobby directly (and are also all unworthy) is \(\Delta_U^f (\pi + \delta(\omega - L)) - k = -k < 0\). Thus it cannot be an equilibrium for the lobbyist to represent unworthy SIGs in \((\omega^f, \omega^d)\). More generally, when the lobbyist has no chance of acquiring the favor for an unworthy SIG, she will never be willing to represent such a SIG if it does not otherwise intend to lobby directly; she will both lose money and have no effect on the likelihood the SIG acquires the favor.
C Proofs

Proof of Lemma A.1 We begin by characterizing properties that apply to all PBEs in which the SIG sometimes lobbies directly.

First, we argue that in any such PBE, unworthy SIGs must stay home with strictly positive probability, and worthy SIGs must lobby with strictly positive probability. If all unworthy SIG’s lobbied or only unworthy SIG’s lobbied, then $E^d [\omega] < P \rightarrow \alpha^d = 0 \rightarrow \Delta^d_U = 0 \rightarrow (\Delta^d_U - \Delta^\theta_U) \pi \leq 0 < k$, so all unworthy SIGs would want to deviate to not lobbying. Next, we argue that unworthy SIGs lobby with strictly positive probability; if not then (a) lobbying would be a perfect signal that the SIG is worthy, and (b) $E^\theta [\omega] < P$. Then (a) would imply $\alpha^c = 1$ and $\phi^c = 0 \rightarrow \Delta^d_U = 1$, while (b) would imply $\alpha^\theta = 0 \rightarrow \Delta^\theta_U = 0$, together implying $(\Delta^d_U - \Delta^\theta_U) \pi = \pi > k$, implying all unworthy SIGs would want to deviate to lobbying.

Now observe that

$$E [\omega] = Pr (c = d) \cdot E^d [\omega] + Pr (c = \theta) \cdot E^\theta [\omega]$$

$$\iff Pr (c = d) \cdot (E^d [\omega] - E [\omega]) = Pr (c = \theta) (E [\omega] - E^\theta [\omega])$$

Since $E [\omega]$ is $< P$ by assumption, the preceding expression implies that $E^c [\omega] \geq P$ (and so $\alpha^c > 0$) for at most one $c \in \{d, \theta\}$. Now a strictly interior probability of lobbying for unworthy SIG’s implies that they must be indifferent, i.e. $(\Delta^d_U - \Delta^\theta_U) \pi = k$. This clearly requires $\alpha^d > 0$, in turn implying $E^d [\omega] \geq P$, $E^\theta [\omega] < P$, and $\alpha^\theta = 0$, further implying $\Delta^\theta_U = 0$ and $\Delta^d_U = \frac{k}{\pi}$.

We now examine the additional implications of the SIG using a cutpoint strategy $\omega_c$. First, $\alpha^d > 0$ requires that $E^d [\omega] = E [\omega | \omega \geq \omega^d] \geq P \rightarrow \omega^d \geq P$. Further we must have $\omega^d < P$ since $\omega^d \geq P \rightarrow \alpha^d = 1$ and $\phi_- (\omega^d) = 0 \rightarrow \Delta^d_U = 1 > \frac{k}{\pi}$. Finally, for every value of $\Delta^d_U \in (0, 1)$ there is a unique combination of lobbyist cutpoint $\omega^d$ and politician best responses $(\alpha^d, \phi^d)$ that achieve it. For $\Delta^d_U \in \left(0, \frac{\phi_-(\omega^d)}{\phi_+(\omega^d)}\right)$ it is $\omega^d = \omega_*^d (\rightarrow E^d [\omega] = P)$ and $\alpha^d = \frac{\Delta^d_U}{1 - \phi_- (\omega^d) / \phi_+ (\omega^d)}$. For $\Delta^d_U \in \left[1 - \frac{\phi_- (\omega^d)}{\phi_+ (\omega^d)}, 1\right]$ it is the unique value satisfying $1 - \frac{\phi_- (\omega^d)}{\phi_+ (\omega^d)} = \Delta^d_U$, implying $\omega^d > \omega_*^d$ and $\alpha^d = 1$. The preceding ensures that the behavior of unworthy SIGs and the politician are mutual best responses. To verify the behavior of worthy SIGs (always lobby) is also a best response observe $\omega^d < P \rightarrow \phi^\theta = 0 < \phi_- (\omega^d)$. QED

Proof of Lemma B.1 Consider an equilibrium strategy profile satisfying Assumption B.1, let $p_A$ be the probability that the SIG accepts price $F_W$, and let $p^t_\omega$ denote the probability a SIG of type $\omega$ acquires lobbyist representation through the bargaining process. Now let $U^t_\omega (F)$ denote the lobbyist’s utility from offering price $F$ in the original strategy profile; it
is easily verified that
\[
U_{\omega}^F (F) = \begin{cases} 
U_{\omega}^A - (F_{\omega} - F) & \text{if } F < F_{\omega} \\
p_A \cdot U_{\omega}^A + (1 - p_A) U_{\omega}^R & \text{if } F = F_{\omega} \\
U_{\omega}^R & \text{if } F > F_{\omega}
\end{cases}
\]

where \(U_{\omega}^A\) is the lobbyist’s utility from “accepting” the SIG at its willingness to pay and \(U_{\omega}^R\) is the lobbyist’s utility from “rejecting” the SIG (which is unaffected by the price due to assumption B.1). From this it is clear that the lobbyist must only mix over prices \(F \geq F_{\omega}\), and that the lobbyist’s equilibrium utility must be \(\rho_{\omega}^L U_{\omega}^A + (1 - \rho_{\omega}^L) U_{\omega}^R\).

Now, jointly perturbing \(p_A\) to \(p_A' = 1\) and the lobbyist’s pricing strategy to \(F_{\omega}\) with probability \(\rho_{\omega}^L\) and \(F_{\omega} + \varepsilon\) with probability \(1 - \rho_{\omega}^L\) keeps the SIG’s strategy a best response, and does not perturb the lobbyist’s utility. We further argue that perturbing the SIG’s strategy did not change the maximum utility \(\max_F \{U_{\omega}^F (F)\}\) achievable by the lobbyist, and thus his strategy in the perturbed profile must also be a best response. If \(U_{\omega}^A \leq U_{\omega}^R\) this is straightforward, and if \(U_{\omega}^A > U_{\omega}^R\) then \(p_A\) must have already been 1 (otherwise the lobbyist would not have had a best response in the original profile). Lastly, the politician’s best response set is only affected by the probability the SIG pursues each channel, which was unaffected. QED

**Proof of Lemma B.2** First suppose that the lobbyist only represents types \(\omega \geq \omega_d\) who would otherwise lobby directly (for whom the net benefit of representation is \((\Delta_{\omega}^f - \Delta_{\omega}^d) (\pi + \delta (\omega^f - L))\)). Then she represents the SIG i.f.f. \(\pi + \delta (\omega - L) \geq 0\), and her behavior must follow a cutpoint.

Suppose next that the lobbyist represents some types \(\omega < \omega_d\) that do not lobby directly. The net benefit of representing such types is \(\Delta_{\omega}^f (\pi + \delta (\omega - L)) \geq k\). Thus, among \(\omega \leq \omega_d\) her behavior is described by a cutpoint. In addition, if she represents some \(\omega \leq \omega_d\) then \(\pi + \delta (\omega - L) > 0 \ \forall \omega > \omega_d\) so she also represent types who would otherwise lobby directly her behavior is described by a cutpoint overall. QED

**Proof of Lemma B.3** First, recall from Observation A.1 that at \(\omega_d = \hat{\omega}^d\) we have \(\phi_{\omega}^d = \phi_{\omega}^d\). Next observe that when \(\omega^f \leq P\), the definitions yield that:
\[
\phi_{\omega}^d = \phi_{\omega}^d = \left(\frac{1}{2}\right) \frac{(1 - \lambda) (\omega - P)^2}{(\lambda (\omega^f - \omega_d) + (1 - \lambda) (\omega - P) + (1 - \lambda) (P - \omega_d))}
\]

where the denominator of the second term is the unconditional probability of direct lobbying, which we denote \(\rho_S (\omega_d; \omega^f)\). Next we argue \(\omega^f \in (2P - \bar{\omega}, \bar{\omega}) \rightarrow \lambda (\omega^f - \hat{\omega}^d) > (1 - \lambda) (\omega_d - (2P - \bar{\omega}))\), which further implies that \(\rho_S (\omega_d; \omega^f) > 2 (1 - \lambda) (\bar{\omega} - P)\). Observe that
\[
(P - \omega_d)^2 = (1 - \lambda) (\bar{\omega} - P)^2 + \lambda (P - \omega^f)^2 \\
> ((1 - \lambda) (\bar{\omega} - P) + \lambda (P - \omega^f))^2 \quad (\text{since } x^2 \text{ convex})
\]
which implies $P - \hat{\omega}^d > (1 - \lambda) (\hat{\omega} - P) + \lambda (P - \hat{\omega}^d)$, which implies $\lambda (\hat{\omega}^e - \hat{\omega}^d) > (1 - \lambda) (\hat{\omega}^d - 2P - \hat{\omega})$.

Finally, using this we have
\[
\frac{(1 - \lambda)(\hat{\omega} - P)^2}{2\rho^2(\hat{\omega}^d; \hat{\omega}^e)} < \frac{(1 - \lambda)(\hat{\omega} - P)^2}{2 \cdot 2(1 - \lambda)(\hat{\omega} - P)} = \frac{\hat{\omega} - P}{4}
\]
proving the desired property for $\hat{\omega}^e \leq P$.

To prove the desired property for $\hat{\omega}^e \geq P$, observe that $\hat{\omega}^d$ is identical for the reflection point $\hat{\omega}^e = 2P - \hat{\omega}^e \leq P$ about $P$. We already know from the preceding that $\hat{\omega}^d - \frac{P}{2} > \phi^d = \phi^d$ at $\hat{\omega}^e \leq P$. We now wish to show that $\phi^d$ at $\hat{\omega}^e \leq P$ is strictly greater than $\phi^d$ at $\hat{\omega}^e = 2P - \hat{\omega}^e \geq P$, which yields the desired property. First observe that $\phi^d$ at $\hat{\omega}^e$ is $W \cdot X$, where
\[
W = \frac{\lambda (\hat{\omega}^e - \hat{\omega}^d) + (1 - \lambda) (P - \hat{\omega}^d)}{\lambda (\hat{\omega}^e - \hat{\omega}^d) + (1 - \lambda) (\hat{\omega} - P) + (1 - \lambda) (P - \hat{\omega}^d)}
\]
\[
X = P - \left( \frac{\lambda (\hat{\omega}^e - \hat{\omega}^d)}{\lambda (\hat{\omega}^e - \hat{\omega}^d) + (1 - \lambda) (P - \hat{\omega}^d)} \right) \left( \frac{\hat{\omega}^d + \hat{\omega}^e}{2} \right)
- \frac{(1 - \lambda) (P - \hat{\omega}^d)}{(1 - \lambda) (P - \hat{\omega}^d)} \left( \frac{\hat{\omega}^d + P}{2} \right)
\]
Next observe that $\phi^d$ at $\hat{\omega}^e$ is $Y \cdot Z$, where
\[
Y = \frac{\lambda (\hat{\omega}^e - \hat{\omega}^d) + (1 - \lambda) (\hat{\omega} - P) + \lambda (P - \hat{\omega}^d)}{\lambda (\hat{\omega}^e - \hat{\omega}^d) + (1 - \lambda) (\hat{\omega} - P) + (1 - \lambda) (P - \hat{\omega}^d) + 2\lambda (P - \hat{\omega}^d)}
\]
and $Z = P - \left( \frac{\hat{\omega}^d + P}{2} \right)$. Clearly, $X > Z$. We wish to show that also $W > Y$, proving the desired property. Write $W$ as $\frac{\alpha}{\beta}$ which yields $Y = \frac{\alpha + c}{\beta + 2c}$, where $c = \lambda (P - \hat{\omega}^d)$; taking the difference $W - Y = \frac{\alpha - \alpha + c}{\beta + 2c}$ yields $\left( \frac{\alpha}{\beta + 2c} \right) \left( \frac{\alpha}{\beta} - \frac{1}{2} \right)$, which is $> 0$ provided $W = \frac{\alpha}{\beta} > \frac{1}{2}$. This is simple again using $\lambda (\hat{\omega}^e - \hat{\omega}^d) > (1 - \lambda) (\hat{\omega}^d - (2P - \hat{\omega}))$ since
\[
W = \frac{\lambda (\hat{\omega}^e - \hat{\omega}^d) + (1 - \lambda) (P - \hat{\omega}^d)}{\lambda (\hat{\omega}^e - \hat{\omega}^d) + (1 - \lambda) (P - \hat{\omega}^d) + (1 - \lambda) (\hat{\omega} - P)} > \frac{(1 - \lambda) (P - \hat{\omega}^d) + (1 - \lambda) (P - \hat{\omega}^d)}{(1 - \lambda)(\hat{\omega}^d - (2P - \hat{\omega}) + (1 - \lambda) (P - \hat{\omega}^d) + (1 - \lambda) (\hat{\omega} - P)} = \frac{1}{2} \text{ QED}
\]

## D Deriving Empirical Predictions

This section derives the comparative statics, (E1) and (E2). We restate the assumptions in Section 4:

**Assumption D.1.** Each lobbyist-politician pair randomly draws a large number of potential clients.

**Assumption D.2.** $0 < L \leq P < \omega$.

Consider a pair of a lobbyist and a politician. Denoting by $N$ the total number of clients that the lobbyist represented to the politician, the following corollary shows that the
probability that there is at least one contact between the pair, \( \Pr(N > 0) \), and the expected number of clients on behalf of whom the lobbyist contacts the politician conditioning on having any contacts between them, \( \mathbb{E}(N|N > 0) \), are weakly increasing in the pair’s ideological difference, \( P - L \equiv D \).

**Corollary D.1.** Suppose Assumptions D.1 and D.2 hold. Then, (i) \( \Pr(N > 0) \) converges to one if \( D \leq \bar{\omega} - P \) and to zero otherwise as the number of potential clients goes infinity; (ii) \( \mathbb{E}(N|N > 0) \) are nondecreasing in \( D \).

**Proof.** Under the two assumptions, Proposition 2 implies that the probability that the lobbyist contacts the politician for a random client, \( \rho \), is:

\[
\rho = \begin{cases} 
\Pr(\omega > \omega_k) = \min \left\{ \bar{\omega} - L + \frac{\pi}{5}, 2(\bar{\omega} - P) \right\} / \bar{\omega} & \text{if } L \geq 2P - \bar{\omega}, \\
0 & \text{otherwise}.
\end{cases}
\]

Denoting \( \tilde{P} \equiv \bar{\omega} - P \), the probability can be rewritten as:

\[
\rho = \begin{cases} 
\min \left\{ \tilde{P} + D + \frac{\pi}{5}, 2\tilde{P} \right\} / \bar{\omega} & \text{if } D \leq \tilde{P}, \\
0 & \text{otherwise}.
\end{cases}
\]  \(\text{(A.1)}\)

Now, denoting the number of potential draws by \( T \), Assumption D.1 implies that \( N \) follows a Binomial distribution with \( T \) draws and \( \rho \) probability of success, and therefore the following holds:

\[
\Pr(N > 0) = 1 - (1 - \rho)^T, \quad \text{(A.2)}
\]

\[
\mathbb{E}(N|N > 0) = \rho T / [1 - (1 - \rho)^T]. \quad \text{(A.3)}
\]

Thus, (i) follows from (A.2). From (A.1), \( \rho \) is nondecreasing in \( D \) if \( D \leq \tilde{P} \), and from (A.3), \( \mathbb{E}(N|N > 0) \) are increasing in \( \rho \). Thus (ii) holds. \( \square \)
# Appendix Tables and Figures

Table A1: Lobbying Firm Characteristics by the LDA Registration

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<th>LDA &amp; FARA</th>
<th></th>
<th>FARA Only</th>
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<tr>
<td></td>
<td>Mean</td>
<td>SD</td>
<td>Mean</td>
<td>SD</td>
</tr>
<tr>
<td>Annual revenues† ($thousand)</td>
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<td>652.9</td>
<td>420.0</td>
<td>675.7</td>
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<tr>
<td>Number of government clients†</td>
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<td>9.23</td>
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<td>Number of lobbyists</td>
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<td></td>
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<tr>
<td>All</td>
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<td>18.97</td>
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<td>0.25</td>
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<td>1.06</td>
<td>1.22</td>
<td>0.18</td>
<td>0.48</td>
</tr>
<tr>
<td>Number of observations</td>
<td>72</td>
<td></td>
<td>36</td>
<td></td>
</tr>
</tbody>
</table>

*Notes:* As for time-varying variables, the summary statistics are over the average value of each variable across multiple filings for each lobbying firm. †: For these two variables, we consider the lobbying reports included in this paper only. Therefore, the total annual revenues and the total number of foreign government clients are larger than the counterparts included here.

Table A2: Report-Level Summary Statistics

<table>
<thead>
<tr>
<th>Contact-level Lobbyist Information:</th>
<th>Retrieved</th>
<th>Not Retrieved</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Inferred,</td>
<td>Observed from</td>
</tr>
<tr>
<td></td>
<td>a Single Lobbyist</td>
<td>the Report</td>
</tr>
<tr>
<td>Number of Reports</td>
<td>87</td>
<td>139</td>
</tr>
<tr>
<td>Number of FARA Clients</td>
<td>1.1</td>
<td>1.6</td>
</tr>
<tr>
<td>Fees ($K)</td>
<td>158</td>
<td>405</td>
</tr>
<tr>
<td>FARA Registration Year</td>
<td>2003</td>
<td>2003</td>
</tr>
<tr>
<td>Involved in the Domestic Lobbying (LDA)</td>
<td>.41</td>
<td>.82</td>
</tr>
<tr>
<td>Number of Lobbyists</td>
<td>2.89</td>
<td>10.3</td>
</tr>
<tr>
<td>Number of Total Contacts</td>
<td>12.2</td>
<td>44.5</td>
</tr>
</tbody>
</table>

*Notes:* The unit of observation is a semi-annual FARA report. a. The average DW-NOMINATE scores of the contacted members, weighted by the contact frequency.
Table A3: Lobbyist’s Issue Specialization

<table>
<thead>
<tr>
<th>Dependent variable</th>
<th>Lobbied on both trade and security issues</th>
<th>(1)</th>
<th>(2)</th>
<th>(3)</th>
<th>(4)</th>
</tr>
</thead>
<tbody>
<tr>
<td>CF Score Difference</td>
<td></td>
<td>-0.0068</td>
<td>-0.0066</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(0.0043)</td>
<td>(0.0092)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ideologically aligned†</td>
<td></td>
<td></td>
<td></td>
<td>0.0074</td>
<td>0.0063</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>(0.0076)</td>
<td>(0.0087)</td>
</tr>
<tr>
<td>Lobbyist FE</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Politician FE</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Number of observations</td>
<td>1,704</td>
<td>1,704</td>
<td>1,704</td>
<td>1,704</td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>0.125</td>
<td>0.361</td>
<td>0.125</td>
<td>0.361</td>
<td></td>
</tr>
</tbody>
</table>

Notes: The unit of observation is politician × lobbyist. Based on the lobbying issues in the reports, we categorize lobbying issues into trade, security, budget, and others. We include all politician-lobbyist pairs with any contacts on either trade or security issues, the main two issues, during the period of study. Standard errors clustered at the lobbyist level are in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. † The CF score difference between the lobbyist and the politician is less than the median value among the pairs with any contacts, 0.37.

Figure A1: Distribution of Ideology Measures by Party Affiliation

(a) CF Scores                                           (b) DW-NOMINATE Scores
Figure A2: A FARA Supplemental Statement: Contacts

<table>
<thead>
<tr>
<th>Name of Registered Individual:</th>
<th>Hal S. Shapiro</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Name of Client:</th>
<th>Embassy of United Arab Emirates</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Activity/Contact (name, title and office/agency)</th>
<th>Type of Activity/Method of contact</th>
<th>Topic</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rep. H. Berman, Chairman, House Committee on Foreign Affairs</td>
<td>Meeting</td>
<td>US-UAE relations, status of pending arms sale, international nuclear fuel bank regional issues</td>
<td>7/31/08</td>
</tr>
<tr>
<td>Alan Makovsky - Senior Staff, House Committee on Foreign Affairs</td>
<td>Meeting</td>
<td>US-UAE relations, status of pending arms sale, international nuclear fuel bank regional issues</td>
<td>7/31/08</td>
</tr>
<tr>
<td>Alan Makovsky - Senior Staff, House Committee on Foreign Affairs</td>
<td>Phone call and email message</td>
<td>Status of pending arms sale and satellite sale</td>
<td>8/5/08</td>
</tr>
<tr>
<td>Alan Makovsky - Senior Staff, House Committee on Foreign Affairs</td>
<td>Email message</td>
<td>Status of pending arms sale and satellite sale</td>
<td>8/6/08</td>
</tr>
<tr>
<td>Alan Makovsky - Senior Staff, House Committee on Foreign Affairs</td>
<td>Email message</td>
<td>Status of pending arms sale</td>
<td>9/9/08</td>
</tr>
<tr>
<td>Alan Makovsky - Senior Staff, House Committee on Foreign Affairs</td>
<td>Email message</td>
<td>Status of pending arms sale</td>
<td>9/19/08</td>
</tr>
<tr>
<td>Rep. C. Rangel, Chairman, House Ways &amp; Means Committee</td>
<td>Meeting</td>
<td>Regional issues, bilateral relationship, international nuclear fuel bank</td>
<td>9/23/08</td>
</tr>
<tr>
<td>Tim Reif, Majority Chef Trade Counsel, House Ways &amp; Means Committee</td>
<td>Meeting</td>
<td>Regional issues, bilateral relationship, international nuclear fuel bank</td>
<td>9/23/08</td>
</tr>
<tr>
<td>Jennifer McCadney, Majority Trade Staff, House Ways &amp; Means Subcommittee on Trade</td>
<td>Meeting</td>
<td>Regional issues, bilateral relationship, international nuclear fuel bank</td>
<td>9/23/08</td>
</tr>
<tr>
<td>Tim Reif, Majority Chef Trade Counsel, House Ways &amp; Means Committee</td>
<td>Email message</td>
<td>Meeting request on regional issues</td>
<td>11/11/08</td>
</tr>
</tbody>
</table>

Notes: This is an excerpt from the report for the six-month period ending December 31, 2008, by Akin Gump Strauss Hauer & Feld, LLP. During this period, the embassy of the United Arab Emirates was one of its clients, and this page reports detailed information on the contacts made by a lobbyist of the firm, Hal S. Shapiro, on behalf of the embassy.