# Lobbyists as Matchmakers in the Market for Access

Karam Kang Hye Young You\*

June 6, 2016

#### Abstract

Lobbying firms provide access to policymakers in the lobbying process, but little is known about how political access is allocated in this market and what role lobbyists play as intermediaries. To answer these questions, we analyze detailed lobbying contacts drawn from reports mandated by the Foreign Agent Registration Act. We find that when lobbying firms have multiple clients, the set of policymakers contacted on behalf of a particular client tends to vary with the identity of the client and the lobbying issue. Firms with connections to a politician are more likely to make contacts to that politician than those without connections. However, we find that lobbyists do not always contact the politicians with whom they have connections; the chance of making such contacts depends on the electoral cycle, the political sensitivity of the lobbying issue, and the type of clients. We find that lobbying firms charge a large premium when they make contacts to the politicians that they have connections with. We also find that there exists even a larger premium for contacts to connected politicians when the client is from an autocratic country with a relatively large US media spotlight during an election year. This additional premium, on the other hand, does not exist for contacts to politicians without connections. These findings suggest that connected lobbyists play an independent role as intermediaries in the market for access between their clients and policymakers.

<sup>\*</sup>Kang: Assistant Professor of Economics, Tepper School of Business, Carnegie Mellon University. You: Assistant Professor, Department of Political Science, Vanderbilt University. We are thankful for suggestions and comments from Attila Ambrus, Kenneth Chay, Joshua Clinton, Dennis Epple, Jeffry Frieden, Brian Knight, Alessandro Lizzeri, Nolan McCarty, Jacopo Perego, Nicola Persico, Mattias Polborn, Edson Severnini, Jesse Shapiro, Keith Schnakenberg, James Snyder, Ken Shepsle, Alan Wiseman, and participants at the 4th Quebec Political Economy Conference, the 2015 European Political Science Meeting, the 2015 International Political Economy Society Meeting, and the 2016 Southern Political Science Meeting and the seminars at Brown University, Carnegie Mellon University, and Vanderbilt University. We also thank Kole Reddig for excellent research assistance.

### 1 Introduction

Access to policymakers is one of the most important and scarce resources sought after in the lobbying process (Truman 1955; Langbein 1986; Hansen 1991; Lohmann 1995; Wright 1996; Austen-Smith 1995, 1998; i Vidal, Draca, and Fons-Rosen 2012; Bertrand, Bombardini, and Trebbi 2014). Lobbying firms often provide this access as intermediaries between interest groups and policymakers, although the majority of the existing literature does not distinguish lobbying firms from special interest groups (Potters and van Winden 1992; Grossman and Helpman 2001; Bennedsen and Feldmann 2002, 2006; Cotton 2009, 2012). The share of lobbying firms' revenues in the US lobbying industry accounts for more than a majority of all lobbying revenues, and their importance has increased over the last decade (Groll and Ellis 2014). Although there is a growing literature on lobbying firms, both theoretically (Ainsworth 1993; Stephenson and Jackson 2010; Groll and Ellis 2014; Hirsch and Montagnes 2015) and empirically (i Vidal, Draca, and Fons-Rosen 2012; Bertrand, Bombardini, and Trebbi 2014), little is known about how lobbying firms sell political access to lobbying clients and how access is allocated in this market, mainly due to the lack of detailed data on lobbying contacts.

We address these questions by utilizing lobbying filings mandated by the Foreign Agent Registration Act of 1938 (FARA). Most empirical studies on lobbying are based upon domestic lobbying reports under the Lobbying Disclosure Act of 1995 (LDA), which does not include lobbying contact information. On the other hand, the FARA requires that lobbyists representing foreign entities submit a semi-annual report detailing all lobbying contacts, including information on who, when, why, and how those contacts were made. The lobbying contacts in the reports include individuals who are associated with both the legislative and executive branches of the US government, the media, and other institutions such as think tanks and universities. This comprehensive lobbying contact data, along with data on foreign country characteristics and lobbyists' work histories and campaign contributions, enables us to systematically study the services that lobbying firms provide in this market.

Using over 20,000 lobbying contact records made between 2007 through 2010, we find the following regularities in the contact patterns and lobbying fees. First, when a lobbying firm has multiple clients, the set of policymakers contacted on behalf of a particular client tends to vary with the identity of the client. For example, a lobbying firm, The Livingstone Group, L.L.C., represented both the governments of Egypt and the Republic of Congo during the period of 2007–2010. For the government of Egypt, 4% of congressional contacts were made to Republicans; for the government of the Republic of Congo, 94% of congressional contacts were made to Republicans. We also find that contact patterns vary by policy issue; in particular, lobbying firms tend to match a foreign government to a set of policymakers who have relevant expertise or jurisdiction over the issue on which that client lobbied. For example, members of the House Ways and Means or Senate Finance Committee are more likely to be contacted for trade issues, while members of the Armed Services or Homeland Security Committee are more often contacted for security issues, such as military actions or arms sales. Similar patterns can be found for contacts to executive agencies. Second, politicians grant access only to a very small number of lobbying firms. On average, a politician gave access to three firms during the period of the study. This implies that the extent to which lobbying firms can provide valuable, tailored access for their clients may be limited by the set of politicians to whom lobbying firms have access. Motivated by recent literature that documents the importance of connection in revenue generation for lobbyists (i Vidal, Draca, and Fons-Rosen 2012; Bertrand, Bombardini, and Trebbi 2014), we examine whether lobbying firms with connections tend to have different contact patterns than other lobbying firms. Following the literature, we define that a lobbying firm is connected to a politician if any of the employees of that firm is a former staff member of the politician and/or gives campaign contributions to him/her. We find that lobbying firms with connections to a member of Congress are more likely to contact him/her on behalf of their clients than those without connections.

Third, we find that lobbying firms do not always contact legislators with whom they have connections, and the chance of contacting such politicians depends on electoral cycles, the political sensitivity of the issue, and the type of clients. We measure the "political sensitivity" of the issue in two dimensions: the annual frequency of *New York Times* articles regarding the client country, and the annual frequency of *Google* searches containing the name of the client country. These two measures are related to the extent of the US interest in the client country and/or the extent of the client country's interests in the US in a given year. We find that an increase in the frequency of *New York Times* appearances (or Google searches) of a client country is associated with a decrease in contacts to connected politicians, especially during an election year if the country is autocratic and the politicians run for a seat in Congress. Such patterns do not appear regarding contacts made to non-connected politicians.

Lastly, we find that making contacts to an additional politician with whom a lobbying firm has connections is associated with a statistically significant increase in lobbying fees, even after controlling for the firm fixed effects, among others. This premium exists for contacts to politicians without connections, but it is much smaller than for counterparts with connections. We also find that there exists an even larger premium for contacts to connected politicians when the client is from an autocratic country receiving a relatively large US media spotlight during an election year. This additional premium, on the other hand, does not exist for contacts to politicians without connections.

These findings suggest that connected lobbyists play an independent role as intermediaries in the market for access between their clients and policymakers. In this market, connections to politicians are valued in the market, and they are associated with actual contacts. The key empirical finding in this paper is that lobbyists use and allocate their connections judiciously; we find that lobbyists increase the price for access to connected politicians when their client is from an autocratic country and has heightened US media attention during an election year, which in turn decreases the equilibrium probability of contacts in such a context. This finding is consistent with a price-discriminating intermediary in the many-to-many matching market or an intermediary who bears different costs in making contacts to politicians depending on the issue and the identity of its client.

Our paper makes three main contributions. First, to our knowledge, this is the most comprehensive empirical analysis of the market for political access, using unique lobbying contacts. In the existing literature, some studies use survey data on lobbying contacts from legislators (Langbein 1986) or from lobbyists (Wright 1990; Hojnacki and Kimball 2001; Hall and Houweling 2012). Others use lobbyists' campaign contributions or their revolving-door career history to indirectly measure their access to members of Congress (Herndon 1982; Bertrand, Bombardini, and Trebbi 2014). Although a lobbyist may give campaign contributions to a Congress member he knows well, this does not mean that all of his clients have access to that Congress member, as our analysis indicates. The detailed lobbying contact information in our data, on the other hand, allows us to measure the intensity of access - by lobbying issue - bestowed on each interest group.

Second, this paper introduces and documents the role of lobbying firms in the policymaking process as matchmakers between interest groups and policymakers. Most existing models assume that interest groups and policymakers directly communicate, although the majority of lobbying activities are engaged in by commercial lobbying firms. Also, the existing models assume a single politician, although there are multiple politicians who grant access. In our paper, we provide empirical evidence that lobbying firms are active actors who determine, for each interest group, which policymakers to contact to advocate on each policy issue for a fee. We contribute to a growing literature on the role of lobbyists (i Vidal, Draca, and Fons-Rosen 2012; Bertrand, Bombardini, and Trebbi 2014; Groll and Ellis 2014; Hirsch and Montagnes 2015).

Third, our paper provides an explanation of why connections matter in the lobbying industry. Recent papers document that connections are a major source of lobbyists' revenues (i Vidal, Draca, and Fons-Rosen 2012; Bertrand, Bombardini, and Trebbi 2014). However, it is not clear why connections to politicians increase lobbying revenues. Bertrand, Bombardini, and Trebbi (2014) speculate that "connected lobbyists are likely to bring to the table a complementary resource, perhaps reputation, credibility, or political savvy, in the transmission of information." Our empirical findings suggest that connections are valued because politicians are more likely to grant access to lobbyists with whom they have connections, and this propensity is related to the "selective" matching service that connected lobbyists provide.

The remainder of the paper proceeds as follows. We first describe the lobbying industry and provide background on the FARA in Section 2. Section 3 describes the data and Section 4 shows key patterns in the data indicating that lobbying firms provide tailored matching services to their clients. In Section 5, we investigate how a lobbying firm's political connections are associated with contacts and analyze how lobbyists contact their connected politicians depending on electoral cycle, issue sensitivity, and types of foreign clients. Section 6 presents our analysis of the premium associated with access to connected politicians, along with an analysis of political sensitivity and access patterns. We conclude in Section 7.

### 2 Background

The practice of lobbying in the US is as old as the history of the country (Allard 2008). The founding fathers and writers of the Constitution were well aware of the "pressures that particular interests, like farmers, merchants, and churches, could put upon them" (Loomis 2006). The right to petition the government is guaranteed by the First Amendment to the United States Constitution, which specifically prohibits the Congress from abridging "the right of the people...to petition the government for a redress of grievances." In exercising such a right, an individual or an interest group may hire a professional lobbyist to contact government officials. In a series of rulings, the Supreme Court upheld the notion that the underlying First Amendment protection includes the right to pay individuals for advocacy activities (Allard 2008).

Individuals who engage in advocacy activities on behalf of their clients are lobbyists and there are two types of lobbyists: those who are hired by an interest group to exclusively work for that group (in-house lobbyists) and those who contract with, potentially multiple, interest groups (contract or commercial lobbyists). In this paper, we focus on the latter type of lobbyists. As the scope of both the federal and state governments has expanded over the last 40 years, the number of interest groups being formed and operating in Washington, DC has dramatically increased. As the number of interest groups skyrocketed, so did the number of commercial lobbying firms and their lobbyists (Rosenthal 2000; Schlozman, Verba, and Brady 2012).

The market share of commercial lobbyists has grown over time, as has their revenue. In 2000, the market share of commercial lobbyists was 40 % and their revenues were around \$1 billion at the federal level. In 2007, however, their market share increased to around 65 % and their revenues reached almost \$2.5 billion (Groll and Ellis 2014). Given that the commercial lobbying industry has been a main driving force of the US lobbying industry's growth over the last 15 years, and their importance in advocacy activities in every corner of the policymaking process has grown, it is important to understand the role of commercial lobbyists in the market for political access.

Despite the importance of commercial lobbyists in the lobbying industry, their role in the political process has received relatively little attention, in contrast to the extensive literature on the nature or the purpose of lobbying. Some view lobbying as buying votes and thus as a *quid pro quo* process (Stigler 1971; Snyder 1992; Besley and Coate 2001; Bennedsen and Feldmann 2002; Dekel, Jackson, and Wolinsky 2009). Others argue that interest groups lobby to transmit their private information on the state of an industry or an issue in order to persuade legislators of their positions (Hansen 1991; Austen-Smith and Wright 1992; Potters and van Winden 1992; Austen-Smith 1993, 1995; Lohmann 1995). A recent view is that lobbying does not change the positions of policymakers, rather it assists like-minded legislators by providing various services (Hall and Deadorff 2006).

Although this literature has advanced our understanding on lobbying in general, most studies do not distinguish the role of commercial lobbyists from the interest groups that hire them, except for a few papers such as Ainsworth and Sened (1993), Groll and Ellis (2014) and Hirsch and Montagnes (2015). These papers argue that lobbyists help communicate between interest groups and policymakers. This enhancement in communication is due to information verification that commercial lobbying firms possess (Groll and Ellis (2014)) or political connections and reputational concerns of lobbyists (Hirsch and Montagnes (2015)).

A recent paper by Bertrand, Bombardini, and Trebbi (2014) shows that lobbyists provide both policy expertise and access to policymakers; the latter generates a larger premium in lobbyists' revenues. Their empirical analyses are based on the lobbying reports mandated by the Lobbying Disclosure Act (1995, LDA), which does not require reporting of detailed information on contacts to policymakers. Without contact information, Bertrand, Bombardini, and Trebbi (2014) proxy lobbyists' political access by their campaign contributions. Although there is some suggestive evidence of a positive relationship between campaign contributions and lobbying contacts (Herndon 1982; Langbein 1986; Wright 1990; Ainsworth 1993), observing actual lobbying contacts has advantages because lobbyists may selectively allocate their political access to multiple clients and it allows analysis of the intensity with which different legislators are targeted - a topic that has been missing from the literature (de Figueiredo and Richter 2014).

We overcome this limitation by constructing a new data set based on the lobbying reports mandated by the Foreign Agent Registration Act (1938, FARA). Under the FARA, any person hired by foreign entities to lobby the US government is mandated to submit a semi-annual lobbying disclosure form.<sup>1</sup> We use these lobbying reports for our analysis.<sup>2</sup> Here, we focus on the lobbying activities conducted on behalf of foreign governments, because most foreign businesses have reported their lobbying activities via the LDA since 1995.

Unlike the LDA, the lobbying reports under the FARA are unique in that they list detailed information on lobbying contacts.<sup>3</sup> For each contact record, we observe (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.

Although some foreign governments hire in-house lobbyists, their activities seem to be limited in comparison to commercial lobbyists, who predominantly contact government officials on behalf of their clients.<sup>4</sup> The main activities of lobbyists are reported to provide legal or strategic consulting services by making contacts in the federal, state, and local governments, academia, and the media.

## 3 Data

In this paper, we focus on lobbying activities on policy issues that are potentially relevant to legislation during 2007–2010, covering two Congresses (the 110th and the 111th Congresses). In doing so, we analyze all lobbying reports that include at least one congressional contact via phone

<sup>&</sup>lt;sup>1</sup>A sample lobbying report can be found in Figures A6, A7, and A8 in Appendix C.

<sup>&</sup>lt;sup>2</sup>Our analyses were made possible by a joint project of ProPublica and the Sunlight Foundation, which has digitized the lobbying reports. For more details, refer to http://foreignlobbying.org. We complemented the data by collecting information from additional lobbying reports that are missing in the dataset, but are available on the FARA government website http://www.fara.gov.

<sup>&</sup>lt;sup>3</sup>The LDA regulates lobbying activities on behalf of domestic clients. It requires that lobbyists disclose the names of the government bodies they contact, but it does not require them to specify any further details about their lobbying contacts.

 $<sup>^4</sup>$ Given our data, 94.3 % of contacts made to the US government were made by lobbying firms.

call or in-person meeting.<sup>5</sup> There are 787 such reports of lobbying activities on behalf of 71 foreign governments in the data.<sup>6</sup>

#### 3.1 Lobbying Firms

Table 1 presents the summary statistics of lobbying firms that represented foreign governments and contacted the Congress on behalf of their foreign clients during the period of our study.<sup>7</sup> These governments were collectively represented by 112 lobbying firms. Among them, 71 firms represented domestic clients as well as foreign clients (i.e., they were registered by both the LDA and the FARA lobbying acts). These firms tended to reap larger yearly revenues, have more foreign clients, contact a larger set of politicians, and employ more lobbyists than those registered by the FARA only.

The semi-annual reports specify the hiring and the termination dates of all FARA-registered lobbyists. Using this information, we construct the list of all FARA-registered lobbyists who were active during each period. For each lobbyist in the list, we obtain his/her career history from www.lobbyists.info, which is maintained by Columbia Books and Information Services. This source has also been used in Bertrand, Bombardini, and Trebbi (2014). Not all lobbyists identified in the FARA reports appear on www.lobbyists.info. Among the 1,397 unique pairs of a firm and a lobbyist's name identified in the FARA reports, we were able to match the career history records of 476 pairs (34%). It can be seen that the lobbying firms who represented both domestic and foreign clients tended to hire more high-profile lobbyists, such as former members of Congress or those who worked in the legislative and/or executive branches, compared to those who represented foreign clients only.

We define that lobbying firm i has personal or professional connections to politician j at time period t if either of the following two conditions are satisfied: (i) if at least one of the employees of firm i at time t made campaign contributions to politician j during the time period; or (ii) if at least one of the employees of the firm at time t had worked as a staff member for politician j prior to the employment. Bertrand, Bombardini, and Trebbi (2014) used the former condition to define connections between lobbyists and politicians, and i Vidal, Draca, and Fons-Rosen (2012) used the latter.<sup>8</sup> We use both definitions to define connections, and given this, we find that a lobbying firm registered in both the LDA and FARA has connections with 15 members of Congress on average, while a firm registered only with FARA has four connections.

 $<sup>{}^{5}</sup>$ In these reports, we identify 20,606 contact records, consisting of contacts to the Congress (73.5%), the executive branches of the federal government (18.8%), the media (2.9%), and others (4.8%) such as think tanks, labor unions, firms, universities, and non-profit organizations. We do not consider emails or party encounters, which are most likely to be one-sided, as contacts.

<sup>&</sup>lt;sup>6</sup>The number of unique lobbying reports, submitted by lobbyists, is 492. Many reports describe the lobbying activities for multiple clients separately, leading to 787 lobbying "reports" for our analysis.

 $<sup>^{7}</sup>$ Some lobbying firms focused on media and/or executive contacts on behalf of their foreign clients. These firms are not included in the analysis.

<sup>&</sup>lt;sup>8</sup>The amount of campaign contributions by lobbying firms is small. The average amount that all employees of a lobbying firm collectively contributed to a member of the 111th Congress during the period of our study, conditional on nonzero contribution, is \$2,190. There is evidence that lobbyists, like other individual donors, follow the partian line when they donate (Drutman 2010), and interviews with lobbyists indicate that lobbyists give campaign contributions to politicians whom they have known for a long time or whom they consider a "friend" (Leech 2013).

Variables	LDA & FARA	FARA Only
Num. of Obs.	71	41
Annual Revenue (\$)	$710,\!053$	509,406
	(890, 350)	(783,554)
Num. of Client Countries	2.83	1.34
	(2.80)	(0.79)
Num. of Contacted Members	48.15	30.53
	(61.04)	(42.07)
Num. of Connected Members <sup><math>a</math></sup>	15.34	4.10
	(20.0)	(6.77)
FARA Registration Year	2002.5	2005.1
	(8.95)	(5.27)
Num. of Lobbyists	10.02	4.72
	(10.84)	(7.96)
Num. of Lobbyists of		
Identified Career History <sup><math>b</math></sup>	4.26	1.53
	(3.68)	(1.99)
Former Member of Congress	0.45	0.19
	(0.89)	(0.51)
White House Experience	1.46	0.43
	(1.42)	(0.74)
Congress Experience	2.25	0.72
	(2.29)	(1.40)

Table 1: Lobbying Firms Representing Foreign Governments

*Notes:* Numbers in parentheses are standard deviations. Unit of observations is a lobbying firm. Based on lobbying filings in 2007 through 2010. As for the variables related to lobbyists (number of connected members and number of lobbyists), the summary statistics are over the average value of each variable across multiple filings for each lobbying firm. a. Connections are defined by the campaign contributions in the FARA reports and the career history of hired lobbyists. b. For each lobbyist hired by a firm, we match the career history records available in www.lobbyists.info.

We find that this measure of connections captures a meaningful relationship between a lobbying firm and a politician. Table 2 shows that the likelihood that there exists a lobbying contact by a firm to a politician, conditional on connections, is 20%, which is five times as high as the counterpart conditional on no connections. We note, however, that contacts can occur without observed connections, which implies that our measure of connections may not represent the full picture of various lobbyist-politician relationships, although it captures a large part of the relationships.

The following pieces of evidence may suggest that the conclusions from our study could have general implications for the US lobbying industry. First, the total revenue from domestic lobbying by the 71 firms that lobbied for foreign governments is, on average, \$15 million, which is much larger than the average revenue of the 2,642 active lobbying firms registered by the LDA during the same period: \$2.1 million. Second, out of 27 domestic lobbying firms that reaped over \$10 million per year during the period, 12 had at least one foreign government as a client.

	Connected	Not Connected
Contacted Not Contacted	525 (20.27%) 2,065 (79.73%)	2,182~(4.09%) 51,124~(95.91%)
Total	2,590~(100%)	53,306~(100%)

Table 2: Relationship between Contacts and the Measured Connections

*Note:* Each observation is a firm-politician pair. There are 102 lobbying firms that were active in 2009-2010, and there were 548 members of the 111th Congress, in total. Therefore, the total number of observations is 55,896 ( $102 \times 548$ ). Connections are measured by campaign contributions and work relationships, and we consider contacts via phone or meetings only.

#### 3.2 Members of Congress

Table 3 presents summary statistics at the member-of-Congress level for those who served in the 111th Congress.<sup>9</sup> We provide the summary statistics for three different groups of legislators: (1) those who were contacted by more than five lobbying firms, (2) those who were contacted less than or equal to five firms, and (3) those who were not contacted at all during the 111th Congress. Among 560 members who served, only 45 legislators did not receive any contact. Among the members who had at least one contact with a lobbyist who represented a foreign client, members who were contacted by more than five firms are more likely to have had a leadership position and a longer tenure in the Congress, to come from a less competitive district, and to have served on the House Foreign Relations or the Senate Foreign Affairs committee.

Figure 1 presents the distribution of contact patterns among legislators who served in the 111th Congress. The histogram on the left shows the distribution of the number of total foreign contacts, and the one on the right shows the number of foreign governments that contacted each member of Congress. During the 111th Congress, the average number of contacts per member is 11, ranging from 0 to 109, and the average number of foreign governments with which a member interacted is 3.9, ranging from 0 to 30. Note that John Kerry (D-MA), who is ranked at the top of both histograms in terms of total number of contacts as well as total number of interactions with foreign governments, was the Senate Foreign Relations Committee chair during the 111th Congress. In Figure A1 in Appendix B, we graphically present a different lobbying network between two prominent Democratic Senators during the period: Blanche Lincoln (D-AR) and John Kerry (D-MA).

#### 3.3 Foreign Countries

Table 4 presents the summary statistics on country characteristics, conditional on the lobbying activities by the countries' governments. All statistics are based on the 2008 filings, although the pattern is similar for different years during the period of study. There are 46 foreign countries whose governments hired a lobbying firm with connections to more than 15 different members of Congress,

<sup>&</sup>lt;sup>9</sup>The summary statistics for the members who served in the 110th Congress are similar. Table ?? in Appendix A presents the results for the 110th Congress.

Variables	Lobbied by	Lobbied by	Not Lobbied
	>5 Firms	$\leq 5$ Firms	
Num. of Obs.	170	345	45
Num. of Contacted Firms	9.72	2.58	0
	(3.98)	(1.32)	-
Num. of Contacted Countries	8.18	2.33	0
	(4.10)	(1.23)	-
Num. of Total Contacts	25.81	5.28	0
	(16.69)	(5.54)	-
Democrat	0.61	0.57	0.53
	(0.46)	(0.34)	(0.50)
Leadership/ Comm. Chair	0.15	0.05	0
	(0.36)	(0.22)	-
Tenure	14.66	9.33	10.57
	(10.05)	(9.66)	(8.16)
Vote Share in Recent Elections	0.68	0.65	0.66
	(0.13)	(0.13)	(0.13)
Foreign Relations/Affairs Comm.	0.11	0.01	0
	(0.32)	(0.07)	-

Table 3: Members of Congress

*Note:* Unit of observations is a member of Congress. Based on lobbying filings in 2010 for the 111th Congress. Standard deviations are in parentheses.

and 25 countries whose governments hired a lobbying firm with less than or equal to 15 connections. The rest, 138 countries, did not hire a lobbying firm to contact members of Congress. Those who hired lobbying firms with many connections tended to spend more money on lobbying, hire more firms, and contact more politicians than those who hired firms with relatively few connections. Note that the amount of lobbying spending by a country in Table 4 reflects the amount spent on the lobbying firms that contacted at least one member of Congress on behalf of that country.<sup>10</sup>

As can be seen in Table 4, many foreign governments hire more than one lobbying firm. This may be related to the fact that lobbyists may not have access to all politicians. As documented in Figure 1 and Table 3, the number of lobbying firms from which politicians accept contacts is limited. Even if a foreign government lobbies regarding the same issue, it sometimes hires multiple lobbying firms. For example, the government of South Korea hired Akin Gump Strauss Hauer, LLP., Fierce, Isakowitz & Blalock, and Loeffler Group to advance its free trade agreement with the US during the period of our study. Figure 2 presents the members of Congress who were contacted by these three lobbying firms on behalf of the South Korean government on the trade issue. Although they lobbied on behalf of the same country regarding the same issue during a similar time period, the set of contacted politicians differed, with a small overlap. We also find that when a foreign government hires multiple lobbying firms, there exists a significant variation in the ratio of contacts to members

<sup>&</sup>lt;sup>10</sup>The foreign governments in our dataset paid their lobbying firms \$126.7 million in total during the four years from 2007 through 2010, and the total lobbying expenditure by all foreign governments, including expenditures by in-house lobbyists, during the same period is \$821.5 million.

Figure 1: Distribution of Contacts to the Members of Congress (111th Congress)



Table 4:	Foreign	Governments
----------	---------	-------------

Variables	Lobbied with	Lobbied with	Not Lobbied
	Firms with	Firms with	
	>15 Connections	$\leq 15$ Connections	
Num. of Obs.	46	25	138
Spending (\$)	770,248	425,187	0
	(768, 686)	(867, 341)	-
Num. of Firms Hired	1.91	1.16	0
	(1.42)	(0.37)	-
Num. of Members Contacted	29.23	9.72	0
	(47.04)	(6.88)	-
Polity IV Score	1.72	4.20	4.05
	(7.45)	(5.58)	(6.27)
Per capita GDP (\$)	14,310.91	8,328.13	$11,\!271.16$
	(768, 686)	(867, 341)	-
US Aid (\$ M)	362.56	85.03	41.85
	(1,596.29)	(166.28)	(116.21)
Middle East	0.21	0.12	0.06
	(0.41)	(0.33)	(0.24)

*Note:* Unit of observations is a country. Based on lobbying filings in 2008. Standard deviations are in parentheses. The Polity IV dictatorship/democracy score is from the Polity IV data set (Marshall and Jaggers 2002). A score of 10 reflects a perfect democracy and a score of -10 reflects a perfect autocracy.

of Congress and contacts to Democrats across the hired firms. See Figure A3 in Appendix B.

Figure 2: Contacted Politicians by Three Lobbying Firms Representing South Korea on Trade



*Note*: The graph shows the names of the politicians who were contacted by three lobbying firms (Akin Gump Strauss Hauer; Fierce, Isakowitz & Blalock; Loeffler Group) hired by the government of South Korea. Red (gray) line indicates that there was at least one contact by the firm to the politician, to whom the firm is connected (not connected).

# 4 Lobbyists as Matchmakers

We provide evidence that lobbying firms contact different sets of politicians, depending on their clients. Figure 3 presents contact patterns of DLA Piper when it represented Afghanistan (left) and Germany (right). To systematically examine these patterns, we focus on 32 lobbying firms that have at least two foreign governments as clients. For these lobbying firms, we calculate the ratio of contacts to members of Congress and contacts to Democrats per client.<sup>11</sup> There exists a large variation within a firm in these two ratios. For example, Squire Patton Boggs, the top-ranked lobbying firm, represented both the government of Albania and China. The ratio of congressional contacts to total contacts for the government of Albania was only 10%, while 80% of the contacts on behalf of China was made to members of Congress. The Livingstone Group, L.L.C., another power firm on K Street, represented both the foreign governments of Egypt and the Republic of Congo. For the government of Egypt, 4% of congressional contacts were made to Republicans, while the congressional contacts on behalf of the Republic of Congo were mainly focused on Republicans (94%).

<sup>&</sup>lt;sup>11</sup>See Figure A2 in Appendix B for these ratios per lobbying firm.

#### Figure 3: DLA Piper Network with Two Clients (Germany and Afghanistan)



*Note*: Each line indicates the frequency of contacts with each legislator on behalf of each foreign government.

To investigate how the contact patterns differ by clients, we look at lobbying issues and connections. First, we find that lobbying firms tend to match a foreign government to a set of policymakers who had relevant expertise in or jurisdiction over the issue on which that client lobbies. As can be seen in Panel A in Table 5, the committee membership of the contacted members of Congress varied by lobbying issue. For example, for trade issues, members of the House Ways and Means or Senate Finance committee were more likely to be contacted, while members of the Armed Services or Homeland Security committee were more popular when security issues, such as military actions or arms sales, were lobbied. Lobbying firms contacted the members in leadership positions or committee chairs more frequently for budgetary issues. Similar patterns can be found for contacts to executive agencies, which are documented in Panel B in Table 5. As one would expect, the Department of State is the most popular entity regardless of lobbying issue, while the Department of Defense was more frequently contacted for security issues.

Second, we find that not all connected politicians are contacted for every client. Table 6 shows the average number of contacted vs. connected members for each firm-client pair observed in the data. Among the lobbying firms with connections more than 15 members of Congress, the average number of contacted members is over 17; among these contacted members, less than 5 members, on average, were connected. A similar pattern can be found for the lobbying firms with connections to less than or equal to seven members, although the average number of contacted members is much smaller.

	Lobbying Issues		
	Budget	Security	Trade
Number of Obs.	53	135	120
Panel A. Congress			
Leadership or Chairmanship (%)	9.33	7.49	11.40
Budget Committees <sup><math>a</math></sup> (%)	8.06	4.56	3.94
Security Committees <sup><math>b</math></sup> (%)	3.28	6.16	2.56
Trade Committees <sup><math>c</math></sup> (%)	4.86	5.40	12.75
For eign Affairs Committees <sup><math>d</math></sup> (%)	6.24	8.16	5.80
Panel B. Executive			
Budget-related Departments/Agencies <sup><math>e</math></sup> (%)	5.29	1.05	1.17
Security-related Departments/Agencies $f$ (%)	1.97	4.27	3.35
Trade-related Departments/Agencies <sup><math>g</math></sup> (%)	4.65	0.93	6.14
Department of State or the White House $(\%)$	14.60	13.43	14.63

#### Table 5: Contact Patterns by Lobbying Issues

*Notes:* Unit of observation is a pair of lobbying firm, client country, and lobbying issue. Lobbying issues are categorized based on key word searches using the description of the contact issues for each contact record. For each observation, we calculate the ratio of contacts to certain members or agencies/departments to all contacts, and then we take the average of the ratio over all observations. a. House and Senate Budget or Appropriations. b. House and Senate Armed Services or Homeland Security. c. House Ways and Means, House Financial Services, or Senate Finance. d. House Foreign Affairs or Senate Foreign Relations Committees. e. Departments of Interior orTreasury, US AID, or IRS. f. Departments of Justice, Commerce, Labor, or Agriculture, FDA, US TDA, Export-Import Bank, or OPIC. g. Departments of Defense or Homeland Security, Central Intelligence Agency, or National Security Council.

# 5 Connections and Matchmaking

We have described that a typical lobbying firm, having access to a certain set of politicians, varies its contacts to these politicians depending on its clients and their issues. This could be driven solely by the demand by the foreign governments and/or by the supply of access by the politicians, without any active, independent role played by lobbyists. To study the role of lobbyists in this market, we focus on the contact patterns conditional on connections. This is motivated by the empirical regularity that connections to politicians are a major source of lobbyist revenues (i Vidal, Draca, and Fons-Rosen 2012; Bertrand, Bombardini, and Trebbi 2014). In the existing literature, when a client hires a lobbying firm with connections to a certain politician, it is assumed that it has access to that politician, which could explain the premium. However, connections do not necessarily lead to lobbying contacts, as can be seen in Tables 2 and 6. Therefore, how lobbyists allocate their access to connected politicians as opposed to non-connected ones and how this behavior is associated with lobbying fees can help us understand the role of lobbyists. Note that this study is possible due to the comprehensive contact data.

We investigate how contact patterns respond to changes in the foreign governments' demand for political access and/or the politicians' supply of access, which are exogenous to (previous or

Variable	Obs.	Mean	Median	Min.	Max.
Highly Connected Firms					
No. of Connected Politicians	216	66.70	49.5	16	245
No. of Contacted Politicians	216	17.55	9	0	197
No. of Connected & Contacted Politicians	216	4.51	2	0	54
Less Connected Firms					
No. of Connected Politicians	264	4.34	2	0	15
No. of Contacted Politicians	264	8.91	4	0	147
No. of Connected & Contacted Politicians	264	0.56	0	0	9

 Table 6: Contact Patterns by Connections

*Notes:* Each observation is a pair of a lobbying firm and its client for each year. *Highly Connected Firms* have 1more than 15 connected members of the current Congress.

concurrent) lobbying contacts. We consider three sources for such exogenous variations. The first source of an exogenous variation is the election cycle. If a politician is running for office, she may be busy with fundraising and other campaign events and, hence, have less time to be involved in policymaking and/or to interact with a lobbyist who represents a foreign client. If a politician ran for a congressional seat in 2008 or 2010, she is categorized as "on cycle" during that year; otherwise, she is "off cycle." For years 2007 and 2009, all politicians are categorized as "off cycle."

The other two sources for exogenous variations are the annual frequency of *New York Times* (NYT) articles regarding each client country, and the annual frequency of *Google* searches in the US that contained the name of each client country. These two measures are associated with the potentially fluctuating extent of the client country's interests in lobbying the US government in a given year, as well as US politicians' interests in learning about the foreign country.

Table 7 presents the summary statistics for the annual number of NYT articles and Google searches per country. On average, 591 articles appeared in the NYT that mentioned the name of a country annually, but variation within country over time is significant. The average difference between the minimum number of NYT articles and the maximum, divided by the average number, is 84%. Google search results show similar patterns with a smaller variation over time. In Figures A4 and A5 in Appendix B, we plot monthly variations in the frequency of Google searches on South Korea and Pakistan, respectively, during our period of study. They show that there is a significant variation over time, and a high frequency of Google searches is often associated with a major event in the foreign country.

We examine how the response in contact patterns to the three exogenous variations differs by the connections, the client country's polity, and the election cycle. We categorize the polity of a country into "democracy," "autocracy," and the rest, based on the Polity IV dictatorship/democracy score: greater than eight, less than four, and between four and eight, respectively.<sup>12</sup> In our analyses, we consider all possible pairs of a lobbying firm, a politician, and a foreign country each year, over 112 lobbying firms, 630 politicians, and 93 countries. There are 206 foreign countries about which

<sup>&</sup>lt;sup>12</sup>The results presented here are robust to a different set of cutoffs.

Variables	Mean	SD
Avg. Annual NYT articles	591.15	936.54
Range of NYT articles/Avg. (%)	84.53	72.36
Avg. Annual Google searches	$26,\!658.13$	$27,\!404.46$
Range of Google searches/Avg. (%)	26.23	38.21

Table 7: Exogenous Variations in the Interests between US and Foreign Countries

*Notes:* Unit of observations is a country. Based on NYT article searches at *LexisNexis* and the Google search statistics from *Google Trend* for 93 countries that lobbied the Congress during 2007–2010.

we have polity information for 2005, but we only include the countries whose governments hired at least one lobbying firm to contact the Congress during the period of study. In total, there are over 15 million pairs on which to calculate the conditional contact probabilities.<sup>13</sup>

As can be expected, the contact probability decreases during the electoral cycle overall. The contact probability is 0.043 percentage point during the off-cycle years while it decreases to 0.037 percentage point during the on-cycle years, and the difference is significant at less than 1%. However, this decrease of lobbyists' contacts in an election year is not statistically significant when the contacts are made to the politicians with whom the lobbyists have connections.

Figure 4 presents the probability of providing a client with access to a politician when the NYT appearances of a client foreign country increase by 10% or more compared to the previous year, conditional on (i) the connections between lobbyists and politicians, (ii) the electoral cycles, and (iii) the polity of the client country. If the client country is autocratic, lobbyists sharply reduced the total contacts to politicians when they are running for office, regardless of connections. In contrast, under the same conditions, lobbyists increased their contact to connected politicians if their client was a democratic country, while such increase is not significant for non-connected politicians.

The contact patterns we have identified in a simple mean-difference analysis are also found when we control for various attributes of members of Congress, lobbying firms, and foreign clients. We estimate the following model on the determination of a contact by firm  $\ell$  on behalf of foreign government g to politician p during period t, denoted by  $y_{\ell,g,p,t} = 1$ . We consider a linear probability model:

$$y_{\ell,g,p,t} = \beta_c X_{g,p,t} \mathbb{1}\{p \in \mathcal{P}_{\ell,t}\} + \beta_n X_{g,p,t} \mathbb{1}\{p \notin \mathcal{P}_{\ell,t}\} + \mu_{\ell,g,p} + \alpha_{111th} + \epsilon_{\ell,g,p,t}$$

where  $\mathcal{P}_{\ell,t}$  is the set of politicians that are connected to firm  $\ell$  during period t,  $\mu_{\ell,g,p}$  accounts for firm, client country, and politician-specific fixed effects, and  $\alpha_{111th}$  is a dummy variable that takes 1 when the year in question is either 2009 or 2010, during the 111th Congress. We assume that  $\epsilon_{\ell,q,p,t}$  is a mean-zero error term.

The estimation results are presented in Table 8. There are two notable trends found in the

<sup>&</sup>lt;sup>13</sup>For each of the 93 foreign countries, we consider all possible combinations of lobbying firms and members. The number of members of the 110th Congress is 550 and that of the 111th is 548. The total number of FARA-active lobbying firms that contacted at least one member of Congress varies over time: 68 (in 2007), 74 (in 2008), 86 (in 2009) and 69 (in 2010). As a result, the total number of observations for the analyses in this section is 15,162,720:  $93 \times \{550 \times (68 + 74) + 548 \times (86 + 69)\}.$ 



Figure 4: Lobbying Contact Patterns by Connections and Electoral Cycles

Notes: When the number of the NYT articles mentioning a foreign client increased by 10% or more compared to previous year.

regression results. First, the probability that a lobbyist representing a foreign government contacts a politician increases when the politician is connected to that lobbyist. Second, the probability of contacting a politician is not affected by election cycles or the polity of the country that a lobbyist represents, if he is connected to that politician. There is an exception to this invariance, however, which is an increase in the frequency the NYT covers the client country: If an autocratic country is in the media spotlight, its lobbyists tend not to contact their connected politicians if they are running for Congress.

## 6 The Value of Access and the Role of Lobbyists

To investigate whether the changes in the equilibrium contact probability that we have documented in the previous section are driven by the clients' demand or by the politicians' supply of access, we study the equilibrium price of access.

For each lobbying firm and its client during a given year, we observe the lobbying fee and all lobbying contacts for that client. We focus on the number of the members of Congress who were contacted during a year, interpreting that at least one contact to a politician implies that he/she gave access to the client through the lobbying firm for the year. We divide the members of Congress into four categories by the following two criteria: (i) whether or not he/she is running for Congress during the year and (ii) whether or not he/she is connected to the lobbying firm in question. Note

	Dependent variable: Contacted				
	(1)	(2)	(3)	(4)	
Connected	$0.00124^{***}$	$0.00125^{***}$	$0.000442^{***}$	$0.000437^{***}$	
	(11.75)	(11.72)	(3.43)	(3.35)	
Connected×On-cycle	-0.000138	-0.000113	$-0.000113^*$	-0.000301	
	(-0.89)	(-0.71)	(-1.68)	(-1.48)	
$Connected \times On-cycle \times Autocracy$	0.0000144	0.000377	0.000302	0.000527	
	(0.08)	(1.55)	(1.04)	(1.46)	
$Connected \times On-cycle \times Autocracy \times NYT \ Increase$		$-0.00129^{***}$		$-0.000857^{**}$	
		(-4.76)		(-2.00)	
Member Attributes	Yes	Yes	No	No	
Firm×Country FE	Yes	Yes	No	No	
$Member \times Firm \times Country FE$	No	No	Yes	Yes	
N	15,162,720	14,958,980	15,162,720	14,958,980	
$R^2$	0.061	0.061	0.492	0.493	

Table 8: How Are Connections Related to Contact Patterns?

*Notes:* Unit of observation is a pair a lobbying firm, a foreign government, and a member for a given year. All regressions include a Congress dummy. Standard errors are clustered at the member level, and t-values are in brackets. Significant at the 1 percent (\*\*\*), 5 percent (\*\*) and 10 percent (\*) levels.

that a politician may be connected to one lobbying firm for a certain year, but she may not be connected to all the other firms. Furthermore, if the connected lobbyist in the lobbying firm could leave the firm, the politician is no longer connected to the firm.

Specifically, we consider the following lobbying fee equation for firm  $\ell$  and foreign government client g during year t:

$$\log\left(fee_{\ell,g,t}\right) = \gamma Z_{\ell,g,t} + \nu_{\ell} + \xi_g + \phi_t + \eta_{\ell,g,t},$$

where  $Z_{\ell,g,t}$  includes the number of the contacted members of each of the four categories and interaction terms related to the polity of client g and the US media attention to the client during the year. We allow that the base fee may vary by the firm, the client, or the year, but we assume that the market premium for the number of contacts depends only on (i) whether or not the country of the government client is autocratic, and (ii) whether or not there was a large increase (10 % or more) in the frequency of NYT articles compared to the previous year. Table 9 shows the regression results based on the above specification.

We find that as a lobbying firm provides access to more politicians, it receives a larger fee. When it provides access to its connected politicians, the premium is higher to autocratic governments especially during the year that they are running for Congress. Based on the estimates of specification (3) in Table 9, access to one more connected politician during an election year is associated with a 5 percent increase in the lobbying fee. The market premium for access to one more non-connected politician is much less, about 1 percent of the lobbying fee. We also find that there exists a large premium on access to a connected politician if it is provided to a foreign government from an autocratic country when it receives a relatively large US media spotlight and there are elections during the year. In specification (3) in Table 9, the premium is estimated to be 28 percent per

	Dependent var.: (log) Lobbying fee			
	(1)	(2)	(3)	
Number of Contacted Members who are				
Connected	$0.0592^{***}$	$0.0595^{***}$	$0.0539^{***}$	
	(3.89)	(3.81)	(2.11)	
Not-connected	$0.00794^{**}$	$0.00792^{**}$	0.00896	
	(2.57)	(2.34)	(1.54)	
(Connected and On-cycle)×Autocracy		-0.0466	-0.135	
		(-0.65)	(-1.40)	
(Connected and On-cycle)×Autocracy×NYT Increase		$0.193^{**}$	$0.287^{***}$	
		(2.18)	(2.63)	
(Not-connected and On-cycle)×Autocracy		0.00645	0.0247	
		(0.44)	(1.26)	
(Not-connected and On-cycle)×Autocracy×NYT Increase		0.202	-0.0147	
		(1.03)	(-0.77)	
Country FE	Yes	Yes	Yes	
Firm FE	No	No	Yes	
N	429	429	433	
$R^2$	0.546	0.550	0.776	

#### Table 9: The Price of Access to the Members of Congress

*Notes:* Unit of observation is a pair a lobbying firm and its foreign government client for a given year. All regressions include lobbying issue and Congress dummies. Standard errors are clustered at the foreign government level, and t-values are in brackets. Significant at the 1 percent (\*\*\*), 5 percent (\*\*) and 10 percent (\*) level.

politician, in addition to the 5 percent premium.

The key patterns in the equilibrium price and quantity of access are twofold. First, the likelihood that a politician gives access to a foreign government increases if it is represented by a lobbying firm that is connected to her, and there is a premium to such an intermediary service, compared to a similar service provided by non-connected lobbyists. This must be mainly driven by a larger demand by foreign governments on the access intermediated by connected lobbyists than that by non-connected ones. This implies that connected lobbyists increase the value of access to their foreign clients, compared to non-connected ones.

Second, when there is a 10 percent or more increase of NYT articles on a foreign, autocratic country during a midterm or presidential election year, access to a politician mediated by lobbyists who are connected to him/her is more highly valued than an alternative scenario where the mediation is by non-connected lobbyists for the same client under the same conditions. This increase in the equilibrium price is coupled with a decrease in the equilibrium quantity, or the equilibrium probability of contacts. This must be driven by a decrease in supply of such services, which could potentially originate from an increase of politicians' reservations and/or lobbyists' costs.

Based on these findings, we can gain some insights about the role of lobbyists. First, these patterns can be consistent with price discrimination by lobbyists. Gomes and Pavan (Forthcoming), for example, provides an intermediary price discriminate in a many-to-many matching model.<sup>14</sup>

<sup>&</sup>lt;sup>14</sup>We test a modified version of the many-to-many matching model of Gomes and Pavan (Forthcoming) using our

Second, our empirical findings are also consistent with politicians' trust in the ability of connected lobbyists to selectively choose interest groups to present to them. Hirsch and Montagnes (2015) argue that a lobbyist's ability to investigate and screen clients according to the political merits of their request is valued.

From politicians' perspectives, there are costs of and benefits to granting access to lobbyists and their clients. Scholars have argued that valuable information that interest groups provide to politicians is an important factor in granting access (Hansen 1991; Austen-Smith and Wright 1994; Grossman and Helpman 2001). Furthermore, lobbyists could improve the quality of this information (Groll and Ellis 2014). However, granting access invovles time costs and reputation costs. As for the latter, close ties to certain clients or lobbyists could damage the reputation of a politician and accordingly could harm her electoral prospects. There is ample anecdotal evidence that politicians are attacked by their opponents regarding their potential ties with repressive foreign regimes. For example, Ed Gillespie in the 2014 Virginia Senate race, who founded a prominent lobbying firm, was questioned about the firm's record of representing certain foreign clients.<sup>15</sup>

One may assume that the politicians' time and reputation costs might not depend on the identity of lobbyists or their connections to politicians. The time costs are the benefits from the best alternative use of time/energy. As for the reputation concern, a news headline of a politician granting access to lobbyists who represented a foreign government, which is associated with an unpopular policy, could be costly enough. If politicians' reservations are held constant, regardless of connections to lobbyists, we can infer that a decrease of lobbying services by connected lobbyists, as opposed to by unconnected ones, is associated with their higher costs of providing such services.

We do not distinguish these two explanations; in either case, lobbyists are more selective in calculating political merits of access, especially for their connected politicians, and this selective matchmaking service is highly valued in the market for access.

## 7 Conclusion

Lobbying firms have been at the center of the market for representation over the last two decades. The majority of existing political economy models of lobbying, however, focus on the interaction between special interests and a single policymaker, assuming there is direct communication between the politician and the interest group. While there has been burgeoning literature on lobbyists, both empirically and theoretically, little is known about how lobbying firms allocate political access due to data limitations.

Using unique lobbying contact data constructed from foreign lobbying reports, we provide empirical evidence that lobbying firms act as matchmakers between interest groups and policymakers, and document that politicians grant access to only a limited set of lobbying firms. We show that the quality of access that lobbying firms provide varies by the extent of their political connections. We

data, and find that their equilibrium characterization is consistent with the patterns found in our data.

<sup>&</sup>lt;sup>15</sup>Nancy Madsen, "Warner says Gillespie's firm lobbied for brutal dictator," *Richmond Times-Dispatch*, October 24, 2014.

also find that connected lobbying firms do not always contact their connected politicians although contacts to connected politicians are valued highly in the market, and this selectivity is associated with the political sensitivity of the lobbying issue and the client. These findings are consistent with the argument that lobbyists provide some gate-keeping functions to politicians because their market values come from the trust that politicians grant to them (Hirsch and Montagnes 2015), as well as price-discrimination by lobbyists.

Interviews with lobbyists and anecdotal stories indicate that reputation is extremely important in the lobbying industry, and that building trust and relationships takes considerable effort on the part of lobbyists (Levin 2009; Leech 2013; McKinley and Groll 2015). Given that, the patterns we identify in this paper provide a micro-foundation of why connected lobbyists earn more revenue in the market (i Vidal, Draca, and Fons-Rosen 2012; Bertrand, Bombardini, and Trebbi 2014). We show that connected lobbyists do not always contact their connected politicians. This suggests that connected lobbying firms can tailor sets of contacted politicians depending on issues and their foreign clients. In addition, having access to multiple members allows them to protect their connected politicians' reputations by contacting non-connected politicians when issues that their autocratic clients want to address become politically sensitive. This ability may increase trust from their connected politicians and the premium associated with contacts to connected politicians in lobbying revenues may reflect their ability to provide better matchmaking services and care for politicians' reputations.

Our paper suggests that lobbyists are active gate-keepers in allocating access to politicians. If connection implies access to a politician, lobbyists with a connection could contact their connected politician for every client they represent. But our research presents evidence that that is not the case. Lobbyists selectively match a client to a different set of politicians, depending on politicians' time constraints, client characteristics, and the news cycle. This implies that the amount of resources interest groups possess may not directly translate into their success in accessing a politician due to calculations and considerations of intermediaries who play an active role in this market.

# References

- Ainsworth, Scott. 1993. "Regulating Lobbyists and Interest Group Influence." *Journal of Politics* 55 (1): 41-56.
- Ainsworth, Scott, and Itai Sened. 1993. "The Role of Lobbyists: Entrepreneurs with Two Audiences." American Journal of Political Science 37 (3): 834-866.
- Allard, Nicholas. 2008. "Lobbying Is An Horoable Profession: The Right To Petition and The Competition To Be Right." *Stanford Law Review* 19 (1): 23-68.
- Austen-Smith, David. 1993. "Information and Influence: Lobbying for Agendas and Votes." American Journal of Political Science 37 (3): 799–833.
- Austen-Smith, David. 1995. "Campaign Contributions and Access." American Political Science Review 89 (3): 566-581.
- Austen-Smith, David. 1998. "Allocating Access for Information and Contributions." Journal of Law, Economics, and Organization 14 (2): 277-303.
- Austen-Smith, David, and John Wright. 1992. "Competitive Lobbying for a Legislator's Vote." Social Choice and Welfare 9 (3): 229–257.
- Austen-Smith, David, and John Wright. 1994. "Counteractive Lobbying." American Journal of Political Science 38 (1): 25–44.
- Bennedsen, Morten, and Sven Feldmann. 2002. "Lobbying Legislature." Journal of Political Economy 110 (4): 919–946.
- Bennedsen, Morten, and Sven Feldmann. 2006. "Informational Lobbying and Political Contributions." Journal of Public Economics 90 (4): 631-656.
- Bertrand, Marianne, Matilde Bombardini, and Francesco Trebbi. 2014. "Is it whom you know or what you know? An Empirical Assessment of the Lobbying Process." *American Economic Review* 104 (12): 3885-3920.
- Besley, Timothy, and Stephen Coate. 2001. "Lobbying and Welfare in a Representative Democracy." *Review of Economic Studies* 68 (1): 67-82.
- Cotton, Christopher. 2009. "Should We Tax or Cap Political Contributions? A Lobbying Model with Policy Favvors and Access." *Journal of Public Economics* 93 (7): 831-842.
- Cotton, Christopher. 2012. "Pay-to-Pay Politics: Informational Lobbying and Contribution Limits when Money Buy Access." *Journal of Public Economics* 96 (3): 369-386.
- de Figueiredo, John M., and Brian Kelleher Richter. 2014. "Advancing the Empirical Research on Lobbying." *Annual Review of Political Science* 17: 163-185.

- Dekel, Eddie, Matthew O. Jackson, and Asher Wolinsky. 2009. "Vote Buying: Legislatures and Lobbying." *Quarterly Journal of Political Science* 4 (2): 103-128.
- Drutman, Lee. 2010. "The Complexities of Lobbying: Toward a Deeper Understanding of the Profession." *PS: Political Science & Politics* 43 (4): 834-837.
- Gomes, Renato, and Alessandro Pavan. Forthcoming. "Many-to-Many Matching and Price Discrimination." *Theoretical Economics*.
- Groll, Thomas, and Christopher J. Ellis. 2014. "A Simple Model of the Commercial Lobbying Industry." *European Economic Review* 79: 299-316.
- Grossman, Gene, and Elhanan Helpman. 2001. Special Interest Politics. Cambridge: MIT Press.
- Hall, Richard, and Alan Deadorff. 2006. "Lobbying as Legislative Subsidy." American Political Science Review 100 (1): 69-84.
- Hall, Richard L., and Robert Van Houweling. 2012. "Lobbying Without Buying Time." UC Berkeley Working Paper.
- Hansen, John Mark. 1991. Gaining Access: Congress and the Farm Lobby, 1919-1981. Chicago: University of Chicago Press.
- Herndon, James F. 1982. "Access, Record, and Competition As Influence on Interest Group Contributions to Congressional Campaigns." *Journal of Politics* 44 (4): 996-1019.
- Hirsch, Alexander V., and B. Pablo Montagnes. 2015. "The Lobbyist's Dilemma: Gatekeeping and the Profit Motive." *California Technology Insittute Working Paper*.
- Hojnacki, Marie, and David Kimball. 2001. "PAC Contributions and Lobbying Contacts in Congressional Committees." *Political Research Quarterly* 54 (1): 161-180.
- i Vidal, Jordi Blanes, Mirko Draca, and Christian Fons-Rosen. 2012. "Rovolving Door Lobbyists." American Economic Review 102 (7): 3731-3748.
- Langbein, Laura. 1986. "Money and Access: Some Empirical Evidence." *Journal of Politics* 48 (4): 1052-1062.
- Leech, Beth. 2013. Lobbyists at Work. New York: APress.
- Levin, Bertram. 2009. The Art of Lobbying: Building Trust and Selling Policy. Washington D.C.: CQ Press.
- Lohmann, Susanne. 1995. "Information, Access, and Contributions: A Signaling Model of Lobbying." Public Choice 85 (3/4): 267–284.

- Loomis, Burdett. 2006. "From the Framing to the Fifties: Lobbying in Constitutional and Historical Context." *Extensions* Fall.
- McKinley, Maggie, and Thomas Groll. 2015. "The Relationship Market: How Modern Lobbying Gets Done." *The Edmond J. Safra Center for Ethics*.
- Potters, Jan, and Frans van Winden. 1992. "Lobbying and Asymmetric Information." *Public Choice* 74 (3): 269-292.
- Rosenthal, Alan. 2000. The Third House: Lobbyists and Lobbying in the States. Washington D.C.: CQ Press.
- Schlozman, Kay Lehman, Sidney Verba, and Henry Brady. 2012. The Unheavenly Chorus: Unequal Political Voice and the Broken Promise of American Democracy. Princeton, N.J.: Princeton University Press.
- Snyder, James. 1992. "Long-Term Investing in Politicians; or, Give Early, Give Often." Journal of Law and Economics 35: 15–43.
- Stephenson, Matthew, and Howell E. Jackson. 2010. "Lobbyists as Imperfect Agencts: Implications for Public Policy in a Pluralist System." *Harvard Journal on Legislation* 47 (3): 1-20.
- Stigler, George. 1971. "The Theory of Economic Regulation." Bell Journal of Economics and Management Science 2 (1): 3-21.
- Truman, David. 1955. The Governmental Process. New York: Alfred A. Knopf.
- Wright, John. 1990. "Contributions, Lobbying, and Committee Voting in the U.S. House of Representatives." American Political Science Review 84 (2): 417-438.
- Wright, John. 1996. Interest Groups and Congress: Lobbying, Contributions, and Influence. New York: Longman.

# Appendix A: Tables

Variables	Lobbied by	Lobbied by	Not Lobbied
	$\geq 6$ Firms	$<\!6$ Firms	
Num. of Obs.	152	353	45
Num. of Firms	9.09	2.64	0
	(3.52)	(1.34)	-
Num. of Countries	9.46	2.65	0
	(4.06)	(1.49)	-
Num. of Contacts	29.53	7.07	0
	(24.57)	(8.57)	-
House	0.55	0.91	0.93
	(0.49)	(0.28)	(0.25)
Democrat	0.59	0.48	0.68
	(0.49)	(0.50)	(0.46)
Leadership/ Comm. Chair	0.17	0.04	0.02
	(0.38)	(0.21)	(0.14)
Tenure	13.03	8.34	7.82
	(10.28)	(9.09)	(9.24)
Vote Share in Recent Elections	0.68	0.65	0.67
	(0.13)	(0.12)	(0.14)
Foreign Relations/Affairs Comm.	0.13	0.01	0
, 	(0.33)	(0.09)	-

Table A1: Members of Congress (110th Congress)

Notes: Unit of observations is a member of Congress. Based on lobbying filings in 2008. Standard deviations are in parentheses.

We examine how contact patterns by a lobbying firm change as the number of connected politicians increases. To do this, we construct variables that characterize contact patterns for each lobbying firm and its client pair and for each Congress (the 110th and the 111th). There are a total of 308 pairs over the two Congresses in the data. Table A2 presents regression results where the dependent variables are contact pattern characteristics and the independent variables include lobbying firm attributes and foreign client attributes. We study four contact pattern attributes: the total number of contacted members (*Number*), how diverse sets of members are contacted (*HHI*), the number of contacted members in leadership positions or committee chairs (*Leadership*), and the ratio of the number of contacted members of committees that are related to the lobbying issue to the total number of contacted members (*Issue Ratio*). To measure the diversity of contacted members, we construct a Herfindahl index for the contact. The Herfindahl index for a pair of firm *i* and client *j* at time *t* is defined by

$$HHI_{ijt} = \sum_{k}^{n} s_{ijtk}^{2},$$

where  $s_{ijtk}$  is the ratio of contacts to member k out of total contacts by the firm-client pair (ij) during time t. Columns (1) through (4) present the results when we include lobbying firm characteristics and foreign client characteristics, and columns (5) through (8) present the results when we include a client country fixed effect. In both specifications, we find that as the number of connected politicians increases, lobbying firms tend to contact more members, especially those in leadership positions or congressional committee chairs, increase the diversity of contacted politicians (lower Herfindahl index), and contact members serving on the relevant committees to the issues foreign clients want to address. These patterns in the data are consistent with the idea that connections help lobbying firms provide better matching services.

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Number	HHI	Leader	Issue Ratio	Number	HHI	Leader	Issue Ratio
#Connections	0.00845**	-0.00171*	0.00814***	$0.00126^{*}$	0.00989**	-0.00110	0.00906***	$0.00145^{*}$
	(2.07)	(-1.92)	(3.38)	(1.94)	(2.03)	(-0.95)	(3.04)	(1.69)
#Ex-Politician Lob.	0.334	0.0104	0.0435	-0.0116	0.420	0.0614	0.157	0.0118
	(1.45)	(0.16)	(0.26)	(-0.21)	(1.65)	(0.93)	(0.89)	(0.20)
#Ex-Executive Lob.	-0.167	-0.0348	-0.134	0.0641	-0.302	-0.0531	-0.246*	0.0362
	(-0.71)	(-0.52)	(-0.98)	(1.11)	(-1.08)	(-0.76)	(-1.72)	(0.51)
#Lobbyist	-0.0568**	0.00416	-0.0381**	-0.00765	-0.0510*	0.00582	-0.0258*	-0.00922*
	(-2.25)	(0.67)	(-2.40)	(-1.64)	(-1.88)	(0.74)	(-1.67)	(-1.81)
$(\#Lobbyist)^2$	0.00103**	-0.0000486	0.000671**	0.000113	0.000597	-0.0000806	0.000373	0.000109
	(2.07)	(-0.47)	(2.06)	(1.23)	(1.50)	(-0.67)	(1.56)	(1.64)
FARA Regis. Year	0.00609	-0.000275	-0.00631	-0.00446**	-0.00768	0.00288	-0.0112	-0.00626**
0	(0.64)	(-0.12)	(-1.06)	(-2.19)	(-0.56)	(0.99)	(-1.46)	(-2.07)
LDA Active	-0.175	0.0624	-0.0743	0.0638	-0.203	0.0602	-0.181	0.0771
	(-0.62)	(1.16)	(-0.36)	(1.42)	(-0.65)	(0.84)	(-0.85)	(1.32)
Congress FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Issue FE	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Country Attributes	Yes	Yes	Yes	Yes	No	No	No	No
Country FE	No	No	No	No	Yes	Yes	Yes	Yes
Ν	250	226	250	250	308	277	308	308
adj. $R^2$	0.147	0.048	0.174	0.143	0.164	0.243	0.176	0.270

Table A2: Connections and Contact Characteristics

*Notes*: Each observation is a pair of a lobbying firm and its client for each Congress. t statistics in parentheses. \* p < 0.10, \*\* p < 0.05, \*\*\* p < 0.01

# **Appendix B: Figures**

Figure A1 compares interaction with lobbying firms who represented foreign governments between two senators: Blanche Lincoln (D-AR) and John Kerry (D-MA). Both democratic senators held prominent roles in the Senate. Senator Lincoln was the chairwoman in the Senate Agriculture Committee and Senator Kerry was the chairman in the Senate Foreign Relations Committee during the period of study. While John Kerry had over 100 contacts with 30 lobbying firms, Blanche Lincoln had only ten contacts with six different lobbying firms.



Figure A1: Contacts with Lobbying Firms: Blanche Lincoln (D-AR) vs. John Kerry (D-MA)

*Notes*: Each line indicates the frequency of contacts. For purposes of this graph, we exclude a lobbying firm if contact between it and John Kerry is below three.

Figure A2: Ratio of Congressional Contacts (top) and Democrat Contacts (bottom) by Lobbying Firm





Figure A3: Ratio of Congressional Contacts (top) and Democrat Contacts (bottom) by Foreign Government



Figure A4: Google Search Volume and Events: South Korea

Figure A5: Google Search Volume and Events: Pakistan



# Appendix C: An Example of a FARA Lobbying Report

Figure A6: A Lobbying Report Submitted by Akin Gump Strauss Hauer & Feld, LLP

Washington, E	DC 20530	Pursuant to Section 2 of 1938, as amended	2 of the Foreign Ager	nts Registration A	ict	
	For Si	x Month Period Endin	g Dec. 31, 2008 (Insen date)	_	1999 - San	
		I - REGI	STRANT			
1. (a) Name o Akin Gump	f Registrant Strauss Hauer & Feld, LLP		(b) Registration N 3492	lo.		
(c) Busines 1333 N Washin	s Address(es) of Registrant ew Hampshire Avenue, NW gton, DC 20036					
2. Has there be	een a change in the information	n previously furnished	in connection with t	he following:		
(a)	If an individual: (1) Residence address(es) (2) Citizenship (3) Occupation	Yes Yes Yes	No 🗆 No 🗆 No 🗆			
(b)	If an organization: (1) Name (2) Ownership or control (3) Branch offices	Yes 🗍 Yes 🗍 Yes 🕡	No × No ×			
(c)	Explain fully all changes, if	any, indicated in item	as (a) and (b) above.			
. If you have	IF THE REGISTRAN	te whether any change	es therein have occur	red during this 6	5(a). month reporting perio	d.
If yes,	have you filed an amendment	to the Exhibit C?	Yes	No 🗆		
If no, j	please attach the required amer	ndment.			2009 JAN 2 CRM/CES/REG	
					7 PM 2 01	
	hich no printed form is provided, consists of	a true copy of the charter, article	es of incorporation, association	, and by laws of a registr	ant that is an organization. (A w	aiver of shingtor
The Exhibit C, for w e requirement to file C 20530.)	an Exhibit C may be obtained for good cause	upon written application to the	Assistant Attorney General, N	ational Security Division,	, U.S. Department of Justice, wa	

Figure A7: A Lobbying Report Submitted by Akin Gump Strauss Hauer & Feld, LLP

(PAGE 3)

II - FOREIGN PRINCIPAL						
7. Has your co	onnection with any foreign p	principal ended d	uring this 6 mont	h reporting period	1?	
If yes, furni	sh the following information					
Name of fo	oreign principal			Date o	f termination	
					,	
8. Have you a	cquired any new foreign prin	ncipal <sup>2</sup> during thi	s 6 month reporti	ng period?		
16	Yes 🗵	] No [				
If yes, furmis	h the following information	:		`		
Name and a	ddress of foreign principal	<i>.</i>		Date ad	quired	
Kili/Bikini/E	ijit Local Government Cour	cil		Decem	ber 2008	
Majuro, Ma	rshall Islands 96960					
9. In addition	o those named in Items 7 an	d 8, if any, list fo	oreign principals2	whom you conti	nued to represent durin	ig the 6 month
reporting pe	riod.					
Governmen Embassy of	t of British Columbia Panama					
Embassy of	the Republic of Korea					
Embassy of	the United Arab Emirates					,
10. EXHIE	ITS A AND B					
(a)	Have you filed for each o	f the newly acqu	ired foreign princ	ipals in Item 8 th	e following:	• .
	Exhibit A <sup>3</sup>	Yes 💌	No 🔲			
	Exhibit B	Yes 🗵	No 📋			
	If no, please attach the re-	quired exhibit.				
(b)	Have there been any char	ges in the Exhib	its A and B previ	ously filed for an	y foreign principal who	om you
	represented during the 6 r	nonth period?	-	Yes 🔲	No 🗵	
	If yes, have you filed an a	mendment to the	ese exhibits?	Yes 🗖	No 🗵	
	If no, please attach the re-	quired amendmen	nt.			
2 The term "foreign pr	incipal" includes, in addition to those def	ined in Section 1(b) of th	e Act, an individual orga	nization any of whose act	ivities are directly or indirectly s	upervised, directed,

The texhibit B, which is filed on Form NSD-3 (Formerty CRM-157), sets forth the information concerning the agreement or understanding between the registrant and the foreign principal.
 The Exhibit B, which is filed on Form NSD-4 (Formerty CRM-157), sets forth the information concerning the agreement or understanding between the registrant and the foreign principal.

Figure A8: A Lobbying Report Submitted by Akin Gump Strauss Hauer & Feld, LLP

Name o	of Client: Embassy of	f United Arab Emirates		
Activity/Contact (name, title and office/agency)	Type of Activity/ Method of contact	Торіс	Date	
Rep. H. Berman, Chairman, House Committee on Foreign Affairs	Meeting	US-UAE relations, status of pending arms sale, international nuclear fuel bank regional issues	7/31/08	
Alan Makovsky - Senior Staff, House Committee on Foreign Affairs	Meeting	US-UAE relations, status of pending arms sale, international nuclear fuel bank regional issues	7/31/08	
Alan Makovsky - Senior Staff, House Committee on Foreign Affairs	Phone call and email message	Status of pending arms sale and satellite sale	8/5/08	
Alan Makovsky - Senior Staff, House Committee on Foreign Affairs	Email message	Status of pending arms sale and satellite sale	8/6/08	
Alan Makovsky - Senior Staff, House Committee on Foreign Affairs	Email message	Status of pending arms sale	9/8/08	
Alan Makovsky - Senior Staff, House Committee on Foreign Affairs	Email message	Status of pending arms sale	9/19/08	
Rep. C. Rangel, Chairman, House Ways & Means Committee	Meeting	Regional issues, bilateral relationship, international nuclear fuel bank	9/23/08	
Tim Reif, Majority Chef Trade Counsel, House Ways & Means Committee	Meeting	Regional issues, bilateral relationship, international nuclear fuel bank	9/23/08	
Jennifer McCadney, Majority Trade Staff, House Ways & Means Subcommittee on Trade	Meeting	Regional issues, bilateral relationship, international nuclear fuel bank	9/23/08	
Tim Reif, Majority Chief Trade Counsel, House Ways & Means Committee	Email message	Meeting request on regional issues	11/11/08	

Name of Registered Individual: Hal S. Shapiro