Three Essays on Lobbying

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Abstract

My dissertation consists of three essays on lobbying activities by special interest groups. The first paper, "Ex Post Lobbying," systematically documents ex post lobbying, the process by which firms allocate resources during the implementation stage after congressional authorization. Previous theories assume all lobbying is done ex ante, where lobbying activities occur before Congress votes. However, my analysis of over 633,731 lobbying reports demonstrates that almost half of lobbying activity from 1998 to 2012, that targeted specific bills, occurred ex post. I argue that the goal of ex post lobbying is to allow firms to bargain over private benefits that will arise from legislation by targeting regulatory rule-making processes that clarify non-specific parts of bills. Ex post lobbying provides a chance for non-participants in the ex ante lobbying stage to claim their share from government policy.

The second paper, "Options for Trade Protection," investigates the effect of partisan dynamics on forms of trade protection. I argue that when partisans are highly divided regarding protection policies, information about favors to special interest groups is more likely to be revealed to voters. Therefore, policy makers deliberately employ opaque and more inefficient policy instruments such as non-tariff barriers, instead of simple tariffs. I provide a simple model for this theory, and by using data on trade barriers on U.S. commodities in the 1990s, I find strong empirical support for the model's implication.

The third paper, "Money and Access: Empirical Evidence from the Foreign Lobbying Registration Act," takes advantage of an invaluable source of contact information from lobbying reports submitted by foreign governments to the United States. I find that democratic countries pay less in fees to their lobbying firms than non-democratic countries, and that

there is overall a large premium to a top lobbying firm, which often charges more of a premium to less democratic foreign government clients. I also find that (i) campaign contributions and contacts are positively correlated, and (ii) when controlling for both member and country attributes, past contributions are a much stronger predictor of current contacts than concurrent contributions especially for the House Representatives.

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Introduction

My dissertation, entitled *Three Essays on the Political Economy of Lobbying*, examines the mechanism and the effect of special interest groups' influence on economic and regulatory policy in the U.S.

Chapter 1, entitled "Ex Post Lobbying," systematically documents ex post lobbying, the process in which special interests allocate resources in the implementation stage after congressional authorization. Previous theories assume ex ante lobbying, where lobbying activities occur before Congress votes. However, my analysis of over 633,731 lobbying reports demonstrates that almost half of lobbying activity from 1998 to 2012, that targeted specific bills, occurred ex post. I argue that the goal of ex post lobbying is to allow firms to bargain over private benefits that arise from legislation by targeting regulatory rule-making processes that clarify non-specific parts of the bill. While some legislation is very specific about the duties of regulatory agencies, many pieces of legislation provide only a vague framework and do not go into great detail. Groups exert ex post lobbying efforts in order to secure rents on the indeterminate part of the bills.

This implies that there is a classic collective action problem among relevant actors. Ex post lobbying provides a chance for non-participants in the ex ante lobbying stage to claim their share from government policy. The formal model that I develop in this paper suggests that larger firms within an industry and trade associations bear a disproportionately large share of the ex ante lobbying burden. This problem of collective action in ex ante lobbying becomes more severe if there are a large number of non-specific benefits in a bill and if market shares are more equally distributed among firms. In addition, I present evidence

that targeting non-legislative federal agencies and employing in-house lobbyists instead of hiring lobbying firms occurs more in ex post lobbying stage.

Chapter 2, entitled "Options for Trade Protection," examines how the political conditions affect the choice of trade protection instruments. Both the glassware and rubber footwear industries are beneficiaries of trade protection under U.S. trade policy, yet rubber footwear is protected by non-tariff barriers that are considerably more inefficient. Despite the considerable variation in specific policies governing protected commodities, much less is known about how trade policy is developed for specific goods. The task of this paper is to understand what conditions influence choices of protectionist instruments. I argue that the choice of a specific form of protectionist policy is due to different incentives faced by an incumbent to employ opaque procedures in order to make it harder for voters to gather information on the incumbent's policy biases toward special interests. When partisans are highly divided on protectionist policies, information about an incumbent's biases toward special interest groups is more likely to be revealed to voters. Conversely, if Democrats and Republicans work together on legislation to protect a certain commodity, protectionist policies should be less complex because there will be diminished incentives for partisans to exploit their opposition's position on a particular policy proposal. I provide a simple model for this theory, and by using data on trade barriers on U.S. commodities in the 1990s, I find strong empirical support for the model's implications.

Studying the link between money and access to politicians has been a challenging task, mainly due to the lack of sufficiently detailed data on lobbying contacts. In Chapter 3, entitled "Money and Access: Empirical Evidence from the Foreign Agent Registration Act" and co-authored with Karam Kang, we take advantage of the Foreign Agent Registration Act of 1938 (FARA), which mandates that lobbyists representing foreign entities submit a semi-annual report detailing all domestic political contacts, including information on who, when, why, and how those contacts were made. This comprehensive lobbying contact data enables us to systematically study what role money plays in lobbying and access to political contacts. Specifically, we ask two questions: (i) What determines the cost of lobbying? and

(ii) Do campaign contributions buy access to the policy makers?

We find that democratic countries pay less in fees to their lobbying firms than non-democratic countries, and that there is overall a large premium to a top lobbying firm, which often charges more of a premium to less democratic foreign government clients. We also find that (i) campaign contributions and contacts are positively correlated, (ii) when controlling for both member and country attributes, past contributions are a much stronger predictor of current contacts than concurrent contributions especially for the House Representatives, and (iii) for the Senators and the first-term members, the correlation between contributions and contacts is very weak.

To further study the relationship between money and access, we look at the chronological sequence of contacts and campaign contributions. In particular, we find that about 4% of the contact records in the data are associated with campaign contributions within a 30-day window of that contact (referred to as "timely contributions"). These timely contributions are more frequently given to Senators and the members with a leadership position or a committee chairmanship. The amount of such contributions are significantly less when they are given by lobbyists at top lobbying firms. We do not find evidence that these timely contributions initiates access.

1 | Ex Post Lobbying/Chapter 1

1.1 Introduction

Lobbying is the heart of interest group politics.[1] Interest groups lobby intensively to influence policy, and total spending on lobbying easily outpaces campaign contributions.[2] During the 2005-2006 election cycle, total Political Action Committee (PAC) contributions to candidates amounted to 372 million dollars. Spending on lobbying activities during the same period amounted to 5 billion dollars. The total federal lobbying spending for 2012 alone was 3.3 billion dollars and the total number of registered federal lobbyists was over 12,000.[3] In their survey, Gais and Walker (1991) note that 80 percent of the sample group considers lobbying to be an important activity, but only 23 percent state that campaign contributions are important. Ansolabehere, Snyder, and Tripathi (2002) find that for firms engaging in campaign contributions, as well as lobbying, the ratio of their lobbying expenditures to PAC contribution is about 10 to 1. Extensive evidence shows that lobbying is the most important interest group activity that influences government policies (Milyo, 2002; Baron, 2006).

To understand the nature of lobbying, scholars have developed three major theories:

[1]The definition of lobbying activity stated in the Lobbying Disclosure Act (LDA) of 1995 is as follows: "Any oral or written communication (including electronic communication) to a covered executive branch official or a covered legislative branch official that is made on behalf of a client with regard to the formation, modification, or adoption of federal legislation, rule, regulation, policy, the nomination or confirmation of a person for the United States government." See: http://lobbyingdisclosure.house.gov/lda.htmlOffice of the Clerk, U.S. House of Representatives

[2]In the literature, scholars use the term "lobbying" interchangeably with "campaign contributions" (PAC contributions), and any broader set of political activities by special interest groups. In this article, I follow the definition of lobbying stated in the Lobbying Disclosure Act (LDA) of 1995 to clearly differentiate lobbying from other types of special interest group activities.

[3]http://www.opensecrets.org/lobby/Center for Responsive Politics

They view lobbying as an exchange, an information transmission, or a legislative subsidy. Scholars of exchange theories argue that lobbying buys votes and this is a *quid pro quo* process (Stigler, 1970; Snyder, 1992; Besley and Coate, 2001; Bennedsen and Feldmann, 2002; Dekel, Jackson, and Wolinsky, 2009). The second model sees information transmission as the heart of the lobbyist-legislator relationship. Interest groups who have private information on the state of nature strategically transmit their information to persuade legislators (Hansen, 1991; Austen-Smith, 1993; Lohmann, 1995). The last model sees lobbying as a legislative subsidy. The objective under this strategy is neither to exchange nor to persuade, but to assist natural allies in achieving their objectives (Hall and Deadorff, 2006).

Despite these stark differences of opinion about why interest groups lobby, the three theories share a key assumption: Lobbying activities are expected to occur before the congressional voting stage. The exchange theory of lobbying assumes that the purpose of lobbying is vote buying. Special interests are assumed to lobby before major voting events - either committee votes or House (Senate) floor votes. The informational theory of lobbying supposes that transmission of information occurs before politicians cast their votes. Finally, the legislative subsidy theory views the role of lobbying as helping legislators draft a bill. Therefore, scholars subscribing to that theory assume lobbying to be underway before the floor vote takes place, occurring most often at the committee stage. Figure 1.1Procedures of Policy Making and Predictions of Lobbying Theoriesfigure.1.1 summarizes how the three main theories of lobbying predict lobbying patterns.

These predictions leave significant amounts of actual lobbying data unexplained. When we set the threshold at the final vote by Congress (i.e., a vote on a conference report), 43.63% of lobbying activity that targets specific bills is ex post in the sense that special interests use their resources after congressional voting has been completed.[4]

What explains ex post lobbying? Most, if not all, political economy models on lobbying assume that voting on a bill is the end of the game. The assumption is that after the vote,

[4]When we set the threshold at the first House vote, 92.82% of lobbying activity that targets specific bills is ex post. For more details on how to measure ex post lobbying, see section 1.2.

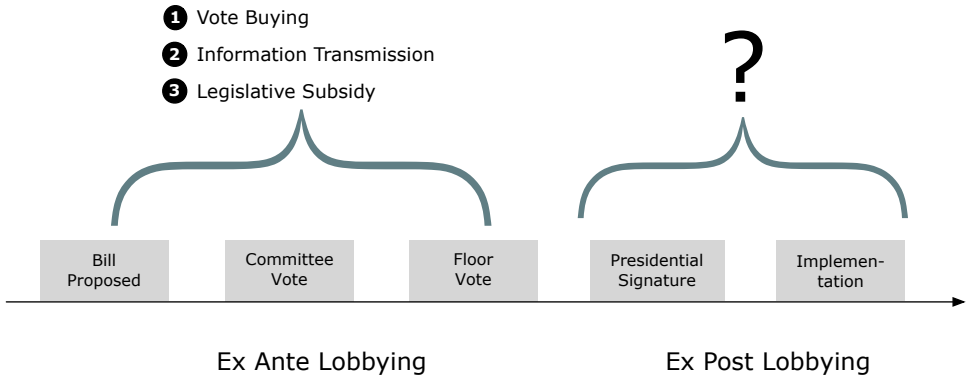

Figure 1.1: Procedures of Policy Making and Predictions of Lobbying Theories

payoffs for interested parties are fully realized (Grossman and Helpman, 1994). In contrast, I argue that the interaction between special interest groups and policy makers is a two-stage game - bill passage and implementation - and interest groups face different problems at each stage. Each act of legislation has two dimensions that affect the payoffs for relevant parties: 1) whether a benefit from a bill is collective or private; and 2) whether a bill is specific or non-specific regarding how it will be implemented. The collective or private dimension determines whether an industry as a whole enjoys benefits from legislation they support, or bears the costs of legislation they oppose. For example, tariffs can be considered to be collective benefits, and producer-specific subsidies to be private benefits. The second dimension, specific or non-specific, describes the amount of discretion Congress leaves to federal agencies and bureaucracies to complete the details of legislation.

Passage of a bill determines the payoffs for groups from both the collective component and the minute details of the bill. Legislation often specifies some general policy objectives for the federal agency to follow, and some legislation is very specific about the duties of a regulatory agency. For example, the Emergency Petroleum Allocation Act and the Energy Policy and Conservation Act provided a detailed formula regarding the price structure for domestic crude oil. As a result, the Federal Energy Administration had minimal discretion in conceding price regulation (Viscusi, Vernon, and Harrington, 1992). However, many pieces of legislation provide only a general framework and do not specify details. Many details in

public policy are inserted in the regulatory or implementation stages, so payoffs are fully realized only when lobbying at these stages is completed.[5]

Even the 2,300-page Dodd-Frank Wall Street Reform and Consumer Protection Act left most of the real decision-making to the Securities and Exchange Commission (SEC) and other agencies.[6] It is not surprising that many groups identify the implementation arena as the place where proposed legislation acquires specific details that actually affect their welfare (Hula, 1999). Therefore, groups exert ex post lobbying effort to claim rents on bills' unspecified areas when the bills contain a higher proportion of uncertainty about their implementation.[7] The significant level of ex post lobbying at the implementation stage after bill passage implies that it should be explicitly considered.[8]

This implies that there is a classic collective action problem among relevant actors. To secure the desired result at the bill passage stage, ex ante lobbying efforts should be exerted. But there is an incentive for groups supporting a bill to sit back at the stage of ex ante lobbying and enjoy the collective benefits that passing a bill generates without bearing any costs.[9] Ex post lobbying provides a chance for those who are inactive in the ex ante lobbying

[5]For example, The Occupational Safety and Health Act stated its ambitious goals in this way: "...to assure, so far as possible, every working man and woman in the nation safe and healthy work conditions." Although it provides some additional guidance, it left the job of defining, through rules, key legal terms such as "so far as possible," "safe," and "healthy" to the administering agency, the Occupational Safety and Health Administration (OSHA). The Administrative Procedure Act of 1946 allows agencies to make rules to fill the gaps left by Congress, the president, and the courts in formulating public policy law (Kerwin, 2003).

[6]Federal agencies are responsible for defining details of at least 243 financial rules. The SEC alone is responsible for developing 95 rules on topics such as derivatives trading.http://www.nytimes.com/2010/07/28/business/28lobby.html?pagewanted=all"Ex-Regulators Get Set to Lobby on New Financial Rules," *The New York Times*, July, 27, 2010.

[7]Even groups that opposed the bill participate in ex post lobbying to influence implementation stage to maximize their own benefits. For example, two large companies in derivatives trading, the CME Group and the IntercontinentalExchange, strongly opposed passage of the Dodd-Frank Act. But once the bill passed, they fought against each other on the specific rules of the so-called position limits plan.http://dealbook.nytimes.com/2011/10/05/wall-st-united-in-disdain-for-dodd-frank-but-split-on-the-details/"United in Distain for Dodd-Frank, Wall Street is Split on the Details," *The New York Times*, October, 5, 2011.

[8]Gordon and Hafer (2005, 2007) consider corporate political activities at the regulatory stage. Although they acknowledge the significant distributional consequences of regulation implementation on firms' welfare, the mechanism they introduce assumes that corporate expenditures only target legislators who could reduce the scope of the regulatory mandate.

[9]Rodrik (1986) presents a model showing how lobbying incentives differ depending on the characteristics

stage to claim a share of the non-specific benefits from government policy once the bill becomes law. The theoretical model predicts that bills with higher non-specific components will draw a higher proportion of ex post lobbying, while firms with larger market shares will bear a disproportionately high burden in ex ante lobbying. The model also suggests that lobbying by smaller firms may reduce the incentive for larger firms to lobby ex ante. Under-provision of ex ante lobbying efforts will be greater in sectors where the market shares of firms are more equally distributed.[10]

Empirical data on lobbying activity supports bill- and group-specific patterns of ex ante and ex post lobbying predicted in the model. By analyzing 633,731 lobbying reports filed between 1998 and 2012 that specified the bills passed from the 107^{th} Congress through the 111^{th} Congress, I present systematic patterns of bill- and group-specific ex ante and ex post lobbying activities. Ex ante lobbying is more widespread for bills that have a highly deterministic and collective nature, such as bills from the Homeland Security Committee. In contrast, bills from the Energy and Commerce or Ways and Means Committees show a higher ratio of ex post lobbying. At the firm-level, firms with large market shares devote resources to both ex ante and ex post lobbying activities, while firms with small market shares are more likely to participate in ex post lobbying if a bill is short on specifics and has a higher distributive component. I also show that firms targeting non-legislative regulatory and bureaucratic agencies, and employing in-house lobbyists instead of hiring outside lobbying firms, have higher ex post lobbying.

This paper makes three contributions. First, it systematically presents the different patterns of lobbying by heterogeneous interest groups. Despite richness in the development of theories about lobbying, systematic empirical evidence on lobbying, in contrast to campaign

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of trade protections. While collective action problems in lobbying are prevalent when seeking tariffs that have a public good nature, special interests do not suffer from free rider problems in cases of producer-specific subsidies which are private goods in nature.

[10]Bombardini and Trebbi (2012) discuss how market structure, whether oligopolistic or competitive, affects the mode of lobbying by firms-whether they lobby together through their industry trade association or individually. They document that more competitive and less concentrated sectors are more likely to organize politically and lobby together as a trade association. But they assume symmetry among firms.

contributions, is lacking. Empirical studies on lobbying have mainly relied on surveys of special interest groups (Wright, 1990; Hojnacki and Kimball, 1998) and it is only recently that studies on lobbying have utilized data from lobbying reports.[11] Furthermore, interest groups are usually treated in the literature as identical actors even though they differ in terms of their goals, priorities, and resources. In this paper, I document how different groups employ different lobbying strategies.

Second, this paper highlights a dynamic and crucial, yet rarely emphasized, aspect of lobbying activities: timing.[12] Lobbying groups join the political game at different times and they have different goals depending on their choice of timing. Understanding this dynamic aspect of lobbying activities enhances our understanding of various incentives and strategies that interest groups employ.

Third, this essay fills the gap left by studies of interdependencies between lobbying and legislative procedures. As Helpman and Persson (2004) note, attempts to integrate lobbying models and legislative models with special interest group politics have been scarce. This significantly limits our ability to understand the motivations and behaviors of relevant actors in the political game because, as Bauer, Pool, and Dexter (1963) pointed out, individual and group interests are redefined by the operation of the social institutions through which they must work. Examining how lobbying and political institutions interact will deepen our understanding of how institutional settings affect the behaviors of special interest groups.

In the next section, I present evidence of ex post lobbying from comprehensive data on lobbying reports, combined with information on bills obtained from the Library of Congress.[13] Then I propose a model to explain the rationale behind ex post lobbying in

[11]The non-exhaustive list includes (Ansolabehere, Snyder, and Tripathi, 2002; Hansen, Mitchell, and Drope, 2005; de Figueiredo and Silverman, 2006; Baumgartner et al., 2009; Deniz Igan, and Prachi Mishra, and Thierry Tressel, 2009; de Figueiredo and Cameron, 2009; Bertrand, Bombardini, and Trebbi, 2012; Bombardini and Trebbi, 2012; Kerr, Lincoln, and Mishra, 2011; i Vidal, Draca, and Fons-Rosen, 2011; Igan and Mishra, 2011; Facchini, Mayda, and Mishra, 2011; Tovar, 2012)

[12]Wirl (1994) and Polborn (2006) provide theoretical models of dynamic lobbying.

[13]Source: http://soprweb.senate.gov/index.cfm?event=selectFieldsreset=1The Senate's Office of Public Records (SOPR) and the http://www.opensecrets.orgCenter for Responsive Politics.

section 1.3. In section 1.4, I present empirical patterns in ex post lobbying. In section 1.5, present my conclusions.

1.2 Data and Stylized Facts

1.2.1 Data Description and Coding Criteria

The Lobbying Disclosure Act (LDA), which was enacted in 1995 and reformed in 2007, requires that interest groups filing their lobbying reports give specific information about their lobbying activities.[14] A lobbying report includes information on the client who paid for the lobbying services, the registrant who provided the lobbying services, expenditures, and the period of the lobbying activity. A quarterly lobbying report should specify the issue areas lobbied for, and if specific legislation was lobbied for, a list of those bills under each issue. Therefore, I was able to match a bill with interest groups that lobbied on it.[15] To match lobbying data with congressional activities, I collected information on legislative proposals originating in the House between the 107^{th} and the 111^{th} Congresses. Among the 3,202 bills that reached the House floor, I choose bills that became law, were designated by either H.R. or H.J.RES, and are controversial—they pass the House under the question of "On Passage." These stipulations reduce the total to 174 bills.[16]

For each bill selected, I match lobbying reports that were filed from 1998 through 2012. The unit of observation in this paper is the matching of a bill with a lobbying report that mentions that bill.[17] The summary statistics of bills and lobbying activity is shown below in Table 1.1Summary Statistics of Bills under "On Passage" question that became Law in

[14]http://lobbyingdisclosure.house.gov/amended_lda_guide.htmlU.S. House of Representatives, Office of the Clerk

[15]For more information on the nature of the lobbying report, see Appendix D

[16]Bills under the question of 'On Passage' are usually the most important and controversial bills. For a detailed account of the bill selection process used in this study, see Appendix B. Appendix B also includes an analysis of ex post lobbying for the cases in which I include all bills that became laws.

[17]If a lobbying report mentions the same bill under different issue areas, I counted it as "one." If a lobbying report mentions multiple bills, the report has multiple entries in the data since the match between the bill and the report is unique for each bill.

Each Congress and Lobbying Activities on them from 1998 through 2012table.1.1.

Table 1.1: Summary Statistics of Bills under "On Passage" question that became Law in Each Congress and Lobbying Activities on them from 1998 through 2012.

Congress	Year	Majority	# Bills	# Lobbying Reports	Average Reports Per Bill
107^{th}	2001-2002	R	36	1,300	36
108^{th}	2003-2004	R	39	2,145	55
109^{th}	2005-2006	R	34	9,661	284
110^{th}	2007-2008	D	32	22,908	716
111^{th}	2009-2010	D	33	40,627	1,231
Total	2001-2010		174	76,641	440

In total, there are 76,641 lobbying reports that match observations.[18] Lobbying activities skyrocketed between the 109^{th} and the 110^{th} Congresses for two reasons. First, reform on the Lobbying Disclosure Act (LDA) in 2007, under the name of Honest Leadership and Open Government Act of 2007, increased lobbying reporting from bi-annually to quarterly. Second, the Democratic Party's control of a majority in the House, for the first time since the end of the 103^{rd} Congress in 1995, drew a huge inflow of lobbying activity as major agendas changed.

To determine the timing patterns of lobbying activities, I compared the date of the congressional vote, obtained through the Library of Congress, and the time period of lobbying activity from the lobbying reports.[19] I use three thresholds for date of the congressional vote: 1) the date of the committee vote, 2) the date of the first House floor vote, 3) and the date of the final congressional vote—usually the vote on the conference report. Figure 1.2Congressional Procedures and Three Thresholdsfigure.1.2 presents three cases of final congressional action. I use threshold 3 to define ex post lobbying since that is the last action taken by Congress before the president signs the bill into law. However, setting different thresholds is

[18]The total number of unique lobbying reports is 74,855. For more information on lobbying report composition, see Appendix B.

[19]The date a lobbying report is filed, and the period of activity it describes, are different. Each registrant must file a quarterly report on Form LD-2 no later than 20 days after the end of the quarterly period beginning on the first day of January, April, July, and October of each year in which a registrant is registered.

still useful since it reveals the volumes of lobbying activity at the different junctures within a legislative process.

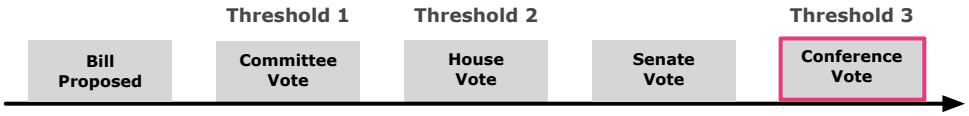

Figure 1.2: Congressional Procedures and Three Thresholds

One limitation in coding the timing of lobbying activity is that lobbying reports do not specify the exact dates when lobbying occurs. Lobbyists only report on the quarter in which they engage in lobbying activities. The following diagram in Figure 1.3Coding Criteria on Possible Cases of Lobbying Timingfigure.1.3 gives a sense of how I define the timing of lobbying. Case 1 is where defining ex ante and ex post lobbying is clear. If floor voting takes place in the second quarter of a given year, all lobbying activities before the second quarter of that year are ex ante. If lobbying activity takes place after the vote, starting from the third quarter of that year and years following, it is ex post lobbying. Case 2 shows that determining the precise timing of lobbying is tricky. If the floor vote and lobbying take place in the same quarter of a given year, lobbying activity could be ex ante or ex post. In this case, I code them as ex ante to eliminate the possibility of overestimating the incidence of ex post lobbying. Combined with the setting the threshold at the date of the vote on the conference report, these coding criteria gives the most conservative measurement of ex post lobbying.

1.2.2 Evidence of Ex Post Lobbying

In this section, I examine the volume of ex post lobbying both in terms of the number of lobbying report submissions and the amount of money spent. First, I investigate ex post lobbying in terms of the frequency of lobbying report submissions. Table 1.2Summary Statistics on Lobbying Type Based on the Frequency of Bill-Lobbying Report Matches. Threshold = Date of the Final Congressional Votetable.1.2 presents the summary statistics

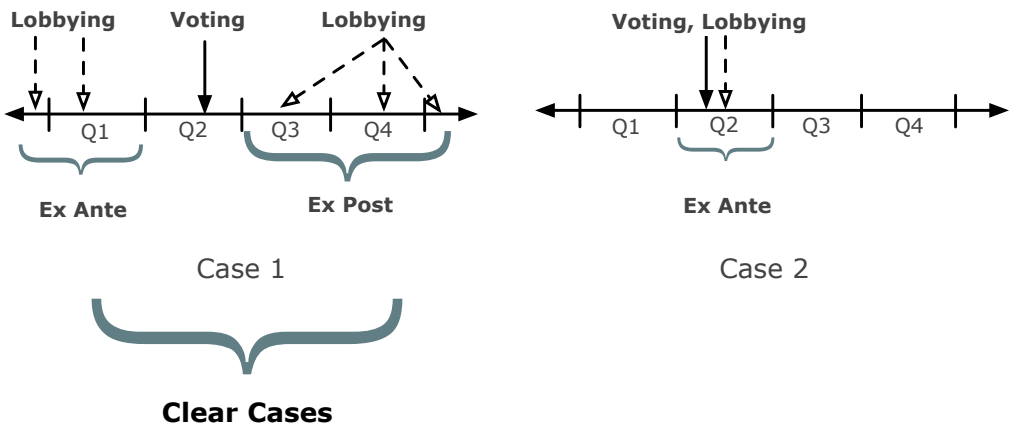

Figure 1.3: Coding Criteria on Possible Cases of Lobbying Timing

on types of lobbying when the threshold is set to the final action by Congress. Under this threshold, ex post lobbying means special interest groups lobby after all congressional actions are closed. Observations are divided into two cases. First, clear cases include observations only if ex ante and ex post lobbying activities are clearly identified. Second, every observation of lobbying activity is listed in the columns under "All Cases," and the lower boundary of the ex post lobbying percentage is provided.

Table 1.2: Summary Statistics on Lobbying Type Based on the Frequency of Bill-Lobbying Report Matches. Threshold = Date of the Final Congressional Vote.

	Clear Cases			**All Cases**		
Congress	Ex Ante(%)	Ex Post(%)	N^a	Ex Ante	Ex Post	N^b
107^{th}	83.36	16.64	494	90.85	9.15	918
108^{th}	83.29	16.71	757	91.47	8.53	1,467
109^{th}	67.64	32.36	3,243	84.15	15.85	6,554
110^{th}	59.40	40.60	4,070	66.33	33.67	5,007
111^{th}	50.97	49.03	8,853	53.81	46.90	13,591
Total	56.37	43.63	46,808	62.68	37.32	76,641

Note: a = Number of lobbying reports under clear cases. b = Number of lobbying reports under all cases.

In clear cases, 43.63% were ex post lobbying on average across five sessions of Congress. Variation across Congresses is large: while only 16.64 % of lobbying in the 107^{th} Congress was ex post, the 111^{th} Congress shows ex post lobbying at 49.03%. Considering all cases,

37.32% were ex post lobbying on average.[20]

Figure 1.4Volume of Lobbying Activities Before and After Votefigure.1.4 shows lobbying volumes before and after the vote. The dotted line indicates final congressional vote dates and it shows that lobbying activities are intensified before and after final congressional votes. At the same time, there is a significant amount of lobbying activity after final congressional votes. Some lobbying activity even targets bills that passed Congress more than 20 months previously.

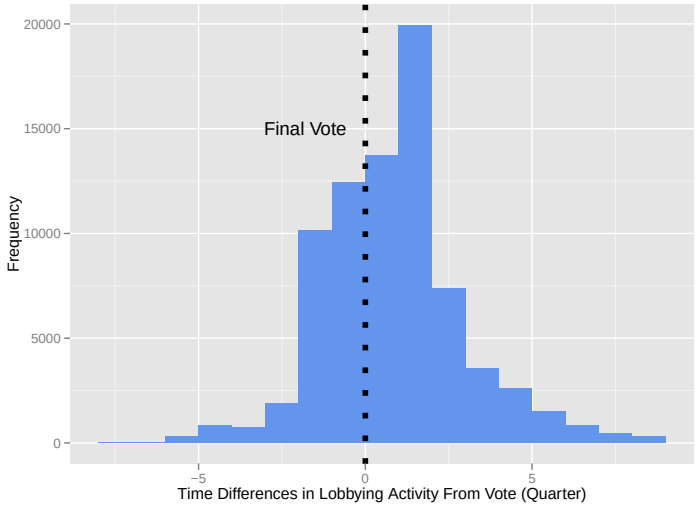

Figure 1.4: Volume of Lobbying Activities Before and After Vote

If we set the threshold earlier than the final congressional voting (e.g., the date of the House floor vote or the committee vote on a bill), the amount of ex post lobbying is even larger. For example, if we set the threshold as the first House floor vote on a bill, which is the first major vote on the floor for bills that originated in the House, 92.82 % received ex post lobbying among clear cases and 76.03 % received ex post lobbying for all cases. Table 1.3Summary Statistics on Lobbying Type Based on Frequency of Bill-Lobbying Report Matchestable.1.3 presents the detailed information at the congressional level. This implies that many groups start lobbying after the first major vote has been taken. If we set the

[20]When I set the threshold as the date when the president signs a bill into law, there is not a large difference in terms of the ex post lobbying ratio since the time gap between the conference vote and the president's action is quite small in most cases.

threshold at the date of the committee vote, the ratio of ex post to ex ante lobbying is even higher.

Table 1.3: Summary Statistics on Lobbying Type Based on Frequency of Bill-Lobbying Report Matches

	Clear Cases			**All Cases**		
Congress	Ex Ante(%)	Ex Post(%)	N^a	Ex Ante	Ex Post	N^a
107th	22.60	77.40	624	62.85	37.15	1,300
108th	23.88	76.12	1,051	62.70	37.30	2,145
109th	4.00	96.00	6,022	40.16	59.84	9,661
110th	12.65	87.35	17,195	32.82	67.18	22,908
111th	3.63	96.37	28,842	11.84	88.16	40,627
Total	7.18	92.82	53,734	29.89	70.11	76,641

Note: Threshold = Date of First House Floor Vote. a = Number of lobbying reports under clear cases. b = Number of lobbying reports under all cases.

What if we measure ex post lobbying using the amount of money spent? One caution in analyzing lobbying spending is that when a special interest group files its quarterly lobbying report, it only reports the total spending per report without delineating the amount spent on each issue. This is not a problem when a lobbying report details actions on a single issue because total spending reported is exactly the amount spent on that issue. However, many lobbying reports detail actions taken on multiple issues. On average, a lobbying report contains five different issue areas. Therefore, comparing lobbying spending between ex ante and ex post lobbying is not straightforward. To overcome this limitation, I present two measures of lobbying expenditures.

First, I take a subsample of lobbying reports that only mentioned one issue: 12,566 observations out of 76,641 cases.[21] Among these reports, average amount spent on ex ante lobbying was $51,308, and the average amount spent on ex post lobbying was $43,161. The second measure of the amount spent on lobbying is calculated as follows. I first count the number of issues in each lobbying report. Some lobbying reports are single-issue reports

[21]It seems that single-issue lobbying reports have some selection issues because 90% of single-issue lobbying reports are filed by hired lobbying firms.

and some reports cover more than 60 different issue areas.[22] After counting the number of issues, I divide total spending by the number of issues in the report. This gives the average spending per issue. The average lobbying spending per issue was $50,175 on ex ante lobbying and $51,007 on ex post lobbying. Figure 1.5Distribution of Lobbying Spending (log scale) between Ex Ante and Ex Post Lobbying among Single Issue Lobbying Reports (top) and the Average Lobbying Spending per Issue (bottom)figure.1.5 shows the distribution of lobbying spending in both measures.[23] There is no discernible difference in spending between ex ante and ex post lobbying activities. Both measures of lobbying spending confirm that special interest groups spend significant amounts of money on ex post lobbying.

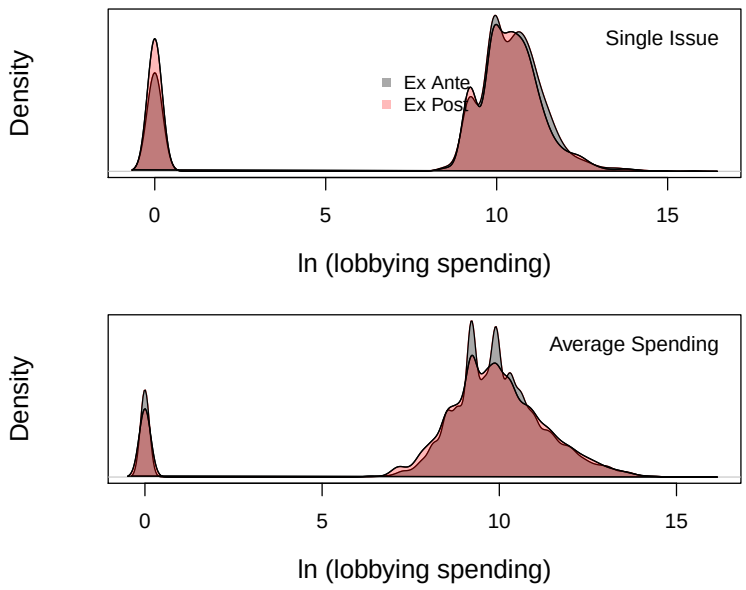

Figure 1.5: Distribution of Lobbying Spending (log scale) between Ex Ante and Ex Post Lobbying among Single Issue Lobbying Reports (top) and the Average Lobbying Spending per Issue (bottom).

[22]The majority of lobbying reports mentioned three or fewer issues. The maximum number of issues mentioned in a lobbying report is 68. There are three lobbying reports that mentioned 68 issues and all lobbying reports were filed by the Association of American Medical Colleagues in the 111th Congress.

[23]This is based on all cases. Clear cases show a similar pattern: average ex ante spending is $62,100 and ex post spending is $69,095.

1.3 A Model

In this section, I present a simple model that explains patterns of timing in lobbying activities.[24] The main idea is as follows. I assume an industry supports a bill's passage.[25] Legislation encompasses two features: collective benefits and private benefits.[26] While some bills show higher levels of collective benefits, others include high levels of private benefits.[27] Passing a bill guarantees that all relevant actors enjoy the collective benefits from the bill, but individual effort should be exerted to secure private benefits from the bill. It is interesting that while passing a bill is a collective action, claiming private benefits is an individual action after the bill's passage. The classic collective action problem arises in this case.

The model presented here tries to answer two questions. First, who bears the burdens of collective action at the bill-passage stage (that is, the costs of ex ante lobbying efforts)? Second, how are lobbying patterns in terms of timing affected by different bills? The model predicts that at the bill-passage stage, large firms with high market share bear disproportionately higher burdens in the collective action. Firms with smaller market share are more likely to join ex post lobbying efforts to enjoy private benefits. Also, the model predicts that the percent of ex post lobbying of the total amount of lobbying will increase as the ratio of private benefits in the bill increases. In sum, group-specific patterns in terms of timing of

[24] A general idea of the model comes from following sources: Olson (1965), Olson and Zeckhauser (1966), and Grossman and Helpman (1996). They discuss the problem of free rides' in lobbying between the thriving and declining industries in a dynamic setting. However, their discussion on the collective action problem mainly depends on the industry structure and they do not consider factors such as group heterogeneity and legislation characteristics.

[25] But this is not a critical assumption. The same logic can be applied to the case where an industry opposes the passage of a bill. In this case, the ex ante lobbying effort should be exerted to block the bill's passage. But ex post dynamics are the same.

[26] I use the terms "collective" and "private" benefits instead of "specific" and "non-specific" to emphasize the dynamics of the collective action problem among firms. Of course, not all collective benefits are specific and not all private benefits are non-specific. Esteban and Ray (2001) present a model on group size and the collective action having a collective prize with a varying mix of public and private characteristics. But they assume that all individuals supporting the same bill are identical.

[27] There are several papers that discuss differences between the collective incentive as an industry and the private incentive as an individual firm of business political activity (Lichtenberg, 1989; Hansen and Mitchell, 2000; de Figueiredo and Tiller, 2001; Hansen, Mitchell, and Drope, 2005).

lobbying activities and the bill-specific lobbying patterns are expected.

1.3.1 Set Up

Consider an industry with n firms. Each firm, denoted by j, is characterized by its size in relation to the industry. Let α_j be the size of firm j. The industry is a vector of sizes $(\alpha_1, \alpha_2, ..., \alpha_n)$.[28] Firms in this industry can benefit from lobbying policy makers since passing legislation generates rents. To enjoy the rents, firms must exert effort. Formally, each firm can exert ex ante effort e_j^A and ex post effort e_j^P. Thus, the total effort of a firm j is measured by $e_j^A + e_j^P$.[29]

Let Π be the rents derived from lobbying the legislature. These benefits are increasing in the total ex ante effort exerted by firms in the industry, thus $\Pi = f(\sum_{j=1}^{n} e_j^A)$ where $f' > 0$. There is a parameter, $\beta \in [0, 1]$ which indicates the ratio of the collective and specific benefits in each bill.[30] If the parameter β is close to 1, the bill has a significant portion of collective benefits and is specific about how to implement the legislation, so passing the bill itself guarantees higher collective benefits to groups and the ways in which rules will be set at the implementation stage is well-defined. Little ex post lobbying effort is required to secure private benefits. Bills on foreign policies may have a β close to 1. In contrast, if β is close to 0, the ratio of the private benefits of the bill is higher and the legislation is short on specifics; therefore passing that bill does not automatically guarantee certain benefits to relevant groups. To secure the private benefits that legislation generates, groups have to exert ex post lobbying efforts to influence the specific rule-making process. Non-specific appropriations and tax bills show these types of features.

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[28] This can be interpreted as lobbying effectiveness as well. Large firms usually have greater resources, such as more information and experiences about the policy-making process or frequent contacts with policy makers. Therefore we can assume that lobbying effectiveness is correlated with the market size of a firm.

[29] Efforts level e_j^A and e_j^B are assumed to be continuous in the general version. But for simplicity, I assume they are binary in the simple example.

[30] In this model, I assume β is exogenous. But it is possible that special interests influence the magnitude of β at the ex ante lobbying stage by influencing the legislative body. In an extension, I plan to endogenize β as a function of ex ante lobbying efforts by special interests.

By exerting ex ante lobbying, all firms in the industry can derive collective benefits from the rents and the size of individual prizes from the collective benefits is proportional to the firm's market size, α_j. By exerting ex post lobbying, each of the firms can extract a fraction of the private benefits. This fraction increases with both the ex post lobbying effort of the firm and the size of the firm in the industry.[31] The cost of ex ante and ex post efforts are denoted by c_j^A and c_j^P. Also, to engage in lobbying activity, firms have to bear an up-front fixed cost, F.[32] The probability that each firm's market size is at most α is $G(\alpha)$, where G is a continuously increasing function.

Let P_j be the fraction that a firm j derives from the private benefits in Π. This fraction depends on both total ex post lobbying and the size of the firms, according to the following expression:[33]

$$P_j(e^p, \alpha) = \frac{e_j^p \alpha_j}{\sum_{j=1}^{n} e_j^p \alpha_j} \qquad \forall j \in \{1, ..., n\} \tag{1.1}$$

Combined, the net earnings of each firm from lobbying corresponds to the following expression:

$$\beta \alpha_j \Pi(e^A) + (1 - \beta) P_j(e^p, \alpha) \Pi(e^A) - c_j^A - c_j^P - F \tag{1.2}$$

[31]This assumes the rent-seeking function, or the portion of the private benefits, should be defined as $P_j(e^p, \alpha) = \frac{e_j^p \alpha_j}{\sum_{j=1}^{n} e_j^p \alpha_j}, \forall j \in \{1, ..., n\}$. However, this rent-seeking function may be different for the regulation-type policy and the procurement-type policy. For the regulation-type policy, the size of rent that groups get from ex post lobbying is proportional to their market sizes. For example, if you collect more information on the tax code, the benefit you can enjoy is proportional to your market size. But competition among interest groups still exists. In a procurement-type of policy, it is similar to dividing a fixed pie among interest groups. Therefore, the portion that you can extract from exerting ex post lobbying may not depend on a firm's market size. But if we assume market size is positively correlated with lobbying efficiency, the rent-seeking function that I assume in the model can also apply to procurement-type legislation.

[32]It is well-known that there are high entry costs to engage in lobbying activities, especially for small groups.

[33]This is similar to one of the most widely used contest success functions from Tullock (1980)'s probability function.

Each firm chooses its effort according to the following optimization problem:

$$\max_{e_j^A} \beta\alpha_j\Pi(e^A) + (1-\beta)P_j(e^p(e^A),\alpha)\Pi(e^A) - c_j^A - c_j^P - F$$

$$s.t. \qquad P_j(e^P(e^A),\alpha) = \frac{e_j^p(e^A)\alpha_j}{\sum_{j=1}^{n} e_j^p\alpha_j}$$

$$\Pi(e^A) = f(\sum_{j=1}^{n} e_j^A)$$

$$e_j^P(e^A) \in \underset{e_j^P}{\text{argmax}}\ \beta\alpha_j\bar{\Pi}(e^A) + (1-\beta)P_j(e^p(e^A),\alpha)\bar{\Pi}(e^A) - \bar{c}_j^A - c_j^P - F$$

$$\beta\alpha_j\Pi(e^A) + (1-\beta)P_j(e^p(e^A),\alpha)\Pi(e^A) - c_j^A - c_j^P - F \geq 0 \tag{1.3}$$

1.3.2 Analysis

For simplicity, I assume that the rent is created if at least one firm is willing to engage in ex ante lobbying.[34] Then $\Pi(e^A)$ is simplified

$$\Pi = \begin{cases} 1 & \text{if at least one firm does lobby ex ante} \\ 0 & \text{otherwise} \end{cases}$$

If $\beta = 1$

I start with the case where a bill provides an entirely collective good. What matters is whether there is one firm willing to engage in ex ante lobbying to generate that collective good and which firm it is. In this case, we only need to check the incentive compatibility of ex ante lobbying activity since engaging in both ex ante and ex post lobbying activities and engaging in only ex post lobbying activity are dominated strategies.[35] The optimization problem is simplified

[34]There are various ways to set rules on the size of rent, Π. For example, I can set the threshold Π^* which satisfies that if $\Pi \geq \Pi^*$, the rent will be provided and if $\Pi < \Pi^*$, rent will not be provided. Also the functional form of f can be defined specifically.

[35]Benefits under each activity are as follows. $U(e^P) = -c^P - F$, $U(e^A + e^P) = \alpha_j - c^A - c^P - F$, $U(e^A) = \alpha_j - c^A - F$. It is obvious that $U(e^P) < U(e^A + e^P) < U(e^A)$ holds.

$$\max_{e_j^A} \alpha_j - c^A - F$$
$$s.t.\ \alpha_j - c^A - F \geq 0 \tag{1.4}$$

First, from the participation constraint, if $\alpha_j < c^A + F$, the firm obtains a negative payoff if it lobbies ex ante and 0 if it does not lobby ax ante. Therefore, for those $\alpha_j < c^A + F$, no lobbying activity is optimal. Set the cutoff $\alpha^* = c^A + F$. For those $\alpha_j \geq c^A + F$, payoffs depend on the action:

$$U_j = \begin{cases} 0 & \text{if does not lobby ex ante} \\ \alpha_j - c^A - F & \text{if does lobby ex ante} \\ (1 - G(\alpha^*))\alpha_j & \text{if does not lobby but other firm lobbies ex ante} \end{cases}$$

If $(1 - G(\alpha^*))\alpha_j \geq \alpha_j - c^A - F$, a firm j does not contribute. This leads to the condition

$$G(\alpha^*) \leq \frac{c^A + F}{\alpha_j} \tag{1.5}$$

We know that if $\alpha_j = \alpha_n$, equation 1.5equation.1.3.5 implies that the biggest firm in the market provides ex ante lobbying and all other firms do not lobby. The case where $\beta = 1$ is similar to the general public goods provision game. Under this case, the largest firm, $\alpha_j = \alpha_n$ engages in ex ante lobbying and everyone else, $\alpha_j \neq \alpha_n$, enjoys a free ride.

If $\beta = 0$

This is the case where a bill is entirely private. To claim a benefit, ex post lobbying is necessary. In this case, we only need to compare payoffs between lobbying both ex ante and ex post, and lobbying only ex post, since lobbying only ex ante is a dominated strategy. The

optimization problem simplifies to

$$\begin{aligned}
&\max_{e_j^A} P_j(e^p(e^A),\alpha)\Pi(e^A) - c_j^A - c_j^P - F \\
&s.t. \qquad P_j(e^P(e^A),\alpha) = \frac{e_j^p(e^A)\alpha_j}{\sum_{j=1}^{n} e_j^p \alpha_j} \\
&\Pi = f(\sum_{j=1}^{n} e_j^A) \\
&e_j^P(e^A) \in \underset{e_j^P}{\operatorname{argmax}} \ (1-\beta)P_j(e^p(e^A),\alpha)\bar{\Pi}(e^A) - \bar{c}_j^A - c_j^P - F \\
&P_j(e^p(e^{A)},\alpha)\Pi(e^A) - c_j^A - c_j^P - F \geq 0
\end{aligned} \tag{1.6}$$

From the participation constraint, given that the biggest firm in the industry provides an ex ante lobbying activity, a firm $j \neq n$ participates in ex post lobbying if $P_j(e^P,\alpha) \geq c^P + F$ is satisfied. Therefore a firm with α_j^* which satisfies the condition that

$$P_j(e^P,\alpha_j^*) = c^P + F \tag{1.7}$$

is the smallest firm among those that engage in ex post lobbying. If we solve the equation 1.7equation.1.3.7, it generates the threshold firm size

$$\alpha_j^* = \frac{(c^P+F)\sum_{i\neq j}^{n} e_i^P \alpha_i}{e_j^P(1-c^P-F)}$$

Firms with sizes greater than α_j^* will participate in the ex post lobbying process and their equilibrium ex post lobbying effort is derived from the 1.6equation.1.3.6:

$$e_j^{P*} = \frac{\sqrt{\alpha_j \sum_{i\neq j}^{n} e_i^P \alpha_i} - \sum_{i\neq j}^{n} e_i^P \alpha_i}{\alpha_j}$$

If $0 < \beta < 1$

This is the case where legislation includes both private and public benefits. A firm's optimization problem is the same as presented in the equation 1.3Set Upequation.1.3.3 above. Given that the biggest firm provides ex ante lobbying to generate the collective good, a firm $j \neq n$ participates in ex post lobbying if and only if

$$\beta\alpha_j + (1-\beta)P_j(e^P, \alpha_j) \geq c^P + F \tag{1.8}$$

Assume that a firm with α_j^* satisfying the equation 1.7equation.1.3.7 participates. We know $P_j(e^P, \alpha_j^*) = c^P + F$ holds. Then we compare the value of $\beta\alpha_j + (1-\beta)P_j(e^P, \alpha_j)$ and $P_j(e^P, \alpha_j)$ when $\alpha_j = \alpha_j^*$. With this exercise, we can identify the smallest firm that participates in ex post lobbying when a legislation is entirely private ($\beta = 0$); it has an incentive to participate in ex post lobbying when the bill includes both the collective and private benefits (i.e. $0 < \beta < 0$).

The benefit from the private benefits as a function of ex post lobbying efforts is defined as $P_j(e^P, \alpha_j^*) = \frac{\alpha_j}{\sum_{j \in \{\forall i : e_i^P \neq 0\}} \alpha_j}$.[36] Since the denominator is less than 1, $P_j(e^P, \alpha^*) > \alpha_j$. Therefore, $\beta\alpha_j^* + (1-\beta)P_j(e^P, \alpha_j^*) < P_j(e^P, \alpha_j^*) = c^P + F$ holds.[37]

This implies the firm with α_j^* is the smallest among those that participate in ex post lobbying when $\beta = 0$ does not have an incentive to participate when $\beta > 0$ since the cost outweighs the benefit. Therefore the threshold α_j^{**} that satisfies the participation constraint, equation 1.8equation.1.3.8, is greater than α^*, the market size of the smallest firm that participates in ex post lobbying when $\beta = 0$. Also as β approaches 1, it becomes harder to satisfy the participation constraint and therefore the threshold level of market size, α_j, should increase.

The prediction of firms' lobbying patterns as a function of a market size, α_j, and the

[36] Since $e_j^P = 1$ for $j \in \{\forall i : e_i^P \neq 0\}$, the formula $P_j(e^P, \alpha_j^*)$ is simplified.

[37] The left hand side can be rearranged as $\beta[\alpha_j - P_j(e^P, \alpha^*)] + P_j(e^P, \alpha_j^*)$. Since $\alpha_j < P_j(e^P, \alpha^*)$, $\beta[\alpha_j - P_j(e^P, \alpha^*)] + P_j(e^P, \alpha_j^*) < P_j(e^P, \alpha^*)$.

collectiveness of a piece of legislation, denoted by β, is presented in Figure 1.6The prediction on the relationship between market share (α) and lobbying pattern as a function of degree of collective benefits in a legislation (β). Case I depicts the situation where the rents are provided if at least one group exerts ax ante lobbying. Case II describes the situation where the rents are provided if the sum of ex ante lobbying passes a certain threshold level. The lines indicate the minimum size of a firm who joins different lobbying strategies, depending on βfigure.1.6. Case I depicts what I analyze here: the collective good is provided if at least one firm engages in ex ante lobbying. Under this scenario, the largest firm, whose market share is α_n, always provides the collective good by exerting ex ante lobbying effort, other firms whose market sizes satisfy the condition $\alpha_j \geq \alpha^*$ engage in only ex post lobbying, and firms with market size $\alpha_j < \alpha^*$ do not participate in the lobbying process. As the β, the collectiveness of a bill, increases, the size of the smallest firm that participates in the lobbying process increases.

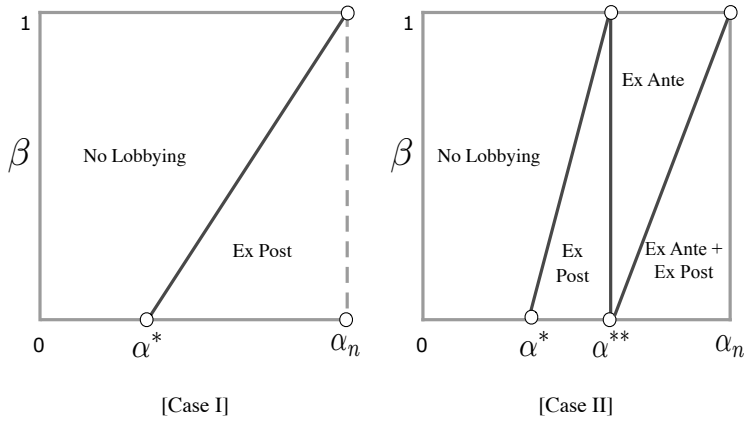

Figure 1.6: The prediction on the relationship between market share (α) and lobbying pattern as a function of degree of collective benefits in a legislation (β). Case I depicts the situation where the rents are provided if at least one group exerts ax ante lobbying. Case II describes the situation where the rents are provided if the sum of ex ante lobbying passes a certain threshold level. The lines indicate the minimum size of a firm who joins different lobbying strategies, depending on β.

Case II in figure 1.6The prediction on the relationship between market share (α) and lobbying pattern as a function of degree of collective benefits in a legislation (β). Case I depicts the situation where the rents are provided if at least one group exerts ax ante

lobbying. Case II describes the situation where the rents are provided if the sum of ex ante lobbying passes a certain threshold level. The lines indicate the minimum size of a firm who joins different lobbying strategies, depending on βfigure.1.6 depicts the prediction under the scenario that the collective good is provided if the sum of ex ante lobbying by relevant actors passes the fixed threshold such that

$$\Pi(e^A) = \begin{cases} 1 & \text{if } \Pi = \sum_{j=1}^{n} e^A \geq \Pi^* \\ 0 & \text{if } \Pi = \sum_{j=1}^{n} e^A < \Pi^* \end{cases}$$

Under this condition, firms with $\alpha_j \geq \alpha^{**}$ definitely engage in ex ante lobbying. Depending on the value of β, firms decide whether they also participate in ex post lobbying. As β becomes close to 1, fewer firms participate in ex post lobbying activity. Firms whose market size α_j is between α^* and α^{**} only engage in ex post lobbying activity and the number of firms employing ex post lobbying decreases as the collectiveness of the bill, β, increases.

1.3.3 The Optimal Level of Lobbying Effort

In this section, I investigate how the opportunity to engage in ex post lobbying affects the level of ex ante lobbying in a general setting with two firms, $j \in \{1, 2\}$. I analyze two games in a general framework. The first is a static situation where each firm only considers lobbying in the current period. Under this assumption, firms decide their optimal level of ex ante lobbying without considering ex post lobbying.[38] Under this scenario, firms are very naive in the sense that they only consider the current stage. Exerting ex ante lobbying effort does not have any impact on ex post lobbying and vice versa. This will be used as a benchmark.[39] The second is a dynamic situation where firms make decisions on ex ante lobbying by taking into account ex post lobbying. Exerting more ex ante effort increases the

[38]Here we assume that the portion of the private benefits P_j, that is determined in the ex post lobbying stage, is given and ex ante lobbying by special interests does not affect the ex post lobbying efforts and therefore has no impact on the fraction.

[39]This benchmark case is similar to what is assumed in most political economy models on lobbying.

size of rents but at the same time, it generates more competition during ex post lobbying to claim non-specific private benefits. Therefore, there are tradeoffs in exerting ex ante lobbying effort. This is a novel feature of the model. The main focus of this section of the paper is to compare the optimal levels of ex ante lobbying efforts between the static and dynamic games and identify how the opportunity of ex post lobbying affects incentive to engage in ex ante lobbying.

The Static Game Equilibrium

In the static game, firms solve two independent games. Decisions on ex ante and ex post lobbying are independent. First, solve the problem with respect to e_j^A. Here we assume each firm's share of the private benefits derived from ex post lobbying is fixed ($\bar{P}_j$). For simplicity, I assume a cost function takes a quadratic form such as $c_j = \frac{1}{2}c(e_j^A)^2$. The size of rents is a function of the sum of ex ante lobbying efforts by the firms and it is defined as $\Pi(e_j^A) = f(\sum_{j=1}^{n} e_j^A)$. I assume $f(\sum_{j=1}^{n} e_j^A) = \sum_{j=1}^{n} e_j$. I take the first order conditions of the equation 1.3Set Upequation.1.3.3 for each firm and solve for the Nash equilibrium ex ante and ex post effort levels.[40]

Proposition 1. *The equilibrium set of ex ante and ex post effort levels,* (e_j^{*AB}, e_j^{*PB})*, in the benchmark static game satisfies the following conditions:*

$$\begin{aligned} e_1^{*A} &= \frac{\beta\alpha_1 + (1-\beta)\bar{P}_1}{c}, \qquad e_1^{*P} = \sqrt{\frac{\alpha_1\alpha_2(1-\beta)\bar{\Pi}(e^A)}{c}} \\ e_2^{*A} &= \frac{\beta\alpha_2 + (1-\beta)\bar{P}_2}{c}, \qquad e_2^{*P} = \sqrt{\frac{\alpha_1\alpha_2(1-\beta)\bar{\Pi}(e^A)}{c}} \end{aligned}$$

The intuition behind the Proposition 1is simple. Each firm exerts more ex ante efforts as its market size increases. As the ratio of collective benefits in the bill increases ($\beta \uparrow$), a firm j whose market size is greater than the exogenously given share of the private benefits in the ex post stage, $\bar{P}_j$, will increase its ex ante lobbying efforts and a firm i whose market

[40]See Appendix A for the proof.

size is smaller than $\bar{P}_i$ will decrease its ex ante lobbying efforts.[41] Given ex ante efforts and the size of rents are determined, it is the market structure that determines firms' ex post efforts. As the market share becomes more equal, the level of ex post effort increases since competition is more intense.[42]

The Sequential Game Equilibrium

In the sequential game, firms take into account the consequences of ex ante lobbying on the ex post lobbying stage when they make a decision on their level of ex ante efforts. Therefore, I solve the sequential game by backward induction. First, I solve the ex post lobbying stage game. Assume the size of rents, $\Pi(e^A)$ is fixed and deduce e_j^P. In the ex post lobbying stage, the sequential game is exactly the same as the static game. Therefore, the equilibrium levels of ex post lobbying effort for firm 1 and 2, e_1^{*P} and e_2^{*P}, are

$$e_1^{*P} = \sqrt{\frac{\alpha_1\alpha_2(1-\beta)\bar{\Pi}(e^A)}{c}}, \qquad e_2^{*P} = \sqrt{\frac{\alpha_1\alpha_2(1-\beta)\bar{\Pi}(e^A)}{c}} \tag{1.9}$$

The possible difference in ex post lobbying effort between the static and sequential games comes from the possibly different level of ex ante lobbying efforts and its consequences for the size of rents. If the size of rents varies, it affects the incentive of other players and therefore the competition on rents could be different. Denote the ex post lobbying effort e_j^{*P} that satisfies equation 1.9equation.1.3.9 as $\bar{e}_j^P$.

Given $\bar{e}_1^P$, we now move backwards to the first stage to find the equilibrium ex ante

[41] This is derived from $\frac{\partial e_j^A}{\partial \beta}$. Assume a government decides how much non-specific private benefits are distributed among firms in the ex post stage. If a firm j receives a fraction of private benefits more than its market share, it has an incentive to exert more ex ante effort as the private portion of the bill increases. However, if the private portion of the bill decreases, the ex post stage's influence on the firm's payoff declines and market share that affects the payoff from the collective benefit becomes more important. Therefore, a firm whose market share is greater than what the government promises to give in an ex post stage will increase its ex ante effort.

[42] The fact that ex post effort level is the same for two firms is derived from the assumptions that cost function does not depend on market share, α_j. But this is not critical for solving the problem.

lobbying effort, e_1^A. The maximization problem in the first stage is as follows:

$$\max_{e_1^A} \alpha_1\beta\Pi(e^A) + P_1(\bar{e}^P(e^A),\alpha_1)(1-\beta)\Pi(e^A) - \frac{1}{2}c\{(\bar{e}_1^P(e^A))^2 + (e_1^A)^2\} - F \qquad (1.10)$$

$$s.t.$$

$$\Pi(e^A) = f(e^A)$$

$$\bar{e}_1^P \in \underset{\bar{e}_1^P}{\text{argmax}}\ P_1(\bar{e}^P(e^A),\alpha_1)(1-\beta)\Pi(e^A) - \frac{1}{2}c(\bar{e}_1^P)^2 - F$$

I take the first order conditions for each firm and solve for the Nash equilibrium ex ante and ex post effort levels.[43]

Proposition 2. *The equilibrium set of ex ante and ex post effort levels,* (e_j^{*AS}, e_j^{*PS})*, in the sequential game satisfies the following conditions:*

$$\begin{aligned} e_1^{*A} &= \frac{\alpha_1\beta + (1-\beta)P_1(e^P,\alpha)}{c} + \frac{1-\beta}{c}\Big[\frac{\alpha_1\alpha_2(e_1^{P'}e_2^P - e_1^P e_2^{P'})}{(e_1^P\alpha_1 + e_2^P\alpha_2)^2}\Pi(e^A) - c\frac{\partial e_1^P}{\partial e_1^A}\Big] \\ e_1^{*P} &= \sqrt{\frac{\alpha_1\alpha_2(1-\beta)\bar{\Pi}(e^A)}{c}} \end{aligned}$$

,where $e_1^{P'} = \frac{\partial e_1^P}{\partial e_1^A}$ *and* $e_2^{P'} = \frac{\partial e_2^P}{\partial e_1^A}$.

How does the ex post lobbying opportunity affect the level of ex ante lobbying activity? Compare the ex ante effort in the sequential game to the ex ante effort in the static game. There are two new components added in the sequential game equilibrium. The first component, $\Big[\frac{\alpha_1\alpha_2(e_1^{P'}e_2^P - e_1^P e_2^{P'})}{(e_1^P\alpha_1 + e_2^P\alpha_2)^2}\Pi(e^A)\Big]$, refers to how the ex ante lobbying effort of firm 1 affects the ex post lobbying efforts of itself and the other firm. This can be separated into two parts:

$$\Big[\frac{\alpha_1\alpha_2(e_1^{P'}e_2^P - e_1^P e_2^{P'})}{(e_1^P\alpha_1 + e_2^P\alpha_2)^2}\Big]\Pi(e^A) = \underbrace{\Big[\frac{\alpha_1\alpha_2(e_1^{P'}e_2^P)}{(e_1^P\alpha_1 + e_2^P\alpha_2)^2}\Big]\Pi(e^A)}_{\text{Part I}} + \underbrace{\Big[\frac{-\alpha_1\alpha_2(e_1^P e_2^{P'})}{(e_1^P\alpha_1 + e_2^P\alpha_2)^2}\Big]\Pi(e^A)}_{\text{Part II}} \qquad (1.11)$$

[43]See Appendix A for the proof.

From the definition of $P_1(e^P, \alpha)$, the sign of Part I in the equation 1.11equation.1.3.11 is positive since more ex ante lobbying effort by firm 1 increases the size of rents and it leads to more ex post lobbying for firm 1 itself. In contrast, the sign of Part II is negative. Part II shows the relationship between firm 1's ex ante lobbying effort and its effect on firm 2's incentive in ex post lobbying. If firm 1puts more effort into ex ante lobbying, it increases the size of the rents and therefore firm 2 has more incentive to exert ex post lobbying. But due to the negative sign, it takes a negative value.

The second new component regarding the difference between the static and sequential games, $-c\frac{\partial e_1^P}{\partial e_1^A}$, comes from additional cost. In terms of cost, firm 1 must pay the additional cost, $c\left[\frac{\partial e_1^P}{\partial e_1^A}\right]$, if exerting more ex ante lobbying effort induces more ex post lobbying effort. Combined, we have extra benefits and extra costs in the sequential game compared to the static game. Extra benefits are as follows:

$$\frac{1-\beta}{c}\Big\{\frac{\alpha_1\alpha_2(e_1^{P'}e_2^P)}{(e_1^P\alpha_1+e_2^P\alpha_2)^2}\Big\}\Pi(e^A) > 0 \tag{1.12}$$

This implies that as firm 1 exerts more efforts ex ante, it increases the size of the rents and therefore induces more ex post lobbying to claim additional private benefits. But at the same time, there are extra costs that firm 1 must pay:

$$\frac{1-\beta}{c}\Big\{\frac{-\alpha_1\alpha_2(e_1^Pe_2^{P'})}{(e_1^P\alpha_1+e_2^P\alpha_2)^2}\Pi(e^A) - c\frac{\partial e_1^P}{\partial e_1^A}\Big\} < 0 \tag{1.13}$$

Therefore, the degree of ex ante lobbying efforts in the sequential game compared to the static game depends on the size of extra benefits and the extra costs.

$$e_1^{AB} = \frac{\alpha_1\beta+\bar{P}_1(1-\beta)}{c} \tag{1.14}$$

$$e_1^{AS} = \frac{\alpha_1\beta+P_1(1-\beta)}{c} + \overbrace{\frac{1-\beta}{c}\frac{\alpha_1\alpha_2(e_1^{P'}e_2^P)}{(e_1^P\alpha_1+e_2^P\alpha_2)^2}\Pi}^{\text{Extra Benefits}} + \overbrace{\frac{1-\beta}{c}\Big\{\frac{-\alpha_1\alpha_2(e_1^Pe_2^{P'})}{(e_1^P\alpha_1+e_2^P\alpha_2)^2}\Pi - c\frac{\partial e_1^P}{\partial e_1^A}\Big\}}^{\text{Extra Costs}}$$

There are several interesting comparative statics worth noting. As β converges toward 1, ex ante lobbying effort in the sequential game is the same as that in the static game because this becomes a game that purely provides for the public good, and therefore, no ex post lobbying stage is required. This means there is no difference between the static game and the sequential game. In contrast, when β converges toward 0, the difference in the ex ante lobbying effort between the static and the sequential games is maximized. A simple simulation illustrates how the size of collective benefits in bills and the market structure affect ex ante lobbying efforts in the sequential game as in Figure 1.7Comparison of Ex Ante Efforts between the Static and Sequential Games as a function of Market Size (α) and the Ratio of Collective Benefits (β)figure.1.7.[44] First, as market share increases, a firm increases its ex ante lobbying effort in both the static and sequential games. Second, except in the case of a monopoly, the ex ante lobbying effort in the sequential game is always smaller than its counterpart in the static setting. Ex post lobbying opportunities lead to the under-provision of ex ante lobbying efforts. There are some small firms that would exert ex ante lobbying in the static game but would not exert it in the sequential game. Third, the issue of under-provision of ex ante lobbying effort is severe as the market becomes more competitive, i.e., when market shares are similar.

1.4 Patterns in Ex Post Lobbying

In this section, I present patterns in ex post lobbying that are implied by the model. First, it is predicted that bills with more non-specific private benefits draw more ex post lobbying. I examine this hypothesis by checking the ex post lobbying ratio for bills originating from different committees. Second, the model shows that groups with larger market shares bear disproportionately high burdens in ex ante lobbying. Using the data on firms that lobbied for the Dodd-Frank legislation, I show that large firms and trade associations are more likely than small firms to exert ex ante lobbying efforts. Third, given the fact that ex

[44]To compare ex ante lobbying efforts in the static and the sequential games, I set the parameters such that c = 1, $\beta = 0.5$ to illustrate the case when $0 < \beta < 1$.

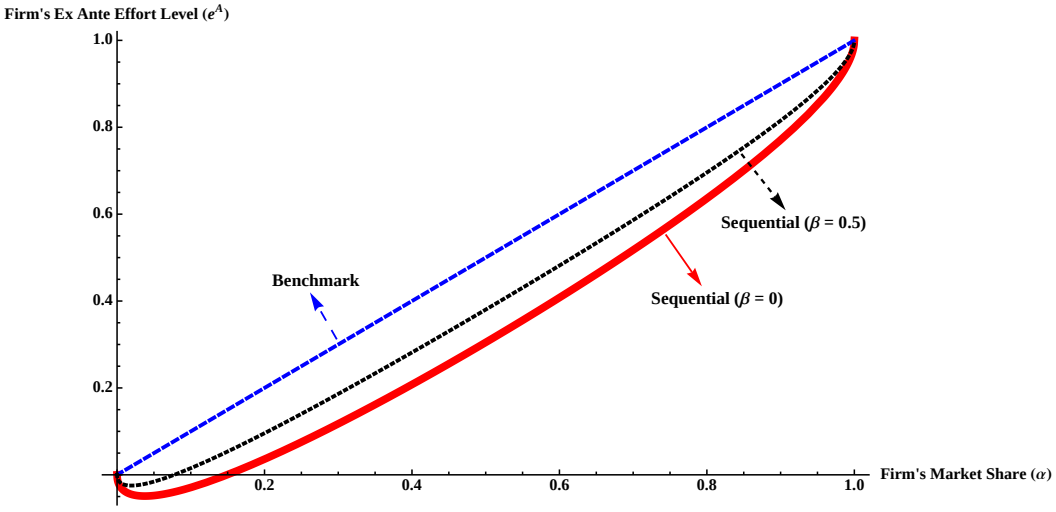

Figure 1.7: Comparison of Ex Ante Efforts between the Static and Sequential Games as a function of Market Size (α) and the Ratio of Collective Benefits (β).

post lobbying targets the implementation stage, it is expected that lobbying activities that contact bureaucrats and regulators should be more ex post. Finally, I examine how the choice of employing in-house lobbyists or hiring outside lobbying firms is related to ex post lobbying patterns. Since ex ante lobbying processes involve more contact with legislators and ex post lobbying may require firm-specific information in the interaction with regulators, it is expected that hiring professional lobbying firms, whose most important asset is their access to legislators, is more frequent in ex ante lobbying, while the use of in-house lobbyists is more frequent in ex post lobbying. All these conjectures are empirically supported.

1.4.1 Bill-Specific Patterns

First, the model predicts that some bills draw more ex ante lobbying and others invite more ex post lobbying, depending on the parameter β, which indicates the amount of collective and specific benefits to be garnered from the bill. Figure 1.8Ex Post Lobbying Ratio at a Bill Level [clear cases]figure.1.8 shows this prediction is supported by the data. For each bill in the sample, I calculate the ex post lobbying ratio. Figure 1.8Ex Post Lobbying Ratio at a Bill Level [clear cases]figure.1.8 shows that there are bill-specific patterns of timing lobbying efforts. While some bills draw an overwhelmingly high ex ante lobbying ratio,

others generate a higher ratio of ex post lobbying.[45]

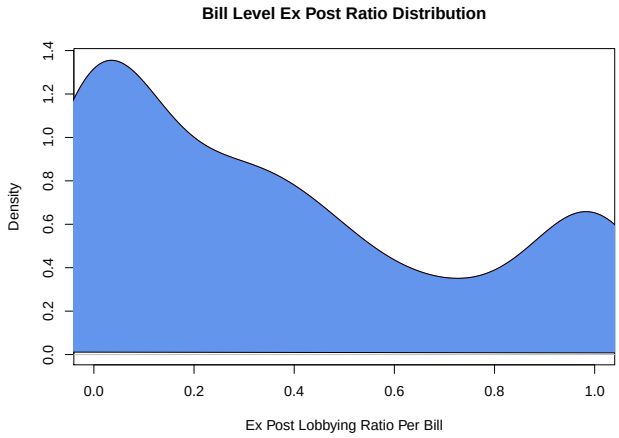

Figure 1.8: Ex Post Lobbying Ratio at a Bill Level [clear cases].

When bills do not require post-bill-passage efforts at the individual level for their benefits to be enjoyed, ex ante lobbying dominates. These are bills from which the passage itself produces a public good to relevant actors. For example, bills originating in the Homeland Security Committee do not generate many ex post lobbying efforts. Across all 174 bills, the average ex post lobbying ratio is 0.23. But the ex post lobbying ratio for bills related to national security are much lower than the average ratio. For example, 25 lobbying contacts were made on "H.R.5682: United States and India Nuclear Cooperation Promotion Act" which passed in the 109th Congress, but none of the contacts resulted in ex post lobbying.

In contrast, bills that required individual post-bill-passage efforts to claim benefit from non-specific parts generated considerable levels of ex post lobbying. In this case, a bill's

[45]One may wonder whether the lobbying pattern is determined by the time when a bill is introduced into Congress, or the amount of time during which a bill is considered in the legislature. For example, bills introduced very late in the session, or bills with a shorter time span between their introduction and their passage may show a higher ratio of ex post lobbying since the time is too short to lobby during the legislation process. In contrast, if a bill is introduced earlier in the session, or the time span is long enough between its introduction and its passage, lobbying can be conducted during the legislative session and, therefore, one may expect the ratio of ex post lobbying to be lower. Although there is a negative relationship between the duration of the time span and the ex post lobbying ratio, there is still a significant level of variation in terms of the ex post lobbying ratio among bills with the same time span. Figures included in Appendix C illustrate this point.

passage itself creates some rents at the aggregate level but the uncertainty regarding how the bill will be implemented remains. Therefore, to benefit from the legislation, relevant parties must exert some lobbying effort during the ex post stage. For example, 205 lobbying reports cited lobbying for "H.R.4297: Tax Relief Extension Reconciliation Act" which passed in the 109^{th} Congress. Among them, only 34 cases are ex ante lobbying, while 171 cases are ex post lobbying. This example highlights the fact that features of bills influence modes of lobbying. To systematically examine how the different contents of bills affect lobbying patterns, I calculate the mean ex post lobbying ratio of bills originating in the same House committee.

Figure 1.9Ex Post Lobbying Ratio at Committee Levelfigure.1.9 compares the ex post lobbying ratio across different bills coming from different committees.[46] As one would expect, bills coming from the Homeland Security (HS) or Oversight and Government Reform (OV) Committees induce little ex post lobbying.[47] In contrast, bills coming from the Energy and Commerce (EG) or Ways and Means (WM)) Committees generate significantly higher levels of ex post lobbying. Those bills are usually more complex and produce more unresolved uncertainties. Groups need more information to take advantage of the benefits in these bills.

One may argue that ex post lobbying could be ex ante lobbying for future legislation if bills are annually renewed, e.g., appropriations bills. Despite specifying the previous year's bill in their lobbying reports, special interest groups may have lobbied on the contents of a future appropriations bill rather than lobbying for the implementation or specific details

[46]Following is the information on what each abbreviation stands for in the Figure 1.9Ex Post Lobbying Ratio at Committee Levelfigure.1.9: SC = Science and Technology, HS= Homeland Security, AD = Administration, IR = International Relations, OV= Oversight and Government Reform, JU = Judiciary, AG= Agriculture, AS = Armed Services, IN = Intelligence, TR= Transportations and Infrastructures, FS= Financial Services, AP = Appropriations, ED = Education and Labor Force, WM = Ways and Means, EG = Energy and Commerce.

[47]Readers may wonder why bills coming from the Science and Technology committee generate so little ex post lobbying. This may be due to the fact that the government's decisions on research support for science are made on merit and expertise as well as peer reviews from institutions such as the National Science Foundation (NSF) or the National Health Service (NHS). That means there is little room for lobbying groups to use political pressure to influence non-policy makers in this area. Also, note that the Appropriations Committee has jurisdiction over defense contract bills, while the Homeland Security Committee does not. Note that observations per committee are small and bills coming from the same committee may have very different characteristics. Hence, one needs to be cautious when interpreting this graph.

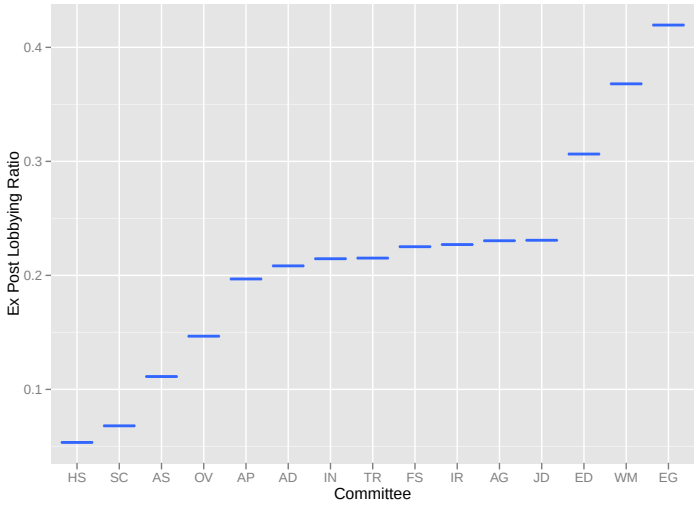

Figure 1.9: Ex Post Lobbying Ratio at Committee Level

of the passed legislation.[48] I present supporting evidence from the analysis on specific bills indicating that this concern does not explain the majority of ex post lobbying activities.[49]

First, I present the volume of lobbying activity before and after the vote date in Figure 1.10Lobbying Volumes Before and After from the Congressional Voting Date in Appropriations and Non Appropriations Bills. Vertical solid lines indicate the final congressional voting datefigure.1.10. I divide the bills into two groups: appropriations bills that are generally annually renewed, and non-appropriations bills that have longer time horizons. Patterns on the timing of lobbying for appropriations and non-appropriations bills do not show a significant difference. Lobbying activities are generally intensified around the con-

[48]This assumes a situation in which a special interest groups indicates that it lobbied on the Defense Appropriation Bill of 2010 in the third quarter of 2011. If the Defense Appropriation Bill of 2010 was passed in Congress on June 2010, this lobbying activity is ex post lobbying. However, it is possible that the special interest group tried to influence the upcoming Defense Appropriations Bill of 2011, although it had specified the previous year's bill.

[49]Not every lobbying report specifies bills that were targeted. Lobbying disclosure forms require registered lobbyists to list the general lobbying issue area code on each form submitted. Under the general issue area code, lobbyists can fill in specific lobbying issues. Sometimes they write specific bill names and sometimes they put in a broad set of issues. Among the lobbying reports that were filed between 1998 and 2012, 46% listed specific bills (see Appendix B for more details). For the list of general issue codes, see http://lobbyingdisclosure.house.gov/help/WordDocuments/lobbyingissuecodes.htmU.S. House of Representatives, Office of the Clerk

gressional vote date but lobbying activities may continue beyond 20 months following the final congressional vote. For non-appropriations bills that have a longer time horizon (e.g., five years for the Omnibus farm bill), a significant amount of ex post lobbying immediately after the bill passed indicates that ex post lobbying activities are not ex ante lobbying for future bills. The case of appropriations bills is also interesting because, despite the fact that appropriations bills are renewed annually, groups still specify previous appropriations bills in their lobbying reports.

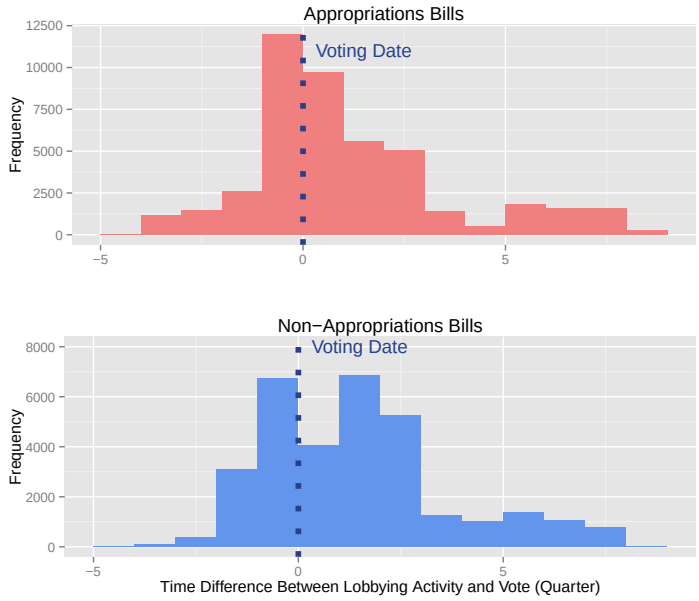

Figure 1.10: Lobbying Volumes Before and After from the Congressional Voting Date in Appropriations and Non Appropriations Bills. Vertical solid lines indicate the final congressional voting date.

Another piece of supporting evidence that indicates ex post lobbying is not only concerned with ex ante lobbying for similar bills in the future is presented in Figure 1.11Ex Post Lobbying Ratio Between Appropriations Bills and Non Appropriations Billsfigure.1.11. It shows the ex post lobbying ratio between appropriations and non-appropriations bills. If the ex post lobbying is only concerned with ex ante lobbying for future bills, the ex post lobbying ratio for the appropriations bills should be similar since it has the same legislative

cycle. But, there is great variation in lobbying patterns for appropriations bills. This is true for non-appropriations bills as well and this implies that bill-specific characteristics matter more than simply the time-cycle of the bill's consideration.

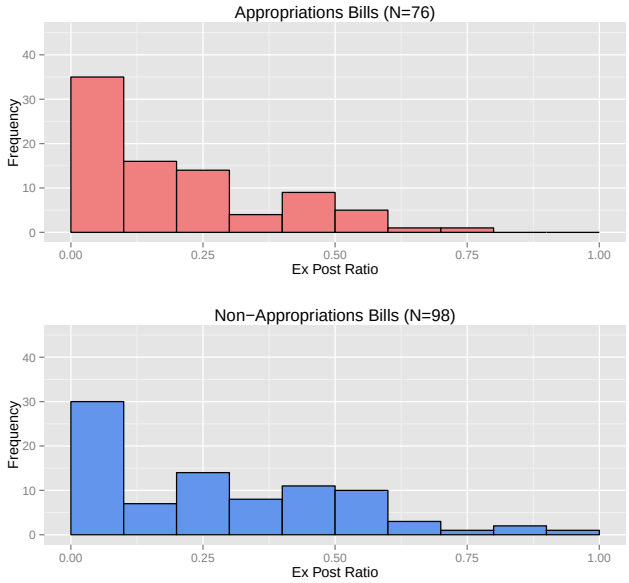

Figure 1.11: Ex Post Lobbying Ratio Between Appropriations Bills and Non Appropriations Bills.

1.4.2 Group-Specific Patterns

Second, the model implies that groups with greater resources to engage in ex ante lobbying and groups with small market share are more likely to focus on ex post lobbying. To examine this prediction, I calculate the ratio of *ex ante* and *ex post* lobbying for each group.[50] Figure 1.12Ex Post Lobbying Ratio at Client Level [clear cases]figure.1.12 shows the pattern of lobbying at the group level.

Some noticeable patterns emerge from the group-level data. First, many groups specialize in either *ex ante* lobbying or *ex post* lobbying. In particular, small firms that submit few lobbying reports and have limited resources show a polarized lobbying pattern. While sectors

[50]I restrict the data on groups whose minimum lobbying is greater than 2.

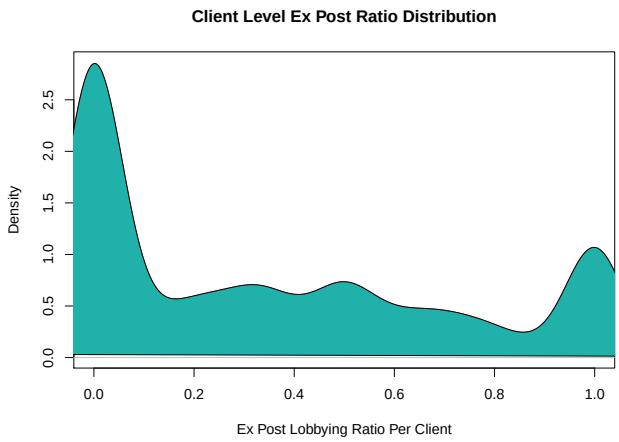

Figure 1.12: Ex Post Lobbying Ratio at Client Level [clear cases].

such as ideology and single-issue advocacy groups engage more in ex ante lobbying, the agribusiness and energy/natural resources sectors show higher ex post lobbying ratios on average.[51] Second, groups that have more resources and lobby more frequently show more balanced resource allocations between ex ante and ex post lobbying, although they are biased toward ex ante lobbying. For example, Citigroup Management Corporation submitted 67 different lobbying reports and its ex post lobbying ratio is 0.44. Lockheed Martin, one of the most active players in lobbying Washington, submitted 114 different lobbying reports and its ex post lobbying ratio is 0.27. Third, trade associations such as Pharmaceutical Research & Manufacturers of America (PhRMA) or the Biotechnology Industry Organization (BIO), show higher ex ante lobbying compared to individual groups. For example, the Biotechnology Industry Organization submitted 75 lobbying reports and its ex post lobbying ratio is 0.27.

To identify a group-specific pattern with more precision, I examine the pattern of groups who lobbied on bill H.R.4173: Dodd-Frank Wall Street Reform and Consumer Protection Act that passed in the 111$^{\text{th}}$ Congress. The Dodd-Frank Act was one of the most controversial and important pieces of legislations in the 111$^{\text{th}}$ Congress and 4,386 lobbying reports

[51]The average ex post lobbying ratio for all sectors is 0.31. The ex post lobbying ratio for ideology/single issue groups is 0.27 and the defense sector's ratio is 0.14. Ex post lobbying ratios for the agribusiness and energy/natural resources sectors are 0.39 and 0.4, respectively.

submitted by 871 different groups (as of 2012) specifically mentioned this ball. Among these groups, I only consider firms and trade associations since that is what I assume in the model.[52] The number of unique firms is 523, and the number of trade associations is 205. The Dodd-Frank Act can be described as a bill that lacks specific details despite spanning some 2,300 pages. It required that 398 mandated rules be written by federal agencies and regulators and it is often cited as a law that is short on specifics.[53]

For each firm, I collect the revenue and employment data from *Orbis*, a global company database. *Orbis* divides firms into four categories: small(S), medium (M), large (L), and very large (VL). Among 523 firms that lobbied on the Dodd-Frank Act, 419 firms (80.11%) are considered to be very large firms. Firms submitted 2,764 lobbying reports and trade associations submitted 1,204 lobbying reports in total. Among the 2,764 lobbying reports that firms submitted, 2,366 (85.6%) have large firms as their clients. To examine the lobbying pattern by different groups, I calculate the ex post lobbying ratio in terms of frequency of lobbying reports filed and lobbying spending for different sizes of firms and trade associations.

Table 1.4Summary Statistics on Ex Post Lobbying by Firms and Trade Associationstable.1.4 presents detailed information on the firms and the associations that lobbied on the Dodd-Frank Act. As the model predicts, small- and medium-sized firms show a higher ex post lobbying ratio, measured in terms of both the frequency of lobbying reports and expenditures on lobbying. Large and very large firms are shown to be disproportionately engaging in ex ante lobbying.[54] Trade associations are more likely to engage in ex ante lobbying compared to small- and medium-sized firms. Given the collective action problems that firms face at the ex ante lobbying stage, this is also consistent with what the model predicts.

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[52] 143 Labor unions, lawyers & lobbyists, and ideology/single issue groups also lobbied for this bill. I dropped them in the analysis.

[53] http://dealbook.nytimes.com/2010/06/28/on-finance-bill-lobbying-shifts-to-regulations/"On Finance Bill, Lobbying Shifts to Regulations," *The New York Times*, June, 28, 2010.

[54] The difference in ex post lobbying ratios between small/medium size firms and large/very large firms is statistically significant.

Table 1.4: Summary Statistics on Ex Post Lobbying by Firms and Trade Associations.

Firm Type	No.	No. of Report	%[a]	Spending(USD)	%[b]
Small Firm	35	97	49	2,671,763	42
Medium Firm	31	124	53	4,315,598	50
Large Firm	38	177	38	8,360,378	33
Very Large Firm	419	2,366	41	180,484,736	37
Trade Associations	205	1,204	42	83,121,727	42
Total	728	3,968	45	278,954,202	41
Small + Medium	66	221	51	6,987,361	47
Large + Very Large	457	2,543	40	188,845,114	36
Trade Associations	205	1,204	42	83,121,727	42

Note: a = Ex post lobbying percentage in terms of lobbying report frequency. b = Percentage of ex post lobbying in terms of lobbying spending.

1.4.3 Contact Agency Pattern

Third, I predict that ex post lobbying aims to target rule-making processes by federal agencies. From this argument, one would expect to observe more ex post lobbying among the lobbying activities that target administrative agencies. In this section, I examine whether this is the case. The Lobbying Disclosure Act requires that names of federal agencies should be listed on line 17 of any issue pages in the lobbying disclosure form.[55] "Federal agency" includes not only Congress, but also the bureaucratic and regulatory agencies. Unlike spending, the contacted federal agencies are listed separately under each issue in a report. For example, 3M's 2010 fourth quarter lobbying report citied 17 different issue areas. Under the issue of "Copyright/Patent/Trademark," 3M lobbied on the house bill, H.R.1260: The Patent Reform Act of 2009 in both the House of Representatives and the Senate. Under the issue of "Taxation/Internal Revenue Code," 3M lobbied on H.R. 2348: Energy Tax Provisions and it targeted four different federal institutions: the House of Representatives, Senate, Department of the Treasury, and the U.S. Trade Representative (USTR).

There are some cases where a lobbying report lists multiple bills under the same issue

[55]http://lobbyingdisclosure.house.gov/amended_lda_guide.htmlU.S. House of Representatives, Office of the Clerk

area. In this case, it is hard to differentiate the targeted agencies per bill. Therefore, I also analyze the targeted agencies among bills mentioning only a single-issue.[56] I divide all targeted agencies into two groups: legislative and administrative. Legislative agencies include the House of Representatives and the Senate; administrative agencies include all other institutions.[57] Table 1.5Summary Statistics on Lobbying Type by Targeted Agency [clear cases]table.1.5 shows the summary statistics of lobbying type by contacted agency for all lobbying reports as well as for single-issue reports.

Table 1.5: Summary Statistics on Lobbying Type by Targeted Agency [clear cases].

	All Reports			**Single Issue Reports**		
Type	Ex Ante(%)	Ex Post	N^a	Ex Ante	Ex Post	N^b
Legislative	56.46	43.54	57,997	57.10	42.90	14,460
Administrative	50.86	49.14	61,052	52.73	47.27	6,924
Total	53.59	46.41	119,049	55.69	44.31	21,384

Note: a = Number of lobbying reports among all reports. b = Number of lobbying reports among single issue reports.

First, among the lobbying activities that targeted the House and the Senate, 56.46% was ex ante and 43.54% was ex post. When lobbying focused on contacting federal agencies and bureaucrats, 50.86% was ex ante lobbying and 49.14% was ex post lobbying. The ex post lobbying ratio is greater when the lobbyists target non-legislative federal agencies and the difference is statistically significant.[58] Second, despite the increase in the ratio of ex post lobbying when targeting administrative agencies, contacting legislative bodies in ex post lobbying is still prevalent. This may seem to contradict the expectation that one should observe more lobbying activities targeting federal regulators and bureaucrats at the

[56]Lobbying reports for a single-issue may have different characteristics from reports on multiple issues. Usually, single-issue lobbying reports are filed by professional lobbying firms (80.32%) and hired lobbying firms disproportionately contact legislators (72.44%) compared to in-house lobbyists.That explains why the absolute volume of contact of legislators is twice the volume of contact of administrative agencies in single-issue lobbying reports. Therefore, it is possible that I am underestimating ex post lobbying that targets federal regulators and bureaucrats in the analysis of single-issue reports.

[57]"Administrative agencies" includes both bureaucratic and regulatory agencies. I do not distinguish them here.

[58]A simple t test confirms this (t-statistic is -19.4304 and p value < 0.001).

ex post lobbying stage. But it is well known that legislators can influence the decisions of bureaucrats on specific rulings. As a result, special interest groups access legislative bodies to influence federal regulators indirectly through legislators (Arnold, 1987; McCubbins, Noll, and Weingast, 1987).[59] For example, the International Brotherhood of Electrical Workers lobbied Congress to delay the Environmental Protection Agency's air pollution rules that could cost jobs of 50,000 workers in mining, utility, and railroads industries.[60] There are many other examples in which groups lobby Congress to put pressure on federal agencies and bureaucracies regarding the rule-making and implementation processes. Therefore, empirical evidence showing that interest groups still heavily lobby legislative bodies at the ex post stage is not surprising.

1.4.4 In-House v.s. Lobbying Firm Patterns

Finally, I analyze whether the choice of different lobbying options is related to different lobbying patterns. When special interest groups decide to lobby, they can employ in-house lobbyists or hire professional lobbying firms. In-house lobbying means that firms or groups employ their own lobbyists. When a group hires a lobbying firm, the client pays the lobbying firm for its services and the lobbying firm files a lobbying report on behalf of the client. Since professional lobbying firms disproportionately contact legislators, and firms that may need to reveal their proprietary information when interacting with regulators would avoid hiring professional lobbying firms due to concerns about information leakage, I expect in-house lobbying cases to show higher levels of ex post lobbying involvement compared to hiring

[59]The Congressional Review Act was created in 1996 as a special way to give Congress the authority to overturn final rules made by federal regulators and bureaucrats. The repeal of bill S.2184, the so-called ergonomics rule for workspace injuries enacted under the Clinton administration, in the 107th Congress was the first time Congress invoked the Congressional Review Act of 1996. This is a textbook case of how the regulatory process can be influenced by outside forces through the legislative body (Skyzycki, 2003).

[60]http://www.nytimes.com/gwire/2011/05/16/16greenwire-power-plant-union-asks-congress-to-delay-epas-87699.html"Power Plant Union Asks Congress to Delay EPA's Air Pollution Rules," *The New York Times*, May, 16, 2011.

lobbying firms.[61] Table 1.6Summary Statistics on the Lobbying Venues and the Lobbying Patterns. [clear cases]table.1.6 shows the relationship between the lobbying option and lobbying patterns. It indicates that groups are more likely to employ in-house lobbyists in ex post lobbying and this is consistent with the expectation.[62]

Table 1.6: Summary Statistics on the Lobbying Venues and the Lobbying Patterns. [clear cases]

Type	Ex Ante(%)	Ex Post(%)	Number of Lobbying Reports
In-House	53.31	46.69	18,658
Lobbying Firms	58.40	41.60	28,150
Total	56.37	43.63	46,808

In sum, ex post lobbying is more prevalent when bills have more private and non-specific characteristics, target federal regulators and bureaucrats, and hire in-house lobbyists. Also, small and medium firms are more likely to engage in ex post lobbying activities than larger firms and trade associations, according to their ex post ratios.

1.5 Conclusion

Despite the fact that interest groups continue to lobby after the passage of a bill in Congress, scholarly research on post-vote interactions between special interest groups and policy makers at the implementation stage is strikingly lacking. Current theories on lobbying primarily focus on the pre-vote stage and leave a significant amount of lobbying unexplained. This paper aims to fill that gap. By analyzing 633,731 lobbying reports filed between 1998 and 2012, I show that almost half of lobbying activity that targeted specific bills occurred during the ex post stage. This paper also explains why special interest groups have an incentive to lobby ex post. While some pieces of legislation are very specific about the

[61] de Figueiredo and Tiller (2001) show that if competitive proprietary information is revealed in the lobbying process, firms are inclined to choose to lobby independently, instead of using trade associations.

[62] The difference in terms of lobbying pattern between in-house and lobbying firms is statistically significant as well (t-statistic is 10.86 and p value < 0.001).

duties of regulatory agencies, many provide only a general framework and do not provide a great amount of detail on implementation itself. I argue that ex post lobbying aims to extract non-specific private benefits from legislation.

Identifying ex post lobbying patterns brings forth the issue of the collective action problem among special interest groups because ex post lobbying provides a chance for those who are inactive in ex ante lobbying to claim their shares from government policy. If special interest groups face tradeoffs in exerting their efforts between ex ante and ex post stages, an interesting question arises: Who pays the cost to obtain a desirable outcome at the bill-passage stage? My model demonstrates that groups with larger market shares bear a disproportionately high share of the burden at the ex ante lobbying stage and firms with smaller market shares and limited resources are more likely to engage in ex post lobbying if the private and non-specific benefits from the legislation are large. Empirical evidence from the data about lobbying activities on the Dodd-Frank bill supports this prediction from the model.

The main point and key contribution of this essay is that lobbying patterns are bill-specific as well as group-specific. Even though lobbying activities are mainly concerned with influencing government policy, attempts to integrate lobbying incentives with the contents of legislation have been scarce. Also, there is little systematic empirical evidence of lobbying behavior at the individual group level. This essay fills these gaps in the lobbying literature by showing how legislative conditions such as bill content and individual-level constraints affect the lobbying strategy of special interest groups.

Lobbying has become an everyday buzz word in the American media. Despite the intense media attention and its significant consequences, we are left with two unresolved questions: What is the exact mechanism of lobbying activities, and how can we measure the influence of lobbying on policy? This paper tackles the first challenge and provides one mechanism of how lobbying works. In particular, this paper shows that groups spend enormous resources and energy on lobbying even after legislation has passed in the Congress. Subsequently, it provides an explanation as to why groups engage in ex post lobbying. Understanding the

mechanism of lobbying is important in preventing scholars from underestimating the volume of lobbying activities by only measuring money spent before bills pass in Congress.

In this paper, I touched upon only one aspect of the dynamics of lobbying: timing. However, there are more issues to address in order to better understand the dynamic mechanism of lobbying activities. How do lobbying activities differ between groups targeting government procurement and groups trying to influence regulatory policies? How do industries with greater homogenous preference differ in their lobbying strategies compared to groups with more differentiated preferences? These are possible future research topics. The next step after identifying the mechanism is to measure the efficacy of lobbying activities. It is well-known that measuring the effect of lobbying activities on public policy is extremely challenging. However, a better understanding of the lobbying mechanism will provide a promising roadmap to measure the efficacy of lobbying in the future.

2 | Options for Trade Protection/Chapter 2

2.1 Introduction

Glassware and rubber footwear both benefit from special protection under U.S. trade policy, yet the incidence of non-tariff barriers (NTBs) on rubber footwear is considerably greater. Although there is a considerable variation in the specific policies governing protected commodities, much less is known about how trade policy is developed for specific goods. Since different instruments generate different incentive structures for rent-seeking and hence have differential implications for social costs, a better theory is needed to explain the form of specific trade policy. The task of this paper is to understand what conditions influence the choice of protection instruments.

I argue that the choice of a specific form of protectionist policy is largely dependent upon different levels of information available to voters. Specifically, when more information about the protection of special interest groups is available to voters, politicians have a strong incentive to set complex protectionist policies such as NTBs. This is because complex instruments raise the challenger's cost of revealing information on the incumbent's favors to special interest groups, and therefore, those favors are less likely to be detected. On the other hand, simpler protection instruments which are economically "efficient," such as tariffs, are likely to be chosen when the supply of information to voters is limited.[1]

In the context of trade policy, this implies that when partisans are highly divided on

[1]Tariffs also generate a huge social deadweight loss, compared to free trade situation. When I say "efficiency," the word should be understood in terms of a relative perspective among different protection instruments.

the choice of a protectionist policy, incentives for the challenger to reveal the incumbent's favors to special interest groups are very high. Here, we expect to observe a more complex form of protection policy. On the other hand, if Democrats and Republicans work together on a particular legislation to protect a certain commodity, in other words when bipartisan support is high, protectionist policies will be less complex because there will be diminished incentives for partisans to exploit the opposition's position on a particular policy proposal.

Theories that connect information and the level of favors to special interest groups have been developed mainly by the information school of economists who stress the importance of informational asymmetries between politicians and citizens. Citizens are presumed to be poorly informed about the effects of various policies and types of politicians, and this leads politicians to select inefficient and difficult-to-trace methods of redistribution over more transparent and efficient methods (Coate and Morris, 1995).

From the perspective of the information school, asymmetric information between politicians and voters is fairly constant across commodities so we should not expect to observe variation in protection policies. However, since there are significant variations in terms of protection policies—for example, some are only protected by high tariffs and others only by NTBs—this implies that emphasis should be placed on institutional arrangements that result in different amounts of information available to voters. Therefore, I ask, what institutional conditions provide more information to voters about politicians' favors to special interest groups?

According to the electoral competition model, a more intense competition among candidates leads to more information available to voters (Bowler and Donovan, 2011). A vote-maximizing opponent has a great incentive to reveal the incumbent's favors to special interest groups in order to receive more votes. When the proportion of informed voters increases, the complex form of protection can be an optimal choice for the incumbent candidate with respect to voters and with special interest groups. First, the complex form of protection policy is less visible and it is less clear how much it will affect voters' welfare. This implies that the opponent must pay more costs to reveal information on incumbent's favors to

interest group. Political competition thus generates biased information: It informs voters about protectionist measures that have simple effects on consumer welfare but tells them little about measures wit more complex effects (Kono, 2006). Regarding the relationship with special interest groups, the complex policy can be a useful mechanism for legislators to solve the political commitment problem (Dixit and Longregan, 1995; Acemoglu and Robinson, 2001). High electoral competition means that future protection for a specific industry cannot be guaranteed: If the challenger is elected in the next election, the protection may disappear. In these circumstances, the complex policy has the advantage of drawing support from special interest groups because the complex policy is difficult to identify and overhaul. In the next section, I provide a theory that illustrates the incentive problems that incumbent politicians face after the choice of a protection instrument.

2.2 Theory

If a transparent policy is socially desirable, why does the complex policy persist? Most answers to this question have focused on the "information effect," which stresses the informational asymmetries between politicians and citizens (Nelson, 1976; Tullock, 1989). But these answers assume that informational asymmetry is constant across different issue areas, and therefore, within the "informational school" framework it is hard to explain the variations within inefficient policies.

That voters are imperfectly informed does not mean that they are irrational. Given an informational structure, voters can rationally calculate costs and benefits. The level of information available to voters, however, varies by issue area. The effects of trade policy are particularly difficult to calculate and are rarely intuitively evident. For instance, suppose that the government provides special subsidies to the automobile industry, and subsequently consumer prices of cars suddenly rise. The public cannot simply blame government policy because this rise in prices might come from some other macroeconomic factor such as a change in exchange rates. Since the benefits or losses of the trade policy are more stochastic

than other types of policies, citizens only observe a noisy signal of whether the policy was warranted *ex post*.

Legislators face trade-offs because they must be responsive to constituent preferences, and also cater to interest groups whose contributions help them secure reelection. This framework of trade-offs was introduced by Grossman and Helpman (1994). Their model features a government with a small open economy that values both its population's welfare as well as campaign contributions from import-competing producers who gain from increased protections. If we apply this framework to a given legislator, the legislator should care about both the votes from voters and the money from interest groups in order to be elected. Failing to pursue policies consistent with their constituent's interest will diminish their chances of reelection. Meanwhile, running for office is an expensive proposition, and interest group contributions are one way through which legislators subsidize campaign costs. In order for the marriage between legislators and interest groups to be successful, legislators must demonstrate their commitment to interest groups' goals. However, an interest group's goals are often in conflict with overall constituents' interests. Therefore, when protection for interest groups harms the welfare of voters, the legislator's reelection chances fall as more information about the legislator's protection of interest groups is revealed. Then, under what conditions is more information available to voters?

I argue that the lack of bipartisan support for protecting a certain industry leads to more available information to voters and consequently, more complex protection instrument is more likely to be adopted to meet the goal of players. In this case, the incentive for the challenger to reveal the incumbent's favors to interest groups is very high. At the same time, interest groups face the greatest uncertainty about the future of their interests when the forms of protections are highly dependent on the partisan composition of the legislature. Here, we expect to observe a more complex form of protection policy. On the other hand, if both Republicans and Democrats have interests in protecting an industry, the muted difference between partisans suppressed the need for the complex policy because neither Republicans nor Democrats have an electoral incentive to reveal those favors to

voters during the campaign. This implies that the level of available information to voters is lower than when the parties disagree on commodity protection policies. Therefore, when bipartisan support exists, protectionist policy should be less complex because there will be diminished incentives for partisans to exploit the opposition's position on a particular policy proposal.[2]

Then, how does the complex policy serve the legislator's goal? A commitment problem exists among a group of actors if they can improve their situation by committing themselves to follow a particular course of action but are unable to do so (Acemoglu and Robinson, 2001). To draw support from interest groups, legislators must solve this commitment problem. Incumbent legislators cannot guarantee their re-election, and if the challenger is elected, interest groups cannot know for certain whether the current special protection will be abrogated or reduced as a consequence of the incumbent's defeat. Complex policy has the advantage of being difficult to undo by future legislatures. Complexity solves the commitment problem by ensuring that protections remain in place whether or not they secure reelection. The problem is solved because the legislator provides protections to a commodity that are difficult for future legislatures to identify and overturn and, in exchange, receives the contributions she needs to fund her reelection campaign.

Before moving to the next section, more clarity about the complexity in protectionist policy is warranted. Complexity in protection policy can be understood in several ways. The approach I take here is to make comparisons between tariffs and non-tariff barriers (NTBs). Trade policy analysts distinguish between three broad forms of protections: tariffs; *core* non-tariff barriers such as anti-dumping laws, quotas, and voluntary export restraints (VERs); and *quality* NTBs, including packing requirements, inspections and testing (Bhagwati, 1967; Baldwin, 1970; Kono, 2006). Tariffs are simple taxes with straightforward effects: a 20% *ad*

[2]Some readers may wonder why special interests do not always prefer the complex form of policy, if it is more durable. However, there are tradeoffs between the amount of rent that special interests can extract (efficiency from the perspective of special interests) and the duration. Becker shows why interest groups have an incentive to have an efficient rent-seeking policy (Becker, 1983). While the simple form of policy can be more efficient but less durable, the complex form of policy is less efficient but more durable. Given these tradeoffs, political conditions affect the incentives of special interest groups to prefer one over the other. I tackle this issue in detail in the model section.

Valorem tariff raises import prices by 20%. Although quotas and other VERs, like tariffs, unambiguously hurt consumers by raising prices on imports, it is much more difficult for consumers to say how much these measures increase prices. The welfare effects of quality NTBs are even more difficult to fathom.

Conventional wisdom in political economy suggests that once an economic policy is introduced, it is likely to persist. Coate and Morris (1999) provide one explanation for this persistence by arguing that when an economic policy is introduced, agents will often respond by undertaking actions in order to benefit from it. These actions increase their willingness to pay for the policy in the future. Rodrik argues that the probability that a policy reform is kept in place in the future will depend positively on the responsiveness of private investment in the reform when it is initially introduced (Rodrik, 1991). Different protection policy instruments will generate different incentive structures for rent-seeking and hence will have differential impacts on social costs. Complex policy makes it difficult for citizens to scrutinize what favors are granted to special interest groups, which allows inefficient policy to continue without any reform. If citizens could easily identify and directly vote on the magnitude of gains and losses and the identities of winners and losers from trade restrictions, there is little doubt that inefficient policies would not persist. Calls for reform often center on the desirability of simplification. Particularly on import policy, there has been a long demand for greater transparency: simple and readily understandable border measures (tariffs) are preferred over more opaque measures such as quotas and hidden protections through standards or other measures (Krueger and Duncan, 1993).

2.3 An Example: Two Cases

Before we move to the model, I present some concrete examples of how partisan politics affect the form of protections. The first example is the case where bipartisan support exists: orange juice. Juice processors in the U.S. purchase about 95% of Florida's fresh orange production. If we look at Florida's GDP by industry, agriculture accounts for 22%, making

it the second biggest section after services (24%).[3] If we look at campaign contributions and lobbying in the 1998 election cycle, the fruit and vegetable industry contributed $1.036 million to all candidates nationwide. Of the total, 67% went to Republican candidates and 33% went to Democrats. However, Florida's contribution was more balanced. Among the largest contributors, *Florida Citrus Mutual* contributed 57% to Democrats and 43% to Republican candidates in Florida's elections.[4] Given employment conditions and contribution schedules, it is in both parties' interests to support Florida's main industry and it is highly risky to oppose any trade protection on orange juice.

The history of orange juice protection clearly shows this dynamic. The Smoot-Hawley Act (Tariff Act) in 1930 initiated the frozen concentrated orange juice (FCOJ) citrus tariff. There had been no change in citrus tariff until 1947 when the General Agreement Tariffs and Trade (GATT) was agreed in Geneva, Switzerland.(VanGrasstek, 2001).

There were several attempts to reduce or eliminate the citrus tariff in the 60s and the 70s. But both attempts did not succeed. When the 103rd Congress passed the NAFTA bill, it still included special provisions for citrus. These provisions granted a 15-year phase-out on import tariffs.[5] Muraro, Spreen, and Roka (2000) estimate that transportation costs and the Florida equalization tax add an additional 10 cents to the cost of delivered product to the United States. The effect of bipartisan support for protecting the orange juice industry through high tariffs can be found in the domestic and import share of U.S. orange juice supply, 1985 - 1999. Despite the intense trade liberalization and various trade deals, domestic production has increased from 46% in 1985 to 62 % in 1999, while imports have decreased from 37% in 1985 to 16% in 1999 (Donovan and Krissoff, 2003).

The example of partisan politics in trade protection comes from the automobile industry. While Democrats strongly support import protections on automobile industries, Republicans rarely express support for this issue. Campaign contributions by the United Auto Workers

[3]Source: US Census Bureau

[4]Source: opensecrets.org

[5]Source: http://flcitrusmutual.com/industry-issues/trade/fcoj$_t ariff.aspx$

(UAW), for example, show a stark difference in their preferences: Of all 207 law makers receiving campaign contributions from the UAW PAC in 2008, only of two are Republicans (Senator Arlen Specter and Representative Frank LoBiondo).[6]. Also, due to the characteristics of the industry, auto workers are concentrated in specific districts where unions play a significant role and strongly support the Democratic party. These partisan characteristics of trade protection on the automobile industry bring fierce debates whenever bills on automobile-industry protection come to the floor.

Final voting patterns also elucidate the partisan characteristics of automobile protection. In early February 1982, UAW-backed "domestic content" legislation was introduced in Congress (*H.R.5133*), which would have required import restrictions, so-called "quotas." *H.R. 5133* passed the House on December 15 by a vote of 215 to 188, mostly along partisan lines.[7] On 2 February 1983, Congressman Richard Ottinger (D-NY) again introduced domestic content legislation, essentially identical to H.R. 5133, entitled the *Fair Practices in Automotive Products Act* (H.R.1234). On November 3, 1983, by a vote of 219 to 199, again along partisan lines, the House passed H.R.1234.[8]

It is well known that the competitiveness of the U.S. automobile industry has been in decline, and employment by the six major domestic auto producers has dropped each year since 1979. But the market share of imports indicates that protection measures are "effective" in a sense to protect domestic markets. The market share of imports was 15.2% in 1979 and rose to 22.2% by 1980. But introducing VER (voluntary export restraints. e.g. one kind of NTBs) effectively reduced the market share of imports to 18.9% in 1984 (Crandall, 1987).

[6]Source: opensecret.org. Arlen Specter (R-PA) was the most liberal Republican Senator based on his roll call voting record at that time (later, he "finally" switched to Democratic party) and Representative Frank Lobiondo (R-NJ) was the third most liberal House Republican in the 110th Congress (2007-2008). Source: voteview.com

[7]In the 97th Congress (January 3, 1981-January 3, 1983), there were 244 Democrats and 191 Republicans in the House. For H.R.5133, 170 Democrats supported the bill and 44 opposed it, whereas 57 Republicans supported the bill and 131 opposed it.

[8]In the 98th Congress (January 3, 1983-January 3, 1985), there were 272 Democrats and 163 Republicans in the House. For H.R.1234, 187 Democrats supported the bill and 32 opposed it, whereas 67 Republicans supported the bill and 132 opposed it (http://beta.congress.gov/bill/98th-congress/house-bill/1234).

Protection measures on automobiles, including the frequency of NTBs shows a substantially higher percentage of NTB use (64% in 2008).

2.4 The Model

I investigate the equilibrium policy choices under two different political situations and examine the implications of equilibrium policy choices for social welfare. The timing of the model is as follows. First, nature determines $\theta \in \{A, B\}$ whether bipartisan support exists or not. An industry then offers a menu of campaign contribution schedules, k. Given the menu of campaign contribution schedules, an incumbent chooses a protectionist instrument, σ, to maximize its probability of reelection. Then voters cast their votes, taking into account the signal they received from the incumbent's behavior.

2.4.1 Set Up

- Actors = {an industry, an incumbent politician, and a representative citizen}
- Time: Infinite repeated game.
- States: There are two possible states of nature, θ - partisan (A) or bipartisan (B). Nature determines this.
- **The Incumbent**: There is a public policy which favors the industry but is costly to citizens at large. The incumbent can choose to introduce the policy or not, and if he introduces it he then decides between using tariff or NTBs. Denote the incumbent choice as $\sigma \in \{0, T, N\}$. This policy is chosen by the incumbent politician in each period. This policy choice gives a signal to voters about the incumbent's behavior. At the end of the period, the incumbent faces an election against another politician. The winner then becomes the incumbent in the next period. The outcome of the election is determined by the voting decision of the representative citizen. Holding an office is valued by politicians and they derive utility from ego rent γ. Hence by

promising not to reelect the incumbent if he introduces the policy, the citizen has some influence on the policy decision. However, the firm can lobby the incumbent politician. Following Grossman and Helpman (1994), this lobbying takes the form of the firm offering the incumbent politicians "political contributions" (bribes) to influence their choice. Thus, a politician in office receiving bribe κ obtains a utility $\gamma + \kappa$. Therefore, in deciding whether to introduce the policy, the incumbent must *tradeoff* the benefits of the contribution with the costs of losing office. Politicians discount future utility at rate δ_p. Once ousted from office, a politician cannot run again. The incumbent politician's utility function is:

$$max_\sigma \sum_{\tau=1}^{\infty} \delta_P^{\tau-1}[\kappa(\sigma) + \gamma(\sigma)] \tag{2.1}$$

■ **incumbent's choice variables:** $\sigma = \{0, T, N\}$.

- **The Industry**: Assume the industry to be an import-competing and declining industry. The industry decides the bribe schedule κ depending on their expected utility from the incumbent's policy choice and the bribe they need to pay to implement the protection policy. The expected utility from the protection policy depends on the state of the nature (θ) and the types of protection policy (σ) that the incumbent chooses. The industry offers bribes if and only if their expected utility is greater than the compensation on the ego rents for the incumbent, $\frac{\delta_P \gamma}{1-\delta_P}$. Assume that the rent ($R_\sigma$) under the Tariff regime is R_T and the rent under the NTB regime is R_N, where $R_T > R_N$. Assume there is no rent if the incumbent does not introduce any protection policy, that is $R_0 = 0$. However, if the incumbent chooses Tariff, the signal to voters of these favors is greater than when the incumbent chooses NTB. And the difference becomes greater under partisan circumstances because the challenger has more incentive to reveal that information to voters. Therefore, the industry trades off the amount of rent they can extract and the duration of favors if the incumbent introduces the policy. I assume that the firm discounts future profits at a rate δ_F. Under each regime, the

bribing schedule is as follows:

$$\kappa_{0,\theta} = \sum_{\tau=1}^{\infty} \delta_F^{\tau-1}[EU_{0,\theta}^s - \frac{\delta_P \gamma}{1-\delta_P}] \tag{2.2}$$

$$\kappa_{T,\theta} = \sum_{\tau=1}^{\infty} \delta_F^{\tau-1}[EU_{T,\theta}^s - \frac{\delta_P \gamma}{1-\delta_P}] \tag{2.3}$$

$$\kappa_{N,\theta} = \sum_{\tau=1}^{\infty} \delta_F^{\tau-1}[EU_{N,\theta}^s - \frac{\delta_P \gamma}{1-\delta_P}] \tag{2.4}$$

Expected utility can be represented in a more concrete way such as:

$$EU_{0,\theta}^s = m_\tau(0,\theta) \cdot R_0 = 0 \tag{2.5}$$

$$EU_{T,\theta}^s = m_\tau(T,\theta) \cdot R_T \tag{2.6}$$

$$EU_{N,\theta}^s = m_\tau(N,\theta) \cdot R_N \tag{2.7}$$

, where $m_\tau(0,\theta)$ means a voting rule by the representative citizen. If we plug 2.6Set Upequation.2.4.5 through 2.7Set Upequation.2.4.5 into 2.3Set Upequation.2.4.2 through 2.4Set Upequation.2.4.2, we have a complete bribing schedule of the industry:

$$\kappa_{0,\theta} = \sum_{\tau=1}^{\infty} \delta_F^{\tau-1}[0 - \frac{\delta_P \gamma}{1-\delta_P}] \tag{2.8}$$

$$\kappa_{T,\theta} = \sum_{\tau=1}^{\infty} \delta_F^{\tau-1}[m_\tau(T,\theta) \cdot R_T - \frac{\delta_P \gamma}{1-\delta_P}] \tag{2.9}$$

$$\kappa_{N,\theta} = \sum_{\tau=1}^{\infty} \delta_F^{\tau-1}[m_\tau(N,\theta) \cdot R_N - \frac{\delta_P \gamma}{1-\delta_P}] \tag{2.10}$$

$\kappa^*(\mathbf{m}) = max\Big\{0, \kappa_{\sigma,\theta}\Big\}$

■ **industry's choice variable**: κ.

- **The representative citizen**: I assume the social cost that is caused by trade protection, **c**, that the representative citizen should bear is equal to the expected utility

of the industry, that is,

$$c = EU^{s}_{\sigma,\theta} \tag{2.11}$$

The citizen discounts future costs at rate δ_c and the citizen's lifetime utility will be

$$-\sum_{\tau=1}^{\infty} \delta_C^{\tau-1} c = -\Big[\frac{c}{1-\delta_C}\Big] \tag{2.12}$$

In each period, the voter's sole decision is whether to reelect the incumbent. Following standard procedure in the political agency literature, I assume that at the beginning of each period the citizen commits to a voting rule and chooses it so as to maximize his expected future utility. I assume that the citizen will observe the policy decision of the politician and the state of the nature. He does not observe the bribe offered to the politician. Thus, a period τ voting rule $\mathbf{m}_\tau$ is a vector $[m_\tau(0,A), m_\tau(0,B), m_\tau(T,A), m_\tau(N,A), m_\tau(T,B), m_\tau(N,B)]$.

$\mathbf{m}_\tau(\sigma,\theta)$ is the probability that the citizen reelects the period τ incumbent if $\sigma_\tau = \sigma, \theta_\tau = \theta$. Then we have an ordering in terms of the incumbent's vote share from the citizen depending on the incumbent's choice and the state of the nature:

$$m_\tau(0,A) = m_\tau(0,B) > m_\tau(T,B) = m_\tau(N,B) > m_\tau(N,A) > m_\tau(T,A)$$

Or depending on the state of the nature,

$$\begin{aligned} m_\tau(0,A) > m_\tau(N,A) > m_\tau(T,A), &\qquad \text{if } \theta = A \\ m_\tau(0,B) > m_\tau(T,B) = m_\tau(N,B) &\qquad \text{if } \theta = B \end{aligned}$$

The rationale on this ordering is as follows. First, if the incumbent does not introduce any protection policy, the state of the nature θ does not affect the voter's voting rule. Therefore, $m_\tau(0,A) = m_\tau(0,B)$. Second, under the partisan circumstance in protecting the industry, choosing a tariff regime gives a more visible signal to voters

than a NTB regime in terms of favors that the incumbent provides to SIG. NTBs are less visible and therefore are less likely to be detected by voters. Since the challenger has an incentive to reveal those favors, types of protection instruments determine the vote share that the incumbent could receive from the voters. Therefore, we have $m_\tau(N, A) > m_\tau(T, A)$. Third, under the bipartisan state of the nature, the challenger has no incentive to reveal the favors that the incumbent provides to SIG because he would also provide those favors to SIG if elected. Given this lack of incentive, I assume the types of protection instruments do not make a big difference. For simplicity, I assume that $m_\tau(T, B) = m_\tau(N, B)$.[9]

■ **a representative citizen's choice variable**: $\mathbf{m}_\tau(\sigma, \theta)$

At the beginning of period τ, the partisan nature of protection, θ, is revealed. That is, θ is exogenous. The sequence of events is as follows. First, the citizen announces his voting rule, $\mathbf{m}_\tau \in [0, 1]^6$. Next, the firm offers the incumbent a bribe, $\kappa_\tau \in \Re_+$, for choosing to implement the policy between T or N, depending on the state of the nature. Then, the incumbent politician makes a policy decision, $\sigma_\tau \in \{0, T, N\}$.

Since we have already described payoffs, we have a complete description of the game. The standard solution concept for such an infinite-horizon perfect-information game is subgame perfect equilibrium. Strategies in a subgame perfect equilibrium might depend upon history in complex ways. However, the partisan nature in protecting the industry is the only payoff relevant state variable in the model. Thus I focus on Markov-perfect equilibria, where actions depend only on within-period histories and the partisan nature of the protection.

Under this assumption, the citizen's voting strategy is a mapping $\mu : \{\sigma, \theta\} \to [0, 1]^6$. So that in any period τ, the incumbent faces the reelection probability $m_\tau = \mu(\theta)$. A bribing strategy for the industry is a mapping $\psi : \theta \times [0, 1]^6 \to \Re_+$, implying that

[9]It may be still true that $m_\tau(N, B) > m_\tau(T, B)$ with the condition that $|m_\tau(N, B) - m_\tau(T, B)| < |m_\tau(N, A) - m_\tau(B, A)|$. I consider this general case in the extension.

in any period τ, the bribe offered to the politician is $\kappa_\tau = \psi(\theta, \mathbf{m}_\tau)$. A strategy for the politician is a mapping $\rho : \{\theta\} \times [0,1]^6 \times \Re_+ \rightarrow \{0, T, N\}$, implying that the politician's period τ policy decision is $\sigma_\tau = \rho(\theta, \mathbf{m}_\tau, \kappa_\tau)$. A strategy profile (μ, ψ, ρ) is a (Markov-perfect) equilibrium if, after any history, each player's strategy under the profile is optimal, given that he expects all other players to use their equilibrium strategies.

2.4.2 Solving the Equilibrium

Case 1: Partisan Nature of the Protection

Nature determines that there exist partisan politics on protecting the industry. $\theta = A$ and all the relevant parameters are realized. The underlying logic is as follows. The citizen, because he must always pay the cost if the protection policy is introduced, provides the maximum incentive for the politician not to introduce protection by promising to always reelect him if and only if he does not implement the policy. The politician, in deciding whether to introduce the policy in any period, trades off the gain from accepting the bribe with the future gain (ego rent, γ) from not implementing the policy. The industry compares its willingness to pay for the policy with the minimum bribe it has to pay to get the policy enacted and to make the incumbent choose her most preferred policy instrument if enacted. Whether the policy is implemented in equilibrium depends on whether the industry's equilibrium willingness to pay for the policy exceeds the minimum bribe necessary to get it enacted. We now have:

Proposition 3. *The following strategies constitute a Markov-perfect equilibrium. The citizen always reelects the incumbent if and only if he does not introduce the policy. Once the politician introduces the protection policy and if the choice is Tariff (T), which is visible, the citizen never reelect him. However, if the choice is N, the citizen can make a mistake in his judgment due to the obscure and complex nature of N. Therefore, there is a positive vote share that the incumbent politician could get from the voter. The politician introduces*

the policy and chooses $\boldsymbol{N}$ *if and only if he is offered a bribe equal to* $\kappa^*(m)$*. The industry offers the politician a bribe equal to* $\kappa^*(\boldsymbol{m})$*, if they decide to bribe.*

Formally, the equilibrium strategy for the citizen is:

$$\mu(\theta = A) = \begin{cases} m_\tau(0, A) = 1 \quad \textit{if } \sigma = 0 \\ m_\tau(T, A) = 0 \quad \textit{if } \sigma = T \\ m_\tau(N, A) = \alpha, 0 < \alpha < 1 \quad \textit{if } \sigma = N \end{cases}$$

The equilibrium strategy for the industry is:

$$\psi(\theta = A) = \begin{cases} 0 \quad \textit{if } \sigma = \{0, T\} \\ \kappa^*(m) \quad \textit{if } \sigma = N \end{cases}$$

The equilibrium strategy for the incumbent politician is:

$$\rho(m, \kappa) = \begin{cases} 0 \quad \textit{if } \kappa = 0 \\ N \quad \textit{if } \kappa = \kappa^*(m) \end{cases}$$

Proof of the Proposition 3prop.3. I show that the strategies (μ, ψ, ρ) described in Proposition 3prop.3 constitute a Markov-perfect equilibrium of the game. I need to show that, after any history, each player's strategy is optimal, given that he expects all players to use their equilibrium strategies in the future.

First, observe that when the citizen uses the voting strategy $\mu(\theta) = (1, 0, \alpha)$, the minimum bribe necessary to get the (preferred) policy implemented is

$$\begin{aligned} k^*(\mathbf{m}) &= 0 \text{ if } \sigma = 0, \text{ since } k^* = \max\left\{0, -\frac{\delta_P \gamma}{(1-\delta_F)(1-\delta_P)}\right\} \\ k^*(\mathbf{m}) &= 0 \text{ if } \sigma = T, \text{ since } k^* = \max\left\{0, -\frac{\delta_P \gamma}{(1-\delta_F)(1-\delta_P)}\right\} \\ k^*(\mathbf{m}) &= \frac{\alpha R_N - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F} \text{ if } \sigma = N, \text{ since } k^* = \max\left\{0, \frac{\alpha R_N - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F}\right\} \end{aligned}$$

We can easily show that $\frac{\alpha R_N - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F} > 0$.[10]

Given this voting rule and the bribing schedule, we can calculate the politician's utility and determine his optimal strategy. The incumbent politician's utility function is defined as:

$$\max_{\sigma} = \sum_{\tau=1}^{\infty} \delta_P^{\tau-1}[\kappa(\sigma) + \gamma(\sigma)] \tag{2.13}$$

If he chooses $\sigma = 0$, he receives γ because the citizen always reelects him. There is no bribe from the industry. Then the utility is

$$\sum_{\tau=1}^{\infty} \delta_P^{\tau-1}[\kappa(0) + \gamma(0)] = \frac{\gamma}{1-\delta_P} \text{ if } \sigma = 0 \tag{2.14}$$

Under $\sigma = 0$, the utility of the citizen = 0 and the utility of the industry is 0 as well.

If he chooses $\sigma = T$, he receives zero ego rent because the citizen never reelect him. Also, there is no bribe from the industry. Then the utility is

$$\sum_{\tau=1}^{\infty} \delta_P^{\tau-1}[\kappa(T) + \gamma(T)] = 0 \text{ if } \sigma = T \tag{2.15}$$

Under $\sigma = T$, the utility of the citizen is 0 and the utility of the industry is 0 as well.

If he chooses $\sigma = N$, he receives some ego rent because there is a positive probability that the citizen reelects him. Also, there is a bribe from the industry. Then the utility is

$$\sum_{\tau=1}^{\infty} \delta_P^{\tau-1}[\kappa(N) + \gamma(N)] = \sum_{\tau=1}^{\infty} \delta_P^{\tau-1}\Big[\frac{\alpha R_N - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F} + \alpha\gamma\Big] \text{ if } \sigma = N \tag{2.16}$$

Under $\sigma = N$, the utility of the citizen is -$\frac{c}{1-\delta_C}$ and the utility of the industry is $\frac{\alpha R_N - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F}$, where $c = \frac{\alpha R_N}{1-\delta_F}$ holds.

The last step of the proof is to check the optimality of proposed strategies. From 2.14Case

[10]The steps are follow as. $\frac{\alpha R_N - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F} = \frac{\alpha R_N (1-\delta_P) - \delta_P \gamma}{(1-\delta_P)(1-\delta_F)}$. We know that $(1-\delta_P)$ and $(1-\delta_F)$ are both positive since $0 < \delta_F, \delta_P < 1$. Therefore, to be larger than 0, the numerator should be larger than 0. The condition is $\alpha R_N(1-\delta_P) - \delta_P\gamma > 0$ and if we rearrange the formula, we get $\alpha R_N - \delta_P(\alpha R_N - \gamma)$ which is larger than 0 since $1 > \delta_P$ and $\alpha R_N > \alpha R_N - \gamma$.

1: Partisan Nature of the Protectionequation.2.4.14 and 2.15Case 1: Partisan Nature of the Protectionequation.2.4.15, we notice that there is no incentive to deviate from $\sigma = 0$ to $\sigma = T$. From 2.15Case 1: Partisan Nature of the Protectionequation.2.4.15 and 2.16Case 1: Partisan Nature of the Protectionequation.2.4.16, we can verify that once the protection policy is introduced, N is the optimal choice. Now compare 2.14Case 1: Partisan Nature of the Protectionequation.2.4.14 and 2.16Case 1: Partisan Nature of the Protectionequation.2.4.16 to check whether there is any incentive to deviate from this strategy. For the proposed strategy to be an equilibrium, I exploit the indifference condition:

$$\frac{\gamma}{1-\delta_P} = \frac{1}{\delta_P}\Big[\frac{\alpha R_N - \frac{\delta_P \gamma}{1-\delta_P}}{1-\delta_F} + \alpha\gamma\Big] \tag{2.17}$$

To simplify the problem, I assume that every player has the same discount utility, that is, $\delta = \delta_F = \delta_P = \delta_C$. Then equation 2.17Case 1: Partisan Nature of the Protectionequation.2.4.17 is simplified as

$$\gamma = \frac{\alpha R_N (1-\delta)}{\delta^2 - \delta - 1} \tag{2.18}$$

Let $\lambda = \frac{1-\delta}{\delta^2-\delta+1}$ and we can show that this constant λ moves from 1 to 0 as δ moves from 0 to 1 as appeared in Figure 2.1Comparative Statics for Discount Factor, δfigure.2.1.

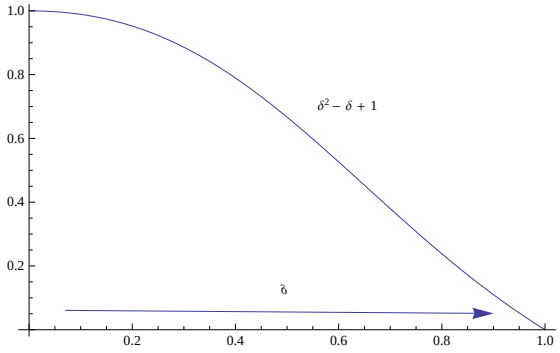


Figure 2.1: Comparative Statics for Discount Factor, δ.

Equation 2.18Case 1: Partisan Nature of the Protectionequation.2.4.18 is presented as:

$$\gamma^* = \alpha^* R_N^* \cdot \lambda, \qquad \lambda = \frac{1-\delta}{\delta^2 - \delta + 1} \tag{2.19}$$

Given the discount factor, δ, equation 2.19Case 1: Partisan Nature of the Protectionequation.2.4.19 indicates the relationship between the ego rent (γ), the obscurity of NTBs and the voting rule (α), and the amount of rent extraction under N regime (R_N) in equilibrium. When the incumbent is very impatient, e.g. $\delta \to 0$, λ is approaching 1, $\gamma^* \approx \alpha^* R_N^*$. This means that whenever the bribe is larger than the ego rent (γ), we see the protection equilibrium where the incumbent introduces the protection policy and chooses N as an instrument. On the other hand, if the incumbent is very patient, e.g., $\delta \to 1$, λ is approaching 0, and to make the equation $\gamma^* = \alpha^* R_N^* \cdot \lambda$ hold R_N should be almost infinity.[11]

From these two extreme cases, we can generalize that as the incumbent becomes patient, a larger bribing schedule deriving from the larger rent extraction under N regime should be guaranteed to maintain the protection equilibrium. As the ego rent (γ) from holding an office increases more than the equilibrium level (γ^*), we are more likely to see only the free trade equilibrium.[12], given the discount factor. As the amount of rent extraction ($R_N > R_N^*$) increases and as the NTBs give obscure signals about the incumbent's behavior ($\alpha > \alpha^*$), we are more likely to have only the protectionist equilibrium.

Case 2: Bipartisan Nature of the Protection

Nature determines that there exist partisan politics on protecting the industry. $\theta = B$ and all the relevant parameters are determined according to this realization.

Proposition 4. *The following strategies constitute a Markov-perfect equilibrium. The citizen always reelects the incumbent if and only if he does not introduce the policy. Once the*

[11]Since $0 < \alpha < 1$, the influence of α is minor.

[12]Barro, Ferejohn's control of politician model.

politician introduces the protection policy, the citizen would never want to reelect him in principle. However, the bipartisan nature of the protection makes this clear cut judgment difficult. Also, the bipartisan state of nature makes the choice between T and N indifferent. Therefore, the same positive vote share exists that the incumbent politician could get from the voter when she introduces the protection instrument. The politician introduces the policy and chooses $\boldsymbol{T}$ *regime if and only if he is offered a bribe equal to* $\kappa^*(m)$*. The industry offers the politician a bribe equal to* $\kappa^*(\boldsymbol{m})$*, if they decide to bribe.*

Formally, the equilibrium strategy for the representative citizen is

$$\mu(\theta = B) = \begin{cases} m_\tau(0, B) = 1 \quad \textit{if } \sigma = 0 \\ m_\tau(T, B) = \beta \quad \textit{if } \sigma = T \\ m_\tau(N, B) = \beta, 0 < \alpha < \beta < 1 \quad \textit{if } \sigma = N \end{cases}$$

The equilibrium strategy for the industry is:

$$\psi(\theta = B) = \begin{cases} 0 \quad \textit{if } \sigma = 0 \\ \kappa_{T,B} \quad \textit{if } \sigma = T \\ \kappa_{N,B} \quad \textit{if } \sigma = N \end{cases}$$

The equilibrium strategy for the incumbent politician is:

$$\rho(m, \kappa) = \begin{cases} 0 \quad \textit{if } \kappa = 0 \\ T \quad \textit{if } \kappa = \kappa^*(m) \end{cases}$$

Proof of the Proposition 4. I show that the strategies (μ, ψ, ρ) described in the proposition 4prop.4 constitute a Markov-perfect equilibrium of the game.

First, observe that when the citizen uses the voting strategy $\mu(\theta) = (1, \beta, \beta)$, the mini-

mum bribe necessary to get the (preferred) policy implemented is

$$
\begin{aligned}
k^*(\mathbf{m}) &= 0 \text{ if } \sigma = 0, \text{ since } k^* = max\Big\{0, -\frac{\delta_P \gamma}{(1-\delta_F)(1-\delta_P)}\Big\} \\
k^*(\mathbf{m}) &= \frac{\beta R_T - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F} \text{ if } \sigma = T, \text{ since } k^* = max\Big\{0, \frac{\beta R_T - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F}\Big\} \\
k^*(\mathbf{m}) &= \frac{\beta R_N - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F} \text{ if } \sigma = N, \text{ since } k^* = max\Big\{0, \frac{\beta R_T - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F}\Big\}
\end{aligned}
$$

We can easily show that $\frac{\beta R_T - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F} > 0$ and $\frac{\beta R_N - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F} > 0$.[13]

Given this voting rule and the bribing schedule, we can calculate the politician's utility and determine his optimal strategy. The incumbent politician's utility function is defined as:

$$max_\sigma = \sum_{\tau=1}^{\infty} \delta_P^{\tau-1}[\kappa(\sigma) + \gamma(\sigma)] \tag{2.20}$$

If he chooses $\sigma = 0$, he receives γ because the citizen always reelects him. There is no bribe from the industry. Then the politician's utility is

$$\sum_{\tau=1}^{\infty} \delta_P^{\tau-1}[\kappa(0) + \gamma(0)] = \frac{\gamma}{1-\delta_P} \text{ if } \sigma = 0 \tag{2.21}$$

Under $\sigma = 0$, the utility of the citizen = 0 and the utility of the industry is 0 as well.

If the politician chooses $\sigma = T$, he receives partial ego rent because the citizen reelects him with a positive probability due to the bipartisan nature of the protection. Also, there is some bribe from the industry. Then the politician's utility is

$$\sum_{\tau=1}^{\infty} \delta_P^{\tau-1}[\kappa(T) + \gamma(T)] = \sum_{\tau=1}^{\infty} \delta_P^{\tau-1}[\beta\gamma + \frac{\beta R_T - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F}] \text{ if } \sigma = T \tag{2.22}$$

Under $\sigma = T$, the utility of the citizen is -$\frac{c}{1-\delta_C}$ where c = $\frac{\beta R_T}{1-\delta_F}$. The utility of the

[13]The steps are follow as. $\frac{\beta R_T - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F} = \frac{\beta R_T(1-\delta_P) - \delta_P \gamma}{(1-\delta_P)(1-\delta_F)}$. We know that $(1-\delta_P)$ and $(1-\delta_F)$ are both positive since $0 < \delta_F, \delta_P < 1$. Therefore, to be larger than 0, the numerator should be larger than 0. The condition is $\delta R_T(1-\delta_P) - \delta_P \gamma > 0$ and if we rearrange the formula, we get $\alpha R_T - \delta_P(\alpha R_T - \gamma)$ which is larger than 0 since $1 > \delta_P$ and $\beta R_T > \beta R_T - \gamma$. The same logic can be applied to the case of R_N.

industry is $\frac{\beta R_T - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F}$.

If the chooses $\sigma = N$, he receives some of ego rent because there is a positive probability that the citizen reelects him. Also, there is a bribe from the industry. Then the politician's utility is

$$\sum_{\tau=1}^{\infty} \delta_P^{\tau-1}[\kappa(N) + \gamma(N)] = \sum_{\tau=1}^{\infty} \delta_P^{\tau-1}\Big[\beta\gamma + \frac{\beta R_N - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F}\Big] \text{ if } \sigma = N \tag{2.23}$$

Under $\sigma = N$, the utility of the citizen is -$\frac{c}{1-\delta_C}$ and the utility of the industry is $\frac{\beta R_N - \frac{\delta_P \gamma}{(1-\delta_P)}}{1-\delta_F}$, where $c = \frac{\beta R_N}{1-\delta_F}$ holds.

The last step of the proof is to check the optimality of the proposed strategies. From the equations 2.22Case 2: Bipartisan Nature of the Protectionequation.2.4.22 and 2.23Case 2: Bipartisan Nature of the Protectionequation.2.4.23, we notice that there is no incentive to choose $\sigma = N$ over $\sigma = T$. We can verify that once the protection policy is introduced, T is the optimal choice because it increases the utility of the incumbent without affecting the voting probability of the citizen. Also the industry prefers T over N since it gives higher net utility. Now compare 2.21Case 2: Bipartisan Nature of the Protectionequation.2.4.21 and 2.22Case 2: Bipartisan Nature of the Protectionequation.2.4.22 to check whether there is any incentive to deviate from each strategy. To make the proposed strategy an equilibrium, I exploit the indifference condition:

$$\frac{\gamma}{1-\delta_P} = \frac{1}{\delta_P}\Big[\beta\gamma + \frac{\alpha R_T - \frac{\delta_P \gamma}{1-\delta_P}}{1-\delta_F}\Big] \tag{2.24}$$

To simplify the problem, I assume that every player has the same discount utility, that is, $\delta = \delta_F = \delta_P = \delta_C$. Then the equation 2.17Case 1: Partisan Nature of the Protectionequation.2.4.17 is simplified as

$$\gamma = \frac{\beta R_T(1-\delta)}{\delta^2 - \delta - 1} \tag{2.25}$$

Put $\lambda = \frac{1-\delta}{\delta^2-\delta+1}$ and we can identify that this constant λ moves from 1 to 0 as δ moves

from 0 to 1 as we already see in the figure 1.

Equation 2.25Case 2: Bipartisan Nature of the Protectionequation.2.4.25 is given by:

$$\gamma^* = \beta^* R_N^* \cdot \lambda, \qquad \lambda = \frac{1-\delta}{\delta^2 - \delta + 1} \tag{2.26}$$

Given discount factor, δ, equation 2.26Case 2: Bipartisan Nature of the Protectionequation.2.4.26 represents the relationship between the ego rent (γ), the obscurity of Tariff regime due to the bipartisan nature of the protection and the voting rule from it (β) and the amount of rent extraction under T regime (R_T) at the equilibrium. When the incumbent is very impatient, e.g., $\delta \to 0$, λ is approaching 1, $\gamma^* \approx \beta^* R_T^*$. That means when the bribe is larger than the ego rent (γ), we see the protection equilibrium where the incumbent introduces the protection policy and chooses T as an instrument. Compare this outcome with the equilibrium in the partisan state of the world. There, we have $\gamma^* \approx \alpha^* R_N^*$. Given the same discount factor δ, and therefore the same λ, it implies that it is easier to tilt into the protection equilibrium under the bipartisan nature than the partisan nature since $\beta R_T > \alpha R_N$ holds. This is intuitive in the sense that under the bipartisan nature of the protection, the election does not provide a proper punishment mechanism and the choice of instrument does not affect the signaling function due to bipartisan aspect. Therefore, at the cost of the citizen at large, there is a higher chance of experiencing a protection equilibrium when both the incumbent and the challenger in the next period support protection of the industry.

On the other hand, if the incumbent is very patient, e.g., $\delta \to 1$, λ is approaching 0, and to make the equation $\gamma^* = \beta^* R_T^* \cdot \lambda$ hold, R_T should be almost infinity. Since $\beta R_T > \alpha R_N$ still holds, there is more likely to be a protection equilibrium than under the partisan nature of the protection. However, as $\lambda \to 0$, the influence of β and R_T is minor and therefore the outcome in the partisan and bipartisan worlds will be very similar if the incumbent is very patient. The implication is similar to the case of the partisan nature of the equilibrium. □

2.5 Hypothesis and Data

2.5.1 Hypothesis

This paper tests one main hypothesis: where there are bipartisan support to protect a commodity, there will be simpler forms of protectionist policies. If this hypothesis is borne out, it provides support for the argument that legislators implement complex protections policies when more information could be provided to voters about legislators' favors to special interests due to the partisan nature of the protection. In summary, different political conditions generate different information-provision incentives, which in turn determine protection policy choices.

In this project, I investigate the case of U.S. commodities traded from 1993 to 1999. All trade barrier data are from the United Nations Commission on Trade and Development(UNCTAD)'s Trade Analysis and Information System (TRAINS). UNCTAD-TRAINS is a comprehensive computerized information system at the Harmonized System-based tariff line level covering tariff, para-tariff and non-tariff measures as well as import flows by origin for more than 140 countries.[14]

2.5.2 Dependent Variable: NTB Coverage Ratios

The dependent variable of interest here is the complexity of protectionist policies. TRAINS data provide detailed information on all types of trade protections. Trade protections can be divided into two main divisions: tariffs and non-tariff barriers. NTBs include price non-tariff barriers, quantity non-tariff barriers (e.g., quotas), and quality nontariff barriers (e.g., packing standards). Measuring the restrictiveness of a trade policy is a difficult task, especially for NTBs. Kee, Nicita, and Olarreaga (2009) provide a unified measure of trade restrictiveness that accounts for different forms of trade protection and their method allows us to disentangle how one commodity is protected by tariffs and NTBs. The overall level of

[14]For more details on UNCTAD-TRAINS dataset, see the Appendix E.

protection on imports on good n is given by:

$$T_{ij} = ave_{ij} + t_{ij} \tag{2.27}$$

, where T_{ij} is the overall level of protection on imports of good j in a year i; ave_{ij} is the tariff equivalent level of NTBs and T_{ij} is the applied on good j in a year i. Based on this equation, I construct the NTBs Ratio, which is defined as $\frac{ave_{ij}}{T_{ij}}$, that shows the relative frequency of NTB use out of total protection. Figure 2.2Distribution of NTB Coverage Ratiofigure.2.2 shows the distribution of NTB coverage ratios across different commodities.

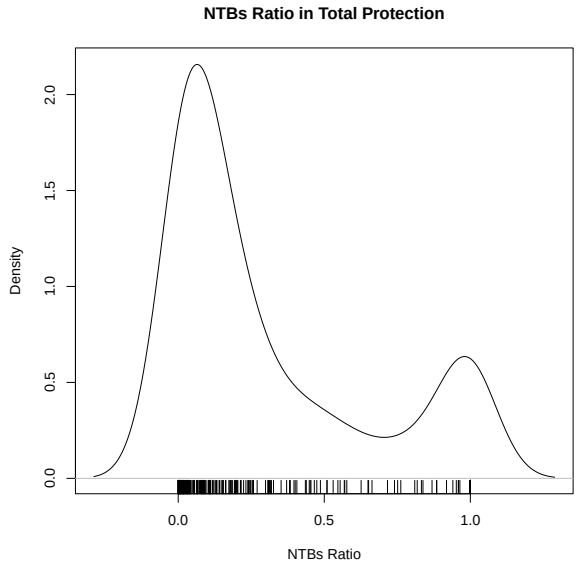


Figure 2.2: Distribution of NTB Coverage Ratio.

2.5.3 Independent Variable: Partisan or Bipartisan Conditions

The theory presented here includes one principle independent variable of interest: whether there exists a bipartisan support on the protection of specific commodities. I employ two indexes to measure the partisan nature of the protection. First, I follow Fordham and McKweon (2003), who study the division of partisan support for protections on various commodities. Some commodity lobbies contribute exclusively (or at least overwhelmingly) to one party over another, while others' contributions are more evenly spread across parties. Their work investigated whether protections on specific items have clear partisan divisions based on Congressional roll-call voting data on five trade bills.[15]

Each contribution has been coded by the Standard Industrialization Classification (SIC) sector from which it originated, producing data on the amount contributed by interests within a particular sector to each member of Congress. Then they ran a logit model to assess how these contribution schedules predict trading voting. The following tables 2.1Sectoral Association With Each Partytable.2.1 and 2.2Classification of Commodities by Geographic Constituencytable.2.2 display a list of the sectoral contributions associated with each party and a similar list of geographic areas.

My argument implies that there is little chance of bipartisan support when roll-call vote outcomes for protectionist policies can be predicted simply by knowing the partisan composition of the legislature. Accordingly, I include an indicator variable that takes a value of 1 when Fordham and McKweon (2003) found that partisanship was a statistically significant determinant of the roll-call vote for protections policy.

Second, I use another variable to measure the sectoral affiliation with the party. I collect the PAC contributions reported to the Federal Election Committee (FEC) from the 1992 to 1998 election cycles that match exactly with the period of the trade barriers and

[15]Fordham and McKweon (2003) code PAC's contribution for 1978-1988 by the SIC sector from which it originated, producing data on the amount contributed by representatives of a particular sector to each member of Congress. Then they chose five trade bills in the 1981-1983 Congress to see whether contribution patterns can predict the partisan congressional voting pattern. The five bills are: (1) H.R.3398; (2) H.R.1562; (3) H.R.1562; (4) H.R.3; (5) H.R.4328.

Table 2.1: Sectoral Association With Each Party

Democratic Party	**Republican Party**
23 Apparel and Other Textile Products	07 Agricultural Services
33 Primary Metal Industries	12 Coal Mining
37 Transportation Equipment	17 Special Trade Contractors
41 Local and Suburban Transit	26 Paper Products
44 Water Transportation	31 Leather and Leather Products
49 Electric, Gas, and Sanitary Services	35 Industrial Machinery and Equipment
54 Food Stores	36 Electronic and Other Electric Equipment
56 Clothing Stores	46 Pipelines, except natural gas
73 Business Services	50 Wholesale Trade-Durable Goods
75 Auto Repair, Services, and Parking	59 Miscellaneous retail

Note: Numbers indicate the 3 digit Standard Industrial Classification (SIG). The table comes from Fordham and McKweon (2003).

Table 2.2: Classification of Commodities by Geographic Constituency

Democratic Party	**Republican Party**
131 Cotton	115 Corn
132 Tobacco Farms	24 Dairy Farms
21 Livestock, except Dairy and Poultry	28 Chemicals and Allied Products
32 Stone, Clay, Glass, and Concrete	36 Electronic and Other Chemicals

Note: The table comes from Fordham and McKweon (2003).

calculate the percentage that goes to the Democratic party. As the percentage diverges from equality (50%), it means a given PAC has a partisan tendency in their contribution and I use this measure as a proxy for whether there is partisan or bipartisan protection.[16]. It is well known that "Ideology/Single Issue" PACs contribute to only one party and therefore I exclude Ideology/Single Issue PACs. The distribution of PAC contributions going to the Democratic party in each election cycle is presented in Figure 3. Even after excluding Ideology/Single Issue PACs, we still see relatively high pikes in the extreme but overall, there is a significant variation in terms of democratic contribution ratios across industrial

[16]Followings are the simple summary statistics for the democratic percentage of contributions: 60.5 (26.41%) in 1992, 69.73 (25.13%) in 1994, 37.87 (26.65%) in 1996, and 41.08 (27.37%) in 1998. A large shift from 1994 to 1996 reflects the fact that the Republican party became the majority in the House for the first time since the 1950s.

sectors.

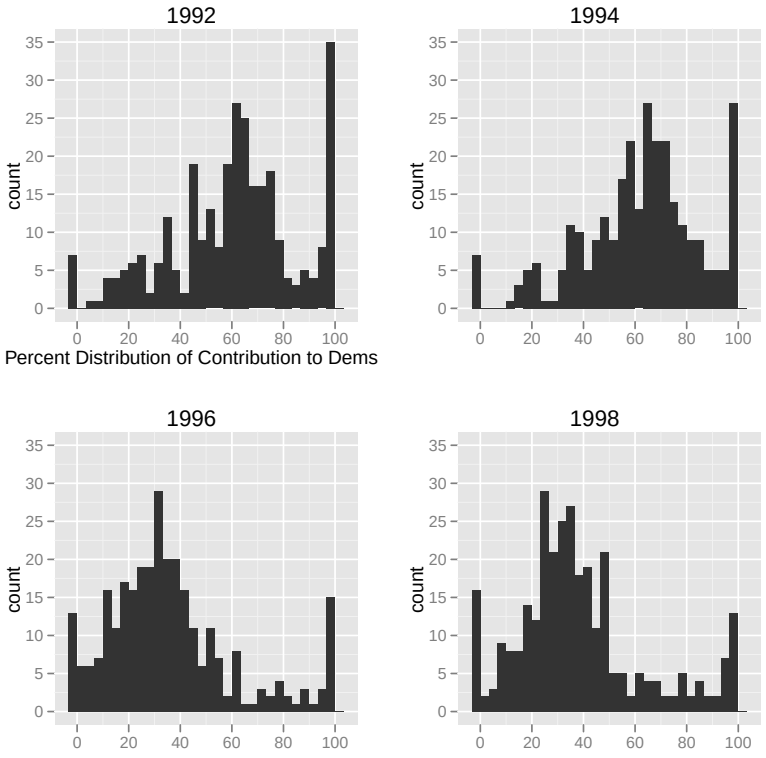


Figure 2.3: PAC Democratic Contribution Percentage Distribution, excluding Ideology PAC

2.5.4 Control Variables

The first control variable is "route of passage." Hufbaueer, Berliner, and Elliot (1986) enumerate five routes through which trade policy is formed, depending on the degree of presidential authority to enact the protection. Research on American trade politics suggests that the rise of free trade policies in the U.S., beginning early in the twentieth century, is partially attributable to increased levels of executive discretion over such matters. Applying similar logic to protectionist policies, the form should be simpler when the president is granted greater authority to set protection policy.[17] Also including the variable, route of

[17]There are five routes to passage and they reflect the push and pull between Congress and the president. A: high tariff, B: escape clause, C: executive use of inherent constitutional power, D: statutory framework

passage, controls the path dependence that might affect the types of protection instrument.

Of course, politics itself does not determine the forms of trade protection. There are multiple factors that affect the degree of trade protection. First, I include import elasticity. Second, I include output-import ratio (import-penetration ratio).[18] Table 2.3Summary Statistics for NTB Coverage Ratios and Control Variablestable.2.3 shows the summary statistics for NTB coverage ratios and the control variables.

Table 2.3: Summary Statistics for NTB Coverage Ratios and Control Variables

Variable	Obs.	Mean	Std.Dev.	Min	Max
NTB Coverage Ratio	4058	.0838	.1382	0	1
Import Penetration	4058	.0094	.0482	.000043	.7042
Import Elasticity	4058	.7246	.2564	.4619	1.1821

Also, previous studies present evidence that there are significant differences in the industrial characteristics of industries with tariff protection compared to those with nontariff trade protection. Specifically, tariffs are positively related to labor intensity while just the opposite is true for nontariff trade restrictions. In addition, nontariff trade restrictions are negatively and significantly related to both seller concentration and geographical concentration in an industry (Ray, 1981). To capture this aspect of trade protection, I divide the commodity into four groups (e.g., manufacturing, service, agriculture and fisheries, and mining), and employ a multilevel model to examine whether systematic differences exist across the groups due to industrial characteristics.[19]

for discretionary protection, E: statues explicitly limiting imports. As the routes get closer to E, it indicates that Congress wields more power when trade protection is initiated.

[18]The rationale to include these variables come from Grossman and Helpman (1994). Data on these variables come from **?**.

[19]Dividing commodities into four groups may not perfectly capture the industry-specific characteristics, although there is a significant level of similarity within the industry. To address this shortcoming, I am constructing a labor-intensity index and the a geographical-concentration index on each commodity level.

2.6 Results

Testing the hypotheses presented here appears straightforward. I could completely pool the data and estimate the global effects of inter-party coalitions and routes to passage on policy complexity. Alternatively, I could estimate four separate regressions to allow the effects estimates to differ by four commodity groups (e.g., manufacturing, service, agriculture and fisheries, and mining).

In addition to these two approaches, I also estimate multilevel models using a partial-pooling approach.[20] The first multilevel model, the varying intercept model, allows the intercept of the regression lines for each of the groups to vary while the slopes of the independent variables remain constant. In the varying intercept, varying slope model, the multilevel regression estimates the global effects of the independent variables on policy complexity while allowing the effects of the independent variables to vary by group (Gelman and Hill, 2007). The approach I use here allows me to borrow strength from the global estimates to more precisely estimate the group-specific effects of the independent variables on policy complexity by allowing the intercepts (and then the slopes and the intercepts) to vary across groups. I report these results in Table 2.4Mutilevel Analysis Resultstable.2.4 and discuss the models in turn.

2.6.1 Complete Pooling

The model specification is as follows:

$$NTB_i = \beta_0 + \beta_1 * \text{Partisan Suport}_i + \gamma' * X_i + \epsilon_i,$$

, where X_i contains control variables. The results of this approach are shown under the column labeled Model 1 in Table 2.4Mutilevel Analysis Resultstable.2.4. The route of passage and import penetration do not appear to have a significant effect but the import elasticity

[20]However, because there is no significant variation in the complexity of protectionist policies between commodity groups, this approach is unlikely to yield more efficient or unbiased estimates.

Table 2.4: Mutilevel Analysis Results

	Model 1	Model 2	Model 3	Model 4
	Coef. (SE)	Coef. (SE)	Coef. (SD)	Coef. (SD)
(Intercept)	.09 (.17)			
Partisan Support (β_1)	.28 (.08)	.34 (.06)	.13 (.03)	.22 (.08)
Democratic Contribution Ratio	.008 (.003)	.01 (.004)	.0083 (.002)	.007 (.002)
Route	.5 (2.3)	.2 (2.2)	.3 (1.4)	-.2 (1.2)
Import Elasticity	.011 (.002)	.017 (.0025)	.018 (.0014)	.016 (.0012)
Import Penetration	.12 (.14)	.13 (.34)	.11 (.36)	.17 (.29)
Group 1 Intercept		.073 (.34)	.086 (.42)	.094 (.3)
Group 2 Intercept		-0.92 (1.6)	1.2 (1.9)	.9 (1.8)
Group 3 Intercept		.08 (.51)	.09 (.64)	.1 (.41)
Group 4 Intercept		-.14 (.57)	-.07 (.48)	.2 (.36)
Group 1 β_1				.26 (.06)
Group 2 β_1				.24 (.04)
Group 3 β_1				.25 (.03)
Group 4 β_1				.21 (.04)
Iterations after burn-in			50000	50000
Deviance			237.4	236.6
DIC			242.4	72.1

Note: Model 1 is the completely pooled regression. Model 2 is the no-pooling model. Model 3 is the varying intercept model; Model 4 is the varying intercept, varying slope model. For models 1 and 2, standard errors are reported in parentheses. For models 3 and 4, standard deviations are reported in parentheses below coefficient estimates. The latter estimates are drawn from the entire population of simulated values resulting from the specification of Bayesian priors

has a sign in an expected direction with the significance on the complexity of protections policy. The main variable of interest, the existence of partisan support, appears to have a highly significant effect. According to the results of this model, protectionist policies are considerably more complex when there is little potential for members of opposing political parties to work together to enact protections for a particular commodity.[21] Specifically, when bipartisan support does not exist, the NTB ratio increases by a minimum of 0.13 to a maximum of 0.34.

2.6.2 No Pooling

The results of this model are shown in the column labeled Model 2 in Table 2.4Mutilevel Analysis Resultstable.2.4. The results are consistent with the complete-pooling approach. Different commodity groups have no effect on the form of instruments.

2.6.3 Varying Intercept Model

Now I move on to a Bayesian hierarchical regression to simulate the values of the effect estimates using diffuse priors. In this case, I allow the intercepts to vary by commodity group. If there is substantial between-group variation and little within-group variation, I will see distinct intercepts for each commodity group. The results of this model are found in the column labeled Model 3 in Table 2.4Mutilevel Analysis Resultstable.2.4. Model specification is the following:[22]

$$NTB_i = \alpha_{j[i]} + \beta_1 * \text{Partian Suport}_{ij} + \gamma' * X_{ij} + \epsilon_i,$$

[21] Partisan support is measured in two different ways. One way is to measure the dichotomy variable based on Fordham and McKewon's work whether there is a clear sectoral association with a particular party. The second measurement comes from my construction of the data on the democratic contribution ratio of each sectoral PAC. Based on the percentage of money that each PAC gives to the Democratic party, I construct a measurement called $partisan_{index} = |dem_{percent} - 50|$. $partisan_{index}$ ranges from 0 to 50 and a higher number means PACs have clear party affiliations.

[22] The variable *Route* is a control variable which indicates how the special protection of each commodity was initiated.

$$\alpha_j \sim N(\mu_\alpha, \sigma_\alpha^2)$$

The intercepts appear to vary across commodity groups. However, this difference is not statistically significant.

2.6.4 Varying Slope, Varying Intercept Model

Finally, I estimate a varying-slope, varying intercept model. This uses the same intuition as the above model, except now I also allow the intercepts to vary by group. As before, the intercepts and the slopes will differ by group to the extent that there is substantial between-group variation and minimal within-group variation. Model specification is the following:

$$NTB_i \sim N(X_i B_{j[i]}, \sigma_y^2), \qquad \text{for } i = 1, ..., n$$

$$\alpha_j \sim N(\mu_\alpha, \sigma_\alpha^2)$$

$$B_j \sim N(M_B, \sum_B), \qquad \text{for } j = 1, ...J.$$

The results of this model are shown in the column labeled Model 4 in 2.4Mutilevel Analysis Resultstable.2.4. Comparing this model with Model 3 reveals some differences in the group-level estimates, but these differences are not robust due to extremely large standard deviations. Further, I see virtually no difference across groups in the effects of the independent variables on policy complexity. However, it does appear that the varying slope, varying intercept model is a better fit because its deviance information criterion (DIC) is considerably lower than that for the varying intercept model. Nevertheless, from a substantive perspective the interpretation of the effects of the potential for inter-party coalitions and route to passage on protection policies complexity remains virtually identical when compared with the less-sophisticated single-level regression models.

Having no significant effect by using the multilevel variable may suggest that I do not capture the commodity-specific characteristics by dividing commodities into four groups. As the literature suggests, including a specific measurement such as labor-capital ratio could

fully capture commodity specific characteristics.

2.7 Discussion

In this paper I have investigated the effects of political coalitions on the choice of protection instrument. Specifically, I have argued that the nature of bipartisan support which determines the available information to voters is a significant determinant in the choice of a protection instrument. Special interests face tradeoffs between the amount of rent they can extract and the durability of protection. Industries desire the complex policy in order to secure benefits for their lobby well into the future when there is more uncertainty on the durability of the protection and this is also optimal for the incumbent politician. On the other hand, if bipartisan support exists between Democrats and Republicans to protect a certain industry, the incumbent and the special interest prefer an "efficient" transfer mechanism over an inefficient redistribution instrument since there is little electoral risk of doing so.

One of the central issues in political economy is to understand how electoral incentives shape economic policy outcomes. The benchmark median voter result suggests that it is voters' preferences rather than political institutions that determine policy outcomes. The new generation of political economy research gives more weight to how institutions affect policy (Besley and Preston, 2007). In a broad sense, this paper contributes to the literature on electoral conditions and their economic consequences (Tabellini and Alesina, 1990). More specifically, it argues that when there is more political uncertainty over whether a challenger with opposing preferences will be elected, it deters the incumbent from undertaking more efficient forms of transfers.

But at the same time, this analysis seems to contradict the argument that competition is good for democracy (Besley and Preston, 2007; Besley, Persson, and Sturm, 2010; Galasso and Nannicini, 2011). A few decades ago, researchers pointed out that the sharp decline in marginal districts in elections for the U.S. House of Representatives was a sign that a

threat of electoral replacement was diminishing, and thus generated significant concerns about the representative system of government (Erikson, 1972; Tufte, 1973; Mayhew, 1974; Fiorina, 1977). It seems that there is an interesting tension between the impact of electoral competition on economic efficiency and on representation issues. My next project will take this tradeoff into account and examine the impacts of electoral competitions on various social and political dimensions.

3 | Money and Access: Empirical Evidence from the Foreign Agent Registration Act/Chapter 3

3.1 Introduction

Over the past several decades, scholars have attempted to understand how money influences access to politicians. Despite the abundance of theoretical research, studying the link between money and access has been a challenging task, mainly due to the lack of sufficiently detailed data on lobbying contacts. In this paper, we address this issue by taking advantage of the lobbying filings mandated by the Foreign Agent Registration Act (FARA). This act 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. This comprehensive lobbying contact data, along with data on the campaign contributions by lobbyists hired by foreign governments, enables us to systematically study what role money plays in lobbying and access.

We study the lobbying reports submitted during the years 2008, 2009, and 2010 by the lobbying firms that collectively represent 144 distinct foreign governments. In particular, we focus on the fees that lobbying firms charged the foreign countries in the data and the relationship between the campaign contributions and the contacts. The FARA reports list all campaign contributions made by the lobbyists that were associated with the lobbying activities on behalf of their foreign clients are listed. These lists provide very useful information, but one limitation is that they list the campaign contributions made during the reporting periods only. To complement the data in this regard, we collect the lobbyists' 10-year history of campaign contributions by retrieving their Federal Elections Commission

records.

We find that democratic countries pay less fees to their lobbying firms, and there is overall a large premium to a top lobbying firm, which often charges more of a premium to less democratic foreign government clients. This finding is related to the literature on endogenous lobbying costs. Some costs are relatively similar across different interest groups (for example, the cost of setting up a Washington, D.C. office). However, other costs may vary by groups' specific characteristics or the information they hold. Potters and Winden (1992) and Grossman and Helpman (2001) explore endogenous lobbying models under the assumption that an interest group signals its type by its lobbying spending. Their main prediction is that interest groups increase lobbying spending when they deal with "unfriendly" legislators. This prediction may be consistent with our empirical findings if the level of democracy of a country is a good predictor of the attitude of the members of the Congress towards the country. Furthermore, we discuss how the endogenous lobbying costs may interact with the characteristics of intermediaries of lobbying activities, i.e. lobbying firms in our context, although related theories are rather scant.

There are many studies on the relationship between campaign contributions and lobbying (Langbein, 1986; Schlozman and Tierney, 1986; Wright, 1996; Ansolabehere, Snyder, and Tripathi, 2002) A dominant view or assumption in this literature is that campaign contributions are used to gain access to legislators so that they can engage in information provision (Hall and Wayman, 1990; Wright, 1990; Ainsworth, 1993; Lohmann, 1995; Austen-Smith, 1995; Ansolabehere, Snyder, and Tripathi, 2002). An alternative view is that campaign contributions are not necessary for access, and campaign contributions and lobbying activities are two viable choices for affecting policies (Austen-Smith, 1998; Bennedsen and Feldmann, 2006; Cotton, 2012). In contrast to the amount of theoretical research on campaign contributions and information provision, there is a dearth of empirical research to analyze both activities due to the lack of data on the identities of the legislators to whom the lobbying activities are targeted. This paper fills in this important gap by exploring the actual relationship between campaign contributions and lobbying contact.

We find that (i) campaign contributions and contacts are positively correlated, (ii) when controlling for both member and country attributes, past contributions are a much stronger predictor of current contacts than concurrent contributions, especially for the House Representatives, and (iii) for the Senators and the first-term members, the correlations between contributions and contacts are very weak.

To further study the relationship of money and access, we look at the chronological sequence of contacts and campaign contributions. In particular, we find that about 4% of the contact records in the data are associated with campaign contributions within a 30-day window of that contact (referred to as "timely contributions"). These timely contributions are more frequently given to Senators and the members with a leadership position or a committee chairmanship. The amount of such contributions are significantly less when they are given by lobbyists at top lobbying firms. We do not find evidence that these timely contributions initiates access.

The rest of the paper proceeds as follows. In the next section, we describe the data and present detailed summary statistics. Section 3 presents our analysis on the determinants of lobbying costs. In Section 4, we study the relationship between campaign contributions and lobbying contacts. We also provide more detailed analysis on the relationship by focusing on the "timely contributions." We conclude in Section 5. Our appendices include descriptive summary statistics of foreign country characteristics, lobbying agents (including lobbying firms), contacts to the members of Congress, and a scanned copy of a sample lobbying report.

3.2 Data

The Foreign Agent Registration Act of 1938 (FARA) has provided a legal channel for foreign governments and businesses to lobby the U.S. government policy. The main restriction is that such foreign principals must hire an agent based in the U.S. These agents are usually lobbying firms, and they contact US government officials or media on behalf of their foreign client (Gawande, Maloney, and Montes-Rojas (2009)). Foreign agents must submit

a semi-annual lobbying disclosure form.[1] FARA imposes strict disclosure requirements for anyone in the employment of foreign clients. Based on the reports, we extract the following information on each contact record: (i) the name of the contacted individuals, (ii) the date of the contact, (iii) the method by which the individual was contacted (phone call, email, in-person meeting, etc.), and (iv) issues discussed with the contact. If the contact was made to the Congress, we also have information on (i) the level of contact for the congressional contact (whether or not the contact was to the member or his/her staff) and (ii) if the contacted individual was a staffer, the office for whom he/she staffer worked. Therefore, this dataset provides very rich information on the lobbying targets, which cannot be obtained by looking at (domestic) lobbying reports mandated by the Lobbying Disclosure Act of 1995. Under this act, lobbyists are required to disclose the government bodies they contacted, but they are not required to specify any further details of their lobbying contacts.

Since May 2007 the Justice Department has maintained a website that posts image files of FARA disclosures online, and a joint project of ProPublica and the Sunlight Foundation has digitized these files.[2] We use their digitized data based on the project, and our data analysis includes lobbying forms submitted in 2008, 2009, and 2010, which spans the second session of the 110th Congress and the full two sessions of the 111th Congress.

3.2.1 Foreign Countries in the Data

During the period of study, there are in total 144 foreign countries which engaged in any type of lobbying activities in the U.S.. Among them, 57 countries did not contact any member of Congress, and 87 countries have at least one record of having a contact with a member of the 110th and/or the 111th Congresses by hiring a lobbyist.[3] The list of the countries in

[1] A sample lobbying report can be found in Appendix D.

[2] For more details, refer to http://foreignlobbying.org.

[3] Out of 62,728 unique individual contact records, 27,168 records (43.3%) are regarding contacts to the members of Congress or their staff. Unfortunately, 30,254 records (48.2%) do not include the agency or the organization of the contacted person(s). If the lobbyist reports the name of the contacted person only, it is often hard to identify him/her unless he/she is a senior official in the government. The rest of the contact records (8.4%) involve the individuals who belong to other branches of the federal government, the state

the dataset is extremely diverse, and this list along with detailed information about their lobbying activities can be found in the Appendix. We collected various information on the countries in the dataset. The sources are U.S. Department of State for the year that the formal relations with a country started (from the US State Department), Polity IV project for the measure of polity which spans from -10 (dictatorship) to 10 (democracy) (from the Polity IV Project), GDP and GDP per capita (from the World Bank), the amount of trade with U.S. and number of U.S. military personnel (from the U.S. Census), and the amount of U.S. aid awarded to the country (from the U.S. Agency for International Development). The summary statistics can be found in Table 3.1Foreign Country Summary Statisticstable.3.1.

The average lobbying expenditures per country during the study period is $5.7 million, and their total lobbying expenditures amount to $821.5 million. Considering that the total (domestic) lobbying expenditures reported via the Lobbying Disclosure Act of 1995 amount to $10.35 billion during the same period, the size of foreign lobbying is relatively large given the number of participating foreign countries. The country which spent the largest amount of money on lobbying is Liberia whose various government entities collectively spent over $90 million, followed by South Korea whose spending exceeded $79 million.

Table 3.1: Foreign Country Summary Statistics

Variable	Mean	Std. Dev.	Min.	Max.	N
Year that U.S. Relations Started	1930.4	63.0	1781	2011	126
Polity in 2010	4.0	6.3	-10	10	112
GDP in 2010 ($B)	315.9	816.3	0.02	5,931	142
GDP per Capita in 2010 ($)	16,820.8	23,100.7	210.7	145,230	138
Import from the U.S. in 2010 ($M)	9,069.3	27,969.1	0	249,256	135
Export to the U.S. in 2010 ($M)	13,715.1	45,501.8	0	364,953	135
U.S. Aid ($M)	115.8	332.7	0	3,001.3	144
Size of the U.S. Military Personnel	1,544.9	8,157.0	0	63,000	144
Lobbying Expenditures (2008–2010, $K)	5,704.8	12,534.7	0	90,381.8	144

and local governments, the media, or or other groups such as think tanks and nonprofit organizations.

3.2.2 Campaign Contributions and Caucus Membership

Foreign entities are not allowed to make a political donations. However, they hire lobbyists who can and do make campaign contributions to politicians. Although the contributions by lobbyists are not necessarily on behalf of their foreign clients, tracking their contributions is one of the few available methods to see any monetary relationship between a foreign entity and a member of Congress. To do this, we rely on the FARA filings on campaign contributions and the donation records from the Federal Election Commission (FEC).

First, the FARA requires the lobbyists or the lobbying firms hired by a foreign entity report their campaign contributions to politicians. Based on the reported contributions, we create a binary variable that indicates whether or not the contributions were made to members of Congress during the 2008 and 2010 election cycles by the lobbyists or lobbying firms hired by foreign countries. In creating this variable, we only use the records approved by the Sunlight Foundation.[4] As can be seen in Table 3.2Campaign Contributions and Caucus Membership during the 110th Congresstable.3.2 and 3.3Campaign Contributions and Caucus Membership during the 111th Congresstable.3.3, about 5% of the pairs of a House member and a foreign country have at least one record of a contribution in 2008. These figures are similar for 2010. Conditional on nonzero contributions, we calculate the summary statistics for the amount of campaign contributions and report the results in the tables.

There are two potential limitations in using the information in the FARA reports. One is that the contributions recorded in the reports represent all contributions made by the employees of the lobbying firm that was hired by a foreign entity. However, the lobbying firm may represent multiple different clients. Therefore, the contributions made by the lobbyists who were not involved in representing a foreign entity may be included. The other limitation is that we can track the monetary relationship as early as June 2007, when the

[4]There are 14,419 country-member pairs where nonzero contributions by the lobbyists that the country hired to the member were reported to be made in the FARA filings. Among them, 7,902 pairs (54.80%) would have different contribution amounts if we include the contribution records that were not approved by the Sunlight Foundation.

Sunlight Foundation started digitalizing the FARA filings. These limitations motivate us to use the FEC filings.

Table 3.2: Campaign Contributions and Caucus Membership during the 110th Congress

Variable	Prob.	Amount
House Representatives		
Contribution in FARA Reports in 2008	0.064 (0.245)	$1,716.2 (2,010.4)
Contribution by Lobbyists in 2002–2006	0.004 (0.067)	$804.7 (619.7)
Contribution by Lobbyists in 2008	0.017 (0.128)	$1,335 (1,388.9)
Country/Regional Caucus Membership	0.077 (0.267)	-
Senators		
Contribution in FARA Reports in 2008	0.135(0.342)	$3,421.7 (5,675.7)
Contribution by Lobbyists in 2002–2006	0.02 (0.13)	$1,413.4 (1,194.6)
Contribution by Lobbyists in 2008	0.037 (0.191)	$2,120.4 (2,217.1)

Note: There are 30,912 observations (448 members × 69 countries) for the House and 6,969 obserations (101 members × 69 countries) for the Senate. The numbers in parentheses are standard deviations. The statistics on the amount of contributions are calculated *conditional on nonzero contributions.*

Table 3.3: Campaign Contributions and Caucus Membership during the 111th Congress

Variable	Prob.	Amount
House Representatives		
Contribution in FARA Reports in 2008	0.052 (0.222)	$1,598.5 (1,942.6)
Contribution in FARA Reports in 2010	0.046 (0.210)	$1,448.4 (1,508.5)
Contribution by Lobbyists in 2002–2008	0.032 (0.176)	$1,122.2 (1,174.7)
Contribution by Lobbyists in 2010	0.032 (0.176)	$1,116.8 (1,064.5)
Country/Regional Caucus Membership	0.083 (0.276)	-
Senators		
Contribution in FARA Reports in 2008	0.113 (0.317)	$3,289.6 (5,545.6)
Contribution in FARA Reports in 2010	0.103 (0.304)	$2,674.3 (2,706.5)
Contribution by Lobbyists in 2002–2008	0.075 (0.264)	$1,697.6 (1,640.2)
Contribution by Lobbyists in 2010	0.05 (0.217)	$1,747.1 (1,813.5)

Note: There are 34,265 observations (445 members × 77 countries) for the House and 7,931 observations (103 members × 77 countries) for the Senate. The numbers in parentheses are standard deviations. The statistics on the amount of contributions are calculated *conditional on nonzero contributions.*

Second, we use the names of the lobbyists who made a contact on behalf of a foreign client and match it with the individual campaign contribution records from the FEC filings.[5] The contribution data based on this method complements the FARA contribution data

[5]When matching the two datasets, not only the name but also the address and the occupation information in the FEC filings were used to decrease the frequency of making errors.

because we focus on the lobbyists who actually made a contact to a representative on behalf of their clients and track their contributions for many periods. As can be seen in Tables 3.2Campaign Contributions and Caucus Membership during the 110th Congresstable.3.2 and 3.3Campaign Contributions and Caucus Membership during the 111th Congresstable.3.3, fewer contributions are detected in both frequency and amount in the FEC data compared to the contributions reported in the FARA reports, and this is as expected.

A representative may participate in a caucus focusing on a specific international region or a country. Examples of such a caucus include the Congressional Caucus on Vietnam, the Congressional Caucus on US-Turkey Relations and Turkish Americans, the Congressional Asian Pacific American Caucus, and the Congressional Caribbean Caucus. This may or may not represent the political interest of a representative in a region or a country depending on his/her district characteristics and/or personal expertise. We collect the regional or country-specific caucus membership information from various on-line sources including the website of the Committee on House Administration. Then we create a binary variable for each pair of a representative and a foreign country that takes 1 if the member belongs to any caucus relevant to the foreign country and 0 otherwise. The summary statistics on this variable can be found in Tables 3.2Campaign Contributions and Caucus Membership during the 110th Congresstable.3.2 and 3.3Campaign Contributions and Caucus Membership during the 111th Congresstable.3.3.

3.2.3 Contacts to the Members of Congress

Contact Level Summary

Over the period between August 2007 and December 2010, there were 17,776 unique contacts to the member of Congress by 87 different foreign countries. 94.3% of the contacts were made by the professional or contract lobbyists, as opposed to in-house lobbyists, hired by the foreign countries. 29.8% of the contacts were directed to the Senators and their staff, and the rest were to the House members and their staff. Most of the contacts (77.9%) were to the staff of a member of Congress, while the rest were direct contacts to the members. This

direct contact to a member is slightly more frequent among the House members (23.4%), compared to among the Senators (18.9%).

The type of contacts is also reported in the filings. A majority of contacts are e-mail communication (44.7%), while more traditional contacts such as face-to-face meetings and phone conversations are also frequent (24.5% and 18.1%, respectively). The rest (12.70%) are various intended or potentially unintended contacts at various venues, such as at a party.

For each contact record, the issue discussed with the contact is briefly explained. Based on key word search, we categorize the contact issues into security or defense (23.2%), trade, immigration, or economy (19.9%), and other (56.9%) issues. Many issues were too general (22.2%) to categorize, such as 'Turkey and U.S. relationship,' and some contacts were made to request a meeting (5.2%).

Filing Level Summary

Table 3.4Contact Summary Statistics by Semiannual Lobbying Filing table.3.4 shows various summary statistics on the characteristics of contacts for each semi-annual lobbying filing that lists at least one contact to a member of Congress.[6] On average, there are 30 contact records in a lobbying filing, but variation in this number is large across lobbying reports. There can be multiple contacts to a given member, so the average of number of the members of Congress whose contacts were reported in a filing is 15. For each filing, we calculate statistics for several characteristics among all the contact records reported in the filing. For example, House contacts make up 62% of all contacts, contacts to Democrats make up 64% of all contacts, direct contacts to members make up 29% of all contacts, and non-policy related contacts make up 46% of all contacts.

Country Level Summary

On average, a foreign country which contacted at least one member of Congress made 204 contacts via their lobbyists. Turkey made the most frequent contacts—3,071 times—

[6]A more detailed description of the filing-level data can be found in the Appendix F, G, and H.

Table 3.4: Contact Summary Statistics by Semiannual Lobbying Filing

Variable	Mean	Median	SD	Min.	Max.	N
Frequency						
Number of Contacts	30	9	58	1	535	557
Number of Members	15	6	25	1	185	557
Member Characteristics						
House	.62	.71	.35	0	1	557
Democrat	.64	.66	.33	0	1	557
Caucus Member	.17	.02	.26	0	1	557
Committee Chair	.14	.04	.22	0	1	557
Leadership Position	.22	.12	.28	0	1	557
Contact Type						
Member Contact	.29	.11	.36	0	1	557
Meeting	.34	.18	.37	0	1	557
Phone	.18	.01	.27	0	1	557
Email	.27	.08	.33	0	1	557
Other	.19	0	.33	0	1	557
Contact Issue						
Security Issue	.20	0	.34	0	1	557
Economic Issue	.26	0	.39	0	1	557
Non-Policy Related Issue	.46	.43	.41	0	1	557

followed by the United Arab Emirates, South Korea, and Egypt. In terms of the unique number of members contacted, the average number of the contacted members by a foreign country is 56. The rank order of foreign countries by the number of members contacted is similar to that by the total number of contacts made. Turkey contacted the largest number of the members, 445 out of 611, followed by Egypt, South Korea, and Morocco. In the Appendix, we present a list of all the countries in the dataset with the total number of contacts, number of contacted members of Congress, and total lobbying expenditures during 2008–2010.

Member Level Summary

Among 630 unique members who served either in the 110th or the 111th congress, 611 members were contacted at least once.[7] Among the contacted members, the average frequency of contacts in the House was 25.2 and 45.1 in the Senate. Table 3.5Top Three Most Contacted Memberstable.3.5 shows the top five most contacted members in the House and the Senate. In the House, Robert Wexler (D-FL19) received the most contacts, followed by Nancy Pelosi (D-CA08). In the Senate, George Voinovich (R-OH) was targeted the most by the lobbyists hired by the foreign countries, followed by John Kerry (D-MA). These statistics include all types of contacts. When focusing on the direct contacts to the members, as opposed to those to their staff, we have 559 members out of 611 who had at least one such contact. Table 3.6Top Three Most Directly-Contacted Memberstable.3.6 shows the top three members in each chamber who directly communicated with lobbyists. For a given legislator, the average number of the foreign countries that contacted him/her is 7.9. 40 countries made contacts with Senator John Kerry (D-MA) and 34 countries targeted Rep. Howard Berman (D-CA08). In the Appendix G, we present the summary statistics of lobbying contacts for each member of Congress in the data.

[7]The summary statistics regarding the members of each Congress can be find in Tables I.1Members of the 110th Congresstable.I.1 and Table I.2Members of the 111th Congresstable.I.2 in the Appendix.

Table 3.5: Top Three Most Contacted Members

Name	District	Party	# of Contacts
House			
Robert Wexler	FL-19	D	209
Nancy Pelosi	CA-08	D	207
Donald Payne	NJ-10	D	189
Senate			
George Voinovich	OH	R	153
John Kerry	MA	D	149
Joe Lieberman	CT	I	142

Table 3.6: Top Three Most Directly-Contacted Members

Name	District	Party	# of Contacts[a]
House			
Donald Payne	NJ-10	D	189 (50)
Howard Berman	CA-28	D	171 (45)
Gregory Meeks	NY-06	D	136 (44)
Senate			
John Kerry	MA	D	149 (43)
Max Baucus	MT	D	65 (33)
Harry Reid	NV	D	138 (29)

Note: Numbers in parentheses are the number of contacts that were made directly to the member.

Country-Member Level Summary

Now we aggregate the contact data by country and member. There are unique 9,133 country-member contact pairs in the data, where each contact pair is made if there was at least one contact to the member by a lobbyist hired by the country. Among these, there was at least one phone or meeting contact in 64.8% of the pairs, meaning that the rest of the pairs are made up of emails, parties, or other types of contacts. 68.4% of the contact pairs are made due to at least one contact on a policy-specific issue. This implies that the rest of the pairs, 31.6%, were made due to contacts whose main purposes were administrative or to build relationships. For 20.1% of the contact pairs, we identify economic policy issues as reasons for a contact and the contact was made via traditional two-way methods such as phone and/or meeting; similarly for 22.7% on security issues. See Table 3.7Contact Summary Statistics Given One Contacttable.3.7.

Given that there was at least one contact to a member of Congress by a lobbyist that represents a country, there were on average 3.7 contacts to the member from the country over the three-year sample period. On average, 1.6 contacts are via phone and/or meeting and 2.1 contacts are via email, parties, and/or other method. On average, 1.9 contacts were policy-specific and 1.6 contacts were not.

Table 3.7: Contact Summary Statistics Given One Contact

Variable	Mean	Std. Dev.	Min.	Max.
Two-way[a]	0.648	0.478	0	1
Policy Specific[b]	0.684	0.465	0	1
Economic Policy and Two-way[c]	0.201	0.401	0	1
Security Policy and Two-way[d]	0.227	0.419	0	1
Frequency[e]	3.694	5.941	1	106
Frequency of Two-way	1.574	2.982	0	70
Frequency of Policy Specific	1.881	3.454	0	86
Frequency of Economic Policy and Two-way	0.395	1.378	0	42
Frequency of Security Policy and Two-way	0.362	0.928	0	20

Note: These statistics are based on 9,133 member-country pairs. a. Two-way contacts refer to contacts via phone or meeting. b. Policy specific contacts refer to contacts where a specific policy issue is listed in the reports. c. Economic policies regard, for example, trade, U.S. foreign aid, and budget appropriations. d. Security policies concern regional conflicts and dispute, for instance.

3.3 What Determines the Amount of Lobbying Costs?

In this section, we examine what determines the amount of money that a foreign government pays to a lobbying firm. More specifically, we investigate how the characteristics of foreign countries and lobbying firms are related to the lobbying fees. Do more democratic countries pay less or more when they hire lobbying firms? Do the lobbying firms with some reputation in the market receive more in fees, and if so why? The answer to these questions may depend on the the lobbying activities that the lobbying firm engaged in on behalf of its foreign clients. In particular, we can divide the lobbying filings into three categories: (1) those with no contact records, (2) those with contact records to the government or media but without any records on congressional contacts, (3) those with records on contacts to the Congress as well as other contacts.

Table 3.8: Semiannual Lobbying Expenditures by Contacts

	N	Median	Mean	SD	Min	Max
Fees to Lobbying Firms (in $K)						
No Contacts	501	65.8	182.1	402.3	0	5,030.1
Contacts to Non-Congress Only	211	150.0	300.1	426.6	4.5	3,433.3
Contacts to Congress (and Other)	500	158.4	252.6	318.6	0	2,619.6
Total	1,212	116.1	231.7	377.1	0	2,619.6
Expenditures of Self-Lobbying (in $K)						
No Contacts	239	552.5	1,247.2	2,009.8	0.3	11,973.9
Contacts to Non-Congress Only	58	487.7	1,783.9	3,417.0	0.3	20,500.0
Contacts to Congress (and Other)	46	653.8	1,071.4	1,179.8	67.4	4,706.6
Total	343	556.0	1,314.4	2,243.5	0.3	20,500.0

There are 774 unique contracts, or client-registrant matches and $1,938$ unique reports, or client-registrant-filing matches. Among $1,938$ lobbying filings, 1,014 filings do not report any contacts, 318 filings report contacts but none of the contacts are to a member of Congress, and 606 filings report at least one contact to a member of the Congress. Those filings without contacts do report their lobbying activities, ranging from attending an event such as a ceremony or an exhibition to giving legal service and advice. Table 3.8Semiannual

Lobbying Expenditures by Contactstable.3.8 shows the summary statistics by whether or not the lobbying activities were conducted by internal lobbyists or not. When lobbying through internal lobbyists, the lobbying expenditures are usually much larger than through external lobbyists.[8] As can be seen in Table 3.8Semiannual Lobbying Expenditures by Contactstable.3.8, the lobbying expenditures tend to be larger when there was at least one contact than when there was no record of contacts. Among the lobbying reports with at least one contact, the lobbying expenditures are similar with or without a contact to the Congress.

Table 3.9Foreign Country Characteristics by Contactstable.3.9 shows the summary statistics of the foreign country characteristics by type of contact their lobbyists made with Congress. Compared to the countries that made no contacts to the U.S. government through lobbyists, those that made contacts tend to have a closer relationship to the U.S., measured by the size of imports from and exports to the U.S. Additionally, the larger the amount of U.S. foreign aid to a country, the more likely that country is to have made contacts in Congress. Furthermore, the countries that make contacts to the Congress tend to have more lobbying contracts than those that do not.

Table 3.9: Foreign Country Characteristics by Contacts

	N	**Aid**[a] **($M)**	**Trade**[b] **($M)**	**# of Lobbying**[c] **Firms Hired**	**Self**[d]
No Contacts	34	.99	766.5	1.55	0.47
Contacts to Non-Congress Only	21	0.00	3,143.7	2.80	0.52
Contacts to Congress (and Other)	89	20.71	3,570.4	7.49	0.36

Note: a. Median value of the U.S. Aid to the country in 2010. b. Median value of the sum of the import from the U.S. and the export to the U.S. in 2010. c. Mean value of the number of unique lobbying contracts, including self-lobbying, during 2008–2010. d. Mean value of the binary variable that takes 1 if the foreign country filed a lobbying report on its own lobbying through the internal lobbyists.

To examine the factors that affect the total fees, we regress total fees on county-specific characteristics (X_i) and lobbying firm characteristics (Z_j) for each category of lobbying

[8] 377 lobbying reports have missing information on the total lobbying fee, and 6 lobbying reports list zero lobbying expenditures. We suspect that those with zero expenditures may have a measurement or reporting error.

filings, $s \in \{1, 2, 3\}$, if lobbying reports were filed by lobbying firms, not a foreign country's in-house lobbying agents. Let y_{ijts} denote a lobbying fee that a country i pays to a lobbying firm j at a given time period of t, when the associated filing belongs to group s. The regression model is defined as in the equation 3.1What Determines the Amount of Lobbying Costs?equation.3.3.1.

$$y_{ijts} = \beta_{0s} + \beta_{1s}\mathbf{X}_i + \beta_{2s}\mathbf{Z}_j + \varepsilon_{ijts} \tag{3.1}$$

Vector $\mathbf{X}_i$ represents the characteristics of country i, including a widely-used measure of how democratic country i is, POLITY IV score, GDP and GDP per capita, the size of foreign direct investment, the ratio of the size of the aid from U.S. to the total economy, and the ratio of the size of imports from and exports to the U.S. to the total economy as of 2010. Vector $\mathbf{Z}_j$ represents the characteristics of lobbying firm j, and in this exercise, we include one variable: an indicator variable that takes 1 if the lobbying firm is one of the top 20 lobbying firms in terms of revenue and 0 otherwise.[9]

Table 3.10Lobbying Fee Regressiontable.3.10 shows the regression results for the total lobbying fees by different group. Democratic countries pay less for every different type of lobbying activity, but the difference in lobbying fees is smaller when countries contact members of Congress than when they contact executive branch officials or contact no one. Trade patterns also matter a great deal: countries pay more lobbying fees as the share of exports to the U.S. to their total economy increases, and they also pay less as the share of imports from the U.S. to their total economy increases. Foreign countries pay more when they hire top 20 lobbying firms, on average $\$92,503$ per six months, when they contact members of Congress but pay less when they contact executive branch officials or the media. This may imply that the reputation of lobbying firms may be closely related to access to the Congress.

Next, we examine how different lobbying firm characteristics affect lobbying fees within the set of cases where lobbying firms have a record of contacting members of Congress. We do

[9]The list of the top 20 lobbying firm is obtained from opensecrets.org.

Table 3.10: Lobbying Fee Regression

	All Groups	Group 1[a]	Group 2	Group 3
Country Characteristics				
POLITY $\geq$ 7	-115,468***	-142,982***	-157,032**	-82,590**
	(26,139)	(43,016)	(71,767)	(3,463)
USAID/GDP(%)	-6,941**	-11,392	374	-7,830**
	(2,772)	(9,164)	(6,629)	(3,048)
Import from U.S./GDP(%)	258	9,864***	-110	-3,685**
	(1,382)	(3,017)	(3,654)	(15,79)
Export to U.S./GDP(%)	1,973	-3,408	-4,516	7,024***
	(1,750)	(3,091)	(4,675)	(2,184)
Lobbying Firm Characteristics				
Top 20 Firms	18,666	34,403	-230,540**	92,503*
	(4,4756.6)	(72,087)	(102,022)	(49,961)
Constant	209,478	209,478	339,983	318,342
N	1,084	462	190	432

Note: The unit is US dollars in 2010. a. We divide all lobbying filings that report non-zero lobbying fee and are submitted by lobbying firms in the data, in total 1,084 filings, into three groups based on the associated contact records. Group 1 are those without any contact records, group 2 are those with contact records, none of which are congressional, and group 3 are those with congressional contacts.

analyses based on equation (3.1What Determines the Amount of Lobbying Costs?equation.3.3.1), but unlike the previous analysis, we include more lobbying firm characteristics related to their connections and expertise. We construct variables which capture the lobbying firm characteristics such as connection or issue expertise from entire set of 17,776 contacts between members of Congress and lobbyists hired by foreign clients. These include how many members of Congress each firm contacts, the total number of contacts, how often lobbyists directly contact members of Congress, (not their staffers), the ratio of Democrats among contacted members, and the frequency of contacts that discuss economic, security, and administrative issues. After constructing each variable, we divide each lobbying firm in each dimension on whether the firm is above or below the median and create a dummy variable for each dimension. For example, $SpecializedinDemocrats_j$ takes 1 if firm j is above the median of the ratio of Democrats, which is 60% in the data, and 0 otherwise. When constructing these variables on the lobbying firm characteristics, we do not include the filings by those with one or two clients only. It is to minimize our concerns of simultaneity bias. We consider the lobbying firm characteristics on connections and expertise are exoge-

nously given. However, we infer these characteristics based on the observed contact patterns in the data, and the potential simultaneity bias can be alleviated when the lobbying firm characteristics are inferred from many filings.

Table 3.11Lobbying Fee Regression among Lobbying Filings with Congressional Contactstable.3.11 shows the results.[10] Column (1) shows the results when we regress the total fees only on the lobbying firm characteristics. Column (2) is the result when we add client country characteristics. Column (3) includes filing characteristics, i.e. what percentage of contacts discussed economic or security issues. Across each specification, the results are similar. When contacting members of Congress, top 20 lobbying firms enjoy a significant boost, greater than $\$110,000$ for six month, in lobbying fees from client countries. Lobbying firms that make more direct contacts with members receive more lobbying fees but making more contacts and contacting more members does not seem to make a significant difference in lobbying fees. Firms with a reputation for specializing in economic issues receive more lobbying fees as well

To look at the source of the premium that top 20 lobbying firms enjoy, we divide the lobbying reports by more democratic countries (POLITY ≥ 7) and less democratic countries (POLITY < 7), and run the regressions with the specification of (3) in Table 3.11Lobbying Fee Regression among Lobbying Filings with Congressional Contactstable.3.11. The results are presented in Table 3.12Country Types and Lobbying Fee Premiumtable.3.12. We find that top 20 lobbying firms do not enjoy this premium when their clients are more democratic countries. However, they receives $156,640 more on average than other firms when they have less democratic countries as clients. Also, the firms that are specialized in economic issues receive more money when they represent more democratic countries and security-focused firms enjoy a premium when they represent less democratic countries.

[10]We limit the cases where the number of clients is greater than or equal to 3.

Table 3.11: Lobbying Fee Regression among Lobbying Filings with Congressional Contacts

	(1)	(2)	(3)
Lobbying Firm Characteristics			
Top 20 Lobbying Firm	110,939***	138,225***	137,290***
	(34,327)	(39,498)	(4,025)
Contacted Many Times ($\geq$ 88)	-29,558	-30,018	-25,933
	(46,035)	(53,079)	(53,797)
Contacted Large # of Members ($\geq$ 15)	-3,497	11,331	4,133
	(57,778)	(67,013)	(68,487)
Specialized in Direct Member Contacts ($\geq$ 15%)	1,152**	1,617**	1,597**
	(537)	(647)	(651)
Specialized in Democrats ($\geq$ 60%)	-231	-468	-362
	(328)	(378)	(392)
Specialized in Economic Issues ($\geq$ 4%)	1,276***	928*	925*
	(437)	(506)	(511)
Specialized in Security Issues ($\geq$ 8%)	439	244	284
	(337)	(377)	(395)
Specialized in Administrative Issue ($\geq$ 18%)	249	442	272
	(316)	(382)	(401)
Country Characteristics			
POLITY $\geq$ 7		-17,561	-7,640
		(35,490)	(37,444)
USAID/GDP(%)		-7,216	-6,646
		(4,996)	(5,163)
Import from U.S./GDP(%)		-1,188	-1,409
		(1,459)	(1,480)
Export to U.S./GDP(%)		1,703	2,491
		(2,483)	(2,599)
Filing Characteristics			
Economic Issue(%)			-1,367
			(956)
Security Issue(%)			-1,156
			(969)
Administrative Issue(%)			-1,012
			(919)
Constant	103,853	144,612	252,014
N	298	260	260

Note: The results are based on the filings by the lobbying firms that have at least three clients in the data. We do not include the filings by those with one or two clients only in constructing the variables on the lobbying firm characteristics.

Table 3.12: Country Types and Lobbying Fee Premium

Country Type	Top 20 Firms	Economic Issue	Security Issue	Constant	N
POLITY ≥ 7	30,143	1,852**	-578	96,611	158
	(48,220)	(656)	(457)		
POLITY < 7	156,490**	246	1,733**	232,426	140
	(60,344)	(734)	(684)		

3.4 Do Campaign Contributions Buy Contacts?

To answer this question, we use country-member level data for all possible combinations of country-member pairs during the 111th Congress. There are 77 countries which contacted a member during 2009–2010, and there were 445 House members and 103 Senators during this period. Therefore, we have 42,196 pairs of country and member. We focus on the 111th Congress to study the effect of campaign contributions made in the 2008 election cycle as well as those in the 2010 cycle.

3.4.1 Campaign Contributions and Contacts

Table 3.13Probability of Contacts by Campaign Contributiontable.3.13 shows the relationship between campaign contributions and contacts. We calculate the probability that there was at least one contact during 2009–2010 between a country and a member conditional on whether or not campaign contributions were made by a lobbyist hired by the country. Given that campaign contributions were made during 2009-2010, the probability of at least one contact during the same period is 23.74%. Without these current campaign contributions, the probability of contacts, 6.58%, is much lower. As can be seen in the table, this trend is remarkably similar when it comes to past contributions. Furthermore, although we do not report the statistics for different types of contacts, such as contacts that were made directly to members, the trends found in the statistics are very similar to those reported here.

Table 3.13: Probability of Contacts by Campaign Contribution

Contribution Type	**Yes (%)**[a]	**No (%)**[b]	**Members**[c]
Current Contributions (2009–2010)	23.74 (42.55)	6.58 (24.79)	548
Past Contributions (2007–2008)	21.30 (40.94)	6.72 (25.05)	548
Past Contributions (2002–2008)	23.15 (42.19)	7.54 (26.41)	371

Note: a. This column shows the probability that there was at least one contact by a country to a member given that the relevant type of campaign contribution was made by a lobbyist hired by the country. We use both the campaign contribution records reported in the FARA filings and the matched data with the FEC filings using the lobbyists' name and occupation. The numbers in parentheses are standard deviations. b. This column shows the contact probability given that the relevant type of campaign contribution was not made. c. This column indicates the number of the members that are included in calculating the contact probabilities. Depending on the type of contributions, the relevant members may differ. We include all members of the 111th Congress, but when comparing the contact probabilities by whether or not campaign contributions were made during 2002–2008, we include only the members who served the Congress at least six years.

These trends imply that there is a positive relationship between campaign contributions and contacts. However, this relationship is not necessarily causal. Furthermore, campaign contributions appear to be neither necessary nor sufficient to obtain contacts to the members: some contacts were made without (observed) campaign contributions, and campaign contributions were made without contacts.

To control for the characteristics of countries and members, we conduct probit analyses. Let $y_{i,j}$ denote whether or not there was at least one contact from country i to member j. We consider the following model of how $y_{i,j}$ is determined:

$$\begin{aligned} y^*_{i,j} &= \beta_{0,i} + \beta_{1,j} + \beta_2 CurrentContribution_{i,j} + \beta_3 PastContribution_{i,j} \\ &\quad + \beta_4 CurrentCont_{i,j} \times Running2010j + \beta_5 PastCont_{i,j} \times Running2010j \\ &\quad + \beta_6 CaucusMember_{i,j} + \epsilon_{i,j}, \end{aligned}$$

$$y_{i,j} = \begin{cases} 1 & \text{if } y^*_{i,j} > 0. \\ 0 & \text{otherwise,} \end{cases}$$

$CurrentContribution_{i,j}$ is an indicator variable where it takes 1 if campaign contributions were made by a lobbyist hired by country i to member j during 2009–2010, and 0 otherwise. Similarly, $PastContribution_{i,j}$ is also an indicator variable, focusing on the

campaign contributions made during 2002–2008. We include the interaction term between the contribution indicators and whether or not the member runs for an office in 2010, $CurrentCont_{i,j} \times Running2010j$ and $PastCont_{i,j} \times Running2010j$. Lastly, we control for the relation between a member and a country by including a indicator variable, $CaucusMember_{i,j}$, which takes 1 if member j is a member of a Congressional caucus that relates to the region that country i resides. Note that we include both country-specific fixed effects and member-specific fixed effects by allowing the constant terms $\beta_{0,i}$ and $\beta_{1,j}$ to vary by countries and members.

$\epsilon_{i,j}$ may include unobserved favors exchanged between a member and a lobbyist that represents a country, such as gifts and paid-for travels, as well as unobserved and exogenously determined friendship or animosity between the member and the country (not captured by the caucus variable) that can simultaneously affect contacts. We assume that $\epsilon_{i,j}$ and $\epsilon_{i,j'}$ are not correlated for $j \neq j'$ and that $\epsilon_{i',j}$ and $\epsilon_{i,j}$ are not correlated with $i \neq i'$.

Table 3.14Contact Probit Regression Analysis: House Representativestable.3.14 shows the probit regression results. We conduct the analyses by each chamber for all members during the 111th Congress and repeat the same analyses for the first-term members only.[11] We find that past contributions are positively associated with contacts when we use all representatives, but this positive association becomes statistically insignificant when we only regress the first-term representatives. Among the senators, the relationship between contributions and contacts are mostly statistically insignificant.

3.4.2 Who Makes "Timely Contributions" to Whom?

Let us refer to the campaign contributions that were made to a member of Congress by a lobbyist who represents a foreign country, as reported in the FARA reports, within the 30-day window of a contact to the member as 'timely' contributions. Out of 17,776 lobbying contacts to the members of the 110th and 111th Congresses in the data, 729 contacts (4.1%) can be classified as timely contributions. The average amount of the donation conditional on

[11] There are 61 first-term representatives and 37 first-term senators in the data.

Table 3.14: Contact Probit Regression Analysis: House Representatives

	All (1)	**All (2)**	**1^{st} Term (1)**	**1^{st} Term (2)**
Current Contribution	0.224***	0.042	0.269	1.876*
	(0.049)	(0.173)	(0.178)	(1.082)
Past Contribution	0.285***	0.343**	0.030	-3.766
	(0.057)	(0.143)	(0.206)	(143.5)
Current Contribution × Running in 2010	-	0.196	-	-1.661
	-	(0.179)	-	(1.097)
Past Contribution × Running in 2010	-	-0.063	-	3.832
	-	(0.160)	-	(143.5)
Caucus Member	0.500***	0.500***	0.318	0.311
	(0.046)	(0.046)	(0.275)	(0.274)
Member Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
N	32,190	32,190	1,740	1,740

Note: The first two regressions are on all representatives in the data, and the rest two regressions, denoted by '1^{st} Term', are on all the first-term representatives in the data. 2,075 observations were dropped due to collinearity when all representatives were regressed, and 2,957 observations were dropped for the same reason when only the first-term representatives were included in the analysis. Both Current and Past Contributions are indicator variables.

Table 3.15: Contact Probit Regression Analysis: Senators

	All (1)	**All (2)**	**1^{st} Term (1)**	**1^{st} Term (2)**
Current Contribution	0.138**	0.102	0.269	0.185
	(0.074)	(0.091)	(0.178)	(0.166)
Past Contribution	0.064	0.080	0.030	0.043
	(0.071)	(0.137)	(0.206)	(0.152)
Current Contribution × Running in 2010	-	0.972	-	0.039
	-	(0.137)	-	(0.248)
Past Contribution × Running in 2010	-	0.101	-	0.416
	-	(0.151)	-	(0.286)
Caucus Member	0.534	0.539	0.318	0.968
	(0.511)	(0.510)	(0.275)	(0.743)
Member Fixed Effects	Yes	Yes	Yes	Yes
Country Fixed Effects	Yes	Yes	Yes	Yes
N	7,210	7,210	1,740	1,740

Note: The first two regressions are on all senators in the data, and the rest two regressions, denoted by '1^{st} Term', are on all the first-term senators in the data. 721 observations were dropped due to collinearity when all representatives were regressed, and 1,109 observations were dropped for the same reason when only the first-term representatives were included in the analysis. Both Current and Past Contributions are indicator variables.

such contacts is $1,169, with a standard deviation of $1,690.4, these statistics do not show a significant difference compared to those of the reported donations in the FARA reports, which are $1,267.7 and $1,480.9 respectively. As can be seen in Table 3.16Contact Characteristics By Timely Contributionstable.3.16, there is no statistically significant difference in terms of contact type, contact level (member or staff), or lobbying issue (policy-relevant or not) between the contacts with and without these timely campaign contributions.

Table 3.16: Contact Characteristics By Timely Contributions

	Not Associated[a]	**Associated**	**Total**
Total # of Obs.	17,047	729	17,776
Meeting	4,182 (24.5%)[b]	181 (24.8%)	4,363 (24.5%)
Phone	3,030 (17.8%)	180 (24.7%)	3,210 (18.1%)
Member Contact	3,732 (21.9%)	199 (27.3%)	3,931 (22.1%)
Policy-relevant	8,669 (50.9%)	379 (52.0%)	9,048 (50.9%)
Potentially Initiative[c]	4,940 (28.9%)	184 (25.7%)	5,124 (28.8%)

Note: a. 'Timely contributions' refer to contributions made to a member of Congress by a lobbyist who represents a foreign country, as reported in the FARA reports, within the 30-day window of a contact to the member. b. The numbers in parentheses are the ratio of the relevant observations to the total observations of each column. c. A 'potentially initiative' contact by a foreign country to a member refers to the earliest contact among the contacts by the country to the member in the data.

We divide the members of Congress who have at least one contact from the foreign countries in the data during the period of the study into two groups: those who have at least one record of receiving campaign contributions by a lobbyist who represents a foreign country and granting a contact within the 30-day window of the contributions to the lobbyist or other lobbyists who represent the same country (in other words, those who are on the receiving any of a timely contribution), and those who have no such records. Table 3.17Member Characteristics By Timely Contributionstable.3.17 shows the summary statistics for each group respectively. In the group of the members who are associated the timely contributions, there are more senators, members with a leadership position or a chairmanship of a committee, and foreign relations committee members, compared to the other group.

Among the 611 members in the dataset, Rep. Steny Hoyer (D-MD05) and Rep. Donald Payne (D-NJ10) received the most contacts that are associated with the timely contributions

(from four distinct countries), followed by Sen. Chris Dodd (D-CT), Rep. Charles Rangel (D-NY15), Rep. James Clyburn (D-SC06), Sen. Byron Dorgan (D-ND), Rep. Roy Blunt (R-MO07), Sen. John McCain (R-AZ), Sen. Blanche Lincoln (D-AZ), Sen. Patrick Leahy (D-VT), and Sen. Norm Coleman (R-MN), all of whom received contacts from three distinct countries and timely contributions. Among these 11 members, 8 members hold either a leadership position or a committee chairmanship.

Table 3.17: Member Characteristics By Timely Contributions

	Didn't Receive[a]	**Received**	**Total**
Total # of Obs.	436	175	611
Senators	57 (13.1%)[b]	60 (34.3%)	117 (19.2%)
Democrats	236 (54.1%)	91 (52.0%)	327 (53.5%)
Recent Vote Share $\geq 60\%$	267 (61.2%)	114 (65.1%)	327 (53.5%)
Leadership and Committee Chair	23 (5.3%)	29 (16.6%)	52 (8.5%)
Economics Committee	95 (21.8%)	37 (21.1%)	132 (21.6%)
Foreign Relations Committee	48 (11.0%)	37 (21.1%)	85 (13.5%)
First-term Member	93 (21.3%)	20 (11.4%)	113 (18.5%)

Note: a. We divide the members of Congress in the data into two groups: those who have at least one record of receiving campaign contributions by a lobbyist who represents a foreign country and granting a contact within the 30-day window of the contributions to the lobbyist or other lobbyists who represent the same country and those who have no such records. b. The numbers in parentheses are the ratio of the relevant observations to the total observations of each column.

An interesting observation is that the contacts associated with timely contributions are not necessarily the first contacts. To see this, we look at whether or not a given contact by a country to a member of Congress appears the earliest in the data. The ratio of the earliest contacts is 28.9% with the standard deviation of 45.3% among the contacts without timely contributions and that statistics for the contacts with those contributions is 25.3% with the standard deviation of 43.4%. Relatedly, among 113 first-term members in the dataset, only 20 of them received any timely contributions. This implies that timely contributions are more likely to be made by lobbyists who already have access to members.

As for the countries, Table 3.18Countries Characteristics By Timely Contributionstable.3.18 shows the summary statistics regarding the countries among two groups: the countries which made at least one contact associated with the timely contributions and those that did not. Compared to the countries that did not make such contacts, countries that made timely

contributions are more likely to be democratic, to receive more U.S. foreign aid, and to have larger amounts of imports from and exports to the U.S. The United Arab Emirates made the largest number of timely contributions, 22, followed by Egypt (13), Turkey (13), and Libya (9).

Table 3.18: Countries Characteristics By Timely Contributions

	Didn't Make[a]	**Made**	**Total**
Total # of Obs.	54	33	87
Polity Measure ≥ 7 (%)	27.77 (45.21)[b]	48.48 (50.75)	35.63 (48.16)
US Aid ($M)	104.3 (204.8)	249.9 (615.1)	159.5 (414.3)
GDP per Capita ($K)	13.07 (20.98)	14.09 (14.17)	13.45 (18.64)
Import from US ($B)	2.83 (4.37)	25.55 (52.42)	12.09 (235.17)
Export to US ($B)	6.25 (9.86)	40.19 (86.52)	20.08 (57.73)
Import from US/GDP (%)	6.54 (10.22)	6.65 (14.54)	6.58 (12.08)
Export to US/GDP (%)	6.21 (7.16)	6.15 (8.80)	6.19 (7.82)
Lobbying Spending in 2008–10 ($M)[c]	209.0 (224.8)	896.8 (126.6)	469.9 (860.6)

Note: a. We divide the foreign countries in the data into two groups: those who have at least one record of having a contact to a member of Congress to whom its hired lobbyists gave campaign contributions within the 30-day window of the contact and thoes that do not. b. The mean values are shown outside parentheses, and the numbers in parentheses are the standard errors. c. The statistics are on the sum of the lobbying fees during the period of the study listed in the lobbying filings that record at least one contact to the Congress. Therefore, these sums are the same or less than the total lobbying expenditures of a country during the period.

3.4.3 What Determines the Amount of "Timely Contributions"?

The amount of "timely contributions" ranges from $30 to $25,000, with a mean of $1,170.0 and a standard deviation of $1,691.4. We study how the various characteristics of members and countries affect the amount of the timely contributions. To do this, we conduct a tobit analysis. Let $y_{i,j,t}$ denote the observed amount of timely contributions from country i to member j at time t. We consider the following model of how $y_{i,j,t}$ is determined:

$$y^*_{i,j,t} = \beta_0 + \beta_1 \mathbf{X}_j + \beta_2 \mathbf{Z}_i + \beta_3 MemberContact_{i,j,t} + \beta_4 CaucusMember_{i,j} + \epsilon_{i,j},$$

$$y_{i,j} = \begin{cases} y^*_{i,j} & \text{if } y^*_{i,j} > 0. \\ 0 & \text{otherwise.} \end{cases}$$

$\mathbf{X}_j$ is a vector of member j's characteristics, including his/her chamber, party, recent vote share received, leadership or committee chairmanship, committee membership, whether or not he/she is a first-term member, and whether or not he/she ran for an office in the 2010 elections. $\mathbf{Z}_i$ is a vector of country j's attributes, including its polity measure, GDP per capita, the amount of aid from the U.S., the amount of trade with the U.S., and whether or not the timely contribution and the contact were made by a lobbyist at a top 20 lobbying firm during the period of study. We also include two other variables: $MemberContact_{i,j,t}$ is an indicator variable that takes value 1 if the contact associated with the timely contribution is direct contact with the member and 0 otherwise; and $CaucusMember_{i,j}$ is an indicator variable that takes 1 if member j belongs to a congressional caucus on the region in which country j resides and 0 otherwise.

Table 3.19Amount of Timely Contribution Regression Analysistable.3.19 shows the results of both ordinary least squares and tobit regression analyses. Members with a leadership position or a committee chairmanship tend to receive more money than those without, and the average difference is estimated to be \$1,465 (158.5) in the Tobit analysis. Countries which receive more U.S. aid tend to pay a larger amount of timely contributions on average \$446.2 (171.0). When the associated contact is directly with the member, the timely contributions are larger by on average \$512.2 (139.9) compared to when the contact is to the staff. Lastly, when the intermediary, or the lobbyist, is at a top 20 lobbying firm, the amount of the timely contribution is lowered by \$521.6 (190.8) on average.

3.5 Conclusion

To our knowledge, this is the first empirical study to explore a large dataset of lobbying contacts. We combine this dataset with various complementary datasets from other sources on the attributes of the members of Congress, the foreign countries, and the lobbying firms in the data and on the history of campaign contributions by the lobbyists that represented the foreign countries. This rich dataset enables us to thoroughly examine the relationship

Table 3.19: Amount of Timely Contribution Regression Analysis

	OLS	**Tobit**
Constant	508.6**(239.0)	-6,438.7***(294.0)
House	-127.3(171.9)	-217.3(171.0)
Democrat	-376.4***(146.0)	-893.2***(128.7)
Recent Vote Share $\geq$ 60%	31.1(168.5)	49.4(145.8)
Leadership or Committee Chairmanship	1,096.4***(165.2)	1,465.0***(158.5)
Economics Committee	585.1***(200.2)	-335.3**(167.5)
Foreign Relations Committee	-167.4(155.7)	165.6(135.4)
First-Term Member	177.9(224.1)	186.7(201.5)
Running for Office in 2010	-14.6(166.5)	437.1***(160.0)
Polity Measure $\geq$ 7	412.9***(156.1)	24.4(137.7)
GDP per Capita in 2010 ($K)	23.1***(6.1)	38.0***(4.8)
US Aid in 2010 ($B)	342.8*(192.3)	446.2***(171.0)
Import from US in 2010 ($B)	-14.0***(4.9)	1.3(5.8)
Export to US in 2010 ($B)	5.8(3.7)	-3.8(4.6)
Import from US/GDP in 2010 (%)	-17.9***(6.6)	-0.91(7.4)
Export to US in/GDP 2010 (%)	61.0***(11.5)	33.1***(12.2)
Via a Top 20 Lobbying Firm	-246.0(226.2)	-521.6***(190.8)
Member Contact	71.4(141.2)	512.2***(132.9)
Regional/Country Caucus Member	-284.4*(172.8)	355.4**(154.2)

Note: Numbers in parentheses are standard errors. The OLS regression is based on 705 observations and the Tobit regression is on 17,018 observations.

between money and access.

We find that more democratic countries pay less compared to their less democratic counterparts, holding constant other country and lobbying firm attributes. This trend is robust to any sub-sample of the data by the nature of the contacts associated with each lobbying filing: those with no contacts, those with contacts but without no congressional ones, and those with congressional contacts. We also find that top lobbying firms charge significant lobbying fee premiums when they engage in contacting members, and this premium becomes more salient when their clients are less democratic foreign countries as compared to foreign democracies.

Campaign contributions and contacts appear to be positively correlated. However, when controlling for both member and country attributes, we find that the correlations become more nuanced. For example, past contributions are a much stronger predictor of current contacts than concurrent contributions especially for the House members. Furthermore, for the Senators and the first-term members, the correlations between contributions and contacts are very weak.

To further study the relationship between money and access, we look at the chronological sequence of contacts and campaign contributions. In particular, we find that about 4% of the contact records in the data are associated with campaign contributions within a 30-day window of that contact. Such contributions are more frequently given to Senators and the members with a leadership position or a committee chairmanship. Furthermore, the contacts associated with such contributions do not appear to initiate contacts. These exchanges are often made among the lobbyists and the legislators who have had previous contacts. Relatedly, the amount of such contributions are significantly less when they are handed by lobbyists at top lobbying firms. These findings may suggest the importance of a long-term relationship that is maintained potentially through money.

A promising direction for future research is to exploit the dynamic nature of this data. One can study the chronological ordering of lobbying contacts and campaign contributions, and explore how it relates to political networks and informational cascades. This analysis

may shed light on the flow of information among policy-makers and the way that access is obtained and sustained. Furthermore, by taking a dynamic approach, one can also study how the lobbying strategies evolve or change as a particular issue progresses or regresses in the political process.

A | Appendix to Chapter 1: Proofs of the Propositions

A.1. Proof of the Proposition 1.

The first order condition of 1.3Set Upequation.1.3.3 with the respect to e_1^A is

$$\begin{aligned}\alpha_1\beta\frac{\partial\Pi(e^A)}{\partial e_1^A}+\bar{P}_1(e^p,\alpha)(1-\beta)\frac{\partial\Pi(e^A)}{\partial e_1^A}-\frac{\partial c_1^A}{\partial e_1^A}=0\\ \rightarrow \alpha_1\beta+\bar{P}_1(e^p(e^A),\alpha)(1-\beta)-ce_1^A=0\\ \rightarrow e_1^{*A}=\frac{\alpha_1\beta+\bar{P}_1(1-\beta)}{c}\end{aligned} \tag{A.1}$$

With the same logic, $e_2^{*A}=\frac{\alpha_2\beta+\bar{P}_2(1-\beta)}{c}$. Given (e_1^{*A},e_2^{*A}), solve the optimization problem with respect to e_j^P. The first order condition of the equation 1.3Set Upequation.1.3.3 with respect to e_1^P is

$$\frac{\partial P_1(e^P,\alpha)}{\partial e_1^P}(1-\beta)\bar{\Pi}(e^A)-\frac{\partial c_1^P}{\partial e_1^P}=0 \tag{A.2}$$

The derivative of P_1 with respect to e_1^P is as follows:

$$\frac{\partial P_1(e^P,\alpha)}{\partial e_1^P}=\frac{\alpha_1\alpha_2e_2^P}{(e_1^P\alpha_1+e_2^P\alpha_2)^2} \tag{A.3}$$

Substituting A.3Appendix to Chapter 1: Proofs of the Propositionsequation.A.0.3 into

A.2Appendix to Chapter 1: Proofs of the Propositionsequation.A.0.2 results in[1]

$$\frac{\alpha_1\alpha_2 e_2^P}{(e_1^P\alpha_1 + e_2^P\alpha_2)^2}(1-\beta)\bar{\Pi}(e^A) - ce_1^P = 0 \tag{A.4}$$

With the same logic, firm 2's optimization problem solves

$$\frac{\alpha_1\alpha_2 e_1^P}{(e_1^P\alpha_1 + e_2^P\alpha_2)^2}(1-\beta)\bar{\Pi}(e^A) - ce_2^P = 0 \tag{A.5}$$

Solving the pair of equations A.4Appendix to Chapter 1: Proofs of the Propositionsequation.A.0.4 and A.5Appendix to Chapter 1: Proofs of the Propositionsequation.A.0.5 yields

$$e_1^{*P} = e_2^{*P} = \sqrt{\frac{\alpha_1\alpha_2(1-\beta)\bar{\Pi}(e^A)}{c}}$$

A.2. Proof of the Proposition 2

Given $P_1(\bar{e}^P, \alpha_j)$ is defined as

$$P_1(\bar{e}^P, \alpha_) = \frac{e_1^P(e^A)\alpha_1}{e_1^P(e^A)\alpha_1 + e_2^P(e^A)\alpha_2} \tag{A.6}$$

And its derivative with the respect to e_1^A is

$$\frac{\partial P_1}{\partial e_1^A} = \frac{\alpha_1\alpha_2(e_1^{P'}e_2^P - e_1^P e_2^{P'})}{(e_1^P\alpha_1 + e_2^P\alpha_2)^2} \tag{A.7}$$

, where $e_1^{P'} = \frac{\partial e_1^P}{\partial e_1^A}$ and $e_2^{P'} = \frac{\partial e_2^P}{\partial e_1^A}$. Take the first order condition of 1.3Set Upequation.1.3.3 with respect to e_1^A:

[1] e_j^P does not have a clean, simple solution.

$$\alpha_1\beta\frac{\partial\Pi(e^A)}{\partial e_1^A}+\frac{\partial P_1(\bar{e}^P(e^A),\alpha)}{\partial e_1^A}(1-\beta)\Pi(e^A)+P_1(\bar{e}^P,\alpha)(1-\beta)\frac{\partial\Pi(e^A)}{\partial e^A}-c\Big\{\frac{\partial e_1^P}{\partial e_1^A}+e_1^A\Big\}=0 \tag{A.8}$$

Plug A.6Appendix to Chapter 1: Proofs of the Propositionsequation.A.0.6 and A.7Appendix to Chapter 1: Proofs of the Propositionsequation.A.0.7 into A.8Appendix to Chapter 1: Proofs of the Propositionsequation.A.0.8 and we get:

$$\alpha_1\beta\frac{\partial\Pi(e^A)}{\partial e_1^A}+\frac{\alpha_1\alpha_2(e_1^{P'}e_2^P-e_1^Pe_2^{P'})}{(e_1^P\alpha_1+e_2^P\alpha_2)^2}(1-\beta)\Pi(e^A)+P_1(e^P,\alpha)(1-\beta)\frac{\partial\Pi(e^A)}{\partial e_1^A}-c\Big[\frac{\partial e_1^P}{\partial e_1^A}+e_1^A\Big]=0 \tag{A.9}$$

Given $\Pi(e^A)=e_1^A+e_2^A$, equation A.9Appendix to Chapter 1: Proofs of the Propositionsequation.A.0.9 is further simplified as

$$\alpha_1\beta+(1-\beta)\Big[\frac{\alpha_1\alpha_2(e_1^{P'}e_2^P-e_1^Pe_2^{P'})}{(e_1^P\alpha_1+e_2^P\alpha_2)^2}\Pi(e^A)+P_1(e^P,\alpha)\Big]-c\Big[\frac{\partial e_1^P}{\partial e_1^A}+e_1^A\Big]=0 \tag{A.10}$$

Denote the ex ante lobbying effort that satisfies equation A.10Appendix to Chapter 1: Proofs of the Propositionsequation.A.0.10 as e_j^{*A} and it is derived as

$$e_1^{*A}=\frac{\alpha_1\beta+(1-\beta)P_1(e^P,\alpha)}{c}+\frac{1-\beta}{c}\Big[\frac{\alpha_1\alpha_2(e_1^{P'}e_2^P-e_1^Pe_2^{P'})}{(e_1^P\alpha_1+e_2^P\alpha_2)^2}\Pi(e^A)-c\frac{\partial e_1^P}{\partial e_1^A}\Big] \tag{A.11}$$

B | Appendix to Chapter 1: A Description of the Bill Selection and The Process of Matching Lobbying Reports

In this study, I select bills that originate from the House and are considered on the House floor from the 107th through the 111th Congress in the U.S. There are 163 bills originated from the Senate reached the House floor and these bills are dropped from the analysis. There are 3,202 different bills originated from the House and reached the House floor through five different congresses. A legislative proposal that reaches the floor takes one of four forms: bills (H R), joint resolutions (H J RES), concurrent resolutions (H CON RES), or resolutions (H RES). A concurrent resolution must be adopted by both Houses, but it is not sent to the president for a signature and therefore does not have the force of law.[1] A resolution requires neither passage by the other chamber nor approval by the president, and it does not have the force of law.[2] Therefore I exclude the concurrent resolutions and resolutions from the legislative proposals. Most legislative proposals before Congress are in the form of bills and are designated by "H.R." A joint resolution, designated by "H.J.RES" requires the approval of both houses and the signature of the president, just as a bill does, and has the force of law if approved. No practical difference exists between a bill and a joint resolution. Therefore, bills designated by either "H.R." or "H.J.RES" on the House floor are considered.

[1] A concurrent resolution is used to fix the time for adjournment of a Congress. It is also used as a vehicle for expressing the sense of Congress on various foreign policy and domestic issues (Oleszek, 2011).

[2] Many resolutions deal with the rules or procedures. They are also used to express the sentiments of a single house, such as condolences to the family of a deceased family, or to commit on foreign policy or executive business (Oleszek, 2011).

In total, there are 1,487 bills designated by H.R. or H.J.RES in five congresses.[3]

Bills are considered under different rules because many bills and resolutions are relatively routine while others provoke more controversies among members. Some bills are considered under the suspension of the rules to expedite action on relatively non-controversial measures (Carr, 2005)

Bills under the order of "On Passage" are the most controversial and significant legislative activities and special rules are assigned to define the length of the debate and the scope of the amendment. Among 1,487 bills, 584 bills were considered under the question of "On Passage."[4]

For these 584 bills, there are numerous activities in both the House and the Senate, mainly the amendment process, before final passage voting. In these cases, I ignore these other activities and focus on the final passage voting. For example, if a bill has been amended five times and voted on the question under "On Passage," I drop the data on amendment process and keep the data on "On Passage" voting. This is used to set the threshold of the House voting. After the House passes the bill, it moves to the Senate and the Senate takes an action. If the Senate passes the bill as well, a conference committee is formed to reconcile the differences between the House and the Senate and if the conference committee agrees upon the bill, that bill is sent to each house for a final vote. If both chambers pass the bill, it is sent to the president to sign into the law. Among 584 bills, only 174 bills across five congresses became the laws. 410 bills were passed the first House floor vote but they failed to pass the Senate floor. For bills that passed the both Chambers, I record the conference vote date to use it as a threshold of the final congressional action. This voting date divides

[3]More specifically, #H.R. = 1,428, #H.J.RES = 59, #H.RES = 1,398, #H.CON.RES = 317.

[4]Bills under the order of "On motion to suspend the rules and pass" or "Table motion to reconsider" are dropped since they are usually non-controversial bills and provides for a maximum of 40 minutes of debate on the motion, and it precludes all floor amendments. Passage of a measure suspension of the rules requires a two-thirds vote of the members voting (Carr, p.2). But I present how the pattern of lobbying timing is different for these types of bills compared to lobbying patterns on controversial bills those are considered for the main analysis in the following section. I drop the legislative proposals that did not receive any committee referrals or bills proposed by delegates from DC, VI, PR, GU, and MP. The bills vetoed by the president are also dropped. There are 7 bills that were vetoed by the president (1 in the 109th and 6 in the 110th Congress). Bill not lobbied at all are also dropped.

the lobbying activities into the bill passage stage and the implementation stage. For bills that became public laws, I match the lobbying reports that specify the bill numbers. Figure B.1A Description on the Bill Selection and Matching Bills and Lobbying Reportsfigure.B.1 summarizes the procedures of the bill selection and matching between bills and lobbying reports.

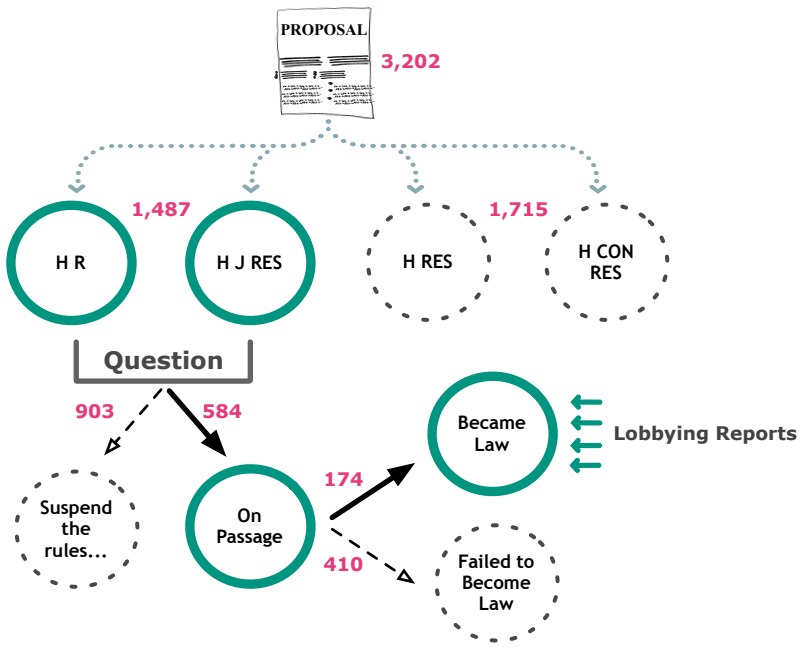


Figure B.1: A Description on the Bill Selection and Matching Bills and Lobbying Reports

Figure B.2Bill Composition, given they reach the House Floorfigure.B.2 shows the bill composition, conditional on that bills are considered on the House floor. Among the 3,202 bills that reached the House floor, 46% has no enforcement power (H.RES or H.CON.RES). 36% are under enforcement but with no controversy which means the bills passed with questions such as the "suspend the rules and pass." 44% (or 16% of entire bills) under this category became the law. 13% has enforcement power and are considered under the question of "On Passage" but they fail to become laws. 5% of bills has enforcement power, considered under the question of "On Passage" and passed the both the House and the Senate and the president signed into the law. These are the most important and controversial bills and my

analysis focuses on these bills. In total, the bills became the laws are 21%.

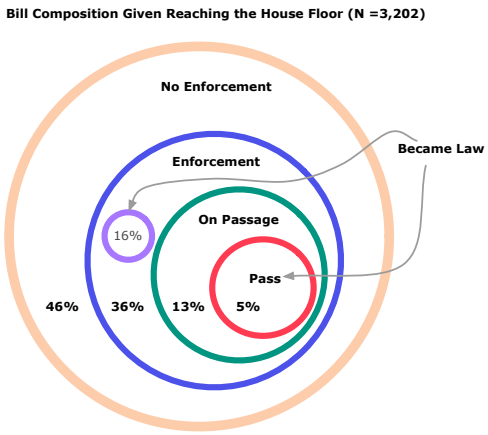


Figure B.2: Bill Composition, given they reach the House Floor

When I match the lobbying report into each bill, there is an issue. Some lobbying reports mention a bill multiple times under different issue areas. For example, a company called *1-800 Contacts* submitted a lobbying report through a lobbying firm Crowell & Moring in the second quarter of 2010. In this report, it mentioned that it lobbied for the bill H.R.3590 both under the issue of Taxation/Internal Revenue Code (TAX) and Health Issues (HCR). Raw data from *opensecrets.org* records this as a separate entry but I consider this as a single attempt to influence H.R. 3590 because this comes from the same lobbying report filed by the same registrant. If a different registrant (lobbying firms or in-house lobbyists) filed a report at the same time and it mentioned the same bill either under the same issue or different issue, they are treated separately because lobbying activities are done by different lobbying groups.

There are 633,731 unique lobbying reports from 1998 through 2012. Among them, 54%(=342,215) did not specify bill names. 46%(=291,516) of the reports specify bill names in their lobbying reports. If we divide them into further, 34% (=216,661) specify either bills originated from the Senate or bills originated from the House but did not reach the House

floor. 12% (= 74,855) specify the bills that reached the House floor. See the left diagram in figure B.3Lobbying Reports and the Frequency for Different Types of Billsfigure.B.3.

Some of the 74,855 lobbying reports mention at least one bill that reached the floor. In this case, that lobbying report has multiple entries in the data because the lobbying report - bill matching is unique for each observation. The total number of lobbying report for all bills that reached the House floor is 174,320. Among 174,320 lobbying reports that mentioned the House bills that are reaching the House floor, 98% (= 171,008) lobbied on bills that have an enforcement power (H.R. or H J RES). Only 2% (= 3,312) lobbied on bills that have no enforcement power (H RES, H CON RES). See the right diagram in figure B.3Lobbying Reports and the Frequency for Different Types of Billsfigure.B.3.

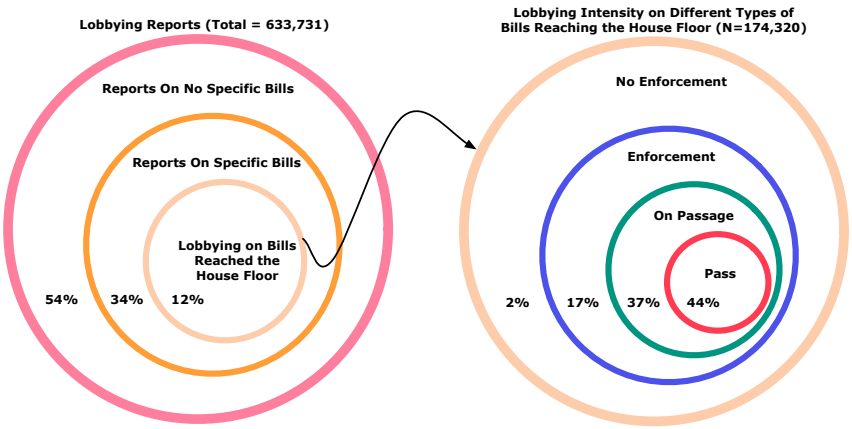


Figure B.3: Lobbying Reports and the Frequency for Different Types of Bills

Do we see different lobbying patterns across different types of bills? Since I only consider the bills with enforcement and under the question of "On Passage" in the main analysis, one may wonder the representativeness of the sample. To show that ex post lobbying is a prevalent pattern for other types of bills as well, I compare the lobbying patterns across different types of bills. Since some bills do not require the president to sign them into the law or some failed to pass the Senate, the only common criteria across different types of

bills that are reaching the floor is the date of the first House floor voting. Therefore I use this date as a threshold to determine ex ante and ex post lobbying pattern across different types of bills. If we set the threshold at the first House voting date, 28.77% is ex ante lobbying and 71.23% is ex post lobbying (all cases). Among clear cases, 11.85% is ex ante and 88.15% is ex post. I divide the lobbying patterns according to different types of bill. Table B.1Lobbying Patterns for Different Types of Billstable.B.1 presents the details of the lobbying patterns for different types of bills, for clear cases and for all cases respectively.

Table B.1: Lobbying Patterns for Different Types of Bills

	Clear Cases			**All Cases**		
Bill Type	Ex Ante(%)	Ex Post(%)	#Reports	Ex Ante	Ex Post	#Reports
Type I	23.61	76.39	1,974	41.91	58.09	3,312
Type II	16.31	83.69	20,311	29.74	70.26	29,057
Type III	14.89	85.11	45,381	33.31	66.69	65,310
Type IV	7.18	92.82	53,734	23.97	76.03	76,641
Total	11.85	88.15	121,400	28.77	71.23	174,320

Note: Type I = no enforcement & no controversy, Type II = enforcement & no controversy, Type III = enforcement & controversy & failed to became law, Type IV = enforcement & controversy & became law. Threshold = First House Floor Voting.

Figure B.4Ex Post Lobbying Ratio for Different Types of Bills When We Set the Threshold at the First House Floor Votingfigure.B.4 shows the different ex post lobbying ratio across different types of bills, both in all cases and in clear cases only. The numbers show that although I only focus a small subset of bills, ex post lobbying is common across all different types of bills.

As a final robustness check, I present the lobbying pattern for all bills that became the law. As Figure B.5A Diagram of the Composition of Bills that Reached the House Floor between the 107th and the 111th Congressfigure.B.5 shows, there are two types of bills that became the law: bills under the question of "On Passage" and bills under the question of non-"On Passage" such as "On Motion to Suspend the Rules and Pass." In the main analysis, I only include 174 bills under the "On Passage" question since they are the most important and controversial bills. But there are additional 395 bills that became the law. In this

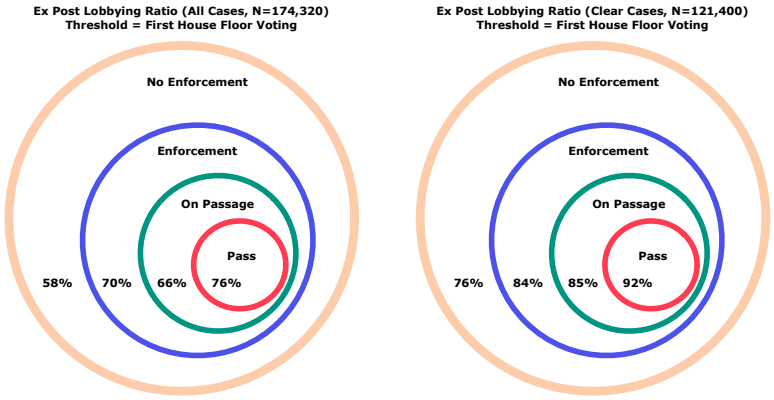


Figure B.4: Ex Post Lobbying Ratio for Different Types of Bills When We Set the Threshold at the First House Floor Voting.

section, I include all bills that became the law and investigate how the lobbying patterns look like.

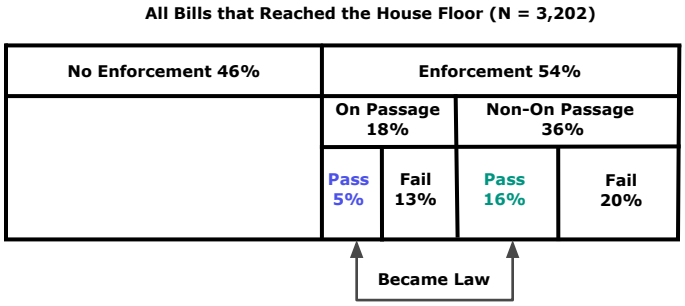


Figure B.5: A Diagram of the Composition of Bills that Reached the House Floor between the 107th and the 111th Congress.

Among the 569 bills that finally became the law, 196 bills were not targeted by any lobbying activities. 373 bills received at least one lobbying activity and 174 bills that passed the Congress under the question of "On Passage" are included in the main analysis. There are 199 bills that became the law but are not included in the main analysis because they did not pass the Congress under the question of "On Passage." For each bill, I match the lobbying reports. In total, there are 16,579 lobbying activities (lobbying report - bill combination)

for the 199 bills that are not included in the main analysis and there are 76,641 lobbying activities for the 174 bills that are included in the main analysis. Table B.2Summary Statistics of Bills that Became Laws and the Corresponding Lobbying Activitiestable.B.2 shows the summary statistics of bills and lobbying activity.

Table B.2: Summary Statistics of Bills that Became Laws and the Corresponding Lobbying Activities

Congress	N1	N2	N3	N4
107^{th}	105	54	1,420	27
108^{th}	113	58	2,206	38
109^{th}	98	71	10,401	146
110^{th}	113	94	29,380	313
111^{th}	140	96	49,813	519
Total	569	373	93,220	250

Note: N1 = Number of bills that became law , N2 = Number of bills that received lobbying, N3 = Number of total lobbying reports , N4 = Average lobbying reports per bill.

Using the same criteria, I determine the timing of each lobbying activity setting the threshold at the final conference voting and Table B.3Summary Statistics on Lobbying Type Based on the Frequency of Bill-Lobbying Report Matchingtable.B.3 shows the result. Ex post lobbying is still prevalent among the bills that I did not include in the main analysis.

Table B.3: Summary Statistics on Lobbying Type Based on the Frequency of Bill-Lobbying Report Matching

	Clear Cases			**All Cases**		
On Passage	Ex Ante(%)	Ex Post(%)	N1	Ex Ante	Ex Post	N2
No	42.52	57.48	9,982	53.26	46.74	16,579
Yes	56.37	43.63	46,808	62.68	37.32	76,641
Total	53.93	46.07	56,790	61.01	38.99	93,220

Note: N1 = Total number of lobbying reports among clear cases, N2 = Total number of lobbying reports among all cases. Threshold = Final Congress Voting. "On Passage" means whether the bill was passed under the question of "On Passage" or not

C | Appendix to Chapter 1: Bill Introducing Timing, Duration of Consideration, and Ex Post Lobbying Ratio

Figure C.1 and Figure C.2 show the relationship between the timing of bill introduction within a Congress and the ex post lobbying ratio for 174 bills under the question of “On Passage" and for all bills that became the law, respectively. There is no clear relationship in each case.

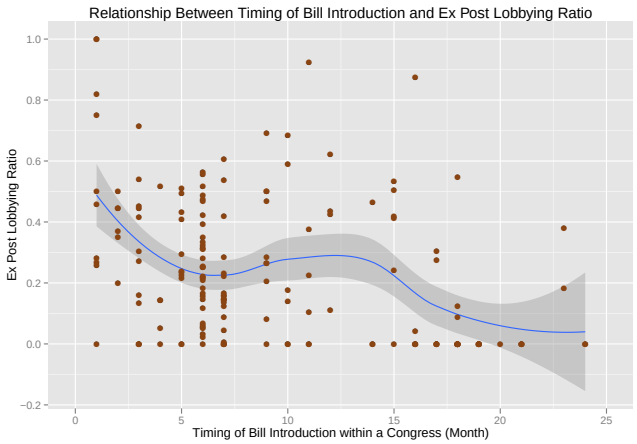


Figure C.1: The Relationship Between The Month A Bill Introduced and Ex Post Lobbying Ratio for the Bills under the question of “On Passage."

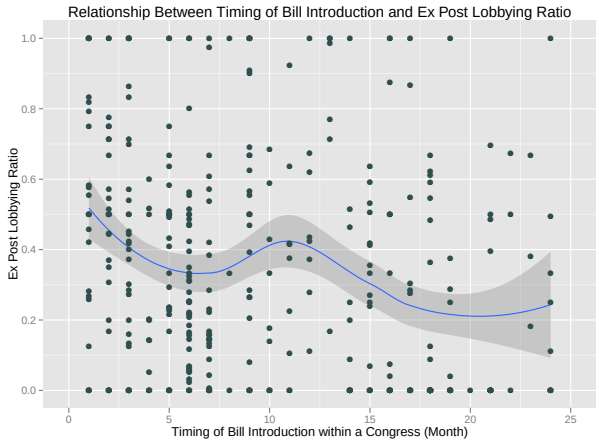


Figure C.2: The Relationship Between The Month A Bill Introduced and Ex Post Lobbying Ratio for All Bills that Became the Law.

Figure C.3 and Figure C.4 show the relationship between the duration of bill consideration (from the introduction to the president's sign) and the ex post lobbying ratio for 174 bills under the question of "On Passage" and for all bills that became laws, respectively. Again, there is no clear relationship in each case. It indicates that ex post lobbying ratio is not a function of just timing of bill introduction or the span of consideration on the bills.

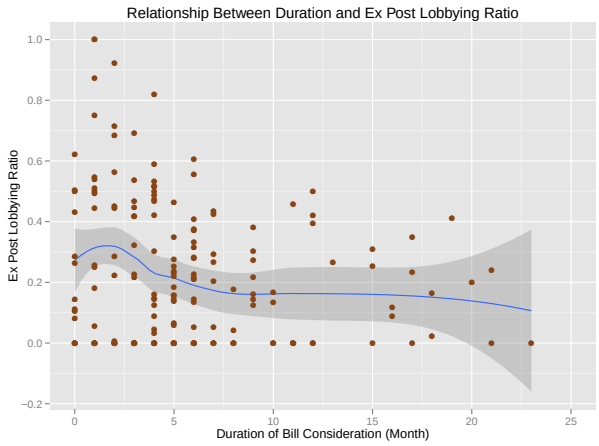


Figure C.3: The Relationship Between Duration and Ex Post Lobbying Ratio for the Bills under the question of "On Passage."

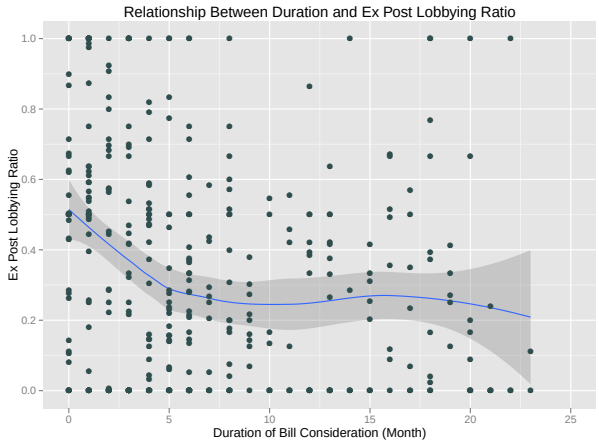
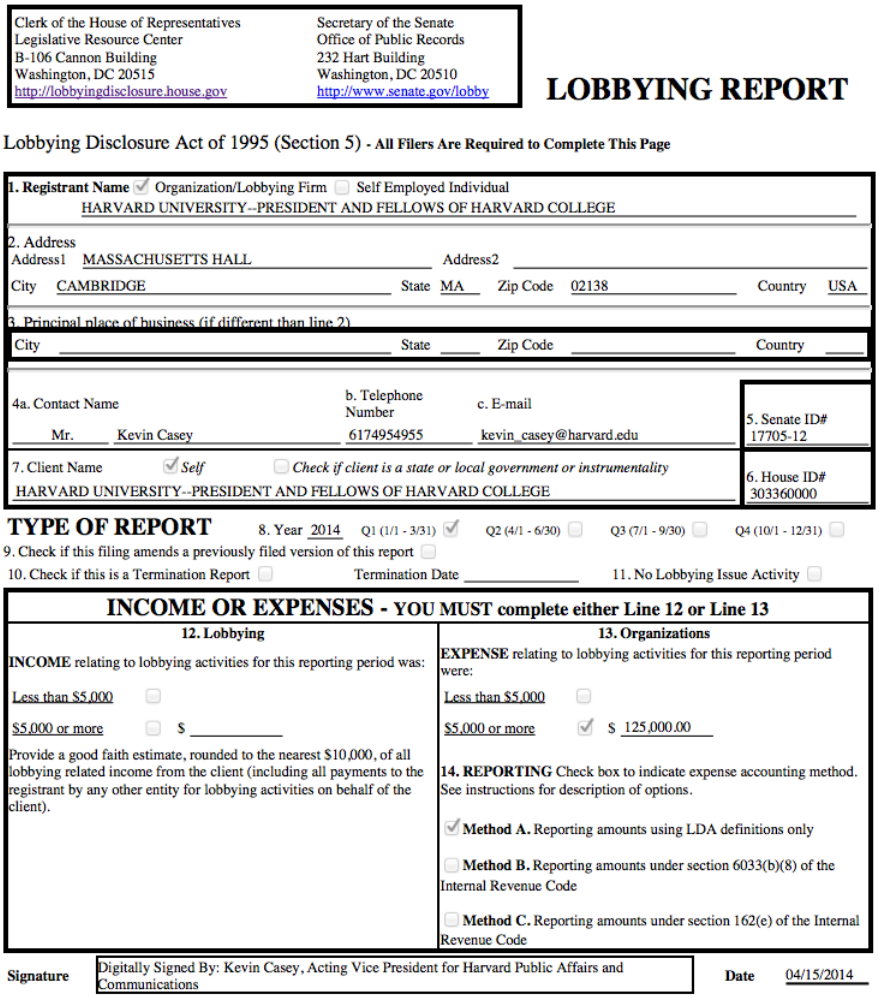


Figure C.4: The Relationship Between Duration and Ex Post Lobbying Ratio for all Bills that Became the Law.

D | Appendix to Chapter 1: An Example of A Lobbying Report (Harvard University)



Clerk of the House of Representatives
Legislative Resource Center
B-106 Cannon Building
Washington, DC 20515
http://lobbyingdisclosure.house.gov

Secretary of the Senate
Office of Public Records
232 Hart Building
Washington, DC 20510
http://www.senate.gov/lobby

LOBBYING REPORT

Lobbying Disclosure Act of 1995 (Section 5) - **All Filers Are Required to Complete This Page**

1. Registrant Name ☑ Organization/Lobbying Firm ☐ Self Employed Individual
HARVARD UNIVERSITY--PRESIDENT AND FELLOWS OF HARVARD COLLEGE

2. Address
Address1 MASSACHUSETTS HALL Address2
City CAMBRIDGE State MA Zip Code 02138 Country USA

3. Principal place of business (if different than line 2)
City State Zip Code Country

4a. Contact Name: Mr. Kevin Casey
b. Telephone Number: 6174954955
c. E-mail: kevin_casey@harvard.edu
5. Senate ID# 17705-12

7. Client Name ☑ *Self* ☐ *Check if client is a state or local government or instrumentality*
HARVARD UNIVERSITY--PRESIDENT AND FELLOWS OF HARVARD COLLEGE
6. House ID# 303360000

TYPE OF REPORT 8. Year 2014 Q1 (1/1 - 3/31) ☑ Q2 (4/1 - 6/30) ☐ Q3 (7/1 - 9/30) ☐ Q4 (10/1 - 12/31) ☐
9. Check if this filing amends a previously filed version of this report ☐
10. Check if this is a Termination Report ☐ Termination Date _____ 11. No Lobbying Issue Activity ☐

INCOME OR EXPENSES - YOU MUST complete either Line 12 or Line 13

12. Lobbying
INCOME relating to lobbying activities for this reporting period was:
Less than $5,000 ☐
$5,000 or more ☐ $ _____
Provide a good faith estimate, rounded to the nearest $10,000, of all lobbying related income from the client (including all payments to the registrant by any other entity for lobbying activities on behalf of the client).

13. Organizations
EXPENSE relating to lobbying activities for this reporting period were:
Less than $5,000 ☐
$5,000 or more ☑ $ 125,000.00

14. REPORTING Check box to indicate expense accounting method. See instructions for description of options.
☑ **Method A.** Reporting amounts using LDA definitions only
☐ **Method B.** Reporting amounts under section 6033(b)(8) of the Internal Revenue Code
☐ **Method C.** Reporting amounts under section 162(e) of the Internal Revenue Code

Signature Digitally Signed By: Kevin Casey, Acting Vice President for Harvard Public Affairs and Communications **Date** 04/15/2014

Figure D.1: Harvard University's 2014 First Quarter Lobbying Report Page 1

LOBBYING ACTIVITY. Select as many codes as necessary to reflect the general issue areas in which the registrant engaged in lobbying on behalf of the client during the reporting period. Using a separate page for each code, provide information as requested. Add additional page(s) as needed.

15. General issue area code EDU

16. Specific lobbying issues

Student aid issues specifically HEA reauthorization, Direct Lending, Pell Grant funding, Stafford loans, college cost, accountability, disclosures, STEM education, Perkins Loans, graduate education, veterans education, distance education, and international education issues.

17. House(s) of Congress and Federal agencies ☐ Check if None

U.S. HOUSE OF REPRESENTATIVES, U.S. SENATE, Education - Dept of, White House Office

18. Name of each individual who acted as a lobbyist in this issue area

First Name	Last Name	Suffix	Covered Official Position (if applicable)	New
Suzanne	Day			☐
Jon	Groteboer			☐

19. Interest of each foreign entity in the specific issues listed on line 16 above ☑ Check if None

Figure D.2: Harvard University's 2014 First Quarter Lobbying Report Page 2

E | Appendix to Chapter 2: TRAINS Data Description

Table E.1: TRAINS Data Variables Descriptions

Variable	**Description**
Importer	Importer country code. U.S. country code is 20
HS6	Six-digit Harmonized System code
Tradeval	value of U.S. imports in thousands of U.S. dollars
Spectar	Number of HS codes for which a specific tariff is present
Price	Number of HS subsectors subject to a Price NTB
Quant	Number of HS subsectors subject to a Quantity NTB
Quality	Number of HS subsectors subject to a Quality NTB
Allntm	Number of HS subsectors subject to at least 1 Price, Quant, Quality NTB
Nlines	the number of subsectors within each six-digit HS sector
Tariff	Ad valorem tariff (A negative value indicates missing)
Year	Year for the NTBs and Tariff data (1993, 1994, 1996, 1999)

Table E.2: Summary Statistics of TRAINS Data in HS6 Level

Variable	Obs.	Mean	Std.Dev	Min	Max
tradeval	20262	148797.5	1176422	0	5.30e+07
spectar	20262	.2675452	.9515855	0	28
price	20262	.1459382	.6372392	0	22
quant	20262	.2124173	.9817886	0	38
quality	20262	.1612378	1.032043	0	50
allntm	20262	.4499062	1.44208	0	50
nlines	20262	1.878294	2.126402	1	50
tariff	20262	3.658926	7.570892	0	272.838

Figure E.1Raw Data on the Relationship Between Tariff and NTB Over Time. HS 6 Level. Number of Observation is 26202. The vertical and the horizontal lines indicate mean

Table E.3: Summary Statistics of TRAINS Data in HS4 Level

Variable	Obs.	Mean	Std.Dev	Min	Max
tradeval	4058	154140.5	1196888	0	5.30e+07
price	4058	.1558319	.5150529	0	6.22222
quant	4058	.2197418	.93927	0	18.4
quality	4058	.1839754	1.008904	0	30.8
allntm	4058	.499071	1.367766	0	30.8
nlines	4058	2.062864	1.843605	1	30.8
tariff	4058	3.440388	6.355485	0	255.299

Table E.4: Summary Statistics of TRAINS Data in HS2 Level

Variable	Obs.	Mean	Std.Dev	Min	Max
tradeval	384	123949.7	246792.4	4977.56	2000000
price	384	.1227167	.3105551	0	2.71429
quant	384	.2380666	.6873295	0	5.96
quality	384	.1924223	.7607455	0	9.2963
allntm	384	.4969253	.9782777	0	9.2963
nlines	384	1.971809	1.069223	1	9.2963
tariff	384	3.44666	6.606458	0	101.813

Tariff and mean NTBsfigure.E.1 shows the scatter plot of raw data in terms of tariff and Non-tariff barriers. There are significant variations in terms of how they are protected. The following histogram in Figure E.2Industry Frequency in High Tariff and High NTB. This graphic does not include outliers which show a significantly higher Tariff (e.g., Tobacco) and NTB (e.g., Dairy Product)figure.E.2 shows the distribution of tariff and Non-tariff barriers among the highly protected items with only one type of protection at HS2 level.

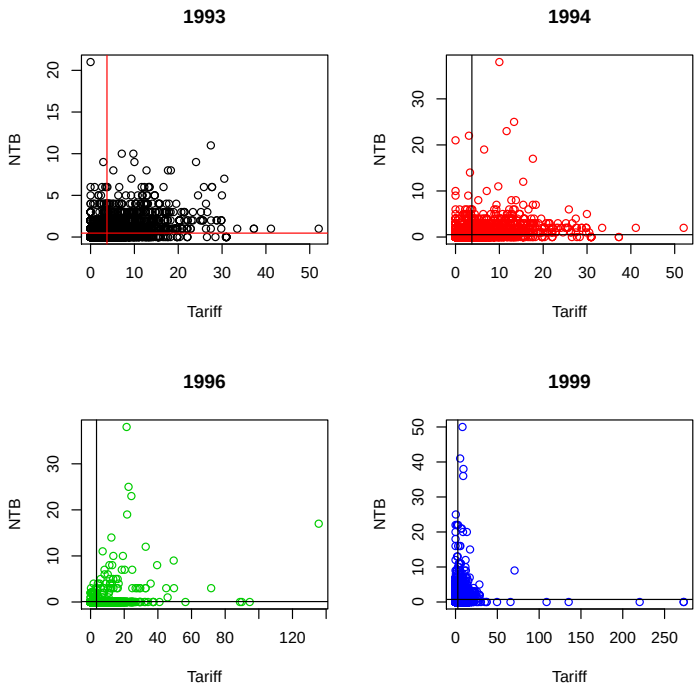


Figure E.1: Raw Data on the Relationship Between Tariff and NTB Over Time. HS 6 Level. Number of Observation is 26202. The vertical and the horizontal lines indicate mean Tariff and mean NTBs.

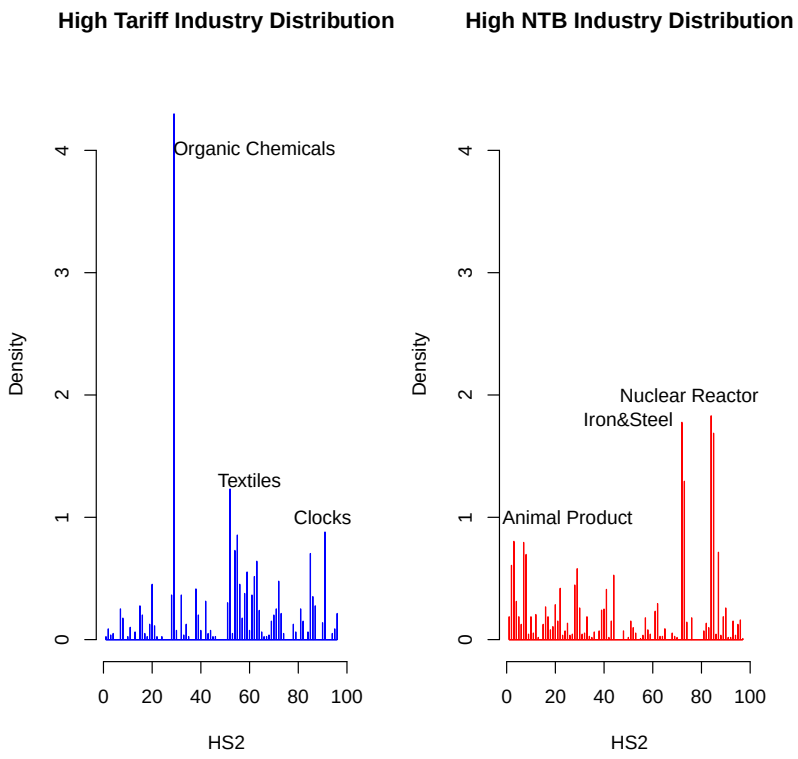


Figure E.2: Industry Frequency in High Tariff and High NTB. This graphic does not include outliers which show a significantly higher Tariff (e.g., Tobacco) and NTB (e.g., Dairy Product).

F | Appendix to Chapter 2: Campaign Contribution Data Description

Table F.1: Summary Statistics of (mean) PAC Contribution Data Across Years

Year	Contribution to Democrat (A)	Contribution to Republican (B)	A/(A+B)
1992	210674.3	104862.5	60.51
	(411299.3)	(199508)	(26.414)
1994	101120.7	236313	62.49
	(201438.6)	(445592.2)	(25.13)
1996	174330.2	213623 .2	37.87
	(358943.8)	(388389.7)	(26.65)
1998	216335.7	204373.5	41.08
	(382185.5)	429161.2)	(27.38)

Note: Data is organized at the RealCode level, which is the standard five character code identifying the donor's industry or ideology. Numbers in parenthesis means a standard deviation. Unit is U.S. dollars. Data is obtained from opensecrets.org.

G | Appendix to Chapter 3: Foreign Countries Summary Statistics

Table G.1: List of Foreign Countries without Congressional Contacts and their Lobbying Expenditures

Country	**$K**[a]	**Country**	**$K**[a]
Australia	4,453.2	Italy	1,197.7
Austria	3,389.9	Jamaica	4,131.6
Bahamas	25,654.6	Kosovo	0.0
Bahrain	123.8	Lebanon	0.0
Barbados	8,541.4	Luxembourg	91.1
Belgium	3,496.5	Monaco	4,528.5
Benin	319.2	Netherlands	4,708.8
Brazil	5,274.9	New Zealand	0.0
British Virgin Islands	2,683.8	Norway	21.1
Burma	0.0	Romania	527.8
Chad	0.0	Rwanda	390
Chile	103.5	Saint Lucia	71.5
Commonwealth of Dominica	0	Saint Vincent and the Grenadines	481.6
Croatia	65.8	Scotland	7,751.7
Curacao	246.6	Sierra Leone	225.3
Czech Republic	720.0	Singapore	12,924.8
Democratic Republic of Congo	0.0	South Africa	3,814.5
Denmark	1,025.0	Spain	465.1
Djibouti	0	Sweden	1,915.1
El Salvador	143.3	Tanzania	912.4
Estonia	296.1	Tibet	1,437.3
Gibraltar	165.0	Tunisia	315.0
Greece	87.1	Ukraine	63.7
Guyana	0.0	Uzbekistan	0.9
Hungary	142.5	Vanuatu	4,353.3
Iceland	3,255.0	West Indies	346.9
Indonesia	21.4	Western Sahara	16.4
Iran	12.0	Zimbabwe	0.0
Israel	16,352.0		

Note: a. Total amount of lobbying expenditures spent by the government entities of the country in 2008–2010 (thousand US dollars).

Table G.2: List of Foreign Countries without Congressional Contacts and their Contact Frequencies and Lobbying Expenditures

Country	**N1**[a]	**N2**[b]	**$K**[c]	**Country**	**N1**[a]	**N2**[b]	**$K**[c]
Afghanistan	49	12	536.8	Macedonia	130	78	472.6
Albania	53	30	1,181.5	Malaysia	36	21	6,472.5
Algeria	137	23	1,259.9	Malta	16	15	88.0
Angola	2	2	2,612.0	Marshall Islands	25	12	23,030.0
Aruba	80	36	778.8	Mauritius	78	31	156.8
Azerbaijan	424	131	2,384.0	Mexico	201	91	13,261.4
Bangladesh	4	4	36.7	Micronesia	16	9	151.9
Belarus	1	1	15.0	Montenegro	6	5	858.5
Bermuda	50	24	14,023.8	Morocco	866	315	10,915.0
Bolivia	12	10	28.1	Nagalim	6	2	126.5
Bosnia and Herzegovina	756	131	9838.8	Nagorno Karabakh Republic	151	124	512.5
Cameroon	18	6	1300.0	Netherlands Antilles	105	39	4,259.6
Canada	169	69	29,786.9	Nicaragua	1	1	537.2
Cayman Islands	14	13	23,284.8	Nigeria	12	8	3,069.9
China	24	11	3,836.8	Pakistan	396	117	5,036.1
Colombia	1	1	534.2	Palau	116	19	664.1
Costa Rica	30	22	1,562.0	Palestine	36	30	3,592.5
Cote d'Ivoire	22	9	932.3	Panama	139	66	4,576.3
Cyprus	367	102	4,390.5	Peru	52	12	712.9
Dominican Republic	223	47	1,221.9	Philippines	899	193	4,845.7
Ecuador	17	12	1,532.7	Poland	147	15	2,524.1
Egypt	1255	325	6,300.4	Qatar	23	12	4,442.5
Equatorial Guinea	35	21	6,607.4	Republic of Abkhazia	11	2	405.0
Ethiopia	537	80	3,918.4	Republic of Congo	163	41	8,141.5
Georgia	287	99	3,315.7	Republic of South Ossetia	10	3	432.8
Germany	148	30	3,247.9	Russia	3	2	7,384.4
Ghana	31	11	750.0	Saudi Arabia	35	18	9,031.3
Guernsey	24	8	1,911.7	Serbia	71	46	4,804.5
Haiti	123	31	442.4	Somalia	1	1	36.1
Honduras	9	2	141.7	South Korea	1338	318	79,108.7
Hong Kong	88	71	18,372.7	Southern Sudan	1	1	472.0
India	263	88	13,374.9	Sri Lanka	15	12	819.2
Iraq	366	137	12,574.9	States of Jersey	22	8	1,238.1
Ireland	35	12	40,396.0	Switzerland	1	1	7,346.2
Isle of Man	16	11	1,548.2	Taiwan	980	242	9,652.3
Japan	125	50	50,327.6	Thailand	22	15	3,401.4
Jordan	7	6	1,414.1	Trinidad and Tobago	60	26	5,240.0
Kazakhstan	74	47	2,736.8	Turkey	3071	445	12,933.7
Kenya	177	65	1,529.5	Uganda	38	14	723.5
Kuwait	9	4	6,805.8	United Arab Emirates	1431	286	46,415.5
Lesotho	112	23	800.0	United Kingdom	155	77	25,905.0
Liberia	178	41	90,381.8	Venezuela	33	20	1,805.1
Libya	368	175	9,011.1	Vietnam	24	12	110.2
Liechtenstein	114	37	1,521.2				

Note: a. Total number of Contact, b. Total number of Members Contacted, c. Total amount of lobbying expenditures spent by the government entities of the country during 2008–2010 (thousand US dollars).

H | Appendix to Chapter 3: Lobbying Agents Summary Statistics

Table H.1: List of In-House Lobbying Agents

Registrant Name	**Client Country**	**K[a]**	**N[b]**
Kurdistan Regional Government	Iraq	4,207.9	27
Friends of Sinn Fein	Ireland	1,294.3	2
Moroccan-American Center for Policy	Morocco	6,555.3	21
Office of the Nagorno Karabakh Republic in the USA	Nagorno Karabakh Republic	512.5	32
Palestinian Liberation Organization	Palestine	3,560.0	2
Korea Economic Institute of America	South Korea	6,626.6	18
Representative of the Turkish Republic of Northern Cyprus	Turkey	2,826.6	6
US-Emirates Alliance	United Arab Emirates	13,336.4	1
Venezuela Information Office	Venezuela	1,591.6	4
Tourism New South Wales	Australia	1,029.6	
Tourism Queensland	Australia	3,286.1	
Austrian Tourist Office	Austria	3,389.9	
Bahamas Ministry of Tourism	Bahamas	20,500.0	
Barbados IDC	Barbados	3,163.6	
Caribbean Tourism Organization	Barbados	4,774.7	
Belgian Tourist Office	Belgium	1,071.6	
Tourist Office for Flanders, Belgium	Belgium	2,074.5	
Bermuda Department of Tourism	Bermuda	11,800.3	
British Virgin Islands Tourist Board	British Virgin Islands	2,458.8	
Quebec Government House	Canada	21,481.9	
Cayman Islands Dept of Tourism	Cayman Islands	22,161.8	
China National Tourist Office	China	1,230.0	
Czech Center New York	Czech Republic	720.0	
Visit Denmark	Denmark	1,025.0	
Enterprise Estonia in San Jose	Estonia	296.1	
Ethiopian People Revolutionary Party	Ethiopia	281.6	
Oromo Liberation Front	Ethiopia	703.5	
Bavarian Ministry for Economic Affairs	Germany	1,517.9	
German National Tourist Office	Germany	1,040.9	
Hong Kong Tourism	Hong Kong	3,599.6	
Hong Kong Trade Development Council	Hong Kong	9,564.1	
Iceland Tourist Board	Iceland	3,150.0	
Dentsu America	India	2,236.9	
India Tourism	India	6,917.5	
India Trade Promotion Organisation	India	2,282.0	

Note: a. Total amount of the revenues from foreign government clients during 2008-2010 (in thousand US dollars), b. Total number of the members of Congress to whom the registrant contacted (blank means zero).

Table H.2: List of In-House Lobbying Agents (Continued)

Registrant Name	Client Country	K[a]	N[b]
Enterprise Ireland	Ireland	2,464.4	
IDA Ireland	Ireland	12,124.4	
Supporters of Fine Gael	Ireland	0.0	
Tourism Ireland Limited	Ireland	24,138.4	
World Zionist Organization	Israel	14,770.8	
Italian Government Tourist Board	Italy	900.7	
Jamaica Tourist Board	Jamaica	2,293.1	
City of Osaka, Chicago Office	Japan	218.5	
Development Bank of Japan	Japan	1,451.8	
Government of Fukuoka Prefecture	Japan	397.9	
Japan Center for Intercultural Communications	Japan	0.0	
Japan National Tourist Organization	Japan	5,123.0	
JETRO Atlanta	Japan	1,217.9	
JETRO Chicago	Japan	3,913.7	
JETRO Houston	Japan	2,680.6	
JETRO Los Angeles	Japan	3,125.8	
JETRO New York	Japan	23,170.7	
JETRO San Francisco	Japan	5478.1	
Kobe Trade Information Office	Japan	418.3	
Osaka Prefectural Government	Japan	161.5	
LISCR LLC	Liberia	89,727.3	
International Relief Fund Inc	Libya	0.0	
Luxcore, Ltd.	Luxembourg	91.1	
Malaysia Tourism Promotion Board	Malaysia	2,405.5	
Malaysian Industrial Development Authority	Malaysia	3,635.3	
International Registries Inc	Marshall Islands	22,684.4	
Mexico Tourism Board	Mexico	705.7	
Monaco Government Tourist Office	Monaco	4,528.5	
Moroccan National Tourist Office	Morocco	491.5	
St. Maarten Tourist Office	Netherlands Antilles	2,345.2	
Pakistan Tehreek E Insaf NA USA	Pakistan	0.0	
Polish National Tourist Office	Poland	1,948.8	
Romanian Tourist Office	Romania	468.6	
Council for Trade and Economic Cooperation	Russia	0.0	
GoodWorks International	Rwanda	1,459.2	
St. Lucia National Development Corp	Saint Lucia	71.5	
Saudi Petroleum International	Saudi Arabia	0.0	
Saudi Refining	Saudi Arabia	0.0	
Scottish Enterprise	Scotland	7,751.7	
Singapore Economic Development Board	Singapore	2,323.2	
Singapore Tourism Board	Singapore	8,989.0	
The Puntland Development Office	Somalia	0.0	
South African Tourism	South Africa	3,792.0	
Korea International Trade Assn	South Korea	1,088.6	
Korea Local Government Center (KLAFIR, America)	South Korea	113.6	
Korea National Tourism Organization	South Korea	6,383.5	
Korea Trade Promotion Center	South Korea	60,759.8	
VisitSweden	Sweden	1,915.1	
Alpine Tourist Commission	Switzerland	1,456.0	
Switzerland Tourism	Switzerland	5,598.4	
Far East Trade Service	Taiwan	1,048.0	
Taiwan Trade Center New York	Taiwan	1,990.3	
Tourism Authority of Thailand	Thailand	2,235.8	
Office of Tibet	Tibet	1,437.3	
Invest Northern Ireland	United Kingdom	9,513.9	
The North of England	United Kingdom	3,868.8	
VisitBritain	United Kingdom	8,314.3	
Office of Deputy Commissioner of Maritime Affairs	Vanuatu	4,003.3	
St. Lucia Tourist Board	West Indies	346.9	

Note: a. Total amount of the revenues from foreign government clients during 2008-2010 (in thousand US dollars), b. Total number of the members of Congress to whom the registrant contacted (blank means zero).

Table H.3: List of the Lobbying Firms with No Contact Records

Lobbying Firm	**N.**[a]	**$K**[b]	**Lobbying Firm**	**N.**[a]	**$K**[b]
Adam McArthur	1	0.0	M+R Strategic Services	1	15.1
Al Paul Lefton Co	1	3,425.4	MPD Consultants	3	39.7
Amato Libero Berard	1	297.0	Mark Alsalih	1	49.8
Arnold & Porter	2	1,716.0	Mark Edmond Clark	1	12.0
Avalanche Strategic Communications	1	161.8	Marston Webb & Associates	1	87.5
Blank Rome LLP	1	783.5	Maynard, Cooper & Gale	1	0.9
Bockorny Group	1	15.0	Melady Associates	1	65.8
Brunswick Group LLC	1	5,367.3	Melinda Farris	1	0.0
Butterfield Carter & Associates	1	30.0	Melwood Communications	1	7.6
C Landon Parvin	1	160.0	Michael E. Veve	1	143.3
CDN International, Inc.	1	269.7	Missy Farren & Associates, Ltd	1	465.5
California Strategies, LLC	1	445.7	Mullen Advertising	1	46.0
Carmen Group	1	0.0	Navigators Global LLC	1	162.4
Cleary ,Gottlieb et al	2	2,184.8	Noonmark Capital Partners LLC	1	56.2
Cranford Johnson Robinson Woods	1	135.0	Norman Liss	1	0.0
Crescent Consultants	1	0.0	Oliver A. Dulle Jr & Company, Inc.	1	18.7
DTB Associates LLP	1	49.0	OpinionMakers LLC	1	73.5
Daniel Passacantilli	1	12.0	PD Frazer Consulting	1	337.0
David E. Everson	1	0.0	Pascal D. Kokora	1	120.0
Development Counsellors International	7	2,506.0	Pepperwood International Corp	1	25.0
DiNovo Strategies	1	237.5	Plexus Consulting Group	1	105.0
Dickens & Madson Canada	1	350.0	Porter Wright Morris & Arthur	1	0.0
FD Dittus Communications	1	22.5	Prairie Avenue Advisors, LLC	1	182.5
Fenton Communications	1	60.0	Prism Public Affairs	1	5.0
Fulbright & Jaworski	1	1,069.9	Reid Collins & Tsai LLP	2	0.0
Gavin Anderson & Company	1	0.0	Rock Creek Strategic Marketing	1	0.0
Geoffrey Weill Assoc	2	163.0	Ruder Finn Inc	2	2,538.0
Global Policy Group	1	63.5	Simon Taylor	1	18.0
Global USA	1	73.0	Slocum & Boddie, P.C.	1	111.8
Gregory J Kuykendall	1	30.0	Smith & Harroff	1	0.0
Gretchen Hamel, Endeavour Global Strategies	1	46.0	Southfive Strategies, LLC	1	0.0
Halpern Associates	1	397.4	Stephen M. Rivers	1	59.5
Hill & Knowlton	8	422.5	Steptoe & Johnson	3	322.5
Holland & Knight	1	365.5	Stewart & Stewart	1	0.0
Hopps & Associates, Inc.	1	665.0	T Dean Reed	3	445.5
Hyde Park Communications	1	100.5	TS Navigations LLC	1	96.0
International Trade & Development Agency Inc	1	447.8	The Gilman Group	1	0.0
Janet M Bitar	1	21.0	Theodore G. Kronmiller	1	0.0
Jay Footlik	1	657.5	Valerie L Van Sickle	1	122.2
Jones, Day et al	1	149.0	Vinca LaFleur	1	39.0
KWR International	2	60.4	Vivien Ravdin	1	128.3
Keene & Associates	1	53.3	Washington Media Group, Inc	1	315.0
Kirkpatrick & Lockhart Preston Gates Ellis	1	0.0	Watts Partners/JC Watts Companies	1	0.0
Larry L. Overstreet	1	305.2	West Wing Writers	3	295.8
Lester S. Hyman	1	225.0	Williams Mullen Strategies	1	0.0
Lou Hammond & Assoc. Inc	2	600.5	Williams, Mullen, Clark & Dobbins	1	0.0
Lubanovici, Mircea	1	59.2	Winston & Strawn LLP	1	297.1
M Silver Associates	4	1,557.1			

Note: a. Total number of foreign government clients, b. Total amount of revenue from foreign country clients during 2008-2010 (in thousand US dollars).

Table H.4: List of Lobbying Firms with Contacts Other Than Congressional Contacts (to Executive Agencies or Media)

Lobbying Firm	**N**.[a]	$**K**[b]
Alliance Consulting Group	1	343.7
Ari Fleischer Communications, Inc.	1	44.5
BGR Public Relations, LLC	1	150.0
Daniel Louis Kunin	1	127.9
Endeavor Group	1	283.5
Global Policy Initiatives	1	0.0
Hedges Strategies	1	10.9
Hudson Consulting Group	1	0.0
Lanny J. Davis & Associates	1	513.2
McDermott Will & Emery LLP	1	513.2
McFarlane Associates, Inc.	1	1,064.3
Olivia Goumbri	1	63.7
Park Strategies	1	28.5
Sitrick & Co	1	100.0
Steven C. Radelet	1	0.0
The Advocacy Group	1	5.6
The Fratelli Group	2	868.9
Vinson & Elkins	1	95.8
Washington Global Consultants, LLC	1	600.0
Bruce Zagaris	1	356.1
Burson-Marsteller	4	2,446.2
Caplin & Drysdale	2	30.2
Daniel Bob	1	5.7
Daniel J Edelman Inc	7	3,651.5
Duane Morris Government Affairs	1	0.0
Fenton Communications	2	574.1
Garvey, Schubert & Barer	1	246.2
Global Communicators LLC	3	132.2
Gregory A. Maniatis	1	450.0
HDMK, LLC	1	746.6
Jefferson Waterman International	1	1,211.3
Miller & Chevalier	3	1,136.2
Nazmi Gur	1	0.0
Public Strategies, Inc.	2	1,179.7
Sheila O'Malley	1	88.3
Spring, O'Brien & Co., Inc.	5	1,037.2
TD International	1	0.0
Weber Shandwick	8	9,363.1

Note: a. Total number of foreign government clients. b. Total amount of the revenues from the foreign government clients during 2008–2010 (in thousand US dollars).

Table H.5: List of Lobbying Firms with Congressional Contacts

Lobbying Firm	**N1**[a]	**N2**[b]	**N3**[c]	**N4**[d]	**$K**[e]
30 Point Strategies	1	1	1	2	2,102.9
Advanced Practical Solutions, LLC	16	30	0.87	1	1,020.0
AG Consulting, Inc	1	1	0	1	15.0
Ainsley Gill & Associates	26	60	0.84	2	5,050.0
Akin Gump Strauss Hauer & Feld, LLP	220	604	0.69	6	3,772.4
Alston & Bird	66	87	0.16	3	1,358.0
Amani Group	26	38	0.65	3	1,334.8
American Business Development Group	14	15	0.85	1	394.0
Anne Smith Caparso	12	16	0.08	1	33.6
APCO Worldwide	54	88	0.59	4	3,563.0
Arent Fox LLP	22	30	0.63	3	445.7
Asia Associates	25	53	0.64	1	80.0
Avatar Enterprises	1	3	1	1	265.6
Barbour, Griffith & Rogers	135	643	0.45	5	5,405.0
BKSH & Associates	36	118	0.52	4	390.6
Blue Star Strategies, LLC	3	4	1	2	94.2
Brownstein Hyatt Farber Schreck, LLP	20	43	0.1	2	252.0
Bryan Cave LLP	7	8	0.42	1	40.0
C&M Capitolink	3	11	0	1	50.0
C&M International Ltd	1	1	1	1	919.9
Caspian Group LLC	93	363	0.54	1	168.0
Cassidy & Associates	48	72	0.37	4	6,220.2
Cedar Group	1	1	0	1	310.0
Chlopak, Leonard, Schechter & Associates	15	37	0.53	5	3,508.5
Clark & Weinstock	9	11	0.11	2	228.2
CMS Strategies	72	302	0.62	1	300.2
Covington & Burling	101	581	0.5	3	3,535.9
Daniel J Edelman Inc	2	2	0.5	5	6,797.5
Darlene Richeson & Associates	23	37	0.95	1	464.0
David M. Staton	9	16	0.44	1	151.9
Dewey & LeBoeuf	81	240	0.65	3	3,144.3
Dickstein Shapiro	203	856	0.33	2	710.5
DLA Piper US	329	2439	0.54	9	11,881.4
Dutko Worldwide LLC	1	4	1	1	60.0
Farrow, Jeffrey L	10	78	0.5	1	206.8
Fierce, Isakowitz & Blalock	11	53	0.18	2	40.6
Fleishman-Hillard	14	15	0.64	8	9,769.6
Foley Hoag LLP	29	144	0.55	4	1,306.7
Gabriel Co	21	26	0.8	1	1,674.9
Gallagher Group	6	8	0	1	90.0
Gateway Consulting, LLC	1	1	0	1	0.0
Gephardt Group Government Affairs, LLC	156	545	0.89	2	2,481.9
Global Water & Energy Strategy Team	4	9	0.25	1	143.0
Glover Park Group	129	250	0.83	4	2,539.7
Grace Collins	2	6	0	2	194.3
Greenberg Traurig	19	37	0.78	3	5,639.3
Harbour Group	108	504	0.55	1	9,236.0
Hecht, Spencer & Associates	21	36	0.28	1	870.0
Hills Stern & Morley LLP	1	1	0	1	0.0
Hogan & Hartson	18	67	0.66	4	5,703.4
Independent Diplomat Inc	1	1	1	5	624.9
Integrated Solutions Group	5	14	1	2	0.0
Johnson, Madigan et al	44	67	0.81	2	1,107.7
Jones, Walker et al	31	72	0.51	3	715.2
Jose Pertierra Pertierra & Toro	1	1	1	1	138.5
Ketchum Inc	1	1	0	2	6,502.2
KRL International	41	187	0.75	2	338.9
Lara Alameh LLC	4	5	0.25	1	32.5
LeClairRyan, A Professional Corporation	13	23	0.61	1	321.1
Levick Strategic Communications	3	8	0.33	2	2,126.4
Levine & Co	7	8	0.85	1	978.1

Note: a. Total number of the members that the lobbying firm contacted. b. Total number of the contact records in the data. c. The ratio of Democrats among the members that the lobbying firm contacted. d. Total number of foreign government clients. e. Total amount of the revenues from the foreign government clients during 2008–2010 (in thousand US dollars).

Table H.6: List of Lobbying Firms with Congressional Contacts (Continued)

Lobbying Firm	**N1**[a]	**N2**[b]	**N3**[c]	**N4**[d]	**$K**[e]
Livingston Group	389	1,491	0.41	7	6,209.5
Locke Lord Strategies	36	63	0.58	1	2.750.1
Loeffler Group	19	33	0.36	4	1.430.3
Manatt, Phelps & Phillips	47	223	0.65	2	1.236.9
Mark Saylor Co	9	32	0.66	4	2,643.9
McGuire Woods Consulting	26	63	0.38	1	708.5
McKenna Long & Aldridge	9	11	0.88	1	583.6
Michael Joseph Fonte	8	11	0.75	1	108.2
MITA Group	37	83	0.32	2	410.0
Native American Rights Fund	4	9	1	1	0
Nazmi Gur	13	19	0.61	1	24.6
Nelson Mullins Riley & Scarborough LLP	8	13	0.5	1	949.2
Neusner Communications	2	5	1	1	164.1
Nurnberger & Associates	24	24	0.79	1	216.0
O'Brien & Associates LLC	2	5	0.5	3	173.8
Ogilvy Public Relations Worldwide	1	1	0	4	2,012.8
Orion Strategies	24	54	0.2	4	744.5
Paige E Reffe	3	4	0.66	1	827.5
Park Strategies	77	401	0.49	1	313.7
Parven Pomper Strategies Inc.	128	514	0.87	3	490.0
Patton Boggs	147	341	0.57	20	15,610.4
Picard Kentz & Rowe LLP	6	7	0.33	1	5,312.9
Pillsbury Winthrop Shaw Pittman	36	46	0.22	3	7,426.0
PLM Group	221	695	0.58	1	3,052.5
Podesta Group, Inc.	93	279	0.76	7	1,860.3
Policy Impact Communications, Inc.	13	22	0.23	1	900.0
Powell Goldstein LLP	11	30	0.54	1	316.6
Private Public Solutions LLC	162	573	0.82	4	2,145.7
Public Private Partnership Inc.	3	5	1	1	216.6
Public Strategies Washington	22	24	0.45	2	457.5
Qorvis Communications	3	3	0.66	9	8,580.2
Quinn Gillespie & Associates	161	851	0.63	4	3,095.8
Rasky Baerlein Strategic Communications	21	32	0.61	2	843.2
Rosemont Associates	13	86	1	1	525.0
Ryberg & Smith	31	78	0.51	1	156.8
Samuels International Associates	2	2	1	2	1,949.3
Sandler, Travis & Rosenberg	2	3	1	1	46.1
Sandler, Travis & Rosenberg, P.A.	13	18	0.53	1	40.0
Scribe Strategies & Advisors	146	146	0.63	1	200.0
Shulman, Rogers, Gandal, Pordy & Ecker, P.A.	1	1	1	1	36.1
Sidley Austin LLP	8	16	0.75	6	1,660.9
Solarz Associates	79	129	0.67	1	172.0
Sonnenschein Nath & Rosenthal LLP	15	16	0.53	1	84.4
Sorini, Samet & Associates	166	495	0.55	6	1,739.7
Squire Sanders Public Advocacy	30	38	0.3	3	80.6
Stuart E. Eizenstat	21	66	0.9	1	1,999.9
The Breaux Lott Leadership Group	5	6	0.2	1	442.5
The Raben Group, LLC	11	25	1	1	90.5
Thomas A Kruse	10	12	0.5	1	28.1
Thomas Capitol Partners, Inc.	169	169	0.63	1	495.0
Tool Shed Group, LLC	10	13	0.7	1	76.0
Trout Cacheris PLLC	2	13	1	1	5,808.9
Van Scoyoc Associates	14	28	0.71	2	495.5
Venable LLP	22	38	0.59	3	527.4
Vision Americas L.L.C.	19	39	0	1	220.0
Washington Group	38	68	0.23	1	346.3
Wexler & Walker Public Policy Associates	24	26	0.91	1	806.2
Whitaker Group	32	203	0.68	4	2,633.0
White & Case	12	62	0.75	7	11,422.6
William B Broydrick	9	13	0.88	1	127.0

Note: a. Total number of the members that the lobbying firm contacted. b. Total number of the contact records in the data. c. The ratio of Democrats among the members that the lobbying firm contacted. d. Total number of foreign government clients. e. Total amount of the revenues from the foreign government clients during 2008–2010 (in thousand US dollars).

I | Appendix to Chapter 3: Members of Congress and Lobbying Contact Summary Statistics

Table I.1: Members of the 110th Congress

Variable	Mean	Std. Dev.	Min.	Max.	N
House Representatives					
DW-NOMINATE	0.019	0.447	-0.73	0.999	443
Democrat	0.538	0.499	0	1	448
Leadership or Committee Chairmanship	0.058	0.234	0	1	448
Economic Committee Member	0.263	0.441	0	1	448
Foreign Relations Committee Mmeber	0.123	0.329	0	1	448
Country/Regional Caucus Mmebership	0.694	0.461	0	1	448
Vote Share in 2006	0.677	0.137	0.301	1	447
Running for Office in 2008	0.906	0.292	0	1	448
Senators					
DW-NOMINATE	0.03	0.39	-0.684	0.817	101
Democrat	0.505	0.502	0	1	101
Leadership or Committee Chairmanship	0.228	0.421	0	1	101
Economic Committee Member	0.099	0.3	0	1	101
Foreign Relations Committee Meber	0.168	0.376	0	1	101
Vote Share in the Most Recent Election	0.622	0.093	0.492	0.992	101
Running for Office in 2008	0.307	0.464	0	1	101

Note: a. Ways and Means, Appropriations, and Budget Committees. b. Foreign Relations, Armed Services, Homeland Security Committees. c. This indicates that a representative belongs to at least one caucus which focus on a specific country or region.

Table I.2: Members of the 111th Congress

Variable	Mean	Std. Dev.	Min.	Max.	N
House Representatives					
DW-NOMINATE	-0.011	0.439	-0.73	0.999	439
Democrat	0.584	0.493	0	1	445
Leadership or Committee Chairmanship	0.058	0.235	0	1	445
Economic Committee Member [a]	0.227	0.419	0	1	445
Foreign Relations Committee Member[b]	0.128	0.335	0	1	445
Country/Regional Caucus Membership[c]	0.742	0.438	0	1	445
Vote Share in 2008	0.678	0.137	0.245	1	445
Running for Office in 2010	0.906	0.293	0	1	445
Senators					
DW-NOMINATE	-0.025	0.389	-0.684	0.817	103
Democrat	0.573	0.497	0	1	103
Leadership or Committee Chairmanship	0.223	0.418	0	1	103
Economic Committee Member	0.087	0.284	0	1	103
Foreign Relations Committee Member	0.194	0.397	0	1	103
Vote Share in the Most Recent Election	0.61	0.092	0.424	0.992	100
Running for Office in 2010	0.243	0.431	0	1	103

Note: a. Ways and Means, Appropriations, and Budget Committees. b. Foreign Relations, Armed Services, Homeland Security Committees. c. This indicates that a representative belongs to at least one caucus which focus on a specific country or region.

Table I.3: Foreign Contact Frequencies by Senators

Name	**N1**[a]	**N2**[b]	**N3**[c]	**Name**	**N1**	**N2**	**N3**	**Name**	**N1**	**N2**	**N3**
Voinovich	153	13	15	Bayh	51	22	12	Chambliss	22	5	12
Kerry	149	43	40	Biden	49	4	13	Shelby	22	4	8
Lieberman	142	20	21	Obama	48	4	14	Carper	21	6	9
Kyl	141	12	25	Dorgan	46	11	10	Thune	21	4	9
Reid	138	29	30	Specter	46	9	11	Lautenberg	21	3	8
Feinstein	117	20	15	Reed	45	10	17	Martinez	20	9	11
Brownback	115	10	18	Burr	44	9	13	Sessions	19	8	11
Feingold	114	9	24	Murkowski	44	4	14	Collins	19	5	7
Hatch	113	10	22	Graham	43	14	16	Lincoln	19	1	13
Isakson	105	21	23	Coleman	43	9	17	Brown	18	5	12
Cantwell	103	5	13	Boxer	43	8	20	Salazar	17	2	9
Demint	93	14	28	Hutchison	42	9	14	Mccaskill	15	2	11
Mcconnell	85	26	24	Levin	41	19	16	Conrad	15	1	12
Menendez	84	19	22	Cochran	41	13	10	Bunning	15	0	7
Inhofe	84	13	18	Wyden	41	10	16	Tester	14	6	6
Bond	82	22	15	Bennett	41	8	10	Byrd	14	2	6
Dodd	82	18	24	Johnson	41	5	7	Enzi	14	1	7
Webb	81	6	18	Murray	41	3	10	Pryor	13	3	10
Lugar	80	28	28	Barrasso	40	6	13	Kohl	12	2	7
Inouye	80	19	14	Grassley	38	19	14	Dole	12	1	4
Hagel	73	17	20	Craig	38	4	5	Warner	11	2	7
Shaheen	71	7	16	Crapo	37	4	17	Merkley	11	1	4
Risch	71	6	16	Ensign	36	8	14	Hagan	10	2	7
Casey	69	4	20	Snowe	36	4	14	Johanns	10	1	6
Cardin	68	16	23	Warner	35	11	11	Allard	9	4	4
Nelson	67	4	17	Sununu	35	2	11	Brown	9	2	4
Baucus	65	33	17	Coburn	34	6	12	Klobuchar	9	2	8
Wicker	64	11	18	Gregg	33	12	9	Mikulski	9	2	4
Schumer	61	25	17	Harkin	28	3	8	Begich	9	0	2
Kaufman	61	11	15	Smith	28	1	12	Domenici	8	3	6
Leahy	60	12	20	Landrieu	26	10	14	Sanders	7	4	5
Cornyn	60	9	11	Stabenow	26	9	7	Burris	6	3	2
Bingaman	59	11	14	Akaka	26	7	8	Bennet	6	0	4
Durbin	57	14	18	Whitehouse	26	5	10	Lott	4	2	3
Vitter	57	5	15	Kennedy	26	3	7	Franken	4	0	2
Rockefeller	54	8	9	Alexander	25	6	12	Coons	2	0	1
Corker	54	8	19	Clinton	24	12	8	Thomas	0	0	0
Roberts	54	4	14	Stevens	23	4	4				
Mccain	53	15	18	Lemieux	23	0	4				
Gillibrand	53	9	18	Nelson	22	9	11				

Note: a. Total number of the contacts made by the foreign countries in the data, b. Total number of the contacts made by the foreign countries in the data directly to the member, c. Total number of the foreign countries that contacted the member.

Table I.4: Foreign Contact Frequencies by House Representatives

Name	**N1**[a]	**N2**[b]	**N3**[c]	**Name**	**N1**	**N2**	**N3**	**Name**	**N1**	**N2**	**N3**
Wexler	209	31	20	Miller	75	14	15	Clarke	47	14	10
Pelosi	207	22	31	Bean	75	3	7	Harman	47	10	10
Payne	189	50	26	Rangel	73	33	26	Eshoo	46	17	8
Berman	171	45	34	Klein	71	18	14	Moran	46	10	15
Burton	148	31	25	Rohrabacher	71	13	15	Thompson	46	4	13
Wilson	146	30	18	Kirk	69	9	13	Wolf	45	8	13
Tanner	141	23	23	Inglis	68	14	15	Larson	44	12	12
Meeks	136	44	33	Berkley	63	16	19	Cuellar	44	7	5
Ros-Lehtinen	134	32	25	Mack	63	8	12	Aderholt	43	14	11
Hastings	128	23	19	Smith	62	18	19	Butterfield	42	20	16
Whitfield	126	16	7	Watson	62	17	20	Snyder	42	8	10
Hoyer	124	17	23	Jackson	62	16	14	Meek	41	11	14
Mcdermott	117	16	18	Schiff	62	16	20	Pitts	41	9	10
Lowey	115	35	21	Fortenberry	62	12	12	Paul	40	2	12
Crowley	111	20	26	Sires	62	11	14	Hinojosa	39	7	13
Foxx	110	40	7	Johnson	62	7	11	Chabot	39	6	12
Filner	108	12	3	Skelton	61	16	11	Waters	39	5	6
Shuster	107	16	9	Issa	60	14	13	Dicks	38	10	11
Clyburn	105	24	22	Barrett	60	13	13	Sherman	38	9	12
Poe	104	13	16	Gallegly	59	8	15	Brady	37	12	15
Royce	103	18	24	Schwartz	59	3	10	Mccotter	36	6	14
Blunt	101	25	19	Kennedy	58	12	11	Green	35	13	12
Boozman	100	13	20	Towns	57	10	10	Camp	35	11	12
Boehner	99	26	22	Herger	56	14	9	Chandler	35	6	12
Pence	99	15	15	Scott	54	7	19	Coble	34	13	10
Bilirakis	97	7	16	Maloney	54	4	12	Rothman	34	10	10
Ackerman	91	39	22	Flake	53	20	15	Perlmutter	34	4	3
Cohen	90	30	13	Israel	52	11	13	Rahall	33	12	10
Smith	90	21	19	Costa	52	5	16	Giffords	33	8	12
Jackson Lee	89	19	20	Diaz-Balart	51	28	5	Ruppersberger	33	8	9
Granger	86	10	13	Reyes	51	16	10	Lewis	33	6	12
Delahunt	85	24	23	Price	51	12	11	Quigley	33	4	5
Lee	84	17	20	Cantor	51	4	12	Ross	32	9	9
Ortiz	83	24	12	Manzullo	50	13	20	Baird	32	7	8
Mcmahon	83	11	10	Franks	50	5	12	Becerra	31	12	10
Van Hollen	82	16	19	Kind	49	8	7	Connolly	31	3	11
Carnahan	82	11	15	Mccollum	48	12	8	Lantos	31	1	7
Engel	80	28	26	Roskam	48	10	10	Conaway	30	8	9
Ellison	80	19	16	Reichert	48	4	5	Forbes	30	6	8
Faleomavaega	78	35	14	Mccaul	48	3	8	Markey	29	13	8

Note: a. Total number of the contacts made by the foreign countries in the data, b. Total number of the contacts made by the foreign countries in the data directly to the member, c. Total number of the foreign countries that contacted the member.

Table I.5: Foreign Contact Frequencies by House Representatives (Continued)

Name	N1[a]	N2[b]	N3[c]	Name	N1	N2	N3	Name	N1	N2	N3
Boustany	29	12	9	Hoekstra	22	14	6	Etheridge	17	6	4
Kucinich	29	8	9	Hinchey	22	13	9	Welch	17	6	6
Delauro	28	9	6	Dingell	22	10	7	Carson	17	6	7
Fortuno	28	5	8	Wittman	22	6	8	Buyer	17	4	6
Holt	28	5	9	Lofgren	22	3	9	Tonko	17	4	5
Cramer	27	9	6	Cole	21	13	7	Stearns	17	3	7
Taylor	27	7	9	Murtha	21	9	7	Woolsey	17	1	7
Tancredo	27	5	7	Davis	21	9	6	Lungren	17	1	7
Brown	27	3	8	Conyers	21	8	9	Alexander	16	9	6
Wamp	27	3	7	Culberson	21	5	7	Stupak	16	8	3
Marchant	27	1	7	Polis	21	1	2	Rogers	16	7	4
English	26	12	9	Serrano	21	0	8	Ryan	16	6	6
King	26	9	12	Udall	20	12	8	Bachus	16	6	8
Rehberg	26	8	7	Saxton	20	12	7	Weller	16	6	7
Pomeroy	26	6	9	Wu	20	10	9	Waxman	16	6	8
Sessions	26	6	6	Abercrombie	20	9	7	Sestak	16	5	7
Schakowsky	26	5	8	Davis	20	6	7	Farr	16	4	6
Sanchez	26	5	11	Lewis	20	5	5	Mcgovern	16	4	8
Barton	26	4	5	Himes	20	3	6	Johnson	16	4	5
Souder	26	3	5	Richardson	20	3	8	Carter	16	3	6
Levin	25	12	12	Thompson	19	13	8	Boswell	16	2	6
Mchugh	25	8	7	Bilbray	19	10	6	Michaud	16	1	5
Ryan	25	5	11	Boren	19	6	6	Courtney	15	9	4
Edwards	25	5	6	Moore	19	4	5	Kline	15	8	7
Tierney	25		5	Brown	19	4	7	Gonzalez	15	8	5
Bordallo	24	8	7	Heller	19	3	7	Sullivan	15	4	4
Davis	24	7	11	Nunes	19	3	10	Nye	15	3	5
Neal	24	7	8	Schmidt	19	3	4	Arcuri	15	2	4
Kilpatrick	24	7	10	Calvert	19	1	3	Garamendi	15	1	3
Tauscher	24	6	9	Kratovil	19	0	4	Boyd	15	1	6
Larsen	24	4	11	Dreier	18	8	10	Pallone	14	7	7
Shadegg	24	3	7	Diaz-Balart	18	7	5	Bartlett	14	6	9
Bachmann	24	3	5	Jones	18	6	7	Coffman	14	5	6
Christensen	23	15	6	Spratt	18	5	6	Matheson	14	5	7
Honda	23	8	7	Blumenauer	18	5	9	Shays	14	5	2
Weiner	23	5	9	Speier	18	5	5	Frank	14	3	7
Pascrell	23	4	8	Obey	18	3	7	Price	14	3	5
Crenshaw	23	4	9	Shuler	18	1	5	Tiberi	14	1	7
Hensarling	23	3	4	Rush	17	12	7	Space	14	0	4
Schrader	23	1	2	Young	17	7	5	Halvorson	14	0	2

Note: a. Total number of the contacts made by the foreign countries in the data, b. Total number of the contacts made by the foreign countries in the data directly to the member, c. Total number of the foreign countries that contacted the member.

Table I.6: Foreign Contact Frequencies by House Representatives (Continued)

Name	N1[a]	N2[b]	N3[c]	Name	N1	N2	N3	Name	N1	N2	N3
Holden	13	5	3	Rodriguez	11	2	4	Turner	9	2	7
Berry	13	5	5	Yarmuth	11	1	6	Kissell	9	2	4
Edwards	13	5	8	Mchenry	11	1	5	Mitchell	9	2	5
Knollenberg	13	4	7	Bright	11	0	2	Burgess	9	2	3
Boucher	13	4	5	Mcclintock	11	0	4	Biggert	9	2	5
Myrick	13	4	5	Olson	11	0	4	Visclosky	9	1	3
Sanchez	13	3	7	Cooper	11	0	4	Loebsack	9	1	4
Cummings	13	2	10	Schock	10	7	6	Minnick	9	1	4
Putnam	13	2	6	Murphy	10	6	4	Allard	9	1	3
Cardoza	13	2	4	Hobson	10	5	5	Murphy	9	1	5
Wasserman Schultz	13	1	8	Gingrey	10	4	6	Kilroy	9	1	3
Adler	13	0	3	Bishop	10	3	4	Braley	9	0	4
Perriello	13	0	3	Mcintyre	10	2	7	Cassidy	9	0	2
Miller	12	6	7	Austria	10	2	3	Hirono	8	6	4
Langevin	12	4	8	Watt	10	2	6	Scott	8	4	6
Higgins	12	3	6	Kildee	10	2	5	Davis	8	4	5
Davis	12	3	6	Drake	10	2	3	Clay	8	4	7
Moore	12	2	5	Mccarthy	10	1	2	Goode	8	3	3
Melancon	12	2	5	Bishop	10	1	3	Gerlach	8	3	3
Emanuel	12	2	5	Olver	10	1	6	Terry	8	3	3
Buchanan	12	1	2	Foster	10	1	2	Gohmert	8	2	5
Barrow	12	1	6	Campbell	10	0	2	Dent	8	2	1
Mcnerney	12	0	3	Heinrich	10	0	2	Porter	8	2	4
Driehaus	12	0	2	Sarbanes	10	0	7	Sutton	8	2	5
Latham	11	9	5	Capuano	9	6	3	Grayson	8	2	5
Kaptur	11	6	6	Slaughter	9	6	7	Shimkus	8	1	4
Mccrery	11	6	6	Castle	9	5	6	Ellsworth	8	1	2
Hunter	11	6	3	Radanovich	9	4	4	Bono	8	1	4
Davis	11	6	6	Latta	9	4	4	Udall	8	0	6
Kingston	11	6	5	Bonner	9	4	4	Lee	8	0	4
Cleaver	11	5	6	Pastor	9	3	5	Tiahrt	7	4	5
Inslee	11	5	5	Neugebauer	9	3	4	Petri	7	4	3
Walden	11	4	5	Akin	9	3	5	Miller	7	3	5
Upton	11	4	5	Doggett	9	3	7	Broun	7	3	2
Miller	11	3	8	Lamborn	9	3	6	Paulsen	7	2	4
Harper	11	3	3	Mckeon	9	3	6	Scalise	7	2	6
Marshall	11	3	4	Johnson	9	3	5	Goodlatte	7	2	5
Simpson	11	2	4	Velazquez	9	3	4	Rodgers	7	2	2
King	11	2	7	Norton	9	3	4	Jordan	7	2	5
Bishop	11	2	4	Kuhl	9	2	3	Thornberry	7	2	5

Note: a. Total number of the contacts made by the foreign countries in the data, b. Total number of the contacts made by the foreign countries in the data directly to the member, c. Total number of the foreign countries that contacted the member.

Table I.7: Foreign Contact Frequencies by House Representatives (Continued)

Name	N1[a]	N2[b]	N3[c]	Name	N1	N2	N3	Name	N1	N2	N3
Weldon	7	1	3	Owens	5	2	4	Rogers	3	2	2
Latourette	7	1	3	Jones	5	2	4	Everett	3	2	2
Hodes	7	1	5	Lujan	5	2	3	Ramstad	3	1	2
Lipinski	7	1	4	Moran	5	1	2	Johnson	3	1	2
Murphy	7	1	3	Chaffetz	5	1	4	Shea-Porter	3	1	3
Capps	7	1	6	Sablan	5	1	2	Lummis	3	1	3
Hall	7	1	3	Sensenbrenner	5	1	5	Smith	3	1	3
Hill	7	0	5	Feeney	5	1	4	Deutch	3	1	2
Roe	7	0	2	Posey	5	1	3	Dahlkemper	3	1	2
Hayes	6	3	3	Pierluisi	5	0	2	Hastert	3	1	1
Brown-Waite	6	2	4	Murphy	5	0	2	Griffith	3	1	1
Mccarthy	6	2	5	Guthrie	5	0	2	Hulshof	3	1	2
Pryce	6	2	4	Lobiondo	4	4	4	Costello	3	1	3
Fattah	6	2	3	Garrett	4	3	3	Brady	3	0	1
Chu	6	2	4	Lahood	4	3	2	Luetkemeyer	3	0	3
Regula	6	2	3	Titus	4	3	4	Andrews	3	0	3
Doyle	6	2	3	Graves	4	3	3	Hall	3	0	1
Massa	6	2	4	Renzi	4	3	2	Peterson	2	2	2
Platts	6	1	2	Mollohan	4	2	3	Pickering	2	2	2
Keller	6	1	3	Blackburn	4	2	2	Oberstar	2	2	1
Grijalva	6	1	2	Schauer	4	2	3	Walsh	2	2	2
Gordon	6	1	3	Emerson	4	2	3	Lucas	2	2	1
Degette	6	1	2	Fallin	4	2	3	Lewis	2	2	2
Rooney	6	1	3	Young	4	2	2	Wilson	2	2	1
Linder	6	1	4	Capito	4	2	3	Donnelly	2	1	2
Baca	6	1	4	Jenkins	4	1	2	Herseth Sandlin	2	1	1
Thompson	6	0	2	Mica	4	1	2	Reynolds	2	1	2
Gutierrez	6	0	4	Lance	4	1	3	Hastings	2	1	2
Nadler	6	0	5	Napolitano	4	0	1	Ehlers	2	0	2
Matsui	6	0	2	Markey	4	0	2	Pingree	2	0	1
Peters	5	4	3	Tsongas	4	0	3	Djou	2	0	2
Peterson	5	3	4	Fleming	4	0	2	Hunter	2	0	2
Westmoreland	5	3	3	Kosmas	4	0	2	Stark	2	0	1
Boccieri	5	3	4	Walberg	3	3	1	Ferguson	2	0	2
Altmire	5	2	3	Sali	3	2	1	Baldwin	2	0	2
Rogers	5	2	2	Frelinghuysen	3	2	2	Jefferson	2	0	2
Kirkpatrick	5	2	3	Pearce	3	2	1	Kanjorski	1	1	1
Cannon	5	2	4	Green	3	2	2	Smith	1	1	1
Musgrave	5	2	1	Mcnulty	3	2	3	Davis	1	1	1
Fudge	5	2	3	Wilson	3	2	3	Carney	1	1	1

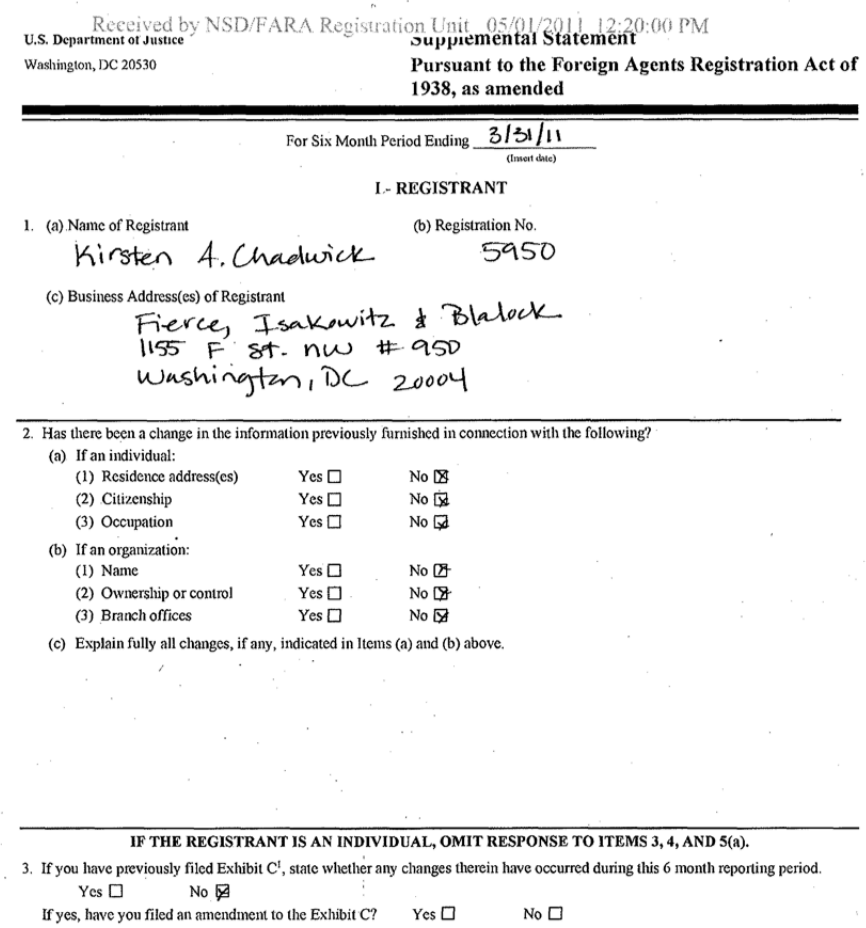
Note: a. Total number of the contacts made by the foreign countries in the data, b. Total number of the contacts made by the foreign countries in the data directly to the member, c. Total number of the foreign countries that contacted the member.

Table I.8: Foreign Contact Frequencies per House Representatives (Continued)

Name	**N1**[a]	**N2**[b]	**N3**[c]
Walz	1	1	1
Fossella	1	1	1
Deal	1	1	1
Gilchrest	1	1	1
Lynch	1	1	1
Cubin	1	1	1
Miller	1	0	1
Maffei	1	0	1
Childers	1	0	1
Hare	1	0	1
Mahoney	1	0	1
Duncan	1	0	1
Salazar	1	0	1
Teague	1	0	1
Castor	1	0	1
Kagen	0	0	0
Baker	0	0	0
Allen	0	0	0
Campbell	0	0	0
Solis	0	0	0
Wynn	0	0	0
Lampson	0	0	0
Cao	0	0	0
Hooley	0	0	0
Castor	0	0	0
Meehan	0	0	0
Millender-Mcdonald	0	0	0
Jindal	0	0	0
Doolittle	0	0	0
Gillmor	0	0	0
Cazayoux	0	0	0
Boyda	0	0	0
Defazio	0	0	0

Note: a. Total number of the contacts made by the foreign countries in the data, b. Total number of the contacts made by the foreign countries in the data directly to the member, c. Total number of the foreign countries that contacted the member.

J | Appendix to Chapter 3: A Sample Lobbying Report Under the Foreign Agents Registration Act



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U.S. Department of Justice
Washington, DC 20530

Supplemental Statement
Pursuant to the Foreign Agents Registration Act of 1938, as amended

For Six Month Period Ending 3/31/11
(Insert date)

I - REGISTRANT

1. (a) Name of Registrant: Kirsten A. Chadwick
   (b) Registration No.: 5950
   (c) Business Address(es) of Registrant:
   Fierce, Isakowitz & Blalock
   1155 F St. NW #950
   Washington, DC 20004

2. Has there been a change in the information previously furnished in connection with the following?

(a) If an individual:		
(1) Residence address(es)	Yes ☐	No ☒
(2) Citizenship	Yes ☐	No ☒
(3) Occupation	Yes ☐	No ☒
(b) If an organization:		
(1) Name	Yes ☐	No ☒
(2) Ownership or control	Yes ☐	No ☒
(3) Branch offices	Yes ☐	No ☒

(c) Explain fully all changes, if any, indicated in Items (a) and (b) above.

IF THE REGISTRANT IS AN INDIVIDUAL, OMIT RESPONSE TO ITEMS 3, 4, AND 5(a).

3. If you have previously filed Exhibit C[1], state whether any changes therein have occurred during this 6 month reporting period.
   Yes ☐ No ☒
   If yes, have you filed an amendment to the Exhibit C? Yes ☐ No ☐

Figure J.1: A Lobbying Report Submitted by Fierce, Isakowitz & Balock (Page 1: Registrant)

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II - FOREIGN PRINCIPAL

7. Has your connection with any foreign principal ended during this 6 month reporting period? Yes ☒ No ☐
If yes, furnish the following information:

Foreign Principal	Date of Termination
FIESP	12/31/10

8. Have you acquired any new foreign principal(s)[2] during this 6 month reporting period? Yes ☐ No ☒
If yes, furnish th following information:

Name and Address of Foreign Principal(s)	Date Acquired

9. In addition to those named in Items 7 and 8, if any, list foreign principal(s)[2] whom you continued to represent during the 6 month reporting period.

FIESP
Republic of South Korea

Figure J.2: A Lobbying Report Submitted by Fierce, Isakowitz & Balock (Page 3: Foreign Clients)

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IV - FINANCIAL INFORMATION

14. (a) **RECEIPTS-MONIES**

During this 6 month reporting period, have you received from any foreign principal named in Items 7, 8, or 9 of this statement, or from any other source, for or in the interests of any such foreign principal, any contributions, income or money either as compensation or otherwise? Yes ☒ No ☐

If no, explain why.

If yes, set forth below in the required detail and separately for each foreign principal an account of such monies.[6]

Date	From Whom	Purpose	Amount
11/29/10	Korea	income	$50,000.00
11/29/10	Korea	income	$50,000.00
12/19/10	Korea	income	$50,000.00
1/29/11	Korea	income	$50,000.00
3/29/11	Korea	income	$50,000.00
3/29/11	Korea	income	$ 5,000.00
10/20/10	Fiesp	income	$ 5,000.00
11/29/10 12/4/10	Fiesp	income	$ 5,000.00
			315,000.00

(b) **RECEIPTS - FUNDRAISING CAMPAIGN**

During this 6 month reporting period, have you received, as part of a fundraising campaign[7], any money on behalf of any foreign principal named in Items 7, 8, or 9 of this statement? Yes ☐ No ☒

If yes, have you filed an Exhibit D to your registration? Yes ☐ No ☒

If yes, indicate the date the Exhibit D was filed. Date _____ n/a

Figure J.3: A Lobbying Report Submitted by Fierce, Isakowitz & Balock (Page 5: Lobbying Fees)

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Question 12.

Korea - All contacts were made in advocating for the passage of the US-Korea Free Trade Agreement.

Paul Fassbender, Counsel to Senator Bob Corker
Meetings: 10/5/10
Telephone calls: 11/16/10, 1/18/11, 3/7,11

Jason Edgar, Legislative Director, Congressman Dave Reichert
Meetings: 10/7/10, 11/18/10, 2/2/11, 3/15/11
Telephone calls: 10/6/10, 1025/10, 11/3/10, 12/9/10, 12/14/10, 12/21/10, 1/5/11, 1/12/11, 1/24/11, 1/28/11, 2/7/11, 2/10/11, 2/15/11, 3/1/11, 3/3/11, 3/8/11, 3/14/11, 3/18/11, 3/28/11

Angela Ellard, Chief Trade Counsel, Ways and Means
Meetings: 10/12/10, 1/31/11, 3/8/11
Telephone calls: 10/6/10, 10/25/10, 11/4/10, 11/17/10, 11/30/11, 12/20/10, 1/7/11, 1/12/11, 1/18/11, 1/20/11, 2/11/11, 2/28/11, 3/18/11, 3/30/11

David Ross, trade counsel, Senate Finance Committee
Meetings: 10/12/10
Telephone calls: 10/25/10, 11/15/10

Neil Bradley, policy Director, Congressman Eric Cantor
Meetings: 10/18/10, 10/25/10
Telephone calls: 10/15/10, 10/24/10, 12/13/10, 1/24/11, 2/16/11, 3/24/11

Jon Lieber, Policy Advisor, Senator Mitch McConnell
Meetings: 10/18/10
Telephone: 10/16/10, 11/19/10, 12/20/11, 1/27/11, 2/16/11, 3/24/11

Dori Friedberg, deputy USTR for legislative affairs
Meetings: 10/18/10
Telephone calls: 10/16/10, 11/18/10, 12/1/10, 2/7/11

Barry Jackson, chief of staff, Congressman John Boehner
Meetings: 12/21/10, 2/3/11
Telephones calls: 10/19/10

Chris Campbell, Legislative Director, Senator Orrin Hatch
Meetings: 10/20/10
Telephone calls: 12/10/10, 2/4/11

Figure J.4: A Lobbying Report Submitted by Fierce, Isakowitz & Balock (Supplement: Contact Information During the Period)

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15.c.

Date	Amount or Thing of Value	Political Organization or Candidate	Location of Event
10/28/10	$2500.00	Cong. David Camp	Washington, DC
10/12/10	$500.00	Cong. Sam JOhnson	Washington, DC
10/12/10	$2500.00	Cong. Eric Cantor	Washington, DC
10/12/10	$2500.00	Cong. John Boehner	Washington, DC
10/28/10	$1000.00	Cong. Pete Sessions	Washington, DC
10/12/10	$2500.00	Cong. Kevin McCarthy	Washington, DC
10/30/10	$500	Sen. John Thune	Washington, DC
10/12/10	$250.00	Cong. Charles Djou	Washington, DC
10/11/10	$250.00	Cory Gardner	Washington, DC
3/18/11	$2500.00	Cong. Kevin McCarthy	Washington,DC
3/18/11	$500.00	Cong. Geoff Davis	Washington, DC
3/8/11	$1000.00	Cong. Dean Heller	Washington, DC
3/18/11	$250.00	Cong. Rick Berg	Washington,DC
3/18/11	$250.00	Cong. Diane Black	Washington, DC
3/18/11	$250.00	Cong. Steve Southerland	Washington, DC
3/18/11	$250.00	Cong Steve Scalise	Washington DC
3/18/11	$250.00	Cong. Tom Reed	Washington, DC
3/19/11	$250.00	Cong. Todd Rokita	Washington DC
3/30/11	$250.00	Cong. Sean Duffy	Washington, DC
1/28/11	$2400.00	Sen. Orrin Hatch	Washington, DC
2/8/11	$1000.00	Sen. Scott Brown	Washington,DC
3/29/11	$1500.00	Sen Scott Brown	Washington DC
2/15/11	$500	Sen. Mark Kirk	Washington, DC

Figure J.5: A Lobbying Report Submitted by Fierce, Isakowitz & Balock (Supplement: Campaign Contributions by Fierce, Isakowitz & Balock and Its Affiliated Lobbyists During the Period)

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