Abstract:
Each year, groups ranging from multinationals to non-profits spend hundreds of millions of dollars lobbying Congress on foreign policy bills. The massive flow of private dollars into lobbying, about ten times the amount of money spent by those same groups through political action committees, raises concerns about the health of political pluralism: whether organized interest groups are distorting American foreign policy for private gain. We focus on firms because they have long been at the center of this debate and account for more than three quarters of foreign policy lobbying dollars. Using an original dataset that combines tens of thousands of Lobbying Disclosure Act filings from 2007 to 2011, information on the content of proposed legislation from the Congressional Research Service, and financial data on all publicly listed firms in the U.S. we make three claims. First, there is a clear—and perhaps worrisome—hierarchy to corporate influence on American foreign policy. Firms that lobby on foreign policy tend to be the largest and most profitable companies best situated to solve the collective action problems associated with lobbying. Second, there is significant variation in the representation of corporate interests by issue area, with a greater diversity of sectors lobbying IPE than international security. Yet, third, across all issue areas, corporate lobbying on foreign policy is in no way representative of American society more generally, which is heavily polarized between liberals and conservatives. The corporate foreign policy lobby—which accounts for 75% of all lobbying dollars—is skewed center right.

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Each year, groups ranging from multinationals to non-profits spend hundreds of millions of dollars lobbying Congress on foreign policy bills. The massive flow of private dollars, and perhaps private influence, into the foreign policy making arena raises concerns about whether the actions of organized interest groups unduly influence American foreign policy. These narrow interests work in stark contrast to the hope, drawn from American pluralist thought, that a diversity of interest groups—spanning consumers and producers, defense contractors and disarmament groups, importers and exporters, firms large and small, along with workers and employers, labor unions and non-profits—will exert robust influence that on balance favors the public good. America’s is a system, after all, designed by Madison to keep interests in check by pitting competing factions against each other (see Hamilton or Madison 1788; Madison 1787). The sum total of the actions of a multiplicity of organized interests, often working at cross-purposes, can provide representation for society’s diverse interests (Dahl 1956, 1961; Lindblom 1977; Truman 1951). A system marked by active lobbying can be beneficial, a “political system in which all the active and legitimate groups in the population can make themselves heard at some critical stage in the process of decision” (Dahl 1956, 137).

Yet pluralism requires both broad participation and a diversity interests. And the fear is that Congressional lobbying might exacerbate societal inequalities if some interests are better organized and more active in a policy realm than others. If all of the most engaged actors on foreign policy speak for a narrow sector of society, then our system “is skewed, loaded and unbalanced in favor of a fraction of a minority” (Schattsneider 1960, 36), elevating that fraction rather than restraining it. Similar fears have animated concerns about a ‘democratic deficit’, whereby American interests in world politics represent, at best, a small fraction of interest groups that are not operating for the

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4 Dahl (1986) and Lindblom (1977) admitted and critics of pluralism such as Schattsneider (1960) and Lowi (1969) insisted on this point.
greater public good while the majority of citizens have little input into American foreign policy or the workings of international organizations (Dahl 1999; Moravcsik 1998).

Firms have long been at the center of this debate. They are the dominant lobbying groups in American politics (Koh 2011; Lowery 2007; Nownes 2013), and have long been thought to exert special influence on American foreign policy (Rogowski 1989; Grossman and Helpman 1994; Keohane and Milner 1996; Milner 1997), especially through their influence on Congress (Jacobs and Page 2005). When it comes to Congressional foreign policy legislation, they account for half of all recent lobbying filings and more than three quarters of lobbying dollars.5

The long tradition of scholarship centrally focused on firms’ incentives to influence American foreign policy—mainly in the realm of trade protectionism—suggests particular reasons to worry about this imbalance (Milner 1988, 1989). According to the standard political economy logic, rational self-interested firms infuse money into the American political process in an effort to sway government to raise barriers against potential competitors (Peltzman 1976; Stigler 1971). Applied to international trade, this logic led to theories on the political economy of protection in which industries whose factors of production were not competitive in the global marketplace would lobby for protectionism (Grossman and Helpman 1994; Koh 2011; Lowery 2007). Extensions of that logic have now shifted from a focus on whole industries to individual firms that are extremely heterogeneous—some highly productive and thus keen for expanded access to markets and others more inclined to protectionism (Melitz 2003). Empirical research has applied that logic to show that only a narrow range of firms can export or engage in foreign direct investment (Bernard et al. 2007; Helpman 2006) and so could have both the interest and the resources to sway politicians to protect their industries from foreign competition. Wealthy, large, productive firms in highly concentrated industries make disproportionate campaign contributions that have, by some accounts, led to greater

5 See section I for evidence.
trade protectionism (Bombardini 2008). The vast majority of this work has focused on the incentives for trade protectionism although some research has also expounded a similar logic to explain the forces that might influence congressional voting on international financial policies such as funding for the International Monetary Fund (Broz 2008). A potentially worrisome implication of this growing body of work is that American pluralism is in deep trouble, as a small minority of high-powered corporate interests exerts excessive influence on Congressional foreign policy.

Until recently scholars have focused almost exclusively on corporate efforts to influence Congressional policy through PAC contributions (Bombardini 2008; Fleisher 1993; Grier and Munger 1993; Milyo et al. 2000). Yet in fact, lobbying expenditures far outweigh PAC contributions (Apollonio 2005). In addition to the much larger size of lobbying investments, U.S. lobbying disclosure laws that took full effect in the 2000s require disclosure of the intended target legislation—making it possible, in principle, to measure attempts at political influence in ways that are connected to actual content. A few studies have begun to use lobbying data to explain the political economy of influence—notably in matters of trade and investment (Ansolabehere et al. 2003; Brasher and Lowery 2006; Drope and Hansen 2006; Bombardini 2008; Bombardini and Trebbi 2012; Kim 2012; Plouffe 2012). One of the central contributions of this paper is to deploy a large new dataset on disclosed lobbying that is linked in novel ways to legislative content in all areas of foreign policy—including trade, finance, foreign aid, human rights and arms control—and to the attributes of the lobbying firms.

We present three central findings that have important implications for the debate over American pluralism and the role of corporate influence on U.S. foreign policy. First, there is a clear—and perhaps worrisome—hierarchy to corporate influence on American foreign policy.

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Corporate lobbying – which accounts for 75% of all foreign policy lobbying dollars – is skewed even within the ranks of private industry. It is a small minority of firms in any given industry that lobby Congress on foreign policy of any kind—of the 8,186 publically traded firms in our sample, only 8% reported lobbying on foreign policy. As we expect, those that lobby tend to be large and prosperous, engaged in commercial activities that stand to gain from government intervention, and situated in the top ranks of concentrated industries. Corporate influence on Congressional foreign policy appears to be the province of a small slice of the biggest companies.

Second, there is significant variation in the representation of corporate interests by issue area. On matters of international political economy, lobbying is widely diffused across nearly all sectors of the economy—just about every industry lobbies Congress in some form or another on IPE. This pattern corresponds to the rise of an “open economy”, where companies in all sectors recognize that a well-functioning global economy is broadly in their interests. One potential implication is that this plurality of corporate voices leads to some measure of political competition that could provide a degree of representation for society’s diverse interests on IPE. However, while this plurality is evident for IPE, it is much less apparent in international security, where lobbying tends to be dominated by a narrow range of the largest corporate interests seeking to translate their economic power into political power, with few other voices at the table.

Third, the groups that lobby on foreign policy are in no way representative of American society more generally, which is heavily polarized between liberals and conservatives. By contrast, the foreign policy lobby is more centrist, but skewed center right. While this fact does not bode well for American pluralism, in that groups lobbying on U.S. foreign policy are generally aligned ideologically and thus the diversity of interests being represented is low and centrist, it may reduce the polarization of political attitudes to ideological extremes over U.S. foreign policy.
This paper is among the few (to our knowledge) to identify systematically which firms lobby Congress specifically on foreign affairs—not simply for trade protection—but for all foreign policy issues, and whose corporate voices are absent. In section one, we map the landscape of lobbying and illustrate that interest groups concerned with foreign policy spend far more on lobbying members of Congress than on contributing to their campaigns, that approximately one in ten lobbying dollars spent on Capitol Hill are targeted at foreign policy issues, that firms account for the majority of these lobbying filings and expenditures; and that less than half of lobbying contributions are spent on trade-related bills which have been the primary focus of most previous scholarship. Next, we explain which types of publically traded firms lobby Congress and for which foreign policy issues—we focus in this paper on all publically traded firms, which account for 50% of the total lobbying expenditures that are focused on foreign policy, because micro level firm data are publically available for these organizations, which account for the lion’s share of total corporate revenue in the US. In section three, we present results of our multivariate models explaining lobbying behavior across public firms, both in the foreign policy arena generally and in specific issues within it such as IPE and security. Finally, we conclude with several key implications.

I. The Foreign Policy Lobby

Who seeks to influence Congress on foreign policy issues, how do these groups spend their money, and what is the scale of the foreign policy lobby overall? In order to answer these questions, we created an original dataset by combining multiple government sources with information on firms drawn from census reports, academic studies, and the Compustat database. To obtain information on lobbyist filings and campaign contributions, we purchased data from the now-defunct “First Street,” a subscription service operated by CQ Press. First Street brought together information on Lobbyist Disclosure Act (LD-203) filings, Federal Elections Commission campaign contribution
reports, and information on legislation provided by the Library of Congress’ “Thomas” web archive. Working with First Street staff, we began by identifying the 7,051 bills tagged with at least one of the Congressional Research Service’s (CRS) subject codes that fell into First Street’s “International Relations and Trade” grouping. Because the quarterly lobbying filings must identify the bills that an interest group lobbied, we were able to pull the 404,335 filings that targeted at least one foreign policy bill. Each filing identifies a client, and using First Street’s unique client number allowed us to obtain the campaign finance reports filed by these interest groups.

Figure 1 combines data from these linked reports, answering the question, “When interest groups seek to influence American foreign policy, do they spend their money donating to congressional campaigns or lobbying Congress?” The answer is that, overwhelmingly, they invest in lobbying. From 2007 through 2010, the years in which all of First Street’s datasets are complete, foreign policy lobbying expenditures dwarf campaign contributions every year. This is not news to those who study lobbying in American politics. As Apollonio’s (2005) study of interest group activity across all issue areas shows, lobbying expenditures greatly exceed campaign contributions for all types of groups except for labor unions. Figure 1 shows that the vast majority of the money goes into lobbying.

The totals shown in this figure exaggerate the amounts of money that are spent, either through lobbying or in campaign donations, on foreign policy alone. A bill that touches on at least one foreign policy issue may also affect other policy areas, and be combined on the same lobbying report with other bills that have nothing to do with foreign policy. Similarly, campaign contributions are given to legislators who vote on foreign policy bills along with a host of other issues. Both totals are similarly overstated, making them a fair basis for comparison in Figure 1, but in the analysis of lobbying behavior that follows, it is vital that we estimate the number of lobbying dollars aimed specifically at foreign policy. We do so by relying on Congressional Research Service’s
issue codes. Each bill is given multiple codes, including both issue areas such as “International Finance,” “Building Construction,” or “Health Policy,” and proper nouns such as “Virginia” and the “Virgin Islands.” After eliminating the proper noun codes, we counted the total number of CRS codes that fall in the foreign policy realm and divided that into the total number of CRS codes attached to the bill altogether. The full list of these foreign policy codes, as well as the subcategories of foreign policy into which they fall, is provided in Appendix 1. This gives us a foreign policy factor for each bill, which we can then use to determine how much of the money spent lobbying it was aimed at foreign policy. For instance, the bill 110 S. 796, the “Fair Currency Act of 2007,” was tagged with 15 overall CRS codes, eight of which were foreign policy codes, giving it a foreign policy factor of 0.53. If an interest group filed a report that it spent $100,000 lobbying on this bill alone, we would categorize $53,000 of this spending as foreign policy lobbying. If that filing instead reporting lobbying on two bills, 110 S. 796 and another bill completely unrelated to foreign policy, we would categorize $26,500 of the group’s spending as aimed at foreign policy. We categorized any bill with a factor below 0.10 as “unrelated to foreign policy,” a level we determined by sampling 100 bills at random and reading each bill—assigning a four point scale (shown on Figure A1 in the appendix) displaying whether the bill was squarely within the realm of foreign policy (code 1) or peripheral (code 4). This approach shows a clear break point at 0.1, with most bills below 0.1 being categorized as peripheral to foreign policy while a majority of bills above this cutpoint received a score that marked them as bills that were indeed related. We then screened out of our data set all bills (and lobbying efforts) that with an index below 0.1. This approach aims to produce a much more accurate estimate of lobbying that is genuinely connected to foreign policy issues.

To make the data set manageable in size we used this index factor to screen out non-germane lobbying records and thus this variable is not present in our data set in a way that can be readily adjusted for robustness checks by changing the threshold.
This trimmed our dataset to 3,126 bills introduced between 2007 and 2010, which interest
groups reported lobbying on in 14,012 filings. Deflating the filing amounts by our foreign policy
factor produces the data displayed in Figure 2, which displays how much of the money spent
lobbying Congress overall is focused on foreign policy. Compared against the congressional
lobbying totals reported by the Center for Responsive Politics (2014), foreign policy lobbying
represents about 10% of the total amount spent on Capitol Hill. For instance, in 2010, interest
groups spent a total of $3.55 billion on lobbying, and we estimate – based on the percentage of CRS
codes attached to lobbied bills – that $387 million of this went toward lobbying foreign policy issues.
This is both a considerable sum in itself and a significant proportion of Washington’s lobbying
activity.

What particular areas within foreign policy attract the most lobbying? Relying again on CRS
codes, we calculated new indices based on the subcategories of CRS foreign policy codes shown in
Appendix A. This allows us to break down foreign policy spending from 2007-2010 into four main
areas of foreign policy (the first pie chart shown in Figure 3) and then to further divide spending
into eight finer grained classifications (in the second pie chart). This breakdown reveals that there
are many types of foreign policy issues that generate major lobbying efforts. Trade and Investment
issues attract a lot of money, but so does the Omnibus Foreign Policy category used to capture bills
that span both international political economy and security issues. Within political economy, both
Finance and Aid bills generated $130 and $100 million of lobbying, respectively, over this four-year
span. While Arms Control, Security, and Human Rights did not see as much spending, the bills that
addressed them still attracted tens of millions of dollars. Trade bills may be the biggest targets of
foreign policy lobbying, but they are far from the only issues that draw the attention of K-Street’s
clients.
Who spends this money? Combining data from 2007 through 2010, Figure 4 breaks down lobbying expenditures on foreign policy by their source, using our own categorization. This figure shows, first, the percentage of filings and then the percentage of dollars spent by different types of groups. Firms, whether public, private, or working together through trade associations, account for just under half of all of the lobbying filings in this realm, with organized groups, unions, government, universities, and other entities making up the remaining 51%. But firms spend much more per filing and thus more overall. The average public firm filing targets $228,528 at foreign policy, compared to $36,652 per filing for groups in the catch-all category. That means that firms provide the vast majority of the dollars spent lobbying foreign policy, with public firms spending 50% of the money, private firms 6%, and trade associations accounting for 25% of expenditures.

The portrait of the foreign policy lobby is sharpened by Table 1, which reports the twenty interest groups that spent the most lobbying on the combination of international political economy (IPE) and security issues in 2010. Nearly all of these major players are firms, ranging from energy industry titans such as Exxon Mobil, ConocoPhillips, and Pacific Gas and Electric to firms with major defense industry contracts such as General Electric, Lockheed Martin, and Boeing. The groups that are not firms are primarily trade associations such as the Chamber of Commerce, PHArama, the Financial Services Roundtable, and the National Association of Manufacturers. The only interest group here is, somewhat surprisingly, the AARP. Each of these groups targeted well over a million dollars of their lobbying at foreign policy issues in 2010, with the Chamber of Commerce leading the way at $24 million. Twenty million of the Chamber’s spending was aimed at political economy issues. Overall, there is a close overlap between the top foreign policy lobbying clients and the top IPE spenders, while the security arena often featured a different set of players.

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8 This table leaves out spending on “Other Foreign Policy” issues and on “Omnibus Foreign Policy” bills; adding all four categories together comprises our aggregate measure of foreign policy lobbying.

9 The AARP primarily lobbies on broader bills related to their members’ interests, including bills relating to the pharmaceutical industry, hiring incentives, health equity, and trade duties.
Energy companies and defense contractors like Raytheon, Boeing, Lockheed Martin and G.E. all ranked in the top ten of security spenders but not of IPE lobbying groups. By contrast, FedEx and Walmart’s IPE lobbying expenditures placed them in the top ten, but neither company was in the top 100 in security lobbying. All of these patterns make substantive sense, and drive home the point that these firms pursue lobbying strategies that reflect their private interest.

From the perspective of pluralism, the fiscal dominance of firms is troubling. When it comes to setting the foreign policy of the world’s dominant superpower, more than eight in ten of the dollars spent to influence that policy debate come from corporate groups that seek to maximize their own profits. Exactly what types of firms choose to lobby foreign policy, and does the political economy that drives this decision make lobbying on foreign policy a one-side affair? That is the question that we turn to in the remainder of our analysis. Focusing on the 50% of foreign policy lobbying that comes from public firms, we use information from the Compustat subscription service and U.S. Census sources to construct a dataset containing both the public firms that did and the firms that did not spend money lobbying foreign policy from 2007 through 2010. This allows us to model the determinants of lobbying and thus to see what distinguishes the voices that are heard in the halls of Congress from those that are silent, at least in the realm of industry. The next section draws on works from international political economy and American politics to generate our hypotheses, which we then test in multivariate models in section four.

II. Explaining Foreign Policy Lobbying

We adopt a standard profit-maximizing framework. Firms seek to maximize profits and returns to their shareholders while minimizing costs. One way firms maximize returns is to obtain political benefits from government such as protectionism, subsidies, contracts, and other forms of market intervention (Stigler 1971; Fama 1970). Although there are a number of partially
substitutable mechanisms for obtaining political benefits (e.g., Hillman et al. 2004), lobbying accounts for the lion’s share of total spending and public firms are the single largest source of lobbying dollars on foreign policy. Yet firms are highly heterogeneous across many factors, such as size and productivity, that affect the strategies they deploy in trying to maximize returns (Rodrik 1995; Melitz 2003; Pinto and Weymouth 2013; Bernard et al. 2007; Alt et al. 1999).

When deciding whether and how much to lobby on foreign policy, individual firms weigh the costs of lobbying activities versus the expected benefits that ultimately may accrue to the firm’s shareholders. There are two primary costs to any lobbying: the dollar amount spent to influence any given piece of legislation and the upfront costs to establishing a lobbying presence, which creates barriers to entry and economies of scale (Kerr et al. 2014). The benefits of lobbying and other forms of political action spending depend on many factors. While there is a large literature on lobbying, recognized among the most important factors are size, the appeal of government intervention and the capacity to solve the collective action problem associated with lobbying (Hansen and Mitchell 2000). Here, we explain why these factors also predict foreign policy lobbying.

*Size*

The economic literature on firm size predicts that lobbying behavior reflects the size and profit of firms. Many of the benefits from government intervention scale with size. The field of industrial organization is rooted, in part, in the idea that firms will seek government intervention that raises barriers to entry against other firms—thus allowing incumbents to obtain greater profits (Stigler 1971). Unlike direct subsidies or contracts, this form of government intervention is peculiarly beneficial to incumbents—making it easier for incumbents to concentrate the benefits of regulatory intervention on themselves. By contrast, subsidies can easily be diffused to other entering

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10 Hansen and Mitchell (2000) also identify the importance of government sales, for which we do not have an empirical measure.
firms that do not pay the cost of obtaining them through lobbying. Since distortions of this type affect profit they multiply with market presence. Similarly, favorable distortions in labor markets multiple with the size of a firm’s labor force. Since a large portion of the costs of lobbying is fixed, advantages also accrue to larger firms that can amortize those fixed costs over a larger base.

There is also substantial variation in individual firms’ capacity to overcome the barriers to entry. Earlier research on PACs and lobbying has placed firm size first in the list of factors that explain business political activities (Boies 1989; Grier et al. 1994; Hansen and Mitchell 2000; Bombardini 2008). And recent research has established that firm size and profitability are predictors of lobbying on policies such as immigration, in part because larger firms have greater capacity to pay the up front costs of entry (Kerr et al. 2014).

Theoretically, this logic leads us to expect—hypothesis 1—that large and profitable firms are more likely to lobby on foreign policy. Empirically, we draw upon the Compustat data to create three distinct measures to test this hypothesis. First, total employees—a standard measure of firm size—should predict greater expenditures on foreign policy lobbying. Second, the profitability of a firm—which we measure by earnings before interest and taxes, one of the most widely reported accounting measures of profitability—should predict foreign policy lobbying. Third, firm rank sales—the firms with the largest market shares—should be the most politically engaged on foreign policy. To measure a firm’s rank sales we look at all 23 sectors of the economy at the two-digit North American Industry Classification System (NAICS). We rank all publicly traded firms within each sector based on employees (our measure of firms size), with “1” as the largest.

The Benefit of Government Intervention

The foreign policy lobbying effort of firms should depend, as well, on whether government has much to offer. For many firms the government offers many potential interventions. Established
firms can seek the help of the government to cement and protect their position within an industry. Firms can also sell a wide array of goods and services to government. However, this logic mainly applies to firms who know where and how government can serve their interests—such as firms that operate in long-established industries, are vendors for government, or are highly regulated. Firms that operate with new business models—because they are in wholly new industries or are disruptors within existing industries—have less to gain from government. Many of these firms are also small or fledgling and thus must focus their resources on demonstrating their profitability and rapidly expanding market share with customers. Old, established firms focus on making friends in Washington; radically new firms focus on making money and ignore the beltway. Theoretically, this logic leads us to expect—hypothesis 2—that firms that are structured to benefit from government intervention will be more likely to lobby on foreign policy.

The challenge lies in actually measuring the potential for government intervention. One approach would involve looking at firms in different sectors—such as by identifying the industrial classification (NAICS) of firms (which is easily measured) and then linking particular industries to some measure of the potential gains from government intervention. That approach, however, requires the intractable task of identifying exactly what government can do in each sector of the economy. There are firms with mature business practices that could benefit from government intervention in essentially every corner of the economy. And there are disruptor firms spread across the economy as well. Another approach would look at individual firms and their earnings per share (EPS). Typically, firms in mature and predictable industries—those that have honed methods for obtaining government advantage—have relatively low and stable EPS. However, in the real world EPS is a difficult measure because earnings can be volatile and sensitive to accounting issues such as tax treatment; firms with negative earnings do not report EPS.

Here we explore a different method that utilizes Tobin’s “Q”—a measure, pioneered by
James Tobin, that assesses the ratio of what the stock market thinks a firm is valued (total market capitalization) versus the booked value of the firm’s assets, adjusted for debt and other accounting assets and liabilities. Tobin’s Q is a measure of whether stock owners see some value in a firm beyond what the accountants estimate is the firm’s value if broken up and sold tomorrow. This measure may also reduce some concerns that stock valuations endogenize the potential benefits of government interventions, which is one of the many challenges in using EPS. Stockholders are forward-looking and can assess the value of government intervention for a firm; however, accountants must also include a reasonable estimate of those same market interventions in the value of the firm’s assets. Thus in Tobin’s Q the value of government intervention appears in both the numerator and the denominator (perhaps with more volatility in the numerator), helping to explain why Tobin’s Q is about 1 for firms in established industries that equity holders and accountants alike know how to value.

To calculate Tobin’s Q we use the method reported by Kaplan and Zingales (1997), which has the advantage that all of the parameters are reported by Compustat for publicly traded firms.\textsuperscript{11} As noted, firms with established, mature business practices on average have Tobin’s Q values slightly above 1—that is, shareholders assign the firm some modest extra value to reflect the agglomeration of its tangible assets, intellectual property, business practices and labor force. We expect these firms to engage in more lobbying than new firms, which tend to have much higher Tobin’s Q values—a reflection that speculators in the stock market see some potential huge new value that accounts cannot yet measure. Thus, we expect that firms with low values of Tobin’s Q will be more likely to lobby on foreign policy.

\textsuperscript{11} We are mindful that there is a large literature on calculation of Tobin’s Q and a variety of other methods as well (e.g., Abel and Eberly 2011; Chung and Pruitt 1994; Lindenberg and Ross 1981).
Collective Action

As Mancur Olson (1965) argued long ago, collective goods tend to be under-supplied unless the group that would benefit from collective action is small and the benefits from working in concert are concentrated. The applications of this logic have been many. They help explain why voters often free ride rather than turn out to vote (Downs 1957). They help explain the stability of a bipolar or hegemonic world (Waltz 1979). They help explain the origin and maintenance of alliances—for example, NATO—which benefit from the willingness of the largest member (e.g., the US) to pay a disproportionate share of the organizational and maintenance costs of the alliance because it also gains the largest share of the benefits (Olson and Zeckhauser 1966; Sandler 1993). Some research has also used Olson’s insight to explain when and how firms join business associations to obtain collective benefits such as lobbying. (Grossman and Helpman 2001; Mitra 1999).

We expect that a similar logic of collective action is at work in lobbying. Often, lobbying generates benefits that flow to a whole industry and thus the provision of those goods depends on the incentives for collective action. Following Olson, any particular firm will lobby if it is dominant within an industry—that is, if it can recover a particularly large share of the industry-wide benefits for itself. Dominance depends on relative size, which can be measured by ranking each firm by size within its industry. Dominance also depends on the concentration of the industry itself since dominant firms in highly concentrated industries will reap a larger share of the collective benefit for themselves. In highly diffuse industries—for example, the thousands of rural electric cooperatives—even the largest firms may see relatively few benefits for themselves from lobbying on behalf of the whole industry. Related work by Bombardini (2008) also theorizes that industrial sectors, where the distribution of firm size is more dispersed, are more likely to have a larger fraction of the sector output produced by firms large enough to incur the fixed cost of contributing to
politicians and participating in the lobby. This logic leads us to expect—hypothesis 3—that an individual firm is more likely to provide public goods to its industry, and thus to lobby on foreign policy, when the industry is concentrated and the firm is highly ranked by size within the industry so that a large share of those public goods flow to the firm that invests most in foreign policy influence.

We compute the concentration of the industry by following a standard procedure from the economics literature. For each sector, we estimate a regression with the log of each firm’s sales ranking (plus 0.5) as the dependent variable and the log of the firm’s sales as the sole independent variable. The estimated coefficient of sales for each sector is our measure of concentration, with larger (less negative) coefficients indicating that the most highly ranked firms account for larger proportions of a sector’s sales.

Open Economy

Our theoretical expectations regarding corporate size, the benefit of government intervention and collective action are not unique to foreign policy—they apply generally to all lobbying efforts. What is unique to foreign policy, however, is the extent to which the “open economy politics” associated with globalization creates incentives for firms to focus their foreign lobbying efforts on particular issue area (Lake 2009). Here, we argue that the effects on pluralism vary significantly between IPE and international security.

We expect that firms, because they seek to maximize profits, will lobby on legislation that affects their sector of the economy. Financial firms will lobby on international financial legislation. Aerospace firms will lobby on arms control as that might affect demand for their fighter jets and drones. Agriculture firms will lobby for foreign aid since much of that takes the form of in-kind donations of food. This expectation is rooted in the idea that firms seek to advance their private interests and are not direct providers of public goods. However, as economies become more
open, a wide array of firms—not just the big exporters—must increasingly rely on global markets for capital and on a well-functioning transportation system for just-in-time trade in primary resources, intermediate goods and final products. They rely on investment law to protect far-flung networks of factories. And firms from just about every sector of industry are developing interests in the international economy. This kind of logic has long been used to explain the orientation of policy in small countries—where national firms must become globally enmeshed because the home market is too small to serve as an engine of growth (Weil 1970). An example is Altria Client Services. Though Altria's business interests reside mostly in tobacco, they have lobbied extensively on bills relating to foreign tax havens and financial regulations—issues that affect both their own priorities and their broader sector's interests. This leads us to expect—hypothesis 4—that firms broadly participate in IPE lobbying regardless of sector—everyone lobbies on trade and aid.

International security legislation is another matter. There is no equivalent open economy of security policy. Arms control, for example, remains largely a state matter, and with the exception of large defense contractors and arms producers or procurers, there is little reason to expect broad participation by companies across sectors. Rather, we expect that on security matters it is a narrow subset of industries that lobby Congress. For example, in 2010 the defense technology contractor Raytheon lobbied exclusively on bills relating to defense appropriations and expansions of intelligence and military capabilities.

III. Predicting Foreign Policy Lobbying by Public Firms

We now explore these hypotheses by constructing a dataset that combines firms which did and which did not lobby on foreign policy, estimating a model that predicts each firm's lobbying
Our dataset links the lobbying records obtained through First Street to the characteristics of 8,186 public firms contained in the Compustat directory, augmented by information on their productivity from a computed Tobin’s Q based on Kaplan and Zingales (1997) and the sector in which they operate from the Census’ North American Industry Classification System (NAICS) (see Census Bureau 2014). Our dependent variable is the annual dollar amount of a firm’s lobbying expenditures targeted at foreign policy (or a subcategory of it, in later models), ranging from the modal case of zero dollars up to the $34,510,644 that the Chamber of Commerce spent on total foreign policy lobbying in 2010. This dependent variable averages $21,219 across our entire sample, but $257,348 in the 2,295 cases in which a firm filed a lobbying report with foreign policy bills. We observe lobbying activity or inactivity from 2007 through 2010, yielding a total of 27,834 observations. Because these are not independent observations, our errors in predicting one firm’s expenditures in 2007 are very likely linked to its errors in the other years. As a consequence, we estimate all of our models with standard errors clustered at the firm level.

Table 3 presents the results of our basic model, which predicts spending on lobbying all areas of foreign policy combined. The first result is that the estimated effect of a firm’s number of employees provides strong support for Hypothesis 1. Firm size predicts political activity. Controlling for other factors, firms with one thousand more employees will spend a predicted $944 more on lobbying foreign policy every year. The positive and significant coefficient on a firm’s earnings also suggests that lobbying is the domain primarily of the firms that can afford it. Every

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12 We focus the analysis on total expenditures rather than any lobbying behavior because we are most interested in which firms are spending the most money—rather than any money—to lobby Congress on foreign policy. Our results are largely consistent when we predict a binary measure of any lobbying.

13 Our data structure allow up to four observations for each firm, but because some firms were not in the Compustat dataset in all four years or had missing data in one or more years, our total number of observations falls short of $4 \times 8,186$. 


extra hundred million dollars of earnings should translate into about $1,248 more in lobbying expenditures, *ceteris paribus*. The third implication of Hypothesis 1 in our model comes from the postulation that within an industry, firms with the largest market shares should be the most politically engaged. The negative and significant coefficient on a firm’s sales rank fits with this expectation, showing that the #1 ranked firm in a sector spends more than the #10 ranked firm. Moving this far down the rankings, which are calculated at the level of the 2-digit NAICS sectors (areas such as “Utilities” or “Petroleum and Chemical Manufacturing”) should reduce a firm’s predicted lobbying expenditures by $2,547.

One finding that does not fit with our theoretical expectations is the apparent non-effect of a firm’s Tobin’s Q. We employed this measure as a proxy for whether a company stands to benefit from government intervention (and thus a relatively low Tobin’s Q, indicating that its market value was relatively similar to the combined value of its assets) or whether it was operating on a new business model (indicated by a relatively high market value and thus a large Tobin’s Q). According to Hypothesis 2, a larger Tobin’s Q should lead to a decline in lobbying activities because these firms have the least to gain from government intervention. Rather than seeking policy protection, they will focus on creating economic value. Yet in our model, the impact of Tobin’s Q falls far short of significance, even in a model with 27,834 observations.

The three scatterplots in Figure 5 explore the link between this measure and lobbying expenditures per employee further, dividing our sample into three based on Tobin’s Q values. The first looks at firms with Tobin’s Q values between zero and one, meaning that their assets are more valuable than their market valuations. For such struggling firms, lobbying expenditures are quite low, but there appears to be a positive link between Tobin’s Q and foreign policy lobbying. This makes sense, as firms with extremely low valuations have very few assets or established business practices to protect—they are the least likely to benefit from government intervention in the
marketplace. We see what we expect in the next scatterplot, with Tobin’s Q ratings from one to four representing the difference between mature and high-flying emerging firms and lobbying expenditures declining over this interval. But in the third scatterplot, which includes the many holding companies with very high Tobin’s Q values, there is no clear correlation. It appears that there is some support for Hypothesis 2 within part of our sample, but not in our full dataset.

Hypothesis 3 predicts that the concentration of interests within a sector should change the dynamics of lobbying because it will affect the incentives and capacity to solve the collective action problems associated with lobbying. Specifically, we expect to find that concentrated industries yield concentrated benefits when the leading firms bear the costs of collective action. Concentration, then, should accentuate the impact of a firm’s ranking; top-ranked firms within a sector should be even more likely to lobby when they operate in highly concentrated industries. This is exactly that pattern we see in the significant interaction between a firm’s ranking in size (which we measure with sales rank, as is done widely) within a sector and that sector’s level of concentration (based on the distribution of sales within a sector). Sales ranking alone has a negative impact, meaning that top-ranked firms lobby more, and this pattern is accentuated in the most concentrated sectors. In industries dominated by a few firms, those firms act on their incentives to be the most active political players. In less concentrated industries, political engagement on foreign policy is spread out across more firms.

These findings are consistent across all different issue areas of foreign policy, the results in Table 4 show. These four models predicting lobbying expenditures on IPE, Security, Other Foreign Policy, and Omnibus Foreign Policy bills, estimated together in a seemingly unrelated regressions framework, yield nearly identical results. That is not because the firms that lobby in one area are always the same firms that lobby in another; Table 1 showed that IPE and Security bills were often

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14 In fact, if we constrain our sample to the cases of firms with a Tobin’s q between 1.5 and 4, this variable has the negative and significant impact of foreign policy lobbying predicted by Hypothesis 2.
lobbied by distinct groups of players. What Table 4 does indicate is that the same firm characteristics and thus the same strategic logics that drive firms to spend on political activity in one realm of foreign policy—such as trade—also operate in the other realms such as security.

The Open Economy

Next we determine whether there is a difference in the breadth of lobbying across issue area by an examination of industry-level fixed effects. We include these effects (which indicate how much more firms in a given industry spent on average compared to the largest industry in our data, financial services) in all of our models. Figure 6 presents a compact look at the impact of industry fixed effects on lobbying in IPE and in security. The fixed effects are converted into a percentage of the average expenditure in each realm, showing them as vertical bars only if they are statistically significant at the 95% confidence level. If one of these realms of foreign policy shows many tall bars, that indicates that corporations in some sectors of the economy spend much more on lobbying than other sectors. If, by contrast, there are few tall bars representing significant fixed effect, that means that lobbying participation is spread more evenly across economic sectors.

The lesson here is that, regardless of sector, firms broadly participate in IPE lobbying. They all appear to share a stake in political economy issues, with no sector (other than metal and electronic manufacturing) much more invested than others. This finding is consistent with “open economy politics.”

By contrast, when it comes to bills touching on security issues, firms in eleven of the sectors lobby significantly more than financial firms and other sectors. Security seems to be a niche foreign policy realm, with sectors like metal and electronic manufacturing (which includes most defense contractors), “mining, quarrying, and oil and gas extraction,” holding companies, and petroleum and chemical manufacturers spending the most. In short, security bills attract the attention of a narrow
IV. Discussion

Our multivariate analyses of which corporations lobby the most on foreign policy – which show that the largest firms with the greatest stakes in highly concentrated industries devote the most money to lobbying – raise troubling questions for the expectations of pluralism. They also raise additional empirical questions, which we can address by analyzing our rich dataset in different ways. Before reaching a final verdict about how patterns in foreign policy lobbying relate to the age-old debate over pluralism in American politics, we briefly explore two of these questions.

First, when Congress considers a piece of foreign policy legislation, how many voices will weigh in on it? Theories of pluralism demand not only that many groups will be generally active in Washington’s affairs, but that multiple groups will lobby the very same bills. Our prior analysis only looks at overall lobbying activity, but the Lobbying Disclosure Act mandates that groups designate the individual bills on which they are active. Looking at our data at the level of individual bills rather than combining a group’s spending across all bills allows us to compute a count of the number of groups that reported lobbying a given bill. If many groups lobby the same bills, this may be evidence of what Austen-Smith and Wright (1994) term “counteractive lobbying” (also see Baumgartner and Leech (1996) for a discussion of the complexities of measuring counteractive lobbying).

Figure 7 reports the distribution of this count of how many groups lobbied a given bill. Importantly, we harness the richness of the FirstStreet dataset to look at each bill’s legislative history and then to place bills into three different categories. The first and darkest line shows lobbying counts for the 1,548 foreign policy bills in our dataset that were introduced in the House or Senate,
then essentially never heard from again. These bills attracted relatively little lobbying attention. Only one group lobbied on 46% of them, 36% saw between two and five groups lobbying, and none generated interest among more than one hundred groups. This pattern does not fulfill the pluralist ideal, with relatively few voices heard from on each piece of legislation. Then again, these are the bills that Congressional committees declined to take up, a signal that they were not deemed important. Legislators heard from more voices on the bills that advanced further in the process, at least to the hearing stage, without ultimately becoming law. Of these 488 bills, less than a third were lobbied by only one group, 29% by a handful of groups, and 24% were lobbied by between eleven and one hundred groups. On more serious legislation, it seems, a larger number of groups mobilized to lobby each bill. On the 90 foreign policy bills that became law in our time period, Congress heard from many more voices. More than one hundred groups lobbied on 29% of these bills, with between eleven and one hundred groups lobbying on other 21% of them. When Congress is in the final throes of making policy, at least, a multitude of groups make their wishes known.

While having many groups at the table is necessary for pluralism to work as theorized, it is not sufficient: this multitude must voice a variety of views that reflect the broad interests of the American public. This is what is needed for truly counteractive lobbying, and for the interest group community to represent the public interest without bias. This raises a thorny empirical question that has often been noted in the study of interest groups. Merely listing the groups that lobby cannot resolves debates about bias and pluralism because “it is difficult to know what in the abstract an unbiased pressure system would look like. (Schlozman and Tierney 1983, 1007)” Baumgarner and Leech (1998, 93) note that “the absence of a clear point of reference makes it difficult for scholars to agree on the degree to which the Washington interest-group system is biased,” and Lowery and

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15 Of course, the fate of these bills may have been endogenous to the lobbying activity; strong opposition from one powerful may have doomed them.
Gray (2004, 7) add their surprise that “far less attention has been accorded to the antecedent assumption that the distribution of organized interests seeking influence is biased with respect to the distribution of interests in society.”

Bonica’s (2013 and forthcoming) recent advance in jointly estimating the ideological distribution of interest groups and the everyday citizens who contribute to politicians at all levels of American government makes this sort of comparison possible. His approach, which uses contribution patterns to place candidates, individual donors, and donating groups on a common ideological scale, allows one to compare the distribution of organized interests with the distribution of interests in society.\textsuperscript{16} By matching up the interest groups in his dataset with the lobbying clients in ours, we can ask whether the groups lobbying foreign policy are generally reflective of the ideology of American voters (or at least those who make political contributions).

Figure 8 answers this question, drawing on data from the 2007-08 campaign cycle. The dotted gray line shows the ideological distribution of 3.3 million individuals. It has two peaks, liberals at the left and more conservative individuals on the right, with a bit greater density on the left and a mean value of -0.18 on Bonica’s scale. The dashed black line displays the distribution of all 250,848 groups making campaign contributions. Groups are much more densely packed in the ideological center than individuals, and skew to the right with a mean value of 0.09. In the solid black line are the 600 foreign policy lobbying groups that we were able to match to Bonica’s dataset. Their distribution looks like that of the large set of interest groups, only more so. The groups that are active in foreign affairs are even more tightly packed in similar ideological locations, and skew even more to the right with a mean of 0.16.

\textsuperscript{16} We admit that there is some degree of bias built into this measure; Bonica can only locate voters who contribute to politicians rather than all voters. However, since contributors are typically more wealthy than voters in general, it is likely that this creates a rightward bias in our measure of the public interest. That bias, then, works against our finding, shown in Figure 8, that interest groups skew to the right of the public, rather than providing an alternative explanation of our finding.
Because the interests lobbying foreign policy are located so consistently on the center-right of the spectrum, because their distribution does not mimic that of individuals in American society, and because their average ideological position is well to the right of individuals, pluralism does not appear to operate in this realm. Rather than providing counteractive lobbying that represents the broad range of American opinion, the multitude of voices that lobby major foreign policy bills are likely saying the same things, compounding the bias towards large corporations that advocate center-right positions. One could view this as more a virtue than a vice; in a polarized political world, these lobbying groups may exert a centrifugal force on policy. But viewed from the lens of pluralist theory, this constellation of positions clearly falls short of what is necessary for interest groups to act as faithful agents of the people. In foreign affairs, the flaw in pluralism’s heavenly chorus is that everyone sings the same note.

V. Conclusion

From a political economy perspective, none of our findings should be terribly shocking. When it comes to Congressional foreign policy, firms and trade associations far outspend labor unions, state and local governments, universities, and other interest groups, by better than a four-to-one margin. Large public firms spend most of this money, with the biggest and most profitable among them turning their advantage in financial resources into a louder voice in foreign policy debates. The top-ranked firms in an industry are the most active, especially when market shares within an industrial sector are highly concentrated among a handful of dominant players. Each of these dynamics fits the expectations from literatures on the “new trade theory,” and its political applications (Dixit and Stiglitz 1977; Krugman 1979, 1991; Milner 1988; Rogowski 1987), the “new new trade theory,” (Antràs and Helpman 2004; Bernard et al. 2007; Meltiz 2003) and the logic of collective action (Grossman and Helpman 2001; Mitra 1999; Olson and Zeckhauser 1966).
Yet for observers of the American political system, our findings should raise normative concerns, especially within some realms of policy and in some industries. The hope of pluralism is that, even when political advocacy is done by interest groups rather than through direct citizen engagement, all sectors of society are fairly represented by lobbyists who line up on multiple sides of an issue (Dahl 1956, 1961; Lindblom 1977; Truman 1951). Yet critics of pluralism warn that this arrangement will falter when only the most privileged groups arguing one side of an issue are represented (Schattschneider 1960).

In the foreign policy arena, the predominance of firms over other types of interest groups threatens the pluralist balance of power. However, the threat should be least serious if a range of firms within one industry or across many industries is present in policy debates. That is the pattern that we observe in international political economy issues, where all of the industrial sectors generally lobby at about the same levels, but not on security bills, where a handful of industries lobby much more than others. An industry’s level of concentration also matters. When market shares are spread out relatively evenly, so is lobbying activity. Yet in highly concentrated sectors, the top-ranked firms carry even more of the lobbying load, potentially using bills to create firm-specific benefits that increase their already strong financial positions. Overall, in some sectors and on some issues we see dispersed lobbying activities by firms from a variety of backgrounds and perspectives competing, as Truman, Dahl, and Lindblom would have hoped, in the marketplace of ideas. Yet in most realms, the strongest voices in America’s foreign policy debates are those of a small group of private interests seeking to turn their market advantages into political influence.
Figure 1. Lobbying Expenditures Dwarf Campaign Contributions

Spending by Groups Lobbying Foreign Policy

- $1,284,985,264
- $1,475,198,010
- $1,183,455,548
- $1,401,245,025

- $158,909,815
- $198,153,090
- $154,724,819
- $206,268,851

- 2007
- 2008
- 2009
- 2010
Figure 2. What Proportion of Lobbying Dollars are Targeted at Foreign Policy?
Figure 3. Which Areas of Foreign Policy Attract the Most Lobbying Money?

- International Political Economy, $769,031,316
- Security, $124,951,730
- Other Foreign Policy, $83,903,354
- Omnibus Foreign Policy, $329,359,549

- Finance, $130,190,251
- Trade and Investment, $539,068,234
- Aid, $99,772,761
- Arms Control, $32,393,320
- Human Rights, $57,598,388
- Misc. Security, $34,960,008
- Other Foreign Policy, $83,903,354


Figure 4. What Types of Groups Lobby in the Foreign Policy Arena?

**Lobbying Filings**

- Public Firms: 20%
- Private Firms: 16%
- Trade Associations: 13%
- Other: 51% (interest groups, unions, governments, universities, etc.)

**Lobbying Dollars**

- Public Firms: 50%
- Trade Associations: 25%
- Private Firms: 6%
- Other: 19% (interest groups, unions, governments, universities, etc.)
Figure 5. The Complex Link Between Tobin’s Q and Lobbying
Figure 6. Exploring Lobbying by Individual Industries (sector fixed-effect coefficients)
Figure 7. How Many Groups Lobby IR Bills, by final bill disposition

- Bills Dying After Introduction (1548 Bills)
- Bills Advancing But Not Passing (488 Bills)
- Enrolled Bills (90 Bills)

Legend:
- 1 Group Lobbying
- 2-5 Groups Lobbying
- 5-10 Groups Lobbying
- 11-100 Groups Lobbying
- Over 100 Groups Lobbying
Figure 8. The Ideological Distributions of Individuals, Interest Groups, and Groups Lobbying Foreign Policy
<table>
<thead>
<tr>
<th>Client</th>
<th>Combined Lobbying</th>
<th>IPE Rank</th>
<th>IPE Lobbying</th>
<th>Security Rank</th>
<th>Security Lobbying</th>
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<td>Chamber of Commerce of the U.S.A.</td>
<td>$24,162,194</td>
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<td>$20,438,267</td>
<td>1</td>
<td>$3,723,927</td>
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<td>Pacific Gas and Electric Company</td>
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<td>2</td>
<td>$12,314,901</td>
<td>9</td>
<td>$822,229</td>
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<tr>
<td>General Electric Company (&amp; Subsidiaries)</td>
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<td>3</td>
<td>$7,122,581</td>
<td>2</td>
<td>$2,278,977</td>
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<td>AARP</td>
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<td>4</td>
<td>$4,543,267</td>
<td>7</td>
<td>$1,008,824</td>
</tr>
<tr>
<td>Conocophilips</td>
<td>$4,501,810</td>
<td>10</td>
<td>$2,783,589</td>
<td>3</td>
<td>$1,718,221</td>
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<td>Financial Services Roundtale</td>
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<td>5</td>
<td>$4,423,909</td>
<td>n/a</td>
<td>$0</td>
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<tr>
<td>Verizon Communications Inc. (&amp; Subsidiaries)</td>
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<td>7</td>
<td>$3,252,892</td>
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<td>Pharmaceutical Research and Manufacturers of Am.</td>
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<td>$3,445,554</td>
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<td>$124,028</td>
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<td>$2,336,471</td>
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<td>$913,936</td>
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<td>$3,103,166</td>
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<td>$95,679</td>
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<td>FedEx Corporation</td>
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<td>$2,897,236</td>
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<td>$100</td>
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<td>The Procter and Gamble Company</td>
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<td>$2,476,685</td>
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<td>Altria Client Services Inc.</td>
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<td>$2,533,137</td>
<td>n/a</td>
<td>$0</td>
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<td>Lockheed Martin Corporation</td>
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<td>$1,318,033</td>
<td>6</td>
<td>$1,082,374</td>
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<tr>
<td>Exxon Mobil Corp</td>
<td>$2,125,401</td>
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<td>$1,602,813</td>
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<td>$522,588</td>
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<td>National Association of Realtors</td>
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<td>Southern Company</td>
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<td>$1,219,270</td>
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<td>$699,612</td>
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<td>Raytheon Company</td>
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<td>$705,248</td>
<td>5</td>
<td>$1,116,764</td>
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<td>National Association of Manufacturers</td>
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<td>19</td>
<td>$1,602,628</td>
<td>47</td>
<td>$205,442</td>
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<td>Monsanto Company</td>
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<td>$1,789,200</td>
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<td>$0</td>
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<tr>
<td>Client</td>
<td>Bill Name</td>
<td>Bill Classification</td>
<td>Bill Description</td>
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<td>---------------------------------------------------------------------------</td>
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<td></td>
<td></td>
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<tr>
<td>Chamber of Commerce of the U.S.A.</td>
<td>111 S.1089: Promoting American Agricultural and Medical Exports to Cuba Act of 2009</td>
<td>1 Finance CRS code and 3 Trade and Investment CRS code</td>
<td>A bill to facilitate the export of United States agricultural commodities and products to Cuba as authorized by the Trade Sanctions Reform and Export Enhancement Act of 2000, to establish an agricultural export promotion program with respect to…</td>
<td></td>
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<tr>
<td>Pacific Gas and Electric Company</td>
<td>111 S.1462: American Clean Energy Leadership Act of 2009</td>
<td>1 Trade and Investment CRS code, 1 Arms Control CRS code</td>
<td>An original bill to promote clean energy technology development, enhanced energy efficiency, improved energy security, and energy innovation and workforce development, and for other purposes.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>General Electric Company (Including Subsidiaries)</td>
<td>111 S.1934: Foreign Account Tax Compliance Act of 2009</td>
<td>1 Finance CRS code</td>
<td>A bill to amend the Internal Revenue Code of 1986 to prevent the avoidance of tax on income from assets held abroad, and for other purposes.</td>
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<tr>
<td>AARP</td>
<td>111 H.R.1408: Inclusive Home Design Act of 2009</td>
<td>1 Trade and Investment CRS code, 2 Human Rights CRS codes</td>
<td>To require all newly constructed, federally assisted, single-family houses and town houses to meet minimum standards of visitability for persons with disabilities.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conocophillips</td>
<td>111 S.1700: Energy Security Through Transparency Act of 2009</td>
<td>1 Other CRS code, 1 Omnibus CRS code</td>
<td>A bill to require certain issuers to disclose payments to foreign governments for the commercial development of oil, natural gas, and minerals, to express the sense of Congress that the President should disclose any payment relating to the…</td>
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<td></td>
</tr>
<tr>
<td>Company</td>
<td>Bill Number</td>
<td>Trade and Investment CRS codes</td>
<td>Description</td>
<td></td>
<td></td>
</tr>
<tr>
<td>---------------------------------</td>
<td>--------------------</td>
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<td>-----------------------------------------------------------------------------</td>
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<tr>
<td>Financial Services Roundtable</td>
<td>111 S.2473</td>
<td>2</td>
<td>A bill to provide for the liquidation or reliquidation of certain entries of truck tires entered on or after July 7, 2004, and on or before July 12, 2006.</td>
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<tr>
<td>Verizon Communications Inc. and Its Subsidiaries</td>
<td>111 S.1649</td>
<td>1</td>
<td>A bill to prevent the proliferation of weapons of mass destruction, to prepare for attacks using weapons of mass destruction, and for other purposes.</td>
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<tr>
<td>Pharmaceutical Research and Manufacturers of America</td>
<td>111 H.R.3012</td>
<td>1</td>
<td>To require a review of existing trade agreements and renegotiation of existing trade agreements based on the review, to set terms for future trade agreements, to express the sense of the Congress that the role of Congress in trade policymaking…</td>
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<td></td>
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<td>Boeing Company</td>
<td>111 H.R.3326</td>
<td>1</td>
<td>Making appropriations for the Department of Defense for the fiscal year ending September 30, 2010, and for other purposes.</td>
<td></td>
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<td>Wal-Mart Stores, Inc.</td>
<td>111 S.1462</td>
<td>1</td>
<td>An original bill to promote clean energy technology development, enhanced energy efficiency, improved energy security, and energy innovation and workforce development, and for other purposes.</td>
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</tr>
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</table>
Table 3. Explaining Public Firm Lobbying Expenditures

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient (std. error)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (in thousands)</td>
<td>$944.4*** (158.6)</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>$0.09 (0.17)</td>
</tr>
<tr>
<td>Earnings Before Interest and Taxes (in $ millions)</td>
<td>$12.48*** (3.56)</td>
</tr>
<tr>
<td>Ranking of Firm’s Sales within Sector</td>
<td>-$254.7*** (93.68)</td>
</tr>
<tr>
<td>Concentration of Firms within Sector</td>
<td>-8,382 (88,031)</td>
</tr>
<tr>
<td>Interaction of Sales Ranking X Concentration of Firms</td>
<td>-696.6** (290.7)</td>
</tr>
<tr>
<td>Constant</td>
<td>-8,982 (31,853)</td>
</tr>
<tr>
<td>Sector Fixed Effects</td>
<td>included</td>
</tr>
<tr>
<td>Observations</td>
<td>27,834</td>
</tr>
<tr>
<td>R-squared</td>
<td>0.1</td>
</tr>
</tbody>
</table>

Note: Table entries are OLS regression coefficients, with standard errors clustered at the firm level in parentheses. The model includes fixed effects for 23 industrial sectors. * indicates p<.05 in a two-tailed test, ** indicates p<.01 in a two-tailed test.
### Table 4. Explaining Public Firm Lobbying, by issue area

<table>
<thead>
<tr>
<th>Variable</th>
<th>International Policy</th>
<th>Security</th>
<th>Other Foreign Policy</th>
<th>Omnibus Foreign Policy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employees (in thousands)</td>
<td>$632.7***</td>
<td>$85.93***</td>
<td>$67.47**</td>
<td>$158.3***</td>
</tr>
<tr>
<td></td>
<td>(105.8)</td>
<td>(29.05)</td>
<td>(29.63)</td>
<td>(57.05)</td>
</tr>
<tr>
<td>Tobin’s Q</td>
<td>0.041</td>
<td>0.015</td>
<td>0.005</td>
<td>0.03</td>
</tr>
<tr>
<td></td>
<td>(0.13)</td>
<td>(0.015)</td>
<td>(0.01)</td>
<td>(0.03)</td>
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<tr>
<td>Earnings Before Interest and Taxes</td>
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<td>1.22***</td>
<td>0.99***</td>
<td>3.52***</td>
</tr>
<tr>
<td></td>
<td>(1.89)</td>
<td>(0.38)</td>
<td>(0.36)</td>
<td>(1.19)</td>
</tr>
<tr>
<td>Ranking of Firm’s Sales in Sector</td>
<td>-106.7**</td>
<td>-36.50***</td>
<td>-34.38***</td>
<td>-77.17***</td>
</tr>
<tr>
<td></td>
<td>(53.34)</td>
<td>(11.61)</td>
<td>(10.15)</td>
<td>(28.17)</td>
</tr>
<tr>
<td>Concentration of Firms in Sector</td>
<td>-4,584</td>
<td>-2,286</td>
<td>1,060</td>
<td>-2,571</td>
</tr>
<tr>
<td></td>
<td>(64,554)</td>
<td>(7,577)</td>
<td>(7,873)</td>
<td>(15,518)</td>
</tr>
<tr>
<td>Interaction of Sales Ranking X</td>
<td>-277.8*</td>
<td>-102.5***</td>
<td>-101.3***</td>
<td>-215.0**</td>
</tr>
<tr>
<td>Concentration of Firms</td>
<td>(165.6)</td>
<td>(35.15)</td>
<td>(31.03)</td>
<td>(87.74)</td>
</tr>
<tr>
<td>Constant</td>
<td>1,400</td>
<td>-3,136</td>
<td>-2,688</td>
<td>-4,559</td>
</tr>
<tr>
<td></td>
<td>(23,854)</td>
<td>(2,842)</td>
<td>(3,025)</td>
<td>(4,963)</td>
</tr>
<tr>
<td>Sector Fixed Effects</td>
<td>included</td>
<td>included</td>
<td>included</td>
<td>included</td>
</tr>
<tr>
<td>Observations</td>
<td>27,834</td>
<td>27,834</td>
<td>27,834</td>
<td>27,834</td>
</tr>
</tbody>
</table>

**R-squared**

Note: Table entries are least squares regression coefficients from a seemingly unrelated regression model, with standard errors clustered at the firm level in parentheses. All models include fixed effects for 23 industrial sectors. * indicates p<.05 in a two-tailed test, ** indicates p<.01 in a two-tailed test.
Appendix A: Congressional Research Codes that Identified Foreign Policy Bills

The following is a list of the CRS codes that we use to identify foreign policy bills, placed into the categories and subcategories that we employ to make finer distinctions between the different foreign policy issue areas.

INTERNATIONAL POLITICAL ECONOMY

Finance
Foreign and international banking (157)
Foreign and international corporations (238)
Foreign loans and debt (162)
International finance (3539)
International monetary system and foreign exchange (123)

Trade and Investment
Competitiveness, trade promotion, trade deficits (315)
Foreign trade and international finance (1448)
Free trade and trade barriers (229)
Export-Import Bank of the United States (210)
International exchange and broadcasting (158)
Office of the U.S. Trade Representative (309)
Overseas Private Investment Corporation (OPIC) (38)
Trade (14285)
Trade adjustment assistance (425)
Trade agreements and negotiations (282)
Trade restrictions (559)
Normal trade relations, most-favored-nation treatment (48)
Tariffs (1377)
U.S. and foreign investments (260)
U.S. International Trade Commission (143)

Aid
Foreign aid (3524)
Foreign aid and international relief (768)
Multilateral development programs (135)
Reconstruction and stabilization (77)
U.S. Agency for International Development (USAID) (98)

SECURITY

Arms Control
Arms Control and Disarmament Agency (79)
Arms control and nonproliferation (346)

**Human Rights**
- Human rights (3586)
- War crimes, genocide, crimes against humanity (201)

**Other**
- Collective security (217)
- Conflicts and wars (491)
- Sanctions (346)

**OTHER**
- Buy American requirements (205)
- Department of State (996)
- General foreign operations matters (17)
- House Committee on Foreign Affairs (30)
- Internal Revenue Service (IRS) (177)
- International law and treaties (485)
- Peace Corps (262)
- Rule of law and government transparency (223)
- Senate Committee on Foreign Relations (16)
- Sovereignty, recognition, national governance and status (326)
- U.S. Institute of Peace (41)

**OMNIBUS CODES**
- Foreign policy (11818)
- International affairs (14481)
- International organizations and cooperation (849)
Appendix Figure A1. Foreign Policy Index

Foreign Policy Index (ratio of FP codes to total CRS codes) vs. Foreign Policy Relevance (1: centrally relevant; 4 only peripherally relevant)
References


Lowery, David, and Virginia Gray. 2004. “Bias in the Heavenly Chorus: Interests in Society and


