

# Foreign Lobbies and US Trade Policy\*

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## Abstract

In popular discussion much has been made recently of the susceptibility of government policies to lobbying by foreigners. The general presumption has also been that such interactions have a deleterious effect on the home economy. However, it can be argued that, in a trade policy context, bending policy in a direction that would suit foreigners may not in fact be harmful: If the policy outcome absent any lobbying by foreigners is characterized by welfare-reducing trade barriers, lobbying by foreigners for reductions in such barriers may, in fact, raise consumer surplus and possibly improve welfare. Using a new data set on foreign political activity in the US, this paper investigates this idea empirically. The underlying theoretical structure that motivates our estimating equations builds on the well known Grossman-Helpman model of trade policy determination (modified suitably to account for the role of foreign lobbies). Our analysis of the data suggests that foreign lobbying activity has significant impact on trade policy - and in the predicted direction (of lowering trade barriers).

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## Abstract

In popular discussion much has been made recently of the susceptibility of government policies to lobbying by foreigners. The general presumption has also been that such interactions have a deleterious effect on the home economy. However, it can be argued that, in a trade policy context, bending policy in a direction that would suit foreigners may not in fact be harmful: If the policy outcome absent any lobbying by foreigners is characterized by welfare-reducing trade barriers, lobbying by foreigners for reductions in such barriers may, in fact, raise consumer surplus and possibly improve welfare. Using a new data set on foreign political activity in the US, this paper investigates this idea empirically. The underlying theoretical structure that motivates our estimating equations builds on the well known Grossman-Helpman model of trade policy determination (modified suitably to account for the role of foreign lobbies). Our analysis of the data suggests that foreign lobbying activity has significant impact on trade policy - and in the predicted direction (of lowering trade barriers).

## I. Introduction

A growing body of work in economics views trade policy as being determined not by a benign welfare maximizing government (as was assumed in the traditional treatments of this topic) but rather by interactions between politicians and organized special interest groups.<sup>1</sup> The emphasis in much of this literature (particularly on the empirical side) has been on the link between *domestic* industry lobbies and the government. Recent events,<sup>2</sup> however, have shifted the focus in popular perception (as well as in the consequent policy discussions related to campaign finance reform) to *foreign* lobbies and the extent to which these are involved in the political process; the general presumption being that such interactions between foreigners and the domestic government have a deleterious effect on the home economy.

In a trade policy context, however, it can be argued that bending policy in a direction that would suit foreigners may not in fact be harmful: If the policy outcome absent any involvement by foreigners is characterized by welfare-reducing (or sub-optimal) trade barriers, lobbying by foreigners for reductions in such barriers may in fact shift trade policy in a direction that improves domestic consumer surplus and possibly welfare. But, is it so? Do foreign lobbies have a significant effect on US trade policy? If so, by how much? These are the questions that this paper attempts to investigate empirically.

The theoretical foundation that we develop to motivate our estimating equations borrows extensively from the well known model of endogenous policy determination developed by Grossman and Helpman (1994) - which is altered here suitably to account for the role of foreign lobbies. This framework assumes a government that trades off its desire to deliver a

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<sup>1</sup>See, for instance, the papers by Findlay and Wellisz (1982), Hillman (1982), Bhagwati and Feenstra (1982), Mayer (1984), Hillman and Ursprung (1988), Magee, Brock and Young (1989) and, most recently, the important and pioneering papers by Grossman and Helpman (1994) and Grossman and Helpman (1995). This interest-group approach to modeling trade policy determination itself has antecedents in the seminal work of Stigler (1971), Peltzman (1976) and Becker (1983) whose work on regulation focused, *inter alia*, on why the political process favors specific industries over others.

<sup>2</sup>These include the widespread accusations relating to foreign campaign contributions in the 1996 US Presidential campaign and the conviction of Rep. Jay Kim (Republican-CA) for his acceptance of illegal contributions from Korean sources. For a more detailed discussion of these events and, importantly, an attempt to quantify the significant presence of foreign lobbies in the US, see the recent MIT Ph.D. dissertation of Byoung-Joo Kim (1999).

higher level of welfare to its polity with its desire for political contributions from organized industry lobbies (which, in turn, provide political contributions to the government so it may move policy in a direction that would suit them). A substantial merit of this framework, from at least the stand point of empirical testing, is that despite its relative rigor and complexity, trade policy is predicted to be a simple function of relatively few variables. This proves to be true even after foreign political involvement is introduced (as we show). In the import competing sectors, for instance, equilibrium tariffs are simply a log-linear function of the import-penetration ratio, the import demand elasticity, the presence (or absence) of domestic and foreign lobbying activity in that sector and finally a parameter that measures the relative emphasis that the government places on contributions relative to overall welfare. This parsimonious specification enables relatively easy econometric implementation - a task that we accomplish using econometric methodology similar to that detailed in the recent work of Gawande and Bandhyopadhyay (2000) and Goldberg and Maggi (1999).

It is perhaps worth emphasizing that the empirical study we conduct, of studying foreign lobbying activity and its impact - in the context of a rigorously specified economic model - is (to our knowledge) the first of its kind. While several scholars and observers have commented upon the presence and importance of foreign lobbying in the context of trade policy formulation,<sup>3</sup> none has studied it in the manner or the detail that we do here. To this end, a substantial component of the research effort on this paper has involved the compilation of a new data set on foreign political activity (whose structure and sources we describe in detail in Section V and in the attached Data Appendix) .

Our estimation results suggest that foreign lobbying has statistically and economically significant impact on trade policy: The presence of an organized foreign lobby representing a particular industrial sector appears to have as much effect in lowering tariffs against imports in that sector as does the presence of a domestic lobby in raising tariffs there. *Ceteris paribus*, US consumers gain unambiguously from the presence of foreign political activity.

The rest of this paper proceeds as follows. Section II describes briefly the evolution of the

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<sup>3</sup>See, for instance, Baldwin (1985), Choate (1990) and Hillman and Ursprung (1988).

legal context in which foreign lobbies operate in the US. Section III describes the theoretical framework that underlies our empirical exercise. Section IV presents the econometric model and discusses data and estimation issues in detail. Section V describes our econometric results. Section VI concludes.

## II. US Federal Law on Foreign Political Activity in the US

Government concern regarding foreign influence on policy has a long history in the US. Thus, for instance, political activity by foreigners in the US was very much on the mind of James Madison when he successfully proposed that legislation impacting the commerce of the United States with foreign powers require only the approval of a simple majority, rather than a super-majority, as was required for treaties. His reasoning was that foreign powers could more easily defeat a tariff proposal by influencing, via bribes, the nine (out of the, then, 26 senators) senators required to defeat a super-majority than they could the fourteen required to defeat a majority. Madison argued that:

*The power of foreign nations to obstruct our retaliating measures [and with successful retaliation on the injurious restrictions of foreign powers] on them by a corrupt influence would also be less if a majority should be made competent than if two-thirds of each House should be required to legislate acts in this case.*

The potential for harmful foreign intrigue was very real to the founders and was addressed in no fewer than fifteen of the *Federalist Papers*. Alexander Hamilton stated his view of the corrupting impact of foreign political presence by writing that,

*One of the weak sides of republics, among their numerous advantages, is that they afford too easy an inlet to foreign corruption... Hence it is that history furnishes us with so many mortifying examples of the prevalence of foreign corruption in republican governments. How much this contributed to the ruin of the ancient commonwealths has been already disclosed. [Hamilton, Federalist #22],*

and that

*Nothing was more to be desired than that every practicable obstacle should be opposed to cabal, intrigue, and corruption. These most deadly adversaries of republican government might naturally have been expected to make their approaches from more than one quarter, but chiefly from the desire in foreign powers to gain an improper ascendant in our councils. [Hamilton, Federalist #68]*

Nevertheless, as Corrado et.al. (1997) note,<sup>4</sup> for many years there was no ban or limit placed on foreign political contributions. This changed in 1938 when, in the face of evidence of Nazi money spent to influence US political debate, Congress passed the so-called Foreign Agents Registration Act (FARA). This law required agents of foreign entities engaged in publishing “political propaganda” to register and disclose their activities, but it did not regulate political contributions. In 1966, after congressional hearings in 1962-63 revealed campaign contributions to federal candidates by Philippine sugar producers and agents of Nicaraguan president Luis Somoza, Congress moved to prohibit political contributions in any US election by any foreign government, political party, corporation or individual (except foreign nationals who were permanent residents of the US).

The contrast with restrictions on *domestic* influence in the electoral process may be clarified as follows. US nationals may make direct political contributions. US corporations and labor unions, while generally restricted from making contributions from their treasury funds to election candidates, may still make contributions through “voluntary” funds collected by “political action committees” (PACs) which are composed of their employees and members respectively.<sup>5</sup> Despite the 1966 regulations (described in the previous paragraph) seeking to prevent the influence of foreign interests on US policymaking, legal contributions from sources

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<sup>4</sup>The discussion that follows borrows extensively from the comprehensive Brookings survey by these authors.

<sup>5</sup>It is worth pointing out that contributions by US entities may be classified as either being in “hard money” (which is money that is limited and otherwise regulated through federal election laws and can be used *directly* in connection with election for federal office) or in “soft money” (which is generally subject to no limits but may only be used *indirectly* in the political process - for such purposes as “getting-out-the-vote” and “issue advocacy”). Corporations and Unions, while banned from making hard money contributions, except through PACs (as described above), may still make unlimited soft money contributions - as can individuals. However, since our study is set in the 1970s, soft money contributors and contributions (which did not really assume significance until the early 1990s) are not an important consideration and we ignore them entirely.

with foreign ties are still allowed. “Foreign agents”, i.e., US citizens acting as lobbyists for foreign governments or officials, foreign individuals, or foreign businesses or associations can make campaign contributions like any other US citizen provided that they are registered with the Justice department (in accordance with the Foreign Agent Registration Act (FARA) of 1938 which we have mentioned above) and that the contributions are made with their own funds. By all popular accounts, the fungibility of cash flows and generally lax monitoring of the activities of foreign agents has implied that in practice, agents of foreign interests have contributed actively to political campaigns on behalf of their principals.<sup>6</sup> It is on these foreign agents that we focus our attention in this study.

### III. Theory

The theoretical framework we use closely parallels that of Grossman and Helpman (1994) - but with some important modifications to allow for the role of foreign lobbies. Consider an open economy which is populated by individuals with identical preferences but different factor endowments. Each individual maximizes utility given by:

$$U = c_0 + \sum_i u_i(c_i), \tag{1}$$

where  $c_0$  denotes consumption of the numeraire good, good 0 and  $c_i$  denotes consumption of goods  $i = 1 \dots n$ . Further, the sub-utilities  $u_i$  are assumed to be quadratic with parameters such that domestic demand for the non-numeraire goods is assumed to take the linear form:

$$P_i = A - Q_i, \quad i = 1 \dots n. \tag{2}$$

where  $Q_i$  denotes aggregate consumption of good  $i$ .

Good 0 is assumed to be produced from labor alone by Ricardian technology (with input-output coefficient equal to one) and is assumed to be freely traded internationally in perfectly competitive markets. Goods  $i = 1 \dots n$ , are assumed to be produced with constant returns

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<sup>6</sup>For a detailed discussion and accounting of the role of foreign agents in recent campaigns, see <http://www.opensecrets.org>.

technologies using labor alone, but are assumed to be sold in internationally segmented oligopolistically competitive markets with supply provided by fixed numbers of domestic and international firms (as in Brander and Krugman (1983)) which compete in Cournot-Nash fashion.

Focusing on the home market for *any* good  $i$ , and using  $j = h, f$  as a country index to denote home and foreign, we let,

$q_i^j$  denote the quantity sold of  $i$  by any one firm from  $j$

$P_i$  denote the equilibrium price of the good  $i$ ,

$\pi_i^j$  denote profits made by an individual firm from  $j$  operating in sector  $i$ ,

$\tau_i$  denote the specific tariff imposed on imports of good  $i$ ,

$n_i^j$  denote the number of symmetric firms from  $j$  operating in sector  $i$ ,

$n_i = n_i^h + n_i^f$  denote the total number of firms operating in  $i$ , and

$c_i$  denote the constant marginal cost of production involved in the production of  $i$ .

For any given tariff rate, the outcome of the oligopolistic competition in the home market may be easily derived: The  $n_i^h$  home firms each sell a quantity in the domestic market given by,

$$q_i^h = \frac{A_i - c_i}{n_i + 1} + \frac{n_i^f \tau_i}{n_i + 1} \quad (3)$$

and have profits given by

$$\pi_i^h = [q_i^h]^2 \quad (4)$$

Correspondingly, a foreign firm, facing import tax  $\tau_i$ , sells,

$$q_i^f = \frac{A_i - c_i}{n_i + 1} + \frac{n_i^f \tau_i}{n_i + 1} - \tau_i \quad (5)$$

and makes profits

$$\pi_i^f = [q_i^f]^2 \quad (6)$$

Having described the features of the economy which determine equilibrium quantities and prices of goods as a function of trade policy, we move on to the determination of trade policy itself: As modeled by Grossman and Helpman (1994), trade policy is determined by interactions between the government and organized lobbies - here representing (separately) domestic and foreign firms. The Government's objective function is assumed to be a weighted function of lobbying contributions and the three components of welfare: consumer surplus, producer surplus and profits, in the following form:

$$G = \sum_{i \in L^h} C_i^h + a[\sum_i n_i^h \pi_i^h + TR + CS] + b \sum_{i \in L^f} C_i^f \quad (7)$$

where  $L^h$  denotes the sectors with organized domestic lobbies,  $C_i^h$  denotes lobbying contributions by the domestic lobby (if any) in  $i$ ,  $L^f$  denotes the set of organized foreign lobbies,  $C_i^f$  denotes foreign contributions, TR denotes tariff revenues, CS denotes consumer surplus and  $\sum_i n_i^h \pi_i^h$  denotes domestic producer profits,  $a$  is a constant reflecting the government's preference for welfare relative to domestic campaign contributions and finally  $b$  is a constant reflecting the government's preference for foreign contributions relative to domestic contributions. Differentiating the weights on foreign and domestic lobbying contributions allows us to empirically investigate whether they are in fact different.

The lobbies representing domestic and foreign firms in any sector would like trade policy to be set in a manner that suits them - for example, a domestic lobby in import competing sector  $i$  would typically want import barriers on imports of  $i$  and import subsidies on imports of all other goods, whereas a foreign lobby in sector  $i$  would want this government to subsidize the imports of  $i$ . The interaction between the various lobbies and the government that we

have in mind has the structure of a “menu-auction” problem - exactly as in Grossman and Helpman (1994). Thus, it is assumed that a lobby representing organized sector  $i$  makes political contributions to the government contingent on the trade policy vector implemented by it. The political equilibrium here is the outcome of a two stage non-cooperative game in which lobbies choose their political contributions in the first stage and the government sets policy in the second. An equilibrium is a set of contribution functions (functions of the trade policy vector), one for each organized lobby group, such that each contribution maximizes the welfare of the lobby taking as given the joint welfare of the other groups and the political optimization of the government in the next stage, and an import tax vector that maximizes government objectives taking the contribution schedules as given.

We assume further that the contribution schedules of the lobbies are “truthful” (using the terminology of Bernheim and Whinston (1985) and Grossman and Helpman (1994)). This is to say that they truthfully reflect everywhere the true preferences of the lobbies - since they pay to the government the excess of the lobby’s gross welfare for any given policy relative to some base level of net welfare  $B$  (which itself is endogenously determined). Formally, such truthful contributions take the form:

$$C_i^j = \max[0, W_i^j - B_i^j] \quad (8)$$

where  $W_i^j$  denotes the gross welfare of lobby representing  $j$  in sector  $i$  and  $B_i^j$  is a constant denoting the lobby’s net welfare.<sup>7</sup>

Letting  $\alpha$  denote the fraction of the home population that is organized into *any* domestic lobby, we can substitute (8) into the government’s objective function to get as the government’s maximand:

$$\sum_{i \in L^h} n_i^h \pi_i^h + \alpha(TR + CS) + a(\sum n_i^h \pi_i^h + TR + CS) + b \sum_{i \in L^f} n_i^f \pi_i^f \quad (9)$$

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<sup>7</sup>The assumption that contributions are *truthful* is made here for expositional convenience and, strictly speaking, need not be made to determine the equilibrium trade policy vector, as Grossman and Helpman (1994) have shown. On this, see also Goldberg and Maggi (1999).

The first-order condition corresponding to the choice of  $\tau_i$ , following from  $\frac{\partial G}{\partial \tau_i} = 0$  is:

$$\sum_{i \in L_h} n_i^h \frac{\partial \pi_i^h}{\partial \tau_i} + a \sum_i n_i^h \frac{\partial \pi_i^h}{\partial \tau_i} + (a + \alpha) \frac{\partial \mathbf{TR}}{\partial \tau_i} + (a + \alpha) \frac{\partial \mathbf{CS}}{\partial \tau_i} + b \sum_{i \in L_f} \frac{\partial \pi_i^f}{\partial \tau_i} = 0 \quad (10)$$

which can be re-written as

$$(I_i^h + a) \sum_i n_i^h \frac{\partial \pi_i^h}{\partial \tau_i} + (a + \alpha) \frac{\partial \mathbf{TR}}{\partial \tau_i} + (a + \alpha) \frac{\partial \mathbf{CS}}{\partial \tau_i} + b(I_i^f) \frac{\partial \pi_i^f}{\partial \tau_i} = 0 \quad (11)$$

where  $I_i^h$  is an indicator variable that takes the value one if domestic sector  $i$  is organized (i.e., is represented by a lobby) and takes the value zero otherwise and where  $I_i^f$  is defined analogously.

Working out the various terms in (11) (using (3), (4), (5) and (6)), substituting these back in and some tedious algebra (along with a minor approximation) gives us :

$$\frac{\tau_i}{P_i} = \left[ \frac{2I_i^h}{(a + \alpha)} + \left( \frac{2a}{a + \alpha} \right) \right] \left( \frac{X_i}{m_i} \right) \frac{1}{|\epsilon_i|} - \left[ \frac{2bI_i^f}{(a + \alpha)} \right] \cdot \left( \frac{X_i}{m_i} \right) \frac{1}{|\epsilon_i|} \quad (12)$$

where  $X_i$  denotes aggregate production of  $i$  in the home economy,  $m_i$  denotes imports and  $\epsilon_i$  is an imports elasticity measure – it measures the “observed” proportionate change in imports with changes in prices, i.e.,  $\frac{\frac{\partial m_i}{\partial P_i}}{\frac{m_i}{P_i}}$ , when the price changes are caused by changes in tariffs.

Overall then, the model implies that sectors that are politically represented by organized domestic lobbies are, *ceteris paribus*, likely to receive more protection. Sectors in which there is foreign political presence are likely to receive less protection. Finally, sectors in which there is neither domestic political representation nor foreign political presence are predicted to receive positive protection (which should not be surprising – given the assumptions regarding imperfectly competitive nature of the product market).

## IV. Econometric Specification, Data, and Estimation Methodology

### IV.1 Econometric Specification

Equation (12) motivates our basic estimating equation – which after the introduction of an (additive) error term  $e_i$  can be expressed as:

$$\frac{t_i}{1+t_i} = \beta_1 \left[ \frac{X_i}{m_i} \cdot \frac{1}{|\epsilon_i|} \right] + \beta_2 \left[ I_i^h \cdot \frac{X_i}{m_i} \cdot \frac{1}{|\epsilon_i|} \right] + \beta_3 \left[ I_i^f \cdot \frac{X_i}{m_i} \cdot \frac{1}{|\epsilon_i|} \right] + e_i \quad (13)$$

where:  $t_i$  denotes the (effective) ad-valorem import tax (i.e.,  $\frac{\tau_i}{P_i - \tau_i}$ ) and where  $\beta_1 = \left[ \frac{2a}{a+\alpha} \right]$ ,  $\beta_2 = \frac{2}{a+\alpha}$  and  $\beta_3 = -\frac{2b}{a+\alpha}$ . Clearly,  $\beta_1$  and  $\beta_2$  are predicted to be greater than zero and  $\beta_3$  is less than zero.

### IV.2 Data

In the estimation of the equation (13) above we employ data from the period 1978-1982. The study is conducted at the 4-digit SIC level of disaggregation, and is focused on U.S. manufacturing industries. Protection is measured by the import tariff rate making this the first study to use U.S. tariffs (rather than a measure of non-tariff barriers as in Gawande and Bandhyopadhyay (2000) and Goldberg and Maggi (1999)) to examine this new generation of political economy models. The explanatory variables are measured as closely as demanded by the theory. The inverse of the import penetration ratio,  $\frac{X_i}{m_i}$  (scaled by 100) is taken directly from the annual survey of manufactures.<sup>8</sup> The import demand elasticity,  $\epsilon_i$ , for various industries is taken from the study by Sheills, Deardorff, and Stern (1986). These are

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<sup>8</sup>Since the concordance from the system of trade data-keeping (TSUS for these years, and Harmonized system in recent years) into the SIC system of industrial data-keeping is less than perfect, a few industries register zero imports. For these industries, the inverse import-penetration ratio is undefined and they are dropped. Largely as a result, our sample comprises of 248 out of a possible 435 industries. Another reason for the abridged sample is that we are forced to drop industries for which their import elasticities are inadequately measured (for example, with the wrong sign). Nevertheless, our sample comprises of the larger industries, and accounts for over two-thirds of manufacturing value added.

estimated at the three digit SIC level, and are replicated at our 4-digit level here. The binary variables for domestic and foreign political organization,  $I$  and  $I^*$  respectively, are measured using political expenditures data we have constructed at the 4-digit level. Issues pertaining to their measurement and those of the other variables are discussed at length below, and an appendix provides further details on their construction.

### *Choice of Protection Measure: Tariffs*

First, consider our choice trade protection measure, namely, the tariff rate. The choice is not an obvious one. Indeed, the problem of choosing between alternative measures of protection has confronted the majority of empirical researchers working in the area of trade policy. The theory on which our model is founded dictates that the protection measure equal the proportional difference between domestic prices and world prices. In a world in which tariff protection is the only form of protection, the choice is obvious: the tariff rate itself is the precise measure of the gap between domestic and foreign prices. When non-tariff barriers (NTBs) are in use, the situation is more empirically more complex because we generally lack even moderately satisfactory measures of the tariff equivalents of those non-tariff barriers. Researchers who have chosen to examine political economy models of trade policy using NTB data (Trefler (1993), Gawande (1998), Goldberg and Maggi (1999), and Gawande and Bandhyopadhyay (2000)) have had to reconcile their choice with using so-called “NTB coverage ratios” to measure protection. The NTB coverage ratio for any SIC industry is the proportion of imports within that industry that is covered by any non-tariff barrier. It is readily evident that the coverage ratio is at best an imprecise measure of non-tariff protection or at least two reasons. First, NTBs are heterogeneous in their effects. In imperfectly competitive contexts, Quantitative NTBs which restrict imports directly (quotas, VERs) can have quite different impact from price-oriented NTBs (antidumping duties, countervailing duties) which protect by raising prices. Further, their impact is predicted to be differ substantially depending on the nature of competition between firms being assumed (e.g., with Cournot competition vs Bertrand competition). The emerging literature on antidumping duties, surveyed in Blonigen and Prusa (2001), bears testimony to the subtle ways in which they serve

to restrict trade even in situations where an antidumping case leads to no levy. Hence, forming an aggregate measure of NTB restrictiveness requires the belief that NTBs are really more homogeneous than we have made them out to be, a belief we doubt is shared by many theorists or empiricists. Second, NTBs are heterogeneous in their intensity. Industries with a large fraction of products are covered by very lenient NTBs would be measured with a high coverage ratio and deemed to be highly protected, while industries in which a lower fraction of products are covered by highly restrictive barriers would be deemed to be less protected which may or may not reflect the aggregate extent of protection actually provided by the NTBs. In fairness, the measurement of NTBs is a complex task, and the coverage ratio appears to be the best available aggregate measure of non tariff barrier protection. The construction of tariff equivalents at the scope of industries required for a cross-industry study such as ours is a major task and has never been undertaken.

A reason sometimes advanced in favor of choosing to study non-tariff barriers is that NTBs have been determined unilaterally while the post-1978 tariffs were the result of multilateral negotiations, namely the Tokyo round cuts. In the context of testing models based on the Grossman-Helpman (1994) theory, this issue deserves consideration. To the extent that this theory has ignored international negotiations as a determinant of trade policy (as opposed to Grossman and Helpman's later (1995) work) and to the extent that trade policy has, in fact, increasingly been determined by international negotiations, it may appear that it is better to use NTB data, even in the imperfectly measured form of coverage ratios (again on the basis of the argument that NTBS are more likely to be determined unilaterally and thus conform to a greater extent to the theoretical framework). However, there is no convincing evidence that all or even most NTBs are determined in a purely unilateral fashion. Thus, for example, in the case of NTBs such as voluntary export restraints, it is clear that they are the outcome of international negotiation. Further, there is ample empirical evidence that U.S. NTBs have a retaliatory component suggesting that NTBs are determined in a multilateral context.<sup>9</sup> Thus, NTB protection measures have no greater claim to empirical validity (in the Grossman-Helpman (1994) context) than do tariffs. The choice of protection

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<sup>9</sup>See, for example, Gawande (1998)).

measure should then depend upon the extent of tariff protection versus NTB protection in place. If the former dominates, using tariff rates seems best. If the latter dominates, using the coverage ratio seems the best one can do. A combined measure of protection, which would be most desirable, is simply not feasible.

As such, we are agnostic on this issue. We nevertheless choose to report results from regressions which use the tariff rate as the measure of protection. We see three important advantages to reporting these results. First, as we have already noted, they are the only theoretically proper measures - in that they are the only measure of the divergence between world prices and domestic prices. Second, we use data from two time periods, 1978-1982 and 1972-1975, one before and one after the Tokyo round of the GATT - which allows us to “control” for any international negotiation effects (thus minimizing the “multilateral” aspect of trade negotiations as a concern). Finally, and just as importantly, in the period under study, NTBs played a much less important role than they do today - this being particularly true in the early period 1972-1975. In any event, we have also estimated models of NTB protection using NTB coverage ratios and many of the qualitative results that we report for tariffs also hold with NTBs. Quantitatively, there are differences which should not be surprising since coverage ratios are clearly not tariff equivalents. The NTB results are not reported for brevity but are available from the authors.

#### *Foreign and Domestic Lobbying Organization*

We compiled data on foreign political organization from U.S. government reports on the administration of the Foreign Agents Registration Act (FARA). These are annual reports put together by the Attorney General’s office for the US Congress and contain detailed and extensive records of political spending patterns in the US of foreign commercial entities from various countries (through so-called “foreign agents” based in the US). All FARA entries were organized by industry and total spending by foreign commercial entities per unit value added of imports for each industry was obtained. Similarly, for domestic lobbies, data was organized by industry and corporate lobby expenditures per unit value added were determined by industry (See Data Appendix for details). The compilation of this data

and their organization is an innovation in the literature, and probably the most distinctive contribution of this paper to it. We construct two FARA data sets, one for the period 1978-82 for use together with the post-Tokyo round tariff data from 1982, and one from the period 1972-1975 before the Tokyo round implementations for use with tariff data from 1975.

Following the example of Goldberg and Maggi (1999), thresholds were used to determine whether the foreign political organization dummy variables was to be assigned a value of one. We used several thresholds for the purpose of investigating the robustness of the results to a variety of definitions for  $I^*$ . The domestic political organization variable  $I$  was also defined on the basis of thresholds. In the cases central to our discussion, the domestic political organization dummy was assigned a value of one if domestic PAC spending per thousand dollars of sectoral value added was in excess of 0.05 and 0.10. Foreign political organization was assigned as follows. The percentile distribution of expenditures per unit value added was first determined. Four percentile thresholds, in increasing order of expenditures per unit value added, are presented in the table: the 0<sup>th</sup> percentile, the 50<sup>th</sup> percentile, the 75<sup>th</sup> percentile and the 85<sup>th</sup> percentile. For any given threshold, say the 50th percentile, the sector was assigned an  $I^* = 1$  if that sector was in that percentile for *all* of the four years in the sample period (1978, 1979, 1981 and 1982).<sup>10</sup> A separate set of results is reported for which an additional criterion was used to assign the foreign political organization variable: the FARA report had to have indicated specifically that the foreign agent had made efforts to contact officials from the US government. We take this to imply that those contributions were directed at influencing government policy. For this subset of the FARA contributions, four different  $I^*$ 's were constructed using the same percentile cutoffs. In sum, eight sets of regressions are reported for each threshold used to determine domestic political organization: Four sets corresponding to the cutoffs used to determine foreign political organization and four additional sets when only those FARA entries which indicated that the relevant foreign agent had specifically made efforts to lobby the US government were used.

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<sup>10</sup>To ensure that our results are not being driven by the different ways in which the domestic and foreign political organization variables are assigned, we also ran the IV regressions using quartile cut-offs for both. As we discuss in the next section, this does not impact the results by much. Those results are available from the authors.

### *Import Elasticities, and Other Variables*

$\frac{X_i}{m_i}$  is the inverse import penetration ratio and is measured using readily available census data on domestic production and imports. Import demand elasticities were taken from the well known study by Sheills, Stern and Deardorff (1986) whose estimates at the 3-digit SIC level were replicated at the 4-digit level for this study (i.e., every four digit SIC industry, the corresponding 3-digit elasticity was directly used). Since the import demand elasticities on the right hand side of (13) are proxied by import demand elasticity estimates rather than actual measures, there is a potentially severe errors-in-variables problem that must be dealt with, given the widely varying levels of precision associated with the estimates. We deal with this as in Gawande and Bandhyopadhyay (2000) where Fuller's (1986) method is used to purge the elasticity data of the errors-in-variables problem.

### **IV.3 Estimation**

Estimation of (13) raises a number of issues having to do with the right hand side variables in the equation. First, each of the right hand side variables, the import penetration ratio, the import demand elasticity and the lobby dummies indicating whether or not a certain sector is politically organized in the home country and abroad, is potentially endogenous. Moreover, what appears on the right hand side is not simply a linear functions of these endogenous variables but is rather the sum of non-linear products of these variables. In order to consistently estimate the structural coefficients of the system, we therefore use the two-stage least squares estimator proposed by Kelejian (1971). We use as "exogenous" variables mostly those variables used as instruments by Gawande and Bandhyopadhyay (2000) and Goldberg and Maggi (1999): Industry characteristics data (such as capital, inventories, labor stocks, seller concentration, unemployment, geographic concentration, natural resource use, etc.) from the Census of Manufacturing and various Annual Surveys of Manufactures. In the first stage, reduced form equations for each of the endogenous variables and their non-linear transformations are estimated using as instruments these exogenous variables, their quadratic terms and their second order cross product terms (see also Strickland and Weiss

(1976) for a similar methodology in a different economic context).<sup>11</sup> Since the left hand side variable in (13), is censored below zero for some industries (for example, import subsidies that are akin to negative trade barriers are not measured in the tariff data), we combine the Smith-Blundell (1986) method with Kelejian (1971) to obtain estimates of the Tobit model (13). However, the extent of censoring in the tariff data is small, and the Tobit results reported are close to the linear instrumental variables estimates.

## V. Econometric Results

Summary statistics for variables employed in our analysis are provided in Table A.1 titled “Descriptive Statistics”. The 1982 tariff data have a sample mean of 6.5% (sample standard deviation=.06). If attention is restricted to the sample conditional on the presence of foreign lobbies, that is,  $I^* = 1$ , then the mean tariff is equal to 4.4% (s.d.=.06). The lower mean hints at the potentially salubrious effect that foreign lobbying may have on U.S. welfare that we alluded to earlier. Of primary interest are the absolute import demand elasticity  $|\epsilon|$  which has a mean of 1.49 (s.d.=1.10) and the inverse import penetration divided by the absolute import elasticity, or  $(X/m)/|\epsilon|$  (this variable is scaled by 100), which has mean .30 (s.d.=.641). As we discuss later, the remaining variables are used to estimate a larger model, but one that has much weaker theoretical foundations than the parsimonious model (13) that is the focus of this paper.

We use a set of eleven tables, Tables I-XI to display the results obtained from the estimation of (13). As discussed earlier, we have FARA data from two time periods: 1972-75 and 1978-82<sup>12</sup>. Tables I-IV contain estimates using  $I^*$  based on the 1978-82 FARA data, which we consider to be our central results. Data from this period is characterized in much greater detail in the FARA reports and enables us to conduct more detailed analysis than with data from the 1972-75 period. Additionally, other variables such as the elasticities  $\epsilon_i$ , are more

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<sup>11</sup>Kelejian shows that if the nonlinear expressions, for example,  $\frac{X_i}{m_i} \cdot I_i^h$ , are regressed on linear, squared and first order cross products of the exogenous variables in the system (13)-(16), then the familiar two-stage least squares estimator may be directly used, and has the desirable properties of consistency and asymptotic efficiency.

<sup>12</sup>1980 data are missing since the FARA report that year was not distributed due to an organizational error at the Justice Department - See Data Appendix

representative of this latter time period. To minimize the possibility that our results are driven by influences external to our theoretical and empirical context (such as international trade negotiations), we then present, in Tables V-IX, results using data from the period prior to the Tokyo Round implementations: 1972-75. Finally, Tables X-XI, we present results from extended models in which we include additional variables that have been used traditionally in more ad hoc models in the political economy of trade policy literature, for example, unionization rates, employment, and industrial concentration ratios.

We begin with Tables IA and IB. Here, a threshold of PAC spending per thousand dollars of sectoral value added greater than 0.05 was used to assign the domestic political organization variable. In determining the quartile cutoffs for assigning  $I^*$ , Table IA considered *all* FARA entries in manufacturing while Table IB included only those entries which made a specific mention of attempts to contact the government on the part of the foreign agent (as the respective table headers indicate). In *both* tables the coefficients of central interest,  $\beta_2$  and  $\beta_3$ , are statistically significant and have the signs predicted by the theory.  $\beta_2$  is positive, implying that domestic political presence, holding all else constant, leads to higher tariffs.  $\beta_3$  is negative, implying that foreign political presence, holding all else constant is correlated with lower tariffs. This is true in all of the cases that we consider (in IA *and* IB). Notably, the magnitude of the foreign coefficient,  $\beta_3$  is much higher when we consider higher percentile thresholds (with correspondingly smaller number of sectors with organized foreign representation).

The closeness of the coefficient estimates of  $\beta_2$  and  $\beta_3$  imply that in our theory the structural coefficient  $b$ , which measures the value of a foreign dollar in contributions relative to a domestic dollar, is about one. That is, the government places about equal weight on a dollar of domestic lobbying contribution as a dollar of foreign lobbying contribution. This is an interesting and robust feature of our results. The coefficient  $\beta_1$  is estimated to be negative and significant, disappointingly for the theory (although this changes when we consider different cutoffs for domestic organization, as we shall discuss shortly).

Tables II (A&B) and III (A&B) present results with thresholds for domestic PAC spending

per thousand dollars of value added set at 0.10 and 0.25 respectively. The results correspond closely to those presented in Tables IA and IB: the coefficient  $\beta_2$  is estimated significant and positive and the coefficient  $\beta_3$  is estimated significant and negative - just as the theory predicts. Here too, in almost all cases, the coefficient  $\beta_3$  is estimated to be higher when higher percentile requirements are imposed on the foreign political organization variable. Tables IVA and IVB present regression results when percentile thresholds (rather than thresholds on simply PAC spending per unit value added) were imposed on the *domestic* political organization variable as well. Once again, the theory appears to find support in the data.

A significant difference of the estimates in these tables from those presented in Table I is that the coefficient  $\beta_1$  is now estimated to be positive but is statistically and economically insignificant. It would appear from the definitions of  $\beta_1$  and  $\beta_2$  given below (13), that the structural parameter  $a$  may be recovered as the ratio of  $\beta_1$  to  $\beta_2$ , and that would indicate that the value of  $a$  is close to zero. That is, the government formulates trade policy almost entirely on the basis of political contributions, with little regard for welfare. That conclusion, however, is not warranted here. As indicated earlier, the theoretical restriction that  $\alpha < 1$  implies the theoretical restriction that  $\beta_1 + \beta_2 > 2$ . Given our scaling by 100 of  $(X/m)/\epsilon$ , this translates to the restriction that  $\beta_1 + \beta_2 > 200$ . Our estimates are nowhere close to satisfying this restriction. Therefore, our estimates should not be used to recover the structural parameter  $a$ . If we do so, the implied value of  $\alpha$  will not satisfy the restriction that it be less than 1.<sup>13</sup>

The results based on the 1978-82 FARA data may then be summarized as follows: The theory finds broad support in the data. When industries are politically organized as domestic import-competing lobbies, tariffs are strongly positively correlated with the inverse import penetration-to-import elasticity ratio, in accord with the Grossman-Helpman theory. When industries are politically organized as foreign exporting lobbies, tariffs are strongly negatively correlated with the inverse import penetration-to-import elasticity ratio, in accord with our

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<sup>13</sup>As is well known in the literature by now, plausible estimates of the parameter  $a$  have proven difficult to obtain. See Goldberg and Maggi (1999) and Gawande and Bandhyopadhyay (2000).

theory.

The quantitative implications of the results are as follows. Consider the 50th percentile cutoff definition for  $I^*$  in Table IA. The estimated value of  $\beta_2$  of 0.223 implies that if an industry is domestically organized then an increase of 0.1 in the inverse import penetration - to - import elasticity ratio will raise the ad valorem tariff by 0.022. The estimated value of  $\beta_3$  of -0.172 implies that if an industry has foreign political organization then the same increase in the inverse import penetration - to - import elasticity ratio will lower the ad valorem tariff by 0.017. Hence, we see a countervailing influence on the U.S. tariff of a similar magnitude exerted by foreign lobbying. A more unconditional inference about lobbying organization and its impact on tariffs may also be made: Consider a representative estimate of  $\beta_2$  and  $\beta_3$  of say, 0.25. Given the mean value of  $\frac{x}{m.\epsilon}$  of 0.3 (see the table with descriptive statistics), this implies that on average, holding all else constant, the presence of an organized foreign lobby lowers tariffs in that industry by about 7.5 percent (which to say lowers the tariff rate from, say, 12 percent to 4.5 percent). Conversely, the presence of an organized domestic lobby raises the tariff rate in that industry by 7.5 percent. These estimates suggest economically significant impacts of domestic and foreign lobbying.

Finally, we observe the intuitively appealing result that these effects are larger when  $I$  and  $I^*$  are measured at higher percentile or spending requirements. Although the theory does not explicitly recognize any fixed costs of lobby formation and organization, in practice it is only after spending exceeds certain amounts that we would expect the industry to be politically organized for lobbying. The results imply the presence of such fixed costs.<sup>14</sup>

As we have noted earlier, the choice of our protection measure and the fact that our sample covers a time period spanning a major international trade negotiation (the Tokyo round of the GATT) possibly raising some doubts as to whether other factors such as international bargaining influence our estimates.<sup>15</sup> We repeat our exercises using trade protection and FARA data from the period 1972-1975 (which preceded the Tokyo round which itself only

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<sup>14</sup>See Mitra (1999) for a detailed theoretical investigation of endogenous determination of lobbies (in a Grossman-Helpman context) in the presence of fixed lobby formation.

<sup>15</sup>It is perhaps worth pointing out that this is a standing problem that has not adequately been dealt with in the literature - the majority of studies on endogenous protection have simply ignored this issue.

started in 1976). The limitation on the FARA data from this time period is that we do not have detailed data in the FARA reports on foreign agent activities. Specifically there is no data for this time period on the actual expenditures by foreign lobbyists and there are no data indicating specifically whether or not the foreign lobbyists made any effort to contact the US government. Lacking any data on actual expenditures, we proceed by using simply the 0<sup>th</sup> percentile criterion (i. e., a sector is assigned  $I^* = 1$  if it simply appears in the FARA data base in each of the years under consideration). Table V presents these results, We note first that the number of observations drops to 196 on account of the greater number of sectors for which imports appear as either very close to zero or where the data are simply missing. Again the theory finds a degree of confirmation in the data: the coefficient  $\beta_2$  is estimated significant and positive and the coefficient  $\beta_3$  is estimated significant and negative. Note that  $\beta_1$  is also estimated as being positive, as the theory predicts, but is larger in magnitude than in the previous exercises.

One of the features of the FARA data set, as well as data on domestic lobbying, is the extent of persistence of lobbying activity: A foreign agent operating today is quite likely to be operating tomorrow as well. So are domestic lobbies. In order to exploit the more detailed information that we have in our FARA data set on spending in the later period, and keeping this persistence of lobbying efforts in mind, we estimate (13) using data on tariffs and import penetration from the earlier period (1972-75) and data on political organization from the later period (1978-82). This amounts to assuming that the distribution of lobbying expenditures across industries in the period 1972-1975 was identical to the distribution in the period 1978-1982. The results show a remarkable degree of similarity with the results reported in Tables I-IV. Foreign Organization is nearly always negatively correlated with trade barriers and domestic lobbying nearly always positively so. The consistency of results using tariff rates from the period prior to the Tokyo round and those after the Tokyo round should perhaps not be greatly surprising: it is only indicative of the fact that even when trade barriers are negotiated internationally, equilibrium outcomes are subject to the same/similar domestic lobbying pressures that would operate if international negotiations were absent. The fact that lobbying data from a later period is used in a regression with trade policy from a prior

period makes these results a less reliable - but it is heartening to see that our earlier results aren't contradicted by this run.

The preceding regressions have all tested the implications of the theory in strict form - restricting the number of variables on the right hand side to those narrowly predicted by the theory. However, the earlier literature on endogenous trade policy has suggested several other variables (such as unionization rates) that may be relevant in explaining protection as well. (see e.g. Baldwin (1985), Trefler (1993), and Gawande (1998)). Tables X and XI present our final set of results which include a number of these additional variables as well. We note first that the coefficients on many of the variables have the signs suggested and confirmed in the earlier literature.<sup>16</sup> Thus, unionization rates show up as positively impacting the tariff rate. Employment (which measures size of the voting population in that industry) also positive impacts the tariff rate. Labor intensive sectors (which are more likely importable sectors) receive higher protection (as indicated by the negative coefficient on the K/L variable). Other variables are less significant. Importantly, both our coefficients of central concern,  $\beta_2$  and  $\beta_3$  retain their signs, magnitude and significance.

## VI. Summary and Conclusions

We have used the theoretical structure of the well-known Grossman-Helpman (1994) model of trade policy to model the impact of foreign political organization on trade policy. This theory predicts that equilibrium trade barriers should be lower in sectors in which foreign influence is prevalent. Using a newly constructed data set on foreign lobbying activity in the US we find empirical confirmation of this prediction: Our estimates indicate that trade policy is indeed influenced by foreign political presence in a manner predicted by the theory - i.e., in the direction of lowering trade barriers against imports. Since lower trade barriers imply that US consumers gain unambiguously, this finding challenges the presumption in the popular discussion as to the deleterious effects of foreign political influence on the home

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<sup>16</sup>A detailed discussion of the determinants of trade policy discussed in the earlier empirical literature and the contrast in methodology with recent structural attempts is provided in the recent survey by Gawande and Krishna (2001).

economy.

## Appendix

The variables that appear in (13) are *ad valorem* tariff rates, domestic production, imports, import demand elasticities, domestic and foreign political organization. In this data appendix, we provide a detailed description of data sources and data construction methodology for the political organization variables (especially for foreign political organization). The remaining variables in (13) are quite familiar and we restrict ourselves to just a brief description here. As we have discussed in the text, IV estimation of (13) also requires information on a number of additional (instrumental) variables as does the estimation of the extended versions of (13) we have presented in Tables X and XI. We discuss each of these variables in turn.

### Foreign Political Organization: $I^*$

The data set used in the estimation of our empirical model was assembled using a report that is sent annually from the U.S. Attorney General to the U.S. Congress. The report is required by the 1938 legislation known as the Foreign Agent Registration Act (FARA)<sup>17</sup>. The report collects information about foreign agents, broadly defined, operating within the United States. The primary results presented in this paper used data taken from the reports that covered calendar years 1978, 1979, 1981, and 1982<sup>18</sup>.

Each entry in the FARA annual reports contains the following information:

1. Name and address of the foreign agent<sup>19</sup>,
2. Name of the foreign principal (usually a private firm, a industry association, or a

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<sup>17</sup>From 1938 until 1950, the report was produced by the Department of State, and then beginning in about 1950, by the Department of Justice

<sup>18</sup>The 1980 report was not used because it alone was not distributed to the regional repository libraries as it fell in-between the years during which hard-copy paper reports were sent out and when microfiche reports were subsequently distributed. Apparently, the one and only copy of it resides in the Department of Justice library in Washington DC

<sup>19</sup>A foreign agent, in the view of the USDOJ, is somebody who (a.) engages in political activities or acts in a public relations capacity for a foreign principal, (b.) solicits or dispenses any thing of value within the United States for a foreign principal, or (c.) who represents the interests of a foreign principal before any agency or official of the U.S. government. This is taken from a “Q&A” document, <http://www.usdoj.gov/criminal/fara/q-A.htm>.

government agency),

3. The purpose of the agency, including any U.S. government entities contacted, and
4. Amount of money exchange in return for the agency services.

For each of the years in question there were generally about 1,300 entries. With the exception of the name of the agent (not useful for our purposes), all of this data was transcribed into an MS Excel spreadsheet, consisting of five columns:

- (*i.*) The calendar year of the activity,
- (*ii.*) The country of the principal,
- (*iii.*) The name of the principal,
- (*iv.*) The amount of money transacted for the agent's representation, and
- (*v.*) A "lobbying" indicator variable that was set to "1" if the description supplied in the report mentioned that the agent contacted either the U.S. Congress or any other U.S. government agency (including the military).

To this data, taken verbatim from the government report, we added a sixth column. This represented our best guess for the U.S. Standard Industrial Classification (SIC) code that the industry would fall into (were it producing in the U.S.). This was done using a combination of the principal's name (which was often quite straightforward, as in the case of sugar cooperatives), the description of the representation activity in the FARA report (again, often helpful if it mentioned, for instance, that the principal was concerned about U.S. automobile safety regulations), and standard business research tools that provide insight into an organization's line of business.

Our object was to provide each entry in our four-year FARA database with a 3-digit SIC code. This task was made easier through the use of a computer-searchable version of the

SIC Handbook available on-line<sup>20</sup> which allowed us to classify even the most detailed of components. Allowance was made for the fact that while the government handbook used the 1987-version of the SIC system, the 1982 data set from the Gawande and Bandhyopadhyay (2000) paper, which we used for information on other variables, was based on the 1972-version of the SIC system. Only a small fraction of the entries had to have their 1987-version SIC codes changed to fit the 1972 scheme. We used the full range of the SIC system, even assigning 9XX SIC codes to principals that were from the government sector, despite the fact that for this paper we were only interested in SIC codes from the 200 – 399 range, that is, the manufacturing industries.

### **Categorization of the Raw Data**

The following is a breakdown of the original 5,302 entries by category of the foreign principal:

1. Fully 34% of the entries were from either tourist boards or government and/or private chambers of commerce that encourage general business contacts.<sup>21</sup>
2. 21% of the entries were related to government to government contacts that fall into the realm of international relations and not lobbying for a particular industry.
3. 18% of the entries fell into the service industries (SIC codes 400 – 859).
4. 5% were either agricultural or raw material industries (SIC codes 001 – 199).
5. Only 4% of the entries were foreign political parties that were campaigning among ethnic diasporas or seeking U.S. government recognition for their cause.

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<sup>20</sup>see <http://www.osha.gov/oshstats/sicser.html>.

<sup>21</sup>The large number of entries that fall into this category is somewhat puzzling because these agents, while they do meet the criteria mentioned in the above footnote, certainly qualify for exemption from reporting based on the following passage from the same document (<http://www.usdoj.gov/criminal/fara/qA.htm>). “For example, diplomats and officials of foreign governments, and their staffs, are exempt if properly recognized by the U.S. State Department. Persons whose activities are of a purely commercial nature or of a religious, academic, and charitable nature are exempt. Lawyers engaged in legal representation of foreign principals in the courts or similar type proceedings, so long as the attorney does not try to influence policy at the behest of his client, are exempt. Any agent who is engaged in lobbying activities and is registered under the Lobbying Disclosure Act is exempt”.

6. The remaining 18% were manufacturing industries in which we were interested. So, out of our four years of data, we ended up working with 934 entries from 71 different countries.

Because it was often impossible to neatly divide entries into a single SIC code, in less than 15% of the 934 entries, we assigned two or (rarely) three SIC codes to a single entry and then divided the lobbying fees listed in the report equally among these other codes. So, for instance, if a lumber company was listed as having paid \$10,000 for a lobbying effort in the U.S., we divided this sum into two entries: \$5,000 under SIC 241 and \$5,000 under SIC 242. Note that the numbers of entries provided above were tabulated *before* any splitting of entries took place.

### **Constructing the Input Table from the Raw Data**

In order to incorporate this raw data into our empirical model, we had to convert the above an indicator variable, “0” for unorganized and “1” for organized, that would correspond to each SIC code in our data set. This would allow us to compare tariffs in industries with only an organized domestic sector versus those with both a domestic *and* foreign organized lobbying presence.

In the interest of being able to later perform sensitivity analysis on our classification of the data, we used several different criteria in the assignment of the indicator variable. The most significant axis on which we divided the data set was:

1. Using the entire 934 entries on the basis that because all of these principals hired lawyers in the U.S. to represent them in some capacity, that they must be “organized” in a political-influence sense. Even if the U.S. government was not lobbied directly in many cases, it is plausible to assume that having a paid representative in the nation’s capitol would provide some added support, even if it relied upon informal contacts among individuals in the lobbying community.
2. Using a much more restrictive criteria to determine political organization: that is,

counting an industrial sector as organized *only* if it had a current contract that paid a positive amount of money *and* if the description of the activity provided in the FARA report specifically mentioned a U.S. government agency as having been contacted. Applying these restrictions reduces the number of usable entries to 437 from 48 countries.

It is interesting to note that the industrial sector (SICs 200-399) have a much higher proportion of entries that fall into the more restrictive “organized” category as described above. For the data set as a whole, only 22.6% (1200 out of 5302) of entries featured positive levels of lobbying *and* a direct lobbying connection to the U.S. government. But this contrasts with the 47% of SICs 200 – 399 industries (438/935) that met both criteria.

To obtain sectoral spending per unit value added of imports, we used sectoral value added in imports data provided by the UNCTAD. Total FARA expenditures by Industry were divided by imports value added to obtain the percentile distribution of spending per unit value added (for each of the cases corresponding to criteria 1 and 2 above) These distribution was then used to assign the foreign political organization dummy using quartile thresholds indicated in the results Tables I-XI.

## **Domestic Political Organization: I**

Domestic political organization was assigned using methodology identical to that used by Gawande and Bandhyopadhyay (2000) The variable  $I_i$  equals 1 if Political Action Committee campaign contributions/Value Added by lobbies associated with industry  $i$  are greater than the threshold limits indicated in the tables. PAC spending data were obtained from the Federal Election Commission (FEC) for the four congressional election cycles 1977-78, 1979-80, 1981-82, and 1983-84.

Since corporate PACs are associated with individual firms they were mapped into SIC industries as follows. Using COMPUSTAT tapes, firms were classified into 3- or 4-digit SIC industries. COMPUSTAT data apply only to publicly traded firms, which constitutes a small percentage of firms associated with corporate PACS. Where possible, the remaining PACs were classified into 2-digit SIC industries using the mapping in Weinberger and Greavey

(1984). The classification of PACs to SIC industries in this manner is one-to-many due to the multi-product nature of most firms. For example, it is possible that PAC spending by a firm, say, Firm A, maps into a 4-digit industry (5555), a 3-digit industry (333) and a 2-digit industry (22). In the absence of further information, our methodology was to split the PAC spending equally across all 4-digit industries into which the spending is mapped (summing up the mapped PAC expenditures at the industry level would erroneously inflate the measure of PAC spending for some industries and understate it for others). In the example, suppose PAC spending by Firm A maps into fifteen four digit industries (say, one given by 5555, four industries 333x, and ten industries 22xx), and Firm A spent \$300,000. Then each of these fifteen 4-digit industries would be allotted \$20,000 due to PAC spending by A. For any 4-digit SIC industry, summing across the allotments from various corporate PACs, we obtain total PAC spending by that industry.

Labor PAC spending is not included in the analysis because most labor PACs are organized not by industry but by trade, and hence are difficult to classify into SIC industries. For example, the electrical workers who are employed across all SIC industries are organized as the (various regional) International Brotherhood of Electrical Workers PAC(s). A few important exceptions do exist. Thus, contributions by the United Auto Workers Union (UAW PAC) would in fact map precisely into the auto industries. We decided to maintain our focus on corporate PACs. Since the big three auto firms were large contributors, adding the expenditures of the UAW does not change the construction of I, which is the main use to which the PAC data are put.

## Other Variables

The remaining variables that appear directly in (13) are:

$\frac{X_i}{m_i}$ , the inverse of the import penetration ratio, measured as sectoral [production/imports]/100. To construct this variable, value added data were obtained from the American Survey of Manufactures and data on imports were obtained from the Compatible Trade and Production (COMTAP) database.

$\epsilon_i$ , the sectoral import demand elasticities, which were obtained directly from the well known study of Shiells, Stern and Deardorff (1986). See the discussion in Goldberg and Maggi (1999).

$t_i$ , the effective ad-valorem tariff rates on imports, measured as the customs collection rates, which were obtained from Professor Robert Feenstra's database maintained at:  
<http://www.internationaldata.org/>.

As discussed in the text, estimation of (13) involved the use of instrumental variables for endogeneity correction. The instruments we used are the actual values, squares and a subset of cross products of the following variables (mostly obtained from the Annual Survey of Manufactures):

**log(herfindahl)**, the log of the herfindahl index of firm concentration within an industry

**% Scientists and Engineers**, the fraction of employees that are scientists and engineers

**% Unskilled**, the fraction of employees classified as unskilled

**Scale**, the output per firm

**K/L**, the capital labor ratio interacted with industry dummies and also

**%exports sold to the US** for the five major exporters to the US France, Germany, Italy, Japan and the UK.

Finally, the **Extended Models** include, in addition to the variables discussed above, the following regressors (also mostly obtained from the Annual Survey of Manufactures):

**Conc**, the 4-firm conc ratio

**% Unionized**, the fraction of the employees who are unionized

**Employment**, the numbers of workers employed in the sector

**Wage**, the production wage

**K/L**, the capital labor ratio.

Squares (but not cross products) of all instruments are used in the extended models for endogeneity correction.

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## A.1. Descriptive Statistics

Variables	Sample Means and Standard Deviations
$t$	0.065 (0.060)
$t$ with $I^* = 1$	(0.041) (0.041)
$\frac{X}{m}/\epsilon$	0.297 (1.641)
$\epsilon$	1.49 (1.100)
% Science-Engg	0.04 (0.040)
Concentration Ratio	0.4 (0.210)
Scale	0.1 (0.010)
% Unionized	0.45 (0.180)
Employment	0.04 (0.060)
Wage	0.009 (0.003)
K/L ratio	4.8791 (5.890)

Total Number of Observations = 248. The units of measurement and scaling is as follows:  $\frac{X}{m}$  is to be multiplied by 100, Scale is in billions of dollars, Employment is in millions, Production wage is in thousands of dollars per hour, the K/L ratio is in ten thousand dollars per worker, the rest of the variables are in percentage terms or unit-less.

**Table IA: Foreign Political Activity and Trade Policy (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.05)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	-0.007 (1.254)	-0.007 (1.264)	-0.01 (1.621)	-0.013 (2.071)
$\beta_2$	0.163 (6.143)	0.17 (6.406)	0.223 (7.247)	0.244 (7.688)
$\beta_3$	-0.051 (2.267)	-0.062 (2.751)	-0.172 (4.521)	-0.212 (5.063)
L	274.85	276.1	283.47	287.53
% $I^* = 1$	0.52	0.37	0.22	0.08
% $I = 1$	0.65	0.65	0.65	0.65

**Table IB: Trade Policy with Foreign Activity Directed To Govt (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.05)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	-0.008 (1.344)	-0.01 (1.661)	-0.012 (2.049)	-0.013 (2.171)
$\beta_2$	0.214 (6.753)	0.222 (7.114)	0.223 (7.367)	0.236 (7.574)
$\beta_3$	-0.129 (3.836)	-0.168 (4.360)	-0.188 (4.532)	-0.218 (2.850)
L	280	282.41	284.46	287.51
% $I^* = 1$	0.33	0.22	0.125	0.05
% $I = 1$	0.65	0.65	0.65	0.65

Total Number of Observations = 248. In each of the regressions, the Domestic Lobbies are taken to be organized if PAC expenditure for every thousand dollars of sectoral value added is greater than 0.05. In Table B, a specific indication of contact with the US government in the the FARA report is an additional requirement for the foreign political organization dummy to take the value one. See main text for details. The figures in parentheses are t-statistics (absolute values).

**Table IIA: Foreign Political Activity and Trade Policy (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.10)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	<i>0<sup>th</sup> Percentile</i>	<i>25<sup>th</sup> Percentile</i>	<i>50<sup>th</sup> Percentile</i>	<i>75<sup>th</sup> Percentile</i>
$\beta_1$	0.002 (0.588)	0.003 (0.645)	-0.0001 (0.009)	-0.005 (0.945)
$\beta_2$	0.147 (4.046)	0.168 (4.520)	0.407 (6.786)	0.438 (7.311)
$\beta_3$	-0.038 (1.479)	-0.056 (2.207)	-0.342 (5.675)	-0.386 (6.229)
L	261.81	263.2	278.92	283.49
% $I^* = 1$	0.52	0.37	0.22	0.08
% $I = 1$	0.43	0.43	0.43	0.43

**Table IIB: Trade Policy with Foreign Activity Directed To Govt (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.10)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	<i>0<sup>th</sup> Percentile</i>	<i>25<sup>th</sup> Percentile</i>	<i>50<sup>th</sup> Percentile</i>	<i>75<sup>th</sup> Percentile</i>
$\beta_1$	0.004 (0.752)	-0.0004 (0.084)	-0.004 (0.823)	-0.005 (0.955)
$\beta_2$	0.211 (4.627)	0.406 (6.526)	0.367 (6.724)	0.387 (6.871)
$\beta_3$	-0.109 (2.762)	-0.338 (5.407)	-0.326 (5.348)	-0.37 (3.162)
L	264.63	276.85	278.29	281.89
% $I^* = 1$	0.33	0.22	0.125	0.05
% $I = 1$	0.43	0.43	0.43	0.43

Total Number of Observations = 248. In each of the regressions, the Domestic Lobbies are taken to be organized if PAC expenditure for every thousand dollars of sectoral value added is greater than 0.10. In Table B, a specific indication of contact with the US government in the the FARA report is an additional requirement for the foreign political organization dummy to take the value one. See main text for details. The figures in parentheses are t-statistics (absolute values).

**Table IIIA: Foreign Political Activity and Trade Policy (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.25)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	0.006 (1.667)	0.007 (1.554)	0.007 (1.703)	0.004 (0.876)
$\beta_2$	0.001 (0.023)	0.024 (0.570)	0.256 (2.222)	0.355 (3.426)
$\beta_3$	0.04 (1.503)	0.02 (0.742)	-0.198 (1.870)	-0.298 (3.098)
L	253.06	276.85	253.77	256.82
% $I^* = 1$	0.52	0.37	0.22	0.08
% $I = 1$	0.14	0.14	0.14	0.14

**Table IIIB: Trade Policy with Foreign Activity Directed To Govt (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.25)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	0.006 (1.326)	0.007 (1.716)	0.002 (0.443)	-0.001 (0.222)
$\beta_2$	-0.03 (0.486)	0.077 (0.787)	0.4 (3.502)	0.586 (4.869)
$\beta_3$	0.07 (1.405)	-0.028 (0.308)	-0.355 (3.209)	-0.533 (4.648)
L	252.92	251.94	257.3	263.49
% $I^* = 1$	0.33	0.22	0.125	0.05
% $I = 1$	0.14	0.14	0.14	0.14

Total Number of Observations = 248. In each of the regressions, the Domestic Lobbies are taken to be organized if PAC expenditure for every thousand dollars of sectoral value added is greater than 0.25. In Table B, a specific indication of contact with the US government in the the FARA report is an additional requirement for the foreign political organization dummy to take the value one. See main text for details.

**Table IVA: Trade Policy with Foreign Activity Directed To Govt (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.05)**

Parameters	$I, I^*$ Expenditures	$I, I^*$ Expenditures	$I, I^*$ Expenditures	$I, I^*$ Expenditures
	<i>0<sup>th</sup> Percentile</i>	<i>25<sup>th</sup> Percentile</i>	<i>50<sup>th</sup> Percentile</i>	<i>75<sup>th</sup> Percentile</i>
$\beta_1$	(0.000)	-0.008 (1.425)	0.001 (0.258)	0.002 (0.551)
$\beta_2$	0.006 (1.357)	0.176 (6.737)	0.336 (6.861)	0.352 (5.101)
$\beta_3$	0.041 (2.340)	-0.076 (3.242)	-0.287 (5.380)	-0.296 (4.442)
L	253.04	279.1	280	265.28
% $I^* = 1$	0.52	0.37	0.22	0.08
% $I = 1$	1	0.75	0.5	0.25

**Table IVB: Trade Policy with Foreign Activity Directed To Govt (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.05)**

Parameters	$I, I^*$ Expenditures	$I, I^*$ Expenditures	$I, I^*$ Expenditures	$I, I^*$ Expenditures
	<i>0<sup>th</sup> Percentile</i>	<i>25<sup>th</sup> Percentile</i>	<i>50<sup>th</sup> Percentile</i>	<i>75<sup>th</sup> Percentile</i>
$\beta_1$	(0.000)	-0.012 (1.566)	-0.002 (0.395)	0.0006 (0.124)
$\beta_2$	0.006 (1.357)	0.212 (7.218)	0.295 (6.695)	0.399 (5.667)
$\beta_3$	0.048 (2.224)	-0.168 (4.376)	-0.236 (4.871)	-0.359 (5.074)
L	252.81	284.02	278.37	269
% $I^* = 1$	0.33	0.22	0.125	0.05
% $I = 1$	1	0.75	0.5	0.25

Total Number of Observations = 248. In Table B, a specific indication of contact with the US government in the the FARA report is an additional requirement for the foreign political organization dummy to take the value one. See main text for details. The figures in parentheses are t-statistics (absolute values).

**Table V: Foreign Political Activity and Trade Policy (1972-1975)**

Parameters	I Cutoff	I Cutoff	I Cutoff	I Cutoff
	0.01	0.05	0.10	0.25
$\beta_1$	0.472 (2.753)	0.517 (5.890)	0.559 (7.143)	0.61 (7.194)
$\beta_2$	0.149 (0.887)	0.191 (1.973)	0.233 (2.181)	-0.007 (0.036)
$\beta_3$	-0.437 (4.420)	-0.449 (4.570)	-0.492 (4.902)	-0.449 (4.502)
L	205.92	207.44	207.81	205.38
% $I^* = 1$	0.54	0.54	0.54	0.54
% $I = 1$	0.94	0.65	0.43	0.17

Total Number of Observations =196. The figures in parentheses are t-statistics (absolute values)

**Table VIA: Foreign Political Activity and Trade Policy (1972-1975)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.05)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	<i>0<sup>th</sup> Percentile</i>	<i>25<sup>th</sup> Percentile</i>	<i>50<sup>th</sup> Percentile</i>	<i>75<sup>th</sup> Percentile</i>
$\beta_1$	0.403 (5.104)	0.379 (5.271)	0.244 (3.970)	0.23 (3.743)
$\beta_2$	0.243 (2.471)	0.223 (2.296)	0.26 (2.518)	0.27 (2.604)
$\beta_3$	-0.308 (3.437)	-0.324 (3.929)	-0.229 (1.967)	-0.283 (2.266)
L	202.73	204.6	199.2	199.41
% $I^* = 1$	0.55	0.37	0.24	0.09
% $I = 1$	0.64	0.64	0.64	0.64

**Table VIB: Trade Policy with Foreign Activity Directed To Govt (1972-1975)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.05)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	<i>0<sup>th</sup> Percentile</i>	<i>25<sup>th</sup> Percentile</i>	<i>50<sup>th</sup> Percentile</i>	<i>75<sup>th</sup> Percentile</i>
$\beta_1$	0.27 (4.066)	0.238 (3.875)	0.238 (3.874)	0.236 (3.835)
$\beta_2$	0.213 (2.156)	0.219 (2.131)	0.217 (2.149)	0.237 (2.345)
$\beta_3$	-0.133 (1.359)	-0.095 (0.783)	-0.115 (0.929)	-0.222 (1.783)
L	197.71	197.7	197.68	198.46
% $I^* = 1$	0.35	0.22	0.14	0.06
% $I = 1$	0.64	0.64	0.64	0.64

Total Number of Observations = 196. In each of the regressions, the Domestic Lobbies are taken to be organized if PAC expenditure for every thousand dollars of sectoral value added is greater than 0.05. In Table B, a specific indication of contact with the US government in the the FARA report is an additional requirement for the foreign political organization dummy to take the value one. See main text for details. The figures in parentheses are t-statistics (absolute values).

**Table VIIA: Foreign Political Activity and Trade Policy (1972-1975)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.10)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	0.461 (6.473)	0.421 (6.705)	0.299 (5.568)	0.288 (5.405)
$\beta_2$	0.29 (2.557)	0.252 (2.310)	0.203 (1.791)	0.213 (1.882)
$\beta_3$	-0.365 (3.821)	-0.36 (4.221)	-0.208 (1.768)	-0.26 (2.065)
L	202.87	204.55	197.33	197.65
% $I^* = 1$	0.55	0.37	0.24	0.09
% $I = 1$	0.43	0.43	0.43	0.43

**Table VIIB: Trade Policy with Foreign Activity Directed To Govt (1972-1975)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.10)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	0.32 (5.472)	0.291 (5.421)	0.288 (5.391)	0.285 (5.348)
$\beta_2$	0.167 (1.533)	0.153 (1.356)	0.17 (7.494)	0.2 (1.770)
$\beta_3$	-0.14 (1.396)	-0.07 (0.576)	-0.122 (0.944)	-0.23 (1.790)
L	196.46	196.1	196.27	197.14
% $I^* = 1$	0.35	0.22	0.14	0.06
% $I = 1$	0.43	0.43	0.43	0.43

Total Number of Observations = 196. In each of the regressions, the Domestic Lobbies are taken to be organized if PAC expenditure for every thousand dollars of sectoral value added is greater than 0.10. In Table B, a specific indication of contact with the US government in the the FARA report is an additional requirement for the foreign political organization dummy to take the value one. See main text for details. The figures in parentheses are t-statistics (absolute values).

**Table VIIIA: Foreign Political Activity and Trade Policy (1972-1975)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.25)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	0.48 (6.324)	0.453 (7.182)	0.331 (6.284)	0.332 (6.366)
$\beta_2$	0.117 (0.648)	0.197 (1.092)	0.148 (0.820)	0.108 (0.587)
$\beta_3$	-0.271 (3.060)	-0.314 (3.818)	-0.13 (1.192)	-0.163 (1.380)
L	199.74	202.42	196.05	196.02
% $I^* = 1$	0.55	0.37	0.24	0.09
% $I = 1$	0.17	0.17	0.17	0.17

**Table VIIIB: Trade Policy with Foreign Activity Directed To Govt (1972-1975)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.25)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	0.341 (5.900)	0.31 (5.943)	0.314 (6.142)	0.326 (6.305)
$\beta_2$	0.155 (0.851)	0.148 (0.814)	0.145 (0.800)	0.11 (0.596)
$\beta_3$	-0.105 (1.078)	-0.007 (0.058)	-0.045 (0.371)	-0.138 (1.124)
L	195.62	195.52	195.47	195.73
% $I^* = 1$	0.35	0.22	0.14	0.06
% $I = 1$	0.17	0.17	0.17	0.17

Total Number of Observations = 196. In each of the regressions, the Domestic Lobbies are taken to be organized if PAC expenditure for every thousand dollars of sectoral value added is greater than 0.25. In Table B, a specific indication of contact with the US government in the the FARA report is an additional requirement for the foreign political organization dummy to take the value one. See main text for details. The figures in parentheses are t-statistics (absolute values).

**Table IXA: Foreign Political Activity and Trade Policy (1972-1975)**

Parameters	$I, I^*$ Expenditures	$I, I^*$ Expenditures	$I, I^*$ Expenditures	$I, I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$		0.346 (3.905)	0.303 (5.640)	0.335 (6.403)
$\beta_2$	0.499 (7.087)	0.235 (1.948)	0.175 (1.661)	0.073 (0.487)
$\beta_3$	-0.274 (3.099)	-0.343 (4.069)	-0.206 (1.738)	-0.169 (1.442)
L	199.52	203.91	197.11	196
% $I^* = 1$	0.55	0.37	0.24	0.09
% $I = 1$	1	0.25	0.5	0.25

**Table IXB: Trade Policy with Foreign Activity Directed To Govt (1972-1975)**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$		0.246 (2.887)	0.295 (5.506)	0.33 (6.348)
$\beta_2$	0.362 (6.945)	0.143 (1.178)	0.13 (1.272)	0.072 (0.483)
$\beta_3$	-0.102 (1.051)	-0.044 (0.373)	-0.1 (0.786)	-0.144 (1.193)
L	195.24	196.1	195.96	195.71
% $I^* = 1$	0.35	0.22	0.14	0.06
% $I = 1$	1	0.25	0.5	0.25

Total Number of Observations = 196. In Table B, a specific indication of contact with the US government in the the FARA report is an additional requirement for the foreign political organization dummy to take the value one. See main text for details. The figures in parentheses are t-statistics (absolute values).

**Table XA: Foreign Political Activity and Trade Policy (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.05)**

**Extended Model**

Parameters	<i>I*</i> Expenditures	<i>I*</i> Expenditures	<i>I*</i> Expenditures	<i>I*</i> Expenditures
	<i>0<sup>th</sup> Percentile</i>	<i>25<sup>th</sup> Percentile</i>	<i>50<sup>th</sup> Percentile</i>	<i>75<sup>th</sup> Percentile</i>
$\beta_1$	-0.004 (0.436)	-0.005 (0.454)	-0.018 (1.231)	-0.019 (1.300)
$\beta_2$	0.107 (3.659)	0.109 (3.676)	0.138 (4.050)	0.122 (3.534)
$\beta_3$	-0.097 (3.888)	-0.095 (3.862)	-0.187 (3.602)	-0.189 (2.697)
% Science-Engg	-0.101 (1.132)	-0.109 (1.213)	-0.088 (1.001)	-0.089 (1.013)
Concentration Ratio	0.076 (3.689)	0.078 (3.749)	0.067 (3.334)	0.072 (3.510)
Scale	-0.264 (1.225)	-0.269 (1.250)	-0.427 (2.073)	-0.464 (2.253)
% Unionized	0.055 (3.149)	0.054 (3.120)	0.064 (3.664)	0.065 (3.634)
Employment	0.109 (1.603)	0.112 (1.646)	0.123 (1.821)	0.143 (2.105)
Wage	-0.266 (0.166)	-0.468 (0.290)	-0.824 (0.510)	-1.174 (0.715)
K/L ratio	-0.002 (2.904)	-0.002 (2.773)	-0.002 (2.567)	-0.002 (2.204)
L	336.09	336.01	337.68	335.28
% $I^* = 1$	0.52	0.37	0.22	0.08
% $I = 1$	0.65	0.65	0.65	0.65

Total Number of Observations = 248. In each of the regressions, the Domestic Lobbies are taken to be organized if PAC expenditure for every thousand dollars of sectoral value added is greater than 0.05. The figures in parentheses are t-statistics (absolute values).

**Table XB: Trade Policy with Foreign Activity Directed To Govt (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.05)**

**Extended Model**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	-0.009 (0.637)	-0.017 (1.216)	-0.019 (1.353)	-0.018 (1.298)
$\beta_2$	0.138 (4.019)	0.147 (4.226)	0.111 (3.300)	0.119 (3.434)
$\beta_3$	-0.151 (4.005)	-0.186 (3.643)	-0.326 (3.078)	-0.27 (2.185)
% Science-Engg	-0.064 (0.723)	-0.053 (0.594)	-0.048 (0.551)	-0.051 (0.570)
Concentration Ratio	0.074 (3.627)	0.065 (3.153)	0.077 (3.936)	0.073 (3.659)
Scale	-0.473 (2.281)	-0.43 (2.080)	-0.36 (1.767)	-0.415 (2.008)
% Unionized	0.067 (3.749)	0.068 (3.832)	0.057 (3.340)	0.055 (3.196)
Employment	0.149 (2.171)	0.117 (1.729)	0.165 (2.497)	0.16 (2.373)
Wage	-1.271 (0.774)	-0.919 (0.568)	-1.33 (0.841)	-1.189 (0.739)
K/L ratio	-0.002 (2.547)	-0.002 (2.711)	-0.002 (2.622)	-0.002 (2.392)
L	337.32	338.06	336.56	335.45
% $I^* = 1$	0.33	0.22	0.125	0.05
% $I = 1$	0.65	0.65	0.65	0.65

Total Number of Observations = 248. In each of the regressions, the Domestic Lobbies are taken to be organized if PAC expenditure for every thousand dollars of sectoral value added is greater than 0.05. For Foreign Lobbies, a specific indication of contact with the US government in the the FARA report is an additional requirement for the foreign political organization dummy to take the value one. See main text for details. The figures in parentheses are t-statistics (absolute values).

**Table XIA: Foreign Political Activity and Trade Policy (1978-1982)**  
**(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.10)**

**Extended Model**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	0.0004 (0.066)	0.0001 (0.015)	-0.001 (0.217)	-0.003 (0.560)
$\beta_2$	0.077 (1.931)	0.078 (1.938)	0.221 (3.361)	0.1 (1.733)
$\beta_3$	-0.083 (2.859)	-0.081 (2.813)	-0.301 (3.881)	-0.196 (2.348)
% Science-Engg	-0.117 (1.294)	-0.124 (1.359)	-0.122 (1.362)	-0.104 (1.154)
Concentration Ratio	0.06 (2.965)	0.061 (3.012)	0.047 (2.329)	0.056 (2.762)
Scale	-0.319 (1.457)	-0.326 (1.489)	-0.467 (2.257)	-0.509 (2.449)
% Unionized	0.053 (2.964)	0.052 (2.935)	0.063 (3.565)	0.063 (3.510)
Employment	0.08 (1.163)	0.083 (1.197)	0.127 (1.819)	0.116 (1.622)
Wage	1.509 (0.983)	1.354 (0.883)	0.656 (0.430)	0.517 (0.333)
K/L ratio	-0.002 (3.109)	-0.002 (3.000)	-0.002 (2.541)	-0.002 (2.347)
L	331.26	331.12	335.06	330.4
% $I^* = 1$	0.52	0.37	0.22	0.08
% $I = 1$	0.43	0.43	0.43	0.43

Total Number of Observations = 248. In each of the regressions, the Domestic Lobbies are taken to be organized if PAC expenditure for every thousand dollars of sectoral value added is greater than 0.10. The figures in parentheses are t-statistics (absolute values).

**Table XIB: Trade Policy with Foreign Activity Directed To Govt  
(Domestic PAC Spending/\$ 1K Value Added Cutoff: 0.10)**

**Extended Model**

Parameters	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures	$I^*$ Expenditures
	$0^{th}$ Percentile	$25^{th}$ Percentile	$50^{th}$ Percentile	$75^{th}$ Percentile
$\beta_1$	0.0005 (0.085)	-0.002 (0.289)	-0.004 (0.629)	-0.003 (0.567)
$\beta_2$	0.081 (1.809)	0.277 (3.861)	0.086 (1.563)	0.086 (1.525)
$\beta_3$	-0.109 (2.537)	-0.351 (4.200)	-0.354 (3.144)	-0.281 (2.192)
% Science-Engg	-0.086 (0.962)	-0.064 (0.717)	-0.055 (0.630)	-0.06 (0.669)
Concentration Ratio	0.056 (2.766)	0.037 (1.814)	0.063 (3.294)	0.058 (2.939)
Scale	-0.512 (2.446)	-0.463 (2.238)	-0.39 (1.909)	-0.451 (2.168)
% Unionized	0.062 (3.454)	0.069 (3.887)	0.055 (3.227)	0.053 (3.056)
Employment	0.102 (1.457)	0.127 (1.824)	0.14 (2.023)	0.129 (1.830)
Wage	0.999 (0.649)	0.607 (0.398)	0.162 (0.108)	0.526 (0.347)
K/L ratio	-0.002 (2.820)	-0.002 (2.819)	-0.002 (2.809)	-0.002 (2.602)
L	330.54	336.47	332.16	330.51
% $I^* = 1$	0.33	0.22	0.125	0.05
% $I = 1$	0.43	0.43	0.43	0.43

Total Number of Observations = 248. In each of the regressions, the Domestic Lobbies are taken to be organized if PAC expenditure for every thousand dollars of sectoral value added is greater than 0.10. For foreign lobbies, a specific indication of contact with the US government in the the FARA report is an additional requirement for the foreign political organization dummy to take the value one. See main text for details. The figures in parentheses are t-statistics (absolute values).