POLITICAL PRESSURE AND THE U.S. GENERALIZED SYSTEM OF PREFERENCES

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INTRODUCTION

The Generalized System of Preferences (GSP) is a program through which developed countries provide preferential tariff treatment for imports from developing countries. While the GSP schemes of different developed countries vary widely, their common purpose is to improve the export performance of developing countries. Although the GSP has been in effect since the early 1970s, most studies have found that it has not significantly increased the exports of developing countries [Karsenty and Laird, 1987; MacPhee and Oguledo, 1991; Mendez and Murray, 1990; Ray, 1987].

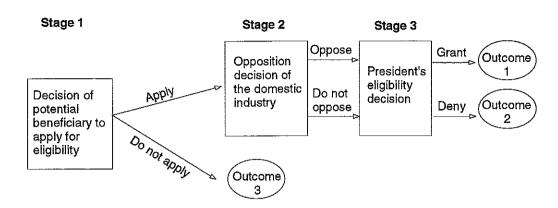
The failure of the GSP can be attributed to several factors, including non-tariff barriers to trade and limits on preferential treatment. The most important factor, however, is the limited nature of GSP product coverage. Few of the developed countries extend coverage to more than a small fraction of the goods produced most efficiently by developing countries. For example, the United States excludes imports of many agricultural products from its GSP scheme, as well as imports of manufactured goods such as textiles, apparel, footwear, and luggage.

While the coverage of many GSP schemes is limited, the U.S. scheme has a process to expand coverage and since 1976 U.S. GSP coverage has been extended to over 500 new products [USTR, 1991, 86-120]. The goal of this paper is to identify the political and economic criteria that determine whether coverage will be broadened.

One reason for identifying these criteria is to assess the prospects for a substantial increase in U.S. GSP coverage. Given the tariff reductions produced by the new GATT agreement, the importance of extending U.S. coverage may appear limited. Declines in U.S. tariff rates do reduce the benefits provided to developing countries by the U.S. GSP. Still, expansion of coverage is important because many of the products now excluded from the U.S. GSP are covered by tariffs that will remain high after the Uruguay cuts. For this reason, expanding preferential treatment is likely to produce substantial benefits.

GSP eligibility decisions also provide an ideal framework in which to examine the determinants of U.S. trade policy. Attempts to extend GSP eligibility are often opposed by domestic industries, making it possible to identify the factors that lead to their opposition and determine their success. While a large literature already addresses these issues, this study provides additional insight by using a unique data set in a novel way.

FIGURE 1



THE GSP SCHEME OF THE UNITED STATES

The U.S. GSP scheme took effect 1 January 1976 as part of the Trade Act of 1974. Since its inception, many products have been added to and removed from the U.S. scheme; at present, imports of some 4,300 products receive preferential treatment. These imports were valued at \$19.5 billion in 1993 but represented only 16 percent of all imports from GSP beneficiaries [USITC, 1993, 17]. Since only 37 percent of U.S. imports enter the U.S. duty free, a large fraction of imports from developing countries are denied GSP treatment. While treatment may be denied for several reasons, roughly 30 percent of U.S. imports from developing countries are excluded because they are not covered by the U.S. GSP scheme.

The United States reviews its GSP scheme each year, and beneficiaries can petition to expand GSP coverage prior to each review. The process begins when a beneficiary submits a petition to the United States Trade Representative (USTR). If the petition is in the appropriate form, it is accepted and reviewed by the USTR. Each review involves public hearings conducted by the USTR to determine the views of interested parties, including the domestic industry. An analysis of the economic implications of granting eligibility is then conducted by the United States International Trade Commission (USITC), which also solicits the views of interested parties. When completed, this analysis is forwarded to the USTR with a confidential recommendation. The final decision is made by the U.S. president in consultation with members of the USTR's Trade Policy Staff. If eligibility is granted, an executive order is issued modifying the list of products eligible for GSP treatment.

THEORETIC MODEL

GSP eligibility decisions can be thought of as being made in three stages. In the first stage, foreign governments or other interested parties decide whether to request eligibility for an uncovered product. In the second stage, domestic firms determine

the strength of their opposition to an eligibility request. In the third stage, the executive branch determines whether an eligibility request is granted. The entire process is depicted in Figure 1.

Rather than model the entire process, this study focuses on the last two stages. In principle, a truncated regression model could identify the factors that influence the first stage — the decision of a beneficiary to apply for eligibility. While feasible, such analysis is probably of little value because the cost of applying for eligibility is small. All that is strictly required is the completion of a single form provided by the USTR. While some technical and legal assistance is required to complete this form, its cost is a minor obstacle in cases involving all but very small import levels. The remainder of this section examines the criteria that influence the two remaining decisions in the petitioning process.

Stage 1: The Domestic Industry

The degree of domestic opposition to an eligibility request depends on three factors: the expected decline in profits if eligibility is granted, the political influence of the domestic industry, and the cost of opposition. Since these factors are not observable, proxies must be created.

Several variables are used to proxy the expected loss to the domestic industry. The first of these is the percentage increase in U.S. imports, computed using the trade creation measure of Laird and Yeats [1986]. I use the ratio of value added to output as a second proxy for the expected loss of the domestic industry. This measure captures the lower effective rates of protection of industries with higher ratios of value added to output. The five-year change in the value of domestic shipments is also used to measure an industry's incentive to oppose eligibility because industries with lower growth rates are hypothesized to be more susceptible to increased import penetration [Marvel and Ray, 1983]. Finally, the ratio of industry exports to imports proxies the loss of the domestic industry. Industries with higher export-import ratios are more likely to be competitive in world markets and should suffer a smaller loss if eligibility is granted.

The political influence of a domestic industry is measured first by its geographic concentration.³ Pincus [1975] argues that geographic concentration is important because more concentrated industries play a greater role in regional economies. This makes the region's political representatives more receptive to overtures from the industry, enabling the industry to exert greater influence. I choose apparent consumption to proxy political influence because larger industries are more likely to have the resources needed to lobby effectively [Caves, 1976]. Political influence may also be reflected in industry tariff rates since industries protected by high tariffs have a demonstrated ability to obtain or preserve tariff protection. Finally, domestic industries may exert greater influence in presidential election years or in periods of weak economic growth.

Measuring a domestic industry's cost of opposition is difficult. Effective opposition entails the preparation of verbal and written testimony, involving legal and administrative expenses as well as the time of important industry executives. While

measures of these costs are not available, the structure of an industry may influence the cost of opposition. Olson [1965] argues that organizational costs increase as the number of firms in an industry rises. If this is true, the number of domestic firms in an industry should be negatively related to the strength of domestic opposition. Domestic opposition may also have to be more effective and more costly when domestic support for eligibility exists outside the domestic industry. If this hypothesis is correct, industry opposition should weaken as domestic support for eligibility increases.

Stage 2: The U.S. President

After domestic firms determine the degree of opposition, the president must decide whether to grant eligibility. Sections 501 and 502(c) of Title V of the Trade Act of 1974 (as amended) state the criteria for reaching this decision. The most important criteria include the impact of eligibility on the petitioning country and the domestic industry. Other criteria include the competitiveness of the petitioning country with respect to the product, the extent of economic development in the petitioning country, the degree to which the petitioning country restricts U.S. foreign investment or exports, and the extent to which U.S. intellectual property rights are respected.

Since none of these criteria is directly observable, proxies must be constructed. The impact on the petitioning country is measured by the percentage increase in its exports.⁴ The percentage increase in U.S. imports is used to represent the impact of eligibility on the domestic industry. The competitiveness of the petitioning country is represented by a dummy variable equalling one if imports from the petitioner exceed competitive need limits (CNLs) and zero otherwise. CNLs are used to deny GSP treatment to eligible imports whose value or import share exceeds a "competitive" threshold. Per capita income proxies the state of economic development in the petitioning country.⁵ Finally, a dummy variable, equalling one if the petitioning country is involved in a Section 301 investigation and zero otherwise, measures the openness of the petitioning country to U.S. exports. Foreign countries become involved in 301 investigations when they unjustifiably or unreasonably restrict U.S. exports or fail to provide adequate protection for U.S. intellectual property rights.

Other non-statutory criteria also influence the president's decisions. Foremost among these is the presence and intensity of domestic opposition. The political influence of the domestic industry may also affect presidential decisions even if the industry does not oppose eligibility. Political influence is measured using several variables including geographic concentration, apparent consumption, and the number of domestic producers.

Presidential decisions may also reflect what Baldwin [1985] terms "social concerns." These concerns center on preserving income equality by protecting lower-paid or less-skilled workers. This hypothesis is tested by including industry wage rates and capital-labor ratios. Higher capital-labor ratios are assumed to be associated with a more skilled labor force.

ECONOMETRIC MODEL

The two-stage decision making process just outlined is estimated using linear and logit regression models. The decision of the domestic industry is analyzed using both models because domestic opposition is measured in two ways. Logit analysis is used when the dependent variable is qualitative, taking a value of one if the domestic industry opposes eligibility and zero otherwise. Ordinary least squares (OLS) is used when the intensity of domestic opposition is the dependent variable. The intensity of domestic opposition is measured by the number of lines in the ITC reports devoted to summarizing the position of the domestic industry.

The intensity of domestic opposition better reflects the domestic industry's position because it captures more than just the presence or absence of opposition. Two cases from the sample illustrate this point. In the first case, one domestic industry expressed its opposition with a phone call to the ITC which was described in two lines in the ITC case summary. In the second case, opposition was expressed through the testimony of ten different congressional representatives and the ITC report summarized the position of the domestic industry in 110 lines. While the intensity of opposition is obviously higher in the second case, the distinction is lost with a binary dependent variable.

A logit model is used to estimate the determinants of the president's eligibility decision because the dependent variable is qualitative, equalling one if the president supports eligibility and zero otherwise.

DATA AND RESULTS

This study examines eligibility decisions from 1988 to 1994.⁶ Of the 324 decisions in the sample, 212 (or about 65 percent) were in favor of granting eligibility. I estimate that this increase in eligibility raised GSP imports by about \$660 million annually, expanding the coverage of the U.S. scheme by about 8 percent. If all the petitions had been granted, total coverage would have expanded by an estimated \$1.5 billion or about 18 percent.

A pattern suggesting domestic industry political strength emerges when the eligibility decisions are broken down according to the position of the domestic industry. When the domestic industry opposed eligibility, eligibility was granted in 50 percent of the cases. When the domestic industry did not oppose eligibility, eligibility was granted in 79 percent of the cases. Import data suggest an even stronger influence of the domestic industry. Table 1 presents estimates of the potential increase in imports according to case outcome and the position of the domestic industry. When domestic industries oppose eligibility, only about 18 percent of the potential increase in imports is realized. In the absence of domestic opposition, 87 percent is realized.

TABLE 1
Trade Expansion, Domestic Opposition, and Case Outcome
(Trade Expansion in Millions of Dollars)

Case Outcome	Position of domestic industry	
	Opposed	Not opposed
Eligibility granted	147.4	571.0
Eligibility denied	687.1	86.5

These results suggest that domestic opposition influences eligibility decisions. Such a conclusion, however, is premature. To see why, suppose domestic industries oppose eligibility only when it seriously injures them. The President's decision to deny eligibility might then be based on the injury suffered by the domestic industry rather than any influence the industry exerts. To properly assess the impact of domestic opposition, econometric analysis is necessary.

The data for the econometric analysis are taken from several sources. The ITC digests that analyze the effects of granting eligibility are the primary data source for the paper. These reports contain comments from interested parties used to determine the presence and intensity of domestic opposition as well as the presence of domestic support. The elasticities, tariff rates, and import levels needed to estimate changes in imports are also from this source, as are domestic shipments, apparent consumption, and exports. All data are reported at the eight-digit HTS level.

The outcome of each case is obtained from the *Federal Register*. Concentration measures, value added to output ratios, wages, employment, and the value of gross depreciable assets are from the *1987 Census of Manufacturers* at the four digit SIC level. Per capita income levels are from the *1992 World Development Report*. HTS and SIC classifications are matched using a Commerce Department concordance.

Tables 2 and 3 present the logit and OLS results obtained by regressing the variables that measure domestic opposition on the explanatory variables described earlier. Table 2 presents the logit results when the dependent variable measures the presence of domestic opposition; Table 3 presents the OLS results when the dependent variable is the *intensity* of domestic opposition. The first model in each table examines the relationship between domestic opposition and the expected loss to the domestic industry. In both tables, only the percentage change in imports has a statistically significant coefficient. This coefficient is positive, so opposition is more likely as the increase in imports rises. The coefficient on the change in imports is also significant and positive in most of the other models.

Of the other variables that proxy the loss to the domestic industry, both the coefficients on the value added to output ratio and the export to import ratio are negative in both tables. This implies that increases in these variables reduce opposition, as hypothesized. Neither coefficient, however, is significant at the 5 percent level. The coefficient on the five-year change in domestic shipments is positive but insignificant in all specifications.

TABLE 2
Logit Results for Presence of Domestic Opposition

Independent Variables	Model 1	Model 2	Model 3
Constant	-0.21	-2.69	-2.73
	(0.57)	(0.97)	(0.99)
Percentage change in U.S. imports	$8.65^{\rm b}$	5.22	6.10 ^a
	(2.60)	(3.04)	(3.06)
Ratio of value added to output	-0.72	0.47	0.70
	(1.09)	(1.27)	(1.28)
Industry export-import ratio	-0.005	-0.006	-0.006
	(0.007)	(0.007)	(0.007)
Five year percentage change in			
value of industry shipments	0.003	0.004	0.002
• •	(0.004)	(0.004)	(0.004)
Geographic concentration	-	1.61 ^b	$1.70^{ m b}$
		(0.49)	(0.51)
Fariff rate	-	0.11^{b}	0.10^{b}
	•	(0.04)	(0.4)
Value of industry shipments	-	3.2E-8	6.8E-8
		(2.8E-7)	(4.0E-8)
Presidential election dummy	-	$2.10^{ m b}$	$2.32^{\rm b}$
		(0.80)	(0.85)
DP growth rate in two previous quarters	-	-0.58	-0.66ª
		(0.30)	(0.32)
Number of U.S. producers	-	-	6.7E-4
			(3.9E-4)
Domestic support dummy variable		-	0.65
			(0.52)
Number of observations	183	183	183
Percentage of cases correctly predicted	61.7	73.8	73.2
McFadden's R^2	0.07	0.20	0.23
Log likelihood	-117.7	-101.0	-97.5
-			

a, b - statistically significant at the 5 percent and 1 percent levels respectively. All standard errors in parentheses.

The second model in both tables includes the variables that proxy the influence of the domestic industry. The hypothesis that the coefficients of these proxies are all zero can be rejected at the 0.5 percent significance level using a log-likelihood ratio test. All the coefficients in both tables have the hypothesized signs, but only two of the coefficients are highly significant. The two variables with highly significant coefficients are the geographic concentration measure and the industry tariff rate. Increases in either variable increase opposition, a result consistent with the hypothesis that domestic opposition grows with the influence of the domestic industry. The presidential election dummy is highly significant in the logit analysis but only weakly significant in the OLS analysis. This suggests that domestic industries are somewhat more likely to oppose eligibility decisions in election years.

TABLE 3
OLS Results for Intensity of Domestic Opposition

dependent variables	Model 1	Model 2	Model 3
nstant	9.48 ^a	-6.21	-6.93
	(4.43)	(5.83)	(5.86)
rcentage change in U.S. imports	85.87 ^b	49.40 ^b	49.59 ^b
	(14.48)	(15.41)	(15.51)
tio of value added to output	-8.34	-2.11	-1.43
	(8.49)	(8.06)	(8.11)
lustry export-import ratio	-0.02	-0.03	-0.03
	(0.04)	(0.04)	(0.04)
e year percentage change in	0.03	0.01	0.01
alue of industry shipments	(0.03)	(0.03)	(0.03)
graphic concentration	-	$8.18^{ m b}$	8.56 ^b
		(3.04)	(3.05)
iff rate	-	$0.87^{ m b}$	$0.84^{ m b}$
		(0.19)	(0.20)
ue of industry shipments	-	2.5E-7	1.8E-7
		(1.9E-7)	(2.2E-5)
sidential election dummy	-	9.28	10.02^{a}
		(4.99)	(5.02)
growth rate in two previous quarters	-	-1.89	-2.29
		(1.90)	(1.92)
nber of U.S. producers	-	-	4.0E-4
			(1.2E-3)
nestic support dummy variable	-	-	4.93
			(3.28)
nber of observations	183	183	183
usted \mathbb{R}^2	0.16	0.29	0.29
tatistic	9.39	9.24	7.8
likelihood	-765.2	-746.9	-745.6

a,b - statistically significant at the 5 percent and 1 percent levels respectively. All standard errors in parentheses.

The third model in both tables incorporates two proxies for the cost of opposition. These proxies are insignificant in both tables and a log-likelihood ratio test cannot reject the hypothesis that both coefficients equal zero at the 2.5 percent level in Table 2 and the 10 percent level in Table 3. These results suggest that the cost of opposition is not an important determinant of opposition decisions, but this may be because the two variables used to represent opposition costs are poor proxies for these costs.

Table 4 reports the logit results for the president's eligibility decision. ¹¹ The first model in Table 4 examines how statutory criteria affect the president's decision. Two of these criteria (the Section 301 dummy and the competitive need dummy) have highly significant and negative coefficients in all cases. This implies that the presi-

TABLE 4
Logit Results for the President's Eligibility Decision

	Model 1	Model 2	Model 3	Model 4
Constant	1.35 ^a	4.36 ^b	4.79 ^b	5.44 ^b
	(0.67)	(1.49)	(1.58)	(1.67)
Percentage increase in				
petitioner's U.S. exports	-0.42	-0.31	-0.28	-0.26
	(0.27)	(0.31)	(0.33)	(0.35)
Per capita income of				
petitioning country	1.1E-5	-8.8Œ-5	-1.1E-4	-2.2E-4
-	(1.2E-4)	(1.4E-4)	(1.5E-4)	(1.6E-4)
Percentage change in U.S. imports	-4.79 ^a	-5.26 ^a	-2.98	-1.28
· · · · ·	(2.26)	(2.55)	(2.73)	(2.69)
Section 301 dummy variable	-1.37 ^b	-1.93 ^b	-2.28 ^b	$-2.55^{ m b}$
	(0.51)	(0.57)	(0.64)	(0.63)
Competitive need dummy variable	-1.41 ^b	-1.59 ^b	-1.82 ^b	$-2.07^{ m b}$
	(0.41)	(0.46)	(0.51)	(0.52)
Capital-labor ratio	_	1.44	1.12	1.38
-		(2.20)	(2.31)	(2.39)
ndustry wage rate	-	-0.05	-0.02	-0.02
		(0.11)	(0.11)	(0.11)
eographic concentration	_	-1.78 ^b	-1.40 ^b	-1.54 ^b
5 1		(0.51)	(0.54)	(0.55)
umber of U.S. producers	-	-3.7E-4	-4.6E-4 ^a	-3.9 E -4
-		(2.3E-4)	(2.2E-4)	(2.3E-4)
Value of industry shipments	-	4.5 E- 8	5.0E-8	5.2-8
		(5.6E-8)	(4.6E-8)	(4.9 E- 8)
residential election dummy	-	-0.87	-0.20	0.09
		(0.81)	(0.88)	(0.89)
GDP growth rate in 2 previous quarters	rs -	-0.04	-0.26	-0.39
		(0.31)	(0.34)	(0.34)
Domestic opposition dummy variable	-	-	$ ext{-}1.57^{\mathrm{b}}$	-
			(0.43)	
ntensity of domestic opposition	<u>.</u>	-	-	-0.07 ^b
				(0.02)
umber of observations	191	191	191	191
ercentage of cases correctly predicted	d 69.6	73.8	74.3	₹ 79.6
McFadden's ${ m R}^2$	0.127	0.216	0.275	0.303
Log Likelihood	-109.6	-98.3	-91.0	-87.5

a, b - Statistically significant at the 5% and 1% levels. Standard errors in parentheses.

dent is more likely to reject eligibility petitions when the petitioning country either discriminates against U.S. producers or is already a competitive supplier. Both results are consistent with the legislation discussed earlier. The percentage increase in imports also has a negative and statistically significant coefficient, suggesting that the president is more likely to reject requests that would substantially increase imports. The impact of greater eligibility on the petitioning country (as measured by

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the increase in its exports or its per capita income) does not appear to influence the president's decision.

The second model in Table 4 adds in non-statutory factors that might influence presidential decisions. Of the non-statutory factors, only the variable representing geographic concentration has a statistically significant coefficient. As expected, this coefficient is negative: so increases in the geographic concentration of the affected domestic industry reduce the likelihood that eligibility is granted. The coefficients of the capital-labor ratio and the size of industry shipments are positive but insignificant. Interestingly, the coefficient of the presidential election dummy, which is significant in some specifications of the domestic industry's decision, is not significant in presidential decisions although it does have the expected negative sign. One interpretation of this result is that domestic producers mistakenly believe that the President is more susceptible to political pressure in election years.

The third and fourth models isolate the role of domestic opposition by adding the variables that measure its presence and intensity. The coefficients of both variables are negative and highly significant, implying that greater domestic opposition reduces the probability that eligibility is granted. The effect of domestic opposition, as measured by the increase in the log-likelihood function, is considerable in both models, but Model 4, which includes the intensity of domestic opposition as an independent variable instead of the domestic opposition dummy, has greater explanatory power.

Having analyzed the factors that affect the decisions of the domestic industry and the President, consider next how domestic opposition affects GSP coverage. The impact of domestic opposition is estimated in two ways. First, the probability that eligibility will be granted is computed from Model 4 of Table 4 for each case with domestic opposition. This probability is then recalculated using the same model but setting the intensity of domestic opposition to zero. The difference between the two probabilities provides a measure of the importance of domestic opposition in presidential decisions. The results show that the probability that eligibility is granted rises on average from 0.486 to 0.722 when domestic opposition is eliminated.

A second measure of the effect of domestic opposition is derived by estimating the expected increase in GSP imports in the presence and absence of domestic opposition. This measure is obtained by multiplying the estimated increase in imports by the probabilities computed above. Summing across cases, the expected increase in GSP imports rises from \$197 million when eligibility is opposed to \$312 million with no opposition, or by 58 percent. Both measures of the effects of domestic opposition show that opposition reduces GSP coverage substantially.

CONCLUSION

The first objective of this paper was to determine whether the benefits provided by the U.S. GSP scheme could be enhanced through the existing review process. The results are not very encouraging in this respect. They show that domestic industries are more likely to oppose eligibility when a significant increase in overall imports is likely. Moreover, when domestic opposition arises, the probability that eligibility will be granted is significantly reduced. Even without opposition, the probability that eligibility will be granted falls as increases in imports become more significant. Under these conditions, it is doubtful that the U.S. GSP review process can be used to significantly expand U.S. GSP coverage.

The second goal of the paper was to analyze U.S. trade policy decisions. The results here are intriguing, especially when compared with recent work by Anderson [1993] and DeVault [1993]. Both studies find that economic factors dominate political factors in USITC antidumping and antisubsidy decisions. In contrast, this paper finds that domestic pressures influence the trade policy decisions of the president. Baldwin [1985] also finds that the president is susceptible to pressure from domestic interests, but the findings of this paper are stronger and identify the pressure applied by domestic interests more exactly. Given the vulnerability of the president to domestic pressure, the GSP review process might be improved if eligibility decisions were administered by an apolitical agency such as the USITC. The results of this paper suggest that such a change would increase the coverage of the U.S. GSP scheme and enhance the benefits provided by it.

NOTES

- Some examples include flatware, silverware, and jewelry (6.4 percent); footwear (10.4 percent); house-hold products and ceramics (5.4 percent); luggage, handbags, and flatgoods (13.0 percent); and textiles (8.3 percent). [USITC, 1994].
- 2. The formula for trade creation is given by $TC = VE_m [(1 + E_x)/E_x E_m] [(dt/(1 + t))$, where TC is trade creation, V is the initial value of GSP imports, E_m is the elasticity of import demand, E_x is the elasticity of import supply, and t is the initial tariff rate.
- 3. The measure of geographic concentration is taken from Trefler [1993]. This measure is given by $\sum_{i=1}^{50} |VA_{ij} POP_i|$ where VA_{ij} is the fraction of industry j's value added produced in state i and POP_i is the fraction of the U.S. population located in state i.
- 4. The percentage increase in the petitioning country's exports is estimated by the sum of trade creation and trade diversion where trade diversion is computed using the approach of Baldwin and Murray [1977].
- The UNDP's HDI index was also used but performed worse than per capita income and was dropped.
- Decisions on imports already receiving duty-free entry under other trade programs (such as the Caribbean Basin Initiative or the U.S.-Israeli Free-Trade Area Agreement) are excluded because they are redundant.
- 7. See ITC publication numbers 2041, 2138, 2236, 2256, 2289, 2337, 2464, 2491, 2582, and 2725.
- 8. The ITC reports categorize the elasticities of import demand and supply as low, moderate, or high. I assign values of 0.5, 1.5, and 5.0 to these categories to make them operational. These values were selected after consulting with an ITC trade analyst. According to the ITC analyst, a low elasticity has a value of less than one, a moderate elasticity has a value between one and two, and a high elasticity has a value greater than two.
- 9. Complete data are available for 183 of the 324 observations.
- 10. It might be argued that the tariff rate and the percentage increase in imports both measure the expected loss of the domestic industry because the increase in imports is a function of the tariff rate. The correlation coefficient between the two variables is 0.44, however, indicating that only about 19 percent of the variation in the increase in imports is explained by the tariff rate.
- 11. Complete data were available for 202 of the 324 cases.
- 12. This coefficient loses its significance in Models 3 and 4, but this is probably the result of multicollinearity. As was shown earlier, there is a significant correlation between the percentage change in imports and the measures of domestic opposition.
- 13. This measure underestimates the impact of domestic opposition because it is based on only 92 of the 151 cases in which domestic opposition is present. 59 cases are excluded because of missing data.

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