

The Erosion of Tariff Preferences:

The Impact of U.S. Tariff Reductions on Developing Countries

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Abstract

The Generalized System of Preferences (GSP), the program instituted in 1976 that allows developing countries to export thousands of products to the United States duty-free, is an important element of U.S. efforts to promote economic growth in the developing world. However, since the program's inception U.S. tariff rates have fallen significantly, thus potentially reducing the ability of the GSP program to encourage U.S. imports from beneficiary countries. This paper estimates the impact of U.S. tariff reductions on imports from the developing world using a panel of import data from 76 countries and 2,389 GSP-eligible products between 1998 and 2001. It finds that reductions in U.S. tariff rates have diminished imports from developing countries significantly, although some countries have been impacted more than others.

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1 Introduction

The United States ushered in a new era in development assistance with the establishment of the Generalized System of Preferences (GSP) program in 1976. The program, which eliminates duties on thousands of products from developing countries, was intended to promote economic growth in the developing world through “trade, not aid.” Since its inception, the program has been a small but important part of the U.S. development assistance strategy. The GSP program currently accounts for 1.6 percent of total U.S. imports and approximately 10 percent of imports from GSP-eligible countries.

Like customs unions, part of the growth in imports that occurs due to preferential trade programs like the GSP program is caused by “trade diversion.” In other words, the tariff reduction on products under the GSP program reduces the U.S. price of products from eligible beneficiary countries; as a result, imports from developing countries increase as U.S. consumers both increase consumption and substitute products produced by the developing world for domestically-produced goods (trade-creation) and other industrialized countries (trade-diversion). Economists believe that the welfare effects of preferential tariff programs increase with the amount of trade-creation, but fall with the amount of trade-diversion as consumers substitute products from less-efficient producers for those produced by more-efficient producers.

However, since the inception of the GSP program U.S. tariff rates have gradually fallen due to global trade negotiations at the World Trade Organization (WTO). In fact, between 1997 and 2001 alone the average U.S. tariff rate on GSP-eligible products fell from 3.9 to 3.4 percent. As tariff rates have fallen, so has the artificial comparative advantage granted to developing countries under the GSP program. While this may decrease the trade diversion effects of the program, thus theoretically reducing the negative welfare impact of the program on the U.S. economy, it may also dramatically reduce imports from developing countries. At the same time that U.S. tariffs on GSP-eligible products fell from 3.9 to 3.4 percent, the already small share of U.S. imports of these products from developing countries fell by 26.4

percent, from 1.8 to 1.4 percent.

This paper estimates the impact of U.S. tariff reductions on imports from the developing world using a panel of U.S. import data from 76 countries and 2,389 GSP-eligible products between 1998 and 2001. It finds that a 1 percent reduction in U.S. tariff rates on GSP-eligible products decreases imports from developing countries by over 0.6 percent. Not surprisingly, it is the countries that currently benefit the most from the program that experience the largest loss in trade due to a decrease in U.S. tariffs. The results have important implications for the future of the GSP program, as well as U.S. development assistance strategies.

The remainder of the paper proceeds as follows. Section [2] includes a brief history and review of the GSP program, as well as a discussion of the theoretical impact of tariff reductions on imports from countries enjoying preferential duties and a review of historical empirical studies on the impact of the GSP program on import levels. Section [3] discusses the empirical model and data used in the estimation, and Section [4] presents the empirical results. The final section concludes.

2 Preferential Tariffs and the GSP Program

During the 1964 and 1968 United Nations Conference on Trade and Development (UNCTAD), industrialized countries agreed to award preferential tariff treatment to the manufacturing exports of developing countries. In the United States, these preferential tariffs were implemented in 1976 under the name the Generalized System of Preferences (GSP).

At the time of implementation, the United States eliminated tariffs on approximately 3,000 eight-digit harmonized system (HS) tariff-line items for 138 beneficiary developing countries and territories. Today, duty-free entry is available for approximately 4,650 products from 144 beneficiary countries and territories. Each year the U.S. Trade Representative (USTR) accepts petitions to add or eliminate eligible articles, although certain products are statutorily banned from eligibility from the GSP program, including textiles, footwear and

other “import-sensitive” products. The USTR also reviews the beneficiary status of specific countries. Countries are graduated from the GSP program when the country’s GNP per capita exceeds the threshold for high-income countries determined by the World Bank, or when the United States deems that the country is no longer a developing country. As of 2003, this high income threshold was \$9,386.¹ In addition, countries can lose preferential status for specific products under the competitive need provisions of the GSP program. If imports from an individual country exceed 50 percent or more of total U.S. imports of that product, or if imports exceed a designated threshold (\$120 million in 2005), then the product is excluded from GSP eligibility.

An additional 1,770 products are designated eligible only for the 38 countries designated as least developed beneficiary countries (LDBC), or those countries whose GNP per capita is less than \$786. Least developed countries are also exempt from competitive need limitations. In 2000, the African Growth and Opportunity Act (AGOA) expanded GSP-benefits for countries in sub-Saharan Africa to include an additional 1,200 products, including many of the import-sensitive products described above.

The GSP program continues to be a relatively small preferential trade program in the United States; imports under the program (excluding those products eligible under AGOA) reached \$22.7 billion in 2004. However, for some countries the GSP program plays a much larger role in their ability to export to the United States. For example, over 70 percent of U.S. imports from the Democratic Republic of the Congo and Equatorial Guinea are under the GSP program. Leading imports under the GSP program include oil and gas products, miscellaneous manufactured products, and motor vehicle parts.

However, U.S. tariff rates have declined dramatically since the implementation of the Uruguay Round trade agreement in 1996. As can be seen in Figure [1] the trade-weighted average tariff rate on products eligible for the GSP program fell 13.7 percent between 1997 and 2001 following passage of the Uruguay Round, from 3.9 to 3.4 percent.² Trade statistics

¹Note that China has never been eligible for the GSP program.

²This represents the Most Favored Nation (MFN) tariff rate, or the tariff rate imposed upon most U.S. trading partners not eligible for any preferential trade programs.

suggest that this decrease in tariff rates may have reduced imports under the GSP program, and thus imports from developing countries in general. During this same time period, the share of GSP-eligible products imported under the GSP program fell by 26.4 percent, from 1.8 percent to only 1.4 percent, as can be seen in Figure [2].³ The share of U.S. imports from other countries enjoying preferential tariff status also decreased during this time period. For example, the United State's North American Free Trade Agreement (NAFTA) partners accounted for 19.8 percent of U.S. imports of GSP-eligible products in 1998, but only 17.2 percent in 2001. As discussed below, part of this decrease may be due to a gradual decline in the trade diversion impact of the preferential programs as tariffs imposed on the rest of the world decrease.

2.1 Preferential Tariffs and Trade Diversion

Like the establishment of a regional trade agreement, the granting of tariff preferences to developing countries can result in both trade-creation and trade-diversion effects, as first introduced by Viner (1950). Consider the U.S. demand for imports of a particular product from a developing country and industrialized country, as illustrated in Figures [3] a and b, respectively. Imports from the two countries are considered imperfect substitutes due to quality and other characteristics. Moreover, for simplicity I assume that both the developing and industrialized country supply curves are perfectly elastic. The elimination of tariffs only on GSP-eligible firms results in an increase in imports from these countries of area $gkmj$. While part of this increase can be traced to an increase in total imports as imports substitute for domestic production, part is diverted from non-GSP eligible countries. The decrease in price of products from GSP-eligible countries causes a decrease in demand for other nations products from D_{ROW75} to $D_{ROW97/01}$, and a resulting decrease in imports of $ae fd$.

³It should be noted that part of this decline could be due to the uncertainty surrounding the program during this time period. Between 1997 and 2001, the U.S. GSP program expired three times for periods ranging from two to nearly six months. The program was always renewed retroactively, however, and duties returned to those businesses importing under the GSP program during the expiration period.

Now consider what happens when tariffs decline due to multilateral trade negotiations. The decrease in price of products from non-GSP eligible countries causes an increase in imports of area $abcd$. However, this price decrease also causes the demand for products from GSP-eligible countries to fall from $D_{GSP75/97}$ to D_{GSP01} and a decrease in imports equal to area $ghij$. The extent of the decrease will depend on the degree of substitution between products from developing and industrialized countries, as well as the import demand elasticity.

2.2 Literature Review

Since the passage of the GSP program, several methods have been used to estimate the trade and welfare effects of the program and some have tried to simulate the impact of reductions in tariffs on imports under the program. Most methods can fall into one of two categories: ex ante studies which try to study the potential impact of the program prior to its implementation and ex post studies which try to isolate the effect of the preferential tariff treatment on actual trade flows. One of the earliest studies, Baldwin and Murray (1977), estimates the impact of the GSP program using a partial-equilibrium model in which imports from beneficiary countries are imperfect substitutes for products from industrialized countries and production from all countries is characterized by perfectly elastic supply curves. They predict a 27 percent increase in trade flows following implementation of the U.S. GSP program.⁴ They estimate that approximately 80 percent of this expansion would be explained by trade creation, with the remainder explained by trade diversion. Baldwin and Murray also simulate the change in benefits that would occur with a 50 percent decrease in MFN tariffs; they calculate that a decrease in preferences for GSP-covered items would reduce trade flows by approximately 10 percent from the baseline estimates. However, the authors point out that this decrease would be more than offset by the benefits developing countries would get from the reduction of tariffs on non-GSP eligible products.

⁴Baldwin and Murray also estimates the impact of the implementation of programs in the European Community and Japan.

Following Baldwin and Murray, a number of studies criticized the Baldwin and Murray approach, claiming that the trade diversion effects of the GSP were underestimated and the conclusion that developing countries would benefit more from MFN tariff cuts than they lose was questionable. For example, Pomfret (1986) notes that Baldwin and Murray overestimate trade creation because foreign export supply elasticities are less than infinite and because of questionable assumptions regarding the cross-price effects. In contrast, Beckmann (1987) notes that the Baldwin-Murray assumption that price elasticity of demand for the product group is zero actually overestimates trade diversion. As noted in MacPhee and Ogulego (1991), ex ante studies conducted shortly after the establishment of the U.S. program typically estimate that GSP results in an increase in U.S. imports from developing countries of somewhere between 11 and 64 percent. Part of this wide range can be traced to different assumptions regarding the average tariff rates and supply elasticities. In contrast, the general equilibrium model estimated in Brown (1987) finds that the GSP program would increase trade with developing countries by 6 percent; however Brown also finds that tariff reductions scheduled to be implemented due to the Tokyo Round would eventually reduce the increase in imports due to the GSP program by 62 percent.

Many of the ex post studies that utilize actual trade flows following the implementation of the GSP program find relatively small effects of the program. For example, Sapir and Lundberg (1984) use cross-section regressions of the import market share and growth in import market shares with the preference margin associated with the GSP program as the key explanatory variable of interest. They find a positive and significant impact of GSP only on the growth in import market shares; this finding corresponds to a 15 percent increase in U.S. imports from beneficiary countries between 1975 and 1979 due to the GSP program. MacPhee and Oguleldo (1991) find that the GSP program resulted in a 15 percent growth in U.S. imports from beneficiary countries between 1975 and 1980. Truett and Truett (1997) estimate an equation of U.S. import demand function for goods from Cyprus, Romania, Turkey and Yugoslavia with a dummy variable for inclusion in the GSP program and find a positive and significant impact on trade for all countries but Yugoslavia. Truett and Truett

(1993) estimate a similar model using data from Bolivia and Brazil, and find a significant positive effect only in the case of Bolivia. They conclude that the U.S. GSP program has a greater impact on the export growth of lower-income beneficiary countries than more developed beneficiaries. This may be due to the fact that competitive need limitations limit the usefulness of the program for more developed countries.

However, recently Rose (2004) estimates a gravity model of trade that incorporates a dummy variable for GSP beneficiaries and finds that extension of GSP benefits from one country to another has a large positive effect on trade; specifically, GSP is estimated to increase trade by over 100 percent.

Other studies have focused on the impact of changes in GSP status for particular products due primarily to competitive need limitations. MacPhee and Rosenbaum (1989) find that market shares of affected beneficiaries fall when tariffs increase due to competitive need limitations but do not rise when tariffs decrease. Similarly, Devault (1996) uses both ex ante and ex post methods and concludes that competitive need limits reduce affected imports by 10 to 17 percent. Moreover, benefits from the import reduction accrue to import competing domestic firms.

This paper is the first wide ranging ex post study of the impact of general tariff reductions on imports under the GSP program. Using an extensive product and country-specific panel of import data between 1998 and 2001, it uses panel estimation techniques to study the impact of tariff reductions on U.S. imports from both developing countries and other countries that currently receive preferential tariff rates. I find evidence that tariff reductions have significantly reduced imports from GSP beneficiary countries, although some countries have been impacted more than others.

3 Empirical Model and Data

I estimate the effect of tariff rates on U.S. imports from developing countries using panel data estimation techniques with product-specific fixed effects. Specifically, I assume that the

U.S. imports from country i in product j in year t , y_{ijt} can be explained through the equation

$$y_{ijt} = x'_{ijt}\beta + \lambda_t + u_j + \epsilon_{ijt}.$$

In this equation, x_{ijt} includes explanatory variables such as the preferential tariff margin country i is eligible for and the country's exchange rate appreciation. The term λ_t represents year dummy-variables that capture macroeconomic determinants of U.S. imports as a whole, u_j are the product-specific fixed effects, and β are the parameters to be estimated.⁵

To construct the dataset, I utilize annual import data from 76 selected countries at the eight-digit HS product level from the NBER's U.S. Import, Export and Tariff Database between 1997 to 2001.⁶ To ensure consistent results, I include only those products in which the U.S. imposes an ad valorem tariff.⁷ I also exclude products which were ineligible for the GSP program at any point between 1997 and 2001, and imports of particular products from countries that failed to export that product to the United States in the base year of 1997. Imports are adjusted for inflation using the U.S. Consumer Price Index for all urban consumers. The resulting dataset is an unbalanced panel of real import data from 76 countries in 2,389 eight-digit HTS lines between 1998 and 2001, for a total of 148,372 observations.⁸

I merged the resulting dataset with information from the U.S. International Trade Commission's Tariff Database. This database includes year-specific information such as the MFN tariff rate, indicators for preferential trade program eligibility, and program-specific tariff

⁵Parameter estimates of the key variables of interest from a random effects model were also similar. However, Hausman's test for fixed or random effects indicates that a fixed-effects model is more appropriate for the estimation.

⁶In order to include exchange rate fluctuations as an explanatory variable, the dataset includes only those countries in the U.S. Department of Agriculture's Exchange Rate Database. These countries account for nearly 95 percent of total U.S. imports of GSP-eligible products during the investigation period.

⁷A one percent reduction in a specific tariff will likely have a much different result than a 1 percent reduction in ad valorem tariffs due to the different units of measurement.

⁸Data limitations prevent a longer sample period; currently, the NBER's U.S. Import, Export and Tariff Database provides import data only through 2001 while the International Trade Commission's Tariff Database provides country-specific tariff data between 1997 and 2005.

rates such as those that apply to U.S. trade with Mexico and Canada by eight-digit HS product line. Using the lists of countries eligible for particular preferential trade programs that appear in the general notes of the annual Harmonized Tariff Schedule of the United States, as well as information such as GSP competitive need exclusions from the Tariff Database, I created a set of dummy variables that indicate whether a specific country and product was eligible for special tariff treatment. Using these dummy variables, I assigned a tariff rate to each country and product. For example, countries eligible for GSP treatment for a particular product were assigned a duty rate of zero; countries ineligible for any preferential trade program were assigned the normal or MFN tariff rate. The preference margin for each country was then calculated by subtracting the country-specific tariff rate from the MFN tariff rate.

Obviously there are many other factors that influence import levels other than the tariff rate. Unfortunately, product-specific data is unavailable at this high level of disaggregation. However, I do control for a number of macroeconomic and country-specific factors. For example, gravity-equation models of trade have shown time and time again that countries sharing a border tend to trade more with one another. Moreover, bilateral trade tends to decrease the further away the trading partners are located and increase with the economic size of the trading partner. Therefore, I include a dummy variable for trade with Mexico and Canada (NAFTA eligible country), as well as the log of the distance between the United States and the country in question. I use distance data calculated by CEPII using the great circle formula, which utilizes the latitudes and longitudes of the most important cities in the countries. The World Bank's World Development Indicators provides the log of the Real GDP of the each country as a measure of the economic size of the trading partner. Finally, I hypothesize that developing countries with limited manufacturing capability may find it more difficult to make inroads to the U.S. market. A dummy variable for GSP-eligible countries should capture this characteristic.

In addition, one would expect U.S. imports from a particular country to increase with a depreciation of that country's currency because the country's products become relatively

less expensive to U.S. consumers. To control for this possibility, I include the log of the exporting country's real annual exchange rate from the U.S. Department of Agriculture's Exchange Rate Dataset. Each country's exchange rate is normalized by dividing by the sample average prior to taking the natural log. The exchange rate is defined as the foreign currency per U.S. dollar, so that an increase in the exchange rate reflects a depreciation of the exporting country's currency. One might also expect larger amount of imports from countries with lower costs and, thus, prices. Although the ideal variable would be the relative wage rate in the trading partner, I proxy the wage rate using the log of the country's real GDP per capita, which is derived from data in the World Bank's World Development Indicators. In order to control for the fact that countries with a historically large U.S. market share in a product will continue to have a competitive advantage in the product, I include the log of U.S. imports of the product from the country in the base year of 1997.

Finally, all of the results presented below include year-fixed effects to control for macroeconomic fluctuations in the United States that would result in a change in imports from all countries. Table [1] includes summary statistics of all the variables used in the estimation procedure.

4 Results

Empirical estimates from the equation described above are presented in Table [2]. As expected, a reduction in the United States' MFN tariff rates results in a decrease in U.S. imports of products from countries that enjoy preferential tariff rates. Specifically, specification [1] suggests that a 1 percent reduction in a country's tariff preference margin results in a 0.32 percent decrease in U.S. imports of products from the country. This suggests that the reduction in U.S. tariff rates over the past 30 years has indeed reduced some of the trade diversion effects of all preferential trade programs, to the detriment of these program's beneficiaries.

Specifications [2]-[4] study this result more closely by looking at which countries suffer

the largest decrease in trade from the reduction in MFN tariff rates. The results from specification [2] indicate that a 1 percent reduction in MFN tariff rates on GSP-eligible products reduces U.S. imports from NAFTA beneficiaries by approximately 0.2 percent and from members of the Andean Trade Preference Act (ATPA) by approximately 0.1 percent.⁹ However, imports under the GSP program seem to be impacted much more by the reduction in the preferential tariff margin. The same one percent reduction results in a 0.6 percent reduction in imports from GSP-eligible countries. This elasticity translates to a 30 percent reduction in imports due to a 50 percent reduction in U.S. tariff rates, which is much larger than the 10 percent reduction predicted in Baldwin and Murray [1977].¹⁰ The parameter estimates suggest that tariff reductions have had an economically significant impact on imports under the GSP program. Given the reduction in average U.S. tariff rates on GSP-eligible products between 1997 and 2001, the results imply that imports from GSP beneficiaries would have been 6.5 percent higher in 2001, or \$1.0 billion, absent the tariff reductions associated with the Uruguay Round.

Although the impact of tariff reductions on imports from all developing countries are significant, the reductions may have had disparate impacts on individual developing countries who utilize the GSP program. Specification [3] finds that a decrease in MFN tariff rates has a much larger impact on GSP beneficiary countries in Asia than other countries.¹¹ Specifically, a one percent reduction in MFN tariff rates results in a nearly 0.9 percent decrease in imports from GSP-beneficiary countries in Asia, but only a 0.4 percent decrease in imports from other beneficiaries. This is likely due to the fact that Asian countries reap the lion's share of benefits under the GSP program. During the sample period, Asian countries accounted for nearly 60 percent of total U.S. imports under the GSP program. In contrast, the results from specification [4] show that the reduction in U.S. tariff rates has had no discernible impact on imports from the poorest countries, or the least developed beneficiary countries (LDBC).

⁹ATPA countries include Bolivia, Colombia, Ecuador, and Peru.

¹⁰Note, however, that this difference may be due to dramatic changes in trade policies over the past 30 years, including significantly lower MFN tariff rates.

¹¹Asian beneficiaries include Sri Lanka, India, Indonesia, Pakistan, the Philippines, and Thailand.

On average, U.S. imports from developing countries are much lower than those from the rest of the world. Specifically, U.S. imports from GSP-eligible countries' were nearly 85 percent less ($\exp(-1.9) - 1$) than those from other countries. This is in sharp contrast to the result in Rose [2004], which found that extending GSP benefits to a particular country raises bilateral trade by over 100 percent. However, the GSP effect is captured in this research in the preferential tariff margin, rather than in the GSP dummy variable as employed by Rose [2004]. Parameter estimates indicate that imports from Canada and Mexico are not higher than those from other countries once the preferential tariff margin enjoyed by these countries under NAFTA, as well as other economic factors, are accounted for.

Parameter estimates associated with other control variables are significant and of the expected sign. For example, the empirical results confirm that U.S. imports increase as the exporting country's currency depreciates, thus reducing the price in the United States. Specifically, a 1 percent depreciation of the exporting country's currency results in a 0.4 percent increase U.S. imports. U.S. imports from countries characterized by higher per capita income levels are relatively less than imports from less developed countries. The results indicate that a 1 percent increase in per capita income level results in a 0.22 percent decrease in imports. As explained above, this could be explained by the fact that countries with higher per capita income levels also have higher wage rates and thus higher prices than less developed countries, thus depressing U.S. imports. Recall that this result is after controlling for the lower growth rate of GSP-eligible or developing countries in general. Imports increase the closer the trading partner is to the United States and the larger the economy of the trading partner, as proxied by the GDP of the country. Not surprisingly, the results prove that it is important to control for initial import levels from each country. The estimates show the U.S. imported more from countries with higher base level of imports during the sample period.

5 Conclusion

The GSP program has been touted as one of the key elements of U.S. efforts to assist developing countries through “trade, not aid” since 1976. Some believe, however, that reductions in normal U.S. tariff rates over the past 30 years have slowly eroded the tariff preferences granted to developing countries through this program. Empirical results from this paper show that tariff reductions have indeed had a large impact on U.S. imports from developing countries. Specifically, I find that a one percent reduction in MFN tariff rates on GSP-eligible products results in a 0.6 percent decline in U.S. imports of these products from the average developing country. Moreover, the largest beneficiary countries—those in Asia—experience an even larger decline in imports. Based on these estimates, developing countries would have had approximately \$1.0 billion more in exports to the United States in 2001 if not for the decrease in U.S. tariff rates under the Uruguay Round trade agreement between 1997 and 2001.

These results do not suggest, however, that developing countries can not significantly benefit from future global trade negotiations that reduce tariff rates around the world. Many of the products produced by developing countries such as textiles and apparel and agriculture products are ineligible for the GSP program. Moreover, the results show that a few more developed countries are reaping the lion’s share of benefits from the GSP program and, thus, will see the largest declines due to the reduction in tariff margins. However, these countries are the very ones that are most likely to lose GSP-eligibility due to competitive need limitations and income thresholds. This research shows that the reduction in preference margins on GSP-eligible products will have very little impact on trade between the United States and the poorest developing countries.

This research also suggests that the United States and other industrialized countries may want to revisit whether the GSP program is the best tool to encourage economic development. The large impact that tariff reductions have had on imports from certain GSP beneficiary countries suggests that the GSP program has resulted in a significant amount of

trade diversion to a few, large beneficiary countries. However, the program does not appear to be assisting the poorest countries at all.

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Figure 1: Average Non-Preferential Tariffs of Products Eligible for GSP Program, 1997-2001

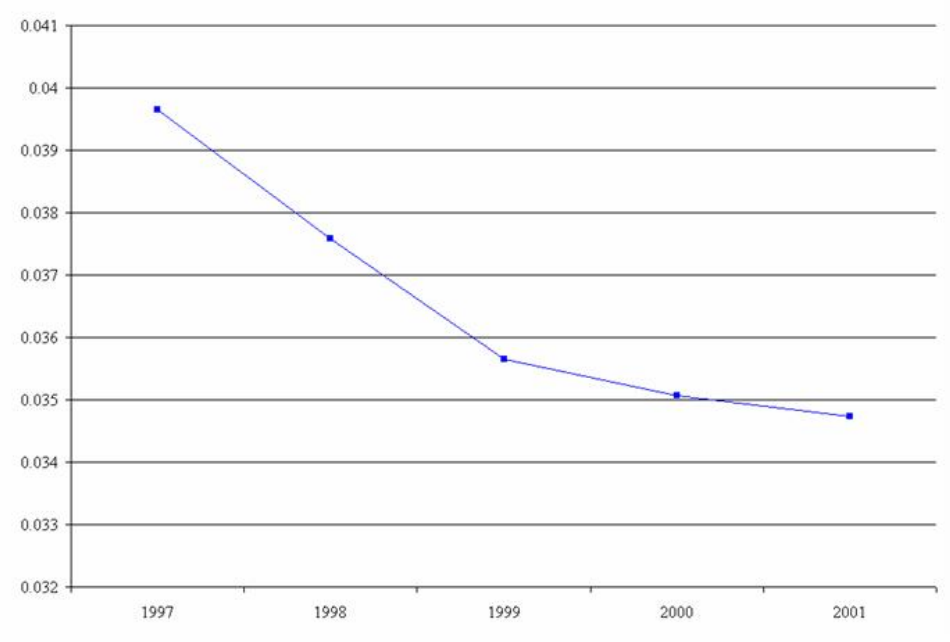


Figure 2: Imports from Preferential Tariff Programs, 1997-2001

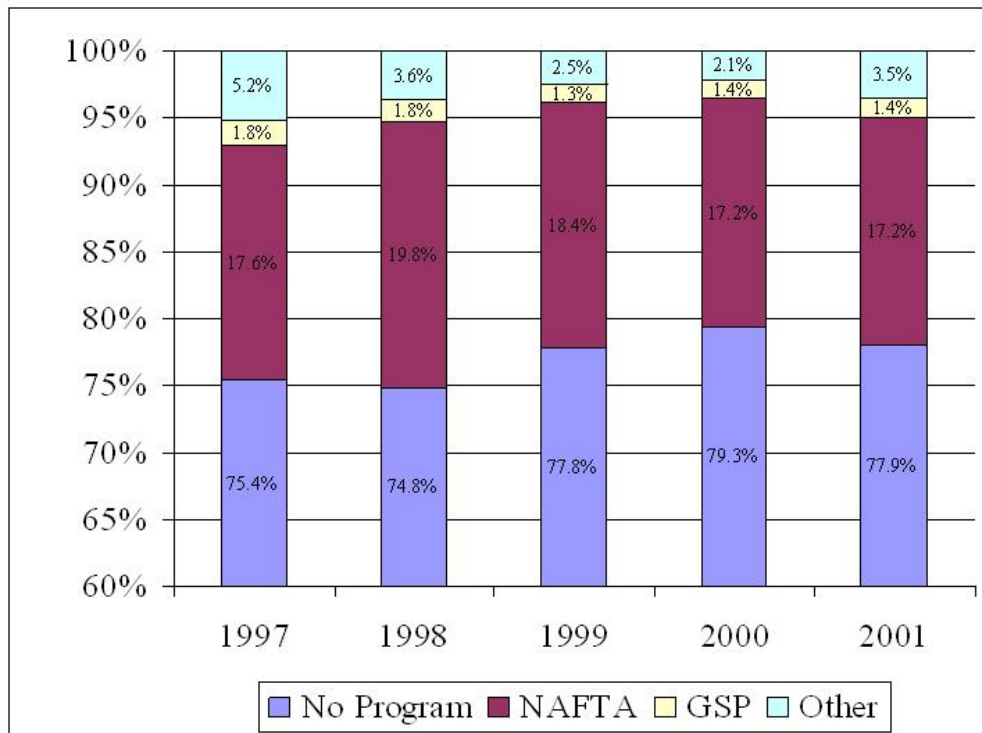


Figure 3: Trade Diversion and Trade Creation

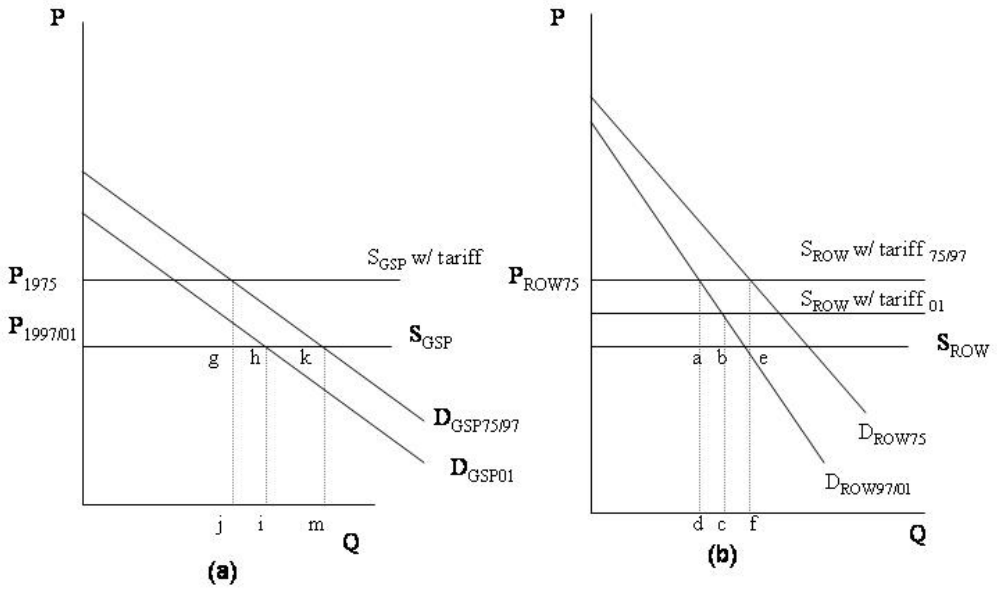


Table 1: Summary Statistics

	Minimum	Maximum	Mean	Std. Dev.
Log(1+Real Imports)	0.00	21.23	8.88	5.12
Log(1+Preference Margin)	0.00	3.30	0.54	0.79
GSP eligible country	0.00	1.00	0.23	0.42
NAFTA Member	0.00	1.00	0.09	0.29
Log per capita GDP	4.82	10.72	9.22	1.28
Log GDP	20.24	29.19	26.55	1.34
Log 1997 imports	5.53	21.16	11.09	2.61
Log Distance	6.31	9.69	8.79	0.70
Log Exchange Rate	-1.07	0.39	0.02	0.09

Table 2: Effect of Diminishing Tariff Rates on GSP Imports

Variable	(1)	(2)	(3)	(4)
Log(1+Preference Margin)	0.322 (9.61)	0.210 (4.97)	0.204 (5.38)	0.208 (5.46)
Log(1+Preference Margin)*GSP country		0.407 (5.78)	0.191 (2.89)	0.412 (6.32)
Log(1+Preference Margin)*Asian Beneficiary			0.503 (17.57)	
Log(1+Preference Margin)*LDC				-0.764 (-6.86)
Log(1+Preference Margin)*NAFTA member		0.013 (0.13)		
Log(1+Preference Margin)*ATPA member		-0.104 (-2.15)		
GSP eligible country	-1.490 (-24.37)	-1.958 (-19.91)	-1.858 (-19.13)	-1.979 (-20.36)
NAFTA member	-0.347 (-4.47)	-0.205 (-1.44)	-0.352 (-4.23)	-0.169 (-2.04)
Log per capita GDP	-0.228 (-19.20)	-0.230 (-19.27)	-0.197 (-16.37)	-0.236 (-19.70)
Log GDP	0.816 (85.30)	0.812 (84.44)	0.794 (82.50)	0.807 (84.17)
Log Distance	-0.286 (-12.12)	-0.291 (-12.12)	-0.392 (-16.03)	-0.282 (-11.91)
Log Exchange Rate	0.440 (3.18)	0.443 (3.20)	0.323 (2.33)	0.431 (3.11)
Log 1997 imports	0.998 (220.36)	0.997 (219.60)	0.998 (220.13)	0.997 (219.68)
Number of Observations	148,372	148,372	148,372	
R-Squared	0.39	0.39	0.39	

Regressand: log real imports. Product-specific fixed effect estimation. Parameter estimated associated with the constant and year-specific fixed effects are not reported. t-statistics in parentheses.