

# Estimated Impacts of the U.S. Generalized System of Preferences to U.S. Industry and Consumers



November 1, 2006

# Estimated Impacts of the U.S. Generalized System of Preferences on U.S. Industry and Consumers

## Executive Summary

The U.S. Generalized System of Preferences (GSP) program is a trade preference program that extends duty-free treatment to selected goods imported from specified developing countries. Its purpose is to promote economic development in developing countries by expanding their trade with the United States. Congress established GSP in 1974 and legislation authorizing the program has been in effect for the last 32 years. By 2005, U.S. imports under GSP totaled \$27 billion.

Over its 30 years of operation, GSP has become an important component of the competitiveness of American manufacturers and an integral part of sourcing for those who sell a range of consumer goods to American families. This study examines the impacts of GSP from the U.S. perspective. It finds:

- GSP keeps American manufacturers and their suppliers competitive. In 2005, three quarters of U.S. imports using GSP were raw materials, parts and components, or machinery and equipment used by U.S. companies to manufacture goods in the United States for domestic consumption or for export. Electrical equipment and parts, and transportation vehicle parts are significant imports under GSP.
- American families also benefit from GSP. Finished consumer goods typically sold by retailers accounted for 25 percent of GSP imports in 2005. Jewelry sold at lower price points was the most significant item.
- GSP is particularly important to U.S. small businesses, many of whom rely on the program's duty savings to compete with much larger companies.
- We estimate that annual sectoral benefits to consumers of GSP products range up to \$273 million.
- GSP imports support U.S. jobs. We estimate that direct and indirect jobs associated with moving aggregate GSP imports from the docks to the retail shelves totaled nearly 82,000 in 2005.

# Estimated Impacts of the U.S. Generalized System of Preferences on U.S. Industry and Consumers\*

## I. Introduction

The U.S. Generalized System of Preferences (GSP) program is a trade preference program that extends duty-free treatment to selected goods imported from specified developing countries. Its purpose is to promote economic development in developing countries by expanding their trade with the United States. Congress established GSP in 1974 and legislation authorizing the program has been in effect for the last 32 years.<sup>1</sup> By 2005, U.S. imports under GSP totaled \$27 billion.

Many have attempted to examine the economic impacts of GSP on beneficiary developing countries.<sup>2</sup> Estimates of the effect of the GSP program on U.S. imports from developing countries range from increases of 11 percent to 64 percent.

Over its 30 years of operation, GSP has become an important component of the competitiveness of American manufacturers and an integral part of sourcing for those who sell a range of consumer goods to American families. While the enormous size of the U.S. economy relative to total U.S. imports under GSP limits the national economic impact of GSP, at the sector-specific level, the impact can be significant. This study updates and expands earlier research that measures that U.S. economic impact of GSP from the perspective of U.S. national welfare, and jobs supported. We focus on U.S. sectors that account for 75 percent of total non-oil U.S. imports under GSP in 2005 (see Table 1). These industries represent a wide range of products, from popular consumer goods

---

\* This study was prepared for the U.S. Chamber of Commerce by The Trade Partnership and Dr. Kara M. Reynolds, Assistant Professor of Economics, The American University.

<sup>1</sup> A detailed description of the U.S. GSP program can be found in The Trade Partnership, "The U.S. Generalized System of Preferences Program: An Update," March 2006, [www.tradepartnership.com/pdf\\_files/2006\\_GSP\\_update.pdf](http://www.tradepartnership.com/pdf_files/2006_GSP_update.pdf), as well as Office of the U.S. Trade Representative, "U.S. Generalized System of Preferences Guidebook," January 2006, [www.ustr.gov/assets/Trade\\_Development/Preference\\_Programs/GSP/asset\\_upload\\_file\\_890\\_8359.pdf](http://www.ustr.gov/assets/Trade_Development/Preference_Programs/GSP/asset_upload_file_890_8359.pdf).

<sup>2</sup> See, for example, R.E. Baldwin and T. Murray, "MFN Tariff Reductions and Developing Country Trade Benefits Under the GSP," *The Economic Journal* 87: 30-46, 1977; Craig R. MacPhee and Victor I. Ogulego, "The Trade Effects of the U.S. Generalized System of Preferences," *Atlantic Economic Journal* 19: 19-26, 1991.

(e.g., jewelry and televisions) to basic raw materials (e.g., ferroalloys and plastics) used to produce other goods in the United States. In fact, approximately 75 percent of all GSP imports are non-finished goods that U.S. companies and workers use to stay competitive in world markets; the remaining 25 percent are finished consumer goods typically sold by retailers directly to American families.

The analysis illustrates the extent to which GSP products lower costs for consumers, not only of finished products sold by retailers, but also of raw materials used by U.S. manufacturers to produce goods in the United States. Section 2 of this study outlines those benefits. The analysis also indicates that the GSP program supports many thousands of jobs in the United States, particularly in small businesses, one of the primary drivers of employment growth. Section 3 estimates U.S. employment related to total GSP imports. Appendix A describes the methodology used to estimate the economic effects of GSP by sector; Appendix B describes the methodology used to estimate the number of U.S. jobs linked to imports under GSP.

**Table 1**  
**Leading U.S. Imports Under GSP by Sector, 2005**  
(Millions)

<b>Products</b>	<b>Customs Value</b>	<b>Tariff Savings</b>	<b>Share of Non-Oil Imports</b>
Jewelry and jewelry parts	\$3,584.8	\$202.5	17.2%
Electrical equipment and parts	2,224.4	75.9	10.6
Transportation vehicle parts	1,617.4	40.6	7.7
Chemicals	1,351.6	60.5	6.5
Plastics and plastic products	1,350.2	65.9	6.5
Iron and steel materials and products	1,253.1	45.6	6.0
Wood and wood products	921.8	47.4	4.4
Machinery and parts	907.2	26.3	4.3
Aluminum mill products	791.6	26.9	3.8
Copper and copper products	653.6	15.5	3.1
Rubber and rubber products	619.5	21.3	3.0
Stone and plaster products	487.6	19.1	2.3
<b>TOTAL, Top 75% of GSP Imports</b>	<b>\$15,762.6</b>	<b>\$647.5</b>	<b>75.4%</b>
<b>TOTAL, All GSP Imports</b>	<b>\$26,747.1</b>	<b>\$923.3</b>	<b>100.0%</b>

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

## II. Effects of GSP: U.S. Sectoral Perspective

Twelve sectoral categories accounted for 75 percent of non-oil GSP imports in 2005. Among those categories, jewelry is the only product primarily sold direct to American consumers, although consumer goods fall within several other categories as well (e.g., televisions under electrical equipment, picture frames under wood products). The other 11 categories primarily represent raw materials, components or other goods (like machinery) used by American manufactures in U.S.-based production.

### A. Jewelry and Jewelry Parts

Jewelry and parts were the most significant (in terms of total value) single product category that benefited from GSP duty-free treatment. Imports of these products reached more than \$3.5 billion in 2005 (see Table 2). Most (\$3.4 billion, or 96 percent) of the goods imported in this sector were precious metal jewelry items, notably diamond rings from India largely sold at relatively low retail prices (\$50 to \$300). Extension of GSP to this product in 2001 made it possible to supply consumers who find this range of price points attractive – consumers who previously could not afford diamond engagement rings because of their cost. GSP benefits are also important for purchases of costume and imitation jewelry, the second-largest category of jewelry products imported under GSP. U.S. jewelry retailers and those who supply them rely on India for low-cost diamond jewelry (50 percent of total U.S. GSP jewelry imports), Thailand for colored stone jewelry (23 percent), and Turkey for gold jewelry (11 percent).

Tariff savings afforded by GSP are significant for these products. We estimate that GSP benefits for jewelry saved consumers a total of \$273 million in 2005. This estimate reflects not only passed-through tariff savings, but also other positive benefits to the U.S. economy specifically linked to GSP benefits for jewelry (e.g., U.S. producer benefits and overall efficiency gains).<sup>3</sup> The average trade-weighted tariff saved by GSP for this group of imports was 6.5 percent, although the tariff rates for some individual products are much higher (e.g., 13.5 percent for silver necklaces, 10.5 percent for certain pearls or semi-precious stones).

---

<sup>3</sup> For detailed information the methodology for determining overall economic gains for specific sectors, please see Appendix A.

*Small Business Profile:*

**Mary Haltom Jewelers**  
Ft. Worth, TX

As an independently owned jewelry store with five employees, Mary Haltom Jewelers must constantly compete with larger discount jewelry chains. Without the luxury of large-scale purchasing operations, small jewelers find GSP to be of critical importance to their profitability, since it allows them to save duties of nearly 6 percent on imports from India, Thailand, and Turkey.

At a time when jewelers face an increase in gold, silver, and diamond prices—and consumers face budget squeezes of their own—businesses like Mary Haltom Jewelers worry that further cost increases, such as re-imposed tariffs on jewelry, could lead to a significant slowdown in customer purchases.

**Table 2**  
**U.S. Imports of Jewelry and Other Parts Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Precious metal jewelry and parts	\$3,432.5	\$189.4	India, Thailand, Turkey
Imitation Jewelry	102.8	11.1	India, Thailand, Philippines
Pearl, semiprecious stone jewelry	41.3	1.7	India, Thailand, Philippines
Articles of precious metals	8.2	0.3	India, Indonesia, Brazil
<b>TOTAL</b>	<b>\$3,584.8</b>	<b>\$202.5</b>	

\* This table covers Harmonized Tariff System (HTS) Nos. 7113, 7114, 7115, 7116, and 7117.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

**B. Electrical Equipment and Parts**

Electrical equipment and parts is the second most important category of total GSP imports in terms of value. Imports of these products totaled \$2.2 billion in 2005 (see Table 3). GSP benefits consumers of both household electrical products as well as U.S. manufacturers who use industrial electrical equipment and parts in their U.S. manufacturing operations. For consumer products, the most important products benefiting from GSP were televisions, which were valued at \$184 million and represented 29 percent of consumer electronics

imported under GSP, and lamps, with imports valued at \$151 million in 2005. For non-consumer electrical equipment and parts, insulated wire and cable was the largest import under GSP, with nearly \$450 million in imports in 2005. The largest suppliers of electrical equipment and parts to the United States under GSP are Thailand (25 percent), the Philippines (21 percent), Brazil (18 percent), and India (14 percent).

GSP duty savings matter to importers and consumers of electrical equipment and parts. We estimate that imports of electrical equipment and parts under GSP saved U.S. households \$26 million in 2005 and manufacturers an additional \$50 million, including tariff savings and benefits resulting from the tariff savings. Although the average trade-weighted tariff saved by GSP for this group of imports is a relatively low 3.5 percent, the tariff rates for some individual products are much higher (e.g., 12.5 percent for certain flashlights, 5.3 percent for insulated cables). Forgone duties on select consumer products include more than \$9 million on TVs and \$8.5 million on lamps, while foregone duties on insulated wire and cable exceeded \$17 million.

**Table 3**  
**U.S. Imports of Electrical Equipment and Parts Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Other electronics and parts	\$1,589.6	\$49.1	Philippines, Brazil, Thailand, India
Consumer electronics and parts	634.8	26.8	Thailand, Indonesia, India
<b>TOTAL</b>	<b>\$2,224.4</b>	<b>\$75.9</b>	

\* Consumer electronic and parts: Harmonized Tariff System (HTS) Nos. 8510, 8513, 8516, 8518, 8519, 8522, 8524-8529, 9006-9008, 9405; other electronics and parts: 8501-8506, 8509, 8511, 8514, 8515, 8531, 8535-8539, 8543, 8544, 8546, 8547.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

### C. Transportation Vehicle Parts

The third most significant category of imports under GSP in 2005 was transportation vehicle parts. These products, with a total value of \$1.6 billion in 2005 (see Table 4), are vital components for Tier 1 automotive companies, their suppliers, and the auto parts aftermarket. The largest category of goods were parts and accessories that fall under HTS codes 8708, which represented 80 percent of U.S. imports under GSP in this category and were valued at \$1.3 billion. GSP has become an important tool that U.S. parts manufacturers have used to alleviate the “cost-price squeeze” they face from their customers, U.S.

car manufacturers. Parts suppliers have been unable to pass on rising costs for steel and energy by raising parts prices, and instead have turned to duty-savings from GSP on imported parts to cut costs.

Parts suppliers must spend time and money to qualify their sub-suppliers in GSP-eligible countries. Today, strong relationships have been developed and integrated into the sourcing and production operations of U.S. producers with parts producers in Brazil (42 percent of total transportation parts imports under GSP in 2005), India (18 percent), and Venezuela (9 percent). Relationships with these suppliers through GSP has helped to keep U.S. producers based in the United States more competitive with alternative transportation parts suppliers in other countries, most notably China.

This enhanced competitiveness arises from significant duty savings afforded by GSP. We estimate that transportation vehicle parts imports under GSP saved U.S. purchasers (largely motor vehicle manufacturers) approximately \$45 million in 2005, including tariff savings and benefits resulting from the tariff savings. While the average trade-weighted tariff saved by GSP for this group of imports was 2.6 percent, the tariff rates for some individual products are much higher (e.g., 10 percent for certain motorcycle parts).

*Small Business Profile:*

**S&V Industries Inc.**

Akron, OH

S&V Industries markets and distributes engineering and polymeric products for original equipment manufacturers (OEMs) in the U.S. transportation industry. Despite its small size—only 20 employees—S&V provides more than 50 North American OEMs with low-cost, just-in-time products, including castings, forgings, and rubber belts and seals.

S&V imports these products from India under GSP and saves duties of nearly \$100,000 every year. Despite the hardships faced by the U.S. automotive industry in the recent past, the advantages provided by GSP have helped S&V to grow from just 4 to 20 employees over the last several years.



**Table 4**  
**U.S. Imports of Transportation Vehicle Parts Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Other parts and accessories	\$1,304.1	\$32.6	Brazil, India, Venezuela
Engine parts	251.4	6.3	Brazil, India, South Africa
Electrical motor vehicle parts	61.9	1.7	Philippines, Brazil, Indonesia
<b>TOTAL</b>	<b>\$1,617.4</b>	<b>\$40.6</b>	

\* This table covers Harmonized Tariff System (HTS) Nos. 8407-8409, 8507, 8512, 8707, 8708, 8714.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

#### D. Chemicals

Chemical product manufacturers are significant users of the GSP program. Chemicals imported under GSP totaled \$1.3 billion in 2005 (see Table 5). These products are used to make a variety of products, such as herbicides and pesticides. Of the organic chemicals, the largest category of goods was acyclic alcohols, which were valued at \$539 million, and ether alcohols, with imports totaling \$119 million. Among the inorganic chemicals, carbides was the largest category of goods imported under GSP with a value of nearly \$75 million. The largest suppliers of chemical imports to the United States under GSP are Venezuela (27 percent), South Africa (17 percent), and Brazil (12 percent).

Duty-savings afforded by GSP contribute positively to costs savings for those who use the imported chemicals as raw materials. We estimate that organic chemical imports under GSP saved U.S. manufacturers \$59 million in 2005, while inorganic chemicals saved an additional \$13 million, including tariff savings and benefits resulting from the tariff savings. The average trade-weighted tariff saved by GSP for this group of imports was 4.8 percent, one of the highest of the major groups. Select foregone duties on organic chemicals imports included \$23 million for acyclic alcohols and \$6.5 million for ether alcohols; foregone duties for inorganic chemicals included \$3 million for imports of hydrogen and other rare gases.

*Small Business Profile:*

**Albaugh, Inc.**

Ankeny, IA

Albaugh, Inc. manufactures herbicides for use by U.S. farmers, employing 75 people. GSP enables this small business to compete with larger chemical makers. Albaugh imports raw materials, some of which are not made in the United States, duty free from Argentina. It then produces end products in U.S. plants, supporting jobs in seven states.

GSP has enabled Albaugh to build up a long-term relationship with its Argentine supplier that has kept the company competitive in the U.S. market and a reliable supplier of herbicides to American farmers. The Argentine supplier of raw materials to Albaugh has undergone a lengthy certification process to meet U.S. Environmental Protection Agency standards and then to receive approval to export to the United States. Thanks to GSP, Albaugh has grown not only in volume of sales but also in number of employees.

**Table 5**  
**U.S. Imports of Chemicals Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Organic chemicals	\$991.6	\$47.0	Venezuela, Equat. Guinea, Brazil
Inorganic chemicals	360.0	13.5	South Africa, Russia, Brazil
<b>TOTAL</b>	<b>\$1,351.6</b>	<b>\$60.5</b>	

\* Organic chemicals: Harmonized Tariff System (HTS) Nos. 2903-2910, 2912, 2914-2935, 2938, 2940, 2942; inorganic chemicals: 2801, 2804, 2805, 2810-2813, 2816, 2818-2827, 2829, 2830, 2832-2836, 2839-2843, 2846, 2849-2851.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

**E. Plastics and Plastic Products**

Plastics and plastic products—both consumer items and materials used by U.S. manufacturers—are important GSP products, with 2005 imports totaling more than \$1.3 billion. These products are sold directly to consumers as well as used in a variety of industries, such as construction, shipping and manufacturing.

The largest category of goods imported under GSP in this sector was primary plastics, which represented 38.5 percent of U.S. plastics imports under GSP and was valued at approximately \$520 million. Packaging materials are also significant. The primary suppliers of plastic and plastic products to the United States under GSP are Thailand (36 percent), India (16 percent), and Indonesia (15 percent).

U.S. duties on some plastic products are high, and GSP savings help to keep American producers competitive and to lower the costs for American households. We estimate that plastic products and parts imported under GSP saved U.S. consumers \$61 million in 2005, including tariff savings and benefits resulting from the tariff savings. While the average trade-weighted tariff saved by GSP for this group of imports is 4.7 percent, the tariff rates for some individual products are notably higher (e.g., 6.5 percent for plastic tableware and certain primary plastics).

**Table 6**  
**U.S. Imports of Plastics Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Primary plastics	\$519.7	\$31.3	Thailand, India, Brazil
Packing materials	304.2	9.8	Thailand, Sri Lanka, Indonesia
Other constructions materials	298.2	14.4	India, Brazil, Indonesia
Other plastics	134.5	6.8	Thailand, Domin. Republic, India
Consumer products	66.4	2.5	Thailand, India, Venezuela
Sheets, tubes, pipes	27.0	1.1	India, Brazil, Bulgaria
<b>TOTAL</b>	<b>\$1,350.2</b>	<b>\$65.9</b>	

\* This table covers Harmonized Tariff System (HTS) Nos. 3901-3914, 3916-3926.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

Constar International, Inc.  
(Philadelphia, PA)

Constar is one of the largest manufacturers of soda and water bottles in the United States, with 14 production locations employing a total of about 1,800 people. Constar imports a raw material for these bottles, bottle-grade PET resin, from India, Indonesia and Thailand. GSP saves the manufacturer – and its customers – a 6.5 percent duty. This cost savings is very important in the highly price-competitive food products business.

F. Iron and Steel Materials and Products

Iron and steel producers benefit from GSP.<sup>4</sup> More than \$1.2 billion of iron and steel raw materials and products were imported duty-free under GSP in 2005 (see Table 7). Raw materials—ferroalloys in particular—were the largest category of goods imported in this sector and represented more than half of total iron and steel imports under GSP with a value of \$668 million. More than 36 percent of all U.S. ferroalloy imports in 2005 came in under the GSP program. The largest suppliers of iron and steel imports to the United States under GSP are India (21 percent), South Africa (18 percent), and Brazil (14 percent).

Duty-savings under GSP lower raw material costs for U.S. manufacturers. We estimate that GSP saved purchases of iron and steel raw materials imported under GSP nearly \$27 million in 2005, and manufacturers purchasing iron and steel products another \$29 million, including tariff savings and benefits resulting from the tariff savings. While the average trade-weighted tariff saved by GSP for this group of imports is 4.1 percent, the tariff levels for some individual products are much higher (e.g., 12.5 percent for certain screws, 8.2 percent for certain kitchenwares).

**Table 7**  
**U.S. Imports of Iron and Steel Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Ferroalloys	\$668.8	\$23.9	South Africa, Kazakhstan, Russia
Other products of iron or steel	190.2	5.8	Brazil, India,

<sup>4</sup> It is important to note that the GSP statute specifically precludes from eligibility for benefits “import-sensitive steel articles.” See 19U.S.2463(b)(1)(D).

			Thailand
Consumer products	182.6	5.2	India, Thailand, Indonesia
Tubes or pipe fittings	128.0	6.7	India, Philippines, Thailand
Screws, bolts, and springs	83.5	4.0	India, Thailand, Brazil
<b>TOTAL</b>	<b>\$1,253.1</b>	<b>\$45.6</b>	

\* This table covers Harmonized Tariff System (HTS) Nos. 7202, 7307, 7315, 7318-7321, 7323-7326.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

*Small Business Profile:*  
**Con-Tech International**  
 New Orleans, LA

Con-Tech International, with 12 employees based out of New Orleans, imports and distributes cold roll steel circles and other component parts used in the manufacture of 55 gallon barrels. GSP allows Con-Tech to import drum closures from India and stamped steel discs from Brazil, and save duties of 2.6 percent and 2.9 percent, respectively.

Con-Tech estimates that about 90 percent of total sales, or \$40 million annually, are made up of products imported under GSP. In an industry that operates on very small margins, GSP savings help both Con-Tech and its customers—the U.S. steel drum manufacturing industry—stay competitive in the global market.

G. Wood and Wood Products

Wood and wood products imported under GSP are important supplies to the U.S. construction sector, in particular. In 2005, these imports reached more than \$900 million (see Table 8). GSP products are used primarily for homebuilding and other construction projects. The largest category of goods imported under GSP was wood for construction (e.g., particleboard, plywood, veneer), which represented nearly a third of wood imports under GSP and was valued at \$306 million. Imports of other construction materials were also significant, valued at \$300 million. The largest suppliers of wood and wood products to the United States under GSP are Brazil (49 percent), Indonesia (21 percent), and Thailand (13 percent).

*Small Business Profile:*  
**Liberty Woods International, Inc.**  
 Carlsbad, CA

Even though it employs only 30 people at its Carlsbad headquarters, thanks to GSP Liberty Woods is one of the largest importers of hardwood lumber into North America, serving customers throughout the United States, Canada, and Mexico. Liberty Woods imports lumber duty free from Indonesia and Brazil under GSP, saving the company more than \$2 million annually. GSP has helped Liberty Woods remain competitive and expand its operations.

For a price-sensitive market like lumber, GSP savings not only affect the price of wood purchased from GSP beneficiaries, but it also provide an incentive for exporters in non-GSP countries (e.g., those in Malaysia and China) to keep prices competitive.

We estimate that wood and wood products imports under GSP saved U.S. purchasers \$57 million in 2005, including tariff savings and benefits resulting from the tariff savings. The average trade-weighted tariff saved by GSP for this group of imports is 5.3 percent, although the tariff rates for some individual products are much higher (e.g., 8 percent for certain plywood, 10.7 percent for shipping pallets). Foregone duties on plywood alone were more than \$24 million.

**Table 8**  
**U.S. Imports of Wood and Wood Products Under GSP, 2005**  
 (Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Particle board, fiberboard, plywood, veneer	\$306.5	\$24.0	Brazil, Indonesia, Ecuador
Other construction materials	300.4	11.4	Brazil, Indonesia, South Africa
Consumer products	201.2	7.3	Thailand, Indonesia, India
Other products	81.1	3.6	Brazil, Indonesia, Thailand
Continuously-shaped wood	32.6	1.1	Brazil, Paraguay, Indonesia
<b>TOTAL</b>	<b>\$921.8</b>	<b>\$47.4</b>	

\* This table covers Harmonized Tariff System (HTS) Nos. 4409-4421.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

## H. Machinery and Parts

Manufacturers and services providers benefit from machinery and parts products imported under GSP. In 2005, those imports exceeded \$900 (see Table 9). These products are used in a variety of industries, such as heating and cooling systems manufacturing, textiles and apparel production, and basic service industries (e.g., office equipment). The largest category of goods was machinery parts, which were valued at \$450 million and represented approximately half of all machinery imports under GSP. The largest suppliers of machinery and parts to the United States under GSP are Brazil (32 percent), India (22 percent), and Thailand (19 percent).

Tariff savings afforded by GSP matter. We estimate that machinery and parts imported under GSP saved U.S. purchasers \$28 million in 2005, including tariff savings and benefits resulting from the tariff savings. While the average trade-weighted tariff saved by GSP for this group of imports is 3.3 percent, the tariff level for some individual products are higher (e.g., 6.7 percent for rotors).

**Table 9**  
**U.S. Imports of Machinery and Parts Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Other various parts for machines	\$449.9	13.6	Brazil, India, Thailand
Pumps, heating and cooling equipment and parts	173.5	3.8	Thailand, Indonesia, Brazil
Other various machines	134.6	3.7	Thailand, Brazil, India
Machine tools and parts	108.6	4.5	Brazil, Thailand, India
Computer and other office equipment and parts	22.8	0.5	Brazil, Indonesia, Afghanistan
Textile and footwear machines and parts	17.8	0.3	Brazil, Thailand, India
<b>TOTAL</b>	<b>\$907.2</b>	<b>\$26.3</b>	

\* This table covers Harmonized Tariff System (HTS) Nos. 8401, 8402, 8406, 8410, 8411, 8413-8415, 8417-8424, 8438, 8442, 8443, 8445, 8448, 8450-8452, 8455-8468, 8472, 8473, 8477, 8479-8485.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

I. Aluminum Mill Products

American manufacturing and construction firms benefit from aluminum mill products imported under GSP. These imports totaled \$800 million in 2005 (see Table 10). The largest category of goods was aluminum plates, sheets, and strip, which represented nearly 80 percent of U.S. aluminum imports under GSP with a valued of \$629 million. The primary suppliers of aluminum mill products to the United States under GSP are Russia (25 percent), South Africa (19 percent), and Brazil (14 percent).

Duty savings afforded by GSP lower costs for American manufacturers and construction firms. We estimate that aluminum mills products imports duty-free thanks to GSP saved U.S. purchasers \$35 million in 2005, including tariff savings and benefits resulting from the tariff savings. While the average trade-weighted tariff saved by GSP for this group of imports is 3.6 percent, the tariff rates for some individual products are much higher (e.g., 6.5 percent for certain aluminum plates).

**Table 10**  
**U.S. Imports of Aluminum Mill Products Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Plates, sheets, and strip	\$629.3	\$20.4	Russia, South Africa, Brazil
Foils	51.4	2.3	Russia, Brazil, Indonesia
Bars, rods, and profiles	39.6	1.1	Brazil, Russia, Argentina
Wire	34.5	1.0	Argentina, Russia, Brazil
Tubes, pipes, and fittings	33.3	1.9	India, Brazil, Russia
Powders and flakes	3.5	0.2	Bahrain, Brazil, India
<b>TOTAL</b>	<b>\$791.6</b>	<b>\$26.9</b>	

\* This table covers Harmonized Tariff System (HTS) Nos. 7603-7609, Source: The Trade Partnership from official statistics of the U.S. Department of Commerce



**Alcoa, Inc.**  
(New York, NY)

GSP keeps Alcoa, the world's leading producer and manager of primary aluminum, fabricated aluminum and alumina, competitive in the U.S. market. Aluminum markets are highly price-sensitive global markets. Alcoa uses GSP to import from Brazil, Russia and Venezuela a number of raw materials and aluminum products it would not have the capacity to make in the United States. GSP enables Alcoa to deliver the broad range of competitively-priced aluminum products that its U.S. customers expect it to offer.

The duty savings afforded by GSP are important: this is a business where a cost increase of pennies per pound is a threat to continued operations and profitability. Alcoa's customers in the aerospace, automotive, packaging and construction industries thus benefit from Alcoa's GSP imports and its ability to deliver them at competitive prices.

J. Copper and Copper Products

Copper and copper products—important to both manufacturers and consumers—also benefits from GSP. Copper and copper products imports under GSP totaled more than \$650 million in 2005 (see Table 11). Imports include manufacturing inputs (e.g., copper wire and refined copper and alloys) and consumer goods (e.g., kitchen wares). Wire represented approximately 60 percent of U.S. copper imports under GSP and was valued at \$407 million. The primary suppliers of copper products to the United States under GSP are Brazil (39 percent), Russia (32 percent), and Turkey (10 percent).

We estimate that copper products imports under GSP saved U.S. purchasers \$13 million in 2005, including tariff savings and benefits resulting from the tariff savings. These savings come despite low tariff rates, as the average trade-weighted tariff saved by GSP for this group of imports is only 1.7 percent.

*Small Business Profile:*  
**Piremag Corporation**  
Middletown, NJ

The Piremag Corporation is one of only four companies selling copper magnet wire in the U.S. market. To provide its customers -- mostly small- to medium-sized U.S. manufacturers -- with a high-quality product at a competitive price, Piremag imports its wire duty-free from Brazil under GSP, saving its customers the 3.5 percent duty cost.

Like many other American companies, Piremag is facing rising costs associated with increasing commodity prices. As a result of falling supplies and increased demand from China and India, copper has more than quadrupled in price over the past four years. While companies like Piremag could remain competitive previously with a 3.5 percent tariff, higher raw material costs would in effect also quadruple the impact of the tariff, so the GSP savings are more important than ever.

In short, the duty savings keep Piremag competitive and its doors open for business. Winners include not only its employees in New Jersey and Fort Wayne, Indiana, but its hundreds of customers that have come to depend on Piremag to fill a niche in the magnet wire market for small- and medium-sized companies.

**Table 11**  
**U.S. Imports of Copper and Copper Products Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Wire	\$407.6	\$12.0	Russia, Brazil, Turkey
Refined copper and alloys	133.8	0.5	Brazil, Kazakhstan, Uruguay
Consumer goods	50.6	1.5	Thailand, Turkey, Indonesia
Tubes, pipes, and fittings	34.9	0.9	Thailand, India, Serbia/Monten.
Bars, rods, and profiles	14.6	0.3	South Africa, Brazil, Turkey
Other copper products	12.1	0.2	India, Brazil, Serbia/Monten.
<b>TOTAL</b>	<b>\$653.6</b>	<b>\$15.5</b>	

\* This table covers Harmonized Tariff System (HTS) Nos. 7403, 7407-7419.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

#### K. Rubber Products

Both consumers and manufacturers benefit from the savings on rubber and rubber products imported under GSP. Rubber and rubber products imports under GSP in 2005 totaled nearly \$620 million (see Table 12). The largest category of goods was tires, which represented more than half of U.S. rubber imports under GSP and was valued at \$334 million. The primary suppliers of rubber products to the United States under GSP are Thailand (36 percent), Indonesia (15 percent), and India (11 percent).

AS noted, duty savings under GSP are particularly important to motor vehicle producers and their customers. Many rubber products imported through GSP are used by motor vehicle producers. We estimate that rubber products imported under GSP saved U.S. purchasers \$25 million in 2005, including tariff savings and benefits resulting from the tariff savings. While the average trade-weighted tariff saved by GSP for this group of imports is 3.6 percent, the tariff

rate for some individual products are much higher (e.g., 8 percent for certain conveyor belts).

**Table 12**  
**U.S. Imports of Rubber and Rubber Products Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Tires	\$334.3	\$13.5	Thailand, Sri Lanka, Indonesia
Apparel and accessories	96.8	3.1	Thailand, Sri Lanka, Indonesia
Tubes, pipes, and hoses	65.4	1.6	Thailand, Brazil, Turkey
Other rubber products	113.0	3.0	India, Thailand, Brazil
<b>TOTAL</b>	<b>\$619.5</b>	<b>\$21.3</b>	

\* This table covers Harmonized Tariff System (HTS) Nos. 4006, 4008-4017.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

#### L. Stone and Plaster Products

Stone and plaster products—used primarily for construction—are important GSP items. They accounted for more than \$488 million of imports under GSP in 2005 (see Table 13). The largest category of goods was worked monumental or building stone (e.g., mosaic stones), which represented more than 95 percent of U.S. imports under GSP and was valued at \$470 million. Key suppliers of stone and plaster products to the United States under GSP are India (38 percent), Brazil (24 percent), and Turkey (21 percent).

We estimate that stone and plaster products imports under GSP saved U.S. purchasers \$22 million in 2005, including tariff savings and benefits resulting from the tariff savings. The average trade-weighted tariff saved by GSP for this group of imports is 3.9 percent, but the tariff rate for some individual products are much higher (e.g., 9 percent for certain cements).

**Table 13**  
**U.S. Imports of Stone and Plaster Products Under GSP, 2005**  
(Millions)

<b>Products*</b>	<b>Value</b>	<b>Tariff Savings</b>	<b>Top GSP Sources</b>
Worked monumental or building stone	\$471.5	\$18.6	India, Brazil, Turkey
Other stone products	16.1	0.5	India, Brazil, Turkey
<b>TOTAL</b>	<b>\$487.6</b>	<b>\$19.1</b>	

\* This table covers Harmonized Tariff System (HTS) Nos. 6801-6807, 6809, 6810, 6814.

Source: The Trade Partnership from official statistics of the U.S. Department of Commerce

*Small Business Profile:*

**Stone International, Inc.**  
East Greenwich, RI

Stone International (“Stonetrade”) works with owners, architects, and contractors to identify and supply the best stone for construction projects. GSP allows Stonetrade to source competitively from India and Brazil, despite the fact that Chinese companies can often supply the stone for less money. Last year, GSP saved Stonetrade duties ranging from 4.5 to 6.5 percent on more than a million dollars worth of imports of high quality stone, such as soapstone.

GSP savings are very significant for companies like Stonetrade, which—despite having only four employees—has successfully supplied materials for large-scale projects as far away as the U.S. Embassy in Venezuela and the Heiwa Golf Club in Heiwa, Japan.

### III. The Job Impact of GSP

GSP imports support U.S. jobs. These include jobs related to unloading the products at U.S. ports of entry, transporting them to their first purchasers (manufacturers, wholesalers or retailers), and then ultimately getting them to their final purchaser (manufacturers or American consumers). Also linked to these imports are jobs related to designing, ordering, marketing, and servicing the imports. In addition, jobs related to GSP imports include farm, manufacturing, wholesaling and retailing jobs linked to the need to manufacture cash registers, trucks, warehouses, and a range of other goods and services – the so-called “up and downstream” impacts that economists include when examining U.S. national economic output.

For this study, we examined these “up and downstream” impacts of GSP (described in detail in Appendix B) to estimate the number of U.S. jobs linked to transporting and selling imports that benefited from GSP in 2005. The results are impressive: the \$28 billion imported under GSP in 2005 supported nearly 82,000 jobs (see Table 14).

This estimate, however, understates the true number of jobs positively impacted by GSP. It does not reflect all of the manufacturing jobs maintained in the United States because U.S. companies are able to incorporate lower-cost inputs procured with duty-savings under GSP to produce greater quantities of competitively priced end products. The manufacturing jobs identified in Table 14 are only those manufacturing jobs supported by the process of transporting and selling, from wholesalers to retailers to final consumers, GSP imports.

**Table 14**  
**Estimated Number of U.S. Jobs Associated with Imports under GSP, 2005**

Manufacturing	3,983
Wholesaling	31,703
Retailing	21,489
Services (including transportation)	21,223
Other (agriculture, mining, etc.)	3,416
TOTAL	81,814

Source: Estimated by The Trade Partnership

#### **IV. Conclusion**

GSP is an important tool to encourage economic development in poor countries. But it is also an important contributor to American competitiveness. The duty-savings it affords U.S. manufacturers lowers the costs of inputs used to make goods in the United States. The duty-savings on finished consumer goods benefit household who purchase goods ranging from pots and pans to moderately-priced engagement rings.

Policy makers typically view GSP through the lens of its impacts on beneficiary countries. This study demonstrates that they should also consider with equal weight its benefits to the American economy.

## Appendix A

### Methodology for Estimating the Sectoral Economic Effects of GSP

The Trade Partnership used the “Global Simulation Model” (GSIM) to estimate the impact of the Generalized System of Preferences (GSP) on U.S. consumers and producers. The model was developed by Joseph Francois and H. Keith Hall to analyze global, regional, and unilateral trade policy changes at the industry level.

GSIM is a static, multi-region, partial-equilibrium model that assumes that imports from different regions of the world are imperfect substitutes for one another. There is a single world price for each region’s goods, but domestic prices for these regional goods will differ due to the level of trade protection. We calculated the impact of the GSP program on the U.S. economy by simulating the effect of an increase in the U.S. tariff rate on current GSP-imports from zero to the average prevailing MFN tariff rate in the industry. The new equilibrium is defined by a world price for products from each region of the world that ensures that total import demand is equal to the export supply of the product.

Like other partial equilibrium models, GSIM does not take into account inter-sectoral linkages. In other words, the impact on each industry is calculated holding trade and prices in all other sectors of the economy constant. As a result, the model may either overestimate or underestimate the impact of the GSP program were the sectoral results to be added together. **The estimates provided for individual industries therefore should not be aggregated to calculate a total for the U.S. economy as a whole.**

The model estimates the impact of trade policy changes using data on current trade flows between regions, tariff rates, and elasticities of import demand, export supply and substitution. For the purposes of this analysis, we defined regions using three categories of U.S. imports: imports under the GSP program, other imports from GSP-eligible countries, and imports from those countries that are not eligible for the GSP program. Trade data are taken from the U.S. Census Bureau and United Nation’s Commodity Trade Statistics Database. Elasticities and tariff levels are estimated using the sources listed below.

An interesting finding of the modeling is that GSP benefits have in most cases a positive impact on U.S. manufacturers of competing products. Tariff elimination causes U.S. import demand for GSP goods to increase, which in turn causes the world price for GSP goods to rise (but not by as much as the tariff rate). The higher world prices result in a decrease in the quantity demand for these GSP goods in other countries, which in turn causes demand for goods from other countries (including the United States) to increase.



**Estimated Sectoral Impact of GSP, 2005**  
(Millions)

	Passed- Through Tariff Savings	Producer Loss/ Benefit	Dead- Weight Loss	Total
Jewelry	\$213.2	-\$2.3	\$62.2	\$273.1
Electrical equipment and parts				
Consumer	24.7	+0.5	0.4	25.6
Other	42.5	+1.0	6.0	49.5
Plastics and plastic products	56.0	-1.4	6.7	61.3
Chemicals				
Organic	47.7	+0.7	11.0	59.4
Inorganic	12.6	-0.2	0.8	13.2
Iron and steel				
Raw materials	22.2	+0.1	4.4	26.7
Iron and steel products	22.7	+0.7	5.8	29.2
Wood and wood products	43.2	+0.4	13.4	57.0
Transportation vehicle parts	39.6	+1.7	3.6	44.9
Machinery parts	27.5	+0.8	0.0	28.3
Aluminum mill products	26.2	+0.8	8.0	35.0
Rubber products	20.5	0.4	3.6	24.5
Stone/plaster products	16.4	+0.3	5.6	22.3
Copper products	10.5	+0.1	2.8	13.4

Source: The Trade Partnership

***References and Data Sources***

William A. Donnelly, Kyle Johnson, and Marinos Tsigas, "Revised Armington Elasticities of Substitution for the U.S. ITC Model and the Concordance for Constructing a Consistent Set for the GTAP Model," U.S. International Trade Commission Office of Economics Research Note, January 2004.

Joseph Francois and H. Keith Hall, "Global Simulation Analysis of Industry-Level Trade Policy," Working Paper, April 2003.

Michael P. Gallaway, Christine A. McDaniel and Sandra A. Rivera, "Short-Run and Long-Run Industry Level Estimates of U.S. Armington Elasticities," *North American Journal of Economics and Finance* 14 (2003), pp. 49-68.

Hiau Looi Kee, Alessandro Nicita, and Marcelo Olarreaga, "Import Demand Elasticities and Trade Distortions," CEPR Discussion Paper No. 4669, October 2004.

Alessandro Nicita, and Marcelo Olarreaga, "Trade, Production and Protection, 1976-2004," Working Paper, April 2006.

## Appendix B

### Methodology for Employment Calculations

The Trade Partnership derived the estimates of the number of jobs related to goods imported under GSP in 2005 using the Bureau of Labor Statistics' "Nominal Domestic Employment Requirements, 2004" spreadsheet. This spreadsheet quantifies the number of jobs at detailed sectoral levels associated with the output (as measured by value added) in a given industry in current dollars. It is based on historical input-output relationships, factoring in employment and productivity variables. The spreadsheet is based on a 1997 input-output table and 1997 employment-output ratios.

The spreadsheet can be used to evaluate the employment impact of GSP imports following these steps:

- Calculate the gross margin (value added) associated with sales at the wholesale and retail levels of trade for the items imported under GSP. To do this, The Trade Partnership separated GSP imports into two categories: those for which the first purchaser is likely a wholesaler, and those which are likely first purchaser is a retailer. Raw materials, components and parts, and machinery and equipment fell into the first category, as well as half of finished consumer goods imported under GSP. The remaining half of finished consumer goods imported was assumed to be imported directly by retailers. Then, wholesaler gross margin rates for disaggregated products (for 2004, from the Census Bureau) were applied to the relevant import categories, and the retailer gross margins for specific products (for 2004 from the Census Bureau) were applied to the direct imports by retailers. Consumer goods imported by wholesalers and then sold to retailers were further market up with the relevant retail gross margin.
- The resulting gross margin values were multiplied by the coefficients provided in the employment requirements table for wholesale trade, and retail trade.
- Imported goods are transported around the country, and the transportation margins need as well to be estimated. We know from input-output tables that every dollar of value added in wholesaling and retailing generates about 2 cents of value added in the transportation and warehousing sector. So the gross margin data for wholesaling and retailing were multiplied by this factor to estimate the transportation margin for imported goods.
- The resulting transportation margin value was multiplied by the average employment coefficient for each mode of transportation, and added to the

coefficients for warehousing. The resulting coefficient was applied to the transportation margin to get the employment estimate.

- The three employment estimates were totaled to derive the overall employment impact of GSP imports.

### ***References***

Bureau of Labor Statistics, Office of Employment Projections, "1998 through 2004 Employment Requirements," December 2005, [www.bls.gov/emp/empind4.htm](http://www.bls.gov/emp/empind4.htm)