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Price Dynamics in the US Market for Apparel Imports: Impact of Quota Elimination under the Agreement on Textiles and Clothing and Safeguard Restrictions on the People's Republic of China

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FOR APPAREL IMPORTS:  
IMPACT OF QUOTA ELIMINATION  
UNDER THE AGREEMENT ON TEXTILES AND CLOTHING  
AND SAFEGUARD RESTRICTIONS  
ON THE PEOPLE'S REPUBLIC OF CHINA**

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**MAY 2008**

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## **FOREWORD**

The ERD Working Paper Series is a forum for ongoing and recently completed research and policy studies undertaken in the Asian Development Bank or on its behalf. The Series is a quick-disseminating, informal publication meant to stimulate discussion and elicit feedback. Papers published under this Series could subsequently be revised for publication as articles in professional journals or chapters in books.



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## **ABSTRACT**

This paper evaluates the impact of the removal of quotas on unit prices of clothing imports from various suppliers into the second largest global market for clothing imports, the United States (US). New quota restrictions over 26 categories of clothing were introduced on 1 January 2006 and will be in place through 31 December 2008. The paper examines the impact of these new restrictions on price movements in 2006 and the first three quarters of 2007. The dynamics of change in unit prices for 26 major groups of suppliers in the US market are indicative of the adverse effects that quantitative restrictions have on US consumers. However, the restrictions have benefited other Asian clothing suppliers. The paper also examines the strategic response to elimination of quotas under the Agreement on Textiles and Clothing by the US using preferential trade agreements to carve out a captive market for US textile intermediate products through large preferential margins in applied tariffs and rules of origin. The outlook for future price developments is assessed and conclusions regarding options for developing Asian suppliers to maintain their ability to compete in the US market are briefly considered.



## I. INTRODUCTION

The use of quantitative measures to restrict imports of textile and clothing products began with the successful negotiation of voluntary export restraints on Japan's cotton textile exports in 1957 by the United States (US) executive branch. However, the drop in Japanese cotton textile imports to the US following the voluntary export restraints on Japan led to increases in imports from new players, such as Egypt; Hong Kong, China; India; Republic of Korea (henceforth Korea); and Portugal. To achieve a comprehensive solution to the influx of cotton textile imports into the US, the president's office negotiated the Short Term Cotton Textile Arrangement that was signed in 1961, which evolved into the Long Term Arrangement on Cotton Textiles the following year (Krishna and Tan 1998, Rosen 2002). The Long Term Arrangement was further extended to cover wool and manmade fiber textile and apparel products, leading to the establishment of the Multi-Fiber Arrangement (MFA) in 1973. The MFA effectively removed trade in textiles and clothing from the General Agreement on Tariffs and Trade (GATT) and its related disciplines, and explicitly allowed developed countries to negotiate bilateral quotas with developing country exporters until the World Trade Organization (WTO) was established. The MFA remained in place until 1994 when it was agreed that quota restrictions would be phased out under GATT 1994, with the transition phase toward total removal of quota restrictions in textile and apparel governed by the Agreement on Textiles and Clothing (ATC) starting on 1 January 1995. The ATC was designed to integrate textiles and clothing trade into the GATT/WTO system over a 10-year period. The ATC was characterized by two tracks: (1) increasing quota growth rates in three phases to enable developing countries to export more goods under restriction; and (2) integrating an increasing number of tariff lines freed from quotas gradually in four phases, with a huge leap in the fourth and final phase on 31 December 2004 so that by 1 January 2005, quotas will have been completely eliminated for WTO contracting members.

The anticipated impact of the removal of quotas is popularly described in Snyder (2008, 24-5):

"What the World Trade Organization is doing by ... eradicating the convoluted quota system is, in essence, pretty simple. It's a giant do-over, sort of like God and the great flood.... As a result of the ending of quotas, starting January 1, 2005, consumer clothing prices were expected to plummet by as much as 30 percent.... It was a death sentence for any country anywhere that couldn't compete with the biggest producers."

However, despite the elimination of quotas, safeguards on shipments of textiles and apparel from the People's Republic of China (PRC) were levied by the US and the European Union (EU), among other contracting members. As part of its 2001 WTO accession, a provision was included enabling WTO members to restrict imports from the PRC in the textile and apparel sector if surging imports from the PRC threatened to disrupt domestic markets and production (Tan 2005). This provision was invoked by the US and EU to negotiate temporary safeguard measures on shipments of certain categories of textiles and apparel from the PRC, following a surge in textile and apparel shipments

in the early part of 2005 to the US and EU markets, as these rising imports were perceived to be disruptive to the domestic market. The EU has already phased out the safeguard measures as of 1 January 2008, but is currently using import licensing and is closely monitoring the PRC's shipments of textiles and clothing to the EU. The US will end the safeguard restrictions on 1 January 2009, allowing quota growth in 2008, as in previous annual quota increases since the safeguards were enacted on 1 January 2006.<sup>1</sup>

In this paper we will take stock of the postquota regime, focusing on the trends in import prices as reflected in textile and apparel items under restriction in the US market, and tracing the unit price movements among other supplier countries.<sup>2</sup> The particular metric will be unit prices, which take into consideration both the values and volumes of imports of a particular good to the US market.

The analysis takes into account the existing safeguards on the PRC, and treats the PRC as the benchmark for prices in the restricted categories due to its role as by far the predominant foreign supplier of textiles and apparel in the US market. The role of the PRC and the perception that it may become an even more dominant supplier will be explored, with comments on how the landscape may change after safeguards are lifted. The paper will examine the competitive position of various Asian suppliers and of preferential suppliers to the US market. It will also briefly consider what countries may do to possibly vie for market share in the US textile and apparel market despite the PRC's apparent dominance.

The paper will explore the use of preferential trade agreements (PTAs) as a strategic response to global pressures in order to preserve and protect the textile industry in the US, and at the same time allow clothing designers, brands, and retailers to avail of lower-cost labor in order to remain profitable. Of particular interest are rules of origin used to determine which suppliers and products may enjoy preferential access to these markets. Restrictive rules of origin requiring use of yarn and fabric originating from US factories are essential in protecting the market share for textile intermediate product exports to developing members of PTAs (James 2007b).

## **II. REVIEW OF LITERATURE: THE RISE OF PREFERENTIAL TRADE AGREEMENTS**

The GATT in 1994 mandated that the quota system in textiles and clothing be phased out and replaced by tariffs. This result can be attributed to the fact that when choosing between protective tools, the tariff is the lesser evil in terms of welfare effects and market efficiency (Hufbauer 1994). Tariffs and quotas have the same impact only in very specific circumstances. All types of protection share the characteristic of altering relative prices and changing quantities transacted, thereby reducing the gains from trade (Bhagwati 1968).

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<sup>1</sup> In reality the US and EU began to unilaterally impose restrictions on some categories of textiles and clothing from the PRC in mid-2005 but then followed up with comprehensive and mutually agreed safeguard restrictions following prolonged negotiations with the PRC. The subject of our analysis is the more comprehensive restrictions agreed upon by the governments of the PRC and the US, which became effective in limiting import volumes from the PRC beginning 2006 (ADB 2006 and James 2007a).

<sup>2</sup> Previous analysis shows that Asian competitive suppliers in South and Southeast Asia have shown robust growth in shipments to the US market since the end of ATC quotas, and have gained market share largely at the expense of preferential suppliers and former "big 3" quota holders in East Asia (see James 2008a). Analysis of EU imports of clothing and price developments there is covered in a separate report (James 2008b).

However, quotas are much costlier than tariffs since tariffs earn revenue for the importing country and proceeds are directed to the national treasury. In contrast, the quota rent or the amount an importer or exporter would be willing to pay for a quota license is usually nontransparent in nature, with proceeds going to private companies or individuals depending on how the quota is administered. Thus, quotas not only restrict trade and raise import prices, as tariffs do, but their impact is also indirect and difficult to measure. Quota rents do not automatically go to the government but are usually appropriated by private interest groups (Krishna and Tan 1998). Quotas are costly to administer and serve to directly reduce market entry resulting in a captive market for quota holders (Markusen et al. 1995). Their impact on consumers is similar to that of monopoly—higher prices, lesser choice, and more limited volumes relative to a freely competitive market. The loss in consumer surplus and efficiency (dead-weight loss) associated with a quota always exceeds the extra producer surplus obtained by the quota holders, resulting in negative net welfare effects.

The very reasons that make quotas undesirable due to their negative welfare impacts are the very same reasons that domestic firms typically prefer quotas over tariffs. With prospective quota rents going to specific interest groups upon enactment of protectionist policy, there is incentive for rent seeking, wherein the interest groups are willing to spend significant amounts of time and money for lobbying to enact quotas in anticipation of gains to their specific interest (Hillman 1982).

The use of quotas as opposed to tariffs is based on control over the volume of imports and not of the value. Thus quotas restrict the volume of imports to levels predictable to textile and clothing producers in the domestic market, and in effect preserve a market share for these producers (along with those obtaining the quota licenses). The quotas provide producers the ability to raise the price of their products well above what would be obtained in a freely competitive market.

One can infer that the persistence of quota protection in the textile and apparel industry, particularly in the US, means that significant quota rents are generated from the policy. Several authors have already pointed out the actions of interest groups in the textile and apparel industry to preserve quota arrangements (Rivoli 2005, Rosen 2002). Others have documented the resulting quota rents and their appropriation by interest groups (Krishna and Tan 1998).

However, since the rise of Asia in labor-intensive manufacturing imports, textile and clothing firms in the US have recognized that they need a source of low-wage workers for the highly labor-intensive work of putting pieces of cloth together to make apparel products. For this reason a series of agreements came into being, wherein US firms were encouraged to invest in neighboring low-wage countries in the apparel assembly industry. This gave rise to several agreements that focused upon setting up factories across the border with Mexico (the *maquiladoras*) and other production-sharing arrangements facilitated by trade preference programs such as the Caribbean Basin Initiative (CBI), the Andean Trade Preference Act, and the African Growth and Opportunity Act (AGOA). In these preferential agreements, suppliers in the preference-receiving countries imported textile intermediate products of US origin for processing (cutting and sewing) into garments, with duties levied only on the foreign value-added in the finished clothing items (Rosen 2002).<sup>3</sup>

In addition to off-loading labor-intensive jobs to low-wage countries to allow US textiles to compete with low-cost Asian suppliers, the shift of labor-intensive clothing assembly operations to off-shore locations with lower wages enabled the focus of US-based production to be on the

<sup>3</sup> The tariff codes for such imports of processed clothing used to be 806.30 and 807.00 but with the adoption of the Harmonized Tariff System are now in chapter 98 including 9802.00, 9820.00, and 9819.00. See the Office of Textiles and Apparel homepage: <http://otexa.ita.doc.gov/agoa-cbtpa/catv0.htm>.

more capital-intensive manufacture of intermediate textile yarns and fabrics and accessories. PTAs that gave a large tariff preference to suppliers using textile yarns and fabrics of US origin helped the US to preserve jobs, profits, and market share for the textile industry and for upstream and downstream segments of the clothing industry as well. These preference programs themselves have been precursors to more comprehensive free trade agreements (FTAs) such as the North American Free Trade Agreement (NAFTA) between Canada, Mexico, and US; and the Central American Free Trade Agreement (CAFTA) between the US and six Central American countries (Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, and Nicaragua). The effective duty rate on US imports of textile intermediate products—yarns and fabrics (Table 1) and clothing (Table 2)—for various groups of suppliers reveal that preferential suppliers enjoy a very significant margin of preference over nonpreferential Asian suppliers. For textile yarns and fabrics, the “margin of preference” for PTA suppliers averages around 6%, and for clothing, it is just under 13%.<sup>4</sup>

The GATT/WTO was originally intended to discourage the proliferation of discriminatory bilateral preferential trade treatment and to encourage the practice of nondiscriminatory trade under the principle of most favored nation (MFN) treatment. The pre-GATT experience showed that a system based on bilateral agreements and varying types of preference programs would be increasingly complex and distorted. However GATT/WTO allows exceptions to the principle of MFN treatment of GATT Article I under Article XXIV and the Enabling Clause (Trebilcock and Howse 2005). Article XXIV allows contracting members to negotiate FTAs where members exchange tariff concessions on a reciprocal basis. The Enabling Clause allows for nonreciprocal trade preference programs such as the Generalized System of Preferences where a developed country unilaterally extends preferential treatment to a developing country (or a group of developing countries such as the US in the case of the CBI, AGOA, and APTA agreements; or the EU in the case of the African Caribbean and Pacific and the Everything But Arms program of preferences for less developed countries).

An interesting dynamic arises wherein the US and other countries negotiate PTAs that benefit the counterpart developing countries through preferential access to the US clothing market; and at the same time benefit US textile companies through the embedded “rules of origin”, wherein gaining preferential access is contingent on the percentage of US content in the imported clothing products. Such an arrangement will lead to a captive market for US textile intermediate goods in the PTA countries, while PTA countries reap the preferential access gains. Such programs provide incentives to producers in both parties to participate; however, consumers suffer via higher prices than would otherwise take place under free multilateral trade. Thus the PTA facilitates collusion in production sharing in order for producers to reap benefits from the trade preference policy. The US PTAs under the 9802 program (formerly 807) are shown to be deliberately calibrated to provide a captive market for US textile yarns and fabrics in clothing assembled for the US market (Rosen 2002). The PTAs stipulated that tariffs of imports to the US from PTA members are calculated only on the value-added done in the member country (the value of the US fabric and yarn is tariff-free). These agreements have evolved into FTAs such as CAFTA and NAFTA. Such FTAs lock in protection with highly restrictive rules of origin. Rules of origin matter for textiles and clothing because MFN tariffs remain high so that the difference between MFN and PTA tariffs is substantial. Kono (2007) finds that FTAs promote MFN tariff reduction in members with convergent comparative advantages but obstruct it in members with divergent comparative advantages. Limao (2006) finds that US

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<sup>4</sup> The margin of preference is calculated as the difference between preferential suppliers’ effective duty rate and that of Asian nonpreferential suppliers or in 2006:  $6.14 - 0.29 = 5.85\%$  for textile intermediate products.

TABLE 1  
EFFECTIVE DUTY RATES ON IMPORTED TEXTILE INTERMEDIATE PRODUCTS BY MAJOR SUPPLIER, 2006–2007

SUPPLIER	CUSTOMS VALUE OF IMPORTS (US\$ MILLIONS)			DUTY PAID (US\$ MILLIONS)			EFFECTIVE DUTY RATE (PERCENT)		
	2006	2006 YTD	2007YTD	2006	2006 YTD	2007YTD	2006	2006 YTD	2007 YTD
Asian Competitive Suppliers									
ASEAN									
Brunei	0.001	0.001	0.014	0.000	0.000	0.000	3.57	3.57	0.00
Cambodia	1.308	1.052	0.622	0.123	0.103	0.045	9.37	9.78	7.26
Indonesia	208.921	161.398	164.167	17.556	13.660	12.905	8.40	8.46	7.86
Malaysia	54.904	44.544	28.595	4.857	3.824	2.544	8.85	8.59	8.90
Philippines	22.775	17.446	16.640	0.885	0.697	0.681	3.89	4.00	4.09
Singapore, of which:	1.690	1.391	0.949	0.083	0.071	0.022	4.89	5.12	2.27
US-Singapore FTA	0.333	0.271	0.455	0.000	0.000	0.000	0.00	0.00	0.00
Thailand	181.709	136.377	146.205	12.947	9.777	9.541	7.13	7.17	6.53
Viet Nam	24.803	16.678	32.683	1.886	1.248	2.055	7.60	7.48	6.29
Subtotal*	496.111	378.886	389.875	38.336	29.380	27.792	7.73	7.75	7.13
SAARC									
Afghanistan	2.319	1.655	2.478	0.003	0.001	0.002	0.11	0.09	0.08
Bangladesh	15.352	12.180	11.943	0.180	0.161	0.008	1.17	1.32	0.07
India	1031.021	784.373	768.003	27.613	21.152	20.863	2.68	2.70	2.72
Nepal	35.991	26.604	28.394	0.060	0.037	0.029	0.17	0.14	0.10
Pakistan	503.149	402.544	260.394	32.600	26.828	15.231	6.48	6.66	5.85
Sri Lanka	12.259	9.434	3.357	0.464	0.392	0.076	3.78	4.16	2.26
Subtotal	1600.091	1236.789	1074.570	60.920	48.572	36.209	3.81	3.93	3.37
PRC	1909.983	1420.734	1477.874	118.737	87.638	92.169	6.22	6.17	6.24
Subtotal	4006.185	3036.409	2942.319	217.993	165.591	156.170	5.44	5.45	5.31

continued next page.



TABLE 1. CONTINUED.

Asian Former Large Quota Holders										
Hong Kong, China	27.265	22.341	14.364	1.732	1.411	0.875	6.35	6.32	6.09	
Korea, Rep. of	979.427	749.535	727.876	78.818	60.308	55.881	8.05	8.05	7.68	
Macau, China	0.079	0.050	0.039	0.005	0.003	0.001	6.48	5.82	2.45	
Taipei, China	525.497	392.895	410.103	41.664	30.990	29.753	7.93	7.89	7.26	
Subtotal	1532.266	1164.821	1152.381	122.219	92.712	86.510	7.98	7.96	7.51	
Nonpreferential Asian Suppliers	5538.452	4201.230	4094.700	340.212	258.303	242.680	6.14	6.15	5.93	
Major Preferential Suppliers**										
NAFTA										
Canada	1749.370	1324.957	1122.588	2.652	1.888	1.044	0.15	0.14	0.09	
Mexico	952.534	718.411	603.798	2.241	1.536	1.273	0.24	0.21	0.21	
Subtotal	2701.904	2043.367	1726.386	4.892	3.424	2.317	0.18	0.17	0.13	
Bilateral FTA										
Israel	232.896	177.553	124.694	0.064	0.053	0.336	0.03	0.03	0.27	
Bilateral QIZ										
Egypt	139.276	116.887	107.762	3.821	3.308	2.775	2.74	2.83	2.57	
Preferential Subtotal	3074.075	2337.807	1958.841	8.777	6.785	5.427	0.29	0.29	0.28	

YTD = year to date covering January to September; FTA = free trade agreement; ASEAN = Association of Southeast Asian Nations; SAARC = South Asian Association for Regional Cooperation; PRC = People's Republic of China; NAFTA = North American Free Trade Agreement; = QIZ = Qualifying Industrial Zone.

\*Subtotal for ASEAN excludes trade under the US-Singapore FTA.

\*\*Suppliers with at least \$100 million of shipments in HS 50-60 to the US market.

Source: Authors' compilations from US Department of Commerce, International Trade Commission data (<http://dataweb.usitc.gov/>, downloaded 12 December 2007).

**TABLE 2**  
**EFFECTIVE DUTY RATES ON IMPORTED CLOTHING BY MAJOR SUPPLIER, 2006–2007**

SUPPLIER	CUSTOMS VALUE OF IMPORTS (US\$ MILLIONS)			DUTY PAID (US\$ MILLIONS)			EFFECTIVE DUTY RATE (PERCENT)		
	2006	2006 YTD	2007YTD	2006	2006 YTD	2007YTD	2006	2006 YTD	2007YTD
Asian Competitive Suppliers									
ASEAN									
Brunei	119.815	91.928	81.544	21.022	16.040	14.535	17.55	17.45	17.82
Cambodia	2131.047	1578.317	1826.617	364.623	268.231	316.336	17.11	16.99	17.32
Indonesia	3665.696	2766.764	3066.299	682.871	512.142	566.674	18.63	18.51	18.48
Lao PDR	7.957	5.846	8.602	1.285	1.011	1.493	16.15	17.29	17.36
Malaysia	705.270	532.408	526.946	118.600	90.180	91.138	16.82	16.94	17.30
Philippines	1996.806	1519.878	1340.307	350.189	264.366	231.417	17.54	17.39	17.27
Singapore, of which:	146.604	109.201	106.926	8.904	12.171	7.976	6.07	11.15	7.46
US-Singapore FTA	98.350	73.775	67.535	7.574	5.618	1.761	7.70	7.61	2.61
Thailand	1856.564	1409.168	1355.865	304.391	230.191	226.595	16.40	16.34	16.71
Viet Nam	3152.564	2456.325	3144.273	535.195	420.737	541.644	16.98	17.13	17.23
Subtotal*	13683.974	10396.061	11389.846	2379.505	1809.450	1996.048	17.39	17.41	17.52
SAARC									
Bangladesh	2807.667	2120.934	2306.204	471.410	356.743	391.010	16.79	16.82	16.95
India	3233.986	2553.088	2542.422	489.441	381.758	385.685	15.13	14.95	15.17
Nepal	50.845	42.595	25.161	7.665	6.501	3.739	15.08	15.26	14.86
Pakistan	1426.209	1058.970	1140.382	224.169	166.502	180.481	15.72	15.72	15.83
Sri Lanka	1683.028	1268.972	1232.810	272.330	205.934	199.685	16.18	16.23	16.20
Subtotal	9201.735	7044.559	7246.980	1465.015	1117.438	1160.600	15.92	15.86	16.01
PRC	19864.863	14143.931	18227.607	2599.273	1793.686	2551.338	13.08	12.68	14.00
Subtotal	42750.572	31584.551	36864.432	6443.793	4720.574	5707.985	15.07	14.95	15.48

*continued next page.*

TABLE 2. CONTINUED.

Asian Former Large Quota Holders										
Hong Kong, China	2799.108	2232.896	1384.664	509.241	405.096	248.326	18.19	18.14	17.93	
Korea, Rep. of	924.642	732.800	486.994	165.948	132.309	83.538	17.95	18.06	17.15	
Macau, China	1160.378	941.849	748.178	201.382	160.560	129.046	17.35	17.05	17.25	
Taipei, China	965.948	748.414	622.704	207.562	160.560	129.046	21.49	21.45	20.72	
Subtotal	5850.076	4655.958	3242.540	1084.134	858.526	589.956	18.53	18.44	18.19	
Nonpreferential Asian Suppliers	48600.648	36240.509	40106.972	7527.927	5579.100	6297.941	15.49	15.39	15.70	
Preferential Suppliers										
NAFTA										
Canada	1173.179	900.438	744.762	5.648	2.784	2.314	0.48	0.31	0.31	
Mexico	5447.581	4179.708	3528.095	34.961	23.981	23.673	0.64	0.57	0.67	
Subtotal	6620.761	5080.145	4272.858	40.609	26.765	25.987	0.61	0.53	0.61	
CAFTA-DR										
Costa Rica	464.910	343.417	323.928	10.563	8.005	7.118	2.27	2.33	2.20	
Dominican Republic	1535.352	1153.773	817.379	24.351	18.409	25.753	1.59	1.60	3.15	
El Salvador	1407.333	1046.719	1100.594	64.109	52.258	30.681	4.56	4.99	2.79	
Guatemala	1666.342	1271.993	1112.385	164.539	127.253	98.976	9.87	10.00	8.90	
Honduras	2517.475	1878.121	1918.731	57.505	45.158	35.993	2.28	2.40	1.88	
Nicaragua	879.310	625.511	718.333	100.206	69.859	30.354	11.40	11.17	4.23	
Subtotal	8470.722	6319.534	5991.348	421.273	320.943	228.875	4.97	5.08	3.82	
ANDEAN										
Bolivia	31.248	24.705	14.000	0.067	0.040	0.069	0.21	0.16	0.49	
Colombia	505.894	377.757	294.115	7.524	6.272	4.388	1.49	1.66	1.49	
Ecuador	14.348	9.463	12.464	0.356	0.288	0.054	2.48	3.04	0.43	
Peru	841.122	620.448	615.232	2.685	2.090	2.945	0.32	0.34	0.48	
Subtotal	1392.612	1032.374	935.811	10.632	8.690	7.456	0.76	0.84	0.80	
AGOA										
Botswana	28.448	23.025	25.656	0.048	0.048	0.031	0.17	0.21	0.12	
Ethiopia	4.955	3.568	3.354	0.013	0.013	0.002	0.26	0.35	0.06	
Ghana	9.502	6.340	6.452	0.097	0.094	0.023	1.02	1.48	0.36	
Kenya	262.752	194.387	180.969	0.857	0.723	0.258	0.33	0.37	0.14	
Lesotho	387.010	289.230	301.043	0.490	0.327	0.568	0.13	0.11	0.19	
Madagascar	238.332	181.147	214.997	0.852	0.617	1.442	0.36	0.34	0.67	

continued next page.

TABLE 2. CONTINUED.

Malawi	18.187	12.747	15.659	0.000	0.000	0.000	0.00	0.00	0.00	0.00
Mauritius	118.731	87.990	87.233	1.496	1.160	0.942	1.26	1.32	1.08	1.08
Mozambique	0.693	0.585	0.161	0.010	0.010	0.000	1.41	1.67	0.00	0.00
Namibia	33.087	25.315	26.290	0.014	0.000	0.003	0.04	0.00	0.01	0.01
South Africa	46.721	33.031	17.865	0.829	0.407	0.309	1.77	1.23	1.73	1.73
Swaziland	135.156	100.879	107.781	0.153	0.085	0.088	0.11	0.08	0.08	0.08
Tanzania	2.998	1.711	2.017	0.001	0.000	0.001	0.02	0.01	0.07	0.07
Uganda	1.252	1.201	0.992	0.000	0.000	0.001	0.03	0.01	0.09	0.09
Subtotal	1287.824	961.154	990.468	4.860	3.483	3.667	0.38	0.36	0.37	0.37
CBI*										
Barbados	0.119	0.111	0.077	0.008	0.007	0.010	6.30	6.73	12.78	12.78
Guyana	4.648	3.576	3.571	0.008	0.008	0.000	0.17	0.21	0.01	0.01
Haiti	450.162	325.208	336.407	5.647	4.635	1.960	1.25	1.43	0.58	0.58
Jamaica	48.472	37.085	31.116	0.116	0.095	0.030	0.24	0.26	0.10	0.10
Netherlands Antilles	0.092	0.054	0.036	0.008	0.004	0.005	8.24	8.11	13.46	13.46
Panama	1.761	1.193	1.414	0.185	0.127	0.137	10.50	10.62	9.67	9.67
Trinidad and Tobago	0.292	0.269	0.113	0.010	0.010	0.006	3.46	3.60	5.52	5.52
Subtotal	505.546	367.496	372.733	5.980	4.887	2.148	1.18	1.33	0.58	0.58
Bilateral FTAs										
Australia	41.521	30.929	7.425	7.409	5.507	1.048	17.84	17.81	14.12	14.12
Bahrain	85.064	67.197	52.929	11.147	10.723	0.346	13.10	15.96	0.65	0.65
Chile	25.667	19.471	11.007	0.493	0.394	0.270	1.92	2.02	2.45	2.45
Egypt	624.668	464.113	546.901	5.844	4.763	3.014	0.94	1.03	0.55	0.55
Israel	241.563	188.203	145.587	2.218	1.669	1.738	0.92	0.89	1.19	1.19
Jordan	1252.178	955.401	883.798	5.696	4.800	2.712	0.45	0.50	0.31	0.31
West Bank-Gaza	2.074	1.735	1.081	0.000	0.000	0.000	0.00	0.00	0.03	0.03
Morocco	100.703	74.092	64.557	10.292	8.381	6.323	10.22	11.31	9.79	9.79
Subtotal	2373.439	1801.141	1713.285	43.098	36.238	15.451	1.82	2.01	0.90	0.90
Preferential Subtotal	20650.903	15561.845	14276.503	526.452	401.006	283.584	2.55	2.58	1.99	1.99

YTD = year to date covering January to September; FTA = free trade agreement; ASEAN = Association of Southeast Asian Nations; PRC = People's Republic of China; SAARC = South Asian Association for Regional Cooperation; NAFTA = North American Free Trade Agreement; CAFTA = Central American Free Trade Agreement; ANDEAN = Andean Trade Preference and Drug Eradication Act; AGOA = African Growth and Opportunity Act; CBI = Caribbean Basin Initiative.

\*Subtotal excludes trade under US-Singapore FTA.

Source: Authors' compilations from US Department of Commerce, International Trade Commission data (<http://dataweb.usitc.gov/>, downloaded 7 December 2007).

participation in PTAs makes the US less likely to reduce MFN tariffs (and tariff bindings) on PTA goods such as textiles and garments in multilateral trade negotiations.

The world has seen a general decline in tariff rates across countries and their respective industries in the 60 plus years since the GATT system and its successor, the WTO, have been in existence. However, tariff protection remains far higher for the textile and clothing industries in comparison with average tariffs for all manufactured goods. This is true for both developed and developing countries, with tariff peaks recurring in developed countries and virtually prohibitive tariff rates prevailing in developing countries that export textiles and clothing, notably India and Bangladesh (Audet 2007).<sup>5</sup> Textile and clothing industries in developed countries also display tariff escalation, wherein developed nations have increasingly higher tariff levels the more processed an imported good becomes, with raw materials entering at low duty levels, intermediate inputs entering at moderate tariff rates, and finished goods entering at high duty levels.<sup>6</sup> Tariff escalation is seen as a barrier against attempts by developing countries to move into the production of higher valued goods and the export of final products (Balassa 1965).

The role of trade preference programs and free trade areas in protecting US textile interests can be appreciated by examining the share of US textile exports that are accounted for by shipments to partners in these agreements relative to the world as a whole. For yarn exports, over 80% or \$1.46 billion out of \$1.83 billion are to partners within preferential trade agreements, and for fabric over 75% or \$6.01 billion out of \$7.91 billion of global US exports are to preferential trade partners (2006 figures, Table 3). The combined US exports of textile intermediate products going to partners within the preferential agreements is nearly 77% of world total exports in 2006. These US exports are assembled into garments and sent back to the US market, paying low preferential duties based upon only the value-added in the garment assembly process. The low duties paid gives these preferentially supplied garments a substantial competitive edge over nonpreferential supplies in the US market while providing US textile makers with a captive market for exports. With intermediate textile products accounting for over 60% of value-added in such garments, and with retail margins going to US clothing retailers, this means the programs are extremely important in protecting US business interests against competitive suppliers in Asia. In contrast to US exports of yarn and fabric to PTA partners in 2006 of \$7.5 billion, imports were only about \$2.4 billion.<sup>7</sup> The preference programs are clearly mercantilist in nature.<sup>8</sup> The rules of origin in the preferential trade agreements coupled with the substantial margins of preference offered partner suppliers of garments made from US yarns and fabrics are instrumental in this large amount of trade diversion.

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<sup>5</sup> It is important to note that the GATT/WTO sets limits with respect to tariff bindings as opposed to applied tariffs. However, as bound rates have been substantially reduced, applied rates have also come down so as to remain at or below the agreed bindings. Applied tariff rates determine the actual effective duties levied upon imports. Despite the GATT/WTO principle of MFN tariff treatment for members, applied rates vary depending upon whether or not the foreign supplier is provided preferential access to a particular market and on what terms. The convoluted nature of effective duties deriving from complex and varying preference schemes is particularly evident in textiles and apparel (Snyder 2008).

<sup>6</sup> The US cotton fiber industry may also benefit from captive markets for US cotton textile products (Rivoli 2005).

<sup>7</sup> Based on authors' estimates of US imports of FTA-qualifying yarn and fabric imports. Imports of textile intermediate yarns and fabrics from non-FTA preferential partners are negligible and are not usually provided preferential tariff treatment.

<sup>8</sup> The US allows less-developed members of AGOA to use third country fabrics in clothing assembled for shipment to the US market subject to strict limits called tariff preference levels (Matoos, Roy, and Subramanian 2002). This limits the ability of these lower-income African countries to expand shipments to the US market.

**TABLE 3**  
**US EXPORTS OF TEXTILE INTERMEDIATE PRODUCTS TO FTA AND PTA PARTNER COUNTRIES:**  
**YARNS AND FABRICS (VALUE IN US\$ MILLIONS)**

<b>YARN</b>	<b>2005</b>	<b>2006</b>	<b>2006 YTD</b>	<b>2007 YTD</b>
Canada	347.778	313.047	264.832	232.681
Mexico	252.264	260.652	225.606	191.271
NAFTA	600.042	573.699	490.438	423.952
Honduras	406.375	464.670	395.058	489.603
Dominican Republic	50.542	145.992	116.043	173.087
Guatemala	74.002	64.540	53.347	61.161
Costa Rica	30.061	32.994	27.168	28.498
CAFTA	616.274	808.991	675.914	847.417
Australia	16.029	19.565	16.384	23.447
Singapore	8.949	15.036	12.136	8.588
ANDEAN	20.799	35.432	31.330	26.029
CBI	4.394	7.000	6.085	7.224
FTA/PTA Partners	1266.487	1459.723	1232.287	1336.657
World	1554.031	1825.120	1540.053	1660.040
FTA/PTA Share (%)	81.497	79.980	80.016	80.520
<b>FABRIC</b>				
Canada	1259.165	1270.244	1083.281	1037.535
Mexico	3022.945	2826.818	2437.897	2242.819
NAFTA	4282.110	4097.062	3521.178	3280.354
Honduras	588.780	526.410	456.556	489.403
Dominican Republic	526.333	480.652	416.092	294.812
El Salvador	351.605	303.950	262.185	252.390
Guatemala	187.119	120.974	105.134	102.111
Costa Rica	66.207	84.145	70.136	78.319
CAFTA	1781.433	1573.145	1361.740	1271.176
Australia	53.609	52.673	44.686	47.478
Israel	26.552	18.396	14.624	23.192
Singapore	18.266	22.663	18.686	21.898
Chile	14.797	16.158	13.589	10.936
ANDEAN	107.270	124.470	109.244	83.213
CBI	104.050	80.533	69.687	60.433
AGOA	26.961	26.256	22.588	23.120
FTA/PTA Partners	6415.048	6011.356	5176.022	4821.800
World	8214.146	7907.385	6767.625	6378.014
FTA/PTA Share (%)	78.10	76.02	76.48	75.60
<b>YARN AND FABRIC</b>				
FTA/PTA Partners	7681.535	7471.079	6408.309	6158.457
World	9768.177	9732.505	8307.678	8038.054
FTA/PTA Share (%)	78.64	76.76	77.14	76.62

YTD = year to date covering January–October 2007 versus January–October 2006; FTA = free trade agreement; PTA = preferential trade agreement; NAFTA = North American Free Trade Agreement; CAFTA = Central American Free Trade Agreement; CBI = Caribbean Basin Initiative; ANDEAN = Andean Trade Preference and Drug Eradication Act; AGOA = African Growth and Opportunity Act.  
Source: Office of Textiles and Apparel homepage (<http://otexa.ita.doc.gov/>, downloaded 19 December 2007).

The external impetus pushing for such PTAs was the elimination of quotas under the ATC, and the fact that MFN tariffs remained high enough to make preferences matter.<sup>9</sup> For example, US MFN tariffs on clothing average 13% with peaks of over 30% on a number of tariff lines (e.g., women's sweaters made of synthetic fabric). In addition there is the overarching shadow of the PRC as the preeminent supplier of textile and clothing in the world. Fears of the PRC "grabbing all" are supported by standard computable general equilibrium model and gravity model predictions on postquota competitiveness (OECD 2003, Nordas 2004). The computable general equilibrium models were based largely on models of standard technology and differing factor endowments, thus importance was placed on relative prices, low wages, and a large production scale to determine competitiveness (Tewari 2006). Predictions by these models have the PRC garnering a much more significant market share, at the expense of almost all other countries, once quotas are eliminated. This gain in market share for suppliers in the PRC arises from scale economies, enabling them to ship at lower prices than other competitors, therefore, a country must be large to compete with the PRC head on. Historical factors also are in play, wherein the PRC has been in the industry for a long time developing the necessary technology and linkages to flourish in a competitive environment. In the following section we examine the price dynamics of clothing imports in the US market with regard to various suppliers using average import prices from all suppliers ("World") and from the PRC as benchmarks to measure price competitiveness.<sup>10</sup>

### **III. PRICE DYNAMICS IN THE US IMPORT MARKET FOR CLOTHING**

#### **A. Data**

Unit values were constructed for 26 individual and groups of suppliers (including "World") for the 26 categories of clothing that are under safeguard restrictions in the US market for imports. The current dollar value of shipments and the volume of shipments in terms of square meter equivalents (SME) are used.<sup>11</sup> This metric of US\$ per SME makes the unit prices comparable across categories of clothing and across all suppliers (James 2006 and 2007). The Office of Textiles and Apparel makes these data available on a monthly basis with only a two-month lag. We compare annual data for 2004, 2005, and 2006. The rationale for selecting these annual observations is to take into account unit prices in a year in which ATC quotas still applied to these items (2004) for most of the groups of suppliers, but especially for the PRC and other competitive Asian suppliers. Then we observe the unit prices in 2005, a year in which quotas were effectively eliminated on these items. In 2006, comprehensive safeguard quotas were adopted on shipments from the PRC. Thus, one would expect mean unit prices of these items to decline in 2005 compared with 2004 and then for mean unit prices to rise again in 2006 relative to 2005. Whether or not unit prices are significantly different in 2006 and 2004 is an open question. We expect mean unit prices to rise relative to 2005 but not necessarily relative to 2004 when almost all suppliers were quota-constrained.

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<sup>9</sup> The US customs levies duties on the basis of the free on board value of imports at the point of export (WTO Secretariat 2006). This means that the effective duty rates are calculated without taking into account costs of insurance and freight.

<sup>10</sup> For an evaluation of the EU clothing market, see James (2008b).

<sup>11</sup> These categories are among those that were only liberalized in the fourth and final phase of the ATC after 31 December 2004.

## B. Elimination of Quotas and Lower Consumer Prices in the US Market: 2004–2006

First we adopt World (all foreign suppliers of restricted clothing items to the US market) mean unit values of clothing for the 26 restricted items as our benchmark. We then use t-tests to determine if the null hypothesis of no significant difference between mean values of world prices over the years of 2004, 2005, and 2006 (Table 4) can be rejected, and then ascertain whether any significant differences emerge between annual mean unit values and in what direction. The statistical test takes the difference between the mean of two sample prices (difference=mean[sample1]-mean[sample2]) and uses t-tests to determine if the difference is significantly different from zero. The tests were further calibrated to determine whether the difference is significantly less than zero (to assess the direction of the difference). Probability values were directly computed from the t-values, which are the test statistic derived from the price data and compared with the T-critical values obtained from t-tables. The t-values were derived from the difference of the mean between the two samples, considering that a negative value for the difference implies that the mean of sample 1 is less than the mean of sample 2. To check for statistical significance, the t-values were compared against T-critical, with probability values showing whether or not the test statistic lies within the critical region. If the probability that the T-critical value is less than the t-value ( $\Pr[T < t]$ ) and is between zero and 0.1, then we can conclude that sample 1 has significantly lower prices than sample 2 at the specified level of significance (either at 1%, 5%, or 10%). We are able to reject the null hypothesis in comparing mean unit prices between the pairs 2004 and 2005, and 2005 and 2006, finding that indeed mean unit prices of the restricted items are significantly lower in 2005 than in either 2004 (full quota year) or in 2006 (safeguard quotas on the PRC alone). Hence, the price

**TABLE 4**  
**TESTING FOR EQUALITY OF MEAN WORLD PRICES OF CLOTHING SHIPMENTS TO THE US**  
**ACROSS TIME (UNIT MEASURE, US\$ PER SME)**

Ho: underlying prices have the same mean across relevant years  
H1: underlying prices do not have the same mean across relevant years

	2004 World price	versus	2005 World price
<b>Average Price</b>	4.90		4.74
Paired, P(T < t)	0.07		
Conclusion	Reject Ho, 2005 mean prices significantly lower than 2004 mean prices		
	2004 World price	versus	2006 World price
<b>Average Price</b>	4.90		4.99
Paired, P(T < t)	0.16		
Conclusion	Cannot reject Ho, 2004 mean prices NOT significantly lower than 2006 mean prices		
	2005 World price	versus	2006 World price
<b>Average Price</b>	4.74		4.99
Paired, P(T < t)	0.00		
Conclusion	Reject Ho, 2005 mean prices significantly lower than 2006 mean prices		



dynamics indicate that removal of quotas led to significantly lower import prices for clothing in the US market in 2005. In contrast, imposition of safeguard quotas in 2006 drove mean unit prices up to a level that was not significantly different from mean unit prices in 2004. Next, we adopt the PRC's mean unit values as an alternative benchmark and focus on whether mean unit prices of the restricted items show a similar pattern to world mean unit prices in the US import market (Table 5). With the PRC as benchmark, we find we can reject the null hypothesis of no difference across all three pairs of years for mean unit prices. Hence, removal of quotas on the restricted items led to significantly lower mean unit prices for imports from the PRC in 2005 compared with 2004 and 2006. However, for imports from the PRC in restricted clothing, mean unit prices in 2006 were significantly lower than in 2004, indicating that safeguard quotas were apparently not as restrictive as quotas under the ATC, in the sense that the PRC could not raise prices all the way up to levels that existed in 2004.

**TABLE 5**  
**TESTING FOR EQUALITY OF MEAN PRC PRICES OF CLOTHING SHIPMENTS TO THE US**  
**ACROSS TIME (UNIT MEASURE, US\$/SME)**

Ho: underlying prices have the same mean across relevant years

H1: underlying prices do not have the same mean across relevant years

	<b>2004 PRC price</b>	<b>versus</b>	<b>2005 PRC price</b>
<b>Average Price</b>	5.30		3.35
Paired, P(T < t)	0.00		
Conclusion	Reject Ho, 2005 mean prices significantly lower than 2004 mean prices		
	<b>2004 PRC price</b>	<b>versus</b>	<b>2006 PRC price</b>
<b>Average Price</b>	5.30		4.44
Paired, P(T < t)	0.01		
Conclusion	Reject Ho, 2006 mean prices significantly lower than 2004 mean prices		
	<b>2005 PRC price</b>	<b>versus</b>	<b>2006 PRC price</b>
<b>Average Price</b>	3.35		4.44
Paired, P(T < t)	0.00		
Conclusion	Reject Ho, 2005 mean prices significantly lower than 2006 mean prices		

The imposition of quotas had significant impacts on price competitiveness of the PRC relative to the world and on various groups of suppliers compared with the PRC. In 2004 and 2006, mean unit prices in the PRC were not significantly different from those of the world, yet for 2005, in the absence of quota restrictions, the PRC's mean unit prices were significantly lower than those of the world (Tables 6–8). Relative to the PRC, individual suppliers and groups of suppliers were strongly impacted by the removal of quotas in 2005 and by the imposition of safeguards on the PRC

in 2006. For example, it can be seen that in 2004 (Table 9) six suppliers had significantly lower mean unit prices than the PRC (including AGOA, Bangladesh, Cambodia, Egypt, Pakistan, and Viet Nam) but only two (Canada and the EU-15) had significantly higher mean unit prices than the PRC. Only Hong Kong, China had a higher mean value among Asian suppliers than the PRC (although not significantly higher in a statistical sense). When quotas were removed in 2005, only one supplier (Pakistan) had significantly lower mean unit prices than the PRC, yet 15 suppliers (including Cambodia; Hong Kong, China; India; Korea, Philippines; Sri Lanka; and Thailand) had significantly higher mean unit prices (Table 10). Mexico, the largest individual preferential supplier of the US market, also had significantly higher mean unit prices compared with the PRC in 2005 whereas there was no such difference in 2004. Once safeguard restrictions were introduced in 2006, four suppliers (including Bangladesh, Malaysia, Pakistan, but also the CBI) had significantly lower mean unit prices than the PRC but only five suppliers (including the ANDEAN group; Canada; EU-15; Hong Kong, China; and Turkey) had significantly higher mean unit prices (Table 11). Thus, in the United States market, the use of quotas has a major impact on the relative price competitiveness of the PRC and other major suppliers. After 2004, the competitive position of most preferential suppliers in the US market deteriorated relative to the PRC. The CBI was an exception but the amount of imports from the CBI (which excludes the CAFTA) is very limited.

**TABLE 6**  
**2004 MEAN PRICES OF SHIPMENTS TO THE US IN CATEGORIES**  
**RESTRICTED BY SAFEGUARD QUOTAS (UNIT VALUE US\$/SME)**

ECONOMY	PRICE, 2004	STATISTICAL SIGNIFICANCE
Pakistan	2.27	Significantly lower*
Egypt	3.10	Significantly lower**
Bangladesh	3.42	Significantly lower**
CBI	3.67	Not significant
Viet Nam	3.83	Not significant
AGOA	3.92	Not significant
Cambodia	4.11	Not significant
CAFTA	4.27	Not significant
Taipei, China	4.30	Not significant
Philippines	4.38	Not significant
Indonesia	4.49	Not significant
Macau, China	4.73	Not significant
Malaysia	4.80	Not significant
Mexico	4.82	Not significant
Sri Lanka	4.85	Not significant
World	4.90	
Korea, Rep. of	5.03	Not significant
India	5.05	Not significant
Thailand	5.29	Not significant
PRC	5.30	Not significant
Jordan	5.89	Not significant
ANDEAN	6.17	Not significant
Turkey	6.98	Not significant
Hong Kong, China	7.91	Significantly higher**
Canada	9.47	Significantly higher*
EU-15	15.78	Significantly higher*

CBI = Caribbean Basin Initiative; AGOA = African Growth and Opportunity Act; CAFTA = Central American Free Trade Agreement; ANDEAN = Andean Trade Preference and Drug Eradication Act.

Note: Benchmark – World: 4.90.

\* At 5% one-tailed test.

\*\* At 10% one-tailed test.

**TABLE 7**  
**2005 MEAN PRICES OF SHIPMENTS TO THE US IN CATEGORIES**  
**RESTRICTED BY SAFEGUARD QUOTAS (UNIT VALUE US\$/SME)**

<b>ECONOMY</b>	<b>PRICE, 2005</b>	<b>STATISTICAL SIGNIFICANCE</b>
Pakistan	2.16	Significantly lower*
CBI	2.66	Significantly lower*
Bangladesh	3.27	Significantly lower**
Egypt	3.27	Not significant
PRC	3.35	Significantly lower**
AGOA	3.79	Not significant
Taipei,China	3.90	Not significant
Viet Nam	4.05	Not significant
Indonesia	4.17	Not significant
Malaysia	4.17	Not significant
CAFTA	4.23	Not significant
Philippines	4.36	Not significant
Cambodia	4.53	Not significant
World	4.74	
Korea, Rep. of	4.75	Not significant
India	4.88	Not significant
Mexico	4.89	Not significant
Macau	4.93	Not significant
Thailand	5.30	Not significant
Sri Lanka	5.45	Not significant
ANDEAN	6.21	Not significant
Jordan	6.32	Not significant
Turkey	7.50	Significantly higher**
Hong Kong, China	7.99	Significantly higher**
Canada	11.60	Significantly higher*
EU-15	17.10	Significantly higher*

CBI = Caribbean Basin Initiative; AGOA = African Growth and Opportunity Act; CAFTA = Central American Free Trade Agreement; ANDEAN = Andean Trade Preference and Drug Eradication Act.

Note: Benchmark – World: 4.74.

\* At 5% one-tailed test.

\*\* At 10% one-tailed test.

**TABLE 8**  
**2006 MEAN PRICES OF SHIPMENTS TO THE US IN CATEGORIES**  
**RESTRICTED BY SAFEGUARD QUOTAS (UNIT VALUE US\$/SME)**

<b>ECONOMY</b>	<b>PRICE, 2006</b>	<b>STATISTICAL SIGNIFICANCE</b>
Pakistan	2.03	Significantly lower*
CBI	2.28	Significantly lower*
Bangladesh	3.13	Significantly lower*
Malaysia	3.17	Significantly lower*
AGOA	3.56	Not significant
Taipei, China	3.68	Not significant
Egypt	3.74	Not significant
Viet Nam	4.01	Not significant
Cambodia	4.03	Not significant
Philippines	4.07	Not significant
Indonesia	4.14	Not significant
Korea, Rep. of	4.33	Not significant
PRC	4.44	Not significant
CAFTA	4.61	Not significant
Macau	4.77	Not significant
Sri Lanka	4.89	Not significant
Mexico	4.98	Not significant
World	4.99	
Thailand	5.30	Not significant
India	5.32	Not significant
Jordan	5.40	Not significant
ANDEAN	6.65	Significantly higher**
Hong Kong, China	7.68	Significantly higher**
Turkey	8.16	Significantly higher*
Canada	13.07	Significantly higher*
EU-15	19.45	Significantly higher*

CBI = Caribbean Basin Initiative; AGOA = African Growth and Opportunity Act; CAFTA = Central American Free Trade Agreement; ANDEAN = Andean Trade Preference and Drug Eradication Act.

Note: Benchmark – World: 4.99.

\* At 5% one-tailed test.

\*\* At 10% one-tailed test.

**TABLE 9**  
**2004 MEAN PRICES OF SHIPMENTS TO THE US IN CATEGORIES RESTRICTED**  
**BY SAFEGUARD QUOTAS (UNIT VALUE US\$/SME)**

<b>ECONOMY</b>	<b>PRICE, 2004</b>	<b>STATISTICAL SIGNIFICANCE</b>
Pakistan	2.27	Significantly lower*
Egypt	3.10	Significantly lower*
Bangladesh	3.42	Significantly lower*
CBI	3.67	Not significant
Viet Nam	3.83	Significantly lower*
AGOA	3.92	Significantly lower**
Cambodia	4.11	Significantly lower**
CAFTA	4.27	Not significant
Taipei, China	4.30	Not significant
Philippines	4.38	Not significant
Indonesia	4.49	Not significant
Macau, China	4.73	Not significant
Malaysia	4.80	Not significant
Mexico	4.82	Not significant
Sri Lanka	4.85	Not significant
World	4.90	Not significant
Korea, Rep. of	5.03	Not significant
India	5.05	Not significant
Thailand	5.29	Not significant
PRC	5.30	
Jordan	5.89	Not significant
ANDEAN	6.17	Not significant
Turkey	6.98	Not significant
Hong Kong, China	7.91	Not significant
Canada	9.47	Significantly higher*
EU-15	15.78	Significantly higher*

CBI = Caribbean Basin Initiative; AGOA = African Growth and Opportunity Act; CAFTA = Central American Free Trade Agreement; ANDEAN = Andean Trade Preference and Drug Eradication Act.

Note: Benchmark – PRC: 5.30.

\* At 5% one-tailed test.

\*\* At 10% one-tailed test.

**TABLE 10**  
**2005 MEAN PRICES OF SHIPMENTS TO THE US IN CATEGORIES RESTRICTED**  
**BY SAFEGUARD QUOTAS (UNIT VALUE US\$/SME)**

ECONOMY	PRICE, 2005	STATISTICAL SIGNIFICANCE
Pakistan	2.16	Significantly lower*
CBI	2.66	Not significant
Bangladesh	3.27	Not significant
Egypt	3.27	Not significant
PRC	3.35	
AGOA	3.79	Not significant
Taipei, China	3.90	Not significant
Viet Nam	4.05	Not significant
Indonesia	4.17	Not significant
Malaysia	4.17	Not significant
CAFTA	4.23	Not significant
Philippines	4.36	Significantly higher**
Cambodia	4.53	Significantly higher**
World	4.74	Significantly higher**
Korea, Rep. of	4.75	Significantly higher*
India	4.88	Significantly higher**
Mexico	4.89	Significantly higher*
Macau, China	4.93	Significantly higher*
Thailand	5.30	Significantly higher*
Sri Lanka	5.45	Significantly higher*
ANDEAN	6.21	Significantly higher*
Jordan	6.32	Significantly higher*
Turkey	7.50	Significantly higher*
Hong Kong, China	7.99	Significantly higher*
Canada	11.60	Significantly higher*
EU-15	17.10	Significantly higher*

CBI = Caribbean Basin Initiative; AGOA = African Growth and Opportunity Act; CAFTA = Central American Free Trade Agreement; ANDEAN = Andean Trade Preference and Drug Eradication Act.

Note: Benchmark – PRC: 3.35.

\* At 5% one-tailed test.

\*\* At 10% one-tailed test.

**TABLE 11**  
**2006 MEAN PRICES OF SHIPMENTS TO THE US IN CATEGORIES RESTRICTED**  
**BY SAFEGUARD QUOTAS (UNIT VALUE US\$/SME)**

ECONOMY	PRICE, 2006	STATISTICAL SIGNIFICANCE
Pakistan	2.03	Significantly lower*
CBI	2.28	Significantly lower*
Bangladesh	3.13	Significantly lower*
Malaysia	3.17	Significantly lower*
AGOA	3.56	Not significant
Taipei, China	3.68	Not significant
Egypt	3.74	Not significant
Viet Nam	4.01	Not significant
Cambodia	4.03	Not significant
Philippines	4.07	Not significant
Indonesia	4.14	Not significant
Korea, Rep. of	4.33	Not significant
PRC	4.44	
CAFTA	4.61	Not significant
Macau, China	4.77	Not significant
Sri Lanka	4.89	Not significant
Mexico	4.98	Not significant
World	4.99	Not significant
Thailand	5.30	Not significant
India	5.32	Not significant
Jordan	5.40	Not significant
ANDEAN	6.65	Significantly higher*
Hong Kong, China	7.68	Significantly higher*
Turkey	8.16	Significantly higher*
Canada	13.07	Significantly higher*
EU-15	19.45	Significantly higher*

CBI = Caribbean Basin Initiative; AGOA = African Growth and Opportunity Act; CAFTA = Central American Free Trade Agreement; ANDEAN = Andean Trade Preference and Drug Eradication Act.

Note: Baseline – PRC: 4.44.

\* At 5% one-tailed test.

\*\* At 10% one-tailed test.

### C. Price Developments in 2007: Preliminary Analysis

In 2007 the PRC was allowed to increase shipments by 15–17% over quota limits of the previous year. This growth allowed a moderation of mean unit prices in the PRC to \$4.30 per square meter equivalent of clothing in the restricted items, down from \$4.44 in 2006 (Table 12). Hence, in comparing prices in 2007 (through the third quarter of the year) with previous years, it is seen that mean unit prices were significantly lower than those in 2004 or 2006 but were still significantly higher than in 2005. However, through time and as quotas become binding, unit prices may rise as they did in 2006. The insignificant difference in mean unit prices in the PRC between the first three quarters of 2006 and the same period of 2007 may not hold for the full year if performance turns out to be similar in the fourth and final quarter. There are strong reasons to suppose why this will not be the case, given the expected slowdown in the US market with the fall of the dollar, and fears

that the US economy may be nearing a recession. The PRC's relative position among suppliers can be characterized as not significantly different from the World in 2007 (Table 13), and with similar numbers of suppliers with significantly lower mean unit prices and with significantly higher mean unit prices (Table 14). South Asian suppliers (Pakistan and Bangladesh) have significantly lower unit mean prices than either the PRC or the World.<sup>12</sup> Unit prices increased in India, Philippines, and Thailand in 2007, and were above the world average (although not in a statistically significant amount), perhaps reflecting the appreciation of their currencies against the US dollar.

**TABLE 12**  
**TESTING FOR EQUALITY OF MEAN CHINESE PRICES OF CLOTHING SHIPMENTS TO THE US ACROSS YEARS**  
**VS. YTD 2007 (UNIT MEASURE, US\$/SME)**

Ho: underlying prices have the same mean across relevant years

H1: underlying prices do not have the same mean across relevant years

	<b>YTD 2007 PRC price</b>	<b>versus</b>	<b>2004 PRC price</b>
<b>Average Price</b>	4.30		5.30
Paired, P(T<t)	0.00		
Conclusion	Reject Ho, YTD2007 prices significantly lower than 2004 prices		
	<b>YTD 2007 PRC price</b>	<b>versus</b>	<b>2005 PRC price</b>
<b>Average Price</b>	4.30		3.35
Paired, P(T>t)	0.00		
Conclusion	Reject Ho, YTD2007 prices significantly higher than 2005 prices		
	<b>YTD 2007 PRC price</b>	<b>versus</b>	<b>2006 PRC price</b>
<b>Average Price</b>	4.30		4.44
Paired, P(T<t)	0.02		
Conclusion	Reject Ho, YTD2007 prices significantly lower than 2006 prices		
	<b>YTD 2007 PRC price</b>	<b>versus</b>	<b>YTD 2006 PRC price</b>
<b>Average Price</b>	4.30		4.41
Paired, P(T<t)	0.24		
Conclusion	Cannot reject Ho, YTD2007 prices NOT significantly lower than YTD2006 prices		

YTD = year to date.

<sup>12</sup> Surprisingly, so does Malaysia. The low prices in Malaysia in 2006 and 2007 may reflect effective use of outsourcing of operations to lower-cost producers, but this would require further investigation.



**TABLE 13**  
**TESTING FOR EQUALITY OF MEAN WORLD PRICES OF CLOTHING SHIPMENTS TO THE US ACROSS YEARS**  
**VS. YTD 2007 (UNIT MEASURE, US\$/SME)**

Ho: underlying prices have the same mean across relevant years

H1: underlying prices do not have the same mean across relevant years

	<b>YTD 2007 World price</b>	<b>versus</b>	<b>2004 World price</b>
<b>Average Price</b>	4.78		4.90
Paired, P(T<t)	0.18		
Conclusion	Cannot reject Ho, YTD 2007 mean prices NOT significantly lower than 2004 mean prices		
	<b>YTD 2007 World price</b>	<b>versus</b>	<b>2005 World price</b>
<b>Average Price</b>	4.78		4.74
Paired, P(T<t)	0.42		
Conclusion	Cannot reject Ho, 2005 mean prices NOT significantly lower than YTD 2007 mean prices		
	<b>YTD 2007 World price</b>	<b>versus</b>	<b>2006 World price</b>
<b>Average Price</b>	4.78		4.99
Paired, P(T<t)	0.11		
Conclusion	Reject Ho, YTD 2007 mean prices significantly lower than 2006 mean prices		
	<b>YTD 2007 World price</b>	<b>versus</b>	<b>YTD 2006 World price</b>
<b>Average Price</b>	4.78		4.93
Paired, P(T<t)	0.18		
Conclusion	Cannot reject Ho, YTD 2007 mean prices NOT significantly lower than YTD 2006 mean prices		

YTD = year to date.

**TABLE 14**  
**YTD 2007 MEAN PRICES OF SHIPMENTS TO THE US IN CATEGORIES RESTRICTED**  
**BY SAFEGUARD QUOTAS (UNIT VALUE US\$/SME)**

<b>ECONOMY</b>	<b>PRICE, YTD 2007</b>	<b>STATISTICAL SIGNIFICANCE</b>
Pakistan	2.16	Significantly lower*
CBI	2.17	Significantly lower*
AGOA	3.10	Significantly lower**
Bangladesh	3.19	Significantly lower**
Malaysia	3.35	Significantly lower**
Taipei, China	3.57	Not significant
Cambodia	3.72	Not significant
Viet Nam	3.83	Not significant
Egypt	3.85	Not significant
Indonesia	4.25	Not significant
PRC	4.30	Not significant
CAFTA	4.49	Not significant
Macau, China	4.53	Not significant
Sri Lanka	4.60	Not significant
Korea, Rep. of	4.73	Not significant
World	4.78	
India	5.13	Not significant
Mexico	5.13	Not significant
Philippines	5.26	Not significant
Thailand	5.76	Not significant
Jordan	6.24	Not significant
ANDEAN	6.91	Significantly higher**
Hong Kong, China	8.49	Significantly higher**
Turkey	9.50	Significantly higher*
Canada	13.45	Significantly higher*
EU-15	21.37	Significantly higher*

YTD = year to date covering January–June 2007. CBI = Caribbean Basin Initiative; AGOA = African Growth and Opportunity Act; PRC = People's Republic of China; CAFTA = Central American Free Trade Agreement; ANDEAN = Andean Trade Preference and Drug Eradication Act.

Note: Benchmark – World: 4.78.

\* At 5% one-tailed test.

\*\* At 10% one-tailed test.

**TABLE 15**  
**YTD 2007 MEAN PRICES OF SHIPMENTS TO THE UNITED STATES IN CATEGORIES RESTRICTED**  
**BY SAFEGUARD QUOTAS (UNIT VALUE US\$/SME)**

<b>ECONOMY</b>	<b>PRICE, YTD 2007</b>	<b>STATISTICAL SIGNIFICANCE</b>
Pakistan	2.16	Significantly lower*
CBI	2.17	Significantly lower*
AGOA	3.10	Significantly lower*
Bangladesh	3.19	Significantly lower**
Malaysia	3.35	Significantly lower**
Taipei,China	3.57	Not significant
Cambodia	3.72	Not significant
Viet Nam	3.83	Not significant
Egypt	3.85	Not significant
Indonesia	4.25	Not significant
PRC	4.30	
CAFTA	4.49	Not significant
Macau, China	4.53	Not significant
Sri Lanka	4.60	Not significant
Korea, Rep. of	4.73	Not significant
World	4.78	Not significant
India	5.13	Not significant
Mexico	5.13	Not significant
Philippines	5.26	Not significant
Thailand	5.76	Not significant
Jordan	6.24	Significantly higher**
ANDEAN	6.91	Significantly higher*
Hong Kong, China	8.49	Significantly higher*
Turkey	9.50	Significantly higher*
Canada	13.45	Significantly higher*
EU-15	21.37	Significantly higher*

YTD = year to date covering January–June 2007. YTD = year to date covering January–June 2007. CBI = Caribbean Basin Initiative;  
AGOA = African Growth and Opportunity Act; PRC = People's Republic of China; CAFTA = Central American Free Trade Agreement;  
ANDEAN = Andean Trade Preference and Drug Eradication Act.

Note: Baseline – PRC: 4.30.

\* At 5% one-tailed test.

\*\* At 10% one-tailed test.

#### IV. OUTLOOK FOR CLOTHING UNIT PRICES WHEN SAFEGUARDS END IN 2009

Safeguards on clothing items originating from the PRC are scheduled to be withdrawn on 1 January 2009. On that date, producers in the PRC will be free to ship as much as they wish to the US market, provided that prices accurately reflect costs of production and market exchange rates. One caveat is that the US textile lobby is likely to seek new forms of protection and is already agitating for countervailing duties to offset alleged subsidies. It may also seek to make use of trade remedies (i.e., antidumping investigations and measures) in order to limit the PRC's market access. The current US administration has been selective in the use of trade remedies but following the forthcoming November 2008 elections, the new administration may seek to earn their spurs by adopting a more vigorous (and protectionist) approach. Such contingent forms of protection are unlikely to have as strong an impact on import prices than more general quantitative restrictions.

The outlook then is for prices to decline, a view that may be reinforced if US growth slows or even turns negative. The inflation concerns that emerged in late 2007 and early 2008 are unlikely to reverse the outlook for lower prices of clothing in 2009. A rise in the renminbi against the dollar may help to moderate the decline in prices but is unlikely to reverse such an outcome. Thus, suppliers of clothing to the US market from South and Southeast Asia had better prepare for fiercer competition with the PRC suppliers in the coming years.

How can Asian suppliers maintain their competitive edge? With the recognition that no other country can be as big as the PRC, and taking into account its historical experience, it is clearly not advisable to tackle the PRC head on. It would be very difficult to replicate the relative prices, low wages, and large scale produced by the PRC. However, studies of competitiveness in the post-ATC trade environment reveal that Asian competitive suppliers have increased, rather than lost, market share (James 2008a). In fact, it is former large quota holders among the "Big 3" (Hong Kong, China; Korea; and Taipei, China) and preferential suppliers that have experienced a loss in market shares.

As many studies have advised (James, Minor, and Dourng 2007; Tewari 2006) improving "soft skills" such as working within transnational production networks, exercising better corporate quality control, timeliness, and taking full advantage of information technology are means to adapt to a more competitive textile and apparel industry, which has shorter product cycles and lead times. Thus, flexibility, quality, product differentiation, and management skills are likely to be the primary tools in engaging the PRC in the competitive global textile and apparel industry.

The other alternative route of joining PTAs may or may not be open depending on the attitude of the incoming administration. Seeking to improve access through the Doha Round of the WTO also may or may not be possible. However, Asian governments will need to consider various avenues to improve market access for their garment exporters in various important global markets.

## V. CONCLUSIONS

This paper has demonstrated that prices of restricted clothing items have behaved in a manner consistent with economic theory. The metric used is not perfect as there are numerous individual products within the categories used to allocate quota restrictions. Nonetheless, there are statistically significant differences in prices in expected directions when quotas are present or are removed.

The outlook is for lower clothing prices once restrictions are eliminated from the perspective of exporters in Asia and among preferential suppliers to the US market (in US dollar terms) in 2009. Competition is likely to become stronger and fewer players will be left standing. Competitive Asian suppliers that depend on exports of textiles and apparel products will need to keep costs down and improve their "soft skills" in order to remain competitive in the US market.

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## **About the Paper**

William E. James and Juan Paolo Hernando examine how mean unit prices of clothing imports in the United States market responded to the elimination of quotas in 2005 and to the imposition of safeguards on the People's Republic of China in 2006 and 2007. The paper finds that prices were significantly lower in 2005 compared with 2004, 2006, and 2007, although in 2006–2007, unit prices did not fully return to their 2004 levels. The removal of safeguards on the largest supplier to the United States market, the People's Republic of China, in 2009 is likely to put renewed downward pressure on clothing prices—to the benefit of consumers. Asian suppliers will have to improve their “soft skills” if they are to remain competitive in coming years.

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