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ASSESSING THE EFFECTS OF THE MULTIFIBRE ARRANGEMENT AFTER ITS TERMINATION

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ACRONYMS

AGOA	African Growth and Opportunity Act
ATC	Agreement on Textile and Clothing
EU	European Union
GATT	General Agreement on Tariffs and Trade
MFA	Multifibre Arrangement
NAFTA	North American Free Trade Agreement
OTEXA	Office of Textiles and Apparel
RTAs	regional trade agreements
WTO	World Trade Organization

EXECUTIVE SUMMARY

This paper assesses the effects on trade of clothing and textiles following the termination of the Multifibre Arrangement (MFA) in 2005, using both world trade data and US trade data. Previous literature assesses its effects while in operation. The trade data analyzed provide mixed results and pose something of a paradox. Some data are consistent with theoretical predictions of more trade volumes, lower product prices, and regional trade agreements' (RTAs') effects on trade volume are smaller, there is less transshipment and quota-hopping investment, and a higher country concentration of exporters after the end of the MFA. However, the aggregate data do not show a significant trend change since 2005. The paper also finds the effects of the termination of the MFA on the clothing trade to be more significant than for the textiles trade. The benefits from freer trade in textiles and clothing shed light on other sectors that are still under trade protection.

INTRODUCTION AND BACKGROUND

During its 20 years of operation (1974–1994) and following the earlier short- and long-term agreements on cotton textiles, the MFA was the subject of study by many trade economists (Evans and Harrigan 2005; Rotunno 2013; Dayaratna-Banda and Whalley 2007; Khandelwal, Schott and Wei 2013). Although the MFA was terminated in 2005 under the World Trade Organization's (WTO's) Agreement on Textile and Clothing (ATC), its effects lingered for some years, in part through transitional safeguard measures with China and other countries. As a system of quota restrictions on the growth rate of trade, and given the prevalence of other remaining quota restrictions worldwide, most notably in agricultural products such as cheese and other dairy products, the effects of the termination of the MFA warrant study.

While it was in place, the effects of the MFA included reduced volumes of trade, higher prices for restricted

products, quality upgrading, transshipment to avoid quota, quota-hopping foreign investment, internal quota allocation schemes and others. In contrast to analyses of these effects generated from data when the MFA was in operation, data after the termination of the MFA is used in this paper to gauge the effects as it was progressively removed. How clearly identifiable are these effects in available data? How strong are the various effects? How long is the adjustment period to an MFA-free world for each of them?

To assess the effects of the MFA and its termination, this paper uses both world and US trade data that was generated after the termination of the MFA. Textiles and clothing was a special sector in world trade in the age of the General Agreement on Tariffs and Trade (GATT), since trade in this sector was governed by the MFA. From 1974 onward, the MFA allowed for quota restrictions on growth rates of trade in cotton, wool and man-made fibers. By the end of the second MFA (1981), most exports from developing countries to the United States and the European Union (EU) were covered by bilateral quota agreements restricting the growth rate of trade. These violated the spirit of the nondiscrimination principle in the GATT multilateral system, but the MFA was renegotiated four times and finally expired at the end of 1994. Five developed countries plus the European Union applied quotas during the final year of the MFA: Austria, Canada, Finland, Norway and the United States.1

The MFA quota system did not end with the expiration of the MFA. From January 1, 1995, when the WTO began, there was a 10-year transitional period under the ATC. Three countries and the European Union continued with MFA quota restrictions in the ATC: Canada, Norway and the United States. Since January 1, 2005, the textiles and clothing trade has been under the general rules of the WTO.

The reason for this special treatment in the WTO is that the textiles and clothing sector is important not only for developing countries, but also for developed countries. In the European Union, for example, the textiles and clothing sector is dominated by small and medium-sized enterprises concentrated in a number of regions that are highly dependent on the sector (Nordas 2004). The US textile manufacturers produce yarn, thread and fabric for apparel, home furnishings and various industrial applications. In 2013, the US textile industry generated nearly \$57 billion² in shipments and directly employed about 230,700 workers, accounting for approximately two percent of all US factory jobs (Platzer 2014, 1). In developing countries, the textiles and clothing industry offers industrialization and jobs

¹ Austria and Finland joined the European Union on January 1, 1995, but in 1994 they were not EU members.

² All figures cited are in US dollars.

for unskilled workers, including women who previously have had no other income opportunities. Many emerging economies, including Korea, China and Vietnam, have used this sector as their first step to industrialization.

Now, more than 10 years after 2005, both the extent and speed of the transition to a quota-free regime in the world's textiles and clothing trade can be assessed. The main findings are:

- Since 2005, the trade volume in clothing and textiles has increased more quickly than the average for all world trade. The increase in the world clothing trade is greater than that of the world textiles trade.
- The average price of both clothing and textiles is lower, and the average quality of exports of clothing has fallen, as consumers were able to benefit from upgraded quality under the MFA.
- The concentration by country of world textiles and clothing exports has increased, consistent with the removal of MFA quota-hopping foreign investment.
- The concentration by country of world imports has changed relatively little, as quota hopping affects only the export side of trade.
- The concentration indices of clothing have increased significantly, while those of textiles remain relatively stable.
- The regional textiles and clothing trade of RTA members is smaller, since world trade in textiles and clothing is freer.
- The clothing trade has been affected more than the textiles trade by the removal of the MFA quota system. However, there is a paradox in the aggregate data. Although some bilateral trade data show a trend change before and after 2005, most aggregate data do not show an obvious structural break in 2005. The last section of this paper offers possible explanations for this paradox.

LITERATURE AND THEORY ANALYSIS ON THE EFFECTS OF THE MFA

The MFA/ATC is essentially a quota system, based on restrictions on the growth rates of exports in the textiles and clothing sector. It represents a quantity restriction on trade. From basic economic theory, the following effects of the MFA can be hypothesized.

Reduced Volume of Trade

The first direct effect of the MFA quota system is reduced trade volume. C. L. Evans and J. Harrigan (2005) use the term "fill rate" to indicate the restrictiveness of quota,

where fill rate is defined as the percentage of a quota that is used. Higher fill rates indicate that the quota keeps imports below what they would otherwise be. A quota with a fill rate of 90 percent or above is defined by them as a binding quota. About 40 percent of US apparel imports came in under binding quotas throughout the 1990s (ibid.).

Higher Price for Restricted Products

With the trade volume reduced, restricted products will have a higher price in import markets. This higher price is caused by two factors. One is that exporters who can get the quota will send higher-priced products to export to make full use of the scarce quota. The other is the limited supply in the importing country, which will also lead to a higher market price. Evans and Harrigan (2005) find that the effect of quotas on prices is a step function: for fill rates between zero and 90 percent, the effect on price is zero, and for fill rates above 90 percent, the effect on price is present.

Quality Upgrading

A third effect is quality upgrading. When quotas are set in physical rather than volume terms, exporters will export higher-priced, higher-quality items. R. Feenstra (2004) provides a theoretical framework for measuring quality upgrading due to quotas. There are two causes for such quality upgrading. One is that, when facing quota restrictions, foreign firms will export those products that are higher quality. The other is the so-called Washington apples effect, which means the highest-quality product will have the smallest relative increase in quality-adjusted price when the quota is binding.

Transshipment to Avoid Quota

In order to avoid quota restrictions, some MFA exporters used a strategy of transshipment, which means exporting to a third country that is less restricted by quota, and then re-exporting from that country to the final destination for import markets. Such pattern changes can be seen in the experience of the African Growth and Opportunity Act (AGOA) countries, which is analyzed in L. Rotunno (2013).

Quota-hopping Foreign Investment

Another strategy to avoid quota restrictions is quotahopping foreign investment, which describes investing in a third country that is less restricted by the quota, where production of the final product takes place and then reexporting to the destination market. O. G. Dayaratna-Banda and John Whalley (2007) argue that in the post-MFA regime, until 2013, there were "China containment agreements," which were trade restrictions primarily targeted at China. The quota restriction on China's textile and clothing exports, which impeded the growth of Chinese exports, benefited other developing countries such as Vietnam, and encouraged quota-hopping investment by China.

Internal Quota-Allocation Schemes

The last effect of quotas is induced internal quota-allocation schemes in the exporting country, which include auction of export licenses, government assignment of quotas and other rent-seeking features. I. Trela and J. Whalley (1995) suggest that schemes used within developing countries to allocate textile export quotas among domestic producers typically have more severe negative effects on developing countries' economic performance than the MFA export quotas themselves. Quotas were typically allocated to established producers rather than to new and more efficient ones. These quota-allocation schemes amplify the welfare loss caused by the quota. A later paper, by A. K. Khandelwal, P. K. Schott and S.-J. Wei (2013), draws similar results by examining Chinese textile and clothing exports before and after the elimination of externally imposed export quotas.

ASSESSING THE EFFECTS OF THE MFA FROM US AND WORLD TRADE DATA

This paper uses world trade data and US trade data to assess the effects of the MFA. Some effects can be found in world trade data (for example, the concentration patterns change in exporters), but some other effects cannot easily be seen at such an aggregate level. For example, to analyze the product quality change, price data is needed, which is not available in the UN Comtrade database. Therefore, country-level trade data must be used. Although EU and Canadian statistics also provide some trade data in the textiles and clothing sectors, they are either not detailed enough or the time period covered is too limited to be used here. The only detailed country-level trade data available is from the US Office of Textiles and Apparel (OTEXA); it is used wherever the world data is insufficient for analysis.

Overall Trends

Since 2001, the world trade volume of textiles and clothing has increased steadily. As shown in Figure 1, in 2001 the world import value of textiles was \$144.8 billion, while in 2013 this had increased to \$242.1 billion, with an average increase rate of 4.4 percent. The trade of clothing is larger and the increase occurred more quickly than in the textiles trade. In 2001, the trade volume of clothing was \$215.9 billion, and in 2013 this had nearly doubled to \$404.8 billion, with an average increase rate of 5.4 percent. During the same period, the total world import value of goods and services increased from \$9.82 trillion to \$17.6 trillion (constant 2005 US dollars), with an average increase rate of 4.9 percent.

There were two times when trade decreased during this period. The first was in 2009, when the world economy

and trade fell sharply during the global financial crisis. The world import of textiles decreased 12.2 percent and imports of clothing decreased 19 percent from 2008. The second time was in 2012, with the economic contraction and euro crisis in the European Union. The decrease then was 5.6 percent in textiles and 7.7 percent in clothing. The two periods of textiles and clothing trade show similarity in their trends, because they are in the same industry. There was, however, no significant trend change after the expiration of the MFA, as shown in Figure 1.

Figure 2 shows that the United States, the largest importer of textiles and clothing in the world, imports more clothing than textiles, with the former industry about four to five times larger than the latter. Clothing imports increased more quickly than textile imports in the period 2001–2013; the rate of clothing imports increase was five percent, while the rate of textiles imports increase was 2.5 percent. The variation in the rate of increase was larger in the clothing sector than in textiles. In 2009, when the global financial crisis moved the US economy into recession, imports of clothing dropped to \$72 billion from \$82 billion the

Figure 1: World Import Value of Textiles and Clothing



Data sources: UN Comtrade Database and World Bank's World Development Indicators Database.



Figure 2: US Imports of Textiles and Clothing

Data source: UN Comtrade Database.

previous year. After one year, clothing imports recovered to \$81 billion, and in 2011 increased to \$88 billion. Imports of textiles were relatively stable, increasing from \$19 billion to \$27 billion after 2004. The removal of the MFA did not show any significant effect on US imports.

Higher Prices and Quality Upgrading for Protected Products

Extrapolating from trade theory, the average price of US imports should decrease after the removal of the MFA/ATC quota system. Are such trends found in the data? Figure 3 shows that the average price of US imports kept dropping after 2001, and the import price from China fell sharply in 2002. In contrast, the import price from Vietnam rose rapidly during the same period. Facing competition from China, other exporters moved up the price ladder. But after 2005, the import price from the world as well as from China actually both increased, until the global financial crisis in 2008. The data from the North American Free Trade Agreement (NAFTA) countries is somewhat in accordance with theoretical expectations. When NAFTA countries no longer had the protection of the MFA, they had to export

Figure 3: US Import Prices for Textile and Apparel Products



Data source: http://otexa.trade.gov/Msrcat.htm.





Data source: http://otexa.trade.gov/Msrcat.htm.

higher-quality items to compete with other countries. No clear effects are seen after the 2005 regime change.

The pattern of change becomes clearer when the import quantity is considered. As Figure 4 shows, the quantity of US imports from China increased between 2001 and 2004, which is an outcome of a higher quota cap. After 2005, the rate of increase is higher, except during the 2008 global crisis. Vietnam did not join the WTO system in this period, therefore its export quantity did not increase much. Facing competition from China, Vietnam had to move into a higher echelon of product quality, and its export price increased significantly. After 2005, the import quantity from NAFTA countries dropped quickly; this may have been an outcome of the expiration of the MFA.

Transshipment and Quota-hopping Foreign Investment

Another change following the expiration of the MFA quota system was the end of quota-hopping investment and transshipment in the textile and clothing trade. Such changes can be seen clearly in the experience of the AGOA countries.

Begun in 2001, the AGOA enabled some less-developed African countries to export hundreds of apparel products, quota free and duty free, to the United States. Although the AGOA trade preferences had a positive and significant impact on African apparel exports to the United States, they did not survive the demise of the MFA/ATC quota system in 2005, and since then, China has taken over the US market.

As pointed out by Rotunno (2013), a key feature of the AGOA preference was the absence of rules of origin, which are usually imposed under RTAs to avoid transshipment. Therefore, the easiest way for these underdeveloped countries to export to the United States was to import directly from other countries and transship them. In Figure 5, the nine countries that started AGOA apparel exports before the end of 2002 — Botswana, Ethiopia, Kenya, Malawi, Mauritius, Namibia, South Africa, Uganda and Tanzania - are analyzed. The increase in their exports to the United States between 2003 and 2005 was accompanied by an increase in imports from China. After 2005, their exports to the United States decreased until 2009, as did their imports from China, although with a one-year lag. Some of their apparel imports from China were likely transshipped to the United States during the last years of the MFA/ATC quota system, when these AGOA countries were free from quota restrictions to export to the United States.

Such a pattern change is more significant in individual countries — for example, Botswana, Namibia and Uganda. As seen in Figure 6, their exports to the United States jumped significantly when they entered the AGOA, but fell sharply following the expiration of the MFA quota system in 2005. Since a country's industry structure and export ability cannot fluctuate so dramatically, a reasonable explanation for this

Figure 5: Clothing Trade — AGOA Countries



Data source: UN Comtrade Database.

Figure 6: Clothing Exports to the United States



Date source: UN Comtrade Database.

pattern change is that these countries largely transshipped other countries' exports to the United States.

The Textile and Clothing Trade of RTA Members Is Smaller

Before the end of the MFA/ATC quota system in 2005, there were many RTAs that provided bilateral tariff reductions

Figure 7: Mexico's Clothing Exports



Data source: UN Comtrade Database.

or quota-free access in the textile and clothing sector. An example is the NAFTA rules, under which Mexico could access the US market more easily, while Chinese exporters were restricted by quota. When the quota system ended, Mexico had no preferential advantage over China and its clothing exports to the United States dropped quickly.

Figure 7 shows that Mexico's clothing exports to the United States decreased rapidly after 2005, and were only stable after 2009, at a relatively low level. Mexico's clothing exports to Germany also decreased after 2005, when the EU-Mexico Free Trade Agreement no longer provided a preferential option for Mexico.

The geographic patterns of US imports show a similar change. Although a detailed analysis of import changes among the top 20 exporters in the 13 years after the MFA would be illuminating, such a table would be too large to include here. Only the changes among the top five exporters in five selected years are shown in Table 1. China is clearly the largest beneficiary, with its proportion of trade to the United States increasing from 13 percent to about 40 percent in both sectors. Asian exporters moved up — for example, in 2013, India was the second-largest in clothing

Sector	No.	2001		2004		2007		2010		2013	
clothing textiles	1	CHN	13%	CHN	23%	CHN	32%	CHN	37%	CHN	37%
	2	CAN	13%	CAN	10%	IND	10%	IND	11%	IND	13%
	3	MEX	10%	IND	9%	CAN	8%	MEX	7%	MEX	6%
	4	IND	7%	MEX	9%	MEX	8%	PAK	7%	PAK	6%
	5	PAK	7%	PAK	7%	PAK	7%	CAN	7%	CAN	6%
	1	CHN	13%	CHN	18%	CHN	33%	CHN	41%	CHN	39%
	2	MEX	12%	MEX	9%	MEX	6%	VNM	8%	VNM	10%
	3	HKG	7%	HKG	5%	VNM	5%	IDN	6%	IDN	6%
	4	KOR	4%	HND	4%	IDN	5%	BGD	5%	BGD	6%
	5	IDN	4%	VNM	4%	IND	4%	MEX	5%	MEX	4%

Table 1: Top-Five Exporters to the United States and Shares in Selected Years

Data source: UN Comtrade Database.

exports. Canada and Mexico, which are beneficiaries from the NAFTA regional trade agreement, moved down the ladder.

In order to give a clearer picture of the geographic patterns, the export values of American exporters and Asian exporters, respectively, have been added to compute the geographic index³ of these two areas. Only the top 10 exporters are considered, with results reported in Figure 8. In both the textiles and clothing sectors, the share of American exporters decreased, while the share of Asian exporters rose rapidly. This trend in clothing imports is clearer. The increase in the Asian exporters' share is more relevant to the quota expiration in 2005.

Concentration by Country of World Imports

The concentration pattern of world textiles and clothing trade is analyzed next. In this and the following section, world data is used, instead of the US trade data, since the United States itself is one of the most important traders in the world and an analysis omitting the United States would be meaningless.

The top 10 importers of textiles have changed significantly since 2001. As shown in Figure 9, comparing 2013 and 2001, while the United States and China remain the two largest importers in the world, Vietnam jumps to the fourth-largest importer, Turkey enters as tenth, while France and Mexico fall out of the top 10.

The top 10 importers in the clothing trade have changed relatively little, as shown in Figure 10. The top seven — France, Germany, Hong Kong, Italy, Japan, the United Kingdom and the United States — do not change, with only Hong Kong falling from fourth in 2001 to sixth in 2013. From the eighth to tenth, Belgium is replaced by Canada, Spain moves forward to eighth, with the Netherlands remaining at ninth. The volume of the top 10 importers accounts for about 70 percent of the world total.

Importantly, the import concentration of the largest top 10 and top five importers continues to decrease. As shown in Figure 11, from 2001 to 2013, the top 10 concentration index⁴ of textiles imports (textiles10) dropped from 0.56 to 0.50, and the top 10 concentration index of clothing import (clothing10) dropped more, from 0.79 to 0.68. The falls of the top five concentration indices are larger. From 2001 to 2013, the top five concentration index for textile imports (textiles5) dropped from 0.38 to 0.34, and the top

Figure 8: Geographic Patterns of US Imports (as a percentage of total)



Data source: UN Comtrade Database.

Figure 9: Top 10 Importers of Textiles in 2001 and 2013 (percentage share of top 10 total)



Data source: UN Comtrade Database.



Figure 10: Top 10 Importers of Clothing in 2001 and 2013 (percentage share of top 10 total)

³ The geographic index is defined as the share of the value of an area's exporters in the United States' total imports.

⁴ The top 10 concentration index is computed as the share of top 10 importers as a proportion of world imports in a particular year, while the top five index is the top five importers as a share of world imports.

Data source: UN Comtrade Database.





Data source: UN Comtrade Database.

Figure 12: Top 10 Exporters of Textiles in 2001 and 2013 (percentage share of top 10 total)



Data source: UN Comtrade Database.

Figure 13: Top 10 Exporters of Clothing in 2001 and 2013 (percentage share of top 10 total)



Data source: UN Comtrade Database.

five concentration index for clothing import (clothing5) dropped more, from 0.64 to 0.52.

The fall in world import concentration means that the import pattern of world textiles and clothing trade had become more diversified by the end of the global quota regime, which was the result of the improvement of equity in world GDP per capita. Most textile and clothing products belong to a product category whose share in consumers' total spending tends to decrease when their income increases. Therefore, the increased speed of textile and clothing imports of developing countries will be higher in textile and clothing imports than in developed countries. Another explanation for this pattern change is the global value chain. This is clear in the curve of textile imports, where Vietnam and Turkey entered the top 10 importers as the fourth and tenth largest. Considering their relatively small domestic markets, it can be assumed that much of their imports are intermediate products that are re-exported later.

Concentration by Country of World Exports

The top 10 exporters in textiles and clothing have changed more dramatically since 2001 than the top 10 importers, as shown in figures 12 and 13. In both sectors, China remains the largest exporter in the world, and its share increased to nearly half the top 10 exporters' total value. As a share of world exports, China was 11.1 percent and 18.4 percent in textiles and clothing respectively in 2001, and this has increased to 35.9 percent and 40.3 percent respectively in 2013. Despite China's containment agreements before 2013, China has acquired an advantage in the world exports of textiles and clothing, while the advantage in clothing exports is more obvious.

As a comparison, Hong Kong has fallen behind in this period. Hong Kong was the second-largest exporter in both sectors in 2001, but in 2013 it ranked eighth among textile exporters and third among clothing exporters. Its share of world textiles exports decreased from 7.8 percent in 2001 to 3.6 percent in 2013, while its share of world clothing exports decreased from 12 percent to 4.9 percent in the same period. A sound explanation for such pattern changes is that after the expiration of the quota, there was no need for Chinese exporters to transship their products to Hong Kong in order to export to the final destinations of the United States, the European Union and Canada.

In contrast to the import pattern, the export concentration of top exporters keeps increasing. As shown in Figure 14, from 2001 to 2013, the top 10 concentration index⁵ of

⁵ The top 10 concentration index is computed as the share of top 10 exporters as a proportion of world exports in a particular year, while the top five index is the top five exporters as a share of world exports.

textiles exports (textiles10) increased from 0.65 to 0.73, and the top 10 concentration index of clothing imports (clothing10) increased more, from 0.61 to 0.73. The increase in the top five concentration index is more obvious. From 2001 to 2013, the top five concentration index of textiles exporters (textiles5) increased from 0.40 to 0.55, and the top five concentration index of clothing exporters (clothing5) increased more, from 0.46 to 0.59. This means that the export pattern of the world textiles and clothing trade has been concentrated in the few largest exporters.

Such export pattern changes may be the result of the expiration of the quota system. Under the quota system, some potential exporters, such as China, could not obtain enough quota for their products, and this would have produced three outcomes. The first was that the export volume of China would have been lower than if there had been no quota limitation, providing market space for other competitive exporters. The second was transexport through a third economy, for example, Hong Kong. The third outcome was the emergence of quota-hopping overseas investments by Chinese companies. With the expiration of the quota system, all three outcomes have changed. China no longer needs trans-export or quotahopping investment through a third country, and it can export as much as the importer's domestic market will accept. As shown in Figure 15, China's share of world exports increased steadily in both sectors, but there was still no significant trend change in 2005.

CONCLUSION

In *An Inquiry into the Nature and Causes of the Wealth of Nations,* Adam Smith provided a famous example in the production of the tools in textiles and clothing sectors: the pin maker. Smith suggested at that time that the division of labour is limited by the extent of the market. Two hundred years later, the obstacles of a global textiles and clothing market were not in the technology, but in trade policies. The notorious quota system in the MFA/ATC twisted the global trade patterns in the textile and clothing sectors, and led to losses in the well-being of the world market as a whole.

This paper addressed the effect of the MFA/ATC after its removal, using world trade data and country data of the United States. The trade data analyzed were mixed. Some bilateral data — for example, the AGOA countries' exports to the United States — show dramatic trend changes before and after the expiration of the MFA that are consistent with theoretical predictions of higher trade volumes, lower product prices, the effects of RTAs are smaller, fewer occasions of transshipment and quota-hopping investment and higher concentrations of exporters. But the aggregate data usually do not tell us much about the effects of the MFA, and this data stands as something of a paradox.

Figure 14: Export Concentration of Top 10 and Top Five Exporters



Data source: UN Comtrade Database.



Figure 15: The Share of China's Exports to the World

Data source: UN Comtrade Database.

There could be three explanations for this paradox. First is the expectation of the policy makers and traders. From 1994, it was public knowledge that the MFA/ATC in the GATT regime would be extended another 10 years. Policy makers and traders therefore did not wait until 2005 to respond to this. The second is that the restriction on China, the largest exporter of textiles and clothing products in the world, continued for another three years after 2005. This may weaken the effect of the expiration of the MFA in 2005. The third is data availability. Since there are many factors that have an impact on the textiles and clothing trade, it is difficult to identify the effect of a single factor (the MFA) from others in the aggregate data. This is why the overall trends show no significant change before and after 2005, while some bilateral trends do show changes. A more accurate evaluation must be left to future studies.

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WORKS CITED

- Dayaratna-Banda, O. G. and John Whalley. 2007. "After the Multi-fiber Arrangement, the China Containment Agreements." *Asia-Pacific Trade and Investment Review* 3 (1): 28–54.
- Evans, C. L. and J. Harrigan. 2005. "How the MFA Affects Asian Apparel Exports." In *NBER*, *International Trade in East Asia*, NBER-East Asia Seminar on Economics, Volume 14. Chicago, IL: University of Chicago Press.
- Feenstra, R. 2004. "Advanced International Trade: Theory and Evidence." Princeton, NJ: Princeton University Press.
- Khandelwal, A. K., P. K. Schott and S.-J. Wei. 2013. "Trade Liberalization and Embedded Institutional Reform: Evidence from Chinese Exporters." *American Economic Review* 103 (6): 2169–95.
- Nordas H. K. 2004. "The Global Textile and Clothing Industry post the Agreement on Textiles and Clothing." WTO Discussion Papers No. 5.
- Platzer, M. D. 2014. "U.S. Textile Manufacturing and the Trans-Pacific Partnership Negotiations." CRS Report No. 42722.
- Rotunno, L. 2013. "The Rise and Fall of (Chinese) African Apparel Exports." *Journal of Development Economics* 105: 152–63.
- Trela, I. and J. Whalley. 1995. "Internal Quota-Allocation Schemes and the Costs of the MFA." *Review of International Economics* 3 (3): 284–306.

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This paper discusses the strengths and weaknesses of the financial sector voluntary sustainability codes of conduct. It concludes that enforcement of the codes of conduct is a major issue, that they mainly focus on the business case of sustainability, rather than on their impact on sustainable development, and that the codes of conduct are compromises that each financial institution can agree to without changing their business to move in a more sustainable direction.



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