



Trade Adjustments following the Removal of Textile and Clothing Quotas

Christian Buelens

Abstract

With the end of the WTO Agreement on Textiles and Clothing and the removal of all textile and clothing quotas on 1 January 2005, the characteristics of global production patterns and trade flows will change substantially. Countries previously constrained by quotas will gain under the new situation. This paper analyses the restrictiveness of the quotas that were applied by the EU in 2004 and argues that large and instantaneous changes in terms of prices and import shares are a natural and expected adjustment that is proportionate in size to the quotas' level of restriction. It also finds that import increases in volumes are much higher than in value, as quota abolition is accompanied by falling prices. In that light the paper discusses the rationale for safeguard measures and concludes that they are not justified. Indeed, sharp increases in imports are simply a natural adaptation to the new situation – to a large extent the shock of the quota removal will be absorbed by other countries. Nevertheless, the 10-year transition period should have been used more effectively by both producers and governments to prepare for the aftermath of the abolition of the quota system.

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TRADE ADJUSTMENTS FOLLOWING THE REMOVAL OF TEXTILE AND CLOTHING QUOTAS

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1. Introduction

With the removal of all textile and clothing quotas on 1 January 2005, the characteristics of global production patterns and trade flows will change substantially. As a major producer and consumer of both types of goods, the EU is significantly affected by this industrial and commercial reshuffling. The objective of this paper is to analyse the restrictiveness of the quotas that were applied by the EU and to make conjectures about the trade and price adjustments that will follow their abolition. It also assesses the prospects for textile- and clothing-producing countries and consumers. It begins by presenting the modalities of the WTO Agreement on Textiles and Clothing and describing the features of the textile and clothing production chain.

1.1 The Agreement on Textiles and Clothing

The EU's trade in textile and clothing products, like that of other industrialised countries, has long been subject to a regime that circumvented the GATT rules. The first system of quantitative restrictions was implemented in 1962 under the Long-Term Arrangement Regarding International Trade in Cotton Textiles, which gave way in 1974 to the broader Multifibre Arrangement (MFA) lasting until 1994. During that period, textile and clothing trade policy was negotiated bilaterally and trade flows were generally subject to quotas. The MFA's rationale was to give countries the opportunity to temporarily shelter their markets from being disrupted and their local industries from potentially being threatened by more competitive imports. The MFA was clearly in breach of the GATT principle of non-discrimination and the administration of quotas was counter to the GATT's preference for custom tariffs.

The Agreement on Textiles and Clothing (ATC), which was signed as a part of the Uruguay Round of trade negotiations, took effect in 1995. It was put in place to manage the progressive phasing out of all textile and clothing quotas by the end of 2004. In a four-stage process, textile and clothing trade was to be gradually subjected to WTO/GATT rules, by integrating textile and clothing categories directly (i.e. removing the quota and subjecting the category to WTO/GATT rules) and by loosening the remaining quotas (i.e. gradually enlarging them). At any of the four stages, a minimum number of products that represented a certain share of a country's imports covered by the ATC in 1990 had to be exempted from quotas. The minimum shares associated with each stage are listed in Table 1. It was left to the restricting countries to decide which products they wanted to integrate at which stage. The sole requirement was to include products belonging to each of the four following groups: tops and yarns; fabrics; made-up textile products; and clothing. The ATC also stipulated that in parallel to the progressive integration of products, the quota growth rates for the remaining quotas, as agreed in the MFA (generally 6% yearly), had to be accelerated at each stage. These increases are also reported in Table 1. For small suppliers (defined in Art. 2.18 of the ATC), the growth factors were to be advanced by one stage.

The ATC also included provisions for a special safeguard mechanism to be invoked in the eventuality of ‘serious damage or threat thereof’ to domestic producers during the transition period. The implementation of the ATC was supervised by the Textiles Monitoring Body. A Textile-Specific Safeguard Clause was included in China’s Protocol of Accession to the WTO.

Table 1. The integration stages of the ATC

Stage	Date	Minimum amount to be integrated*	Annual increase of the existing quota growth rate
1	1.1.1995	16	16
2	1.1.1998	17	25
3	1.1.2002	18	27
4	1.1.2005	49	Full integration

* As a percentage of 1990 imports covered by the ATC.

In practice, quota-imposing countries simply increased the number of import categories covered by the ATC relative to the number previously covered by the MFA. These *pseudo-quotas* were then removed in the ATC’s first stages – this of course had no real effects but allowed the countries to fully comply with the ATC (Nordas, 2004). Hence, “what could have been a gradual adjustment process [was turned] into a major shock at the beginning of 2005” (Mlachila & Yang, 2004, p. 4).

1.2 The textile and clothing production chain

Despite being widely perceived as a single industry, the textile and clothing industries are two distinct, yet central elements in a long supply chain, which incorporates product design, the production of raw materials (natural or man-made), their transformation, and finally, the distribution and marketing of the final product.¹ The fabric (i.e. textile), is produced in a capital-intensive process, which nowadays relies heavily on advanced technology with automated processes. Consequently, there are important economies of scale in the textile industry as production is often carried out in bulk operations, performing spinning, weaving and finishing in a single process. Textiles increasingly serve as inputs for the production of non-clothing items, such as floor coverings, home textiles and industrial textiles. Their traditional use, however, is to manufacture clothing. This stage is generally very labour-intensive and requires few skills. It is barely responsive to technological progress and “sewing techniques... similar to those that were used a century ago” (Audet, 2004, p. 10), combined with low initial investment requirements and low entry and exit costs, make this industry footloose.² Parallel to this, the demand for non-clothing textiles and in particular technical textiles is growing fast and now accounts for a larger share than textiles produced for clothing fabrication (OECD, 2004). Technical textiles require more R&D and skilled labour input.

It is important to keep in mind that the textile and clothing industries are part of a segmented production process that uses different capital-labour mixes in its different stages. A direct implication of this division is that different national factor endowments will be reflected in a country’s degree of specialisation in a specific element of the production chain.

¹ More detailed accounts of the textile and clothing supply chain may be found in OECD (2004), Nordas (2004) or relevant parts of the European Commission’s website (retrievable from http://europa.eu.int/comm/enterprise/textile/index_en.htm).

² Yet a small segment of the clothing industry that is predominantly located in high-income countries is less footloose. It contrasts with our description by relying on innovation, high-skilled workers and high-quality inputs in order to produce quality and fashionable items.

1.3 Outline

The next section offers a snapshot of the textile and clothing industry in the EU and describes the major trade-related trends. Section 3 explains the theoretical effects of a quota and analyses the restrictiveness of the textile and clothing quotas that were imposed by the EU until 2004. It identifies both the products and the countries affected by their incidence and it examines the outcomes of a previous quota removal as a benchmark. Finally, it discusses the justification of safeguard measures. Section 4 analyses the impact the quota removal will have on trade and production patterns as well as on consumers. A number of scale factors that could magnify or mitigate the effects of the quota removal are presented in section 5. Section 6 concludes.

2. A snapshot of the textile and clothing production and trade in the EU

2.1 Production and employment

The textile and clothing industry in Europe has a long tradition and is well-established in the EU's industrial landscape and heritage. It typically appears in regional clusters in which it is often the predominant economic activity.³ In 2002 it comprised over 100,000 enterprises that jointly employed more than 2 million persons, 55% of whom worked in the textile sector.⁴ It is therefore not surprising that it is dominated by small- and medium-sized enterprises, which employed an average of 19 persons each in 2003. Yet the sector has constantly been downsized in the past decades, in terms of employment and production units, as a result of efficiency and productivity gains, as well as relocations of some production segments to lower-cost countries. This reinforced the need for the remainder of the industry to modernise and adjust by shifting production towards high-quality and fashionable products, making use of innovation along with information and communication technology (Stengg, 2001).

Table 2 displays the key figures about the textile and clothing industries in the EU for 1995 and 2002. Over this time span the turnover of the textile industry stayed constant, while that of the clothing industry expanded by 5%. At the same time employment and the number of companies in both industries fell by 20 to 25%. Both observations taken together, however, suggest that there were significant productivity gains in the two sectors. Despite of these gains, investment has receded, pointing towards a further downward adjustment of both sectors in the future.

Table 2. Characteristics of the EU textile and clothing industry in 1995 and 2002

	Turnover (€ billion)			Investment (€ billion)			Employment (in thousands)			Enterprises		
	T	C	T&C	T	C	T&C	T	C	T&C	T	C	T&C
1995	119	65	184	6.1	1.2	7.4	1,356	1,193	2,550	73,062	59,100	132,162
2002	119	68	187	4.7	1.0	5.7	1,105	902	2,008	57,462	45,438	102,900
% change	0.0	4.9	1.7	-24.1	-19.0	-23.2	-18.5	-24.4	-21.3	-21.4	-23.1	-22.1

Notes: T=Textiles (incl. knitting), C=Clothing.

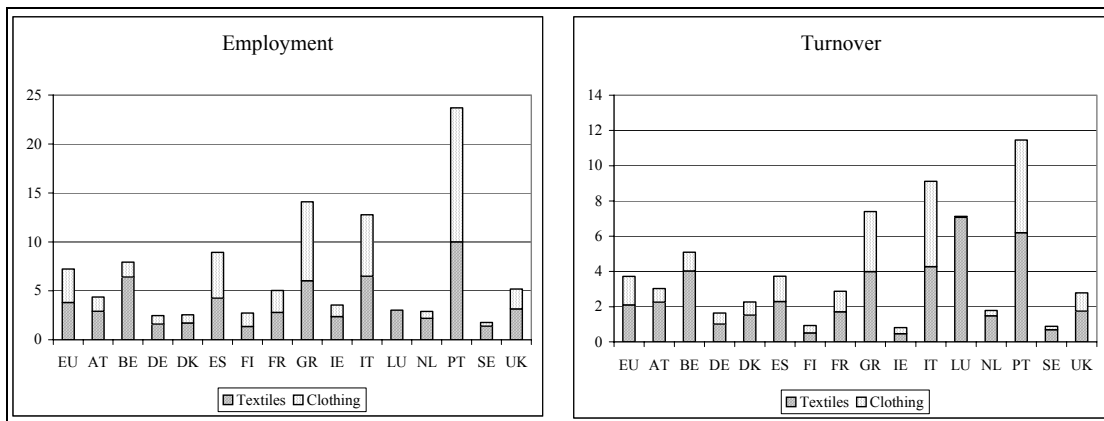
Source: Euratex (2004).

³ Examples of regional clusters include the regions of Prato (Italy), Kortrijk (Belgium) and Picardie (France).

⁴ Unless otherwise mentioned, EU refers to the 15-member state constellation (also shown as EU-15).

The corresponding figures for the individual member states of the enlarged EU for the year 2002 are listed in Tables A.1 and A.2 of the Appendix.⁵ Among both old and new EU members, Italy is the largest textile and clothing producer with a turnover of €78 billion and more than 600,000 persons employed. Figure 1 shows the weight of the textile and clothing industries in the manufacturing sectors of individual countries. At first sight, a clear intra-European north-south divide emerges. Indeed, in Spain, Italy, Greece and Portugal, the share of textile and clothing in overall manufacturing employment is the highest, ranging from 9 to 24%. On the other hand it is much lower in Germany, Denmark and Sweden, where it only accounts for about 2.5%. The Portuguese case illustrates the central role of both industries in some countries, in terms of employment as well as production. The data also reveal that it has the lowest productivity, measured as turnover per employee. The charts show that the smaller the relative size of the textile and clothing industries, the stronger is the bias towards the capital-intensive textile industry. In general this bias is stronger in terms of turnover than in terms of employment, suggesting that there is a higher productivity and value added per employee in textile production. This is not the case for countries such as Denmark, Sweden or the UK, where the proportionate size of both industries is the same in terms of employment and turnover.

Figure 1. Share of textile and clothing as a percentage of manufacturing (2002)



Source: European Commission (2003).

An international comparison reveals that the textile and clothing industries play a smaller part in terms of employment in the US. Nevertheless, the US has witnessed a much stronger decline in the sector than the EU, as employment figures dropped by nearly half between 1995 and 2002, chiefly in the clothing industry, as can be seen in Table 3. Although absolute employment figures have also dropped in India and China – mainly owing to restructuring and technological progress in the textiles industry – they still dwarf those of other countries in size. We also notice that Morocco and Mexico have recorded increasing employment in both industries over the time span analysed. A somewhat surprising yet striking observation is that according to these figures the textile-clothing employment-ratio in 2002 was higher for China than for the EU.

⁵ Tables 2 and A.1 make use of data from different sources (Euratex and the European Commission), which use slightly different classifications and hence do not coincide perfectly.

Table 3. Textile and clothing employment in other countries (in thousands)

	1995	1998	2000	2002*
Textile				
United States	688	642	595	489
China	6,730	5,780	4,829	4,775
India	1,579	1,330	1,289	–
Morocco	70	71	70	–
Mexico	187	240	269	317
<i>EU-15</i>	<i>1,356</i>	<i>1,256</i>	<i>1,190</i>	<i>1,105</i>
Clothing				
United States	814	639	497	358
China	1,750	2,117	2,156	2,027
India	264	279	331	–
Morocco	102	122	135	–
Mexico	476	740	760	681
<i>EU-15</i>	<i>1,193</i>	<i>1,086</i>	<i>1,001</i>	<i>902</i>

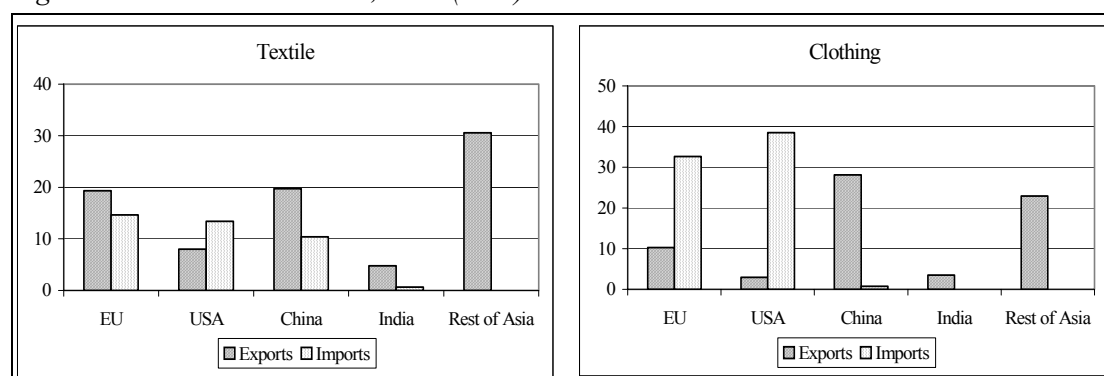
* Data for China and Mexico refer to 2001.

Sources: Nordas (2004), based on ILO and UNIDO data; Euratex (2004).

2.2 Global and European trade patterns

Global trade in textile and clothing amounted to €120 billion and €164 billion respectively in 2003, after growing at a rate of 11% relative to the previous year. Both sectors combined amounted to a share of 7.3% in world manufacturing exports.⁶ Figure 2 shows the share of the EU and the US, as well as Asian countries in world textile and clothing trade. The chart illustrating textile trade shows that the EU is the largest single supplier of textiles together with China, both accounting for around 20% of world exports. Unlike the US, both are net suppliers. This is in stark contrast to the clothing trade, where the EU and the US alone import around 70% of world exports, which results in a huge trade deficit. China and India not only have a big trade surplus, but hardly import any clothing at all. Both charts also underline the key role of the remaining Asian countries.

Figure 2. Share in world trade, 2003 (in %)



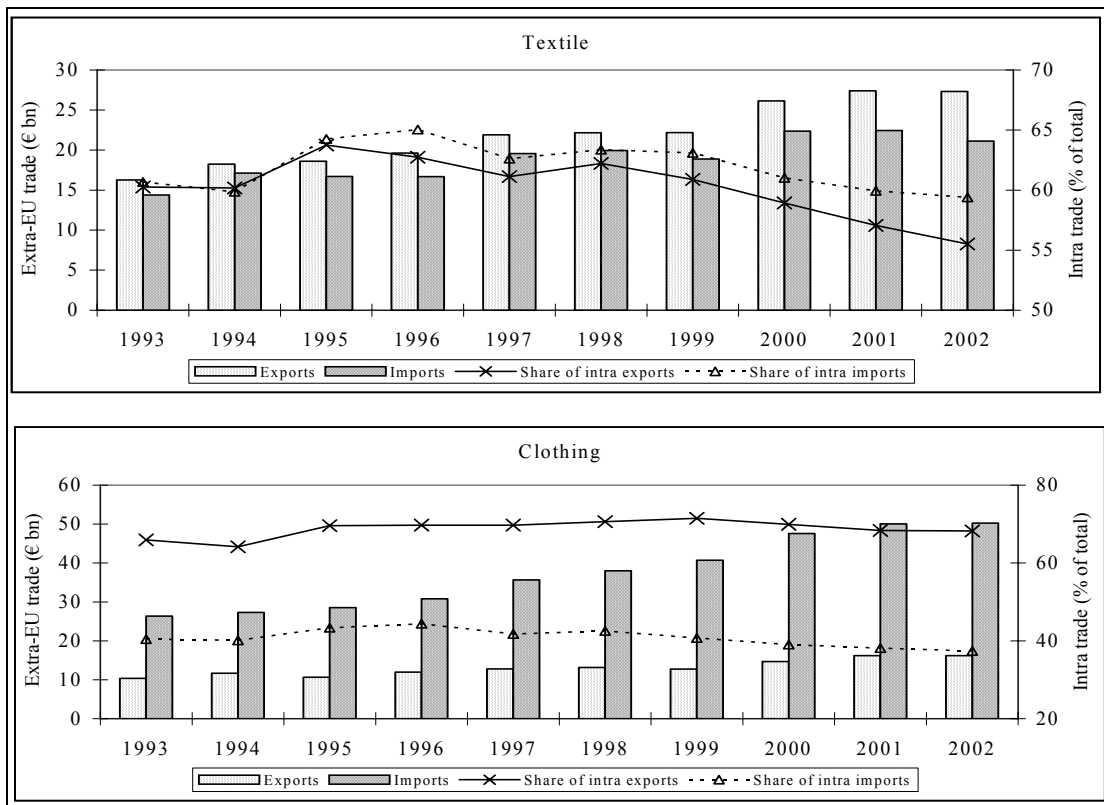
Notes: Intra-EU trade is excluded. Data on imports from the rest of Asia are not available.

Source: Own calculations based on WTO (2004).

⁶ This is based on WTO figures. The trade flows exclude intra-EU trade, while the growth rate and the share include intra-EU trade.

In 2002, the EU as a whole imported textile and clothing products worth €71 billion for an exported value of €43 billion, causing a trade deficit of €28 billion.⁷ Figure 3 illustrates the development of extra-EU textile and clothing trade between 1993 and 2002 – the bars and the left-hand axis display extra-EU trade in € billion, while the lines and the right-hand axis represent the share of intra-EU trade in total (intra + extra) trade. Over the analysed period, the EU yielded a growing trade surplus in textiles as a result of rising exports. Since 1996, the relative importance of intra-EU textile trade in overall trade has diminished, but it has still exceeded 50%. This suggests that the EU textile industry is increasingly oriented towards other markets, but also that the local textile-processing industry is increasingly relying on foreign inputs. A different picture emerges from clothing trade patterns. Here the EU has accumulated an ever-growing trade deficit, owing to a rapid increase in imports. The distribution of EU exports is strongly biased towards intra-EU exports, which have remained fairly stable at around 70%. More than 60% of imported clothing products come from outside the EU. This share has slowly but constantly diminished since 1996.

Figure 3. Evolution of EU textile and clothing trade (1993-2002)



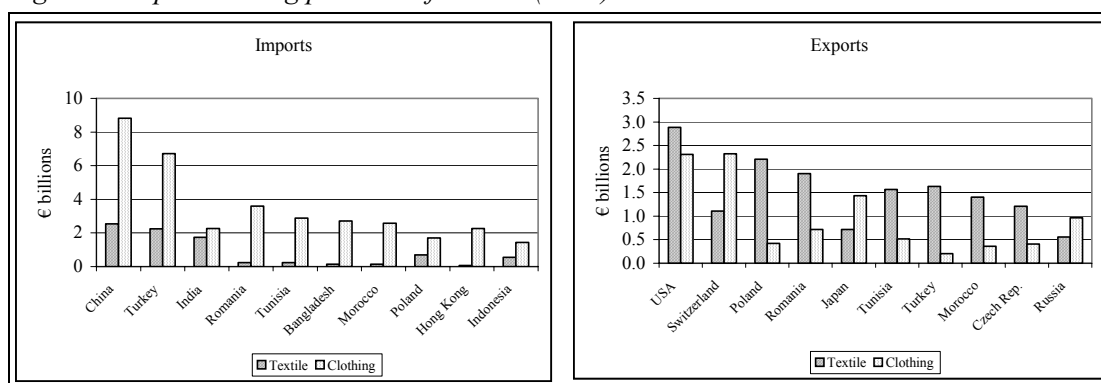
Source: Comext (Eurostat).

Figure 4 displays the 10 largest textile and clothing trading partners of the EU in 2002. The top 10 source countries together accounted for over 60% of extra-EU imports. China (at €11 billion) and Turkey (at €9 billion) were by far the largest suppliers. Half of these 10 countries are located in Asia, while the other half is in the EU's vicinity (Turkey, Morocco and Romania), and even includes one of its new member states in the case of Poland. Imports from all 10

⁷ Textile products are covered by chapters 50-60 and 63 of the EU's *Combined Nomenclature*, while clothing products are covered by chapters 61 and 62.

countries were mainly composed of clothing. On the export side, the top 10 destination countries together accounted for nearly 60% of extra-EU exports and also included two broad categories of countries: high-income countries (the US, Switzerland and Japan) and neighbouring countries (some of which are new member states). We also observe that the export pattern is different for them. Indeed for the former group, clothing plays a prominent role, while for the latter exports are based on textiles. In 2002, the EU sourced 14% of its textile imports and 10% of its clothing imports in the eight new Eastern European member states, along with Bulgaria and Romania. The equivalent figures for exports were 23% and 12% respectively. This obvious regional dimension not only points to a trade dynamic based on outward finishing activities, but also to a high degree of integration between both regions. After enlargement the domestic focus of the EU's textile and clothing trade will thus be of increased importance.

Figure 4. Top 10 trading partners of the EU (2002)



Source: Comext (Eurostat).

3. Textile and clothing quotas and their effects

3.1 How do import quotas work?

To better understand what is entailed by quota abolition, it is necessary to first examine how a quota works. An import quota is the most traditional form of a non-tariff barrier to trade. It fixes a quantitative limit on a specific good, beyond which further imports are prohibited. Usually enforced over a specific period of time, it can be imposed either bilaterally (on a country-specific basis) or globally.⁸ Under a binding quota, the price of a good on the domestic market is increased and the exchanged quantity is reduced relative to a state of non-intervention (free trade). In terms of domestic welfare effects, this results in a partial transfer of the consumer surplus to the local producers and to import-licence holders, who collect 'quota rents',⁹ as well as in a partial deadweight loss of the consumer surplus.

Two trade-related implications resulting directly from these ceilings on imports are trade restriction and trade diversion. Indeed, by rationing current imports from a country that enjoys a comparative advantage in the production of a good, inbound trade flows are either curtailed or

⁸ A quota may be a type of trade barrier preferred by policy-makers and local producers as it provides them with a sense of certainty about the maximum imported quantity, which a tariff cannot guarantee. Furthermore, it is more visible.

⁹ The artificial scarcity allows exporters or importers to buy goods at the lower price of the constrained country and to sell them at a higher domestic market price, thus collecting the difference (quota rent).

diverted to less-efficient countries. Although a quota thus reduces production in the former country, the less-efficient countries benefit from guaranteed market access, which induces them to engage in or to step up their production. Quotas applied against one country can thus have a direct influence on the global production pattern of a product. From a dynamic perspective, quotas provide incentives to channel investments to non-quota-restricted locations. This results in a double efficiency loss, as on the one hand comparative advantages are foregone in the restrained country and on the other hand incentives are given to other countries to engage in activities in which they do not have a long-term comparative advantage. The likely circumvention of quotas through trade deflection via non-restricted countries furthermore requires enhanced surveillance costs.

3.2 Analysis of the textile and clothing quotas applied by the EU in 2004

This section analyses the nature of the textile and clothing quotas applied by the EU prior to the final stage of liberalisation. We first identify the WTO countries that were subject to quotas in 2004 and analyse the quotas' constraining nature by classifying them as binding or non-binding.¹⁰ In 2004, 14 WTO member countries faced a total of 205 quotas (including subcategories), as is shown in Table 4.¹¹ With the exception of Argentina and Peru, all were Asian countries. China, South Korea (both having 28 quotas) and Taiwan (with 25 quotas) faced the highest number of quotas. These figures do not capture the actual impact of the quotas, as not all of them had a restrictive effect. Indeed, only 61 out of the 205 quotas were binding, 19 of them strongly. The countries most affected by the quotas were China, India and Pakistan, for which more than 60% of the respective quotas were binding. In contrast to this, Argentina, Peru and Singapore did not face binding quotas at all. The table moreover displays the share of quota-constrained imports in EU imports from each country. It additionally makes the distinction between the share of quota-constrained imports of textile and clothing products. This distinction immediately reveals that by and large the quotas were significantly more constraining for clothing than for textile products.¹² On the whole, Pakistan, India and China were the most constrained countries. The overall value of extra-EU imports in the categories integrated in the fourth stage amounted to €42 billion in 2002. The value of restricted imports amounted to €9.6 billion, corresponding to 68% of the value imported (€14 billion) from the 14 countries listed in the table.

¹⁰ We define a quota as binding if its fill rate exceeds 80% of the working level. In our analysis we further distinguish between weakly binding quotas (with a fill rate between 80% and 95%) and strongly binding quotas (with a fill rate above 95%).

¹¹ The system of import licensing by which textile and clothing quotas are administered in the EU is the SIGL (*Système Intégré de Gestion des Licences*) and is maintained by the European Commission. It divides textile and clothing products into different categories on which the bilateral quotas are imposed. A description of the categories is given in Appendix II.

¹² We further note that the number of quotas imposed on a country does not necessarily reflect the country's general level of constraint. For instance, 17% of imports of Chinese textiles and 41% of imports of Chinese clothing fell into categories restricted by quotas. For other countries these shares are much higher, despite a smaller absolute number of quotas, as in the case of Pakistan.

Table 4. The country-specific effect of quotas applied in 2004

Country	Number of quotas *	Number of weakly binding quotas *	Number of strongly binding quotas *	Total number of binding quotas *	Share of imports falling under binding quotas (% of import value)			Imports falling under binding quotas (in € bn)
					Textiles	Clothing	Textiles and Clothing	
Argentina	3	0	0	0	n.a.	n.a.	n.a.	0.0
China	28	12	8	20	16.8	41.1	35.6	4.0
Hong Kong	19	2	1	3	n.a.	25.4	24.6	0.6
India	17	8	1	9	18.1	58.5	40.9	1.6
Indonesia	12	2	1	3	n.a.	42.9	31.0	0.6
Macao	14	4	2	6	n.a.	71.2	71.1	0.4
Malaysia	10	1	0	1	n.a.	18.2	14.3	0.1
Pakistan	14	5	4	9	61.3	56.5	59.5	1.2
Peru	2	0	0	0	n.a.	n.a.	n.a.	0.0
Philippines	9	1	0	1	n.a.	27.4	24.7	0.1
Singapore	8	0	0	0	n.a.	n.a.	n.a.	0.0
South Korea	28	4	1	5	n.a.	65.4	26.4	0.4
Taiwan	25	1	0	1	n.a.	50.3	22.3	0.2
Thailand	16	2	1	3	n.a.	49.7	37.2	0.4
Total	205	42	19	61	–	–	–	9.6

* Number of quotas including subcategories.

Notes: Columns 2-5 use data from 2004, columns 6-9 use data from 2002; n.a. refers to not applicable, i.e. the share of constrained countries is zero.

Sources: Own calculations based on Comext data; SIGL (European Commission, 2005).

A detailed analysis of the categories that were subject to binding quotas is reported in Table 5. The category and its type (textile or clothing) are listed in the first two columns. The relatively high number of quota-affected clothing categories (16 categories compared with 10 textile categories) and the high number of bilateral quotas for some clothing categories – in particular categories 4, 5 and 6 – underlines the higher protection for clothing products. The third column displays the ‘fill rate’ or utilisation of a category’s quota, i.e. the number of import licences used relative to the overall available licences. Columns 4 and 5 list the share of those licences held by (strongly) restricted countries, while the sixth column gives the number of bilateral binding quotas per category. The next two columns display the share of the restricted countries in the extra EU-15 imports of the respective categories. As shown, 23% of the overall imported value of products in the listed categories was actually restricted. Combining the information on the quotas’ restrictiveness (i.e. binding or not) with the import share of constrained countries conveys a signal on the consequences of the removal of the quotas on other producer countries. The intuition here is simple: if (strongly) binding quotas are lifted, the constrained countries are likely to expand their production and adjust it to a ‘natural’ trade level. If their import share is low, we would expect the effect on EU producers to be somewhat mitigated as expanded production of the restricted countries would partly be at the expense of other supplier countries. If the import share of restricted countries is high, the brunt of the quota removal will mainly be felt by EU producers. The second to last column shows the value of imports falling under binding quotas for each category.

Table 5. Product-specific effects of quotas applied in 2004

Category Textiles (T) or Clothing (C)	Fill rate	Import licences held by (strongly) restricted countries (as a % of total licences)		Number of bilateral quotas	Import share of (strongly) restricted countries (% of extra EU import value) in category		Value of restricted imports (€ bn) in category	<i>Memo item: Import share of China (% of extra EU imports) in category</i>	
1	T	57.1	75.6	(22.5)	2	23.5	(5.1)	0.23	1.4 [†]
2	T	59.5	48.1	(31.2)	2	16.6	(7.5)	0.32	9.2
2A	T	44.6	8.1	(0.0)	1	6.0	n.a.	0.06	6.0
3	T	59.7	61.0	(0.0)	2	30.3	n.a.	0.21	3.4
4	C	81.7	79.3	(22.7)	7	21.7	(8.4)	1.16	(8.4)
5	C	91.4	97.0	(64.8)	11	35.7	(23.1)	2.35	(5.1)
6	C	79.8	61.6	(15.0)	7	12.8	(3.2)	1.11	(3.2)
6A	C	87.9	100.0	(0.0)	1	–	–	–	–
7	C	59.3	54.0	(10.1)	2	16.3	(4.2)	0.41	(4.2)
8	C	53.5	51.4	(34.1)	2	16.4	(11.0)	0.39	5.3
9	T	82.3	60.9	(42.4)	2	14.0	(9.8)	0.00	4.2
12	C	57.1	65.6	(0.0)	1	10.5	n.a.	0.10	2.9 [†]
13	C	86.0	85.6	(84.3)	2	30.0	(29.9)	0.23	(29.9)
15	C	48.1	78.0	(75.7)	2	8.9	(8.5)	0.12	(8.5)
16	C	59.3	98.5	(0.0)	1	16.1	n.a.	0.14	16.1
20	T	77.6	70.5	(70.5)	1	39.5	(31.1)	0.42	8.4
20/39	T	91.4	100.0	(0.0)	1	–	–	–	–
23	T	62.6	57.9	(0.0)	1	39.0	n.a.	0.06	0.0 [†]
26	C	42.4	61.9	(0.0)	2	28.4	n.a.	0.24	15.0
28	C	53.1	73.8	(0.0)	1	19.7	n.a.	0.20	19.7
29	C	57.9	69.4	(69.4)	1	42.8	n.a.	0.19	42.8
31	C	77.5	92.6	(73.4)	3	29.4	(22.4)	0.39	(20.8)
39	T	82.1	99.2	(0.0)	2	48.6	n.a.	0.19	19.3
78	C	53.6	77.2	(0.0)	1	44.3	n.a.	0.81	44.3
83	C	83.7	83.3	(0.0)	2	39.1	n.a.	0.25	38.2
163	T	80.4	100.0	(0.0)	1	59.8	n.a.	0.06	59.8
Total	–	–	–	–	61	23.0	9.0	9.59	9.9

Notes: Columns 3-6 use data from 2004, columns 7-10 use data from 2002; () = strongly restricted; † = not restricted.

Sources: Own calculations based on Comext; SIGL (European Commission, 2005).

3.3 Drawing inferences from the past: Analysis of the third stage of the ATC

We now put our theoretical and qualitative analysis of the effects of ATC quota-removal into a historical perspective.¹³ This paragraph examines how unit values and imports changed in the textile and clothing categories freed from quotas in the third phase of the integration of the ATC. On 1 January 2002, 61 textile and clothing categories¹⁴ were integrated in the GATT/WTO rules. At that point, quotas had been effectively applied in only 22 categories. In

¹³ This sub-section builds on CEPS & WIIW (2005).

¹⁴ See European Council Regulation (EC) No. 2474/2000 of 9.11.2000, establishing the list of textiles to be incorporated into the GATT, OJL 286, 11.11.2000.

half of them the quotas exclusively affected non-WTO members (North Korea in particular), who did not benefit from the abolition of quotas. For WTO countries, quotas were thus effectively lifted from only the 11 categories listed in Table 6. Merely six of them were affected by binding quotas. In each case, China was weakly restricted, while Macao was strongly restricted in one category. The last four columns display Chinese import shares and absolute imports (Macao is of negligible size) before and after the quota removal for the constrained categories only. In 2001, extra-EU imports in all 11 categories amounted to €7.3 billion. Extra-EU imports in the six restricted categories represented €4.8 billion, to which China contributed €1.1 billion (24.5%). The table also presents the fill rates of the quotas and the share of licences used by restricted countries prior to the quota abolition. It reveals that five of the six binding quotas affected clothing products. As already hinted at in the introduction, our simple analysis confirms that binding quotas were back-loaded to the final stages. Indeed, the number of binding categories integrated in 2002 was much lower than in 2005 and the quotas involved were less restrictive.

Table 6. Product-specific effects of the quotas applied in 2001

Category Textiles (T) or Clothing (C)	Fill rate	Import licences from (strongly) restricted countries (as a % of total licences)		Weakly (strongly) restricted countries	Share of restricted imports from China (% of extra- EU import value), 2001	Share of imports from China (% of extra- EU import value), 2002	Value of Chinese imports under binding quotas (in € bn), 2001	Value of Chinese imports (in € bn), 2002
10 C	50.3	44.2	26.3	China	26.3	37.0	0.08	0.11
18 C	27.1	38.5	26.5	China	26.5	31.6	0.18	0.22
21 C	54.4	21.6	16.9	China, Macao)	16.6	44.6	0.35	1.06
24 C	55.2	0.0	n.a.	–	n.a.	n.a.	n.a.	n.a.
27 C	38.0	0.0	n.a.	–	n.a.	n.a.	n.a.	n.a.
32 T	37.3	64.2	25.3	China	25.3	47.3	0.04	0.10
33 T	29.3	0.0	n.a.	–	n.a.	n.a.	n.a.	n.a.
36 T	26.1	0.0	n.a.	–	n.a.	n.a.	n.a.	n.a.
37 T	33.4	0.0	n.a.	–	n.a.	n.a.	n.a.	n.a.
68 C	74.7	89.0	40.1	China	40.1	45.4	0.38	0.43
73 C	28.3	46.8	24.4	China	24.4	44.5	0.07	0.12
Total (restricted categories)					24.5	42.5	1.10	2.04

Sources: Own calculations based on Comext; SIGL (European Commission, 2005).

Table 7 reports the percentage point change between 2001 and 2002 in unit values of imports belonging to the 11 categories.¹⁵ Besides distinguishing among five regional groups,¹⁶ the table lists three selected Asian countries – China, as the country most affected by the incidence of quotas, India and Bangladesh for comparison. Apart from one textile category (37), unit values of extra-EU imports dropped on average in all the categories analysed. This is in conformity with our theoretical predictions and in line with the empirical results obtained by Evans &

¹⁵ Unit values are used as a proxy for prices. As the different categories include a range of products (tariff lines), they are only an imperfect measure. They have little informational content on their own and thus should be examined in a cross-country comparison or analysed over time.

¹⁶ The five groups are: the new member states (NMS) and candidate countries (CCs); Mediterranean countries (MED) and the Commonwealth of Independent States (CIS); Asia (including China); industrialised countries; and the rest of the world (ROW).

Harrigan (2004), who find a significant positive effect of binding quotas on prices, reflecting both product-upgrading, but also the capture of quota rents. For the 11 categories analysed in the table, the signs and magnitudes vary according to the origin, although the unit value drops of Asian and in particular Chinese imported goods stand out. The unit values of Chinese products in the categories 10 (gloves, mittens and mitts), 18 (singlets, vests and night-dresses) and 21 (parkas and anoraks) fell by around half; those of categories 32 (woven pile and chenille fabrics), 68 (babies' garments and clothing accessories) and 73 (tracksuits) fell by around 40%. These are also the products previously constrained by binding quotas. As the quota regime limited the imported volume (the number of T-shirts, pullovers, etc.) that the Chinese could export, they were given an incentive to export to the EU those items with the highest value (thus generating the highest profit). Upon the quota removal the product mix in each category is likely to have shifted towards lower-priced (and presumably lower quality) items. It is thus not surprising that unit values tumble after the removal of quotas; in fact, to some extent the EU is now simply importing different goods. It is furthermore observable that the unit values of Chinese imports have also dropped in other non-restricted categories – to a lesser but nonetheless considerable extent.

Table 7. Change in unit values between 2001 and 2002 (in %)

Category	Extra EU	NMS & CCs	MED & CIS	Industrialised countries	ROW	Asia	China	India	Bangladesh
*10	-18.6	-8.0	7.1	6.9	18.1	-20.2	-48.3	4.3	-67.4
*18	-20.8	-9.5	2.0	0.0	-6.7	-32.2	-55.4	-4.5	-20.3
*21	-31.3	17.0	0.7	-10.8	-11.6	-37.0	-55.9	-20.9	-16.1
24	-8.9	-4.8	-5.9	-20.9	33.2	-11.7	-22.4	-7.3	-6.1
27	-11.2	0.5	6.1	1.1	-2.1	-24.5	-24.6	-2.7	-13.2
*32	-18.7	3.6	-3.3	-12.5	1.2	-33.9	-41.8	98.7	–
33	-4.8	-2.0	-7.1	-0.4	-6.9	-6.5	-2.1	-1.8	54.1
36	-6.4	8.9	15.7	9.0	-2.8	-10.2	-9.7	15.5	–
37	89.7	2.6	3.2	-11.3	-9.0	123.7	-10.6	23.0	–
*68	-22.0	6.5	-3.4	-9.3	2.3	-29.6	-40.8	-8.2	-6.2
*73	-24.3	9.7	-2.5	-20.9	-10.0	-30.8	-41.1	3.8	-20.4

* Categories restricted prior to liberalisation.

Source: Own calculations based on Comext data.

Table 8 shows how import shares have changed after the quota removal, both in terms of value and volume. In the 11 categories taken together, there was a slight reshuffling among the different country groups, with Asia gaining 2.3 percentage points at the expense of the other regional groups. China in particular made a leap of 11 percentage points in its import market share. In the case of China, there is, as expected, a negative relationship between changes in unit values and changes in market shares. The strength of this link varies according to the different categories. In some cases (categories 32 and 73), China's market share nearly doubled, while in another case it even more than doubled, now representing 45% of imports (category 21). Market share gains for China were much higher in terms of volume, reflecting the lower price of Chinese products. Still, in category 21, China captured 46 percentage points of the import market in one year in terms of volume, climbing to 61% of the imported volume. Again, the changes show the highest increases for the previously restricted categories.

Table 8. Change in import shares between 2001 and 2002 (in percentage points)

Category	NMS & CC	MED & CIS	Industrialised countries	ROW	Asia	China	India	Bangladesh
Value								
*10	-0.3	-0.1	-2.3	-1.0	3.7	10.7	0.0	0.0
*18	0.0	2.3	0.0	-2.4	0.1	5.1	-0.9	-0.5
*21	-1.1	-1.8	-0.1	-1.0	4.0	27.9	-0.9	-2.2
24	-0.4	0.4	-0.1	-0.2	0.4	2.2	-1.4	0.4
27	-5.1	2.1	-0.3	-0.1	3.4	3.6	0.5	0.2
*32	-5.4	-0.3	-1.0	-5.1	11.9	22.0	-0.3	0.0
33	0.9	-0.5	0.9	-0.1	-1.3	-0.5	-2.8	0.1
36	0.6	-2.6	-2.4	-1.6	6.1	7.3	-0.1	0.0
37	2.5	2.8	1.7	-1.0	-5.9	4.4	-0.2	0.0
*68	-1.0	-0.3	0.0	-1.0	2.3	5.3	0.1	0.0
*73	0.7	-3.3	0.0	-2.6	5.3	20.2	0.3	-1.5
Total	-0.8	-0.1	-0.4	-1.0	2.3	10.8	-0.9	-0.6
Volume								
*10	-0.6	-0.8	-1.7	-2.7	5.8	25.0	-0.8	0.1
*18	-0.6	-6.1	-0.1	-2.4	9.2	17.2	-2.6	-0.7
*21	-4.8	-4.9	-0.1	-1.5	11.3	46.4	-1.0	-3.9
24	-0.8	-0.6	0.0	-0.9	2.3	5.9	-2.2	0.4
27	-7.3	-3.5	-0.1	-0.3	11.3	9.9	0.0	0.3
*32	-12.6	-1.4	-0.5	-7.7	22.2	34.3	-0.7	0.0
33	0.2	0.4	0.4	0.0	-1.1	-0.8	-4.3	0.1
36	-2.2	-5.6	-2.2	-0.6	10.7	12.1	-0.2	0.0
37	10.2	7.7	1.4	0.6	-19.9	18.3	0.2	0.0
*68	-3.8	-4.3	0.0	-1.3	9.4	15.8	-1.5	-0.4
*73	-1.9	-7.6	0.0	-2.5	12.0	31.3	-0.2	-2.0

* Categories restricted prior to liberalisation.

Source: Own calculations based on Comext data.

This analysis shows that the magnitude of the increase in China's import share is not even nearly matched by an increase in the import share of Asian countries as a whole. Indeed the remaining Asian countries' import share declined by around 8 percentage points in the 11 categories. This suggests that a large part of China's import share gains have occurred at the expense of other Asian countries and that the impact on non-Asian countries is partly absorbed by this reshuffling. In our tables, this is reflected in the import share losses of India and Bangladesh. In the case of anoraks and parkas (category 21), for instance, the import share of Bangladesh plunged by half within one year. Other regional groups also bear part of the burden of the quota removal, as Asia's gains are the largest in those categories in which China faced binding quotas.

Table 9 displays the absolute changes in imported value and volume for the different country groups. In terms of value, average imports rose significantly in five categories (three of which were previously affected by binding quotas), stagnated and decreased in three categories respectively. The picture is mixed for the individual regional groups. The imported value from China rose in all categories but one, generating an increase of 66% for the 11 categories analysed. Gains in categories that previously faced binding quotas were particularly large, ranging from 13% to 201%. In contrast to these gains, Bangladeshi imports fell by 25% in the 11 categories taken together, while Indian imports fell by 6%. Decreases were particularly sharp

in some of the categories in which China had faced binding quotas, underlining the benefits this generated for other countries. In terms of volume, extra-EU imports rose for all categories but one. The imported volume from China in the previously restricted categories rose between 90% and 580%. Again, this was largely at the detriment of other Asian countries.

Table 9. Change in imports between 2001 and 2002 (in %)

Category	Extra-EU	NMS & CC	MED & CIS	Industrialised countries	ROW	Asia	China	India	Bangladesh
Value									
*10	2.6	-5.1	-0.4	-23.3	-16.5	7.5	44.1	4.1	273.4
*18	0.3	0.7	7.8	1.8	-50.8	0.5	19.5	-8.9	-27.3
*21	12.6	3.8	-5.1	-12.7	-19.5	19.0	201.2	-36.3	-38.0
24	-2.7	-6.2	-1.6	-23.3	-7.6	-2.0	7.8	-9.8	30.4
27	13.7	-4.7	21.0	-16.4	7.5	26.0	36.4	23.7	40.2
*32	29.3	6.7	23.4	-24.3	-10.3	65.6	141.8	-27.4	–
33	4.1	8.2	2.9	264.8	2.6	-0.4	-6.1	-17.4	1410.1
36	-0.2	2.8	-13.8	-14.4	-23.6	15.7	35.0	-10.6	–
37	-20.3	-7.2	-10.2	9.1	-43.8	-28.8	6.9	-31.8	–
*68	-0.4	-10.9	-2.2	8.8	-31.7	3.0	12.8	1.0	-1.5
*73	-3.9	4.5	-19.1	-16.9	-53.0	3.8	75.6	17.0	-37.7
Total	5.6	-1.3	4.0	-11.2	-20.4	10.4	66.2	-6.3	-25.7
Volume									
*10	26.0	3.2	-7.0	-28.2	-29.3	34.8	178.7	-0.2	1044.4
*18	26.6	11.3	5.6	1.8	-47.3	48.2	167.7	-4.6	-8.8
*21	64.0	-11.2	-5.8	-2.1	-8.9	88.9	582.5	-19.4	-26.1
24	6.8	-1.5	4.6	-3.0	-30.6	11.0	38.9	-2.7	38.8
27	28.0	-5.1	14.0	-17.3	9.9	66.9	80.9	27.1	61.4
*32	59.1	3.0	27.6	-13.5	-11.3	150.6	315.4	-63.5	–
33	9.3	10.4	10.7	266.1	10.1	6.5	-4.2	-15.9	880.1
36	6.6	-5.6	-25.5	-21.5	-21.4	28.8	49.4	-22.6	–
37	-58.0	-9.6	-12.9	23.0	-38.2	-68.2	19.6	-44.5	–
*68	27.8	-16.4	1.3	19.9	-33.2	46.2	90.7	10.0	5.0
*73	26.9	-4.7	-17.1	5.0	-47.8	50.0	198.3	12.7	-21.7

* Categories restricted prior to liberalisation.

Source: Own calculations based on Comext data.

What inferences can be made from this analysis with respect to the final stage of liberalisation? Our analysis has shown that drops in unit value can be large even within a single year and that they directly translate into changes in import shares. The following consideration gives an indication of the scale of the final ATC stage: the imports affected by the quota removal in 2001 and 2004 amounted to €1.1 billion and €9.6 billion respectively – a nine-fold difference. Furthermore, the number of quotas was much higher in 2004. In 2001, binding quotas affecting China were lifted in six categories. In 2004 China still faced quotas in 20 categories, 8 of which were strongly binding. The low share of China in many quota categories in 2004, compared with both China's overall share in textile and clothing imports as well as China's current share in the categories liberalised in 2001, emphasises the restrictiveness of these quotas. In addition, significant constraints on other WTO member countries, such as India and Pakistan, were also lifted. In the categories in which binding quotas were applied until the end of 2004, very sharp price falls may thus be expected, which will go along with strong increases in the restricted countries' market shares.

3.4 Discussion of safeguard measures

The anticipated adverse effects on EU producers arising from the quota removal have prompted the inclusion of a textile-specific safeguard clause in China's Protocol of Accession to the WTO. Applying safeguard measures would *de facto* be a continuation of the quota system. This subsection discusses their justification.

In 2002, China's share in extra-EU textile and clothing imports amounted to 12% and 17% respectively. These shares are obviously an aggregation and are themselves affected by import-ceilings, but they can be viewed as a lower benchmark for imports in restricted categories since it is clear that the market share of China is likely to increase for those products that faced the most binding quotas. A more appropriate benchmark may be obtained from the experience of the 2001 quota removal. On average, China had an import value share of around 25% in the restricted categories prior to the quota removal (in 2001), which rose to over 40% after the quotas had been lifted (see Table 6 for details). Since the products for which quotas were removed on 1 January 2005 were more strongly restricted, it is not unreasonable to expect China to be able to attain a 'natural' import share of around 25 to 40% after liberalisation. Significant jumps in import shares would thus appear as a by-product of quota removal. As can be seen in Table 5, by and large the shares of China in the listed categories were very low before quota removal. Table 10 lists the categories that we identified as strongly binding or that the Commission selected for its current investigation (or both).¹⁷ A rough calculation suggests that, for example, imports of men's trousers (category 6) would have to increase by over 500% (in value) to reach China's 2002 average clothing import share and by much more if China's share were to be closer to the 25 to 40% range attained in the categories integrated in 2002. The table gives the size of the necessary import leaps for each category to reach these hypothetical import shares. Assuming a price drop of 40% – which corresponds to the magnitudes observed after the third ATC stage – the table also lists the volume growth associated with the value increases. This thought exercise is quite simple, but nonetheless revealing. Obviously the lower the import shares are (kept), the larger the size of the adjustment will need to be.

Table 10. The necessary size of adjustment to reach a 'natural' import share

Category	Import share of China (% of extra EU import value) in bound category ¹⁾	Necessary growth rates for China to reach a 'natural' import value share of			Associated volume growth rate, assuming a price drop of 40%		
		15%	25%	40%	15%	25%	40%
4	8.4	179	298	476	298	497	793
5	5.1	294	490	784	490	817	1307
6	3.2	469	781	1250	782	1302	2083
†12	2.9	517	862	1379	862	1437	2298
13	29.9	50	84	134	83	140	223
15	8.5	176	294	471	293	490	785
31	20.8	72	120	192	120	200	320

¹⁾ All categories are strongly restricted except 12 (†); data are from 2002.

Source: Own calculations based on Comext.

The jump in import volumes since the beginning of 2005 widely reported by the press and used by the Commission (Table 11) to justify the launch of investigations for the application of safeguard measures, hence appears in a different light: the actual increases in imports reported were of the order of magnitude one would expect as a result of the abolition of very restrictive

¹⁷ The Commission has also included categories 115 and 117, which no longer face any quotas (SIGL).

quotas. Export surges of 500% are a perfectly normal – one-off – adjustment. Given the low initial shares of China, it is also clear that the impact of this adjustment will not only be borne by industries in the EU, but to a very large extent by industries in other supplier countries, mainly in Asia. Table 12 contains benchmarks set by the Commission to define alert zones, in which safeguard investigations can be launched. The authorised increases are set extremely low when compared with our defined ranges and it is thus not surprising that they are surpassed. Moreover, the data used by the Commission refer to import volumes (the number of T-shirts, pullovers, etc.). As unit prices have certainly fallen, the value of EU imports has not risen by nearly as much.

Table 11. Increase in import volumes since the start of 2005

Category	Description	Actual imports as a % of alert level (1 st quarter 2005)	Actual imports Jan-March 2005 compared with 2004
4	T-shirts	157%	164%
5	Pullovers	202%	534%
6	Men's trousers	275%	413%
7	Blouses	168%	186%
12	Stockings + socks	111%	183%
15	Women's overcoats	103%	139%
31	Brassieres	106%	63%
115	Flax or ramie yarn	124%	51%
117	Woven fabrics flax	415%	257%

Source: European Commission; the data was released by the Commission on 24.04.2005 and is available on the DG Trade webpage.

Table 12. Formulae for determining consultation levels

A. Formula to determine the consultation levels					
Products whose imports from China represent, as a % of total EU imports in 2004 in volume:	2005	2006	2007	2008	
	Increase over 2004 in % of 2004 imports	Increase over 2005 level in % of 2004 imports	Increase over 2006 level in % of 2004 imports	Increase over 2007 level in % of 2004 imports	Increase over 2007 level in % of 2004 imports
7.5% or less	100	50	50	50	50
> 7.5% to 20%	50	50	50	50	50
> 20% to 35%	30	30	30	30	30
Over 35%	10	10	10	10	10

B. Levels below which in principle the Textile-Specific Safeguard Clause should not be invoked					
All products for which quotas will be liberalised in 2005	2005	2006	2007	2008	
	Increase over 2004 in % of 2004 imports	Increase over 2005 level in % of 2004 imports	Increase over 2006 level in % of 2004 imports	Increase over 2007 level in % of 2004 imports	Increase over 2007 level in % of 2004 imports
7.5% or less	25	25	25	25	25
> 7.5% to 20%	20	20	20	20	20
> 20% to 35%	15	15	15	15	15
Over 35%	10	10	10	10	10

Source: European Commission; guidelines for the use of safeguards on Chinese textile exports to the EU issued on 06.04.2005.

4. Distributional consequences of the quota removal

4.1 A new global trade and production pattern

The quota system acted as a straitjacket, deterring restricted countries from expanding their production to a level that would have prevailed under ‘free trade’. Bidding quotas and constraints farewell should thus allow them to step up their production and to increase their market share in previously restricting countries. The quota analysis has identified that Pakistan, India, China, Indonesia and South Korea are the most constrained suppliers of textiles and clothing to the EU-15, and has also shown that following previous stages of liberalisation restricted countries were able to rapidly expand their supply and to capture substantial import shares. Analogously, countries that benefited from trade diversion under the quotas are expected to suffer from the new situation. Among the developing countries this chiefly concerns small Asian countries such as Bangladesh or Thailand, but in certain sectors it applies to India as well. Producers in both the old and new EU member states and the US will also be hardly hit. As already noted in section 2, the EU textile and clothing industry has been receding in terms of employment and number of enterprises. Our analysis suggests that a further downsizing is inevitable, given the rapidity of China in expanding its production and lowering its prices. The downsizing is likely to particularly hit countries in which the clothing industry still has a strong foothold and has not upgraded its production (such as Portugal, Greece or some of the new member states). This section reviews four empirical, quantitative studies.

The magnitude of the adjustment to the post-quota era is difficult to quantify in a reliable way, as estimations depend on the underlying assumptions. Hence, models generally capture all the complementary effects adding to the mere quota removal at best imperfectly. Mlachila & Yang (2004) forecast the changes in textile and clothing imports and exports upon quota removal. Although the signs of their estimates confirm our theoretical predictions, the magnitudes should be treated with caution for the reasons mentioned. Their estimates are listed in Table 13. Nordas (2004) forecasts market-share changes in textile and clothing imports in the EU and US. Her results – which are not reported here – confirm that there is a more sizeable reshuffle among suppliers in the clothing than in the textile market and that previously restricted countries will witness the largest increases at the expense of regions that have been enjoying preferential trade schemes.

Table 13. Effects of the quota removal on textile and clothing trade (% change)

	Exports		Imports	
	Clothing	Textiles	Clothing	Textiles
Bangladesh	-17.7	-4.7	-6.2	-12.8
Newly industrialising economies	-9.6	2.3	-0.4	-0.7
ASEAN	5.2	8.2	0.4	2.4
China	100.7	10.8	3.3	11.0
Rest of South Asia	94.5	13.9	58.6	33.2
Middle East and North Africa	-24.0	-10.3	-2.1	-4.0
Latin America	-50.1	-11.4	1.0	-4.0
Sub-Saharan Africa	-30.8	-7.7	-1.1	-2.3
Rest of the world	-22.9	-5.4	-1.1	-1.9

Source: Mlachila & Yang (2004).

Brenton et al. (2002) also use a computable general-equilibrium model to forecast the effects of the quota removal on production and employment in the textile and clothing sector. Although the particular focus of the model lies on Germany, the results are very valuable to us, as they

also include the EU-15 countries, the Central and Eastern European countries (CEECs), Turkey and some selected countries separately. They make an initial simulation for EU enlargement that serves as a base for three further simulations.¹⁸ In Table 14 we report the initial simulation as well as the simulation of the full quota removal. The results show that under the enlargement simulation the CEECs record an initial gain that tapers off with quota liberalisation. The simulations of the quota removal point towards a decline in the production of textiles (-4.4% in Germany, -3.5% in the rest of the EU and -4.5% in the CEECs) and clothing (-6.4%, -8.1% and -12.9% respectively). The gains for China and India on the other hand are very large.

Table 14. Effects of EU enlargement and quota removal (base year 1997)

	Output				Employment			
	Enlargement		Quota removal		Enlargement		Quota removal	
	Textile	Clothing	Textile	Clothing	Textile	Clothing	Textile	Clothing
Germany	2.9	-1.5	-4.4	-6.4	2.8	-1.6	-4.4	-6.4
EU (excl. Germany)	-0.1	-2.7	-3.5	-8.1	-0.1	-2.7	-3.5	-8.0
CEECs	13.4	54.2	-4.5	-12.9	13.1	53.9	-4.4	-12.8
Turkey	-1.7	-5.5	-0.8	-9.7	-1.7	-5.5	-0.8	-9.7
MED	-0.6	-2.0	-7.9	-8.0	-0.6	-2.0	-7.8	-7.9
North America	-0.1	-0.2	-6.4	-19.5	-0.1	-0.2	-6.3	-19.5
Latin America	0.0	0.0	-4.1	-9.6	0.0	0.1	-4.1	-9.6
Australia	-0.2	-0.2	0.6	-0.1	-0.2	-0.2	0.6	-0.1
China	-0.4	-1.3	11.9	40.5	-0.4	-1.2	11.7	40.3
India	-0.2	-1.7	6.9	100.9	-0.2	-1.6	7.2	101.4
Rest of Asia	-0.8	-1.5	3.7	-3.0	-0.8	-1.5	3.7	-3.0
Japan	-0.1	-0.1	2.2	0.7	-0.1	-0.1	2.2	0.7
ROW	-0.4	-1.8	-2.0	-7.3	-0.4	-1.8	-2.0	-7.2

Source: Brenton et al. (2002).

4.2 Benefits to consumers

While negatively affecting the EU industry, the quota removal will bring benefits to consumers who until then paid a high price for protectionism. Indeed, barriers to trade, such as quotas or tariffs directly feed through to consumers by artificially inflating prices. Under the MFA and the ATC, consumers were particularly hard hit, as clothing accounts for a significant share of the household consumption basket. Although this share has fallen in the EU from 9.3% in 1970 to 6.4% in 1997 (OECD, 2004), it is still considerable. Inducing price falls by relaxing trade barriers will thus raise consumers' real income. This effect will have distributional consequences, as it will particularly affect poorer households for which the share of expenditure spent on clothing is higher. As restrictions on imports are lifted, consumers should furthermore have a broader choice of products.

¹⁸ Here, enlargement means unrestricted textile and clothing trade between the EU-15 and the new member states (including Bulgaria and Romania) and does not refer to the actual date of accession.

François et al. (2000) estimate the annual welfare gains accruing to EU countries following quota removal to over €25 billion, which represents a welfare gain of €270 per four-person household. Their results are reported in Table 15. These gains are lowest in countries where the textile and clothing industry still plays a prominent role (Greece, Portugal and Spain), as they will partly be offset by production losses. The gains are highest in countries where the industry is relatively small (Denmark, Germany and Austria) and price effects dominate.

Table 15. Annual welfare gains from quota removal (base year 1997)

	Total welfare gains	Four-person household
	in € millions	in €
Austria	661	327
Belgium/Lux.	815	307
Denmark	511	386
Finland	362	281
France	4,581	312
Germany	6,999	341
Greece	217	83
Ireland	181	196
Italy	3,453	240
Netherlands	1,140	291
Portugal	235	94
Spain	1,633	166
Sweden	536	242
United Kingdom	3,956	268
<i>EU</i>	25,282	270

Source: François et al. (2000), as reproduced in OECD (2004).

5. Complementary aspects of the quota removal: Scale factors

The gains and losses arising from quota liberalisation in the countries that produce textiles and clothing will primarily be determined by how quotas have affected a country. Nevertheless, a multitude of *scale factors* will influence the eventual magnitude of these effects. This section discusses some of them.

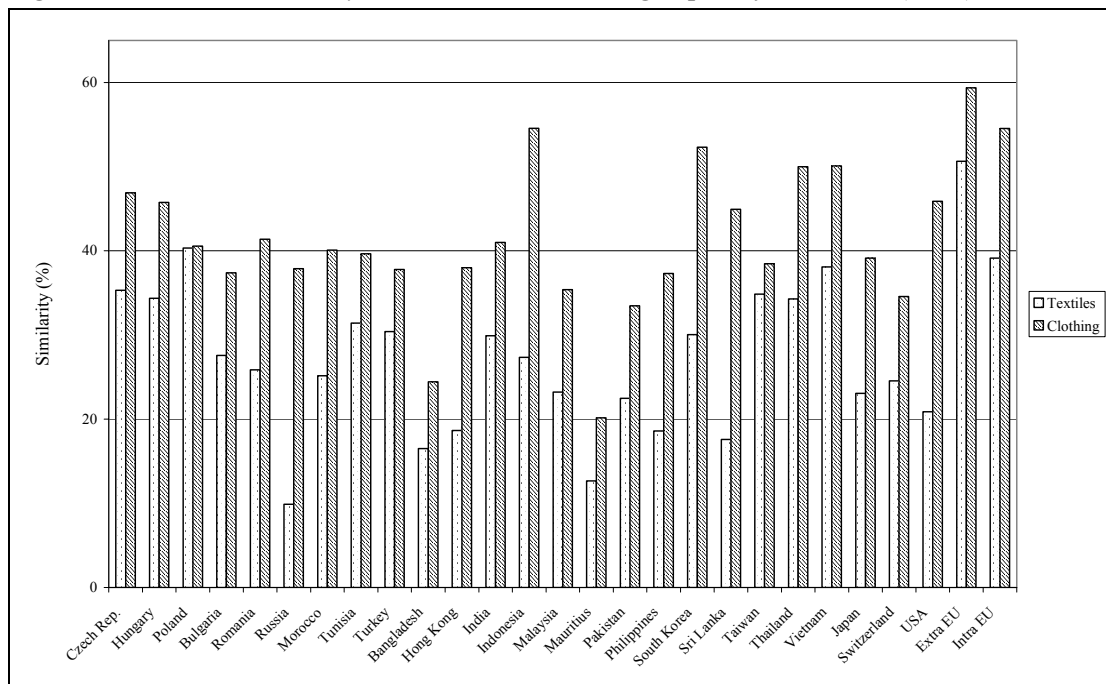
Trade policy can still act in a discriminatory or differentiating way through preferential trade schemes, such as the EU's Generalised System of Preferences, which confer preferential market access to products from their beneficiary countries. The relative advantages granted by preferential treatments will of course be eroded once trade barriers for other countries are lowered, but could still cushion the adverse effects of quota liberalisation.

As a result of a more even trade-policy treatment of countries, production characteristics are becoming more relevant. Countries that own or can easily develop a vertically-integrated production structure will be in a privileged position relative to those that have specialised in a particular sub-activity of the production chain. They will be able to benefit from economies of scale and to coordinate the individual stages of production more efficiently. As frequent border crossings of intermediary products generate long periods of custom clearances and tariff costs, a production chain located within a single country will speed up production and lower its costs. Vertical integration moreover facilitates compliance with rules-of-origin requirements (Brenton & Manchin, 2002). Clearly, this is a matter of large vs. small countries, in which highly specialised, least-developed countries that were unable to develop backward linkages will be on

the losing side. A vertical specialisation index reported in Nordas (2004) suggests that the smaller Asian countries are relatively more specialised.

Countries with a production and export structure similar to constrained countries will be exposed to higher competition once quotas are lifted. The higher the similarity of the export structures, the higher is the overall substitutability of their products and the stronger they consequently compete. Under the assumption that a country's export structure reflects its domestic industrial structure, we can make direct conjectures as to the severity of the impact of the quota removal on the local industries. In Figure 5 we display the results of a similarity analysis performed in CEPS & WIIW (2005), in which the overlap of EU-15 imports from selected countries with EU-15 imports from China is computed for the year 2002, applying the Finger-Kreinin similarity index. China is used as a benchmark, as it is the largest and most constrained source country. An initial, striking observation is that the similarity between Chinese exports and those of other countries is much higher for clothing than for textile products in general, which suggests that the different national clothing industries will be much more exposed to competition with China, while national specialisation seems to be higher in the textile sector. In particular, we take note of the relatively high similarity between imports from China and from within the EU, which hints at an impending pressure on EU producers. The analysis does not reveal any remarkable regional disparities. Interestingly, the overlap between Chinese imports and imports from Bangladesh and Mauritius is relatively small at around 20%. This observation suggests that both countries have specialised in exporting products for which China faced quantitative limitations. Here we would expect the similarity index to rise strongly in the post-quota era.¹⁹

Figure 5. Structural similarity with textile and clothing imports from China (2002)



Source: CEPS & WIIW (2005).

¹⁹ Mlachila & Yang (2004) confirm this low degree of similarity for the two countries. They also find a much higher overlap (71.5%) for the exports by both countries to the US, which imposed quotas against them.

Decisions about the location of production are influenced by a host of factors including production costs, the institutional environment, etc. Recent research in economic geography has put forward the importance of transport time to market as an explanatory factor for location decisions. Producing close to the final market is crucial. As seen in section 2, an emerging regional dimension in textile and clothing trade is plain in both the EU and the US, where Mediterranean and Eastern European countries, and Mexico and the Caribbean respectively, play an increasingly important role. Nowadays, new business strategies based on information technology and rapid data exchange allow better inventory management. Instead of filling stocks at the start of the season and clearing them at the end, the electronic communication of point-of-sales information permits the holding of smaller inventories, which are refilled on a more frequent basis in response to fluctuations in a product's demand.²⁰ To ensure this quick replenishment, the producer's proximity to the market is a key factor, even if the importance of delivery time obviously varies for different clothing categories. Evans & Harrigan (2004) measure this 'demand for timeliness' using data on the replenishment of different clothing items within a selling season. They test the hypothesis of whether imports from countries close to the final market (in their case the US)²¹ of products with a high reordering frequency have witnessed relatively higher growth rates. Their results indeed corroborate this hypothesis. The preconditions for such a system of 'lean retailing' are a good communication and transport infrastructure to ensure that proximity is translated into rapid delivery, as well as a well-trained workforce. Producers have to be equipped with data-processing programmes that are compatible with those of the retailers and rely on rapid and performing telecommunication networks. Evans & Harrigan (2003) find that the importance of labour costs diminishes if a more proximate production can compensate for this by shorter delivery times.

Consumer preferences influenced by brand image, fashion content and the quality of the product are also of major significance. An indicator attempting to broadly separate the nature of competition between goods into price- and quality-competition is the Revealed Quality Elasticity (RQE) indicator.²² Its premise is that for products competing in quality, the price is only of secondary importance and one would expect a country with a relatively high (low) quality product, reflected by a higher (lower) unit value, to have a positive (negative) trade balance. Such a product would then be judged as *quality-elastic*, as opposed to *price-elastic*, where competition is determined by prices. Stengg (2001), Brenton et al. (2002) and CEPS & WIIW (2005) all apply the RQE indicator.²³ Their results suggest that the quality aspect is much more relevant for the textile sector than for the clothing sector, where competition is mainly determined by prices. They also suggest that EU products generally have an advantage when competition is quality-driven, but that the EU can compete in neither textiles nor clothing when competition is determined by prices. Price falls linked to the quota removal would thus have a stronger competitive impact on the clothing industry than on textile producers, who can fend off stronger competition by higher quality.

²⁰ The buying cycle of an importer from design to arrival in the warehouse lasts 13 months for seasonal collections and 4-6 months for basic items (Eurocommerce, 2004).

²¹ They acknowledge that air transport can compensate for distance, but that it is only an imperfect substitute owing to its high cost, rendering it gainful for light products only.

²² For caveats of the RQE indicator, see Stengg (2001).

²³ CEPS & WIIW (2005) apply the RQE indicator to 137 SIGL categories, 96 and 41 of which respectively comprise textile and clothing products. Slightly more than half of the textile categories were revealed as price-elastic with EU countries charging higher prices. Where competition was quality-driven, the EU generally had a superior quality. Out of the 41 clothing categories, more than three-quarters were competing on prices, with the EU being disadvantaged every time. EU products had a quality advantage in six categories.

6. Conclusions

The quota system for textile and clothing trade, which was in place until the end of 2004, created an artificial global trade and production pattern that is now being reversed. Countries that were previously restricted will benefit under the post-quota situation. Vertically-integrated production chains, a good infrastructure, a sound, domestic regulatory framework and proximity to the final market will magnify their gains. Conversely, some smaller, less-developed countries that have profited from the shelter offered by the MFA and the quota-induced trade diversion will emerge as losers. Adverse effects on the industry are also likely to be considerable in the EU and other industrialised countries. Particularly in the clothing industry, it is clear that the ongoing adjustment process will accelerate. The pressure will be strongest in those segments (and countries) that have so far specialised in low value-added production. EU consumers on the other hand will benefit from access to a wider variety of products, available to them at lower prices.

This paper has examined the impact of the removal of quotas in terms of changes in prices and import shares. It finds that these changes can be substantial, but concludes that they are a natural adjustment that is proportionate to the quotas' level of restriction. The sharp import increases from previously restricted countries overstate the impact on the EU industry, however, as they will partly occur at the expense of other supplier countries. Nonetheless, a safeguard provision has been included in China's Protocol of Accession to the WTO in anticipation of adverse effects on textile and clothing industries in industrialised countries. As the alert levels for invoking it have been set very low, it is not surprising that the levels are breached.

Apart from the fact that the adjustment is natural, a number of other reasons why the EU should refrain from applying safeguards can be put forward. Essentially, this type of prolonged protectionism would simply adjourn and possibly exacerbate the effects arising from quota removal, while in the meantime maintaining the distorted incentive structure for producers and inflated prices for consumers that are characteristic of quota systems. The 10-year phasing-out period foreseen in the ATC should have been used more effectively by both producers and governments to prepare for the aftermath of the removal of the quota system by taking advantage of new opportunities, concentrating on high quality, rapid delivery, etc. Upholding protection against low-cost clothing imports would only lock them in a low-wage level of development.

Applying safeguard measures for the 'benefit' of previously unrestricted countries mainly engaged in clothing production, such as Bangladesh, is a myopic argument. Despite the short-term benefits of such a measure, the footloose character of their garment industries would simply lead to the postponement of the negative shock rather than the cushioning of it. The lack of incentives to progressively downsize the industry makes a transition period highly unlikely. Furthermore, as time and resources would be diverted even longer from more efficient uses, the adverse effects would be exacerbated.

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Appendix I. Tables

Table A.1. Characteristics of the EU textile and clothing industry by country (2002)

	Investment (€ million)						Employment (in thousands)			Companies (in thousands)		
	T	C	T&C	T	C	T&C	T	C	T&C	T	C	T&C
Austria	2,528	869	3,397	97	34	131	18	9	27	1	1	2
Belgium	7,196	1,900	9,096	255	34	289	42	10	52	1	1	3
Denmark	1,177	572	1,750	18	22	41	8	4	12	–	–	1
Finland	678	538	1,216	36	9	45	6	6	12	1	1	2
France	15,552	10,569	26,121	447	155	602	109	87	196	5	10	16
Germany	14,341	8,984	23,326	612	132	744	116	62	177	4	5	9
Greece	1,226	1,045	2,271	93	45	137	18	24	42	1	2	3
Ireland	493	363	856	24	7	31	6	3	10	–	–	–
Italy	36,712	41,591	78,303	842	737	1,579	312	301	613	28	44	72
Luxembourg	593	4	597	–	–	–	1	–	1	–	–	–
Netherlands	3,221	658	3,879	141	14	155	19	6	26	1	2	3
Portugal	4,321	3,664	7,985	321	110	431	96	131	227	4	9	14
Spain	9,384	5,891	15,275	324	105	429	113	124	237	10	15	25
Sweden	1,117	314	1,430	32	3	35	11	3	14	2	1	3
United Kingdom	12,739	7,458	20,198	267	118	385	120	77	198	5	5	10
<i>EU</i>	<i>115,600</i>	<i>88,083</i>	<i>203,683</i>	<i>3,509</i>	<i>1,525</i>	<i>5,034</i>	<i>1,092</i>	<i>980</i>	<i>2,072</i>	<i>70</i>	<i>107</i>	<i>177</i>

Notes: T=textiles; C=clothing.

Source: European Commission (2003).

Table A.2. Characteristics of the textile and clothing industry of the NMS by country (2002)

	Textile				Clothing			
	Production		Employment (in thousands)		Production		Employment (in thousands)	
	€ Million	% of manuf.	Persons	% of manuf.	€ Million	% of manuf.	Persons	% of manuf.
Cyprus	36	1.2	1.0**	2.6	82	2.8	2.5**	6.6
Czech Rep.	1.877	3.3	64.7	6.2	693	1.2	50.5	4.9
Estonia	227*	6.8*	10.5*	8.7*	150*	4.5*	13.1*	10.9*
Hungary	619	1.3	28.5	3.8	879	1.9	60.3	8.1
Latvia	171*	5.2*	10.2*	6.9*	112*	3.4*	13.8*	9.4*
Lithuania	405*	6.4*	21.8*	9.4*	567*	8.9*	38.0*	16.3*
Malta	52	2	0.8*	2.3	143	5.5	2.8*	8.7
Poland	2.226	2	80.3	3.6	2.355	2.1	171.6	7.8
Slovak Rep.	253	1.5	19.4*	5.1	220	1.3	30.2*	7.9
Slovenia	604	4.4	13.8	6	215	1.6	14.5	6.3
Bulgaria	342	4	32.1*	5.8	568	6.7	118.7*	21.3
Romania	743	2.3	84.5	5.5	1.523	4.8	274.2	17.9
<i>NMS</i>	<i>6.47</i>	<i>2.4</i>	<i>250.8</i>	<i>4.8</i>	<i>5.416</i>	<i>2</i>	<i>397.3</i>	<i>7.7</i>
<i>NMS & CC</i>	<i>7.555</i>	<i>2.5</i>	<i>367.4</i>	<i>5.1</i>	<i>5.984</i>	<i>2.5</i>	<i>790.2</i>	<i>10.9</i>

* (2001); ** (2000)

Source: CEPS/WIIW (2005).

Appendix II. Description of the SIGL categories

Category	Description
1	Cotton yarn, not put up for retail sale
2	Woven fabrics of cotton, other than gauze, terry fabrics, pile fabrics, chenille fabrics, tulle and other net fabrics
2 (A)	Of which: Other than unbleached or bleached
3	Woven fabrics of synthetic fibres
4	Shirts, T-shirts, lightweight fine knit roll, polo or turtle-necked jumpers and pullovers, undervests and the like
5	Jerseys, pullovers, slip-overs, waistcoats, twinsets, cardigans, bed-jackets and jumpers, anoraks, wind-cheaters, waister jackets and the like
6	Men's or boys' woven breeches, shorts other than swimwear and trousers; women's or girls' woven trousers and slacks, of wool, cotton or man-made fibres; lower parts of track suits with lining
7	Women's or girls' blouses, shirts and shirt-blouses, whether or not knitted or crocheted, of wool, of cotton or man-made fibres
8	Men's or boys' shirts, other than knitted or crocheted, of wool, cotton or man-made fibres
9	Terry towelling and similar woven terry fabrics
10	Gloves, mittens and mitts, knitted or crocheted
12	Panty-hose and tights, stockings, understockings, socks, ankle-socks, sockettes and the like, knitted or crocheted, other than for babies, including stockings for varicose veins
13	Men's or boys' underpants and briefs, women's or girls' knickers and briefs
15	Women's or girls' woven overcoats, raincoats and other coats, cloaks and capes; jackets and blazers
16	Men's or boys' suits and ensembles
18	Men's or boys' singlets and other vests, underpants, briefs, nightshirts, pyjamas, bathrobes, dressing gowns and similar articles
	Women's or girls' singlets and other vests, slips, petticoats, briefs, panties, night-dresses, pyjamas, negligees, bathrobes, dressing gowns and similar articles
20	Bed linen
21	Parkas; anoraks, windcheaters, waister jackets and the like, other than knitted or crocheted, of wool, cotton or man-made fibres; upper parts of tracksuits with lining
23	Yarn of staple or waste artificial fibres
24	Men's or boys' nightshirts, pyjamas, bathrobes, dressing gowns and similar articles
	Women's or girls' night-dresses, pyjamas, negligees, bathrobes, dressing gowns and similar articles
26	Women's or girls' dresses
27	Women's or girls' skirts, including divided skirts
28	Trousers, bib and brace overalls, breeches and shorts
29	Women's or girls' suits and ensembles
31	Brassieres
32	Woven pile fabrics and chenille fabrics
33	Woven fabrics of synthetic filament yarn obtained from strip or the like of polyethylene or polypropylene
	Sacks and bags, of a kind used for the packing of goods, not knitted or crocheted, obtained from strip or the like
36	Woven fabrics of continuous artificial fibres
37	Woven fabrics of artificial staple fibres
39	Table linen, toilet linen and kitchen linen
68	Babies' garments and clothing accessories
73	Track suits
78	Garments, other than knitted or crocheted
83	Overcoats, jackets, blazers and other garments
163	Gauze and articles of gauze put up in forms or packing for retail sale (K)

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