

CHAPTER 1: INTRODUCTION

Purpose and Scope

The U.S. International Trade Commission (Commission) instituted this investigation following receipt of a letter from the United States Trade Representative (USTR) on September 16, 2002. The USTR requested that the Commission institute an investigation under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)) and prepare a report that assesses the textile and apparel industries of certain foreign suppliers to the U.S. market with respect to their competitiveness and other factors pertinent to their adjustment to the final completion of the phaseout of quotas on January 1, 2005, as required by the Uruguay Round Agreement on Textiles and Clothing (ATC).¹ As requested by the USTR, this report assesses the textile and apparel industries of (1) significant ATC suppliers to the U.S. market, (2) Mexico, and (3) other supplying countries with preferential market access. As requested by the USTR, the Commission's analysis also addresses factors such as textile and apparel consumption, production, employment, and prices in major exporting countries, as well as their textile and apparel trade, particularly with industrial country markets. The USTR requested that the Commission provide the information in a confidential report by June 30, 2003.

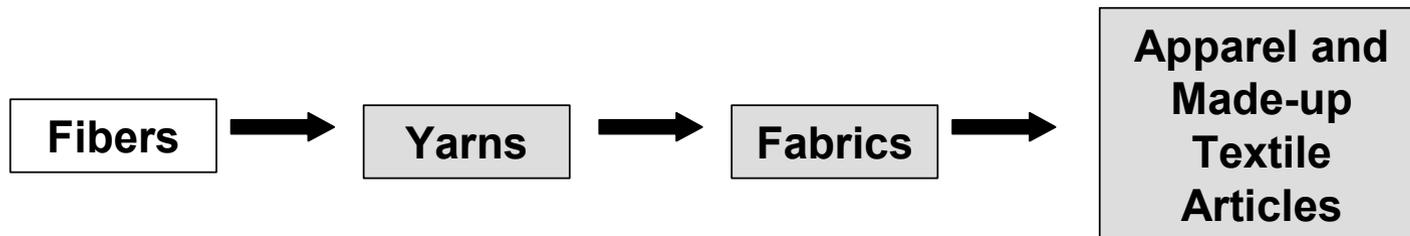
The ATC entered into force with the World Trade Organization (WTO) agreements in 1995 and created special interim rules to govern trade in textiles and apparel among WTO countries for 10 years. The ATC called for the gradual and complete elimination of quotas on textiles and apparel established by the United States and other importing countries under the Multifiber Arrangement (MFA) and predecessor arrangements by January 1, 2005 (information on the ATC and the MFA is presented later in this chapter). In the request letter, the USTR stated that, in anticipation of the completion of the quota phaseout required by the ATC, "it may be that significant changes will occur in the global pattern of production, trade and consumption of these products. It would be most helpful for the Administration to be able to anticipate the nature of these changes as much as possible."

Product and Country Coverage

The study focuses on textile and apparel articles that were subject to the MFA and subsumed into the ATC—namely, articles of cotton, other vegetable fibers (e.g., flax (linen)), wool, manmade fibers, and silk blends. As shown in figure 1-1, the articles represent almost all the output of the textile and apparel supply chain and can be divided into two groups: (1) textile products, which consist of yarns, fabrics, and made-up textile articles (including carpets and carpeting; bed, bath, and kitchen linens; luggage; and other goods) and (2) apparel products, including knitted and not knitted (mainly woven) garments and clothing accessories, gloves,

¹ The USTR letter is in appendix A, and the Commission's notice of investigation, published in the *Federal Register* of Oct. 17, 2002 (67 F.R. 64131), is in appendix B.

Figure 1-1 Major Products of Fiber, Textile, and Apparel Industries



1-2

Agricultural sector (natural)



- Cotton
- Wool and fine animal hair
- Silk
- Ramie

Chemical industry (manmade fibers)



- Synthetic
 - Polyester
 - Nylon
 - Acrylic
- Artificial
 - Rayon
 - Acetate

Spun



- Cotton & manmade fibers
- Wool and fine animal hair

Filament

- Manmade fibers
- Silk

Woven



- Denim
- Printcloth
- Broadcloth
- Sheeting

Knit

Nonwoven

Industrial fabrics

Apparel



- Shirts and blouses
- Trousers and shorts
- Skirts and dresses
- Underwear

Home textiles



- Towels
- Sheets, pillowcases
- Curtains and drapes

Carpets and rugs

Other made-ups



- Luggage
- Tents
- Bags

headwear, and neckwear. In this report, these two product groups are the subject of the discussion of industry conditions and trade trends. For example, data on world textile and apparel trade are presented in terms of Standard International Trade Classification (SITC) 65, textile yarn, fabrics, made-up articles, and related products, and SITC 84, articles of apparel and clothing accessories. Although the MFA generally did not cover basic raw materials such as natural fibers (e.g., cotton and wool), which are the output of the agricultural sector, and manmade fibers (e.g., polyester), the output of the chemical industry, the study examines the relative importance of textile fibers (SITC 26) as major inputs for use in textile production.

The countries for which the USTR requested an assessment of their textile and apparel industries can be divided into two broad groups: (1) significant ATC suppliers to the U.S. market and (2) Mexico and other suppliers receiving U.S. trade preferences for qualifying textile and apparel articles. The countries were selected in consultation with USTR staff; they are listed in table 1-1. The 35 selected countries together represented 80 percent of the total value of U.S. textile and apparel imports in 2002.

Many of these selected countries differ from one another in terms of key social and economic indicators, but many of them are similar with respect to the importance of their textile and apparel industries as a source of employment and export earnings. The selected countries include the two most populous countries in the world—China and India, with more than 1 billion people each—as well as a supplier with a population of less than 1 million, Macau. Also included are four countries designated by the United Nations as “least developed countries” (Bangladesh, Haiti, Lesotho, and Madagascar) and five “newly industrialized” economies (Hong Kong, India, Mexico, Taiwan, and Korea).² Among the selected countries, per capita gross domestic product (GDP, at constant 1995 prices) ranged from less than \$500 in Bangladesh, Haiti, India, Kenya, Madagascar, and Nicaragua to slightly more than \$24,000 in Hong Kong. As shown in figure 1-2, many of the selected countries depend on textiles and apparel for 50 percent or more of their total merchandise exports.

Approach

The report provides a profile of the textile and apparel industries in each of the selected countries covered by the study, and a qualitative assessment of these industries’ competitiveness and other factors pertinent to their adjustment to the completion of the phaseout of textile and apparel quotas in 2005. To the extent practicable, each profile discusses the relative importance of the industries in the country’s economy and examines the industries in terms of their structure; capacity, output, and employment levels; factors of production; investment in new technology; and infrastructure conditions. The profile discusses government domestic and trade policies and programs affecting the industries and recent or pending developments likely to affect the industries’ global competitiveness. The profile examines the country’s textile and apparel trade during the past 5 years, overall and

² United Nations Industrial Development Organization (UNIDO), *International Yearbook of Industrial Statistics 2002* (Vienna), pp. 15-16.

Table 1-1

Selected textile and apparel suppliers: Population, GDP per capita (constant 1995 dollars), textile and apparel exports, and such exports' share of each supplier's total merchandise exports, 2001

Supplier	Population	GDP per capita	Textile and apparel exports--	
			Total	Share of total merchandise exports
	<i>Million</i>		<i>Million dollars</i>	<i>Percent</i>
Significant ATC suppliers:				
Bangladesh	133.4	\$386	5,527.1	86
China	1,271.9	878	53,276.6	20
Egypt	65.2	1,243	1,128.7	23
Hong Kong	6.9	24,187	10,310.9	52
India	1,033.4	472	¹ 11,730.0	26
Indonesia	213.6	1,012	7,803.3	14
Korea	47.6	13,420	15,238.6	10
Macau4	² 15,244	1,679.6	89
Malaysia	23.8	4,709	3,112.4	4
Pakistan	141.5	521	6,730.0	73
Philippines	77.0	1,185	2,682.1	8
Sri Lanka	19.6	869	2,747.9	61
Taiwan	22.0	³ 17,200	12,288.4	10
Thailand	61.2	2,853	5,492.2	8
Turkey	66.2	2,902	10,601.0	34
Suppliers covered by free-trade agreements:				
Mexico	99.4	3,739	10,085.2	6
Israel	6.4	² 17,067	¹ 1,150.0	¹ 4
Jordan	5.0	1,639	316.2	17
Sub-Saharan Africa:				
Kenya	30.7	325	83.4	5
Lesotho	2.1	558	233.7	94
Madagascar	16.0	255	457.8	44
Mauritius	1.2	4,359	955.3	63
South Africa	43.2	4,068	471.0	2
CBERA countries: ⁴				
Costa Rica	3.9	3,886	838.7	14
Dominican Republic	8.5	2,079	2,439.0	51
El Salvador	6.4	1,752	1,801.5	60
Guatemala	11.7	1,554	1,765.6	37
Haiti	8.1	340	251.8	83
Honduras	6.6	712	2,571.0	63
Jamaica	2.7	2,124	271.8	18
Nicaragua	5.2	⁵ 437	397.2	37

See footnotes at end of table.

Table 1-1--Continued

Selected textile and apparel suppliers: Population, GDP per capita (constant 1995 dollars), textile and apparel exports, and such exports' share of each supplier's total merchandise exports, 2001

Supplier	Population	GDP per capita	Textile and apparel exports--	
			Total	Share of total merchandise exports
	<i>Million</i>		<i>Million dollars</i>	<i>Percent</i>
Andean countries:				
Bolivia	8.5	944	38.6	3
Colombia	43.0	2,281	835.1	7
Ecuador	12.9	1,473	70.4	2
Peru	26.1	2,334	621.4	11

¹ Estimated by the Commission based on the percentage change in world imports from the country from 2000 to 2001.

² Represents GDP per capita for 2000, the latest year for which data are available.

³ U.S. Central Intelligence Agency, *The World Factbook 2002*.

⁴ CBERA countries are beneficiaries under the Caribbean Basin Economic Recovery Act (CBERA).

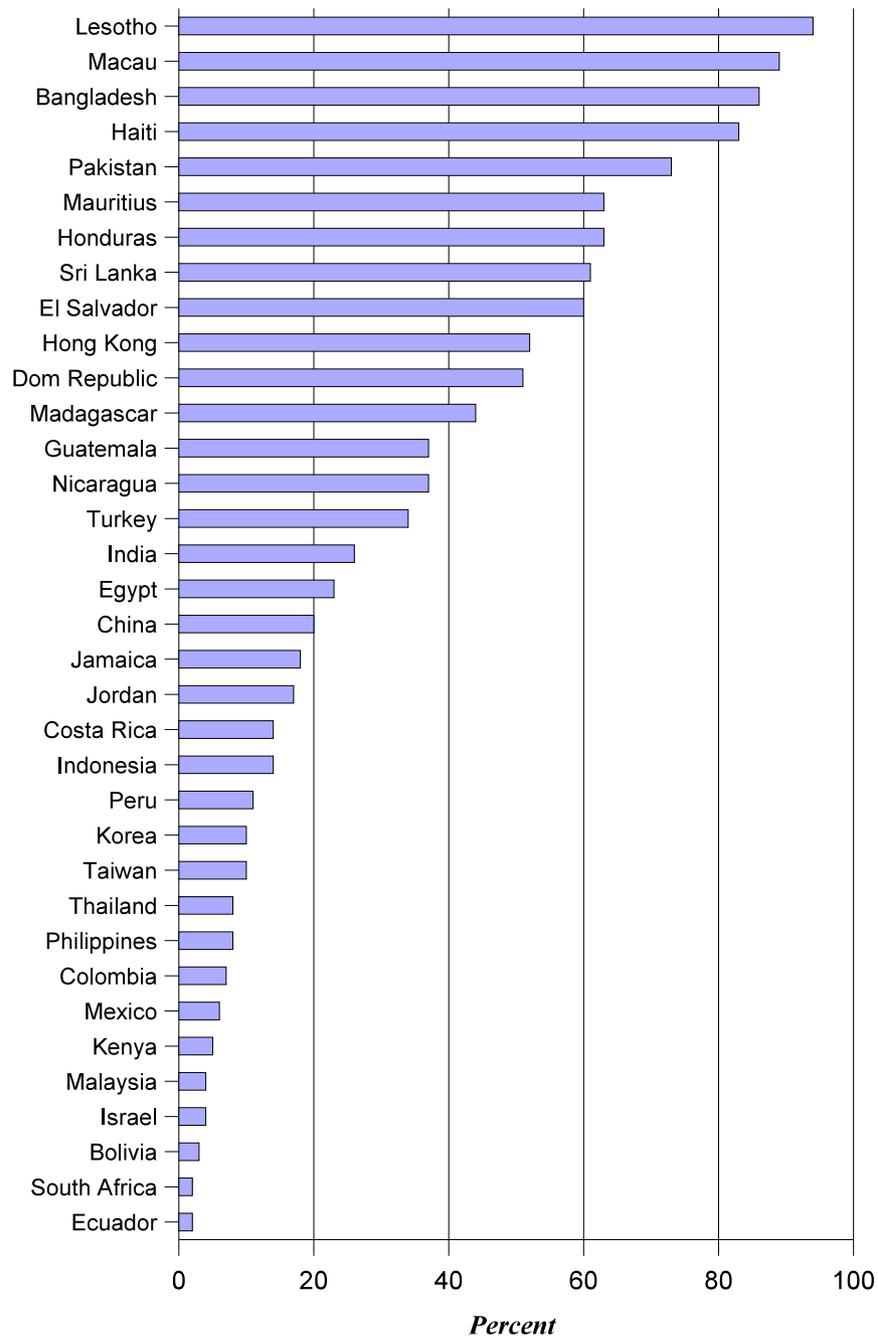
⁵ Represents GDP per capita for 1998, the latest year for which data are available.

Note.--Data shown for textile and apparel exports are based on data reported to the United Nations either by the specified country ("reporter data") or by the specified country's trading partners ("partner data"). Reporter data were used for all "significant ATC suppliers" except Bangladesh, Egypt, and Sri Lanka; all three "suppliers covered by free-trade agreements;" Mauritius and South Africa; and all four Andean countries. Partner data were used for all other countries.

Source: Data on population and GDP per capita compiled from the online *World Development Indicators* database of the World Bank (<https://publications.worldbank.org>), retrieved Mar. 25, 2003, except as noted. Trade data are United Nations data, except as noted.

Figure 1-2

Selected suppliers: Percentage share of total merchandise exports accounted for by textiles and apparel, 2001



Source: Compiled from United Nations data.

by major products and trading partners; it also reviews U.S. imports of textiles and apparel from the country in terms of trends and major products.

Information in this report came from many different sources, including (1) the views of interested parties as presented in testimony to the Commission at the public hearing and in written statements,³ (2) other U.S. Government agencies, including U.S. Department of State telegrams prepared by U.S. Embassies concerning the textile and apparel industries of their respective host countries, (3) foreign governments, (4) international organizations such as the United Nations, the WTO, and the World Bank, (5) domestic and foreign industry and trade organizations, and (6) a review of the literature. Commission staff conducted in-person and telephone interviews with representatives of U.S. textile and apparel producers, importers, and retailers to obtain information on likely changes in their global sourcing strategies in anticipation of complete quota elimination in 2005 and on their views on the competitive strengths and weaknesses of foreign suppliers. Staff conducted fieldwork in Mexico, India, East Asia (China, Hong Kong, Taiwan, and Korea), Central America (Guatemala, Honduras, and El Salvador), and sub-Saharan Africa (South Africa, Mauritius, and Lesotho) to interview representatives of foreign governments, producers, and trade and industry groups in order to obtain information on the state of the textile and apparel industries in their countries and likely changes in the global pattern of textile and apparel production, investment, and trade as a result of quota elimination.⁴

Organization

The rest of this chapter examines the ATC, the U.S. textile and apparel trade agreements program, the world textile and apparel industries, and global trade in these products. Chapter 2 reviews recent literature on factors of competition affecting supply and demand for textiles and apparel, likely changes in global production and trade in such goods in anticipation of complete quota elimination, and the impact of quota elimination on individual countries' textile and apparel industries. Chapter 3 begins with an overview of key factors of competition in the textile and apparel industries, followed by a comparative analysis of the competitive strengths and weaknesses of the textile and apparel industries in the selected countries. Chapter 4 summarizes the views of interested parties as presented in testimony at the public hearing and in written statements (a list of witnesses appearing at the hearing is in appendix C). The profiles of the textile and apparel industries for each of the 35 selected countries are presented in the following appendixes to this report:

³ Appendix C contains a list of witnesses appearing at the hearing held by the Commission on January 22, 2003. Chapter 4 of this report summarizes the views of interested parties as presented in testimony at the hearing and in written statements.

⁴ Appendix D contains a list of persons and their organizations interviewed by Commission staff in connection with the study between September 2002 and June 2003.

Appendix E:	East Asia (China, Hong Kong, Korea, Macau, and Taiwan)
Appendix F:	South Asia (Bangladesh, India, Pakistan, and Sri Lanka)
Appendix G:	ASEAN region (Indonesia, Malaysia, the Philippines, and Thailand)
Appendix H:	Mexico
Appendix I:	Caribbean Basin (Costa Rica, Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Jamaica, and Nicaragua)
Appendix J:	Andean region (Bolivia, Colombia, Ecuador, and Peru)
Appendix K:	Sub-Saharan Africa (Kenya, Lesotho, Madagascar, Mauritius, and South Africa)
Appendix L:	Egypt, Israel, Jordan, and Turkey

The Uruguay Round Agreement on Textiles and Clothing

The ATC came into force with the WTO agreements in 1995 and created special interim rules to govern trade in textiles and apparel among WTO countries. It provides for the gradual elimination of quotas on textiles and apparel established by the United States, the European Union (EU), Canada, and Norway under the MFA, an arrangement that was negotiated under the General Agreement on Tariffs and Trade 1947 (GATT 1947) and that governed most world trade in textiles and apparel during 1974-94.⁵ The MFA was intended to deal with market disruption in importing countries (developed countries), while allowing exporting countries (developing countries) to expand their world textile and apparel trade. Under the MFA, importing countries negotiated bilateral agreements with exporting countries to set quotas, which are a departure from the GATT in two respects: (1) they were applied on a country-specific basis, in contradiction of the nondiscrimination obligation (all GATT members be treated equally when any trade measures are applied) and (2) they contradict the general principle of reducing or avoiding absolute quantitative limits.

The ATC requires countries to “integrate” textile and apparel articles into GATT 1994 over a 10-year transition period ending on January 1, 2005; that is, the articles must be brought under GATT discipline, subject to the same rules as products of other sectors, and are no longer subjected to a regularized quota regime. As countries integrate textile and apparel articles into the GATT, they are required to eliminate any quotas on such goods and may not establish new quotas on the integrated articles, except as provided under normal GATT rules. The ATC also (1) contains a safeguard mechanism that permits countries to establish transition-period quotas on articles not yet integrated into the GATT, if necessary, to protect their domestic markets from import surges, (2) requires members to reduce trade barriers to textiles and apparel in their home markets, and (3) allows countries to take action against quota circumvention. All WTO countries are subject to ATC disciplines, and only WTO countries are eligible for ATC benefits (countries that are not WTO members are ineligible for quota liberalization).⁶

⁵ Norway eliminated all its remaining MFA quotas in 2001.

⁶ Major foreign suppliers that are not WTO members and, thus, are ineligible for quota liberalization under the ATC are Cambodia, Russia, and Vietnam.

The ATC requires WTO countries to integrate groups of articles representing specified minimum percentages of their respective 1990 textile and apparel import volumes in four stages over the 10-year transition period. As shown in table 1-2, the major importing countries integrated goods totaling 16 percent of their trade on January 1, 1995; another 17 percent on January 1, 1998; and an additional 18 percent on January 1, 2002, for a total of 51 percent. The remaining 49 percent of the trade is to be integrated at the end of the transition period on January 1, 2005. For quotas that were not eliminated in one of the first three stages of integration, the ATC requires importing countries to increase the base annual growth rates applicable to each such quota, which were specified in the bilateral MFA agreements in place in 1994. Under this ATC “growth-on-growth” provision, the major importing countries increased the base growth rates by 16 percent in 1995, by another 25 percent in 1998, and by another 27 percent in 2002.⁷ For small WTO suppliers (countries accounting for 1.2 percent or less of an importing country’s total quotas in 1991), quota growth rates were advanced by one stage--that is, the growth rates were increased by 25 percent in 1995 and by 27 percent in 1998, and again by 27 percent in 2002. Under the ATC, the trade-weighted average annual growth rate for WTO countries’ quotas rose from a pre-ATC rate of 4.9 percent in 1994 to 5.7 percent in 1995, 7.3 percent in 2000, and 9.3 percent in 2002.⁸

Table 1-2
Agreement on Textiles and Clothing: Stages, starting dates, share of trade integrated, and increase in quota growth rates

Stage	Starting date	Share of trade integrated	Increase in quota growth rate ¹
		-----Percent-----	
1 (1995-1997)	January 1, 1995	16	16
2 (1998-2001)	January 1, 1998	17	25
3 (2002-2004)	January 1, 2002	18	27
4	January 1, 2005	49	(2)

¹ The acceleration of quota growth will be advanced by one stage for supplying countries that accounted for 1.2 percent or less of an importing country’s total quotas as of December 31, 1991.

² Not applicable.

Source: Agreement on Textiles and Clothing, Final Act Embodying the Results of the Uruguay Round of Multilateral Trade Negotiations.

⁷ The base quota growth rates vary by country and article, but ranged from less than 1 percent to as high as 6 percent or 7 percent. Assuming a 6-percent base rate for a major supplier, the annual quota growth rate would be 6.96 percent (6 multiplied by 1.16) during 1995-97, 8.7 percent during 1998-2001, and 11.05 percent during 2002-04.

⁸ Office of the United States Trade Representative, *2003 Trade Policy Agenda and 2002 Annual Report*, p. 96, and selected back issues.

The ATC provides importing countries considerable flexibility in selecting the articles for GATT integration at each stage. Although it requires them to integrate articles from each of four categories (tops and yarns, fabrics, made-up textile articles, and apparel) at each stage, it does not specify any allocation percentages. Because the products subject to GATT integration under the ATC include not only all of the articles covered by the MFA, but also numerous non-MFA goods (e.g., pure silk goods), the major importing countries chose first to integrate the non-MFA goods or MFA articles that were not under quota and low value-added items, and to defer integration of the most “sensitive” articles until the end of the 10-year transition period.⁹ In a report on the integration process, the WTO stated that only 20 percent of the total trade integrated by the major importing countries during the first three stages represented goods under quota and that most of the articles integrated were relatively low-value-added items such as yarn and fabric, rather than higher value-added apparel products.¹⁰ Under the U.S. integration schedule, none of the articles integrated in the first stage was under quota, and most of the articles integrated in the second and third stages either were not under quota or had low quota usage. The U.S. Statement of Administrative Action accompanying the Uruguay Round implementing legislation stated that the Committee for the Implementation of Textile Agreements (CITA),¹¹ in drawing up the lists of products, was to defer integration of the most sensitive articles until the end of the 10-year transition period.¹² As a result, 67 percent of the total volume of U.S. textile and apparel imports under quota (or 89 percent of apparel imports and 47 percent of textile imports) will not be integrated until 2005.¹³

U.S. Textile and Apparel Trade Program

The United States has quotas on textiles and apparel from 46 countries, which together accounted for 79 percent of the total value of U.S. imports of such goods in 2002. U.S. quotas are being phased out for Mexico under the North American Free-Trade Agreement (NAFTA) and for the other 38 WTO countries under the ATC. Seven countries covered by quotas are not WTO members (Belarus, Cambodia, Laos, Nepal, Russia, Ukraine, and

⁹ Under the U.S. integration schedule, for example, 29 percent of U.S. textile and apparel imports that are subject to GATT integration were either non-MFA goods (e.g., pure silk goods and jute bags) or articles that were not covered by the U.S. quota program (e.g., seat belts, parachutes, and umbrellas). Data of the U.S. Department of Commerce show that U.S. imports of articles covered by the ATC totaled 17.1 billion square meters equivalent (SMEs) in 1990, the base year for determining the volume of trade for GATT integration. U.S. imports of MFA products that year totaled 12.2 billion SMEs.

¹⁰ WTO, Trade Policy Review Body, *Overview of Developments in the International Trading Environment: Annual Report by the Director-General* (WT/TPR/OV/8 – 02-6147), Nov. 15, 2002, pp. 17-18.

¹¹ CITA is an interagency group responsible for administering the U.S. textile and apparel trade agreements program. It is chaired by the U.S. Department of Commerce and made up of representatives from USTR and the U.S. Departments of State, Treasury, and Labor.

¹² U.S. House of Representatives, “Statement of Administrative Action,” *The Uruguay Round Trade Agreements, Texts of Agreements Implementing Bill, Supporting Statements, Message from the President of the United States*, Sept. 27, 1994, House Doc. 103-316, vol. 1, p. 115.

¹³ United States General Accounting Office, *Report to Congressional Requesters: Textile Trade - Operations of the Committee for the Implementation of Textile Agreements* (GAO/NSIAD-96-186), Sept. 1996, p. 3.

Vietnam) and, thus, are ineligible for quota liberalization under the ATC.¹⁴ U.S. textile and apparel imports for 1997-2002 from the 35 selected countries covered by the study are shown in table 1-3.

U.S. imports of textiles and apparel from the world rose 67 percent by quantity and 34 percent by value during 1997-2002 to 38.3 billion square meters equivalent (SMEs) valued at \$72 billion. The higher growth in import volume, compared with import value, largely reflected increased competition in the domestic retail market and the effects of the Asian financial crisis of mid-1997 and early 1998. Weak economic activity in East Asia led to increased efforts to boost exports and earn much-needed foreign exchange. At the same time, the significant currency devaluations in several Asian countries effectively reduced U.S. dollar prices of their goods in the U.S. market. U.S. textile and apparel imports fell for the first time in more than 10 years in 2001, by less than 0.5 percent, reflecting a slowdown in U.S. economic activity that was exacerbated by the terrorist attacks of September 11, 2001. In 2002, imports rebounded considerably, rising by 17 percent over the 2001 level.

Apparel accounted for 45 percent (17.3 billion SMEs) of the quantity but 79 percent (\$57 billion) of the value of total U.S. textile and apparel imports in 2002. The share of the U.S. apparel market accounted for by imports is estimated at approximately 65 to 70 percent for 2001.

The increase in U.S. textile and apparel imports during 1997-2002 came from many countries, led by China, whose shipments grew by 137 percent to almost 5.0 billion SMEs, with most of the growth occurring in 2002, when China's shipments increased by 125 percent. China supplanted Mexico as the largest foreign supplier in 2002, shipping 13 percent of the total import volume, compared with 11.3 percent for Mexico. Imports from Mexico grew by 43 percent during 1997-2002 to 4.3 billion SMEs. Mexico's shipments have grown more slowly in recent years, following rapid growth during the early years of NAFTA; they fell sharply in 2001 and then partially recovered in 2002, rising by 1 percent to 4.3 billion SMEs. Imports from NAFTA signatory Canada rose by 63 percent during 1997-2002 to 3.4 billion SMEs. Other important suppliers that posted significant growth in shipments during 1997-2002 were Pakistan (125 percent, to 2.5 billion SMEs),¹⁵ Korea (149 percent, to 2.0 billion SMEs), and Turkey (171 percent, to 1.1 billion SMEs). The substantial changes in imports from China from 2001 to 2002, along with those from non-WTO countries Cambodia and Vietnam, are discussed below.

¹⁴ Imports of textiles and apparel from non-WTO countries are subject to quotas imposed by the President under section 204 of the Agricultural Act of 1956 (7 U.S.C. 1854), which provides the President with the basic statutory authority to enter into agreements with foreign governments to limit their exports of such items to the United States.

¹⁵ In recognition of the role that Pakistan has played in the war against terrorism, the United States granted Pakistan an increase of 15 percent in the base quota levels for 2002 and special swing (a shift of unused quota from one category to another) of 25 percent for the years 2002-04 for 14 categories of cotton and manmade-fiber apparel. Pakistan was also granted special swing for 2002-04 of 8 percent for cotton trousers, knit shirts, and knit blouses and 25 percent for cotton and manmade-fiber underwear and men's and boys' woven shirts. All of the special swing is in addition to the normal swing provided in the bilateral textile agreement.

Table 1-3
Textiles and apparel: U.S. general imports from selected suppliers, 1997-2002

(1,000 square meters equivalent)

Country	1997	1998	1999	2000	2001	2002
Bangladesh	764,510	865,537	910,519	1,130,770	1,169,041	1,149,765
Bolivia	1,567	2,320	2,351	3,423	3,525	5,349
China	2,094,944	1,943,215	2,035,487	2,217,897	2,210,674	4,963,269
Colombia	100,347	96,070	112,570	117,338	96,518	109,611
Costa Rica	317,441	327,187	370,030	373,371	367,131	377,066
Dominican Republic	863,315	886,406	900,252	858,892	772,755	743,276
Ecuador	14,176	10,307	12,513	16,397	18,004	14,919
Egypt	196,114	247,368	200,977	254,105	282,441	264,762
El Salvador	460,078	524,009	640,934	757,217	767,758	816,789
Guatemala	252,530	301,720	332,990	389,719	425,841	451,900
Haiti	78,228	113,415	127,350	125,011	109,099	109,285
Honduras	735,175	808,461	958,257	1,045,195	1,032,289	1,098,840
Hong Kong	863,355	1,020,897	1,017,557	1,123,250	1,092,272	961,680
India	985,739	1,083,648	1,149,428	1,248,337	1,250,245	1,544,666
Indonesia	855,047	974,751	907,305	1,052,667	1,164,629	1,215,355
Israel	266,001	298,416	359,775	476,367	517,174	533,959
Jamaica	194,424	171,281	148,803	126,331	102,637	85,189
Jordan	1,331	2,610	1,365	20,314	62,667	91,328
Kenya	11,305	10,223	12,573	12,670	18,573	36,514
Korea	817,648	1,044,700	1,222,089	1,311,775	1,383,482	2,032,158
Lesotho	21,312	23,955	25,804	34,366	50,913	84,393
Macau	176,477	226,012	277,674	306,031	293,245	321,796
Madagascar	4,633	5,280	9,247	20,511	37,486	22,165
Malaysia	238,490	263,499	321,503	337,407	288,980	325,592
Mauritius	34,222	37,566	38,950	40,115	41,116	47,064
Mexico	3,041,069	3,559,315	4,142,701	4,746,533	4,289,934	4,335,089
Nicaragua	47,765	56,597	69,381	87,513	97,724	120,441
Pakistan	1,125,845	1,483,357	1,544,766	1,996,768	2,189,346	2,536,917
Peru	45,198	44,597	58,315	70,461	58,281	63,474
Philippines	659,070	795,581	905,265	928,860	915,559	817,380
South Africa	49,959	41,659	45,383	55,181	59,319	74,614
Sri Lanka	479,375	527,636	559,945	655,436	631,465	559,150
Taiwan	1,197,396	1,189,899	1,269,894	1,233,308	1,224,379	1,391,301
Thailand	768,575	997,023	1,117,474	1,318,245	1,308,481	1,315,546
Turkey	394,563	511,904	711,634	866,479	871,097	1,068,270
World	22,894,521	25,944,586	28,614,986	32,864,151	32,809,615	38,284,599

Source: Compiled from official statistics of the U.S. Department of Commerce, which are available on its website at <http://otexa.ita.doc.gov>.

China

Most of the growth in imports from China in 2002 was in product categories that were integrated into the GATT regime by the United States in either 1998 or 2002, but for which China did not become eligible for ATC quota-liberalization benefits until its accession to the WTO on December 11, 2001. Imports of integrated products from China rose from slightly less than 1.0 billion SMEs in 2001 to almost 3.6 billion SMEs in 2002. Most of the increase occurred in made-up textile articles, particularly textile-based luggage; imports of made-up textile articles from China rose from 779 million SMEs in 2001 to 2.6 billion SMEs in 2002. China's shipments of integrated apparel also rose rapidly, from 195 million SMEs to 747 million SMEs. By comparison, imports of Chinese textile and apparel articles that will be integrated in 2005 rose more slowly, from 1.2 billion SMEs in 2001 to almost 1.4 billion SMEs in 2002.

The United States implemented the first three stages of integration for China on January 1, 2002; however, the United States no longer applied quotas on articles that were integrated during the first two stages and that were made in China and exported on or after December 11, 2001.¹⁶ For 2002, the United States increased the size of each quota that was not eliminated in one of the three stages of integration by growth rates specified in the bilateral textile agreement. Effective March 19, 2002, the United States increased the 2002 quotas for China for the application of the growth-on-growth provision, as required by the ATC. China received a quota-growth-rate increase of 27 percent; it also received an additional prorated increase to account for its 21 days of WTO membership in 2001.

In November 1999, the United States signed a market access agreement with China that became part of China's WTO accession package; it obligates the United States to eliminate quotas on imports of Chinese textiles and apparel as of January 1, 2005, the same date as that for other WTO countries. However, the agreement allows the United States to apply selective safeguards (quotas) on imports of textiles and apparel from China for four additional years beyond the termination of textile and apparel quotas for WTO members--that is, from January 1, 2005, through December 31, 2008. The agreement also states that no safeguards established during the 4-year period will remain in effect beyond one year, without reapplication, unless both countries agree.

Cambodia and Vietnam

U.S. imports of textiles and apparel from Cambodia and Vietnam have grown rapidly in recent years. Imports from Cambodia totaled 474 million SMEs (valued at \$1.1 billion) in 2002, up from less than 1 million SMEs (valued at less than \$1 million) in 1995, the year before the country received most-favored-nation (now normal-trade-relations (NTR)) status. The United States and Cambodia negotiated a bilateral textile agreement that provided for the establishment of quotas on Cambodia's shipments of apparel for the 3-year period

¹⁶ Information in paragraph on China is from *Federal Register* notices of the Committee for the Implementation of Textile Agreements, "Announcement of Import Limits for . . . Textile Products Integrated into GATT 1994 in the First, Second, and Third Stage," published Dec. 28, 2001 (66 F.R. 67229), and "Amendment of Import Limits for . . . Textile Products," published Mar. 19, 2002 (67 F.R. 12525).

beginning on January 1, 1999.¹⁷ This quota agreement on apparel, which accounted for almost all U.S. merchandise imports from Cambodia in 2002, was the first bilateral textile agreement in which the United States obtained a commitment from an exporting country to improve labor conditions in its textile and apparel sector. The agreement linked increases in U.S. quotas on Cambodian apparel to Cambodia's compliance with international labor standards. The 1999 agreement was extended for three additional years on December 31, 2001, when the United States and Cambodia signed a memorandum of understanding.¹⁸

The U.S.-Vietnam Bilateral Trade Agreement (BTA) entered into force on December 10, 2001, when the United States and Vietnam exchanged letters of implementation.¹⁹ Under the BTA, Vietnam received conditional NTR status (subject to an annual Jackson-Vanik waiver by the President), meaning that U.S. imports of Vietnamese goods are now subject to much lower rates of duty. For example, the 2003 NTR duty rate on cotton shirts and blouses, a key apparel import from Vietnam, is 19.8 percent ad valorem, compared with a non-NTR rate of 45 percent ad valorem. The BTA spurred imports of apparel from Vietnam, which already exported significant quantities to the EU. U.S. apparel imports from Vietnam grew from 33 million SMEs (\$49 million) in 2001 to 358 million SMEs (\$952 million) in 2002. On April 25, 2003, representatives of the United States and Vietnam initialed a bilateral textile agreement providing for quotas on Vietnam's shipments of textiles and apparel to the United States, beginning on May 1, 2003.²⁰

World Textile and Apparel Industries

The world textile and apparel industries covered by the study encompass almost the entire textile and apparel supply chain, from the processing of raw materials to the production of finished goods. As shown in figure 1-3, the major links in the supply chain are (1) preparing the fibers for spinning, (2) spinning the fibers into yarns, (3) processing the yarns into fabrics or, in some cases, finished goods, and (4) cutting and making the fabrics into finished goods such as apparel and home textiles. Large quantities of home textiles are also made in vertically integrated textile mills that process raw materials into intermediate inputs and produce end-use goods such as towels, sheets, and pillowcases. Another key link in the supply chain is dyeing and finishing, which can add considerable value and help determine the final quality of the goods. Textile articles can be dyed at the fiber, yarn, fabric, or finished product stage. As previously noted, excluded from the supply chain for purposes

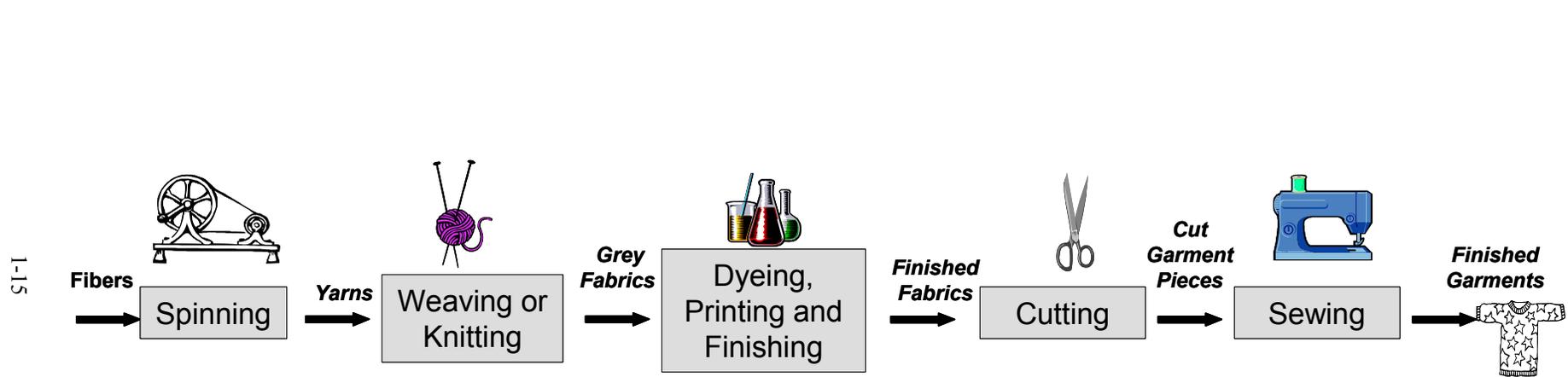
¹⁷ Committee for the Implementation of Textile Agreements, "Establishment of Import Restraint Limits for Certain Cotton, Wool and Man-Made Fiber Textile Products Produced or Manufactured in Cambodia," *Federal Register*, Feb. 8, 1999 (64 F.R. 6050).

¹⁸ Office of the United States Trade Representative, "U.S.-Cambodian Textile Agreement Links Increasing Trade With Improving Workers' Rights," press release 02-03, Jan. 7, 2002, found at <http://www.ustr.gov>.

¹⁹ Office of the United States Trade Representative, "United States and Vietnam Trade Agreement Takes Effect Today," press release 01-110, Dec. 10, 2001.

²⁰ Committee for the Implementation of Textile Agreements, "Establishment of Import Limits for Certain Cotton, Wool, and Man-Made Fiber Textiles and Textile Products Produced or Manufactured in the Socialist Republic of Vietnam," *Federal Register*, May 16, 2003 (68 F.R. 26575), p. 26575.

Figure 1-3
Major Production Steps for the Textile and Apparel Sector



Source: Compiled by the U.S. International Trade Commission.

of this study are producers of natural fibers (the agricultural sector) and manmade fibers (the chemical industry).

The structure of the different links in the supply chain changes significantly from upstream production processes, such as yarn preparation and spinning, to downstream operations, such as cut-sew-and-trim tasks. The processes become less capital- and knowledge-intensive and more labor-intensive, while the scale of operations tends to decline significantly. Moreover, the number of firms increases as one moves downstream, with many of the firms doing assembly being small or medium-sized firms.

The world textile and apparel manufacturing sector has been undergoing significant restructuring and modernization as a result of the introduction of new manufacturing and information technologies and the increasingly keen competition in global markets. A significant portion of productive capacity for textiles and apparel has moved from developed countries to developing countries during the past two decades. Unlike apparel producers in developed countries, which rely heavily on their home markets, producers in many developing countries depend on export markets for growth. This trend has led to a decline of the textile and apparel sector in developed countries, where structural adjustments in response to greater import competition have led to decreases or slower growth in textile and apparel production and, in turn, declines in employment.

The migration of textile and apparel production to areas with lower labor costs began more than three decades ago, when the “Big Three” Asian producers—Hong Kong, Taiwan, and Korea—became major exporters of low-cost apparel. Trade, rather than domestic consumption, had been the driving force behind the rapid growth of the textile and apparel sector in the Big Three. At their peak in the early 1980s, the Big Three supplied almost 30 percent of world apparel exports. In 2001, their share had fallen to 8 percent. The relative decline of the Big Three partly reflected growing competition from a then-new generation of low-cost exporting countries that emerged in the 1970s and early 1980s, led by China, India, Pakistan, Indonesia, the Philippines, Thailand, and other Asian countries. The growing trade restrictions placed on these Asian countries by major importing countries created opportunities for other apparel suppliers to develop their export potential, either for specific or multiple products. Bangladesh, Macau, and Sri Lanka are among the larger exporting countries in this group; it also includes countries in Central Europe and North Africa, where producers in the EU have production-sharing arrangements, and in Latin America, where U.S. producers have similar arrangements.

Today, Asia is the world’s largest producer and exporter of textiles and apparel, and it likely will remain so because of its low operating costs, particularly labor costs, and investment in new production equipment during the 10-year period 1992-2001. Firms in the “Big Three” economies, along with the global trading companies in Japan and many, mostly large apparel companies and retailers in the United States and the EU, provided developing countries in Asia and other regions with capital and technical assistance to produce finished goods for export. They also lessened the financial risks inherent in global trade by providing materials, coordinating production, and marketing the finished goods. With the phaseout of textile and apparel quotas under the WTO scheduled to be completed in 2005, producers of textiles and apparel in developed and developing countries are likely to undergo further restructuring and upgrading in an effort to ensure their competitive position in markets both at home and abroad.

World Production

Published data of the United Nations Industrial Development Organization (UNIDO) show that world textile and apparel production continued to move from developed to developing countries during 1990-2000, the latest period for which such data are available. However, the UNIDO data understate the extent of this shift in production because the data exclude China, the world's largest producer and exporter of textiles and apparel whose output grew significantly during the period. According to UNIDO data presented in table 1-4, manufacturing value added (at constant 1990 prices) for textiles during 1990-2000 fell at an average annual rate of 1.5 percent in developed countries but rose 0.9 percent annually in developing countries. As such, the developed-country share of world textile value-added fell during the period from 74.9 percent to 67.4 percent, while the developing-country share rose from 25.1 percent to 32.6 percent. If the data included China, the developing-country share would have been higher.

The UNIDO data show that the increase in the developing-country share of world textile value-added was mainly accounted for by South and East Asia, whose share of the total rose from 13.6 percent in 1990 to 19.4 percent in 2000. A large portion of the decline in the developed-country share was accounted for by Russia and the former Soviet Republics, along with Eastern Europe. Part of the increased share for the EU--from 27.7 percent to 32.3 percent--reflected the inclusion of the eastern part of Germany after 1990 and probably the increased use of outward processing arrangements for apparel made in Eastern Europe and North Africa from EU fabrics. The share of global textile value-added accounted for by North America (the United States and Canada) rose from 14.6 percent in 1990 to 20 percent in 1995, and then fell to 19.1 percent in 2000; the increase between 1990 and 2000 likely reflected expansion of U.S. apparel production-sharing trade with Latin America.

The developed and developing countries also show divergent trends in apparel production. The developed-country share of world apparel value-added fell from 75.3 percent in 1990 to 71.9 percent in 2000, whereas the developing-country share rose from 24.7 percent to 28.1 percent. Today the apparel industry is a key source of output and job growth in many developing countries and provides them much-needed foreign exchange to foster further economic development. The apparel industry also remains a major employer in the developed countries. It is likely that the decline in apparel production in the developed countries was less than the decline in employment, largely reflecting the more widespread adoption of labor-saving equipment in North America and the corollary gain in labor productivity.

Table 1-4**Textiles and apparel: Percentage distribution of world value-added and annual growth of value-added, at constant 1990 prices, by specified products and country groups, 1990, 1995, and 2000¹**

Item and country group	1990	1995	2000	Annual growth of value-added 1990-2000 ¹
Textiles:				
Industrialized countries, total	74.9	70.2	67.4	² -1.5
European Union ³	27.7	32.1	32.3	(⁴)
North America	14.6	20.0	19.1	(⁴)
Japan	13.2	10.7	8.5	(⁴)
Eastern Europe and former USSR	17.2	4.9	5.2	-9.0
Developing countries, total	25.1	29.8	32.6	0.9
North Africa	1.2	(⁴)	1.3	-0.4
Sub-Saharan Africa	1.0	(⁴)	1.2	0.7
Latin America	5.8	(⁴)	6.7	-0.7
South and East Asia	13.6	(⁴)	19.4	1.8
West Asia and Europe	3.6	(⁴)	4.0	0.7
Apparel:⁵				
Industrialized countries, total	75.3	74.9	71.9	² -2.3
European Union ³	31.2	33.6	31.7	(⁴)
North America	17.6	21.1	20.8	(⁴)
Japan	10.2	11.8	9.3	(⁴)
Eastern Europe and former USSR	13.7	5.3	7.0	-6.7
Developing countries, total	24.7	25.1	28.1	-1.4
North Africa	1.0	(⁴)	1.5	1.3
Sub-Saharan Africa	0.6	(⁴)	0.8	0.8
Latin America	8.5	(⁴)	10.0	-1.0
South and East Asia	10.7	(⁴)	12.3	-1.8
West Asia and Europe	3.9	(⁴)	3.5	2.7

¹ Excludes China, the world's largest producer of textiles and apparel.² Excludes Eastern Europe and former USSR.³ After 1990, data include estimates for the eastern part of Germany.⁴ Not available.⁵ Also includes leather and footwear.Source: United Nations Industrial Development Organization (UNIDO), *International Yearbook of Industrial Statistics 2002* (Vienna), pp. 45, 47, 58, and 59.

World Consumption and Capacity

The size and performance of the world textile industry can be measured in terms of mill consumption of fibers, installed spinning and weaving capacity, and investment in new production equipment. As the information presented below indicates, there has been a shift of world yarn spinning and fabric weaving capacity from developed countries to developing countries in the past two decades. Most of the increase in production capacity has occurred in Asia, particularly China, which along with India, has the largest number of spindles and weaving machines in the world. Growth of spinning and weaving capacity in China and India has been facilitated by strong demand for their exports of downstream textile goods.

Mill Fiber Consumption²¹

World mill fiber consumption rose by 11 percent during 1997-2001 to an estimated 122 million pounds (table 1-5), representing a slowdown in growth from the 15-percent rate in the preceding 4-year period (1994-97). Most of the growth during 1997-2001 was accounted for by Asia, which expanded its mill consumption by 20 percent to 73.1 billion pounds, or 60 percent of the world total in 2001. Mill fiber consumption in China far exceeded that of any other developing country (table 1-5 and figure 1-4). China alone accounted for 29 percent (34.7 billion pounds) of the world total in 2001; its mill consumption rose three times as fast as that for the world during 1997-2001 (39 percent versus 13 percent). Mill consumption in the United States, the second-largest fiber consumer with 15.1 billion pounds in 2001, fell by 14 percent during 1997-2001. Western Europe was the third-largest fiber consumer with 11.9 billion pounds in 2001; its level of mill consumption remained relatively stable during 1997-2001.

Yarn and Fabric Production Capacity

Asia is believed to have the world's largest capacity to spin yarn and weave fabric, and was also the largest buyer of new textile production equipment during 1992-2001.²² As shown in table 1-6 for 2000, Asia accounted for 71 percent of the short-staple spindles, 45 percent of the long-staple spindles, and 27 percent of the open-end (O-E) rotors. China and India have the largest number of short-staple spindles in the world with 46 percent of the 2000 total, followed by Pakistan and Indonesia with 11 percent. These countries' large domestic supply of raw materials has facilitated the development of their large spun yarn segment, as access to competitively priced raw materials has a significant effect on total production costs. Of total world purchases of spinning equipment during 1992-2001, Asia accounted for 71 percent of the short-staple spindles, 53 percent of the long-staple spindles, and 29 percent of the O-E rotors. However, most of the installed spinning capacity in Asia was

²¹ Mill fiber consumption represents production plus imports minus exports of fibers and yarn, and is indicative of the size of the textile industry in a country or region, and the trend in its output.

²² Data in this section were compiled from statistics of the International Textile Manufacturers Federation (ITMF), *International Textile Machinery Shipment Statistics* (Zurich, Switzerland), vols. 22-24, 1999-2001. ITMF members include trade associations in many countries representing producers of textiles and textile machinery.

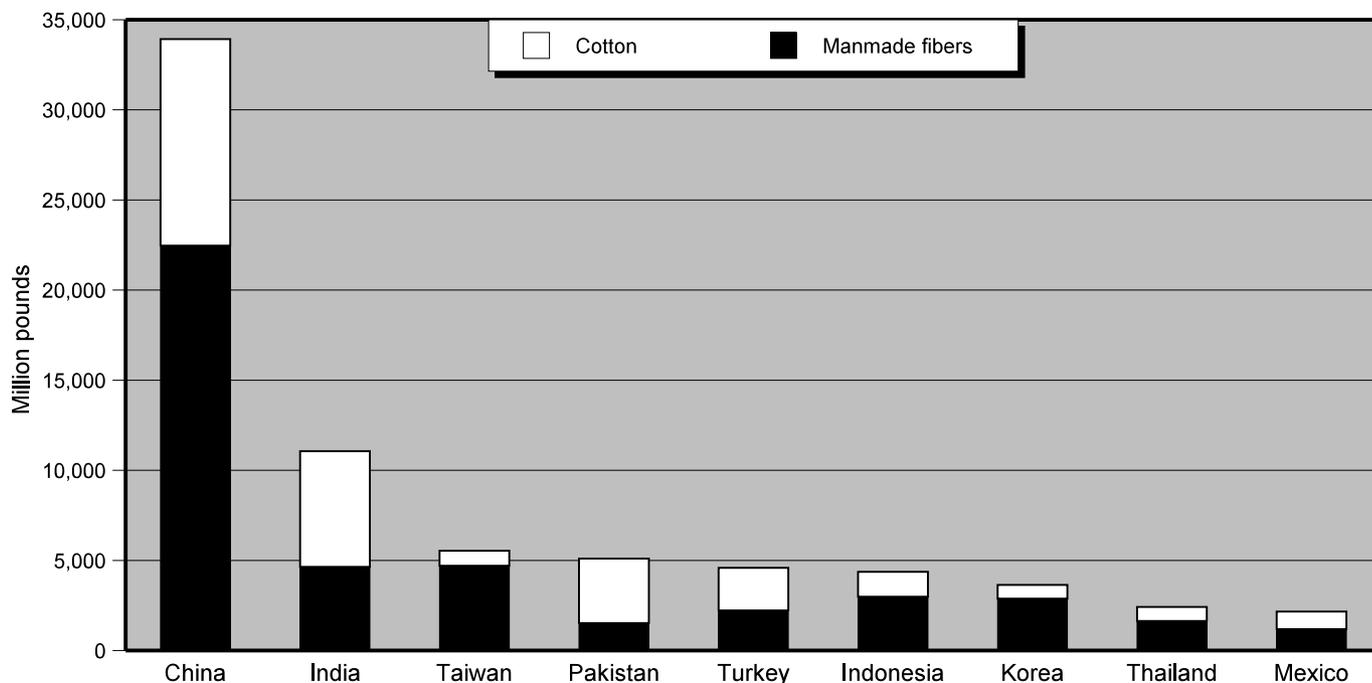
Table 1-5
Global mill fiber consumption, by regions, 1997-2001

Region or country	1997	1998	1999	2000	2001
-----Million pounds-----					
Asia	60,672.3	62,990.3	66,862.1	70,727.2	73,082.4
China	24,947.3	26,515.4	29,010.4	31,800.3	34,691.8
India	9,586.0	10,111.1	10,901.2	11,303.6	11,208.1
North America	18,503.6	18,415.9	18,381.0	18,513.3	15,983.1
Latin America	5,873.5	5,838.6	6,378.0	6,747.9	¹ 6,507.0
Western Europe	11,880.0	12,000.0	11,850.0	12,040.0	¹ 11,850.0
Eastern Europe	3,953.9	3,792.6	3,724.9	3,814.0	¹ 3,750.0
Africa	2,895.6	2,920.1	2,904.4	2,911.3	¹ 3,000.0
Middle East	5,605.9	6,117.0	6,581.0	6,800.5	¹ 6,800.0
Oceania	501.4	563.4	592.4	613.3	¹ 650.0
Total	109,886.2	112,637.9	117,273.8	122,167.5	¹ 121,622.5

¹ Estimated by the Commission.

Source: Compiled from data published by the Fiber Economics Bureau, Inc., in *Fiber Organon*, Nov. 2002, and selected back issues, and Geerdes International, Inc., Richmond, VA, facsimile to USITC staff, Feb. 4, 2003, except as noted.

Figure 1-4
Global mill fiber consumption, by types, 2001



Source: Based on data supplied by Geerdes International, Inc., Richmond, VA, Feb. 4, 2003.

Table 1-6
Spinning equipment: Number of installed spindles and rotors in 2000, and number of new spindles and rotors purchased during 1992-2001, by types and by selected countries

Country	Installed capacity, 2000			Cumulative purchases 1992-2001		
	Spindles		Open-end rotors	Spindles		Open-end rotors
	Short-staple	Long-staple		Short-staple	Long-staple	
World	156,913,000	15,372,000	8,284,700	30,257,491	3,316,120	2,530,091
United States	3,331,000	628,000	860,000	787,236	63,488	529,844
European Union	5,493,500	4,449,000	496,700	1,681,338	686,518	303,653
Canada	305,000	51,000	40,000	67,920	5,984	26,603
Mexico	3,500,000	227,000	100,000	814,328	102,820	96,840
Asia, total ¹	111,904,500	6,881,000	2,230,700	21,481,335	1,756,282	726,389
China	34,435,000	3,600,000	623,800	2,005,480	961,610	208,363
Hong Kong	48,000	24,000	20,100	96,672	12,676	16,739
Korea	1,803,000	676,000	13,700	409,820	90,708	14,384
Taiwan	2,716,000	339,000	85,700	710,872	66,652	33,105
Bangladesh	2,469,000	15,000	55,900	929,376	2,520	25,616
India	37,698,000	990,000	453,100	11,041,023	233,164	162,083
Pakistan	8,567,000	35,000	149,500	1,351,632	0	8,604
Sri Lanka	246,000	0	0	35,616	0	160
Indonesia	8,500,000	103,000	56,000	1,419,912	90,948	19,247
Malaysia	650,000	35,000	6,000	437,614	21,900	5,451
Philippines	950,000	13,000	50,000	160,112	2,032	14,049
Thailand	3,719,000	65,000	58,500	893,324	61,042	41,609
CBERA countries	489,000	3,000	28,600	77,948	5,280	13,745
Andean countries	1,900,000	148,000	54,500	165,536	58,140	20,287
Sub-Saharan Africa	391,000	70,000	20,200	127,864	10,752	14,064
Other:						
Egypt	2,600,000	98,000	41,000	148,936	66,000	1,976
Turkey	5,554,000	743,000	430,400	2,646,076	299,768	402,513
Share of world total accounted for by Asia (percent)	71	45	27	71	53	29

¹ Also includes a number of countries in Oceania, including Australia and New Zealand.

Source: International Textile Manufacturers Federation, *International Textile Machinery Shipment Statistics*, vol. 24/2001.

more than 10 years old. Although developed countries have incorporated faster, labor-saving equipment to remain competitive in the global market, low-labor-cost countries such as China and India have been able to remain competitive, especially in standard products, using relatively old, less-efficient equipment. Moreover, the number of spindles or rotors does not necessarily correlate with an individual country's actual level of production. Through advances in spinning technology, developed countries, such as the United States, have been able to reduce the number of spindles by replacing them with faster, more efficient equipment, such as O-E rotors.

In the weaving segment during 2000, Asia accounted for 39 percent of the shuttleless looms and 75 percent of the shuttlelooms in place for weaving fabrics from yarns spun on the "cotton system," 92 percent of the filament weaving looms, and 37 percent of the wool

weaving looms (table 1-7).²³ Of total world purchases of weaving equipment during 1992-2001, Asia accounted for 68 percent of the shuttleless looms and 97 percent of the shuttle looms. Most of the installed looms in Asia during 2000 were shuttle looms, which represent the older weaving technology and account for most of the looms in use in China and India. Shuttleless looms are the more advanced technology, have much higher levels of productivity and generally produce wider fabrics with fewer defects and at reduced cost, owing to much faster operating speeds and lower power, space, and labor requirements per unit area of fabric.²⁴ China had the greatest number of installed shuttleless looms of any country in Asia in 2000, followed by Indonesia; China was the largest purchaser of shuttleless looms during 1992-2001 and accounted for over one-half of world purchases of new shuttleless looms during 2000-01 (figure 1-5). Russia and the former Soviet Republics, along with Eastern Europe, also had relatively large capacities to weave fabrics, as did the EU and the United States. Most installed looms in the EU and the United States were shuttleless.

Global Trade

Global textile and apparel trade rose by 6 percent during 1997-2000, to \$374 billion, and then fell by 3 percent in 2001, to \$365 billion. The decline in 2001 reflected the downturn in the global economy, which was exacerbated by the terrorist attacks of September 11, 2001. Based on United Nations data, the share of global merchandise trade accounted for by textiles and apparel was 6.2 percent in 2001, representing a slight decline from the 5-year average (1997-2001) of 6.3 percent.

World Imports

World imports of apparel grew by 11 percent during 1997-2001 to \$215 billion (table 1-8). The major world markets for apparel were developed countries, led by the United States and the EU, which together accounted for 55 percent of world apparel imports in 2001. Other leading apparel markets were Japan, Hong Kong, and Canada. U.S. apparel imports rose by 32 percent during 1997-2001 to \$67 billion—almost one-third of the world's total apparel imports—reflecting the continued shift in focus by U.S. apparel companies away from domestic production to foreign sourcing and the marketing of their products. EU apparel

²³ The cotton system refers to a process originally used for spinning cotton fiber into yarn and now also used for making spun yarns of manmade fibers (staple fiber) and blends of cotton and manmade fibers. Filament weaving looms are used for weaving filament yarn (fiber of indefinite length) of manmade fiber or silk.

²⁴ Shuttleless looms generally are much more efficient than shuttle looms; one industry observer assumed that one shuttleless loom equals three shuttle looms for purposes of estimating broadwoven fabric production capacity. See Robin Anson, Managing Editor, "World Capacities and Shipments of Textile Machinery," *Textile Outlook International* (United Kingdom: Textiles Intelligence Ltd.), July 2000, p. 94.

Table 1-7

Weaving equipment: Number of installed looms in 2000 and number of new looms purchased during 1992-2001, by types and by selected countries

Region or country	Installed capacity, 2000				Cumulative purchases, 1992-2001	
	Cotton system		Filament weaving looms	Wool weaving looms	Shuttleless looms	Shuttle looms
	Shuttleless looms	Shuttle looms				
World	635,680	1,424,620	553,810	128,250	461,586	104,602
United States	¹ 51,560	¹ 2,870	(¹)	860	22,883	22
European Union	50,850	9,720	21,190	32,070	57,602	100
Canada	¹ 3,100	0	(1)	350	982	0
Mexico	14,500	35,000	0	1,150	5,992	0
Asia, total ²	247,560	1,072,250	507,740	46,930	313,091	101,146
China	60,930	594,500	196,440	24,000	144,994	67,720
Hong Kong	4,670	370	0	0	6,198	407
Korea	2,200	0	76,340	880	49,541	4,772
Taiwan	20,890	1,220	24,950	620	32,614	8
Bangladesh ³	3,200	4,700	0	0	1,724	1,324
India ⁴	7,500	115,500	1,500	7,300	7,866	10,983
Pakistan ⁵	16,000	7,200	50,000	0	5,044	1,855
Sri Lanka	1,300	11,000	0	0	29	60
Indonesia ⁶	27,000	200,000	34,000	0	18,684	10,258
Malaysia	4,000	1,200	0	0	5,992	15
Philippines	2,500	7,000	0	0	841	95
Thailand	21,000	61,000	50,000	0	7,067	276
CBERA countries	1,490	8,000	0	0	810	0
Andean countries	6,430	17,500	0	0	1,419	1
Sub-Saharan Africa	1,850	2,440	1,420	400	1,480	592
Other countries:						
Egypt	2,600	8,000	0	1,230	2,034	28
Turkey	16,000	30,000	3,000	6,250	17,552	2
Share of world total accounted for by Asia (percent)	39	75	92	37	68	97

¹ Filament weaving looms included with shuttleless looms on the cotton system.

² Also includes a number of countries in Oceania, including Australia and New Zealand.

³ In addition, there were approximately 30,000 powerlooms and 500,000 handlooms in the non-mill sector.

⁴ In addition, in 1996, there were approximately 1.4 million powerlooms in the decentralized sector on the cotton system, of which 3,000 were shuttleless, and 700,000 powerlooms in the non-mill sector for filament.

⁵ In addition, there were approximately 200,000 powerlooms and 80,000 handlooms in the non-mill sector.

⁶ In addition, there were approximately 30,000 handlooms in the non-mill sector.

Source: International Textile Manufacturers Federation, *International Textile Machinery Shipment Statistics*, vol. 24/2001.

Table 1-8
World imports of apparel (SITC 84), by major markets, 1997-2001

Country or region	1997	1998	1999	2000	2001	Change,
						1997 to 2001
-----Million dollars-----						<i>Percent</i>
United States	50,490.4	55,990.6	59,070.2	67,428.5	66,623.7	32
Extra-EU imports ¹	47,511.3	49,729.2	50,246.1	50,843.1	52,331.5	10
Japan	16,750.2	14,736.0	16,417.5	19,744.1	19,225.9	15
Hong Kong	14,916.4	14,219.5	14,697.1	15,935.1	16,028.1	7
Canada	3,025.6	3,278.5	3,286.2	3,677.2	3,907.8	29
Subtotal	132,693.9	137,953.8	143,717.1	157,628.0	158,117.0	19
Total	194,399.9	198,861.5	203,279.0	216,391.9	215,277.6	11

¹ Data represent EU imports from non-EU countries.

Source: Compiled from United Nations data.

imports rose by 10 percent during the period to \$52 billion in 2001, and Japan's imports increased by 15 percent to \$19 billion. Both the EU and Japanese markets were driven by the same competitive factors as those in the United States; high domestic labor costs forcing production of apparel to lower cost supplying countries. Hong Kong's apparel imports rose by 7 percent to \$16 billion, a major portion of which consisted of shipments of partially-assembled garments from China for further processing under outward processing arrangements set up between Hong Kong and China.

World imports of textiles fell by 5 percent overall during 1997-2001 to \$150 billion (table 1-9). The EU and the United States were also the world's largest markets for textiles in 2001, accounting for 11 percent and 10 percent, respectively, of world textile imports that year. EU textile imports declined by 5 percent during 1997-2001 to \$17 billion, while U.S. textile imports increased by 23 percent to \$15 billion. China's textile imports rose by 2 percent during the period to \$13 billion, making it the world's third-largest importer of textiles, reflecting its use of imported fabrics in its growing apparel production. Hong Kong's textile imports declined by 25 percent during this period, to \$12 billion, reflecting an ongoing shift in apparel production from Hong Kong to China.

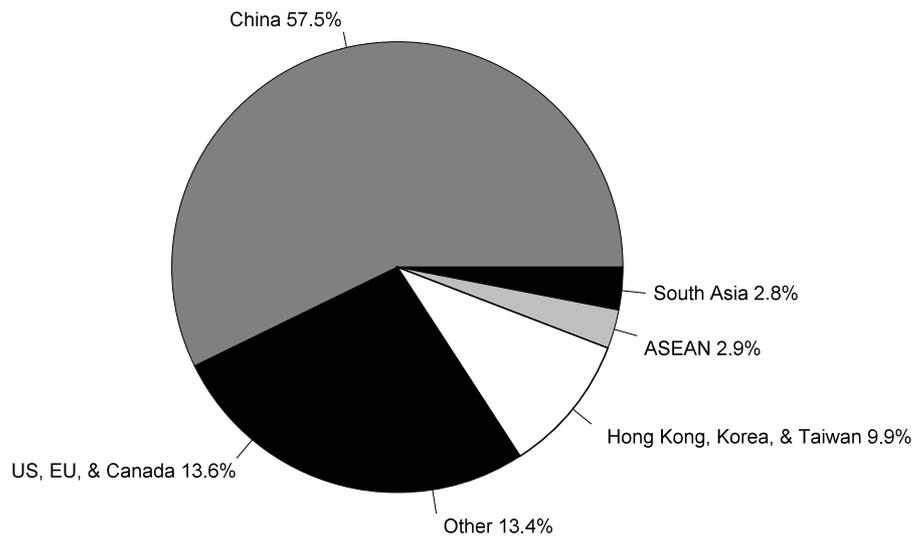
Table 1-9
World imports of textiles (SITC 65), by major markets, 1997-2001¹

Country or region	1997	1998	1999	2000	2001	Change,
						1997 to 2001
-----Million dollars-----						<i>Percent</i>
Extra-EU imports ¹	17,946.0	18,974.9	17,485.3	17,816.0	17,088.1	-5
United States	12,152.0	13,042.9	13,797.8	15,476.9	14,906.1	23
China	12,254.1	11,071.3	11,064.3	12,816.4	12,560.4	2
Hong Kong	16,191.6	13,474.7	12,548.8	13,697.1	12,152.5	-25
Subtotal	58,543.7	56,563.8	54,896.2	59,806.4	56,707.1	-3
Total	157,765.1	155,224.5	146,944.9	158,048.2	149,966.1	-5

¹ Data represent EU imports from non-EU countries.

Source: Compiled from United Nations data.

Figure 1-5
Share of world shipments of new shuttleless looms during 2000-2001



Source: Based on data from the International Textile Manufacturers Federation. *International Textile Machinery Shipment Statistics*, selected issues. Data on shuttleless looms were partly estimated by USITC staff.

World Exports

World exports of apparel rose by 7 percent during 1997-2001 to \$199 billion (table 1-10). China's apparel exports rose by 15 percent during the period to \$36 billion, making it the world's largest apparel exporter with 18 percent of the world total. China supplies a wide variety of apparel, ranging from standard- to medium-quality goods to high-quality apparel. The EU, with apparel exports valued at \$16 billion, was the world's second-largest apparel exporter in 2001, accounting for 8 percent of the world total. EU apparel exports ranged from \$15 billion to \$16 billion during 1997-2001, supplying the world's niche markets with high-quality apparel. Other notable world apparel suppliers such as Hong Kong, Mexico, Turkey, India, and Bangladesh each supplied between 3 and 5 percent of world apparel exports in 2001. Turkey's apparel exports remained relatively stable during 1997-2001, while world apparel exports from Mexico, India, and Bangladesh each rose by approximately 40 percent or more. Mexico's apparel exports grew by 53 percent during 1997-2000 to almost \$9 billion, largely reflecting preferential access to the U.S. market under NAFTA, and then declined by 8 percent in 2001. The significant growth in apparel exports of many countries in Asia; Mexico; the Caribbean Basin region; and Eastern Europe and Northern Africa (which mostly supply the EU market) reflected the low labor costs found in these economies, continuing a trend of apparel production migration from developed countries to these developing areas.

World exports of textiles fell by 8 percent during 1997-2001 to \$144 billion (table 1-11). Much of this decline may be attributed to declining textile exports from Korea and Taiwan, whose exports fell during the period by 18 percent and 23 percent, respectively. Textile companies in both of these economies shifted production of fabrics and other textile products largely to China and other lower cost Asian countries. The EU and China were the largest world exporters of textiles in 2001, accounting for 15 percent and 12 percent, respectively, of total world textile exports. The EU supplies high-quality and specialty yarns, fabrics, and other textile products. China's textile exports increased by 21 percent during 1997-2001 to \$17 billion, as China continued to become an important low-cost source of textiles.

The high growth rates of textile exports, as with apparel exports, from China, Turkey, Mexico, and Eastern Europe reflected the low labor costs found in these economies. The growth in U.S. textile exports may be traced to requirements under U.S. trade preference programs for use of U.S. yarns and fabrics in the offshore assembly of apparel for export to the United States.

Table 1-10
World exports of apparel (SITC 84), by major suppliers, 1997-2001

Country or region	1997	1998	1999	2000	2001	Change,
						1997 to 2001
-----Million dollars-----						Percent
China	31,685.3	29,900.5	29,945.4	35,944.6	36,496.5	15
Extra-EU exports ¹	15,861.2	15,902.0	14,711.5	14,763.8	15,800.6	(²)
Hong Kong	9,323.9	9,663.8	9,569.3	9,932.2	9,261.1	1
Mexico	5,732.8	6,784.0	8,134.0	8,772.4	8,033.3	40
Turkey	6,868.3	7,260.6	6,715.7	6,719.1	6,841.2	(²)
India	4,759.0	5,165.9	5,582.3	6,692.1	6,682.0	40
Bangladesh	3,502.4	3,870.0	4,027.6	5,029.2	5,153.0	47
Subtotal	77,732.9	78,546.8	78,685.8	87,853.4	88,267.7	14
Total	186,026.7	187,404.1	188,798.5	200,408.3	198,527.9	7

¹ Data represent EU exports to non-EU countries.

² Represents a decline of less than 0.5 percent.

Source: Compiled from United Nations data.

Table 1-11
World exports of textiles (SITC 65), by major suppliers, 1997-2001

Country or region	1997	1998	1999	2000	2001	Change,
						1997 to 2001
-----Million dollars-----						Percent
Extra-EU exports ¹	22,782.9	24,077.4	21,548.6	21,745.7	22,062.0	-3
China	13,851.3	12,780.9	13,013.7	16,115.5	16,780.1	21
Korea	13,317.7	11,258.6	11,581.4	12,658.4	10,882.5	-18
United States	8,936.4	8,936.2	9,209.7	10,481.8	10,020.1	12
Taiwan	12,731.9	11,195.2	10,840.4	11,876.5	9,860.8	-23
Japan	6,732.6	5,949.3	6,76.43	6,997.9	6,179.8	-8
India	4,844.0	4,188.9	4,673.6	5,499.1	5,048.0	4
Subtotal	83,196.8	78,296.5	77,443.8	85,374.9	80,833.3	-3
Total	156,767.6	149,776.5	144,611.6	152,426.2	144,340.1	-8

¹ Data represent EU exports to non-EU countries.

Source: Compiled from United Nations data.

