

United States International Trade Commission

Textiles and Apparel:

Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market

**CLASSIFIED BY: United States Trade Representative,
Letter Dated March 3, 1998**

**DECLASSIFIED BY: Robert B. Zoellick, United States
Trade Representative, Letter Dated January 26, 2004**

Volume I

Investigation No. 332-448
USITC Publication 3671
January 2004



U.S. International Trade Commission

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NOTICE

THIS REPORT IS A PUBLIC VERSION OF THE REPORT SUBMITTED TO THE UNITED STATES TRADE REPRESENTATIVE ON JUNE 30, 2003. ALL CONFIDENTIAL BUSINESS INFORMATION HAS BEEN REMOVED AND REPLACED WITH ASTERISKS ().**

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ABSTRACT

Following receipt of a request from the United States Trade Representative (USTR) on September 16, 2002, the U.S. International Trade Commission instituted investigation No. 332-448, *Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market*, under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)). As requested by the USTR, the report 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). The foreign suppliers are (1) significant ATC suppliers to the U.S. market, (2) Mexico, and (3) other supplying countries with preferential market access.

China is expected to become the “supplier of choice” for most U.S. importers (the large apparel companies and retailers) because of its ability to make almost any type of textile and apparel product at any quality level at a competitive price. However, the extent to which China continues to expand its shipments following quota elimination in 2005 will be tempered by the uncertainty over the use by the United States of the textile-specific safeguard provision contained in China’s WTO protocol of accession. To reduce the risk of sourcing from only one country, U.S. importers also plan to expand trade relationships with other low-cost countries as alternatives to China, particularly with India, which also has a very large manufacturing base for textiles and apparel and a large supply of relatively low-cost skilled labor. One or two other low-cost exporting countries in South Asia--Bangladesh or Pakistan--are expected to emerge as major suppliers for a narrower but still significant range of goods. Some U.S. importers indicated they would also consider CBERA countries, particularly those located in Central America, as a major source of supply if a Central American or hemispheric free-trade agreement is negotiated that allows the use of third-country fabrics. In the ASEAN region, the only countries considered competitive as major alternate suppliers to China or India are Vietnam and, to a lesser extent, Indonesia. However, although both countries have an abundant supply of low-cost labor, Vietnam will not be eligible for quota elimination until it becomes a WTO member, while Indonesia is considered somewhat risky because of its political and social unrest.

Although many countries may see their share of the U.S. market decline, a large number of countries likely will become second-tier suppliers to U.S. apparel companies and retailers in niche goods and services. As U.S. firms strive to balance cost, flexibility, speed, and risk in their sourcing strategies, they will look to the second-tier suppliers to meet those needs not met by the first-tier suppliers. Regardless of the outcome of any regional free-trade agreements, the production of certain goods likely will remain in Mexico and the CBERA region to service U.S. buyers’ quick turnaround or mid-season orders requirements. Turkey and Colombia also are considered capable suppliers for quick turnaround business.

The information and analysis in this report are for the purpose of this report only. Nothing in this report should be construed to indicate how the Commission would find in an investigation conducted under other statutory authority.

List of Selected Acronyms

Agreement on Textiles and Clothing (ATC)
Africa, Caribbean, and Pacific (ACP)
African Growth and Opportunity Act (AGOA)
Andean Community (ANCOM)
Andean Trade Preference Act (ATPA)
Andean Trade Promotion and Drug Eradication Act (ATPDEA)
Association of South East Asian Nations (ASEAN)
ASEAN Free Trade Area (AFTA)
Caribbean Basin Trade Partnership Act (CBTPA)
Caribbean Basin Economic Recovery Act (CBERA)
Caribbean Common Market (CARICOM)
Central American Common Market (CACM)
Common Market for Eastern and Southern Africa (COMESA)
East African Co-operation (EAC)
European Union (EU)
Export processing zones (EPZs)
Export tax equivalents (ETEs)
Foreign direct investment (FDI)
Free-trade zones (FTZs)
Generalized System of Preferences (GSP)
Gross domestic product (GDP)
Guaranteed access levels (GALs)
General Agreement on Tariffs and Trade (GATT)
Harmonized Tariff Schedule of the United States (HTS)
International Textile Manufacturers Federation (ITMF)
International Monetary Fund (IMF)
Latin American Integration Association (LAIA)
Lesser-developed beneficiary countries (LDBC)
Manmade fibers (MMF)
Memorandum of Understanding (MOU)
Metric tons (mt)
Most-favored-nation (MFN)
Multifiber Arrangement (MFA)
Multinational corporations (MNCs)
Newly Industrialized Economies (NIEs)
North American Free-Trade Agreement (NAFTA)
Normal-trade-relations (NTR)
Outward processing arrangements (OPAs)
Quantitative restrictions (QRs)
Qualified industrial zones (QIZs)

List of Selected Acronyms—*continued*

Special economic zones (SEZs)
South Asian Association for Regional Cooperation (SAARC)
South African Customs Union (SACU)
Special Administrative Regions (SARs)
Square meters equivalent (SMEs)
Standard International Trade Classification (SITC)
State-owned enterprises (SOEs)
Sub-Saharan Africa (SSA)
Tariff preference levels (TPLs)
Tariff Schedules of the United States (TSUS)
United States-Central America Free-Trade Agreement (CAFTA) (proposed)
United States International Trade Commission (USITC)
Value added tax (VAT)
World Trade Organization (WTO)

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ITC READER SATISFACTION SURVEY

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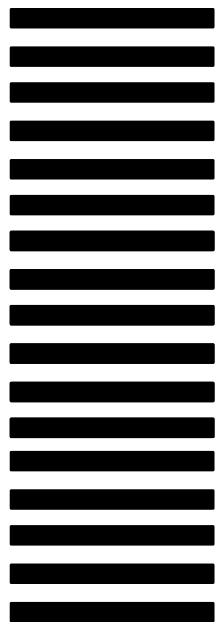
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EXECUTIVE SUMMARY

Following receipt of a request from the United States Trade Representative (USTR) on September 16, 2002, the U.S. International Trade Commission (Commission) instituted investigation No. 332-448, *Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market* under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)). As requested by the USTR, the report 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). 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. 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 Commission assessment highlighting key changes that likely will occur in the global pattern of textile and apparel production and trade following quota elimination in 2005 is presented in the following table. China is expected to become the "supplier of choice" for most U.S. importers (the large apparel companies and retailers) because of its ability to make almost any type of textile and apparel product at any quality level at a competitive price. However, the extent to which China continues to expand its shipments following quota elimination in 2005 will be tempered by the uncertainty over the use by the United States and other importing countries of the textile-specific safeguard provisions contained in China's World Trade Organization (WTO) protocol of accession. To reduce the risk of sourcing from only one country, U.S. importers also plan to expand trade relationships with other low-cost countries as alternatives to China, particularly with India, which also has a very large manufacturing base to produce a wide range of textiles and apparel at competitive prices and a large supply of relatively low-cost skilled labor. Over the long term, exports from China and India could be affected by their strong economic growth, which is likely to increase domestic demand for textiles and apparel, as well as for labor and capital to make these products. One or two other low-cost exporting countries in South Asia—Bangladesh or Pakistan—are expected to emerge as major suppliers for a narrower but still significant range of goods, such as mass-produced basic knit cotton tops and woven cotton shirts and pants (Bangladesh) or men's and boys' cotton apparel (Pakistan). Some firms indicated they also would consider Caribbean Basin Economic Recovery Act (CBERA) beneficiary countries, particularly those located in Central America, as a major source of supply if a Central American or hemispheric free-trade agreement is negotiated that permits the use of regional (e.g., Mexican) fabrics or third-country (e.g., Asian) fabrics. Among the member countries of the Association of South East Asian Nations (ASEAN), the only countries considered competitive as major alternate suppliers to China or India are Vietnam and, to a lesser extent, Indonesia. However, although both countries have an abundant supply of low-cost labor, Vietnam will not be eligible for quota elimination until it becomes a WTO member, while Indonesia is considered somewhat risky because of its political and social unrest.

Although many countries may see their share of the U.S. market decline, there likely will be exceptions to these trends, especially at the firm level, reflecting the importance of longstanding relationships between U.S. apparel companies and retailers and their foreign suppliers, as well as the efficiency, flexibility, and experience of foreign suppliers in producing certain articles. A large number of countries likely will become major “second-tier” suppliers to U.S. apparel companies and retailers for niche goods or services. As U.S. firms seek to balance cost, flexibility, speed, and risk in their sourcing strategies, they likely will look to the second-tier suppliers to meet those needs that are not met by the first-tier suppliers. For example, production of certain goods likely will remain in Mexico and the CBERA region to service U.S. buyers’ quick turnaround or mid-season order requirements, particularly for replenishment of basic items offered in a wide range of different sizes, such as men’s dress shirts and pants. Quick-turn orders also are needed sometimes for fashion goods, when retailers are “chasing” the latest trends, styles or colors. Turkey and Colombia also are considered capable suppliers for quick-turn business. Firms also are looking for low-cost suppliers that have preferential duty access to the U.S. market to help contain costs for articles subject to relatively high duty rates.

Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries		
Region/country	Likely effect of quota removal	Contributing factors
EAST ASIA	<p>Summary: U.S. apparel companies and retailers are likely to expand sourcing from the region and continue close relationships with suppliers in the region, who are major sources of textile and apparel investment worldwide.</p>	<p>Summary: Labor - Sewing skills considered among the best in the world. Inputs - Substantial manufacturing base for raw materials. Transportation - Best shipping times to the U.S. west coast within Asia.</p>
	<p>China: Likely to be supplier of choice for most large U.S. apparel companies and retailers; uncertainty regarding textile-specific safeguards may temper export growth. Over the long term, competitiveness may diminish as strong economic growth leads to greater domestic demand for textiles and apparel, and for the labor and capital to make these goods. Showed tremendous growth in export of goods for which it became eligible for quota-free entry in 2002.</p>	<p>China: Labor - Per-unit labor costs very low due to low wages and high productivity. Inputs - Produces fabrics, trim, packaging, and most other components used to make apparel and made-up textile articles. Products - Considered by industry among the best in making most garments and made-up textile articles at any quality or price level. World's largest producer and exporter of textiles and apparel, notwithstanding tight quotas in major world import markets.</p>
	<p>Hong Kong and Macau: Initially, may continue to be suppliers of some apparel under outward processing arrangements (OPAs) with China because of uncertainty regarding textile-specific safeguards with China. There are no other compelling reasons to source most apparel from these relatively high-cost suppliers.</p>	<p>Hong Kong and Macau: Labor - High-cost suppliers compared with China. Special arrangements - OPAs allow for some of the labor intensive production steps to take place in China, but remain a product of Hong Kong or Macau for trade purposes. Will not be subject to China-specific safeguards after quotas are removed.</p>
	<p>Korea and Taiwan: Likely to continue as major suppliers of fabrics to global industry, including to China. However, U.S. firms are likely to move sourcing of apparel to lower-cost countries, particularly China; may continue to source certain garments from these suppliers (e.g., men's dress shirts, dresses, and other fashion apparel).</p>	<p>Korea and Taiwan: Labor - High per-unit labor costs; high labor productivity. Products - Small, flexible sewing lines advantageous for fashion apparel; highly automated sewing lines for dress shirts; offer full-package services.</p>

Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries

Region or country	Anticipated effects of quota removal	Key competitive factors
<p>SOUTH ASIA</p>	<p>Summary: U.S. firms will likely expand sourcing from South Asia with the removal of quotas in 2005.</p>	<p>Summary: Inputs - Huge manufacturing base for yarns and fabrics. Competitive position - Most competitive alternative to China as a supplier, but competitiveness of each country varies widely.</p>
	<p>India: Likely to remain a competitive supplier to the United States when quotas are removed in 2005. Considered by many U.S. firms the primary alternative to China. Over the long term, competitiveness may diminish as strong economic growth leads to greater domestic demand for textiles and apparel, and for the labor and capital to make these goods.</p>	<p>India: Labor - Huge, relatively inexpensive, skilled workforce; has design expertise. Inputs - Among the world's largest producers of yarns and fabrics; Products - Wide range of apparel; considered a competitive source for home textiles (e.g., bed linens and towels). Business climate - Personal safety, security of shipments between factories and ports and bureaucratic red tape and infrastructure are issues, with many U.S. firms using agents in lieu of dealing directly with producers.</p>
	<p>Pakistan: Likely to continue as a supplier to the U.S. market. Considered by many U.S. firms as a competitive alternative to China, particularly for men's apparel. May continue to be a global supplier of cotton yarns and fabrics.</p>	<p>Pakistan Labor - Large, relatively inexpensive labor supply. Inputs - Access to local supplies of raw cotton. Business climate - The Government is taking steps to ensure the global competitiveness of the textile and apparel sector; personal safety and security of shipments between factories and ports are issues.</p>
	<p>Bangladesh: The status of Bangladesh as an overall supplier to U.S. market is uncertain. Considered by some U.S. firms to be competitive alternative to China for mass-produced, low-end apparel.</p>	<p>Bangladesh: Labor - Very low wage rates; productivity improving, but lags China; government is working to improve labor standards. Inputs - Relies heavily on imports for woven fabric requirements; becoming increasingly self-sufficient in knit fabrics. Special arrangements - Duty-free access to major world import markets, including the EU, Canada, and Norway. Products - Mass-produced basic garments, including knit cotton tops and woven cotton pants.</p>

Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries		
Region or country	Anticipated effects of quota removal	Key competitive factors
	<p>Sri Lanka: Likely to see its share of U.S. apparel imports fall, but expected to be a niche supplier for specialty or fashion goods, hosiery, and women's intimate apparel such as bras and underwear.</p>	<p>Sri Lanka Labor - Relatively small labor pool; relatively high wage rates. Inputs - Relies heavily on imported yarn and fabric.</p>
ASEAN	<p>Summary: Overall share of U.S. textile and apparel imports is likely to decline as U.S. firms reduce sourcing in all but a few countries.</p>	<p>Summary: Labor - Costs relatively high in all ASEAN countries except Indonesia and non-WTO members Vietnam and Cambodia, which are ineligible for quota liberalization. Transportation - Shipping times to the U.S. west coast average 45 days, compared with 12 to 18 days from China.</p>
	<p>Indonesia: Future status as a supplier to the U.S. market uncertain. Many U.S. firms consider Indonesia to be a competitive supplier, but indicated its political and social unrest may discourage future sourcing.</p>	<p>Indonesia: Labor - Abundant supply of low-cost, skilled labor. Inputs - Huge manufacturing base for raw materials, especially synthetic fibers, yarns, and fabrics. Business Climate - Frequent political and social unrest likely to deter growth in sourcing in the short term.</p>
	<p>Philippines: Share of U.S. apparel imports is likely to decline, as has already occurred in goods for which quotas were eliminated (e.g., babies' apparel).</p>	<p>Philippines: Labor - English-speaking, skilled labor force; high wage rates. Inputs - Relies heavily on imported yarn and fabric. Special arrangements - Foreign-trade zones on former U.S. military bases provide established modern infrastructure. Business Climate - Political and social unrest.</p>
	<p>Thailand: Share of U.S. imports is likely to decline, as has already occurred in goods for which quotas were eliminated (e.g., babies' apparel and luggage); may become a niche supplier of garments having complex construction or detailed sewing requirements.</p>	<p>Thailand: Labor - Highly-skilled workforce; high wages, partly because of a labor shortage. Inputs - Domestic supply of yarns and fabrics. Products - Strong needlework skills and small-scale factories enable intricately designed garments and flexibility in sourcing fashion apparel.</p>

Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries		
Region or country	Anticipated effects of quota removal	Key competitive factors
	<p>Malaysia: Share of U.S. apparel imports is likely to decline significantly.</p>	<p>Malaysia: Labor - Labor shortage; wages second-highest in the region after Singapore.</p> <p>Business climate - Although Government highlights importance of textile and apparel sector, investment is largely directed to other industries.</p>
MEXICO	<p>Share of U.S. apparel imports is likely to decline further, even with NAFTA preferences. May continue to be a niche supply for some basic apparel, particularly for goods needed on short-turnaround basis.</p> <p>Has the potential to expand yarn and fabric exports to other countries in the western hemisphere under a proposed Free Trade Area of the Americas or to Central America if the proposed U.S.-Central America FTA permits the use of Mexican inputs.</p>	<p>Labor - Costs are relatively high; product quality and production reliability problematic; middle management responsible for running the factories is considered weak; product design expertise limited.</p> <p>Inputs - Produces knit and woven fabrics. Cost is reportedly less than that for similar U.S.-produced fabrics, but higher than similar Asian fabrics.</p> <p>Products - Concentrates on mass-producing basic garments, particularly 5-pocket denim jeans, knit tops, and undergarments; limited capability for fashion apparel. Limited ability to offer full-package services.</p> <p>Business climate - Additional overhead costs in providing security for shipments from factories to the U.S. border and complying with paperwork requirements for preferential treatment under NAFTA.</p>
CBERA	<p>Summary: Most U.S. firms indicated they will reduce sourcing from the CBERA countries, especially if the proposed U.S.-Central America FTA does not permit the use of regional (e.g., Mexican) or third-country (e.g., Mexican or Asian) fabrics.</p> <p>However, even without a regional or third-country fabric provision in the proposed U.S.-Central America FTA, the region is likely to continue to mass-produce garments having minimal labor content and make apparel for quick-turn orders.</p>	<p>Summary: Products - Mass-produces basic garments, particularly those with low-labor content and few delicate sewing operations.</p> <p>Inputs - Relies heavily on imported yarn and fabric from the United States, largely reflecting U.S. content rules under the CBTPA to qualify for trade benefits; U.S. and regional fabrics required to qualify for CBTPA preferences cost more than similar fabrics made in Asia.</p> <p>Transportation - Benefits from proximity to U.S. market.</p> <p>Special arrangements - Duty-free access under CBERA.</p>

Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries		
Region or country	Anticipated effects of quota removal	Key competitive factors
	<p>Costa Rica: Share of U.S. apparel imports is likely to decline significantly.</p>	<p>Costa Rica: Labor - Highest labor costs in region; highly educated labor force. Business climate - Government trying to attract other, non-apparel investment.</p>
	<p>Dominican Republic: Share of U.S. apparel imports may decline, but likely to continue to supply apparel for quick-turn orders. Considered among the five most attractive suppliers from the region.</p>	<p>Dominican Republic: Labor - Shifted some assembly operations to Haiti to take advantage of Haiti's lower labor costs. Transportation - Benefits from proximity to U.S. market.</p>
	<p>El Salvador, Guatemala, Honduras, and Nicaragua: Future status as a supplier to the U.S. market uncertain, pending the outcome of regional or hemispheric free trade negotiations. Considered among the five most attractive suppliers from the region.</p>	<p>El Salvador, Guatemala, Honduras, and Nicaragua: Labor - Costs in most countries higher than China and other Asian countries. Inputs - Some regional knit fabric production.</p>
	<p>Haiti and Jamaica: Share of U.S. apparel imports is likely to decline significantly.</p>	<p>Haiti and Jamaica: Labor - Haiti has lowest hourly compensation costs in region. Business climate - Personal safety and security of shipments are issues.</p>
ANDEAN	<p>Summary: Share of U.S. imports likely to decline overall, but may continue to be a niche supplier to the U.S. market.</p>	<p>Summary: Special arrangements - U.S. legislation enacted in August 2002 providing for duty-free treatment of apparel imports from region using regional yarns and fabrics.</p>
	<p>Colombia: Colombia likely to become less cost competitive in the U.S. market with Asian suppliers following quota removal, but could still be competitive for garments in which lead times are critical.</p>	<p>Colombia: Inputs - Domestic supply of knit and woven fabrics. Products - Considered capable supplier of tailored clothing, sportswear, and only country in South and Central America skilled in fashion apparel. Business climate - Personal safety and security of shipments between factories and ports are issues.</p>

Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries		
Region or country	Anticipated effects of quota removal	Key competitive factors
	<p>Peru: May see its overall share of U.S. apparel imports decline, but expected to continue to be a niche supplier of high-end knit shirts.</p>	<p>Peru: Inputs - Domestic supply of high-quality cotton and fine-animal hair. Domestic production of yarns and fabrics. Products - Niche supplier of high quality, cotton knit shirts and related garments.</p>
	<p>Bolivia and Ecuador: Very small suppliers to the U.S. market; could become sources for specialty goods, such as those made of fine hairs from animals indigenous to these countries.</p>	<p>Bolivia and Ecuador: Inputs - Relies heavily on imports of fibers, yarns, fabrics, and findings. Has some supply of specialty animal fibers.</p>
TURKEY	<p>Future status as a supplier to the U.S. market uncertain. Several firms indicated Turkey would be an attractive supplier if it had a free-trade agreement with the United States. A few firms indicated they would continue or increase sourcing from Turkey, even without a free-trade agreement.</p> <p>May continue to be a global supplier of cotton fabrics.</p>	<p>Inputs - Domestic supplies of raw cotton, cotton yarns and fabrics.</p> <p>Special arrangements - Proximity and duty-free access to EU market.</p> <p>Products - Large cotton-based textile and export-oriented apparel industries; fast turnaround and fashion capabilities.</p> <p>Transportation - Shipping times to U.S. market similar to those for East Asia.</p>
EGYPT	<p>Likely to decline in importance as a supplier to the U.S. market, though a few industry sources indicated they will continue to source some products from Egypt following the removal of quotas. U.S. firms indicated Egypt would be an attractive supplier if a free trade agreement were negotiated with the United States.</p>	<p>Inputs - Largely government-owned textile industry characterized by excess employment, outdated technology and relatively low productivity. High raw material costs, owing to government -set minimum prices on cotton. Apparel manufacturers import yarn and fabric.</p> <p>Products - Industry largely cotton-based. Exports large quantities of its acclaimed "Egyptian cotton" in the form of yarns to the U.S. textile industry.</p>

Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries

Region or country	Anticipated effects of quota removal	Key competitive factors
<p>ISRAEL AND JORDAN</p>	<p>Israel may continue to be a niche supplier for intimate apparel.</p> <p>Jordan may continue to be a niche supplier of apparel articles that are subject to high U.S. duty rates, such as manmade-fiber garments. However, sourcing from Jordan may be affected by the outcome of free-trade negotiations involving countries in the Western Hemisphere. If the proposed U.S.-Central America FTA or FTAA extends unlimited duty-free treatment to U.S. imports of apparel made in the region from third-country fabrics, U.S. firms are likely to shift sourcing to the region from distant sources such as Jordan.</p>	<p>Labor - Production in Israel highly automated and labor costs are high. Relatively low labor costs in Jordan.</p> <p>Special arrangements - Under the FTA with Israel, the United States established a “qualified industrial zone” program with Jordan and Israel that grants duty-free treatment to qualifying textile and apparel articles.</p>
<p>SUB-SAHARAN AFRICA</p>	<p>Summary: Industry sources indicated that this region’s overall share of U.S. apparel imports will fall, notwithstanding AGOA preferences.</p> <p>AGOA preferences may spur U.S. firms to source products from the region that are subject to high U.S. duty rates, such as manmade-fiber and wool apparel, particularly if the provision allowing for the use of third-country fabrics is extended beyond 2004. Some sourcing of basic garments made in the region from local fabrics, such as pants and knit tops, may also continue.</p> <p>Kenya: Share of U.S. apparel imports is likely to decline.</p> <p>Lesotho: Share of U.S. apparel imports is likely to decline.</p> <p>Madagascar: Share of U.S. apparel imports is likely to decline.</p>	<p>Summary: Products - Produces basic, rather than fashion apparel. Most manufacturers do not offer full-package services. Many firms have limited capacity to offer large volumes that may be required by U.S. firms looking to consolidate sourcing following quota removal.</p> <p>Infrastructure - Infrastructure and logistics inferior to those in other regions of the world. Shipping time longer than that from East Asia.</p> <p>Kenya: Business climate - Personal safety an issue for sourcing from country.</p> <p>Lesotho: Inputs - No domestic yarn or fabric supply. Planned investment in new yarn and knit fabric production capacity.</p> <p>Madagascar: Business climate - Political unrest in 2001 and 2002 resulted in large disinvestment in the industry. Government is trying to restart the industry, but future prospects are uncertain.</p>

Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries		
Region or country	Anticipated effects of quota removal	Key competitive factors
	<p>Mauritius: Share of U.S. apparel imports is likely to decline.</p>	<p>Mauritius: Labor- High labor costs owing to shortage of labor. Competition for workers from high-tech sectors.</p> <p>Inputs - Shortage of cotton yarn production for knit apparel. Planned investment in new yarn spinning capacity.</p>
	<p>South Africa: Share of U.S. apparel imports is likely to decline.</p>	<p>South Africa: Labor - Relatively high labor costs.</p> <p>Inputs - Domestic supply of yarns and fabrics. Only SSA country producing synthetic filament yarn.</p>

Source: The Commission assessment is based on interviews with representatives of U.S. apparel and textile companies, U.S. retailers, foreign textile and apparel producers and investors, and foreign government officials; a review of the literature; and testimony presented to the Commission at the public hearing and in written statements.

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.

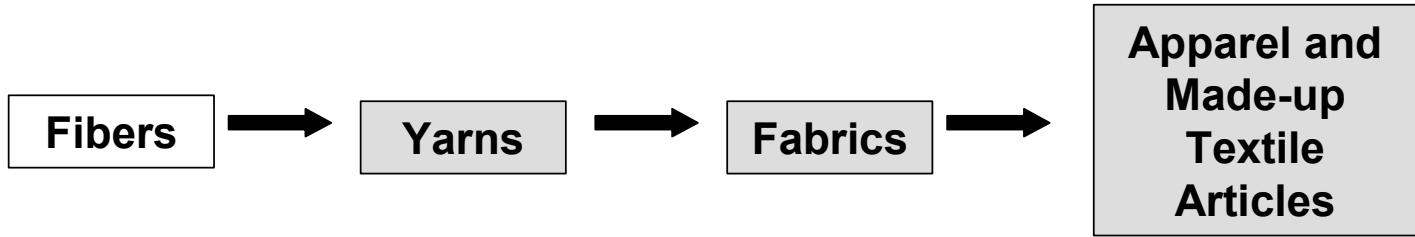
The ATC entered into force with the World Trade Organization (WTO) agreements in 1995 and created special interim rules to govern trade in textiles and apparel among WTO countries for 10 years. The ATC called for the gradual and complete elimination of quotas on textiles and apparel established by the 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,

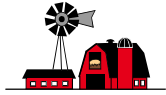
¹ The USTR letter is in appendix A, and the Commission's notice of investigation, published in the *Federal Register* of Oct. 17, 2002 (67 F.R. 64131), is in appendix B.

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
Macau	.4	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).

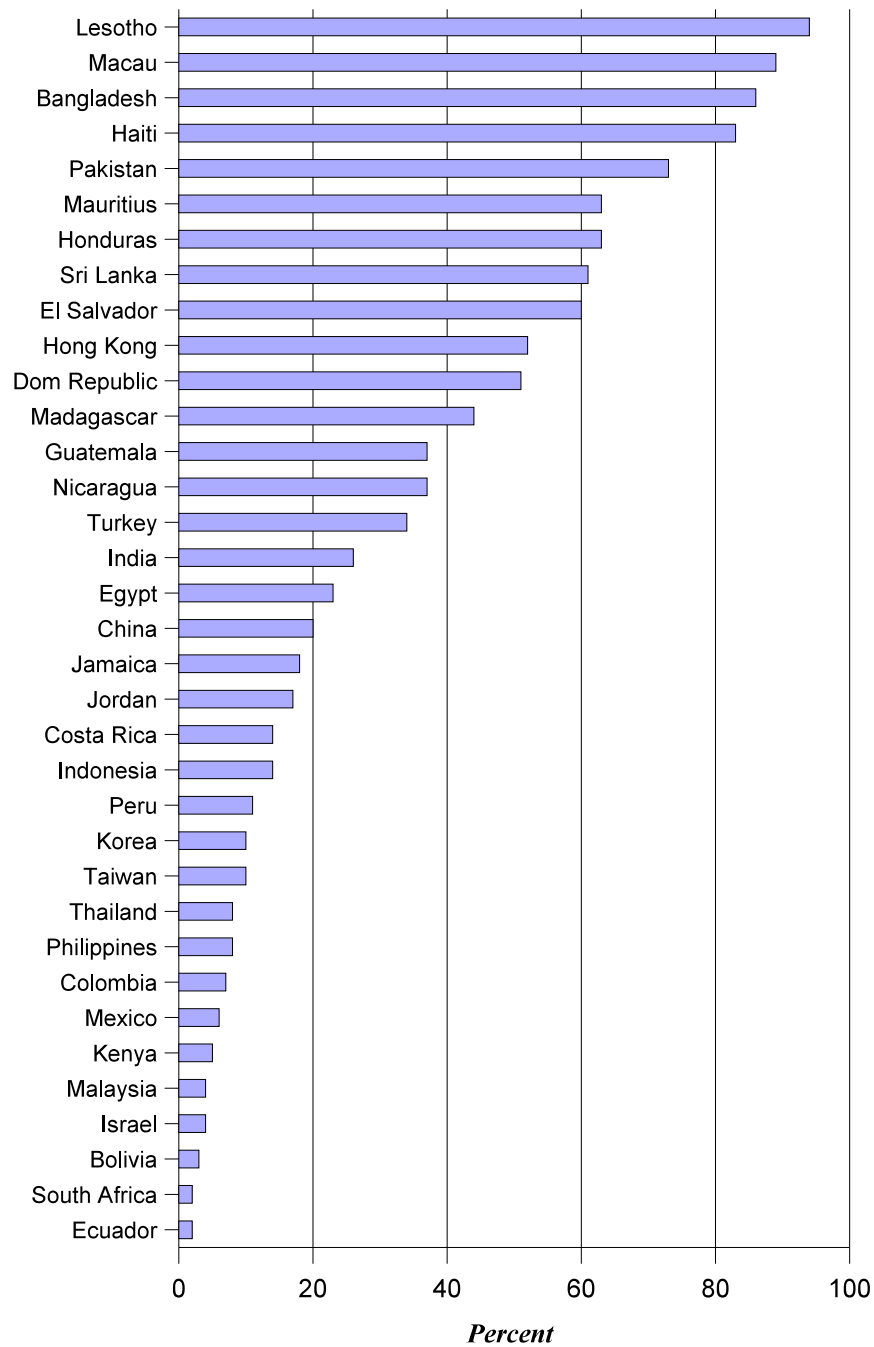
⁵ Represents GDP per capita for 1998, the latest year for which data are available.

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

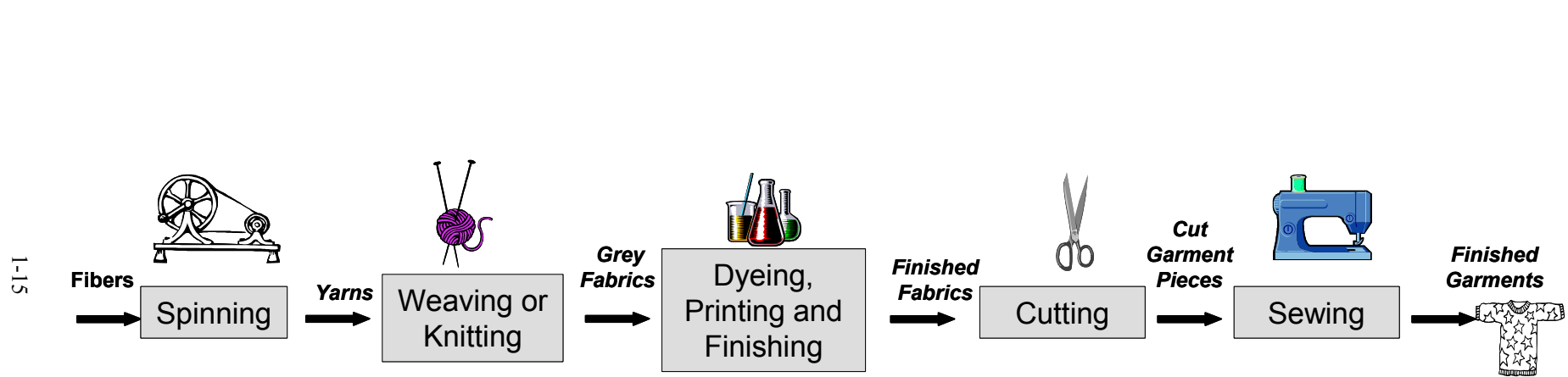
¹⁷ Committee for the Implementation of Textile Agreements, "Establishment of Import Restraint Limits for Certain Cotton, Wool and Man-Made Fiber Textile Products Produced or Manufactured in Cambodia," *Federal Register*, Feb. 8, 1999 (64 F.R. 6050).

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 1990-2000¹
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.

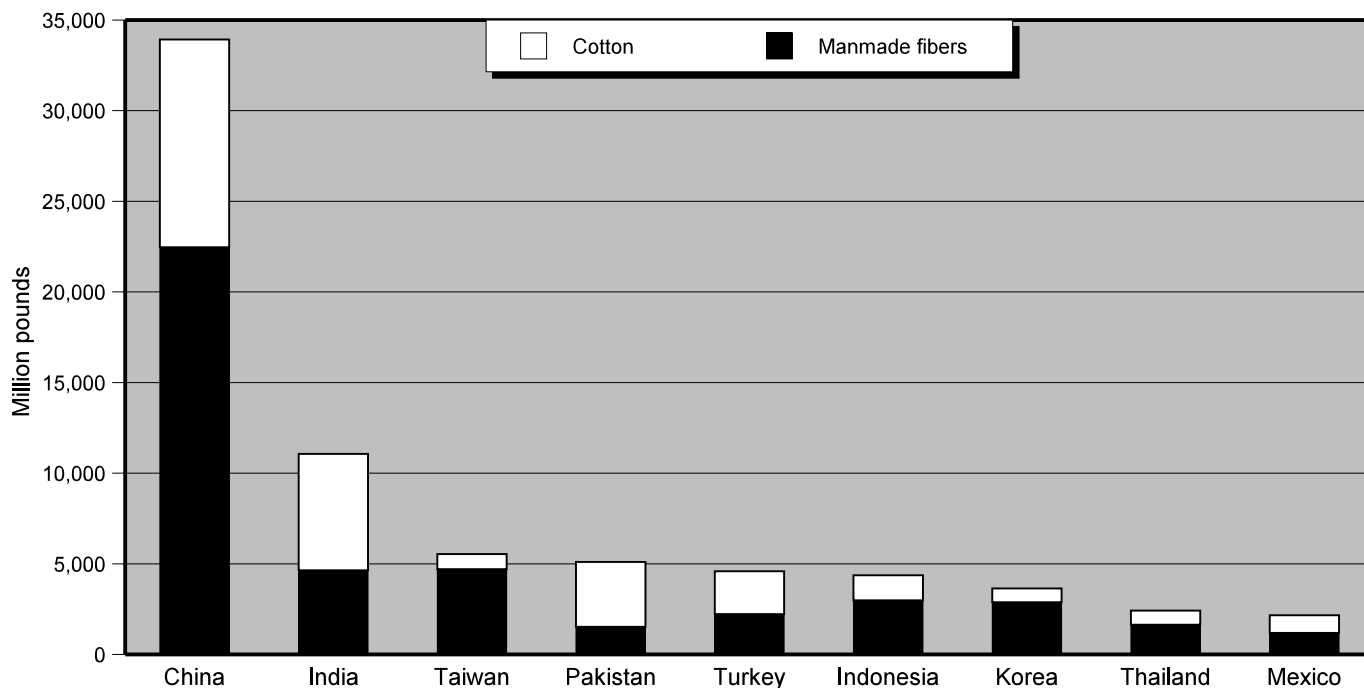
Table 1-5
Global mill fiber consumption, by regions, 1997-2001

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-----						Percent
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.

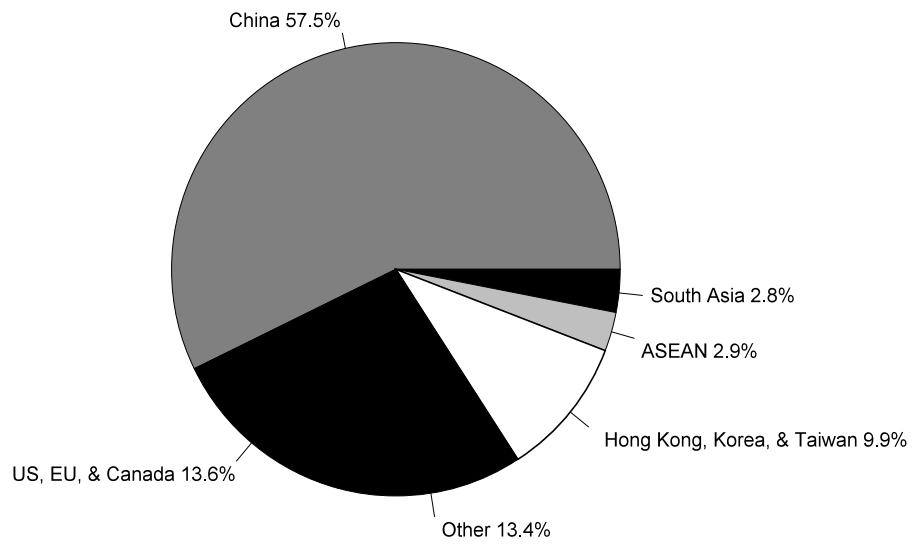
Table 1-9
World imports of textiles (SITC 65), by major markets, 1997-2001¹

Country or region	1997	1998	1999	2000	2001	Change,
						1997 to 2001
-----Million dollars-----						Percent
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	6,764.43	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.

CHAPTER 2: REVIEW OF THE LITERATURE¹

The extent of the impact of the removal of the MultiFiber Agreement (MFA) quotas on world textile and apparel trade patterns is likely to depend on a number of factors including the degree of restraint imposed by the quotas. This chapter first reviews analytical studies that have looked at the direct impact of quota elimination on the global pattern of textile and apparel trade and production. Second, it discusses the different competitiveness factors identified in the literature as potentially affecting post-2005 trade patterns.

Impact of Quota Removal

MFA quotas are quantitative restrictions that have a number of characteristics. First, they are applied on a discriminatory basis to some exporting countries but not to others. Second, they are negotiated on a bilateral basis rather than imposed globally and, therefore, differ from country to country in terms of product coverage and degree of restrictiveness. Third, they involve limits on exports, transferring rents (generated by these restraints) from the importing country to the exporting country.²

A large body of literature attempts to predict or to quantify the likely impact of the removal of quantitative restrictions.³ Different approaches have been used to address the issue (table 2-1).⁴ Diao and Somwaru (2001) estimate that over the 25-year period following the ATC implementation, the annual growth of world textile and apparel trade would be more than 5 percent faster than in the absence of the ATC.⁵ According to their simulations, this acceleration translates into about \$20 billion more trade in the short run (upon implementation) and as much as \$200 billion in the long run (25 years). They also predict that, consistent with the trend in the historical data, world apparel trade will increase twice as fast as textile trade in the post-quota world. Similar results are reported by Avisse and

¹ A detailed list of references cited in this chapter appear at the end of this chapter.

² As with other voluntary export restraints (VERs), the quantitative restraints on textiles and apparel are not “voluntary” in that they are imposed by the importing country (e.g., the United States or the EU) pursuant to bilateral agreements with each exporting country. The difference between what the exporter is able to charge in the foreign market and the world market as a result of a VER is referred to as economic rent. For more on this, see USITC (2002, pp. 23-43).

³ This chapter reviews only recent analytical studies. These studies use different types of analytical tools, the characteristics of which are summarized in table 2-1. For references and review of earlier works, see OECD (2003).

⁴ Most of the analytical studies surveyed in this chapter are based on a 1995 or 1997 database. Despite some adjustments, the results contained in those studies are derived primarily by using trade patterns and other information for those years. Trade patterns may be quite different when quotas are actually lifted in 2005.

⁵ That is, if world textile and apparel trade is expected to grow 8 percent annually in the 25 years following 2005, then, the new annual growth rate in the model is about an 8.5 percent average.

Table 2-1
Characteristics of selected analytical studies relating to the ATC

Authors	Database	Model Characteristics	Policy Simulations	General Results
Francois and Spinanger (2001)	GTAP 4 (Base year 1995) Quota prices for Hong Kong for 1998/99	Standard Static GTAP model and parameters	Quota removal plus Uruguay Round trade liberalization in the context of China's WTO accession. (Focus: Hong Kong)	Textile and clothing exports from Asia (especially south Asia) increase substantially. Preferential access to the United States and the EU would be reduced and there would be a shift in demand away from countries like Mexico and Turkey. Sub-Saharan Africa's exports would also drop.
Terra (2001)	GTAP 4 (Base year 1995)	Standard Static GTAP model and parameters	(i) Quota removal and (ii) Quota removal plus tariff reductions (Focus: Latin America)	Developing countries subject to the biggest quantitative restrictions would expand their exports at the expense of the importing developed countries, but also of other developing countries which are less restricted (i.e., Latin American countries). MERCOSUR and Chile would reduce their exports of clothing significantly, and their exports of textiles moderately. Effects would be stronger in (ii) than in (i).
Avisse and Fouquin (2001)	GTAP 4 (Base year 1995)	Standard Static GTAP model and parameters	Quota removal	Output share of Asia increases from 12 percent to 18 percent. China's exports would increase by 87 percent, South and Southeast Asia's would increase by 36 percent. Latin America and NAFTA would lose 39 percent and 27 percent, respectively.
Diao and Somwaru (2001)	GTAP 5 (Base year 1997); 25 year baseline	Counterfactual analysis using an intertemporal version of GTAP	MFA phase-out simulated by improving the efficiency of textile and apparel exports from constrained countries. Other trade barriers on textile and apparel imports are reduced by 30 to 40 percent in all countries. They econometrically estimate that a percent increase in apparel trade shares is associated with a 3.3 percent increase in per capita income.	The annual growth of world textile and apparel trade would be more than 5 percent higher. Market share of developing countries as a whole would increase by 4 percentage points following the ATC. China would gain almost 3 percentage points of the world Textile and apparel market, while other Asian countries would capture more than 2 percent. Non-quota developing countries are predicted to lose about 20 percent of their markets (equal to 2.3 percentage points of world total textile and apparel markets) to the restrained ones.

Table 2-1--Continued
Characteristics of selected analytical studies relating to the ATC

Authors	Database	Model Characteristics	Policy Simulations	General Results
Matoo, Roy, and Subramanian (2002)	Data collected by the authors.	Partial Equilibrium. ETEs derived from Kathuria and Bharadwaj (2000). Leontief production. Export elasticities from 1 to 5.	Interaction between the ATC and the AGOA rules of origin for Mauritius and Madagascar	Under the current AGOA system, the apparel exports of Mauritius and Madagascar would be about 26 percent and 19 percent lower, respectively, following 2005. If AGOA's rules of origin requirement is eliminated, the decline in Mauritius's exports would be only 18 percent, and Madagascar's exports could increase.
Lankes (2002)	GTAP 5 (Base Year 1997)	Standard Static GTAP model and parameters	Quota removal	Total export revenue loss attributed to the MFA quotas estimated to be \$22 billion for developing countries and \$33 billion for the world as a whole.

Source: Compiled by Commission Staff.

Fouquin (2001), who find that, as a result of the ATC, the global trade in textiles and apparel would be about 10 percent and 14 percent higher, respectively.

Although the elimination of MFA quotas is predicted to result in an increase in global trade, the impact is likely to differ among countries and regions. For each country, quota elimination represents both an opportunity and a threat: an opportunity because markets will no longer be restricted and a threat because other suppliers will no longer be restrained and major markets will be open to intense competition.⁶ For instance, Lankes (2002) argued that the ATC may lead to a reallocation of production to the detriment of developing-country exporters that have been “effectively protected” from more competitive suppliers by the quota system.⁷

The degree of restrictiveness of a quota can then serve as a useful, albeit imprecise, yardstick in broadly predicting the likely impact of its removal.⁸ Being able to determine which countries are quota-constrained and which are not is useful in understanding how particular countries will fare following quota elimination. In the existing literature, the degree of restrictiveness of an MFA quota is often measured in terms of its “export tax equivalent” (ETE): MFA quotas are administered by the exporting countries and impose a cost on exporting firms that is exactly analogous to an export tax.⁹ In order to export, a firm in a

⁶ See Kathuria and Bhardwaj (1998).

⁷ At the same time, he also estimates the total export revenue loss attributed to the MFA quotas to be \$22 billion for developing countries and \$33 billion for the world as a whole.

⁸ See, for example, Nathan Associates, Inc (2002).

⁹ Kathuria, Martin, and Bhardwaj (2001). See also, USITC (2002).

quota-constrained country has to obtain or purchase a quota (or an export license). The more restrictive a quotas is, the higher this tax will be.¹⁰

ETEs are obviously zero for non-restrained products or countries. Flanagan (2003) pointed out that, although as many as 73 countries are included in the quota system, some do not fully utilize their quotas. Elimination of an unfilled or non-binding quota has little effect on a country's ability to export because it could have continued to export to the quota limit in any case.¹¹

Many estimates of ETEs exist, and they vary for different countries and timeframes. Francois and Spinanger (2001) estimate that Hong Kong clothing exporters face an implicit export tax of up to 10 percent for goods intended for the U.S. market and 5 percent for the European Union (EU) market.¹² Kathuria and Bhadrwaj (1998) report that in 1996, Indian exporters to the United States paid an ETE of 39 percent (cotton based) and 16 percent (synthetics), versus 17 percent (cotton based) and 23 percent (synthetics) in the EU market. In USITC (2002, table 3-3), the import-weighted ETEs for U.S. imports were estimated to be about 21 percent for apparel, and those for nonapparel textile categories were around 1 percent.

In general, the literature reveals that Asian countries are relatively more constrained than other regions. Flanagan (2003) categorizes countries into groups depending on how "quota-constrained" they are in terms of the number of product categories where quotas seriously limit demand. In the group of "Countries seriously held back, almost across the board, by quota today" are Bangladesh, China, Hong Kong, India, Indonesia, Pakistan, Philippines, Korea, Sri Lanka, and Thailand. At the other end of the spectrum, countries such as Nepal, Oman, Qatar, and United Arab Emirates (UAE) are categorized as "Countries whose quotas have been a valuable tool, now threatened." According to Flanagan, China, India and Indonesia have shown the most consistent and widespread near-saturation of quotas for yarn, fabric, and garments.

Many analysts predict that the market shares of quota-constrained suppliers will increase markedly following 2005.¹³ Terra (2001) predicts that apparel production of the restrained exporters, as a whole, will increase by almost 20 percent, and their textile production will increase by almost 6 percent (table 2-2). Meanwhile, Terra estimates that the market shares of non-quota-constrained suppliers (e.g., Mexico as well as African and CBI countries) will shrink, predicting a fall in the exports of Latin American countries, which will be displaced

¹⁰ If these restraints are binding, the prices of these products are expected to rise in the importing country. Exporters who have licenses to export are able to capture economic rents by increasing the export prices of their products. An increase in the restrictiveness of a quota will raise the price for the good, which then makes the quota license more valuable and the export tax equivalent higher. See USITC (2002) for more on this.

¹¹ Nathan Associates (2002). Many studies have defined a binding quota on the basis of quota utilization, where utilization is measured by the ratio of actual imports to quota allotment. Utilization can be difficult to measure and quotas might be binding despite relatively low utilization rates, for reasons such as inefficient administration of quotas. See USITC (2002, p. 32) and Trella (1998).

¹² They also report that the ETE for Hong Kong textile exporters is 1 percent.

¹³ See, for example, Nathan Associates (2002).

Table 2-2
Textiles and apparel: Likely impact of removing the MFA quotas on production and trade¹

(Percent change)

Region	Production		Trade	
	Textiles	Apparel	Textiles	Apparel
Importers:				
United States and Canada	-2.6	-8.6	-1.3	-8.1
EU	-0.9	-3.7	-0.7	-6.1
Exporters:				
Restrained exporters	5.6	19.6	4.4	32.0
Argentina	0	0	0.3	-6.8
Brazil	0	-0.1	0.4	-13.7
Chile	-0.4	-0.6	-4.3	-17.9
Mexico	-5.5	-20.9	-1.6	-64.0
Uruguay	1.2	-0.9	2.3	-5.4
Other Latin America	-16	-35.8	-0.4	-92.1
Rest of the World	-0.2	-0.5	1.7	-10.4

¹ Based on 1995 data.

Source: Terra (2001).

by the big exporters subject to restrictions. MERCOSUR and Chile are predicted to reduce their exports of clothing significantly and their exports of textiles moderately.

Avisse and Fouquin (2001) estimate that Asian apparel exports will rise by 54 percent and their share of the world market will increase to 60 percent (table 2-3) from 40 percent in 1995 (the base year). Chinese apparel exports, in particular, will rise by 87 percent, and their share of world apparel exports will rise by more than 10 percentage points. Both South Asia's and Southeast Asia's apparel exports also will experience substantial gains, increasing by 36 percent, combined. On the other hand, Latin American apparel exports are predicted to decrease by 39 percent. Asian countries will also experience some increases in textile exports: China's exports will increase by 9 percent and South Asia's by 22 percent. Avisse and Fouquin estimate that Chinese production will rise by 70 percent, and that of other Asian countries, by 26 percent. Within a broadly unchanged level of global output, Asia's share will rise from 12 percent to 18 percent.¹⁴ North American production of apparel will decline by 19 percent and European production will drop by 11 percent in the estimates.

Diao and Somwaru (2001) provide similar estimates. According to their dynamic model, world market share of developing countries as a whole will increase by 4 percentage points following the ATC. China gains almost 3 percentage points of the world textile and apparel market, and other Asian countries will capture more than 2 percentage points (table 2-4). Current non-quota holding developing countries are predicted to lose about 20 percent of their markets (equivalent to 2.3 percentage points of total world textile and apparel markets)

¹⁴ Avisse and Fouquin also predict that the rise in Chinese apparel output will increase the production of textiles in Asian newly industrialized economies (NIEs) and to a lesser extent Japan, which together supply around 80 percent of Chinese textile imports.

Table 2-3
Apparel: Likely impact of removing the MFA quotas on apparel exports¹

Region	Percent change
NAFTA	-27
Latin America (exclude Mexico)	-39
EU	-19
Mediterranean Basin and CEECs	-5
Asian NICs	18
China	87
South and South-East Asia	36
World	14

¹ Based on 1995 data.

Source: Avisse and Fouquin (2001).

Table 2-4
Textiles and apparel: Simulated shares of world total exports for selected countries/regions

(Percent)					
Region	2005	2010	2015	2020	2025
Developing countries	59.57	60.2	61.32	62.41	63.49
China	19.69	20.50	21.24	21.91	22.52
India	4.40	4.43	4.57	4.72	4.88
Other Asia	13.00	13.68	14.18	14.70	15.22
Middle East	5.03	5.22	5.39	5.57	5.76
Eastern Europe	6.50	6.02	5.80	5.59	5.38
Mexico and Caribbean	6.09	5.51	5.32	5.14	4.96
Industrial countries	40.43	39.80	38.68	37.59	36.51
North America	6.61	6.31	6.13	5.95	5.77
European Union	14.39	13.91	13.48	13.06	12.65

Source: Diao and Somwaru (2001)

to the restrained ones. Nathan Associates (2002, p. 12) contends that this trend is already well under way, citing as an example the fact that, between the first quarters of 2001 and 2002, China's market share increased by 5 percentage points while other suppliers' market share declined.

In addition to the costs of quotas themselves, the nature or the quality of the quota administration system can also restrict an individual country's exports, and lead to quota "underfill." Whalley (1999) points out that many developing countries have built costly domestic administrative structures around the internal allocation of MFA quotas.¹⁵ Krishna and Tan (1998) present empirical evidence that the costs of the export license system within the restrained countries are significant and that both the license cost and hidden

¹⁵ See also Yang (1999).

administrative costs are added to the price of the product prior to its entering the foreign market.¹⁶ These extra inefficiency costs will be eliminated when the quotas are removed and will be likely to intensify the estimated effects of the ATC.¹⁷

Determinants of Trade Patterns in the Absence of Quotas

The MFA has, at least partly, led to the spread of apparel industries across a wide range of countries around the world.¹⁸ Over time, as quotas have become more restrictive in one country, investment has flowed to initially unconstrained countries which, in turn, became restrained causing investment to flow again elsewhere. For instance, constraints on Korean exports have generated investment flows to ASEAN nations (Thailand, Philippines, Malaysia, and Indonesia), while quotas on Indian exports have led to investment flows to countries like Nepal. The MFA was considered an opportunity for those latter countries to get foreign investment and to start up an apparel industry. It has been argued that the end of the MFA could lead to a consolidation to larger, established, low-cost exporters.¹⁹

Similarly, Birnbaum (2001) and Tait (2002) assert that without quotas, customers will no longer need to divide their orders among several countries, but will concentrate in those countries where they can operate best. Someya, Shunnar, and Srinivasan (2002) contend that the exporting success of some Middle Eastern countries (e.g., United Arab Emirates) in recent years is mainly attributable to the presence of Far-Eastern (quota-restrained) foreign investors that are using those countries as export platforms. They predict that the textile and apparel exports from these countries will be subject to substantial risk, as the post-quota world will offer little justification for continued export from the Middle East, given that they offer neither the geographic closeness of the Mediterranean to the EU market nor the low costs of Asian exporters. Similarly, Kheir-El-Din and Abdel-Fattah (2000) argue that Bahrain will lose its attractiveness to fabric producers because it has neither low-cost raw materials nor low wage costs.²⁰ Dowlah (1999) warns that with the removal of quota restrictions, investors might find it economically advantageous to withdraw their production

¹⁶ See also Trela (1998), who argues, for instance, that not permitting trade in licenses provides protection for existing firms against more efficient producers and that past performance criteria for allocating quota volumes can result in firms producing at suboptimal scale.

¹⁷ See, for example, Verma (2002) and Kathuria and Bhardwaj (1998).

¹⁸ Trela (1998) and Whalley (1999).

¹⁹ See, for instance, Trela (1998) and Whalley (1999). Whalley (1999) points to China and other Asian countries as potential gainers, and notes that China already accounts for 60 percent of developing country exports.

²⁰ They note that in general the prospects for exporters of textiles and apparel in Gulf Cooperation Council (GCC) countries are not encouraging. With no preferential agreements either with the EU or the United States, these countries are vulnerable to loss of market share, particularly in the apparel sector, which requires low-cost labor. In the manmade-fiber fabrics, however, they may continue to enjoy advantages because of domestic petroleum-based industries that supply critical inputs.

facilities from Bangladesh and export directly from their home countries.²¹ Whalley (1999) asserts that from that point of view, the prospects for smaller country suppliers in a post-MFA world would seem rather bleak to some observers. However, Whalley (1999) also presents another point of view, arguing that “the threat of becoming entangled with MFA restraints has restrained the growth of textile and apparel exports from Africa. As latecomers to the MFA, these countries would receive only small MFA quotas; and the argument is that the removal of the MFA opens up new growth opportunities for them in manufactured exports.”

A number of factors have been identified in the literature as likely to be important in determining the new patterns of trade, and affecting location and sourcing decisions in the quota-free world. Factors that could give countries competitive advantages in terms of supplying textiles and clothing are discussed below.

Business Climate and Infrastructure

Tait (2002) asserts that purchasers are likely to concentrate on four or five politically and financially stable countries. Factors that are considered important include: respect of basic human ethics such as minimum wages; absence of child or forced labor; and good working conditions. In addition, Birnbaum (2002b) argues that current and future sourcing decisions depend in great part on which countries offer the best facilities and greatest logistical advantages. Tait (2002) also stresses the importance of infrastructure that supports the buying process (e.g., good telecommunications, ease of import and export documentation and procedures, international logistics companies, quality controllers, and test centers).

Proximity to Markets

Proximity to the export market, or the ability to quickly respond to changes in market conditions is considered to be an important determinant of the pattern of trade.²² Tait (2002) asserts that in the post-2005 world, buyers will choose suppliers in terms of reliable delivery and lead times. Birnbaum (2001) notes that since U.S. buyers are increasingly demanding “quick response” services, distant factories will find it harder to satisfy customer requirements. In particular, he reports that shipping time from Sri Lanka, Bangladesh, and India to the United States averages 28 days, compared to 2 days from Mexico or Canada.

Tait (2002) reports that Romania, the Czech Republic, and Hungary are all within 1 or 2 days by road freight to the EU (all relatively low cost) and, therefore, would likely be suppliers to European firms. Hyvarinen (2001) argues that the post-MFA outlook for Morocco and Tunisia is good due to their proximity to the EU markets. In particular, he points out that as a fabric exporter, Tunisia will probably preserve its EU market share because of the Euro-

²¹ However, pointing to Bangladesh’s past performance (such as high quota utilization rates), he concludes that it has been quite successful in exploiting the MFA regime by achieving considerable marketability and consumer acceptance in the sophisticated markets in the United States and the EU. A formidable factor that will continue to help the Bangladesh clothing industry is the existence of cheap labor, which helps it to compete successfully in low-cost, high-quality products.

²² Hummels (2001) estimates that each day of increased ocean transit time between two countries reduces the probability of trade by as much as 1.5 percent. He also reports that an ocean voyage of 20 days is equivalent to a 16 percent tariff.

Med agreement, under which European yarn is shipped to Tunisia for processing into fabrics and garments.²³ Kheir-El-Din and Abdel-Fattah (2000) make a similar argument, saying that Middle Eastern and North African apparel producers around the Mediterranean will be able to enjoy market shares in fast-moving, high-value items, helped in large measure by the logistical advantage of being close to the European market. The ongoing Euro-Med partnership agreements will further consolidate this advantage because of outward processing opportunities offered under the agreements. However, Someya, Shunnar, and Srinivasan (2002) suggest that the market proximity enjoyed by Mediterranean countries could be eroded quickly by decreasing communication and transport costs.

Market Access

In general, suppliers that are not constrained by quotas and/or benefit from preferential trade agreements have an advantage over quota-constrained, as well as other non-constrained, suppliers. The market position of U.S.-preferred suppliers (e.g., those shipping under NAFTA, AGOA, and CBERA) is highly dependent on quotas, constraining Asian and Chinese exporters.²⁴ The same is true for preferred suppliers to the EU, which are shielded from Asian suppliers by the MFA quotas. Birnbaun (2001) notes that, even without quotas, U.S. import duties assessed on garment imports from nonpreferred suppliers still average 18 percent, which would constitute an advantage for preferred suppliers. Hyvarinen (2001), on the other hand, argues that, although preferential access to European and U.S. markets will not be completely removed (since preferential tariffs will remain), it would be somewhat diluted with the 2005 elimination of MFA quotas and the extension of such privileges to a larger group of countries.

Francois and Spinanger (2001) argue that the “protective shield” will disappear gradually as quotas are phased out, and preferred supplying groups will probably see dramatic increases in competition from Chinese and other Asian exporters. They assert that preferential access to North America (by Mexico) and Europe (by Turkey and Eastern European countries) will be reduced considerably when quotas are eliminated (and as tariffs are reduced) for competing exporters, and there will be a shift in demand away from these countries to other suppliers (e.g., Asian countries). They predict that Mexico stands to be the largest loser among exporting countries (table 2-5).²⁵ Turkey, as well as the Eastern European countries, could also experience losses for this reason.

In the context of AGOA, Matoo, Roy, and Subramanian (2002) argue that African countries will be exposed to competition from other developing countries and that apparel exports may drop by as much as 30 percent after the dismantling of the MFA quotas. However, they assert that the actual impact will depend on the structure of the AGOA rules of origin. Using

²³ Kheir-El-Din and Abdel-Fattah (2000) note, however, that keen competition in fabrics is to be expected from Thailand and Malaysia, which have regularly exceeded their quotas to the EU.

²⁴ Nathan Associates (2002).

²⁵ Terra (2001) also predicts that Mexican apparel exports would drop by as much as 64 percent post-2005.

Table 2-5
Textiles and apparel: Likely impact of the Uruguay Round Agreement on quantity exported¹

(Percent change)

Country	Textiles exports	Apparel exports
Australia/New Zealand	-2.94	-7.89
Japan	5.67	-0.46
Korea	6.66	-14.08
Indonesia	14.33	31.72
Malaysia	5.84	5.92
Philippines	11.5	3.03
Singapore	5.79	-22.02
Thailand	20.01	36.01
Vietnam	-1.53	1.91
China	6.67	26.97
Hong Kong	6.25	8.87
Taiwan	8.57	1.23
India	9.89	108.69
Sri Lanka	17.19	50.34
Rest of South Asia	33.63	76.65
Canada	-4.97	-21.59
United States	-1.85	10.75
Mexico	-6.32	-33.71
Latin America	3.19	-15.48
West Europe	-3.62	-11.23
Central and Eastern Europe	-2.02	-12.94
Turkey	3.24	-10.7
Africa and Middle East	-2.82	-18.89
Rest of the World	-0.2	-17.39

¹ Based on 1995 data.

Source: Francois and Spinanger (2001, Table 6 - scenario urg).

a simple partial equilibrium model, they show that, under the current AGOA rules of origin, the quota removal will decrease Africa's apparel exports by over 30 percent. However, if AGOA were to provide unrestricted access, the negative impact could be nearly fully offset. As examples, they show that, under the current AGOA system, the apparel exports of Mauritius and Madagascar will decrease by about 26 percent and 19 percent, respectively. But if AGOA is modified to eliminate the rules of origin requirement, the decline in Mauritius's exports would be only 18 percent, and Madagascar's exports could actually be higher than they are currently, despite the elimination of the MFA.

Labor and Management

While the MFA has led to some of the spread of textiles and apparel activities across a wide range of countries around the world, some analysts have noted that the emergence of new suppliers might have been simply part of a natural evolution of the comparative advantage

from high-cost to low-cost suppliers.²⁶ For instance, Yang (1999) points out that Japan lost its comparative advantage in labor-intensive textiles and apparel in the 1970s and that over the last two decades, the Newly Industrialized Economies (NIEs) of Hong Kong, Korea, Singapore, and Taiwan have also rapidly shifted away from these products, while China and other low-wage economies have emerged as major suppliers.²⁷ He even contends that in the past few years China itself has shown signs of export diversification (at the expense of textiles and apparel).²⁸

Gereffi (2003) argues that the East Asian NIEs illustrate the process of industrial upgrading among developing countries. Because of domestic labor shortages, high wages, high land prices, and, external constraints (tariffs and quotas), they have moved smoothly and rapidly through the manufacturing stages from assembly to original brand-name manufacturing. As they began to move production offshore, they devised ways to coordinate and control their sourcing networks, and focused on the more profitable design and marketing segments within the apparel commodity chain. In this new international division of labor, skill-intensive activities were retained in East Asia, and labor-intensive activities were relocated. Whether the removal of the quotas will reverse these shifts is unclear.

Trela (1998) argues that the principal reason for upgrading is that, when faced with volume restrictions on their exports, producers can expand their sales value by moving up-market into higher quality lines within quota categories. For example, despite (or because of) the MFA quotas, Hong Kong succeeded in establishing a reputation for quality fabrics and fashion sophistication.

Raw-Material Inputs

The availability of local or regional raw material greatly improves a country's ability to respond to orders with shorter lead times. As purchasers consolidate and rationalize their sources, the degree of vertical integration in countries or firms becomes an important competitiveness factor. For instance, Dowlah (1999) identifies inefficient upstream sectors as a major obstacle for future growth in the Bangladesh clothing industry.²⁹

Spinager (1999) notes that the MFA kept major European producers of high-quality textile inputs from establishing large spinning and fabric manufacturing facilities in countries with high productivity and low labor costs, such as those in Asia. Indeed, European companies were not certain that, given the existence of quotas, such facilities would be able to produce at adequate capacity levels. Once quotas are eliminated, it is quite possible that these producers will invest in this part of the world.

²⁶ See, e.g., Gereffi (2002). He explains the recent trade shifts by arguing that the most labor-intensive segments of the apparel commodity chain are being located in countries with the lowest wages.

²⁷ Yang argues that the declining share of the NIEs in the global apparel market is due to the high labor intensity. As real wages increase and labor skills upgrade, they lose most of their comparative advantage in apparel (while maintaining it in textiles).

²⁸ Yang stresses, however, that China still needs strong growth of labor-intensive industries to absorb its massive labor surplus in rural areas and unemployment in urban areas.

²⁹ Dowlah also argues that survival in the quota-free world would depend on the diversification of the exported product mix to include high-value and high-fashion products, in which Bangladesh has not yet been successful.

Phasing out the MFA may be expected to have a favorable impact on fiber production by increasing the long-term demand for, and hence the price of, textile fibers. Lankes (2002) and the IMF/World Bank (2002) suggest that MFA quotas and tariffs reduce the demand for fiber crops. They report that the full liberalization of world trade in textile and clothing will boost cotton exports by 9 percent in sub-Saharan Africa (about US\$132 million). Kheir-El-Din and Abdel-Fattah (2000) argue that as cotton producers and yarn exporters, Egypt and Syria stand to gain after 2005. They contend that the MFA phase-out is likely to have two distinct effects: an output effect arising from increases in the volume of textile and apparel output and, hence, fiber input, and a substitution effect resulting from elimination of the distortions between fibers created by the MFA. For cotton producers, the substitution effect may be relatively large, since it has been reported that the MFA has imposed an implicit tax of about 20 percent on cotton products relative to manmade-fiber products. These effects may be of particular importance for major cotton producers such as Egypt and Syria.

Level of Service Provided and Reliability of Supplier

According to Birnbaum (2002b), today's sourcing decisions are increasingly based on which factories can best meet customers' ever-increasing requirements. He notes that buyers go to China because Chinese factories give the customers what they want, from patternmaking to final stock garment shipment.³⁰ Tait (2002) has argued that the level of service required by buyers is evolving and that a "full package from design to delivery of the finished product, inclusive of fabric and trim sourcing, right down to the delivery of store-ready items to individual shops" is now in demand. As an example, she cites India, where apparel parks of factories, housing the whole value and supply chain, are being established to help improve the industry's competitiveness.

Domestic Demand

The growth in domestic demand in Asian countries, particularly in China, might lessen the dramatic changes in trade patterns after 2005. Flanagan (2003) argues that rich countries' wealth (and therefore the people's ability to buy clothes) is not growing as quickly as the world's middle-income countries – especially in the world's two most populous countries (China and India). He argues that faster economic growth would be accompanied by even faster growth in apparel purchases and apparel importing. As an illustration, he points out that in 2001, China's retail sales of apparel grew twice as fast as its economy.³¹

³⁰ Birnbaum (2002).

³¹ In the past 10 years, China's economy in real terms has grown 142 percent (over five times as fast as that of the United States) and India's has grown 77 percent (over three times as fast).

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CHAPTER 3: COMPARATIVE ASSESSMENT OF THE COMPETITIVENESS OF THE TEXTILE AND APPAREL SECTOR IN SELECTED COUNTRIES

This chapter is divided into two parts: (1) a discussion of the analytical framework used in the study to assess the competitiveness of the textile and apparel industries of the selected countries, which are listed in table 1-1 of chapter 1 of this report; and (2) a comparative assessment of the competitive strengths and weaknesses of these countries' textile and apparel industries.

To better understand the key factors underpinning a country's competitiveness in textiles and apparel, Commission staff conducted interviews in the United States and abroad with buying managers of major U.S. importers of apparel and home textiles--namely, the large apparel and home textile companies and retailers--regarding their current sourcing strategies, likely changes to their sourcing strategies following quota elimination in 2005, and reasons for the expected changes. Staff also conducted interviews with representatives of East Asian firms that produce or purchase textiles and apparel worldwide and that are major sources of investment in the production of such goods in many countries covered by the study; representatives of textile and apparel producers in India, which is considered by many U.S. apparel companies and retailers as the major low-cost alternative to China as a source for apparel and home textiles; and representatives of textile and apparel producers in sub-Saharan Africa, Mexico, and Central America.¹ The analytical framework and competitive assessment presented in this chapter are also based on information obtained from a wide range of sources, including a review of the literature (discussed in chapter 2 of this report) and testimony presented to the Commission at the hearing and in written statements (a summary of the views of interested parties is presented in chapter 4).

Several caveats should be noted about the Commission assessment. First, as requested by USTR, the Commission analysis focuses on likely changes in trade and production among certain developing-country suppliers, and does not consider likely changes in trade and production among developed-country suppliers, particularly the United States and the

¹ In interviews with USITC staff, representatives of both U.S. and foreign firms stressed that the information provided was "confidential business information" and that they did not want their own names or their firm names connected to specific information in the USITC report to USTR because of the "sensitive economic and political nature" of the information. A list of U.S. and foreign firms interviewed by USITC staff appears in appendix D.

European Union (EU), or the impact of such changes on global production and trade patterns. Second, the assessment focuses primarily on likely changes in sourcing strategies of U.S. apparel companies and retailers, and not the likely effects of the elimination of EU quotas. Third, the assessment looks primarily at static, rather than dynamic, effects of quota removal on the competitiveness of the textile and apparel sector in selected countries.² In particular, the study does not fully consider the possible long-term effects of economic growth in key developing-country markets, particularly China and India, and how it might affect global trade patterns.

In the long term, continued economic growth in Asian countries, particularly China and India, may spur their domestic demand for goods, including textiles and apparel, and lessen their propensity to export.³ Economic growth in China and India likely will lead to rising incomes and an increase in domestic consumption of textiles and apparel, which might provide opportunities for other exporting countries to expand sales. As wages and domestic demand for textiles and apparel increase, the possibility exists that China and India could become less cost competitive in the production of textiles and especially apparel, compared with other low-cost producers. Although it is difficult to predict when such a development might occur, some analysts have noted that the shift to new suppliers might simply be part of a natural evolution of the comparative advantage from high-cost to low-cost suppliers.⁴ During the past three decades, for example, Japan and then the newly industrialized economies (NIEs) of East Asia (Hong Kong, Korea, Singapore, and Taiwan) have lost their comparative advantage in labor-intensive apparel production and have been shifting from these products into other sectors, while China and other low-wage economies have emerged as major suppliers.⁵

² As requested by the USTR, this study provides a qualitative assessment of the relative competitiveness of the textile and apparel sectors in selected countries. For a quantitative assessment of the likely effects of the removal U.S. textile and apparel quotas, see U.S. International Trade Commission, *The Economic Effects of Significant U.S. Import Restraints* (inv. No. 332-325), USITC Pub. 3519, June 2002.

³ In the past 10 years, real economic growth in China was 142 percent (more than five times as fast as that of the United States) and India's was 77 percent (more than three times as fast as that of United States).

⁴ See, for example, Gary Gereffi, "The International Competitiveness of Asian Economies in the Apparel Commodity Chain," Asian Development Bank, ERD Working Paper Series No. 5, Feb. 2002.

⁵ The relative decline of the NIEs in the global apparel market has been attributed to the sector's high labor intensity. As real wages increase and labor skills upgrade, they lose most of their comparative advantage in apparel (while maintaining it in textiles). Rapid growth in other sectors may also be enough to divert resources (both labor and investment flows) away from the apparel sector.

Analytical Framework

During the past two decades, the availability and cost of quotas have influenced sourcing strategies of U.S. apparel companies and retailers, and investment and production strategies of Asian producers and trading companies. Many of the U.S. firms stated that quota availability and cost largely explain why they import apparel from as many as 50 or more countries, especially for heavily traded items such as tops and pants. The cost of quotas can be quite high and thus serve as deterrent to sourcing. For example, in 2002, the estimated export tax equivalent on the quota for Chinese knit cotton shirts was about 27 percent ad valorem and for cotton trousers it was 64 percent ad valorem.⁶ With the elimination of quotas and related quota costs, other factors will grow in importance in the sourcing decisions of U.S. apparel companies and retailers; it is likely that some countries will have the capability to meet these factors but many others will not. U.S. apparel companies and retailers plan to consolidate their post-quota sourcing among many fewer countries as part of their strategy “to reduce the merchandise cost structure, reduce the timeline to get product into the stores, and increase the flexibility of their supply chains.”⁷

The analytical framework used in this study to assess the competitiveness of selected countries’ textile and apparel industries comprises factors that affect sourcing strategies of U.S. apparel companies and retailers. As shown in figure 3-1, the factors include a country’s business climate, infrastructure conditions, proximity and preferential access to major world markets, availability of low-cost skilled workers and effective management, access to a reliable supply of competitively priced raw materials, and the level of supplier service and reliability. Although the relative importance of each factor can vary by firm, depending on its corporate philosophy, import volume and product mix, risk tolerance, and existing supplier relationships, the key criteria likely to affect sourcing decisions in a post-quota world are cost and availability of labor; cost, quality and availability of raw materials (including fabric, trim, and findings); and the efficiency and flexibility of suppliers to meet changing fashions and retailer demands. The competitive factors are discussed below.

Business Climate

An assessment of a country’s business climate is an important element of evaluating the risk of doing business there. According to the American Apparel & Footwear Association (AAFA), numerous factors enter into this assessment, including compliance with human

⁶ See discussion on China in appendix E of this report for additional information on export tax equivalents of quotas on U.S. apparel imports from China.

⁷ Peter McGrath, Senior Vice President and Director, JCPenney Product Development & Sourcing, and Chairman, Board of Directors, USA-ITA, transcript of public hearing, pp. 62-63.

**Figure 3-1
Textiles and Apparel: Factors of Competitiveness**

Business climate

- Political stability
- Safety of personnel
- Security of production and shipping
- Transparent and predictable legal, commercial, and regulatory system
- Minimal administrative burden and corruption
- Compliance with internationally recognized health and labor standards
- Subsidies and tax credits
- Free trade zones
- Real exchange rates
- Market demand and economic growth

Infrastructure and proximity to markets

- Roads, ports, rail, and airports for moving goods into and out of the country
- Shipping and other transportation times and costs
- Proximity to major markets
- Access to reliable sources of energy, water, and telecommunications

Market access

- Preferential access in major markets

Labor and management

- Availability of workers and competition for workers from other sectors
- Compensation rates
- Labor skills and productivity
- Availability of qualified managers, including middle management

Raw-material inputs

- Access to quality and cost-competitive domestic or regional yarn and fabric production
- Tariffs on imports of raw materials
- Rules of origin for trade preferences
- Cost and availability of capital to invest in new machinery and purchase raw materials

Level of service provided and reliability of supplier

- Reputation for quality and on-time delivery
- Existing business networks (supply chain linkages, relationship with customers)
- Level of service provided (e.g., full-package versus assembly)
- Flexibility and variety in styles or products and lot sizes offered
- Lead time and flexibility to respond to quick turnaround orders

rights requirements in the country and ensuring the security of shipments from the factory through the country's infrastructure.⁸ Some firms cited the lack of internationally recognized labor standards as a reason for not sourcing from certain countries. For example, many firms said they would not source apparel from Myanmar (Burma) because of human rights concerns. Several firms cited security as a reason for not sourcing garments from a country at all, while some firms said they would use buying agents to source from a country where there was a safety concern, rather than set up their own office there.

AAFA stated that firms also examine factors affecting the movement of inputs into, and final goods out of, a country, including compliance with applicable local and U.S. customs requirements; the level of U.S. customs enforcement activities related to that country; transparency in the foreign country's political system; and transparency and predictability in the foreign country's commercial, regulatory, and legal system. U.S. firms can incur significant costs to ensure that a foreign supplier complies with local laws and regulations, U.S. import regulations, and policies of the individual U.S. firms. Further, the lack of transparency in laws and regulations can lead to disruptions in sources of supply and shipments of goods. These overhead costs are among the reasons U.S. apparel companies and retailers are planning to consolidate sources of supply following quota elimination and strengthen strategic relationships with their suppliers.

Infrastructure and Proximity to Market

A country's infrastructure affects a firm's ability to produce goods and move them into and out of the country in a timely manner. Access to ports having frequent shipping traffic to and from the United States can make even geographically distant locations competitive from a shipping standpoint. Shipping times largely depend on the frequency of shipping from a port and the volume of business conducted. According to U.S. retailers, shipping times to the west coast of the United States generally average from 12 to 18 days from Taiwan, Hong Kong, and China, but as much as 45 days from some member countries of the Association of South East Asian Nations (ASEAN). The geographic proximity to a market can also be an advantage for goods needed on short notice. Shipping from the Caribbean Basin Economic Recovery Act (CBERA) countries to the United States can take as little as 2 to 7 days.

A country's telecommunications infrastructure has become very important for U.S. apparel companies and retailers in communicating with suppliers and handling supply chain logistics as they seek to reduce lead times and increase control over all elements of the supply chain. In addition, a reliable source of electricity is essential for all segments of the industry, as is access to reliable supplies of water for dyeing and finishing yarns, fabrics, and certain garments requiring special finishes, such as denim jeans.

⁸ Kevin M. Burke, President and CEO, AAFA, written submission to the Commission, Jan. 22, 2003.

Market Access

U.S. apparel companies and retailers indicated that the major benefit of U.S. trade preferences is the absence of quota restrictions, with duty-free access a secondary benefit. The firms claimed that the extent to which duty-free access is a competitive advantage depends on the rules of origin and the accompanying customs regulations to implement the trade preferences. According to the firms, preferential trade agreements permitting the use of third-country fabrics (e.g., the African Growth and Opportunity Act (AGOA), the U.S.-Israel Free Trade Agreement, and the qualified industrial zone (QIZ) program with Jordan) are more beneficial than agreements requiring U.S. content (e.g., the Caribbean Basin Trade Partnership Act (CBTPA)), because they allow for the use of less expensive Asian fabrics and for greater flexibility in the choice of fabrics. The U.S. firms stated that the benefit of trade preferences is diminished considerably or eliminated by U.S.-content rules because U.S. fabrics reportedly cost as much as 20 to 40 percent more than Asian fabrics. In addition, two large U.S. apparel companies claimed that it is more difficult to work with U.S. mills in the development of new products; one company said that U.S. mills' minimum lot sizes are too large. The allowance for the use of regional inputs was considered of some benefit, to the extent that regional fabrics are available in the quantities and styles required. ***

Other disincentives to sourcing apparel from CBTPA and the North American Free Trade Agreement (NAFTA) beneficiary countries are paperwork requirements and related compliance costs. Some U.S. apparel firms noted that the cost of complying with regulations under the CBTPA and NAFTA offset a large portion of the program benefits. A firm estimated that the paperwork associated with complying with CBTPA and NAFTA regulations adds 3 percent to 5 percent to the cost of the goods.

Labor and Management

U.S. apparel companies and retailers stated that a country will need to have an abundance of skilled, inexpensive, productive labor to remain competitive in a post-quota world. The cost and availability of a trained or trainable workforce will be critical. Low wage rates alone are not a good indicator of labor costs, as rates of productivity, which contribute to the cost of labor, vary among countries. Table 3-1 shows the hourly compensation rates of selected countries for spinning and weaving, and apparel operations. According to the U.S. firms, although wage rates are higher in China than in such countries as Bangladesh, India, and Vietnam, productivity is considered much higher in China, making its overall labor cost lower. Sewing skills of workers, along with factory setup, influence the type of product that U.S. importers would consider sourcing from a particular country or factory. For example, sewing skills are particularly important in the production of fashion items, for which styles change frequently. In general, sewing skills are considered to be very good in Asia, particularly in China, Hong Kong, Korea, Taiwan, and Thailand. U.S. apparel companies and retailers often import apparel from East Asia that requires more sewing and construction, complex operations, and detailed work.

Another important competitive factor is the effectiveness of middle management, which has the day-to-day responsibility for maintaining the reliability of product quality and supply

Table 3-1
Textiles and apparel: Hourly compensation¹ for selected countries, 2002

Region or country	Textile industry	Apparel industry
	-----U.S. dollars-----	
East Asia:		
China	² \$0.41 ³ \$0.69	\$0.68 ⁴ \$0.88
Hong Kong	6.15	(⁵)
Korea	5.73	(⁵)
Taiwan	7.15	(⁵)
South Asia:		
Bangladesh	0.25	0.39
India	0.57	0.38
Pakistan	0.34	0.41
Sri Lanka	0.40	0.48
ASEAN countries:		
Indonesia	0.50	0.27
Malaysia	1.16	1.41
Philippines	(⁵)	0.76
Thailand	1.24	0.91
Mexico	2.30	2.45
CBERA countries:		
Costa Rica	(⁵)	2.70
Dominican Republic	(⁵)	1.65
El Salvador	(⁵)	1.58
Guatemala	(⁵)	1.49
Haiti	(⁵)	0.49
Honduras	(⁵)	1.48
Nicaragua	(⁵)	0.92
Sub-Saharan Africa:		
Kenya	0.62	0.38
Madagascar	(⁵)	0.33
Mauritius	1.33	1.25
South Africa	2.17	1.38
Andean countries:		
Colombia	1.82	0.98
Peru	1.63	(⁵)
Other countries:		
Egypt	1.01	0.77
Israel	8.17	(⁵)
Jordan	(⁵)	0.81
Turkey	2.13	(⁵)

¹ Includes wages and fringe benefits.

² Represents hourly compensation for China, other than in coastal areas.

³ Represents hourly compensation for coastal China.

⁴ Reflects labor compensation for factories in China producing moderate to better apparel.

⁵ Not available.

Source: Data for the textile industries compiled from Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002," Reston, VA; and data for the apparel industries compiled from Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers" (New York, NY), Nov. 2002.

and ensuring the flexibility to change orders as needed. Many importers contended that middle management is very good in many factories in China and other East Asian countries, but problematic in many factories in Mexico. In fact, weak middle management was cited as a major reason why U.S. importers have had problems sourcing from Mexico.

Raw-Material Inputs

The availability of cost-competitive, quality fabrics and trim in a country or region is expected to grow in importance in determining sourcing strategies for apparel in a post-quota world. Fabric availability affects lead times not only for production of goods for delivery, but also for production of samples prior to order placement. The availability of fabric, trim, and findings (e.g., zippers and buttons) is considered one of the many advantages of sourcing from China, because almost all the raw materials needed to make a garment are produced there.

If fabrics are not available locally, then shipping times and other logistics (such as customs issues) can affect lead times and costs. Shipping times and the frequency of shipping are important factors in determining the availability of fabrics in cases in which local fabrics are not available in the quantities or styles required. The Philippines, for example, does not have a local supply of export-quality fabrics, but several U.S. companies said they are able to obtain such fabrics in about 2 days from Taiwan for cut-and-sew operations in the Philippines. Preferential trade agreements that require use of certain yarns and fabrics in order to qualify for the trade preferences can deter sourcing if the yarns or fabrics are not available at the price, quality, or quantity needed.

Level of Service Provided and Reliability of Supplier

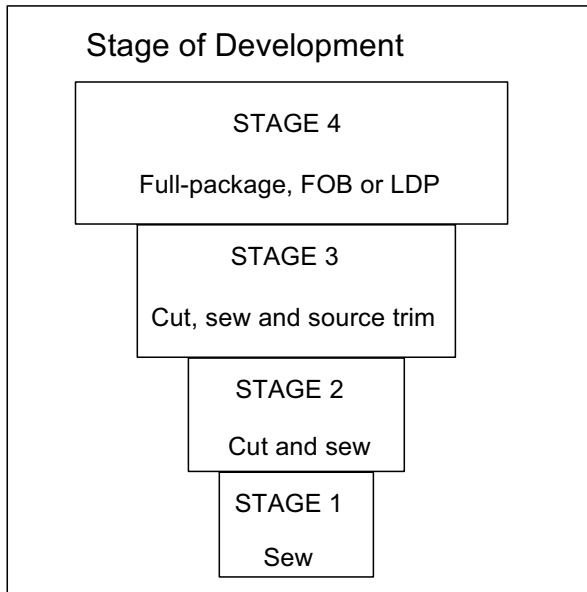
The enormous buying power of major U.S. retailers has challenged existing supplier-buyer relationships and compelled suppliers to be more responsive to retailer demands, as it tends to reduce the flexibility of suppliers in scheduling production and negotiating prices and other contract terms. As U.S. retailers consolidate their sourcing among fewer suppliers in a post-quota world, they are likely to use suppliers that offer not only competitively priced goods but also faster, more flexible service. With retailers reducing stocks and pushing inventory costs back up the supply chain, suppliers will need to be able to respond more quickly and efficiently to retailer demands for smaller, more frequent orders.

U.S. apparel companies and retailers said they prefer to source from foreign suppliers that can provide “full package” services. An established infrastructure exists in East Asia to provide such services to U.S. buyers, including product development, fabric sourcing and cutting, garment sewing, packaging, quality control, trade financing, and logistics arrangements. Retailers said they generally supply their own designs, but some suggested they are open to ideas from their suppliers and even solicit design and trend information. A certain skill level and knowledge base are required to translate a garment design into production patterns, which must be adapted to specific body types in the target markets. Another service sometimes supplied by manufacturers is point-of-sale replenishment, where the manufacturer ships store-ready products to the retailers on the basis of point-of-sale data at the retail level (see box 3-1 for information on the stages of development in apparel production).

**Box 3-1
Stages of Development in Apparel Manufacturing**

The figure below shows the different levels of service offered by manufacturers or vendors. At the first stage, the manufacturer sews the cut garment pieces as a contract service. This stage was common in the development of new offshore assembly operations in the Caribbean or Mexico in which fabric was cut into garment parts in the United States and sewn together offshore.¹

The next level of garment industry development is cutting and sewing. At this stage, the factory still generally operates as contractor, and does not procure the raw materials needed to produce the garments. The production patterns are also provided by the apparel company. At the next stage, manufacturers will take the next step and source trim, particularly for basic products, for which the trim is standard, such as white buttons for a men's dress shirt.



At the final stage, a manufacturer becomes a full-package supplier, responsible for many aspects of the garment production from purchasing the fabric and trim, patternmaking, to full production and packaging, ready for retail sale.

The level of service for full-package producers can vary. Even though the manufacturer will purchase the fabric and trim, the retailer or apparel company importing the garments will often choose the actual fabrics, and the mill to produce the fabrics. The retailers and apparel companies then issue a letter of credit against which the apparel manufacturer issues a letter of credit to purchase the raw materials. Sometimes the full-package supplier will select the fabric and fabric suppliers, or suggest alternative suppliers that are able to meet the fabric specifications given by the customer. Full-package suppliers must be financially solvent in order to obtain financing for the purchase of raw materials.

Generally the large importers purchase the products on a free-on-board (FOB) basis, taking responsibility for shipping and duty charges, because they can negotiate better shipping rates than smaller overseas apparel suppliers. However, some companies will purchase part of their product on a landed-duty-paid basis, allowing the foreign manufacturer to take care of shipping and payment of duties.

¹ Prior to legislation implementing NAFTA and the CBTPA, garments were required to be assembled from fabric formed and cut in the United States in order to qualify for preferential quota access and reduced duty treatment under the production sharing arrangements.

² For example, full package programs in the CBERA region generally refer to services ranging from procurement of materials to cutting and sewing, and to finishing and packaging of the final products. In the Far East, an established infrastructure exists to provide full package imports to U.S. buyers, including product development, fabric sourcing and cutting, garment sewing, packaging, quality control, trade financing, and logistics arrangements.

Country and Regional Assessment

The rest of this chapter provides a comparative assessment of the competitiveness of the textile and apparel sector in the selected countries, which are grouped by region.⁹ In order to anticipate the possible implications of quota removal in 2005, it is useful to examine the changes in trade that have occurred for certain textile and apparel products that have been integrated into the General Agreement on Tariffs and Trade (GATT) and for which quotas have been removed for WTO members (table 3-2). For every product, the total volume of U.S. imports increased from 2001 to 2002, and China significantly increased its share of the U.S. import market for these products. For example, China's share of the U.S. import market for babies' apparel rose from 3 percent in 2001 to 27 percent in 2002, while that for robes (and dressing gowns) increased from 5 percent to 25 percent.

It is also helpful to examine the extent to which imports of textiles and apparel from the selected countries are concentrated in product categories that are highly constrained by quota for a large number of U.S. suppliers. Following quota elimination in 2005, countries whose shipments are concentrated in such product categories, likely will face significantly greater competition in the U.S. market than those countries whose shipments are diversified across a broader spectrum of products. As shown in table 3-3, U.S. textile and apparel imports from countries that benefit from preferential market access—particularly the CBERA countries, sub-Saharan African countries, Jordan, and, to a lesser extent, the Andean countries—are concentrated in a narrow range of highly import-sensitive product categories. By contrast, these same product categories make up only a small share of U.S. textile and apparel imports from China, India, and Pakistan, largely because all or a large share of the imports of such goods from these Asian countries are subject to binding quotas.

Table 3-4 summarizes the Commission assessment of key changes that are likely to occur in the global pattern of textile and apparel production and trade following quota elimination in 2005. Chief among the major beneficiaries will be China, which is expected to become the “supplier of choice” for most U.S. importers because of its ability to make almost any type of textile and apparel product at any quality level at competitive prices. China has proven its ability to compete in other developed country markets, particularly Australia and Japan, for which it accounted for 69 percent (2002) and 77 percent (2001) of their apparel import markets, respectively.¹⁰ However, the extent to which China continues to expand its shipments to the United States and the EU following quota elimination in 2005 may be tempered by uncertainty over the use by the United States and other importing countries of the textile-specific safeguard provisions contained in China's protocol of accession to the World Trade Organization (WTO). In addition, as noted above, long-term economic growth in China may increase its domestic demand for textiles and apparel, as well as for labor and capital from competing sectors of the economy, possibly reducing the cost competitiveness of China vis-a-vis other developing country suppliers.

⁹ The assessment is based on the detailed information presented in the individual profiles of each country's textile and apparel industries in appendixes E through L of this report. The information used in preparing this assessment came from many sources, as noted in the beginning of this chapter.

¹⁰ Based on United Nations data.

Table 3-2

Selected textile and apparel products integrated into the GATT: U.S. imports, total and by selected countries, 2002, percentage change in imports from 2001 to 2002, and share of total U.S. imports, 2001 and 2002

Product and source	U.S.	Change in	Share of U.S. imports	
	imports, 2002	imports 2001 to 2002	2001	2002
	1,000 units		Percent	
Babies' garments (category 239 in kilograms):				
World	109,446	10	100	100
China	29,941	826	3	27
Thailand	16,250	-7	17	15
CBERA	10,560	-14	12	10
Philippines	7,252	-17	9	7
Indonesia	5,716	-12	6	5
Bangladesh	5,518	-18	7	5
Mexico	4,514	-21	6	4
Hong Kong	4,299	-70.6	11	3
Brassieres (categories 349 and 649 in dozens):				
World	44,641	21	100	100
CBERA	13,297	15	31	30
China	10,580	232	9	24
Honduras	4,666	38	9	10
Mexico	4,322	-21	15	10
Indonesia	3,927	16	9	9
Thailand	3,536	10	9	8
Dominican Republic	3,662	-1	10	8
Costa Rica	2,286	2	6	5
Robes (categories 350 and 650 in dozens):				
World	8,538	28	100	100
China	2,172	540	5	25
CBERA	1,172	25	14	14
Turkey	1,072	20	13	13
Pakistan	826	15	11	10
Bangladesh	346	-6	6	4
Mexico	415	-14	7	5
Indonesia	208	5	3	2
Philippines	184	-36	4	2
Hong Kong	109	-57	4	1
Luggage and flat goods (category 670 in kilograms):				
World	276,735	39	100	100
China	181,812	536	14	66
Thailand	28,970	-43	25	10
Philippines	18,556	-49	18	7
Indonesia	12,876	-34	10	5

Table 3-2--Continued

Selected textile and apparel products integrated into the GATT: U.S. imports, total and by selected countries, 2002, percentage change in imports from 2001 to 2002, and share of total U.S. imports, 2001 and 2002

Product and source	U.S.	Change in	Share of U.S. imports	
	imports, 2002	imports 2001 to 2002	from the world-- 2001	2002
	<i>1,000 units</i>		<i>Percent</i>	
Luggage and flat goods (category 670 in kilograms):--Continued				
Sri Lanka	10,570	-44	10	4
Vietnam	4,987	6,850	0	2
Taiwan	4,612	-72	8	2
Mexico	2,138	-52	2	1
Korea	2,053	-72	4	1
Knit fabrics (category 222 in kilograms):				
World	140,616	33	100	100
Canada	54,310	-6	55	39
Korea	33,199	212	10	24
Taiwan	21,619	120	9	15
China	7,011	21,976	0	5
Mexico	7,773	10	7	6
Thailand	2,102	-29	3	1
Hong Kong	1,729	-65	5	1

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 3-3

U.S. imports of selected apparel articles in highly constrained quota categories,¹ their share of total textile and apparel imports, and share subject to binding quotas, by selected countries and regions, 2002

Country or region	U.S. imports of selected apparel articles--		
	Total	Share of total textile and apparel imports in highly constrained categories	Share subject to binding quota
	<i>Million SMEs</i>	<i>Percent</i>	
Bangladesh	356.8	32	100
China	252.2	5	100
Egypt	97.8	37	0
Hong Kong	440.7	46	81
India	136.4	9	90
Indonesia	207.7	17	88
Israel	94.4	18	0
Jordan	62.5	69	0
Korea	124.6	6	98
Macau	204.1	64	51
Malaysia	88.0	27	51
Mexico	1,406.0	33	0
Pakistan	131.9	5	73
Philippines	235.1	29	100
Sri Lanka	130.1	23	90
Taiwan	223.8	16	23
Thailand	193.4	15	67
Turkey	215.2	20	96
Andean countries	104.5	54	0
CBERA countries	2,967.4	78	0
Sub-Saharan Africa	223.4	73	0

¹ The highly constrained quota categories are cotton and manmade-fiber knit tops (categories 338/339 and 638/639), pants and shorts (347/348 and 647/648), nightwear (351 and 651), and underwear (352 and 652). These categories, which accounted for 53 percent of total U.S. apparel imports in 2002, have a large number of supplying countries subject to binding quotas (individual country quotas with a "fill rate" of 90 percent or more in 2002).

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table 3-4
Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries

Region/country	Likely effect of quota removal	Contributing factors
EAST ASIA	<p>Summary: U.S. apparel companies and retailers are likely to expand sourcing from the region and continue close relationships with suppliers in the region, who are major sources of textile and apparel investment worldwide.</p>	<p>Summary: Labor - Sewing skills considered among the best in the world. Inputs - Substantial manufacturing base for raw materials. Transportation - Best shipping times to the U.S. west coast within Asia.</p>
	<p>China: Likely to be supplier of choice for most large U.S. apparel companies and retailers; uncertainty regarding textile-specific safeguards may temper export growth. Over the long term, competitiveness may diminish as strong economic growth leads to greater domestic demand for textiles and apparel, and for the labor and capital to make these goods. Showed tremendous growth in export of goods for which it became eligible for quota-free entry in 2002.</p>	<p>China: Labor - Per-unit labor costs very low due to low wages and high productivity. Inputs - Produces fabrics, trim, packaging, and most other components used to make apparel and made-up textile articles. Products - Considered by industry among the best in making most garments and made-up textile articles at any quality or price level. World's largest producer and exporter of textiles and apparel, notwithstanding tight quotas in major world import markets.</p>
	<p>Hong Kong and Macau: Initially, may continue to be suppliers of some apparel under outward processing arrangements (OPAs) with China because of uncertainty regarding textile-specific safeguards with China. There are no other compelling reasons to source most apparel from these relatively high-cost suppliers.</p>	<p>Hong Kong and Macau: Labor - High-cost suppliers compared with China. Special arrangements - OPAs allow for some of the labor intensive production steps to take place in China, but remain a product of Hong Kong or Macau for trade purposes. Will not be subject to China-specific safeguards after quotas are removed.</p>
	<p>Korea and Taiwan: Likely to continue as major suppliers of fabrics to global industry, including to China. However, U.S. firms are likely to move sourcing of apparel to lower-cost countries, particularly China; may continue to source certain garments from these suppliers (e.g., men's dress shirts, dresses, and other fashion apparel).</p>	<p>Korea and Taiwan: Labor - High per-unit labor costs; high labor productivity. Products - Small, flexible sewing lines advantageous for fashion apparel; highly automated sewing lines for dress shirts; offer full-package services.</p>

Table 3-4--Continued
Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries

Region or country	Anticipated effects of quota removal	Key competitive factors
SOUTH ASIA	<p>Summary: U.S. firms will likely expand sourcing from South Asia with the removal of quotas in 2005.</p>	<p>Summary: Inputs - Huge manufacturing base for yarns and fabrics. Competitive position - Most competitive alternative to China as a supplier, but competitiveness of each country varies widely.</p>
	<p>India: Likely to remain a competitive supplier to the United States when quotas are removed in 2005. Considered by many U.S. firms the primary alternative to China. Over the long term, competitiveness may diminish as strong economic growth leads to greater domestic demand for textiles and apparel, and for the labor and capital to make these goods.</p>	<p>India: Labor - Huge, relatively inexpensive, skilled workforce; has design expertise. Inputs - Among the world's largest producers of yarns and fabrics; Products - Wide range of apparel; considered a competitive source for home textiles (e.g., bed linens and towels). Business climate - Personal safety, security of shipments between factories and ports and bureaucratic red tape and infrastructure are issues, with many U.S. firms using agents in lieu of dealing directly with producers.</p>
	<p>Pakistan: Likely to continue as a supplier to the U.S. market. Considered by many U.S. firms as a competitive alternative to China, particularly for men's apparel. May continue to be a global supplier of cotton yarns and fabrics.</p>	<p>Pakistan Labor - Large, relatively inexpensive labor supply. Inputs - Access to local supplies of raw cotton. Business climate - The Government is taking steps to ensure the global competitiveness of the textile and apparel sector; personal safety and security of shipments between factories and ports are issues.</p>
	<p>Bangladesh: The status of Bangladesh as an overall supplier to U.S. market is uncertain. Considered by some U.S. firms to be competitive alternative to China for mass-produced, low-end apparel.</p>	<p>Bangladesh: Labor - Very low wage rates; productivity improving, but lags China; government is working to improve labor standards. Inputs - Relies heavily on imports for woven fabric requirements; becoming increasingly self-sufficient in knit fabrics. Special arrangements - Duty-free access to major world import markets, including the EU, Canada, and Norway. Products - Mass-produced basic garments, including knit cotton tops and woven cotton pants.</p>

Table 3-4--Continued
Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries

Region or country	Anticipated effects of quota removal	Key competitive factors
	<p>Sri Lanka: Likely to see its share of U.S. apparel imports fall, but expected to be a niche supplier for specialty or fashion goods, hosiery, and women's intimate apparel such as bras and underwear.</p>	<p>Sri Lanka Labor - Relatively small labor pool; relatively high wage rates. Inputs - Relies heavily on imported yarn and fabric.</p>
<p>ASEAN</p>	<p>Summary: Overall share of U.S. textile and apparel imports is likely to decline as U.S. firms reduce sourcing in all but a few countries.</p>	<p>Summary: Labor - Costs relatively high in all ASEAN countries except Indonesia and non-WTO members Vietnam and Cambodia, which are ineligible for quota liberalization. Transportation - Shipping times to the U.S. west coast average 45 days, compared with 12 to 18 days from China.</p>
	<p>Indonesia: Future status as a supplier to the U.S. market uncertain. Many U.S. firms consider Indonesia to be a competitive supplier, but indicated its political and social unrest may discourage future sourcing.</p>	<p>Indonesia: Labor - Abundant supply of low-cost, skilled labor. Inputs - Huge manufacturing base for raw materials, especially synthetic fibers, yarns, and fabrics. Business Climate - Frequent political and social unrest likely to deter growth in sourcing in the short term.</p>
	<p>Philippines: Share of U.S. apparel imports is likely to decline, as has already occurred in goods for which quotas were eliminated (e.g., babies' apparel).</p>	<p>Philippines: Labor - English-speaking, skilled labor force; high wage rates. Inputs - Relies heavily on imported yarn and fabric. Special arrangements - Foreign-trade zones on former U.S. military bases provide established modern infrastructure. Business Climate - Political and social unrest.</p>
	<p>Thailand: Share of U.S. imports is likely to decline, as has already occurred in goods for which quotas were eliminated (e.g., babies' apparel and luggage); may become a niche supplier of garments having complex construction or detailed sewing requirements.</p>	<p>Thailand: Labor - Highly-skilled workforce; high wages, partly because of a labor shortage. Inputs - Domestic supply of yarns and fabrics. Products - Strong needlework skills and small-scale factories enable intricately designed garments and flexibility in sourcing fashion apparel.</p>

Table 3-4--Continued
Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries

Region or country	Anticipated effects of quota removal	Key competitive factors
	<p>Malaysia: Share of U.S. apparel imports is likely to decline significantly.</p>	<p>Malaysia: Labor - Labor shortage; wages second-highest in the region after Singapore.</p> <p>Business climate - Although Government highlights importance of textile and apparel sector, investment is largely directed to other industries.</p>
<p>MEXICO</p>	<p>Share of U.S. apparel imports is likely to decline further, even with NAFTA preferences. May continue to be a niche supply for some basic apparel, particularly for goods needed on short-turnaround basis.</p> <p>Has the potential to expand yarn and fabric exports to other countries in the western hemisphere under a proposed Free Trade Area of the Americas or to Central America if the proposed U.S.-Central America FTA permits the use of Mexican inputs.</p>	<p>Labor - Costs are relatively high; product quality and production reliability problematic; middle management responsible for running the factories is considered weak; product design expertise limited.</p> <p>Inputs - Produces knit and woven fabrics. Cost is reportedly less than that for similar U.S.-produced fabrics, but higher than similar Asian fabrics.</p> <p>Products - Concentrates on mass-producing basic garments, particularly 5-pocket denim jeans, knit tops, and undergarments; limited capability for fashion apparel. Limited ability to offer full-package services.</p> <p>Business climate - Additional overhead costs in providing security for shipments from factories to the U.S. border and complying with paperwork requirements for preferential treatment under NAFTA.</p>
<p>CBERA</p>	<p>Summary: Most U.S. firms indicated they will reduce sourcing from the CBERA countries, especially if the proposed U.S.-Central America FTA does not permit the use of regional (e.g., Mexican) or third-country (e.g., Mexican or Asian) fabrics.</p> <p>However, even without a regional or third-country fabric provision in the proposed U.S.-Central America FTA, the region is likely to continue to mass-produce garments having minimal labor content and make apparel for quick-turn orders.</p>	<p>Summary: Products - Mass-produces basic garments, particularly those with low-labor content and few delicate sewing operations.</p> <p>Inputs - Relies heavily on imported yarn and fabric from the United States, largely reflecting U.S. content rules under the CBTPA to qualify for trade benefits; U.S. and regional fabrics required to qualify for CBTPA preferences cost more than similar fabrics made in Asia.</p> <p>Transportation - Benefits from proximity to U.S. market.</p> <p>Special arrangements - Duty-free access under CBERA.</p>

Table 3-4--Continued		
Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries		
Region or country	Anticipated effects of quota removal	Key competitive factors
	<p>Costa Rica: Share of U.S. apparel imports is likely to decline significantly.</p>	<p>Costa Rica: Labor - Highest labor costs in region; highly educated labor force.</p> <p>Business climate - Government trying to attract other, non-apparel investment.</p>
	<p>Dominican Republic: Share of U.S. apparel imports may decline, but likely to continue to supply apparel for quick-turn orders. Considered among the five most attractive suppliers from the region.</p>	<p>Dominican Republic: Labor - Shifted some assembly operations to Haiti to take advantage of Haiti's lower labor costs.</p> <p>Transportation - Benefits from proximity to U.S. market.</p>
	<p>El Salvador, Guatemala, Honduras, and Nicaragua: Future status as a supplier to the U.S. market uncertain, pending the outcome of regional or hemispheric free trade negotiations. Considered among the five most attractive suppliers from the region.</p>	<p>El Salvador, Guatemala, Honduras, and Nicaragua: Labor - Costs in most countries higher than China and other Asian countries.</p> <p>Inputs - Some regional knit fabric production.</p>
	<p>Haiti and Jamaica: Share of U.S. apparel imports is likely to decline significantly.</p>	<p>Haiti and Jamaica: Labor - Haiti has lowest hourly compensation costs in region.</p> <p>Business climate - Personal safety and security of shipments are issues.</p>
ANDEAN	<p>Summary: Share of U.S. imports likely to decline overall, but may continue to be a niche supplier to the U.S. market.</p>	<p>Summary: Special arrangements - U.S. legislation enacted in August 2002 providing for duty-free treatment of apparel imports from region using regional yarns and fabrics.</p>
	<p>Colombia: Colombia likely to become less cost competitive in the U.S. market with Asian suppliers following quota removal, but could still be competitive for garments in which lead times are critical.</p>	<p>Colombia: Inputs - Domestic supply of knit and woven fabrics.</p> <p>Products - Considered capable supplier of tailored clothing, sportswear, and only country in South and Central America skilled in fashion apparel.</p> <p>Business climate - Personal safety and security of shipments between factories and ports are issues.</p>

Table 3-4--Continued
Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries

Region or country	Anticipated effects of quota removal	Key competitive factors
	<p>Peru: May see its overall share of U.S. apparel imports decline, but expected to continue to be a niche supplier of high-end knit shirts.</p>	<p>Peru: Inputs - Domestic supply of high-quality cotton and fine-animal hair. Domestic production of yarns and fabrics. Products - Niche supplier of high quality, cotton knit shirts and related garments.</p>
	<p>Bolivia and Ecuador: Very small suppliers to the U.S. market; could become sources for specialty goods, such as those made of fine hairs from animals indigenous to these countries.</p>	<p>Bolivia and Ecuador: Inputs - Relies heavily on imports of fibers, yarns, fabrics, and findings. Has some supply of specialty animal fibers.</p>
TURKEY	<p>Future status as a supplier to the U.S. market uncertain. Several firms indicated Turkey would be an attractive supplier if it had a free-trade agreement with the United States. A few firms indicated they would continue or increase sourcing from Turkey, even without a free-trade agreement.</p> <p>May continue to be a global supplier of cotton fabrics.</p>	<p>Inputs - Domestic supplies of raw cotton, cotton yarns and fabrics.</p> <p>Special arrangements - Proximity and duty-free access to EU market.</p> <p>Products - Large cotton-based textile and export-oriented apparel industries; fast turnaround and fashion capabilities.</p> <p>Transportation - Shipping times to U.S. market similar to those for East Asia.</p>
EGYPT	<p>Likely to decline in importance as a supplier to the U.S. market, though a few industry sources indicated they will continue to source some products from Egypt following the removal of quotas. U.S. firms indicated Egypt would be an attractive supplier if a free trade agreement were negotiated with the United States.</p>	<p>Inputs - Largely government-owned textile industry characterized by excess employment, outdated technology and relatively low productivity. High raw material costs, owing to government -set minimum prices on cotton. Apparel manufacturers import yarn and fabric.</p> <p>Products - Industry largely cotton-based. Exports large quantities of its acclaimed "Egyptian cotton" in the form of yarns to the U.S. textile industry.</p>

Table 3-4--Continued
Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries

Region or country	Anticipated effects of quota removal	Key competitive factors
ISRAEL AND JORDAN	<p>Israel may continue to be a niche supplier for intimate apparel.</p> <p>Jordan may continue to be a niche supplier of apparel articles that are subject to high U.S. duty rates, such as manmade-fiber garments. However, sourcing from Jordan may be affected by the outcome of free-trade negotiations involving countries in the Western Hemisphere. If the proposed U.S.-Central America FTA or FTAA extends unlimited duty-free treatment to U.S. imports of apparel made in the region from third-country fabrics, U.S. firms are likely to shift sourcing to the region from distant sources such as Jordan.</p>	<p>Labor - Production in Israel highly automated and labor costs are high. Relatively low labor costs in Jordan.</p> <p>Special arrangements - Under the FTA with Israel, the United States established a "qualified industrial zone" program with Jordan and Israel that grants duty-free treatment to qualifying textile and apparel articles.</p>
SUB-SAHARAN AFRICA	<p>Summary: Industry sources indicated that this region's overall share of U.S. apparel imports will fall, notwithstanding AGOA preferences.</p> <p>AGOA preferences may spur U.S. firms to source products from the region that are subject to high U.S. duty rates, such as manmade-fiber and wool apparel, particularly if the provision allowing for the use of third-country fabrics is extended beyond 2004. Some sourcing of basic garments made in the region from local fabrics, such as pants and knit tops, may also continue.</p>	<p>Summary: Products - Produces basic, rather than fashion apparel. Most manufacturers do not offer full-package services. Many firms have limited capacity to offer large volumes that may be required by U.S. firms looking to consolidate sourcing following quota removal.</p> <p>Infrastructure - Infrastructure and logistics inferior to those in other regions of the world. Shipping time longer than that from East Asia.</p>
	<p>Kenya: Share of U.S. apparel imports is likely to decline.</p>	<p>Kenya: Business climate - Personal safety an issue for sourcing from country.</p>
	<p>Lesotho: Share of U.S. apparel imports is likely to decline.</p>	<p>Lesotho: Inputs - No domestic yarn or fabric supply. Planned investment in new yarn and knit fabric production capacity.</p>
	<p>Madagascar: Share of U.S. apparel imports is likely to decline.</p>	<p>Madagascar: Business climate - Political unrest in 2001 and 2002 resulted in large disinvestment in the industry. Government is trying to restart the industry, but future prospects are uncertain.</p>

Table 3-4--Continued

Summary of anticipated effects of quota elimination in 2005 and key competitive factors, by selected regions and countries

Region or country	Anticipated effects of quota removal	Key competitive factors
	<p>Mauritius: Share of U.S. apparel imports is likely to decline.</p>	<p>Mauritius: Labor- High labor costs owing to shortage of labor. Competition for workers from high-tech sectors. Inputs - Shortage of cotton yarn production for knit apparel. Planned investment in new yarn spinning capacity.</p>
	<p>South Africa: Share of U.S. apparel imports is likely to decline.</p>	<p>South Africa: Labor - Relatively high labor costs. Inputs - Domestic supply of yarns and fabrics. Only SSA country producing synthetic filament yarn.</p>

Source: The Commission assessment is based on interviews with representatives of U.S. apparel and textile companies, U.S. retailers, foreign textile and apparel producers and investors, and foreign government officials; a review of the literature; and testimony presented to the Commission at the public hearing and in written statements.

To reduce the risk of sourcing from only one country, U.S. importers also plan to expand trade relationships with other low-cost countries as alternatives to China, particularly with India, which also, like China, has a very large manufacturing base to produce a wide range of textile and apparel goods at competitive prices and a large supply of relatively low-cost, skilled labor. One or two other low-cost exporting countries in South Asia—Bangladesh or Pakistan—are expected to emerge as major suppliers of a narrower but still significant range of goods, such as mass-produced basic knit cotton tops and woven cotton shirts and pants (Bangladesh) or men’s and boys’ cotton apparel (Pakistan). Some firms indicated they also would consider CBERA countries, particularly those located in Central America, as a major source of supply if a Central American or western hemisphere free-trade agreement is negotiated that permits the use of regional (e.g., Mexican) fabrics or third-country (e.g., Asian) fabrics. In the ASEAN region, the only countries considered competitive as major alternate suppliers to China or India are Vietnam and, to a lesser extent, Indonesia. Although both countries have an abundant supply of low-cost labor, Vietnam will not be eligible for quota elimination until it becomes a WTO member, while Indonesia is considered somewhat risky because of its political and social unrest.

There are likely to be exceptions to the overall trends, especially at the firm level, reflecting the importance of longstanding relationships that U.S. apparel companies and retailers have with foreign suppliers, and the efficiency, flexibility, and experience of foreign suppliers in producing certain articles. In addition, although many countries are likely to see their share of the U.S. market decline, a large number of them may become major “second-tier” suppliers to U.S. apparel companies and retailers for niche goods or services. As U.S. firms seek to balance cost, flexibility, speed, and risk in their sourcing strategies, they likely will look to the second-tier suppliers to meet the needs that are not met by the first-tier suppliers. For example, Mexico, currently a major supplier to some U.S. companies, is expected to decline in importance; however, it may still remain a significant supplier of some basic garments, particularly 5-pocket denim jeans, for which it is considered cost competitive. Regardless of the outcome of regional free-trade negotiations, the production of certain goods is likely to remain in the CBERA region and Mexico to service U.S. buyers’ quick turnaround or mid-season order requirements. For quick-turn business, CBERA countries and Mexico primarily are used for replenishment of basics, particularly garments offered in a wide range of sizes, such as men’s dress shirts and pants. Quick-turn orders sometimes also are needed for fashion goods, when retailers are “chasing” the latest trends, styles, or colors. Turkey is considered a capable supplier for quick-turn business. Industry sources believe that Colombia has the potential to become a source for quick-turn apparel once it resolves concerns about personal safety and the security of merchandise shipped into and out of the country. Firms also are looking for low-cost suppliers that have preferential access to the U.S. market to help contain costs for articles subject to relatively high duty rates.

China

China is the world’s largest producer and exporter of textiles and apparel and it has invested in more spinning and weaving equipment than any other country during the last 5 years. Moreover, China’s huge supply of inexpensive labor and skilled sewers, coupled with access to indigenous raw materials, has enabled the Chinese textile and apparel industries to remain highly price competitive and attract foreign direct investment (FDI) in facilities and technologies. The industries also are considered to have efficient management and the technical know-how to produce virtually any textile or apparel article. For U.S. retailers,

buying more from China will also allow them to take advantage of the existing infrastructure and logistics they have in place there for buying and shipping non-textile products (e.g., housewares and toys), in addition to textiles and apparel.¹¹ Trade data reveal that China's share of the U.S. market has increased markedly in products for which quota restrictions have already been removed (table 3-2). Several retailers indicated that they have shifted sourcing of these products to China from such countries as the Philippines, Thailand, and Malaysia.

However, most firms indicated that the uncertainty of whether or not safeguard actions could be placed on U.S. imports from China likely will temper the amount of sourcing that firms dedicate to China, at least in the early years following quota elimination. To reduce the risk of sourcing from only one country, U.S. importers also plan to expand trade relationships with other low-cost countries as alternatives to China, particularly with India, which also has a very large manufacturing base to produce a wide range of textiles and apparel at competitive prices.

Prices are expected to decline following quota elimination. Several U.S. firms estimated that prices might fall by as much as *** percent; another said China likely will be the price leader in a post-quota world that other countries will need to match or beat. U.S. importers are concerned that the decline in prices, combined with stiff competition among supplying countries, could result in antidumping actions, particularly against China and possibly against India; however, it is not clear who in the U.S. apparel sector might initiate such actions.

Business Climate, Infrastructure, and Proximity and Access to Markets

U.S. apparel companies and retailers reportedly are finding China to be a much more business friendly place from which to source textiles and apparel as a result of changes China has made as part of joining the WTO. U.S. firms increasingly work directly with manufacturers in China rather than through buying agents, as was the common practice in the past. Industry sources described much of the Chinese industry as very business savvy and capable of meeting the needs of western buyers.

U.S. imports of most textile and apparel articles from China are highly constrained by quotas. In November 1999, the United States signed a market-access agreement with China that became part of China's WTO accession package and obligated the United States and other major import markets, such as the EU, to eliminate quotas on imports of Chinese textile and apparel as of January 1, 2005, the same date as that for other WTO members. However, the agreement allows for the United States and other importing countries to apply selective safeguards (quotas) on imports of textiles and apparel from China for 4 additional years beyond the termination of the textile and apparel quotas for WTO members—that is, from January 1, 2005 to December 31, 2008. The agreement also states that no textile-specific safeguards established during the 4-year period will remain in effect beyond 1 year without reapplication, unless both countries agree.

¹¹ Retailers indicated they are able to negotiate better shipping rates with large volume loads. In addition, retailers will generally establish a buying office in countries with which they do a lot of business.

U.S. industry representatives noted that China, unlike India, its major competitor, is investing heavily in infrastructure throughout the country, including a major highway system linking western China with the more developed eastern part of the country. In terms of location, industry sources indicate that shipping times from China to the West Coast of the United States are relatively fast, particularly compared with many of the ASEAN countries or India. China is also investing in deep water port facilities that will further shorten shipping times.

Labor and Management

China has a very large pool of inexpensive skilled labor, and its management is considered very effective and relatively low cost. In the apparel sector, the workers are considered to have very good sewing skills. In fact, several U.S. importers said there is no garment that they would not make in China. China currently has high-level specialists that can be hired at low cost, which saves a firm from sending its own specialist to oversee production. One trading company representative asserted that it has even hired Chinese supervisors in its overseas (non-China) facilities.

China's abundant supply of labor helps keep wages relatively low. Those low wages, which are especially important for the labor-intensive garment industry, have led many companies to move or to plan to move at least some of their production to China in order to take advantage of abundant cheap and productive labor. Some retailers noted that because of rapid economic development, labor costs have started to rise in Chinese textile and apparel factories, especially in the eastern and coastal special economic zones (SEZs). However, even though China does not have the lowest wages in the region, it is considered competitive in terms of per unit costs.

Raw-Material Inputs

Many industry representatives in Hong Kong, Korea, and Taiwan reported in effect, that "China has everything" and, thus, will be in a good position to compete. China has a competitive local supply of raw materials, including fibers, yarns, fabrics, and trim. Although China is currently importing cotton, as its domestic supply is insufficient to meet domestic demand, it has abundant supplies of other natural fibers such as ramie, silk, and angora rabbit hair, and the government is encouraging the production of these fibers.

China is the world's largest producer of manmade fibers, even though it still imports some fibers. China's shift in development policy toward a market-friendly approach has led to upgraded technology in manmade fiber production, as well as for the production of yarns and fabrics. Numerous firms interviewed by Commission staff believe that China is in the process of becoming a competitive fabric supplier, and in 1 or 2 years, China will catch up to Taiwan and Korea in the manmade-fiber sector.

Some inefficiency has been noted in Chinese state-owned enterprises (SOEs), especially in the cotton textile industries. However, there has been major restructuring and market-oriented policies have led to diversified ownership as well as product diversification. Although the SOEs still experience lower productivity rates than private firms and foreign-invested enterprises, they account for less than a quarter of the total gross output value of Chinese textile and apparel production.

According to a number of companies, the Chinese dyeing and printing sector lags behind the rest of the world in terms of equipment, technology, expertise, product innovation, variety, and research and development. For these reasons, some Chinese grey fabric is exported to Hong Kong or Korea for finishing before being reimported for manufacture in the Chinese apparel sector.

Level of Service Provided and Reliability of Supplier

According to industry representatives interviewed by Commission staff, one of China's advantages is that it can make virtually all types of textile and apparel products, from basics to fashion. At the lower end of the retail market, one firm is expecting the bulk of its commodity (or basic) business (which is very price sensitive) to go to China. At the higher end, another firm asserts that Chinese factories are very flexible and good at producing fashion garments. One firm indicated that China is likely to capture most of its fashion business. One trading firm indicated that it makes sense to make China its manufacturing center because so much of what the firm sells is already being made there.

Currently, most Chinese apparel exports are manufactured in response to orders received, often with samples and materials supplied by clients. China has few internationally recognized brand names and few experienced apparel designers.

Other East Asia (Hong Kong, Macau, Korea, and Taiwan)

The industries in Hong Kong and Macau are largely platforms for outward processing arrangements (OPAs) with China, whereby a certain amount of sewing takes place in Hong Kong or Macau to confer origin for trade purposes, while the remainder of the sewing and packaging takes place across the border in China, where labor costs are much lower. In table 3-2, U.S. imports from Hong Kong show a substantial decline for several products that were integrated into the GATT regime and became quota free in 2002. However, discussions with U.S. retailers and apparel suppliers indicate that at least some of this sourcing may stay in Macau and especially Hong Kong, until there is a better sense as to whether safeguards will be placed on U.S. imports from China.

Korea and Taiwan are major world suppliers of fabrics, benefiting from their large manmade fiber industries. Both countries have large spinning and weaving sectors, and despite rising labor costs, it is generally believed that they will remain competitive in the relatively capital-intensive production of synthetic fibers and fabrics. According to some retailers, the best yarns for knit-to-shape garments are made in Korea and Taiwan. Industry sources stated that apparel manufacturers worldwide likely will continue to use Taiwan and Korean fabrics.

A number of U.S. retailers noted that wage rates in Korea and Taiwan are relatively high, and that following quota elimination in 2005, they will be too high for producing most labor-intensive garments. Also, rapid development in high tech sectors means that traditional sectors like textiles and apparel have more difficulty attracting skilled labor. Taiwan has had to recruit some workers from other countries to help offset the chronic labor shortage. Although these economies have high labor costs compared with China's, their workers are considered highly skilled in making dress shirts, production of which is relatively automated compared with that of other garments. Industry officials indicated that some of this production may remain in these countries. Many firms believe that East Asian workers offer

much better sewing skills than those in Latin America or sub-Saharan Africa. Korea and Taiwan are also known for having excellent plant managers. These labor and management skills, along with the relatively small, flexible production lines, favor the production of fashion garments. Industry sources indicated that they likely will continue to source some dresses, which require highly skilled sewers and flexible production lines.

South Asia (Bangladesh, India, Pakistan, and Sri Lanka)

U.S. apparel companies and retailers generally indicated that they will expand their sourcing in South Asia after quota removal in 2005. However, sourcing decisions will vary significantly among the four countries in the region, in line with each country's competitive strengths in textiles and apparel. Industry sources cited a plentiful supply of low cost labor as a primary reason for sourcing in all four countries.

India is regarded as a major alternative source to China once quotas are removed for apparel and made-up textile products. Retailers and apparel suppliers acknowledged that India is likely to remain competitive after quota removal because of its large, relatively low-cost labor force, a large domestic supply of fabrics, and the industry's ability to manufacture a wide range of products. Retailers described Indian firms as innovative, particularly in design functions. Poor infrastructure and an inefficient bureaucracy were cited as concerns, but not as factors that will necessarily determine investment and sourcing decisions. Pakistan provides a more limited range of products than India, but is considered a competitive supplier of cotton goods, particularly men's apparel, home textile products, and fabrics.

U.S. firms presented a mixed picture when discussing the future of textile and apparel production in Bangladesh and Sri Lanka. Some buyers are confident that both countries will continue to manufacture large volumes of low-end apparel for Western markets once quotas are removed; others believe that sourcing will decline in Bangladesh and Sri Lanka if local producers are unable to provide full-service packaging and local inputs, such as fabric and trim. Several firms indicated that Sri Lanka will probably continue to be competitive in the production of intimate apparel, even if the country loses business in some other segments of its apparel industry.

Business Climate, Infrastructure, and Proximity and Access to Markets

The governments of the South Asian countries are taking steps to enhance the competitiveness of their textile and apparel sectors. Most of these efforts focus on encouraging new investment in the private sector, eliminating certain trade barriers to expand exports, and promoting industry quality standards. Nevertheless, a number of firms expressed difficulties in working in India and indicated that the lack of transparency in legal requirements and complicated paperwork increase producer costs and often necessitate the use of a broker rather than dealing directly with the manufacturers, particularly when many small manufacturers are involved. U.S. retailers noted that India's bureaucratic red tape required to move inputs and produce goods in a timely matter has also affected the time-to-market process for Indian-made goods.

Some industry sources considered Pakistan's business climate more difficult than India's. Some U.S. retailers indicated that they refuse to purchase from private mills in Pakistan not funded by World Bank loans for fear that financing has come from drug-money profits. ***.

Industry sources also expressed concern about the personal safety of their staff when examining factories and testing products prior to shipment. To encourage sales, some Pakistani firms are setting up showrooms in Dubai and other sites in the region.

Firms had mixed views on the ease of doing business in Bangladesh and Sri Lanka. One U.S. firm indicated that it thought manufacturers in Bangladesh had a more western approach to business than those in Pakistan, while another indicated that it is more difficult to work in Bangladesh than in India. In response to industry concerns regarding child labor, Bangladesh reportedly is working to get its factories certified for international labor standards. Some industry sources had concerns about working in Sri Lanka, in part because of its recent history of civil unrest. However, others described Sri Lanka as having a favorable business environment, including a functioning rule of law, corporate executives educated in the United States and the United Kingdom, and the use of English as the language of business.

South Asian countries face many challenges in upgrading infrastructure to enhance the competitiveness of their textile and apparel sector. U.S. firms indicated that India has poor infrastructure, including no deep-water ports and an antiquated railroad network. Bangladesh's poor physical infrastructure is reportedly less of a concern to business because most apparel production is in Dhaka or port regions, both easily accessible to the sea. However, communication networks in Bangladesh are described as substandard, and infrastructure is characterized by poor roads, port congestion, and frequent power outages.¹² Industry sources also described Sri Lanka as having poor infrastructure, in part because of the damage inflicted during the long period of civil unrest. Shipping times from South Asia reportedly are significantly longer than those from East Asia. One industry source said it takes about 45 to 60 days to ship from India to the east coast of the United States.

South Asian governments are beginning to focus on increased market access for their textile and apparel products both inside and outside the region to spur economic growth. In the aftermath of the September 11 terrorist attacks, Pakistan obtained additional quota access to the U.S. market for certain apparel and expanded trade preferences and market access from the EU. Sri Lanka obtained and currently enjoys quota-free and reduced-duty access to the EU and reduced-duty access to India, as well as duty-free access to large Asian markets as a member of the South Asian Association for Regional Cooperation.¹³ Bangladesh also benefits from duty-free and quota-free treatment in the EU and trade preferences extended by Canada and Norway.

Labor and Management

The textile and apparel sector is believed to be the largest source of manufacturing jobs in South Asia. Labor costs for textile and apparel production in the region are among the lowest in the world. However, South Asia's relatively low labor costs are partially offset by lower

¹² The World Bank estimated that Bangladesh loses about \$1 billion annually because of power outages and unreliability of power supply. See U.S. Department of Energy, Energy Information Agency, *Country Analysis Brief: Bangladesh*, Feb. 2002, p. 2.

¹³ In return for EU market access, Sri Lanka reduced duties to 5 percent for yarns and fibers and 10 percent for textile items from the EU. Certain articles are subject to a double-checking system of export and import licensing.

productivity levels. U.S. retailers interviewed by Commission staff indicate that productivity rates in India, Pakistan, and Bangladesh are about 20 to 25 percent below those in China.

India has a very large pool of skilled and unskilled workers employed on a 48-hour, 6-day work week. Indian firms reportedly also have well-educated management and technicians. Bangladesh suffers from low literacy levels, frequent labor unrest, and outdated technology. In general, the quality of management in Bangladesh's factories is considered poor, though one industry source indicated that some factories there have very good managers. Sri Lanka reportedly has low industrial labor productivity resulting from relatively high employee absenteeism and turnover, and strict labor standards lead to a shorter workday than that for India and Bangladesh. Nevertheless, one U.S. firm stated that Sri Lanka benefits from well-educated middle managers.

Raw-Material Inputs

India ranks among the world's largest producers of cotton, cotton yarn, and manmade fibers and filament yarns; it also has a large domestic fabric supply. However, with the exception of yarn spinning, an area of competitive strength for Indian firms, India's textile industry is highly fragmented. The weaving, dyeing, finishing, and processing segments are considered the weakest links. The textile and apparel sector in Bangladesh relies heavily on imports for its production inputs, including fibers, yarns, fabrics, and findings. The sector is cotton based, with most of the cotton fiber coming from India and the United States. Cotton fiber imports are expected to rise from their current levels through 2005, reflecting the addition of new spinning capacity, increased demand for cotton yarn, and the substitution of lower priced cotton for polyester fibers. In 2002, Bangladesh's textile industry reportedly had the capability to supply about 70 percent of its apparel industry's yarn needs for knitwear production (e.g., T-shirts) and 20 percent of its woven fabric needs for production of casual apparel such as shirts and pants.

The availability of domestic cotton in Pakistan has been an important factor in the development of its cotton textile sector: it is the world's fourth-largest producer of cotton after China, the United States, and India.¹⁴ In addition, Pakistani companies have begun purchasing more high-quality cotton to create better cotton yarns and fabrics.¹⁵ Pakistan has the third-largest installed capacity for spun yarn in the world, after China and India. U.S. retailers believe that Pakistani firms will remain competitive in unfinished cotton fabrics owing to large installed capacity, continued investments, and consistent quality.

Level of Service Provided and Reliability of Supplier

The size and quality of Indian textile production has made Indian suppliers a major source for both woven and knit products. Several industry sources noted that India produces good-quality home textiles and maintains a full range of knit and woven apparel. Indian firms are considered innovative with designs, and are capable of manufacturing a multitude of different styles. With its large supply of relatively low-cost labor, India is known for its

¹⁴ U.S. Department of Agriculture, FAS, *Cotton: World Markets and Trade*, Dec. 2002, table 1.

¹⁵ "Pakistan Shifts to Quality Cotton Textiles," *World Textile News*, June 4, 2001, found at <http://www.emergingtextiles.com>, retrieved June 8, 2001.

capability to provide relatively labor-intensive embellishments to apparel and home textile products, such as hand embroidery.

Pakistan provides a more limited range of products than India but is considered a competitive supplier for such cotton goods as men's apparel, bed linens, and fabrics. Pakistan is generally considered a competitive producer of knit tops. Bangladesh is considered a competitive low-cost supplier for large quantities of basic apparel items, including knit and woven shirts. Sri Lanka has developed a reputation as a niche supplier of intimate apparel. In addition, one U.S. firm described Sri Lankan firms as market savvy, and competitive in garment finishing and product development.

Association of South East Asian Nations (ASEAN Countries)¹⁶

A number of U.S. apparel companies and retailers expressed concern about the competitive position of most ASEAN countries following quota elimination in 2005. For example, although Indonesia has a huge textile and apparel infrastructure, from raw materials to finished goods, it faces political and social instability. Some firms contended that Thailand is likely to remain competitive in a post-quota world, because of its sophisticated textile industry; however, other firms claimed that Thailand may decline in importance because its costs are relatively high and its product quality is not high enough to compensate. Malaysia is considered an even higher cost supplier, and given its focus on more advanced manufacturing sectors, it is likely to see its share of the U.S. and global textile and apparel market diminish in a post-quota world. A number of firms interviewed claimed that the recent rapid growth in Vietnam's apparel shipments to the United States largely reflected its low labor costs and absence of quotas. However, the United States and Vietnam recently reached a bilateral agreement that establishes quotas on U.S. imports of apparel from Vietnam; because Vietnam is not a WTO member, those quotas will not be lifted in 2005.¹⁷

¹⁶ Includes Brunei, Myanmar, Cambodia, Indonesia, Laos, Malaysia, Philippines, Singapore, Thailand, and Vietnam. In this report, the focus is on Indonesia, Malaysia, Philippines, and Thailand.

¹⁷ 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).

Business Climate, Infrastructure, and Proximity and Access to Markets

A number of political and policy issues have been identified as increasing costs or exacerbating uncertainty regarding supply in some ASEAN countries. Many firms have raised concerns about political and social instability in Indonesia; for example, the concentration of wealth in the country's Chinese population has been cited as triggering social and racial tensions there. Similarly, FDI has declined significantly owing to concerns about the judicial system's ability to protect an investor's capital. In the Philippines, domestic security concerns are an issue. Some firms have complained that corruption in some countries, including Cambodia, has led to substantial cost increases.

The geographical location of some ASEAN countries was presented as a disadvantage. For instance, according to an industry source, shipping times from ASEAN countries to the west coast of the United States average 45 days. Cargo shipping from Indonesia to the United States reportedly takes about 55 days (with a transit in Singapore), while shipping from the Philippines can take as little as 20 days (through Taiwan). One firm has indicated that it takes 2 days to ship from Vietnam to Taiwan, and from there 12 days to the U.S. west coast.

Labor and Management

Industry representatives generally did not consider the ASEAN countries, particularly Thailand, the Philippines, and Malaysia, to be very competitive in terms of labor costs or labor abundance. According to one industry source, manufacturing costs in the Philippines are 11 cents per minute, compared with 5 cents per minute in China. In Malaysia, local labor is scarce and expensive, prompting some firms to bring in foreign workers (from Indonesia and Pakistan), a costly approach. Thailand faces a similar problem and has relatively high labor rates. The relatively high cost of labor has caused more than one firm to move production of babies' garments from Malaysia and Thailand to China following quota elimination for China in 2002.

Some ASEAN countries do have low labor costs. According to many retailers and apparel suppliers, Indonesia has a large labor force and much lower costs than the Philippines and Thailand. Similarly, although Vietnamese workers are not necessarily as productive as workers in China, their costs are low enough that Vietnam is considered by a number of companies to be competitive.

Skill levels and productivity vary greatly among ASEAN countries. According to one retailer, Cambodia is 40 percent less productive than China (manufacturing productivity) and yet their manufacturing costs are similar (5 cents per minute). The existence of an English-speaking, skilled and semiskilled workforce is considered an advantage for the Philippines. Thailand has skilled sewers and small production lines that favor the production of fashion apparel and embellished garments.

Raw-Material Inputs

ASEAN countries have ready access to raw materials in the region. However, ASEAN countries having a fabric industry are believed to be more competitive than those without one. For instance, the Philippines is at a disadvantage because it has no locally produced raw materials, and thus lead times are longer when sourcing from the country (though one

industry source indicated that fabric can be shipped from Taiwan to the Philippines in as little as 2 days). Customs delays for importing fabrics into the Philippines, combined with high port and shipping costs, can greatly extend lead times and total costs.

Lead times are shorter in Thailand than in the Philippines because of the availability of locally produced materials, reflecting the vertically integrated structure of the textile and apparel sector in Thailand. A retailer asserted that it would consider Thailand second to China in a post-quota world, simply because it has a competitive textile industry. On the other hand, Thailand's strong reliance on imported high-quality raw materials has been considered a competitive weakness. Malaysia and Indonesia also have vertically integrated textile and apparel sectors through all phases of production ranging from yarn to apparel. Indonesia is known for its quality fabrics and is said to be competitive in both cotton and polyester goods.

Level of Service Provided and Reliability of Supplier

The quality of production in Thailand and the Philippines is considered good, but the cost is relatively high compared with that in China. Thailand, in particular, is considered a capable supplier of fashion garments. U.S. apparel companies and retailers noted that they produce high-volume basic tops and bottoms with few style changes in Cambodia and Vietnam, but it is difficult to produce high-end or fashion goods in either of these countries.

Mexico

U.S. apparel companies and retailers interviewed by Commission staff indicated that they have reduced or eliminated their sourcing in Mexico, or plan to reduce their sourcing when quotas are removed, because of a number of factors that make Mexico less competitive than other suppliers. Industry sources cited rising labor costs, inconsistent quality, and problems with the reliability of production as major reasons for moving sourcing, along with concerns for the security of shipments during transit. Most products being sewed in Mexico are basics, particularly 5-pocket denim jeans and knit shirts. Industry sources expressed concern that their Mexican suppliers were not able to diversify into fashion denim jeans. Industry sources also pointed to the limited availability of full-package services as an impediment to doing business in Mexico.

Business Climate, Infrastructure, and Proximity and Access to Markets

Proximity and preferential access to the U.S. market are Mexico's major competitive advantages as a source of supply for apparel and textile products. Companies indicated that the duty-free and quota-free preferences are what originally attracted U.S. companies to Mexico for sourcing purposes, but that Mexico has lost some of its competitive advantage and the administrative burdens of doing business in Mexico have not improved. U.S. firms also indicated that they must devote considerable resources to dealing with U.S. Customs and administrative matters when importing from Mexico, adding to the total cost of the product.

The time required to ship goods to the United States from Mexico's interior, where a substantial amount of Mexico's textiles and apparel are now made, is sometimes longer than

the shipping time from the Caribbean because goods move by truck.¹⁸ Security issues, particularly as they relate to truck hijackings and container security (to prevent problems with drug smuggling) are issues many firms listed as disincentives to sourcing from Mexico. According to Mexican industry sources, up to 5 percent of the cost of apparel from Mexico can be attributed to shipments being stolen or security measures taken to prevent such theft.¹⁹ An Asian apparel supplier that has invested in Mexico indicated that Mexico is a difficult country in which to produce garments, but proximity to the U.S. market has made such production worthwhile.

Labor and Management

The cost of labor in Mexico is higher than that for most of the Caribbean countries, and much higher than that for China or India. U.S. firms indicated that labor productivity or efficiency is much lower in Mexico than in Asia. Several firms listed rising labor costs, which are partly associated with the appreciation of the Mexican peso, as one of the reasons they are shifting production out of Mexico to other regions, including to Central America and Africa. According to one retailer, Mexican factories do not have effective middle management—the decisionmaking power rests at the top, so it can be difficult to communicate with the factory if the top manager is away. Another concern expressed by an Asian apparel supplier is high absenteeism among Mexican workers.

Raw-Material Inputs

Mexico has a domestic textile industry producing both knitted and woven fabrics. However, Mexican fabrics tend to be priced higher than fabric from Asia, but lower than fabric from the United States.²⁰ Mexico specializes in basic fabrics,²¹ and is reportedly the world's third-largest producer of denim.²² However, according to the Mexican Apparel Chamber, fashion trends are moving toward the production of more fashion garments, using fabrics that the Mexican industry does not produce. While Mexico is considered competitive in the production of denim and certain wool fabrics, it is not considered competitive in the production of many other fabrics, particularly manmade-fiber fabrics. Under the NAFTA, the United States has tariff preference levels (TPLs) with Mexico that permit a certain volume of U.S. apparel imports from Mexico to consist of non-NAFTA fabrics. Mexico has fully utilized these TPLs over the last 5 years.

¹⁸ Some apparel is still made in the border region between the United States and Mexico, which reportedly has much faster transport times, and new apparel production is increasingly moving into the Yucatan Peninsula region, from which apparel is generally transported by ship.

¹⁹ Representative of the Textile Industry Chamber, Mexico City, interview by USITC staff, Feb. 10, 2003.

²⁰ Representatives of the Fiber Articles and Synthetics Section of the National Association of the Chemicals Industry, Mexico City, interview by USITC staff, Feb. 10, 2003, and representative of the Textile and Apparel Industry Association, Guatemala City, interview by USITC staff, Feb. 26, 2003.

²¹ Representative of the Apparel Chamber in Mexico, Mexico City, interview by USITC staff, Feb. 10, 2003.

²² Representatives of the Fiber Articles and Synthetics Section of the National Association of the Chemicals Industry, Mexico City, interview by USITC staff, Feb. 10, 2003.

Level of Service Provided and Reliability of Supplier

Companies interviewed by the Commission said that most of the Mexican factories are able to handle production of only basic, commodity goods that they can produce in large volumes. One company interviewed by Commission staff indicated it pulled some of its business out of Mexico because of a lack of flexibility on the part of manufacturers to switch production to more fashion-oriented jeans that are currently in style. Only a few large apparel firms in Mexico are vertically integrated. Most of the Mexican firms continue to focus on basic apparel assembly rather than providing the full-package service requested by U.S. importers.

CBERA Region

According to U.S. apparel companies and retailers, the major competitive advantages of sourcing apparel from the CBERA region are its quota-free access and proximity to the U.S. market, which makes shipping to the U.S. market faster and relatively less expensive than it is from Asia. U.S. apparel imports from CBERA countries are concentrated in product categories for which imports from lower cost Asian suppliers are highly constrained by quotas. The CBERA region mostly supplies high-volume commodity garments that have reasonably predictable consumer demand, particularly basic knit shirts, pants, underwear, and nightwear. The production of these basic goods involves large and standardized runs, relatively simple sewing operations, and few styling changes, which together help offset the higher cost of labor in the region vis-a-vis Asia.

Several large U.S. apparel suppliers indicated that the CBERA countries have been an integral part of their sourcing strategy; however, most industry sources indicated that the benefits of the CBTPA preferences are becoming less attractive as production costs in the region increase vis a vis those in Asia, particularly when combined with the higher costs of using U.S. yarns and fabrics. Most U.S. apparel companies and retailers indicated that their decisions regarding sourcing from the CBERA region in 2005 will depend on the outcome of negotiations on the proposed U.S.- Central American Free Trade Agreement (CAFTA) and/or Free Trade Area of the Americas (FTAA), and what type of provisions are put in place regarding the use of non-U.S. fabrics. Among the CBERA countries considered most promising for sourcing are Honduras, Guatemala, the Dominican Republic, El Salvador, and Nicaragua. High costs in Costa Rica reportedly have priced the country out of the market for many U.S. importers, and the Government of Costa Rica is now trying to attract other, nonapparel investment to the country to utilize its highly educated labor force.

Business Climate, Infrastructure, and Proximity and Access to Markets

Importers reported shipping times from Central America to the United States ranging from 2 to 7 days, depending on the country from which they ship and the port of entry. One U.S. firm said it sources large quantities of apparel from the region because the short lead times allow it to adjust orders according to market demand.

U.S. firms indicated that they have developed strategic relationships with their suppliers in the CBERA region, and many import garments under the CBTPA provisions using either

U.S. or regional fabrics.²³ In 2002, 79 percent of the value of U.S. apparel imports from CBTPA-eligible countries entered under preferential duty provisions, though the shares for individual countries varied considerably. For example, 85 percent of imports from Honduras qualified for preferential access in 2002, while only 32 percent from Nicaragua and 49 percent from Guatemala qualified. Nevertheless, industry sources indicated that CBTPA requirements are complex and add an additional layer of administrative burden, which in turn adds to the cost of the product. According to industry sources, the CBTPA yarn and fabric provisions also limit firms' flexibility in their supply chains. A number of firms indicated that they have already reduced apparel sourcing from the region or are in the process of doing so because of cost considerations and other disruptions to supply resulting from CBTPA regulations.

U.S. industry sources cited safety and security concerns in doing business in Jamaica and Haiti. Drug smuggling in Jamaica, Haiti, and Guatemala was also cited as a concern.

Labor and Management

Labor costs in CBERA countries are lower than those in Mexico, but higher than those in most apparel exporting countries in Asia. As such, U.S. apparel imports from CBERA countries are concentrated in products having low labor content, particularly basic knit tops, pants, shorts, underwear, and nightwear. A large U.S. retailer indicated that it has found labor productivity in CBERA countries to be about 50 percent of that in China. Labor costs reportedly have been increasing in El Salvador and especially in Guatemala, making them less competitive from a cost perspective. Some Dominican Republic firms have reportedly shifted some assembly operations to Haiti, which has lower labor costs.

U.S. apparel companies and retailers indicated that they generally do not source fashion apparel from the CBERA region or garments that require many delicate sewing operations. One large U.S. apparel supplier indicated that most factories in the region do not have skill sets, management, or production lines to handle fashion goods or complex sewing operations. This supplier also indicated that middle management is one of the biggest challenges of working in the region.

²³ See the "overview" in appendix I (CBERA countries) for information on CBTPA preferences.

Raw-Material Inputs

Most fabrics used in apparel production in the CBTPA countries are imported from either the United States, Mexico, or Asia. The Caribbean countries do not produce woven fabrics (except for some limited amounts believed to be for local consumption). The region does have a small knit fabric industry whose development was facilitated by the regional fabric provision under the CBTPA. Honduras has several integrated knit apparel facilities that produce fabric as well as finished garments, and in 2002, it was the largest supplier of regional knit fabric for U.S. apparel imports from the region qualifying for CBTPA benefits under the regional fabric provision. Nevertheless, U.S. imports of apparel using regional fabrics accounted for no more than 5 percent of total apparel imports from the region in 2002. In the same year, the TPL for goods using regional fabrics was fully utilized for T-shirts, but the TPL for other knit apparel, which accounted for most of the regional fabric provision, had a utilization rate of 51 percent.²⁴ A U.S. firm interviewed by Commission staff indicated that regional fabrics meet only one-half of its sourcing needs from the region.

One firm indicated that it rarely uses U.S. fabric in clothing produced in the region, except for some manmade-fiber products that have higher duty rates than cotton products. Several retailers and apparel suppliers indicated that they use some regional knit fabrics and forgo the preferential duty treatment under the CBTPA for the remainder, because U.S. fabrics cost 20 to 40 percent more than Asian fabrics. According to one retailer, apparel suppliers that sell under branded labels can charge a premium for their product and so can afford to pay more for their raw materials and are more likely to use U.S. fabrics than retailers sourcing for private label programs. Commission staff interviews with certain U.S. branded apparel suppliers indicated that they use U.S. fabric in their production in the region.

Level of Service Provided and Reliability of Supplier

According to companies interviewed by Commission staff, CBERA apparel factories generally are set up specifically to produce basic garments in long and standardized runs, rather than smaller and more flexible runs that are typical for making fashion apparel. To make fashion goods in the region would require a higher level of labor and managerial skills than currently exists in most factories and a redesign of production lines to accommodate the shorter, flexible runs. Moreover, while CBERA firms recognize the growing importance of offering full-package services to U.S. apparel companies and retailers, few currently offer it.²⁵ Among the firms offering full-package production in the region are some of the Asian investors that have links back to their parent companies in Korea or Taiwan. In the Dominican Republic, at least some apparel firms in the free zones reportedly offer full-package services. Honduras also has some companies capable of offering full-package

²⁴ TPL data were compiled from data of the U.S. Department of Commerce, Office of Textiles and Apparel, found at http://otexa.ita.doc.gov/agoa-cbtpa/agoa-cbtpa_2002.htm, retrieved Apr. 8, 2003.

²⁵ Full package programs in the CBERA region generally refer to services ranging from procurement of materials to cutting and sewing, and to finishing and packaging of the final products. In the Far East, an established infrastructure exists to provide full package imports to U.S. buyers, including product development, fabric sourcing and cutting, garment sewing, packaging, quality control, trade financing, and logistics arrangements.

production. Korean and Taiwanese producers have established spinning and knitting facilities in Honduras to supply apparel manufacturers in Central America.²⁶

Andean Countries

The Andean countries (Bolivia, Colombia, Ecuador, and Peru) are a small source of U.S. imports of textiles and apparel, which became eligible for duty-free treatment for the first time with the enactment of the Andean Trade Promotion and Drug Eradication Act (ATPDEA, Division D of the Trade Act of 2002). Peru and Colombia, which account for most of U.S. textile and apparel imports from the Andean region, produce high-quality apparel products, such as combed cotton knit tops (Peru) and tailored clothing, fashion apparel, and jeans (Colombia). Both countries are considered cost competitive by some importers, in large part because quotas increase the cost of sourcing garments from certain lower cost producing countries. The allowance for regional yarns and fabrics in the ATPDEA is considered a factor that will help the region to compete with other suppliers, though some firms question whether the region will be able to be cost competitive once the quotas are removed. Some suppliers thought Peru may be able to compete in the supply of high-end knit shirts, and Colombia might be a good source for retailers and apparel suppliers looking to do quick-turn business, for which they might be willing to pay a premium.

Business Climate, Infrastructure, and Proximity and Access to Markets

During the past decade, the Andean countries have implemented numerous government incentives (substantial reduction of tariffs, the elimination of most import-license requirements, and simplified import and export procedures) to open their economies and attract foreign investment. Under the ATPDEA, qualifying textile and apparel articles have duty-free and quota-free access to the U.S. market. The trade preferences are limited to apparel made of U.S. fabric and to specified quantities of apparel made from regional fabrics (see the “overview” in appendix J, Andean countries, for information on the trade preferences).

Colombia has ports on both its coasts, but transportation inside the country can be difficult. One industry source noted that Colombia has a well-developed airfreight industry for its flower sector that could be used to transport fashion items that are needed on a quick-turn basis. However, one apparel supplier pointed out that it is difficult to ship fashion garments on hangers by air. Safety and security for both personnel and shipments are always a concern for importers. ***. Peru has problems with its infrastructure, which was severely damaged during the disruptive weather patterns of El Nino in 1997-98. In addition, its shipping and transportation costs reportedly are higher than those of its regional competitors.

²⁶ Representative of textile producer, San Pedro Sula, Honduras, interview by USITC staff, Feb. 21, 2003.

Labor and Management

Colombia has an ample supply of highly skilled textile and apparel workers. Peru reportedly has an abundant labor force, but a shortage of skilled workers. From a cost perspective, one firm indicated its apparel vendor in Colombia is able to match China's prices. However, it indicated that once the quotas are removed (and the associated quota costs), its Colombia supplier may not be price competitive with China. Another firm indicated that Colombia is slightly more expensive than the Central American countries, but the Colombian workers have excellent needlework skills.

Raw-Material Inputs

Both Colombia and Peru have a local supply of fabrics for their domestic apparel industries. Peru's fabric capabilities are concentrated in knit fabric production, particularly cotton; it has developed a reputation for its ability to make high-quality cotton knit fabrics using long-staple cotton. One U.S. industry source said Peru also is competitive in polyester knit fabrics. Colombia's textile industry has vertically integrated firms that make a wide variety of cotton, manmade-fiber, and wool woven fabrics, as well as knit fabrics for use by its apparel sector.

Level of Service Provided and Reliability of Supplier

Colombia is an established supplier of tailored goods, jeans, and other sportswear. It is also recognized as a viable, though perhaps more expensive, alternative to Asian suppliers for fashion items, particularly for quick-turn items. By contrast, Peru supplies both knit and woven products to the U.S. market; it is known for its high-quality pima cotton knit tops. In an interview with Commission staff, a representative of the Peruvian government indicated that the high-end knit shirts will likely be the niche in which its industry will be most equipped to compete once quotas are removed, but he expressed some concern about the rest of the industry, including that which produces less expensive cotton T-shirts.²⁷

Turkey and Egypt

Several U.S. retailers and apparel suppliers indicated that Turkey and Egypt would be more attractive suppliers from a cost standpoint if they had free-trade agreements with the United States. A few firms indicated that in the absence of a free-trade agreement they are likely to continue or increase their purchases of apparel from Turkey; other companies indicated that it probably would not be a significant supplier for them. However, Turkey is a member of the EU Customs Union and may continue to be a source of supply to that market, which accounted for nearly two-thirds of the value of Turkey's textile and apparel exports in 2001. Similarly, most U.S. firms indicated Egypt would decline in importance as a supplier to the U.S. market. However, at least one large retailer indicated that Egypt is likely to do well in a post-quota environment, and another large retailer stated that it will likely continue to source some products from Egypt because of its good relationship with the manufacturer and the fact that the products they purchase are competitive with other suppliers from a cost and quality standpoint.

²⁷ Counselor, Embassy of Peru, interview by USITC staff, Washington, DC, Jan. 8, 2003.

A few retailers indicated that they are likely continue to source from Turkey after 2005. The Turkish workforce is flexible and highly skilled, even though labor costs are relatively high compared with those in China and India. Turkey also has an integrated and diversified textile and apparel sector, active in every segment of the supply chain, particularly cotton manufacturing. One retailer thinks that Turkey is and will remain competitive in cotton fabrics after 2005. According to industry sources, the Turkish industry is also skilled in making tailored clothing and has a good reputation for manufacturing apparel on a fast turnaround basis. However, another industry source indicated that the quality of apparel manufactured in Turkey is somewhat lower than that of similar goods from Hong Kong and China, and somewhat higher in price. Turkey caters mainly to the EU market, whose customers reportedly are demanding from the delivery standpoint, but are not as concerned with quality. According to industry sources, shipping time from Turkey to the United States is comparable with that from East Asia, at about 14 days.

Egypt has a relatively abundant labor supply, but its labor costs are higher than that for China. Egypt also has a well-established textile industry based on its production of high-quality cotton. However, owing to price floors set by the Government of Egypt, Egyptian cotton is relatively expensive, forcing downstream producers to import yarns and fabrics. According to some producers, imported inputs generally face high tariffs, but some firms are participating in a duty drawback program for exported final products. The textile sector in Egypt is largely under public-sector ownership and is characterized by excess employment, outdated technology, and relatively low productivity.

Israel and Jordan

Industry sources expressed uncertainty over the future of sourcing garments in Israel and Jordan. On the one hand, Israel and Jordan have preferential access—with advantageous rules of origin under free-trade agreements—to major import markets. On the other hand, U.S. apparel companies and retailers expressed concern about political instability and security matters in the region, which have greatly affected reliability of supply and inhibited the ability of firms to make long-term sourcing decisions and FDI in the region. Generally, U.S. firms indicated that any sourcing from Jordan is likely to be in apparel items that would normally be subject to high rates of duty, such as synthetic fleece tops and wool apparel. Given its high labor costs, the Israeli apparel sector tends to concentrate on the niche and high-end market segments. One firm told Commission staff that Israel is likely to remain competitive in those segments following 2005.

Both Israel and Jordan have free-trade agreements with the United States. In addition, their textile and apparel sectors have been significantly affected by the 1998 U.S. legislation on qualified industrial zones (QIZs), which allows U.S. imports of qualifying goods made in designated QIZs to enter free of duty and quota. For example, several firms reported that they buy synthetic fleece garments that are made in QIZs in Jordan from Asian fabrics, using the required minimum amount of content from Israel and enter the goods free of duty and quota into the United States (thereby avoiding payment of about 30 percent normal trade relations tariff rate). Shipping times from the region to the United States are also considered advantageous, with average shipping times from Israel (and Jordan via Israel) of about 2 weeks, which is better than that from many Asian countries.

Although Jordan and Israel are linked in terms of the QIZ program, they differ in terms of their cost competitiveness. Jordan has low manufacturing costs because of low wages, no income taxes, and inexpensive rents and electricity. Israel has high labor costs, which have pushed domestic firms to move production to more cost-competitive countries. Israel has a highly educated and trained workforce and it has been noted that high production costs in Israel are partially offset by the use of advanced technology and high product quality. The Israeli industry is highly automated, which keeps it competitive, and has a strong reputation for good service and fast turnaround.

The apparel industry in Jordan consists largely of assembly operations; lack of access to water prevents the development of a textile industry there. However, it has the advantage of being close to major regional fabric suppliers, including Egypt, Turkey, Israel, and Pakistan.

Sub-Saharan Africa

According to industry sources, sub-Saharan Africa (SSA) is not a particularly low-cost area for production of textiles and apparel, given the labor costs, low productivity, long lead times, and high cost of other inputs compared with those in Asia. Most companies located their production in SSA because of quotas on other suppliers. These quotas, combined with duty-free, quota-free access to the EU and, since October 2000, to the U.S. market, has led to increasing exports of mainly apparel items from SSA. Most companies interviewed indicated that because of the importance of quotas, it will be difficult for SSA to compete in a quota-free world. They indicated that EU and AGOA preferences will not be enough to keep the industry competitive except in the area of manmade-fiber and wool apparel, where SSA is competitive and U.S. duties are high. A number of SSA companies reported they are already losing sales in the EU market to countries such as Bangladesh, even with EU quotas in place. Most SSA firms view vertical integration as the means of survival in a quota-free world.

Business Climate, Infrastructure, and Proximity and Access to Markets

The political and business environment in the major SSA countries producing textiles and apparel is generally considered safe and secure. However, U.S. retailers have indicated that they will not send staff to countries where terrorism may be an issue, and this may affect countries such as Kenya. A benefit of AGOA is that the beneficiary SSA countries have had increased technical assistance and contact with U.S. Government agencies and companies. SSA countries exporting to the United States under AGOA have had to improve customs procedures and transparency, including adoption of procedures to prevent unlawful transshipments and the use of counterfeit documents. Many companies operating in the region believe that these changes have improved the business environment for textile and apparel exports.²⁸ A setback in SSA's attempts to improve the business environment in textiles and apparel occurred in Madagascar in 2002, when many foreign-owned textile and apparel companies pulled out of the country because of political unrest and refusal by the

²⁸ Indeed, one representative of a major company in South Africa noted that one of the big benefits of the AGOA was the technical assistance provided by the U.S. Customs Service in improving customs procedures in that country, particularly regarding the issue of under invoicing. Representative of textile/apparel company, interview by USITC staff in Durban, South Africa, Feb. 27, 2003.

Government of Madagascar to remit value-added taxes owed to businesses. Although the current government is attempting to restart the industry, to the extent that SSA countries experience the types of political problems, SSA will be at a disadvantage to other countries.

The United States and the EU provide preferential market access to qualifying textile and apparel articles from eligible SSA countries. Under the Cotonou Agreement, the EU grants duty-free and quota-free access to textile and apparel imports from African, Caribbean, and Pacific (ACP) countries, excluding South Africa,²⁹ subject to the use of ACP fabric with a double transformation rule.³⁰ In January 2000, the EU negotiated the EU-South Africa Trade, Development and Cooperation Agreement (TDCA) with South Africa under which the EU agreed to phase down its duties on textiles and apparel from South Africa over 6 years, while South Africa will phase down its tariffs on EU textiles and apparel to 50 percent of the MFN rate over 8 years.³¹ The United States extends duty-free and quota free access to apparel from eligible SSA countries, including South Africa, under AGOA, which is described in more detail in appendix K of this report.

Companies in SSA indicated that both U.S. incentives under AGOA and the restrictiveness of U.S. quotas on imports of textiles and apparel from non-SSA suppliers have provided a significant impetus for expanded exports to the United States. However, most companies pointed out that the quotas on non-SSA suppliers were the most important policies making it economical to locate textile and apparel production in SSA and to export. Many companies indicated that retailers were increasing their purchases of apparel from SSA under AGOA because they do not have to pay duty, but without quotas on non-SSA suppliers, the absence of duties likely would not retain SSA's competitiveness, except in cases where U.S. duties are relatively high.

The importance of the U.S. market to SSA was stressed by a number of companies. These representatives noted that growth in EU imports of textiles and apparel from non-SSA suppliers, particularly Bangladesh, under the Everything But Arms initiative has made it difficult to compete in the EU market. The companies noted that the implementation of AGOA in 2000 served to provide a new outlet for SSA apparel exports at about the time export sales to the EU were starting to slump.

SSA has a number of disadvantages in terms of logistics and infrastructure. Buyers and companies in Mauritius cited the long shipping time to the U.S. market as a significant disadvantage. For example, one buyer in Mauritius noted that it can take up to 43 days to ship apparel to the U.S. market, (which travels via Durban and Capetown, South Africa). Long shipping times affect not only transportation to the final market, but also the time required to complete an order, because many inputs, including fabrics and yarns, have to be imported.

²⁹ Although South Africa acceded to the Lome Convention as an ACP country, it was denied the trade preference benefits in favor of an FTA with the EU.

³⁰ Under the double transformation rule of the Cotonou Agreement, the fabric must be made in an ACP beneficiary country, and the fabric must be transformed into a new product, such as a shirt. Musa A. Rubin, "Effect of AGOA/Cotonou Agreements on the Garment and Textile Industries in Southern Africa," prepared for IPM meeting, Maputo, Mozambique, Nov. 5, 2002.

³¹ Textile Federation, *South African Textile Statistics & Economic Review 2001/2002* (Bruma, South Africa), p. 4.

Shipping is shorter in terms of time, and more frequent in occurrence, from southern Africa, about 21-30 days. Shipping times were not cited as a particular disadvantage by companies operating in South Africa, although one company in Lesotho noted that it was starting to lose orders for basic trousers to Mexico, which has much shorter shipping times. Longer lead times mean that SSA products will be largely confined to “basics” that do not depend on quick changes in fashion. These are also the types of products that can be produced in China, India, Bangladesh and other Asian countries very competitively.

Other logistical problems also confront SSA. For example, one integrated manufacturing firm indicated that the entire cost base in Mauritius is high; buildings, electricity, fabrics, and labor are cheaper in China. The same firm noted that although wages were cheaper in Madagascar, other costs were more expensive, including electricity and transportation. In Lesotho, utility costs, including water and electricity, are higher than in competitor countries,³² and outages occur. One company operating in Mozambique indicated that operating a textile factory in that country would be extremely difficult owing to a lack of electricity and constant outages.

Labor and Management

With the exception of Mauritius, SSA has abundant labor for production of textiles and apparel. In SSA countries other than Mauritius and South Africa, factory ownership and most of the management are controlled by foreign interests, largely from Asia. Mauritius is labor constrained for expansion of textiles and apparel. It is reported that workers in Mauritius increasingly prefer to obtain jobs in high tech areas and that it is difficult to retain workers in the textiles and apparel industries. Approximately one-third of the workforce in textiles and apparel in Mauritius is foreign workers, largely from Asia.

Wages for textile and apparel workers in SSA are highest in South Africa and Mauritius, and tend to be much lower in other SSA countries. Workers in South Africa are highly unionized, resulting in the highest average wages for workers in this sector in SSA. Most companies interviewed indicated that workforce skill levels and labor productivity on average are lower in SSA than in Asia. For example, productivity in making basic trousers in Lesotho is estimated at 70 percent of that in Taiwan, and the rate falls to 50 percent or less if the style of the trouser is changed.³³ Most companies interviewed noted that SSA countries will have difficulty competing with Asia in global markets following quota elimination in 2005 either because their wages are high (South Africa and Mauritius) or because their low productivity, combined with the cost of other raw materials, offsets their low wages (for example, Lesotho, Madagascar, and Swaziland).

Raw-Material Inputs

Companies interviewed in SSA noted that the competitiveness of the region’s apparel industry is undermined by the limited availability and high cost of regional inputs, compared with countries such as China and India. Although SSA has an important textile fiber base for the development of textile and apparel industries, many of the countries that produce fibers

³² Department of Industry, *Proposed Incentives for the Manufacturing Sector in Lesotho*, Oct. 2002.

³³ Representative of large apparel company, interview by USITC staff, Lesotho, Mar. 7, 2003.

have lacked the manufacturing investments required to use these fibers (mainly cotton and wool) locally. To improve utilization of SSA cotton within the region, a number of SSA countries are participating in the Cotton Pipeline Project, whose purpose is to assist cotton production, increase the number of ginning mills, and improve the distribution of SSA cotton so as to expand textile and apparel industries within SSA.³⁴

SSA is a higher cost producer of cotton yarn and fabrics than China and India. As noted in Appendix K, U.S. imports of apparel made from third-country fabrics amounted to 75 percent of AGOA apparel imports in 2002. This reflects the high cost of U.S. fabrics in SSA, as well as the limited availability and relatively high cost of SSA yarns and fabrics. For example, one company estimated that the cost of a standard cotton chino fabric imported into Lesotho from China was 58 cents per square yard, compared with \$1.57 per square yard for an identical fabric produced in South Africa. Some of this cost differential may be due to the appreciation of the rand against the U.S. dollar in 2002.³⁵

In addition to cost differentials, concerns have been expressed about the small variety of fabrics that can be produced in SSA, compared with Asia. This is considered an important disadvantage for the region, as buyers and fashion dictate the type of fabrics used. In particular, SSA has a deficit in the production of knitwear fabric. Mauritius, an important SSA fabric producer, has a deficit in the production of cotton yarn for knitwear,³⁶ and Lesotho, a major exporter of knit shirts, does not produce yarn or fabric. Both countries have planned investments coming on line in the future, but these industries will take time to get into full-time operation. AGOA preferences have enabled SSA to become more competitive in manmade-fiber apparel due to the relatively high duties on such apparel. However, South Africa is the only country in SSA producing synthetic filament yarn, as this industry is highly capital intensive.

Another important disadvantage, particularly in Mauritius, is the lack of ability of SSA countries to produce the volume of apparel that can be produced in China and India. Many companies in SSA expressed concern that as buyers reduce the number of countries from which they source following the phaseout of the quotas, SSA will be left out as buyers work to eliminate sourcing costs by purchasing from larger suppliers.³⁷ The volume disadvantage was particularly cited in the context of the U.S. market, as the EU market generally demands smaller quantities on a flow basis.

Level of Service Provided and Reliability of Supplier

Companies operating in SSA recognize that to be competitive they need to become vertically integrated and to offer full service packages. Some companies in Mauritius and South Africa

³⁴ Representative of the Department of Trade and Industry, interview by USITC staff, South Africa, Feb. 27, 2003.

³⁵ A representative of an integrated textile/apparel company in South Africa indicated that until the appreciation of the rand against the dollar, South African-produced denim was competitive with denim imported into Lesotho. In 2002, the rand appreciated 40 percent against the dollar.

³⁶ A number of planned investment is expected to come on line in the second quarter of 2003.

³⁷ For example, one large apparel company indicated that it has already begun to narrow its list of suppliers and that it does not like to account for more than 20-25 percent of a supplier's capacity.

produce high-value added products, such as fully fashioned sweaters in cotton, cashmere, lambswool, and various blends, and apparel from wool and manmade fibers. It is highly likely that these countries will be competitive in these high-value products in the future. However, most SSA exports are in basic products that will be vulnerable to lower cost Asian production once the quotas are phased out.

A number of investments are underway in SSA countries to increase the number of vertically integrated companies and to upgrade service packages, but these types of investments take time. Most companies cited vertical integration as a way to compete in a quota-free world because it will cut lead times, assure fabric availability, and give a company more control and flexibility over its output. There is recognition in Mauritius that due to the challenges the industry will face in a quota-free world, its industry may be better placed as a regional SSA center for textile and apparel services than as a producer of goods.³⁸

³⁸ Joint Economic Council, *The Economic Transition of Mauritius: Report of the JEC Task Force*, Feb. 2001, and appendix K of the Commission report.

CHAPTER 4: POSITION OF INTERESTED PARTIES

This chapter summarizes the views of interested parties submitted to the Commission in connection with the investigation, either at the hearing or in written statements.¹ The order in which the summaries of submissions are shown is as follows: (1) the views of officials of the Governments of Bolivia, Ecuador, Guatemala, Honduras, Indonesia, Kenya, Korea, Mauritius, Nicaragua, Peru, and Sri Lanka; and (2) the views of the American Apparel and Footwear Association, the American Textile Manufacturers Institute, the American Textile Trade Action Coalition, the Consumers for World Trade, the International Mass Retail Association, the Textile and Apparel Manufacturing Association of Israel, and the United States Association of Importers of Textiles and Apparel.

Bolivia²

The Embassy of Bolivia states that the elimination of quotas in 2005 will change the competitive environment in the international textiles and apparel sector significantly. Countries such as China that engage in mass production will gain a competitive advantage in international trade in these products. The Embassy recommends establishing a system to enable Bolivia's textile and apparel entrepreneurs to take full advantage of current business opportunities with developed markets such as the United States. The Embassy acknowledges that the duty-free benefits granted under the Andean Trade Promotion and Drug Eradication Act (ATPDEA) will allow Bolivia to develop a more proactive export strategy for its textile and apparel sector and, thereby, boost employment, attract foreign investment, and increase economic growth.

The Embassy of Bolivia provides statistics that show a significant decline in the country's cotton production, largely caused by falling international cotton prices. The Embassy reports that Bolivia has only three thread producers and that Bolivia imports 75 percent to 80 percent of its thread from Peru. The Embassy also states that Bolivia's apparel exports were fairly steady during 1996-2000, and that its apparel industry is important to Bolivia's economy because it creates employment. Apparel employment accounts for 10 percent of Bolivia's total manufacturing employment. The Embassy's submission also discusses and provides data concerning family-run operations that raise alpacas and llamas. Export data provided by the Embassy for 2000-2002 confirm that the United States is Bolivia's leading export market for its textile and apparel products.

¹ See appendix C for a list of witnesses appearing at the public hearing held by the Commission in connection with this investigation on Jan. 22, 2003.

² Ambassador Jaime Aparicio Otero, Embassy of Bolivia, Washington, DC, written submission to the Commission, Feb. 21, 2003.

Ecuador³

The Embassy of Ecuador's submission prepared by the Industrial Textile Association of Ecuador (AITE) states that Ecuador's textile industry is one of the country's oldest and most labor intensive industries. Currently, Ecuador's textile and apparel sector accounts for 25,000 direct jobs (sewing and cutting) and 100,000 indirect jobs (sourcing, shipping, handling). Textile production accounts for 19 percent of manufacturing GDP. Embassy notes that, during the past decade, Ecuador's textile industry has diversified its export product mix to increase its competitiveness in the global marketplace. Apparel producers in Ecuador have begun to offer high quality goods at competitive prices in order to gain access to the more quality-conscious markets. Embassy reports that in 2001, the textile and apparel sector invested \$24 million to improve its productivity and competitiveness in domestic and international markets.

The AITE is optimistic about the benefits that the ATPDEA will generate for Ecuador's textile and apparel sector. Exports can be expected to increase by 70 percent from the current level by 2006. The AITE notes, however, that Ecuador's textile and apparel sector recently went through a crisis, reportedly caused by contraband and underpricing of imported goods. Illegal sales of apparel in the domestic market jeopardize the strength of the domestic sector as an important source of employment. Other challenges include competition from Brazil and Asian countries. Ecuador's adoption of the U.S. dollar as its currency made domestically produced goods less competitive in the domestic and international markets as other nations devalued their currencies. Ecuador also experienced rising electricity costs and rising interest rates. AITE hopes that the Ecuadorian government will implement policies to promote domestic manufacturing and increase its competitiveness in the domestic and international markets.

Guatemala⁴

On February 5, 2003, the Executive Office of Textiles and Apparel Quotas, the national entity assigned by the Guatemalan Ministry of the Economy to administer and allocate apparel quotas, filed a statement on behalf of the Apparel and Textile Industry of Guatemala, Vestex, in connection with this investigation. Vestex represents 38 textile manufacturers, 234 apparel manufacturers, and 260 suppliers of accessories and services in Guatemala.

The Executive Office and Vestex maintain that the textile and apparel sector in Guatemala will remain competitive in 2005 and beyond, following the elimination of U.S. quotas on textile and apparel products. They argue that sector manufacturers in Central American countries, especially Guatemala, benefit from a high level of integration with members of the U.S. textile, apparel, and retail industries. The competitive advantage is partially due to

³ Industrial Textile Association of Ecuador (AITE), submitted by Carlos Jativa, Charge D'Affaires, Embassy of Ecuador, Washington, DC, Feb. 4, 2003.

⁴ Guatemalan Ministry of the Economy, Executive Office of Textiles and Apparel Quotas, written submission to the Commission, Feb. 5, 2003.

the unilateral preference programs offered by the United States, particularly the duty-free and quota-free treatment for garments made from U.S. yarns and fabrics (under the CBTPA).

Guatemala's central location, ability to provide quick deliveries, and excellent port facilities give Guatemala a competitive advantage and provide an important benefit to the Central American region. Guatemala's apparel industry believes that its use of assembly operations using U.S. yarns and fabrics, as well as its full-package manufacturing operations, provide both the versatility and the expertise to allow Guatemala to maintain its position as a major source of apparel to the U.S. market.

The statement covers Guatemala's interests in the evolving negotiations for a Central American Free Trade Agreement (CAFTA). The outcome of the CAFTA negotiations will have a direct impact on the competitiveness of the textile and apparel sector in Guatemala. The Executive Office and Vestex shared several goals for the negotiations, including expanded trade for textiles and apparel; enhanced competitiveness for the region through expanded rules of origin, specifically the use of inputs from the region, CBI and NAFTA countries; provisions allowing dyeing, finishing, and printing of fabrics in the region; and an integrated customs compliance procedure and security program, similar to the one used by the U.S. Customs Service for goods from Asia and Europe.

The industry believes that its future rests on the negotiation of both CAFTA and the Free Trade Area of the Americas (FTAA) agreement. It argues that these agreements should include expanded access for textiles and apparel so that the region can attain the economies of scale that will assure an ongoing competitive advantage to Guatemala's textile and apparel sector.

Honduras⁵

The Embassy of Honduras' submission states that Honduras is the third-largest exporter of apparel to the United States after Mexico and China. Textile and apparel exports from Honduras to the United States totaled \$2.3 billion in 2001-2002, with apparel exports accounting for virtually all of these exports. The Embassy states that the CBI and the CBTPA are largely responsible for the growth in this industry. However, initially the CBTPA resulted in a loss of 15,000 jobs in the maquila sector. The Embassy speculates that the passage of the enhanced CBTPA in 2002 seems to have reversed that trend. Employment in Honduras' apparel industry is expected to be 120,000 employees in 2003; 130,000 in 2004; and 143,000 workers in 2005.

The Embassy states that removal of U.S. textile and apparel quotas on January 1, 2005, is "a watershed period of potential dislocation for Honduras and other Central American and CBI countries." Any change could be "dramatic and detrimentally impact the current economies of the Central American and CBI countries, including Honduras." The

⁵ Ambassador Mario M. Canahuati, Embassy of the Republic of Honduras, Washington, DC, written submission to the Commission, Feb. 4, 2003.

negotiations between the Central American countries and the United States for a free trade agreement (CAFTA) are expected to impact Honduras' competitiveness in the global apparel market significantly, post January 1, 2005. The Embassy states that because the United States intends to model CAFTA after the U.S.-Chile free trade agreement it could be damaging to Honduras and Central America, especially after U.S. quotas are removed on apparel products on December 31, 2004. The Embassy advocates that Honduras and Central America should be integrated through the CAFTA negotiations with Mexico, Canada, CBI, and eventually the Andean regions. Honduras is concerned about the potential for market dislocation if the dyeing and finishing prohibitions under CBTPA are carried over to the CAFTA.

The Embassy states that trade policy concessions made by the United States to the Central American countries, including Honduras, are likely to have major beneficial ramifications for the United States. After passage of CBTPA, U.S. yarn exports to Honduras doubled from 2001 to 2002. For 2001, 58 percent of all U.S. cotton yarns that were exported to the CBI region were exported to Honduras. The U.S. industry is tied closely to Honduras and other CBI countries, as demonstrated by the share of U.S. inputs in the CBI region's exports - 68 percent of all CBI exports consist of U.S. inputs. Another example of U.S. ties to the region is in the area of investment. In Honduras, 40 percent of total investment is from the United States.

The Embassy urges the Commission to recommend to USTR that the final CAFTA textile and apparel provisions: (1) allow for development of a seamless textile and apparel sector; (2) establish flexible rules of origin to allow use of fabrics produced in NAFTA, Central America, CBI, and the Andean countries; (3) allow woven fabrics produced in the region to be eligible for preferential treatment; (4) integrate and simplify the customs compliance and security programs for Central America; (5) allow dyeing, finishing, and printing of all fabrics to occur in the region; (6) allow access for woven fabrics; and (7) allow for commercially reasonable use of the short supply provisions.

Kenya⁶

According to the Embassy of Kenya, Kenya's liberalization measures in the 1990s led to the closure of many companies in Kenya's textile and apparel sector and substantial unemployment. The Embassy states that sector imports mainly from developed countries were priced lower than Kenyan sector products, or "dumped" into Kenya's market.

The Embassy states that AGOA has enabled Kenya to redevelop its textile and apparel sector. AGOA's implementation created jobs, introduced new technologies, increased exports to the United States, and created foreign investment in the apparel industry. All of these benefits are expected to disappear with the elimination of quotas in 2005. The quota elimination will expose Kenya to competition with the world's leading textile and apparel manufacturers, such as China. The implementation of AGOA did not allow enough time for

⁶ Ms. Lina Ochine, Commercial Attaché of the Kenyan Embassy, Washington, DC, written submission to the Commission, Jan. 24, 2003.

Kenya's textile and apparel sector to become competitive with such countries. However, the Government of Kenya is currently attempting to prepare for such competition.

The Government of Kenya is creating a friendly foreign investment environment to attract investment and new technology. To revive its cotton and textile sector, the Government of Kenya has encouraged research development, such as improving cotton seeds and upgrading ginning technology. Kenya is supporting regional integration through bilateral and multilateral trade relationships such as COMESA and EAC, which should facilitate regional exports of apparel. The Government of Kenya is also planning to remove remaining impediments at Kenya's ports and to upgrade its transportation and telecommunication systems. In addition, Kenya is attempting to diversify its economy.

Korea⁷

The Embassy of the Republic of Korea submitted a set of statistics concerning the Korean textile industry. These data reported on the importance of the textile industry to the overall Korean economy as a share of industrial production, of value-added output, and of employment.

Data on international trade show the increasing relative importance of textile and apparel imports versus these exports to the Korean economy. The text suggested that Korea will become a net textile-importing country, the same as the United States. In response to the suggestion that Korea benefited excessively from currency devaluation, data show that Korea's share of the U.S. textile and apparel market has decreased over time as the shares of Canada, Mexico, and Honduras increased.

Mauritius

Ministry of Industry and International Trade⁸

The Secretary of the Ministry of Industry and International Trade of Mauritius states that the removal of quotas is an important issue for Mauritius as textiles and apparel are its main exports and that, along with other developing countries, economic progress has depended on investment attracted by quota benefits.

Without the quota system, Mauritius would not have attained its current market shares in the United States and Europe. A quota-free system would benefit large, low-cost producers such as India, Indonesia, Pakistan, Malaysia, and Thailand. Due to the substantial cost of imported raw material and production input costs, Mauritius "would find it difficult to

⁷ Mr. Shinhak Moon, Commercial Attaché of the Republic of Korea Embassy, Washington, DC, written submission to the Commission, Jan. 21, 2003.

⁸ Written statement submitted to the Commission, on behalf of the Permanent Secretary, Ministry of Industry and International Trade, Mauritius, Feb. 20, 2003.

compete in the open market when quotas would disappear.” China would likely acquire 50 percent of the world market.

Mauritius’ current market share has been a result of the integration process, which has reserved the most sensitive items until the end. Industry survival will depend on improving competitiveness, by moving toward services and by increasing technology-intensive and upmarket production. The Government of Mauritius is facilitating this process, but support from international institutions and the United States in improving competitiveness and technology transfer is vital.

Embassy of Mauritius⁹

The Embassy of Mauritius states that the textile and apparel industry has “been the motor of economic development” in Mauritius, transforming 25 percent unemployment to full employment. The textile and apparel sector is an important sector of the economy, accounting for 90,000 jobs and 25 percent of GDP. It is the largest employer and main foreign-exchange earner.

Mauritius currently exports 65 percent of its products to the EU and 20 percent to the United States. Current difficulties include high transport costs, long lead-time requirements, and increasing labor costs. Mauritius has invested in other sub-Saharan African countries, such as Madagascar and Mozambique, for the production of basic garments, contributing to the continued economic development of these countries.

Mauritius and other sub-Saharan African countries face three major threats: “(1) The end of the phase-out of the Multi Fiber Agreement on January 1, 2005; (2) the continued opening of the EU and U.S. markets to duty-free entry of apparel and textile exports from countries under FTAs; and (3) the threat of a complete phase out of the US and EU tariffs by the year 2015.” The Embassy also noted that--

1. When quotas are removed, Mauritius and other infant African textile and apparel industries will compete directly with long-established, vertically-integrated industries with access to large pools of low-cost labor (such as China, India, and Bangladesh).
2. The relative benefit of preferences diminishes as more countries receive the same access, especially as Mauritius does not qualify for the less developed status.
3. Small and infant industries in Africa are requesting at least 10 years to develop their industries to compete with long-established countries with huge export capacities.

Small industries, such as the one in Mauritius, are inhibited by distance, lack of marketing, and capacity constraints. Mauritius has tried to combat these constraints by moving up

⁹ Ambassador Dr. Usha Jeetah, Embassy of Mauritius, Washington, DC, written submission to the Commission, Mar. 6, 2003.

market in its products and by moving upstream to spinning and weaving through training and technology investments. The end of the MFA will impact the economic and social development of the country negatively.

Nicaragua¹⁰

The Embassy of Nicaragua points out the major strides made by its free-trade zone regime in general, and the textile and apparel sector in particular, during 1990-2003. Sector exports increased from \$3 million to \$322 million during 1991-2002, and direct and indirect jobs increased from 900 and 2,700, respectively, to 50,000 and 150,000, respectively, during 1990-2003. The Embassy attributes the rapid growth in Nicaragua's textile and apparel sector in large part to the country's good business climate, civil security, developing industries, and zero quota. The Embassy notes, however, that the quota-free advantage was lost when the CBTPA was enacted, as the CBTPA extended quota-free status to other countries in the region. However, the CBTPA had not, to date, negatively impacted the growth in Nicaragua's textile and apparel sector, which has continued to expand more rapidly than Nicaragua's principal regional competitors over the last two years.

Nevertheless, when the Uruguay Round ATC is fully implemented, the Embassy contends that Nicaragua and other countries in the region will face a major threat from China with its lower production and transportation costs (to the U.S. west coast). The Embassy contends that the United States has not demanded that China improve its labor conditions despite concerns for the condition of workers in China that have been expressed by human rights organizations, the Labor Department, and international labor organizations. The Embassy notes that the United States has demanded improved labor conditions from Nicaragua and other countries in the region.

The Embassy concludes by indicating that the political and military problems of the 1980s have resulted in Nicaragua having no textile industry and the least developed apparel industry in the region. It suggests that the current status of Nicaragua's apparel industry justifies the granting of deferential treatment and suggests that this treatment take the form of extended export subsidies of the kind outlined in WTO annex 7 for countries with per capita GDP of less than \$1,000. The Embassy also indicates that Nicaragua should be given "reasonable" time to establish new investments in the textile and apparel sector and to develop its industries to a competitive level.

¹⁰ Ambassador Carlos J. Ulvert, Embassy of the Republic of Nicaragua, Washington, DC, written submission to the Commission, Jan. 30, 2003.

Peru¹¹

The Embassy of Peru states that the Peruvian government and the private sector have worked together, particularly during the past four years, to strengthen the competitiveness of the country's textile and apparel sector. The sector should benefit from the renewal and enhancement of the Andean Trade and Preference Act (ATPA), now known as the Andean Trade Promotion and Drug Eradication Act (ATPDEA). The submission notes that to further enhance its access into the U.S. market, Peru has been investing in technology and creating strategic alliances to work efficiently with U.S. clients. Peruvian textile and apparel firms must also offer quick response and on-time deliveries and promote high-quality, fashionable Peruvian brands. Such efforts will also enable Peruvian exporters of textiles and apparel to compete more effectively after quotas are eliminated by the ATC on January 1, 2005.

The Embassy notes that the ATPDEA will encourage more foreign direct investment in Peru, and consequently, the Peruvian government has been proactive in providing comprehensive information about Peru's economy and labor regulations to potential investors. Efforts are also underway to encourage large Peruvian exporters to subcontract with small and mid-sized textile and apparel firms to maximize the sector's involvement in export opportunities. The Embassy states that, as part of its efforts to support free trade as a tool to promote economic development, the Peruvian Government has reduced tariffs from 7 percent to 4 percent on more than 1,000 tariff items and is supporting initiatives to establish a U.S.-Peru Free Trade Agreement that will consolidate preferences granted under the ATPDEA and give potential investors more time to take advantage of them.

Indonesia¹²

The Embassy of Indonesia states that the United States has been Indonesia's leading market for textiles and apparel, accounting for 27 percent of total exports of these products in 2001. Textiles and apparel accounted for 18 percent of Indonesia's non-oil and gas revenue in 2001 and employed upwards of 1.2 million workers with additional workers in the supporting industries.

The Embassy states that Indonesia is aware of the importance of preparing for trade in a quota-free environment; however, the 1997 financial crisis slowed the sector's response to the upcoming elimination of quotas. The Indonesian Department of Industry and Trade states that the development of the textiles and apparel sector has been hindered by the lack of progress in supporting industries, such as those supplying raw materials, coloring substances, and replacement parts for machinery; the lack of marketable designs; out-of-date equipment which inhibits increasing production efficiency; high rates of interest for bank credit and difficulty in opening lines of credit; and high prices for raw materials and energy.

¹¹ Ambassador Roberto Danino, Embassy of Peru, Washington, DC, written submission to the Commission, Feb. 3, 2003.

¹² Ambassador Soemadi D.M. Brotodiningrat, Embassy of the Republic of Indonesia, Washington, DC, written submission to the Commission, Feb. 4, 2003.

The government has adopted certain strategies aimed at preparing the sector for the elimination of quotas. Among these strategies are the move toward producing higher value-added, high-fashion products; attracting foreign investment; developing nontraditional markets; improving the use of the nation's natural resources (the chemical industry) in the production of synthetic fibers; improving labor policy; simplifying regulations and procedures for doing business; and providing better security and stability.

Sri Lanka¹³

The Embassy of Sri Lanka's submission provides an in-depth summary of the Sri Lankan apparel industry covering industry structure; exports to the United States, the European Union (EU), and Canada; labor; vertical integration; and the competitiveness of the Sri Lankan textile and apparel sector. The Embassy states that Sri Lanka has the most liberalized economy in South Asia and is in compliance with international trade and labor rules.

The Embassy emphasizes that the apparel industry represents the strongest manufacturing industry in Sri Lanka in 2001 in terms of its contribution to industrial production (45 percent), foreign exchange earnings (51 percent), and employment (about 340,000 workers). According to Embassy, a few large manufacturers account for most of Sri Lanka's apparel industry. These large enterprises have a higher percentage of unskilled workers, technicians, and supervisors than the small- and medium-sized firms.

The Embassy notes that the United States, a large and homogenous market, is Sri Lanka's main export market. Within the U.S. market, Sri Lanka's enterprises concentrate on manufacturing for discount and department stores. The heterogenous EU is Sri Lanka's second-largest export market, with most exports going to the United Kingdom, the Benelux countries, and Germany. According to Embassy, Canada is not an important market for Sri Lanka, as it has four apparel manufacturing centers of its own. The Embassy notes that the growing number of preferential trading arrangements that other countries have with the United States and the EU have hindered Sri Lanka's access to its main markets. EU quotas have been replaced by a bilateral trade agreement between Sri Lanka and the EU, signed in 2001. Apparel exports to the EU declined by 7 percent in 2001.

According to the Embassy, Sri Lanka's labor costs are lower than those of the more developed Asian countries, but higher than those of some South Asian competitors. Sri Lankan manufacturers need to update their technology, improve vertical integration, reduce lead times, and enhance productivity to remain competitive. The Embassy states that the manufacturing base of Sri Lanka is expected to shrink considerably by 2005, if the Government and industry do not make a concerted effort to prepare the apparel industry for quota removal. The Government of Sri Lanka is attempting to address these issues through developing technology, implementing a utility cost reduction program, securing strong business contacts in major markets, reforming labor laws, improving infrastructure, and exploring the possibility of preferential trade arrangements with importing countries. The

¹³ Ambassador Devinda R. Subasinghe, Embassy of Sri Lanka, Washington, DC, written submission to the Commission, Feb. 3, 2003.

industry is reportedly working on improving marketing skills, increasing productivity, reducing manufacturing costs, introducing training courses in design and product development, investing in information technology, and reducing lead times.

The Embassy states that the negative impact of integration into the GATT system may threaten the democratic institutions of Sri Lanka, which has faced two Marxist rebellions and a separatist war during the past three decades. The Embassy is requesting U.S. technological assistance and an extension of GSP to apparel products assembled in Sri Lanka and to other sectors into which Sri Lanka plans to diversify (including footwear, rubber products, jewelry, and electronic products).

Trade Organizations

American Apparel and Footwear Association¹⁴

American Apparel and Footwear Association (AAFA), the national trade association of the apparel and nonrubber footwear industries, states that elimination of quotas will create many challenges for U.S. apparel companies and their suppliers in foreign countries. AAFA recognizes that price is a critical factor in the textile and apparel sector. As a result, costs associated with factors such as proximity to markets, compliance with customs requirements, transportation, labor-force training, cost of inputs, the countries social and political considerations, and logistics play a significant role in the competitiveness of textile and apparel manufacturers.

According to AAFA, the Caribbean is an important area to AAFA members and possesses many advantages, such as the proximity to the U.S. market, a well-trained workforce, and an established infrastructure. However, the CBTPA has not met the expectations of AAFA and its members, as restrictive rules such as the short supply provision and burdensome documentation requirements hinder the effectiveness of the agreement.

AAFA states that Central American countries have taken steps to remain competitive by moving toward a “full package” product, and by addressing social responsibility, customs, and security issues. Finally, AAFA hopes that the outcome of the CAFTA negotiations will further benefit the region.

American Textile Manufacturers Institute¹⁵

American Textile Manufacturers Institute (ATMI), a national association of the domestic textile mill products industry, states that if quotas are eliminated U.S. imports of textiles and apparel will be dominated by China, Vietnam, India, and Pakistan, at the expense of countries which have been suppliers to the U.S. market for over 20 years. Further, tariffs are

¹⁴ Kevin Burke, President and CEO, American Apparel and Footwear Association, Arlington, VA, written submission to the Commission, Jan. 22, 2003.

¹⁵ Carlos Moore, Senior Vice President, American Textile Manufacturers Institute, Washington, DC, written submission to the Commission, Jan. 22, 2003, and Jerry Rowland, testimony before the Commission, Jan. 22, 2003.

necessary to counter the advantages the Chinese Government provides to the textiles and apparel sector.

According to ATMI, China has an advantage due to its unlimited supply of low-cost labor and its ability to supply raw materials to the textile and apparel sector. In addition, the Government allows an undervalued currency that provides Chinese textiles and apparel goods a 30 percent to 40 percent price advantage in the U.S. market; does not enforce textile designs and copyrights regulations; subsidizes exports by allowing a “rebate” of its value added tax on exports; and does not adequately address predatory pricing or dumping by the sector.

According to ATMI, the only other countries that will be able to compete with China after 2004 are those with which the United States has free trade agreements or those to which the United States has extended preferential trade programs such as AGOA, CBTPA, and ATPA. In order for the United States to compete, the United States needs to:

1. Utilize available safeguard provisions to put limits on disruptive imports from China.
2. Pressure China to abandon its fixed currency.
3. Take measures to prevent Chinese transshipping and duty evasion.

American Textile Trade Action Coalition¹⁶

The American Textile Trade Action Coalition (ATTAC), a coalition consisting of U.S. textile manufacturers and the Union of Needletrade, Industry and Textile Employees, states that full elimination of quotas would result in a surge in imports from countries with weak labor and environmental laws, low taxes, and low-cost labor, and displacement of U.S. suppliers in Central America, South America, and Africa.

According to ATTAC, as a result of the Uruguay Round Agreement, which initiated the phaseout of U.S. textile quotas, 723,000 U.S. textile and apparel jobs have been lost and more than 200 companies have closed. ATTAC believes that this situation will worsen as a result of total quota phase-out in 2005.

In order to maintain the presence of small, developing countries in the U.S. market and to prevent loss of U.S. textile and apparel jobs, ATTAC suggests that the United States establish a China safeguard mechanism to allow for textile quotas in categories disrupted by imports post 2005; that bilateral textile agreements limit the access of non-WTO suppliers, and that the United States extend textile and apparel quotas on large WTO suppliers beyond 2005 as part of the Doha Round.

¹⁶ Augustine Tantillo, Washington Coordinator, American Textile Trade Action Coalition, Washington, DC, written submission to the Commission, Feb. 3, 2003.

Consumers for World Trade¹⁷

Consumers for World Trade (CWT), a non-profit public interest organization, supports the phaseout of the ATC and encourages the U.S. Government to refrain from implementing any new barriers to textiles and apparel trade. According to CWT, quotas have driven up prices for American consumers and have failed to protect the U.S. textile and apparel industry.

According to CWT, the U.S. textile industry's assertion, that all business will flow to China after 2005, fails to consider other factors influencing competitiveness and sourcing decisions, such as geography, access to skilled labor, infrastructure, preferential access to the U.S. market, and labor and security standards. Further, there is a risk associated with limiting all of one's exposure to a single source, particularly China, where the possibility of special textile safeguard measures and threat of anti-dumping measures will discourage importers from relying too heavily on sources in China after 2004.

International Mass Retail Association¹⁸

The International Mass Retail Association (IMRA), an alliance of retailers and their product and service suppliers, states that arguments that, in the absence of quotas, low-cost suppliers such as China will dominate the textiles and apparel market, do not take into account that price is not the only basis for sourcing and consuming patterns. According to IMRA, the elimination of quotas will likely result in a more secure supply chain with fewer suppliers.

According to IMRA, in order to develop a sourcing strategy, retailers and suppliers consider the following six non-price characteristics, excluding price, when determining where to source merchandise: customer choice, proximity to the end market, quality workmanship, relationships between purchasers and suppliers, reliability, and volume to meet customer demand.

IMRA suggests that, once quotas are phased out, the benefits that regional trading partners through NAFTA, CBI, or CBTPA receive will be lessened. Therefore, these agreements should be expanded to provide more flexibility in input selection and rule of origin construction.

IMRA further suggests that special access programs which provide for fewer limits on rules of origin and input selection be applied to regions such as Central Asia, Sub-Saharan Africa, and South America to prevent the elimination of these areas as major or long-term sources for apparel.

¹⁷ Pamela Slater, Consumers for World Trade, Washington, DC, written submission to the Commission, Feb. 4, 2003.

¹⁸ Sandra Kennedy, President, International Mass Retail Association, Arlington, VA, written submission to the Commission, Feb. 4, 2003.

Textile and Apparel Manufacturing Association of Israel¹⁹

The Textile and Apparel Manufacturing Association of Israel (TAMA), an association representing 140 textile and clothing manufacturers in Israel, is concerned that the quota removals on January 1, 2005, could lead to the collapse of the Israeli textile industry and requests that quota removal be postponed for several years.

According to TAMA, imports from low-income countries have hurt Israel. Over 20,000 workers have been laid off and many small business have closed. TAMA states that the textile industry in Israel cannot compete against non-market economies on a fair competitive basis and removal of import quotas will reward countries which pay monthly salaries of \$80 or less.

United States Association of Importers of Textiles and Apparel²⁰

The United States Association of Importers of Textiles and Apparel (USA-ITA), an association of manufacturers, distributors, retailers, importers and related service providers, states that the quota system has distorted trade and, as a result, there will be consolidation in the industry after 2004. According to USA-ITA, factors such as costs, logistics, infrastructure, supply chain management, social and government stability, human rights, plant efficiency, reliability and relationships, and vertical integration capabilities will influence sourcing decisions after 2005. Based upon these factors, existing major suppliers to the U.S. market and the preferential trading partners will continue to supply the U.S. market even after the transition to a quota-free environment.

According to USA-ITA, the CBTPA and ATPA countries will continue to be important to U.S. importers and retailers after 2004 because of their close proximity, shortened production cycles, duty savings, and lower transportation costs. However, rules of origin which require higher priced U.S.-made inputs undermine the value of duty savings.

According to USA-ITA, some supplying countries with preferential access to the U.S. market are not likely to fare as well after 2004, largely because of restrictive rules of origin that limit duty-free benefits. For example, a decline in exports to the United States will likely occur for AGOA countries currently allowed to use “third country” fabrics and yarns, a benefit that will expire at the end of 2004.

USA-ITA states that China will inevitably gain market share as a result of the elimination of quotas. However, most U.S. importers and retailers will maintain business relationships with long-time trusted suppliers, particularly those suppliers that are vertically integrated. Also, suppliers of niche products that are less price sensitive are likely to compete more effectively with large cost-competitive suppliers, such as China.

¹⁹ Ramzi Gabby, Chairman, Textile and Apparel Manufacturing Association of Israel, Tel-Aviv, written submission to the Commission, Jan. 30, 2003.

²⁰ Laura Jones, Executive Director, United States Association of Importers of Textiles and Apparel (USA-ITA), New York, NY, written submission to the Commission, Jan. 30, 2003, and Peter McGrath, Chairman, Board of Directors, USA-ITA, and Senior Vice President and Director, JC Penney Product Development and Sourcing, testimony before the Commission, Jan. 22, 2003.

APPENDIX A
REQUEST LETTER FROM THE UNITED
STATES TRADE REPRESENTATIVE

EXECUTIVE OFFICE OF THE PRESIDENT
THE UNITED STATES TRADE REPRESENTATIVE
WASHINGTON, D.C. 20508

Chair rec'd 9/17/02
✓ 1 - Secretary
2 - ER

SEP 16 2002

02 SEP 17 12:10
OFC OF THE PRESIDENT
US TRADE REPRESENTATIVE
COMMITTEE

2269

The Honorable Deanna Tanner Okun
Chairman
United States International Trade Commission
500 E Street, SW
Washington, DC 20436

Dear Chairman Okun:

As you are aware, the Uruguay Round Agreement on Textiles and Clothing (ATC), which entered into force with the WTO agreements in 1995, created special interim rules to govern trade in textiles and apparel among WTO Members for 10 years. The ATC calls for the gradual and complete elimination of import quotas on textiles and apparel established by the United States and other importing countries under the Multifiber Arrangement and predecessor arrangements by January 1, 2005. As we anticipate the final completion of the quota phase-out 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.

Therefore, under authority delegated by the President, I request that the United States International Trade Commission (Commission) initiate an investigation under section 332(g) of the Tariff Act of 1930, as amended (19 U.S.C. 1332(g)), and provide a report that assesses the textile and apparel industries of the countries, described below, that are currently suppliers to the U.S. market with respect to their competitiveness and other factors pertinent to their adjustment to ATC completion. These countries should include: (a) significant ATC suppliers to the U.S. market, (b) Mexico, and (c) other supplying countries with preferential access to the U.S. market. To the extent practicable, your analysis should discuss factors such as textile and apparel consumption, production, employment, and prices in major textile and apparel exporting countries, as well as their textile and apparel trade, particularly with industrial country markets.

I request that the Commission provide its report in this matter by June 30, 2003. In accordance with USTR policy on implementing Executive Order 12958, I direct you to mark or identify as "confidential," for a period of 10 years, such portions of the Commission's report and its working papers that deal with the requested information on the relative competitiveness of the textile and apparel industries in the selected foreign countries. Consistent with the Executive Order, this information is being classified on the basis that it concerns economic matters relating to the national security. USTR also considers the Commission's report to be an inter-agency memorandum that will contain predecisional advice and be subject to the deliberative process

* Original to fax rec'd 9-16-02

The Honorable Deanna Tanner Okun
Page 2

privilege. I also request that you submit an outline of the report as soon as possible to enable USTR officials to provide you with further guidance on the extent and duration to which portions of the report require classification. Based on this outline, a USTR official with original classification authority will provide you with written instructions.

Thank you for your cooperation in this matter.

Sincerely,

A handwritten signature in cursive script, appearing to read "Bob", written in dark ink.

Robert B. Zoellick

APPENDIX B

FEDERAL REGISTER NOTICE

FEIS evaluates the Proposed Plan Amendments and three alternatives. The FEIS also includes public comments on the Draft Environmental Impact Statement (DEIS) and BLM's response to those comments.

DATES: The protest shall be in writing and shall be filed with the Director. The protest shall be filed within 30 days of the date the Environmental Protection Agency published the notice of receipt of the final EIS containing the plan or amendment in the **Federal Register**. For an amendment not requiring the preparation of an EIS, the protest shall be filed within 30 days of the publication of the notice of its effective date. The BLM will issue a press release citing the actual date for closure of the protest period when determined, including publication on the BLM California's Internet site. Instructions for filing protests are contained in the Coachella Valley Plan cover sheet just inside the front cover, and are included below under "Supplementary Information."

ADDRESSES: Mailing address for filing a protest:

Regular mail—U.S. Department of the Interior, Director, Bureau of Land Management (210), Attn: Brenda Williams, P.O. Box 66538, Washington, DC 20035.

Overnight mail—U.S. Department of the Interior, Director, Bureau of Land Management (210), Attn: Brenda Williams, Telephone (202) 452-5045, 1620 "L" Street NW, Rm. 1075, Washington, DC 20036.

FOR FURTHER INFORMATION CONTACT: Jim Foote at (760) 251-4836 or jfoote@ca.blm.gov. Copies of the Coachella Valley Plan are being mailed to those who received the DEIS or provided comments on the DEIS. The document is available for review via the Internet at <http://www.ca.blm.gov/palmsprings> and is also available in hard copy at the following addresses and telephone numbers:

BLM, 690 West Garnet Ave., P.O. Box 581260, North Palm Springs, CA 92258; (760) 251-4800.

BLM, 6221 Box Springs Blvd., Riverside, CA 92507; (909) 697-5200.

SUPPLEMENTARY INFORMATION: Following are the instructions from *Title 43 Code of Federal Regulations 1610.5-2* for filing protests:

(a) Any person who participates in the planning process and has an interest that is or may be adversely affected by the approval or amendment of a resource management plan may protest such approval or amendment. A protest may raise only those issues that were

submitted for the record during the planning process.

(1) The protest shall be in writing and shall be filed with the Director. The protest shall be filed within 30 days of the date the Environmental Protection Agency published the notice of receipt of the final EIS containing the plan or amendment in the **Federal Register**. For an amendment not requiring the preparation of an EIS, the protest shall be filed within 30 days of the publication of the notice of its effective date.

(2) The protest shall contain:

(i) The name, mailing address, telephone number and interest of the person filing the protest;

(ii) A statement of the issue or issues being protested;

(iii) A statement of the part or parts of the plan or amendment being protested;

(iv) A copy of all documents addressing the issue or issues that were submitted during the planning process by the protesting party or an indication of the date the issue or issues were discussed for the record; and

(v) A concise statement explaining why the State Director's decision is believed to be wrong.

(3) The Director shall promptly render a decision on the protest. The decision shall be in writing and shall set forth the reasons for the decision. The decision shall be sent to the protesting party by certified mail, return receipt requested.

(b) The decision of the Director shall be the final decision for the Department of the Interior.

Dated: September 13, 2002.

James G. Kenna,

Field Manager.

[FR Doc. 02-26390 Filed 10-16-02; 8:45 am]

BILLING CODE 4310-40-P

INTERNATIONAL TRADE COMMISSION

[Investigation No. 332-448]

Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market

AGENCY: United States International Trade Commission.

ACTION: Institution of investigation, scheduling of public hearing, and request for public comments.

EFFECTIVE DATE: October 10, 2002.

SUMMARY: Following receipt of a request from the United States Trade Representative (USTR) on September 16, 2002, the Commission instituted investigation No. 332-448, Textiles and

Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market, under section 332(g) of the Tariff Act of 1930 (19 U.S.C. 1332(g)) for the purpose of assessing the textile and apparel industries of certain foreign suppliers with respect to their competitiveness and other factors pertinent to their adjustment to the final completion of the phaseout of quotas required by the Uruguay Round Agreement on Textiles and Clothing (ATC) on January 1, 2005.

FOR FURTHER INFORMATION CONTACT: For general information, contact Robert W. Wallace (202-205-3458; wallace@usitc.gov) or Kimberlie Freund (202-708-5402; kfreund@usitc.gov) of the Office of Industries. For information on legal aspects, contact William Gearhart of the Office of the General Counsel (202-205-3091; wgearhart@usitc.gov). Hearing impaired individuals may obtain information on this matter by contacting the Commission's TDD terminal on 202-205-1810. Persons with mobility impairments who will need access to the Commission should contact the Office of the Secretary at 202-205-2000. General information about the Commission can be found on its Internet server at <http://www.usitc.gov>. The public record for this investigation may be viewed on the Commission's electronic docket (EDIS-ON-LINE) at <http://dockets.usitc.gov/eol/public/>.

Background: As requested by the USTR, the Commission will assess the textile and apparel industries of certain countries that are currently suppliers to the U.S. market with respect to their competitiveness and other factors pertinent to their adjustment to ATC completion. These countries include: (a) significant ATC suppliers to the U.S. market, (b) Mexico, and (c) other supplying countries with preferential access to the U.S. market. In the letter, the USTR requested that, to the extent practicable, the Commission's analysis should discuss factors such as textile and apparel consumption, production, employment, and prices in major textile and apparel 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. In consultation with USTR staff, countries identified as significant ATC suppliers to the U.S. market for purposes of this investigation are Bangladesh, China, Egypt, Hong Kong, India, Indonesia, Korea, Malaysia, Macao, Pakistan, the Philippines, Sri Lanka, Taiwan, Thailand, and Turkey.

Countries identified as "other supplying countries with preferential access to the U.S. market" are Israel, Jordan, and certain designated beneficiary countries under the African Growth and Opportunity Act, the Andean Trade Promotion and Drug Eradication Act, and the United States-Caribbean Basin Trade Partnership Act. In the request letter, the USTR referred to the ATC, which entered into force with the WTO agreements in 1995 and created special interim rules to govern trade in textiles and apparel among World Trade Organization Members for 10 years. The ATC called for the gradual and complete elimination of import quotas on textiles and apparel established by the United States and other importing countries under the Multifiber Arrangement and predecessor arrangements by January 1, 2005. Also in the request letter, USTR stated that, in anticipation of the final 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."

Public Hearing: A public hearing in connection with the investigation will be held at the U.S. International Trade Commission Building, 500 E Street SW, Washington, DC, beginning at 9:30 a.m. on January 22, 2003. All persons shall have the right to appear, by counsel or in person, to present information and to be heard. Requests to appear at the public hearing should be filed with the Secretary, United States International Trade Commission, 500 E Street SW, Washington, DC 20436, no later than 5:15 p.m., January 6, 2003. Any prehearing briefs (original and 14 copies) should be filed no later than 5:15 p.m., January 8, 2003; the deadline for filing post-hearing briefs or statements is 5:15 p.m., February 4, 2003. In the event that, as of the close of business on January 6, 2003, no witnesses are scheduled to appear at the hearing, the hearing will be canceled. Any person interested in attending the hearing as an observer or non-participant may call the Secretary to the Commission (202-205-1806) after January 6, 2003, for information concerning whether the hearing will be held.

Written Submissions: In lieu of or in addition to participating in the hearing, interested parties are invited to submit written statements (original and 14 copies) concerning the matters to be addressed by the Commission in its report on this investigation. Commercial or financial information that a submitter

desires the Commission to treat as confidential must be submitted on separate sheets of paper, each clearly marked "Confidential Business Information" at the top. All submissions requesting confidential treatment must conform with the requirements of section 201.6 of the Commission's Rules of Practice and Procedure (19 CFR 201.6). All written submissions, except for confidential business information, will be made available in the Office of the Secretary to the Commission for inspection by interested parties. The Commission may include such confidential business information in the report it sends to the USTR. To be assured of consideration by the Commission, written statements relating to the Commission's report should be submitted to the Commission at the earliest practical date and should be received no later than the close of business on February 4, 2003.

All submissions should be addressed to the Secretary, United States International Trade Commission, 500 E Street SW., Washington, DC 20436. The Commission's rules do not authorize filing submissions with the Secretary by facsimile or electronic means.

List of Subjects: Textiles, apparel, quotas, and imports.

By order of the Commission.

Issued: October 10, 2002.

Marilyn R. Abbott,

Secretary to the Commission.

[FR Doc. 02-26356 Filed 10-16-02; 8:45 am]

BILLING CODE 7020-02-P

DEPARTMENT OF JUSTICE

[AAG/A Order No. 289-2002]

Privacy Act of 1974; System of Records

Pursuant to the provisions of the Privacy Act of 1974 (5 U.S.C. 552a), the Immigration and Naturalization Service (INS), Department of Justice, proposes to modify the following system of records—previously published November 4, 1997 (62 FR 58734):

Computer Linked Application Information Management System (CLAIMS 3 and 4) Justice/INS-013

INS proposes to modify the following sections of the notice: System Location—by providing the web address for locating INS field office addresses; Categories of Individuals—to adequately describe the individuals at issue within the system; Categories of Records in the System—describing three other database systems that are either components or extractions of CLAIMS; Purpose—

adding an additional purpose for maintaining this system of records; Retrieval—adding another means for retrieval of the data; Retention and Disposal—updating the schedule to include its current description; System Manager—an internal reorganization switched authority for the system to a new program office; and Records Access Procedures—the text has been updated. Also, three routine uses (B), (F), and (G) are being edited and three routine uses (H), (I), and (J) have been added. Finally, other minor corrections and edits have also been made.

In accordance with 5 U.S.C. 552a (e)(4) and (11), the public is given a 30-day period in which to comment on the proposed routine uses. The Office of Management and Budget (OMB), which has oversight responsibility under the Act, requires a 40-day period in which to conclude its review of the system.

Therefore, please submit any comment by November 18, 2002. The public, OMB, and the Congress are invited to submit any comments to Mary Cahill, Management Analyst, Management and Planning Staff, Justice Management Division of Justice, Washington, DC 20530 (Room 1400, National Place Building).

In accordance with 5 U.S.C. 552a the Department has provided a report to OMB and the Congress.

Dated: October 4, 2002.

Robert F. Diegelman,

Acting Assistant Attorney General for Administration.

JUSTICE/INS-013

SYSTEM NAME:

Computer Linked Application Information Management System (CLAIMS 3 and 4).

SYSTEM LOCATION:

The Department of Justice (DOJ) Data Processing Center with data access by Immigration and Naturalization Service (INS) users from Headquarters, Regional and District offices, Service Centers, and sub-offices as detailed in JUSTICE/INS-999, last published in the **Federal Register** on April 13, 1999 (64 FR 18052), and on the Internet at the INS Web page, at <http://www.INS.gov>.

CATEGORIES OF INDIVIDUALS COVERED BY THE SYSTEM:

Individuals who have filed applications or petitions for benefits under the Immigration and Nationality Act, as amended, and/or who have submitted fee payments with such applications or petitions; and individuals who have paid fees for access to records under the Freedom of Information/Privacy Acts (FOIA/PA).

APPENDIX C
CALENDAR OF PUBLIC HEARING

CALENDAR OF PUBLIC HEARING

Those listed below appeared as witnesses at the United States International Trade Commission's hearing:

Subject: Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market

Inv. No.: 332-448

Date and Time: January 22, 2003 - 9:30 a.m.

Sessions were held in connection with this investigation in the Main Hearing Room, (Room 101), 500 E Street, S.W., Washington, DC.

ORGANIZATION AND WITNESS:

PANEL 1

Sandler, Travis & Rosenberg, P.A.
Washington, DC
on behalf of

Dominican Association of Free Zones
Dominican Council of Export Free Zones

The Honorable Judith Marcano, Minister-Counselor,
Embassy of the Dominican Republic

Virgilio Mota, Trade Advisor, Sandler, Travis & Rosenberg,
P.A.; Former Executive Director, Dominican Council
of Export Free Zones; and Former Commercial
Counselor, Embassy of the Dominican Republic

Chandri Navarro-Bowman) – OF COUNSEL

ORGANIZATION AND WITNESS:
PANEL 2

American Textile Manufacturers Institute
Washington, DC

Carlos Moore, Senior Vice President, American
Textile Manufacturers Institute

Jerry D. Rowland, Chief Executive Officer,
National Textiles LLC

American Apparel & Footwear Association
Arlington, VA

Kevin M. Burke, President and CEO, American
Apparel & Footwear Association

Stephen Lamar, Senior Vice President, American
Apparel & Footwear Association

United States Association of Importers of Textiles and Apparel (USA-ITA)
Washington, DC

Peter McGrath, Senior Vice President and Director,
JCPenney Product Development & Sourcing, and
Chairman, Board of Directors, USA-ITA

Julia K. Hughes, Vice President, International
Trade and Government Relations, USA-ITA

Brenda A. Jacobs) – OF COUNSEL

- END -

APPENDIX D
INTERVIEWS BY COMMISSION STAFF

INTERVIEWS BY COMMISSION STAFF

INTERVIEWS IN THE UNITED STATES

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INTERVIEWS IN HONG KONG

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INTERVIEWS IN CHINA

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INTERVIEWS IN TAIPAI, TAIWAN

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INTERVIEWS IN KOREA

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INTERVIEWS IN EL SALVADOR

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INTERVIEWS IN GUATEMALA CITY, GUATEMALA

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INTERVIEWS IN HONDURAS

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INTERVIEWS IN MEXICO

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INTERVIEWS IN INDIA

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INTERVIEWS IN MASERU, LESOTHO

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INTERVIEWS IN MAURITIUS

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INTERVIEWS IN SOUTH AFRICA

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NOTICE

THIS REPORT IS A PUBLIC VERSION OF THE REPORT SUBMITTED TO THE UNITED STATES TRADE REPRESENTATIVE ON JUNE 30, 2003. ALL CONFIDENTIAL BUSINESS INFORMATION HAS BEEN REMOVED AND REPLACED WITH ASTERISKS ().**

U.S. International Trade Commission

Washington, DC 20436

www.usitc.gov

Textiles and Apparel: Assessment of the Competitiveness of Certain Foreign Suppliers to the U.S. Market

Volume II

Investigation No. 332-448

CLASSIFIED BY: United States Trade Representative, Letter Dated March 3, 1998

**DECLASSIFIED BY: Robert B. Zoellick, United States Trade Representative,
Letter Dated January 26, 2004**



Publication 3671

January 2004

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APPENDIX E
EAST ASIA

Overview

East Asian textile and apparel suppliers covered by this report include Korea, Taiwan, China, and China's Special Administrative Regions (SARs)¹—Hong Kong and Macau. Except for Macau, these suppliers rank among the world's largest exporters of textiles and apparel, together accounting for one-fourth of world exports of such goods by value during 1997-2001. China and Taiwan became eligible for quota liberalization under the World Trade Organization (WTO) Agreement on Textiles and Clothing upon their accession to the WTO on December 11, 2001, and January 1, 2002, respectively. The United States eliminated quotas on articles integrated into the GATT regime during the three stages of integration for China and Taiwan, and will eliminate the remaining quotas on their goods as of January 1, 2005, the same date as that for other WTO members.² However, in a market access agreement that became part of China's WTO accession package, the United States can apply selective safeguards (quotas) on imports of textiles and apparel from China for 4 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 1 year, without re-application, unless both countries agree.³

China's exports of textiles and apparel grew by 17 percent during 1997-2001 to \$53 billion, making it the world's leading exporter of textiles and apparel with 16 percent of the total in 2001. In contrast, declines were recorded in textile and apparel exports during 1997-2001 for Hong Kong (6 percent), Korea (13 percent), Macau (8 percent), and Taiwan (23 percent). The divergent trade trend between China and the other East Asian suppliers reflected a shift in textile and apparel production from the relatively high-cost East Asian suppliers to China, which benefits from low production costs, high labor productivity, and an abundant supply of low-cost, skilled labor. The average cost per operator hour, including social benefits, in spinning and weaving for 2002 was \$0.69 in the coastal area of China, compared with \$6.15 in Hong Kong, \$5.73 in Korea, and \$7.15 in Taiwan.⁴ As such, Korea and Taiwan focus on producing more capital-intensive, high-quality textiles.

Companies in Hong Kong, Korea, and Taiwan are major investors in textile and apparel production worldwide, including in China and other countries in Asia, sub-Saharan Africa, Mexico, and the Caribbean Basin. In addition, the textile and apparel industries in Hong

¹ Hong Kong and Macau became SARs of China on July 1, 1997, and Dec. 20, 1999, respectively. The United States has separate quotas on imports from Hong Kong, Macau, and China.

² 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" for China and Taiwan, published in the *Federal Register* of Dec. 28, 2001 (66 F.R. 67229 and 66 F.R. 67232, respectively).

³ The agreement incorporates the text of an agreement contained in a Memorandum of Understanding between the United States and China of Feb. 1, 1997, which provided that should China become a member of the WTO, the United States would grant China the same benefits on the same schedule accorded other WTO textile-exporting countries under the ATC.

⁴ Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002," Reston, VA.

Kong and Macau have largely become integrated with those in China through outward processing arrangements (OPAs). Industry sources report that approximately 90 percent of Hong Kong's apparel production is conducted through OPAs,⁵ whereby production of a garment occurs in both Hong Kong and China. A carefully planned, but small part of the apparel assembly process, is performed in Hong Kong so that the garment can be considered to have Hong Kong origin. For example, in the production of a woman's woven, long-sleeve shirt, only 3 of the 18 major sewing operations needed to be performed in Hong Kong in order for the shirt to be considered of Hong Kong origin.⁶ The other major sewing operations along with the many nonassembly operations involved in the production of the shirt, such as fabric inspection, packaging, and washing, are performed in China.

China supplanted Mexico as the largest foreign supplier of textiles and apparel to the United States in 2002, when its shipments rose 34 percent by value over the 2001 level to \$8.7 billion (5.0 billion square meters equivalent (SMEs)). Hong Kong was the third-largest supplier with shipments of \$4.0 billion (962 million SMEs), while Korea was the sixth-largest supplier at \$2.9 billion (2 billion SMEs) and Taiwan was the ninth-largest supplier at \$2.2 billion (1 billion SMEs).

⁵ Industry officials, interview by USITC staff, Hong Kong, Feb. 26, 2003.

⁶ The three operations performed in Hong Kong included sewing the shoulder seams, the arm hole/sleeve seams, and the side seams. Industry officials, presentations to USITC staff, Hong Kong, Feb. 28, 2003.

Overview

China is the world's largest exporter of textiles and apparel, accounting for 16 percent of the total in 2001, and likely will become the "supplier of choice" for many U.S. importers following quota elimination in 2005 because of its ability to produce almost any type of textile and apparel article at any quality level at competitive prices.² A U.S. industry source noted that "the breadth and variety of China's apparel production is unmatched in the world" and that Chinese apparel is sold at all price levels and in all types of stores, ranging from "the lowest-end, most price conscious discount stores" to "the most prestigious, highest-priced specialty and department stores."³ However, many U.S. importers said the uncertainty over whether safeguards (quotas) will be placed on U.S. textile and apparel imports from China likely will temper growth in sourcing from China, at least in the early years following quota elimination (see preceding section of this appendix for information on the China textile safeguards). To reduce the risk of sourcing from only one country, U.S. importers also plan to expand trade relationships with other low-cost countries as alternatives to China, particularly with India, which also has a very large manufacturing base to produce a wide range of textiles and apparel at competitive prices and a large supply of relatively low-cost skilled labor.

Industry Profile

China is the world's largest producer of textiles and apparel, which accounted for 10 percent of its manufacturing output in 2000 and 20 percent of its total exports in 2001.⁴ China is upgrading its production capacity in the textile and apparel sector, as evidenced by the fact that it was the world's largest investor in new spinning and weaving equipment during 1997-2001. China is highly price competitive in sector goods, largely reflecting its large supply of low-cost labor and raw materials, which have enabled the sector to attract foreign direct investment (FDI). Also, the sector is considered to have effective middle management and the technical know-how to produce a wide range of sector goods.

China's textile and apparel sector encompasses all segments of the supply chain, from the production of raw materials (e.g., cotton and manmade fibers) to the manufacture of yarns and fabrics and the processing of these inputs into final goods such as garments, carpets, home furnishings, and industrial textiles. According to the China National Textile Industry

¹ Prepared by Michael Barry, Office of Economics.

² Information on U.S. importers and other organizations interviewed by USITC staff in connection with this study is presented in appendix D and the opening section of chapter 3 of this report.

³ Carlos Moore, Senior Vice President, American Textile Manufacturers Institute, written submission to the Commission, Jan. 22, 2003.

⁴ Export information is based on United Nations data and industry data are from *China Economic and Trade Statistics 2001, Industrial Development Report* (translated from Chinese).

Council (CNTIC), the national federation of all textile-related industries in China, the sector comprises textiles, including knit apparel (62.0 percent of sector sales in 2002), woven apparel (31.5 percent), and manmade fibers (6.5 percent).⁵ Official Chinese statistics for 2001 show that the sector comprised about 21,000 enterprises with total output of \$116 billion and employment of 7.9 million workers, or 14.5 percent of Chinese industrial employment (table E-1, found at the end of this country profile). However, sector production and employment levels are believed to be much higher, because the official statistics include data only for “statistically sizable enterprises” (SSEs), or firms having an annual output of more than 5 million renminbi (RMB, approximately \$600,000). As such, the official statistics do not include data for the many small firms (mainly family-based production units) involved in production of sector goods in China.⁶ In 2002, CNTIC estimated that there were about 15 million workers in the Chinese textile and apparel sector, including both SSEs and small firms.

China’s textile and apparel sector is concentrated in the coastal areas of the country. In 2002, five coastal provinces (Zhejiang, Jiangsu, Guangdong, Shandong, and Fujian), along with the city of Shanghai, accounted for 79 percent of SSE sector shipments and 82 percent of China’s exports of textiles and apparel by value.⁷ Exports accounted for about one-third of sector output in 2001.⁸

Industry structure and performance

Textiles

China accounted for an estimated 29 percent of world fiber consumption in 2001, roughly triple that of India.⁹ China’s textile industry has grown substantially during the past decade. Between 1990 and 2002, China’s production of cotton yarn (including blends) grew at an average annual rate of 8.8 percent, to 8.5 million tons, while its production of cotton and manmade-fiber fabrics grew at an average annual rate of 4.6 percent, to 32.2 billion meters.¹⁰

⁵ Information in paragraph is mainly from CNTIC, “Outlines of the Textile Industry in China” (briefing paper prepared for USITC staff), Feb. 19, 2003.

⁶ For example, there reportedly were 250,000 small firms in Zhejiang Province alone employing more than 1.4 million workers in 2001 (CNTIC, “Outlines of the Textile Industry in China,” pp. 8 and 18).

⁷ CNTIC, “Outlines of the Textile Industry in China,” p. 8.

⁸ Representatives of CNTIC, interview by USITC staff, Beijing, Feb. 16, 2003.

⁹ Based on data from Fiber Economics Bureau, Inc., *Fiber Organon*, Nov. 2002, and Geerdes International, Inc., Richmond, VA, facsimile to USITC staff, Feb. 4, 2003. See table 1-5 in chapter 1 of this report for data on world fiber consumption by regions and selected countries.

¹⁰ CNTIC, “Outlines of the Textile Industry in China.”

China's textile industry consists mostly of state-owned enterprises (SOEs), which reportedly have excess capacity and employment, and use outdated technology.¹¹ Facing enormous losses in the textile industry, the Chinese government implemented a "reform equals rescue" plan in 1998 in an effort to increase production efficiencies and reduce redundant costs in the industry. The SOEs eliminated 1.5 million jobs and large numbers of obsolete spindles, and installed newer production technologies.¹² Nevertheless, in 2001, slightly more than 90 percent of the installed spinning capacity in the cotton sector (excluding open-end rotors) was more than 10 years old.¹³

China's large fabric-weaving industry reportedly is beset by low fabric quality and limited fabric variety, design, and innovation.¹⁴ ***¹⁵ China has been the world's largest purchaser of new weaving equipment in recent years, accounting for 58 percent of world shipments of new shuttleless looms in 2000-01 and 72 percent of the total in 2002.¹⁶ According to CNTIC, China's imports of textile machinery tripled from slightly less than \$1.2 billion in 1998 to \$3.5 billion in 2002.¹⁷ Nevertheless, shuttleless looms represent only about 20 percent of China's installed weaving capacity overall and one-third of the installed looms in the cotton sector.¹⁸ Moreover, capacity utilization rates reportedly are low, averaging 30 percent in the cotton weaving segment of the industry.¹⁹

CNTIC officials stated that a major concern of the Chinese textile industry is the dyeing and printing segment, which uses old equipment and has weak management and marketing skills, and an "irrational structure of products" in which producers focus solely on low-end products for domestic consumption.²⁰ According to the Chinese Dyeing and Printing Association, the dyeing and finishing segment consists mostly of private firms rather than SOEs. During the 1990s, China commonly exported grey (unfinished) fabric to Korea and Hong Kong for dyeing and printing, and then re-imported the fabric for cutting and sewing

¹¹ U.S. Department of State telegram 2711, "SOE Reform: China Textile Industry Leads the Way!?" prepared by U.S. Embassy, Beijing, Mar. 24, 2000, and Zhiming Zhang, "Textiles and Apparel in China: Competitive Threat or Investment Opportunity?" *Textile Outlook International* (United Kingdom: Textiles Intelligence Ltd.), Sept.-Oct. 2002, p. 92.

¹² Representatives of the Chinese State Economic and Trade Commission, interview by USITC staff, Beijing, Feb. 16, 2003, and U.S. Department of State telegram 3981, "China's Textile Industry After Quotas," prepared by U.S. Embassy, Beijing, Apr. 30, 2002.

¹³ International Textiles Manufacturers Federation (ITMF), *International Textile Machinery Shipment Statistics* (Zurich), vol. 25/2002, p. 12.

¹⁴ Representatives of the Chinese Cotton Textile Association, interview by USITC staff, Beijing, Feb. 19, 2003.

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¹⁶ ITMF, *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues.

¹⁷ CNTIC, "Outlines of the Textile Industry in China," p. 13.

¹⁸ CNTIC, "Outlines of the Textile Industry in China," p. 20, and representatives of the Chinese Cotton Textile Association.

¹⁹ Representatives of the Chinese Cotton Textile Association.

²⁰ Representatives of the Chinese Dyeing and Printing Association, interview by USITC staff, Beijing, Feb. 20, 2003.

into final goods. As China expanded its imports of dyestuffs and dyeing and printing equipment, this phenomenon has significantly decreased.²¹ Chinese industry officials stated that printing of multiple colors or patterns is more difficult than simple dyeing operations and that the Chinese industry is not yet able to produce functional fabrics with “nature-like” patterns.²² Despite concerns about Chinese fabric quality, local fabrics account for about 40 percent of the fabrics used by apparel producers in Guangdong, which has a large export-oriented apparel industry.²³ U.S. apparel importers also report using Chinese cotton fabrics (e.g., denim) in apparel made for the U.S. market.

The knitting segment is dominated by SOEs and generally consists of small firms that supply the low-end domestic market and larger firms having better equipment that generally supply export markets. Industry officials believe that future growth in the knitting segment will be driven by China’s expanding domestic market.²⁴ According to industry officials, the knitting segment lacks high-end production and suffers from low quality, limited technical advancement and innovation, weak marketing and management skills, and sometimes an unsteady supply of raw materials.²⁵ However, the knitting segment has been purchasing new equipment to upgrade its operations. During 2000-02, China accounted for 27 percent of world purchases of new circular knitting machines.²⁶ Although China accounted for only 7 percent of world shipments of flatbed knitting machines in 2000-01, Hong Kong, whose industry is closely linked to that of China, accounted for 20 percent of world purchases.²⁷

Apparel

China’s apparel industry consists mainly of small, mostly privately owned firms making low value-added garments on contract to foreign and Hong Kong buyers.²⁸ The available data suggest that exports account for more than 60 percent of industry output. Guangdong is China’s major producer of apparel for export, accounting for one-third of the country’s apparel exports in recent years. About 70 percent of Guangdong’s apparel firms produce for export, with exports totaling about \$10 billion in 2001. Guangdong has roughly 30,000 apparel plants employing about 5 million workers. Its apparel industry uses mostly imported materials (60 percent of the total), mainly from Taiwan, Korea, Italy, and Japan. The remainder (40 percent) of the inputs comes from local suppliers.

²¹ Ibid. Between 1998 and 2002, China’s imports of dyestuff rose by 52 percent (CNTIC, “Outlines of the Textile Industry in China”).

²² Representatives of the Chinese Dyeing and Printing Association.

²³ U.S. Department of State telegram 3981, “China’s Textile Industry After Quotas,” prepared by U.S. Embassy, Beijing, Apr. 30, 2002.

²⁴ Representatives of the Chinese Knitting Industrial Association, interview by USITC staff, Beijing, Feb. 20, 2003.

²⁵ Ibid.

²⁶ ITMF, *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues.

²⁷ Ibid.

²⁸ Information in paragraph is from U.S. Department of State telegram 3981, “China’s Textile Industry After Quotas.”

Official Chinese statistics for 2001 show that China's apparel industry comprised nearly 8,000 firms with an average of 300 employees each; however, the statistics exclude the many small apparel firms. The industry comprises three different groups of operations: (1) factories run by overseas Chinese investors, primarily based in Hong Kong, in joint ventures mainly in Guangdong, and which are China's major apparel exporters; (2) SOEs, which sell their output mostly for local consumption, and (3) the former state-owned, now privatized "town and village" enterprises, which essentially make up China's "domestic apparel industry."²⁹ In general, the town and village firms are owned and operated by local managers, who typically were the managers of the plants when they were SOEs. The town and village firms tend to operate at a much higher level of efficiency than the SOEs and have lower overhead than the factories owned by the overseas Chinese, which incur Hong Kong-based overhead. In addition, the low overhead of town and village firms reflects their "lean" management structure.

China has significant competitive advantages in apparel production, including low labor costs, high labor productivity, and access to local supplies of raw materials. In general, sewing skills are considered to be very good in China, as is its middle management, which has the day-to-day responsibility for maintaining the reliability of product quality and supply and ensuring the flexibility to change orders as needed. The availability of fabric, trim, and findings (e.g., buttons) is considered an advantage in sourcing apparel from China, because almost all the raw materials needed to make apparel are produced there. According to U.S. retailers, China also has competitive shipping times. For example, shipping times to the west coast of the United States generally average between 12 and 18 days from China, Hong Kong, and Taiwan, but as much as 45 days from some member countries of the Association of South East Asian Nations (ASEAN). Chinese apparel producers tend to be highly flexible in making samples and small runs. Nevertheless, wage rates in the apparel industry are rising, as are other costs of production, such as land prices, training, social fees, and shipping costs.³⁰ Chinese officials stated that the apparel industry would benefit from greater innovation, design, marketing, and production of higher end goods.³¹

China remains attractive to U.S. buyers because Chinese firms tend to offer more value-added services, react faster to changes in fashion and retailer demands, and meet customer product standards better than producers in other parts of the world. Currently, most Chinese apparel exports are made in response to orders received, often with samples and materials supplied by clients. China has few internationally recognized brand names and few experienced apparel designers. There is evidence that this is changing and that China is starting to participate more actively in design and innovation.

²⁹ Information in remainder of paragraph is from Merrill Weingrod, President, China Strategies, Providence, RI, and Linsun Cheng, Professor, University of Massachusetts - Dartmouth, interview by USITC staff, Feb. 4, 2003.

³⁰ Representatives of Shenzhen Textile Industry, interview by USITC staff, Shenzhen, China, Feb. 21, 2003.

³¹ Representatives of CNTIC, interview by USITC staff.

Factors of production

Raw materials

China has a competitive local supply of raw materials, including fibers, yarns, fabrics, and trim. Although China ranks among the world's largest producers of cotton and manmade fibers, it still imports large quantities of these fibers, as well as wool fibers (especially from Australia), as its domestic supply is insufficient to meet domestic demand. China has abundant supplies of other fibers such as ramie, silk, and angora rabbit hair, and is promoting the production of these fibers. China ended all price supports for domestic cotton in the fall of 1999 and Chinese cotton prices fell to \$1,145 per ton by year end 1999, from \$2,350 in 1997.³² The Cotton Textile Association in China stated that the price of cotton in China at the beginning of 2003 equaled or exceeded world prices and that raw materials accounted for 70 percent of China's production costs for cotton fabrics.³³

China has been upgrading production technologies in the manmade-fiber sector. Chinese sources stated that manmade-fiber production capacity has increased at an average annual rate of 18.3 percent in the past 5 years.³⁴ Chinese industry representatives report challenges in acquiring the needed chemical inputs³⁵ and that Chinese manmade-fiber facilities, although numerous, are much smaller than those in Taiwan and Korea, which benefit from significant economies of scale and lower production costs.³⁶ Officials in Taiwan and Korea believe that Chinese investment in the manmade-fiber industry will enable China to "catch up" with Taiwan and Korea in 2 to 3 years.³⁷ Much of the equipment in China's manmade-fiber industry is obsolete, resulting in lower productivity, higher costs, and more pollution than that associated with modern equipment. Chinese firms produce only a limited variety of fibers, and much of their production is of basic or commodity fibers. Research and development has lagged world markets, resulting in less competitive fibers produced domestically. Many manmade-fiber firms are SOEs that carry large debt burdens and obligations to retired workers.³⁸

³² U.S. Department of State telegram 2711, "SOE Reform."

³³ Zhiming Zhang, "Textiles and Apparel in China," p. 90, and representatives of the Chinese Cotton Textile Association.

³⁴ Representatives of the Chinese Chemical Fiber Association, interview by USITC staff, Beijing, Feb. 16, 2003.

³⁵ Representatives of the State Economic and Trade Commission (SETC), interview by USITC staff, Beijing, Feb. 16, 2003.

³⁶ Zhiming Zhang, "Textiles and Apparel in China," p. 91.

³⁷ Industry representatives, interviews by USITC staff, Beijing and Shenzhen, China; Hong Kong; Taipei, Taiwan; and Seoul, Korea, Feb.-Mar. 2003.

³⁸ Industry representatives, interviews by USITC staff, Beijing and Shenzhen, China; and Hong Kong. Also see Zhiming Zhang, "Textiles and Apparel in China," p. 91.

Labor

CNTIC data show that approximately 15 million people worked in the Chinese textile and apparel sector during 2002. Labor availability in China appears enormous. According to a U.S. Government report, China has a “chronic and growing labor surplus” of about “23 million people laid off ‘temporarily’ in the state sector or approximately 150 million surplus rural workers who make up a ‘floating population’ that migrates between agriculture and urban jobs and that are at other times unemployed.”³⁹

China ranks among the world’s lowest cost producers of textiles and apparel, reflecting low wage rates and high productivity levels.⁴⁰ According to U.S. firms, although wage rates are higher in China than in such countries as Bangladesh, India, and Vietnam, productivity is considered much higher in China, making its overall labor cost lower. In 2002, hourly compensation of apparel production workers averaged \$0.68 in China, compared with less than \$0.50 in Bangladesh, India, Indonesia, and Pakistan; roughly \$1.50 in Guatemala and Honduras; and \$2.45 in Mexico (see table 3-1 in chapter 3 of this report for more information on wage rates of selected countries).⁴¹ In the textile industry, hourly compensation averaged \$0.69 in the coastal areas of China, compared with \$5.73 in Korea, \$7.15 in Taiwan, and \$0.57 in India. In general, sewing skills in China are considered to be very good. As such, U.S. apparel companies and retailers often import garments from China, as well as other East Asian countries, that require more sewing and construction, complex operations, and detailed work.

Domestic market

A number of factors have been cited in the rapid growth of the domestic textiles and apparel market in China. First, with 1.3 billion people, China is the world’s most populous country. China’s GDP has grown nearly 8 percent annually in recent years and this rapid growth translates into higher incomes and higher rates of consumption. This is especially true for the more than 900 million Chinese citizens who live in the rural west of China, where development lags that of the eastern coastal cities. As Chinese Government policies attempt to raise the incomes of the rural west, the textile industry expects to find more demand and higher consumption rates.⁴² Chinese industry representatives uniformly reported that the focus of Chinese textiles and apparel producers in the coming decade will be the growing domestic market.⁴³ The China Textile Council reports that currently, the domestic market

³⁹ U.S. and Foreign Commercial Service, “FY 2003 Country Commercial Guide for China” (sec. 1, Economic Trends and Outlook), found at <http://www.buyusainfo.net>, retrieved May 28, 2003.

⁴⁰ Industry representatives, interviews by USITC staff, China, Hong Kong, Taiwan, and Korea, Feb.-Mar. 2003.

⁴¹ Data on hourly compensation in the paragraph, which include fringe benefits, are from Werner International Management Consultants, “Spinning and Weaving Labor Cost Comparisons 2002,” Reston, VA, and Jassin-O’Rourke Group, “Global Competitiveness Report: Selling to Full Package Providers,” New York, NY.

⁴² Industry representatives, interviews by USITC staff, Beijing, Hong Kong, and Taipei, Feb.-Mar. 2003.

⁴³ Chinese industry representatives, interviews by USITC staff, Beijing, Feb. 2003.

accounts for approximately two-thirds of Chinese production and this share is expected to increase, even when textile quotas are eliminated.⁴⁴

Second, Chinese economic development has created new opportunities for textile producers in China. Several Chinese officials and industry representatives cite functional fabrics or industrial fabrics as a future growth area. As more roads and north-south highways are being built to connect the booming cities of the coast and to reach the western regions, demand grows for special industrial and nonwoven fabrics needed to line the roadways and shoulders of roads to prevent erosion. Similarly, to increase agricultural efficiency in feeding the enormous population, certain functional fabrics are used to prevent erosion, conserve moisture, and control unwanted weeds. As developments continue, use of industrial fabrics is expected to rise.⁴⁵

Finally, China has recently undertaken significant housing reforms. A result is that a much greater percentage of Chinese consumers now own their own homes instead of simply residing in state-owned residences. Chinese industry representatives consider this a significant opportunity for more domestic sales. Homeowners are more likely to buy curtains, fabric sofas and furniture, textile rugs and carpeting, bedspreads, sheets, and similar products associated with owning a home.⁴⁶ Housing reforms combined with growing incomes constitute a significant growth opportunity for Chinese home textiles.

Investment

CNTIC data on investment in the textile and apparel sector for 2000 show that there was foreign investment in 5,336 enterprises (3,061 apparel firms, 2,063 textile firms, and 212 manmade-fiber firms).⁴⁷ In 2000, these enterprises had \$31.8 billion in gross output, \$30.0 billion in sales, and \$1.3 billion in profit. Contracted foreign investment totaled \$2.0 billion, while actual investment was \$1.37 billion. Hong Kong accounted for more than 70 percent of the investment in the Chinese textile and apparel sector, followed by Taiwan with 10 percent. Most of the investment was in the eastern coastal region; however, Chinese officials hope to promote further investment in the less developed western regions of the country.⁴⁸ In recent years, China has relied on FDI to finance equipment upgrades in the sector, especially in the cotton textile industry.⁴⁹

⁴⁴ Ibid.

⁴⁵ Chinese officials and industry representatives, interviews by USITC staff, Beijing, Feb. 2003.

⁴⁶ Ibid.

⁴⁷ Unless otherwise noted, investment data are from Zhiming Zhang, "Textiles and Apparel in China," pp. 110-111.

⁴⁸ Chinese textile authorities, interviews by USITC staff, Beijing, Feb. 2003.

⁴⁹ Chinese officials and industry representatives, interviews by USITC staff, Beijing, Feb. 2003.

Government Policies

Domestic policy

China's textile industry has undergone extensive restructuring since 1998, when the Government began a massive reform to improve operations in SOEs, many of which had been losing money since 1993.⁵⁰ As a part of its reform efforts, the Government closed hundreds of unprofitable factories, merged money-losing factories with more successful ones, and permitted hundreds of enterprises to declare bankruptcy. Enterprises filing for bankruptcy were allowed to write off bad debts. To assist the industry, the Government established a \$1.5 billion reserve fund in 1998 and added unspecified amounts to this fund in the following years. As part of the plan, the industry has laid off more than 1.5 million workers⁵¹ and scrapped 10 million obsolete spindles. In 2000, the State Textile Bureau stated that China committed \$2.4 billion in grants to the industry's top 200 firms and \$1.7 billion in bank loans to finance technological upgrades. The Government also pledged \$1.8 billion in support and \$1.2 billion in bank loans to the industry as a whole.

More recently, CNTIC⁵² implemented a "Fabrics China" campaign in an effort to modernize the textile industry.⁵³ According to the plan, the 600 "best" mills are to be organized into 24 groups. CNTIC indicated that the fabric industry needs to upgrade into higher value-added fabrics and replace its current quality standards with international standards. CNTIC is also trying to play a role as an "intermediary" between the fabric mills and foreign buyers.

Trade policies

China's quotas were originally administered by the Ministry of Foreign Trade and Economic Cooperation (MOFTEC) and allocated only to enterprises which had been granted the official right to export. In recent years, the quota allocation system has changed. Quota allocation is administered jointly between MOFTEC and the China Chamber of Commerce for the Import and Export of Textiles. According to Chinatex officials in Beijing, there are three systems used today for allocating quotas. In the first method the Chamber of Commerce offers historically "high fill" quota categories for bidding. The first bid takes place in October, when approximately 80 percent of the following year's quota open for bidding is purchased. Bidding opens again in March, and most categories are filled by that time. The Chamber offers a third bid in July and August for those categories that have gone unfilled.⁵⁴ The second method used to allocate quotas is a "first-come-first-served" system, which is reserved for those quota categories with lower fill rates in the previous year. The

⁵⁰ Unless otherwise noted, information in paragraph is from U.S. Department of State telegram 2711, "SOE Reform."

⁵¹ U.S. Department of State telegram 3981, "China's Textile Industry After Quotas."

⁵² According to U.S. Department of State telegram 3981, "China's Textile Industry After Quotas," although the Government of China no longer officially manages the textile industry, CNTIC is staffed with former textile ministry officials.

⁵³ U.S. Department of State telegram 3981, "China's Textile Industry After Quotas."

⁵⁴ Chinese industry representatives, interviews by USITC staff, Beijing, Feb. 2003.

final method for quota allocation is the MOFTEC assignment method. For an undetermined number of quota categories, the Chinese trade authorities assign free quotas to a selected list of textile and apparel enterprises. Chinese authorities report that the share of quotas allocated by this third method is “very small.”⁵⁵

WTO accession and safeguard provisions

As a part of its WTO accession bid, China signed a bilateral trade agreement with the United States in November 1999. China signed similar bilateral agreements with the EU and other WTO Working Party members before becoming a full member of the WTO in December 2001. As a member of the WTO, China will participate in the 2005 phaseout of quotas mandated by the WTO Agreement on Textiles and Clothing (ATC). Quotas that presently restrict Chinese exports to the United States and the EU will be removed, providing greater market access for Chinese goods. As part of its accession, China has committed to a wide range of market-access and trade barrier concessions, including a number of textile- and apparel-specific provisions. China’s WTO protocol package includes product-specific and textile-specific safeguard mechanisms designed to prevent injury that U.S. or other WTO members’ industries and workers might experience based on import surges (see the “overview” at the beginning of this appendix for information on the textile-specific safeguard mechanism).

Foreign Trade

China’s trade surplus in textiles and apparel fell from \$32.2 billion in 1997 to slightly less than \$31.0 billion in 1998 and 1999, and then rose significantly to \$38.1 billion in 2000 and \$39.5 billion in 2001 (table E-1). China’s textile and apparel exports followed a similar pattern, declining from \$45.5 billion in 1997 to about \$43 billion in 1998 and 1999, and then increasing to \$53.3 billion in 2001. A trade observer attributed the decline in 1998 and 1999 to a downturn in the global economy and the impact of the Asian financial crisis, during which many of China’s competitors devalued their currencies, making their products more competitive in foreign markets.⁵⁶ Although China’s exports of textiles and apparel rose by 17 percent during 1997-2001, their share of China’s total merchandise exports fell from 25 percent to 20 percent in the period. China’s textile and apparel imports also followed a similar trend, although they declined slightly in 2001, to \$13.8 billion, for a gain of 3 percent during 1997-2001. Most of China’s sector exports consisted of apparel, while most of its sector imports consisted of textile articles. For manmade fibers, China posted a trade deficit of almost \$2.0 billion in 2001, up from slightly less than \$1.0 billion in 1999, but down from \$3.2 billion in 1997.

China’s largest export markets for textiles and apparel are Japan, Hong Kong, the United States, and the European Union (EU). A large part of the apparel exports go to the United States and the EU. Much of China’s textiles exports, most of which are exported for dyeing

⁵⁵ Ibid.

⁵⁶ Zhiming Zhang, “Textiles and Apparel in China,” p. 103.

and finishing, are sent to neighboring Asian countries. China's largest import suppliers include Japan, Taiwan, Korea, and Hong Kong. The bulk of these imports are fabrics not produced in China; fabrics produced in quantities insufficient to meet demand; or fabrics which have been dyed and finished in other countries.

China's exports of textiles and apparel to markets with quota limitations (the United States, the EU, and Canada) accounted for 22 percent of China's total textile and apparel exports in 2001 (table E-2). These quota markets accounted for 17 percent of China's total textile exports and 25 percent of China's total apparel exports in 2001.

U.S. imports from China

U.S. imports of textiles and apparel from China fluctuated during 1997-2001, rising from an annual average of 2.0 billion square meters equivalent (SMEs) (valued at approximately \$6.0 billion annually) during 1997-99 to an annual average of 2.2 billion SMEs (\$6.5 billion annually) in 2000-01, and then rose by 125 percent to almost 5.0 billion SMEs (\$8.7 billion) in 2002. Apparel accounted for 32 percent (1.6 billion SMEs) of the quantity but 64 percent (\$5.6 billion) of the value of total U.S. textile and apparel imports from China in 2002. Textiles and textile products accounted for the remainder of the sector imports from China in 2002, representing 68 percent (3.4 billion SMEs) of the total quantity but 36 percent (\$3.2 billion) of the total value. Between 1997 and 2002 the quantity of apparel from China increased by 65 percent and the quantity of imports of textiles and textile products from China rose by 196 percent, with most of the increase in both apparel and textiles occurring in 2002.

The 2002 increase in U.S. imports of Chinese textiles and apparel is in large part due to the removal of quotas for a series of U.S. categories after China joined the WTO at the end of 2001. U.S. imports increased significantly in 2002 in the following categories for which China now has quota-free access to the U.S. market: babies' apparel (category 239), brassieres (categories 349 and 649), robes (categories 350 and 650), luggage and flat goods (category 670), and knit fabric (category 222) (table E-3).⁵⁷

U.S. quotas and quota utilization rates

U.S. imports of textiles and apparel from China are subject to group limits and product-specific limits (quotas). In 2002, three of the four group limits were filled by more than 90 percent.⁵⁸ These three group limits included most imports from China subject to quota that year. Thus, virtually all textile and apparel products not yet integrated into the GATT under the ATC (all goods subject to quota elimination in 2005) were subject to binding quotas in

⁵⁷ Also see table 3-3 in chapter 3 of this report for additional data on U.S. imports of textile and apparel products integrated into the GATT.

⁵⁸ The three group limits having "fill rates" of more than 90 percent accounted for almost all (99.9 percent) of China's total group limits for 2002.

2002. Table E-4 shows quota utilization for selected products that were also subject to an aggregate quota limit under the Group 1 quota.⁵⁹

An important factor in the final price of textile and apparel goods in the United States is the quota price charged to importers.⁶⁰ For goods coming from China, Chinatex reported that quota rents are paid to the Chinese Textiles Chamber of Commerce, which administers the quota system in cooperation with MOFTEC.⁶¹ Chinese officials report that prices are determined on the market and paid to the chamber. Officials acknowledged awareness of a secondary “black market” for quotas, but stressed it was illegal in China and not widely used. Private industry representatives suggest the opposite. According to some U.S. retailers, quota is widely available on the secondary market, and prices are quoted on the Internet. Some industry representatives suggested the prices on the secondary market are sometimes significantly higher than those on the official market administered by the Chinese Textiles Chamber of Commerce. The official prices were not available. Table E-4 shows a sampling of quota prices listed on the secondary market and their export tax equivalent (ETE). The ETE can add significantly to the cost of the exported good. In some cases (e.g., cotton trousers), the ETE exceeded 60 percent of the pre-quota price of the good.

The EU had 42 quotas on imports of textile and apparel products (mostly apparel) from China in 2002. Of these quotas, 25 were filled by 90 percent or more. The major restricted products were woven fabrics of cotton and synthetic fibers; T-shirts, turtlenecks, and other knit shirts; woven and knitted trousers, slacks, and shorts; woven blouses and shirts; knitted underpants and briefs; and brassieres.

⁵⁹ The sum of the individual product quotas in Group 1 exceed the aggregate Group 1 quota. As such, even though some of the individual quotas in Group 1 were not fully utilized in 2002, they were still fully restricted by the group quota.

⁶⁰ U.S. industry representatives, interviews by USITC staff, Hong Kong, Feb. 2003.

⁶¹ Information in remainder of paragraph is mainly from Chinese industry representatives, interviews by USITC staff, Beijing, Feb. 2003.

Table E-1
China: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Textile and apparel share of manufacturing					
value-added (percent)	12.2	11.9	11.5	9.6	(¹)
Number of textile and apparel establishments	45,600	19,300	18,900	18,900	21,144
Number of textile and apparel workers (1,000)	10,649	8,590	7,772	7,592	7,890
Installed spinning capacities:					
Short-staple spindles (1,000)	42,456.0	42,456.0	33,826.0	34,435.0	35,483.9
Long-staple spindles (1,000)	3,871.0	3,871.0	3,878.0	3,600.0	3,600.0
Open-end rotors (1,000)	578.2	578.2	593.6	623.8	711.5
Installed weaving capacities for the cotton system:					
Shuttleless looms (number)	45,800	45,800	58,700	60,930	82,900
Shuttle looms (number)	687,500	687,500	637,500	594,500	578,400
Purchases of large circular knitting machines	(¹)	1,007	1,675	3,600	2,587
Average total labor cost per operator hour:					
Coastal China	(¹)	(¹)	(¹)	² \$0.69	³ \$0.69
China, other than in coastal areas	(¹)	(¹)	(¹)	(¹)	³ \$0.41
Mill fiber consumption:					
Cotton (1,000 metric tons)	5,118.2	4,704.2	4,766.1	4,804.0	5,210.6
Wool (1,000 metric tons)	262.7	267.0	271.1	304.2	314.4
Manmade fibers (1,000 metric tons)	5,935.2	7,056.2	8,121.9	9,316.4	10,211.2
Total (1,000 metric tons)	11,316.1	12,027.4	13,159.1	14,424.6	15,736.2
Production of selected products:					
Manmade fibers (1,000 metric tons)	4,609.0	5,100.0	6,020.4	6,941.6	(¹)
Synthetic fibers (1,000 metric tons)	4,176.3	4,604.2	5,542.2	6,395.0	(¹)
Rayon fibers (1,000 metric tons)	432.7	481.5	464.0	547.0	(¹)
Yarn (1,000 metric tons)	5,618.0	5,420.0	5,704.8	6,574.7	(¹)
Cotton and manmade-fiber fabric (million meters)	24,873.0	24,100.0	25,000.0	27,725.0	(¹)
Cotton fabric (million meters)	11,886.0	11,427.0	11,846.0	13,922.0	(¹)
Cotton blend fabric (million meters)	7,162.0	8,158.0	8,030.0	8,306.0	(¹)
Manmade-fiber fabric (million meters)	5,825.0	4,515.0	5,124.0	5,472.0	(¹)
Printed and dyed fabric (million meters)	14,139.0	14,652.0	16,045.0	15,871.0	(¹)
Wool fabric (million meters)	388.1	268.1	275.5	279.0	(¹)
Ramie fabric (million meters)	110.9	42.8	93.5	(¹)	(¹)
Linen fabric (million meters)	34.9	39.2	35.5	(¹)	(¹)
Silk fabric (million meters)	6,523.0	6,386.0	6,956.0	4,692.0	(¹)
Apparel (million units)	7,999.0	8,665.0	9,545.0	10,641.0	(¹)
Foreign trade in textiles and apparel:					
Exports:					
Textiles (million dollars)	13,851.3	12,780.9	13,013.7	16,115.5	16,780.1
Apparel (million dollars)	31,685.3	29,900.5	29,945.4	35,944.6	36,496.5
Total (million dollars)	45,536.6	42,681.4	42,959.1	52,060.2	53,276.6
Imports:					
Textiles (million dollars)	12,254.1	11,071.3	11,064.3	12,816.4	12,560.4
Apparel (million dollars)	1,104.6	1,059.3	1,088.7	1,173.3	1,258.3
Total (million dollars)	13,358.7	12,130.5	12,153.0	13,989.8	13,818.6
Trade balance:					
Textiles (million dollars)	1,597.2	1,709.6	1,949.4	3,299.1	4,219.7
Apparel (million dollars)	30,580.7	28,841.2	28,856.7	34,771.3	35,238.2
Total (million dollars)	32,177.9	30,550.9	30,806.1	38,070.4	39,458.0

Table E-1- Continued
China: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Foreign trade in manmade fibers:					
Exports (<i>million dollars</i>)	806	609	979	1,085	751
Imports (<i>million dollars</i>)	3,964	2,402	1,938	2,846	2,703
Trade balance (<i>million dollars</i>)	-3,158	-1,793	-959	-1,761	-1,952

¹ Not available.

² National average.

³ Represents 2002 data for the textile industry in China. For the apparel industry, the average hourly compensation (including fringe benefits) was \$0.88 for coastal China and \$0.68 for China, other than in coastal areas.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data from International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; *Chinese Economic and Trade Statistics 2001*; *China Textile Industry Development Report 2001/2002* (translated from Chinese); Geerdes International, Inc., Richmond, VA; Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002," Reston, VA; and Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers," New York, NY. Trade data are United Nations data as reported by China.

Table E-2
China: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	855	928	1,033	1,211	1,200
European Union	1,026	1,110	1,086	1,420	1,473
Canada	116	121	125	162	177
Subtotal	1,997	2,160	2,244	2,793	2,850
All other:					
Hong Kong	5,350	4,608	4,192	4,861	4,870
Japan	1,697	1,423	1,543	1,859	1,962
Korea	1,092	820	994	1,126	1,074
Other	3,715	3,771	4,042	5,476	6,024
Subtotal	11,854	10,621	10,770	13,322	13,930
Grand total	13,851	12,781	13,014	16,116	16,780
Apparel (SITC 84):					
Quota markets:					
United States	3,527	3,654	3,775	4,673	4,773
European Union	2,800	2,918	3,016	3,544	3,696
Canada	317	359	409	538	583
Subtotal	6,644	6,931	7,199	8,755	9,052
All other	25,041	22,970	22,746	27,190	27,444
Grand total	31,685	29,900	29,945	35,945	36,497
Textiles and apparel:					
Quota markets:					
United States	4,383	4,582	4,807	5,884	5,973
European Union	3,826	4,028	4,102	4,964	5,169
Canada	433	480	534	700	760
Subtotal	8,642	9,091	9,443	11,548	11,902
All other	36,895	33,591	33,516	40,512	41,375
Grand total	45,537	42,681	42,959	52,060	53,277
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	14	17	17	17	17
Apparel	21	23	24	24	25
Average	19	21	22	22	22

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table E-3

Textiles and apparel: U.S. general imports from China, by specified product categories,¹ 1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		————— 1,000 square meters equivalent —————					
0	Textiles and apparel, total	2,094,944	1,943,215	2,035,487	2,217,897	2,210,674	4,963,259
1	Apparel	947,376	910,256	910,407	929,159	975,980	1,565,247
2	Textiles	1,147,569	1,032,959	1,125,080	1,288,738	1,234,695	3,398,012
11	Yarns	28,165	13,759	24,507	27,647	21,624	31,594
12	Fabrics	437,960	352,865	381,711	405,317	331,065	612,640
14	Other miscellaneous articles	681,444	666,336	716,862	855,774	882,006	2,753,778
30	Cotton textiles and apparel	984,302	909,719	968,172	946,997	943,623	2,000,000
40	Wool textiles and apparel	18,820	19,792	19,686	23,352	26,752	27,182
60	Manmade-fiber textiles and apparel	752,484	692,784	702,362	758,110	766,071	2,529,103
80	Silk blend/veg fiber textiles/apparel	339,338	320,921	345,267	489,439	474,228	565,610
222	Knit fabric	6,998	7,857	1,384	523	391	86,241
223	Nonwoven fabric	587	330	649	566	161	16,551
224	Pile and tufted fabric	23,467	16,696	9,204	8,133	9,969	12,783
226	Cheesecloth, batistes, lawns, voile	9,485	9,101	9,114	8,934	6,956	12,992
229	Special purpose fabric	8,848	5,074	7,326	7,200	7,044	51,983
237	Playsuits	44,076	44,746	27,075	50,404	55,972	54,244
239	Babies' apparel	18,857	18,378	19,893	22,092	20,374	188,630
313	Cotton sheeting fabric	41,718	31,257	43,312	42,023	33,217	47,469
314	Cotton poplin and broadcloth fabric	64,594	47,137	49,597	47,763	47,234	61,285
315	Cotton printcloth fabric	148,456	121,748	150,121	138,799	97,336	148,397
317	Cotton twill fabric	13,425	6,600	19,745	17,959	20,717	19,297
326	Cotton sateen fabric	147	1,282	1,581	2,263	2,287	6,119
330	Cotton handkerchiefs	3,621	4,086	3,687	3,256	5,557	8,224
331	Cotton gloves	16,743	15,194	13,415	19,028	15,431	49,707
334	Other cotton coats, men/boys	13,012	9,432	9,993	11,296	10,293	13,797
335	Cotton coats, women/girls	14,411	7,254	9,002	16,750	14,822	14,176
336	Cotton dresses	4,866	6,762	7,955	5,327	5,400	9,099
338	Cotton knit shirts, men/boys	9,449	7,987	6,355	6,295	6,471	8,107
339	Cotton knit shirts, women/girls	5,766	5,636	9,892	8,844	9,362	8,979
340	Cotton not knit shirts, men/boys	17,814	16,485	14,514	17,490	15,709	21,250
341	Cotton not knit blouses	8,342	7,062	10,164	6,881	9,883	9,684
342	Cotton skirts	2,495	3,441	5,138	3,980	4,631	4,585
345	Cotton sweaters	4,014	3,501	4,454	4,427	4,070	3,664
347	Cotton trousers, men/boys	22,587	22,091	22,148	16,252	20,166	16,156
348	Cotton trousers, women/girls	16,910	15,072	14,593	11,617	18,680	25,376
349	Cotton brassieres	8,721	10,155	11,641	12,612	8,404	11,180
350	Cotton robes	7,506	7,765	7,742	5,453	9,368	58,422
351	Cotton nightwear	23,588	24,680	26,726	17,711	34,764	25,349

See footnotes at end of table.

Table E-3—Continued
Textiles and apparel: U.S. general imports from China, by specified product categories,¹ 1997-2002

Cat.							
No.	Description	1997	1998	1999	2000	2001	2002
		————— 1,000 square meters equivalent —————					
352	Cotton underwear	18,013	15,728	19,049	11,840	20,028	14,478
359	Other cotton apparel	73,009	77,139	76,489	64,415	56,747	142,293
360	Cotton pillowcases	5,452	5,269	5,292	4,670	5,946	5,357
361	Cotton sheets	21,350	26,457	23,598	18,635	26,324	27,207
362	Cotton bedspreads and quilts	38,436	49,514	46,604	39,245	45,524	51,385
363	Cotton terry and other pile towels	10,513	7,840	7,151	10,004	10,034	10,352
369	Other cotton manufactures	257,323	253,554	259,301	260,752	269,893	719,891
446	Wool sweaters, women/girls	2,936	2,893	3,004	2,813	3,100	3,156
447	Wool trousers, men/boys	1,078	1,135	1,046	1,140	754	1,128
465	Wool floor coverings	4,240	5,301	5,240	6,359	5,864	6,556
600	Textured filament yarn	173	52	1	7	13	9,222
604	Yarn of synthetic staple fiber	6,255	2,604	2,706	2,849	1,910	408
606	Non-textured filament yarn	3,940	0	0	3	2	3,803
611	Woven fabric, artificial staple	7,037	4,968	4,582	4,621	2,626	3,098
613	Manmade-fiber sheeting fabric	3,052	4,381	3,530	3,777	3,431	9,926
614	Manmade-fiber poplin/broadcloth	14,560	11,884	9,113	9,478	12,973	15,838
615	Manmade-fiber printcloth fabric	20,762	18,353	11,364	19,355	19,662	31,004
617	Manmade-fiber twill/sateen fabric	18,462	17,318	11,832	12,229	7,956	18,031
631	Manmade-fiber gloves	3,826	3,055	2,803	4,017	4,197	15,108
632	Manmade-fiber hosiery	412	661	678	551	2,213	20,658
634	Other manmade coats, men/boys	22,100	16,636	20,610	24,064	25,703	27,287
635	Manmade-fiber coats, women/girls	23,000	18,246	20,252	25,009	27,650	25,496
636	Manmade-fiber dresses	20,433	16,101	24,743	16,227	21,683	28,726
638	Manmade knit shirts, men/boys	16,166	11,938	8,170	7,184	11,983	7,085
639	Manmade knit shirts, women/girls	19,298	22,722	23,897	16,374	31,334	26,677
640	Manmade not knit shirts, men/boys	29,200	36,046	29,610	24,338	32,607	29,804
641	Manmade-fiber not knit blouses	18,085	12,175	15,699	16,789	18,728	16,147
642	Manmade-fiber skirts	4,638	5,168	5,654	4,319	5,460	7,886
643	Manmade-fiber suits, men/boys	2,076	2,124	2,231	2,134	1,806	2,286
644	Manmade-fiber suits, women/girls	10,456	14,183	13,335	12,878	14,058	15,989
645	Manmade-fiber sweaters, men/boys	2,433	1,370	1,195	1,878	2,706	2,559
646	Manmade-fiber sweaters, women/girls	23,973	22,332	14,534	24,169	26,279	22,760
647	Manmade-fiber trousers, men/boys	27,413	21,845	23,914	25,842	17,904	29,074
648	Manmade-fiber trousers, women/girls	17,746	16,183	19,612	15,990	16,875	21,080
649	Manmade-fiber brassieres	3,978	4,028	4,132	3,725	4,337	31,140
650	Manmade-fiber robes	4,762	4,954	4,608	5,617	5,081	34,101
651	Manmade-fiber nightwear	36,538	32,626	34,098	38,943	35,888	36,392
652	Manmade-fiber underwear	40,486	32,581	39,097	42,017	43,102	38,494
653	Manmade down-fill coats, men/boys	11,774	9,729	9,917	14,117	11,655	14,920
654	Manmade down-fill coats, women/girls	4,154	5,530	11,971	14,369	9,760	14,092
659	Other manmade-fiber apparel	76,362	78,944	83,348	85,131	73,110	133,498

See footnotes at end of table.

Table E-3—Continued

Textiles and apparel: U.S. general imports from China, by specified product categories,¹ 1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		————— 1,000 square meters equivalent —————					
666	Other manmade-fiber furnishings	53,181	58,339	51,819	52,699	64,585	769,873
669	Other manmade-fiber manufactures	45,110	36,200	33,252	38,969	40,823	181,383
670	Manmade-fiber handbags/luggage	94,515	94,211	114,379	118,650	105,745	672,698
836	Dresses, silk blends/vegetable fibers . . .	8,478	13,485	12,089	10,359	7,242	12,721
838	Knit shirts, silk blends/vegetable fibers . .	5,650	6,220	9,224	6,400	9,386	33,363
840	Shirts, not knit, silk/vegetable fibers	9,819	8,379	7,702	7,578	7,865	28,089
845	Sweaters, other vegetable fibers	111,080	106,180	88,861	100,618	105,768	98,211
847	Trousers, silk blends/vegetable fibers . . .	12,796	18,833	20,216	23,091	13,890	32,442
870	Luggage of silk blends/vegetable fibers . .	142,094	120,427	121,849	138,776	132,262	135,117
899	Other, silk blends/vegetable fibers	4,718	4,009	41,990	156,010	160,695	157,737

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov/>.

Table E-4

Textiles and apparel: China's fill rates of adjusted U.S. quota levels, selected products, 2000-2002

		Fill rates			Quota prices ¹	
		2000	2001	2002	Value ²	ETE ³
		Percent filled			US dollars	Percent ad valorem
<u>Cotton apparel</u>						
334	Other men's and boys' coats	83.0	68.0	87.9	36.00	27.9
335	Women's and girls' coats	94.8	94.9	92.5	41.00	27.1
338/339	Knit shirts and blouses	89.0	89.8	92.6	15.50	27.4
338/339 (S)	Knit tops, including tanktops	98.4	95.5	92.7	33.00	(⁴)
340	Men's and boys' shirts, not knit	84.4	78.1	97.3	29.00	64.0
341	Women's and girls' shirts, not knit	74.2	85.6	92.0	31.00	44.8
342	Skirts	82.5	90.1	94.8	39.00	60.4
347/348	Trousers and shorts	75.7	88.0	97.6	41.50	64.0
351	Nightwear and pajamas	66.6	98.0	85.7	24.00	44.0
352	Underwear	70.5	100.0	86.1	7.00	29.7
359 C	Coveralls and overalls	65.1	65.0	89.7	2.80	(⁴)
<u>Wool apparel</u>						
434	Other men's and boys' coats	67.1	96.5	96.1	80.00	23.0
445/446	Sweaters	95.2	100.0	95.0	78.00	25.6
<u>Manmade-fiber apparel</u>						
635	Women's and girls' coats	90.0	97.9	86.8	45.00	24.0
636	Dresses	69.2	79.9	87.6	37.50	13.8
638/639	Knit shirts	66.4	97.6	90.2	23.00	41.6
640	Men's and boys' shirts, not knit	82.9	90.5	87.2	15.00	43.3
641	Women's and girls' shirts, not knot	87.1	95.0	86.3	15.50	23.8
642	Skirts	78.7	78.9	93.8	36.00	55.9
648	Women's and girls' trousers and shorts	86.8	82.0	92.0	24.50	34.1
651	Nightwear and pajamas	97.6	91.8	87.4	16.00	26.2
659 H	Headwear	94.0	84.1	92.1	4.50	(⁴)

¹ Quota prices are black market quota prices. Official quota prices quoted by the Chinese Textiles Chamber of Commerce are not available.

² Prices are per dozen, except for category 659-H, which is per kilogram.

³ Export tax equivalents calculated using customs average unit value per category and the quota price per category.

⁴ Not available.

Note.--For all the products listed above, U.S. imports from China are subject to an aggregate ("group 1") quota covering a large number of different products subject to quota. China filled more than 95 percent of this aggregate quota in each of the years 2000-02. The sum of the individual product quotas in group 1 exceed the aggregate group 1 quota. As such, although some individual quotas were not fully utilized, they were still fully restricted by the group quota.

Source: Compiled from official statistics of the U.S. Department of Commerce, Office of Textiles and Apparel, except as noted.

Hong Kong¹

Overview

Although much of Hong Kong's production of textiles and apparel has moved to China and other low-cost supplying countries in recent years, the sector continues to play an important role in Hong Kong's economy through its OPAs,² some domestic sector production, and its role as a global apparel sourcing hub. Although Hong Kong's economy is largely dominated by the service sector (accounting for 85 percent of Hong Kong's gross domestic product (GDP) in recent years), textile and apparel manufacturing and trading companies account for a large part of the remainder, specifically 5.3 percent of Hong Kong's GDP in 2000.³ The textile and apparel sector directly employed over 56,000 people, approximately one-third of Hong Kong's industrial workforce, and an additional 108,000 persons are employed by textile and apparel trading companies involved in textile and apparel import-export trade. The textile and apparel sector also accounted for 52 percent of Hong Kong's total domestic exports in 2001, when Hong Kong was the world's second-largest exporter of apparel.⁴

Hong Kong has taken advantage of its strategic location and advanced port facilities and infrastructure to become a hub for global apparel sourcing, including a portal for world textile and apparel trade with China. Its textile and apparel companies, primarily the apparel companies, act as headquarters for firms which manage foreign operations and provide services. Hong Kong firms offer full package production and are "efficient in managing production and performing services, such as order placement, product development, material sourcing, quality control, marketing, trade financing, and logistic arrangement."⁵ Many U.S. and European Union (EU) retailers source apparel directly from Hong Kong, either through their own buying offices there or through Hong Kong apparel or trading companies. Firms producing apparel with Hong Kong origin generally concentrate in more sophisticated, higher value-added operations and most use OPAs with factories in China. U.S. apparel firms reported that Hong Kong's and China's apparel production workers are highly skilled sewers. However, an industry source in Hong Kong noted that most Hong Kong sewers are in their 40s and 50s and that the young people in Hong Kong are not moving into apparel production, but seeking white collar professional jobs.

Hong Kong's production of apparel through OPAs is directly related to the existence of global quotas⁶ on Hong Kong's and China's apparel shipments to developed country markets—primarily, the EU and the United States. The shift from utilizing OPAs to producing

¹ Prepared by Jackie W. Jones, Office of Industries.

² For more information on OPAs, see the "overview" at the beginning of this appendix.

³ U.S. Department of State telegram 2138, "Hong Kong's Textile Industry After Quotas," prepared by U.S. Consulate, Hong Kong, Apr. 22, 2002.

⁴ The export shares for textiles and apparel of the countries covered by the study are shown in chapter 1 of this report, table 1-1 and figure 1-2.

⁵ "Hong Kong and China Economies," http://www.tdc.org.hk/main/industries/t2_2_4.htm, p. 1.

⁶ Includes quotas placed on Hong Kong's shipments to the European Union (EU), Canada, and the United States.

totally in China is largely dependent upon the future use of safeguards by the United States and the EU on rapidly increasing textile and apparel shipments from China to these developed country markets.

Industry Profile

Industry structure and performance

Textiles

Hong Kong's textile industry is concentrated in cotton spinning, denim weaving, knit-to-shape panel knitting, fine-gauge cotton knit production, and dyeing and finishing.⁷ It is a major supplier to Hong Kong's apparel industry, having the ability to supply local apparel manufacturers' quick turnaround operations with both local textile production and also with production offshore, especially in China. To improve their competitiveness, some Hong Kong textile companies have formed partnerships with Chinese companies and have shifted their production operations to China.

Hong Kong's production of textiles, including denim fabrics, has declined considerably in recent years. Increased environmental regulations and rising production costs have been the impetus for a shift in textile production and finishing from Hong Kong to offshore locations—China and other southeast Asian countries that offer lower production costs and less stringent environmental regulations. For example, a representative of a U.S. apparel firm in Hong Kong stated that the printing and dyeing segment of Hong Kong's textile industry is moving to Shanghai, where that segment of the industry is expanding and developing its quality.

Between 1997 and 2001, the number of establishments producing textiles⁸ in Hong Kong declined by 28 percent, to 1,283, and the number of textile production workers decreased by one-third, to 15,045 persons (table E-16).⁹ Textile output declined by 29 percent during 1996-99, to \$26.6 billion (in producer prices). The major segments of Hong Kong's textile industry are knitting mills, with output of \$15.2 billion and accounting for 57 percent of total textile output in 1999, and spinning, weaving, and finishing mills, with output of \$10.7 billion and accounting for 40 percent of the total.

⁷ "Hong Kong's Textile Industry," Profiles of Hong Kong Major Manufacturing Industries, found at www.tdctrade.com, retrieved Oct. 8, 2001, p. 1.

⁸ Includes spinning, weaving, and finishing mills; knitting mills; and production of carpets and rugs, cordage, rope, and twine, and other made-up textile products (other than apparel).

⁹ Data in this paragraph on the number of establishments and employees are from the Hong Kong Economic and Trade Office, Washington, DC. Data on sector output are mostly from the United Nations Industrial Development Organization (UNIDO), *International Yearbook of Industrial Statistics 2002* (Vienna), p. 232.

Production of higher priced textile products, such as quality ring-spun and open-end yarn; knitted fabric; and complex dyed and printed fabrics, has remained in Hong Kong. Hong Kong's textile industry is focused on "sophisticated textile products with original designs."¹⁰ Generally, Hong Kong's textile industry is focused on high-value-added activities such as sales and marketing, quality control, design and development, while factories offshore are focused on lower value-added activities.¹¹ Hong Kong textile companies that continue to manufacture locally have invested in advanced machinery and technology, such as open-end spinning machines and shuttleless looms.

Apparel

Increasing wages and land costs¹² have made Hong Kong one of the most expensive apparel suppliers in the Asian Pacific region¹³ and curbed the growth of its apparel production. Hong Kong industry sources reported that entry level skilled workers in Hong Kong's apparel industry earn HK\$5,000-6,000 per month, compared with earnings in China of the equivalent of HK\$2,000-3,000 per month. Consequently, Hong Kong apparel companies have moved production, especially of high-volume, lower cost apparel, to China and other low-cost supplying countries. The Hong Kong apparel industry currently emphasizes production of high-quality, high-fashion apparel and continues to work towards becoming more price and quality competitive, shortening delivery times, and developing and using the latest production and communication technologies.¹⁴ In addition, to remain competitive, apparel companies that continue to produce garments locally utilize OPAs with factories in China. Much of the apparel production attributable to Hong Kong is performed both in China, through OPAs with companies or contractors there, and in Hong Kong. Under OPAs, a carefully planned, but small part of the assembly process, is performed in Hong Kong so that the apparel articles can be considered to have Hong Kong origin. As early as the late 1980s, Hong Kong-based apparel producers began subcontracting production to factories in southeastern China. OPAs eventually turned into a partial relocation of Hong Kong's apparel industry. Hong Kong's apparel industry, for the most part, is not vertically integrated. Apparel companies source fabrics locally and from all over the world; major sources include Korea, Taiwan, and China.

As stated above, Hong Kong apparel producers now either utilize OPAs or have diversified their production worldwide. Consequently, the number of establishments producing apparel in Hong Kong dropped from 3,717 in 1997 to 2,413 in 2001.¹⁵ The number of employees involved in apparel manufacturing in Hong Kong dropped by 43 percent from 76,785 to

¹⁰ "Hong Kong's Textile Industry," p. 5.

¹¹ Ibid.

¹² Since the beginning of Hong Kong's latest recession, the cost of factory space has steadily declined and, reportedly, is currently competitively priced with China's rates. Representative of Hong Kong Government, interview by USITC staff, Feb. 25, 2003.

¹³ James Glass, "Hong Kong's Textile and Clothing Industry: Prospects to 1997 and Beyond," *Textile Outlook International*, May 1994.

¹⁴ "Hong Kong's Clothing Industry."

¹⁵ Establishment and employee data from the Hong Kong Economic and Trade Office, Washington, DC.

43,776 during 1997-2001. Gross output in the sector dropped by 30 percent from \$36.1 billion in 1997 to \$25.1 billion in 1999.¹⁶

Apparel industry sources in Hong Kong reported that most of Hong Kong's apparel industry is made up of small- and medium-sized companies, most of which utilize OPAs and have plants both in Hong Kong and in other countries such as China and Macau. These smaller to medium-sized companies used to subcontract out their production, but now tend to own more assets in order to have more control over their manufacturing facilities, especially as U.S. retailers have made human rights requirements more stringent. These companies specialize and work together to fill large orders and complicated production requirements demanded by U.S. retailers. In spite of the large number of these small- and medium-sized firms, Hong Kong's apparel industry is said to be dominated by approximately 20 to 30 large companies, with sales of up to \$500 million each.¹⁷ These apparel companies have production networks all over the world, including China, Australia, Bangladesh, Cambodia, Indonesia, Madagascar, Mauritius, Mexico, South Africa, Korea, Sri Lanka, Thailand, and Vietnam.¹⁸ Reportedly, the "favorite" location for offshore production is China because of its low cost, cultural similarities to Hong Kong, geographical proximity, and large potential consumer market.¹⁹ Hong Kong industry sources report that Cambodia and Vietnam are also increasingly popular sites for investment.²⁰ A Hong Kong Trade Development Council survey found 48 percent of Hong Kong's textile and apparel companies' exports were produced in China; 35 percent were produced in other countries, such as Vietnam and Cambodia; and 17 percent were produced in Hong Kong.²¹

In summary, Hong Kong has become a regional sourcing hub and entrepot for Asian apparel sourcing. Hong Kong's apparel companies provide such services as product development, material sourcing, quality control, merchandising, trade financing, and logistics arrangements. However, with China's entry to the WTO, Hong Kong faces more competition as apparel buyers increasingly may be attracted to dealing directly with producers in China.²²

Investment

Hong Kong operates a free-market economy, with minimum government intervention in corporate activity.²³ In general, Hong Kong affords national treatment to foreign-headquartered companies and foreign direct investment. Foreign-owned firms and local

¹⁶ Data from UNIDO, *International Yearbook of Industrial Statistics 2002*, p. 234.

¹⁷ Alkman Granitsas, "Back in Fashion," *Far Eastern Economic Review*, May 21, 1998, p. 53.

¹⁸ "Hong Kong's Clothing Industry."

¹⁹ Ibid.

²⁰ Representative of Hong Kong Government, interview by USITC staff, Hong Kong, Feb. 25, 2003.

²¹ U.S. Department of State telegram 5999, "Textiles Challenges Ahead and Diversification," prepared by the U.S. Consulate, Hong Kong, Nov. 1, 2002.

²² "World Textile and Apparel Trade and Production Trends," *Textile Outlook International*, Sept.-Oct. 2002, p. 59.

²³ U.S. Department of State telegram 5741, "1999 Hong Kong Investment Climate," prepared by the U.S. Consulate, Hong Kong, July 3, 1999.

firms are taxed at the same rate, 16 percent of profits. There are no capital gains or withholding taxes on dividends and royalties of foreign or local companies.

U.S. and other foreign investment in Hong Kong's textile and apparel manufacturing sector has been on the decline as investment has been redirected to China and other lower cost supplying countries. U.S. investment in the Hong Kong sector declined from \$81 million in 1994 to \$49 million in 1997 (latest year available).²⁴ Japanese investment in textile and apparel manufacturing in Hong Kong declined from \$210 million in 1994 to \$46 million in 1997.²⁵

In contrast, there has been growth in the number of foreign corporate regional offices and headquarters opening in Hong Kong and also in Hong Kong's outward investment. As of June 1, 2002, 3,119 foreign companies²⁶ had regional operations in Hong Kong; 948 were regional headquarters and 2,171 were regional offices.²⁷ There is also increased investment in apparel manufacturing in lower cost countries by Hong Kong companies, which have been investing heavily in all types of manufacturing in China. At the end of 2002, Hong Kong's foreign direct investment in China totaled \$130 billion and accounted for 33 percent of Hong Kong's total foreign investment.²⁸ This investment is concentrated largely in Guangdong Province, with the majority of such investment in the industrial sector, mainly OPAs.²⁹

Government Domestic and Trade Policies

The Hong Kong Trade and Industry Department reportedly has no plans to provide subsidies to textile and apparel firms that produce in Hong Kong, nor to provide tax incentives to encourage new manufacturing or to keep firms from relocating to China or other low-cost apparel suppliers.³⁰ The Hong Kong Trade and Industry Department's overall goal for the textile and apparel sector is for it to move "up the value chain" by providing services and becoming a "high-tech hub."³¹ The Trade and Industry Department is also encouraging Hong

²⁴ U.S. Department of State telegram 5741, "1999 Hong Kong Investment Climate."

²⁵ It is possible that these trends in U.S. and Japanese investment may have been influenced in part by the return of Hong Kong to China. However, China has honored Hong Kong's economic and trade autonomy.

²⁶ These figures are for total regional operations in Hong Kong; not just for those involving textiles and apparel.

²⁷ "Territory Continues to Attract Foreign Companies," *Hong Kong Digest*, Nov. 2002, p. 1.

²⁸ The information in this paragraph applies to investment in all sectors and is taken from the Hong Kong Economic and Trade Office report "Hong Kong's Investment in the Mainland Report," last updated Oct. 2002.

²⁹ This applies to outward processing arrangements producing all types of products, not just textiles and apparel.

³⁰ Representative of the Hong Kong Trade and Industry Department, interview by USITC staff, Hong Kong, Feb. 25, 2003.

³¹ U.S. Department of State telegram 5999, "Textiles Challenges Ahead and Diversification," and representative of Hong Kong Trade and Industry Department, interview by USITC staff, Feb. 25, 2003.

Kong firms to develop their own brand names, such as Girodana, and to become a design center, especially a style leader for China.³²

Hong Kong is a duty-free port and has no tariff barriers.³³ In addition, Hong Kong maintains no preferential or discriminatory export or import policies, such as import quotas, performance requirements, bonds, deposits, or similar requirements which affect foreign trade.

Foreign Trade³⁴

Imports

Hong Kong's imports of textiles and apparel³⁵ declined by 9 percent during 1997-2001 to \$28.2 billion (table E-5). A significant portion of these imports likely are partially made garments shipped from China to Hong Kong as part of OPAs, and apparel inputs such as fabrics shipped to Hong Kong for further dyeing and/or finishing. Hong Kong's imports of apparel increased by 7 percent during the period to \$16.0 billion, or 57 percent of Hong Kong's total textile and apparel imports, while Hong Kong's imports of textiles declined by 25 percent to \$12.2 billion, or 43 percent of the total. This decline in textile imports likely reflected the movement of apparel production from Hong Kong to China and other low-cost Asian suppliers.

Exports

Hong Kong was the world's sixth-largest exporter of textiles and apparel in 2001 with exports valued at \$10.3 billion (table E-5). Almost 90 percent (or \$9.3 billion) consisted of apparel, making Hong Kong the world's second-largest exporter of apparel in 2001. Hong Kong's exports of domestic textiles and apparel decreased by 6 percent during 1997-2001 to \$10.3 billion.³⁶

Hong Kong reports data for exports of "domestic" textiles and apparel—that is, textiles and apparel for which the production is attributable to Hong Kong—and for "re-exports" of

³² Representative of Hong Kong Government, interview by USITC staff, Feb. 25, 2003.

³³ U.S. Department of State telegram 5741, "1999 Hong Kong Investment Climate."

³⁴ Analysis of Hong Kong's trade balance is difficult because the export data used reflect exports only of "locally produced" textiles and apparel (although some of the production of these exports likely occurs through OPAs with producers in China), while the import data reflect trade in textiles and apparel that may be passing through Hong Kong for further production in China or other low-cost Asian producers.

³⁵ The import data reflect shipments of textiles and apparel that may be only passing through Hong Kong for further production or consumption in China and other low-cost Asian producers or markets.

³⁶ The following discussion on Hong Kong's foreign trade is based on statistics of the United Nations, as reported by Hong Kong.

textiles and apparel. In the case of a domestic export that is eligible for Hong Kong origin, production of a garment may occur in China by producers or contractors which participate in OPAs with Hong Kong producers. The production operations occurring in China may include cutting, assembly, pressing, and packaging. Re-exports of textiles and apparel are produced primarily or entirely in China for Hong Kong apparel or trading companies and exported through Hong Kong to their ultimate end-use markets. Re-exports do not confer Hong Kong origin.

Hong Kong's domestic apparel exports fluctuated between \$9.3 billion and \$9.9 billion during 1997-2001, with a 7-percent decline occurring in 2001, when apparel exports fell to \$9.3 billion from the 2000 level (table E-5). The principal market for Hong Kong's domestic apparel exports was the United States, accounting for \$4.3 billion or 47 percent of the total value of apparel exports in 2001, followed by the EU and China with 23 percent and 22 percent, respectively, of the total value (table E-6).³⁷

Hong Kong's domestic textile exports totaled almost \$1.1 billion in 2001 (table E-6). Textile exports accounted for approximately 5 percent of the estimated total output of Hong Kong's domestic textiles industry. Most of the domestic textiles are used by Hong Kong apparel companies which produce garments in Hong Kong through OPAs and/or in China. The leading markets for Hong Kong's domestic textiles were China, with \$469 million, or 45 percent of the total value in 2001, and the United States, with \$176 million, or 17 percent of the total (table E-6).³⁸ The Philippines, Bangladesh, and Canada, with imports from Hong Kong of \$40 million, \$39 million, and \$30 million, respectively, in 2001, were smaller, but the next largest markets. Exports to China and other Asian markets reflect Hong Kong textile companies supplying the inputs—yarns and fabrics—for the production of apparel by manufacturers affiliated with Hong Kong apparel companies in these lower cost apparel producing countries.

The value of Hong Kong's re-exports of textiles decreased by 14 percent from almost \$13.0 billion in 1997 to \$11.2 billion in 2001.³⁹ The largest market for these re-exports in 2001 was, by far, China, which accounted for approximately 70 percent of the total value. The next largest markets were the United States, accounting for 3 percent; and Bangladesh, the Philippines, Thailand, Indonesia, and Sri Lanka, each accounting for 2 percent of the total value. The total value of Hong Kong's re-exports of apparel increased by 3 percent from \$13.8 billion in 1997 to \$14.2 billion in 2001. The largest markets for these re-exports were the United States (which accounted for 28 percent of the total value), Japan (14 percent), the United Kingdom (9 percent), Germany (5 percent), and Australia (3 percent).

³⁷ In 2001, the calculated trade-weighted average U.S. duty on apparel imports from Hong Kong was 17 percent ad valorem.

³⁸ The calculated trade-weighted average duty on U.S. imports of textile mill products was 8.7 percent ad valorem in 2001.

³⁹ Data compiled from United Nations statistics.

U.S. imports from Hong Kong⁴⁰

U.S. imports of textiles and apparel from Hong Kong increased by 27 percent during 1997-2001 to 1,092 million square meters equivalent (SMEs), before declining by 12 percent to 962 million SMEs in 2002 (table E-7). The value of these imports increased by only 7 percent during 1997-2001, to \$4.4 billion in 2001, before declining by 9 percent in 2002 to \$4 billion. The smaller increase in value is due to the Asian financial crisis of 1997 with its devaluations of several major East Asian currencies, including Hong Kong's, plus the highly competitive U.S. apparel market exerting downward pressure on prices. Once one of the largest U.S. textile and apparel suppliers as part of the "Big Three,"⁴¹ Hong Kong was the 13th-largest supplier of U.S. textile and apparel imports by quantity in 2002, accounting for 6 percent of the total import quantity, but the third-largest supplier by value, with 5.6 percent of the total value.

Apparel represented the majority of U.S. imports of textiles and apparel from Hong Kong, accounting for 85 percent of the total quantity of U.S. imports of these products in 2002 (table E-7). Textiles accounted for the remaining 15 percent. Major apparel products imported from Hong Kong include manmade-fiber and cotton underwear and nightwear; babies' garments; women's and girls' cotton trousers, knit shirts, and woven blouses; women's and girls' manmade-fiber knit shirts; men's and boys' cotton woven shirts; and sweaters of manmade fibers and of vegetable fibers such as ramie and/or linen. Major textile products imported from Hong Kong include knit fabrics, blue denim fabrics, and cotton twill fabrics.⁴²

U.S. quotas and quota utilization rates

U.S. imports of textiles and apparel from Hong Kong are subject to group and specific limits or quotas. The United States uses about 70 product categories to administer the textile quota program⁴³ to Hong Kong. These 70 categories are divided into 3 groups and 2 subgroups with an overall quota assigned to each group and subgroup. The textile and apparel articles in each group are subject to specific limits. During 2001, there were approximately 75 specific limits covering imports of textile and apparel articles from Hong Kong, and these limits were applied to individual product categories, subsets of product categories, and

⁴⁰ Trade data in this section are based on official statistics of the U.S. Department of Commerce (DOC), with the quantity measured in square meters equivalent (SMEs). These data, which are also used in quota analysis, are not entirely comparable to UN data. DOC data include textile and apparel products made of cotton, wool, manmade fibers, ramie, flax, and silk blends. By contrast, UN data also include apparel made of leather, fur, and plastics.

⁴¹ The "Big Three" included Hong Kong, Korea, and Taiwan.

⁴² U.S. imports of all of these products from Hong Kong, except for baby garments and knitted fabrics, are covered by specific limits or quotas. Any existing quotas on U.S. imports of the babies' garments and knitted fabrics were eliminated on Jan. 1, 2002, as these products became integrated into the WTO.

⁴³ To administer the U.S. textile quota program, textile articles are grouped under 3-digit category numbers, which cover several thousand 10-digit item numbers under which merchandise is classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS).

combined product categories. During 2001, approximately 80 percent of the total quantity of U.S. imports of textiles and apparel from Hong Kong (as measured in SMEs) was covered by U.S. quotas—either by specific limits or by group limits.⁴⁴ Although none of the group or subgroup limits was binding during 2001, 22 of the specific limits were filled at 90 percent or more.

EU quotas and quota utilization rates

During 2002, the EU had 23 quotas on textile and apparel products imported from Hong Kong. The majority of these products included apparel items, such as T-shirts and other knitted shirts for men and women; knitted underwear; trousers, slacks, and shorts; men's and women's suits and ensembles of woven fabrics; panty hose, tights, and socks; dresses; and overcoats, jackets, and blazers made of knitted fabrics. Textile products included woven cotton fabrics, including a specific quota on unbleached or bleached cotton fabrics; woven fabrics of synthetic fibers, including a specific quota on those which are unbleached or bleached; and woven table, kitchen, and bath linens. Three of these quotas were filled at more than 90 percent during 2002. These quotas covered certain knitted shirts and T-shirts, and trousers, slacks, and shorts.

⁴⁴ Based on 2001 trade, this percentage would decrease to about 68 percent, reflecting the elimination of quotas on some product categories as part of the product integration under the ATC of the WTO in 2002.

Table E-5
Hong Kong: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Textile and apparel share of manufacturing value-added (percent)					
	23	21	(¹)	(¹)	(¹)
Number of establishments:					
Textiles	1,778	1,555	1,504	1,424	1,283
Apparel	3,717	3,225	2,998	2,669	2,413
Total	5,495	4,780	4,502	4,093	3,696
Number of workers:					
Textiles	22,671	17,720	16,482	16,200	15,045
Apparel	76,785	62,333	58,490	50,214	43,776
Total	99,456	80,053	74,972	66,414	58,821
Installed spinning capacities:					
Short-staple spindles (number)	32,000	39,000	45,400	48,000	48,000
Long-staple spindles (number)	24,000	24,000	24,000	24,000	24,000
Open-end rotors (number)	24,100	23,400	22,600	20,100	20,100
Installed weaving capacities:					
Shuttleless looms (number)	4,270	4,270	4,670	4,670	(¹)
Shuttle looms (number)	370	370	370	370	(¹)
Purchases of large circular knitting machines (number) ...	(¹)	148	134	279	247
Average total labor cost per operator hour	(¹)	(¹)	(¹)	\$6.10	² \$6.15
Foreign trade:					
Exports:					
Textiles (million dollars)	1,633.7	1,389.1	1,221.7	1,175.4	1,049.8
Apparel (million dollars)	9,323.9	9,663.8	9,569.3	9,932.2	9,261.1
Total (million dollars)	10,957.6	11,053.0	10,791.0	11,107.6	10,310.9
Imports:					
Textiles (million dollars)	16,191.6	13,474.7	12,548.8	13,697.1	12,152.5
Apparel (million dollars)	14,916.4	14,219.5	14,697.1	15,935.1	16,028.1
Total (million dollars)	31,108.0	27,694.2	27,245.8	29,632.2	28,180.6
Trade balance:					
Textiles (million dollars)	-14,557.9	-12,085.6	-11,327.0	-12,521.7	-11,102.7
Apparel (million dollars)	-5,592.5	-4,555.7	-5,127.8	-6,002.9	-6,767.0
Total (million dollars)	-20,150.4	-16,641.2	-16,454.9	-18,524.6	-17,869.7

¹ Not available.

² Represents 2002 data for textile production workers.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from data of the World Bank (manufacturing value added), available on its website at <http://publication.worldbank.org>; Hong Kong Economic and Trade Office, Washington, DC (establishment and employment data); International Textile Manufacturers Federation, *International Textile Machinery Shipment Statistics* (Zurich), vol. 25/2002, and selected back issues; and Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002," Reston, VA. Trade data are United Nations data as reported by Hong Kong.

Table E-6
Hong Kong: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	158	183	195	206	176
European Union	31	28	27	29	30
Canada	18	19	14	14	12
Subtotal	206	230	236	249	217
All other:					
China	869	692	545	507	469
Philippines	69	44	59	55	40
Bangladesh	51	44	41	42	39
Other	438	379	340	323	285
Subtotal	1,427	1,160	985	927	833
Grand total	1,634	1,389	1,222	1,175	1,050
Apparel (SITC 84):					
Quota markets:					
United States	4,204	4,549	4,316	4,523	4,308
European Union	2,665	2,485	2,491	2,539	2,106
Canada	335	333	299	310	305
Subtotal	7,204	7,367	7,105	7,372	6,718
All other	2,120	2,297	2,464	2,560	2,543
Grand total	9,324	9,664	9,569	9,932	9,261
Textiles and apparel:					
Quota markets:					
United States	4,362	4,732	4,511	4,729	4,483
European Union	2,696	2,513	2,518	2,567	2,135
Canada	353	352	313	324	317
Subtotal	7,410	7,597	7,342	7,621	6,936
All other	3,547	3,456	3,449	3,487	3,375
Grand total	10,958	11,053	10,791	11,108	10,311
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	13	17	19	21	21
Apparel	77	76	74	74	73
Average	68	69	68	69	67

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table E-7
Textiles and apparel: U.S. general imports from Hong Kong, by specified product categories,¹ 1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
<i>1,000 square meters equivalent</i>							
0	Textiles and apparel, total	863,355	1,020,897	1,017,557	1,123,250	1,092,272	961,680
1	Apparel	736,450	862,469	840,948	916,306	916,931	821,261
2	Textiles	126,905	158,429	176,609	206,945	175,341	140,420
12	Fabrics	114,158	142,893	157,805	168,021	138,367	97,272
14	Other miscellaneous articles	10,478	13,278	16,569	37,014	36,038	42,970
30	Cotton textiles and apparel	506,514	596,495	608,069	601,799	590,789	545,846
40	Wool textiles and apparel	34,957	34,508	32,843	34,983	33,832	30,955
60	Manmade-fiber textiles and apparel	274,843	316,538	314,994	410,790	394,572	340,983
80	Silk blend/veg fiber textiles/apparel	47,041	73,355	61,651	75,678	73,080	43,896
200	Yarn for retail sale, sewing thread	2,268	2,249	2,228	1,906	927	(²)
222	Knit fabric	47,491	38,136	58,061	78,089	59,868	21,265
225	Blue denim fabric	26,342	26,346	21,434	29,247	36,209	33,960
239	Babies' apparel	27,918	35,353	34,033	59,745	68,130	20,018
331	Cotton gloves	8,668	10,148	9,499	12,044	11,883	6,585
334	Other cotton coats, men/boys	5,712	7,925	7,677	9,643	6,362	7,415
335	Cotton coats, women/girls	8,205	10,664	8,997	11,812	11,592	11,953
336	Cotton dresses	5,852	8,638	9,257	9,110	6,019	9,977
338	Cotton knit shirts, men/boys	7,061	5,840	6,296	6,475	4,768	4,788
339	Cotton knit shirts, women/girls	23,853	25,730	25,230	24,020	23,587	30,008
340	Cotton not knit shirts, men/boys	50,977	60,773	51,708	53,840	54,186	52,648
341	Cotton not knit blouses	26,403	31,655	34,879	27,420	23,551	32,382
342	Cotton skirts	4,559	6,645	8,811	7,459	9,087	10,179
345	Cotton sweaters	12,567	13,710	13,716	16,222	14,328	14,944
347	Cotton trousers, men/boys	37,220	37,405	33,463	33,554	31,187	30,795
348	Cotton trousers, women/girls	64,256	62,491	64,810	60,989	65,701	84,306
350	Cotton robes	2,680	6,191	5,947	5,256	6,084	3,198
351	Cotton nightwear	42,751	55,995	52,794	43,675	50,496	52,033
352	Cotton underwear	60,031	64,708	71,387	55,134	54,096	66,462
359	Other cotton apparel	31,071	30,509	35,688	31,824	31,476	14,227
438	Wool knit shirts	9,952	10,159	9,444	10,442	10,000	9,042
445	Wool sweaters, men/boys	4,680	3,995	2,732	2,953	3,407	3,421
446	Wool sweaters, women/girls	12,275	12,212	14,311	13,612	12,079	13,055
634	Other manmade coats, men/boys	16,201	17,777	11,902	14,181	14,185	13,225
635	Manmade-fiber coats, women/girls	22,020	23,732	22,789	24,660	32,726	24,380
636	Manmade-fiber dresses	5,624	7,185	6,796	13,721	10,311	9,218
638	Manmade knit shirts, men/boys	8,013	8,411	4,311	5,408	5,287	3,521
639	Manmade knit shirts, women/girls	45,219	58,689	54,364	50,002	61,281	58,252
640	Manmade not knit shirts, men/boys	5,997	4,786	8,851	10,006	7,414	3,808
641	Manmade-fiber not knit blouses	4,554	7,394	5,838	7,564	8,439	7,694
642	Manmade-fiber skirts	2,254	3,107	4,075	3,663	3,251	3,901

See footnotes at end of table.

Table E-7—Continued
Textiles and apparel: U.S. general imports from Hong Kong, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
645	Manmade-fiber sweaters, men/boys . . .	1,752	2,111	1,932	4,923	5,172	5,018
646	Manmade-fiber sweaters, women/girls .	39,414	34,333	30,732	31,828	39,257	32,420
647	Manmade-fiber trousers, men/boys . . .	6,720	8,510	8,113	8,764	6,561	7,543
648	Manmade-fiber trousers, women/girls . .	10,392	17,422	15,290	18,205	15,661	15,850
651	Manmade-fiber nightwear	4,775	8,081	8,951	15,088	15,746	15,084
652	Manmade-fiber underwear	31,852	38,774	43,471	62,729	74,981	72,098
845	Sweaters, other vegetable fibers	28,835	35,573	18,017	30,315	33,772	29,570

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Overview

Korea has a relatively large, vertically integrated, textile and apparel sector, which has played a significant role in the country's economic development.² However, because of the sector's inherent labor intensity, and due to shortages of skilled labor, labor-management disputes, rapid wage increases, and other issues, the domestic importance of the sector has been in decline since the late 1980s.³ The textile sector is highly export oriented and significantly weighted toward manmade fibers because of government promotion of the chemical sector in the 1970s,⁴ but it has increasingly invested in China in recent years. The apparel sector is relatively small domestically, and firm strategy has been to move production offshore. Because of strong government support, a skilled technical home base, and active outward investment, the economic outlook is positive, and the textile industry is viewed as a relatively strong competitor in the post quota global market.⁵

Korea's textile and apparel sector is large and vertically integrated. The sector's share of overall manufacturing in Korea shrank from 15.5 percent in 1985 to 10.0 percent in 1995, and to 7.0 percent in 2000.⁶ The sector accounted for 18.5 percent of the total number of manufacturing establishments and 14.8 percent of total employment, or more than 390,000 jobs, in 2000.⁷

Korea and other East Asian nations suffered a major setback during the Asian financial crisis of 1997-98 as its gross domestic product declined from a pre-crisis level of \$520 billion in 1996 to \$318 billion in 1998.⁸ The Korean currency underwent a major devaluation and Korea instituted a restructuring program that significantly affected its manufacturing sector, including textiles and apparel. Growth rates in the textile and apparel sector increased in

¹ Prepared by Robert Hughes, Office of Industries.

² Korea's GDP grew from 3 trillion won in 1970 to 517 trillion won in 2000. Byungki Ha, "International Direct Investment and Industrial Restructuring," Korean Institute for Industrial Economics and Trade (KIET), Issue Paper 2001-102 (in Korean), 2001, summarized in vol. 1, No. 1, p. 25, Jan.-Feb. 2002.

³ The industry's shares of total manufacturing employment and exports declined from 25.8 percent and 23.1 percent in 1985 to 14.8 percent and 10.7 percent in 2000. Park Hoon, "Inter-industry Analysis of the Textile Industry," KIET Industrial Economic Review, May/June 2002, p. 23.

⁴ U.S. International Trade Commission (USITC), U.S.-Korea FTA: *The Economic Impact of Establishing a Free Trade Agreement (FTA) Between the United States and the Republic of Korea*, USITC Pub. 3452, Sept. 2001, p. 3-25.

⁵ The Textile Committee, American Chamber of Commerce, Hong Kong, "Transition: The Integration of Apparel and Textile Quotas," Draft, Feb. 2003, p. 20.

⁶ Korea Institute for Industrial Economics and Trade (KIET), "Inter-industry Analysis of the Textile Industry," Park Hoon, May 25, 2002.

⁷ Embassy of the Republic of Korea, written submission to the Commission, Jan. 2003, pp. 1-2.

⁸ International Textile Manufacturers Federation, *Country Statements 2001* (Zurich, Switzerland), Aug. 2001, p. 21.

1999, 2000, and early 2001, but have now slowed substantially because of Korea's dependence on export markets in Japan and the United States, which have also experienced slower economic growth, and because of weakening domestic demand.

By 2000, Korean exports of textiles and apparel of \$17.7 billion had recovered to slightly more than pre-crisis highs of \$17.5 billion in 1997 (table E-8). Imports of \$4.7 billion in 2000 had not yet regained the level of \$5.0 billion in 1997. As economic growth slowed in 2001, the value of exports fell significantly to \$15.3 billion, while imports remained fairly stable. The trade surplus for textiles and apparel, which had fluctuated between \$12.5 billion and \$13.2 billion during 1997-2000, declined to \$10.5 billion in 2001.

Industry Profile

Production of all textile and apparel products declined significantly in 2001, and this decrease continued into 2002 in all sectors except cotton spinning.⁹ The main reasons for this decline were the continued slowdown in Korea's principal export markets, the United States and Japan; competition from China; and the shift in production to overseas factories. Overall, Korea's textile and apparel exports declined by 14.5 percent in 2001 and by 9.5 percent in the first half of 2002.

Industry structure and performance

Fibers

Korea does not produce natural fibers in quantity and imports virtually all of its requirements of cotton and wool. Since the 1970s, it has targeted manmade fibers as an integral part of its development plan and produces more than its own needs, exporting significant quantities while importing limited quantities of specialized manmade fibers.¹⁰ Total production of manmade fibers has grown steadily, even during the crisis of 1997-98. Total production increased by 10 percent from 2.4 million metric tons in 1997 to 2.6 million metric tons in 2000 (table E-8). Although it produces a wide range of manmade fibers, including acetate, acrylic, and nylon, it has emphasized polyester fiber, especially polyester filament, production of which has grown by 15 percent during the same period from 1.3 million to 1.5 million metric tons (table E-8). Production of polyester staple fiber was 0.7 million metric tons in 2000, down slightly from the previous year. The capacity of facilities to produce manmade fibers has increased steadily over this period, except for nylon, and were capable of producing 8,349 metric tons per day in 2000.¹¹

Textiles

⁹ "World Textile and Apparel Trade and Production Trends," *Textile Outlook International* (United Kingdom: Textile Intelligence Limited), Sept.-Oct. 2002, p. 60.

¹⁰ USITC, *U.S.-Korea FTA*, p. 3-25.

¹¹ Korean Federation of Textile Industries (KOFOTI), found at <http://www.kofoti.org.industrystatistics>.

Korea's textile industry is highly integrated, including spinning, weaving, and nonwoven and industrial textile operations. Domestic manmade fibers are an important input to textile production. The apparel industry is also substantial and depends heavily on input from the domestic textile sector.

The total number of textile firms fluctuated during the crisis of 1997-98, but increased slightly from 16,092 in 1997 to 16,216 in 1999 (table E-8). Total employment also fluctuated, but was down from 422,200 workers in 1997 to 407,200 workers in 1999. Wages and salaries also fell in 1998, and did not quite recover in 1999 to previous levels. Total production, measured in producer prices increased steadily from 40 trillion won in 1997 to over 46 trillion won in 1999, while an index of industrial production followed the more typical pattern of falling in 1998, but not quite recovering in 1999 to the level of 1997.¹²

Consumption of fibers by the Korean textile industry indicates the relative importance of manmade and natural fibers. Total mill consumption of fibers increased by 16 percent from 1.6 million metric tons in 1997 to 1.8 million metric tons in 2000 before falling to 1.7 million metric tons in 2001 (table E-8). Manmade fibers' share was 77 percent of total mill fiber consumption in 2001.

Korea has a significant spinning industry. Production of polyester spun yarn increased by 9 percent during 1997 to 2000, reaching 731 metric tons.¹³ Production of acrylic spun yarn was much smaller and decreased by 14 percent during 1997-2000, to 119 million metric tons. Cotton yarn production fluctuated, but fell from 247,000 metric tons in 1997 to 239,000 metric tons in 2000. Worsted woolen yarn output of over 31,000 metric tons in 1997 had declined to a little over 24,000 metric tons in 2000. Woolen yarn production, which had been over 15,000 metric tons in 1997, fell to 11,000 metric tons in 2000. The spinning industry has been upgrading its technology as the number of ring spindles was reduced by almost 40,000 from the beginning of 2000 to 2,023,592 ring spindles in July 2001, while the number of open-end rotors has increased by 2,000 to 17,424.¹⁴

Korea's woven fabric industry is an important segment of the textile industry. Total production of woven fabrics declined during 1997-2000 as competition increased and foreign markets declined. Production fell by 15 percent from 9,966 million square meters in 1997 to 8,475 million square meters in 2000.¹⁵ Synthetic filament fabric dominated fabric

¹² Ibid.

¹³ Discussion on yarn production based on data from KOFOTI.

¹⁴ Members of the Spinners' & Weavers' Association report that their ring-spinning equipment has fallen by one million spindles from 3 million in 1995. "Korea Second-half Gloom," *Textile Asia*, Oct. 2001, p. 60.

¹⁵ Discussion in the following paragraphs on the different segments of the textile industry is based on data from KOFOTI.

production with over 70 percent of total output in 1997, but its share decreased to 65 percent by 2000.

Knitting is another important textile activity. Although knitting production data are not available, total employment in knitting production declined steadily by 17 percent from 33,204 workers in 1997 to 27,654 in 2000. However, the number of facilities increased slightly from 32,367 in 1997 to 33,613 in 2000.

Dyeing and finishing activities are likewise substantial, but also in decline. Yarn dyeing decreased by almost 20 percent from 133,015 metric tons in 1997 to 107,081 metric tons in 2000, while fabric printing fell by 14 percent to 493 million square yards. Fabric dyeing fluctuated, but was up slightly to 5.4 billion square yards in 2000.

Nonwoven fabric production is an area of growth for Korea, as it has been for the U.S. industry. This sector represents one of the key opportunities to build on Korea's strengths in textile production and technology.¹⁶ This sector has been targeted for development by the government in its plan to double textile exports by 2010. Production data are available only for 1997 and 1998, but production increased substantially for nonwoven products of both staple and filament fiber, even during the crisis of 1997-98 when most other textile and apparel activities were in significant decline. Staple fiber nonwoven production increased by 24 percent to 179 million square yards in 1998, while filament nonwoven production increased 25 percent to 232 million square yards in 1998.

Apparel

Apparel production has been an important contributor to Korea's development, but the structure of the industry has changed in recent years, given competitive pressure from China, rising wage rates, and problems of labor availability.¹⁷ Consequently, Korean firms have invested abroad by moving production of labor intensive items to countries offering advantages of abundant labor at lower costs. The total number of apparel firms fluctuated during the crisis, but decreased from 8,109 in 1997 to 7,403 in 1999 (table E-8). Total employment also fluctuated, but was down from 151,500 workers in 1997 to 132,300 workers in 1999. Wages and salaries also declined, and did not recover in 1999 to levels of 1997. Apparel production, measured in producer prices, fell from 9,963 billion won in 1997 to 6,928 billion won in 1998, and then recovered somewhat to 7,595 billion won in 1999.¹⁸ The index of industrial production followed the same pattern.

Aggregate production data for apparel are not available, but output for certain products are reported. Knitwear production increased slightly in 1998 to 813 million pieces from the 1997 level, remained approximately the same level in 1999, but fell in 2000 to 811 million pieces (table E-8). Production of socks fluctuated, but remained approximately the same level of

¹⁶ Government plans to promote growth in this sector are discussed in the section on planning.

¹⁷ "World Textile and Apparel Trade and Production Trends," p. 60.

¹⁸ Data in this paragraph compiled from data from KOFOTI.

slightly more than 1 million pairs in 1997-2000. Glove production was relatively steady at slightly less than one-half million pairs.

Factors of production

Raw materials

Korea does not have extensive production of natural fibers, almost all of which it must import, but it is strong in the production of manmade fibers. Mill consumption of natural fibers increased steadily from 342,000 metric tons in 1997 to 396,000 metric tons in 2000, and then fell to 380,000 metric tons in 2001 (table E-8). Cotton spinning's consumption increased slightly in early 2002 because of increased orders, but the woolen sector was challenged by low priced goods from China and Southeast Asia.¹⁹

Consumption of manmade fibers dipped slightly in 1998, but rebounded strongly and consumption levels of 615,383 metric tons in 2000 were almost 50 percent higher than those of 1997.²⁰ By 2001 the production of synthetic fiber was being reduced in an organized manner because of excess world production and inventories.²¹

Labor

Korea's textile and apparel sector has a shortage of skilled labor. Wage rates have been rising, which has driven up total labor costs. Employment has declined in virtually all sectors as the industry restructures by closing companies and pursuing mergers.²² These developments have resulted in labor problems, including strikes that have adversely affected production.²³ Korean companies also have had problems at their foreign operations, but companies have introduced labor reforms, especially in Latin America.²⁴

The average hourly labor costs in the Korean spinning and weaving segment of \$5.73 per hour in 2002 were less than those in Japan (\$22.76), Taiwan (\$7.15), and Hong Kong (\$6.15), but more than those in Thailand (\$1.24), China (\$0.69), India (\$0.57), Pakistan

¹⁹ Based on data from KOFOTI, "Industry by Sector," p. 1, retrieved Dec. 12, 2002.

²⁰ Trends based on data from KOFOTI differ from the mill fiber consumption data for manmade fibers in table E-8 because data taken from two different sources.

²¹ Korea's synthetic textile industry will reportedly reduce its output by 30 percent. The cutback will be accomplished by a 10-percent reduction of output by each member of the Korean Synthetic Textile Association, the retirement of machinery over 20 years old, the relocation of machinery to China, and the shutdown of Daeha Synthetic Textile. "Korea, Synthetic Surplus," *Textile Asia*, July 2001, p. 91.

²² Discussed in section on domestic policy.

²³ Details on work stoppages at several plants are discussed. *Textile Asia*, July 2001, p. 92.

²⁴ Jozef De Coster, "Korea Goes Latin," *Textile Asia*, June 1999, p. 8.

(\$0.34), and Indonesia (\$0.50).²⁵ Thus, significant incentives exist to move labor intensive activities to other countries. Also, rapid development in high tech sectors means that traditional sectors like textiles and apparel find it more difficult to attract skilled workers.²⁶

The average usage of labor per unit of output (labor coefficient) has decreased over time as textile and apparel manufacturers have shifted from more labor-intensive to more capital-intensive activities. The textile and apparel industry labor coefficient fell from 39 persons per billion won in 1990, to 11 persons per billion in 1998.²⁷ Apparel's labor coefficient was 13.5 persons in 1998, while the coefficient for manmade- fiber production was 2.7 persons. The coefficient for yarn production fell sharply from 25.5 persons in 1995 to 10.9 in 1998 as significant restructuring led to a large manpower reduction.²⁸

Technology

Recent investment in the spinning sector has led to the wholesale renewal of much of the equipment. While major investment has been undertaken, much of the remaining equipment in the sector is approaching obsolescence.²⁹ In the major Daegu weaving district, 4,000-5,000 water-jet looms were scrapped or transferred overseas in 2000, while only 350 new water-jet looms were added. Of the 32,000 installed looms, less than 30 percent was less than 6 years old, while 43 percent was more than 10 years old. Weavers are exiting the industry; 690 weavers reportedly have stopped production or closed in the past 2 years.³⁰

Sixty Korean textile and apparel firms have formed a B2B e-commerce site.³¹ Such sites are designed to facilitate communications between firms, especially in sourcing. The Korean Government has announced plans to link the electronics, automotive, steel, textile, and distribution sectors through a comprehensive e-network.

Investment

The significant increase in foreign investment by the Korean textile industry in recent years is a response to many factors, including increasing wage rates and labor shortages in Korea, the increasing competitiveness of China, and the eventual phaseout of the quota system.³² Foreign investment by Korean firms has been substantial as the Korean textile and apparel

²⁵ Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002," Reston, VA.

²⁶ Industry representatives, interviews by USITC staff, Seoul, Mar. 6-7, 2003.

²⁷ This was still approximately twice that of manufacturing overall. Coefficients are from Park Hoon, KIET Magazine, June 2002, p. 34.

²⁸ This was still approximately twice that of manufacturing overall. Ibid., p. 34.

²⁹ "Korea: More Looms Scrapped in Daegu," *Asian Textile Business*, Nov. 2002, p. 36.

³⁰ Ibid.

³¹ *Pacific Trade Winds*, Santa Barbara, CA, Aug. 2000, p. 3.

³² Trade Compliance Center, World Trade Organization (WTO), "Trade Policy Review Summary," Sept. 2000, p. 1.

sector has been moving factories abroad to cut costs.³³ The industry had invested a cumulative \$2.3 billion overseas through August 2002, compared with a cumulative \$2.1 billion 15 years ago. Yearly average overseas investment was \$1.1 billion during the period 1981-86, \$205 million annually during 1992-97, and a record \$279 million in 2001.³⁴

China topped the list of destination countries with 1,274 projects and total investment of \$660 million, followed by the Philippines, Indonesia, Bangladesh, and Vietnam.³⁵ Korean firms are reported to be the largest investors in Bangladesh.³⁶ Another major destination of Korean textile and apparel investment is Latin America, especially Guatemala (130 of a total of 244 companies producing apparel in Guatemala). According to a trade source, in 1999, Korean firms represented 53 percent of apparel enterprises in Guatemala, but only 17 percent of those in Honduras and 5 percent in El Salvador.³⁷ An indication of the importance of this investment is that Guatemala was second only to China as a destination of Korea's exports of knitted fabrics, and ahead of the United States, Hong Kong, and Vietnam.³⁸

A major investment project that has been under consideration for some time is an industrial complex in Kaesong, North Korea. A total of 171 textile and apparel companies have expressed an interest in the industrial park.³⁹ Apparel manufacturers were the most numerous with 59 companies; weaving companies were next with 39. Total planned investment was \$395 million for 2.3 million square meters of land for their operations. Companies planned to hire 38,000 workers and pay a monthly salary of \$85. On the other hand, the project may not be as attractive as initially believed. Recent reports from the Korea Development Institute are that North Korea is demanding higher wages and land prices than originally believed.⁴⁰ North Korea has demanded about 300,000 won for each 3.3 square meter of land, while prices in Tianjin and Shenyang, China, were less than 100,000 won. Similarly, the requested \$80-100 per month in wages is more than the \$50-60 per month in Vietnam, or the \$50-100 in China.

³³ Industry representatives, interviews by USITC staff, Seoul, Mar. 6-7, 2003. Park Hoon, reported in "Korea: Offshore Production Hitting Textile Industry, Says KIET," *bharattextile.com*, Dec. 4, 2002, retrieved May 5, 2002.

³⁴ Hoon, p. 7.

³⁵ In a survey conducted by the Federation of Small and Medium Businesses, more than half of the responding Korean firms indicated they planned to invest in China within the next five years. See "China: Partner, Rival or Both?," *New York Times*, Mar. 2, 2003.

³⁶ "Korea's Textile and Apparel Industry," *Pacific Trade Winds*, Santa Barbara, CA, June 2001, p. 1.

³⁷ Jozef De Coster, p. 7.

³⁸ Based on Nov. 2002 data, "Knitted Fabrics: Korea Confirms Its Supremacy," found at *emergingtextiles.com*, retrieved Jan. 27, 2003.

³⁹ "Korea: Major Textile Cos to Move to Kaesong Industrial Complex," found at *bharattextile.com*, Dec. 13, 2002, retrieved Dec. 25, 2002.

⁴⁰ "Kaesong Complex Not Attractive: KAI" (news clipping), found at *www.gobuyer.com*, retrieved Dec. 4, 2002.

Government Policies

The Government of the Republic of Korea instituted a number of general reforms during 1997-2002.⁴¹ Many of these reforms were linked to its commitments under the Uruguay Round; others are the result of conditions stemming from the Asian financial crisis of 1997-98, and conditions imposed by international institutions. These included opening its financial and equity markets to foreign investment and the restructuring of the financial and corporate sectors through market-based reforms to increase transparency, accountability, and efficiency.⁴² More recently, the Government has proposed changes directed specifically at the textile and apparel sector.⁴³

Domestic policies

As a condition of the \$58 billion International Monetary Fund (IMF) assistance package in 1998, Korea agreed to open its financial and equity markets to foreign investment and to reform its financial and corporate sectors to increase transparency, accountability, and efficiency.⁴⁴ The Government injected approximately \$120 billion in public funds to recapitalize the financial sector. Regulators instituted international accounting standards and banks were encouraged to put ailing borrowers under continuous credit-risk assessment. As of April 2001, 1,544 companies were under assessment.⁴⁵

In general, there was a movement from the past, state-led economic program to a more market-oriented plan.⁴⁶ Other reforms included removing almost half of the top 30 business groups or “chaebols” from the market, and establishing goals of debt/equity ratios of below 200 percent. There were numerous business problems, including the Daewoo Group bankruptcy in 1999 and the Hyundai Engineering and Construction liquidity crisis. After an initially expansionary fiscal policy to counter the adverse effects of the crisis, public expenditures are being restrained and taxes increased.

A principal feature of these changes was the devaluation of the Korean won from 965 won per U.S. dollar in October 1997 to a low of 1665 won per dollar in December 1997 as Korea shifted from a managed to a free floating exchange rate system with a program of exchange rate stabilization.⁴⁷ In May 2001, the won traded in the range of 1300 won to the dollar, and is currently in the 1200-1210 range.⁴⁸ Following the devaluation of 1998, Korean exports responded strongly in 1998-2000, but were down significantly in 2001. In its submission, the Embassy of Korea pointed out that, while Asian textile shipments to the U.S. market

⁴¹ Trade Compliance Center, WTO, Sept. 2000, p. 1.

⁴² U.S. and Foreign Commercial Service, p. 1.

⁴³ Korean Ministry of Commerce, Industry, and Energy (MOCIE), *Vision for the Year 2010*.

⁴⁴ “Economic Trends and Outlook,” *Korea Country Commercial Guide FY 2002*, p. 1.

⁴⁵ *Ibid.*, p. 2.

⁴⁶ Information in the paragraph is mainly from the Trade Compliance Center, WTO, p. 5.

⁴⁷ *Ibid.*, pp. 5 and 14.

⁴⁸ “Federal Reserve Statistical Release: Foreign Exchange Rates,” Jan. 6, 2003.

rose by more than 80 percent in the 4 years following the devaluation, Korea's share of the U.S. apparel market declined from 9.7 percent in 1990 to 3.8 percent in 2000.⁴⁹

On March 20, 2001, the Korean Minister of Commerce, Industry and Energy (MOCIE) stated that the ministry is developing mid- and long-term plans for restructuring the textile industry. The new plans will reportedly focus on the development of industrial textiles,⁵⁰ the structuring of specialized industries by location, and the revitalization of the fashion industry and e-commerce.⁵¹ The Government reportedly will spend 2 trillion won on the development of industrial textile materials until 2011.⁵² The plan calls for an increase of more than 1,000 new firms by 2010 to produce industrial textiles as the goal is to bring the production of apparel and industrial materials into balance. The minister stated that the ministry will offer assistance in information technology, employee training and research and development "to help enhance the competitiveness of the country's textile industry in preparation for textile trade liberalization in 2005."⁵³

The MOCIE plan for 2010 calls for Korean textile and apparel industry exports to the United States to increase from \$16 billion in 2001 to \$30 billion in 2010, with an increase in the trade surplus from \$11 billion in 2001 to \$20 billion in 2010. It also calls for the share of fashion apparel exports to increase from 5 percent in 2001 to 30 percent in 2010, while the share of industrial textile production is to increase from 22 percent in 2001 to 50 percent in 2010.

According to the plan, the increase in production of industrial textiles is to be through development of high-tech fibers and cooperation with foreign research institutes. Infrastructure would be enhanced by building a textile research center to facilitate domestic application of new technology and to train experts in industrial textiles. According to the MOCIE plan, competitiveness would be improved by organizing international industrial textile exhibitions. The dyeing and processing industry would also be upgraded by developing advanced processing technology for dye processing. Textile dyeing factories would be digitalized with on-line transaction systems and automated equipment. Labor would be trained to operate the new systems. Skilled mechanics would be trained at the rate of 350 persons per year, and the allocation of foreign trainees would be increased from 1,885 in 2001 to 3,500 each year.

A major element of the MOCIE vision is to upgrade Korea's fashion industry by constructing a multipurpose building for different fashion events, including making the Seoul Collection a world-class event. The Seoul Fashion-Brand Expo would be held regularly, and over 300 persons per year would be trained in fashion design. Digital design and color transaction would be promoted through the Internet. Establishing a textile and fashion department in the University would provide incentives through scholarships and

⁴⁹ Embassy of the Republic of Korea, p. 4.

⁵⁰ Korean industrial textile materials represent 22 percent of total textile output. The Korean Minister also urged the cotton spinning and synthetic fiber industries to make "self-rescue" efforts.

⁵¹ "Korea: Reform to Come," *Textile Asia*, Apr. 2001, p. 68.

⁵² Ibid.

⁵³ Ibid.

internships with factory training. Shortage of labor would be addressed by improved allocation of foreign trainees to include 25,000 laborers per year.

Another major MOCIE goal is the restructuring of the manmade-fiber and cotton spinning industry. The number of companies and capacity to produce polyester filament yarn would be reduced from 13 companies to 9, and specialized production would be promoted. Obsolete facilities in cotton spinning would be reduced from 1.25 million spindles to 890,000 spindles.

New E-Business applications would include quick response (QR) systems with standard product code, and the conversion of an off-line production and distribution system to an online system through the Internet. This would include a textile and fashion e-Portal and a web site for foreign buyers to find information on domestic enterprises and products. Export marketing would be enhanced by training 300 persons per year as overseas marketing specialists, expanding overseas exhibition events, and the construction of a data base of export market information.⁵⁴

MOCIE expects China to gain market share at the expense of Korea and Taiwan from the phaseout of quotas in 2005.⁵⁵ It sees China's growth as an opportunity to sell more Korean textile goods to China, but that the Korean apparel industry would have significant competitive problems. As the best strategy for the industry, MOCIE identifies the shift to high technology products, especially functional or industrial textiles.

Korean companies and associations expressed concern about the MOCIE plan, but they tended to agree that companies would not be competitive in commodity products and should pursue higher technology products, niche markets with high quality items targeted to customers' needs, and relocating production overseas.⁵⁶ Company officials varied in their views on how their firm should approach these objectives, but some agreed that location advantages to inputs were more important than proximity to customers. They viewed rapid response to customers needs with full package performance to be very important.

⁵⁴ "Korea: Reform to Come," *Textile Asia*, Apr. 2001, pp. 9-10.

⁵⁵ MOCIE officials, interview by USITC staff, Mar. 6, 2003.

⁵⁶ *Ibid.*

Trade policies

Korea's average applied MFN tariff in 2000 was 13.8 percent for all goods and 7.5 percent for industrial products. Import duties are an important source of revenue. However, the multiplicity of rates, and the divergence between applied rates and bound rates render the system highly complex, thereby imparting a degree of uncertainty, which could be considered trade restrictive.⁵⁷ The customs tariff is Korea's main trade policy instrument. The multiplicity of rates, including 96 ad valorem rates, 11 specific rates, and 18 alternative rates, make it a complex instrument. The gap between applied and bound rates allows for a considerable scope for the authorities to increase rates which they have done for some "sensitive items" including textiles and apparel. All voluntary restraints, except those for exports of textiles and apparel have been eliminated.

Korea and Chile signed a free-trade agreement on February 15, 2002.⁵⁸ This is Korea's first free-trade agreement and would remove tariffs on two-thirds of Korean products. Virtually all Chilean manufactured goods would become tariff free. The agreement will take effect 30 days after ratification by both countries' national assemblies. Yonhap, the semiofficial Korean news agency, indicated that Korea was looking for similar deals with Japan, Mexico, and Singapore, and is studying the possibility with other Southeast Asia nations.

Foreign Trade

Korea had a fluctuating trade surplus during 1997-2001, which declined overall by 16 percent to \$10.5 billion (table E-8).

In 1991, Korea's textile and apparel exports to the United States were \$15.5 billion for a 23-percent share of the U.S. market. Market shares in Japan and the European Union were 19 and 13.5 percent.⁵⁹ At that time, Korea was part of the "Big Three,"⁶⁰ textile and apparel suppliers to the U.S. market. By 2001, Korea's share of the U.S. market had fallen to 3.7 percent.⁶¹

Imports

Based on United Nations trade statistics, Korea's principal sources of natural and manmade fibers, which are not included in textiles, are Australia, the United States, and China, which supplied over 60 percent of these materials in 2000. Major sources of textiles are China, the EU, and Japan, which supplied 55 percent of textiles to Korea in 2000. Trade in apparel is

⁵⁷ Information in paragraph is mainly from the WTO, pp. 7 and 10.

⁵⁸ "Korea, in Deal with Chile, Signs Its First Free-Trade Pact," *New York Times*, Feb. 17, 2002.

⁵⁹ Textile Outlook International, *Textile Intelligence Limited*, Nov. 1992, p. 45.

⁶⁰ Also included Hong Kong and Taiwan.

⁶¹ Embassy of the Republic of Korea, p. 6.

even more concentrated with China and the EU supplying 85 percent of Korean imports of apparel in 2000.

Exports

Based on United Nations trade statistics, Korea's principal markets for fibers, almost exclusively manmade, are China, the EU, and the United States, which were the destination of over 60 percent of Korea's exports. Textile exports were more diverse as China, Hong Kong, the United States, the EU, and Indonesia accounted for half of these exports (table E-9). The United States (with almost half of the total), Japan, and the EU received 84 percent of Korea's exports of apparel in 2000.

Trends in Korean exports of manmade fibers were down by 25 percent from \$1.1 billion in 1997 to \$0.8 billion in 2001 (table E-8). Imports fell by slightly less, or 21 percent to \$0.9 billion in 2001. Trade in fibers is roughly in balance, alternating between deficit and surplus. However, the distribution between natural and manmade-fiber trade reflects Korea's dependence on imports of natural products, which were almost 80 percent of total fiber imports of \$650 million in 2002. Exports of manmade fibers were 97 percent of total exports of fibers of \$635 million.⁶² The trade balance of fibers was in deficit by \$0.1 billion in 2001.

Exports of textiles fell from \$13.3 billion in 1997 to \$10.9 billion in 2001, while imports of textiles also fell from \$3.6 billion in 1997 to \$3.1 billion in 2001 (table E-8). Accordingly, the trade surplus for textiles declined from \$9.8 billion in 1997 to \$7.9 billion in 2001.

Exports of apparel increased steadily from \$4.2 billion in 1997 to \$5.0 billion in 2000, before falling to \$4.4 billion in 2001 (table E-8). Imports of apparel fell significantly in 1998 by over 60 percent, but have steadily rebounded to \$1.6 billion in 2001, 17 percent more than the level of 1997. The trade surplus for apparel fluctuated but declined by 4 percent to \$2.7 billion in 2001.

U.S. imports from Korea

On the basis of official U.S. statistics, U.S. imports of textiles and apparel from Korea increased by 149 percent during 1997-2002 to 206 million square meters equivalent (SMEs) (table E-10). U.S. imports of textiles from Korea increased by 178 percent during the period to 1.4 billion SMEs, while apparel imports increased by 103 percent to 650 million SMEs.

U.S. imports of sector goods from Korea during 1997-2002 consisted mostly of manmade-fiber products, which accounted for 87 percent of the total quantity of sector imports from

⁶² Based on data from KOFOTI.

Korea in 2002. Major imports were of fabrics (category 12),⁶³ which increased from 328 million SMEs in 1997 to 960 million SMEs in 2002, or by 192 percent. U.S. imports of knit fabrics (category 222) accounted for a significant part of this increase, increasing from 56 million SMEs in 1997 to 408 million SMEs in 2002. Imports of special purpose fabric (category 229) also grew significantly from 45 million SMEs to 294 million SMEs. “Other miscellaneous articles” was a substantial category, but imports of these items fell from 153 million SMEs in 1997 to 116 million SMEs in 2001, before increasing by 125 percent in 2002, to 376 million SMEs.

U.S. and EU quotas and quota utilization rates

U.S. imports of textiles and apparel from Korea were subject to binding aggregate, or group, quotas in 2002 (binding quotas are considered those having a “fill rate” of 90 percent or more). In 2002, Korea filled 90.4 percent of its adjusted “group I” limit of 263 million SMEs, which covered non-apparel products such as yarns, fabrics, and home textiles. Korea had a fill rate of 98.3 percent for its adjusted “group II” limit of 570 million SMEs, which covered apparel articles.

The EU had 31 quotas on imports of textiles and apparel from Korea in 2002. The quotas covered a variety of textile and apparel products. Four of Korea’s quotas had fill rates of more than 90 percent in 2002. These quotas covered broadwoven synthetic staple fiber fabrics, other than bleached or unbleached; knit jerseys, pullovers, and similar articles; men’s and women’s woven pants and shorts; and woven synthetic filament fiber fabrics.

⁶³ As shown in table E-10, the 1-digit and 2-digit category numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., category 12 represents total imports of fabrics covered by the former Multifiber Arrangement--namely, fabrics of cotton, wool, manmade fibers, non-cotton vegetable fibers, and silk blends).

Table E-8
Korea: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Textile and apparel share of manufacturing value-added (percent)	9	8	8	(¹)	(¹)
Number of establishments:					
Textiles	16,092	14,481	16,216	(¹)	(¹)
Apparel	8,109	6,676	7,403	(¹)	(¹)
Total	24,201	21,157	23,619	(¹)	(¹)
Number of workers:					
Textiles (1,000)	422,200	375,500	407,200	(¹)	(¹)
Apparel (1,000)	151,500	121,400	132,300	(¹)	(¹)
Total (1,000)	573,700	496,900	539,500	(¹)	(¹)
Average labor cost per operator hour	(¹)	(¹)	(¹)	\$5.32	² \$5.73
Installed spinning capacity:					
Short-staple spindles (1,000)	1,997.0	1,957.0	1,938.0	1,803.0	1,757.1
Long-staple spindles (1,000)	676.0	676.0	676.0	676.0	676.0
Open-end rotors (1,000)	16.8	16.8	15.4	13.7	15.6
Installed weaving capacity:					
Shuttleless looms (number)	27,000	27,000	(¹)	2,200	1,800
Shuttle looms (number)	5,000	5,000	(¹)	(¹)	(¹)
Purchases of large circular knitting machines	(¹)	146	185	123	86
Production index (1997=100):					
Yarns	(¹)	(¹)	(¹)	99.7	97.2
Fabrics	(¹)	(¹)	(¹)	78.7	68.9
Mill fiber consumption:					
Manmade fibers (1,000 metric tons)	1,216.1	1,265.7	1,343.4	1,413.5	1,306.6
Cotton (1,000 metric tons)	310.5	323.0	361.0	362.0	347.9
Wool (1,000 metric tons)	31.7	35.4	32.9	33.9	31.6
Total (1,000 metric tons)	1,558.3	1,624.1	1,737.3	1,809.4	1,686.1
Production of selected products:					
Manmade fibers:					
Nylon filament (1,000 metric tons)	283	252	277	292	(¹)
Poly filament (1,000 metric tons)	1,290	1,332	1,406	1,484	(¹)
Poly staple (1,000 metric tons)	673	699	741	731	(¹)
Acrylic staple (1,000 metric tons)	138	134	140	119	(¹)
Other (1,000 metric tons)	22	20	21	23	(¹)
Total (1,000 metric tons)	2,406	2,437	2,585	2,649	(¹)
Knitwear (1,000 pieces)	799,882	812,765	812,977	810,795	(¹)
Socks (1,000 pairs)	1,044,046	1,034,968	1,039,718	1,042,921	(¹)
Gloves (1,000 pairs)	429,073	429,014	435,236	437,115	(¹)
Sweaters (1,000 pieces)	166,897	175,246	177,546	170,327	(¹)
Warp knits (1,000 yards)	1,734,201	1,725,230	1,779,979	1,803,773	(¹)

See footnotes at end of table.

Table E-8—Continued

Korea: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Foreign trade in textiles and apparel:					
Exports:					
Textiles (<i>million dollars</i>)	13,317.7	11,258.6	11,581.4	12,658.4	10,882.5
Apparel (<i>million dollars</i>)	4,204.1	4,670.8	4,902.4	5,071.5	4,356.1
Total (<i>million dollars</i>)	17,521.8	15,929.4	16,483.9	17,729.9	15,238.6
Imports:					
Textiles (<i>million dollars</i>)	3,567.3	2,222.4	3,007.8	3,366.6	3,076.7
Apparel (<i>million dollars</i>)	1,408.9	511.5	768.9	1,313.8	1,646.8
Total (<i>million dollars</i>)	4,976.2	2,733.9	3,776.6	4,680.4	4,723.6
Trade balance:					
Textiles (<i>million dollars</i>)	9,750.4	9,036.2	8,573.7	9,291.8	7,805.7
Apparel (<i>million dollars</i>)	2,795.2	4,159.3	4,133.5	3,757.7	2,709.3
Total (<i>million dollars</i>)	12,545.5	13,195.5	12,707.2	13,049.5	10,515.0
Foreign trade in manmade fibers:					
Exports (<i>million dollars</i>)	1,078	853	848	984	809
Imports (<i>million dollars</i>)	1,141	847	917	863	898
Trade balance (<i>million dollars</i>)	-63	6	-69	121	-89

¹ Not available.

² Represents 2002 data.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from data of the Korean Federation of Textile Industries (KOFOTI), found at <http://www.kofoti.org>; the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; Geerdes International, Inc., Richmond, VA, facsimile to Commission staff, Feb. 4, 2003; and Werner International Management Consultants, Reston, VA. Trade data are United Nations data as reported by Korea.

Table E-9

Korea: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	901	870	934	1,016	894
European Union	907	907	830	906	783
Canada	117	111	114	122	107
Subtotal	1,926	1,889	1,878	2,045	1,784
All other:					
China	2,030	1,581	1,764	2,112	1,966
Hong Kong	2,299	1,677	1,531	1,515	1,180
Indonesia	645	447	587	726	634
Other	6,418	5,664	5,822	6,261	5,318
Subtotal	11,392	9,370	9,704	10,614	9,098
Grand total	13,318	11,259	11,581	12,658	10,882
Apparel (SITC 84):					
Quota markets:					
United States	1,700	2,078	2,259	2,465	2,230
European Union	595	608	739	734	583
Canada	126	154	163	189	190
Subtotal	2,421	2,840	3,161	3,388	3,002
All other	1,783	1,831	1,741	1,683	1,354
Grand total	4,204	4,671	4,902	5,071	4,356
Textiles and apparel:					
Quota markets:					
United States	2,601	2,948	3,193	3,481	3,123
European Union	1,503	1,516	1,569	1,640	1,366
Canada	244	265	277	312	297
Subtotal	4,347	4,729	5,039	5,433	4,786
All other	13,174	11,201	11,445	12,297	10,453
Grand total	17,522	15,929	16,484	17,730	15,239
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	14	17	16	16	16
Apparel	58	61	64	67	69
Average	36	39	40	42	43

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table E-10
Textiles and apparel: U.S. general imports from Korea, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	817,648	1,044,700	1,222,089	1,311,775	1,383,482	2,032,165
1	Apparel	320,484	460,075	537,370	587,193	631,957	649,952
2	Textiles	497,163	584,626	684,719	724,582	751,525	1,382,213
11	Yarns	16,094	25,669	15,548	14,970	20,504	46,214
12	Fabrics	328,316	391,211	519,462	573,745	615,223	959,912
14	Other miscellaneous articles	152,754	167,746	149,710	135,867	115,798	376,087
30	Cotton textiles and apparel	132,227	176,877	192,986	211,823	219,055	245,265
31	Cotton apparel	75,960	108,858	130,437	142,805	151,100	166,639
32	Cotton textiles	56,267	68,020	62,549	69,017	67,955	78,626
40	Wool textiles and apparel	7,205	10,085	12,180	12,092	10,137	9,414
60	Manmade-fiber textiles and apparel	671,637	850,486	1,009,052	1,079,272	1,143,232	1,766,645
61	Manmade-fiber apparel	234,277	338,274	392,503	428,366	463,565	466,704
62	Manmade-fiber textiles	437,360	512,212	616,549	650,906	679,666	1,299,941
80	Silk blend/veg fiber textiles/apparel	6,579	7,252	7,872	8,588	11,059	10,842
222	Knit fabric	55,810	60,975	98,432	71,388	130,827	408,350
223	Nonwoven fabric	3,684	5,327	3,103	1,819	2,265	38,788
224	Pile and tufted fabric	48,382	44,755	44,229	47,573	44,756	31,117
229	Special purpose fabric	44,951	110,788	183,782	272,503	268,933	293,940
239	Babies' apparel	5,912	9,429	16,693	19,138	16,328	15,777
331	Cotton gloves	10,918	16,997	22,780	26,747	21,383	14,444
332	Cotton hosiery	9,947	15,492	24,269	32,463	40,525	64,121
340	Cotton not knit shirts, men/boys	13,879	15,941	14,154	13,357	13,130	14,639
619	Polyester filament fabric, lightweight	68,525	53,152	59,415	48,052	50,856	69,978
620	Other synthetic filament fabric	32,460	43,672	56,956	53,724	43,687	35,824
632	Manmade-fiber hosiery	2,194	3,399	5,316	7,383	10,884	13,964
634	Other manmade coats, men/boys	36,308	38,769	28,563	27,554	32,410	30,254
635	Manmade-fiber coats, women/girls	10,480	12,779	13,945	16,556	17,763	13,611
636	Manmade-fiber dresses	10,720	10,083	12,314	9,252	10,077	10,577
638	Manmade knit shirts, men/boys	12,077	21,754	21,137	23,095	25,434	34,263
639	Manmade knit shirts, women/girls	37,458	49,664	54,273	39,172	39,757	39,091
640	Manmade not knit shirts, men/boys	34,799	44,893	62,559	89,505	83,816	78,707
641	Manmade-fiber not knit blouses	8,779	8,792	9,187	12,980	9,400	6,551
645	Manmade-fiber sweaters, men/boys	5,721	14,745	14,524	21,210	39,759	42,006
646	Manmade-fiber sweaters, women/girls	15,709	35,497	30,590	41,302	68,609	84,291
647	Manmade-fiber trousers, men/boys	4,294	7,689	6,607	6,533	7,976	11,048
648	Manmade-fiber trousers, women/girls	6,189	12,571	12,287	13,277	12,079	8,439
659	Other manmade-fiber apparel	38,674	59,893	98,436	98,207	81,756	71,976
666	Other manmade-fiber furnishings	23,166	39,961	29,899	24,697	18,572	281,906
669	Other manmade-fiber manufactures	89,649	75,599	58,131	56,555	52,497	71,676
670	Manmade-fiber handbags/luggage	26,043	33,061	38,917	32,202	27,115	7,595

¹To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov/>.

Macau¹

Overview

Macau reverted to China on December 29, 1999, after several centuries of Portuguese dominion. It was established as a Special Administrative Region (SAR) under the same "one country, two systems" principle that governed the handover of Hong Kong by the British, so that Macau retained control over its economic and social affairs while China took all responsibility for foreign affairs and national security.

Information on Macau's textile and apparel sector is limited, but the sector is second only to gambling and associated tourism as a contributor to Macau's gross domestic product, representing about one-third of output and national income. The sector represents approximately 15 percent of Macau's workforce. Apparel production accounts for nearly all Macau's manufacturing output, and about 85 percent of Macau's merchandise exports. The United States and Europe are Macau's principal markets.

The key competitive determinants for Macau are its excellent transportation and communication infrastructure, Macau's proximity to China for production sharing, and its open, freely competitive business climate. Most observers believe Macau's apparel production would quickly shift to China, where labor costs are much lower, in the absence of quotas.

Industry Profile

Macau has no significant textile industry, having no fiber production, spinning, weaving, dyeing, or fabric-finishing industries. The country does have knitting operations, but these are typically integrated with garment production.² UNIDO reported 115 textile establishments in Macau in 1999, down from 140 establishments in 1997. These establishments employ about 45 persons on average.

Macau's apparel industry consists of cut-and-sew garment production based on imported fabrics. UNIDO reported 394 establishments in 1999, down from 408 establishments in 1997. These establishments employ less than 60 workers on average. Macau is a major exporter of apparel, particularly knitwear, to the United States and Europe. There reportedly have been problems with transshipment of garments manufactured across the border in China in Guangdong Province.

Macau's apparel industry relies on imports for its raw material requirements. Macau built a new container port and has road connections with China, so raw material flows are efficient.

¹ Prepared by Robert L. Randall, Office of Industries.

² Statistics referring to Macau's textile industry are assumed to include knitwear production.

According to data published by UNIDO, employment in Macau's textile and apparel sector rose from 29,000 in 1997 to 32,600 in 1999, representing about 15 percent of Macau's workforce (table E-11). UNIDO statistics show that annual wages and salaries in Macau in textile manufacturing were about \$6,700-\$6,800 per worker in the textile industry and about \$6,000-\$6,300 in the apparel industry. Macau has a "guest worker" program to balance labor needs; such workers can be repatriated in less than a year as their permits expire if their labor is no longer required.

Investment

Gross fixed investment in Macau's textile and apparel sector was reported by UNIDO to be about \$31 to \$32 million in 1998 and 1999, or about \$60,000 per firm. Foreign investors (none are known to exist or be contemplated in this industry) are entitled to nondiscriminatory national treatment on capital flows, repatriation of profits, and to exert full management control.

Government Policies

Under the Basic Law governing reversion of Macau to China, Macau is not subject to China's taxation or regulation. However, Macau is responsible for raising all revenue necessary to provide all its government services (except for national defense and foreign affairs, which China provides). Macau has low tax rates on profits and personal services, raising most of its revenue through gambling taxes.

The Macau pataca (worth about 8 PMo to \$US) is fixed to the Hong Kong dollar, which, in turn, is essentially fixed to the U.S. dollar through a currency board arrangement. No change in this policy is contemplated by either Macau or Hong Kong, despite criticism by some outside observers that this practice tends to cause high interest rates. This fixed currency policy is, however, a major advantage to outside investors and exporters because it reduces exchange rate risk associated with international trade and investment. Macau has a dozen commercial banks and has easy access to Hong Kong and Chinese banks for any necessary financing. Exchange controls are prohibited by Macau's Basic Law. However, exporters must convert at least 40 percent of all export proceeds into patacas.

Macau has no special policies or incentives expressly affecting or influencing the textile and apparel sector nor any plans for introducing any such special industrial policies. China regards investments from, or channeled through, Macau (along with Hong Kong and Taiwan) as "foreign investment" entitled to special favorable treatment. Macau businesses with operations in China are treated as "foreign investors," thereby benefiting from lower Chinese labor costs and Macau's shipping and communications facilities. Macau is a free port.

Foreign Trade

Macau's textile imports to have been in the \$800-900 million range during 1997-2001 (table E-11). Apparel imports have increased steadily from \$105.8 million in 1997 to \$243.4 million in 2001. There is no available breakdown of reported apparel imports between (1) finished garments for domestic Macau consumption, (2) finished garments for re-export to other countries, and (3) partially completed garments for finishing in Macau.

Macau's textile exports have declined from \$148 million in 1997 to \$20 million in 2001, while Macau's apparel exports have held fairly steady during the period, totaling almost \$1.7 billion in 2001 (table E-11). Table E-12 provides a further breakdown of Macau's exports by selected markets, divided between quota and nonquota markets. The United States is Macau's principal quota market, accounting for about two-thirds of Macau's total textile and apparel exports. As shown in table E-13, U.S. imports of textiles and apparel from Macau rose by 82 percent during 1997-2002 to 322 million square meters equivalent (SMEs). Sector imports from Macau consisted almost entirely of apparel products.

Table E-11
Macau: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Textiles	140	134	115	(¹)	(¹)
Apparel	408	441	394	(¹)	(¹)
Total	548	575	509	(¹)	(¹)
Number of workers:					
Textiles	5,980	5,878	6,200	(¹)	(¹)
Apparel	23,916	25,520	26,429	(¹)	(¹)
Total	29,896	31,398	32,629	(¹)	(¹)
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	148.1	38.0	53.4	45.6	20.4
Apparel (<i>million dollars</i>)	1,674.9	1,636.9	1,627.6	1,847.4	1,659.2
Total (<i>million dollars</i>)	1,823.0	1,674.8	1,681.0	1,893.0	1,679.6
Imports:					
Textiles (<i>million dollars</i>)	839.2	841.3	802.5	901.0	839.8
Apparel (<i>million dollars</i>)	105.8	125.6	169.2	213.7	243.4
Total (<i>million dollars</i>)	945.0	966.8	971.6	1,114.7	1,083.2
Trade balance:					
Textiles (<i>million dollars</i>)	-691.1	-803.3	-749.1	-855.5	-819.4
Apparel (<i>million dollars</i>)	1,569.1	1,511.3	1,458.4	1,633.7	1,415.8
Total (<i>million dollars</i>)	878.0	708.0	709.4	778.2	596.5

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from the United Nations Industrial Development Organization, *International Yearbook of Industrial Statistics 2002*. Trade data are United Nations data as reported by Macau.

Table E-12
Macau: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	(¹)	8	23	15	7
European Union	(¹)	(¹)	(¹)	(¹)	(¹)
Canada	(¹)	0	(¹)	(¹)	(¹)
Subtotal	1	8	23	15	7
All other:					
Japan	2	(¹)	2	4	5
China	67	5	8	11	4
Hong Kong	73	18	15	13	3
Other	5	7	5	3	1
Subtotal	147	30	31	31	13
Grand total	148	38	53	46	20
Apparel (SITC 84):					
Quota markets:					
United States	917	965	963	1,143	1,051
European Union	641	575	578	612	520
Canada	31	35	30	38	37
Subtotal	1,589	1,575	1,571	1,793	1,609
All other	86	62	56	55	50
Grand total	1,675	1,637	1,628	1,847	1,659
Textiles and apparel:					
Quota markets:					
United States	917	974	985	1,158	1,058
European Union	641	575	578	612	521
Canada	32	35	30	38	37
Subtotal	1,590	1,583	1,594	1,808	1,616
All other	233	91	87	85	64
Grand total	1,823	1,675	1,681	1,893	1,680
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	1	22	42	33	34
Apparel	95	96	97	97	97
Average	48	59	70	65	66

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table E-13

Textiles and apparel: U.S. general imports from Macau, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	176,477	226,012	277,674	306,031	293,245	321,800
1	Apparel	176,401	207,232	210,898	256,475	267,863	318,960
2	Textiles	75	18,780	66,776	49,556	25,382	2,840
30	Cotton textiles and apparel	87,949	107,195	110,842	123,631	125,884	133,149
60	Manmade-fiber textiles and apparel	85,331	112,498	160,998	177,266	162,896	181,810
239	Babies' apparel	13,965	15,683	10,532	12,875	12,229	5,640
334	Other cotton coats, men/boys	3,288	4,175	3,411	4,807	3,792	4,424
335	Cotton coats, women/girls	3,497	2,738	2,028	4,822	9,071	8,091
336	Cotton dresses	2,446	2,570	2,792	2,593	3,304	3,323
338	Cotton knit shirts, men/boys	2,312	2,370	2,648	3,057	2,586	3,689
339	Cotton knit shirts, women/girls	8,956	10,692	11,975	10,314	14,724	14,994
340	Cotton not knit shirts, men/boys	5,502	7,156	9,469	7,261	7,261	6,293
341	Cotton not knit blouses	2,380	2,882	3,412	2,624	2,325	4,422
342	Cotton skirts	1,102	1,196	1,894	1,558	2,069	2,920
345	Cotton sweaters	1,851	2,148	1,928	2,919	2,686	3,061
347	Cotton trousers, men/boys	3,488	4,026	4,808	5,937	4,992	5,437
348	Cotton trousers, women/girls	10,156	9,666	10,575	10,180	13,181	16,477
349	Cotton brassieres	1,970	1,162	1,573	1,859	338	473
350	Cotton robes	632	1,667	2,867	2,866	1,586	1,679
351	Cotton nightwear	3,877	3,947	4,309	4,122	4,796	6,326
352	Cotton underwear	11,791	18,614	19,094	30,490	29,134	41,632
359	Other cotton apparel	10,734	16,242	16,994	16,475	12,213	4,903
634	Other manmade coats, men/boys	14,237	14,419	8,584	11,175	10,358	13,204
635	Manmade-fiber coats, women/girls	9,292	6,535	6,604	6,315	8,218	13,179
636	Manmade-fiber dresses	7,743	4,681	4,252	10,137	9,694	7,792
638	Manmade knit shirts, men/boys	4,301	7,356	7,097	6,927	7,526	9,970
639	Manmade knit shirts, women/girls	17,222	19,743	23,540	19,021	17,742	31,484
640	Manmade not knit shirts, men/boys	628	538	1,108	1,976	1,660	1,587
641	Manmade-fiber not knit blouses	1,911	2,312	1,394	1,828	1,540	1,971
642	Manmade-fiber skirts	1,048	1,559	2,452	2,203	1,853	2,123
645	Manmade-fiber sweaters, men/boys	37	475	334	460	615	364
646	Manmade-fiber sweaters, women/girls	6,552	4,869	1,326	3,427	5,549	4,233
647	Manmade-fiber trousers, men/boys	2,056	5,731	7,295	6,448	6,771	7,273
648	Manmade-fiber trousers, women/girls	5,692	4,413	5,384	5,339	4,916	7,641
649	Manmade-fiber brassieres	940	1,865	2,915	4,423	5,924	1,311
650	Manmade-fiber robes	1,045	682	517	1,713	1,847	972
651	Manmade-fiber nightwear	775	1,963	2,590	5,669	6,084	17,864
652	Manmade-fiber underwear	1,731	5,242	4,858	8,059	27,092	41,330
659	Other manmade-fiber apparel	8,128	9,781	12,897	30,454	17,918	15,036

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov/>.

Overview

The Taiwan textile and apparel sector contributed \$13.9 billion, or 5 percent, of the economy's GDP in 2001. Of this, the textile industry accounted for \$11.3 billion, and apparel, \$2.6 billion. Sector exports in 2001 reached \$12.3 billion, or about 90 percent of production value. Sector imports in 2001 totaled \$2.0 billion. Employment in textiles and apparel was 218,345 persons in 2001 (table E-14, found at the end of this profile), about 10 percent of the economy's total workforce.

Taiwan's textile and apparel sector is highly export-oriented and Taiwan apparel makers have invested heavily in Chinese apparel production, motivated by rising wages in Taiwan that make the domestic apparel industry less competitive.³ Taiwan has also invested elsewhere in Asia and in Latin America and Africa. As Taiwan apparel producers relocate overseas, Taiwan exports of fibers and fabrics have increased (except where constrained by quotas).⁴ Therefore, the success of China and other low-cost fabric and apparel producers in a quota-free global market could provide strategic benefits to some segments of the Taiwan industry, which could offset competitive challenges to other segments.

Industry Profile

Taiwan's textile and apparel sector includes almost all links in the supply chain from man-made fibers to yarn, fabrics, and apparel/accessories. Only in the natural fiber area is a key link missing. In 2001, about 80 percent of Taiwan's fiber imports and more than 25 percent of yarn imports were natural, because of negligible domestic cotton and wool production. The sector benefits from excellent infrastructure throughout Taiwan, as well as a skilled workforce, access to technology and capital, and an advantageous geographic location as the "gateway to Asia."

Industry structure and performance

Taiwan's textile industry consists of several large, vertically integrated firms, including a handful of multinational enterprises, and a significant but shrinking number of small businesses.

¹ Prepared by Roger Corey, Office of Industries.

² Except where noted, all dollar values are in U.S. dollars, converted from NT\$ at the rate of exchange listed in Taiwan Textile Federation, "Statistics on Taiwan Textile and Apparel Industries 2001."

³ Taiwan Textile Federation representatives, interview by USITC staff, Taipei, Mar. 4, 2003.

⁴ U.S. Department of State telegram 1634, "Taiwan: Post-2004 textile Trade Impacts," prepared by the American Institute in Taiwan (AIT), May 13, 2002.

These latter firms generally focus on one stage of the supply chain, such as spinning yarn, while the larger firms are integrated fully from fiber production (or in some cases even to petrochemical production) forward into apparel production and distribution.

Small Taiwan textile firms are competitively disadvantaged. They are poorly positioned to negotiate low prices for raw materials from the highly concentrated domestic petrochemical industry. Fiber prices, for example, are set for spinners in the larger (even international) market place. Without the market power to make long-term contracts or obtain volume discounts, such firms are at the mercy of volatile international markets for textiles and petrochemicals. Small Taiwan textile firms are also hampered by their inability to fill orders of large volume or multiple products from domestic and foreign chain retailers and other distributors. Because the retail market is growing more concentrated, this competitive disadvantage also grows. As a result, the number of small firms is shrinking, a trend actively encouraged by government policy (see below) aimed at boosting textile industry scale and competitiveness. Large textile firms do not have these disadvantages. In addition, large firms have a further advantage because of their foreign interests, especially investments in low-cost apparel factories in low-wage countries, to which Taiwan's textile exports are increasingly being channeled.⁵

The yarn segment includes firms that spin cotton, wool, and manmade fibers and firms that produce textured manmade fibers. The spun fiber segment of the industry has reportedly suffered from competitive pressure on prices and from U.S. trade barriers on such items as sweaters from Taiwan, Korea, and Hong Kong.⁶ From 1999 to 2001, Taiwan production of spun fiber (polyester, nylon, and acrylic) fell by 16 percent, from 124,000 metric tons (MT) to 104,000 MT. At the same time, textured yarn output fell by only 3 percent, from 1,187,000 MT to 1,151,000 MT.⁷

The fabric segment of the textile industry includes weavers, knitters, and nonwoven fabric makers. Fabric producers using filament fibers rely on silk, manmade fibers, and textured yarn. Fabric weavers using spun yarns rely on cotton and manmade-fiber spun yarns. Fabrics woven with filament yarns are on the rise, while yarn woven of spun yarns are on the decline. Knitting establishments include numerous family enterprises.⁸ The nonwoven segment of the industry, which is relatively new in Taiwan, specializes in low-price products.⁹

Retail distribution channels in Taiwan, as in the United States, are mainly department stores and warehouse stores. However, Taiwan department stores, like their Japanese counterparts, commonly consist of concessionaires operating booths or stalls in a shared facility. Foreign

⁵ However, large firms also experience competitive pressure. Industrywide, the daily production capacity for polyester and nylon yarn, for example, fell by 21 percent between 1999 and 2001, after nearly tripling during the 1990s. "Taiwan Textile Industry," *Asian Textile Business*, Apr. 2002, pp. 41-46. For more discussion, see the "Investment" section below.

⁶ U.S. Department of State telegram 2434, "SPR 521: Textile Industry Outlook," prepared by AIT, Apr. 26, 1995.

⁷ Taiwan Textile Federation, "Statistics on Taiwan Textile and Apparel Industries 2001."

⁸ U.S. Department of State telegram 2434, "SPR 521: Textile Industry Outlook," prepared by AIT, Apr. 26, 1995.

⁹ Ibid.

textile firms have been advised to distribute their products through agents, although some U.S. retailers have begun establishing themselves in Taiwan.¹⁰

Taiwan's textile (including manmade fibers) and apparel output fell by 25 percent in value during 1997-2001, from \$18.5 billion (7.3 percent of GDP) in 1997 to \$13.9 billion (5.1 percent) in 2001 (table E-14). Within this sector, apparel output declined more rapidly than textiles, falling by 37 percent from \$3.2 billion in 1997 to \$2.0 billion in 2001. In comparison, textile output declined by only 23 percent, from \$15.3 billion in 1997 to \$11.9 billion in 2001. Sector exports (not including manmade fibers) declined during this period, by 33 percent from \$16.0 billion (about 15 percent of all exports) in 1997 to \$12.3 billion (about 10 percent) in 2001 (table E-14). Sector exports accounted for approximately 90 percent of sector output during this period. Imports declined by 28 percent from \$2.9 billion (about 3 percent of all imports) in 1997 to almost \$2.0 billion (about 2 percent) in 2001.

Factors of production

Raw materials

The limited supply of domestic cotton and wool in Taiwan has led to an emphasis on manmade fibers and products. Polyester is the dominant fiber type (more than 75 percent by volume of all fibers produced in 2001)¹¹ although nylon fiber is rising in importance due to strong foreign demand in major apparel markets. Taiwan produces both manmade filament fiber and staple fiber. Fiber and yarn imports, more than half of which are cotton- or wool-based, made up 40 percent of Taiwan's fiber and yarn consumption in 2001.

Labor

Taiwan's textile and apparel industries employed 218,400 persons (about 9 percent of Taiwan's workforce) in 2001, down by 17 percent from 262,100 (11 percent of the total workforce) in 1997 (table E-14).¹² Shortages of both skilled and unskilled labor create a major burden on the Taiwan textile and apparel industry. For example, a shortage of professional designers hampers the competitiveness of the home furnishings segment of the textile industry.¹³ This problem is exacerbated by government-imposed limits on workweek hours, which force employers to find additional labor or pay overtime.¹⁴ "Guest workers" from the Philippines, China, and elsewhere,

¹⁰ U.S. Department of Commerce, *Taiwan Country Commercial Guide FY2002*, found at www.usatrade.gov, retrieved Mar. 5, 2002.

¹¹ Taiwan Textile Federation, "Statistics on Taiwan Textile and Apparel Industries 2001."

¹² Some from the Taiwan Textile Federation, cited in "Hi-Tech Textiles Give Added Value to Taiwan," [just-style.com](http://www.just-style.com), Feb. 10, 2003, found at <http://www.just-style.com>, retrieved Feb. 13, 2003.

¹³ Includes fringe benefits. Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002," Reston, VA.

¹⁴ "Asia's Apparel Industry: Notable Trends in 2000," *Pacific Trade Winds*, Jan. 2001, p. 3.

who account for a significant amount of the industry's labor, help offset the chronic labor shortage.¹⁵ The skill level of such workers is often poor, and low productivity and high training costs mitigate the wage cost savings.¹⁶ The government has recently placed supply restrictions on the number of guest workers.

Labor costs in Taiwan textiles are lower than in the United States but higher than in other Asian economies. The average labor cost per hour of spinning and weaving in Taiwan in 2002 was \$7.15, compared with \$15.13 in the United States and \$0.57 in India.¹⁷

One reason for Taiwan's labor cost disadvantage compared with its Asian competitors is a result of generous fringe benefits. Labor costs to employers include a bonus of 1 month's pay at yearend; insurance for maternity leave and retirement; and health insurance for the employee and his/her family.¹⁸ These benefits are not always available, or are available at lower levels, to workers in other textile producing countries, such as Indonesia, Vietnam, and India.

Labor productivity in Taiwan's textiles industry is rising (although not as fast as that in the manufacturing sector as a whole), while that in the apparel industry is falling. From a 1996 base of 100, the labor productivity index for all manufacturing reached 131.97 in 2001, while that for textiles rose only to 115.60. The index for apparel and accessories actually fell to 87.91.¹⁹ This is possibly due to larger, more integrated firms moving overseas, leaving smaller, less efficient ones behind.

Technology

Technological development is high in the textile industry, but lower in the apparel industry, contributing to the latter's decline in output. Manufacturers of manmade fibers and yarn employ state-of-the-art technology, due in part to liberal Taiwan policies regarding foreign investment in the industry. Yarn spinners use a variety of technologies, including ring, open-end, and jet spindle types. Fabric manufacturers utilize both shuttle and shuttleless looms; these producers use a full range of technologies, including both water and air jet, flexible as well as rigid rapier, and projectile types. The apparel industry, however, is much more labor-intensive and thus much less competitive, given Taiwan's rising wages and other labor costs.

In 2000, Taiwan employed 2,800 spindles, of which almost all were of the ring type, and the remainder, open-end spindles. This mix of spindle technology is similar to China (98 percent ring), Korea (99 percent), and Pakistan (98 percent), but it is superior to that in the U.S. industry

¹⁵ U.S. Department of Commerce, *Taiwan Country Commercial Guide FY2002*.

¹⁶ Industrial Development Bureau, "The Development of Taiwan's Textile and Apparel Industry," Nov. 1994. Also, Taiwan Textile Federation, interviews by USITC staff, Taipei, Mar. 4, 2003.

¹⁷ International Textile Manufacturers Federation, *Country Statements 2001*.

¹⁸ U.S. Department of State telegram 569, "Labor Wage Study of Taiwan's Textile Industry," prepared by AIT, Feb. 25, 1999; Industrial Development Bureau.

¹⁹ Taiwan Textile Federation.

(80 percent).²⁰ On the weaving side, Taiwan's technological mix is more closely aligned with that in the United States: of a total of 45,800 looms in 2000, 95 percent were of the shuttleless type and the rest were shuttle looms, but superior to those of Pakistan (67 percent) and China (8 percent).^{21 22}

Investment

Domestic investment

During 1997-2002, private industry investment in manmade-fiber production totaled \$2.5 billion. An additional \$10 billion was invested (in the textile and apparel sector generally) by the Taiwan Government.²³ Investment in polyester filament production rose in the 1990s, in anticipation of increased demand from Chinese fabric and apparel makers.²⁴ However, this expected demand did not fully materialize for several reasons: China encouraged growth in its own fiber and fabric industry; China's accession into the WTO (with its associated reductions in Chinese tariffs) was delayed; and Taiwan has lagged in the production of more popular materials such as nylon and natural fibers and yarns, relying heavily instead on polyester.²⁵ Thus, with substantial overcapacity in polyester production, total investment in Taiwan's textile industry has declined in recent years, albeit not as rapidly as the decline in its more competitively disadvantaged apparel industry. However, Taiwan's productive capacity in some textile segments appears flexible: in response to a downturn in demand for cotton and cotton-blend apparel in 2000, the number of operational spindles reportedly fell by nearly 30 percent, leading to a sizeable drop in cotton imports in that year.²⁶

Any future investment, according to some industry observers, is likely to be in high value-added goods such as bullet-proof clothing, fire-retardant materials, and fabrics for the medical sector.²⁷ Investment in more traditional textile and apparel products is less likely because of reduced or volatile demand. Taiwan's recession in early 2001 and the post-September 11, 2001, economic downturn caused some textile firms in Taiwan to go bankrupt while others cut back capacity utilization by as much as 20 percent.²⁸

²⁰ Data from International Textile Manufacturers Federation, *Country Statements 2001*, pp. 34-35.

²¹ Ibid.

²² ITMF data on other measures, such as Taiwan's capacity utilization and labor productivity, are not available.

²³ Data from the Taiwan Textile Federation, cited in "Hi-Tech Textiles Give Added Value to Taiwan."

²⁴ "Taiwan," *JTN Monthly*, Jan. 2000, p. 44.

²⁵ "Asia's Apparel Industry," *Pacific Trade Winds*, Jan. 2001, p. 2.

²⁶ "Imports Below a Million," *Textile Asia*, Dec. 2001, p. 63.

²⁷ "Impact of WTO," *Textile Asia*, Dec. 2001, p. 62.

²⁸ "Textured Yarn Cut," *Textile Asia*, Dec. 2001, pp. 63-64; "Textured Yarn Supply and Demand Must be Adjusted," *Asian Textile Business*, Jan. 2002, pp. 45-46. Some firms reported to have avoided bankruptcy likely did so because they are said to have enjoyed historically better

Foreign investment in Taiwan is generally not treated differently from domestic investment.²⁹ As a result, foreign investment is growing. Foreign investment is attracted by transparent legal and accounting systems in Taiwan, modern and efficient capital markets, and only limited restrictions on currency convertibility and repatriation of profits.³⁰

Foreign investment

Many Taiwan apparel producers and some textile producers have been investing in foreign operations to take advantage of lower labor costs as well as quota availability.³¹ This pattern began for apparel manufacturers in the early 1990s, followed by fabric makers in the late 1990s, and most recently by some fiber and yarn producers.³² However, in many cases the foreign operations continue to rely largely on Taiwan-made textile inputs (where foreign import quotas allow). This reliance will probably decrease as preferential agreements such as AGOA are fully implemented so that duty preferences apply only to apparel products made from local (or U.S.) inputs.³³

Taiwan foreign investment in textiles and apparel (excluding China, which is discussed later in this section) totaled \$143 million in 2001, up by \$46 million (47 percent) from \$97 million in 2000.³⁴ Foreign investment in apparel was \$24.2 million in 2001; this flow has not shown any clear trend in recent years, ranging from a low of \$20.3 million in 1998 to a high of \$47.4 million in 1999. In contrast, the flow of investment abroad in textiles declined from \$66.6 million in 1997 to a low of \$12.4 million in 2000, before recovering somewhat to \$27.2 million in 2001.³⁵

Taiwan firms have invested in Africa, Latin America, Southeast Asia, and China. In Africa, the greatest concentrations of Taiwan investment are found in Lesotho and Swaziland, both countries that traditionally have received Taiwan development assistance. In Lesotho, a Taiwan firm reportedly spent \$2.4 million on new sewing machines to expand its factory in 2002.

economic health than their Taiwanese and foreign rivals due to low debt/equity ratios (“Taiwan,” *JTN Monthly*, Jan. 2000, p. 44).

²⁹ U.S. Department of Commerce, *Taiwan Country Commercial Guide FY2002*.

³⁰ *Ibid.*

³¹ Taiwan Textile Federation, interviews by USITC staff, Taipei, Mar. 4, 2003.

³² “Asia: World’s Textile Center,” *Asian Textile Business*, Apr. 2001, p. 22.

³³ See also prehearing brief, United States Association of Importers of Textiles and Apparel, pp. 6-7.

³⁴ These data represent cumulative annual investment flows since 1960. Data from U.S. Department of State telegram 1634, “Taiwan: Post-2004 Textile Trade Impacts,” prepared by AIT, May 13, 2002; also, Taiwan Textile Federation, communication to USITC staff, Mar. 14, 2002.

³⁵ Taiwan Textile Federation, “Statistics on Taiwan Textile and Apparel Industries 2001;” also, Taiwan Textile Federation, communication to USITC staff, Mar. 14, 2002.

Another Taiwan firm added a third factory, at a cost of almost \$30 million, to its Lesotho operations, for a combined monthly capacity of 137,000 garments.³⁶

In Swaziland, which like Lesotho benefits from U.S. duty-free treatment for apparel made from nonlocal (e.g., Taiwan) inputs, a Taiwan firm operates a garment factory, which it expanded in 2000.³⁷ Another operates a garment factory in Swaziland and was recently reported to be opening a second.³⁸

In Central America, Taiwanese investment has been encouraged in Honduras, Mexico, Nicaragua, and other countries. According to a Honduran industry representative, Taiwan firms enjoy a reputation for high quality that works well with Honduras' low production costs and economical, timely access to the U.S. market.³⁹ Taiwan textile firms with investments in Mexico include a t-shirt and casual apparel factory with a capacity of 600,000 pieces of clothing annually,⁴⁰ an integrated knitted fabric factory,⁴¹ and others.⁴² One firm operates one denim factory in Mexico and five other factories in Nicaragua,⁴³ while others have factories in Nicaragua and El Salvador.⁴⁴

³⁶ "Taiwan: Garment Makers Expand Sub-Saharan Africa Plants," Just-style.com, July 25, 2002, found at <http://www.just-style.com>, retrieved July 26, 2002. Elsewhere, this investment was reported at \$85 million. "News Briefs," *Pacific Trade Winds*, Aug. 2000, p. 3.

³⁷ "News Briefs," *Pacific Trade Winds*, Feb. 2000, p. 3.

³⁸ "Nan-Woei, Roo Hsing Scored Handsome Profits From Overseas Garment Plants in 2002," Global NewsWire (e-mail), *Taiwan Economic News*, Jan. 29, 2003.

³⁹ "A Hand to Honduras," *Textile Asia*, Oct. 2002, p. 78; "Honduras signs textile deal with Taiwan," just-style.com, Nov. 5, 2001, found at <http://www.just-style.com>, retrieved Nov. 6, 2001 (announcing a "cooperation agreement" between the Taiwan Textile Federation and the Honduran Investment and Export Development Foundation to encourage investment in Honduras). See also, "A place to invest," *Textile Asia*, Apr. 2001, p. 62 (describing efforts by the China (Taiwan) External Trade Development Council to encourage apparel investment in Honduras).

⁴⁰ "Taiwan Textile Firm Hong Ho Enjoys Profit Surge," Just-style.com, Sept. 3, 2002, found at <http://www.just-style.com>, retrieved Sept. 5, 2002.

⁴¹ "Taiwan Textile Firm to Open Factory in Mexico," Just-style.com, Aug. 1, 2001, found at <http://www.just-style.com>, retrieved Aug. 1, 2001.

⁴² "Nan-Woei, Roo Hsing Scored Handsome Profits From Overseas Garment Plants in 2002," Global NewsWire (e-mail), *Taiwan Economic News*, Jan. 29, 2003.

⁴³ "Taiwan's Nien Hsing Becomes World's Largest Denim Maker," *EmergingTextiles.com*, Jan. 18, 2000, found at <http://www.emergingtextiles.com>, retrieved Feb. 27, 2002, "Taiwanese Textile Companies to Massively Invest in Central America," *EmergingTextiles.com*, Sept. 14, 2000, found at <http://www.emergingtextiles.com>, retrieved Feb. 27, 2002. See also, "New Protests Against Taiwanese Apparel Plant in Nicaragua," *EmergingTextiles.com*, Dec. 12, 2000, found at <http://www.emergingtextiles.com>, retrieved Feb. 27, 2002.

⁴⁴ "Taiwan's Textile Companies to Massively Invest in Central America."

In Southeast Asia, Taiwan textile and apparel firms have invested heavily in Vietnam.⁴⁵ Among the reasons commonly cited are Vietnam's skilled and low-cost labor force.⁴⁶ Other locations include the Philippines (where at least one firm has invested in a duty-free zone at Subic Bay),⁴⁷ Cambodia,⁴⁸ Malaysia and Thailand.⁴⁹ Many of these investments are joint-venture arrangements with Chinese-speaking locals, and reportedly often include the shipment of older machinery to these factories.⁵⁰

Taiwan's investment in China's textile and apparel sector totaled \$1.2 billion in 2001.⁵¹ Of this figure, 70 percent was invested in the textile industry and 30 percent in the apparel industry. However, growth in apparel investment has been rapid: about 40 percent of total apparel investment during 1960-2001 took place during the last 5 years, and 2001 investment of approximately \$65 million was almost four times the previous year's investment of \$17.6 million. This investment has been spurred in part by recent reductions in China's import tariffs for items such as polyester filament yarn and staple yarn and other apparel inputs and by lower labor costs in China.⁵² This has aided Taiwan exporters of these items as well as Taiwan investors in China's apparel factories that depend on such imports for raw material.⁵³ However, there is resistance in China to rapid expansion of Taiwan investment, because it creates competition for Chinese firms. The most consistently reported driving force behind these and other investments is the disparity in labor costs between the two economies.⁵⁴

⁴⁵ "Taiwan Textile Groups Relocate Production, on Their Turn," *EmergingTextiles.com*, Oct. 19, 2000, found at <http://www.emergingtextiles.com>, retrieved Feb. 27, 2002; "Setting up in Vietnam," *Textile Asia*, May 2001, p. 66; "Accelerating Advances into Vietnam," *Asian Textile Business*, Feb. 2002, p. 71; and "Vietnam to Develop a Strong Textile Industry," *EmergingTextiles.com*, Jan. 7, 2002, found at <http://www.emergingtextiles.com>, retrieved on Feb. 27, 2002.

⁴⁶ See, e.g., "Vietnam to Develop a Strong Textile Industry," *EmergingTextiles.com*, Jan. 7, 2002, found at <http://www.emergingtextiles.com>, retrieved Feb. 27, 2002.

⁴⁷ "Taiwanese Garment Firm to Invest in Subic," *texwatch.com*, Aug. 14, 2002; found at <http://www.texwatch.com>, retrieved Nov. 6, 2002.

⁴⁸ "Roo Hsing Profit Surges 89 Percent on Soaring U.S. Orders," *Just-style.com*, Oct. 29, 2002, found at <http://www.just-style.com>, retrieved Oct. 30, 2002.

⁴⁹ "Taiwan: Increased Financial Difficulties," *Asian Textile Business*, Sept. 2001, p. 79.

⁵⁰ "Taiwan's Textile Industry: Pressures at Home, Expansion Abroad, Political Constraints, and E-Commerce Developments," *Pacific Trade Winds*, Nov. 2000, pp. 1-2.

⁵¹ Taiwan Textile Federation, communication to USITC staff, Mar. 14, 2002; see also "Taiwan: Decline of a Textile Giant?," *EmergingTextiles.com*, found at <http://www.emergingtextiles.com>, retrieved Mar. 29, 2002.

⁵² "Taiwan Textile Industry," *Asian Textile Business*, Apr. 2002, p. 43.

⁵³ Such investors are as often as not the same firms that export Taiwan yarn and other inputs.

⁵⁴ "Taiwanese Textile Firms to Massively Invest in China," *EmergingTextiles.com*, Nov. 26, 2001, found at <http://www.emergingtextiles.com>, retrieved Feb. 27, 2002.

Government Policies

Domestic policies

Of greatest importance to the domestic industry and to foreign investors is Taiwan's policy toward investment.⁵⁵ Rules regarding investment have been relaxed in recent years, owing not only to Taiwan's WTO obligations but also to the need to sustain growth in the face of several economic downturns. Private ownership and business establishment (with foreign as well as domestic capital) is allowed in all lines of business except national security and state monopolies. Such investment is assisted by efficient capital markets and transparent regulatory and tax regimes.

Transparency issues in Taiwan law and finance were a concern to U.S. investors during the 1990s.⁵⁶ Since then, however, the two driving forces that have led to improvements in this area are Taiwan's obligations as a WTO member and the need to sustain exports by attracting foreign investment.⁵⁷

The Taiwan Government is reportedly encouraging mergers in the textile and apparel industry (from about 13 firms to 3 or 4 "giant" firms).⁵⁸ In addition, the Ministry of Economic Affairs has reportedly expanded the number of synthetic fiber producers and spinners eligible for loans for updated equipment investment and for establishing manufacturing bases overseas.⁵⁹

Trade policies

Taiwan's average tariffs on yarns, fibers, and apparel have fallen sharply. Between 1997 and 1998, tariffs on cotton yarn fell from 4 percent ad valorem to 3 percent; that on wool yarn from 15 to 7.5 percent, and on synthetic yarn from 5 to 3 percent. The average tariffs on fabrics fell from 20 to 25 percent ad valorem to 5-10 percent. Woven and knitted apparel tariffs fell from 25 to 30 percent ad valorem to an average of 12.5 percent.⁶⁰ Taiwan's tariffs fell further upon its accession to the WTO on January 1, 2002. The average import tariff on all goods declined from 8.2 percent to 7.1 percent, and is scheduled to fall to 4.2 percent by 2007. Currently, manmade fiber is dutiable at 1.5 percent, gray cloth at 7.5 percent, and apparel at an average of 12.5 percent.

⁵⁵ For more information on this issue, see U.S. Department of Commerce, "Taiwan: Country Commercial Guide," found at <http://www.usatrade.gov> or <http://www.Export.gov>.

⁵⁶ Sharon Lockwood, "Taiwan's Accession to GATT: A Washington Perspective," *Columbia Journal of World Business*, Fall 1993, pp. 97-99.

⁵⁷ U.S. Department of State telegram 569, "Labor Wage Study on Taiwan's Apparel Industry," prepared by AIT, Feb. 25, 1999.

⁵⁸ Emerging Textiles.com, "Taiwan: Decline of a Textile Giant?," found at www.emergingtextiles.com, retrieved Mar. 29, 2002.

⁵⁹ "Challenge to Changes: Taiwan's Textile Industry," *Asian Textile Business*, Apr. 2001.

⁶⁰ Taiwan Textile Federation, *Statistics on Taiwan Textile and Apparel Industries 2001*.

Foreign Trade

Taiwan has run a substantial trade surplus in textiles and apparel for many years. In 2001, this surplus was \$10.3 billion, (table E-14). Sector exports in 2001 reached \$12.3 billion and sector imports totaled almost \$2.0 billion. The surplus in textiles and apparel has diminished somewhat in recent years, down from \$13.1 billion in 1997, because exports fell more rapidly than imports during this period, particularly in 2001.

Imports

Overall imports of textiles and apparel into Taiwan dropped steadily from \$2.9 billion in 1997 to just under \$2.0 billion in 2001, a decline of 32 percent (table E-14). Imports of fiber, yarn, and fabric were all down sharply, reflecting the weakened condition of the domestic apparel industry.⁶¹ Imports from the United States fell by 21 percent, from \$287 million in 1997 to \$228 million in 2001. However, as a share of total sector imports, imports from the United States rose from 8 percent in 1997 to 10 percent in 2001. Japan was for several years the largest source of Taiwan's imports of textiles and apparel. In 2001 Hong Kong surpassed Japan with 16 percent of Taiwan's total import value, compared with the latter's 12-percent share. Korea and the United States have competed for third and fourth place, each accounting for between 8 and 10 percent of Taiwan's import market in recent years, and Italy was in fifth place with 6 to 7 percent throughout 1997-2001. The United States is Taiwan's largest supplier of imported textile fibers, mostly cotton and nylon, with 23 percent of the import market in 2001. Australia was the second-largest fiber supplier with 22 percent, mainly cotton and wool types. Yarns are supplied mainly by Japan (16 percent in 2001), Malaysia (13 percent), India (12 percent), Pakistan (10 percent), and Korea (9 percent). The United States ranks third (9 percent) as Taiwan's largest fabric supplier, behind Japan (23 percent) and Korea (17 percent). The chief fabrics imported from the United States include coated fabrics, nonwoven fabrics, and carpets. Apparel imports -- largely women's apparel made from woven fabrics -- are supplied mainly from Hong Kong (42 percent of the total value in 2001). Other significant suppliers are Italy (14 percent), Vietnam (9 percent), Japan (6 percent), and Korea (6 percent). The United States supplied less than 2 percent of Taiwan's apparel imports in 2001.

⁶¹ Data in remainder of the paragraph are from Taiwan Textile Federation, *Statistics on Taiwan Textile and Apparel Industries 2001*.

Exports

Exports of textiles and apparel from Taiwan totaled \$12.3 billion in 2001, down from \$16.0 billion in 1997, a decline of \$3.7 billion or 23 percent (table E-14). Exports of all items-- fibers, yarns, fabrics, and apparel--declined, with apparel showing the greatest decline, owing (as with imports) to the declining state of the apparel industry. Exports to the United States fell by 18 percent during 1997-2001 to \$2.2 billion (table E-15). The U.S. share of Taiwan's total textile and apparel exports rose to 18 percent in 2001 from 17 percent in 1997.

In recent years, Hong Kong, Taiwan's traditional conduit into China, has been Taiwan's largest export market, albeit a shrinking one: Hong Kong's share of Taiwan's total exports fell from 37 percent in 1997 to 31 percent in 2001. The United States accounted for 16 to 18 percent of total exports throughout 1997-2001, while Indonesia was the third-largest market with 4 percent. Japan, the Philippines, Vietnam, and numerous other small markets accounted for the remainder. U.S.-bound exports from Taiwan in recent years have consisted almost entirely of apparel of all types (woven, knitted, and sweaters) as well as apparel accessories, bed linens, and the like.

Taiwan exporters face a wide range of foreign tariffs. The following tabulation of data supplied by the Taiwan Textile Federation presents tariffs for key product groups in certain important markets for 2000.

Item	Tariff ad valorem equivalent rates (AVE) on imports from Taiwan			
	Japan	Korea	USA	EU
Manmade fibers	3-9	8	1.7-9.5	12-14
Cotton yarn	7.6	8	3.7-12	10-16
Synthetic yarn	3.6-9	8	3-14.6	13-19
Grey cotton fabric	7.6	8	6.5-13.5	17-19
Finished cotton fabric	7.6-10	8	5.4-15.5	17-19
Grey manmade fiber fabric	7.2-13.6	8	13.8	19-21
Finished manmade fiber fabric	7.2-17	8	3	19-21
Woven apparel	10.1-17.8	8	2.4-30	20-22
Knitted apparel	10.1-15	8	3.3-34.1	20-23

In addition to tariffs, Taiwan faces quotas in the United States, Canada, and the EU. Taiwan's quota fill rates in the U.S. market are high for many products of manmade fibers, cotton, and wool. There are a number of products with low fill rates that may be explained by high unit values (relative to the average for all U.S. import sources). For example, the average unit value of cotton poplin/broadcloth fabric (category 314) from Taiwan was 50 percent higher than the average for U.S. imports of such fabric from all sources, 145 percent higher for manmade-fiber poplin/broadcloth fabric (category 614) and 29 percent higher for women's and girls' not

knitted manmade-fiber shirts and blouses (category 641).⁶² However, few quotas are completely filled. Examples of manmade-fiber products with fill rates of 90 percent or more in 2001 include synthetic filament fabric (categories 619/620); assorted fabrics (categories 625/6/7/8/9); and trousers/shorts (categories 647/8). Examples of cotton and wool products with fill rates of 90 percent or more in 2001 include cotton sweaters (category 345); cotton trousers (categories 347/8); and wool sweaters (categories 445/6).

*U.S. imports from Taiwan*⁶³

U.S. imports of textiles and apparel from Taiwan increased by 16 percent during 1997-2002 to 1,391 million square meters equivalent (SMEs) (table E-16). U.S. imports of textiles from Taiwan accounted for most of this increase, rising by 34 percent during 1997-2002 to 816 million SMEs; imports of apparel decreased by 2 percent during the period to 576 million SMEs.

In 2002, Taiwan was the seventh-largest supplier of U.S. textile and apparel imports, accounting for 4 percent of the total quantity of imports. Once one of the “Big Three”⁶⁴ suppliers to the U.S. market, Taiwan has been overtaken by China, Mexico, Canada, Pakistan, Korea, and India.

Major textile and apparel products imported from Taiwan during 1997-2002 included knit fabric; special purpose fabric; textured filament yarn; pile and tufted fabric; blue denim fabric; men’s and boys’ woven cotton shirts; manmade-fiber hosiery; manmade-fiber knit shirts; women’s and girls’ manmade-fiber sweaters; and manmade-fiber nightwear.

EU quotas and quota utilization rates

During 2002, the EU had 28 quotas on textiles and apparel products imported from Taiwan. The quotas covered a variety textile and apparel products, including cotton and synthetic woven fabrics; T-shirts of all fibers except wool; other knit shirts such as pullovers, jerseys, and twin sets; men’s and women’s woven trousers and slacks; panty hose and socks; men’s and women’s underpants and briefs; women’s and girls’ dresses; knit pants; and overcoats, jackets, and blazers. Three of these quotas were filled by more than 90 percent during 2002. These quotas included knit jerseys, pullover, and other knit shirts; men’s and women’s woven trousers and pants; and woven fabrics of synthetic filament yarn.

⁶² Comparisons of average unit values of imports based on official trade statistics of the U.S. Department of Commerce.

⁶³ Trade data in this section is based on official statistics of the U.S. Department of Commerce (USDOC).

⁶⁴ The “Big Three” included Hong Kong, Korea, and Taiwan.

Table E-14
Taiwan: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of workers:					
Textiles (1,000)	185,687	152,059	156,662	148,901	135,922
Apparel (1,000)	76,395	101,159	95,396	90,123	82,423
Total (1,000)	262,082	253,218	252,058	239,024	218,345
Production:					
Manmade fibers (million dollars)	3,857.2	3,550.6	3,382.6	3,652.6	3,182.9
Textiles (million dollars)	11,458.3	11,238.4	11,105.1	10,554.7	8,694.3
Yarns (million dollars)	(¹)	(¹)	3,200.0	3,340.0	2,559.0
Fabrics (million dollars)	(¹)	(¹)	4,877.0	4,379.0	2,969.0
Apparel (million dollars)	3,198.5	3,528.9	3,051.0	2,606.9	2,008.6
Total (million dollars)	(¹)	(¹)	25,615.7	24,533.2	19,413.8
Production index (1997=100):					
Yarn	(¹)	(¹)	(¹)	94.1	81.6
Fabric	(¹)	(¹)	(¹)	106.6	87.0
Mill fiber consumption:					
Manmade fibers (1,000 metric tons)	2,320.0	2,484.8	2,346.0	2,323.1	2,139.4
Cotton (1,000 metric tons)	288.6	314.0	299.9	387.0	376.3
Wool (1,000 metric tons)	40.0	42.0	34.9	37.2	35.4
Total (1,000 metric tons)	2,648.6	2,840.8	2,680.8	2,747.3	2,551.1
Installed spinning capacities:					
Short-staple spindles (1,000)	3,334.0	3,041.0	2,843.0	2,716.0	2,550.2
Long-staple spindles (1,000)	339.0	339.0	339.0	339.0	339.0
Open-end rotors (1,000)	140.0	110.0	102.3	85.7	81.8
Installed weaving capacities:					
Shuttleless looms (number)	20,050	20,050	21,300	20,890	20,800
Shuttle looms (number)	3,040	3,040	2,500	1,220	1,220
Foreign trade in textiles and apparel:					
Exports:					
Textiles (million dollars)	12,731.9	11,105.2	10,840.4	11,876.5	9,860.8
Apparel (million dollars)	3,276.9	3,070.8	2,761.0	2,947.4	2,427.5
Total (million dollars)	16,008.8	14,175.9	13,601.3	14,823.9	12,288.4
Imports:					
Textiles (million dollars)	1,860.9	1,572.1	1,472.9	1,447.2	1,031.1
Apparel (million dollars)	1,007.5	925.2	864.5	993.3	929.3
Total (million dollars)	2,868.3	2,497.2	2,337.4	2,440.4	1,960.3
Trade balance:					
Textiles (million dollars)	10,871.0	9,533.1	9,367.4	10,429.3	8,829.8
Apparel (million dollars)	2,269.5	2,145.6	1,895.6	1,954.1	1,498.8
Total (million dollars)	13,140.4	11,678.7	11,264.0	12,383.5	10,328.0
Foreign trade in textile fibers:					
Exports (million dollars)	1,035.9	769.7	746.6	946.7	797.8
Imports (million dollars)	907.5	805.0	669.9	622.3	524.0
Trade balance (million dollars)	128.4	-35.3	76.7	324.4	273.8

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown. Because data on Taiwan's production and foreign trade of sector products are compiled from two different sources, in many cases, production is less than exports.

Source: Industry data from the Taiwan Textile Federation, *Statistics of Taiwan Textile and Apparel Industries 2001*; the International Textile Machinery Federation, *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; and Geerdes International, Inc., Richmond, VA. Trade data are United Nations data.

Table E-15
Taiwan: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	675	650	651	655	598
European Union	569	639	570	522	423
Canada	97	94	94	99	70
Subtotal	1,341	1,383	1,315	1,275	1,091
All other:					
Hong Kong	5,585	4,509	4,237	4,471	3,654
Indonesia	457	372	402	536	443
Vietnam	351	338	355	403	389
Other	4,998	4,504	4,531	5,192	4,283
Subtotal	11,391	9,723	9,526	10,602	8,770
Grand total	12,732	11,105	10,840	11,876	9,861
Apparel (SITC 84):					
Quota markets:					
United States	2,053	2,043	1,866	2,021	1,647
European Union	485	412	368	372	282
Canada	92	103	86	100	100
Subtotal	2,631	2,558	2,320	2,492	2,029
All other	646	513	441	455	398
Grand total	3,277	3,071	2,761	2,947	2,428
Textiles and apparel:					
Quota markets:					
United States	2,728	2,693	2,517	2,676	2,245
European Union	1,054	1,051	938	893	705
Canada	189	197	180	198	170
Subtotal	3,971	3,940	3,634	3,767	3,120
All other	12,038	10,236	9,967	11,057	9,169
Grand total	16,009	14,176	13,601	14,824	12,288
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	11	12	12	11	11
Apparel	80	83	84	85	84
Average	25	28	27	25	25

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table E-16
Textiles and apparel: U.S. general imports from Taiwan, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	(1,000 square meters equivalent)					
0	Textiles and apparel, total	1,197,396	1,189,899	1,269,894	1,233,308	1,224,379	1,391,299
1	Apparel	589,586	620,652	637,435	670,737	614,130	575,679
2	Textiles	607,810	569,248	632,460	562,571	610,248	815,620
11	Yarns	26,695	26,428	24,858	25,861	16,879	27,851
12	Fabrics	394,034	350,739	401,437	341,025	383,263	610,191
14	Other miscellaneous articles	187,081	192,081	206,165	195,686	210,106	177,578
30	Cotton textiles and apparel	270,465	287,763	310,148	303,962	278,252	269,005
31	Cotton apparel	147,693	163,917	157,863	156,517	134,144	121,914
32	Cotton textiles	122,773	123,846	152,285	147,445	144,108	147,091
40	Wool textiles and apparel	4,280	4,261	3,800	3,964	4,700	3,135
60	Manmade-fiber textiles and apparel	914,516	888,016	948,173	918,704	933,321	1,112,861
61	Manmade-fiber apparel	435,665	448,929	473,319	507,299	470,070	445,877
62	Manmade-fiber textiles	478,851	439,086	474,854	411,405	463,252	666,984
80	Silk blend/veg fiber textiles/apparel	8,135	9,860	7,773	6,678	8,106	6,298
222	Knit fabric	140,342	109,463	147,767	90,954	121,068	265,913
224	Pile and tufted fabric	74,526	79,974	76,695	82,464	80,255	94,392
225	Blue denim fabric	10,556	11,835	10,050	10,867	24,308	30,620
229	Special purpose fabric	66,999	64,959	62,900	68,715	69,479	144,397
239	Babies' apparel	24,031	28,939	26,394	31,126	22,664	15,549
332	Cotton hosiery	3,997	4,555	6,699	9,437	10,488	13,358
340	Cotton not knit shirts, men/boys	22,302	24,688	24,736	23,313	20,566	15,405
359	Other cotton apparel	45,757	42,366	38,653	39,500	37,393	24,000
369	Other cotton manufactures	40,729	43,402	59,568	63,040	51,466	58,347
600	Textured filament yarn	7,381	5,397	5,076	5,147	4,653	20,933
620	Other synthetic filament fabric	9,702	12,974	12,356	10,392	13,118	13,383
631	Manmade-fiber gloves	14,352	15,733	15,335	15,187	16,145	14,158
632	Manmade-fiber hosiery	22,363	22,559	27,076	32,578	36,468	39,715
634	Other manmade coats, men/boys	33,792	28,498	24,259	28,065	22,796	18,771
635	Manmade-fiber coats, women/girls	24,668	20,700	17,940	18,040	17,865	15,184
636	Manmade-fiber dresses	14,496	12,213	15,129	12,970	8,087	10,173
638	Manmade knit shirts, men/boys	15,879	17,549	22,593	20,832	22,936	21,792
639	Manmade knit shirts, women/girls	56,223	60,608	71,521	59,621	47,570	54,788
646	Manmade-fiber sweaters, women/girls	20,239	35,056	21,740	24,697	38,164	39,501
647	Manmade-fiber trousers, men/boys	24,100	24,851	27,241	30,156	29,241	24,487
648	Manmade-fiber trousers, women/girls	55,489	52,543	56,346	52,639	44,916	41,422
651	Manmade-fiber nightwear	16,295	16,399	20,232	21,701	17,275	22,433
652	Manmade-fiber underwear	9,146	11,730	17,156	18,652	23,345	18,819
659	Other manmade-fiber apparel	93,246	88,659	92,822	117,590	98,649	94,295
666	Other manmade-fiber furnishings	67,354	62,206	65,045	60,045	80,999	85,489
669	Other manmade-fiber manufactures	6,810	7,355	8,381	9,048	6,828	9,413
670	Manmade-fiber handbags/luggage	56,968	63,565	59,258	54,287	60,806	17,066

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov/>.

APPENDIX F
SOUTH ASIA

Overview

The textile and apparel sector remains the primary engine for economic growth in South Asia, an area that includes Bangladesh, India, Pakistan, and Sri Lanka. For each of these countries, the textile and apparel sector accounts for a significant portion of traded goods, contributing between 25 percent (India) and 86 percent (Bangladesh) of the total value of exports in 2001.¹ South Asian countries are highly dependent on the sector for both jobs and export earnings.

The textile and apparel sectors in Bangladesh, India, Pakistan, and Sri Lanka exhibit different degrees of specialization. While firms in Pakistan specialize in cotton textile intermediate goods (yarn and grey fabric), as well as towels and bed linen, firms in Bangladesh and Sri Lanka remain export-oriented apparel producers, dependent on imported inputs such as yarn and fabric to augment local textile production. India has developed a highly complex sector covering the entire value and production chain from fiber production to garment manufacture and packaging. Firms in South Asia generally are not vertically integrated, and are, for the most part, independent, privately owned small and medium-size firms.²

Textile and apparel exports from South Asian countries rose during 1997-2001. Total Bangladeshi exports increased from \$3.9 billion in 1997 to \$5.5 billion in 2001; almost all of the increase was in exports of apparel products to U.S. and EU markets. Total Indian exports rose from \$9.6 billion in 1997 to \$12.2 billion in 2000; exports of both textiles and apparel products to U.S., EU, and Canadian markets rose significantly.³ Pakistani and Sri Lankan textile and apparel exports rose slightly during 1997-2001, but growth was hampered by declines in exports to the EU.

According to official U.S. trade statistics, U.S. imports of textiles and apparel from Bangladesh, India, Pakistan, and Sri Lanka together rose by 73 percent during 1997-2002 to 5.8 billion square meters equivalent (SMEs), valued at \$8.5 billion. Apparel accounted for 38 percent (2.2 billion SMEs), of the quantity but 72 percent (\$6.1 billion) of the value of total imports from the South Asian countries as a group in 2002. Most of the apparel consisted of cotton garments. The remainder of the sector imports from the south Asian countries consisted of textile products, which accounted for 62 percent of the quantity (3.6 billion SMEs) but 28 percent of the value (\$2.4 billion).

¹ Trade data in this “overview” are United Nations data. Data for India for 2001 were estimated by USITC staff.

² Several firms within the larger South Asian textile and apparel sector have become vertically integrated in recent years. For example, bed linens in Pakistan are produced by large, integrated units that continue to upgrade capacity with new machines when needed.

³ The 2001 data for India are not available.

Bangladesh¹

Overview

Bangladesh is one of the world's poorest and most densely populated countries, with a per capita income of \$362 in 2000 and a population of 137 million in an area the size of Wisconsin.² Bangladesh has a rural-based economy, with the agricultural sector employing almost two-thirds of the workforce and representing one-third of GDP. The apparel-dominated manufacturing sector accounted for 9 percent of GDP in 2000.³ Bangladesh has a large apparel industry which, along with its smaller textile industry, generated 86 percent of total exports in 2001. Bangladesh's apparel exports grew by 48 percent during 1997-2001 to \$5.6 billion; however, the apparel industry relies heavily on imports for its inputs (e.g., fabrics), which totaled \$1.0 billion in 2001. Bangladesh's major trading partners in textiles and apparel are the European Union (EU) and the United States, which account for almost all of its apparel exports, while other Asian countries, led by China, India, and Korea, are the major import sources for apparel inputs. Most of its apparel exports are low-cost garments, such as basic cotton shirts and pants, for which Bangladesh and other major suppliers are constrained by U.S. quotas.

Bangladesh's apparel industry is completely privately owned and export-oriented, while its textile industry is divided roughly equally between state-owned enterprises (SOEs), which are mostly old inefficient mills, and private mills, which tend to be efficient producers of yarns and fabrics.⁴ The country's competitiveness with respect to apparel is largely based on access to an abundant supply of extremely low-cost labor,⁵ as well as preferential market access in the United States, the EU, Canada, Japan, and other countries. However, its labor-cost advantage is somewhat offset by low productivity, largely reflecting low literacy levels, frequent labor unrest, and outdated technology as well as an underdeveloped infrastructure characterized by poor roads, port congestion, and frequent power outages.⁶ To enhance its global competitiveness overall and in textiles and apparel, the Government has taken steps

¹ Prepared by Norman Van Toai, Office of Industries.

² Bangladesh, surrounded by India, Myanmar (Burma), and the Bay of Bengal in southern Asia, is one of 43 least developed countries, as defined by the United Nations Industrial Development Organization (UNIDO) in *International Yearbook of Industrial Statistics 2002*, p. 16. Data on Bangladesh's population and per capita income for 2000 are from the United Nations found at <http://www.un.org>, retrieved Feb. 10, 2003.

³ World Trade Organization (WTO), "Trade Policy Reviews—Bangladesh: May 2000," press release (press/TPRB/132), May 1, 2000, found at <http://www.wto.org>, retrieved Oct. 17, 2002.

⁴ Shabbir Ahmed, Bangladesh Garment Manufacturers and Exporters Association, Bethesda, MD, telephone interview by USITC staff, Feb. 12, 2003.

⁵ An industry official stated that Bangladesh needlework skills in the apparel industry could be considered as superior to those in Indonesia, Malaysia, and even Korea. Bangladeshi workers are capable of producing high-quality, upscale apparel. Industry official, interview by USITC staff, Apr. 1, 2003.

⁶ The World Bank estimated that Bangladesh loses about \$1 billion annually because of power outages and power supply unreliability. See U.S. Department of Energy, Energy Information Agency, *Country Analysis Brief: Bangladesh*, Feb. 2002, p. 2.

to (1) improve the infrastructure and enhance worker skill levels; (2) build new yarn and fabric production capacity in order to reduce the apparel industry's reliance on imported inputs; and (3) liberalize trade and investment policies to attract foreign direct investment (FDI), obtain new technologies, enter new export markets, and promote economic diversification and growth. The recent influx of FDI to develop newly discovered natural gas reserves in the Bay of Bengal has brought hope that expected revenues from the energy sector will be used to improve the country's infrastructure.

Industry Profile

Industry structure and performance

The textile and apparel sector consists of 3,600 firms with a total workforce of 1.6 to 1.8 million workers, 90 percent of whom are women (table F-1).⁷ Indirect employment⁸ totals approximately 10 million, making direct and indirect apparel employment a very significant share of the total workforce. The apparel industry is the country's largest and fastest growing industry although many of its firms still operate as a "cottage industry." The industry is seeking government funding to establish large, modern facilities. The Government reportedly has expressed concern that quota removal in 2005 will expose the industry to greater competition from other low-cost supplying countries and price its goods out of global markets, leading to massive plant closings and job losses.⁹ In contrast, the Bangladesh Textile Mills Association is optimistic that Bangladesh's textile and apparel sector will enjoy expanded market opportunities because it has a mature garment industry, a large local market, and growing backward linkages in the textile industry.¹⁰

The Government has provided financial incentives to help the textile industry modernize and expand its production capacity for yarns and fabrics in an effort to reduce the apparel industry's reliance on imported inputs, as well as to improve the reliability of yarn and fabric supplies and minimize the lead-times for purchases and deliveries of these inputs.¹¹ The

⁷ S.S. Absar, *Why Women Work in Factories in Bangladesh?* and Laura M. Baughman et al., *Estimated Effects on the United States and Bangladesh of Liberalizing U.S. Barriers to Apparel Imports*, Trade Partnership Worldwide, LLC, Washington, DC, prepared for the Bangladesh Garment Manufacturers and Exporters Association, Nov. 26, 2001, p. 4.

⁸ That is, workers in other sectors that owe their employment to the apparel industry. Thus, total direct and indirect employment of the apparel sector accounts for a quarter of total Bangladesh's workforce of 40 million. Official of the Embassy of Bangladesh, interview by USITC staff, Apr. 1, 2003.

⁹ Josephine J. Bow, *Bangladesh's Export-Apparel Industry Into the 21st Century--The Next Challenges* (Dhaka, Bangladesh: The Asia Foundation), Nov. 2001, and Reuter, *TexWatch News*, found at <http://www.textwatch.com/News/news>, retrieved Nov. 6, 2002, p. 1.

¹⁰ U.S. Department of State telegram 2675, "Two Views of Garment Sector After Quotas," prepared by U.S. Embassy, Dhaka, Sept. 12, 2002.

¹¹ Bangladesh industry officials reportedly have expressed concern that the cost of Indian yarns and fabrics will rise rapidly as a result of increased demand for these inputs by China, the world's largest producer and exporter of textiles and apparel. See Vijay Trivedi, "Chinese Textile Exporters Seek Indian Yarn, Grey fabric Suppliers," *The Financial Express*, Apr. 28, 2002.

industry has added more than 1 million spindles since 1995 to process (spin) fibers into yarns.¹² As a result, the textile industry has reportedly enhanced its capability to support the apparel industry's yarn needs for knitwear production (e.g., polo shirts and T-shirts) and its woven fabric needs for production of casual apparel such as shirts and pants. To reduce imports of apparel inputs further, the Government has announced plans to provide funds to build significantly more textile production capacity at a time when it is seeking to privatize or reduce the number of SOEs.¹³ As a way to improve the domestic textile sector, in November 2002, the Bangladesh Textile Mills Association (BTMA), a trade group representing textile mills, urged that the Government eliminate all duties and taxes, provide low-interest loans and partial subsidies of utility costs and port fees, and enforce the ban on importing of Indian textiles into the country over land.¹⁴

Factors of production

Raw materials

The textile and apparel sector relies heavily on imports for its production inputs, including fibers, yarns, fabrics, and findings (e.g., buttons).¹⁵ The sector is cotton-based, with most of the cotton coming from India and the United States (local farmers supply only about 5 percent of Bangladesh's cotton needs). Cotton demand was expected to reach 220,000 tons in the 12-month period ending July 2002. Cotton imports are expected to rise fivefold between 1998 and 2005, reflecting the addition of new spinning capacity, increased demand for cotton yarn, and substitution of lower priced cotton for polyester fibers.

In 2000, the apparel industry imported roughly 70 percent of its inputs, including 30 percent of its yarns and 80 percent of its woven fabrics.¹⁶ The small but growing use of local inputs partly reflected Government efforts to promote the development of yarn and fabric production and to offer export bonuses of 25 percent for garments made of local content. Reportedly, in 1999, almost 10 percent of the 141 yarn-spinning mills had the capability to produce export-quality yarns and their combined yarn capacity was 96 million kilograms, or about 20 percent of total domestic demand of 447 million kilograms.¹⁷ The textile industry

¹² The World Bank, Background Paper: Bangladesh Development Forum, "Bangladesh: Globalization, the Investment Climate and Poverty Reduction," Mar. 2002, p. 10.

¹³ Ken Stier, "The Garment Trade May Unravel . . . but a New Port Would Help," *Business Week*, June 6, 2001, p. 5.

¹⁴ CybertGT Technology Indonesia, *Textile Chief Unveil Industry Blueprint*, Nov. 12, 2002, found at <http://www.cybergt.com/gt/11-02/08-01.html>, retrieved Nov. 12, 2002.

¹⁵ Information in paragraph is mainly from the EmergingTextiles.com article, June 18, 2002, found at <http://emergingtextiles.com>, retrieved Nov. 27, 2002, and U.S. Department of Commerce, "Leading Sectors For U.S. Exports and Investment 1999," National Trade Data Bank, Sept. 3, 1999.

¹⁶ Selim Raihan, *The Textile and Clothing Industry of Bangladesh: In a Changing World Economy*, Center for Policy Dialogue, Report No. 18, Dec. 1999; Laura M. Baughman et al., *Estimated Effects on the United States and Bangladesh of Liberalizing U.S. Barriers to Apparel Imports*, p. 5; and EmergingTextiles.com, Apr. 15, 2002, found at <http://emergingtextiles.com>, retrieved Nov. 8, 2002.

¹⁷ U.S. Department of Commerce, National Trade Data Bank, Sept. 3, 1999.

reportedly can satisfy 80 percent of local demand for knitwear yarns, but only about 20 percent of the demand for woven fabrics.¹⁸ According to a U.S. importer, there are at least four or five big mills that have the capability to produce quality yarns and fabrics for use in production of apparel for export to developed-country markets. However, Bangladesh's apparel producers reportedly claim that yarns and fabrics made locally are lower in quality but much higher in price than imports. For example, the cost of denim fabric made in Bangladesh is \$1.09 per meter, compared with \$0.90 (c.i.f.) for similar fabrics made in China.¹⁹

Labor

The textile and apparel sector has access to an abundant supply of low-cost labor, which is somewhat offset by low productivity in relation to China. The hourly compensation rate in the textile sector was \$0.25 per hour, and for apparel, about \$0.39 per hour in 2002; both were less than the hourly compensation rates for textiles and apparel in China.²⁰ Low productivity in the sector stems from low skill levels, reflecting low literacy rates, and limited use of modern technology.²¹ In an effort to improve labor standards, the Government signed the Geneva Child Labor Agreement to abolish child labor on June 16, 2002.²²

Investment

FDI in Bangladesh is relatively small overall and concentrated in the energy sector.²³ It accounted for 2 percent of GDP and 10 percent of gross fixed investment in FY 1999.²⁴ The limited FDI largely reflected Bangladesh's underdeveloped infrastructure (e.g., the national electrification rate is 30 percent), inadequate port facilities, and frequent occurrences of

¹⁸ Official of the Embassy of Bangladesh, interview by USITC staff, Washington, DC, Apr. 1, 2003.

¹⁹ Trade official, Embassy of Bangladesh, interview by USITC staff, Washington, DC, Nov. 15, 2002.

²⁰ Based on data in Chapter 3, table 3-1 of this report.

²¹ The literacy rate of Bangladesh was 52 percent in 2000, the second-lowest in South Asia ahead of only Afghanistan. The Bangladesh Government plans to improve enrollment in primary schools up to 100 percent. See Directorate General, External Relations, European Commission, *Country Strategy Paper: Bangladesh, 2000-2006*, pp. 12 and 14.

²² U.S. Embassy, Dhaka, "U.S. Welcomes Agreement to Continue Program For Elimination of Child Labor in Bangladesh's Export Garment Industry," June 18, 2002, found at <http://www.usembassy-dhaka.org>.

²³ The majority of the FDI is for the energy sector including natural gas and power production. The World Bank, "Foreign Direct Investment in Bangladesh," Oct. 1999.

²⁴ The World Bank, "Foreign Direct Investment in Bangladesh," Oct. 1999, pp. 13, 14, and 18.

natural disasters, civil and labor unrest, and political upheavals.²⁵ During 1991-2001, the United States was the largest foreign direct investor in Bangladesh with \$5.5 billion, followed by the United Kingdom at \$1.6 billion, Malaysia at \$1.3 billion, and Japan at \$1.1 billion.²⁶ Most FDI in the textile and apparel sector reportedly is from investors attracted by its low labor costs and access to EU and U.S. markets.

The Government is seeking to attract FDI from textile and apparel producers in countries such as Thailand, Taiwan, Korea, and China; and encourage U.S. mills to transfer equipment from recently closed U.S. facilities.²⁷ The Government has also held discussions with Germany, Bangladesh's biggest market in the EU, to upgrade technology in Bangladesh's textile and apparel sector (German exports of textile machinery to Bangladesh in 2001 rose by 60 percent over the 2000 level to 42 million euros).²⁸

Government Policies

The Government, which had nationalized all industries following independence in 1972, seeks to privatize its still-dominant public sector, attract FDI, and diversify its economy away from agriculture into export industries such as textiles and apparel. It began to privatize textile mills in 1981, including selling mills directly to employees.²⁹ Currently, it is estimated that roughly one-half of the textile mills are SOEs, while the apparel industry is entirely privately owned.

To enhance the country's industrial competitiveness, the Government has recently taken steps to promote economic diversification and growth. These steps include (1) increasing workforce skill levels, (2) modernizing the capital equipment stock, (3) privatizing and downscaling SOEs, (4) upgrading the financial and physical infrastructure, (5) improving export marketing efforts, (6) building new production capacity for textiles to reduce the apparel industry's reliance on imported inputs, and (7) liberalizing trade and investment policies to attract FDI as a means to obtain technology transfers and investment funds.³⁰

The WTO Trade Policy Review Body (TPRB) has commended Bangladesh for making considerable progress in reducing tariffs and quantitative restrictions on imports. However, its tariffs remain higher than those of many other countries because import duties are

²⁵ Asian Development Bank, "Bangladesh: Globalization, the Investment Climate and Poverty Reduction," Mar. 13, 2002, and U.S. Department of Energy, Energy Information Agency, "Country Analysis Briefs: Bangladesh," Feb. 2002.

²⁶ Bank of Bangladesh, found at http://www.boibd.org/-image/so8urce_country.gif, retrieved Nov. 5, 2002.

²⁷ Official of the Embassy of Bangladesh, interview by USITC staff, Washington, DC, Apr. 1, 2003.

²⁸ M. Saifur Rahman, Finance and Planning Minister of Bangladesh, as reported in *The Independent*, Oct. 30, 2002, found at <http://web1.epnet.com>, retrieved Nov. 5, 2002.

²⁹ IMF, Bangladesh, Selected Issues and Statistical Appendix, Apr. 15, 2002, p. 13.

³⁰ EmergingTextiles.com, June 18, 2002, found at <http://emergingtextiles.com>, retrieved Nov. 8, 2002.

Bangladesh's key source of revenue. The TPRB suggested that the Government expedite the country's structural reforms.³¹

The Government's Export Development Strategy and Trade Policy³² are intended to upgrade export quality, diversify export products, expand textile upstream industries, and promote the use of local content to enhance the value-added in the textile industry.³³ To develop upstream industries, the Government plans to provide funds to establish new textile mills in an effort to shorten lead-times for the apparel industry, enhance industrial efficiencies, and upgrade product quality.³⁴ The Government has launched a Custom and Modernization Program to upgrade its foreign trade management capacity and established export processing zones in Dhaka, the capital, and Chittagong, a major seaport.³⁵

The Government has also sought to expand foreign trade with neighboring countries through negotiation of a South Asian Preferential Trading Agreement and the negotiation of tariff concessions from members of the South Asian Association for Regional Cooperation (SAARC).³⁶ For example, Bangladesh has held talks with India to narrow its bilateral trade deficit by removing tariff and nontariff barriers to increase Bangladesh exports to the North Eastern Indian states.

Bangladesh benefits from duty-free and quota-free treatment on exports to the EU and also trade preferences on exports to Japan, Canada, Norway, and New Zealand. Under a "regional cumulation" provision, the EU extends trade preferences to imports of qualifying apparel made in Bangladesh from fabrics produced in India and Pakistan.³⁷

Foreign Trade

Because of preferential treatment in the two largest markets, the EU and the United States, Bangladesh's trade surplus in textiles and apparel rose by 81 percent during 1997-2001 to \$4.2 billion (table F-1), reflecting an increase of 43 percent in exports, to \$5.5 billion, and 16 percent in imports, to \$1.3 billion. Textiles and apparel accounted for 86 percent of total merchandise exports and 17 percent of total imports in 2001. The principal sector export is

³¹ Duties account for one-third of Bangladesh's total tax revenues. WTO, *Bangladesh: May 2000*, found at <http://www.wto.org/english>, retrieved Oct. 17, 2002.

³² These policies include the Bangladesh's Export Development Strategy of the Fifth Five-Year Plan (1997-2002) and the 1998 Five-Year Trade Policy. These are overlapping strategies.

³³ Directorate General, External Relations, European Commission, *Country Strategy Paper: Bangladesh, 2000-2006*, p. 13.

³⁴ "Government to Provide Special Fund for Textile Sector," *The Independent*, Oct. 30, 2002, found at <http://web1.epnet.com>, retrieved Nov. 5, 2002.

³⁵ U.S. Department of Energy, Energy Information Agency, "Country Analysis Briefs: Bangladesh," Feb. 2002, and WTO, "Bangladesh: May 2000, Trade Policy Review," press release, May 1, 2000.

³⁶ SAARC members include Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

³⁷ Information in this paragraph is mainly from EmergingTextiles.com, June 18, 2002, found at <http://emergingtextiles.com>, retrieved Nov. 8, 2002.

apparel, while the major imports are apparel inputs such as fabrics. The EU and the United States are the major markets for Bangladesh's sector exports, while other Asian countries are the main sources of Bangladesh's sector imports.

Imports

Bangladesh imported \$1.3 billion of textile products in 2001 for use in the production of apparel for export and another \$168 million in textile fibers such as cotton (F-1). Most of the fiber imports came from the United States (\$79 million) and Australia (\$23 million). United Nations (UN) trade data as reported by Bangladesh show that the major suppliers of fabric inputs in 2001 were China (\$441 million), India (an estimated \$245 million), and Korea (\$232 million). The relative importance of India and Pakistan (\$68 million) as fabric suppliers partly reflects the fact that garments made in Bangladesh from Indian and Pakistani materials are eligible for duty-free and quota-free entry into the EU under its rules of origin for regional cumulation, which extends trade preferences to apparel made in Bangladesh of textile materials produced in SAARC countries.³⁸

Exports

All but a small part of Bangladesh's textile and apparel exports go to the EU (50 percent of the 2001 total, or \$2.7 billion) and the United States (42 percent, or \$2.4 billion) (table F-2). Bangladesh's exports of qualifying garments to the EU are eligible for duty-free entry under the EU Generalized System of Preferences (GSP).³⁹ The trade-weighted average U.S. tariff on imports of apparel from Bangladesh was 15.5 percent ad valorem in 2001.

U.S. imports of textiles and apparel from Bangladesh rose by 53 percent during 1997-2002 to 1.2 billion square meters equivalent (SMEs), valued at \$2.2 billion (table F-3). In 2002, however, imports fell for the first time in many years, by 2 percent in quantity and 3 percent in value, largely reflecting weak demand for apparel. Bangladesh shipments to the United States are concentrated in apparel, which accounted for 80 percent of the quantity but 95 percent of the value of its U.S. textile and apparel shipments in 2002. Its apparel shipments peaked in 2000, then fell by less than 0.5 percent in 2001 and by another 4 percent in 2002, to 930 million SMEs (valued at \$1.9 billion). As a result, Bangladesh's share of the U.S. apparel import volume fell from 6.0 percent in 2000 to 5.5 percent in 2002, when it was the fourth-largest foreign supplier, trailing only Mexico, China, and Honduras.

Similar to other major suppliers to the U.S. apparel market, Bangladesh cotton and manmade-fiber garments are generally constrained by quotas. The principal quota products from Bangladesh are shirts and blouses (both knit and woven), pants, underwear, jackets, and sleepwear, for which it ranks among the largest suppliers. In 2001, Bangladesh filled

³⁸ Laura M. Baughman, "Estimated Effects on the United States and Bangladesh of Liberalizing U.S. Barriers to Apparel Imports," p. 5.

³⁹ The EU has offered SAARC cumulation provision according to which the EU rules of origin will be waived for Bangladesh products if the input materials originate in an SAARC country. EU European Commission, *Country Strategy Paper, Bangladesh, 2002-2006*, p. 18.

all but 1 of its 21 quotas, which covered articles representing 51 percent of the quantity and 66 percent of the value of its total U.S. textile and apparel shipments.⁴⁰ In October 2002, the United States penalized Bangladesh for exceeding its 2002 quota on cotton trousers by reducing this quota for 2003 by three times the additional access granted in 2002. Among quota-free apparel products from Bangladesh, imports of Bangladeshi cotton sweaters accelerated rapidly from 2.6 million SMEs (\$3.4 million) in 1997 to 38.1 million SMEs (\$80 million) in 2002.

⁴⁰ The only nonapparel article covered by quota was cotton shop towels (industrial wiping cloths).

Table F-1
Bangladesh: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Textiles	12,278	(¹)	(¹)	(¹)	(¹)
Apparel	2,412	(¹)	(¹)	(¹)	3,600
Total	14,690	(¹)	(¹)	(¹)	(¹)
Number of workers:					
Textiles (1,000)	473	(¹)	(¹)	(¹)	(¹)
Apparel (1,000)	999	(¹)	(¹)	(¹)	1,800
Total	1,472	(¹)	(¹)	(¹)	(¹)
Installed spinning capacities:					
Short-staple spindles (1,000)	2,810.0	2,899.0	2,469.0	2,469.0	2,469.0
Long-staple spindles (1,000)	15.0	15.0	15.0	15.0	15.0
Open-end rotors (1,000)	43.0	45.9	55.9	55.9	55.9
Installed weaving capacities:					
Shuttleless looms (number)	² 1,300	² 2,500	² 3,200	² 3,200	² 3,200
Shuttle looms (number)	² 9,000	² 3,000	² 4,700	² 4,700	² 4,700
Factor output:					
Textiles (million dollars)	1,592.0	(¹)	(¹)	(¹)	(¹)
Apparel (million dollars)	3,622.8	(¹)	(¹)	(¹)	(¹)
Production:					
Textiles (million dollars)	530.0	(¹)	(¹)	(¹)	(¹)
Apparel (million dollars)	892.3	(¹)	(¹)	(¹)	(¹)
Gross fixed capital formation:					
Textiles (million dollars)	166.2	(¹)	(¹)	(¹)	(¹)
Apparel (million dollars)	25.7	(¹)	(¹)	(¹)	(¹)
Mill fiber consumption:					
Cotton (1,000 metric tons)	142.9	153.0	174.6	166.0	126.7
Manmade fibers (1,000 metric tons)	47.7	48.7	50.2	57.8	59.5
Wool (1,000 metric tons)6	.8	.8	.5	.6
Total (1,000 metric tons)	191.2	202.5	225.6	224.3	186.8
Foreign trade:					
Exports:					
Textiles (million dollars)	374.9	361.2	344.4	395.9	374.1
Apparel (million dollars)	3,502.4	3,870.0	4,027.6	5,029.2	5,153.0
Total (million dollars)	3,877.3	4,231.2	4,372.0	5,425.1	5,527.1
Imports:					
Textiles (million dollars)	1,513.2	1,292.9	1,350.1	1,675.9	1,258.5
Apparel (million dollars)	35.6	33.3	33.4	39.4	43.3
Total (million dollars)	1,548.8	1,326.2	1,383.5	1,715.2	1,301.8
Trade balance:					
Textiles (million dollars)	-1,138.3	-931.7	-1,005.7	-1,280.0	-884.4
Apparel (million dollars)	3,466.8	3,836.6	3,994.2	4,989.8	5,109.7
Total (million dollars)	2,328.5	2,905.0	2,988.5	3,709.8	4,225.3

¹ Not available.

² In addition, there were approximately 25,000 powerlooms and 500,000 hand-looms in the nonmill sector.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from United Nations Industrial Development Organization, *International Yearbook of Industrial Statistics 2002 (1997 data)*; Laura M. Baughman et al., *Estimated Effects on the United States and Bangladesh of Liberalizing U.S. Barriers to Apparel Imports*, 2001 (2001 data); the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; Geerdes International, Inc., Richmond, VA, facsimile to Commission staff, Feb. 4, 2003; and trade data are United Nations data as reported by Bangladesh's trading partners.

Table F-2
Bangladesh: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	42	70	79	91	108
European Union	117	112	106	122	128
Canada	3	4	6	7	12
Subtotal	162	187	191	221	247
All other:					
Iran	45	31	38	32	39
Turkey	15	24	23	25	21
Japan	14	11	11	13	9
Other	138	109	81	106	57
Subtotal	213	175	153	175	127
Grand total	375	361	344	396	374
Apparel (SITC 84):					
Quota markets:					
United States	1,557	1,733	1,812	2,292	2,244
European Union	1,742	1,921	1,986	2,436	2,615
Canada	75	84	87	104	104
Subtotal	3,374	3,738	3,885	4,832	4,962
All other	129	132	143	197	191
Grand total	3,502	3,870	4,028	5,029	5,153
Textiles and apparel:					
Quota markets:					
United States	1,599	1,803	1,891	2,383	2,352
European Union	1,859	2,034	2,092	2,559	2,742
Canada	78	88	93	111	115
Subtotal	3,536	3,924	4,076	5,053	5,210
All other	341	307	296	372	317
Grand total	3,877	4,231	4,372	5,425	5,527
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	43	52	56	56	66
Apparel	96	97	96	96	96
Average	91	93	93	93	94

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table F-3
Textiles and apparel: U.S. general imports from Bangladesh, by specified product categories,¹
1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meter equivalent</i>					
0	Textiles and apparel, total	764,510	865,537	10,519	1,130,770	1,169,041	1,149,969
1	Apparel	671,763	743,516	773,077	966,612	965,942	927,717
2	Textiles	92,747	122,022	137,442	164,158	203,099	222,252
14	Other miscellaneous articles	92,012	118,714	131,207	151,954	192,112	214,172
30	Cotton textiles and apparel	508,829	561,266	597,627	674,640	702,638	701,220
31	Cotton apparel	438,227	484,966	507,469	583,645	601,968	577,162
32	Cotton textiles	70,602	76,301	90,158	90,995	100,670	124,058
40	Wool textiles and apparel	2,687	7,310	6,513	7,528	6,515	3,942
60	Manmade-fiber textiles and apparel	245,080	278,194	283,441	418,195	429,888	423,423
61	Manmade-fiber apparel	224,406	233,623	237,844	345,473	327,908	325,563
62	Manmade-fiber textiles	20,674	44,572	45,597	72,721	101,979	97,860
80	Silk blend/veg fiber textiles/apparel	7,914	18,766	22,938	30,408	30,000	21,384
237	Playsuits	11,502	11,949	11,451	8,113	9,352	6,500
239	Babies' apparel	21,840	27,097	23,643	32,146	42,594	34,765
334	Other cotton coats, men/boys	5,168	5,173	4,592	7,894	7,857	7,521
335	Cotton coats, women/girls	5,534	8,312	4,505	7,411	5,384	10,868
336	Cotton dresses	7,074	8,680	9,902	9,436	9,563	13,849
338	Cotton knit shirts, men/boys	6,260	6,193	7,261	7,600	8,853	8,426
339	Cotton knit shirts, women/girls	2,561	2,222	3,591	4,332	4,677	7,003
340	Cotton not knit shirts, men/boys	61,264	66,580	60,662	80,001	78,358	75,950
341	Cotton not knit blouses	19,384	22,014	32,297	39,790	35,448	29,145
342	Cotton skirts	3,132	3,989	4,672	7,725	6,643	9,592
347	Cotton trousers, men/boys	28,567	27,202	33,799	33,239	29,645	34,415
348	Cotton trousers, women/girls	13,337	12,288	15,869	17,168	22,864	30,391
350	Cotton robes	9,259	9,948	12,192	12,244	11,546	10,223
351	Cotton nightwear	33,560	32,441	28,709	42,853	40,725	47,202
352	Cotton underwear	90,454	95,034	103,341	99,304	108,539	116,153
363	Cotton terry and other pile towels	9,055	11,931	11,355	11,975	13,194	16,513
369	Other cotton manufactures	60,862	60,919	71,935	63,322	72,506	83,456
634	Other manmade coats, men/boys	21,487	19,224	14,682	24,466	28,127	27,695
635	Manmade-fiber coats, women/girls	14,232	12,811	11,650	17,346	17,928	20,462
636	Manmade-fiber dresses	4,294	9,925	10,111	14,207	13,879	11,917
638	Manmade knit shirts, men/boys	14,955	16,869	16,541	22,129	18,145	18,285
639	Manmade knit shirts, women/girls	9,367	6,066	8,308	10,716	9,038	10,852
640	Manmade not knit shirts, men/boys	1,797	1,518	3,404	10,843	10,507	9,213
641	Manmade-fiber not knit blouses	5,702	6,539	5,199	8,857	8,821	8,092
646	Manmade-fiber sweaters, women/girls	13,044	13,424	5,827	13,402	11,984	11,496
647	Manmade-fiber trousers, men/boys	15,631	19,190	19,082	22,037	24,870	29,381
648	Manmade-fiber trousers, women/girls	9,078	7,310	10,731	10,506	11,046	11,271
652	Manmade-fiber underwear	8,299	16,818	19,050	18,903	30,898	39,092
659	Other manmade-fiber apparel	89,812	84,755	93,042	148,804	116,142	99,330
669	Other manmade-fiber manufactures	16,521	38,458	35,825	58,927	84,838	86,786

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Overview

India is believed to be the world's second-largest producer of textiles and apparel after China.² The textile and apparel sector is one of India's oldest and most important economic sectors, second only to agriculture in terms of employment, net foreign earnings, and industrial production.³ In 2000-01, the sector accounted for more than 14 percent of national industrial production, 27 percent of total exports, 4 percent of gross domestic product (GDP), and 11 percent of the total workforce (or 35 million workers).⁴

India's textile and apparel sector is highly diverse and covers the entire supply chain from fiber production through spinning, weaving, knitting, and dyeing and finishing, to production of finished goods such as apparel and home textiles. Although the sector is primarily cotton based,⁵ it benefits from access to a wide range of textile fibers for which India is a major world producer such as manmade fibers, jute, linen and silk. The sector also benefits from access to a vast pool of workers, both skilled and unskilled, as well as technicians and managers, at relatively low wage rates; and English is the language of business. The sector has the capability to produce both basic garments in long runs and fashion goods in smaller and more flexible runs. A large and growing domestic market, totaling an estimated \$26 billion in 2001 and expected to rise to more than \$41 billion by 2005,⁶ supports a broad textile and apparel sector.⁷ India's strengths have enabled it to compete in the world market in terms of price and quality.

¹ Prepared by William L. Greene, Office of Industries.

² "Report: India's Textile Industry," *Asian Textile Business*, May 2002, p. 30, found at <http://www.blonnet.com>, retrieved Jan. 10, 2003.

³ Sharad Mistry and Sanjoy Jog, "Global Cotton Grorolis For 14 Removal of Distortions," *The Financial Express*, July 2002, found at <http://www.financialexpress.com/fe/fulstory.php/contentid=13158>, retrieved Jan. 10, 2003. Savita Gaur, "Star Export," *Textile Asia*, Aug. 2001, p. 98.

⁴ Annual Report 2001-2002, Ministry of Textiles, found at <http://texmin.nic.in/annualrep/ar02con.htm>, retrieved Jan. 30, 2003; G. Srinivasan, "Gvt. Upbeat on Investment in Textile Ind.," *Business Line*, Apr. 6, 2001, found at <http://www.blonnet.com>, retrieved Jan. 10, 2003; Samar Verma, *Export Competitiveness of Indian Textile and Garment Industry*, Indian Council for Research on International Economic Relations, Working Paper No. 94, Nov. 2002.

⁵ Cotton currently accounts for about 55 percent of India's total fiber consumption, compared with roughly 90 percent of total fiber consumption in the mid-1970s to about 55 percent today. Most wool used in India is imported from New Zealand and Australia. Industry officials, interviews by USITC staff, Lubhiana, India; and "Local Textile Industry Can Meet Future Demand Too," *Financial Express*, July 29, 2002, found at <http://www.financialexpress-.com>, retrieved Jan. 8, 2003.

⁶ Sri Ram Khanna and the IBC Research Team, "Prospects for the Fibre, Textile and Apparel Markets in India," *Textile Outlook International* (United Kingdom: Textiles Intelligence), Jan.-Feb. 2002, p. 34.

⁷ Industry officials, interviews by USITC staff, Coimbatore, Tamil Nadu, India, Nov. 1 and 5, 2002.

However, India's advantages have been offset somewhat by the sector's structure, aging plants and equipment, high operating costs, and government policies.⁸ Operating costs such as power and interest rates are higher and productivity is lower than major competitors in East and Southeast Asia. Government tax and regulatory policies have favored small producers at the expense of larger enterprises. India's textile and apparel sector is dominated by a vast number of small and inefficient producers that employ antiquated machinery and equipment. This sector is expected to undergo extensive structural change after the quota regime is abolished in 2005, and a large number of India's mills and processing houses are expected to close since many have not achieved sufficient economies of scale or developed the efficiencies needed to compete in the international market.⁹

Industry Profile

As a significant source of employment, the Indian textile and apparel sector has traditionally been heavily regulated by the government. Government regulations and incentives have promoted and protected small companies in this sector since the 1950s. Firms with an investment in both plants and machinery of 10 million rupees or less qualify for a number of preferences.¹⁰

The small-scale industry (SSI) sector controls more than 95 percent of India's looms and performs weaving, fabric processing, and apparel manufacturing. Until recently, SSI firms were the only Indian manufacturers permitted to produce solely for the domestic market. All others had to export at least 50 percent of their production. The small-scale nature of the industry prevented companies from achieving economies of scale, from investing in new state-of-the-art technology, and from specializing. India's taxation policies also favor small-scale producers. SSI producers were exempted from excise duties imposed on the apparel sector in 2000.

The Indian textile and apparel sector has experienced extraordinary growth since India's independence. India is second only to China in spindle capacity, with a little more than 20 percent share of the world total (table F-4). However, many segments of India's textile and apparel sector, especially the weaving segment, employ obsolete equipment. For example, nearly 4 million of the 5.6 million looms in India are handlooms, and only 1.3 percent are shuttleless looms.

Currently, the Indian apparel industry produces between 5.2 billion and 5.5 billion pieces per year, with a domestic market of \$26 billion. The industry is highly fragmented and is

⁸ Ibid., Lubhiana; New Delhi; and Coimbatore, Tamil Nadu, India, Nov. 1, 5, and 7, 2002.

⁹ "Textile Exports Show Welcome Revival," *Business Standard*, Dec. 19, 2002, found at <http://www.business-standard.com/archives/2002/dec/50191202.003.asp>, retrieved Feb. 24, 2003; and "Tax Structure for Textile Sector May Be Rationalised Further," *Financial Express*, Nov. 8, 2001, found at <http://www.financialexpress.com>, retrieved Jan. 9, 2003.

¹⁰ In the 1950s, the investment limit was 500,000 rupees. It has been raised several times and was set at 10 million rupees in 1997. India Export Import Portal, "Investment Limits," *SSI Corner*, found at <http://exim.indiamart.com>, retrieved May 15, 2003. Information in paragraph is from *Annual Reports*, Ministry of Textiles, found at <http://texmin.nic.in>, retrieved Jan. 10, 2003.

spread over the entire country.¹¹ There is very little vertical integration in the apparel industry, which consists primarily of independent, privately owned small- and medium-sized firms with most firms operating on a 2 percent average profit margin.¹² These small firms remained viable largely because the government “reserved” the domestic apparel market for the SSI producers, which accounted for more than 95 percent of Indian apparel production prior to 1990.¹³ The Government “de-reserved” the woven segment of the apparel market in 2001 and de-reservation of the knitted segment in the Budget 2002-03.¹⁴ Although India has some of the world’s lowest labor costs, its total production costs are among the highest in the world. Labor costs have declined as a percentage of production, whereas power and other costs continued to grow. In 2002, power accounted for between 12 and 13 percent of total costs, up from 5 percent in the 1980s. Most of the remainder of the industry’s costs is accounted for by raw materials (62 to 75 percent) and labor costs (7 to 8 percent, down from 12 percent in the 1990s).¹⁵

Weaving is performed throughout the country, whereas a significant portion of the cotton spinning takes place in the south and most of the synthetic spinning and composite mills are located in the west and north.¹⁶ India’s nonapparel textile industry consists of three principal segments: the handloom and powerloom SSI segment, an organized mill segment, and a crafts segment.¹⁷ The vast majority of weaving and knitting operations are performed by SSI firms with less than 30 machines per production unit. According to data of the Ministry of Textiles, there were approximately 1.7 million powerlooms in the decentralized sector and 3.9 million handlooms in the handloom sector during 1998-2000. There are fewer than 3,000 mills in the organized sector, and among them, there are only 1,000 large integrated mills (performing spinning, weaving, and finishing).

¹¹ Industry officials, interviews by USITC staff, New Delhi, Oct. 31, 2002.

¹² Industry officials, interviews by USITC staff, Coimbatore, Tamil Nadu, India, Nov. 5, 2002.

¹³ “What India Wears,” *Textile Asia*, June 2001, p. 64.

¹⁴ Press Information Bureau, Government of India, “Steps Taken for Increasing Exports of Garments,” Apr. 18, 2002, found at <http://pib.nic.in>, retrieved May 14, 2003.

¹⁵ Industry official, interview by USITC staff, Coimbatore, Tamil Nadu, India, Nov. 5, 2002.

¹⁶ Industry official, interview by USITC staff, Coimbatore, Tamil Nadu, India, Nov. 5, 2002.

¹⁷ The handloom segment consists principally of small, family-owned production units having three to five manually operated looms. Production is very low, usually no more than 5 meters per day compared to 250 to 300 meters on a modern loom. The powerloom SSI segment includes weavers with 10 to 50 looms and employs antiquated powered shuttle looms. Both segments include a high percentage of subcontractors for exporters, are beneficiaries of government tax and fiscal programs, and are exempt from most government labor regulations. Most of the looms are more than 12 to 15 years old. Productivity and quality are very low in both segments, and neither has the capital to upgrade and modernize equipment. In many instances, these firms act as ancillaries to larger firms by performing contract work. *Annual Reports*, Ministry of Textiles, found at <http://texmin.nic.in>.

Industry structure and performance

Textiles

India's textile industry employs approximately 15 million workers¹⁸ and has steadily expanded production since the late 1990s (table F-4). India ranks among the world leaders in the production of cotton yarn and of manmade fibers and filament yarns. India's annual production of fabrics totals 42 billion square meters, 15 percent of which consists of blended-fiber fabrics for apparel, furnishings, and upholstery. Indian consumption of textile fibers continues to be low at 8.7 kilograms per person, compared with 9.1 kilograms in China and 36.9 kilograms in the United States.

Indian production of spun yarn and fabric in 2001-2002 totaled an estimated 4.2 billion kilograms and 42 million square meters, respectively. Manmade fiber yarn is one of the fastest-growing segments. For example, in the last 5 years, the consumption of polyester staple fiber has grown from less than 20,000 tons per month to more than 45,000 tons per month, and industry sources report the potential for consumption to grow by another 50 percent over the next 5 years.¹⁹ Cotton fabric accounted for 47 percent of total Indian fabric produced in 2001, yet most of India's cotton fabric is reportedly made on antiquated looms capable of producing only marginal quality fabric at very low productivity levels.²⁰ In 1998, nearly 71 percent of India's fabric output came from the decentralized SSI sector, 23 percent from the handloom sector, and 6 percent from the organized mill sector.²¹

India's textile industry is highly fragmented, with the exception of spinning, which is possibly the industry's strength. Most of India's cotton spinning is performed in the State of Tamil Nadu (cities of Coimbatore and Tirupur), whereas spinning of manmade fibers takes place principally in the State of Punjab.²² India's export-oriented spinning segment is internationally competitive and is made up of mostly medium- and large-scale factories. Spinning is the industry's most technologically sophisticated segment and includes most of India's vertically integrated composite production facilities that perform spinning, weaving, and processing. Cotton dominates India's spinning segment and accounts for more than 55 percent of the value of yarn production. The spinning segment has an 80 percent capacity utilization rate and accounts for more than 20 percent of world production of cotton yarn.²³

¹⁸ Indian Cotton Mills' Federation, found at <http://www.icmfindia.com>, retrieved May 28, 2003.

¹⁹ Industry official, interview by USITC staff, New Delhi (Nodia), Nov. 1, 2002.

²⁰ Ministry of Textiles, Government of India, "Kashiram Rana Urges States to Reap Full Benefit of Schemes for Weavers and Artisans; Sinha Calls for Creation of Separate Department of Textiles in Different States," Apr. 10, 2001, found at http://texmin.nic.in/pr_04102001.htm, retrieved Oct. 8, 2002.

²¹ "Textile Industry - A Flashback," *Financial Express*, Jan. 17, 2000, found at <http://www.financialexpress.com/fe/daily/20000117/ffe11115.html>, retrieved Jan. 13, 2003.

²² Industry official, interview by USITC staff, Tirupur, Tamil Nadu, India, Nov. 6, 2002.

²³ "Indian Textile Policy-2000," IndiaMart, found at <http://www.apparel.indiamart.com/indiantextilepolicy-/index.html>, retrieved Jan. 17, 2003.

Nevertheless, the spinning sector maintains excess capacity and over 70 percent of its short-staple spindles are more than 10 years old.

In 2000-01, India's knitting segment constituted approximately 1 percent of the world's global production. Production is concentrated in Tirupur and Ludhiana (Punjab) and over 75 percent of India's exports of knitwear, especially cotton, is produced in Tirupur, whereas Ludhiana produces primarily for domestic consumption.²⁴ Traditionally, knitting and weaving have been biased toward cotton, but in the last 5 years there has been a shift in consumer demand toward synthetics and blends. Yarn is produced by all three sectors of the industry, but cloth is produced mainly by the SSI sector. A major weakness in India's industry is its inability to produce defect-free cloth meeting the specifications of both domestic and international mills.²⁵

Weaving, dyeing, finishing, and processing reportedly are the weakest links in India's textile industry. Because it is not economical to run a composite mill, many weavers operate multiple small mills which tends to create production bottlenecks.²⁶ Most of the small weaving units subcontract for the export market. India's knitters do not possess capacity to perform dyeing, processing, and finishing to international standards because of the high capital costs associated with the purchase of modern state-of-the-art machinery.²⁷ Small, independent processing houses, which perform nearly 90 percent of the industry's processing and finishing, tend to employ very low-end technology. Most work as job processors for small garment exporters.

In the face of intense international competition brought on by the end of the quota regime and the demand for higher quality and manufacturing versatility, industry sources anticipate that many of India's small-scale textile producers will close. As of November 2002, 338 mills closed, reportedly due to declining domestic and export demand, a global recession, rising production costs, reduced profits, and government imposed labor market rigidities.²⁸ Also, a number of mills owned by the federal and the state governments closed, including 66 owned by the National Textile Corporation (NTC).²⁹ The Indian government estimated that these closures resulted in the loss of approximately 575 million kilograms of yarn production, 736 million square meters of fabric production, and more than 362,180

²⁴ Industry officials, interviews by USITC staff, Ludhiana and Tirupur, Tamil Nadu, India, Nov. 6, 2002; *Tirupur Exporters Association (TEA) Bulletin*, Nov. 2002; and Knitwear Club, July-Aug. 2002, June 2001, May-June 2002, and Oct. 2001.

²⁵ "Textile Industry Not Shipshape," *Business Line*, Oct. 15, 2002, found at <http://www.thehindubusinessline-.com/2002/10/16/stories/2002101602040300.htm>, retrieved Jan. 10, 2003.

²⁶ Industry officials, interviews by USITC staff, Ludhiana and Tirupur, Tamil Nadu, India, Nov. 6, 2002; *Tirupur Exporters Association (TEA) Bulletin*, Nov. 2002; and Knitwear Club, July-Aug. 2002, June 2001, May-June 2002, and Oct. 2001.

²⁷ *Sectors of the Textile Industry*, Confederation of Indian Industry (CII), found at <http://www.ciionline.org/busserv/textile/sectors.html>, retrieved Jan. 13, 2003.

²⁸ G. Gurusurthy, "48 More Textile Mills Shut Shop in Apr.-Nov.," *Business Line*, Feb. 6, 2003, found at <http://www.thehindubusinessline.com/bline/2003/02/07/stories/2003020701-990440.htm>, retrieved Jan. 13, 2003.

²⁹ "Restructuring of State-Owned Textile Behemoth Begins," *Asian Textile Business*, Oct. 2002, p. 47.

jobs. Approximately 9.5 million spindles, 60,000 rotors, and 71,541 looms were idle as of March 2002.³⁰

Apparel

India's apparel industry is one of the country's largest foreign-exchange earners; it is also the most fragmented industry of the sector. The Indian apparel market has grown by more than 20 percent in recent years and is estimated to be valued at \$26 billion. There are approximately 27,000 domestic manufacturers, 48,000 contractors, and 1,000 manufacturer-exporters.³¹ The industry is dominated by fabricators and subcontractors that account for more than 72 percent of manufacturing capacity.³² India's strength lies in the manufacture of medium-quality and relatively high-fashion ready-made apparel produced in small lots for niche segments of the domestic and export markets (e.g., containing garments of considerable embroidery).³³ The majority of the fabricators are small firms with 30 to 50 machines that produce primarily for the quota markets and account for nearly 75 percent of total domestic apparel production.³⁴ In 2001-02, the government opened the domestic apparel market to participation by large- and medium-sized companies, which now can produce apparel without being obligated to export a certain percentage of their output.³⁵

More than 50 percent of India's knitwear is manufactured in Tirupur (Tamil Nadu). The growth of production was principally in response to the introduction of textile quotas by the United States, the EU, and Canada.³⁶ The majority of Tirupur's production is for the lower price segments of the market. Although exports constitute a large share of production, over the last 4 to 5 years production for the local market has grown by 12 to 13 percent, whereas export production has grown only by 2 to 3 percent. Most industry experts do not expect many of the smaller garment producers manufacturing for the local market or performing as jobbers to survive in the post-quota era. India's knitwear segment has an advantage in the middle and upper-middle price ranges and it already supplies garments to the world's leading labels.³⁷

Recently, Indian consumer buying patterns and behavior have shifted substantially. Because of a large and growing middle class, rising incomes, and greater exposure to international fashion trends, urban Indians are slowly shifting from custom-made tailored clothing to contemporary, ready-to-wear garments.³⁸ The ready-to-wear market was estimated at \$1.3 billion in 2002 representing a small share of apparel consumption in India.³⁹

³⁰ "Report: India's Textile Industry," *Asian Textile Business*, May 2002, p. 30.

³¹ Confederation of Indian Industry (CII), *The Garment Manufacturing Sector*, found at <http://www.ciionline.org>, retrieved Jan. 13, 2003.

³² Ibid.

³³ Industry officials, interviews by USITC staff, New Delhi, Oct. 31, 2002.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid., Tirupur, Tamil Nadu, Nov. 6, 2002.

³⁷ Ibid., New Delhi and Tamil Nadu, Nov. 5-8, 2002.

³⁸ "What India Wears," *Textile Asia*, June 2001, p. 64.

³⁹ Bhagyashree Pande, "Textile Majors Set Eyes on Readywear Segment," *Financial Express*, Oct. 30, 2002, found at <http://financialexpress.com>, retrieved Jan. 9, 2003.

The market for ready-made women's garments in India is small but growing, since it is fashionable in the large urban areas to shift from saris, sherwanis, and other traditional ethnic-regional apparel to Western wear. However, the market for women's ready-to-wear garments is smaller than for men's clothing because more older women continue to purchase traditional clothing. Yet, the younger generation of women is demanding items such as trousers, jackets, jeans, and T-shirts. In the last 3 years, more than 65 national and subnational regional brands have been established in India.⁴⁰

Because of the increasing price of cotton garments and improved comfort, durability, and longevity of blended cotton-polyester garments, blended and manmade-fiber garments are growing in popularity. In India's rural areas, where 70 percent of the population still resides, apparel produced from manmade-fiber materials is in higher demand as it becomes less expensive vis-a-vis all-cotton garments. As the domestic market shifts from cotton to manmade fibers, most of the apparel produced from cotton is being exported to quota-imposing countries.⁴¹

Factors of production

Raw materials

Cotton

The Indian textile industry is highly dependent on cotton, which accounts for 75 percent of the fiber used by the spinning segment and 57 percent of total mill fiber consumption in 2001.⁴² India is the world's third-largest cotton producer (after China and the United States) and has 9 million hectares under cultivation, according to the Ministry of Textiles. Domestic Indian cotton, grown largely by small farmers on 1.5 to 2 acre plots, ranges from short staple to extra-long staple (20 to 38 mm). In accordance with government regulations, 40 percent of all cotton sold in India is in hank form to ensure a sufficient yarn supply for India's handloom segment.⁴³ Prior to January 2003, the hank yarn requirement was 50 percent.⁴⁴ Textile mills have lobbied the government unsuccessfully to lower hank yarn obligation to 30 percent of domestic sales.

⁴⁰ Industry officials, interview by USITC staff, Nadu New Delhi, Nov. 1, 2002.

⁴¹ Ibid., Tamil Nadu, Nov. 5, 2002.

⁴² Ministry of Textiles, *Annual Report 2000-2001*, IndiaMart, found at <http://apparel.indiamart.com/annual-report/raw-material.htm>, retrieved Oct. 16, 2002, and Geerdes International, Inc., Richmond, VA, facsimile to USITC staff, Feb. 4, 2003.

⁴³ Under the "hank yarn obligation," the Government of India requires the organized mill sector to supply the handloom sector with yarn suitable for use in the manufacture of fabrics on handlooms at favorable prices.

⁴⁴ Joseph Vackayil, "Reduction Inadequate, SIMA Seeks Abolition of Hank Yarn Obligation," *Financial Express*, Jan. 19, 2003, found at <http://www.financialexpress.com>, retrieved May 16, 2003.

Because of hand picking, inadequate storage facilities, antiquated equipment, and obsolete packing and pressing methods, Indian cotton is reported to be among the most contaminated in the world.⁴⁵ India also has one of the lowest yields in the world. Whereas the world average cotton yield is nearly 900 to 1,000 kilograms (kgs) per hectare, India's yield is only 330 kg per hectare. Because India has limited irrigated lands in its cotton belt, states such as Gujarat, Madhya Pradesh, and Maharashtra are dependent on rainfall from monsoons, and yields can be dramatically affected by drought or a delay in the monsoon season.⁴⁶

Since India's cotton yield is not keeping pace with the growth in consumption, textile mills have begun to import cotton principally from the United States, Australia, Latin America, and South Africa.⁴⁷ To improve yields, the Indian government recently approved limited, experimental cultivation of genetically modified, insect-protected transgenic Bt cotton (Bt stands for *bacillus thuringiensis*) in six states. It is anticipated that Bt cotton will enable farmers to increase their yields to between 1,000 and 1,200 kg per hectare.⁴⁸ To moderate imports, the government doubled the import duty on cotton to 10 percent in January 2002.⁴⁹

Manmade fibers

Manmade fibers accounted for 42 percent of India's mill fiber consumption in 2001.⁵⁰ India was the world's fifth-largest producer of synthetic fibers in 2001 (3.1 billion pounds), trailing China (16.1 billion pounds), Taiwan (6.6 billion), the United States (5.8 billion), and Korea (5.2 billion).⁵¹ India's synthetic fiber production reportedly is concentrated in polyester; India's production of polyester fiber is estimated at 1,500 tons per day.⁵²

Leading synthetic producers in India include Reliance Industries, Indo Rama Synthetics, and Rajasthan Spinning and Weaving Mills. Reliance Industries indicated that it is India's largest producer of polyester, accounting for over 51 percent of domestic production, and that it is the world's second-largest producer of polyester staple fiber and polyester filament

⁴⁵ Officials of the North India Textile Mills Association (NITMA), interviews by USITC staff, New Delhi, Oct. 31, 2002.

⁴⁶ India's principal cotton states are Gujarat, Karnataka, Maharashtra, Punjab, Andhra Pradesh, Haryana, Rajasthan, and Tamil Nadu. NITMA officials, interviews by USITC staff, New Delhi, Oct. 31, 2002.

⁴⁷ India employs older roller gins and estimates that it needs 1,200 new ginning machines to modernize and improve its ginning facilities. The United States is said to have the lowest contamination rates in the world and India imports large quantities of pima cotton from California and Arizona. NITMA officials, interviews by USITC staff, New Delhi, Oct. 31, 2002, and Tamil Nadu, Nov. 5, 2002.

⁴⁸ "GM Cotton Finally Cleared," *Asian Textile Business*, June 2002, p. 56.

⁴⁹ "Cotton Textile Products Will Be Expensive Say Experts," *Business Standard*, Jan. 10, 2003, found at <http://www.business-standard.com/archives/2002>, retrieved Feb. 8, 2003.

⁵⁰ Geerdes International, Inc., Richmond, VA, facsimile to USITC staff, Feb. 4, 2002.

⁵¹ Fiber Economics Bureau, Inc., *Fiber Organon* (Arlington, VA), July 2002, pp. 120-123.

⁵² Industry official, interviews by USITC staff, Coimbatore, Tamil Nadu, Nov. 5, 2002 and Ludhiana, Nov. 7, 2002.

yarn, with production facilities throughout India.⁵³ Reliance is a vertically integrated company with state-of-the art plants and equipment. According to Reliance, its polyester production increased by 12 percent in 2001-02 to 812,000 metric tons with plans to increase production to 1.2 million metric tons by 2005.⁵⁴

The average consumption of manmade fibers in India is estimated to be very low at 3 kilograms per person, compared with 6 kilograms in China and 12 to 13 kilograms in the United States.⁵⁵ However, as noted above, there has been a shift in consumer preferences toward blends and synthetics. As a result, Indian demand for synthetics grew by 13 percent in 1999-2000 and by 2.5 percent in 2000-01.

Labor

The Indian textile and apparel sector employs 35 million workers, which represents 11 percent of the total labor force. India possesses a vast pool of skilled and unskilled workers employed on a 48-hour, 6-day work week. Salaries vary by occupational specialty and are set by the Minimum Wage Act. In some regions, workers are paid at a piece rate, especially where men make up most of the workforce. In other regions, monthly wages generally average \$40 to \$42 per month for unskilled workers and \$54 to \$80 per month for skilled workers.⁵⁶ Indian textile and apparel workers, especially in the organized sector, are represented by unions. India's labor laws allow unions to be tied to political parties, making it difficult for mills to lay off workers.⁵⁷ Mill owners tend to limit mill size to less than 1,000 workers to mitigate the effect of India's labor laws and of strikes or other work stoppages. Working conditions are similar to those in other developing countries and workers are covered by a variety of social security measures.⁵⁸

India's low wage rates are partially offset by high overall production costs and low labor productivity, the lack of flexibility in domestic labor laws, increasing fuel and power costs, and obsolete machinery and equipment. Many companies have shifted a significant portion of their production to subcontractors and fabricators to minimize the cost of direct labor.⁵⁹ Also, labor laws designed to protect workers and the SSI sector have greatly restricted layoffs and the adoption of modern machinery. The cost of labor as a percentage of total production costs in the Indian textile and apparel sector reportedly declined from 12 percent in the 1990s to between 7 and 8 percent in 2002.⁶⁰ According to the Garment Exporters Association (GEA), wages in India are approximately 10 percent lower than in China, but differences in productivity translate to labor costs that are effectively 40 percent higher.⁶¹

⁵³ Bharat Desai, Senior Vice President, Business Analysis, and Madhu Suthanan, Manager Business Analysis, Reliance Industries, interview by USITC staff, Oct. 30, 2002.

⁵⁴ Reliance Industries, *Annual Report 2000-01*, found at <http://www.ril.com>.

⁵⁵ NITMA official, interview by USITC staff, New Delhi, Oct. 31, 2002.

⁵⁶ "The Far Pavilions: India's Apparel Industry," *Bobbin*, Nov. 2001, p. 51.

⁵⁷ Official of Apparel Export Promotion Council, interview by USITC staff, New Delhi, Oct. 31, 2002.

⁵⁸ *Ibid.*

⁵⁹ NITMA officials, interview by USITC staff, New Delhi, Oct. 31, 2002.

⁶⁰ Industry officials, interview by USITC staff, Tamil Nadu, Nov. 5, 2002.

⁶¹ "The Far Pavilions," p. 51.

Consequently, the unit cost is higher in India than in China. The GEA maintains that the average Indian worker can produce 10 shirts per day whereas the average Chinese worker can produce 22 shirts per day, which effectively gives Chinese manufacturers a wage advantage.

Technology

Since the early 1990s, the Indian textile and apparel sector has experienced an infusion of new technology that principally entailed shifting from manual controls to computer-controlled machines. However, most production equipment is old and operates slowly and inefficiently. In the weaving segment, many looms are outmoded and are used to produce plain, striped, and checkered fabrics.⁶² India recently allowed the importation of used textile and apparel machinery, and the estimated number of used shuttleless looms operating in India is expected to grow to between 1,500 and 2,000 by the end of 2002, with imports of new machines ranging between 800 and 1,000 units.⁶³ The organized mill sector reportedly has imported modern looms to produce defect-free cloth and higher-end fabrics.⁶⁴ In 2002, India imported 4,000 shuttleless looms and is expected to import an additional 5,000 looms in 2003.⁶⁵

India has approximately 20 producers of textile machinery for spinning, weaving, texturing, and finishing. However, most machines used for cotton spinning, carding, winding, knitting, weaving, dyeing and finishing, and texturing are imported from Europe, the United States, Korea, or Japan. The use of computer-aided design (CAD) and computer-integrated manufacturing (CIM) remains limited, and it is reported that only about 300 CAD installations in India perform design, pattern making, grading, and marking.⁶⁶

To encourage the rapid integration of new technologies, the government lowered import duties on textile machines from 15 percent to 5 percent and implemented the Technology Upgradation Fund (TUF). The \$5.9 billion TUF program was designed to facilitate investment and modernize the industry, particularly the weaving and processing segments through greenfield projects and the upgrade of machinery, labor, and raw materials.⁶⁷

⁶² "Technology Upgradation," BharatTextiles.com, found at <http://bharattextile.com/library/003002.php>, retrieved May 17, 2003.

⁶³ "Investment in Weaving Grows," *Asian Textile Business*, Oct. 2002, p. 46.

⁶⁴ "Technology Upgradation," BharatTextile.com, Dec. 12, 2002, found at <http://www.bharattextile.com/library/003002.php>, retrieved Dec. 12, 2002.

⁶⁵ Official of Ministry of Textiles, interview by USITC staff, Udyog Bhawan, Nov. 8, 2002.

⁶⁶ "The Far Pavilions," p. 51.

⁶⁷ The TUF program is a 5-percentage-point, government-borne interest reimbursement or a 12 percent upfront subsidy, credit-linked, capital subsidy scheme on the interest charged by the financial institution for money loaned to textile mills for either modernization or technology improvement. As of Jan. 1, 2001, approximately 1,000 applications had been received and 800 loans had been approved, totaling \$875 million. For a variety of reasons, many segments of the industry have yet to take advantage of the TUF, and most of the loans have been to larger mills. Prime lending rates for major public sector banks have declined to 12 percent in 2003 from 16 to 17 percent in the 1990s. Ministry of Textiles, *Annual Report 2001-2002*, found at http://texmin.nic.in/annualrep/ar02_con.htm, retrieved Jan. 10, 2003.

Although the program called for installation of 50,000 new shuttleless looms and modernization of 250,000 semi/auto looms⁶⁸ in the decentralized textile segment, only a limited number of mills invested in new equipment in 2001-02, as both domestic demand for cotton yarn and exports declined.⁶⁹

Investment

India's apparel industry has made substantial investments to modernize its manufacturing capabilities to meet anticipated demand after 2005. The government's National Textile Policy 2000 established a desired investment target of \$1.2 billion to reach India's goal of \$25 billion in exports by 2010. The Indian Apparel Export Council predicted that India's textile and apparel sector would double its investment in new machinery and facilities within the next several years.⁷⁰ Domestic investment in the garment industry reportedly is expected to exceed \$167 million by the middle of 2004 as the apparel industry places greater emphasis on imports of specialized machinery for stitching, preparatory, and post-production operations.

In January 2001, the Indian government increased the permissible level of foreign equity participation in the Indian textile and apparel industry from 49 percent to 100 percent and also abolished the existing licensing system on the importation of textile products. However, these measures, combined with the de-reservation of the apparel industry, have thus far failed to attract meaningful levels of foreign direct investment (FDI). Since the early 1990s, proposed FDI in India's textile and apparel sector totaled only \$715 million and proposed FDI for January-May 2002 was estimated at \$4.9 million.⁷¹ Low labor productivity, restrictive labor laws, the rising costs of inputs and power, and infrastructure bottlenecks continue to discourage FDI. Further, many banks are reluctant to loan limited investment funds to India's textile and apparel sector, and interest rates continue to be high, especially when compared to the United States and Western Europe.⁷²

⁶⁸ Ibid.

⁶⁹ Industry officials, interview by USITC staff, India, Oct. 31-Nov. 7, 2002.

⁷⁰ Savita Gaur, "On Recovery Road?" *Textile Asia*, Sept. 2002, p. 82.

⁷¹ Rajeev Jayaswal, "Garment Industry Still in Tatters as Far as FDI Is Concerned," *Financial Express*, Aug. 13, 2002, found at http://www.financialexpress.com/print.php?content_id=15192, retrieved Jan. 9, 2003.

⁷² Officials of the Indian Ministry of Textiles, interview by USITC staff, New Delhi, Nov. 8, 2002.

Government Policies

Domestic policies

The Union Budget for 2001-02⁷³ includes measures intended to assist the Indian textile and apparel sector in becoming internationally competitive in terms of price and quality. Recent measures instituted by the government to improve the industry's competitive position include the de-reservation of the ready-made garments segment; elimination of limits on FDI; creation of the Technology Mission on Cotton to improve the yield and quality of India's cotton crop; reduction of customs duties on imported textile machines, permitting imports of used machines, and acceleration of depreciation schedules on new machinery; the dismantlement of quantitative restrictions (QRs) on 342 textile and apparel products; reduction of excise duties on fabrics, made-up textile articles, and garments from 16 percent to 12 percent; establishment of the Textile Centres Infrastructure Development Scheme (TCIDS) to improve the infrastructure and facilities of important textile centers; capitalization of the National Institute for Fashion Technology to train indigenous fashion designers; and implementation of the TUF.⁷⁴

To attract FDI and increase exports, the government recently approved the creation of Integrated Apparel Parks in Tronica City (Uttar Pradesh) and Ghaziabad and Surat (Gujarat). Various Indian states have submitted proposals for additional Integrated Apparel Parks.⁷⁵

Trade policies

Although India is a member of the South Asian Association for Regional Cooperation (SAARC), it continues to maintain quotas and other restrictions on imports of textiles and apparel from other SAARC members.⁷⁶ Separately, under the Indo-Nepal Trade Treaty, India limits imports of acrylic yarn from SAARC member Nepal.⁷⁷ Also, there is very little formal trade between India and Pakistan due to the ongoing dispute over Kashmir. Since 1992-93, India has initiated a total of 121 antidumping cases and reportedly is second only to the United States in the number of cases it has filed.⁷⁸ In 2001-02, India initiated 30 antidumping cases, including 5 cases involving textile fibers which result in the imposition of duties on acrylic yarn from Nepal and Italy; partially oriented yarn from Korea and

⁷³ Information on the Union Budget is available from the website of the Ministry of Finance at <http://www.indiabudget.nic.in>.

⁷⁴ The TUF program, as discussed earlier, has met with limited success.

⁷⁵ Rajeev Jayaswal, "Garment Industry Still in Tatters as Far as FDI Is Concerned."

⁷⁶ SAARC members include Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

⁷⁷ According to a trade report, in April-December 2002, India's imports of acrylic yarn from Nepal totaled 709.7 million tons, while the quota was 10,000 million tons. See "Revised Norms for Quota Imports from Nepal," *Business Standard*, Feb. 10, 2003, found at <http://www.business-standard.com/archives/2003/feb/50100203.020.asp>, retrieved Feb. 24, 2003.

⁷⁸ Aradhna Aggarwal, *Antidumping Law and Practice: An Indian Perspective* (Indian Council for Research on International Economic Relations, Apr. 2002).

Turkey; polyester staple fiber from Korea, Malaysia, Taiwan, and Thailand; and acrylic fibers from Germany, the United Kingdom, Bulgaria, and Brazil.⁷⁹

To increase its share of world trade and address the fact that India is not a member of a major, regional free-trade agreement, Indian Prime Minister A.B. Vajpayee met with the ASEAN Business Summit in October 2002 to discuss how India could develop closer economic ties with ASEAN. In 2002, India-ASEAN trade totaled \$10 billion, which represented slightly more than 1 percent of ASEAN's \$720 billion external trade.⁸⁰ Indian and ASEAN officials agreed to work toward the creation of a free trade area. This process would advance former Prime Minister Narasimha Rao's 1992 "Look East" policy to enhance India's economic ties with its Asian neighbors.

Many of India's prohibition and licensing schemes used to ban or limit imports were removed in 2001. As part of an agreement with the United States, India removed QRs on imports of 342 textile and apparel products.⁸¹ However, imports are still subject to certain restrictions, including high tariff rates. India's average bound duty rate for textiles and apparel is approximately 88 percent ad valorem and its applied rate ranges between 26 and 29 percent.⁸² After additional taxes are added to applied rates, the levy can be as high as 73 percent ad valorem.

Foreign Trade

India's trade surplus in textiles and apparel increased by 21 percent during 1997-2001 to \$11 billion (table F-4). The trade surplus is expected to narrow in 2002 due to declining exports to quota countries caused by the worldwide recession, the aftereffects of the attacks of September 11, and an overvalued rupee vis-a-vis the currencies of India's leading competitors. Indian exporters and importers expect trade patterns to change significantly after the quota regime is abolished in 2005. Indian industry officials predict that China and India will emerge as the principal beneficiaries if no new restrictions or preferential trade treaties are put in place after quotas are removed.⁸³

⁷⁹ Ministry of Commerce and Industry, Department of Commerce, *Annual Report 2002-2003*, found at <http://www.comerce.nic.in>, retrieved June 16, 2003; "India Initiated 30 Antidumping Cases Last Year," Indo-Asian News Service, May 3, 2001, found at <http://in.news.yahoo.com/-020503/43/1n82e.html>, retrieved Feb. 24, 2003; and "India Ready to Halve Textile Tariffs," *EmergingTextiles.com*, July 15, 2002, found at <http://www.emergingtextiles.com>, retrieved Oct. 17, 2002.

⁸⁰ S.D. Naik, "India and Asean: Towards Enhancing Economic Partnership," *Hindu Business Line*, Oct. 16, 2002, found at <http://www.blonnet.com/2002/10/16/stories/2002101600050800-.htm>, retrieved Feb. 20, 2003.

⁸¹ Office of the United States Trade Representative, "U.S. Lands India's Lifting of QRs," *rediff.com*, Apr. 6, 2001, found at <http://www.rediff.com/money/201/apr/06qr.htm>, retrieved June 13, 2003.

⁸² Malcolm Subhan, "Where Clouds Will Break," *Textile Asia*, June 2002, pp. 5-6.

⁸³ Industry officials, interviews by USITC staff, India, Oct. 31-Nov. 7, 2002.

Imports

India's imports of textiles and apparel increased by 65 percent during the 1997-2001 period. Imports consisted principally of cotton yarns and fabrics, filament yarn, spun blended yarn, made-ups, and ready-made apparel. Textiles accounted for virtually all of the imports during the period. Yarns and fabrics were the principal imports, accounting for over 90 percent of the total textile imports in 2000. Manmade-fiber yarn accounted for about 80 percent of total yarn imports in 2000. India's principal sources of textile and apparel imports include Taiwan, China, and Korea (together accounting for about 40 percent of the value in 2000). About 5 percent of the value of India's total textile and apparel imports were from the United States in 2001.⁸⁴

Due to the rising cost of domestic cotton and its reported contamination problems, combined with the inability of Indian weavers to produce defect-free cloth, many mills are now importing raw cotton from the United States, Latin America, South Africa, and Australia, as well as finished cotton fabrics from Southeast Asia and China.

Exports

India is one of the world's 10 largest exporters of textiles and apparel and is heavily reliant on exports to sustain its industry. Presently, approximately 28,000 companies in India export apparel, but reportedly less than 5 percent are internationally competitive. The Indian textile and apparel sector is expected to undergo extensive structural changes, and only 7,000 to 8,000 exporters are expected to survive following quota elimination in 2005.⁸⁵ To become more competitive, Indian exporters have signaled a willingness to use higher-performance textiles and make significant investments in order to move up the value-added chain rather than concentrating on commodities such as yarn and fabric where margins reportedly are very small.⁸⁶

India exports more than 30 percent of its total textile and apparel production, with sector exports accounting for 26 percent of India's total merchandise exports in 2001 (table F-4). According to the Ministry of Textiles, India's exports of textiles and apparel are projected to exceed \$50 billion by 2010. Garments account for over one-half of India's textile and apparel exports. Other leading exports include cotton yarns and fabrics, and made-up textile articles. Cotton apparel accounts for the majority of India's apparel exports.⁸⁷

Although India ranks among the world's leading suppliers of cotton yarn, India's cotton yarn exports were negatively affected by reduced demand in the United States, Canada, and the EU for garments produced in Bangladesh, Korea, and Taiwan that use Indian cotton yarn.

⁸⁴ Based on United Nations trade data.

⁸⁵ "Textile Exports Show Welcome Revival," *Business Standard*, Dec. 19, 2002, found at <http://www.business-standard.com/archive/2002/dec/50191202.003.asp>, retrieved Feb. 24, 2003.

⁸⁶ Industry official, interview by USITC staff, Nadu, New Delhi, Nov. 1, 2002.

⁸⁷ "Gateway to India: India's Apparel Export Manufacturing Industry," *Just-style.com*, p. 6.

In 2000, cotton yarn exports declined 14 percent by quantity to 457 million kilograms and 16 percent by value to \$1.2 billion.⁸⁸

India's primary export markets are the United States (25 percent) and the EU (31 percent) (table F-5). The remainder of India's exports is spread over a number of non-quota countries, especially the UAE, Japan, and the former Soviet republics. The Middle East is India's principal export market for synthetics and blended textiles.

The United States had binding quotas on nine categories of textile and apparel products from India in 2002, and a binding group quota, which effectively limited U.S. imports from India of all other textile and apparel items not subject to individual quotas. Indian exporters have primarily targeted niche markets in the quota countries, where they supply a broad range of semi-fashion, mid-priced casual wear (T-shirts, shirts, blouses, dresses, and skirts) and high-quality fashion items.⁸⁹ Quota categories with "fill rates" of 90 percent or more in 2002 included men's (and boys') cotton and manmade-fiber coats; knitted cotton shirts and blouses; men's cotton and manmade-fiber woven shirts; cotton sweaters; cotton trousers, slacks and shorts; cotton and manmade-fiber nightwear and pajamas; and cotton terry and other pile towels (table F-6). India also fully utilized its EU quotas in a number of product categories in 2002. Among the Indian products subject to binding EU quotas included cotton and artificial (e.g., rayon) yarn, knit and woven shirts; sweaters; dresses; and trousers.⁹⁰ During 1999, the estimated export tax equivalents for Indian garment exports to the United States and the EU were approximately 40 percent and 19 percent, respectively.⁹¹

The 3.8 percent decline in Indian exports of sector goods in 2001, compared with 2000 (table F-4), was attributed to the strength of the rupee against the currencies of its competitors, the slowed economies of its principal trading partners, the lack of preferential regional trade agreements, as well as the war in Afghanistan and the aftereffects of the attacks of September 11.⁹² Rising production, distribution, and transaction costs also have resulted in an erosion in the price advantage held by Indian products in many quota-country markets.⁹³ However, India's exports to the United States showed improvement during the later half of 2001 and during the April-July period of 2002, as exports increased from \$908 million to \$992 million after falling by 9.3 percent during the April-July period of the

⁸⁸ "Fall in India's Cotton Textile Exports," EmergingTextiles.com, found at <http://www.emergingtextiles.com/?q=art&s=020124-coun&r=search&n=19>, retrieved Oct. 17, 2002.

⁸⁹ "Gateway to India: India's Apparel Export Manufacturing Industry," Just-style.com, p. 6.

⁹⁰ Based on EU data, available at <http://www.sigl.cec.eu.int/>.

⁹¹ Sanjay Kathuria, Will Martin, and Anjali Bhardwaj, *Implications for South Asian Countries of Abolishing the Multifiber Agreement*, World Bank, Nov. 2001.

⁹² Ajit Lakra, Superfine Knitters, interview by USITC staff, Ludhiana, Nov. 7, 2002.

⁹³ Transaction costs include the cost of credit, local scales taxes, power costs, and handling and transportation costs. These costs account for 10 to 15 percent of production costs. Kavitha Venkatraman and P. Vinod Kumar, "Textiles Sector Needs to Gear Up for Global Arena," *Financial Express*, July 21, 2002, found at http://www.financialexpress.com/fe_full_story-.php?content_id=13572, retrieved Jan. 9, 2003.

previous year.⁹⁴ In the near future, Indian cotton textile producers see China as a potentially huge market for their exports of medium-staple fiber, yarn, and other textile items where China faces shortfalls. Cotton textile exports to China during 2000-2001 totaled approximately \$67 million, and the industry expects exports to reach \$104 million within the next 5 years.⁹⁵

Indian exporters are facing increasing competition from Bangladesh, Pakistan, China, and Sri Lanka in the United States, the EU, Japan, and Canada. With regard to the EU market, the increased competition reportedly was due in part to special quota and tariff concessions extended to Pakistan by the EU during 2001-2002.⁹⁶ Further, Indian exports of bed linen declined significantly in 2001 after the EU reimposed antidumping duties of 9.6 percent on Indian products.⁹⁷ Similar effects are anticipated from antidumping and countervailing actions against 10 Indian companies selling polyester texturized yarn in the EU, as well as Canada's imposition of a 20 percent import duty on ready-made garments from India while granting duty-free access to garments from Bangladesh.⁹⁸ Indian exporters are also concerned that the United States and other quota countries will erect other types of import barriers when quotas are removed in 2005. Indian exporters also expressed concern over the proliferation of free trade agreements and nonreciprocal tariff preference programs to which India is not a party or beneficiary. According to the Indian exporters, such trade agreements and programs place Indian products at a tariff disadvantage vis-a-vis competitors in important markets such as the United States. Examples include NAFTA and AGOA; current or potential bilateral free-trade agreements between the United States and Jordan, Singapore, Chile, and Australia; and the possibility of a Free Trade Area of the Americas.

⁹⁴ S. Venkitachalam, "Textile Exports to U.S. Jump 9% in April-July," *Financial Express*, Dec. 24, 2002, found at http://www.financialexpress.com/fe_full_story.php?content_id=24533, retrieved Jan. 10, 2003.

⁹⁵ Vijay Trivedi, "Chinese Textile Exporters Seek Indian Yarn, Grey Fabric Suppliers," *Financial Express*, Apr. 28, 2002, found at http://www.financialexpress.com/pring.php?content_id=7784, retrieved Jan. 9, 2003.

⁹⁶ See country profile on Pakistan, below, for further details.

⁹⁷ "Indian Bed Linen Victim of EU's Sanctions," *EmergingTextiles.com*, Aug. 13, 2002, found at <http://www.emergingtextiles.com/?q=art&s=020813>, retrieved Nov. 8, 2002.

⁹⁸ S. Venkitachalam, "Exporters Cry Foul over Canadian Duty on Indian Garments," *Financial Express*, Oct. 8, 2002, found at http://www.financialexpress.com/fe_full_story.php?content_id=19902, retrieved Dec. 17, 2002.

Table F-4
India: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Textile and apparel share of manufacturing					
value-added (percent)	12	11	10	(¹)	(¹)
Number of mills ²	(¹)	2,924	2,973	3,145	3,087
Spinning mills (non-SSI) ²	(¹)	1,543	1,575	1,665	1,579
Spinning mills (SSI) ²	(¹)	901	921	996	1,046
Composite mills (non-SSI) ²	(¹)	281	285	281	281
Installed spinning capacities:					
Short-staple spindles (1,000)	34,874	35,499	36,910	37,698	38,091
Long-staple spindles (1,000)	950	980	984	990	990
Open-end rotors (1,000)	309	352	442	453	473
Installed weaving capacities:					
Shuttleless looms ⁴ (number)	7,170	7,750	7,955	7,500	11,800
Shuttle looms ⁴ (number)	116,420	116,320	120,439	115,500	129,400
Purchases of large circular knitting machines	(¹)	606	822	835	678
Production index (1997=100):					
Yarns	(¹)	(¹)	(¹)	105.0	103.2
Fabrics	(¹)	(¹)	(¹)	88.6	65.4
Average total labor cost per operator hour	(¹)	(¹)	(¹)	\$0.58	³ \$0.57
Fiber production:					
Raw cotton ⁵	(¹)	165	156	140	158
Manmade fibers (million kilograms)	(¹)	782	835	904	834
Raw wool (million kilograms)	(¹)	48	47	47	47
Raw silk (million kilograms)	(¹)	16	15	16	18
Yarn production:					
Cotton yarn (million kilograms)	(¹)	2,022	2,204	2,267	2,212
Other spun yarn (million kilograms)	(¹)	786	815	893	889
Manmade filament yarn (million kilograms)	(¹)	850	894	920	962
Total (million kilograms)	(¹)	3,658	3,913	4,080	4,063
Fabric production:					
Cotton (million square meters)	(¹)	17,948	18,989	19,718	19,769
Blended (million square meters)	(¹)	5,700	5,913	6,351	6,287
100 percent non-cotton (million square meters)	(¹)	12,479	14,306	14,187	15,978
Total (million square meters)	(¹)	36,127	39,208	40,256	42,034
Mill fiber consumption:					
Cotton (1,000 metric tons)	2,664.0	2,707.1	2,911.3	2,979.0	2,917.1
Wool (1,000 metric tons)	51.3	48.9	52.4	54.2	55.6
Manmade fibers (1,000 metric tons)	1,632.9	1,830.4	1,981.1	2,094.1	2,111.3
Total (1,000 metric tons)	4,348.2	4,586.4	4,944.8	5,127.3	5,084.0
Foreign trade:					
Exports:					
Textiles (million dollars)	4,844.0	4,188.9	4,673.6	5,499.1	⁶ 5,048.0
Apparel (million dollars)	4,759.0	5,165.9	5,582.3	6,692.1	⁶ 6,682.0
Total (million dollars)	9,602.9	9,354.8	10,255.9	12,191.2	⁶ 11,730.0
Imports:					
Textiles (million dollars)	390.7	444.1	497.6	574.4	⁶ 600.0
Apparel (million dollars)	8.2	12.1	18.4	25.2	⁶ 25.0
Total (million dollars)	378.9	506.1	516.0	599.5	625.0

See footnotes at end of table.

Table F-4--Continued
India: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Trade balance:					
Textiles (<i>million dollars</i>)	4,453.2	3,744.8	4,176.0	4,924.7	4,448.0
Apparel (<i>million dollars</i>)	4,750.8	5,153.9	5,563.9	6,667.0	6,657.0
Total (<i>million dollars</i>)	9,204.0	8,898.7	9,739.9	11,591.7	11,105.0

¹ Not available.

² SSI refers to the small-scale industry sectors. Data on the number of mills are from the Ministry of Textiles, Government of India.

³ Represents 2002 data.

⁴ Data are for the mill sector only. In addition, data for 1998-2001 from the Ministry of Textiles, Government of India, show that there were approximately 1.6-1.7 million powerlooms in the decentralized sector and 3.9 million handlooms in the handloom sector.

⁵ 100,000 Indian bales: Indian bales weigh 165 kilograms. U.S. bales weigh 220 kilograms.

⁶ Estimated by the Commission based on the percentage change in world imports from India as reported by India's trading partners.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from the web site of the World Bank (<http://publications.worldbank.org>); International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and *Country Statements 2002*, and selected back issues; Werner International Management Consultants, Reston, VA; mill fiber consumption data from Geerdes International, Inc., Richmond, VA, facsimile to Commission staff, Feb. 4, 2003; and trade data are United Nations data as reported by India, except as noted.

Table F-5
India: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	627	640	741	845	(¹)
European Union	1,465	1,320	1,324	1,501	(¹)
Canada	79	78	86	91	(¹)
Subtotal	2,172	2,037	2,150	2,436	(¹)
All other:					
Afghanistan	2	2	3	5	(¹)
Albania	(²)	0	(²)	(²)	(¹)
Algeria	2	3	3	7	(¹)
Other	2,668	2,146	2,518	3,051	(¹)
Subtotal	2,672	2,151	2,523	3,063	(¹)
Grand total	4,844	4,189	4,674	5,499	(¹)
Apparel (SITC 84):					
Quota markets:					
United States	1,512	1,628	1,698	2,204	(¹)
European Union	1,995	2,010	2,065	2,305	(¹)
Canada	158	190	218	259	(¹)
Subtotal	3,665	3,828	3,980	4,767	(¹)
All other	1,094	1,338	1,602	1,925	(¹)
Grand total	4,759	5,166	5,582	6,692	(¹)
Textiles and apparel:					
Quota markets:					
United States	2,140	2,269	2,438	3,048	(¹)
European Union	3,460	3,329	3,388	3,805	(¹)
Canada	237	268	304	349	(¹)
Subtotal	5,837	5,866	6,130	7,203	(¹)
All other	3,766	3,489	4,126	4,988	(¹)
Grand total	9,603	9,355	10,256	12,191	(¹)
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	45	49	46	44	(³)
Apparel	77	74	71	71	(³)
Average	61	61	60	59	(³)

¹ No data reported.

² Less than \$500,000.

³ Not applicable.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table F-6
Textiles and apparel: U.S. general imports from India, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	—————1,000 square meters equivalent—————					
0	Textiles and apparel, total	985,739	1,083,648	1,149,428	1,248,337	1,250,245	1,544,689
1	Apparel	315,584	364,260	376,091	399,232	402,811	508,737
2	Textiles	670,155	719,387	773,337	849,106	847,434	1,035,951
11	Yarns	11,894	19,768	16,491	17,542	12,525	23,633
12	Fabrics	230,881	210,044	182,745	191,609	151,196	169,759
14	Other miscellaneous articles	427,381	489,576	574,100	639,955	683,713	842,560
30	Cotton textiles and apparel	844,296	913,314	967,981	1,034,109	1,031,137	1,207,865
31	Cotton apparel	210,615	240,645	246,388	247,886	250,102	338,773
32	Cotton textiles	633,681	672,670	721,593	786,223	781,035	869,092
40	Wool textiles and apparel	14,120	17,145	15,727	19,677	22,746	23,725
60	Manmade-fiber textiles and apparel	116,676	143,185	148,947	174,272	172,214	286,162
61	Manmade-fiber apparel	95,268	109,871	116,305	132,628	129,490	145,347
62	Manmade-fiber textiles	21,407	33,314	32,642	41,644	42,724	140,815
80	Silk blend/veg fiber textiles/apparel	10,648	10,003	16,774	20,279	24,148	26,938
218	Fabrics of different colored yarn	13,052	13,954	12,103	14,057	11,893	16,836
219	Duck fabric of cotton/manmade fiber	68,035	63,697	52,884	58,265	50,955	48,886
229	Special purpose fabric	2,433	4,838	10,802	15,969	18,179	17,168
239	Babies' apparel	3,476	4,489	5,190	10,801	16,980	19,622
313	Cotton sheeting fabric	40,276	30,197	37,139	33,745	17,452	21,099
317	Cotton twill fabric	44,429	31,683	24,353	19,814	11,931	14,117
335	Cotton coats, women/girls	8,950	9,300	9,820	10,315	9,817	13,175
336	Cotton dresses	12,495	13,311	17,226	17,377	14,905	20,373
338	Cotton knit shirts, men/boys	19,385	21,404	20,181	19,368	22,680	29,238
339	Cotton knit shirts, women/girls	3,563	5,459	7,735	7,770	5,780	8,420
340	Cotton not knit shirts, men/boys	39,748	48,838	45,899	45,494	42,070	54,873
341	Cotton not knit blouses	51,848	60,465	55,340	54,969	54,819	80,373
342	Cotton skirts	6,620	5,274	6,747	10,172	9,425	12,345
345	Cotton sweaters	5,398	5,874	6,059	6,924	7,464	6,592
347	Cotton trousers, men/boys	4,798	6,455	5,456	5,912	7,403	10,661
348	Cotton trousers, women/girls	5,762	5,531	5,727	6,629	6,395	9,706
351	Cotton nightwear	11,118	14,667	13,036	13,971	13,996	19,557
352	Cotton underwear	11,229	10,734	17,682	10,361	11,455	26,750
359	Other cotton apparel	18,228	21,268	22,466	21,836	20,126	16,769
361	Cotton sheets	2,882	3,849	4,459	8,619	20,012	39,223
362	Cotton bedspreads and quilts	7,817	12,303	12,207	15,630	14,179	20,912
363	Cotton terry and other pile towels	16,900	17,615	21,997	21,212	22,686	31,110
369	Other cotton manufactures	379,854	437,396	512,004	565,932	590,031	631,681
635	Manmade-fiber coats, women/girls	9,546	11,250	10,539	11,704	13,691	11,509
636	Manmade-fiber dresses	25,801	30,825	30,684	26,237	25,031	28,877
638	Manmade knit shirts, men/boys	2,080	3,928	5,934	7,680	11,304	13,061
639	Manmade knit shirts, women/girls	3,772	4,132	4,805	5,483	4,213	4,574

See footnote at end of table.

Table F-6—Continued

Textiles and apparel: U.S. general imports from India, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	—————1,000 square meters equivalent—————					
640	Manmade not knit shirts, men/boys	486	1,262	2,020	4,377	4,041	7,500
641	Manmade-fiber not knit blouses	15,443	16,523	18,471	18,620	15,446	22,913
642	Manmade-fiber skirts	11,752	11,971	11,680	12,447	8,391	7,433
647	Manmade-fiber trousers, men/boys	428	566	1,520	3,245	6,563	6,680
648	Manmade-fiber trousers, women/girls	5,815	6,683	7,096	8,791	7,535	6,710
659	Other manmade-fiber apparel	13,811	15,939	16,653	24,454	21,828	24,144
666	Other manmade-fiber furnishings	5,342	4,534	2,772	4,767	8,010	36,073
669	Other manmade-fiber manufactures	1,078	2,251	2,531	2,221	3,085	48,866

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Pakistan¹

Overview

Pakistan is a major global producer and exporter of textiles and apparel. Pakistan's textile industry is the backbone of the economy, contributing 60 percent of export value and 46 percent of total manufacturing income. In 2000, the textile industry employed approximately 217,000 persons,² and the apparel industry employed 700,000 persons. Overall gross domestic product (GDP) for Pakistan grew 3.6 percent in 2002, with a 1.4-percent growth in agriculture, 4.4-percent in manufacturing, and 5.1-percent in services. The key to growth in manufacturing was the textiles and apparel sector, which benefited from low interest rates and increased access to Western markets.³

Historically, Pakistan produced only cotton textiles and apparel because the agricultural economy grew sizable amounts of cotton for both domestic use and export. Over the last few years, changing global demand toward apparel made from cotton blends has forced Pakistan's textile industry to shift its product mix to include synthetic yarns, fabrics, and apparel. Although synthetic fibers have taken a 58 percent share of global fiber consumption, only about 30 percent of Pakistan's fiber consumption is synthetics. The growth of the polyester filament yarn industry in Pakistan has been blunted by a government excise tax of 15 percent ad valorem instituted in 1999 on polyester chips, a primary input. However, Pakistani textile firms continue to face pressure to diversify away from cotton as a fiber input because the domestic cotton crop was plagued by the leaf curl virus throughout the 1990s, affecting both quality and yields.

The future of Pakistan's textile and clothing exports remains uncertain after the expiration of global textile quotas. Spinning capacity expanded throughout the 1990s, but mismanagement has made many of the mills unprofitable. Yarn production consists mainly of lower value coarse and medium counts due to outdated machinery, and roughly 70 percent of production is still cotton yarn, rather than higher-value cotton blends or synthetic yarn.

Although cotton fabric is also made by large, organized mills, Pakistan's weaving sector is dominated by small, family-owned power-loom weavers who produce poor quality fabrics at very low productivity levels. The cottage or nonmill sector produces roughly 90 percent of Pakistan's output, mostly grey fabric. Pakistani fine thread-count cotton fabric is often of high quality, and the plants making this fabric are state-of-the-art facilities. However, some U.S. retailers refuse to purchase from private mills not funded by World Bank loans, fearing

¹ Prepared by John T. Fry, Office of Industries.

² The number of workers is listed as "full-time equivalents," so the actual number of workers may be higher if some work part time only. International Textile Manufacturers Federation (ITMF), *Country Statements 2001*, table 2.2, p. 36. Other sources indicate that Pakistan's employment in the textiles and apparel sector totals approximately 1.4 million.

³ Embassy of the Islamic Republic of Pakistan, Washington, DC, found at <http://www.pakistan-embassy.com>, retrieved Feb. 14, 2003.

that financing has come from drug-money profits.⁴ *** Since the terrorist attacks of Sept. 11, 2001, some Western buyers, and particularly Americans, have been reluctant to source textiles and apparel from Pakistan because of concerns for their personal safety while testing products before shipment. To encourage sales, Pakistani firms are setting up show rooms in Dubai and other areas in the region.

The success story in the Pakistani textile industry remains cotton towel and bed linen production. Approximately 6,500 towel looms operate in Pakistan, with an increase in the value of exports to all markets of more than 300 percent since 1993. Pakistani firms produce a wide variety of bed linens, including flat and fitted sheets, pillow covers, quilt covers, and duvets. Those firms are large, integrated units that continue to upgrade capacity with new machines when needed. They tend to face less competition in foreign markets than companies that produce for other textile and apparel sectors.

Industry Profile

Industry structure and performance

Textiles

Pakistan has the third-largest installed capacity of short-staple spindles for spun yarn in the world, after China and India. In 2000, Pakistani firms possessed 8.6 million short-staple spindles, or 5 percent of global capacity (table F-7). Local production of cotton yarn⁵ in 2000 totaled 1.3 million mt, up from 1.2 million mt in 1999; cotton-blend yarn (51-84 percent cotton fiber) production totaled more than 305,000 mt, down from 418,000 mt in 1999.⁶ Currently, only 18 percent of Pakistan's spindle utilization is devoted to manmade fiber production.⁷ The Pakistani Government would like to expand that percentage to 40 percent to satisfy more of the global demand for synthetic and cotton-blend yarns.⁸ Furthermore, seventy percent of Pakistan's cotton yarn production is coarse and medium counts, and the local industry is unable to fully compete for the increased demand in higher value-added finer-count yarns.⁹ Therefore, while the global export market for all yarn (cotton, blends and synthetics) is growing, Pakistan is losing market share.¹⁰

⁴ Information in the remainder of this paragraph is from industry sources, interview by USITC staff, Hong Kong, Feb. 25, 2003.

⁵ Cotton yarn is defined here as 85 percent or more cotton fiber.

⁶ ITMF, *Country Statements 2001*, table 3.2, p. 40.

⁷ Embassy of the Islamic Republic of Pakistan, Washington DC, data found at <http://www.pakistan-embassy.com> and <http://www.smeda.org.pk>, retrieved Feb. 14, 2003.

⁸ Ibid.

⁹ Ibid.

¹⁰ Ibid.

Blended yarn production in Pakistan consists of two main segments: polyester/cotton (PC) and polyester/viscose (PV). Approximately 70 percent of local production is PC yarn, and most of the rest is PV yarn. Because the polyester industry in Pakistan has expanded since 1995, and polyester staple fiber is in greater supply, PC yarn production has grown to 18 percent of total Pakistani yarn production in 1999.¹¹ Viscose fiber, however, is almost entirely imported, and PV yarn production has grown at a much smaller rate, to 7.5 percent of yarn production in 1999.

The knitwear industry in Pakistan has expanded in recent years, containing roughly 600 units with about 10,000 knitting machines working at 60 percent capacity utilization. Nearly 200 units are major, integrated composite mills with knitting, dyeing, and sewing processes. Many mills have installed imported soft-flow dyeing machines and tension-free dryers. The total added value of this subsector is small compared with the total textile and apparel sector in Pakistan. Because knitting is primarily mechanized, Pakistani knitting operations provide direct employment to only about 20,000 people.¹²

Textile made-ups can be divided into six categories: towels and cleaning cloths; bed wear and linen; blankets; curtains and furnishings; canvas products; and table linen. According to Pakistan's Federal Bureau of Statistics, Pakistani exports of textile made-ups to all countries in 2000 totaled \$1.3 billion.¹³ Bed wear and bed linens, which include bed sheets, pillow covers, and quilts, is an important subsector for the Pakistani textile industry. Most of Pakistan's bed wear and bed linen production is provided by the informal manufacturing sector in which small manufacturers cut, stitch, and package apparel but purchase the fabric and/or contract for other processing services.¹⁴ The higher-quality market segments are supplied by vertically integrated units which closely monitor product quality.¹⁵

Pakistan is an extremely competitive global competitor in the bed wear and linen subsector, running a close second to China in export value, and Pakistan production has doubled in value since 1996, according to data of the Small and Medium Enterprise Development Authority, Government of Pakistan, as shown in the following tabulation (in million of dollars):

Year	Value
1996	376
1997	469
1998	487
1999	567
2000	681
2001	753

¹¹ Ibid.

¹² Noor Ahmed Memon, "Development of Knitwear Industry in Pakistan," *Pakistan Textile Journal*, Jan. 2002, pp. 1-6, found at <http://www.ptj.com.pk>, retrieved Dec. 26, 2002.

¹³ Small and Medium Enterprise Development Authority, Government of Pakistan, *Bed-wear & Linen: Sector Brief*, July 12, 2002, found at <http://www.smeda.org.pk>, retrieved Dec. 15, 2002.

¹⁴ Ibid.

¹⁵ Ibid.

Pakistan's global market share jumped from 13.7 percent of the bed wear and linen market in 1995 to 21 percent in 1999.¹⁶ Most bed wear and linens are made from low-density fabrics of wider widths, easily made on power looms,¹⁷ and the cost of low-density fabric is low compared to other fabrics that could also be used for the production of garments. In addition, fabric for bed wear is printed rather than dyed, and printing reportedly is both a cheaper process compared to dyeing and far easier to control quality.¹⁸

EU imports of bed linen from Pakistan, under the EU's category 9 quota, totaled 42,844 mt in 2001. Pakistan was by far the largest supplier to the EU market, with India second (16,070 mt). In light of increased EU market access for Pakistani goods under category 9 and the removal of import duties on those goods in the wake of the September 11 attacks, Pakistani shipments of bed linens to the EU are expected to be significantly higher when full year 2002 data are released.¹⁹

Apparel

The number of production units in the Pakistani apparel industry during 2001 is estimated to be 4,500, and the majority of the units are located in Karachi and Lahore. Roughly 80 percent is part of the cottage industry, with small production lines often found in workers' homes. The remainder are larger industrial units utilizing economies of scale. The knit garments sector tends to use integrated manufacturing facilities that produce fabric and stitch it into garments, whereas the woven sector continues to use nonintegrated stitching units due to the heavy investments required in the weaving and processing industries.²⁰

Total installed capacity during 2000 was estimated at 650,000 machines, with 200,000 serving the industrial sewing market and the remainder classified as domestic sewing machines used by cottage industry units. The Pakistani apparel industry employs approximately 700,000 people, due to the labor-intensive nature of sewing. Production totaled 685 million pieces in 2000,²¹ according to data of the Small and Medium Enterprise

¹⁶ Ibid. About 70 percent of the total export value of Pakistani bed wear and linen is nonknit cotton bed linen.

¹⁷ Power looms are handlooms. Industry sources interview by USITC staff, New York, NY, Mar. 12, 2003.

¹⁸ Small and Medium Enterprise Development Authority, *Bed-wear & Linen*.

¹⁹ Pakistani officials voluntarily imposed minimum export prices on bed linen shipments to the EU in Apr. 2002 after the EU reimposed antidumping duties on similar products from India. See "EU slaps duties on Indian bed linen," Apr. 26, 2002, found at <http://www.emergingtextiles.com>, retrieved Nov. 8, 2002.

²⁰ Small and Medium Enterprise Development Authority, Government of Pakistan, *Apparel: Sector Brief*, July 12, 2002, found at <http://www.smeda.org.pk>, retrieved Dec. 15, 2002.

²¹ Ibid.

Development Authority, Government of Pakistan, as shown in the following tabulation (in millions of pieces):²²

Year	Pieces
1996	650
1997	665
1998	670
1999	(¹)
2000	685
2001	753

¹ Not available.

Factors of production

Raw materials

Total fiber consumption was estimated to be more than 2.3 million mt in 2001, up from 2.0 million mt in 1997 (table F-7). In 2001, cotton fiber usage totaled 1.6 million mt; the remainder was synthetic fiber. The availability of domestic cotton fibers, estimated at 1.8 million mt during August 2001-July 2002, has been an important factor in the development of the cotton textile sector. Pakistan is the fourth-largest producer of cotton in the world after China, the United States, and India.²³ Pakistani cotton growers have been struggling since 1992 against leaf roll (also called leaf curl) disease, which has caused production losses of 1.3 million mt and an estimated \$5 billion in lost sales over the last 10 years. As leaf roll disease has been contained, Pakistani cotton production has risen 1.7 million mt per year over the last three growing seasons. However, a new variant of leafroll disease has recently been discovered in Pakistan, to which existing cotton plants are still susceptible.²⁴

The cotton-ginning industry in Pakistan has quality and efficiency problems that affect the final cotton goods. Much of the sector is operated by second-generation mechanics (*mistris*) that have learned the business through trial and error and years of experience. But Pakistani ginning technology is obsolete, with machines only one-fifth as productive as machines in developed countries.²⁵ In addition, different ginning mills have their own standards, affecting the overall uniformity of cotton lint produced.

²² Ibid.

²³ U.S. Department of Agriculture, Foreign Agricultural Service, *Cotton: World Markets and Trade*, Dec. 2002, table 1.

²⁴ "Pakistani Cotton Attacked by a New kind of Virus," *ITS Newsletter* No. 20, Oct. 22, 2002, p. 4.

²⁵ Energy usage is higher than it should be, moisture is improperly controlled (causing fiber damage), and saw gins are past their useful lives, with varying tooth angles on the saws and an insufficient number of saws in the gin stand to meeting international efficiency standards.

The Pakistani Government is promoting improvements to the cotton ginning sector by encouraging uniform standards and making ginners aware of technological advances.²⁶

Pakistani textile firms are attempting to satisfy the increasing global market demand for noncotton fabrics by converting some of its cotton yarn production into blended-cotton yarn. European consumers in particular want blended fabrics because of their durability and lower retail prices. Local Pakistani companies are aggressively using new technologies to meet that demand. Official Pakistani figures indicate that Pakistani textile plants consumed 400 million mt of synthetic fibers in yarn production during 2001, accounting for 30 percent of Pakistan's fiber consumption.²⁷ Synthetic fiber consumption is estimated to top 40 percent of total Pakistani fiber consumption in 2002.²⁸ In addition, Pakistani companies have begun purchasing more high-quality cotton, such as U.S. Pima and Acala varieties, to create better cotton yarns and fabrics.²⁹ U.S. exports of long-staple cotton to Pakistan rose from 3,700 mt in 1999 to 15,253 mt in 2001.³⁰

The growth of the polyester filament yarn industry has been blunted by a government excise tax of 15 percent ad valorem in 1999 on polyester chips, a primary input. Although the removal of tariffs on polyester fiber offset this tax somewhat, the overall impact of these government policies on the production of downstream polyester goods has been to raise the cost of polyester filament yarn.³¹

²⁶ "Pakistan: Ginning Industry: Need for Modernization," Oct. 11, 2002, pp. 1-3, found at <http://www.texwatch.com>, retrieved Nov. 6, 2002.

²⁷ Official data indicating an increased use of synthetics may be misleading because synthetic fiber consumption appears to have increased as a percentage of total consumption in 2001 only because cotton fiber usage declined rapidly after Sept. 11, 2001.

²⁸ "Pakistan: Synthetic Fibre Consumption to Hit Record Levels," Nov. 13, 2001, p. 1, found at <http://www.just-style.com>, retrieved Nov. 13, 2001. Currently about 58 percent of global fiber consumption is synthetic fibers.

²⁹ "Pakistan Shifts to Quality Cotton Textiles," *World Textile News*, June 4, 2001, found at <http://www.emergingtextiles.com>, retrieved June 8, 2001.

³⁰ U.S. Department of Commerce data.

³¹ Polyester fiber manufacturers in Pakistan are protected against imports of manmade fibers under a so-called sovereign guarantee, for 10 years, meaning that the Pakistani Government will not withdraw or reduce the current 15-percent *ad valorem* import tariff during that time. Abdul Razzak Dawood, Minister of Commerce, has said that the Pakistani Government will stand by this commitment. The sovereign guarantee was secured by ICI Pakistan Ltd., which built a polyester fiber facility in Sheikhpura at a cost of \$490 million. ICI claims it could have saved approximately \$80 million if they had built the same facility in Korea. See "Sovereign Protection," *Textile Asia*, May 2002, p. 73.

Labor

The textile and apparel sector in Pakistan provides employment to more than 1.4 million people, or roughly 40 percent of the employment in the manufacturing sector.³² The apparel industry employs approximately 700,000 people.³³

Pakistani labor costs for textile production are among the lowest in the world. Pakistani labor costs for spinning and weaving for 2000, which include medical insurance and any fringe benefits such as meals and child care, were \$0.37 per hour.³⁴ In 2002, those social costs declined to \$0.34 per hour.³⁵ (table F-7). Of the major countries with spinning and weaving operations, only Indonesia has lower costs than Pakistan.³⁶

Investment

Private and foreign government investment

In May 2002, the All Pakistan Textile Mills Association (APTMA) announced that it expects investment in Pakistan's textile industry will likely total \$500 million in 2002, which follows investments of \$485 million in 2001, primarily in the spinning and weaving subsectors. Much of the investment for 2002 is for value-added sectors outside Pakistan's traditional spinning and weaving operations.³⁷ Pakistani textile firms are also purchasing textile equipment such as ring frames from Chinese equipment manufacturers.³⁸

The Export-Import Bank of China has extended a \$200 million line of credit for financing equipment replacement in and the modernization and capacity expansion of Pakistan's textile industry. The line of credit is designed to encourage exports of value-added textile items to the United States, taking advantage of Pakistan's abundant supply of cotton yarn and grey fabrics.³⁹

In January 2002, the Chinese Government offered Pakistan \$25 million for investment in

³² Not all of the workers are employed full-time. Estimates from other sources put the full-time equivalent work force in textiles and apparel at just over 900,000. Pakistan's textile sector--a future in the balance: Part 3," Jan. 15, 2001, pp. 1-11, found at <http://www.just-style.com>, retrieved Dec. 3, 2002.

³³ Small and Medium Enterprise Development Authority, *Apparel: Sector Brief*.

³⁴ Werner International Management Consultants, *International Wage Survey*, Year 2000, faxed from Werner infortex, Nov. 2, 2001.

³⁵ Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons, 2002," Reston, VA.

³⁶ For comparison, China's social costs were \$0.69 per hour and India's were \$0.57 per hour in 2002. See Werner International Management Consultants, "Spinning and Weaving Labor Cost Companies, 2002."

³⁷ "Pakistan: Textile Investment Set to Top \$500m," May 23, 2002, p. 1, found at <http://www.just-style.com>, retrieved May 23, 2002.

³⁸ Shahid Iqbal, "Textile Sector Faces Tough Competition in World Market," *Business Recorder*, Dec. 14, 2002, found at <http://www.businessrecorder.com>, retrieved Dec. 30, 2002.

³⁹ "Pak-China Joint Ventures in Textiles," *Pakistan Textile Journal*, Jan. 2002, pp. 1-2, found at <http://www.ptj.com.pk>, retrieved Dec. 26, 2002.

joint ventures, which included two units to produce printed and embroidered silk garments. In addition, China is planning to set up an industrial park in Pakistan that would print silk cloth and convert it into garments for re-export. Pakistan has allocated land in Karachi for this purpose.⁴⁰

Government Policies

Inefficient cotton ginning negatively impacts the cost and quality of Pakistani exports of fabric and apparel. The Pakistani government's Small and Medium Enterprise Development Authority is creating programs to develop the ginning sector through standards implementation, gin saws upgrades, pneumatic control systems installation, and incentives for ginners to modernize their facilities.⁴¹

A recent Pakistani Government analysis identified two weak links in the Pakistani industry: ginning and power looms. Power-loom technology currently in place is often from the 1940s and 1950s and has become obsolete, producing 48-inch fabric when present demand is for fabric widths of 92 inches.⁴² To encourage machinery upgrades, the Pakistani Government created a program (under Textile Vision 2005) to upgrade the technology used in a large portion of Pakistan's weaving sector. The program is designed to give loans to textile firms in Faisalabad to upgrade from power looms to auto looms.⁴³ The final stage began in December 2002. Faisalabad was chosen for this program because 125,000 of the 225,000 power and auto looms in the country are in that region.

⁴⁰ Ibid.

⁴¹ "Pakistan: Ginning Industry: Need for Modernization," Oct. 11, 2002, pp. 1-3, found at <http://www.texwatch.com>, retrieved Nov. 6, 2002.

⁴² Low quality of output, low productivity, and low unit value are the major issues of the power-loom sector today, and the discussion in the industry has been whether to switch to shuttleless looms or auto looms. Second-hand air-jet or shuttleless looms cost Rs 800,000 but second-hand auto looms cost only Rs 125,000. Some Pakistani textile owners believe that product quality differences between the two machinery types are minimal and that only significant productivity gains from shuttleless looms could justify the additional cost. "Pakistan: Power Looms Up-Gradation Project Enters Final Stage," Nov. 29, 2002, p. 1, found at <http://www.texwatch.com>, retrieved Dec. 12, 2002.

⁴³ Auto looms are power looms (hand looms) which have been equipped with an auto cop changer. Basic power looms (without the auto cop changer) have shorter widths than auto looms and do not meet international specifications for woven fabric. In addition, power looms tend to produce lower-quality fabrics at a lower productivity level than auto looms. See Small and Medium Enterprise Development Authority, Government of Pakistan, *Pre-Feasibility Study: Fabric Weaving Unit (Auto Looms)*, June 2002, found at <http://www.smeda.org.pk>, retrieved Feb. 14, 2003.

Domestic policies

In August 2000, President Pervez Musharraf announced the Textile Vision 2005 program, which was intended to increase textile exports to \$13 billion annually through a planned development and investment strategy. Of the total Pakistani Government investment of Rs 333 billion (\$5.5 billion) earmarked for projects prior to 2005, Rs 87 billion (\$1.5 billion) will be spent for spindles, Rs 62 billion (\$1.0 billion) for processing and weaving, Rs 39 billion (\$650 million) for stitching machines, Rs 40 billion (\$670 million) for water jet and air jet looms, Rs 29 billion (\$480 million) for knitting, Rs 29 billion (\$480 million) for polyester fiber, and Rs 7 billion (\$120 million) for knit-processing.⁴⁴

The Pakistani Government has implemented the Textile Vision 2005 strategy through the establishment of a textile management fund to remodel the textile industry and stimulate textile exports. A banking consortium operates the fund and disburses loans for the development of value-added textile businesses. APTMA, the primary association of Pakistani mills, is concerned that future loans will be given for so-called value-added projects to the detriment of traditional spinning and weaving operations. But the finance ministry has said that the investment strategy will be based on the principle of “parallelism,” meaning that the Pakistani Government would like to build domestic capacity in value-added textile processing while recognizing that older industries also require financial and technical upgrading to compete globally. The State Bank of Pakistan has indicated that credit will be extended on merit, with better credit risks being given better rates. Recent government analysis estimates that the Pakistani textile industry will need at least Rs 24 billion (\$400 million) in loans and Rs 16 billion (\$270 million) in equity for balancing, modernization, and replacement needs. In addition, the Trading Corporation of Pakistan (TCP) was given the role of stabilizing cotton prices and ensuring a fair return for growers. TCP is now the buyer of last resort when domestic prices fall below a fixed minimum.⁴⁵

Pakistan is also establishing productivity standards for its spinning sector. Eleven spinning factories have volunteered for the first phase of the trials, intended to study Pakistan’s production capacity and set standards at par with the textile sector of Europe. Initially, Pakistani products will be compared with those of India and Thailand, and a productivity study focusing on ways to improve productivity per spindle will be prepared. Notably, in the last few years, \$400 million has been spent replacing Pakistani spinning machinery and another \$500 million has yet to be spent.⁴⁶

The private sector is also beginning to focus on modernization and developing industry standards. In December 2002, the Pakistani Towel Manufacturers Association (TMA) urged the Pakistani Government to set up a special section of the Labour Ministry to advise factory

⁴⁴ “Pakistan: Textile Industry’s Investment Strategy,” Sept. 9, 2002, pp. 1-3, found at <http://www.texwatch.com>, retrieved Nov. 15, 2002.

⁴⁵ Ayub Mehar, “Financing Expansion,” *Textile Asia*, July 2000, p. 82.

⁴⁶ “Pakistan: Spinning Sector Productivity Standards to Be Set Up,” Aug. 28, 2002, p. 1, found at <http://www.texwatch.com>, retrieved Nov. 6, 2002.

owners on how they can comply with new regulations on labor and safety standards imposed by U.S. retailers.⁴⁷

Trade policies

Pakistan

Pakistan has traditionally imported very few textile products, primarily because of government policies banning the importation of textiles that competed with domestic production in local markets. In February 2000, however, the Pakistani Government removed 14 textile made-ups from its “negative import list,” a compilation of foreign goods prohibited from importation. The items included woven fabrics, carpets, curtains, apparel, clothing, and bed linen. Pakistan continued to ban the importation of many other textile goods at that time, even in light of its WTO commitments to open its textile regime.⁴⁸ By November 2002, the Pakistani Government had removed all textile products from its negative import list and also reached an agreement with the WTO Balance of Payments Committee to phase out quantitative restrictions on all textile imports.⁴⁹

In August 2000, under the Textile Vision 2005 program, the Pakistani Government eliminated the 15 percent *ad valorem* import duty on cotton and allowed duty-free import of machinery for production of export-oriented products through June 30, 2001.⁵⁰ The Pakistani Government also removed the import duty on cotton to ease a shortage caused by past government practice of buying cotton to halt domestic price declines and then selling the stocks abroad in exchange for hard currency.⁵¹

United States

In the aftermath of the September 11 attacks, export demand for Pakistani textiles and apparel reportedly fell sharply as customers in the United States and elsewhere cancelled orders because of the heightened risk of doing business in Pakistan.⁵² Both the United States and the EU later negotiated with Pakistan to provide additional preferential market access for certain Pakistani textiles and apparel exports into the two markets.

⁴⁷ Muzaffar Qureshi, “U.S. Stores Ask Pak Textile Exporters to Get Their Factories Certified,” *Business Recorder*, Dec. 13, 2002, found at <http://www.businessrecorder.com>, retrieved Dec. 30, 2002.

⁴⁸ “Textile Made-Ups Removed from Negative Import List,” *Business Recorder*, Feb. 7, 2000, reprinted in U.S. Department of State telegram 792, “Pakistan: Economic Highlights in the Press,” prepared by the U.S. Embassy, Islamabad, Mar. 10, 2000.

⁴⁹ Office of the United States Trade Representative, *2002 National Trade Estimates Report on Foreign Trade Barriers*, Pakistan Country Writeup, Apr. 2002, p. 2.

⁵⁰ Ayub Mehar, “Financing Expansion,” *Textile Asia*, July 2000, p. 82.

⁵¹ *Pacific Trade Winds*, July 2000, p. 4.

⁵² USITC, *The Year in Trade 2001: Operation of the Trade Agreements Program*, 53rd Report, USITC publication 3510, May 2002, p. 5-29.

The United States increased import quotas in February 2002 for certain Pakistani apparel goods by 15 percent over 2002 base levels and by a “special swing” of 25 percent for the 2002-2004 period, in addition to the swing in the original bilateral agreement on quotas.⁵³ The apparel goods affected included cotton and manmade fiber woven gloves, men’s and boys’ other coats, women’s and girls’ coats, women’s and girls’ woven blouses, and pajamas and other nightwear, manmade fiber knit shirts and blouses, and manmade fiber trousers.⁵⁴

The United States also provided a “special swing” to the following Pakistani products for 2002-2004: 8 percent for men’s and boys’ cotton knit shirts, women’s and girls’ cotton knit blouses, and cotton trousers; and 25 percent for manmade fiber men’s and boys’ woven shirts and underwear.⁵⁵

U.S. retailers are requesting that textile exporters in Pakistan get their factories certified by U.S. agencies regarding labor standards and worker health and fire safety. These retailers are threatening to stop purchasing from companies which fail to uphold basic labor and safety standards. Wal-Mart in particular reportedly has presented local Pakistani firms with factory certification suppliers’ manuals, which contain contact information for U.S. inspection agencies.⁵⁶

European Union

In October 2001, the EU signed a Memorandum of Understanding (MOU) with Pakistan, which granted the following additional EU market access to Pakistani textiles and apparel:

- Removal of all tariffs on apparel (currently averaging 8 percent *ad valorem*) and increased quotas on imports of Pakistani textiles and apparel by 15 percent;⁵⁷ and
- Extension of duty-free treatment to apparel and certain articles from Pakistan under special provisions of its new Generalized System of Preferences (GSP) scheme, aimed at providing increased market access to those countries taking aggressive measures to wipe out illegal drug production and trafficking.⁵⁸

⁵³ “Swing” is a shift of unused quota from one category to another.

⁵⁴ *Apparel Benefits for Pakistan*, Fax from DOC, OTEXA, Feb. 26, 2002.

⁵⁵ The special swings granted by the United States can only be taken from textile (nonapparel) quota categories, as listed in the U.S.-Pakistan bilateral agreement. *Apparel Benefits for Pakistan*, Fax from U.S. Department of Commerce, OTEXA, Feb. 26, 2002.

⁵⁶ Muzaffar Qureshi, “U.S. Stores Ask Pak Textile Exporters to Get Their Factories Certified.”

⁵⁷ The EU Commission estimates that the additional textile and apparel quota access will be worth € 1 billion between Oct. 2001 and the end of 2004. See *European Commission proposes comprehensive preferential trade package for Pakistan*, Oct. 16, 2001, found at <http://www.europa.eu.int>, retrieved Dec. 28, 2001.

⁵⁸ The textile articles imported into the EU from Pakistan that are eligible for the duty-free treatment include those provided for in HTS ch. 63, “other made-up textile articles” (e.g., home textiles such as towels, sheets and pillowcases, and curtains).

In return for increased market access, Pakistan was required to lower import tariffs on EU textiles and clothing.⁵⁹

Foreign Trade

Pakistan had a fluctuating trade surplus during 1997-2001 which increased overall by 3 percent to \$6.6 billion (table F-7). Pakistan's exports of textiles and apparel, which rose by 4 percent to \$6.7 billion, far outstripped its textile and apparel imports which increased by 82 percent to \$159 million. The United States and the European Union were Pakistan's leading trading partners throughout the 1997-2001 period.

Imports

Although Pakistan produces much of the cotton and synthetic fiber local firms consume producing textiles and apparel, local firms depend on the United States for much of the supply of extra-long-staple (ELS) and Acala cottons used in high-end cotton and cotton-blend fabrics. As a result, the United States is the primary supplier of fiber, valued at \$33.7 million in 2000, or 39 percent of the total value of fiber imports to the Pakistani market. Other major fiber suppliers include Australia (cotton) and Korea (synthetics).⁶⁰

Pakistani textile and apparel imports in 2001 totaled \$159.4 million, increasing from \$87.7 million in 1997, or by 82 percent over the period (F-7). More than 90 percent of Pakistani imports are textile inputs for the local textile and apparel production rather than apparel for consumers.

Exports

Global apparel trade has grown significantly faster than trade in textiles since the mid-1980s (trade in clothing totaled \$199 billion in 2001, with textiles at \$144 billion). However, Pakistani trade runs counter to this trend; local firms continue to export significantly more textiles than apparel. The United States and the EU are the two largest export markets for Pakistan's textile and apparel products (table F-8).⁶¹ U.S. imports of textiles and apparel from Pakistan rose by 125 percent during 1997-2002 to 2.5 billion square meter equivalents (SMEs) (table F-9).⁶² The single largest category of U.S. imports of Pakistani textiles and apparel, with nearly 27 percent of the volume total, is other cotton manufactures (369),

⁵⁹ *European Commission Proposes Comprehensive Preferential Trade Package for Pakistan*, Oct. 16, 2001, found at <http://www.europa.eu.int>, retrieved Dec. 28, 2001.

⁶⁰ United Nations data found at www.un.org.

⁶¹ Textiles and apparel constitute three-fourths of Pakistan exports to the EU.

⁶² In 2001, Pakistan was the fourth-largest source of U.S. imports of textiles and apparel (6.7 percent of the total volume).

which includes toilet and kitchen linen, cotton terry fabric bar mops, and cotton dust mops.⁶³ Pakistan faced trade-weighted import duties into the United States averaging 7.8 percent ad valorem for textiles and 15.8 percent ad valorem for apparel in 2001.⁶⁴ The United States maintains a variety of quotas on imports of Pakistani textiles and apparel goods. During the 2002 quota year, Pakistan filled or substantially filled its U.S. quotas for several categories, primarily in cotton fabrics, cotton apparel and towel and bed linen products.⁶⁵

The EU maintains 14 import quotas on Pakistani textiles and apparel, including cotton yarn, cotton fabrics, synthetic fabrics, T-shirts, pullovers, blouses, shirts, towels, singlets and vests, bed linen, trousers (categories 6 and 28) and table linen. Pakistan filled its 2002 EU quotas for men's and boys' woven bottoms (category 6) and bed linen (category 20), and substantially filled their EU quotas for cotton yarn (category 1) and cotton towels and table linen (category 9).

Pakistan supplies large quantities of grey cotton cloth to China because Chinese-produced grey cloth was traditionally of inconsistent quality. This trade may be in jeopardy as Chinese firms upgrade machinery and concentrate on that part of the value chain.⁶⁶

Textiles

Pakistani textile exports to all markets totaled \$4.4 billion in 2001, down slightly from \$4.5 billion in 1997 (table F-8). The total value of Pakistani textile exports to the EU, Canada, and United States increased from \$1.9 billion to \$2.1 billion during 1997-2001. In two of Pakistan's other large markets, United Arab Emirates and Korea, textile exports rose during 1997-2001.⁶⁷ However, exports to Hong Kong declined 37 percent during the same period, reflecting a decline in Hong Kong's textile and apparel sector.⁶⁸

Markets in the United States and the EU imported roughly 46 percent of Pakistan's exports of textiles in 2001, up from 40 percent in 1997. These gains came entirely from increased

⁶³ Because Pakistani firms produce low value-added products, particularly in cotton apparel and grey cloth, Pakistan was only the 15th-largest source of U.S. imports of textiles and apparel by value in 2001, with 2.7 percent of the total value, but the fourth-largest source of U.S. imports by volume. *The Year in Trade 2001: Operation of the Trade Agreements Program, 53rd Report*, USITC publication 3510, May 2002, p. 5-29.

⁶⁴ Data compiled by USITC staff.

⁶⁵ "Substantially filled" are fill rates over 90 percent. The U.S. import quotas on Pakistani textiles and apparel filled or substantially filled in 2001 were cotton or MMF cheesecloth (226/313), cotton poplin and broadcloth fabric (314), cotton printcloth fabric (315), cotton and MMF gloves and mittens (331), other men's and boys' cotton and MMF coats (334/634), cotton men's and boys' knit shirts (338), cotton women's and girls' knit shirts/blouses (339), cotton trousers slacks and shorts (347/348), cotton and MMF nightwear and pajamas (351/651), cotton and MMF underwear (352/652), cotton pillowcases (360), cotton sheets (361), cotton terry & other pile towels (363), other cotton manufacturers (369-F/369-P), shop towels (369-S), MMF printcloth fabric (615), MMF trousers slacks and shorts (647/648), pillowcases except bolsters (666-P), and MMF sheets (666-S).

⁶⁶ Industry sources, interview by USITC staff, Hong Kong, Feb. 25, 2003.

⁶⁷ Data from the United Nations compiled by USITC staff.

⁶⁸ *Ibid.*

imports into the United States. While U.S. imports of Pakistani textiles rose from \$600 million in 1997 to \$925 million in 2001, EU imports declined from \$1.2 billion in 1997 to \$1.1 billion in 2001.⁶⁹

Apparel

Pakistani apparel exports in 2001 totaled \$2.4 billion, increasing from \$2.0 billion in 1997 (table F-8). Roughly half of the value were woven and knit men's and boys' wear. The value of Pakistan's apparel exports rose 18 percent during 1997-2001, but Pakistan's share of global trade in apparel still remains less than 1 percent.⁷⁰ Increases in Pakistani apparel exports were entirely due to increased exports to the United States during 1997-2001. Markets in the United States and the EU imported 84 percent of Pakistan's exports of apparel in 2001, down slightly from 85 percent in 1997 (table-F-8).

Despite significant local and limited foreign investment in the textile and apparel sectors totaling more than \$1 billion over the last three years, Pakistani companies have not reported a sizable shift in textile exports away from cotton yarn and grey fabrics into higher value products such as ready-made garments. Total Pakistani exports rose, but much of the growth continues to be in cotton yarn and grey cloth.⁷¹ Much of the difficulty for Pakistani exports in making the transition from textile inputs such as yarn and grey cloth into finished garments appears to come from Chinese competitors who are also investing heavily to maintain their market share in finished goods.⁷²

⁶⁹ Ibid.

⁷⁰ Small and Medium Enterprise Development Authority, *Apparel: Sector Brief*.

⁷¹ Over the 5-month period from July -November 2002, cotton yarn exports increased by 7.9 percent in quantity and cotton cloth increased 19.5 percent from the same period 1 year earlier. In terms of value, cotton yarn increased by 2.5 percent and cotton cloth increased by 28.7 percent. Exports of apparel during July-November 2002 declined by 9.2 percent by volume but increased by 26.5 percent in value because of better quality and higher prices on world markets. See Shahid Iqbal, "Textile sector faces tough competition in world market," *Business Recorder*, Dec. 14, 2002, retrieved from <http://www.businessrecorder.com>, Dec. 30, 2002.

⁷² Ibid.

Table F-7
Pakistan: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Textiles	1,370	(¹)	(¹)	(¹)	(¹)
Apparel	(¹)	(¹)	(¹)	(¹)	4,500
Number of workers:²					
Textiles	(¹)	(¹)	(¹)	² 217,000	(¹)
Apparel	(¹)	(¹)	(¹)	700,000	(¹)
Total	(¹)	(¹)	(¹)	917,000	(¹)
Installed spinning capacities:					
Short-staple spindles (1,000)	8,333.0	8,340.0	8,438.0	8,567.0	8,567.0
Long-staple spindles (1,000)	35.0	35.0	35.0	35.0	35.0
Open-end rotors (1,000)	144.8	147.4	146.2	149.5	149.5
Installed weaving capacities:					
Shuttleless looms (number)	³ 13,200	³ 15,000	³ 15,000	³ 16,000	³ 17,500
Shuttle looms (number)	³ 8,110	³ 7,390	³ 7,298	³ 7,200	³ 10,100
Shipments of large circular knitting machines					
	(¹)	238	186	203	148
Production index (1997=100):					
Yarn	(¹)	(¹)	(¹)	109.3	112.5
Fabric	(¹)	(¹)	(¹)	138.3	155.7
Total labor cost per operator hour					
	(¹)	(¹)	(¹)	\$0.37	⁴ \$0.34
Mill fiber consumption:					
Cotton (1,000 metric tons)	1,549.0	1,483.1	1,523.6	1,629.2	1,628.3
Wool (1,000 metric tons)	21.5	23.3	15.6	17.0	17.3
Manmade fibers (1,000 metric tons)	452.6	563.6	626.9	667.1	690.7
Total (1,000 metric tons)	2,023.1	2,070.0	2,166.1	2,313.3	2,336.3
Foreign trade:					
Exports:					
Textiles (million dollars)	4,492.0	4,172.4	4,121.4	4,380.8	4,374.5
Apparel (million dollars)	<u>2,001.4</u>	<u>2,044.7</u>	<u>2,053.8</u>	<u>2,364.5</u>	<u>2,355.5</u>
Total (million dollars)	6,493.3	6,217.1	6,175.2	6,745.2	6,730.0
Imports:					
Textiles (million dollars)	85.2	91.4	113.5	129.4	154.0
Apparel (million dollars)	<u>2.5</u>	<u>3.9</u>	<u>3.6</u>	<u>4.4</u>	<u>5.3</u>
Total (million dollars)	87.7	95.3	117.1	133.9	159.4
Trade balance:					
Textiles (million dollars)	4,406.8	4,081.0	4,007.9	4,251.3	4,220.5
Apparel (million dollars)	<u>1,998.9</u>	<u>2,040.9</u>	<u>2,050.2</u>	<u>2,360.1</u>	<u>2,350.2</u>
Total (million dollars)	6,405.6	6,121.9	6,058.1	6,611.4	6,570.6

¹ Not available.

² Full-time equivalents.

³ In addition, there were approximately 200,000 powerlooms and 80,000 handlooms in the non-mill sector.

⁴ Represents 2002 data.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; Geerdes International, Inc., Richmond, VA, facsimile to Commission staff, Feb. 4, 2003; and Werner International, Reston, VA. Trade data are United Nations data as reported by Pakistan.

Table F-8
Pakistan: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	600	710	744	881	925
European Union	1,198	1,209	1,125	1,085	1,092
Canada	91	90	103	102	88
Subtotal	1,890	2,009	1,972	2,068	2,106
All other:					
Hong Kong	638	514	457	469	402
United Arab Emirates	203	182	202	215	246
Korea	166	101	183	203	210
Other	1,596	1,367	1,308	1,425	1,411
Subtotal	2,602	2,163	2,150	2,312	2,269
Grand total	4,492	4,172	4,121	4,381	4,375
Apparel (SITC 84):					
Quota markets:					
United States	839	938	989	1,196	1,127
European Union	868	840	826	859	853
Canada	61	60	59	70	74
Subtotal	1,768	1,838	1,874	2,124	2,055
All other	233	207	179	240	301
Grand total	2,001	2,045	2,054	2,364	2,355
Textiles and apparel:					
Quota markets:					
United States	1,439	1,647	1,733	2,077	2,053
European Union	2,067	2,049	1,951	1,944	1,946
Canada	152	151	162	172	162
Subtotal	3,658	3,847	3,846	4,193	4,160
All other	2,836	2,370	2,329	2,552	2,569
Grand total	6,493	6,217	6,175	6,745	6,730
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	42	48	48	47	48
Apparel	88	90	91	90	87
Average	56	62	62	62	62

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table F-9
Textiles and apparel: U.S. general imports from Pakistan, by specified product categories,¹
1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	1,125,845	1,483,357	1,544,766	1,996,768	2,189,346	2,536,902
1	Apparel	193,656	214,783	237,014	330,206	347,009	382,080
2	Textiles	932,189	1,268,574	1,307,751	1,666,562	1,842,337	2,154,822
11	Yarns	115,118	188,342	193,136	310,879	276,988	297,516
12	Fabrics	391,484	477,049	370,498	449,745	475,592	695,948
14	Other miscellaneous articles	425,588	603,183	744,117	905,939	1,089,757	1,161,359
30	Cotton textiles and apparel	921,922	1,193,283	1,270,164	1,636,476	1,782,967	2,062,087
31	Cotton apparel	162,003	182,620	204,199	271,722	290,349	318,447
32	Cotton textiles	759,918	1,010,662	1,065,965	1,364,754	1,492,617	1,743,639
40	Wool textiles and apparel	1,399	1,340	1,416	2,046	1,748	1,663
60	Manmade-fiber textiles and apparel	202,458	288,589	272,956	357,508	403,471	471,895
61	Manmade-fiber apparel	31,309	31,943	32,657	57,304	55,450	62,756
62	Manmade-fiber textiles	171,149	256,646	240,299	300,204	348,021	409,139
80	Silk blend/veg fiber textiles/apparel	66	145	229	739	1,161	1,257
239	Babies' apparel	3,195	5,394	6,729	12,168	11,383	10,609
300	Carded cotton yarn	89,754	138,992	149,915	252,722	231,652	208,138
301	Combed cotton yarn	23,028	37,798	33,440	45,681	32,525	81,199
313	Cotton sheeting fabric	99,596	118,183	102,916	108,236	119,575	132,721
315	Cotton printcloth fabric	82,805	75,382	59,440	58,794	78,205	125,713
317	Cotton twill fabric	23,705	22,829	17,324	25,420	25,764	47,279
326	Cotton sateen fabric	6,200	24,949	27,150	57,938	42,099	68,858
332	Cotton hosiery	15	267	2,941	10,496	19,428	39,677
334	Other cotton coats, men/boys	7,186	5,162	9,208	11,991	10,871	15,338
336	Cotton dresses	14,260	19,405	9,716	14,961	15,088	20,887
338	Cotton knit shirts, men/boys	28,670	31,946	37,215	45,544	45,142	45,297
339	Cotton knit shirts, women/girls	7,355	8,011	10,750	13,052	10,133	13,578
340	Cotton not knit shirts, men/boys	14,255	10,319	15,983	15,328	11,363	12,243
347	Cotton trousers, men/boys	8,881	9,706	13,483	15,328	13,583	16,944
348	Cotton trousers, women/girls	5,091	3,786	4,209	3,584	5,162	8,258
350	Cotton robes	5,038	6,991	10,227	16,225	21,422	22,331
351	Cotton nightwear	10,557	11,478	10,613	17,531	15,439	15,945
352	Cotton underwear	5,836	7,547	5,642	10,442	11,472	10,500
359	Other cotton apparel	37,296	48,313	50,258	57,371	61,936	54,437
360	Cotton pillowcases	5,656	4,537	7,028	6,192	8,120	7,577
361	Cotton sheets	31,186	31,373	45,958	43,540	51,630	50,938
362	Cotton bedspreads and quilts	28,769	64,080	90,085	115,705	135,420	154,284
363	Cotton terry and other pile towels	18,585	21,272	21,625	23,754	29,570	26,348
369	Other cotton manufactures	276,083	381,156	444,994	539,651	640,880	679,883
613	Manmade-fiber sheeting fabric	8,038	12,478	11,916	5,412	6,448	15,839
614	Manmade-fiber poplin/broadcloth	11,023	13,239	6,883	13,632	11,029	23,101
615	Manmade-fiber printcloth fabric	21,281	24,416	25,696	26,055	39,460	35,781
625	Manmade-fiber poplin/broadcloth	28,238	46,501	16,499	26,610	28,379	54,518
626	Manmade-fiber printcloth fabric	16,624	31,159	19,379	18,787	11,691	13,911
666	Other manmade-fiber furnishings	63,945	98,802	132,483	174,564	221,064	239,213

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical item numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Sri Lanka¹

Overview

Sri Lanka's textile and apparel sector is the largest manufacturing sector in the country, accounting for 6 percent of gross domestic product (GDP), 39 percent of industrial production, 33 percent of manufacturing employment, and 61 percent of exports.² Sri Lanka, therefore, is highly dependent on the sector for both jobs and export earnings. Foreign investors reportedly own about 50 percent of the companies in Sri Lanka's apparel industry; these companies account for almost 90 percent of Sri Lanka's apparel exports. Sri Lanka enjoys quota-free and reduced-duty access to the European Union (EU) market and reduced-duty access to India's market, as well as duty-free access to large Asian markets as a South Asian Association for Regional Cooperation (SAARC) member.

Sri Lanka's competitive strengths include a highly literate labor force, low wages, strict labor standards, investment-friendly government policies, and a deep-water harbor on strategic shipping lanes. Its competitive weaknesses include long lead times for deliveries due to a lack of domestic raw materials; weak marketing; lack of product development; and low labor productivity, partly due to outdated technology. A lack of vertical integration (into yarns and fabrics) also characterizes the Sri Lankan textiles and apparel sector, as Sri Lanka has a large export-oriented apparel industry, but a small textile industry that is unable to produce the quantity and quality of yarns and fabrics required by the apparel industry. Further, a July 2001 terrorist attack, an ongoing civil war, and recent power crises due to drought are likely to discourage investment in this sector.

Industry Profile

The Sri Lankan Government strongly supports the export-oriented apparel industry, which is much larger than the textile industry and has a greater impact on the Sri Lankan economy. Fibers and yarns are imported, as are most textiles and trim that the apparel industry requires. The lack of domestically produced raw materials hampers both the textile and apparel industries, as finding reliable suppliers and managing delivery time of supplies proves difficult.

¹ Prepared by Heather Sykes, Office of Industries.

² Written statement of Sri Lanka to the Commission Feb. 5, 2002; and Hassen Saheed, "Prospects for the Textile and Apparel Industry in Sri Lanka," *Textile Outlook International*, Nov.-Dec. 2002, pp. 10-43.

Industry structure and performance

Sri Lanka's textile and apparel sector consists of about 1,000 companies (table F-10), nearly 90 percent of which are apparel manufacturers; the remainder are textile mills. Textile and apparel production increased from \$1.5 billion in 1997 to \$2.3 billion in 2001.

About 20 to 25 percent of garment employees work in factories with more than 1,000 workers, and the largest of these factories are located in free-trade zones. It is estimated that the top 25 apparel manufacturing firms in Sri Lanka are responsible for nearly one-third of total output. Small- and medium-sized firms account for 70 percent of garment factories, but only 40 percent of apparel exports.³ Sri Lanka's apparel industry has a world market share of about 1 percent.⁴ As Sri Lanka exports most of its apparel to the United States and the EU, companies from these markets have investments in Sri Lanka.

Most of Sri Lanka's textiles are produced by fewer than 10 large textile mills, out of about 100 mills in total.⁵ Aside from textiles produced by a few large firms, the quality of Sri Lankan textile products reportedly is not acceptable for export markets.⁶ Sri Lanka's apparel industry requires about 600 million meters of fabric annually, only 20 percent of which can be met by domestic producers due to Sri Lanka's outdated technology, high production costs, rising costs of energy, limited product range, and high cost of capital.⁷ Sri Lanka's fabric production, which reached more than 200 million meters during the early 1990s, has declined throughout the past decade.⁸ After the Sri Lankan Government cut tariffs on textile imports in 1997, some producers were forced to cut capacity while others closed.⁹

In contrast, the apparel industry has grown rapidly. According to one industry source, Sri Lanka's main strength in apparel is its ability to produce high-quality goods at competitive prices, combined with an industry structure that is flexible and capable of servicing leading international brands.¹⁰ As Sri Lanka is moving up-market in its product lines (away from basics), the average unit price of apparel produced in Sri Lanka has increased from just over \$2 in the 1980s to about \$6 in 2000, as value added per apparel employee rose from \$1,600 during 1990 to \$2,500 in 1998.¹¹ Although Sri Lanka is geographically distant from the countries to which it exports apparel, lead time has been reduced by 50 percent over the last decade. However, industry sources indicate that lead time must shrink further, from the

³ Most of these small- and medium-sized firms claim to be on the verge of collapse. About 250 small- and medium-sized factories are operating at 50 percent below installed capacity, while some of these factories have been closed. Dushni Weerakoon and Janaka Wijayasiri, *Textiles and Clothing Sector in Sri Lanka*, Institute of Policy Studies - Colombo, Mar. 2000, p. 48.

⁴ H. Saheed, "Strategic Approach for Export Garment Industry to Meet its Future Challenges?" *Daily News*, Aug. 7, 2001, p. 39.

⁵ These firms consist mostly of weaving operations.

⁶ H. Saheed, "Prospects for the Textile and Apparel Industry in Sri Lanka," pp.10-43.

⁷ Ibid.

⁸ "Sri Lanka's Fabric Imports Declined in First Half," found at www.emergingtextiles.com, retrieved Sept. 12, 2002.

⁹ Ibid. Two large integrated factories producing more than 15 million meters of fabric per year closed in 1997.

¹⁰ B.H.S. Jayewardene, "Promotion Plan," *Textile Asia*, Jan. 2001.

¹¹ United Nations Industrial Development Organization (UNID)), *International Yearbook of Industrial Statistics 2002*, pp. 72-73.

current 90-120 days to 30-45 days, for the industry to remain competitive.¹² Most firms in Sri Lanka do not design their own apparel, but rather import designs from the United Kingdom and the United States. In recent years, the Sri Lanka Government has encouraged vertical integration to produce textile materials for apparel, and the continued success of the apparel industry depends on attracting foreign investors to develop textile operations in the country.¹³ The Government also is encouraging the development of a fabric weaving industry that would use yarns from India.¹⁴

Factors of production

Key inputs for Sri Lanka's apparel industry are fabrics, most of which are imported, and labor, for which low productivity partially offsets low wage rates.

Raw materials

The apparel industry relies on imports for 80 percent of its fabric requirements.¹⁵ Virtually all fibers and yarns are imported, as are most textiles and trim that the apparel industry requires. The apparel industry's annual cotton requirements consist of more than 60 million kilograms of cotton fabrics and 17 million kilograms of cotton yarns.¹⁶ Manmade fibers also are imported. Fabrics enter Sri Lanka free of duty and there are no further restrictions.

Labor

The textile and apparel sector employed 450,000 people in 2001 (table F-10); most of this employment is in the apparel industry.¹⁷ Wage rates in Sri Lanka are among the lowest in Asia, but labor productivity also is low. According to Werner International, the average hourly wage for apparel production workers in Sri Lanka was \$0.48 in 2002, which was higher than in Pakistan (\$0.41), but much lower than in China (\$0.69).¹⁸

Despite having the second-highest literacy rate in Asia,¹⁹ Sri Lanka has low industrial labor productivity resulting from absenteeism, strict labor standards leading to a shorter work day

¹² H. Saheed, "Strategic Approach," p. 39.

¹³ For example, a large knitted textile factory and a zipper factory have opened during 2000-02. Ibid.

¹⁴ B.H.S. Jayewardene, "Setting Up Weaving," *Textile Asia*, June 2001.

¹⁵ H. Saheed, "Prospects For the Textile and Apparel Industry in Sri Lanka," p. 40.

¹⁶ B.H.S. Jayewardene, "India Show," *Textile Asia*, Apr. 2001.

¹⁷ This figure represents 13 percent of the total workforce. H. Saheed, "Prospects For the Textile and Apparel Industry in Sri Lanka," pp. 17, 19.

¹⁸ Data for apparel industry were compiled from Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers," New York, NY.

¹⁹ The World Bank Group, "Sri Lanka Country Brief," found at <http://lnweb18.worldbank.org/sar/sa.nsf/a2044>, retrieved Oct. 25, 2002.

than in countries such as India and Bangladesh, and relatively high employee turnover.²⁰ The Government is attempting to improve general industrial productivity by introducing training and related programs in factories, including textile and apparel plants. Limited use of modern technology also limits labor productivity. Many companies are now automating their inventory to streamline operations.²¹

Labor for use in the textile and apparel sector is abundant in Sri Lanka, although the supply is small compared with India. In the apparel industry, 88 percent of workers are women.²² Foreign employees in the textile and apparel sector totaled 184,000 in 2001, 68 percent of whom were female.²³

Investment

The textile and apparel sector accounted for 16 percent of foreign direct investment (FDI) in Sri Lanka in 1999.²⁴ After increasing steadily during the 1990s, FDI in the sector slowed in 2001 because of a drought, an economic downturn, a July 2001 airport terrorist attack, and the 20-year civil war.²⁵ However, equipment investment continued to increase in 2000-01, as \$70 million worth of equipment was imported into Sri Lanka in 2000 and another \$36.3 million was imported during the first half of 2001.²⁶

Sri Lanka reportedly has transparent investment laws across all economic sectors and no restrictions on the repatriation of earnings and profits. In fact, the Japan International Corp. Agency reportedly claimed that Sri Lanka has the best FDI regulatory framework in Asia.²⁷ Some local companies have complained that they face discrimination because qualifying foreign investors can benefit from a wide range of advantages not available to domestic firms.²⁸

²⁰ Sri Lanka's population is 92 percent literate. Dushni Weerakoon and Janaka Wijayasiri, *Textiles and Clothing Sector in Sri Lanka*, Institute of Policy Studies - Colombo, Mar. 2000, pp. 37-39; and U.S. Department of State telegram 671, "Sri Lanka: Good News for the U.S. Textiles Industry," prepared by U.S. Embassy, Colombo, Apr. 10, 2002.

²¹ H. Saheed, "Strategic Approach," p. 39.

²² B.H.S. Jayewardene, "Labour to Come In?" *Textile Asia*, Nov. 2000; and H. Saheed, "Prospects for the Textile and Apparel Industry in Sri Lanka," pp. 10-43.

²³ *Central Bank of Sri Lanka Annual Report 2001*.

²⁴ Data also includes leather products. See SAARC Business Information Network, found at <http://www.saarcnet.org/newsarcnet/index.htm>, retrieved Nov. 20, 2002.

²⁵ Sri Lanka's GDP has grown by 4 to 6 percent a year over the past decade, except in 2001. *Central Bank of Sri Lanka Annual Report 2001*; and U.S. Department of State telegram 1400, "Investment Climate Statement 2002: Sri Lanka," U.S. Embassy, Colombo, July 30, 2002.

²⁶ Weaving machines were mostly imported from Switzerland, Korea, and Japan; knitting machines from Germany, Japan, Singapore, and Italy; and apparel machinery from Singapore, the United Kingdom, and Japan. "Equipment Investments Increase in 2000," *Asian Textile Business*, Sept. 2001.

²⁷ SAARC Business Information Network, found at <http://www.saarcnet.org/newsarcnet/index.htm>, retrieved Nov. 20, 2002.

²⁸ U.S. Department of State telegram 1400, "Investment Climate Statement 2002: Sri Lanka."

Many foreign investors in Sri Lanka are from Hong Kong and Korea. For example, the Korean-based Kabool Group has had an integrated textile operation in Sri Lanka since 1989.²⁹ Sara Lee recently set up its Sri Lanka operations, and a large textile company in Thailand, the Nan Yang Textile Group, is expected to establish cotton textile operations in Sri Lanka. In addition, four foreign investors--Mast Industries, MAS Holdings, Phoenix Ventures, and Textured Jersey UK--have combined to build a \$25 million fabric mill in Sri Lanka with a weekly capacity of 165,000 SMEs of polyester and nylon fabrics.³⁰

Government Policies

The Sri Lankan Government has introduced policies and programs in recent years to improve the competitiveness of its apparel industry and further develop the textiles industry. As discussed below, the Government instituted a 5-year plan to help strengthen the sector, reduced tariffs on imports of textile inputs for the export-oriented apparel industry, and established separate free trade agreements with India and other countries in the region. In addition, the Government negotiated the EU removal of quotas and reduction of duties on Sri Lankan apparel imports.

Domestic policies

The Government's 5-year Vision 2005 Apparel Industry Support Program is designed to increase vertical integration in the sector, partly by encouraging the establishment of new fabric mills; improving infrastructure; reforming labor laws; and enhancing human resource management and marketing at the firm level.³¹ The Government plans to streamline sector operations by encouraging joint ventures, alliances, and mergers.³² Sri Lanka's Board of Investment (BOI) introduced proposals to provide less expensive electricity to the textile industry and partially to fund the establishment of training institutes for apparel design and marketing.³³ The Government initiated a restructuring program for textile firms affected by

²⁹ Its Sri Lankan mills reportedly have a production capacity of 14,000 tons of yarn and 48 million yards of finished fabric. B.H.S. Jayewardene, "Ten-Year Success," *Textile Asia*, Aug. 2000, p. 113; and Kabool Group, found at <http://www.kabool.co.kr/english/aboutkabool/about.htm>, retrieved Dec. 19, 2002.

³⁰ B.H.S. Jayewardene, "Investors at Work," *Textile Asia*, Mar. 2002, p. 81.

³¹ "Sri Lanka: Garment Factories Will Not Be Closed," found at www.BharatTextile.com, retrieved Nov. 28, 2001; U.S. Department of State telegram 1740, "Sri Lanka Prepares for Post-Quota World," prepared by U.S. Embassy, Colombo, Sept. 18, 2002; and B.H.S. Jayewardene, "Large-Scale Plan," *Textile Asia*, July 2000, p. 88.

³² B.H.S. Jayewardene, "Non-Competitive Requirement," *Textile Asia*, Sept. 2000.

³³ Although the BOI mainly facilitates foreign investment, domestic apparel exporters can be given the special status foreign investors receive if they employ 50 workers and export 90 percent of their production. Advantages of BOI status include duty-free import of raw materials and other project-related items, exemption from exchange control regulations, insurance coverage from any worldwide insurance company at competitive rates, and a preferential tax rate of 15 percent for 20 years. B.H.S. Jayewardene, "Playing Field Levelled," *Textile Asia*, Dec. 2001, p. 81.

the removal of tariffs on imports of apparel inputs (e.g., fabrics) in 1997.³⁴ A total of 25 textile firms have implemented restructuring projects and 73 others have received endorsements for restructuring from banks, as agreements were signed among textile firms, banks, and the Government to ensure the recovery of debts.³⁵ In another effort to help the local textile and apparel industries, the Government requires that all orders for uniforms for the schools, police, and armed forces be placed through the State Trading Textiles Corp. and allocated to provincial manufacturers that will use locally manufactured fabrics.³⁶

Trade policies

The Government reduced tariffs on imports of apparel inputs to 35 percent ad valorem in 1995 and then to zero in 1997. Although the tariff reductions were designed to help apparel producers, they introduced new competition for domestic textile producers. Consequently, many mills closed, and employment in the textile industry dropped from about 42,000 in 1995 to 10,000 in 2001. Sri Lanka has no known nontariff barriers that affect the textile and apparel sector.

Sri Lanka is a member of the SAARC,³⁷ which entered into force in December 1995 and enables Sri Lankan apparel exporters to use fabrics from other member countries, such as India or Pakistan, without losing EU benefits under the Generalized System of Preferences program.³⁸ The Indo-Lankan Free-Trade Agreement that entered into force in March 2000 enabled slightly more than 1,300 Sri Lankan export items to gain duty-free access to India's market and 2,700 items to qualify for a 50-percent duty reduction. Apparel, subject to a quota allocation of 8 million pieces per year, is on the duty reduction list.³⁹ The Pakistan-Sri Lanka Free-Trade Agreement entered into force in August 2002 with terms similar to those contained in the Indo-Lankan Free Trade Agreement. In addition, Sri Lanka's agreement with the EU reduced tariffs on textile imports from the EU to 5 percent ad valorem for fibers and yarns and 10 percent for textiles, while the EU suspended quotas on apparel imports from Sri Lanka.⁴⁰

³⁴ In 1996, the Government introduced a program to provide \$7 million in funding over 3 years to defray the interest expenses of the textile industry. "Sri Lankan Government to Assist Textile Industry," NewsEdge, Jan. 1996.

³⁵ "Restructuring Program for Textile Firms," *Asian Textile Business*, Apr. 2001, p. 79.

³⁶ B.H.S. Jayewardene, "Playing Field Levelled," *Textile Asia*, Dec. 2001, p. 81.

³⁷ SAARC member countries include Bangladesh, Bhutan, India, Maldives, Nepal, Pakistan, and Sri Lanka.

³⁸ "Sri Lanka: Fall in Clothing Prices Destroying Apparel Industry," found at www.BharatTextile.com, retrieved June 18, 2002.

³⁹ Of this quota, 6 million pieces must use Indian fabrics and no single export category can exceed 1.5 million pieces per year. Sri Lankan tariffs ordinarily average about 25 percent. SAARC Business Information Network, found at <http://www.saarcnet.org/newsarcnet/index.htm>, retrieved Nov. 20, 2002.

⁴⁰ This agreement came into effect on Mar. 1, 2001. "EU and Sri Lanka Sign Agreement to Open Their Textiles Markets," found at <http://europa.eu.int>, retrieved Feb. 3, 2003.

Foreign Trade

Sri Lanka expanded its trade surplus in textiles and apparel by \$544 million during 1997-2001 to \$1.8 billion (table F-10).⁴¹ The increase reflected steady growth in exports, which grew by 15 percent, and a 17 percent decline in imports. Textiles and apparel are Sri Lanka's principal export, accounting for about 50 percent of its total merchandise exports in 2001, and a major import with 13 percent of its total imports. The textile and apparel sector exports mostly finished goods, especially garments; most of its imports are believed to be inputs for use in the production of apparel for export.

Imports

Sri Lanka's imports of textiles and apparel rose from \$1.1 billion in 1997 to a high of \$1.2 billion in 2000, and then fell to \$903 million in 2001 (table F-10). The import decline reportedly continued into the first half of 2002.⁴² The major share of imports consisted of woven fabrics of cotton and manmade staple fibers and knitted fabrics, but Sri Lanka also imports 80 percent of the yarn and fabric inputs needed for the apparel industry. Sri Lanka imported \$27 million of textile fibers in 2001, down from \$30 million in 1997. The largest fiber suppliers to Sri Lanka were Korea, Indonesia, Australia, and Thailand. Most of the imports from these countries are of manmade fibers (MMF) and wool. The removal of tariffs on imports of apparel inputs has opened up the Sri Lankan market to fabrics from Southeast Asia, especially Korea, China, and India, and also the EU. India had long been Sri Lanka's largest foreign supplier of cotton yarns and fabrics, but although Sri Lanka's cotton fabric imports have grown over the years, India's share has declined steadily to less than 10 percent in 2000. According to industry sources, Sri Lankan importers expressed concern related to the consistency of fabric quality and delays in fabric shipments from India.⁴³

Exports

Sri Lankan exports of textiles and apparel increased by 15 percent during 1997-2001 to \$2.7 billion (table F-11). Apparel accounted for 93 percent of this total, as Sri Lanka exports more than 95 percent of its apparel production. The growth in textile and apparel exports abated in 2001 due to the slowdown in economic growth in major export markets, exacerbated by the terrorist attacks on September 11, 2001. Textile and apparel exports dropped by 22 percent in the first half of 2002, compared with the first half of 2001, attributable to lower demand in the United States and the EU. Sri Lanka's exports of textile fibers, mostly shipped to the EU and the United States, decreased by \$5 million during 1997-2001, to \$21 million.

⁴¹ All figures are United Nations data, unless otherwise stated.

⁴² "Sri Lanka's Fabric Imports Declined in First Half," found at www.emergingtextiles.com, retrieved Dec. 5, 2002.

⁴³ "Exploring Sri Lanka," *Asian Textile Business*, Apr. 2001, p. 81.

The top markets for Sri Lankan textile and apparel exports are the United States and the EU, which together accounted for 92 percent in 2001. The United States is the single largest market, importing \$1.7 billion of Sri Lankan textiles and apparel in 2001. Most of these imports were apparel, which grew 24 percent during 1997-2001 to \$1.6 billion. The EU, which removed quotas on Sri Lankan apparel in March 2001, imported \$783 million of Sri Lankan apparel in 2001, down from \$862 million in 2000. Sri Lanka's trade balance with the EU grew by 13 percent during 1997-2000, before falling by 8 percent, to \$728 million, in 2001.

According to official U.S. trade statistics, U.S. imports of textiles and apparel from Sri Lanka grew from 479 million SMEs in 1997 to 655 million SMEs in 2000, before dropping throughout 2001-02 to 559 million SMEs (valued at \$1.5 billion) (table F-12). Sri Lanka is the 17th largest supplier of textiles and apparel to the United States, with 1.5 percent of U.S. imports, down from a 2.1-percent share in 1997. Of the 70 percent of U.S. textile and apparel imports from Sri Lanka that were apparel, most are of cotton and MMF. The principal products are knitted and woven shirts and blouses, pants, skirts and dresses, coats, and brassieres. The 2001 trade-weighted average duty for goods imported into the United States was 9.1 percent for textiles and 16.2 percent for apparel.

One of the largest percentage declines in U.S. imports by product from Sri Lanka during 2002 occurred in MMF luggage. After increasing from \$78 million in 1997 to \$106 million in 2001, imports fell 53 percent to \$50 million in 2002. This product was integrated into the GATT regime on January 1, 2002, as quotas were removed. The decline in U.S. imports of MMF luggage from Sri Lanka may be partially attributed to competition from China, which significantly increased its MMF luggage exports to the United States.

Sri Lanka has shown a high degree of competitiveness in another product category that was integrated into the GATT regime in 2002—MMF brassieres. U.S. imports of Sri Lankan MMF brassieres have steadily increased from 488,802 units (\$30 million) in 1997 to 919,361 units (\$73 million) in 2001. U.S. imports of manmade fiber brassieres from Sri Lanka increased by an additional 30 percent in 2002, to 1.2 million units (\$80 million), even though imports from China have increased by more than 300 percent in this category. In a post-quota environment, industry sources expect Sri Lanka to be a niche supplier for women's intimate apparel such as bras and underwear, as well as specialty goods and hosiery. Other significant U.S. import increases from Sri Lanka took place in cotton robes and pajamas, silk pants, men's wool pants, and wool skirts; decreases occurred in wool suits, gloves and hosiery, women's woven silk shirts, and silk dresses. For the 2001 quota year, Sri Lanka filled five U.S. quota categories, including cotton knit shirts, sweaters, cotton and MMF pants, and cotton underwear, and came close to filling many others. However, U.S. imports from Sri Lanka are concentrated in categories where other major suppliers are restrained by quotas, which suggests that Sri Lanka will face significant competition in a post-quota environment.

Table F-10
Sri Lanka: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Textiles	2,155	2,109	(¹)	(¹)	(¹)
Apparel	646	622	(¹)	(¹)	(¹)
Total	2,801	2,731	(¹)	(¹)	1,000
Number of workers:					
Textiles	142,364	156,519	(¹)	(¹)	(¹)
Apparel	64,112	71,285	(¹)	(¹)	(¹)
Total	206,476	227,804	(¹)	(¹)	450,000
Installed short-staple spinning capacity (1,000 spindles)					
	289.0	254.0	256.0	246.0	(¹)
Installed weaving capacities:					
Shuttleless looms (number)	1,000	1,100	1,100	1,300	1,500
Shuttle looms (number)	13,000	11,400	11,300	11,000	11,000
Production of textiles and apparel (million dollars)					
	1,500	(¹)	(¹)	(¹)	2,300
Total (million dollars)	1,500	(¹)	(¹)	(¹)	2,300
Foreign trade:					
Exports:					
Textiles (million dollars)	223.6	236.2	221.6	243.3	194.3
Apparel (million dollars)	2,167.4	2,278.8	2,306.3	2,617.5	2,553.6
Total (million dollars)	2,391.0	2,515.1	2,527.9	2,860.8	2,747.9
Imports:					
Textiles (million dollars)	1,034.8	1,034.4	1,022.8	1,101.1	856.2
Apparel (million dollars)	55.3	56.8	69.4	88.8	46.7
Total (million dollars)	1,090.0	1,091.3	1,092.1	1,189.9	902.9
Trade balance:					
Textiles (million dollars)	-811.2	-798.2	-801.1	-857.8	-661.9
Apparel (million dollars)	2,109.2	2,227.2	2,237.9	2,431.6	2,498.3
Total (million dollars)	1,301.0	1,423.8	1,435.8	1,671.0	1,845.0

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from the United Nations Industrial Development Organization, *International Yearbook of Industrial Statistics 2002*, and the Central Bank of Sri Lanka, found at <http://www.lanka.net/centralbank>; the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; and Geerdes International, Inc., Richmond, VA, facsimile to Commission staff, Feb. 4, 2003. Trade data are United Nations data as reported by Sri Lanka's trading partners

Table F-11
Sri Lanka: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	81	96	106	119	103
European Union	81	72	41	39	28
Canada	2	1	3	3	2
Subtotal	163	169	150	161	133
All other:					
Korea	24	23	31	30	22
Maldiv Islands	8	10	12	15	14
Hong Kong	8	8	6	9	7
Other	20	26	23	29	18
Subtotal	61	68	72	82	61
Grand total	224	236	222	243	194
Apparel (SITC 84):					
Quota markets:					
United States	1,312	1,414	1,385	1,613	1,622
European Union	738	750	810	862	783
Canada	35	41	37	48	53
Subtotal	2,086	2,204	2,232	2,522	2,458
All other	82	75	74	96	96
Grand total	2,167	2,279	2,306	2,618	2,554
Textiles and apparel:					
Quota markets:					
United States	1,393	1,509	1,492	1,732	1,726
European Union	819	821	851	900	811
Canada	37	42	39	51	55
Subtotal	2,249	2,373	2,382	2,683	2,591
All other	142	142	146	178	157
Grand total	2,391	2,515	2,528	2,861	2,748
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	73	71	68	66	69
Apparel	96	97	97	96	96
Average	94	94	94	94	94

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table F-12
Textiles and apparel: U.S. general imports from Sri Lanka, by specified product categories,¹
1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	479,375	527,636	559,945	655,436	631,465	559,150
1	Apparel	322,046	332,451	337,097	408,625	403,392	393,888
2	Textiles	157,329	195,185	222,848	246,811	228,073	165,261
11	Yarns	5,142	7,583	27,832	35,023	26,738	27,667
12	Fabrics	33,290	33,884	35,611	33,994	23,404	31,733
14	Other miscellaneous articles	118,897	153,717	159,405	177,793	177,930	105,861
30	Cotton textiles and apparel	191,037	197,864	202,641	208,660	215,120	217,543
31	Cotton apparel	163,622	164,983	167,392	174,902	192,518	191,626
32	Cotton textiles	27,415	32,881	35,248	33,758	22,602	25,917
40	Wool textiles and apparel	1,414	1,346	1,196	2,392	2,867	2,728
60	Manmade-fiber textiles and apparel	283,292	321,238	346,332	433,653	404,276	331,801
61	Manmade-fiber apparel	154,323	159,690	159,200	220,715	199,281	192,754
62	Manmade-fiber textiles	128,968	161,549	187,132	212,938	204,994	139,047
80	Silk blend/veg fiber textiles/apparel	3,632	7,188	9,776	10,732	9,201	7,077
237	Playsuits	5,077	4,287	3,667	1,794	1,924	561
239	Babies' apparel	11,973	13,019	12,839	14,213	20,023	15,185
334	Other cotton coats, men/boys	5,556	5,940	6,564	4,958	5,378	8,206
335	Cotton coats, women/girls	6,572	6,389	3,284	2,320	3,946	5,406
336	Cotton dresses	2,790	5,570	7,706	6,727	6,741	9,930
338	Cotton knit shirts, men/boys	6,574	6,489	5,239	6,144	7,666	6,385
339	Cotton knit shirts, women/girls	2,876	3,747	4,587	5,321	6,917	6,999
340	Cotton not knit shirts, men/boys	24,738	32,758	26,336	24,794	30,323	24,211
341	Cotton not knit blouses	7,409	7,914	16,748	17,493	12,784	16,345
342	Cotton skirts	3,828	3,502	4,397	6,730	3,930	8,894
347	Cotton trousers, men/boys	13,154	10,795	12,630	13,497	16,205	12,432
348	Cotton trousers, women/girls	15,117	15,120	15,692	15,696	16,934	20,561
350	Cotton robes	483	620	317	375	1,532	6,071
351	Cotton nightwear	7,002	6,523	5,719	5,141	7,583	12,823
352	Cotton underwear	7,365	4,151	6,454	8,086	11,954	10,516
359	Other cotton apparel	36,123	31,037	26,994	27,804	22,815	16,874
634	Other manmade coats, men/boys	28,489	26,066	16,493	24,702	27,933	32,035
635	Manmade-fiber coats, women/girls	18,615	17,582	14,736	15,456	20,533	18,694
636	Manmade-fiber dresses	9,668	13,914	14,471	12,693	13,962	13,962
638	Manmade knit shirts, men/boys	5,153	4,797	7,442	9,850	6,557	7,092
639	Manmade knit shirts, women/girls	3,313	4,758	5,698	6,559	4,770	6,158
640	Manmade not knit shirts, men/boys	959	808	2,880	1,842	3,205	3,000
641	Manmade-fiber not knit blouses	5,380	7,085	4,767	8,258	7,481	6,700
642	Manmade-fiber skirts	3,318	5,454	7,618	7,169	6,447	6,161
647	Manmade-fiber trousers, men/boys	9,614	9,771	5,941	10,036	10,410	9,098
648	Manmade-fiber trousers, women/girls	7,382	8,303	8,438	11,578	11,575	11,705
649	Manmade-fiber brassieres	1,955	2,844	2,889	3,350	3,677	4,766
650	Manmade-fiber robes	4,396	4,912	4,821	6,176	6,082	6,423
651	Manmade-fiber nightwear	10,745	12,052	11,318	12,704	15,147	14,081
652	Manmade-fiber underwear	7,995	7,342	8,069	7,857	12,740	12,259
669	Other manmade-fiber manufactures	57,972	82,243	63,727	80,610	89,572	48,719
670	Manmade-fiber handbags/luggage	42,137	52,249	73,054	75,293	70,424	39,110

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

APPENDIX G
ASEAN COUNTRIES

Overview

The Association of South East Asian Nations (ASEAN) countries,¹ expanded their exports of textiles and apparel by 17 percent during 1997-2001 to \$26 billion (table G-1). Three-fourths of the exports in 2001 came from Indonesia, Thailand, Malaysia, and the Philippines, whose textile and apparel industries are profiled in this appendix. Most ASEAN countries benefit from low labor costs, established textile manufacturing infrastructures and export markets, and access to many raw materials. The elimination of quotas in 2005 likely will intensify competition for ASEAN countries in their home and export markets, particularly from China.

In 1993, the then seven members of ASEAN created the ASEAN Free Trade Area (AFTA) as a means to promote regional economic competitiveness and prosperity.² The objective of AFTA is to promote trade among ASEAN countries by gradually reducing customs duties on intra-ASEAN trade of qualifying products by 2005, with special allowances for sensitive sectors. By agreement, AFTA members agreed to accelerate the reduction of tariff cuts under AFTA to 2003 (from 2005).

During the December 1998 ASEAN Summit in Hanoi, leaders agreed to accelerate reduction of AFTA Common Effective Preferential Tariff (CEPT) rates to ensure that a minimum 90 percent of tariff lines are subject to 0-5 percent rates by 2000 (3 years ahead of schedule). They also agreed to expand the scope of products for which CEPT rates be eliminated by 2003 (which accounts for roughly 83 percent of AFTA tariff lines). In recognition of their late accession to the AFTA, Vietnam, Laos, and Burma will follow a modified schedule.

Two of the world's fastest growing exporters of textiles and apparel are ASEAN countries, Vietnam and Cambodia. Neither country is a member of the World Trade Organization (WTO) and, as such, the countries are ineligible for quota liberalization under the WTO Agreement on Textiles and Clothing. Vietnam and Cambodia have greatly expanded their exports of apparel to the United States in recent years, leading to the establishment of U.S. quotas on their apparel shipments.

U.S. imports from Cambodia totaled 474 million square meters equivalent (SMEs) valued at \$1.1 billion in 2002, up from 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 beginning on

¹ The ASEAN countries are Brunei, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Philippines, Singapore, Thailand, and Vietnam.

² Information in this paragraph is from the Office of the United States Trade Representative, *2000 Trade Policy Agenda and 1999 Annual Report*, p. 189.

January 1, 1999.³ 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 agreements linked increases in U.S. quotas on Cambodian apparel to Cambodia's compliance with international labor standards. Because the United States determined that Cambodia had made progress on labor standards, the United States increased its quotas for 2001 by 9 percent, in addition to the normal 6-percent annual increases in most quotas. The 1999 agreement was extended for 3 additional years on December 31, 2001, when the United States and Cambodia signed a Memorandum of Understanding.⁴

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.⁵ 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 exports 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. In April 2003, the United States concluded a bilateral textile agreement with Vietnam providing for quotas on its apparel shipments.⁶

Vietnam accounted for 8 percent of ASEAN exports of textiles and apparel in 2001. The textile and apparel industries account for more than 20 percent of Vietnam's total industrial output and employs 1.6 million workers. Although the industry is predominately run by the state, the private sector currently accounts for about 40 percent of total textile production and about 70 percent of apparel production.⁷ The textile and apparel sector is currently Vietnam's second-largest export, by value, after crude petroleum. However, the rising cost of importing essential raw materials, mainly due to surging global crude petroleum prices, threatens to derail the strength of Vietnam's success. With 80 percent of the industry's inputs, including synthetic fiber, dependent on imports, businesses estimate the cost of manufacturing apparel could be 20 percent higher for Vietnamese firms in the coming years.

³ Committee for the Implementation of Textile Agreements, "Establishments of Import Restraint Limits for Certain Cotton, Wool and Manmade Fiber Textile Products Produced or Manufactured in Cambodia," *Federal Register*, Feb. 8, 1999 (64 F.R. 6050).

⁴ Office of the United States Trade Representative, "U.S.-Cambodian Textiles Agreement Links Increasing Trade with Improving Workers' Rights," press release 02-03, found at <http://www.ustr.gov>, retrieved Jan. 7, 2002.

⁵ Office of the United States Trade Representative, "United States and Vietnam Trade agreement Links Increasing Trade with Improving Workers' Rights," press release 02-03, Jan. 7, 2002.

⁶ Office of the United States Trade Representative, "Vietnam-U.S. Textile Agreement Summary," found at <http://www.USTR.gov>, retrieved May 14, 2003.

⁷ Vietnam Trade Office in the United States of America, "Garments & Textiles," found at www.vietnam-ustrade.org, retrieved Mar. 14, 2003.

Table G-1
ASEAN countries: World exports of textiles and apparel, 1997-2001

Country	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Indonesia	5,218	5,032	6,936	8,316	7,803
Thailand	5,707	5,318	5,294	5,735	5,492
Malaysia	3,627	3,390	3,366	3,518	3,112
Philippines	2,684	2,641	2,540	2,877	2,682
Singapore	2,729	2,284	2,453	2,728	2,358
Vietnam	1,642	1,619	1,765	2,073	1,959
Cambodia	291	585	969	1,215	1,434
Myanmar	218	271	397	782	876
Brunei	93	147	225	329	375
Laos	111	109	118	121	128
Total	22,320	21,397	24,064	27,694	26,220

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Cambodia, with its low labor costs, significantly increased exports of textiles and apparel beginning in 1999, with the United States and the EU being the primary markets. The textile and apparel sector in Cambodia employs more than 250,000 workers, mostly women, and plays a key role in the economic development of the country.

Indonesia¹

Overview

Indonesia has become an important global source of textiles and apparel during the past two decades. The textile and apparel sector is an important part of Indonesia's economy as the largest source of jobs and a major source of export earnings. The sector employed upwards of 1.2 million workers and accounted for 14 percent of total exports in 2001.² The United States is the largest market for Indonesian textile and apparel exports, accounting for an average of about 15 percent of total exports. The Indonesian textile industry is integrated vertically through almost every phase of production. Although much of the raw cotton used by the industry is imported, there is a large synthetic fiber manufacturing industry in place. The Indonesian industry has traditionally held a competitive advantage in terms of labor, electricity, and fuel costs; however, these costs have increased significantly since 1999.³

Indonesia is one of the largest producers of textiles and apparel in the ASEAN region. Textile production capacity in Indonesia has been running at a high-capacity utilization rate, but equipment expansions and upgrades were generally put on hold in 2000 and 2001 because of reduced foreign direct investment (FDI), high inflation, and political instability.

Industry Profile

Industry structure and performance

The Indonesian textile and apparel sector encompasses almost the entire textile supply chain, from the production of synthetic fibers to yarn spinning, fabric forming and finishing, and apparel manufacturing. Indonesia has approximately 8,000 manufacturers of textiles and apparel, most of which are in West Java and Jakarta (table G-2). According to the Indonesian Department of Industry and Trade, more than 1,000 fabric factories are in operation, with 700 to 800 producing woven fabrics, 250 producing knit fabrics, and approximately 10 producing nonwoven fabrics. Generally, the quality of Indonesian textile products has improved and the industry has become less dependent upon imported fabrics to meet the demand of apparel manufacturers. Much of Indonesia's capacity to produce textiles and apparel remained relatively stable during 1999-2001, increasing from a total of 5.5 million metric tons in 1999 to 6.0 million metric tons in 2000 and 2001. During 1997-2000, capacity utilization rates also increased. Indonesia's total production of textiles and apparel grew by

¹ Prepared by Cynthia Foreso, Office of Industries.

² U.S. Department of State telegram 2013, "Indonesian Textiles in a Post-Quota World," prepared by U.S. Embassy, Jakarta, June 5, 2002, and "Indonesian Textile & Apparel Industry, New Turning Point," *JTN Monthly, Asian Textile Business*, Feb. 2002, various pages.

³ "Costs Increasing One After Another," *Textile & Apparel Indonesia*, 2001-02, p. 16.

18 percent during 1999-2001, reflecting production increases of 25 percent for fibers, 21 percent for yarns, 16 percent for fabrics (woven and knit), and 4 percent for apparel.

Indonesia's textile industry supplies most of domestic yarn demand. The primary yarn consumers are weaving and knitting mills. Excess yarn production generally is exported to South Korea, Japan, and Hong Kong.

Factors of production

Raw materials

Indonesia's textile industry consumes cotton and manmade fibers, particularly polyester, which accounts for more than 50 percent of total consumption. With the exception of cotton, all of the other textile fibers are produced domestically. Over the past decade, the share of polyester fibers in the total consumption of fibers has rapidly increased and captured the previously dominant position of cotton.

Indonesian production of cotton accounts for less than 4 percent of the country's domestic consumption and is generally viewed as inferior in quality to the imported cotton.⁴ In 2001, the value of Indonesia's imports of raw cotton reached \$1.1 billion, compared with imports of manmade fibers, which were valued at \$259 million. The cost of producing cotton yarn is relatively high in Indonesia, \$1.22 per kilogram in 2001, compared with \$1.04 per kilogram in the United States.⁵ Because of the highly vertically integrated production system, imports of threads, yarns, fabrics, and garments remain low and exports of garments and apparel are high.

Labor

The Indonesian textile and apparel industry is highly labor-intensive, employing approximately 1.2 million workers directly and an additional 3.5 million workers in other textile-related areas, such as distribution. As shown in table G-2, the largest share of workers are involved in the production of apparel (376,600 workers) and fabrics (355,600 workers). Manufacturing operations often are overseen by expatriate management.⁶

Indonesia's textile industry has had one of the lowest labor costs in the region. However, there have been significant increases in the minimum wage (which is determined on a regional basis) throughout the country, and the textile industry has stated that wage increases have reduced its competitiveness. Yet, current wage rates are less than that in other countries within the region and among the lowest worldwide. The average wage rate for textile production workers in 2002 was \$0.50 per hour, compared with \$1.24 for Thailand and

⁴ "Textile Product Trade," *Asian Textile Business*, Sept. 2002.

⁵ International Textile Manufacturers Federation (ITMF), *International Production Cost Comparison 2001*, Zurich.

⁶ Industry official, interview by USITC staff, Hong Kong, Feb. 25, 2003.

\$2.30 for Mexico. Hourly wage rates for production workers in Indonesia's apparel industry were about \$0.27 in 2002.⁷ Labor costs accounted for about 5 percent of total costs for a basic cotton fabric, compared with rates of 11 percent in India, 13 percent in Turkey, and 47 percent in the United States.⁸

Technology

In 2001, Indonesia accounts for a large share of the installed textile capacity in the ASEAN region, accounting for 57 percent of the region's short-staple spindles, 31 percent of its shuttleless looms, 67 percent of its shuttle looms, and 40 percent of its filament weaving looms.⁹ However, the Indonesian textile production machinery is beginning to become outdated, with 90 percent of machinery more than 5 years old¹⁰ and the Ministry of Trade and Industry reports that the average age of machinery in the textile industry is more than 15 years.¹¹ Although older machinery currently does not appear to be affecting competitiveness, it is unlikely that new investment will materialize. FDI has declined significantly due to political instability and concerns about the judicial system's ability to protect an investor's capital.

In 1998, Indonesia's Department of Industry and Trade estimated that in order to achieve the government's export target of \$13 billion by 2003, the industry would need to invest at least \$4.9 billion for new equipment.¹² Of this total, \$2.3 billion would be for the weaving and knitting sectors, \$1.3 billion for the spinning sectors, \$950 million for the finishing sector, and \$300 million for the sewing sector. Equipment expansions and upgrades were planned for the 1990s; however, the Asian economic crisis delayed or cancelled many of the expansions. As of 2001, equipment expansions were still on hold.

Investment

Indonesia experienced 78 percent inflation and a recessionary climate in 1998, similar to that faced by other countries in the region. Although other regions largely have been able to recover from these effects, Indonesia has fallen behind and continues to stagnate. A large part of this is due to the economic turmoil and lack of foreign investment in the country. The

⁷ Data for the textile industries compiled from Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002," Reston, VA; and data for the apparel industries compiled from Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers," New York, NY, Nov. 2002. Wage rate data are provided in table 3-1 in chapter 3 of this report.

⁸ ITMF, *International Production Cost Comparison*, 2001.

⁹ ITMF, *International Textile Machinery Statistics*, 2002.

¹⁰ "Indonesia Tries to Regain Buyers' Confidence," found at www.emergingtextiles.com, retrieved June 16, 2000.

¹¹ U.S. Department of State telegram 2013, "Indonesian Textiles in a Post-Quota World," prepared by U.S. Embassy, Jakarta, June 5, 2002.

¹² Information in this paragraph based on "Market Survey of the Indonesia Textile Industry," *EKONID-Deutsch-Indonesische Industrie-UND HANDERSKAMMER*, a working source paper, provided to USITC staff by the Embassy of Indonesia, Jan. 30, 2003.

companies that have been able to return to competitiveness have primarily been the producers that export.

The total value of FDI approvals decreased significantly from 1997 to 1998, rebounded, and then declined in 2001 (table G-2). The decline in FDI in 2001 largely reflected concerns over contract law, personal safety, labor unrest, and overall political instability.¹³

Government Policies

Domestic policies

The Indonesian Government is not directly involved in the operations of the textile and apparel sector. In the past, the Indonesian Government had subsidized electricity and natural gas, thereby benefiting the textile industry. Recent policy changes have included phasing out subsidized electricity and natural gas as required by the IMF. Consequently, electricity and other fuel costs have risen sharply.¹⁴ Prices for energy increased immediately to one-half of the world market price by April 1, 2001, and continued to rise during 2002.¹⁵ By April 2002, diesel fuel had increased by 76 percent and kerosene by 200 percent. As noted above, this has reduced the ability of the Indonesian producers to compete in the international textile and apparel export markets.

Foreign Trade

Indonesia is a net exporter of textiles and apparel. The positive trade balance increased from \$4.0 billion in 1997 to \$7.0 billion in 2000 but declined to \$6.7 billion in 2001.

¹³ "Bali Blast to Affect Indonesia's Textile Industry," found at www.emergingtextiles.com, retrieved Oct. 14, 2002.

¹⁴ "Costs Increasing One After Another," *Textile & Apparel Indonesia, 2001-02*, p. 16.

¹⁵ *Ibid.*

Imports

Indonesia's imports of textiles and apparel decreased from \$1.2 billion in 1997 to \$1.1 billion in 2001 (table G-2). In 2001, yarns and fabrics accounted for the majority of Indonesia's sector imports. Indonesia's primary import sources in 2001 were Australia and the United States. Other import sources included Taiwan, South Korea, Japan, and China.

Imports from China have been of growing concern to the Indonesian textile industry. Chinese-made products such as stretch jeans and knits are gaining an increasing share of the Indonesian domestic market. Indonesia's imports of Chinese textile products reportedly include up to 1,700 container loads of apparel smuggled into the country.¹⁶

Exports

Indonesia's textile and apparel sector has ranked among the fastest growing industries in the nation and consistently has been the largest source of non-oil and gas foreign exchange. Indonesia exports textiles and apparel articles to more than 130 countries, with the primary markets being the United States and the European Union. Other markets include other ASEAN and Asian nations, the nations of the Middle East, and Australia.

Of Indonesia's total exports of textiles and apparel to the U.S. market, an estimated 60 percent were subject to specific quotas in 2002. A relatively large number of apparel products from Indonesia were subject to binding quotas that year, including: cotton and manmade fiber knit shirts and blouses; cotton and manmade-fiber trousers and shorts; nightwear and pajamas; skirts; men's and boys' woven shirts; women's and girls' cotton woven shirts; women's and girls' coats; and women's and girls' manmade fiber suits. The EU maintains quotas on imports from Indonesia of trousers of cotton, wool, and manmade fibers; jerseys, shirts and T-shirts; staple yarn; and woven fabrics. EU quotas on these Indonesian products were largely filled in 2002.¹⁷

U.S. imports of textiles and apparel from Indonesia increased from 855 million square meter equivalent (SMEs) in 1997 to 1.2 billion SMEs in 2002 (table G-4). The imports from Indonesia in 2002 consisted primarily of products of manmade fibers (769 million SMEs) and cotton (422 million SMEs). The principle products imported from Indonesia in 2002 were "other" manmade-fiber manufactures (category 669, 184 million SMEs), cotton poplin and broadcloth fabric (category 314, 67 million SMEs), and "other" manmade-fiber apparel (category 659, 56 million SMEs). The 2001 trade-weighted average duty on U.S. imports of sector goods from Indonesia was 9.3 percent ad valorem for textiles, and 17.5 percent ad valorem for apparel.

¹⁶ "Indonesian Textile Industry, Challenge to Improve Prices," *Asian Textile Business*, July 2002, p. 13.

¹⁷ European Commission DG Trade, *Système Intègrè de Gestion de Licenses*, found at <http://sigl.cec.eu.int/sigl/sigl.pl>, retrieved May 8, 2003.

With the removal of quotas, Indonesia has expressed concern that its textile and apparel sector will lose U.S. market share to other producers subject to quotas.¹⁸ China is of particular concern to the Indonesian textile and apparel sector, as Chinese-made products have already taken export market share from Indonesian products. Following the September 11 terrorist attacks, a trade source reported that orders for Indonesian textile and apparel products from Western Europe and the United States were cancelled and the orders were filled by manufacturers in Vietnam and China.¹⁹ With rising costs of labor, energy, and raw materials, coupled with the elimination of quotas, Indonesia may lose additional market share to competitors.

¹⁸ “Indonesia’s Textile and Apparel Industry: A Changing World Trading Environment,” Partnership for Economic Growth and the Ministry of Industry and Trade.

¹⁹ “Indonesian Textile Industry, Challenge to Improve Prices,” p. 13.

Table G-2
Indonesia: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments	8,000	8,000	8,000	8,000	8,000
Number of workers:					
Fibers (1,000 workers)	25.5	26.1	26.8	29.3	29.7
Yarns (1,000 workers)	175.3	186.4	189.8	193.4	207.9
Fabrics (1,000 workers)	329.4	338.0	341.4	349.4	355.6
Apparel (1,000 workers)	346.2	348.4	355.2	372.7	376.6
Other (1,000 workers)	243.9	244.5	246.7	247.4	249.6
Total (1,000 workers)	1,120.3	1,143.4	1,159.9	1,192.2	1,219.3
Installed spinning capacities:					
Short-staple spindles (1,000)	7,050	7,050	7,078	8,500	8,500
Long-staple spindles (1,000)	100	100	103	103	103
Open-end rotors (1,000)	86	86	56	56	56
Installed weaving capacities:					
Shuttleless looms (number)	³ 27,000	³ 27,000	³ 27,000	³ 27,000	³ 27,000
Shuttle looms (number)	³ 200,000	³ 200,000	³ 200,000	³ 200,000	³ 200,000
Production of selected products:					
Yarns (1,000 metric tons)	1,374.0	1,374.0	1,913.5	2,086.3	2,321.7
Fabrics (1,000 metric tons)	(¹)	(¹)	1,348.2	1,546.4	1,561.8
Apparel (1,000 metric tons)	(¹)	(¹)	543.2	554.4	566.5
Other ² (1,000 metric tons)	(¹)	(¹)	22.5	42.2	43.0
Production:					
Textiles (million dollars)	22,471.8	15,924.1	20,454.9	21,698.5	19,732.1
Apparel (million dollars)	18,277.4	16,615.8	27,231.6	4,244.3	7,916.3
Total (million dollars)	40,749.2	32,539.9	47,686.5	25,942.8	27,648.3
Mill fiber consumption:					
Manmade fibers (1,000 metric tons)	1,199.4	1,190.2	1,381.5	1,345.0	1,357.8
Cotton (1,000 metric tons)	509.8	527.3	518.4	542.3	628.6
Wool (1,000 metric tons)2	.1	.1	0	0
Total (1,000 metric tons)	1,709.4	1,717.6	1,900.1	1,887.3	1,986.4
Foreign direct investment in textiles and apparel:					
Number of projects	56.0	80.0	121.0	107.0	90.0
Value (million dollars)	372.6	216.9	240.2	401.3	267.1
Foreign trade:					
Exports:					
Textiles (million dollars)	2,259.9	2,349.3	3,016.5	3,505.2	3,199.3
Apparel (million dollars)	2,957.8	2,682.8	3,919.7	4,811.1	4,604.0
Total (million dollars)	5,217.7	5,032.2	6,936.2	8,316.3	7,803.3
Imports:					
Textiles (million dollars)	1,151.3	1,020.4	865.7	1,251.0	1,088.3
Apparel (million dollars)	30.6	19.3	23.9	32.2	22.8
Total (million dollars)	1,181.9	1,039.6	889.6	1,283.2	1,111.2
Trade balance:					
Textiles (million dollars)	1,108.6	1,329.0	2,150.8	2,254.1	2,111.0
Apparel (million dollars)	2,927.2	2,663.6	3,895.8	4,778.9	4,581.1
Total (million dollars)	4,035.8	3,992.5	6,046.7	7,033.1	6,692.1

¹ Not available.

² Includes carpets.

³ In addition, there were an estimated 30,000 handlooms in the non-mill sector.

Note.—Because of rounding, figures may not add to totals shown.

Source: Mill fiber consumption from Geerdes International, Inc., Richmond, VA, and installed spinning and weaving capacities from International Textile Manufacturers Federation (Zurich), *International Textile Machinery Statistics*, vol. 25/2002, and selected back issues. All other industry data from the Indonesian Textile Association at www.indotex.com; Embassy of Indonesia, written submission to the U.S. International Trade Commission, Feb. 4, 2003; and *Textile and Apparel Indonesia*, 2001-02. Trade data are United Nations data as reported by Indonesia.

Table G-3
Indonesia: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	151	164	165	240	231
European Union	478	545	553	565	576
Canada	29	26	41	46	35
Subtotal	658	734	760	852	842
All other:					
Japan	243	188	304	311	291
United Arab Emirates	127	119	209	226	201
Korea	61	96	204	190	181
Other	1,171	1,211	1,539	1,926	1,684
Subtotal	1,602	1,615	2,257	2,654	2,357
Grand total	2,260	2,349	3,017	3,505	3,199
Apparel (SITC 84):					
Quota markets:					
United States	1,109	1,232	1,555	2,069	1,991
European Union	848	801	1,211	1,489	1,334
Canada	41	39	76	88	106
Subtotal	1,998	2,072	2,842	3,646	3,431
All other	960	611	1,077	1,165	1,173
Grand total	2,958	2,683	3,920	4,811	4,604
Textiles and apparel:					
Quota markets:					
United States	1,260	1,396	1,721	2,310	2,222
European Union	1,326	1,346	1,764	2,054	1,910
Canada	69	64	117	134	141
Subtotal	2,656	2,806	3,602	4,498	4,273
All other	2,562	2,226	3,334	3,819	3,530
Grand total	5,218	5,032	6,936	8,316	7,803
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	29	31	25	24	26
Apparel	68	77	73	76	75
Average	51	56	52	54	55

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table G-4
Textiles and apparel: U.S. general imports from Indonesia, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	—————1,000 square meters equivalent—————					
0	Textiles and apparel, total	855,047	974,751	907,305	1,052,667	1,164,629	1,215,355
1	Apparel	393,554	433,682	440,892	522,026	593,736	594,645
2	Textiles	461,493	541,069	466,413	530,641	570,893	620,711
11	Yarns	111,920	109,223	117,382	107,411	107,642	113,418
12	Fabrics	220,587	259,028	162,683	203,821	183,991	234,970
14	Other miscellaneous articles	128,986	172,819	186,348	219,409	279,259	272,323
30	Cotton textiles and apparel	381,637	396,192	361,310	383,773	415,642	422,149
31	Cotton apparel	179,824	189,423	197,781	208,622	250,239	247,947
32	Cotton textiles	201,814	206,770	163,529	175,151	165,402	174,202
42	Wool textiles	43	139	24	39	10	29
60	Manmade-fiber textiles and apparel	460,022	564,445	529,483	643,164	721,836	769,051
61	Manmade-fiber apparel	202,975	231,914	227,769	288,902	317,585	322,944
62	Manmade-fiber textiles	257,046	332,531	301,714	354,261	404,251	446,107
80	Silk blend/veg fiber textiles/apparel	7,717	9,506	12,343	20,437	22,913	20,044
237	Playsuits	8,890	13,002	13,273	6,078	3,437	2,378
239	Babies' apparel	8,802	15,871	17,933	30,941	40,721	36,011
300	Carded cotton yarn	19,380	7,772	12,382	19,502	19,466	15,891
301	Combed cotton yarn	16,017	22,495	33,111	22,715	13,081	18,730
313	Cotton sheeting fabric	11,465	13,476	13,050	14,668	14,454	12,644
314	Cotton poplin and broadcloth fabric	64,345	70,507	47,069	57,061	43,724	67,335
315	Cotton printcloth fabric	34,857	32,950	18,267	20,170	31,307	21,677
331	Cotton gloves	3,377	2,785	3,427	3,392	8,085	10,942
340	Cotton not knit shirts, men/boys	31,850	33,923	31,925	33,305	36,096	41,924
341	Cotton not knit blouses	12,634	12,376	12,607	13,220	11,775	17,562
345	Cotton sweaters	12,978	15,757	14,439	16,869	20,179	13,078
347	Cotton trousers, men/boys	18,136	18,980	19,377	16,141	20,172	18,375
348	Cotton trousers, women/girls	10,543	8,870	12,891	10,852	20,425	21,650
351	Cotton nightwear	22,796	17,513	22,172	24,110	31,601	27,474
352	Cotton underwear	8,779	11,749	12,180	14,275	15,228	16,078
600	Textured filament yarn	61,409	58,805	58,600	51,839	52,166	44,551
604	Yarn of synthetic staple fiber	7,748	6,952	4,131	5,811	9,362	12,516
607	Other staple fiber yarn	111	0	361	0	2,007	12,304
614	Manmade-fiber poplin/broadcloth	17,181	18,739	13,882	23,435	19,685	21,583
625	Manmade-fiber poplin/broadcloth	26,253	31,449	15,481	16,057	6,916	38,166
636	Manmade-fiber dresses	20,458	21,392	23,471	28,084	24,012	24,544
638	Manmade knit shirts, men/boys	15,768	16,420	14,182	17,379	16,406	19,241
639	Manmade knit shirts, women/girls	6,298	6,966	6,045	10,580	7,805	14,107
640	Manmade not knit shirts, men/boys	2,245	1,638	2,336	2,939	3,812	7,276
641	Manmade-fiber not knit blouses	16,920	19,069	21,241	31,888	35,549	35,833
642	Manmade-fiber skirts	2,715	3,524	4,817	4,683	6,528	6,623
645	Manmade-fiber sweaters, men/boys	1,433	991	1,386	2,310	5,253	5,707
646	Manmade-fiber sweaters, women/girls	24,877	24,647	13,800	21,501	32,505	23,890
647	Manmade-fiber trousers, men/boys	26,444	33,253	28,522	34,249	40,551	35,734
648	Manmade-fiber trousers, women/girls	20,701	28,061	23,613	29,932	28,903	29,186
649	Manmade-fiber brassieres	4,421	6,373	11,570	11,903	12,937	15,507
659	Other manmade-fiber apparel	32,990	33,263	36,313	46,790	54,150	55,973

See footnote at end of table.

Table G-4—Continued
Textiles and apparel: U.S. general imports from Indonesia, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	—————1,000 square meters equivalent—————					
666	Other manmade-fiber furnishings	5,459	9,568	9,500	4,354	4,901	20,338
669	Other manmade-fiber manufactures	79,970	103,197	106,082	135,996	178,888	183,976
670	Manmade-fiber handbags/luggage	20,702	32,034	48,557	60,484	72,039	47,639

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Malaysia¹

Overview

The textile and apparel sector plays a significant role in Malaysia's economy, but it has declined in relative importance during the past decade as a result of slow export growth and the build-up of other industries in the country, particularly high-technology, knowledge-based, and capital-intensive industries. The largest export of Malaysia is electrical and electronic products, which made up 57 percent of its total exports in 2001.² The textile and apparel share was only 4 percent, the lowest of the 15 "significant quota suppliers" covered by this study (the export shares for textiles and apparel of the countries covered by the study are shown in chapter 1 of this report, table 1-1 and figure 1-2). The textile and apparel sector also accounted for 4 percent of Malaysian manufacturing value added and 3.5 percent of manufacturing employment in 2000.³

Malaysian government and industry officials agree that the textile and apparel sector, whose labor costs are among the highest in Asia, will need to focus on making high-end apparel to remain competitive against low-cost exporting countries following quota removal in 2005.⁴ The Malaysian sector is shifting from yarn and fabric manufacturing to apparel production and providing value-added services such as marketing, logistics, and distribution. Malaysian apparel producers reportedly have a reputation for timely, consistent, high-quality production and for meeting buyers' requirements on labor rights and conditions. In addition, Malaysia's high standard of vendor (supplier) conduct and stable political climate have helped to offset the advantage of cheap labor in neighboring countries.

¹ Prepared by Erik Daugherty, Office of Industries.

² Malaysia External Trade Development Corporation (MATRADE), "Key Export Industries: Electrical and Electronics," found at <http://www.matrade.gov.my>, retrieved May 10, 2003.

³ Bank Negara Malaysia (the Central Bank), *Monthly Statistical Bulletin*, found at <http://www.bnm.gov.my>, retrieved May 10, 2003, and Niki Tait, "Prospects for the Textile and Clothing Industry in Malaysia," *Textile Outlook International* (United Kingdom: Textiles Intelligence Ltd.), Sept.-Oct. 2002, p. 197.

⁴ Information in this paragraph is from U.S. Department of State telegram 2502, "Malaysia: Preparing for World Textile Trade Without Quotas," prepared by U.S. Embassy, Kuala Lumpur, May 2, 2002.

Industry Profile

Industry Structure⁵

The textile and apparel sector is integrated from the production of chemicals for manmade fibers to spinning, knitting, weaving, and apparel production. It consisted of 237 firms in 2000; firms making apparel were mostly small and medium-sized firms.⁶ The sector has declined in size in the past decade, and it is expected to undergo a greater degree of consolidation following quota removal, particularly in spinning and weaving, mainly because of rising operating costs and growing competition in domestic and foreign markets from low-cost suppliers. From 1993 to 2000, the number of apparel firms fell from 158 to 138, while the number of spinning and knitting mills fell from 18 to 12 and 57 to 47, respectively.⁷

Malaysia must import both cotton and wool for spinning and weaving. Malaysian imports of raw cotton have fallen as the number of spindles in the spinning segment has dropped, although cotton usage in the production of finished apparel has increased. The Government is dismantling import duties on inputs to help strengthen the competitiveness of apparel producers. According to the Malaysian Textile Manufacturers Association (MTMA), import duties on yarns, currently 10 percent ad valorem, will be reduced further and the duties on synthetic fibers, currently between 3 and 5 percent to protect the fledgling petrochemical industry, are expected to be eliminated in the future.

Although the Malaysian Industrial Development Authority (MIDA) estimates that 95,000 to 100,000 workers are employed in the textile and apparel sector, MTMA believes the numbers may be as high as 150,000 based on its membership. The sector employs substantial numbers of foreign workers, especially from Indonesia and Bangladesh, but new government restrictions on the hiring of foreign workers likely will reduce their numbers. The Malaysian Government has limited the number of foreign workers in an effort to minimize unemployment. In August 2002, the Malaysian Government deported about 500,000 illegal Indonesian workers under a new immigration law.⁸ The deportation of the Indonesian workers was expected to hurt the Malaysian textile industry by raising labor costs.⁹ In October 2002, the Malaysian Government affirmed that Malaysia still needs officially registered Indonesian workers.¹⁰

⁵ Information in this section is mainly from U.S. Department of State telegram 2502, "Malaysia: Preparing for World Textile Trade Without Quotas," prepared by U.S. Embassy, Kuala Lumpur, May 2, 2002.

⁶ Niki Tait, "Prospects for the Textile and Clothing Industry in Malaysia," *Textile Outlook International*, Sept.-Oct. 2002, pp. 193 and 194.

⁷ Adeline P. Raj, "Further Consolidation Seen in Textile Sector after Afta," *Business Times*, Oct. 11, 2001.

⁸ "Indonesia: Malaysia Still Needs Indonesian Workers," *Asian Textile Weekly* (Osaka Senken Ltd.), Oct. 11, 2002.

⁹ "Indonesia: 350,000 Workers Deported from Malaysia," *Asian Textile Weekly* (Osaka Senken Ltd.), Oct. 4, 2002.

¹⁰ "Indonesia: Malaysia Still Needs Indonesian Workers."

Malaysian industry officials acknowledge that it cannot compete with Chinese producers of men's dress shirts. According to the Malaysian Ministry of International Trade and Industries (MITI), the Chinese can produce a shirt for \$2.63, while Malaysian manufacturers' cost to produce the same shirt is at least \$5.26. To compete in a quota-free marketplace, MITI officials indicate that Malaysian manufacturers will have to focus on the high-end apparel market and add value to their exports through branding and packaging.

Technology and Investment

Investments made during 1989-95 contributed to the increased integration of the Malaysian textile and apparel industries by expanding textile manufacturing capacity. Installed spinning capacity rose by about 40 percent during the second half of the 1990s.¹¹ From 1993 to 2002, Malaysia purchased 5,172 looms, almost all of which were the highly efficient shuttleless type.¹² The industry is also becoming more vertically integrated through a series of mergers and consolidations.¹³ Analysts expect to see even more consolidation in the Malaysian textile industry after quotas are eliminated in 2005.¹⁴

The textile and apparel sector, faced with a tight labor market and rising production costs, has invested in new production equipment to reduce unit costs, boost productivity, and increase self-sufficiency and vertical integration.¹⁵ Government-approved investment projects in textiles and apparel fluctuated widely during 1997-2001, rising from \$75 million in 1997 to \$187 million in 1998, falling to \$49 million in 1999, and then accelerating to \$310 million in 2000 (table G-5). In 2001, the Government approved 43 textile and apparel projects with a total capital investment of \$113 million. These measures have been effective in steadily raising labor productivity by 5 percent per annum over the last several years.¹⁶ In addition to investments in production, major apparel companies have adopted e-business platforms to provide fast delivery and response time to changing customer orders. Better supply chain management has reduced lead times on orders from 75 to 33 days.¹⁷

Several large textile producers in Malaysia are moving some production to lower cost countries because of labor shortages and rising costs.¹⁸ For example, Ramatex is building

¹¹ John Coker, "Textile and Clothing Consumption in Six Asian Countries: Forecasts to 2005," *Textile Outlook International*, May 1999, p. 115.

¹² International Textile Manufacturers Federation, *International Textile Machinery Shipment Statistics* (Zurich) vol. 25/2002.

¹³ Niki Tait, "Prospects for the Textile and Clothing Industry in Malaysia," p. 192.

¹⁴ Adeline P. Raj, "Further Consolidation Seen in Textile Sector after Afta," *Business Times*, Oct. 11, 2001.

¹⁵ EmergingTextiles.com, "Malaysia's Textiles and Apparel Involved in Automatization Process," Mar. 21, 2001, found at <http://www.emergintextiles.com>, and Adeline P. Raj, "Further Consolidation Seen in Textile Sector after Afta," *Business Times*, Oct. 11, 2001.

¹⁶ Niki Tait, "Prospects for the Textile and Clothing Industry in Malaysia," p. 195.

¹⁷ *Ibid.*, p. 212.

¹⁸ Information in the paragraph is from "Malaysia's Textiles and Apparel Involved in Automatization Process," Emerging Textiles.com, Mar. 21, 2001; "Ramatex 'Knits' Its Intentions in Namibia," *Namibia Economist*, found at www.economist.com.na/2001/070901/story7.htm, 2001, and Niki Tait, "Prospects for the Textile and Clothing Industry," p. 213.

its second-largest integrated textile factory in Namibia (Africa), second only to its operations in China. The firm attributed the investment in part to opportunities afforded by the African Growth and Opportunity Act (AGOA).

Government Policies

Malaysia has an open trade regime that has enabled foreign trade to account for about two-thirds of the country's gross domestic product.¹⁹ The Government has implemented policies to improve economic conditions in Malaysia in an effort to attract foreign direct investment (FDI). The Government has made significant infrastructure improvements to maintain a business friendly environment, including construction of the Kuala Lumpur International Airport, Malaysia's newest and biggest airport that opened for business in mid-1998. Malaysia has an established highway network that links major growth centers to its world-class seaports and airports throughout the peninsula. Malaysia has installed electronic data interchange in several ports to provide electronic transfer of documentation that proves vital for the timely clearance of cargo. It also has more than 200 industrial parks as well as 14 free industrial zones (FIZs) that permit duty-free imports of raw materials for export-oriented industries.

Recognizing the need to shift production toward more high-end apparel manufacturing, the Government and industry associations encourage manufacturers to improve skills development and production specialization. The Government established the Malaysian Textile and Apparel Center several years ago to provide training opportunities in high-end fashion and apparel development.

Foreign Trade

Malaysia's trade surplus in textiles and apparel totaled \$2.0 billion in 2001, down from slightly more than \$2.2 billion in the years 1997-2000 (table G-5). From 1997 to 2001, Malaysia posted declines in both exports and imports of 14 percent, to \$3.1 billion, and 20 percent, to \$1.1 billion, respectively. The imports were concentrated in textiles and came primarily from China, Italy, Korea, Germany, and the United States. The exports were concentrated in apparel and went mostly to quota markets, particularly the United States and the European Union (table G-6). As a producer of petrochemicals, Malaysia also exports quantities of synthetic fibers and yarns as well as cotton and wool fabrics made from imported fibers and yarns.

Based on official U.S. statistics, U.S. imports of textiles and apparel from Malaysia rose irregularly from 238 million square meters equivalent (SMEs) to 326 million SMEs valued at \$776 million in 2002 (table G-7). Apparel accounted for almost 60 percent of the quantity but 93 percent of the value of total sector imports from Malaysia in 2002. A large portion of the import volume consists of low-unit-valued goods such as yarns. Malaysia generally fills few of its U.S. quotas; in 2002, it achieved fill rates of 90 percent or more in only 6 of

¹⁹ Information in the paragraph is from Niki Tait, "Prospects for the Textile and Clothing Industry in Malaysia," pp. 187-189.

its 37 quotas. The 2001 trade-weighted average duties on U.S. imports of sector goods from Malaysia were 9.3 percent ad valorem for textiles and 11.1 percent ad valorem for apparel.

Table G-5
Malaysia: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of textile and apparel establishments	(¹)	(¹)	(¹)	237	(¹)
Number of workers:					
Textiles (1,000)	16.0	19.7	(¹)	(¹)	(¹)
Apparel (1,000)	12.8	13.8	(¹)	(¹)	(¹)
Total (1,000)	28.8	33.5	(¹)	(¹)	(¹)
Installed spinning capacities:					
Short-staple spindles (1,000)	650	650	650	650	650
Long-staple spindles (1,000)	35	35	35	35	35
Open-end rotors (1,000)	6	6	6	6	6
Installed weaving capacities:					
Shuttleless looms (number)	4,000	4,000	4,000	4,000	4,000
Shuttle looms (number)	1,200	1,200	1,200	1,200	1,200
Production index (Jan. 1998=100):²					
Textiles	(¹)	91.7	95.8	97.4	92.7
Apparel	(¹)	93.9	97.0	117.0	101.3
Mill fiber consumption:					
Cotton (1,000 metric tons)	59.2	62.6	73.4	64.8	24.3
Manmade fibers (1,000 metric tons)	304.0	318.0	334.3	376.0	374.7
Total (1,000 metric tons)	363.2	380.6	407.7	440.8	399.0
Index of industrial production (1993=100):					
All manufacturing	165.6	148.6	167.8	209.7	195.8
Electronic and electrical products	181.6	167.6	193.9	272.4	229.2
Textiles and apparel	121.0	114.6	119.2	129.6	118.8
Value added by manufacturing, total (million dollars)	20,835	(¹)	23,103	27,915	(¹)
Textiles (million dollars)	655	(¹)	560	648	(¹)
Apparel nonrubber footwear, and made-up textile articles (million dollars)	350	(¹)	385	469	(¹)
Total (million dollars)	1,005	(¹)	945	1,117	(¹)
Share of total value-added by manufacturing (percent)	4.8	(¹)	4.1	4.0	(¹)
Production of selected products:					
Cotton fabrics (million meters)	176.8	170.1	181.1	187.5	177.4
Apparel (million units)	71.9	75.7	79.8	88.4	79.9
Approved investment projects in textiles and apparel:					
Number of approved projects	(¹)	(¹)	(¹)	(¹)	43
Total capital investment (million dollars)	74.7	187.2	49.3	309.6	113.0
Domestic investment (million dollars)	(¹)	(¹)	(¹)	(¹)	28.7
Foreign investment (million dollars)	(¹)	(¹)	(¹)	(¹)	84.3

See footnotes at end of table.

Table G-5—Continued

Malaysia: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	1,289.3	1,090.9	1,116.9	1,265.6	1,051.3
Apparel (<i>million dollars</i>)	2,337.9	2,298.9	2,249.4	2,252.7	2,061.1
Total (<i>million dollars</i>)	3,627.2	3,389.8	3,366.3	3,518.3	3,112.4
Imports:					
Textiles (<i>million dollars</i>)	1,222.3	922.3	1,012.0	1,111.0	931.9
Apparel (<i>million dollars</i>)	155.8	107.9	125.1	149.0	165.8
Total (<i>million dollars</i>)	1,378.1	1,030.2	1,137.1	1,260.0	1,097.7
Trade balance:					
Textiles (<i>million dollars</i>)	67.0	168.6	104.9	154.6	119.4
Apparel (<i>million dollars</i>)	2,182.1	2,191.0	2,124.3	2,103.6	1,895.3
Total (<i>million dollars</i>)	2,249.1	2,359.6	2,229.2	2,258.3	2,014.7

¹ Not available.

² By volume.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data from Bank Negara Malaysia (the Central Bank), *Monthly Statistical Bulletin*, Mar. 2003, tables VI.4-VI.6; *The Malaysian Economy in Figures 2001*, Prime Minister's Department, Economic Planning Unit (<http://www.epu.jpm.my>), Mar. 31, 2003, Malaysian Industrial Development Authority (MIDA, at <http://www.mida.gov.my>), retrieved May 10, 2003; and International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; and data on mill fiber consumption from Geerdes International, Inc., Richmond, VA. Trade data are United Nations data as reported by Malaysia.

Table G-6
Malaysia: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	63	60	74	77	46
European Union	133	140	126	106	103
Canada	13	10	12	6	6
Subtotal	209	210	212	190	156
All other:					
Hong Kong	333	260	188	262	191
Singapore	124	91	98	119	101
Japan	101	57	73	99	82
Other	522	473	546	596	522
Subtotal	1,080	881	904	1,076	896
Grand total	1,289	1,091	1,117	1,266	1,051
Apparel (SITC 84):					
Quota markets:					
United States	1,149	1,249	1,152	1,202	1,118
European Union	705	622	617	600	532
Canada	60	68	69	70	63
Subtotal	1,914	1,938	1,838	1,871	1,713
All other	424	360	411	381	348
Grand total	2,338	2,299	2,249	2,253	2,061
Textiles and apparel:					
Quota markets:					
United States	1,212	1,309	1,226	1,280	1,164
European Union	838	762	743	706	636
Canada	73	78	81	76	69
Subtotal	2,123	2,148	2,050	2,061	1,869
All other	1,504	1,241	1,316	1,457	1,244
Grand total	3,627	3,390	3,366	3,518	3,112
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	16	19	19	15	15
Apparel	82	84	82	83	83
Average	59	63	61	59	60

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table G-7

Textiles and apparel: U.S. general imports from Malaysia, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	(1,000 square meters equivalent)					
0	Textiles and apparel, total	238,490	263,499	321,503	337,407	288,980	325,592
1	Apparel	134,984	162,381	178,261	201,347	192,838	193,060
2	Textiles	103,507	101,118	143,242	136,060	96,141	132,532
11	Yarns	38,980	47,734	74,102	68,046	46,134	78,436
12	Fabrics	53,865	41,369	60,648	63,397	43,954	48,791
14	Other miscellaneous articles	10,661	12,015	8,492	4,617	6,053	5,304
30	Cotton textiles and apparel	107,887	131,527	167,286	173,314	155,863	185,150
31	Cotton apparel	73,809	91,260	100,635	106,819	105,705	117,902
32	Cotton textiles	34,078	40,267	66,651	66,495	50,159	67,247
40	Wool textiles and apparel	1,784	1,956	1,073	2,004	2,256	1,319
60	Manmade-fiber textiles and apparel . . .	123,993	123,878	146,899	161,166	130,188	138,669
61	Manmade-fiber apparel	59,395	69,513	74,422	92,085	84,884	73,704
62	Manmade-fiber textiles	64,597	54,365	72,477	69,080	45,304	64,965
80	Silk blend/veg fiber textiles/apparel . . .	4,827	6,138	6,245	923	673	454
239	Babies' apparel	6,451	9,085	12,480	15,644	19,825	22,226
300	Carded cotton yarn	0	3,513	16,406	19,771	17,012	24,692
301	Combed cotton yarn	9,497	13,761	19,460	14,731	7,024	18,681
340	Cotton not knit shirts, men/boys	15,228	15,895	17,250	19,879	16,835	12,986
341	Cotton not knit blouses	2,618	2,392	2,686	1,666	1,568	2,836
347	Cotton trousers, men/boys	3,929	5,310	5,608	3,104	3,697	6,486
348	Cotton trousers, women/girls	3,711	5,344	5,390	4,251	5,677	8,301
351	Cotton nightwear	7,245	13,364	13,162	14,263	12,933	13,757
352	Cotton underwear	3,725	2,777	4,868	2,775	3,513	8,532
600	Textured filament yarn	22,463	24,454	27,520	16,027	16,686	30,938
647	Manmade-fiber trousers, men/boys . . .	6,803	9,547	11,993	16,775	18,281	10,643
648	Manmade-fiber trousers, women/girls . .	7,294	10,181	12,398	18,370	17,141	14,924

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

² Less than 500 square meters equivalent.

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov/>.

Philippines¹

Overview

The textile and apparel sector plays a key role in the Philippine economy but has declined in size during the past decade, largely reflecting greater competition from lower-cost suppliers in markets both at home and abroad. The sector is the country's second-largest source of export earnings after electronics with 8 percent of the total in 2001, down from 11 percent in 1997. It employs 1 percent of the country's salaried labor force² and benefits from an abundance of English-speaking, skilled and semiskilled labor. However, the textile industry is relatively small and inefficient, lagging behind textile industries in many other Asian countries in the use of advanced manufacturing technologies. The apparel industry is large and export oriented, but relies heavily on imports for its yarn and fabric requirements.

To reduce import dependence, the Philippine Government is promoting domestic production of fiber crops, establishing competitive-market programs for electricity, ordering roll-backs of port charges, banning imports of used apparel, and including sector products in the "Buy Filipino" program. To enhance the apparel industry's productivity and export competitiveness, the Philippine Garments and Textile Export Board has recently established an incentive-based export quota allocation system, promoted high-quality products abroad, and certified products meeting social accountability requirements. Similarly, the Philippines Export-Import Bank recently provided financing for plant expansion and equipment modernization. Further, Philippine apparel manufacturers have begun to develop market presence in the ASEAN region to reduce reliance on the U.S. and the EU markets.

Industry Profile

The Philippine \$3-billion textile and apparel sector consists of 1,200 factories employing some 400,000 workers³ (table G-8). Export-oriented apparel is the predominant product.⁴ Apparel companies producing for export rely heavily on imports for their yarn and fabric requirements. The Philippine textile industry also produces some home textiles and yarns.

¹ Prepared by James Stamps, Office of Economics, and Karl S. Tsuji, Office of Industries.

² Sector production data were not readily available. Bureau of Export Trade Promotion (BETP), found at http://tradelinephil.dti.gov.ph/betp/trade_stat2.exppoo_sumprod, retrieved Feb. 27, 2003; and "\$4-B Garments Exports Likely by 2005," *Manila Times*, Mar. 11, 2002.

³ These data most likely understate sector employment, as a significant amount of economic activity occurs in micro-enterprises consisting of small shops and factories in the unregulated, informal sector including self-employed workers and their unpaid family workers. However, even if the inclusion of informal sector workers, were to double the estimate of apparel sector workers, this still would represent less than 3 percent of the Philippine labor force. "\$4-B Garments Exports Likely by 2005," *Manila Times*.

⁴ U.S. Department of Agriculture (USDA), Foreign Agriculture Service (FAS), *Philippines: Cotton and Products, Annual 2000*, Global Agricultural Information Network (GAIN) Report No. RPP0040, June 5, 2000, found at <http://www.fas.usda.gov/gainfiles/200007/25698163.pdf>, retrieved Jan. 2, 2003.

Industry structure and performance

The number of textile producers has declined in recent years, partly reflecting the sharp decline in domestic cotton and other fiber production⁵ and extensive smuggling of both textiles and apparel.⁶ The distribution of textile firms among supply chain segments is shown in table G-8. The leading textile firms are vertically integrated.⁷

The Philippine apparel industry has undergone considerable consolidation in recent years as a result of increased competition from lower-cost producers. From 12,000 apparel producers operating in the early 1990s, only 3,000 remained by 2000.⁸ Using primarily imported fabrics from China, Taiwan, and India,⁹ Philippine apparel manufacturers produce garments in a variety of quality levels and price ranges for sale in major discount, midlevel, and upscale retail outlets. Supporting the primary firms is a large pool of local subcontractors which sew, embroider,¹⁰ and print. Although primarily relying on their customer design specifications, the Philippine apparel industry is increasingly utilizing Philippine apparel designs and marketing to produce higher value-added products.¹¹

Factors of production

Raw materials

The Philippines produces small quantities of fiber crops, including cotton, abaca,¹² and silk. Abaca and silk (but not cotton) are exported in both their raw and processed forms. Cotton production declined from the 1970s through the late 1990s and today is “virtually abandoned,” largely due to lack of financing and technical assistance.¹³ Cotton growers never

⁵ “Philippines: Use Local Fabrics to Save Textile Industry,” *Texwatch.com*, Aug. 6, 2002.

⁶ “Textile Makers Seek Help vs. Smuggling,” *Philippine Daily Inquirer*, July 30, 2001, found at http://archive.inq7.net/archive/2001-p/bus/2001/jul/31/bus_3-1-p.htm, retrieved Jan. 3, 2003.

⁷ Philippine Exporters Confederation, Inc., “Dressing Up the World,” found at <http://www.philexport.ph/garments.html>, retrieved Jan. 3, 2003.

⁸ “Textile Makers Seek Help vs. Smuggling.”

⁹ “Philippines: Call for Signing of Philippine-US FTA,” *Bharat Textile News*, Jan. 13, 2003, found at <http://www.bharattextile.com/newsitems/1980857>, retrieved Mar. 3, 2003.

¹⁰ The Philippines historically supplied intricately embroidered and precisely hand-packed products. In the past, embroidering of children’s and women’s apparel was consigned to small contractors in rural areas with available skilled labor, particularly women as off-season workers. Today, hand embroidering has been replaced by machines. “RTW Against Poverty,” *Textile Asia*, June 2001, p. 88.

¹¹ British Trade International (BTI), Trade Partners UK, “Clothing, Fashion, & Footwear Market in the Philippines,” found at <http://www.tradepartners.gov.uk/clothing/philippines/opportunities>, retrieved Dec. 15, 2002.

¹² Abaca is a variety of the banana tree; the fibers are used for making rope, paper products, and apparel.

¹³ “Reviving Cotton,” *Textile Asia*, Mar. 2002, p. 72.

produced more than 25 percent of the country's requirements, and by the late 1990s, provided no more than 5 to 10 percent of domestic spinning needs. The United States was the main source for cotton (27 percent share in 1999), followed by Australia (23 percent share).¹⁴ Import duties were raised on fabric and spun yarn in 1999 to encourage development of local fabric makers.¹⁵

Labor

Trade sources differ as to their assessment of the Philippine labor force and its productivity. Most agree that there is an abundant domestic supply of skilled and semiskilled production workers in the Philippines. According to a 2001 survey of 81 multinational corporations (MNCs), "a large pool of educated, English-speaking, and highly trainable manpower" is a primary reason that the Philippines remains "a location of choice" for many MNCs.¹⁶ Similarly, U.S.-based employers, praising the country-wide quality of secondary education, noted that most young Filipino workers can read and speak English well enough to use English training materials and instructors in the first phases of new production.¹⁷

Another report provided a different assessment of the Philippine labor force, finding that the Philippines ranked first in the ASEAN region in terms of lowest unit labor costs in manufacturing, but ranked last in terms of labor productivity. Companies operating in the country attributed low labor productivity to the lack of modern equipment, poor training, and high levels of contractual labor.¹⁸ Another report estimated Chinese labor to be three times more productive than Filipino labor, and that Chinese workers reportedly having a learning curve of 2 to 5 weeks, versus 6 to 8 weeks in the Philippines.¹⁹

Sector workforce skill levels are relatively high, ranking along with Hong Kong, Korea, and Taiwan.²⁰ However, manufacturing MNCs reported that they tend to spend more on worker training in the Philippines than in Malaysia, but less than in Indonesia, Singapore, Taiwan, and Thailand. Companies operating in the Philippines reported that they "experience more difficulty recruiting managers and professionals than in recruiting clerical, sales, services and production personnel."²¹ Expatriate management are often needed to oversee

¹⁴ Most recent year available. USDA FAS, *Philippines: Cotton and Products, Annual 2000*.

¹⁵ "Government Urged to Raise Tariffs on Fabrics, Yarn," *Philippine Daily Inquirer*, Sept. 14, 2001, found at http://inq7.net/bus/2001/sep/15/bus_4-1.htm, retrieved Jan. 3, 2003.

¹⁶ Technical Education and Skills Development Authority (TESDA), *Labor Market Intelligence Report*, No. 20, found at <http://www.tesda.gov.ph/services1/issue20.asp>, retrieved Jan. 22, 2003.

¹⁷ U.S. Department of State telegram 3553, "Philippines: 2002 Investment Climate Statement," prepared by U.S. Embassy, Manila, July 2, 2002.

¹⁸ U.S. Department of State telegram 3553, "Philippines: 2002 Investment Climate Statement."

¹⁹ Philippine Garment and Textile Export Board (GTEB), "Survival Assistance Package Laid Out for the Philippine Garment Export Industry," *GTEB News*, found at http://www.gteb.gov.ph/news/02/Oct/mar_roxas.htm, retrieved Dec. 18, 2002.

²⁰ Philippine Exporters Confederation, Inc., "Dressing Up the World," found at <http://www.philexport.ph/garments.html>, retrieved Jan. 3, 2003.

²¹ TESDA, *Labor Market Intelligence Report*.

operations.²² To a certain extent, overseas employment drains the domestic economy of the Philippines of technical workers.²³

Although labor costs in the apparel industry in the Philippines are among the lowest in the ASEAN countries at \$0.76 per hour, they are, however, higher than that for Indonesia (\$0.27 per hour), as well as other major apparel manufacturers, including Pakistan and Bangladesh.²⁴ Total compensation packages for skilled workers and mid-level managers, however were reportedly lower than that for many other countries.²⁵ Export apparel manufacturers reportedly are interested in expanding their operations to gain access to local labor in Mindanao and other Filipino islands, where the minimum wage is 20 to 50 percent lower than in Manila.²⁶ However, concern about domestic unrest reportedly has discouraged investment in Mindanao.²⁷

Technology

The Philippine textile industry lags behind many other Asian competitors in the use of state-of-the-art technology, with many of its textile mills being either obsolete (as evidenced by the low percentage of installed machines shipped in the past 10 years) or underutilized.²⁸ In a recent survey of technology utilization, the Philippines ranked ahead of Indonesia and Vietnam, but behind Hong Kong, Korea, Malaysia, Singapore, Taiwan, and Thailand.²⁹ Another study found that adopting computerized machinery and barcode tickets could enhance efficiency and reduce manpower requirements in Philippine apparel manufacturing processes, therein reducing costs, improving product quality, and speeding delivery. That report also recommended that sector manufacturers upgrade production technologies particularly in the dyeing, finishing, printing, and design segments.³⁰

²² Interviews by USITC staff with a U.S. industry official, Mar. 2003, and an industry official in Hong Kong, Feb. 25, 2003.

²³ "Workers for Export," *Textile Asia*, Mar. 2002, p. 73.

²⁴ Data on labor costs for apparel production workers compiled from Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers," New York, NY, Nov. 2002. See table 3-1 in Chapter 3 for additional wage rate data.

²⁵ U.S. Department of State telegram 3553, "Philippines: 2002 Investment Climate Statement."

²⁶ Minimum wages in the Philippines are determined by regional wage and productivity boards that meet periodically in each of the country's 16 administrative regions. In May 2002, the daily minimum wage in Manila was 250 pesos plus a 30 pesos cost-of living allowance (totaling about \$5.50); daily minimum wages were 50-140 pesos less outside Manila. U.S. Department of State telegram 3553, "Philippines: 2002 Investment Climate Statement."

²⁷ "War and RTW," *Textile Asia*, Oct. 2001, p. 66.

²⁸ "Aiming to Modernize," *Textile Asia*, Oct. 2001, p. 66.

²⁹ TESDA, *Labor Market Intelligence Report*, No.18, found at <http://www.tesda.gov.ph/services1/issue18.asp>, retrieved Jan. 22, 2003.

³⁰ BTI, Trade Partners UK, "Clothing, Fashion, & Footwear Market in the Philippines."

Investment

A significant share of FDI in Philippine export-oriented manufacturing occurs in export processing zones or free-trade zones that offer tax, labor, and import-duty advantages.^{31 32} The Clark and Subic Bay Special Economic Zones are important FDI locations for export-oriented textile and apparel manufacturing.³³ Because many of these special economic zones are located on former U.S. military bases, each has its own international airport, power plant, telecommunications network, water system, housing complexes, a large number of locally available skilled workers who were left unemployed when the bases closed,³⁴ and ISO 9001:2000-certified one-stop export documentation centers.³⁵ In addition, the Philippine Economic Zone Authority (PEZA) operated 156 PEZA-approved zones in January 2003. About 1 percent of PEZA investments during 1995-2001 was for textile and apparel products.³⁶

However, further economic reforms would improve the investment climate in the Philippines. “Compared to other countries in Southeast Asia, the Philippines financial sector lags behind in terms of size and sophistication.”³⁷ Limited domestic credit from local banks burdened by growing nonperforming assets, high domestic interest rates, and exchange rate volatility have increased commercial risks for investors. Further, domestic unrest and deteriorating law and order are also of concern for investors, particularly in less-developed regions, despite abundant labor at competitive costs.³⁸

³¹ PricewaterhouseCoopers, *How to Invest in the Philippines*, found at <http://www.philippinebusiness.com.ph/guide/prc01.htm>, retrieved Feb. 3, 2003; and U.S. Department of State telegram 3553, “Philippines: 2002 Investment Climate Statement.”

³² Business enterprises operating within these zones are entitled to tax holidays and preferential tax rates. These zones have their own labor centers and links to government agencies to assist with labor recruitment and in mediating labor disputes. Enterprises located in EPZs can import free of duty, the capital equipment, raw materials, and other inputs needed to produce goods for export. Further, goods imported into FTZs may be stored, prepacked, or otherwise handled without being subject to import duties. U.S. Department of State telegram 3553, “Philippines: 2002 Investment Climate Statement.”

³³ These two zones, which operate outside of the PEZA, were established in the early 1990s to take advantage of the existing economic infrastructure when the United States ceased using those military bases. Subic Bay Metropolitan Authority, “Subic Bay: From Ammunition Depot to World Class Freeport,” found at <http://www.sbma.com/hist/hist.html>, retrieved Feb. 12, 2003.

³⁴ U.S. Department of State telegram, “Philippines: 2002 Investment Climate Statement.”

³⁵ ISO certification ensures investors that the operations meet internationally recognized management standards. One-stop export documentation centers facilitate the processing of export documents and movement of goods by housing different host government agencies with deputized representatives. GTEB, “OSDC Region III Soaring High,” news release, Jan. 13, 2003, found at <http://www.gteb.gov.ph/NEWS/03/Jan/osdc.htm>, retrieved Jan. 30, 2003.

³⁶ Philippine Economic Zone Authority (PEZA), found at <http://www.peza.gov.ph>, “About Us,” and “Performance Indicators,” retrieved Feb. 12, 2003, and PricewaterhouseCoopers, *How to Invest in the Philippines*.

³⁷ U.S. Department of State telegram 6754, “Philippines: Financial Sector-Led Growth Initiative,” prepared by U.S. Embassy, Manila, Dec. 16, 2002.

³⁸ “Philippines: RTW Looks Up,” “Workers for Export,” *Textile Asia*; and U.S. Department of State telegram 3553, “Philippines: 2002 Investment Climate Statement.”

Specific data regarding domestic investment and FDI were not available for the textile and apparel sector. Nevertheless, several reports of new apparel-related investment projects during 2002 indicated that Hong Kong, Korean, and Taiwan firms continue to view the Philippines as an attractive long-term investment locale and competitive producer in certain lines of apparel for the U.S. market.³⁹

Government Policies

The Philippine Government encourages FDI by imposing few restrictions on exchange transactions and offering numerous investment incentives. Measures to assist the sector to adjust to quota phase out include export quota incentives, market development promotions, technical assistance and financing, social accountability certifications, used-apparel import bans, crack-downs on re-export diversions, and extension of official purchasing requirements to sector products.

Domestic policies

The Philippines does not impose exchange controls on capital flows. Similarly, the foreign investment code guarantees foreign investors rights to repatriate liquidation proceeds in the currency originally invested and to remit earnings. The code also ensures freedom from expropriation and non-requisition without just compensation.⁴⁰

The Board of Investments (BOI) offers numerous incentives for BOI-registered FDI projects in BOI-identified priority sectors, (such as certain textiles and textile products, especially those indigenous to the Philippines),⁴¹ including income tax holidays; exemptions from duty on imported spare parts, wharfage dues, and export taxes and fees; and deductibility of certain labor expenses and major infrastructure costs from taxable income. There are preferential corporate tax rates and exemptions from local taxes and fees for multinational firms that establish regional operating headquarters in the Philippines and invest in

³⁹ “Boost for RTW,” *Textile Asia*, Sept. 2002, p. 75; “Philippines: Taiwanese Garment Firm to Invest in Subic,” *Texwatch.com*, Aug. 14, 2002; “Disney Apparel Maker Is Now in Clark,” found at <http://www.wcorridor.com/sep02-devarchives/sep02-Disney%20Apparels%20Maker%20is%20Now%20in%20Clark.htm>, retrieved Feb. 3, 2003; “Hong Kong Shirt Company Opens at Clark,” *Philippine Daily Inquirer*, Feb. 13, 2003, found at http://www.inq7money.net/breakingnews/printable_breakingnews.php?yyyy=2003&mon=02&dd=13&file=2, retrieved Feb. 3, 2003; and “Philippines: HK Garment Firm Builds Factory at Clark Ecozone,” *Bharat Textile News*, Sept. 10, 2002, found at <http://www.bharattextile.com/newsitems/1979026>, retrieved Dec. 8, 2002.

⁴⁰ Philippine Board of Investment (BOI), “Primer on Investment Policy in the Philippines,” found at <http://www.boi.gov.ph/Docs/PRIMER%20on%20Investment%20Policies.pdf>, retrieved Feb. 21, 2003.

⁴¹ Eligibility requires that Filipino-owned enterprises export at least 50 percent of their production, whereas majority foreign-owned enterprises must export at least 70 percent of production. BOI, “Investment with Incentives,” found at <http://www.boi.gov.ph/incentives.html>, retrieved Feb. 20, 2003.

“preferred areas of investment” designated by the Philippine Government Investment Priorities Plan, including abaca and certain textile products.⁴²

Expensive interisland shipping⁴³ and cargo handling in ports⁴⁴ discourage investors from locating projects on more remote islands of the Philippines. For example, Mindanao,⁴⁵ the second-largest and most southerly island of the Philippines archipelago, has abundant low-cost labor and significant potential for export-based industries.⁴⁶ However, cabotage laws require that exports from provincial ports must first be shipped to a major domestic port (e.g., Manila) on domestic carriers before being transferred to an international carrier. Further, international shipments are frequently directed to foreign feeder ports (e.g., Hong Kong or Singapore) because Philippine ports have limited ability to handle containerized cargo.⁴⁷ Such shipping patterns and port inefficiencies contribute to slower turnaround time than in other Asian countries.⁴⁸ In an effort to enhance international competitiveness, the BOI has proposed that interisland shipping be opened to foreign shippers to reduce domestic

⁴² Examples include yarns and fabrics, handwoven textiles, specialty fabrics, ramie, and fabrics of indigenous raw materials. BOI, “Primer on Investment Policy in the Philippines.”

⁴³ According to one source, shipping costs for a 40-foot container range from \$1,800 to \$2,000 between Manila and Cebu, whereas the cost from Manila to Hong Kong is around \$1,500. Domestic vessels also pay higher fuel oil, insurance, taxes, and interest costs than their foreign counterparts. “Mindanao Traders Hail EO 59 Repeal, Urge Action on Illicit Fees,” *Mindanao Policy News*, No. 4, 20002, found at <http://www.mindanao.org/policy~news/vol4.htm>, retrieved Jan. 28, 2003; Catherine L. Viator, Wu-yi Fang, Jennifer L. Hadley, and Wipon Aiew, *Infrastructure Needs Assessment for Distribution of Frozen Processed Potato Products in Southeast Asian Countries*, Dec. 2000, found at <http://agecon.tamu.edu/faculty/salin/research/aptasum.ppdf>, retrieved Jan. 28, 2003; and Emerson M. Lorenzo, “The Domestic Shipping Industry of the Philippines: A Situation Report,” Domestic Shipping Office, Maritime Industry Authority, found at www.marina.gov.ph/report/domestic/domestic98.pdf, retrieved Jan. 28, 2003.

⁴⁴ Manila has the lowest port costs in the Asia-Pacific region, but total port and cargo handling costs are higher than in other ASEAN countries because of underdeveloped port facilities. For example, the Port of Manila North Harbor reportedly lacks a large cargo handler to load and unload cargo speedily, and ships must remain in port longer and incur higher total cargo costs. United Nations Economic and Social Commission for Asia and the Pacific, *Comparative Analysis of Port Tariffs in the ESCAP Region*, found at http://www.unescap.org/tctd/pubs/files/porttariffs_dec01_escap2190.pdf, retrieved Jan. 29, 2003; and Neal H. Cruz, “Port Costs in Manila are Lowest in Asia-Pacific,” *Philippine Daily Inquirer*, May 13, 2002, found at http://www.inq7.nte/opi/2002/may/14/text/opi_nhcruez-1-p.htm, retrieved Jan. 29, 2003.

⁴⁵ “Mindanao Traders Hail EO 59 Repeal, Urge Action on Illicit Fees,” *Mindanao Policy News*.

⁴⁶ Construction of a new container terminal on Mindanao began in Feb. 2002 and is scheduled to be completed by Jan. 2004. Philippine Veterans Industrial Development Estate Corp., Industrial Authority, “Mindanao Container Terminal Project,” found at <http://www.phividecauthority.com.ph/>, retrieved Feb. 12, 2003.

⁴⁷ “Industry Structure and Competitiveness: Inter-Island Freight Shipping,” found at <http://dirpp4.pids.gov.ph/ris/taps/tapspp9821.pdf>, retrieved Jan. 28, 2003.

⁴⁸ U.S. buyers and retailers, who reportedly tend to order later and look for faster delivery times, have expressed the concern that turnaround time in the Philippines is 120 to 145 days, compared to estimates of 40 days for Hong Kong. “Philippines Exports Threatened by Mexican and Asian Competitors,” *Emerging Textiles.com*, Feb. 9, 1999, found at <http://www.emergingtextiles.com/?q=art&s=990209-ind&r=philippines&n-25>, retrieved Nov. 27, 2002.

shipping costs,⁴⁹ and in April 2002, the government ordered the Philippine Ports Authority to roll-back cargo-handling rates by 20 percent.⁵⁰

High electricity costs, reportedly the second-highest in Asia,⁵¹ have a significant adverse impact on the competitiveness of Philippine export-based industries. As a result, energy-intensive textile production, such as woven fabrics for most shirts and blouses, are too expensive to manufacture in the Philippines and must be imported.⁵² In 2001, the Philippines launched a program to create a competitive market for power generation and retail supply, with the ultimate goal of paving the way for privatizing the national power utility.⁵³

In anticipation of the phase out of the MFA quota regime, the government has taken steps to redefine the Philippine Garments and Textile Export Board (GTEB or Board) from a regulatory and quota-administering body to a promotional and service-oriented agency for enhancing the domestic apparel industry's competitiveness.⁵⁴ In March 2002, GTEB launched a strategic assistance plan for the Philippine apparel industry. The key-component Growth Enhancement Program was launched the following month. In addition to a new incentive-based export-quota system,⁵⁵ this program includes (1) a 30-percent reduction in fees charged for export authorizations, which is estimated to save apparel exporters approximately \$2 million annually; (2) development assistance for productivity enhancements, trade facilitation, market and product development and promotion, and financing; and (3) Board-funded sewing school and workshops (including a garment

⁴⁹ "BOI Pushes Liberalization of Inter-Island shipping," *Philippine Daily Inquirer*, Apr. 30, 2001, found at http://www.inq7.net/bus/2001/apr/30/bus_10-1.htm, retrieved Jan. 28, 2003.

⁵⁰ Between 1998 and 2002, cargo-handling costs in the Philippines reportedly increased by 80 percent and 52 percent for domestic and foreign cargos, respectively. "Palace Orders Rollback of Cargo Handling Rates," *Philippine Daily Inquirer*, Apr. 4, 2002, found at http://www.inq7.net/bus/2002/apr/05/text/bus_4-1-p.htm, retrieved Jan. 29, 2003.

⁵¹ High electricity costs are attributed to surcharge fees imposed by the Philippines National Power Corp. (Napocor). Significantly reduced electricity demand after the 1997 Asian financial crisis left Napocor holding take or pay contracts. Napocor passes along the costs for this unused electricity as an extra charge, reportedly accounting for up to nearly one-third of a customer's electricity bill. John McLean, "Sparks Fly Over Philippines Electricity," *BBC News World Edition*, June 12, 2002, found at <http://news.bbc.co.uk/2/hi/business/2040586.htm>, retrieved Jan. 29, 2003. One source reports electricity costs during 2002 of approximately \$0.08 per kilowatt-hour (kwh) in the Philippines compared to \$0.04 per kwh in China. Arnold S. Tenorio, "RP Semiconductor Sector Decries High Power Cost," *BusinessWorld Reporter*, May 20, 2002, found at http://itmatters.com.ph/news/news_05202002i.html, retrieved Jan. 29, 2003.

⁵² U.S. Department of State telegram 2429, "Philippines: Garments and Textiles Face Uncertain Future," prepared by U.S. Embassy, Manila, May 3, 2002.

⁵³ U.S. Department of Commerce, *Philippines Country Commercial Guide, FY 2002*.

⁵⁴ "Philippines: GTEB Shifts to Promotion Role to Help Garment Sector," *Bharat Textile News*, May 7, 2002, found at <http://www.baharatextile.com/newsitems/1977469>, retrieved Dec. 10, 2002.

⁵⁵ The new export quota allocation system was launched in early 2002. Under the new system, GTEB allocates 30 percent of free quotas (i.e., the yearly increase in quotas granted to the Philippines by importing quota countries as well as that part of the quota that is flexible) to exporters that either increased their productivity or diversified into higher value-added product categories. The remaining 70 percent of the free quota is awarded based on a queuing system that divides firms among 3 size categories and ranks them based on the previous year's exports.

academy in the Clark Economic Zone), and financial assistance for firms seeking ISO 9004 certification.⁵⁶

A GTEB evaluation of the Philippine apparel industry in early 2002 identified several critical challenges needing immediate counter-measures aided by government support.⁵⁷ To reduce sector reliance on imported inputs, GTEB and other government agencies are encouraging research and development of domestically produced natural fibers and fabrics.⁵⁸ Board-sponsored productivity enhancing measures include investment in capital equipment and production systems and trade promotion.⁵⁹ In 2002, the Board formalized a partnership with the British firm General Sewing Data, Ltd. to use its motion time system technology.⁶⁰ GTEB began suggesting in early 2002 that domestic small and medium-size producers merge and consolidate their operations to provide foreign buyers with Philippine suppliers capable of providing a wide range of products with flexible production capabilities and faster turnaround time.⁶¹ A “big buyers” program was established to provide additional quota flexibility to companies serving major global brands.⁶² GTEB also implemented an electronic data interchange system in 2000 to reduce processing time of export documents and to permit electronic approvals for certain quota applications.⁶³

To promote Philippine apparel abroad, GTEB sponsors exhibits of apparel collections developed by clusters of Pro-Filipino (Profil)⁶⁴ companies twice annually in Europe.⁶⁵ A

⁵⁶ U.S. Department of State telegram 2429, “Philippines: Garments and Textiles Face Uncertain Future.”

⁵⁷ GTEB, “Survival Assistance Package Laid Out for the Philippine Garment Export Industry.”

⁵⁸ Philippines Government, Department of Environment and Natural Resources, “4 Government Agencies to Revive Textile Industry, July 10, 2002,” found at <http://www1.denr.gov.ph/article/articleview/288/2/137>, retrieved Jan. 6, 2003.

⁵⁹ “GTEB Adopts New Export Quota Allocation System,” Jan. 15, 2002, found at <http://www.ptri.dost.gov.ph/td/janfeb2k2/ps01.htm>, retrieved Dec. 18, 2002; “Garments Industry Leaders Bow to Roxas’ Formula of Reforming the Quota System,” *Philexport News and Features*, Mar. 9, 2001, found at <http://www.philexport.ph/news/features/march9/newspage1.html>, retrieved Feb. 24, 2003; Republic of the Philippines, “Economy Paper,” Seventh Asia-Pacific Textile and Clothing Industry Forum, Taipei, Taiwan, Dec. 9-11, 2002,” found at www.trade.gov.tw/whatnew/ASPAC/EP-7%20%20Philippine-Economy%20Paper.doc, retrieved Feb. 3, 2003; and U.S. Department of State telegram 2429, “Philippines: Garments and Textiles Face Uncertain Future.”

⁶⁰ This technology, designed specifically for the apparel industry, uses time and motion standards to evaluate and improve cutting, sewing, and packing operations to allow firms to measure the optimum time and cost of manufacturing a product. “Philippines: DTI Encourages Garment Exporters to Try GSD Technology,” *Bharat Textile News*, Jan. 29, 2003, found at <http://www.bharattextile.com/newsitems/1981237>, retrieved Feb. 12, 2003.

⁶¹ “DTI Pushes for Consolidation of Garment, Textile Industry,” *Philippine Daily Inquirer*.

⁶² “Philippines: Garment Exporters Invest in Modern Equipment,” *Bharat Textile News*, Jan. 14, 2003, found at <http://www.bharattextile.com/newsitems/1980901>, retrieved Jan. 24, 2003.

⁶³ GTEB, “The GTEBNET (EDI Processing),” found at <http://www.gteb.gov.ph/knowledgebase/knowContent/gtebnet.htm>, retrieved Jan. 6, 2003.

⁶⁴ GTEB initiated the Pro-Filipino (Profil) design and market development program in 1997 to showcase high-quality Philippine apparel primarily in Europe. The program aims to attract European customers by offering “one-stop sourcing” for integrated value-added services covering design, logistics, delivery, and after-sales support. To achieve economies of scale, Profil matches

major promotional event in Shanghai is planned for 2003 to launch entry into the Chinese market,⁶⁶ and participation in U.S. trade shows is the strategy to sustain its U.S. market presence.⁶⁷ Similarly, the Board guarantees through its re-accreditation program all apparel supplied by Profil companies to be free from social accountability issues such as child labor, workplace hazards, and unfair trade and labor practices.⁶⁸ This program, which is overseen by independent monitors, made the Philippines one of the first Asian countries to undertake a social compliance program for its apparel sector.⁶⁹ As of October 2002, more than 340 apparel companies had been certified to be in full compliance.⁷⁰

The Philippines Export-Import Bank (Philexim) began in 2002 to provide financing specifically for helping Philippine apparel exporters to prepare for the phase out of the MFA quota system. Philexim's \$19-million standby guarantee facility is intended to encourage banks to lend to small and medium-size apparel firms that are creditworthy but otherwise lack sufficient collateral. Its \$4-million direct lending window offers working capital to firms needing pre-shipment as well as medium- and long-term financing for plant expansion, equipment modernization, and other production-capacity improvements.⁷¹

The Philippine Government has implemented additional measures to encourage domestic production of sector products. In January 2001, used-apparel imports were prohibited in response to domestic textile producers' concerns that sales by local second-hand apparel stores undercut domestic sector growth. That order was expanded in February 2002 to cover used apparel donated to non-government organizations in the country.⁷² The government also continues to explore ways to reduce smuggling. Of particular concern are imports ostensibly for re-export being diverted to the local market.⁷³ In March 2002, the "Buy Filipino" program was amended to require all government agencies (military, police, public schools,

the facilities and capabilities of several apparel producers in the Philippines to create manufacturing clusters that are able to provide complete apparel collections.

⁶⁵ "A Glimpse of What the Philippines Can Offer to the UK Garment Industry," found at <http://www.dti.gov.ph/gteb/glimpse.htm>, retrieved Feb. 24, 2003.

⁶⁶ GTEB, "Major Promo Activity Slated in China," *GTEB News*, Nov. 4, 2002, found at <http://www.gteb.gov.ph/news/02/Nov/majorchina.htm>, retrieved Dec. 18, 2002.

⁶⁷ GTEB, "The Philippines Sustains International Market Presence," *GTEB News*, found at http://www.gteb.gov.ph/news/02/Oct/magic_news.htm, retrieved Dec. 18, 2002.

⁶⁸ GTEB, "The Philippines PROfil Program," found at <http://www.gteb.gov.ph/knowledgebase/knowContent/profil.htm>, retrieved Dec. 16, 2002.

⁶⁹ "What the Philippines Can Offer to the UK Garment Industry," *Bharat Textile News*, Oct. 15, 2001, retrieved Dec. 15, 2002; and GTEB, "Manufacturers and Exporters Re-accreditation Program," found at <http://www.gteb.gov.ph/knowledgebase/knowContent/manpri.htm>, retrieved Feb. 25, 2003.

⁷⁰ GTEB, "Update on Renewal of Re-Accreditation," *GTEB News*, Oct. 18, 2002, found at <http://www.gteb.gov.ph/news/02/Oct/renewal.htm>, retrieved Dec. 18, 2002.

⁷¹ GTEB, "Special Financing Program Available to Garment Exporters," *GTEB News*, Oct. 2002, found at http://www.gteb.gov.ph/NEWS/02/Oct/financing_news.htm, retrieved Feb. 26, 2003.

⁷² "Ban on Used Clothing Imports Pleases Local Manufacturers," *Manila Times*, Feb. 5, 2002.

⁷³ "Textile Makers Seek Help vs. Smuggling," *Philippine Daily Inquirer*.

and government-controlled corporations) to source all of their textile and apparel requirements locally.⁷⁴

Trade policies

The Philippine Government is committed to reducing and simplifying tariffs gradually to a uniform 5 percent ad valorem for most imports by January 2004.⁷⁵ During the 1990s, tariffs were reduced on inputs needed by the sector to help reduce both production costs and smuggling.⁷⁶ However, in 1999, in response to requests from apparel producers, duties on yarns were raised from 7 percent ad valorem to 10 percent, threads from 5 to 15 percent, fabrics from 15 to 20 percent, and apparel from 20 to 25 percent.⁷⁷ Domestic apparel producers continue to press for further tariff increases to stimulate development of local fabric makers and to prevent dumping by neighboring countries.⁷⁸

Foreign Trade

The Philippine trade surplus for textile and apparel articles improved 14 percent during 1997-2001 to \$1.5 billion (table G-8), largely reflecting the value added embodied in export-oriented apparel produced from imported textile inputs. The enhanced trade surplus was credited primarily to a decline of imports across all product categories. Imports (primarily textiles) declined by 13 percent over the 5-year period to \$1.2 billion; major sources were China, Taiwan, India, the United States, and Australia. Exports (predominantly apparel) peaked at \$2.9 billion in 2000 but fell the following year to \$2.7 billion, just slightly below the amount in 1997; major market destinations were the United States, the EU, and Canada.

Imports

Textile imports declined by 12 percent during 1997-2001 to \$1.2 billion (table G-9). The Philippines is highly dependent on foreign sources for raw materials--yarn and fabric. Apparel imports declined by 18 percent over the same period to \$68.9 million in 2002.

⁷⁴ Foreign fabric and apparel are permissible only if locally produced products of the desired quality or standard are not available at competitive prices. "Government Takes 'Buy Filipino' Policy a Step Further," *Manila Times*, Mar. 12, 2002.

⁷⁵ Office of the United States Trade Representative, "Philippines," *2001 National Trade Estimate Report on Foreign Trade Barriers*, p. 354.

⁷⁶ Philippine Exporters Confederation, "Dressing Up the World."

⁷⁷ "Philippines," *Pacific Trade Winds*, Feb. 1999, p. 4.

⁷⁸ "Government Urged to Raise Tariffs on Fabrics, Yarn."

Exports

Apparel articles generated 91 percent of all sector export revenues for the Philippines in 2001 (table G-9). Exports of apparel increased only slightly (3 percent) during 1997-2001 to \$2.4 billion. Exports of textiles declined 24 percent during the period to \$238 million. The principal market for the Philippines' exports of textiles and apparel is the United States, which accounted for 73 percent of the total in 2001. Another 13 percent of the Philippines' sector exports went to the other quota markets—the EU (11 percent) and Canada (2 percent). In each of the quota markets, apparel predominated with shares of 96 percent for the United States, 91 percent for the EU, and 97 percent for Canada.

During 1997-2002, U.S. imports of textiles and apparel from the Philippines peaked in 2000 at 929 million square meters equivalent (SMEs), and then declined by 12 percent to 817 million SMEs, valued at \$2.0 billion, in 2002 (table G-10). In 2002, apparel accounted for 67 percent of the quantity (551 million SMEs, but 89 percent of the value at \$1.9 billion) of total U.S. sector imports from the Philippines; textile products accounted for the remainder. Major apparel products imported from the Philippines during 2002 were babies' apparel; cotton underwear and nightwear; cotton and manmade-fiber dresses; women's and girls' cotton woven trousers; and men's and boys' cotton woven shirts. In the textile products area, manmade-fiber handbags and luggage were also major imported textile products, with imports totaling 69 million SMEs in 2002; however, this was almost one-half the amount imported during the previous year. The quota on this category of products was eliminated in 2002 as part of the quota phaseout under the Agreement of Textiles and Clothing (ATC). The decline in imports of these handbags and luggage reflected a shift in trade to China. Twelve of the quotas on U.S. imports of textiles and apparel from the Philippines had "fill rates" of 90 percent or more in 2002, compared with 16 in 2000. For the Philippines shipments to the EU, cotton breeches, slacks and trousers, and jerseys and pullovers had high EU quota fill rates. According to one recent report, the Philippines has not been able to fill all of its EU quotas and Vietnam has sought to export to the EU by using the quota allocated to the Philippines.⁷⁹

⁷⁹ Under the ASEAN-EU quota swap agreement program, unutilized textile and apparel quotas can be transferred from one ASEAN member country to another, subject to certain limitations. "Philippines: Vietnam Seeks Permission to Use Unutilized Garment Quota for 2003-04," *BharatTextile News*, Feb. 27, 2003, found at <http://www.bharattextile.com/newsitems/1981815>, retrieved Mar. 3, 2003.

Table G-8
Philippines: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Textile and apparel share of manufacturing					
value-added (<i>percent</i>)	9	(¹)	(¹)	(¹)	(¹)
Number of textile and apparel firms	(¹)	(¹)	(¹)	(¹)	1,200
Number of textile and apparel workers	(¹)	(¹)	(¹)	(¹)	400,000
Installed spinning capacities:					
Short-staple spindles (<i>1,000</i>)	950,000	950,000	950,000	950,000	950,000
Long-staple spindles (<i>1,000</i>)	13,000	13,000	13,000	13,000	13,000
Open-end rotors (<i>1,000</i>)	50,000	50,000	50,000	50,000	50,000
Installed weaving capacities:					
Shuttleless looms for the cotton sector (<i>number</i>)	2,500	2,500	2,500	2,500	2,500
Shuttle looms for the cotton sector (<i>number</i>)	7,000	7,000	7,000	7,000	7,000
Purchases of large circular knitting machines (<i>number</i>)	(¹)	31	125	49	30
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	312.6	268.9	240.9	281.2	238.4
Apparel (<i>million dollars</i>)	2,371.1	2,372.1	2,299.3	2,595.3	2,443.7
Total (<i>million dollars</i>)	2,683.7	2,641.0	2,540.0	2,876.5	2,682.1
Imports:					
Textiles (<i>million dollars</i>)	1,314.8	1,194.1	1,237.1	1,249.0	1,151.6
Apparel (<i>million dollars</i>)	84.4	69.7	66.5	74.0	68.9
Total (<i>million dollars</i>)	1,399.2	1,263.8	1,303.5	1,323.0	1,220.5
Trade balance:					
Textiles (<i>million dollars</i>)	-1,002.2	-925.2	-996.2	-967.8	-913.2
Apparel (<i>million dollars</i>)	2,286.7	2,302.4	2,232.8	2,521.3	2,374.8
Total (<i>million dollars</i>)	1,284.5	1,377.2	1,236.7	1,553.5	1,461.6

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Manufacturing value-added data from the World Bank, found at its website at <http://publications.worldbank.org>, retrieved Mar. 25, 2003. Industry data from the International Textile Manufacturers Federation, *International Textile Machinery Shipment Statistics* (Zurich), vol. 25/2002, and selected back issues. Firm and employment data for 2000 are from U.S. Department of State telegram 2429, "Philippines: Garments and Textiles Face Uncertain Future," prepared by U.S. Embassy, Manila, May 3, 2002. Data on installed spinning and weaving capacities, and purchases of knitting machines, are from ITMF. Trade data are United Nations data as reported by the Philippines.

Table G-9
Philippines: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	72	87	92	103	85
European Union	43	39	28	28	26
Canada	3	3	1	2	2
Subtotal	118	129	121	133	112
All other:					
Japan	10	7	12	16	20
Hong Kong	33	29	28	26	16
Taiwan	12	15	22	20	14
Other	140	88	58	86	77
Subtotal	194	139	120	148	126
Grand total	313	269	241	281	238
Apparel (SITC 84):					
Quota markets:					
United States	1,568	1,740	1,754	1,976	1,866
European Union	332	279	265	310	261
Canada	54	51	51	64	65
Subtotal	1,953	2,070	2,069	2,350	2,192
All other	418	302	230	245	251
Grand total	2,371	2,372	2,299	2,595	2,444
Textiles and apparel:					
Quota markets:					
United States	1,640	1,827	1,846	2,079	1,951
European Union	375	319	292	337	287
Canada	58	54	52	66	67
Subtotal	2,072	2,200	2,190	2,483	2,305
All other	612	441	350	394	377
Grand total	2,684	2,641	2,540	2,877	2,682
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	38	48	50	47	47
Apparel	82	87	90	91	90
Average	77	83	86	86	86

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table G-10
Textiles and apparel: U.S. general imports from Philippines, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	(1,000 square meters equivalent)					
0	Textiles and apparel, total	659,070	795,581	905,265	928,860	915,559	817,380
1	Apparel	445,408	474,932	505,892	529,912	553,269	550,522
2	Textiles	213,662	320,649	399,373	398,948	362,290	266,857
11	Yarns	4,026	22,804	54,483	37,847	26,361	46,185
12	Fabrics	29,435	57,236	84,744	74,786	50,709	66,915
14	Other miscellaneous articles	180,201	240,609	260,146	286,316	285,219	153,758
30	Cotton textiles and apparel	263,304	298,447	309,753	319,808	331,232	331,883
31	Cotton apparel	203,839	226,473	245,705	254,411	263,128	285,740
32	Cotton textiles	59,464	71,975	64,049	65,396	68,104	46,143
40	Wool textiles and apparel	7,113	7,655	8,078	9,463	13,515	9,983
60	Manmade-fiber textiles and apparel	369,438	449,878	549,928	567,543	534,512	464,467
61	Manmade-fiber apparel	231,576	235,103	244,549	257,553	266,677	248,206
62	Manmade-fiber textiles	137,862	214,775	305,379	309,990	267,834	216,261
80	Silk blend/veg fiber textiles/apparel	19,216	39,600	37,506	32,047	36,300	11,047
239	Babies' apparel	48,746	48,468	42,544	47,154	54,922	45,689
331	Cotton gloves	10,255	10,829	12,003	13,381	13,280	12,623
336	Cotton dresses	17,036	15,666	21,841	28,478	25,312	21,674
338	Cotton knit shirts, men/boys	7,986	9,736	8,767	8,035	7,904	9,931
339	Cotton knit shirts, women/girls	5,299	8,097	8,385	8,848	9,963	15,420
340	Cotton not knit shirts, men/boys	16,132	19,633	22,411	23,420	21,295	20,734
341	Cotton not knit blouses	3,290	5,286	6,815	7,229	7,521	9,793
347	Cotton trousers, men/boys	18,104	19,118	22,703	17,628	13,406	18,036
348	Cotton trousers, women/girls	18,403	18,502	23,758	25,755	30,513	38,492
351	Cotton nightwear	11,322	24,001	27,772	21,490	27,308	28,280
352	Cotton underwear	10,340	7,958	10,138	16,116	19,217	32,552
359	Other cotton apparel	30,878	27,969	20,796	17,957	15,287	10,041
361	Cotton sheets	11,070	11,576	11,361	12,722	14,532	13,008
369	Other cotton manufactures	31,068	38,899	31,882	28,924	30,873	15,188
603	Yarn of artificial staple fiber	1,099	6,196	16,575	12,137	6,587	9,251
604	Yarn of synthetic staple fiber	0	2,157	10,085	8,079	10,162	16,761
619	Polyester filament fabric, lightweight	1,203	2,802	4,828	9,179	8,129	23,633
620	Other synthetic filament fabric	12,607	29,365	45,967	49,568	25,941	25,375
625	Manmade-fiber poplin/broadcloth	461	838	4,389	932	6,241	10,744
634	Other manmade coats, men/boys	22,492	21,708	16,294	16,738	19,887	15,292
635	Manmade-fiber coats, women/girls	12,571	12,898	12,814	15,109	19,969	16,807
636	Manmade-fiber dresses	46,903	46,866	44,269	38,117	37,247	25,500
638	Manmade knit shirts, men/boys	18,246	19,855	20,563	16,323	15,238	19,654
639	Manmade knit shirts, women/girls	14,765	11,771	13,998	13,074	11,888	17,877
646	Manmade-fiber sweaters, women/girls	11,509	10,363	7,559	11,506	18,272	14,448
647	Manmade-fiber trousers, men/boys	11,895	10,451	13,066	10,189	11,889	14,439
648	Manmade-fiber trousers, women/girls	8,529	8,671	10,442	12,547	14,745	12,607
651	Manmade-fiber nightwear	4,546	7,717	12,519	10,733	15,715	17,267
652	Manmade-fiber underwear	9,427	10,467	10,551	11,709	12,441	10,508
659	Other manmade-fiber apparel	30,190	27,206	34,834	51,597	35,158	32,070
666	Other manmade-fiber furnishings	5,487	7,631	16,498	17,672	10,391	11,544
669	Other manmade-fiber manufactures	29,397	38,623	41,481	46,957	53,456	31,857
670	Manmade-fiber handbags/luggage	71,160	95,012	115,950	142,412	134,843	68,656

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov/>.

Thailand¹

Overview

The textile and apparel sector plays an important role in Thailand's economy, accounting for about 3 percent of GDP, 10 percent of manufacturing output, 21 percent of manufacturing employment, and 8 percent of all exports in 2001.² Sector output grew significantly from 1997 to 2001, largely reflecting government investment incentives, access to abundant low-cost labor, and development as a contract producer of foreign brand-name apparel. However, most sector exports are commodity products subject to intense price competition from lower-cost suppliers, especially China. In fact, Thailand is now experiencing a diversion of investment to China and Southeast Asia.

The quality of production in Thailand is considered good, but the Thai sector is losing its competitive edge in the world market due to higher production costs, as manufacturers continue to rely on older production technology. The sector also faces shortages of technically skilled manpower, lack of basic quality-control equipment, limited access to capital from a banking sector burdened with nonperforming loans, and high import reliance for high-quality raw materials. The Thai Government has adopted programs to enhance and promote the sector, including funding for upgrading production capabilities, incentives to attract foreign direct investment, and promotional campaigns for local brands both abroad and at home, as there is a sizeable and growing domestic market for apparel. In concert with the domestic industry's goals, there are government promotional programs to shift towards higher end fashions and to transform Bangkok into a major fashion center.

Industry Profile

The Thai textile and apparel sector comprises a full spectrum of operations, including yarn spinning, weaving and knitting, dyeing and finishing, and apparel design and sewing.³ The sector is concentrated in Bangkok,⁴ but it is not as well supported by existing infrastructure, as compared with the sectors in more affluent Malaysia and Singapore.⁵

¹ Prepared by Karl S. Tsuji, Office of Industries.

² Compiled from United Nations data and official statistics of the Bank of Thailand, National Social Economic Development Board (NSED), National Statistical Office (NSO) Thailand, and Thailand Industrial Information Center (TIIC).

³ Watcharapong Thongrungs, "Ministry Plan Aims to Boost Textile Exports," *Nation*, Dec. 9, 2000, <http://today.newscast.com/>, retrieved Dec. 10, 2000.

⁴ Thailand Industrial Information Center (TIIC), *The Textile Industry in Thailand* (Bangkok, no date), p. 1.

⁵ "Give it a Chance, Despite Its Problems, Thai Business has Plenty of Potential," in "A New Order, a Survey of Thailand," *Economist*, Mar. 12, 2002, pp. 11-12.

Industry structure and performance

Textiles

The number of textile firms registered with the Department of Industrial Works (DIW) in 2000 totaled 1,885, most of which were engaged in weaving (677 firms) and knitting (412) (table G-11, found at the end of this country profile). Most textile producers are small or medium-size enterprises, with only a few being large modern firms. Linkages exist between large firms and small and medium-sized enterprises.⁶ Several spinners also operate weaving or knitting factories.⁷ There are no state enterprises that produce textiles.⁸ A significant number of textile producers (particularly of manmade fibers⁹) are joint ventures with East Asian firms.

Thailand's production of yarns and fabrics of cotton and manmade fibers rose (in quantity terms) during 1997-2001 (table G-11).¹⁰ Thai fabric production grew in 2001 as several producers switched production from less-profitable manmade-fiber fabric to cotton fabric.¹¹ Employment declined in each of the textile production segments, as the entire textile industry employed 241,080 workers in 2001, a drop of 6 percent from the 1997 level. Similarly, consumption of both yarns and fabrics, whether of cotton or manmade fibers, rose (in quantity terms) during 1997-2001. In each year, approximately 93 percent (on a weight basis) of cotton yarn production and 73 percent of manmade-fiber yarn production were consumed domestically, as was 85 percent (on a weight basis) of both cotton and manmade-fiber fabric production.¹²

Spun yarns and cotton fabrics are sold to both domestic and foreign markets. Thailand is less able to produce finished fabrics, and most cotton fabric is exported as grey product.¹³ According to trade sources,¹⁴ some Thai textile firms, to compete with lower-cost producers (e.g., China, India, Indonesia, and Vietnam), continue to upgrade their yarn spinning, fabric production, dyeing, and decorating capabilities;¹⁵ optimize production costs; improve

⁶ WTO, Trade Policy Review Body (TPRB), "Thailand, Report by the Secretariat, Summary Observations," press release PRESS/TPRB/21, Dec. 1, 1995, found at http://www.wto.org/english/tratop_e/tpr_e/tp21_e.htm, retrieved Oct. 17, 2002.

⁷ U.S. Department of Agriculture (USDA), Foreign Agricultural Service (FAS), *Thailand Cotton and Products Annual 2002*, Global Agriculture Information Network (GAIN) Report No. TH2046, May 31, 2002, p. 5.

⁸ U.S. and Foreign Commercial Service, "Economic Trends and Outlook," *Thailand, Country Commercial Guide FY2002*.

⁹ *The Impact of Liberalization, Communicating with APEC Communities: Textiles Industry in Thailand*, Asian-Pacific Economic Cooperation (APEC) Committee on Trade and Investment, (Singapore: APEC Secretariat, Nov. 1998), p. 8.

¹⁰ Production quantities, unlike values, were readily available over the entire 5-year time period.

¹¹ USDA, FAS, p. 6.

¹² Statistics of the Thailand Textile Institute, cited in *Ibid.*, pp. 13 and 16.

¹³ USDA, FAS, pp. 5-6.

¹⁴ USDA, FAS, p. 5.

¹⁵ Nattinee Netraumpai, "Challenges Ahead for Garment Industry, Thailand Aims to be a World Fashion Center," *BOI Investment Review*, Sept. 30, 2002, p. 11.

management and logistic procedures; and provide regular labor training.¹⁶ Overall, most Thai textile exports are commodity products subject to intense foreign competition and low prices.¹⁷

Apparel

Thailand's apparel industry has a large number of firms, with 2,672 registered with the DIW in 2000 (table G-11), ranging in size from small enterprises with fewer than 10 sewing machines to those with more than 1,000 sewing machines.¹⁸ About one-half of the apparel production capacity is owned by large firms that usually perform all production stages within the same factory. Smaller firms frequently subcontract out simpler portions of the production process to household enterprises.¹⁹ There are no state enterprises producing apparel in Thailand. The sector was boosted in the 1980s by its growing importance as an offshore base for foreign investors who applied the country's skills and low labor costs to subcontract production of high domestic-content, high value-added, and high-quality apparel.²⁰

Thailand's apparel production rose by 6 percent during 1997-2001 to 2.8 billion pieces (table G-11). Employment in the apparel industry declined by 2 percent during the period to 840,460 workers. Domestic consumption of apparel in 2000 totaled 262,000 metric tons, of which 72 percent was of woven fabrics and 28 percent was of knitted fabrics. Although not readily quantifiable, a significant proportion of apparel production is exported, given Thailand's historic role as an offshore base for contract apparel production.

The Thai apparel industry produces for a wide range of major international brands and large retailers. According to Thai sources, the industry includes a large number of producers with good quality, design, and marketing capabilities. Similarly, its craftsmanship and capability to produce in mass volumes also have helped Thailand remain competitive in world markets.²¹ Thai apparel producers are now improving product quality to capture middle- and high-end markets,²² particularly after a number of foreign apparel producers exited Thailand and moved their operations to China.²³ Nevertheless, according to a report published in January 2000, the Thai apparel industry had problems with inefficient production, poor quality control, and a high volume of rejects; manufacturers had neglected to improve quality

¹⁶ USDA, FAS, p. 5.

¹⁷ TIIC, *The Textile Industry in Thailand*, p. 5.

¹⁸ This count is likely an underestimate, as small firms with less than 30 sewing machines are not required to register.

¹⁹ The more highly skilled tasks (e.g., purchasing and cutting fabric, more complicated sewing, labeling, and other fine work) are performed in house, whereas the less skilled work (e.g., usually simple sewing) is subcontracted out. APEC Secretariat, *The Impact of Liberalization*, pp. 8 and 13.

²⁰ David McGarry, "Thailand's Textile and Garment Industry, After the Asian Crisis," *Textile Outlook International*, Jan. 2000, p. 102.

²¹ Netraumpai, pp. 9 and 11.

²² Somluck Srimalee, "Garment Makers Gear for Free Trade," *Nation*, Oct. 14, 1999, e-mail received by USITC staff from WorldSources Online, Oct. 15, 1999.

²³ Suchart Chantranakarach, Chairman, Thai Garment Manufacturers Association (TGMA), cited in "Thailand, Garment Leaders Lift 2002 Export Outlook," *Just-style.com*, Oct. 18, 2002, found at http://www.just-style.com/news_archive.asp, retrieved Oct. 18, 2002.

and production efficiencies because rejected items could be sold in the domestic market.²⁴ Additional needed improvements included greater flexibility in meeting order requirements, enhanced product quality and consistency, and punctual delivery times.²⁵ Otherwise, Thai apparel firms have shortened delivery periods to 1-2 months from 2-3 months, thus gaining foreign market share, despite charging prices 20-30 percent above those quoted by competitors.²⁶ Thai apparel firms have also begun forming production alliances to satisfy very large orders upwards of 2.5 million pieces.²⁷

Factors of production

Thailand's textile and apparel sector has access to domestic supplies of certain raw materials, supplemented with higher quality imports from abroad; is supplied with cheap, abundant, but less technically skilled labor; and relies on older production and quality-control technologies.

Raw materials

Due to limited domestic cotton supplies, Thailand is highly dependent on imported raw cotton to meet growing domestic textile industry demand.²⁸ Hence, cotton was the predominant fiber imported in 2001, accounting for 76 percent of all fiber imports, and was valued at \$483 million. Other principal imports included other wool, degreased but not combed (\$45 million, primarily from Australia); raw and waste silk (totaling \$11 million, primarily from China and India, respectively); and jute fibers (\$9 million, primarily from Bangladesh). According to United Nations data, the primary sources of Thailand's fiber imports were major cotton producers: Australia (\$202 million or 32 percent of all Thai fiber imports) and the United States (\$109 million or 17 percent).

Thai spinners are capable of producing cotton yarns across wide degrees of fineness;²⁹ following efforts to upgrade yarn quality in recent years, some can now produce high-quality, fine-count yarns.³⁰ Output includes 100-percent cotton and various cotton/manmade

²⁴ McGarry, p. 116.

²⁵ Shigeyuki Aoki, Japan External Trade Organization (JETRO) Import Business Adviser consultant, cited by *Ibid.*, p. 116.

²⁶ Thongsathit Leelapratak, Secretary, Thai Garment Development Foundation (TGDF) cited in "Thailand: Garment Exports Recover," *BharatTextile.Com*, Nov. 30, 2002, found at <http://www.bharattextile.com/newsitems/1980078>, retrieved Dec. 11, 2002.

²⁷ In 2001, four producers joined capacities and supply-chain skills to accept minimum orders of 800,000 pieces and now plan to develop the capability for handling 2.5 million pieces. "As a Result of Quicker Delivery," *Emergingtextiles.com*.

²⁸ In 2002, about 65 percent of cotton consumed was medium-count, 30 percent was coarse-count, and 5 percent was fine-count and extra-long staple yarns. USDA, FAS, *Thailand Cotton and Products Annual 2002*, p. 3.

²⁹ USDA, FAS, p. 5.

³⁰ "Rise in Korean, Thai, and Indonesian Markets, Asia's Cotton Yarn Market is Recovering," *Emergingtextiles.com*, June 11, 2002, found at <http://www.emergingtextiles.com/print/?q-art&s-020611-coun&r=search>, retrieved Dec. 5, 2002.

blend yarns. The increased number of installed spindles and lower prices for raw cotton relative to manmade fibers encouraged several spinners to expand production of blended yarns with higher cotton content.³¹ Principal types of manmade fibers are polyester staple fibers and yarns, polyester pre-oriented yarn, nylon filament and pre-oriented yarns, and acrylic and rayon staple fibers.³² New polyester plants continue to come on stream, particularly as Japanese textile mills reduce production at home and move their factories to Thailand.³³

Thai weaving and knitting mills continue to import cotton yarn as well, mostly low-end products from China, India, and Pakistan, among other sources. Cotton fabric imports are distinguished by quality differences to meet specific segments of the apparel industry. Imports from Hong Kong, Japan, and Taiwan are primarily high-quality cotton fabrics, mostly for export-oriented apparel factories. Imports from China, India, and Pakistan are less-expensive cotton fabrics primarily for domestic-oriented apparel production.³⁴ There have been few if any recent significant changes in production policy and the government has not subsidized cotton prices or production.³⁵

The Thai silk industry includes advanced, fully mechanized, and globally competitive firms, but there are numerous cottage weavers producing intricate handiworks.³⁶ Although Thailand produces quality silk suitable for weft threads, imports are necessary because domestic silk fibers are not strong enough for warp threads.³⁷ In recent years, the silk market has expanded to the point that one-half of filaments had to be imported.³⁸ Otherwise, Thailand has high import reliance on high-quality raw materials, especially high-quality yarns and fabric.³⁹

³¹ USDA, FAS, pp. 2 and 5.

³² TIIC, p. 2.

³³ Also to China and Indonesia, as well as Thailand. "Asia's Apparel Industry: Notable Trends in 2000 with Implications for 2001," *Pacific Trade Winds*, Jan. 2001, pp. 1-2.

³⁴ USDA, FAS, pp. 6-7.

³⁵ USDA, FAS, *Thailand Cotton and Products Annual (various years)*, GAIN Reports (various years).

³⁶ "Down the Ages," *Nation*, Oct. 27, 1998, found at <http://today.newscast.com/>, retrieved Mar. 2, 1999.

³⁷ McGarry, p. 104.

³⁸ "Down the Ages," *Nation*.

³⁹ TIIC, p. 5.

Labor

The Thai textile and apparel sector has access to abundant cheap labor,⁴⁰ both native and immigrant. However, the apparel industry is experiencing difficulties recruiting native industrial engineers, factory managers, and other highly skilled staff,⁴¹ prompting some firms to recruit from overseas, particularly Hong Kong. Along the Thai-Myanmar border, Myanmar workers enter Thailand looking for work and are willing to accept lower wages. However, in the late 1990s, the Thai Government expelled illegal Myanmar workers and revoked the work permits of legal ones. Reportedly, about 30 Taiwan and Hong Kong owners of apparel factories lost more than 60,000 Myanmar employees to such expulsions.⁴² Thailand reportedly has virtually no child labor in its sector factories, even among hand weavers in the less developed north.⁴³ Thai apparel exporters strive to qualify for Social Accountability 8000 certification⁴⁴ as a means of setting themselves apart from cheap-labor competitors and nearly 80 percent have implemented social-responsibility policies required by international brands.⁴⁵

Thai workers are considered comparatively more efficient than those in countries with similar or lower labor costs.⁴⁶ In 2002, the average hourly labor cost (including fringe benefits) for production workers in Thailand's spinning and weaving mills was \$1.24, compared with \$0.50 in Indonesia (an ASEAN country), \$0.69 in China (coastal areas), and \$0.57 in India. Nevertheless, Thai textile producers still have an advantage of labor costs that were approximately 17 to 22 percent of those in more developed regional competitors, such as Hong Kong (\$6.15), Korea (\$5.73), and Taiwan (\$7.15).⁴⁷

Technology

In 2001, Thailand had the second-largest installed spinning capacity among the ASEAN countries (after Indonesia), but the largest number of shuttleless looms for weaving fabrics

⁴⁰ TIIC, p. 5.

⁴¹ The TGMA requested that the Ministry of Commerce provide greater support for establishing apparel-specific courses at various educational institutions. Somboon Juasathirattana, director, Thai Garment Export (TGE), and Secretary General, TGMA, cited in R.H. Leary, "Thailand, People for Clothing," *Textile Asia*, Apr. 2001, p. 71.

⁴² McGarry, pp. 103 and 113.

⁴³ R.H. Leary, "Thailand, Start Now!" *Textile Asia*, Dec. 2000, p. 74.

⁴⁴ Achara Pongvutitham, "Plants Rush for Labor Proof," *Nation*, May 2, 2000, e-mail received by USITC staff from WorldSources Online, May 3, 2000.

⁴⁵ Kartchai Jamkajornkeiat, Director, TGMA, cited in "Thailand: Accountability Essential for Garment Exports," *BharatTextile.Com*, Nov. 16, 2002, found at <http://www.bharattextile.com/newsitems/1979822>, retrieved Nov. 19, 2002.

⁴⁶ TIIC, p. 6.

⁴⁷ Information on labor costs in the paragraph is from Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002, Reston, VA.

from yarns spun on the cotton system.⁴⁸ According to data of the International Textile Manufacturers Federation for 2001, the number of installed short-staple spindles in Thailand's spinning industry was 3.6 million, about one-fourth of which were less than 10 years old, and the number of shuttleless looms was 52,000, of which less than 15 percent were installed in the past 10 years. Thus, the Thai yarn and fabric producers rely primarily on older production equipment. In the Thai apparel industry, the number of installed apparel machines declined by 2 percent during 1997-2001 to 757,307.⁴⁹ Moreover, there are reportedly only 2 computerized cutting machines, 87 computerized pattern and design machines, and 190 computerized conveyor systems within the entire industry.⁵⁰

Investment

Over the past three decades, successive national governments, including the current one, have committed Thailand to an increasingly open trade and investment regime without an industrial policy directing investment.⁵¹ In anticipation of quota removal, the Thai Government encourages domestic and foreign direct investment (FDI) in the textile and apparel sector through various incentive programs to upgrade production capabilities towards higher-quality products and to develop fashion-design capabilities.⁵² FDI is directed at both the textile and apparel industries,⁵³ particularly for utilizing Thailand as an export platform. Net inflows of FDI into the sector totaled just over \$53 million in 2001, down 6 percent from the inflow in 1997, the year that the Asian financial crisis began.⁵⁴ Over the same 5-year period, the textile and apparel sector accounted for, on annual average, about 2 percent of the net inflow of FDI into all industry sectors, and 1 percent into all economic sectors.⁵⁵ The primary sources of net inflows were Japan, India, Taiwan, Hong Kong, and more recently, China.⁵⁶

⁴⁸ Compared with shuttle looms, shuttleless looms 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.

⁴⁹ Thailand Textile Institute, cited in USDA, FAS, p. 12.

⁵⁰ APEC Secretariat, *The Impact of Liberalization*, p. 19.

⁵¹ U.S. and Foreign Commercial Service, "Economic Trends and Outlook," *Thailand, Country Commercial Guide FY2002*.

⁵² Largely in response to the 1997 Asian financial crisis, the Thai Government has also streamlined bureaucratic procedures, lowered import duties, liberalized FDI laws, offered low-interest development loans, and implemented road construction projects to ease congestion in Bangkok. "Focus on Thailand," *Pacific Trade Winds*, pp. 1-2.

⁵³ The extent of domestic investment was not readily available.

⁵⁴ For more information about the financial crisis and recovery in Thailand, see Karl S. Tsuji, "Thailand's Financial Crisis and Progress Towards Recovery—Implications for U.S. Trade," *Industry, Trade and Technology Review*, USITC publication 3253, Oct. 1999, pp. 15-38.

⁵⁵ Compiled from Bank of Thailand, "Table 62, Net Flows of Foreign Direct Investment Classified by Sector," *Economic and Financial Statistics*, Sept. 2002, pp. 105-106.

⁵⁶ Shares by specific sources into the textile and apparel sectors were not readily available, but the top countries investing in Thai textile and apparel production can be deduced from the nationalities of the largest foreign-owned firms.

Thailand does not impose controls on access to capital but does offer various investment incentive programs to facilitate imports of raw materials and machinery. Thailand's infrastructure, technology, and market sophistication is considered superior to that of most of its lower cost competitors (e.g., Cambodia, China, Indonesia, Laos, Myanmar, and Vietnam).⁵⁷ Advantages include fewer restrictions on the Internet and other communication technologies (e.g., compared to China); greater accessibility for designers from Western Europe, the United States, and Japan; lower travel costs; and the general perception of Thailand as more "visitor friendly" than regional competitors. However, remarks by Thai ministers suggested that, in a significant shift in policy, firms employing cheap foreign labor (i.e., from neighboring Myanmar) will no longer be eligible for special investment incentives.⁵⁸

Leading Thai textile and apparel producers reflect diverse ownership, from Hong Kong, India, Japan, Taiwan, and Thailand.⁵⁹ Japanese investment in the Thai textile industry is extensive, with numerous firms producing polyester and polyester/cotton blended spun yarns and woven fabrics in particular.⁶⁰ Apparel manufacturers from Hong Kong and Taiwan are also seeking investment opportunities in Thailand to take advantage of the tariff cuts under the recent ASEAN Free Trade Agreement and to establish production bases.⁶¹ More recently, China is beginning to provide extensive investment. For example, China Worldbest Group announced plans to invest \$117 million for a cotton yarn mill, spinning mill, and household textile plant, with most of the output for export by the end of 2003.⁶²

⁵⁷ "Focus on Thailand," *Pacific Trade Winds*, pp. 1-2; and McGarry, p. 123.

⁵⁸ McGarry, pp. 103 and 123.

⁵⁹ Examples include Tuntex (Taiwan-Thailand) the second-largest fabric and manmade fiber producer, Hua Thai (Hong Kong) a large apparel producer, Luckytex (partly owned by Toray of Japan) a manmade fibers producer, Siam Polyester (Indorama of India), Teijin Ltd. (Japan) with seven subsidiaries and affiliates producing polyester fibers, and Thai Yamaki Co. Ltd. (Japan) a dress shirt manufacturer. "Focus on Thailand," *Pacific Trade Winds*, pp. 1-2; and "Thai Textile & Apparel Industry, Striving for Development in New Competitive Environment," *Asian Textile Business*, Mar. 2002, pp. 23-26.

⁶⁰ "Thailand, Expansion of Non-Apparel Textiles," *Asian Textile Business*, Sept. 2002, pp. 74-80.

⁶¹ Chavalit Nimla-or, president, TGMA, cited in Achara Pongvutitham, "AFTA to Boost Apparel Exports," *Nation*, Jan. 12, 2000, e-mail received by USITC staff from WorldSources Online, Jan. 13, 2000.

⁶² China Worldbest imported the best available technology from western countries because they plan for Thailand as a prominent production base. Factory construction was scheduled for completion in early fourth quarter 2002. Export production is anticipated to begin by the end of 2003, destined primarily for Southeast Asia, Hong Kong, Japan, Europe, and North America. If business performance is satisfactory, production in Thailand is planned to double in the next few years. "Chinese Eye Thai Textile Industry as Base," *Bangkok Post*, Apr. 3, 2002, in *Thailand Update*, May 2002, p. 2.

Government Policies

Key policies affecting output, trade, and investment flows include government-provided loans and machinery upgrade incentives, import duty waivers and tax incentives, promotion of higher-quality apparel and fashion design, promotion of Bangkok as a regional fashion center, export quota system changes, and implementation of lower tariffs under the regional free-trade agreement.

Domestic policies

Previous restrictions on majority foreign ownership and participation in non-export apparel production and all segments of silk production⁶³ were eased in early 2000 with enactment of the new Alien Business Act.⁶⁴ The baht is freely convertible and investors are allowed to repatriate investment funds, dividends, profits, and loan and interest repayments, net of all taxes.⁶⁵ Exporters are exempted (“zero rated”) from the 7-percent value-added tax but must file returns and apply for rebates. U.S. firms have received equivalent tax treatment to that of Thai and other tax-treaty partner firms since early 1998.⁶⁶

The Board of Investment (BOI) is responsible for granting special benefits for new investments under the Investment Promotion Act, including exemptions from import duties on machinery not produced in Thailand and on raw and essential materials for production of export goods, exemptions from corporate income taxes for 3-8 years, and an income tax deduction equal to 5 percent of increased income over the previous year amount derived from exports.⁶⁷ The textile and apparel sector is one of five eligible to receive BOI aid for rehabilitating and strengthening competitiveness in overseas markets. Firms previously not receiving BOI privileges can now import raw materials free of duty, provided they are for producing goods for export or re-export. Incentives also have been extended to more parts of the country with foreign ownership allowed in existing investment projects.⁶⁸ The sector is also one of six selected by the Ministry of Industry for funding in 2003 for upgrading production to enhance the value of exports by 10 percent.⁶⁹ Under this program, firms

⁶³ Ministry of Commerce (MOC), Department of Export Promotion (DEP), “Guide to Doing Business in Thailand, Legal Issues for Foreign Investors/Alien Business Law,” found at http://www.thailand.com/exports/html/country_finvest_guide_legal_alien.htm, retrieved Feb. 7, 2003.

⁶⁴ U.S. and Foreign Commercial Service, “Investment Climate Statement,” *Thailand, Country Commercial Guide FY2002*.

⁶⁵ European Commission (EC), “Market Access Sectoral and Trade Barriers Database, Thailand, General Features of Trade Policy,” Oct. 29, 2001, found at <http://mkaccdb.eu.int/mkdb/stb/mkstb.pl>, retrieved June 26, 2002.

⁶⁶ U.S. Department of State, Bureau of Economic and Business Affairs, “2001 Country Reports on Economic Policy and Trade Practices, Thailand,” Feb. 2002, found at <http://www.state.gov/documents/organization/8173.pdf>, retrieved Feb. 7, 2003.

⁶⁷ EC, “Market Access Sectoral and Trade Barriers Database, Thailand.”

⁶⁸ McGarry, pp. 120 and 122.

⁶⁹ “State Offers B23 Billion in Aid to Industry, Focus on Six Sectors to Boost Production,” *Thailand Update*, Feb. 2002, p. 4.

importing high-technology replacement looms will also be granted exemptions from import duties.⁷⁰

To help the sector adjust to MFA quota phase-out, the Ministry of Commerce (MOC) reportedly is eager for the textile and apparel firms to expand into markets for higher quality products and is encouraging improved product quality through integration of production from yarn through apparel.⁷¹ Likewise, fashions (apparel, along with jewelry and leather goods) are among the five industries identified by the BOI in April 2002 for proactive industry-specific marketing campaigns to attract FDI.⁷² In conjunction with other government agencies and with industry associations, the BOI will actively promote these products, with Bangkok being promoted as the “Fashion Center of the Region” by 2005 and “Bangkok, Fashion City of the World” by 2012.⁷³ The BOI reportedly perceives that, by developing product design and building up local products and brands, Thailand can become the fashion center for Southeast Asia.⁷⁴ In the 3 years after 2003, the Thai Government anticipates providing funds from both the national budget and collected from fashion industries⁷⁵ to establish a training center for apparel designers and textile trade managers, and to sponsor fashion shows as trade venues. The Federation of Thai Industries expects the plan to boost the total export value of textiles, precious stones, and ornaments by at least 10 percent above the year-2002 amount.⁷⁶ Likewise, Thai apparel producers are supporting the promotion of Bangkok as a world fashion center within 10 years.⁷⁷

Trade policies

When the ASEAN Free Trade Agreement (AFTA) entered into force on January 1, 2000, Thailand lowered import duties on raw materials and textiles from ASEAN countries to 0-5 percent ad valorem. However, Thai textile and apparel producers rely on raw materials originating primarily from outside the AFTA region, which are subject to applied duty rates considered very high even by regional standards,⁷⁸ ranging from 10-25 percent ad valorem for yarns, 25-40 percent for fabrics, and 35-45 percent for apparel. Application of specific rates of duty to roughly one-third of all textile and apparel items results in even higher

⁷⁰ McGarry, p. 117.

⁷¹ Ibid, p. 123.

⁷² Selection was based on comparative advantages, market potential, and image projected abroad. “BOI Plans to Focus on Five Industries,” *Bangkok Post*, Apr. 12, 2002, in *Thailand Update*, May 2002, p. 4.

⁷³ Netraumpai, p. 10.

⁷⁴ “BOI Plans to Focus on Five Industries,” *Bangkok Post*, p. 4.

⁷⁵ “China vs. ASEAN Textile Industries, Fiercer Competition and Coexistence,” *Asian Textile Business*, May 2002, p. 20.

⁷⁶ “State Offers B23 Billion in Aid to Industry,” p. 4.

⁷⁷ Netraumpai, p. 9.

⁷⁸ The Ministry of Finance had not acted on the Confederation of Thai Textile Industries’ request for lower duties on certain raw materials and components from non-AFTA sources at the same time that the AFTA entered into force. McGarry, p. 119.

effective duty rates on an ad valorem equivalent basis.⁷⁹ Some apparel manufacturers expressed concern about competition with legal imports of lower cost Indonesian fabrics. Further, the AFTA reportedly has encouraged illegal imports of Chinese fabric through Myanmar.⁸⁰

Although the number of products requiring import licenses has been reduced, such licenses are still required for importation of textiles.⁸¹ Import quotas on silk yarn are due to expire by 2005, in line with Thailand's WTO commitments and to deter smuggling from China and Vietnam.⁸² Otherwise, Thailand does not protect its textile and apparel sector with import quotas.⁸³

Thai import regulations are considered complicated, non-transparent, and inconsistently applied. Common problems frequently cited by international business representatives are excessive paperwork, lack of coordination among import regulatory agencies, and lack of modern computerized processes. Legislation enacted in March 2000 to implement the WTO Customs Valuation Agreement has alleviated some valuation problems, although some importers complain of uneven implementation, and discretionary application of minimum "standard appraised prices" to value imported goods for customs purposes.⁸⁴

Several improvements, including amendments to the trademark law in 1992 providing stiffer penalties for infringement, the streamlining of the trademark application process in 1998, and amendments in June 2000 broadening the legal definition of a trademark to bring Thai law into compliance with the TRIPS Agreement, have created a viable legal framework and led to some improvement in enforcement. However, trademark infringement remains a serious problem for apparel and accessories. According to a major U.S. apparel manufacturer, penalties are slight and do not serve as a deterrent to counterfeiters.⁸⁵ Arrests of exporters who re-exported Chinese-made apparel prompted the Department of Foreign Trade (DFT) to tighten screening procedures to assure that products originated in Thailand. The new

⁷⁹ Office of the United States Trade Representative (USTR), "Thailand," *2002 National Trade Estimate Report on Foreign Trade Barriers*, 2002, p. 413.

⁸⁰ Pichai Uttamapinant, President, Association of Thai Bleaching, Dyeing, Printing, and Finishing Industries, cited in Achara Pongvutitham, "Fabric Makers Hurt by Imports," *Nation*, Mar. 23, 2000, e-mail received by USITC staff from WorldSources Online, Mar. 24, 2000.

⁸¹ U.S. Department of State, "2001 Country Reports on Economic Policy and Trade Practices, Thailand."

⁸² Currently, Thai silk fabric exporters are allowed to import 1.5 times the amount of domestic silk yarn purchased, a measure intended to protect 200,000 local silk-farming families. The rigid import quota requirement has encouraged smuggling because imported yarn costs 600-800 bhat per kilogram (kg) compared to 850-1,200 baht per kg for local yarn. Estimates of smuggled silk yarn from China are around 450 metric tons (mt) a year, compared with annual demand for 2,000 mt from all sources. "Thailand: Silk Exporters Eagerly Await Ending of Quotas," *BharatTextile.Com*, June 19, 2002, found at <http://www.bharattextile.com/newsitems/1977890>, retrieved Nov. 19, 2002.

⁸³ WTO, TPRB, "Thailand, Report by the Secretariat, Summary Observations," press release PRESS/TPRB/122, Dec. 10, 1999, found at http://www.wto.org/english/tratop_e/tpr_e/tp122_e.htm, retrieved Nov. 21, 2002.

⁸⁴ USTR, "Thailand," pp. 413-414.

⁸⁵ *Ibid.*, p. 417.

regulations will be applied to apparel exports in 2003, followed by a new set of regulations when the MFA quota system is eliminated.⁸⁶

As a signatory of the MFA, Thailand has bilateral textile and apparel quota agreements with the United States, Canada, the European Union (EU), and Norway.⁸⁷ However, Thai textile and apparel for sale abroad are subject to export quotas allocated to producing firms by the DFT. With allocations being based largely on past export performance,⁸⁸ the system tends to favor the large exporting producers and to act as a barrier to new entrants. By ensuring that they meet the criteria for maintaining their quotas, large firms have little incentive to expand outside quota markets. Hence, small, medium, and new exporters concentrate on nonquota markets such as Japan and ASEAN partners.⁸⁹ To eliminate the long-standing practice of nonproducing “shell companies” selling their quota allocations, the MOC cut quotas and terminated the bidding for quotas in February 2002. However, given that the changes were announced without prior warning, genuine producers were concerned as to whether they would have quota allocations assigned by the time of shipments. Apparel producers bear the largest negative impact by losing one-quarter of their previous year’s quota allocation and hence lose guaranteed use of part of their production capacity. Intense competition anticipated among exporters for purchasing other firms’ allocations is likely to drive up prices beyond the reach of small and medium producers serving lower price and medium-price brands. Fabric manufacturers probably will be affected to a lesser extent as quota allocations for the few large firms will be relatively unchanged, but smaller producers with lower quality standards will definitely be harder hit. Because many buyers have policies preventing them from dealing with countries whose quota allocation policies are unclear, several major foreign brands considered putting orders on hold and relocating their apparel production from Thailand to China, Vietnam, and other countries. The anticipated loss to the Thai apparel industry is estimated at up to \$700 million, a decline of up to 30 percent from order values of the previous year.⁹⁰

⁸⁶ “Thailand: Trade Rules Revised to Stop Quota, Origin Frauds,” *BharatTextile.Com*, Dec. 12, 2002, found at <http://www.bharattextile.com/newsitems/1980316>, retrieved Dec. 12, 2002.

⁸⁷ Ministry of Commerce, Department of Export Promotion, “Industry Outlook, Textiles, Garments, and Fashion Accessories,” found at http://www.thailand.com/exports/html/industry_garments.htm, retrieved Dec. 5, 2002.

⁸⁸ Available quotas (one for yarns and fabrics, and another for apparel) are divided into the principal or basic quota and the residual quota. The principal quota (usually 70 to 80 percent of the available export quota) is distributed on an annual basis to exporting firms on the basis of past export performance. The residual quota (about 20 percent of the available export quota) is allocated on a monthly basis, which can be sought by both new exporters and those already holding principal quotas. APEC Secretariat, *The Impact of Liberalization*, pp. 12-13.

⁸⁹ Ministry of Commerce, “Industry Outlook, Textiles, Garments, and Fashion Accessories.”

⁹⁰ “Trouble in Thailand,” *Just-style.com*, Feb. 6, 2002, found at http://just-style.com/news_archive.asp, retrieved Jan. 31, 2003. No further information on quota allocation policies has been received from Thai industry representatives or government sources.

Foreign Trade

Thailand's trade surplus in textiles and apparel declined from \$4.3 billion in 1997 to \$3.8 billion in 2001, as exports declined and imports increased (table G-11). Imports rose by 21 percent during the period to \$1.7 billion, and were predominantly textiles; major sector import sources were China, Taiwan, Korea, and Japan. Exports fell by 4 percent during the period to \$5.5 billion, and were predominantly apparel; major sector markets were the United States, the EU, ASEAN partners, and Japan (table G-12).

Imports

Textile imports rose by 23 percent during 1997-2001 to \$1.5 billion (table G-11). Thailand relies on foreign sources for yarn and fabric of high-enough quality and in the necessary volumes required by export-oriented apparel producers. Major sources reflect either providers of lower-cost products (e.g., China), or corporate sourcing ties with Taiwan, Korean, and Japanese textile firms. Over the same period, Thai apparel imports rose by 4 percent to \$143 million, with major sources being primarily China and Hong Kong, especially for commodity-grade apparel, followed by the EU and Japan, particularly for more up-scale or designer-brand name apparel.

Exports

Fabric (44 percent of all textile exports) was Thailand's primary textile export in 2001, followed by yarn (23 percent), and household textiles (8 percent), which were predominantly of manmade fibers. Textile exports, although recovering from low levels after the Asian financial crisis, nevertheless fell by 6 percent during 1997-2001 to \$1.9 billion, particularly to ASEAN partners, despite AFTA duty reductions enhancing inter-regional textile trade, followed by shipments to the United States and EU (table G-13). Among Thailand's major apparel exports are cotton garments (34 percent of all apparel exports in 2001) and manmade-fiber garments (21 percent).⁹¹ Apparel exports similarly recovered from post-crisis levels, but fell by 3 percent during the period to \$3.6 billion. Thailand is highly dependent on sales of foreign brand-name apparel, produced under subcontract, to quota markets (79 percent of all export destinations); hence, Thai authorities are urging exporters to diversify their markets.⁹²

U.S. imports of Thai textiles and apparel have shown little growth in recent years, averaging 1.3 billion square meters equivalent (SMEs) annually during 2000-02 (\$2.4 billion), up from 769 million SMEs in 1997 (table G-13). Sector imports from Thailand consisted primarily of textiles and apparel of manmade fibers (61 percent of the import quantity in 2002) and cotton (37 percent). In 2002, apparel accounted for 37 percent of the quantity (490 million SMEs), but 78 percent of the value (\$1.7 billion) of total sector imports from Thailand. In

⁹¹ Ibid.

⁹² "Too Dependent on the U.S. Market, Thai Industry Urged to Diversify Export Destinations," *Emergingtextiles.com*, May 7, 2001, found at <http://www.emergingtextiles.com/print/?q-art&s-010507-coun&r=search>, retrieved Nov. 27, 2002.

2002, Thailand filled 87 percent of its aggregate (“group II”) limit on apparel articles subject to individual quotas. Apparel articles subject to binding quotas in 2002 were cotton and manmade-fiber knit shirts and blouses, nightwear and pajamas, and trousers and shorts, as well as cotton sweaters.⁹³ Thailand also faced binding quotas on its exports of certain sector goods to the EU.⁹⁴

Official U.S. trade statistics show that the average unit values of U.S. imports of Thai textiles and apparel were relatively unchanged during 2000-01, with the major exception of wool non-apparel (textile) products (up \$16.07 or 37 percent). Thai textiles averaged \$0.73 per SME in 2001, a slight (\$0.01 or 1 percent) decline from the previous year, as most textile products declined in average unit value. The value of apparel of all MFA fibers, averaging \$4.02 per SME in 2001, reflected the somewhat higher quality (an increase of \$0.14 or 4 percent) in all apparel product categories compared to the previous year. The trade-weighted average U.S. duty rate on Thai textiles and apparel was 13.1 percent ad valorem in 2001, roughly the median rate for the ASEAN region. More specifically, Thailand’s average duty rate was 9.0 percent on textiles and 13.7 percent on apparel.

⁹³ Binding quotas are considered to be those with fill rates of 90 percent or more.

⁹⁴ In 2002, Thailand filled its EU quotas for apparel in categories 5 (knitted or crocheted jerseys, pullovers, wind breakers, etc.) and 6 (trousers, slacks, and shorts of wool, cotton, or manmade fibers). Official statistics of the EC, *Système Intégré de Gestion de Licences (SIGL)*.

Table G-11
Thailand: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Manmade fibers	(¹)	(¹)	(¹)	17	(¹)
Spinning	(¹)	(¹)	(¹)	148	(¹)
Weaving	(¹)	(¹)	(¹)	677	(¹)
Knitting	(¹)	(¹)	(¹)	631	(¹)
Dyeing and printing	(¹)	(¹)	(¹)	412	(¹)
Apparel	(¹)	(¹)	(¹)	2,672	(¹)
Total	(¹)	(¹)	(¹)	4,557	(¹)
Number of workers:					
Manmade fibers	17,070	17,000	15,900	15,400	15,340
Spinning	65,890	63,450	61,800	60,310	60,470
Weaving	64,250	60,730	59,540	58,870	58,730
Knitting	60,670	58,870	58,480	58,740	59,790
Dyeing and printing	47,840	47,280	47,050	47,180	46,750
Apparel	857,830	849,570	843,030	843,200	840,460
Total	1,113,550	1,096,900	1,085,800	1,083,700	1,081,540
Installed spinning capacities:					
Short-staple spindles (1,000)	4,095	3,708	3,719	3,719	3,587
Long-staple spindles (1,000)	65	65	65	65	65
Open-end rotors (1,000)	75	55	59	59	58
Installed weaving capacities:					
Shuttleless looms for the cotton sector (number)	10,000	20,000	21,000	21,000	52,000
Shuttle looms for the cotton sector(number)	45,000	61,000	61,000	61,000	78,000
Value of production:²					
Textiles (million dollars)	4,829.9	3,709.8	5,620.7	8,200.2	6,929.3
Apparel (million dollars)	2,878.2	2,214.3	3,346.8	1,860.8	1,596.6
Total (million dollars)	7,708.1	5,924.1	8,967.5	10,061.0	8,525.9
Production of selected products:					
Yarns:					
Cotton (1,000 metric tons)	297.4	267.2	268.5	299.2	337.7
Manmade fibers (1,000 metric tons)	472.2	509.9	494.3	539.6	550.5
Total (1,000 metric tons)	769.6	777.1	762.8	838.8	888.2
Fabrics, by fibers:					
Cotton (1,000 metric tons)	172.6	159.2	161.2	190.7	211.4
Manmade fibers (1,000 metric tons)	238.7	224.7	231.4	275.5	262.7
Total (1,000 metric tons)	411.3	383.9	392.6	466.2	474.1
Fabrics, by types:					
Woven (million square yards)	4,359	4,411	4,363	4,330	4,277
Knit (million square yards)	1,499	1,521	1,537	1,563	1,575
Total (million square yards)	5,858	5,932	5,900	5,893	5,852
Apparel (million pieces)	2,669	2,709	2,662	2,785	2,824

See footnotes at end of table.

Table G-11—Continued
Thailand: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Net inflows of foreign direct investment					
(million dollars)	47.6	118.7	20.4	-4.2	53.0
Mill fiber consumption:					
Manmade fibers (1,000 metric tons)	609.2	546.7	700.9	743.5	744.6
Cotton (1,000 metric tons)	351.0	349.0	348.0	345.9	355.4
Total (1,000 metric tons)	960.2	³ 895.9	1,048.9	1,089.4	1,100.0
Consumption of selected products:					
Yarns:					
Cotton (1,000 metric tons)	261.9	242.5	245.6	291.3	323.7
Manmade fibers (1,000 metric tons)	362.1	342.2	352.7	420.8	402.3
Total (1,000 metric tons)	624.0	584.7	598.3	712.1	726.0
Fabrics:					
Cotton (1,000 metric tons)	142.0	127.1	134.2	168.5	188.0
Manmade fibers (1,000 metric tons)	202.8	183.0	192.2	237.9	238.2
Total (1,000 metric tons)	344.8	310.1	326.4	406.4	426.2
Apparel:					
Woven fabric (1,000 metric tons)	(¹)	(¹)	(¹)	187.7	(¹)
Knit fabric (1,000 metric tons)	(¹)	(¹)	(¹)	74.3	(¹)
Total (1,000 metric tons)	(¹)	(¹)	(¹)	262.0	(¹)
Foreign trade in textiles and apparel:					
Exports:					
Textiles (million dollars)	2,006.0	1,754.7	1,808.4	1,956.7	1,884.0
Apparel (million dollars)	3,701.3	3,563.5	3,486.1	3,778.3	3,608.2
Total (million dollars)	5,707.4	5,318.2	5,294.5	5,734.9	5,492.2
Imports:					
Textiles (million dollars)	1,243.8	1,154.5	1,339.2	1,626.4	1,530.9
Apparel (million dollars)	138.1	91.4	98.9	131.1	143.2
Total (million dollars)	1,381.9	1,246.0	1,438.1	1,757.5	1,674.1
Trade balance:					
Textiles (million dollars)	762.2	600.2	469.2	330.3	353.1
Apparel (million dollars)	3,563.2	3,472.1	3,387.2	3,647.1	3,465.0
Total (million dollars)	4,325.5	4,072.3	3,856.3	3,977.4	3,818.1
Foreign trade in textile fibers:					
Exports (million dollars)	195.7	204.1	225.6	267.2	244.6
Imports (million dollars)	658.3	579.6	528.3	628.8	638.6
Trade balance (million dollars)	-462.6	-375.5	-302.7	-361.6	-394.0

¹ Not available.

² Production estimated for 1997 and 2001 with production indexes based on 1998 and 2000 data, respectively.

³ Includes 0.2 metric ton of wool fibers.

Note.—All dollar values for production and net inflows of foreign direct investment were converted from baht values with average annual exchange rates.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from International Textile Manufacturers Federation, *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; official statistics of the Bank of Thailand, Department of Customs, National Social Economic Board, National Statistics Office Thailand, and Thailand Industrial Information Center; Thailand Textile Institute; and Geerdes International Inc., Richmond, VA. Trade data are United Nations data as reported by Thailand.

Table G-12
Thailand: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	245	268	275	310	294
European Union	413	376	321	329	274
Canada	28	23	16	21	19
Subtotal	686	667	612	661	586
All other:					
Japan	121	78	96	114	105
Hong Kong	183	133	113	116	101
United Arab Emirates	112	97	97	93	79
Other	904	780	891	973	1,012
Subtotal	1,320	1,087	1,196	1,295	1,298
Grand total	2,006	1,755	1,808	1,957	1,884
Apparel (SITC 84):					
Quota markets:					
United States	1,596	1,800	1,788	2,050	1,984
European Union	838	797	823	836	774
Canada	78	84	88	97	98
Subtotal	2,512	2,681	2,698	2,984	2,857
All other	1,189	882	788	794	752
Grand total	3,701	3,563	3,486	3,778	3,608
Textiles and apparel:					
Quota markets:					
United States	1,842	2,069	2,063	2,361	2,278
European Union	1,250	1,173	1,143	1,166	1,048
Canada	106	107	104	119	116
Subtotal	3,198	3,349	3,310	3,645	3,443
All other	2,509	1,970	1,984	2,090	2,050
Grand total	5,707	5,318	5,294	5,735	5,492
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	34	38	34	34	31
Apparel	68	75	77	79	79
Average	56	63	63	64	63

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table G-13

Textiles and apparel: U.S. general imports from Thailand, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>(1,000 square meters equivalent)</i>					
0	Textiles and apparel, total	768,575	997,023	1,117,474	1,318,245	1,308,481	1,315,546
1	Apparel	283,767	334,890	385,769	469,686	452,594	490,258
2	Textiles	484,808	662,133	731,704	848,560	855,887	825,288
11	Yarns	109,757	124,350	120,775	141,619	132,515	143,300
12	Fabrics	189,192	257,552	245,144	279,063	251,623	272,466
14	Other miscellaneous articles	185,859	280,230	365,785	427,878	471,748	409,521
30	Cotton textiles and apparel	284,104	381,222	418,475	453,998	413,700	485,746
31	Cotton apparel	136,738	181,885	217,821	254,828	240,464	272,383
32	Cotton textiles	147,366	199,337	200,654	199,170	173,236	213,364
40	Wool textiles and apparel	9,260	14,007	13,043	19,541	20,020	11,824
60	Manmade-fiber textiles and apparel	454,940	566,892	648,726	814,830	845,546	803,774
61	Manmade-fiber apparel	135,785	136,284	152,190	192,028	188,540	202,727
62	Manmade-fiber textiles	319,154	430,608	496,536	622,801	657,006	601,047
80	Silk blend/veg fiber textiles/apparel	20,271	34,902	37,230	29,877	29,214	14,201
220	Fabric of special weave	76	288	92	2,053	12,449	37,797
222	Knit fabric	665	357	8,543	32,684	36,261	25,851
223	Nonwoven fabric	145	17	5,701	19,447	20,814	17,030
229	Special purpose fabric	32,995	43,016	24,187	29,042	24,666	24,268
239	Babies' apparel	35,170	57,213	75,672	97,370	109,652	102,374
300	Carded cotton yarn	13,994	7,438	7,927	2,107	1,540	4,433
301	Combed cotton yarn	18,065	21,026	13,976	21,442	24,298	20,296
314	Cotton poplin and broadcloth fabric	37,169	61,434	54,854	43,538	43,811	33,996
315	Cotton printcloth fabric	24,214	36,393	31,651	28,761	23,363	24,372
317	Cotton twill fabric	1,732	7,191	3,423	6,236	1,798	3,805
326	Cotton sateen fabric	2,319	2,438	5,745	8,370	9,218	4,803
330	Cotton handkerchiefs	0	2	0	0	31	43
331	Cotton gloves	3,909	4,110	3,052	4,130	2,806	2,593
332	Cotton hosiery	515	1,315	1,938	2,181	1,676	2,016
333	Cotton suit-type coats, men/boys	64	22	53	37	47	122
334	Other cotton coats, men/boys	3,057	3,540	3,174	2,535	3,806	5,824
335	Cotton coats, women/girls	1,680	1,860	2,200	3,245	2,597	6,021
336	Cotton dresses	6,816	6,361	6,956	7,579	7,680	9,254
338	Cotton knit shirts, men/boys	8,744	10,593	8,746	9,685	8,597	9,626
339	Cotton knit shirts, women/girls	2,720	4,661	4,503	6,232	6,423	9,701
340	Cotton not knit shirts, men/boys	5,488	6,055	7,905	7,805	5,273	7,166
341	Cotton not knit blouses	3,354	5,505	5,559	7,526	7,841	8,216
345	Cotton sweaters	10,787	9,404	10,945	12,344	9,941	13,372
347	Cotton trousers, men/boys	6,189	6,361	7,005	5,345	4,926	7,838
348	Cotton trousers, women/girls	7,253	7,222	8,877	8,233	7,449	16,529
351	Cotton nightwear	7,151	12,888	9,693	13,856	9,550	15,330
352	Cotton underwear	20,857	30,679	40,846	50,886	46,485	52,772
363	Cotton terry and other pile towels	8,556	9,438	9,168	10,312	9,516	10,145
369	Other cotton manufactures	15,661	25,176	37,374	37,154	28,417	47,333
600	Textured filament yarn	39,795	49,453	46,441	72,780	38,099	39,091
603	Yarn of artificial staple fiber	13,333	16,269	14,565	13,408	34,366	39,051
607	Other staple fiber yarn	658	4,940	17,963	5,961	13,602	16,106
614	Manmade-fiber poplin/broadcloth	20,963	25,726	23,686	24,192	16,621	22,308
625	Manmade-fiber poplin/broadcloth	9,006	10,550	10,693	8,595	10,461	15,171
634	Other manmade coats, men/boys	21,481	18,380	13,318	14,791	17,634	16,260
635	Manmade-fiber coats, women/girls	12,654	12,961	13,424	12,879	13,895	15,573
638	Manmade knit shirts, men/boys	10,435	12,726	11,544	16,967	19,633	28,324
639	Manmade knit shirts, women/girls	22,085	16,444	14,283	17,043	13,691	13,910

See footnote at end of table.

Table G-13

Textiles and apparel: U.S. general imports from Thailand, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>(1,000 square meters equivalent)</i>					
640	Manmade not knit shirts, men/boys	4,872	5,050	7,347	10,084	10,689	9,538
641	Manmade-fiber not knit blouses	605	806	1,679	2,366	2,760	2,209
647	Manmade-fiber trousers, men/boys	10,285	8,748	10,851	13,146	13,598	17,350
648	Manmade-fiber trousers, women/girls . . .	7,258	6,344	7,737	8,706	7,765	7,501
649	Manmade-fiber brassieres	1,268	2,977	5,699	9,163	10,213	11,998
652	Manmade-fiber underwear	1,522	5,925	8,509	8,399	6,745	11,828
659	Other manmade-fiber apparel	25,415	19,344	28,433	39,982	27,191	26,197
666	Other manmade-fiber furnishings	1,288	2,088	4,788	35,387	69,563	54,321
669	Other manmade-fiber manufactures	64,056	93,700	120,355	147,324	150,735	173,725
670	Manmade-fiber handbags/luggage	77,898	117,555	159,380	170,288	187,541	107,189

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov/>.

APPENDIX H
MEXICO

Mexico¹

Overview

The implementation of NAFTA in 1994 and the devaluation of the peso in 1995 helped Mexico to become the largest foreign supplier of textiles and apparel to the United States in the late 1980s and early 1990s. In 2002, however, Mexico was surpassed by China as the largest foreign supplier, largely reflecting the effects of the appreciation of the peso in recent years and the acceleration of imports from China in quota-free product categories. The textile and apparel sector accounted for 1.2 percent of Mexico's gross domestic product (GDP), 7.1 percent of the manufacturing GDP, and about 18 percent of manufacturing employment in 2001. However, the sector accounted for only 2.4 percent of foreign direct investment (FDI) in the manufacturing sector.²

The U.S. market accounted for 95 percent (\$9.6 billion) of Mexico's textile and apparel exports in 2001. Mexico is facing growing competition in the U.S. textile and apparel market from lower cost countries in Asia and the Caribbean Basin, while the recent appreciation of its currency is effectively reducing the price competitiveness of Mexican textile and apparel products. A large part of the increased competition for Mexico in the U.S. market reflects the entrance of China into the WTO, which resulted in the elimination of certain quotas on Chinese exports to North American markets, and implementation of U.S. trade preferences for certain textile and apparel products from Caribbean Basin and sub-Saharan Africa countries.

According to Mexican industry consultants, to remain a major supplier of textiles and apparel to the United States, Mexican firms will have to continue their efforts to shift production from low-value-added basic garments to more "full-package" and technology-intensive products.³ According to a U.S. apparel retailer, faced with increasing competitive pressure from countries such as China, Mexican apparel producers will need to focus more on higher fashion, brand-name products that require smaller and more flexible runs.⁴

¹ Prepared by Ruben Mata, Office of Industries.

² Mexican Secretariat of the Economy, "Program for the Competitiveness of the Fibers, Textiles, and Apparel Industries," (translated from Spanish), Mexico City, Mar. 18, 2002, p. 2.

³ Javier Mancera, Associate Partner, Public Strategies Inc., interview by USITC staff, Mexico City, Feb. 11, 2003.

⁴ Representative of major U.S. apparel retailer, interview by USITC staff on Mar. 11, 2003.

Industry Profile

The Mexican textile and apparel sector covers the entire production chain, which includes fibers, yarns, textiles, and apparel. The apparel industry is the largest segment in the textile chain, accounting for 86 percent of sector exports to the United States in 2002. NAFTA preferences and the emergence of new organizational buyers, especially retailers and brand-name marketers, have led to attempts toward greater vertical integration in the textile and apparel sector, particularly in the export-oriented centers of North-Central Mexico.⁵ However, only a few relatively large apparel firms are vertically integrated.⁶

Industry structure and performance

The Mexican textile and apparel sector comprised 14,000 firms and employed 909,000 workers in 2001. The sector can be divided into three distinct segments: apparel firms, maquila establishments, and textile producers. Apparel firms constitute the largest share of the sector (79 percent, or 11,076 firms). Maquila establishments, which produce mostly garments for export, numbered 860 firms (6 percent) and textile producers totaled 2,100 (15 percent).⁷ Nearly 98 percent of Mexican firms are considered small to medium size (averaging 44 employees per plant) and 2 percent of the firms are large apparel firms.⁸ Most apparel firms are family owned and managed, and are largely subcontractors that do cut-and-sew operations. The Mexican apparel industry produces primarily basic garments, particularly five-pocket denim jeans and knit tops (e.g., T-shirts), mainly for export to the United States.

Mexico's textile and apparel sector is highly fragmented, and is located primarily in the South-Central part of the country, in the industrial States of Mexico, Puebla, Tlaxcala, Morelos, Hidalgo, and Jalisco. However, there are other significant regional apparel and textile clusters along the U.S.-Mexico border, in the States of Coahuila, Chihuahua, and Sonora. These are mostly large maquiladora centers, with nearly all production going to the U.S. market.

⁵ Gary Gereffi, David Spener, and Jennifer Bair, "Free Trade and Uneven Development" (Philadelphia: Temple University Press, 2002), p. 204.

⁶ Raul Garcia, General Director, National Chamber for the Apparel Industry, interview by USITC staff, Feb. 10, 2003.

⁷ National Chamber of the Textile Industry, *Mexican Apparel, Textile, and Maquiladora Fact Book*.

⁸ Gereffi, Spener, and Bair, p. 33.

Textiles

The Mexican textile industry primarily produces yarns, and knitted and woven fabrics, with denim fabric being a specialty. The industry has traditionally sold these fabrics to domestic apparel manufacturers. In 2001, there were 2,100 textile firms in Mexico, most producing solely for the domestic market. Approximately 80 percent of these firms are in the Central Valley (State of Mexico, Puebla, Tlaxcala, and Guanajuato) near Mexico City. According to Mexican industry sources, about 40 percent of the textile firms in Mexico are family-owned “microfirms,” employing fewer than five employees. A number of integrated multinational textile producers (e.g., Cone-Parras and Burlington Denim) have formed partnerships with Mexican firms to produce fabric primarily for cut-and-sew producers. Leading Mexican textile firms exporting to the U.S. market include Kaltex S.A., Lear Mexican Trim, and Eagle Trading Co.

Mexico is a significant fabric supplier to apparel manufacturers in Central America. According to customers there, Mexico’s strength lies in denim, denim/lycra blends, and fabric of specialty manmade fibers. The Central American textile and apparel firms indicated that for them to be competitive following quota elimination in 2005, it is essential that fabric from Mexico qualify as originating under the CAFTA rules of origin. Industry representatives also stated that certain Mexican fabric is less expensive, and in greater supply than comparable U.S. fabric.⁹

NAFTA preferences apply to products made in North America from the yarn stage forward (the “yarn forward” rule). Mexican textile producers have not always provided consistent quality in fabric production, particularly in the finishing processes.¹⁰ Mexican garment producers have at times sourced more expensive U.S. fabrics because comparable products are sometimes unavailable or in limited supply from Mexican textile mills.¹¹ Recently, Mexican textile mills have forged alliances with apparel producers to integrate textile and apparel production. Additionally, some textile firms are evaluating product development of select apparel categories and a few have entered into joint ventures with U.S. textile manufacturers for production of fabrics in Mexico.¹²

New investments in textile production, particularly in denim, are increasing the quality and quantity of fabrics available in Mexico. The growth of denim production underscores the important role that U.S.-based firms have in Mexico’s attempts to convert from assembly to full-package exports in apparel. Although Mexico is considered competitive in the production of denim and certain wool fabrics, it is not considered by some Mexican apparel

⁹ Interviews by USITC staff with Henry Franssen, Executive Director, Honduran Apparel Manufacturers Association, San Pedro Sula, Honduras, Feb 21, 2003; manager of a Honduran textile producer, San Pedro Sula, Honduras, Feb. 21, 2003; Edwin Zamora, President, UNITEX, San Salvador, El Salvador, Feb. 24, 2003; and representatives of two textile mills, Guatemala City, Guatemala, Feb. 27, 2003.

¹⁰ Representative of major U.S. textile mill, interview by USITC staff, Mexico City, Feb. 11, 2003.

¹¹ “The Great Mexican Cotton Pants Disaster of 2005,” Sept. 23, 2002, found at <http://www.just-style.com>, retrieved Mar. 17, 2003.

¹² Gereffi, Spener, and Bair, p. 37.

producers to be competitive in the production of many other fabrics, particularly manmade-fiber fabrics.¹³

Apparel

Until recently, the majority of Mexican apparel firms did not purchase fabric used to produce garments. Instead, the fabric was supplied by their customers, chiefly U.S. apparel firms that shifted assembly to Mexico or contracted out assembly to Mexican sewing operations. As these U.S. firms evolved from being producers to brand-name marketers, apparel production in Mexico increasingly shifted from wholly-owned subsidiaries of U.S. apparel firms to contract assemblers. To reduce costs and increase marketing focus, U.S. apparel firms increasingly favor contractors that source all of their production inputs without assistance from their customers. Becoming a full-package supplier requires access to capital (to finance the purchase of fabric and other inputs) that is not available to most apparel producers in Mexico. Mexican and U.S. textile mills have been reluctant to extend credit to much of the industry, except for the largest and most competitive apparel producers with access to external financing. Since the 1990s, Mexican commercial banks, often carrying significant uncollected debt, have restricted additional credit to manufacturers, including apparel firms. As a result, the Mexican apparel industry has been severely limited in its attempts to develop full-package services.¹⁴

Factors of production

Raw materials

The Mexican fiber industry consists of six major producers that are among the largest firms in Latin America. They operate in Mexico with Mexican joint-venture partners; most of these producers have become integrated with large U.S. producers after implementation of NAFTA in 1994. The majority of Mexico's fiber production is concentrated in commodity fibers, such as polyester staple and filament, acetate filament, high tenacity polyester, nylon filament, and high tenacity nylon. Mexico's installed production capacity for manmade fiber is 700,000 tons annually. Nevertheless, Mexico imports about 80 percent of all of its cotton, yarn, and fabric requirements from the United States. Major competing countries such as China also specialize in cotton and polyester, but do not produce as many nylon products. The bulk of Mexico's competition with China is in the basic commodity fibers.¹⁵

In recent years, according to industry officials, the Mexican market for both fabric and apparel has been impaired by transhipped goods from Asian countries that make use of Western U.S. ports of entry. Reportedly, fabrics imported from Asia can sell for as little as 10 cents per meter in the Mexican market. According to these officials, Mexican apparel

¹³ Representative of the Apparel Chamber in Mexico, interview by USITC staff, Feb. 10, 2003.

¹⁴ Ibid.

¹⁵ Carlos Lopez Amaya, Artificial Fiber, and Synthetics Section of the National Association of the Industrial Chemicals, interview by USITC staff, Feb. 10, 2003.

producers are purchasing the transhipped fabric, thereby injuring the domestic textile industry; in addition, these sources also claim that transhipped apparel is also harming the local garment market. Industry representatives interviewed in Mexico City claimed that firms importing textiles and apparel into North America allegedly under-value the products to reduce their tariff obligations, making these products more competitive in the North American market and reducing market share for both Mexican and U.S. producers.¹⁶

The recent downturn in fabric and garment production in Mexico reduced demand for production inputs. Cotton consumption peaked in 1999 (falling by 15 percent in 2001); consumption of manmade fibers peaked in 2000 (falling by 10 percent in 2001) (table H-1, found at the end of this appendix). Mexico exports approximately 32 percent of its production of manmade fibers. The United States is the largest market for Mexican fiber exports, accounting for 70 percent of total exports. Other major export markets for Mexican fibers include Colombia, Chile, and Central America.

Labor

The number of workers in the Mexican textile and apparel sector increased by 22 percent from 650,000 in 1997 to 795,000 in 1999. However, rising labor costs associated with the appreciation of the peso, together with the sluggish U.S. market and a loss of market share to China, led to a loss of 144,256 workers in 2000 and 2001. This decline was most visible in the apparel industry, which lost 111,000 workers in the 2-year period covering 2000 and 2001.¹⁷

Cross-border integration of manufacturing in North America has resulted in the growth of the automotive, electronic and electrical, and major household appliance industries in Mexico, displacing many of the labor-intensive, lower wage apparel firms in the U.S.-Mexico border region. Many of these firms have either shifted operations southward to the interior of the country or to the Yucatan region of Mexico, or to more cost competitive countries in Central America and Asia.

Wage rates in the Mexican textile and apparel sector are significantly higher than those of most other major supplying countries. The average hourly compensation (including social benefits) of apparel production in Mexico workers in 2002 was \$2.45, compared with less than \$1.60 in Guatemala, El Salvador, and Honduras; \$0.88 in the coastal area of China, and less than \$0.50 in Bangladesh, India, and Pakistan.¹⁸ Asian producers in Mexico indicated that wage rates for apparel production workers there are about \$300 per month, compared with an estimated \$100 to \$150 in Central American countries. Several firms listed rising

¹⁶ Similar assertions were made by four representatives of textile and apparel manufacturers and one trade consultant during interviews by USITC staff, Mexico City, Feb. 10, 2003.

¹⁷ Mexican Apparel, Textile, and Maquiladora Fact Book.

¹⁸ Data prepared by The Jassin-O'Rourke Group, New York, NY, for the National Cotton Council of America, Nov. 2002.

labor costs as one of the reasons for shifting production from Mexico to other regions, including Central America and Africa.¹⁹

In Puebla, one of Mexico's leading centers for the production of apparel and denim, wages have increased between 4 percent and 7 percent annually in recent years and are inclined to follow wage increases at the local Volkswagen de Mexico auto plant.²⁰ Additionally, labor laws requiring generous severance pay and holiday bonuses, as well as administrative regulations restricting labor flexibility, significantly reduce the competitiveness of the Mexican apparel industry.²¹

Although the Mexican apparel industry is frequently considered to have a highly skilled labor force, compared with apparel producers in the CBERA region, it generally has lower productivity, higher rates of turnover and absenteeism, longer lead times (to U.S. customers on the Atlantic seaboard), and higher additional costs (because of security needed to prevent pirating of apparel shipments).²²

Technology

Mexico's apparel sector generally has not made necessary improvements in manufacturing processes to remain globally competitive with major suppliers such as China and India. To remain a major supplier of apparel and textiles to the U.S. market, Mexican firms reportedly will have to turn away from basic garments toward production of more technology intensive apparel.²³ For example, capital investments are needed in advanced knitting (e.g., sweater production), embroidery, and assembly technology. In recent years, a limited number of knitwear producers in Mexico have been able to produce at the demanding quality levels required for export to the United States by obtaining limited government support in securing long-term credit for machinery in this capital-intensive industry.²⁴ In contrast to other areas of Mexico's apparel production, Mexican knitwear producers have obtained some state-of-the-art technology, and a growing number of advanced machines are now found in Mexico. Another recent technological development employed by knitwear producers has been the introduction of computerized embroidery machines capable of stitching logos on most kinds of apparel, including sweaters. An important aspect of both knitting and embroidery

¹⁹ According to a U.S. retailer, Mexican apparel factories do not have effective middle management. Decision-making power typically resides with one or two key executives, making it difficult to communicate with the factory when top managers are away. Interviews by USITC staff with industry officials in the United States and Taiwan, Mar. 2003.

²⁰ Julian Park, Director of Production, Impresiones de Baja, interview by USITC staff, Feb. 12, 2003.

²¹ Gabriel Nabielsky D., engineer, American Textil, S.A., interview by USITC staff, Feb. 11, 2003.

²² Industry official, conference call with USITC staff, Mar. 11, 2003.

²³ Mancera.

²⁴ Long-term capital financing is difficult to obtain domestically and interest rates are much higher than other major competitive countries such as China and India. Mexico has granted highly competitive long-term credit to a few small and medium-size firms to purchase a nominal amount of specialized machinery.

machines is their low economies of scale, making it possible for small firms to operate in the industry.

Mexican knitwear producers depend on domestic synthetic fiber and yarn manufacturers. Synthetic yarn constitutes almost 100 percent of yarn inputs and 85 to 90 percent of variable costs in the production of knitwear fabric. Direct labor accounts for approximately 10 percent of labor costs.²⁵

Investment

The implementation of NAFTA in 1994 and the devaluation of the Mexican peso in 1995 promoted considerable FDI in the Mexican apparel industry. During 1995-2000, FDI in apparel expanded from \$176 million to \$343 million. During this period, approximately 40 percent of all FDI in Mexico was destined for the apparel industry. The dominant share of apparel investment reportedly was made by U.S. firms seeking to remain competitive with Asian exporters of these products.²⁶

In December 2001, there were 917 textile and apparel firms with FDI. The United States was the leading investor with 568 firms (62 percent), followed by Korea with 119 firms (13 percent), and Spain and China with 25 firms each (3 percent). All other nations had investments in 180 Mexican firms (22 percent).²⁷ The Mexico City area and surrounding States of Mexico, Puebla, and Tlaxcala accounted for approximately 38 percent of total FDI. Mexican States along the U.S.-Mexico border accounted for 33 percent of FDI, and the rapidly growing Yucatan Peninsula area accounted for 8 percent.

Since 1999, Mexico's textile industry has received significantly more FDI than the apparel industry, largely as a result of major investments by multinational firms such as Burlington Industries, Cone, Guilford Mills, and Tuntex Mills (Thailand).²⁸ Major textile producers sought to forge alliances with apparel suppliers to permit more integrated textile and apparel production in different regions of Mexico. In addition, some textile firms explored the possibility of creating their own product-development firms for select apparel categories. A few of these major mills firms have entered into joint ventures with Mexican textile manufacturers (e.g., Cone-Parras in the Mexican state of Tlaxcala) for the production of fabrics in Mexico.²⁹

In late 2001, Guilford Mills closed its newly constructed yarn and fabric facility in Altamira, Mexico, taking a loss (\$80 million).³⁰ The firm had anticipated that fabric made in Mexico

²⁵ Gereffi, Spener, and Bair.

²⁶ Raul Garcia, General Director, National Chamber for the Apparel Industry, interview by USITC staff, Feb. 10, 2003.

²⁷ "Director Foreign Investment in the Textile Industry," *Subsecretaria De Normatividad y Servicios A La Industrial Y Al Comercio Exterior*, frame 2, p. 6, Dec. 2001.

²⁸ Gereffi, Spener, and Bair, pp. 37-40.

²⁹ *Ibid.*, p. 37.

³⁰ Nabielsky D.

would qualify as originating for the purposes of the CBTPA. The final version of that legislation did not permit use of Mexican fabric in CBTPA-eligible apparel products.

Many factors contributed to reducing Mexico's competitiveness in textiles and apparel. These include a slowdown in the Mexican economy in 2001, due in part to weak U.S. economic activity; continued difficulties in enacting tax reforms and measures to liberalize foreign participation in the electricity and telecommunications sectors, and the erosion of NAFTA advantages with respect to U.S. imports from the CBERA region.³¹

Government Policies

Mexico has few major programs to assist its textile and apparel sector. The Government of Mexico implemented its National Plan for Development (NDP), 2001-2006, on May 30, 2001. The NDP identifies 12 strategic, priority industry sectors vital to the competitiveness of the country. The fiber, textile, and apparel industries were classified as vital strategic industries because they are major generators of employment and they attract manufacturing investment.³²

The Sectoral Promotion Program was established in October 2000 to eliminate or reduce Mexican tariffs on non-NAFTA inputs not manufactured in Mexico for firms that use such imports in the manufacture of goods for export.³³ However, maquiladora apparel producers reportedly found the ProSec process impractical because of record keeping requirements and other administrative burdens that draw resources from manufacturing and technology improvement efforts.³⁴

Domestic policies

The Mexican Secretariat of the Economy (SECON) is devoting more resources to antidumping and subsidy cases against Chinese and other Asian suppliers.³⁵ At present, SECON has imposed tariffs as high as 533 percent ad valorem on Mexican imports of Chinese apparel.³⁶

To assist the domestic textile and apparel industry, the Government of Mexico plans to introduce the "Mexico is in Fashion" program in mid-2003. The program will offer incentives for the use of domestic textiles in apparel production and will authorize the use

³¹ Ibid.

³² Mexican Secretariat of the Economy, p. 2.

³³ Nora Ambriz, General Director, Mexican Textile Industries Chamber, interview by USITC staff, Mexico City, Feb. 10, 2003.

³⁴ U.S. Department of State telegram 1446, "Overview of Maquiladora Operations In Mexico," prepared by U.S. Embassy, Mexico City, Feb. 21, 2003.

³⁵ "Mexico's Apparel Losing NAFTA Advantages," May 8, 2002, found at <http://www.emergingtextiles.com>, retrieved Mar. 17, 2003.

³⁶ Raul Garcia, General Director, National Chamber for the Apparel Industry.

of official textile suppliers. The program will also support the efforts of nearly 150 fabric producers and more than 6,000 apparel firms to achieve a marketing advantage by developing improved, fashion-oriented products and creating brand awareness.³⁷

Trade policies

Mexico has entered into a number of FTAs to promote and facilitate trade.³⁸ The most significant of these agreements and the model used for all other FTAs was the NAFTA. NAFTA provided Mexican apparel producers exclusive duty-free and-quota free benefits, greatly boosting the competitiveness of Mexican apparel in the U.S. market. Proximity is also an essential factor of competition for Mexico's textile and apparel sector. As a result, Mexican apparel producers have not been successful at exporting their products to other Latin American countries largely as a result of the difficult economic conditions that existed throughout Latin America during most of the 1990s. In recent years, Mexican textile producers have enjoyed some success in exporting fabric to Colombia and Central America. However, because of U.S. rule of origin, apparel articles made in Colombia and Central America from Mexican fabrics are ineligible for duty-free entry into the United States under the ATPDEA and CBTPA, respectively.

Mexican industry sources stated that the Mexican textile industry would benefit from CAFTA and FTAA if the United States agreed to extend duty-free treatment to imports of apparel made in Central America or other countries in the Western Hemisphere from Mexican fabric. At present, most of Mexico's numerous FTAs have not been successful in assisting the textile and apparel industry because of complex rules of origin requirements and rising industry costs, which are much higher than those of major competing countries such as China.³⁹

Foreign trade

The United States plays a dominant role in the Mexican textile and apparel sector as an investor, supplier, and customer. During 1997-2001, 97 percent of Mexico's textile and apparel trade was with the United States. Prior to 1994, most of this bilateral trade involved production-sharing operations with U.S. firms that exported cut garment parts to Mexico for assembly and then re-imported the finished garments under heading 9802.00.80 of the Harmonized Tariff Schedule of the United States (HTS). NAFTA permitted significant expansion of value-added processes in Mexico. Under NAFTA, apparel made in Mexico could be eligible for duty-free treatment when entering the U.S. market even if the U.S. fabric was cut, dyed, or finished in Mexico. Any apparel made in Mexico of North American yarn was afforded duty-free entry. NAFTA led to a surge in investment in the textile and apparel industries in Mexico and an equivalent rise in U.S. imports of apparel from Mexico.

³⁷ Mexican Secretariat, p. 18.

³⁸ As of 2002, Mexico had signed 10 FTAs with 32 countries.

³⁹ Giorgio Bicocco, General Manager and Director of Manufacturing, Casimeres Burlmex, interview by USITC staff, Mexico City, Feb. 10, 2003.

Under NAFTA, the United States also has tariff preference levels (TPLs) with Mexico that extend duty-free treatment to specified quantities of apparel made in Mexico from non-NAFTA fabric. Mexico has fully utilized these TPLs over the last 5 years. According to United Nations data as reported by the United States, Mexico had a \$4.6 billion trade surplus with the United States in textiles and apparel in 2001 compared with a trade surplus of \$220 million in 1993, the year before NAFTA entered into force.

Imports

Mexico's imports of textiles and apparel from the United States have increased substantially during 1997-2000, rising from \$5.2 billion to \$8 billion. However, the U.S. share of Mexico's market for textiles and apparel decreased from approximately 90 percent in 1997 to 85 percent in 2000. Although Mexico imports yarn, fabric, and apparel primarily from the United States, industry sources assert that much of the apparel imported from the United States is actually of Asian origin. Other leading suppliers of textiles and apparel to Mexico in 2001 were the EU (6 percent) and Korea (4 percent). Mexican imports of textiles and apparel from the EU increased by 91 percent as a result of an FTA between both countries that took effect in 2000. Imports from Korea increased by 39 percent in 2001 because of substantially lower prices for its goods as both the Mexican peso and the U.S. dollar appreciated against the Korean won.

Mexican imports of apparel totaled \$3.8 billion in 2001 and accounted for 40 percent of Mexico's total imports of textiles and apparel (table H-1). As discussed, imports of apparel and textiles from Asia reportedly are undervalued to reduce tariff obligations.⁴⁰ These actions make Asian products more competitive in North America and also reduce the share of the market served by U.S. and Mexican producers.⁴¹

Exports

Mexico's exports of textiles and apparel to the United States increased by 50 percent during 1997-2000, to \$10.3 billion, and then fell by 10 percent in 2001, to \$9.3 billion (table H-2). This figure represented 5.8 percent of Mexico's total exports of \$159 billion in 2001. Other important markets for textiles and apparel included Canada (\$113 million) and the EU (\$83 million). Mexico's exports to Canada have risen steadily largely as a result of NAFTA. On the other hand, despite the fact that Mexico has an FTA with the EU, exports have continuously decreased from \$136 million in 1997 to \$83 million in 2001. These declines are largely attributable to Europe's long-standing relationships with established apparel suppliers in Central Europe, Turkey, and North Africa with which EU textile producers have production-sharing arrangements.

Based on official U.S. statistics, U.S. imports of textiles and apparel from Mexico peaked at 4.7 billion SMEs in 2000, and then fell to lower levels in 2001 and 2002, when they

⁴⁰ Similar assertions were made by four representatives of textile and apparel manufacturers and one trade consultant during interviews by USITC staff, Mexico City, Feb. 10, 2003.

⁴¹ Lopez Amaya.

totaled 4.3 billion SMEs (table H-3). Imports in 2002 were equally divided between textiles and apparel--2.2 billion SMEs each. Manmade-fiber articles accounted for 64 percent of total U.S. textile and apparel imports from Mexico that year and cotton textiles accounted for 35 percent of the total. Cotton trousers accounted for 24 percent of total U.S. apparel imports from Mexico by quantity in 2002, and knit shirts and blouses of manmade fibers accounted for 11 percent. The leading apparel imports by value were men's and women's trousers (\$2.9 billion, or 39 percent of total apparel imports from Mexico in 2002) and knit cotton shirts and blouses (\$1.3 billion, or 17 percent).

Table H-1
Mexico: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Textile and apparel share of manufacturing					
value-added (percent)	3	3	3	(¹)	(¹)
Installed spinning capacities:					
Short-staple spindles (1,000)	3,500	3,500	3,500	3,500	3,500
Long-staple spindles (1,000)	200	200	227	227	227
Open-end rotors (1,000)	100	100	100	100	100
Installed weaving capacities:					
Shuttleless looms (number)	14,500	14,500	14,500	14,500	14,500
Shuttle looms (number)	35,00	35,000	35,000	35,000	35,000
Purchases of large circular knitting machines	(¹)	399	444	267	191
Average total labor cost per operator hour	(¹)	(¹)	(¹)	\$2.20	² \$2.45
Mill fiber consumption:					
Cotton (1,000 metric tons)	393.1	513.1	521.9	492.1	442.4
Wool (1,000 metric tons)	7.2	5.7	5.9	11.5	11.7
Manmade fibers (1,000 metric tons)	553.4	546.6	584.1	601.2	539.4
Total (1,000 metric tons)	953.7	1,065.4	1,111.9	1,104.8	993.5
Foreign trade:					
Exports:					
Textiles (million dollars)	1,784.4	1,832.2	1,922.2	2,409.5	2,051.9
Apparel (million dollars)	5,732.8	6,784.0	8,134.0	8,772.4	8,033.3
Total (million dollars)	7,517.2	8,616.2	10,056.1	11,181.9	10,085.2
Imports:					
Textiles (million dollars)	2,852.9	3,415.2	4,869.2	6,189.0	5,979.9
Apparel (million dollars)	3,342.0	3,740.9	3,667.8	4,007.6	3,808.1
Total (million dollars)	6,194.9	7,156.0	8,536.9	10,196.6	9,788.1
Trade balance:					
Textiles (million dollars)	-1,068.5	-1,582.9	-2,947.0	-3,779.5	-3928.0
Apparel (million dollars)	2,390.8	3,043.0	4,466.2	4,764.8	4,225.2
Total (million dollars)	1,322.3	1,460.2	1,519.2	985.3	297.1

¹ Not available.

² Represents 2002 data for the apparel industry, as compiled by the Jassin-O'Rourke Group, New York, NY.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data from International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; labor cost data from Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons, 2002", Reston, VA; mill fiber consumption data from Geerdes International, Inc., Richmond, VA; and trade data are United Nations data as reported by Mexico, except as noted.

Table H-2
Mexico: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	1,296	1,414	1,554	1,959	1,685
European Union	85	65	52	50	53
Canada	65	74	68	66	61
Subtotal	1,447	1,552	1,674	2,075	1,800
All other:					
Korea	8	8	48	97	75
Colombia	29	32	29	38	25
Guatemala	28	26	24	27	23
Other	273	214	147	172	129
Subtotal	338	280	249	334	252
Grand total	1,784	1,832	1,922	2,410	2,052
Apparel (SITC 84):					
Quota markets:					
United States	5,595	6,570	7,734	8,354	7,641
European Union	50	30	29	43	30
Canada	18	22	37	46	51
Subtotal	5,664	6,623	7,800	8,442	7,722
All other	69	161	334	330	311
Grand total	5,733	6,784	8,134	8,772	8,033
Textiles and apparel:					
Quota markets:					
United States	6,891	7,984	9,288	10,313	9,326
European Union	136	95	81	93	83
Canada	84	96	106	112	113
Subtotal	7,111	8,175	9,474	10,517	9,522
All other	406	441	582	665	563
Grand total	7,517	8,616	10,056	11,182	10,085
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	81	85	87	86	88
Apparel	99	98	96	96	96
Average	95	95	94	94	94

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table H-3

Textiles and apparel: U.S. general imports from Mexico, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	3,041,069	3,559,315	4,142,701	4,746,533	4,289,934	4,335,107
1	Apparel	1,555,103	1,984,577	2,306,888	2,526,814	2,290,142	2,157,215
2	Textiles	1,485,966	1,574,738	1,835,813	2,219,719	1,999,793	2,177,892
11	Yarns	425,647	511,313	646,988	718,441	603,373	566,304
12	Fabrics	502,477	389,132	400,950	430,517	443,132	569,980
14	Other miscellaneous articles	557,842	674,293	787,875	1,070,761	953,287	1,041,607
30	Cotton textiles and apparel	985,610	1,319,380	1,588,883	1,717,378	1,557,260	1,518,100
31	Cotton apparel	705,281	958,961	1,164,917	1,260,641	1,145,007	1,123,162
32	Cotton textiles	280,329	360,419	423,966	456,737	412,253	394,939
40	Wool textiles and apparel	18,626	23,868	24,548	34,861	30,402	25,725
60	Manmade-fiber textiles and apparel	2,026,553	2,206,641	2,519,300	2,980,609	2,691,366	2,771,580
61	Manmade-fiber apparel	828,571	1,001,176	1,119,259	1,239,066	1,121,419	1,013,934
62	Manmade-fiber textiles	1,197,981	1,205,464	1,400,042	1,741,544	1,569,947	1,757,646
80	Silk blend/veg fiber textiles/apparel	10,280	9,427	9,969	13,685	10,906	19,702
200	Yarn for retail sale, sewing thread	13,281	11,987	11,161	8,277	6,428	11,219
201	Specialty yarn	40,090	50,238	75,374	67,763	73,050	75,314
218	Fabrics of different colored yarn	3,654	14,315	17,552	26,678	12,986	10,864
222	Knit fabric	52,151	51,873	73,674	96,622	87,217	95,605
223	Nonwoven fabric	179,118	58,998	76,828	90,627	114,484	139,122
225	Blue denim fabric	78,527	65,351	60,756	44,366	37,259	50,225
229	Special purpose fabric	54,494	60,599	53,722	65,653	69,631	140,234
237	Playsuits	11,388	14,244	8,699	13,414	8,832	8,805
239	Babies' apparel	25,327	33,135	41,309	37,595	36,028	28,436
300	Carded cotton yarn	46,094	65,839	114,896	92,534	75,595	67,641
301	Combed cotton yarn	30,631	62,982	81,992	107,139	106,921	98,499
317	Cotton twill fabric	32,000	27,979	27,479	23,895	5,054	10,072
331	Cotton gloves	3,426	3,367	4,374	6,693	9,539	17,869
332	Cotton hosiery	31,331	44,732	62,386	77,664	88,548	95,803
336	Cotton dresses	16,785	18,132	20,203	17,300	8,028	8,407
338	Cotton knit shirts, men/boys	84,419	123,368	170,213	164,922	155,886	153,968
339	Cotton knit shirts, women/girls	50,155	72,820	113,071	119,220	113,784	125,419
340	Cotton not knit shirts, men/boys	17,181	24,468	26,337	26,449	17,469	16,576
342	Cotton skirts	3,211	3,996	4,861	4,979	8,059	11,289
347	Cotton trousers, men/boys	159,230	202,235	255,285	278,541	250,081	258,128
348	Cotton trousers, women/girls	159,511	212,239	246,389	301,457	274,503	266,727
351	Cotton nightwear	15,660	18,827	22,417	17,178	11,683	12,814
352	Cotton underwear	85,773	129,236	120,506	128,291	85,496	57,496
359	Other cotton apparel	33,027	44,839	52,068	51,918	56,876	44,448
369	Other cotton manufactures	38,725	47,934	44,930	72,973	75,335	71,628
600	Textured filament yarn	61,690	58,630	82,313	101,428	97,473	118,802
604	Yarn of synthetic staple fiber	42,696	36,762	22,874	30,949	35,235	28,014
606	Non-textured filament yarn	188,759	218,454	240,236	289,572	198,249	150,189
607	Other staple fiber yarn	1,762	5,718	17,604	16,727	9,982	16,590
620	Other synthetic filament fabric	60,898	50,149	46,753	26,849	46,403	44,209
622	Glass fiber fabric	1,291	886	844	1,339	10,043	15,462
632	Manmade-fiber hosiery	40,056	45,777	47,828	44,221	34,126	27,272
634	Other manmade coats, men/boys	6,890	14,845	19,926	26,550	28,274	27,195
635	Manmade-fiber coats, women/girls	14,823	28,162	23,626	34,661	29,906	25,021
636	Manmade-fiber dresses	43,613	60,107	74,966	73,854	53,898	47,889
638	Manmade knit shirts, men/boys	126,848	120,815	193,564	230,943	203,661	167,444
639	Manmade knit shirts, women/girls	97,996	101,493	83,229	68,890	70,878	74,077

See footnotes at end of table.

Table H-3—Continued

Textiles and apparel: U.S. general imports from Mexico, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
640	Manmade not knit shirts, men/boys	5,666	7,653	10,398	16,284	14,856	18,388
641	Manmade-fiber not knit blouses	11,814	16,884	18,015	21,062	22,658	20,047
647	Manmade-fiber trousers, men/boys	43,280	50,201	67,065	103,496	102,453	97,623
648	Manmade-fiber trousers, women/girls	75,150	87,159	77,297	83,878	82,159	68,392
649	Manmade-fiber brassieres	24,268	27,195	31,441	26,028	20,332	16,166
651	Manmade-fiber nightwear	57,576	89,090	75,617	77,159	54,436	50,347
652	Manmade-fiber underwear	85,720	92,640	94,982	94,761	84,767	73,542
659	Other manmade-fiber apparel	148,134	193,318	231,999	262,715	261,291	252,513
666	Other manmade-fiber furnishings	212,517	239,060	277,057	416,812	357,179	448,424
669	Other manmade-fiber manufactures	254,774	330,924	404,198	518,770	472,456	476,460
670	Manmade-fiber handbags/luggage	32,814	31,500	27,380	25,102	16,600	7,910

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

² Less than 500 square meters equivalent.

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

APPENDIX I
CARIBBEAN BASIN

Overview¹

U.S. imports of textiles and apparel from beneficiary countries under the 1983 Caribbean Basin Economic Recovery Act (CBERA) have grown sixfold since 1986, when the United States liberalized apparel quotas for the region, reaching 3.7 billion square meters equivalent (SMEs) valued at \$9.5 billion in 2002 (table I-1). The growth in such imports, which consisted almost entirely of apparel, largely reflected the expanded use of production-sharing operations in the region by U.S. apparel producers. In addition, firms based in Korea and Taiwan have made significant investments in CBERA apparel production. Although apparel is excluded from the CBERA duty-free program that applies to most other CBERA goods,² it is still the largest import from the region, representing 45 percent of total CBERA shipments in 2002. Legislation enacted in May 2000 extended, for the first time, duty-free benefits to imports of cotton, wool, and manmade-fiber apparel made in CBERA countries. In October 2002, the United States announced its intent to enter into negotiations on a proposed free-trade agreement with Central America. A summary of these issues as well as recent trends in U.S.-CBERA apparel trade and competitive conditions in the CBERA apparel industry appears below. The appendix also includes profiles of the textile and apparel sectors of the major CBERA suppliers—Costa Rica, the Dominican Republic, El Salvador, Guatemala, Haiti, Honduras, Jamaica, and Nicaragua.

U.S. Production-Sharing Measures

U.S. apparel trade with CBERA countries historically involved production sharing (table I-2), whereby U.S. firms shipped cut garment parts to the region for assembly and re-imported the assembled garments under heading 9802.00.80 of the Harmonized Tariff Schedule of the United States (HTS) and, prior to 1989, item 807.00 of the former Tariff Schedules of the United States (TSUS). The tariff heading provides a duty exemption for U.S. components incorporated in imports of assembled goods. In general, the duty under this heading is assessed only on the value added abroad; in the case of apparel, labor constitutes much of the value added. The fabric for making the garment parts can be of either U.S. or foreign origin as long as it is cut in the United States, exported ready for assembly, and not advanced in value abroad except by assembly and incidental operations. In 1986, the United States created a “special access program” within the framework of the former TSUS item 807.00 (commonly known as 807A), providing virtually unlimited market access for apparel assembled in the region from “fabric wholly formed and cut in the United States.” Rather

¹ Prepared by Ralph Watkins, Office of Industries.

² Textiles and apparel subject to textile agreements (i.e., articles covered by the former Multifiber Arrangement as in effect on Aug. 6, 1983) are excluded by law from duty-free treatment under CBERA; they include articles of cotton, wool, and manmade fibers.

Table I-1**Textiles and apparel: U.S. general imports from CBERA countries, by principal sources, 1997-2002**

Country	1997	1998	1999	2000	2001	2002	2002
	————— Million square meters equivalent —————						<i>Million dollars</i>
Honduras	735.2	808.5	958.3	1,045.2	1,032.3	1,098.8	2,443.6
El Salvador	460.1	524.0	640.9	757.2	767.8	816.8	1,709.4
Dominican Republic	863.3	886.4	900.3	858.9	772.8	743.3	2,173.3
Guatemala	252.5	301.7	333.0	389.7	425.8	451.9	1,669.7
Costa Rica	317.4	327.2	370.0	373.4	367.1	377.1	729.8
Nicaragua	47.8	56.6	69.4	87.5	97.7	120.4	433.1
Haiti	78.2	113.4	127.4	125.0	109.1	109.3	216.7
Jamaica	194.4	171.3	148.8	126.3	102.6	85.2	124.6
Other	29.8	26.7	22.6	24.8	28.3	27.1	38.8
Total	2,978.7	3,215.8	3,570.6	3,788.0	3,703.6	3,829.8	9,539.0

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Table I-2**Textiles and apparel: U.S. general imports from CBERA countries entered duty-free under the United States-Caribbean Basin Trade Partnership Act (CBTPA), at reduced duties under HTS heading 9802.00.80, and at normal trade relations (NTR) duty rates, by principal sources, 2002¹**

Country	Duty-free under the CBTPA			Under HTS heading 9802.00.80	At NTR duty rates	Grand total
	U.S. fabrics	Regional knit fabrics	Total ²			
	————— Million dollars —————					
Costa Rica	466.8	3.4	473.1	205.4	51.3	729.8
Dominican Republic	1,710.7	38.9	1,761.6	272.7	139.0	2,173.3
El Salvador	901.5	136.0	1,052.7	368.9	287.8	1,709.4
Guatemala	432.9	111.5	551.6	261.5	856.6	1,669.7
Haiti	157.7	2.2	160.0	30.7	26.1	216.7
Honduras	1,546.8	225.1	1,773.6	310.3	359.7	2,443.6
Jamaica	109.9	0	109.9	5.5	9.2	124.6
Nicaragua	127.6	.1	127.7	11.2	294.1	433.1
Other	20.7	0	20.7	8.2	9.8	38.8
Total	5,474.6	517.2	6,030.9	1,474.4	2,033.6	9,539.0

¹ Under heading 9802.00.80 of the Harmonized Tariff Schedule of the United States (HTS), U.S. importers receive a partial duty exemption for articles assembled abroad in whole or in part of U.S. components. In general, the duty is assessed only on the value added abroad (mainly the cost of sewing the garment parts together). The fabric for making the garment parts can be of either U.S. or foreign origin as long as the fabric is cut to shape in the United States, exported ready for assembly, and not advanced in value abroad except by assembly and incidental operations.

² Also includes imports of apparel made in CBERA countries from yarns or fabrics that are not produced in the United States in commercial quantities.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

than being charged against regular quotas, 807A imports enter under preferential quotas known as “guaranteed access levels” (GALs).³

United States-Caribbean Basin Trade Partnership Act (CBTPA)

On May 18, 2000, the President signed into law the Trade and Development Act of 2000. Title II of the Act (the CBTPA) extended preferential treatment to certain apparel made in CBERA countries,⁴ effective on October 1, 2000.⁵ The CBTPA granted unlimited duty-free treatment to apparel made in CBERA countries from fabrics formed in the United States from U.S. yarns, whether the fabrics were cut in the United States or in eligible CBERA countries.⁶ It also granted duty-free treatment for limited quantities of apparel made from “regional knit fabrics” formed in CBERA countries from U.S. yarns. For the 1-year period that began on October 1, 2000, duty-free benefits for apparel made from regional knit fabrics were capped at 4.2 million dozen outerwear T-shirts and 250 million SMEs of other knit apparel; both caps were to be increased by 16 percent in each of the three succeeding 1-year periods.

On August 6, 2002, the President signed the Trade Act of 2002, which in section 3107(a) amended the CBTPA apparel provisions, including greatly expanded “caps” on knit apparel made from regional fabrics that are eligible for duty-free treatment (table I-3). The T-shirt cap was increased to 4.9 million dozen for the 1-year period that began on October 1, 2001, increasing in the three succeeding 1-year periods to 9 million, 10 million, and 12 million dozen, respectively, and remaining at that level through September 2008. The cap on other knit apparel was expanded to 500 million SMEs for the 1-year period beginning on October 1, 2002, rising in the two succeeding 1-year periods to 850 million and 970 million SMEs, and remaining unchanged thereafter.⁷ The Trade Act of 2002 also clarified that trade preferences are to be granted to knit-to-shape apparel made in CBERA countries⁸ and added

³ GALs are in place for Costa Rica, Dominican Republic, El Salvador, Guatemala, Honduras, and Jamaica.

⁴ The trade benefits are available to 24 beneficiary countries that meet certain customs-related requirements. As of May 1, 2003, 14 countries had met the requirements and, thus, are eligible for the trade benefits: Barbados, Belize, Costa Rica, Dominican Republic, El Salvador, Guatemala, Guyana, Haiti, Honduras, Jamaica, Nicaragua, Panama, Saint Lucia, and Trinidad and Tobago.

⁵ The trade benefits will end on the earlier of Sept. 8, 2008, or the date on which the Free-Trade Area of the Americas or a similar free-trade agreement between the United States and CBERA countries enters into force.

⁶ If the U.S. fabric was cut in CBERA countries, the garments must be sewn with U.S. thread in order to qualify for CBTPA preferences.

⁷ In 2002, the CBERA countries filled all the T-shirt cap and 51 percent of the cap on other knit apparel.

⁸ The interim regulations issued by the U.S. Customs Service to implement the CBTPA trade provisions stated that knit-to-shape apparel was not eligible for trade benefits because it technically does not go through the fabric stage (the garments are knitted directly from yarns). See U.S. House of Representatives, *Andean Trade Promotion and Drug Eradication Act*, 107th Cong., 1st sess., Report 107-290, Nov. 14, 2001, p. 18.

Table I-3

Key apparel provisions in the Caribbean Basin Trade Partnership Act (CBTPA), as amended by the Trade Act of 2002

Textile/Apparel Articles Eligible to Enter Duty Free and Quota Free¹	Criteria
Apparel assembled in one or more CBTPA countries from fabrics wholly formed and cut in the United States	*From U.S. yarn only *Requires U.S. thread if fabric is cut in region *Knit and woven fabrics must be dyed, printed, and finished in the United States
Apparel cut and assembled in CBTPA countries from fabrics wholly made in the United States	*From U.S. yarn only *Sewn together with U.S. thread
Apparel assembled from components knit-to-shape in the United States	*From U.S. yarn only
Apparel assembled from regional fabric	*From U.S. yarn only *Subject to a cap
Apparel assembled from components knit-to-shape in the region	*From U.S. yarn only *Subject to cap *Socks excluded
Size of regional cap	*Outerwear T-shirts = 4.9 million dozen beginning on October 1, 2001; 9 million dozen (2002-03); 10 million dozen (2003-04); 12 million dozen in each succeeding 1-year period through Sept. 30, 2008. *Other knit apparel = 500 million SMEs (2002-03); 850 million SMEs (2003-04); 970 million SMEs in each succeeding 1-year through Sept. 30, 2008.
Certain brassieres cut and sewn or otherwise assembled in the United States or one or more CBTPA countries or both	*Total costs of U.S. fabric components in previous 1-year period must be at least 75 percent of the aggregate declared customs value of the fabric (exclusive of all findings and trimmings) contained in all brassieres entered in that period.
Apparel assembled in CBTPA countries from fibers, yarns, or fabrics deemed to be in "short supply" in the United States, as identified in annex 401 of NAFTA, at the date of implementation of the CBTPA. Preferential treatment for additional yarns and fabrics that have been deemed in "short supply" after the President has determined that certain yarns and fabrics cannot be supplied by the domestic industry in commercial quantities in a timely manner.	*Apparel inputs in "short supply" include fine-count cotton fabrics for nightwear and certain underwear; linen; silk; cotton velveteen and fine-wale corduroy fabrics; certain hand-woven Harris Tweed wool fabrics; certain woven wool fabrics made with fine animal hair; certain lightweight, high-thread count polyester-cotton woven fabrics; and certain lightweight, high-thread count woven fabrics for use in men's and boys' shirts. *Interested parties may request short supply designation for certain yarns and fabrics. The President makes his decision after receiving advice from the Committee for the Implementation Agreements and the U.S. International Trade Commission and after consulting with the House Ways and Means committee and the Senate Finance Committee.
Certified handloomed, handmade, and folklore articles.	*Originating in CBTPA countries
Textile luggage assembled in CBTPA countries from U.S. fabrics	*Must be of U.S. yarn
Duration	*Ends on the earlier of September 30, 2008 or when FTAA enters into force

¹ Applies to textile and apparel articles that are ineligible for duty-free treatment under the 1983 CBERA (articles of cotton, wool, and manmade fibers).

new rules to ensure and give effect to Congressional intent that authorizes trade preferences for apparel subject to “hybrid cutting,” in which the fabric is cut in both the United States and CBERA countries.

A key change made to the CBTPA by the Trade Act of 2002 was the new requirement that the dyeing and finishing of U.S. knit and woven fabrics used in apparel from CBERA countries must be performed in the United States in order to qualify for CBTPA duty-free treatment, effective for apparel entered into the customs territory on or after September 1, 2002.⁹ As originally enacted, the CBTPA granted preferences to apparel made in CBERA countries from “fabrics wholly formed in the United States” of U.S. yarns, but it did not define such fabrics, raising the question of whether the fabrics had to be dyed and finished in the United States or whether they could also be dyed and finished in CBERA countries. In the absence of a specific statutory directive, the U.S. Customs Service had granted preferential treatment to qualifying apparel made in the region from U.S.-formed fabrics, regardless of whether the fabrics were dyed and finished in the United States or in CBERA countries.

The U.S. textile industry had expressed concern that the interim regulations issued by the U.S. Customs Service to implement the CBTPA trade provisions effectively granted preferential treatment to apparel assembled in CBERA countries from fabrics made in the United States, but dyed and finished in CBERA countries. The industry asserted that the CBTPA preferences are for apparel assembly only and that the CBTPA did not “state or imply that the beneficiary countries will be permitted to engage in textile manufacturing or finishing operations,” other than for a limited exception for fabric knitted in CBERA countries. The CBERA countries have expressed concern that the new dyeing and finishing requirement would limit the development of their textile and apparel manufacturing capabilities and their ability to respond quickly to changing fashions and retailer demands. Companies interviewed by Commission staff stated that the dyeing and finishing provision would limit the efficiency and flexibility of their sourcing in the region.

United States-Central America Free-Trade Agreement (CAFTA)

On October 1, 2002, the USTR notified the Congress of the President’s intent to enter into trade negotiations with the five members of the Central American Economic Integration System (Costa Rica, El Salvador, Guatemala, Honduras, and Nicaragua) on the proposed CAFTA. The CAFTA will build on the CBERA and lend momentum to concluding the Free-Trade Area of the Americas negotiations by January 2005.¹⁰

U.S. apparel companies and retailers interviewed by Commission staff stated that the likely impact of quota elimination in 2005 on apparel sourcing from CBERA countries will largely depend on the outcome of the CAFTA negotiations, particularly regarding whether the

⁹ Carlos Moore, Executive Vice President, American Textile Manufacturers Institute, letter to the U.S. Customs Service, dated Dec. 4, 2000.

¹⁰ Office of the United States Trade Representative, “Trade Policy Staff Committee; Request for Public Comment on Review of Employment Impact of Proposed United States-Central America Free Trade Agreement,” *Federal Register* (68 F.R. 13358), Mar. 19, 2003, p. 13358.

agreement will extend preferential treatment to apparel made in CBERA countries from regional or third-country (e.g., Mexican or Asian) fabrics. Without such a provision, the firms stated that many firms currently sourcing apparel from CBERA countries will shift to sourcing the garments in Asia where there is little use of U.S. fabrics in apparel production. Such a shift in output to Asia likely will hurt the U.S. textile mill industry because the CBERA countries as a group are its largest export market for textiles, either as cut garment parts, yarns, or fabrics.

Industry officials in Central America stated that the proposed CAFTA should provide parity with NAFTA or benefits comparable to those recently implemented for the Andean countries.¹¹ The Government of Guatemala asserted that the outcome of the CAFTA negotiations will directly impact the competitiveness of the country's textile and apparel sector.¹² The Government called for enhanced competitiveness for the region through expanded rules of origin, specifically the use of inputs from other CBERA countries, Mexico, and Canada; provisions permitting dyeing and finishing of fabrics in the region without loss of duty-free entry into the United States; the inclusion of apparel made from woven fabric as well as apparel made from knit fabric; and an integrated customs compliance procedure and security program, similar to the one for goods from Asia and Europe. It argues that the CAFTA should include expanded access for textiles and apparel so that the region can attain the economies of scale that will assure an ongoing competitive advantage to the textile and apparel sector.

U.S. Trade

U.S. apparel imports from CBERA countries rose by 29 percent during 1997-2002, to 3.7 billion SMEs, compared with a 52-percent gain in total U.S. apparel imports, to 17.3 billion SMEs (table I-4). As a result, the share of total U.S. apparel imports accounted for by CBERA countries declined from 25 percent in 1997 to 22 percent in 2002. The decline in CBERA market share largely reflected increased competition from Asian countries whose currencies depreciated significantly in the aftermath of the Asian financial crisis of 1997-98, effectively reducing the dollar prices of their goods in the U.S. market. Moreover, the expected benefits of the CBTPA in the first 2 years of the program were tempered by weak U.S. economic activity and also by "unresolved implementation and technical issues" associated with the language of the legislation.¹³ Rather than spurring new trade flows, the CBTPA appeared to primarily cause a shift in trade from the traditional production-sharing provisions to the CBTPA duty-free provisions, generating significant duty savings for U.S. importers. In 2002, 79 percent of CBERA apparel shipments by value entered under the duty-free provisions, although the share varied widely by country, ranging from 32 percent for Nicaragua to 85 percent for Honduras.

¹¹ For information on the new Andean trade legislation, see the "overview" in appendix J of this report (Andean Countries).

¹² Government of Guatemala, Executive Office of Textiles and Apparel Quotas, written submission to the Commission, Feb. 5, 2003.

¹³ Office of the United States Trade Representative, *Fourth Report to Congress on the Operation of the Caribbean Basin Economic Recovery Act*, Dec. 31, 2001, p. 58.

U.S. apparel imports from CBERA countries are concentrated in garments for which imports from major Asian suppliers are highly constrained by quotas (table I-4). The CBERA region mostly supplies high-volume commodity garments that have reasonably predictable consumer demand, such as basic tops, pants, underwear, and nightwear. The production of these basic goods involves large and standardized runs, low-skilled operations, and few styling changes, which together help offset the higher cost of labor in the region vis-a-vis Asia.

Competitive Conditions

The CBERA countries rely heavily on the United States as a market for their apparel exports, where they benefit from trade preferences, few restrictive quotas, and proximity. The countries also rely on the United States for fabrics and related inputs used in apparel export production, because U.S. trade preferences are contingent on the use of U.S. fabrics, although there is limited yarn and fabric production in the region. U.S. apparel producers greatly expanded their assembly operations in the region following implementation of the 807A program in 1986 to reduce their overall cost structure and improve their competitiveness in the U.S. market vis-a-vis low-cost Asian suppliers. The proximity of the region to suppliers and markets in the United States enabled the U.S. firms to maintain greater management control over production, adjust orders in response to changes in market demand, and obtain quicker turnaround and lower shipping costs than those firms importing from Asia.¹⁴

According to firms interviewed by Commission staff, CBERA factories generally are set up specifically to produce basic garments in long runs, rather than smaller and more flexible runs that are typical for making fashion apparel. To make fashion goods in the region would require a higher level of labor and managerial skills than currently exists in most factories and a re-design of production lines to accommodate the shorter, flexible runs.¹⁵ Moreover, while CBERA firms recognize the growing importance of offering “full-package” services to U.S. apparel companies and retailers, few currently are able to offer it.¹⁶

U.S. apparel companies and retailers stated that the benefit of CBTPA preferences to CBERA countries is being offset by rising production costs in these countries. To qualify for the CBTPA preferences, firms must use fabrics that are formed in the United States of U.S. yarns, which are more expensive than Asian fabrics. The firms claimed that the U.S. content rule also limits their efficiency and flexibility in sourcing and adds another layer of administrative burden and cost to the product. In addition, CBERA countries generally have higher labor costs and lower labor productivity than most major Asian countries. A major

¹⁴ Importers reported that shipping times from Central America to the United States range from 2 to 7 days, depending on the country from which they ship and the port of entry, compared with 12 to 14 days from China.

¹⁵ Representative of major U.S. apparel supplier, interview by USITC staff, Mar. 12, 2003.

¹⁶ Full package programs in the CBERA region generally refer to services ranging from procurement of materials to cutting and sewing, and to finishing and packaging of the final products. In the Far East, an established infrastructure exists to provide full package imports to U.S. buyers, including product development, fabric sourcing and cutting, garment sewing, packaging, quality control, trade financing, and logistics arrangements.

U.S. retailer stated that labor productivity in CBERA countries is about half that in China. According to the U.S. firms, the higher labor costs of CBERA countries are a major reason why U.S. apparel imports from the region consist primarily of mass-produced basic garments with low labor content.

Table I-4

Apparel: U.S. imports from Caribbean Basin Trade Partnership Act (CBTPA)-eligible countries, and Mexico, China, and the World, by selected quota categories,¹ 2002

Quota category (country)	338	339	347	348	352	638	647	649	Other*	Total
Quantity (million square meters equivalent)										
Honduras	168	93	34	36	341	123	12	17	266	1,090
Dominican Republic	19	18	88	38	229	8	35	14	281	730
El Salvador	82	43	16	36	326	44	13	3	214	777
Guatemala	31	84	29	42	8	6	10	0	205	415
Costa Rica	2	2	27	13	160	2	9	9	138	362
Nicaragua	5	11	31	21	2	7	4	4	77	120
Haiti	21	3	4	7	26	12	2	2	32	109
Jamaica	2	0	0	0	64	0	1	0	17	84
Other CBTPA	0	2	0	0	0	0	0	1	22	27
Total CBTPA	330	256	229	194	1,156	201	87	50	1,211	3,714
Mexico	154	125	258	267	57	167	98	16	1,015	2,157
China	8	9	16	25	14	7	29	31	1,426	1,565
World	797	794	914	1,176	1,823	617	500	151	10,485	17,256
Value (million dollars)										
Honduras	554	379	123	91	394	170	52	193	484	2,440
Dominican Republic	107	91	549	180	276	17	208	164	570	2,162
El Salvador	330	181	55	105	366	82	38	36	482	1,675
Guatemala	207	501	186	165	11	15	34	0	540	1,659
Costa Rica	6	4	106	49	172	5	27	83	273	725
Nicaragua	30	70	118	72	3	5	18	30	87	433
Haiti	65	13	12	12	36	13	7	7	52	217
Jamaica	8	0	0	0	88	0	3	0	25	124
Other CBTPA	0	7	0	0	0	0	0	3	25	37
Total CBTPA	1,308	1,246	1,150	674	1,345	307	387	516	2,539	9,472
Mexico	693	593	1,519	1,403	94	325	369	180	2,248	7,424
China	113	93	115	200	48	31	149	219	4,626	5,594
World	4,775	5,138	4,764	5,641	2,386	1,402	1,680	1,418	29,761	56,965
Average unit value (per square meter equivalent)										
Honduras	\$3.30	\$4.07	\$3.63	\$2.51	\$1.16	\$1.38	\$4.19	\$11.61	\$1.82	\$2.24
Dominican Republic	5.68	5.07	6.21	4.70	1.21	2.03	5.86	11.47	2.03	2.96
El Salvador	4.03	4.17	3.31	2.93	1.12	1.88	2.87	10.81	2.25	2.16
Guatemala	6.68	5.94	6.48	3.95	1.32	2.57	3.33	0	2.63	4.00
Costa Rica	3.37	2.56	3.95	3.66	1.08	2.89	2.96	9.14	1.98	2.00
Nicaragua	5.40	6.18	3.85	3.49	1.91	0.71	4.42	7.97	1.13	3.60
Haiti	3.10	4.12	3.05	1.75	1.38	1.08	4.01	2.88	1.63	1.99
Jamaica	5.23	0	0	0	1.37	0	3.60	0	1.47	1.47
Other CBTPA	0	3.50	0	0	0	0	0	3.00	1.23	1.37
Total CBTPA	3.96	4.87	5.02	3.47	1.16	1.52	4.45	10.32	2.10	2.55
Mexico	4.49	4.73	5.89	5.26	1.64	1.94	3.78	11.15	2.21	3.44
China	13.94	10.30	7.09	7.90	3.32	4.42	5.12	7.03	3.24	3.57
World	5.99	6.47	5.21	4.80	1.31	2.72	3.36	9.39	2.84	3.30

¹ Categories 338 and 339 cover knit cotton tops for men (including boys) and women (including girls), respectively; categories 347 and 348, cotton pants and shorts for men and women; category 352, cotton underwear; category 638, knit manmade-fiber tops for men; category 647, manmade-fiber trousers for men; and category 649, brassieres and other body-supporting garments.

Source: Compiled from official statistics of the U.S. Department of Commerce, Office of Textiles and Apparel.

Costa Rica¹

Overview

The textile and apparel sector in Costa Rica is the country's second-largest source of export earnings, accounting for 14 percent of its total exports in 2001. The sector exports consist almost entirely of apparel destined for the United States. Costa Rica's share of U.S. apparel imports has declined since the mid-1990s, largely because of rising labor costs, which are now the highest in the CBERA region, and which spurred investors to move production to lower cost countries.

A number of factors have contributed to the strength of Costa Rica's apparel industry and continue to make Costa Rica an attractive destination for foreign direct investment (FDI). These factors include political and economic stability, an educated and skilled workforce, a climate conducive to investment, relatively good infrastructure, proximity and preferential access to the U.S. market, and a strong institutional structure for investment promotion. In an effort to diversify away from apparel and primary products, the Government and CINDE (the Costa Rican Investment Board), a private, nonprofit, investment promotion agency, have been targeting investment in the electronics and other more skilled sectors.

Industry Profile

Industry structure and performance

The textile and apparel sector in Costa Rica consists almost exclusively of apparel assembly for the U.S. market. The apparel industry developed in the early 1980s in response to low wages, a favorable climate for FDI, and U.S. trade preferences (see "overview" at the beginning of this appendix for information on the trade preferences).² The apparel firms produce primarily lower priced store brands for mass merchandisers and manufacturers and inexpensive low-quality products for large-volume discount stores.³ Only 10 percent of Costa Rica's apparel production supplies the entire domestic market.⁴ Apparel exports are primarily made from imported raw materials because of tightly defined importer's specifications and because of insufficient yarn and fabric production capacity in Costa Rica.⁵ Textile production is limited and sold primarily to the local market.

¹ Prepared by Joanne E. Guth, Office of Economics.

² United Nations Conference on Trade and Development (UNCTAD), *The Competitiveness Challenge: Transnational Corporations and Industrial Restructuring in Developing Countries* (New York and Geneva), 2000, pp. 95-98.

³ UNCTAD, *The Competitiveness Challenge*, p. 91.

⁴ "CBI Countries: Weathering the Storms," *Apparel Industry Magazine*, Sept. 1999.

⁵ U.S. Department of State telegram 1218, "Costa Rica: World Textile Trade Without Quotas," prepared by U.S. Embassy, San Jose, May 3, 2002.

The sector has declined in size during the past decade, largely reflecting the migration of manufacturers to other Central American countries with lower labor costs and competition in the U.S. market with Mexico, which benefits from preferences under NAFTA.⁶ According to data of the United Nations and the International Monetary Fund, apparel production in Costa Rica has declined since the mid-1990s (table I-5, found at the end of this country profile).⁷ In May 2002, employment in the textile and apparel sector was estimated at 45,000 workers, or about 5 percent of the formal labor force.⁸ In April 2003, there were about 98 companies active in the apparel export sector, employing less than 30,000 workers.⁹ Most of these companies are U.S. owned and operated.¹⁰

Factors of production

Almost all of the inputs used in the export-based apparel assembly operations in Costa Rica are imported.¹¹ According to a United Nations survey, almost all of the inputs of the foreign-owned companies are supplied by their own multinational network, whereas national firms rely on local sourcing somewhat more (30 percent of inputs).¹² Local sourcing includes mostly purchases of items such as packaging materials, thread, or buttons.

Costa Rica's strong stock of human capital has been credited with helping to compensate apparel companies for their high labor costs as well as with attracting more high-technology FDI than any other country in the region.¹³ Costa Rica has a highly educated and skilled labor force, a literacy rate of 96 percent, and high productivity in the apparel industry.¹⁴ Another factor supporting apparel workers' relatively high productivity is the fact that Costa Rica's apparel industry is more mature than in most of the other countries in the region.¹⁵ For example, although competition from Mexico under NAFTA adversely affected Costa Rica's apparel industry, Costa Rican companies have observed that the rates of apparel rejects and labor turnover are much lower in Costa Rica than in Mexico.¹⁶

⁶ See, for example, UNCTAD, *The Competitiveness Challenge*, pp. 103-4, and "President Repeats Call for Dialogue," *Tico Times*, May 19, 2000.

⁷ Table I-5 shows UN data. The IMF data are similar; industrial production (index 1991=100) shows production in the textile, clothing, and leather sector declining from 103.7 in 1998 to an estimated 90.1 in 2000. See IMF, "Costa Rica: Selected Issues," IMF Country Report No. 02/89, Apr. 2002, p. 35.

⁸ U.S. Department of State telegram 1218, "Costa Rica: World Textile Trade Without Quotas."

⁹ Representative of U.S. Embassy, San Jose, e-mail communication to USITC staff, Apr. 28, 2003.

¹⁰ Miguel Schyfter, President, Consejo Cuotas Textiles, written submission to the Commission, Oct. 17, 2002.

¹¹ U.S. Department of State telegram 1218, "Costa Rica: World Textile Trade Without Quotas."

¹² UNCTAD, *The Competitiveness Challenge*, p. 107.

¹³ Tatiana Remy, Executive Director, Consejo de Cuotas Textiles, interview by USITC staff, Mar. 15, 2000, and David de Ferranti et al., *From Natural Resources to the Knowledge Economy*, World Bank Latin American and Caribbean Studies, Viewpoints (The World Bank, Washington, DC), 2002, p. 92.

¹⁴ World Bank, "Costa Rica at a Glance," Sept. 12, 2002, and Tatiana Remy, interview by USITC staff.

¹⁵ Lisa Rabon, "CBI is Strong in Sewing but Needs Textile Investment," *Bobbin*, Nov. 2000.

¹⁶ Jordan K. Speer, "CBI Spashdown," *Bobbin*, Nov. 2000.

The wage levels in Costa Rica's apparel industry are the highest in Caribbean. Wages rose considerably in the first half of the 1990s and are now high in relation to other major garment exporters. The average hourly compensation (including social benefits) in Costa Rica's apparel industry-- in 2002 was \$2.70, compared with \$1.65 or less in other Caribbean Basin countries, \$2.45 in Mexico, and less than \$0.05 in many Asian countries.¹⁷ In 1999, labor costs accounted for about 30 percent of the total cost of apparel production in Costa Rica.¹⁸

In the early 1990s, as rising wage rates were affecting the competitiveness of Costa Rican apparel producers, CINDE began to target FDI in new higher value-added sectors that would better match the country's relatively high education levels. The Costa Rican Government supported the new investment by establishing additional educational programs focused on technical skills that would be useful to high-tech employers and by promoting English proficiency, which all continue today.¹⁹ The high-tech firms already established in Costa Rica reported that there is a sufficient supply of qualified, skilled personnel at costs far lower than those in the United States and often below increasingly competitive countries in Asia and other parts of the world.²⁰

Investment

FDI in Costa Rica's industrial sector (table I-5) primarily reflected investment in electronics (including by Intel) and medical devices.²¹ Although FDI in the textile and apparel sector is not officially collected, one estimate placed FDI in the sector for 1999 at \$28.9 million,²² or 4.6 percent of total FDI. Trade sources believe that there is little prospect of textile investment and that any apparel investment is being made by existing companies, rather than new companies seeking to establish operations in Costa Rica.²³ The United States is the largest foreign investor in Costa Rica's apparel industry; Asian investors reportedly have

¹⁷ Jassin-O'Rourke Group, New York, NY, Nov. 2002.

¹⁸ Michael Mortimore and Ronney Zamora, "The International Competitiveness of the Costa Rican Clothing Industry," *Serie Desarrollo Productivo*, vol. 46, Feb. 1999, found at <http://www.eclac.org>, retrieved Dec. 19, 2002, p. 68.

¹⁹ See, for example, Economist Intelligence Unit, "Costa Rica: Tech Education Has Become a High Priority," Aug. 16, 2001, found at <http://www.ebusinessforum.com>, retrieved Dec. 18, 2002. According to the article, Costa Rica "has become a leader among developing countries in integrating computers into primary-school curricula, thereby fostering technological competence among its young people."

²⁰ David de Ferranti et al., p. 101, and U.S. Department of Commerce, "Costa Rica Investor Attitude Study," Nov. 1998, p. 5, found at <http://www.usembassy.or.cr/investstudy.html>, retrieved Oct. 30, 2002.

²¹ ECLAC, *Foreign Investment in Latin America and the Caribbean*, 2001, pp. 33 and 35. The decline in FDI inflows in 2000 reflected the winding down of Intel's investment.

²² U.S. and Foreign Commercial Service, *Costa Rica Country Commercial Guide, FY 2002*, found at <http://www.stat-usa.gov>, retrieved Nov. 15, 2002, app. D.

²³ Lisa Rabon, "CBI is Strong in Sewing," and representative of the U.S. Embassy, San Jose, telephone interview by USITC staff, Mar. 14, 2003.

moved to lower cost Central American countries.²⁴ The 10 largest apparel companies in Costa Rica are U.S.-based firms, and account for about two-thirds of its total apparel exports.

Costa Rica offers one of the most open and friendly investment climates in the CBERA region, including a stable democratic regime and economic environment with moderate inflation; an educated and skilled workforce; relatively high living standards; proximity to the United States and a central location within the hemisphere; a relatively modern infrastructure; no legal restrictions on capital or profit repatriation and no investment-screening mechanisms; government policies that encourage FDI, including the tax- and duty-free incentives offered by industrial free-trade zones; and strong, proactive FDI promotion policies undertaken jointly by the private and public sectors.²⁵

Although these government policies attracted FDI in apparel in the past, the Government's focus today has shifted to other sectors, particularly high technology. According to an official of the American Chamber of Commerce in Costa Rica, the Costa Rican Government has "deemphasized the apparel industry. At this time I think they see the apparel industry as an industry that is not permanent and is in search of the lowest wages and they feel that it's not necessarily in their best interest" to focus on the apparel industry.²⁶ In the early 1990s, the CINDE, with the support of the government, realized Costa Rica was losing its competitiveness in certain unskilled labor-intensive industries and began to target its investment promotion efforts on more skilled, higher value-added, labor-intensive sectors such as electronics and telecommunications.²⁷ According to UNCTAD, "(t)he country's investment promotion agency made careful efforts to channel FDI into electronics in order to restructure the country's comparative advantage away from garments and primary products. The results of Costa Rica's targeting have spread beyond the initial areas (electronics and medical devices) to the services sector. The investment promotion agency has thus put Costa Rica on a more dynamic development trajectory, through its active role in shaping the country's development policy." According to a recent analysis, Costa Rica is one of only a few countries in Latin America and the Caribbean that has shown a significant change in its trade structure over the past two decades.²⁸ Government policies reportedly have played a key role in building a high level of human capital, creating a favorable climate for investment, fostering an open international trade regime, and attracting foreign investment in more skill- and technology-intensive products. According to UNCTAD, "there is no doubt that an active Government has been a central factor in Costa Rica's success. Efforts to upgrade the level of education, improve infrastructure, provide a friendly

²⁴ Ibid., and Tatiana Remy, interview by USITC staff, Mar. 15, 2000.

²⁵ See, for example, U.S. and Foreign Commercial Service, *Costa Rica Country Commercial Guide, FY 2002*, chs. 1 and 7; UNCTAD, *The Competitiveness Challenge*, pp. 96-97; Economist Intelligence Unit, "Investment Regulations," EIU Viewswire, Aug. 15, 2001; and David de Ferranti et al., *From Natural Resources to the Knowledge Economy*, pp. 8 and 75.

²⁶ Michael Seth Borg, President, Confecciones BorKar, and member, Board of Chambers, American Chamber of Commerce in Costa Rica, in testimony presented at the hearing of the U.S. International Trade Commission on *U.S.-Central America Free Trade Agreement: Advice Concerning Probable Economic Effect* (inv. Nos. TA-131-22 and TA-2104-2), transcript of hearing, Oct. 8, 2002, pp. 5 and 19.

²⁷ David de Ferranti et al., *From Natural Resources to the Knowledge Economy*, pp. 75 and 97-99.

²⁸ Ibid., pp. 20-29.

investment environment, and encourage the widespread use of English are combined with deliberate FDI targeting strategies.”²⁹

Domestic policies

In response to the debt crisis of the early 1980s and problems associated with high dependence on traditional agricultural exports, in the mid-1980s the Costa Rican Government implemented policies aimed at structural adjustment, trade and investment liberalization, and export promotion, including an emphasis on new, nontraditional production. The Government reduced tariffs, liberalized capital movements, developed institutions to promote FDI in export-oriented activities, and adopted export-promotion mechanisms, including free-trade zones (FTZs). In the apparel industry, implementation of these government policies coincided with international market factors that led U.S. apparel firms to seek offshore apparel assembly under the production sharing mechanism. The apparel industry in Costa Rica lost local market share when it reduced tariffs, but it benefitted from export expansion and became the first major manufacturing industry to integrate with the global economy, in particular with the United States.³⁰

Costa Rica currently has two export incentive systems. FTZs provide 100-percent exemption from duties on inputs used to make exported products and on the machinery and equipment used in this process. FTZs also permit exemptions on virtually all taxes, including an 8-year exemption on income taxes followed by a reduced tax rate after this period. FTZs rent facilities to the companies and reduce transaction costs for companies by simplifying investment, trade, and customs procedures. The second program, the Regime of Active Finishing, provides temporary admission and suspension of duty collection for material and equipment used to produce goods that are subsequently exported. However, there are no income tax benefits associated with this program.³¹ Today, the majority of apparel companies operate under the Regime of Active Finishing outside of FTZs in the countryside and have access to labor that would not otherwise be available. Also, they operate in their own facilities, which may be larger and better installations than are available in the FTZs.³² Costa Rica has long been considered to have the best infrastructure in telecommunications, energy, health care, and education among the Central American countries. However, lack of investment in recent years has led to inadequate roads, ports, airports, and bridges. Also, poor Internet service and a poor cellular network remain major concerns. In 1998, a law was enacted to permit concessions to build, finance and manage large public works projects. Since then, concessions have been granted for various projects, including concessions to improve roads, the airport, and the cellphone network; however, progress has been slow. Furthermore, the Costa Rican Government has not yet dismantled state-run monopolies in

²⁹ UNCTAD, *World Investment Report 2002: Transnational Corporations and Export Competitiveness*, 2002, p. 168.

³⁰ See for example, UNCTAD, *The Competitiveness Challenge*, pp. 95-98; and Michael Mortimore and Ronney Zamora, “The International Competitiveness of the Costa Rican Clothing Industry,” pp. 65-67.

³¹ U.S. and Foreign Commercial Service, *Costa Rica Country Commercial Guide, FY 2002*, pp. 46-47.

³² Representative of the U.S. Embassy, San Jose, e-mail communication to USITC staff, Apr. 28, 2003.

the telecommunications and energy sectors, which some observers believe could be a disincentive to invest.³³

Trade policies

U.S. trade preferences have played an important role in the development of the Costa Rican apparel industry. Slightly more than 90 percent of the total value of U.S. apparel imports from Costa Rica in 2002 entered under either the reduced-duty provisions of HTS heading 9802.00.80 or the duty-free provisions of the CBTPA (see table I-1, found at the beginning of this appendix).

Costa Rica has a generally open international trade regime. Between 1995 and 2000, its average most-favored-nation (MFN) tariff decreased from almost 12 percent to 7 percent.³⁴ Costa Rica's average MFN tariff is 7.6 percent for textiles and 13.9 percent for apparel, lower by far than the average for Latin America as well as the average for high and middle-income developing economies.³⁵ Costa Rica's use of nontariff barriers has been limited.³⁶

Costa Rica's trade policies remain aimed at integrating the country into the international market through unilateral trade liberalization and bilateral trade agreements to improve market access.³⁷ Costa Rica's newest bilateral free-trade agreement with Canada, which entered into effect on Nov. 1, 2002, is scheduled to eliminate tariffs on textiles and apparel over 7 years.³⁸ Costa Rica also has trade agreements with Mexico, Chile, and the Dominican Republic. Similar agreements are being negotiated with Panama and Trinidad and Tobago. Costa Rica is also a member of the Central American Common Market.³⁹ Costa Rica trades small amounts of textiles and apparel with countries other than the United States, including other Central American countries where such trade is duty free.⁴⁰

Foreign Trade

Costa Rica's trade surplus in textiles and apparel totaled \$238 million in 2001, down from a 5-year high of \$267 million in 1999, but up from \$192 million in 1997. The fluctuations

³³ U.S. and Foreign Commercial Service, *Costa Rica Country Commercial Guide, FY 2002*, pp. 2-7.

³⁴ WTO, *Trade Policy Review, Costa Rica, 2001: The Secretariat's Report-Summary*, found at http://www.wto.org/english/tratop_e/tp_r_etp162_.htm, retrieved Oct. 16, 2002.

³⁵ United Nations Conference on Trade and Development (UNCTAD), *Trade and Development Report 2002*, pp. 130-131.

³⁶ WTO, *Trade Policy Review, Costa Rica, 2001: The Secretariat's Report-Summary*.

³⁷ ECLAC, *Economic Survey of Latin America and the Caribbean, 2000-2001*, p. 150.

³⁸ Department of Foreign Affairs and International Trade, Canada, "Canada-Costa Rica Free Trade Agreement," and "Backgrounder - Summary of the Canada-Costa Rica Free Trade Agreement," found at <http://www.dfait-maeci.gc.ca/tna-nac/CR-back-e.asp>, retrieved Nov. 25, 2002.

³⁹ U.S. and Foreign Commercial Service, *Costa Rica Country Commercial Guide, FY 2002*, p. 42, and Costa Rican Foreign Trade Corp. (PROCOMER), found at <http://www.procomer.com>, retrieved Feb. 3, 2003.

⁴⁰ Representative of the U.S. Embassy, San Jose, e-mail communication to USITC staff, Apr. 28, 2003.

reflected declines in both exports, which consist mostly of apparel, and imports, which comprise inputs for use in the production of apparel for export.

Costa Rica's textile and apparel sector is dependent on its trade relationship with the United States. Slightly more than 90 percent of total Costa Rican trade in textiles and apparel during 1997-2001 was with the United States. Most of this bilateral trade involved production-sharing activity with U.S. firms, which historically shipped garment parts to Costa Rica for assembly and then re-imported the finished garments under HTS 9802.00.80. Since the implementation of CBTPA in October 2000, U.S. firms have begun shipping uncut fabric to Costa Rica for cutting and assembly into finished garments eligible for preferential import treatment. Consequently, U.S. shipments of cut garment parts to Costa Rica have fallen.

Imports

Costa Rican imports of textiles and apparel decreased by 20 percent during 1997-2001 to \$601 million (table I-5). Such imports consisted almost entirely of inputs for use in the production of apparel for export to the United States. The United States was the principal supplier, accounting for 87 percent of its apparel imports and 57 percent of its textile imports in 2001. Colombia was the second-largest source of apparel imports, accounting for 4 percent of the total. Mexico (with 9 percent) and China (with 8 percent) were the other largest suppliers of textiles to Costa Rica.

Exports

Costa Rican exports of textiles and apparel declined by 11 percent during 1997-2001 to \$839 million, almost all of which consisted of apparel (table I-6). The United States was the principal market, accounting for 95 percent of Costa Rica's sector exports in 2001.

According to official U.S. trade data, U.S. imports of textiles and apparel from Costa Rica rose 18 percent by volume during 1997-2000, decreased by 2 percent in 2001, and then increased by 3 percent in 2002 to 377 million SMEs, almost all of which consisted of apparel (table I-7). The U.S. trade-weighted average duty on imports of Costa Rican apparel was 2.3 percent ad valorem in 2001, less than half the 5.8 percent trade-weighted average duty applied to such imports from all CBERA countries.

The United States applies quotas on five apparel categories from Costa Rica. Quota utilization was low in 2001 (less than 50 percent fill rates) and in 2002 (less than 23 percent fill rates). In 2000, the quota on men's and women's cotton trousers (quota categories 347/348) was binding. As a result of the CBTPA, most U.S. apparel imports from Costa Rica enter free of duty and quotas. In 2000 and 2001, 90 percent of U.S. apparel imports from Costa Rica represented apparel items that had not yet been integrated into the GATT regime, but that qualified for CBTPA preferences.

Costa Rica's share of total U.S. apparel imports by volume declined from 2.7 percent in 1997 to 2.1 percent in 2002, while its share of U.S. apparel imports from CBERA countries declined from 10.6 percent to 9.7 percent. Leading U.S. imports from Costa Rica are concentrated in garments such as underwear, hosiery, nightwear, brassieres, trousers, and

shirts (table I-7). Imports of most of these products from major suppliers are highly constrained by quotas.

Neither Canada nor the EU has import quotas on Costa Rican textiles or apparel. In 2002, Canada applied a quota on Costa Rican underwear,⁴¹ but it was removed with the implementation of the Costa Rica-Canada Free-Trade Agreement in November 2002. Costa Rica's principal sector export to Canada is intimate apparel. None of Costa Rica's top 30 exports to the EU included a textile or apparel item.⁴²

⁴¹ The fill rate was 11 percent in 2002. Department of Foreign Affairs and International Trade, Canada, found at <http://www.dfait-maeci.gc.ca/~eicb/textile/textiles-e.htm>, retrieved Jan. 30, 2003.

⁴² Ministry of Foreign Trade of Costa Rica (COMEX), statistics, found at <http://www.comex.go.cr>, retrieved Feb. 3, 2003.

Table I-5
Costa Rica: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Textiles	150	134	157	(¹)	(¹)
Apparel	481	434	455	(¹)	(¹)
Total	631	568	612	(¹)	(¹)
Number of workers:					
Textiles	7,771	7,647	5,950	(¹)	(¹)
Apparel	32,944	34,377	30,858	(¹)	(¹)
Total	40,715	42,024	36,808	(¹)	(¹)
Installed spinning capacities:					
Short-staple spindles (<i>number</i>)	14,000	14,000	14,000	14,000	14,000
Open-end rotors (<i>number</i>)	600	600	600	600	600
Installed weaving capacities:					
Shuttleless looms (<i>number</i>)	100	100	100	100	100
Shuttle looms (<i>number</i>)	1,000	1,000	1,000	1,000	1,000
Production index (1990=100):					
Textiles	72	78	71	(¹)	(¹)
Apparel	115	120	111	(¹)	(¹)
Foreign direct investment (FDI):					
Net textile and apparel share inflows (<i>million dollars</i>)	408	613	669	400	² 447
Textile and apparel share in industry sector (<i>percent</i>)	66	69	57	72	² 52
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	34.2	31.5	32.6	30.9	21.9
Apparel (<i>million dollars</i>)	911.6	879.7	870.5	871.4	816.8
Total (<i>million dollars</i>)	945.8	911.1	903.0	902.3	838.7
Imports:					
Textiles (<i>million dollars</i>)	170.4	168.1	157.4	161.0	158.1
Apparel (<i>million dollars</i>)	583.6	509.7	478.7	514.2	442.8
Total (<i>million dollars</i>)	754.0	677.8	636.1	675.2	600.9
Trade balance:					
Textiles (<i>million dollars</i>)	-136.2	-136.6	-124.8	-130.1	-136.2
Apparel (<i>million dollars</i>)	328.0	370.0	391.7	357.2	374.0
Total (<i>million dollars</i>)	191.8	233.3	266.9	227.1	237.8

¹ Not available.

² Estimate by the Commission.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from UNIDO, *International Yearbook of Industrial Statistics 2002*; FDI data from ECLAC, *Foreign Investment in Latin America and the Caribbean*, 2001, pp. 35-36; the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; and trade data are United Nations data as reported by Costa Rica's trading partners.

Table I-6
Costa Rica: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	18	17	18	16	8
European Union	2	1	1	1	(¹)
Canada	1	1	1	1	(¹)
Subtotal	21	19	20	17	9
All other:					
Guatemala	2	3	2	3	4
Colombia	1	1	(¹)	(¹)	2
Mexico	4	3	4	3	2
Other	7	6	6	8	5
Subtotal	13	13	13	14	13
Grand total	34	31	33	31	22
Apparel (SITC 84):					
Quota markets:					
United States	869	840	847	847	791
European Union	13	12	5	4	5
Canada	14	14	9	7	7
Subtotal	896	866	860	857	802
All other	16	14	10	14	15
Grand total	912	880	870	871	817
Textiles and apparel:					
Quota markets:					
United States	887	857	865	863	799
European Union	14	13	6	4	5
Canada	15	15	10	7	7
Subtotal	917	885	880	874	811
All other	29	26	23	28	28
Grand total	946	911	903	902	839
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	61	60	61	56	40
Apparel	98	98	99	98	98
Average	97	97	97	97	97

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table I-7
Textiles and apparel: U.S. general imports from Costa Rica, by specified product categories,¹
1997-2002

Cat.							
No.	Description	1997	1998	1999	2000	2001	2002
0	Textiles and apparel, total	317,441	327,187	370,030	373,371	367,131	377,066
1	Apparel	301,939	306,986	345,713	350,387	349,966	361,595
2	Textiles	15,502	20,201	24,317	22,983	17,166	15,471
30	Cotton textiles and apparel	203,432	210,573	247,233	267,357	273,676	289,291
60	Manmade-fiber textiles and apparel	111,220	113,216	119,608	102,517	91,529	86,374
201	Specialty yarn	10,712	15,455	18,991	13,855	14,025	13,767
239	Babies' apparel	17,762	26,783	23,877	26,635	23,610	23,545
332	Cotton hosiery	3,010	3,441	13,948	29,247	43,714	44,458
338	Cotton knit shirts, men/boys	8,922	6,164	5,270	4,504	4,346	1,670
339	Cotton knit shirts, women/girls	2,477	1,711	1,743	1,506	1,398	1,577
340	Cotton not knit shirts, men/boys	7,846	7,454	5,753	6,180	6,078	3,303
347	Cotton trousers, men/boys	35,923	32,167	31,354	33,965	26,560	26,944
348	Cotton trousers, women/girls	11,771	13,746	10,817	11,158	9,706	13,328
351	Cotton nightwear	2,102	1,381	7,534	10,922	12,317	14,965
352	Cotton underwear	116,089	121,442	147,788	143,186	148,168	160,209
638	Manmade knit shirts, men/boys	4,539	1,033	1,125	1,824	2,199	1,847
639	Manmade knit shirts, women/girls	2,080	1,314	1,304	818	725	1,049
640	Manmade not knit shirts, men/boys	1,603	1,643	2,137	3,247	3,792	3,621
641	Manmade-fiber not knit blouses	1,377	1,336	1,074	919	879	888
647	Manmade-fiber trousers, men/boys	3,374	2,876	2,305	2,217	5,087	9,030
648	Manmade-fiber trousers, women/girls	2,027	1,859	2,117	2,375	2,704	2,814
649	Manmade-fiber brassieres	7,705	6,191	6,164	6,895	8,985	9,054
651	Manmade-fiber nightwear	13,174	7,654	6,505	4,548	10,429	8,234
652	Manmade-fiber underwear	38,704	47,429	52,866	38,534	23,045	22,234
659	Other manmade-fiber apparel	11,630	12,354	13,053	13,381	9,193	7,420

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Dominican Republic¹

Overview

The Dominican Republic is the United States' second-largest source of apparel imports in the Western Hemisphere after Mexico, and has a large, export-oriented apparel industry and a small textile industry, which together are the country's major source of jobs and export earnings. Data for 2002 show that 125,000–150,000 workers out of a total Dominican population of 8.7 million were engaged in apparel production. As Dominican workers have become more skilled, their wages have increased to the point where Dominican labor costs are among the highest in the CBERA region. As such, the Dominican Republic has been losing apparel business to lower cost countries in the region such as Nicaragua and Honduras as well as those in Asia. In an effort to remain competitive, the Dominican apparel industry is attempting to become more of a full-service supplier, to include aspects such as design and marketing. The industry is also shifting some sewing operations to neighboring Haiti, which still has very low labor costs, with the added hope of stemming some of the illegal immigration from Haiti to the Dominican Republic. The Dominican Republic has benefited from U.S. trade programs that have encouraged U.S. apparel firms to use production-sharing operations in the country and that have extended trade preferences to qualifying apparel made there from U.S. fabrics.² The Dominican apparel industry's great reliance on the U.S. market has left the industry vulnerable to U.S. economic swings, such as the 2001 economic downturn, which caused U.S. demand for Dominican apparel to drop significantly.

Industry Profile

Industry structure and performance

Most apparel manufacturing operations in the Dominican Republic are located in approximately 50 free-zone industrial parks throughout the nation (hereafter referred to as free-trade zones (FTZs)).³ Most FTZs are owned by private companies; two are partially owned by the Dominican Government. The FTZ industries, which consisted of 490 businesses that employed more than 194,000 workers in December 2000,⁴ accounted for

¹ Prepared by Ralph Watkins, Office of Industries.

² See the "overview" at the beginning of this appendix for information on the U.S. trade programs.

³ "Free Zone Industrial Parks," Asociacion Dominicana de Zonas Francas, Inc., found at <http://www.adozona.org/ing/business/parques.asp>, retrieved Dec. 11, 2002; U.S. and Foreign Commercial Service, *Textile Machinery and Equipment*, Industry Sector Analysis, prepared by Sheila Andujar, June 23, 2001. The remaining apparel production operations in the Dominican Republic, not located in free-zone industrial parks, produce primarily for the Dominican domestic market.

⁴ "Free Zone Sector Behavior During the Year 2000," Asociacion Dominicana de Zonas Francas, Inc., found at <http://www.adozona.org/ing/business/estadisticas.asp>, retrieved Dec. 11, 2002.

80 percent (or \$4.7 billion) of total Dominican exports in 2000. Sources indicated that the number of firms in the FTZs may have grown to more than 500 with a total workforce of more than 200,000 workers.⁵ The textile and apparel sector accounted for 52 percent of the businesses in the FTZs,⁶ and apparel accounted for approximately 60 percent of the total value of production in the FTZs. In the past, the textile and apparel sector accounted for 80 percent of the FTZ companies. Currently, Dominican assembly operations have been increasingly shifting to produce products such as cigars, electronic components, medical instruments, pharmaceuticals, electrical products, food products, plastics, jewelry, luggage, metal mechanics, and handicrafts. The FTZ services sector, including telemarketing, Internet-related services, and warehousing services, is also growing, joining the long-time leading services sector in the Dominican economy--tourism.

Apparel firms operating in Dominican FTZs are focusing on the production of more elaborate apparel and the vertical integration of the apparel industry,⁷ taking advantage of a workforce that has become progressively more skilled. Certain Dominican apparel companies in the FTZs offer clients complete full-package service, not just assembly.⁸ Dominican companies are providing the design, fabric, automated cutting, embroidery, knitting, dyeing, finishing, and laundering of the product and all types of supplies, from packing boxes to labels or sewing thread. Only the largest Dominican apparel manufacturing groups, however, may be capable of offering full-package service.⁹

In recent years, the Dominican Republic reportedly has lost apparel assembly contracts requiring unskilled apparel workers to countries in the CBERA region, such as Honduras and Nicaragua, which have lower labor costs. The Dominican Republic has the second-highest labor costs among major CBERA apparel suppliers, only surpassed by Costa Rica. As a result, some Dominican apparel companies have begun shifting some apparel assembly operations to Haiti, which still has low labor costs.¹⁰ Trade sources indicate that each country in the region possesses different manufacturing strengths. Central America, especially Honduras, has specialized in knit fabrics and intimate apparel, whereas the Dominican Republic has focused on more elaborate and higher value-added garments such as pants and jackets.¹¹

The Dominican apparel assembly industry in the FTZs was expected to increase its business by 30 percent in 2001, adding another 30,000 jobs in the first year under the CBTPA. The

⁵ Ibid., See also "Dominican Republic: Economic Overview," Trade Partners UK, located at www.tradepartners.gov.uk, retrieved Dec. 4, 2002.

⁶ National Council of Export Free Zones and the Association of Free Zones of the Dominican Republic, written submission to the Commission, Jan. 22, 2003, p. 2 (hereinafter Dominican Free Zones statement).

⁷ Transcript of hearing, p. 98.

⁸ U.S. Department of State telegram 1517, "Impact on Dominican Republic of Elimination of Textile Tariffs," prepared by U.S. Embassy, Santo Domingo, Apr. 26, 2002; *Textile Machinery and Equipment*, U.S. and Foreign Commercial Service.

⁹ Dominican Free Zones statement, p. 4.

¹⁰ U.S. Department of State telegram 1517, "Impact on Dominican Republic of Elimination of Textile Tariffs."

¹¹ U.S. and Foreign Commercial Service, *Textile Machinery and Equipment*.

slowdown of the U.S. economy, however, worsened by terrorist attacks on September 11, 2001, has led forecasters to revise their predictions downward.¹²

Factors of production

Raw materials

The Dominican Republic has a very small textile manufacturing sector, largely owing to restraints placed on its apparel exports to the United States that require the use of U.S. fabric/yarn in apparel assembly.¹³ Consequently, the Dominican Republic imports most of the raw materials necessary for apparel assembly, resulting in little demand for domestically produced textiles. The apparel assembly firms in the free zones have experienced periodic shortages of electricity,¹⁴ as have industries in other parts of the country, which have disrupted production. Increased investment in the Dominican energy sector may help rectify this long-standing difficulty.¹⁵

Dominican apparel producers occasionally have used non-U.S. materials in the production of apparel for export when their operational costs are lower than if they had used U.S. materials. Reportedly, prices from U.S. suppliers for certain inputs are not competitive vis-à-vis Asian suppliers, and the benefits accrued under the CBTPA do not compensate for the difference.¹⁶ Nevertheless, apparel assembled in the Dominican Republic from U.S. fabrics accounted for 57 percent of U.S. imports of Dominican apparel by value in 2002 (table I-2, found in the “overview” at the beginning of this appendix).

Labor

Of the 200,000 jobs related to industries located in the Dominican FTZs, various sources indicate that between 125,000 and 150,000 are related to the textile and apparel sector (approximately 6 percent of the total Dominican workforce).¹⁷ One source indicates that the number of Dominican workers in the textile and apparel sector dropped from its peak of 152,000 in 2000 to 126,000 in 2002 (table I-8, found at the end of this country profile).¹⁸ Some sources indicate that more than 100,000 Dominican jobs are dependent on the

¹² U.S. and Foreign Commercial Service, *Dominican Republic Country Commercial Guide FY 2003 - Economic Trends and Outlook*, Aug. 15, 2002. One source estimated that the Dominican Republic would experience 20-percent growth in 2002 in apparel exports, for an increase to \$4.5 billion, with up to 35,000 new jobs in the Dominican apparel sector. U.S. and Foreign Commercial Service, *Textile Machinery and Equipment*.

¹³ Dominican Free Zones statement, p. 4.

¹⁴ U.S. and Foreign Commercial Service, *Textile Machinery and Equipment*.

¹⁵ *Ibid.*, *Dominican Republic Country Commercial Guide FY 2003*.

¹⁶ *Ibid.*, *Textile Machinery and Equipment*.

¹⁷ U.S. Department of State telegram 1517, “Impact on Dominican Republic of Elimination of Textile Tariff,” and U.S. and Foreign Commercial Service, *Textile Machinery and Equipment*.

¹⁸ Dominican Free Zones statement, p. 3.

continuation of apparel exports to the United States at their current rate. One source indicated that 72 percent of FTZ employment is generated by the textile and apparel sector.¹⁹

Technology

In 1999, the Dominican Republic's Ministry of Industry and Trade stated that the Dominican Republic possessed an annual production capacity for 194 million square meters of fabric.²⁰ One source stated that seven knitting companies produce 62 million square meters equivalent (SMEs) of fabric per year.²¹ Dominican fabric production, however, is expected to remain small, relative to Dominican apparel production, largely due to requirements on the use of U.S. fabric for assembly of apparel destined for the U.S. market and the limit on CBTPA preferences for apparel made from regional limit fabrics.

Investment

U.S. companies own one-half of the almost 500 companies in the Dominican FTZs. Dominican ownership represents the second-largest grouping, followed by Korean and Taiwan investors.²² In 2000 the Dominican Government approved the establishment of 43 textile enterprises totaling \$43 million and employing 14,452 people.

Government Policies

The Dominican Republic is a signatory to the Lomé Convention, which gives Dominican apparel exports preferential treatment in Europe. These advantages, however, are largely negated by Europe's historic commercial ties with Africa and apparel producers of that region. The Dominican Republic is also a member of the Caribbean Community (Caricom) and the Central American Common Market and receives some preferential treatment of its exports as a result.

The Dominican Republic has recently devoted a great amount of attention to the proposed CAFTA (see CAFTA section in the overview, this appendix). The United States has thus far not agreed to start FTA talks with the Dominican Republic,²³ which believes that an FTA with the United States, either bilateral or under a possible multilateral proposal involving

¹⁹ "Free Zone Sector Behavior During the Year 2000" and *Dominican Free Zones* statement, p. 2.

²⁰ U.S. Department of State telegram, "Textiles: Fabric Information for the Dominican Republic," prepared by the U.S. Embassy, Santo Domingo, Sept. 1999.

²¹ Alfredo Milian, Central American & Caribbean Textiles and Apparel Council, meeting notes, Feb. 20, 2002.

²² Dominican Free Zones statement, p. 4; and transcript of hearing at 46. Investments by Taiwan in the textile sector were estimated to be US\$100 million in 1997 ("ROC Economic Minister Examines Dominican Ties," Central News Agency (Taiwan), June 24, 1997).

²³ "Officials See Early 2003 Launch of U.S.-Central America FTA Talks," *Inside U.S. Trade*, Sept. 20, 2002.

other Caribbean nations,²⁴ is the best opportunity for Dominican goods to remain competitive in the U.S. market against Asian imports and imports from countries with FTAs with the United States, such as Mexico.²⁵

Foreign Trade

The Dominican Republic's textile and apparel sector is almost wholly dependent on its trade relationship with the United States, which accounted for slightly more than 90 percent of total Dominican trade in textiles and apparel during 1997-2001. Most of this bilateral trade involved production-sharing activity with U.S. firms, which historically shipped cut garment parts to the Dominican Republic for assembly and then re-imported the finished garments under the production-sharing tariff provision. Since the implementation of the CBTPA in October 2000, U.S. firms have begun shipping to the Dominican Republic greater quantities of uncut fabric, which is then cut and assembled into finished garments eligible for preferential import treatment. Consequently, U.S. shipments of cut garment parts to the country have fallen.

Imports

Dominican imports of textiles and apparel from the United States were virtually unchanged during 1997-2001, peaking at \$1.4 billion in 2000, and then falling to \$1.3 billion in 2001. The composition of these imports during this period, however, changed significantly. In 1997, Dominican apparel imports from the United States—primarily garment parts—accounted for 82 percent (\$1.1 billion) of total textile and apparel imports from the United States; by 2001, that number had fallen to 60 percent (\$794 million). In comparison, Dominican imports of yarns and fabrics from the United States increased by 119 percent during that period, from \$229 million in 1997 to \$501 million in 2001, rising from 17 percent to 38 percent of total textile and apparel imports from the United States. An important factor in the rise in U.S. yarn and fabric exports to the Dominican Republic was the October 2000 implementation of the CBTPA, which for the first time allowed uncut U.S. fabrics to be sent to the Dominican Republic for cutting and assembly into apparel that would receive preferential treatment.²⁶

²⁴ "Bush Lukewarm on Central American Proposal for Regional FTA," *Inside U.S. Trade*, Apr. 27, 2002.

²⁵ "Dominican Republic and USA to Begin Negotiations for Free Trade Policy," *Caribbean Investor*, June 26, 2002.

²⁶ The Dominican Republic also imports fabrics and yarns from Taiwan, China, Hong Kong, Mexico, and Korea. U.S. and Foreign Commercial Service, *Textile Machinery and Equipment*.

Exports

Dominican exports of textiles and apparel to the United States rose from \$2.3 billion in 1997 to a high of \$2.5 billion in 2000, and then fell to \$2.3 billion in 2001 (table I-9). Apparel is the major export to the United States, accounting for 97 percent of sector exports to both the United States and all countries in 2001. Dominican textile and apparel exports face U.S. trade-weighted average duty rates of 1.6 percent ad valorem on textiles and 3.3 percent on apparel that are lower than those for all other major regional and global suppliers, except Mexico.

Based on official U.S. statistics, U.S. imports of textiles and apparel from the Dominican Republic rose from 863 million SMEs in 1997 to a high of 900 million SMEs in 1999, and then to 743 million SMEs in 2002 (table I-10). A large portion of the decline in such U.S. imports occurred in women's (and girls') manmade-fiber coats; men's (and boys') knit shirts; and certain textile articles, (tents, tarps, sacks, and twine). Imports from the Dominican Republic consisted almost entirely of apparel. The Dominican Republic's share of U.S. apparel imports by quantity declined from 7.0 percent in 1997 to 4.2 percent in 2002, placing the Dominican Republic as the seventh-largest supplier overall and the third-largest CBERA supplier after Honduras and El Salvador. In 2002, 94 percent of U.S. apparel imports from the Dominican Republic entered under HTS heading 9802.00.80 and the CBTPA.

Most U.S. apparel imports from the Dominican Republic are in product categories in which other major foreign suppliers are constrained by quotas. As such, the Dominican Republic could face increased competition in the U.S. market for most of its products following the elimination of quotas in 2005. Among these products are trousers, for which the Dominican Republic is a major supplier. In 2002 the Dominican Republic was the second-largest supplier of men's (and boys') cotton trousers (following Mexico), the third-largest supplier of men's manmade-fiber trousers (following Mexico and Indonesia), and the fourth-largest supplier of men's wool trousers. The Dominican Republic was also the third-largest supplier of cotton underwear (following Honduras and El Salvador) and manmade-fiber nightwear (following Cambodia and Mexico), the second-largest supplier of men's wool sport coats (following Mexico), and the largest supplier of manmade-fiber sport coats (with China second).

In the 2000 quota (calendar) year, the Dominican Republic posted quota-fill rates of 90 percent or more for five quotas covering trousers, knit shirts, nightwear, and suits; no guaranteed access limits (GALs) were 90 percent or greater filled.²⁷ In 2001, only one quota—men's wool suits—and no GALs had a fill rate of 90 percent or more. In 2002, no quotas or GALs had a fill rate of 90 percent or more.²⁸

²⁷ The National Free-trade Zone Council, a joint government/industry group, assigns quotas to companies largely based on historic performance and without charge. "USTR Officials Seek to Bridge Gaps with Caricom in FTAA Talks," *Inside U.S. Trade*, July 26, 2002.

²⁸ U.S. Department of State telegram 1517, "Impact on Dominican Republic of Elimination of Textile Tariffs."

Table I-8
Dominican Republic: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of textile and apparel establishments	(¹)	293	279	277	262
Number of textile and apparel workers	(¹)	146,000	136,000	152,000	126,000
Installed spinning capacities:					
Short-staple spindles (<i>number</i>)	35,000	35,000	35,000	35,000	35,000
Open-end rotors (<i>number</i>)	(¹)	(¹)	500	500	500
Installed weaving capacities:					
Shuttleless looms (<i>number</i>)	150	150	150	150	150
Shuttle looms (<i>number</i>)	500	500	500	500	500
Purchases of large circular knitting machines	(¹)	2	27	64	8
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	41.8	45.8	40.6	46.7	72.0
Apparel (<i>million dollars</i>)	<u>2,323.4</u>	<u>2,447.9</u>	<u>2,453.0</u>	<u>2,546.4</u>	<u>2,367.1</u>
Total (<i>million dollars</i>)	<u>2,365.2</u>	<u>2,493.7</u>	<u>2,493.6</u>	<u>2,593.1</u>	<u>2,439.0</u>
Imports:					
Textiles (<i>million dollars</i>)	396.9	438.6	435.9	505.1	656.9
Apparel (<i>million dollars</i>)	<u>1,097.2</u>	<u>1,124.3</u>	<u>1,093.8</u>	<u>1,209.7</u>	<u>889.0</u>
Total (<i>million dollars</i>)	<u>1,494.1</u>	<u>1,562.8</u>	<u>1,529.7</u>	<u>1,714.8</u>	<u>1,545.9</u>
Trade balance:					
Textiles (<i>million dollars</i>)	-355.1	-392.7	-395.3	-458.3	-584.9
Apparel (<i>million dollars</i>)	<u>1,226.2</u>	<u>1,323.6</u>	<u>1,359.2</u>	<u>1,336.6</u>	<u>1,478.0</u>
Total (<i>million dollars</i>)	<u>871.1</u>	<u>930.8</u>	<u>963.9</u>	<u>878.3</u>	<u>893.1</u>

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data estimated by the U.S. International Trade Commission from industry sources; International Textiles Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002 and selected back issues; and trade data are United Nations data as reported by the Dominican Republic's trading partners.

Table I-9
Dominican Republic: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	39	40	34	35	61
European Union	1	(¹)	1	1	1
Canada	1	2	4	8	7
Subtotal	41	43	39	44	69
All other:					
Australia	(¹)	0	(¹)	(¹)	1
Korea	(¹)	(¹)	(¹)	1	(¹)
Japan	(¹)	(¹)	(¹)	(¹)	(¹)
Other	1	2	1	1	1
Subtotal	1	3	2	3	3
Grand total	42	46	41	47	72
Apparel (SITC 84):					
Quota markets:					
United States	2,282	2,408	2,403	2,499	2,327
European Union	15	12	16	16	8
Canada	19	21	24	23	22
Subtotal	2,316	2,441	2,443	2,538	2,357
All other	8	7	10	9	11
Grand total	2,323	2,448	2,453	2,546	2,367
Textiles and apparel:					
Quota markets:					
United States	2,320	2,448	2,437	2,534	2,388
European Union	15	13	17	17	9
Canada	20	23	29	31	29
Subtotal	2,356	2,484	2,482	2,582	2,426
All other	9	10	12	11	13
Grand total	2,365	2,494	2,494	2,593	2,439
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	97	94	95	94	97
Apparel	100	100	100	100	100
Average	100	100	100	100	99

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table I-10
Textiles and apparel: U.S. general imports from Dominican Republic, by specified product categories,¹ 1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	863,315	886,406	900,252	858,892	772,755	743,276
1	Apparel	796,924	831,570	857,517	836,582	753,006	730,030
2	Textiles	66,391	54,837	42,735	22,310	19,749	13,246
30	Cotton textiles and apparel	496,674	544,390	580,038	536,002	433,354	465,206
40	Wool textiles and apparel	26,568	17,917	15,211	14,742	15,238	12,341
60	Manmade-fiber textiles and apparel	332,169	317,063	301,182	304,698	320,178	264,453
239	Babies' apparel	16,021	14,370	14,932	15,845	10,746	6,699
332	Cotton hosiery	1,562	20,937	23,540	25,021	19,313	21,973
335	Cotton coats, women/girls	422	517	323	288	1,673	2,183
336	Cotton dresses	2,823	2,260	2,514	3,041	3,844	2,695
338	Cotton knit shirts, men/boys	16,096	27,517	32,190	26,437	16,893	18,832
339	Cotton knit shirts, women/girls	14,886	17,494	22,098	29,729	24,260	17,868
340	Cotton not knit shirts, men/boys	14,457	13,391	10,736	9,821	8,095	5,024
347	Cotton trousers, men/boys	84,322	84,245	87,264	93,466	83,253	88,436
348	Cotton trousers, women/girls	39,839	51,282	46,010	54,383	42,738	38,293
350	Cotton robes	5,437	6,561	5,721	6,173	4,642	6,717
351	Cotton nightwear	30,662	41,278	34,601	30,648	24,537	15,725
352	Cotton underwear	245,313	242,454	278,119	222,245	179,967	228,649
359	Other cotton apparel	13,558	13,030	14,845	13,039	10,710	8,446
435	Wool coats, women/girls	16,395	9,688	7,038	6,768	7,483	6,215
447	Wool trousers, men/boys	3,261	1,871	2,441	2,432	2,292	1,809
448	Wool trousers, women/girls	1,048	389	649	547	521	290
633	Manmade-fiber suit coats, men/boys	7,711	7,495	6,023	4,167	2,902	2,382
634	Other manmade coats, men/boys	3,211	2,362	1,527	2,678	1,414	1,840
635	Manmade-fiber coats, women/girls	15,520	10,238	3,462	4,686	3,983	2,749
636	Manmade-fiber dresses	6,108	5,214	5,746	2,493	2,749	2,723
638	Manmade knit shirts, men/boys	36,542	32,380	29,541	11,249	14,227	8,211
639	Manmade knit shirts, women/girls	13,871	12,453	9,206	14,137	12,563	9,545
640	Manmade not knit shirts, men/boys	5,933	4,876	3,941	5,347	4,721	3,411
641	Manmade-fiber not knit blouses	2,094	2,412	2,135	2,905	2,452	1,839
642	Manmade-fiber skirts	3,157	3,114	3,108	3,087	3,626	3,100
647	Manmade-fiber trousers, men/boys	27,753	30,341	29,537	35,757	38,389	35,403
648	Manmade-fiber trousers, women/girls	14,862	13,594	10,945	12,935	21,113	15,791
649	Manmade-fiber brassieres	16,871	17,640	18,107	15,808	14,226	14,236
650	Manmade-fiber robes	3,946	4,543	5,946	9,920	9,725	10,187
651	Manmade-fiber nightwear	37,251	41,532	51,117	60,630	62,468	40,219
652	Manmade-fiber underwear	40,758	42,585	39,638	37,819	40,844	38,860
659	Other manmade-fiber apparel	35,731	36,362	40,391	56,441	59,259	56,700
669	Other manmade-fiber manufactures	42,200	34,878	19,945	1,686	3,346	74
670	Manmade-fiber handbags/luggage	13,430	11,530	17,195	15,858	11,068	7,385

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

El Salvador¹

Overview

The textile and apparel sector in El Salvador plays a key role in the country's economy, accounting for 60 percent of its total exports in 2001, 66 percent of its manufacturing workforce, and 8-10 percent of its overall workforce. The country relies on the United States as a market for its apparel exports (97 percent of the total in 2001). Apparel is the country's principal export to the United States, accounting for 85 percent of the total value of U.S. imports from El Salvador in 2002. Without preferences such as those provided under the CBTPA,² it is estimated that up to 50 percent of the Salvadoran industry would not survive the elimination of quotas in 2005.³ The Salvadoran Government hopes that the proposed CAFTA will come into effect by that time, providing preferences that will sustain the industry.⁴

Industry Profile

Industry structure and performance

The Salvadoran textile industry supplies only 5 percent of the fabric used by the country's apparel producers.⁵ Of the 16 fabric producers,⁶ 14 are Salvadoran and 2 are Asian-owned. The Asian mills reportedly started operations decades ago to supply the regional apparel industry. No customer accounts for more than 20 percent of the production of any of the Salvadoran fabric producers. Prior to the CBTPA, textile mills in El Salvador spun yarns from imported cotton and polyester fibers, mostly from the United States. To comply with CBTPA requirements, many Salvadoran firms now import yarn from the United States to produce knit fabrics for use in the production of knit apparel destined for the United States.⁷ Yarns now made in El Salvador are used to produce fabric for garments sold in the regional market or exported to Mexico.

¹ Prepared by Walker A. Pollard, Office of Economics.

² See "overview" at the beginning of this appendix for a discussion of the CBTPA preferences.

³ U.S. Department of State telegram 2786, "El Salvador is Attempting to Diversify its Economy, but Needs CAFTA to Stimulate Investments," prepared by U.S. Embassy, San Salvador, Sept. 2, 2002.

⁴ Ibid.

⁵ Waldo Humberto Jimenez, National Association of Private Business, interview by USITC staff, San Salvador, Feb. 25, 2003.

⁶ Edwin Zamora, UNITEX (Union of Textile Industries), interview by USITC staff, San Salvador, Feb. 24, 2003.

⁷ Alfredo Milian Jerez, Executive Coordinator, Central American & Caribbean Textiles and Apparel Council, interview by USITC staff, San Salvador, Feb. 24, 2003.

The Salvadoran textile industry employs 10,000 to 15,000 workers and often employs foreign managers.⁸ The spinning mills tend to have more modern equipment and fewer workers than knitting and weaving mills. Most knitting machines used in El Salvador are imported from the United States. The Salvadoran textile industry competes in the regional market with fabric imported from the United States based on lead times and responsiveness to the needs of the regional apparel industry. Some local apparel producers report that Salvadoran textile producers cannot produce fabrics in the quantity, variety, or quality needed by apparel companies. Electricity, gas, equipment, water, and chemicals are more expensive in El Salvador than in the United States.

El Salvador's apparel industry comprises about 240 firms⁹ employing 80,000 to 90,000 workers. Most apparel companies are owned by investors from El Salvador, the United States, Taiwan, and Korea.¹⁰ The apparel industry primarily cuts and sews apparel from imported fabric or sews apparel from imported garment parts. Most production occurs in maquiladoras. More than 90 percent of the business in the free-trade zones (FTZs) are maquiladora apparel and textile plants.¹¹ The number of FTZs in operation in El Salvador grew from 8 in 2000 to 16 in 2002.¹² In 2001, maquiladora production, consisting primarily of apparel, accounted for 58 percent of El Salvador's exports. Of the \$1.6 billion in maquiladora exports in 2001, Salvadoran value added totaled \$490 million (30 percent of maquiladora exports and 3.6 percent of GDP).¹³ Most apparel produced in El Salvador is shipped by truck to Puerto Cortes in Honduras or Puerto Barrios in Guatemala. The trip takes 6 hours to reach Puerto Cortes from industrial parks near San Salvador's international airport and 6 to 7 hours to reach Puerto Barrios.¹⁴

Factors of production

The apparel industry relies almost entirely on imports for its raw materials needs, which consists mostly of cotton fabrics and garments parts, and manmade-fibers fabrics. These apparel inputs can be imported into the maquiladoras free of duty.

As of December 2000, El Salvador had a labor force of approximately 2.5 million, almost half of which was employed in services. About one-fifth of the labor force works in the agricultural sector and about one-sixth is in manufacturing. Salvadoran labor is perceived as hard working, but the general educational level is low, which may pose a problem for investors needing skilled labor. There is a lack of local middle-management personnel, which sometimes results in foreigners performing such tasks.¹⁵ The average hourly wage rate

⁸ Information in the paragraph is mainly from Edwin Zamora, UNITEX.

⁹ Alfredo Milian Jerez and representatives of the Ministry of the Economy, interview by USITC staff, San Salvador, Feb. 24, 2003; and "Relative Data," handout from Alfredo Milian Jerez.

¹⁰ U.S. and Foreign Commercial Service, *El Salvador Country Commercial Guide 2002/2003*, p. 33.

¹¹ *Ibid.*, p. 27.

¹² Representatives of the Ministry of the Economy, interview by USITC staff, San Salvador, Feb. 24, 2003.

¹³ U.S. Department of State telegram 1179, "Textile Trade Without Quotas—El Salvador," prepared by the U.S. Embassy, San Salvador, May 2, 2002.

¹⁴ Representatives of FTZ firm, interview by USITC staff, La Paz, San Salvador, Feb. 25, 2003.

¹⁵ *Ibid.*

in El Salvador's apparel industry was \$1.58 in 2002, compared with slightly less than \$1.50 in Guatemala and Honduras, and \$2.45 in Mexico. However, wage rates in El Salvador and many other CBERA apparel exporting countries are much higher than those in many Asian countries such as Bangladesh, India, and Pakistan, where hourly wage rates average less than \$0.50.¹⁶

Investment

The United States is the primary source of foreign direct investment (FDI) in all industries in El Salvador, with 36 percent of the accumulated total in 2001, a 33-percent increase over the 1999 total. FDI flows (new investment) from all countries in FTZ textile and apparel operations rose rapidly from \$3.2 million in 1999 to \$18.6 million in 2000 and \$25.7 million in 2001, presumably in response to opportunities created by the CBTPA.¹⁷ Most of the FDI inflows have come from Taiwan and Korea; one of Mexico's largest producers of denim jeans shifted production to El Salvador in 2000.¹⁸

Government Policies¹⁹

The U.S. dollar freely circulates and can be used in all transactions under the provisions of the Monetary Integration Law, effective on January 1, 2001. As a result, interest rates in El Salvador are the lowest in Central America.²⁰ The dollar and the Salvadoran colon both circulate with the intention of phasing out the use of the colon. The law fixed the colon at 8.75 per \$1.00. As of May 2002, U.S. dollars accounted for about 71 percent of all currency in circulation.

¹⁶ Information on wage rates is from Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers" (New York), Nov. 2002.

¹⁷ U.S. and Foreign Commercial Service, *El Salvador Country Commercial Guide 2002/2003*, p. 34.

¹⁸ In an interview by USITC staff, in La Paz, El Salvador, Feb. 25, 2003, the director of an FTZ there stated that the presence of the Nissan auto assembly plant in Aguascalientes, Mexico, drove up the cost of labor compensation for the jeans manufacturer in the region near the plant, leading the jeans company to shift production to El Salvador.

¹⁹ Except as noted, information in this section is from U.S. and Foreign Commercial Service, *El Salvador Country Commercial Guide 2002/2003*, p. 26.

²⁰ International Monetary Fund, *International Financial Statistics*, vol. 55, No. 12, Dec. 2003.

Domestic policies

The Government of El Salvador views FDI as crucial for economic growth and development and has taken numerous steps in recent years to improve the investment climate.²¹ The Government has enacted new laws and amended existing ones to facilitate and regulate direct and portfolio investment and to privatize state-owned enterprises. Generally, the 1999 Investment Law grants equal treatment to foreign and domestic investors and allows foreign investors to freely establish businesses in El Salvador. The investment law does not require investors to export specific amounts, transfer technology, incorporate set levels of local content, or fulfill other performance criteria. Exports of goods and services are not subject to the value added tax (VAT). Foreign businesses freely remit net profits, repatriate capital, reinvest profits, and bring in capital for additional investment. There are no delays in remitting investment returns. The investment law also allows unrestricted remittance of royalties and fees from the use of foreign patents, trademarks, technical assistance and other similar services.

Trade policies

El Salvador is a member of the Central American Common Market (CACM) along with Guatemala, Honduras, Costa Rica, and Nicaragua. El Salvador has free-trade agreements in force with Mexico (along with Guatemala and Honduras), the Dominican Republic, and Chile (along with Guatemala and Honduras).

Import tariffs for capital goods are zero, raw materials range from zero to 5 percent, intermediate goods range from 5 to 10 percent (maximum), and final goods are charged a maximum of 15 percent. Textiles, agricultural products, vehicles, and a few other nonessential products are charged higher tariffs that range from 15 to 30 percent. These new tariffs apply to products coming from outside the CACM. In addition, there is a 13-percent VAT. Materials and equipment used in FTZs and materials processed in FTZs and then exported are exempt from tariffs and the VAT.

The 1998 Free Trade Zones Law is designed to attract investment in a wide range of activities; however, more than 90 percent of the businesses in the FTZs are apparel plants. As of June 2002, there were 13 FTZs in the country and two more under construction. The FTZ law and the Export Reactivation Law provide incentives for firms in export processing zones or bonded warehouses that export their production. These firms enjoy the following benefits: (1) Up to 20 years exemption from income, municipal, and certain other taxes; (2) duty-free importation of machinery, equipment, tools, spare parts, furniture, and other products necessary for production of exports; (3) duty free importation of raw materials, semimanufactured, and intermediate products; and (4) duty-free importation of fuels and lubricants that are not produced in the country.

Under the Export Reactivation Law, firms may apply for tax rebates of 6 percent of the f.o.b. value of manufactured exports shipped outside the CACM. The law does not require firms

²¹ The Heritage Foundation ranks the Salvadoran economy as second freest in Latin America after Chile. Latin Business Chronicle, "El Salvador, Economic and Political Overview," found at <http://www.latinbusinesschronicle-.com/countries/elsalvador>, retrieved Feb. 14, 2003.

to be in the FTZs or export 100 percent of their output. The benefits offered by the law are available to firms engaged in production or marketing of goods for foreign markets; firms engaged in storing, merchandise packing and re-export; and firms that build and administer FTZs. Administrators/developers of free zones and maquiladora operators or manufacturers may import materials and equipment duty-free and without VAT.

Foreign Trade

El Salvador's trade surplus in textiles and apparel widened from \$518 million in 1997 to \$808 million in 2001, reflecting increases of 52 percent in exports, to \$1.8 billion, and 49 percent in imports, to almost \$1.0 billion (table I-11). The United States accounted for 95 percent of the exports and 83 percent of the imports in 2000.

The composition of El Salvador's imports of textiles and apparel from the United States has changed significantly following implementation of the CBTPA in October 2000. Prior to that time, in order to enjoy virtually unlimited access to the U.S. market under the 807A program, the fabrics used in the apparel had to be formed and cut into garment parts in the United States. Trade in these garment parts is recorded as apparel trade. Under the CBTPA, uncut U.S. fabrics may now be shipped to beneficiary countries for both cutting and assembly. As such, uncut fabrics are replacing cut garment parts in El Salvador's imports from the United States. In 2000 (with only 3 months of actual CBTPA trade), garment parts reported as apparel accounted for 87 percent of U.S. textile and apparel exports to El Salvador, 60 percent in 2001, (the first full year of CBTPA), and 49 percent in 2002.

El Salvador's exports of sector goods during 1997-2001 consisted almost entirely of apparel destined for the United States (table I-12). Based on official U.S. statistics, U.S. imports of textiles and apparel from El Salvador rose by 78 percent during 1997-2002 to 817 million square meters equivalent (SMEs) (table I-13). The 2002 imports consisted almost entirely of apparel, particularly cotton garments and, to a lesser extent, manmade-fiber garments. As such, El Salvador was the sixth-largest volume supplier of apparel overall and the second-largest apparel supplier in the CBERA region in 2002. The imports from El Salvador are concentrated in product categories for which major suppliers are highly constrained by quotas, especially cotton and manmade-fiber underwear, knit tops, and pants.

Although the majority of U.S. apparel imports from El Salvador enter free of duty under the CBTPA, some of the knit apparel imports do not qualify for CBTPA preferences because the fabric used to make the knit apparel is made from Mexican or Salvadoran yarn.²² In addition, some Salvadoran apparel producers have found that the price differential between Asian (primarily Korean) and U.S. woven fabrics is more than enough to offset U.S. tariffs on apparel assembled in El Salvador from non-U.S. woven fabrics.

²² Representative of a Salvadoran textile manufacturer, interview by USITC staff, San Salvador, Feb. 24, 2003.

Table I-11
El Salvador: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Textile and apparel share of manufacturing value-added (percent)	29	28	(¹)	(¹)	(¹)
Installed spinning capacities:					
Short-staple spindles (1,000)	250.0	250.0	250.0	250.0	250.0
Open-end rotors (1,000)	6.5	6.5	6.5	6.5	6.5
Installed weaving capacities:					
Shuttleless looms (number)	200	200	200	200	200
Shuttle looms (number)	3,000	3,000	3,000	3,000	3,000
Purchases of large circular knitting machines	(¹)	18	11	229	24
Foreign trade:					
Exports:					
Textiles (million dollars)	71.8	83.1	72.7	70.2	71.0
Apparel (million dollars)	1,114.3	1,246.4	1,396.6	1,691.2	1,730.4
Total (million dollars)	1,186.1	1,329.5	1,469.3	1,761.4	1,801.5
Imports:					
Textiles (million dollars)	250.3	267.7	233.0	313.1	492.4
Apparel (million dollars)	417.7	530.1	520.3	720.5	501.1
Total (million dollars)	668.0	797.8	753.3	1,033.6	993.4
Trade balance:					
Textiles (million dollars)	-178.5	-184.6	-160.3	-242.8	-421.4
Apparel (million dollars)	696.6	716.3	876.3	970.7	1,229.4
Total (million dollars)	518.1	531.7	716.1	727.9	808.0

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data estimated by the U.S. International Trade Commission from industry sources; the International Textiles Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002 and selected back issues; and trade data are United Nations data as reported by El Salvador's trading partners.

Table I-12
El Salvador: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	26	31	33	33	33
European Union	4	2	1	1	1
Canada	(¹)	(¹)	1	1	1
Subtotal	30	34	34	35	35
All other:					
Guatemala	10	19	12	11	15
Costa Rica	15	16	13	10	10
Nicaragua	3	3	3	3	3
Other	14	12	10	11	7
Subtotal	42	50	38	35	36
Grand total	72	83	73	70	71
Apparel (SITC 84):					
Quota markets:					
United States	1,078	1,199	1,361	1,641	1,671
European Union	3	4	2	12	7
Canada	9	8	10	11	15
Subtotal	1,090	1,211	1,372	1,664	1,693
All other	24	35	24	27	37
Grand total	1,114	1,246	1,397	1,691	1,730
Textiles and apparel:					
Quota markets:					
United States	1,104	1,230	1,394	1,674	1,705
European Union	6	5	2	13	8
Canada	10	9	10	12	15
Subtotal	1,120	1,244	1,406	1,699	1,728
All other	67	85	63	62	73
Grand total	1,186	1,330	1,469	1,761	1,801
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	41	40	47	50	49
Apparel	98	97	98	98	98
Average	94	94	96	96	96

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table I-13
Textiles and apparel: U.S. general imports from El Salvador, by specified product categories,¹
1997-2002

Cat.		<i>1,000 square meters equivalent</i>					
No.	Description	1997	1998	1999	2000	2001	2002
0	Textiles and apparel, total	460,078	524,009	640,934	757,217	767,758	816,784
1	Apparel	433,193	482,603	601,720	719,248	723,831	777,175
2	Textiles	26,884	41,407	39,214	37,968	43,927	39,609
30	Cotton textiles and apparel	309,710	381,922	475,601	556,054	549,755	606,709
60	Manmade-fiber textiles and apparel	142,501	136,468	162,049	197,755	214,811	207,338
222	Knit fabric	6,721	9,228	5,050	3,083	5,550	2,286
239	Babies' apparel	7,235	5,193	5,454	6,116	5,894	7,112
331	Cotton gloves	2,580	2,767	1,444	51	1	14
338	Cotton knit shirts, men/boys	29,796	44,807	63,931	72,871	60,098	81,772
339	Cotton knit shirts, women/girls	11,420	12,823	19,794	37,319	47,804	43,284
340	Cotton not knit shirts, men/boys	21,933	25,002	23,961	20,947	18,384	18,355
341	Cotton not knit blouses	1,769	1,383	1,687	1,860	2,073	1,278
347	Cotton trousers, men/boys	7,098	10,811	17,267	15,730	14,870	16,474
348	Cotton trousers, women/girls	16,611	18,620	24,039	30,293	37,264	35,679
350	Cotton robes	9,675	7,917	3,655	5,252	5,441	6,852
351	Cotton nightwear	16,338	17,675	17,459	19,619	26,147	29,550
352	Cotton underwear	150,106	190,433	252,994	305,799	288,248	326,262
632	Manmade-fiber hosiery	15,514	16,347	19,769	18,053	17,556	22,134
636	Manmade-fiber dresses	12,003	13,026	16,698	16,889	15,055	10,600
638	Manmade knit shirts, men/boys	40,484	35,304	49,818	36,345	19,775	43,611
639	Manmade knit shirts, women/girls	3,648	4,846	5,684	32,215	50,016	11,239
640	Manmade not knit shirts, men/boys	5,794	2,929	2,594	5,821	7,062	6,280
641	Manmade-fiber not knit blouses	1,667	2,752	2,385	3,724	3,201	3,020
647	Manmade-fiber trousers, men/boys	3,140	1,554	5,141	6,482	11,057	13,206
648	Manmade-fiber trousers, women/girls	7,541	3,740	5,627	7,652	9,041	10,648
649	Manmade-fiber brassieres	2,835	2,929	3,123	2,576	2,185	3,371
650	Manmade-fiber robes	3,213	3,636	2,698	5,545	2,116	3,938
651	Manmade-fiber nightwear	7,270	7,019	5,780	7,098	7,990	7,811
652	Manmade-fiber underwear	17,100	9,897	8,224	20,511	30,411	33,563
659	Other manmade-fiber apparel	6,131	6,680	11,154	10,724	10,545	13,646
666	Other manmade-fiber furnishings	1,156	7,335	7,755	7,668	7,565	8,438

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Guatemala¹

Overview

The textile and apparel sector in Guatemala is the country's second-largest source of export earnings, accounting for 37 percent of the total in 2001. The sector provided direct employment for 122,000 people in 2002.² The latest available data show that the sector's value added of \$308 million in 1998 accounted for about 2 percent of the country's GDP.³ U.S. investors play a smaller role in the Guatemalan sector than in most other CBERA countries. A significant portion of foreign direct investment (FDI) in Guatemala's textile and apparel sector is from Korean-based investors, which account for most sector production and exports to the United States.

The Guatemalan textile and apparel sector benefits from proximity to the U.S. market, quick-turnaround capabilities, and a relatively developed textile industry.⁴ U.S. trade preferences, once considered significant, appear to be increasingly less important because of the high cost of U.S. fabrics. Many Guatemalan apparel producers have found that the cost differential between certain U.S. and Asian fabrics is greater than the duty savings from using U.S. fabrics and entering the goods under the CBTPA.⁵

Guatemalan industry officials expressed concern over the impact on the local textile and apparel sector of enactment of U.S. legislation in August 2002 that requires the dyeing and finishing of U.S. fabrics for use in CBERA apparel to be performed in the United States in order for the apparel to qualify for CBTPA preferences.⁶ The officials stated that a number of Guatemalan companies had made investments in equipment to dye and finish U.S. fabrics for use in apparel for export to the United States under the CBTPA. The officials asserted that the new U.S. dyeing and finishing requirements will slow the development of "full package" programs in the sector.⁷ The officials indicated that the use of full package programs would enable the sector to maintain a competitive advantage through vertical integration or development of complementary manufacturing clusters and to deliver apparel and provide services that meet the needs of U.S. retailers and brand-name markets.⁸

¹ Prepared by Thomas F. Jennings, Office of Economics.

² Representative of the Commission for the Textile and Apparel Industry (Vestex), interview by USITC staff, Guatemala City, Feb. 26, 2003.

³ Jozef De Coster, "Profile of the Guatemalan Clothing Export Industry," *Textile Outlook International* (United Kingdom: Textiles Intelligence Ltd.), Sept. 1999, p. 85.

⁴ "Guatemala: Textile Industry and Market, a Report," Bharattextile.com, Nov. 26, 2001, retrieved Mar. 18, 2003.

⁵ Representative of Vestex, interview by USITC staff, Guatemala City, Feb. 26, 2003.

⁶ See "overview" at the beginning of this appendix for information on U.S. dyeing and finishing requirements.

⁷ Full package programs in the CBERA region generally refer to production services ranging from procurement of raw materials to cutting and sewing, and to finishing and packaging of the final products.

⁸ Representatives of textile and apparel firms, interviews by USITC staff, Guatemala City, Feb. 26, 2003.

Industry Profile

Industry structure and performance

The Guatemalan textile and apparel sector consisted of 36 textile mills, 230 apparel plants, and 260 clothing accessory and services companies in 2002.⁹ Sector employment in 2002 totaled 137,600 workers, 75 percent of which were employed in apparel plants.¹⁰ The textile mills employed 18,500 workers. Korean-based investors account for about 65 percent of Guatemala's apparel production.¹¹

Factors of production

Although the Guatemalan textile industry produces cotton and manmade-fiber yarns and sewing thread, as well as cotton, cotton-blend, and manmade-fiber knit and woven fabrics,¹² Guatemala is dependent on imports for most of its yarn and fabric requirements. According to data provided by Vestex, Guatemala's annual production capacity is estimated at 60 million square meters for woven fabrics and 22 million pounds for knit fabrics. The Guatemalan textile industry reportedly has capacity to print about 7 million meters of woven fabrics and 96 million pounds of knit fabrics per year.¹³ Korean-based firms in Guatemala that offer full-package apparel programs reportedly use mostly imported Korean fabrics to make apparel.¹⁴ Guatemalan manufacturers also import U.S. yarns and fabrics for use in apparel to qualify for CBTPA preferences.

The textile and apparel sector has access to an abundant supply of labor, but its labor costs have risen in recent years and are now among the highest in Central America. Average hourly compensation (including fringe benefits) in the apparel industry in 2002 was \$1.49 in Guatemala, compared with \$0.92 in Nicaragua, \$1.48 in Honduras, \$1.65 in the Dominican Republic, and \$2.45 in Mexico.¹⁵ However, these compensation figures were much higher than those for many Asian supplying countries (e.g., average hourly compensation was less than \$0.50 in Bangladesh, India, and Pakistan).

With higher labor costs than some other CBERA countries, Guatemala is shifting production from price-sensitive garments such as T-shirts and underwear to higher valued-added garments where producers can benefit from workers' sewing skills. To remain competitive

⁹ Information in the paragraph is from Vestex.

¹⁰ In 1998, the sector reportedly employed 77,100 workers. Data attributed to Michael Buhlmann, *The Textile Cluster in Central America*, 1998, in Jozef De Coster, "Profile of the Guatemalan Clothing Export Industry," p. 87.

¹¹ Daniel Thompson, Commercial Counselor, U.S. Embassy, Guatemala City, interview by USITC staff, Feb. 26, 2003.

¹² Vestex, "Guatemala Delivers," cd-rom provided to USITC staff, Feb. 2003.

¹³ Capacity data based on data provided by Vestex, "Guatemala Delivers" (cd-rom).

¹⁴ Daniel Thompson, Commercial Counselor, U.S. Embassy, Guatemala City, interview by USITC staff, Feb. 26, 2003.

¹⁵ Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers," (New York, NY), Nov. 2002.

in a quota-free market environment, Guatemalan industry officials believe that they will need to offer full package services, keep labor costs in check, and continue to take advantage of proximity to the U.S. market and speed of delivery.¹⁶

Investment¹⁷

There were 41 investments valued at \$44.3 million in Guatemala's apparel industry in 2000; there were also 7 firms that invested in textile production.¹⁸ FDI in Guatemala's textile and apparel sector grew following the establishment of free-trade zones in the 1990s, along with government decrees providing for the establishment of maquiladoras and the implementation of the foreign investment law, which guaranteed national treatment.¹⁹ Most tenants in the 12 authorized free-trade zones are apparel producers.²⁰ It was reported that, in 1998, more than half the FDI in the textile and apparel sector came from Korea.²¹ Faced with tight U.S. quotas on their home-country exports, a number of Korean firms in the late 1980s and early 1990s moved apparel production to Guatemala. Although many of these Korean-run plants use fabrics from Korea and other Asian sources, others invested with the intention of using U.S.-cut fabrics to benefit from reduced duties under HTS subheading 9802.00.80 (see "overview" at the beginning of this appendix for information on this U.S. production-sharing provision).

Representatives of the Ministry of the Economy (Trade and Investment section) maintained that the major force behind new investment in Guatemala has been the U.S. production-sharing program rather than CBERA or CBTPA. They stated that Guatemala did lose investment when NAFTA went into effect in 1994 and that investment has not returned. The new U.S. dyeing and finishing requirements also affected FDI flows into the country. It was reported that investment in the textile and apparel sector, and in Guatemala in general, declined in 2002.²²

¹⁶ U.S. Department of State telegram 1151, "Guatemala's Textile Industry Without Quotas," prepared by U.S. Embassy, Guatemala City, Apr. 30, 2002.

¹⁷ Information in this section is from the USITC, *The Impact of the Caribbean Basin Economic Recovery Act, Fifteenth Report 1999-2000*, (inv. No. 332-227), USITC publication 3447, Sept. 2001, pp. 81-84, except as noted.

¹⁸ Statistics from the Guatemalan Ministry of the Economy, Office of Commercial and Investment Services, June 2001.

¹⁹ Decrees 29-89, 65-89 and 9-98, respectively. See Jozef De Coster, "Profile of the Guatemalan Clothing Export Industry," pp. 105 and 106.

²⁰ Vestex, e-mail to USITC staff, Apr. 22, 2003.

²¹ Jozef De Coster, "Profile of the Guatemalan Clothing Export Industry," p. 104.

²² Representatives of U.S. Embassy and Guatemalan Ministry of the Economy, interviews by USITC staff, Guatemala City, Feb. 27-28, 2003.

A major Guatemalan producer of trousers indicated that the U.S. production-sharing program had been the driving force behind growth in the Guatemalan apparel industry.²³ However, the rising cost of U.S. materials reduced the firm's ability to compete against apparel made with Asian inputs. Although the firm did not offer full package services at the time, it anticipated doing so following enactment of the CBTPA in order to provide added value to its products by dyeing, cutting, and sewing fabric and trim.

Government Policies

Guatemala has an increasingly open trade regime, imports generally are not subject to nontariff trade barriers, and there are no restrictions on repatriation of profits by foreign firms.²⁴ In 2001, Guatemala's tariffs ranged from 5 to 10 percent ad valorem for unfinished goods, while the tariff on most finished goods was 15 percent. Guatemala plans to reduce its tariff on textiles and textile products from the 2001 rate of 22 percent to 15 percent for finished goods and 10 percent for unfinished goods in 2005.²⁵ The 10-percent value added tax applies to all domestic and imported goods. Decree 29-89, Guatemala's 1989 Drawback and Export Promotion Law, allows duty-free and tax-free entry of raw materials, intermediate products, packaging, and labels used in the production or assembly of products for export to markets outside Central America. It allows a single business to qualify as a stand-alone free-trade zone anywhere in the country.

In an April 2002 report prepared by the U.S. Embassy in Guatemala, it is stated that "(t)he elimination of textile and apparel quotas under the WTO Agreement on Textiles and Clothing (ATC) is not a major concern of Guatemala's industry. . . . Guatemalan exports are neither constrained by U.S. quotas nor threatened by the post-2004 lifting of quotas in Asia or elsewhere. . . . Guatemalans believe that the evolution of their industry depends more on the future of tariff preferences under the CBTPA and the possibility of negotiating a U.S.-Central American Free Trade Agreement."²⁶ The report further stated that the definition of the rules of origin in any free-trade agreement will in large part determine the future competitiveness of the country in the textile and apparel sector. Given the diminishing use of U.S. trade preferences because of the U.S. content requirement, Guatemalans "believe they can remain competitive without preferences, but without using U.S. inputs in the post-quota period."²⁷

In January 2003, with the release of President Bush's Narcotics Certification Determinations for Fiscal Year 2003, the U.S. Department of State officially "decertified" Guatemala, which was one of three countries found to have "failed demonstrably" to make substantial efforts

²³ Information in paragraph drawn from notes prepared in connection with a June 2001 trip by USITC staff to Guatemala.

²⁴ ISA, Textile Fabrics, p. 2.

²⁵ Information presented in the remainder of the paragraph is from "Guatemalan Country Commercial Guide," found at <http://www2.usatrade.gov/Website/CCG.nst/CCGurl/CCG-GUATEMALA2002-CH6:-004C4B3B>, retrieved Oct. 25, 2002.

²⁶ U.S. Department of State telegram 1151, "Guatemala's Textile Industry Without Quotas."

²⁷ Ibid.

during the prior 12 months to meet their international counter-narcotics requirements.²⁸ The decertification was waived in the national interest of the United States, however. The INCSR report and the presidential letter to Congress are matters of public record and illustrate the administration's dissatisfaction with the lack of Guatemalan support in the area of drug trafficking and control.²⁹

Foreign Trade

Guatemala's trade surplus in textiles and apparel rose from \$399 million in 1997 to \$812 million in 2001 (table I-14, found at the end of this country profile). Exports of such goods rose by 63 percent during the period to \$1.8 billion, almost all of which consisted of apparel. Imports rose by 22 percent to \$954 million, almost all of which were apparel inputs (e.g., fabrics and cut garment parts).

Imports

Guatemalan textile imports more than doubled during 1997-2001 to \$780 million, while apparel imports (mainly cut garment parts) fell significantly to \$173 million. With the implementation of the CBTPA in October 2000, uncut U.S. fabrics may now be shipped to the CBERA region for both cutting and sewing. The major foreign suppliers were Mexico, El Salvador, the United States, Taiwan, and Korea; imports from China have grown rapidly. U.S. fabrics have had a high level of acceptance and recognition among consumers; however, there have been recent complaints about the timely availability, quality, and price of U.S. fabrics.³⁰

The Guatemalan cotton market is totally supplied by imports.³¹ The United States' position as the major supplier of cotton to Guatemala was reinforced by the CBTPA in 2001. In 2000, cotton imports were expected to reach \$60 million, of which the U.S. was expected to supply \$54 million.

Exports

Almost all of Guatemala's apparel exports are shipped to the United States (table I-15). According to official U.S. statistics, U.S. textile and apparel imports from Guatemala rose by 79 percent during 1997-2002 to 452 million square meters equivalent (SMEs), 92 percent of which consisted of apparel articles (table I-16). The increased imports from Guatemala, the fourth-largest CBERA apparel supplier in the U.S. market, reflected a combination of

²⁸ U.S. Department of State, "Briefing on the President's FY 2003 Narcotics Certification Determinations," Jan. 31, 2003, found at <http://www.state.gov/g/inl/rls/rm/17110.htm>, retrieved Apr. 23, 2003.

²⁹ *Ibid.*, *International Narcotics Control Strategy Report* (INCSR).

³⁰ Representatives of Guatemalan textile and apparel firms, interviews by USITC staff, Feb. 26 and 27, 2003.

³¹ Information in paragraph is from "Guatemala: Textile Industry and Market, A Report," Bharattextile.com, Nov. 26, 2001, retrieved Mar. 18, 2003.

low prices, compliance with product specifications, and quick turnaround time.³² U.S. imports of certain apparel from Guatemala that do not receive CBTPA preferences are subject to quota--namely, certain cotton and manmade-fiber shirts (categories 340/640), cotton pants and shorts (347/348), cotton and manmade-fiber nightwear (351/651), wool suits (443), and wool pants (448).³³ In 2002, Guatemala filled all of its wool suit quota, about three-fourths of its quotas on cotton pants and cotton and manmade-fiber nightwear, and less than 25 percent of its quotas on the shirts and wool pants.

U.S. apparel imports from Guatemala are concentrated in products for which major foreign suppliers are highly constrained by quotas. Almost 60 percent of the apparel imports from Guatemala in 2002 consisted of cotton and manmade-fiber pants and knit tops. Imports of women's knit cotton tops from Guatemala rose from 6 million to 84 million SMEs, largely reflecting increased activity by Korean investors. Significant growth also occurred in women's manmade-fiber pants (from 6 million to 30 million SMEs), women's knit manmade-fiber shirts (from 2 million to 13 million SMEs), and manmade-fiber nightwear (from 2 million to 11 million SMEs). In addition, imports from Guatemala doubled in men's knit cotton shirts and manmade-fiber trousers; women's cotton slacks; cotton robes; and cotton nightwear.

The most significant decrease in U.S. apparel imports from Guatemala during 1997-2002 was in men's woven cotton shirts (from 25 million to 9 million SMEs). Several U.S. apparel companies reportedly shifted their sourcing of cotton dress shirts from Guatemala and Honduras to Asia after the CBTPA excluded apparel of locally woven fabric from duty-free treatment under the preference program.³⁴

U.S. apparel imports from Guatemala entered under the CBTPA or production-sharing provisions accounted for 49 percent of the total in 2002, compared with 77 percent for all CBERA countries, reflecting the linkage between Korean-based apparel manufacturers in Guatemala and Asian fabric producers. The Korean-based investors and some Guatemalan investors use mostly Asian yarns and fabrics, which are lower in cost than similar U.S. materials, even though such apparel is subject to full U.S. duty rates.³⁵ The duty savings provided by U.S. trade preferences are not sufficient to offset the cost of cheaper Asian fabric and, as a result, utilization of the preferences is continuing to decline.

In seven of the eight leading quota categories of U.S. apparel imports from CBERA countries in 2002, the average unit value (dollars per SME) was higher for Guatemala than that for all CBERA countries. Guatemala was the leading CBERA supplier of women's and girls' knit cotton blouses (category 339), even though the average unit value of its garments

³² Mike Flanagan, "Apparel Sourcing in the 21st Century, the 10 Lessons so Far," found at www.just-style.com.

³³ The products covered by quotas are knit cotton tops (categories 338 and 339); cotton and manmade-fiber pants (347/348 and 647/648) and nightwear (351 and 651); and manmade-fiber dresses (636), skirts (639), and coats (635) for women and girls.

³⁴ Industry official, interview by USITC staff, Guatemala City, Feb. 26, 2003.

³⁵ U.S. Department of State telegram 1151, "Guatemala's Textile Industry Without Quotas."

was 70 percent higher than that for all CBERA countries. Guatemala was also the second-leading CBERA supplier of women's cotton pants (category 348) in 2002, although the average unit value of its goods was 14 percent higher than the CBERA average.

Table I-14
Guatemala: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Textiles	(¹)	(¹)	(¹)	(¹)	² 36
Apparel	(¹)	(¹)	(¹)	(¹)	² 230
Trimmings and services	(¹)	(¹)	(¹)	(¹)	² 260
Number of employees:					
Textiles	(¹)	(¹)	(¹)	(¹)	² 18,500
Apparel	(¹)	(¹)	(¹)	(¹)	² 104,071
Trimmings and services	(¹)	(¹)	(¹)	(¹)	² 15,000
Installed spinning capacities:					
Short-staple spindles (1,000)	150.0	150.0	150.0	150.0	150.0
Long-staple spindles (1,000)	3.0	3.0	3.0	3.0	3.0
Open-end rotors (1,000)	20.0	20.0	21.0	21.0	21.0
Installed weaving capacities:					
Shuttleless looms (number)	820	820	890	890	890
Shuttle looms (number)	3,000	3,000	3,000	3,000	3,000
Foreign trade:					
Exports:					
Textiles (million dollars)	50.6	48.0	40.8	47.9	47.4
Apparel (million dollars)	1,031.5	1,216.1	1,312.0	1,580.1	1,718.1
Total (million dollars)	1,082.0	1,264.1	1,352.8	1,628.0	1,765.6
Imports:					
Textiles (million dollars)	376.3	449.7	551.8	702.7	780.5
Apparel (million dollars)	307.3	316.2	234.9	266.2	173.4
Total (million dollars)	683.5	765.9	786.6	968.9	953.9
Trade balance:					
Textiles (million dollars)	-325.7	-401.7	-511.0	-654.8	-733.1
Apparel (million dollars)	724.2	899.8	1,077.1	1,313.9	1,544.8
Total (million dollars)	398.5	498.2	566.1	659.1	811.7

¹ Not available.

² Data are for 2002.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data are from Vestex; the International Textiles Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002 and selected back issues; and trade data are United Nations data as reported by Guatemala's trading partners.

Table I-15
Guatemala: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	16	13	13	14	14
European Union	1	1	1	1	1
Canada	(¹)	(¹)	(¹)	(¹)	(¹)
Subtotal	16	14	14	15	15
All other:					
El Salvador	12	12	11	13	11
Mexico	6	6	4	7	10
Costa Rica	8	7	5	6	5
Other	8	8	7	7	6
Subtotal	34	34	27	33	33
Grand total	51	48	41	48	47
Apparel (SITC 84):					
Quota markets:					
United States	1,002	1,184	1,280	1,545	1,676
European Union	2	2	3	3	3
Canada	8	8	7	7	12
Subtotal	1,012	1,194	1,290	1,554	1,692
All other	20	22	22	26	26
Grand total	1,031	1,216	1,312	1,580	1,718
Textiles and apparel:					
Quota markets:					
United States	1,017	1,197	1,293	1,558	1,690
European Union	3	3	3	4	4
Canada	8	8	7	7	13
Subtotal	1,028	1,208	1,304	1,569	1,707
All other	54	56	49	59	59
Grand total	1,082	1,264	1,353	1,628	1,766
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	32	30	33	31	31
Apparel	98	98	98	98	98
Average	95	96	96	96	97

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table I-16
Textiles and apparel: U.S. general imports from Guatemala, by specified product categories,¹
1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	252,530	301,720	332,990	389,719	425,841	451,900
1	Apparel	237,120	280,454	305,030	359,769	388,103	415,362
2	Textiles	15,410	21,266	27,960	29,949	37,738	36,537
30	Cotton textiles and apparel	141,259	166,495	190,498	207,772	226,120	266,080
60	Manmade-fiber textiles and apparel	94,421	116,301	130,782	169,517	188,021	176,434
222	Knit fabric	4,722	2,813	2,286	764	819	478
239	Babies' apparel	9,358	14,264	14,947	16,111	16,726	9,032
331	Cotton gloves	3,740	3,125	2,913	1,829	2,076	731
336	Cotton dresses	4,861	3,795	7,939	5,829	4,200	5,333
338	Cotton knit shirts, men/boys	13,088	17,942	17,146	22,511	25,094	31,007
339	Cotton knit shirts, women/girls	6,484	15,491	33,275	52,654	68,492	84,419
340	Cotton not knit shirts, men/boys	25,012	25,946	22,498	20,107	14,171	8,675
341	Cotton not knit blouses	2,333	2,387	2,935	3,467	3,875	3,169
342	Cotton skirts	2,479	1,593	2,069	1,953	3,297	3,986
347	Cotton trousers, men/boys	25,398	22,526	24,249	20,146	24,311	28,673
348	Cotton trousers, women/girls	20,590	25,657	26,365	30,556	31,252	41,707
350	Cotton robes	1,763	2,789	5,289	3,612	3,233	4,703
351	Cotton nightwear	7,369	12,695	12,963	13,686	13,551	18,042
352	Cotton underwear	7,818	11,893	10,721	8,238	6,709	8,367
435	Wool coats, women/girls	12,759	12,839	6,768	7,186	6,866	5,200
634	Other manmade coats, men/boys	7,934	7,217	3,100	2,358	2,127	2,951
635	Manmade-fiber coats, women/girls	15,566	16,227	14,697	24,592	25,206	14,973
636	Manmade-fiber dresses	14,991	16,161	22,524	27,674	24,256	21,474
638	Manmade knit shirts, men/boys	3,919	3,291	4,123	3,265	4,484	5,927
639	Manmade knit shirts, women/girls	2,326	1,845	4,909	11,834	10,377	13,146
640	Manmade not knit shirts, men/boys	1,543	3,248	2,892	3,865	3,243	2,108
641	Manmade-fiber not knit blouses	4,092	6,019	5,375	7,285	7,971	6,403
642	Manmade-fiber skirts	6,259	8,547	11,730	13,119	12,007	10,609
647	Manmade-fiber trousers, men/boys	3,410	3,831	3,236	7,107	9,445	10,341
648	Manmade-fiber trousers, women/girls	5,849	9,078	12,907	22,386	30,093	29,677
650	Manmade-fiber robes	2,165	3,150	2,196	712	259	1,124
651	Manmade-fiber nightwear	2,491	3,897	5,797	2,772	3,699	11,072
652	Manmade-fiber underwear	4,472	2,980	3,068	2,815	4,341	4,120
659	Other manmade-fiber apparel	4,635	5,538	5,600	8,191	8,574	7,383
669	Other manmade-fiber manufactures	6,249	13,422	16,054	19,197	29,232	25,160

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Overview

The apparel industry in Haiti is the country's largest single source of jobs and export earnings, and it relies almost entirely on the United States as a market for its output. The apparel share of total Haitian exports in 2001 was 83 percent, or \$245 million. The Haitian apparel industry employed about 27,000 workers in early 2002, down from 60,000 in 1986, but up from 17,000 in 1997.² The Haitian unemployment rate currently is 50 percent.³

Haiti has an abundance of unskilled labor, but an effective adult illiteracy rate of at least 50 percent.⁴ Haiti's wage rates are the lowest of the CBERA exporting countries at \$0.49 per hour (including social benefits), compared with almost \$1.50 in Guatemala and Honduras and \$1.65 in the Dominican Republic.⁵ Nevertheless, the growth of Haiti's apparel industry is constrained by the country's underdeveloped infrastructure; high utility, shipping, and warehousing costs; shortage of qualified managerial personnel; high cost and low quality of local inputs; and political instability.⁶ Legislation introduced in the U.S. Congress (H.R. 1031 and S. 489) would expand trade preferences for Haiti by extending duty-free treatment to apparel made in Haiti from yarns and fabrics produced in countries in the Caribbean Basin, Andean region, or sub-Saharan Africa that are beneficiaries of U.S. textile and apparel trade preferences, or in countries with which the United States has a free-trade agreement (e.g., Mexico).⁷

Industry Profile

The political instability following the fall of the Duvalier regime in 1986, when employment in the Haitian apparel industry totaled 60,000 workers, prompted U.S. contractors to move operations to other countries.⁸ Apparel employment declined to about 5,000 in 1993, reflecting difficulties occasioned by the U.S. embargo of 1991-94. Following the end of the embargo and the return of democratic government in 1994, apparel employment rebounded to 17,000 jobs in 1997. Notwithstanding the economic slowdown in Haiti since late 1999,

¹ Prepared by Josephine Spalding, Office of Industries.

² U.S. Department of State telegram 404, "Haiti's Apparel Industry Sector: U.S. Industry Takes Another Look," prepared by U.S. Embassy, Port-au-Prince, Feb. 21, 2002.

³ Found at <http://www.usaid.gov/country/country/lac/ht>, retrieved Feb. 21, 2003.

⁴ U.S. Department of State telegram 1730, "Haiti: 2002 Investment Climate Statement," prepared by U.S. Embassy, Port-au-Prince, July 23, 2002, para. 63.

⁵ Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers," (New York, NY), Nov. 2002.

⁶ Found at <http://www.state.gov>, retrieved Oct. 22, 2002.

⁷ The legislation was introduced on Feb. 27, 2003, and is under consideration in the House Subcommittee on Trade and the Senate Committee on Finance.

⁸ Information in the paragraph is from U.S. Department of State telegram 404, "Haiti's Apparel Industry Sector."

apparel employment has remained fairly steady, fluctuating between 25,000 and 27,000 workers.

The Haitian apparel industry assembles low-cost basic products such as T-shirts from imported fabrics, mainly from the United States. Contract apparel operations accounted for about 70 percent of employment in Haiti's assembly sector in 1997.⁹ The Haitian industry also assembles apparel for firms based in Asia (mainly China and the Philippines) for export to the United States. This assembly trade likely will decline in importance for Haiti following elimination of quotas in 2005.

The Dominican Republic has established a number of apparel assembly firms along its border with Haiti.¹⁰ It is likely that a number of these firms will establish full package apparel production. Higher wage rates in the Dominican Republic have made their apparel production less competitive in world markets. In exchange for access to lower cost labor in Haiti, the Dominican Republic provides investment and production expertise.

Most Haitian assembly firms are captive suppliers to one U.S. firm. U.S. firms only contract for apparel assembly and do not provide financing for Haitian assembly operations. The back-to-back financing that is currently available to Haitian apparel assemblers, is offered by Haitian banks. Financing is dependent on the apparel assembler securing a contract with a U.S. apparel producer. Once the Haitian apparel assembler has a contract with a U.S. client they can use the contract to get a loan from a bank. Haitian apparel assemblers use these loans to pay for their labor and any additional raw materials.¹¹

Foreign Trade

Haiti's foreign trade (imports plus exports) in textiles and apparel, which is accounted for almost entirely by the United States, grew by 71 percent during 1997-2000 to \$470 million, and then fell by 11 percent in 2001 to \$419 million (table I-17). The Haitian trade surplus in sector goods fluctuated widely during 1997-2001, rising from \$44 million in 1997 to \$122 million in 1999, and then falling to slightly less than \$85 million in 2001. During 1997-2001, Haitian imports of sector goods peaked at \$277 million in 1999, before declining to \$252 million in 2001, while Haitian sector exports peaked at \$195 million in 2000, and then decreased to \$167 million in 2001. The imports consisted of apparel inputs, while the exports consisted almost entirely of finished garments.

Haiti's apparel exports are shipped almost entirely to the United States (table I-18). Based on official U.S. statistics, U.S. imports of textiles and apparel from Haiti rose by 63 percent during 1997-99 to a high of 127 million square meters equivalent (SMEs), and then fell to 109 million SMEs, valued at \$217 million, in 2002 (table I-19). The imports in 2002 consisted almost entirely of cotton apparel (67 million SMEs) and manmade-fiber apparel

⁹ U.S. and Foreign Commercial Service, "Assembly Sector Textile and Apparel - Haiti," Market Research Reports, found at <http://www.stat-usa.gov/mrd.nsf/vw...penDocument&sessID=F09E11D213A2C52>, retrieved Nov. 13, 2002.

¹⁰ Jeannette Dominguez, Executive Director, Dominican Council of Export Free Zone, transcript of hearing, Jan. 22, 2002, p. 29.

¹¹ U.S. and Foreign Commercial Service, "Assembly Sector Textile and Apparel - Haiti."

(41 million SMEs). The Haitian shipments were concentrated in basic garments for which major suppliers are highly constrained by quotas—namely, knit tops (e.g., T-shirts), underwear and other intimate apparel, pants and shorts, and nightwear. These basic garments are characterized by long and standardized production runs, low labor content, and few styling changes.

Table I-17
Haiti: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of apparel workers	17,000	(¹)	(¹)	(¹)	27,000
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	4.8	4.0	8.1	6.1	7.2
Apparel (<i>million dollars</i>)	154.7	236.0	269.0	269.2	244.6
Total (<i>million dollars</i>)	159.5	240.0	277.1	275.3	251.8
Imports:					
Textiles (<i>million dollars</i>)	21.3	32.7	30.6	36.4	44.7
Apparel (<i>million dollars</i>)	94.6	109.5	124.9	158.2	122.3
Total (<i>million dollars</i>)	115.9	142.2	155.5	194.6	166.9
Trade balance:					
Textiles (<i>million dollars</i>)	-16.6	-28.7	-22.5	-30.3	-37.5
Apparel (<i>million dollars</i>)	60.1	126.5	144.1	111.0	122.4
Total (<i>million dollars</i>)	43.6	97.7	121.5	80.7	84.9

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Employment data from U.S. Department of State telegram 404, "Haiti's Apparel Industry Sector;" trade data are United Nations data as reported by Haiti's trading partners.

Table I-18
Haiti: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	4	4	4	4	3
European Union	(¹)	(¹)	(¹)	(¹)	(¹)
Canada	1	(¹)	4	2	4
Subtotal	5	4	8	6	7
All other:					
Philippines	0	0	0	0	(¹)
Hong Kong	0	0	(¹)	0	(¹)
Barbados	0	0	(¹)	(¹)	(¹)
Other	(¹)	(¹)	(¹)	(¹)	(¹)
Subtotal	(¹)	(¹)	(¹)	(¹)	(¹)
Grand total	5	4	8	6	7
Apparel (SITC 84):					
Quota markets:					
United States	149	232	265	264	238
European Union	4	2	2	1	5
Canada	1	1	2	3	1
Subtotal	154	236	269	269	244
All other	(¹)	(¹)	(¹)	(¹)	1
Grand total	155	236	269	269	245
Textiles and apparel:					
Quota markets:					
United States	153	236	269	268	241
European Union	5	2	2	1	5
Canada	2	1	6	5	5
Subtotal	159	240	277	275	251
All other	(¹)	(¹)	(¹)	(¹)	1
Grand total	159	240	277	275	252
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	99	98	98	97	95
Apparel	100	100	100	100	100
Average	100	100	100	100	100

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table I-19
Textiles and apparel: U.S. general imports from Haiti, by specified product categories,¹ 1997-2002

Cat.							
No.	Description	1997	1998	1999	2000	2001	2002
—————1,000 square meters equivalent—————							
0	Textiles and apparel, total	78,228	113,415	127,350	125,011	109,099	109,285
1	Apparel	77,640	112,877	126,737	124,784	109,001	108,984
2	Textiles	587	538	613	227	97	300
30	Cotton textiles and apparel	40,958	67,701	86,925	89,032	72,416	67,193
60	Manmade-fiber textiles and apparel	37,197	45,651	40,394	35,959	36,384	41,435
239	Babies' apparel	2,694	4,211	2,696	1,142	612	745
338	Cotton knit shirts, men/boys	6,761	10,852	16,033	16,611	13,667	20,930
339	Cotton knit shirts, women/girls	930	2,423	2,949	3,680	2,695	3,071
347	Cotton trousers, men/boys	5,205	5,959	6,612	4,091	3,585	4,050
348	Cotton trousers, women/girls	3,801	5,411	5,196	7,105	9,517	6,607
350	Cotton robes	2,292	3,025	2,124	1,415	1,627	1,798
351	Cotton nightwear	2,538	2,780	308	487	872	1,235
352	Cotton underwear	14,417	31,905	49,833	53,501	38,557	26,271
638	Manmade knit shirts, men/boys	1,721	818	822	697	983	11,561
639	Manmade knit shirts, women/girls	697	946	1,521	261	1,239	3,371
640	Manmade not knit shirts, men/boys	226	126	100	327	879	1,422
641	Manmade-fiber not knit blouses	24	119	247	271	279	374
647	Manmade-fiber trousers, men/boys	3,041	1,400	1,245	1,352	1,806	1,715
648	Manmade-fiber trousers, women/girls	482	547	1,207	780	1,031	2,805
649	Manmade-fiber brassieres	1,425	3,809	2,998	2,584	2,432	2,320
650	Manmade-fiber robes	3,139	3,634	1,795	3,410	3,475	766
651	Manmade-fiber nightwear	16,045	24,437	24,154	21,126	17,969	8,452
652	Manmade-fiber underwear	7,586	6,787	4,433	2,007	3,341	2,867
659	Other manmade-fiber apparel	1,038	605	689	1,708	1,764	3,275

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Honduras¹

Overview

The textile and apparel sector is Honduras' largest source of export earnings and employment, accounting for one-half (\$2.6 billion) of total exports in 2001 and 26 percent (107,000 workers) of the workforce in 2002.² Honduras was the third-largest volume supplier of U.S. apparel imports in 2002 (after Mexico and China), having benefited from quota-free access and U.S. trade programs that encouraged U.S. apparel firms to use production-sharing operations in the CBERA region. Honduras also benefits from an abundance of low-cost labor, a productive workforce, and proximity to its export market. However, dependence on the United States as a market for its sector goods makes Honduras vulnerable to changes in U.S. economic activity, as occurred in 2001 and 2002 when there was a marked slowdown in U.S. consumer spending on apparel.

Industry Profile

The Honduran textile and apparel sector traditionally processed U.S. materials into apparel for export to the United States. U.S. apparel firms shipped cut garment parts to Honduras for assembly and imported the finished garments at reduced duties under HTS heading 9802.00.80 (see "overview" at the beginning of this appendix for information on U.S. production-sharing tariff provisions). The pattern of U.S. production-sharing activity in Honduras has begun to change since implementation of the CBTPA in October 2000. U.S. firms now ship uncut U.S. fabrics to Honduras for cutting and assembly into qualifying garments. Moreover, as a result of the CBTPA provision that grants duty-free and quota-free access to the U.S. market for specified quantities of garments made in CBERA countries from "regional knit fabrics," investors have established or expanded knitting operations in Honduras to make outerwear T-shirts, underwear, and other knitwear for export to the United States. A few Honduran firms now offer "full package" knitwear programs, in which the firms knit, dye, and finish, the fabrics, cut and sew the fabrics, and package the finished garments for sale at retail. Honduras purchased a total of 367 large circular knitting machines during 1995-2002; in 2002 alone, it purchased 98 machines.³

¹ Prepared by Diane Manifold, Office of Economics.

² Mario Canahuati, Embassy of Honduras, written submission to the Commission, Feb. 4, 2003, p. 1.

³ International Textile Manufacturers Federation, *International Textile Machinery Shipment Statistics*, vol. 25/2002, pp. 44-45.

Industry structure and performance

The Honduran textile and apparel sector has expanded significantly in recent years. Employment in the sector grew from 50,000 workers in 1994 to 125,000 in 2000, and then fell to 110,000 in 2001 (table I-20, found at the end of this country profile), when 36 maquiladora plants closed as a result of weakness in its export market.⁴ According to Honduran sources, the decline in apparel employment in 2001 was also attributable to investments by more efficient producers in Honduras and decreased availability of fabrics from the United States.⁵ Although several of the maquiladoras continued to downsize in 2002, leading to a reduction in employment to 107,000 workers, 20 new apparel companies registered that year, creating 3,000 jobs. Industry production in 2002 grew 7 percent by quantity and 3 percent by value to \$2.4 billion.⁶

The Foundation of Investment and the Promotion of Exports (FIDE) has projected employment in the textile and apparel sector to reach 146,000 workers in 2005.⁷ However, Honduras reportedly has an inflexible and increasingly expensive labor market, and its textile and apparel sector has difficulty obtaining credit. Larger maquiladora firms that have access to U.S. credit are better equipped to cope with the economic contraction while smaller and medium-size companies have had difficulties meeting payroll and inventory needs.⁸

A 1998 law made all of Honduras a free-trade zone. Virtually all companies in the textile and apparel sector are registered as export processing zones (EPZs)⁹ and are near the deepwater port of Puerto Cortes, the closest major port to Miami in Central America.¹⁰ Shipping times from the port to major southern U.S. ports are approximately 48 hours. Other ports in

⁴ U.S. Department of State telegram.

⁵ A representative of a textile manufacturer in Honduras, in an interview with USITC staff in San Pedro Sula, Honduras, Feb. 21, 2003, attributed much of the reduction in plants and employment in 2001 to the closure of relatively small and fiscally weak apparel plants that could not compete with the scale and productivity levels of the large-scale apparel plants recently established in the country by foreign investors. Another Honduran source stated that some Honduran apparel producers reportedly went out of business in 2001 because of the reduced availability of U.S. fabrics as a result of the failure of several U.S. textile firms, leading customers of the Honduran companies to switch to Asian suppliers. Jesus Canahuati, "Message from the President," in Honduran Apparel Manufacturers Association, *2002 Annual Report*.

⁶ Henry Fransen, "Message from the Executive Director," in Honduran Apparel Manufacturers Association, *2002 Annual Report*.

⁷ FIDE, *Destination Honduras 2003*, p. 117. Similarly, the Honduran Apparel Manufacturers Association projects employment in the sector to reach 130,000 in 2004 and 143,000 in 2005, (Mario Canahuati, Embassy of Honduras, written submission to the Commission, Feb. 4, 2003, p. 2). Another industry source predicted that the apparel workforce in Honduras would plateau at 110,000 until 2005, then lose 20,000 to 30,000 jobs following quota elimination in 2005 (representative of a U.S. textile mill and Honduran apparel company, interview by USITC staff, San Pedro Sula, Feb. 21, 2003).

⁸ U.S. Department of State telegram 1391, "Honduras Maquila Update--Prospects for the Textile Industry after Quotas," prepared by U.S. Embassy, Tegucigalpa, May 7, 2002.

⁹ "Honduran Apparel Manufacturing Industry," *Destination Honduras 2002*.

¹⁰ Following damage by Hurricane Mitch in 1998, Texaco Caribbean invested \$10.1 million in a pier and dredging project in Puerto Cortes, which deepened the main ship channel so that 80 metric ton vessels can easily get into port. U.S. Department of State telegram 3364, "Honduran Economic Highlights - August," prepared by U.S. Embassy, Tegucigalpa, Oct. 4, 2000.

Honduras that handle ocean-going freight are Puerto Castillo on the Caribbean and San Lorenzo on the Pacific. Honduras has international airports serving Tegucigalpa and the commercial center of San Pedro Sula, which has a modern international airport that can handle 32,000 metric tons of cargo and 510,000 passengers per year.¹¹

According to a World Bank report, factors that could inhibit further development of the Honduran textile and apparel sector include infrastructure problems (e.g., in 1999, only 20 percent of the roads were paved and there were only 44 telephone mainlines per 1,000 people).¹² However, most of the 24 industrial parks in Honduras are within a 1-hour drive of Puerto Cortes.¹³ Further, Honduras has 13,603 kilometers of roads connecting the ports and airports with secondary cities and rural areas of the country. There are good surface connections with the rest of Central America, and the domestic roads generally satisfy local and foreign companies' distribution needs. Apparel producers in Honduras have an advantage over those in Nicaragua and El Salvador in terms of quick response and transportation costs. Most apparel produced in Nicaragua is transported by truck to Puerto Cortes, then shipped to the United States,¹⁴ while most apparel produced in El Salvador is transported by truck to either Puerto Cortes or to Santo Tomas de Castillo in Guatemala.¹⁵

Factors of production

As noted above, the apparel industry relies heavily on imports for its input requirements, particularly from the United States. A few local firms produce for both the local and export markets, especially in Central America. Honduras, along with Nicaragua, grows the most cotton in the CBERA region, but Honduran cotton is characterized by short fibers, which limits its uses.¹⁶

Honduras has an abundant supply of low-cost labor, and its workers are considered among the most productive in the CBERA region. However, labor costs reportedly are rising. Maquiladora owners have expressed concern about the rising minimum wage, the implementation of bonus salary payments in June and December, high severance payment requirements, and a government-mandated increase in employer social security contributions in 2001.¹⁷ The textile and apparel sector offers the highest daily minimum wage in Honduras, with the average maquiladora worker earning between double and triple the minimum

¹¹ U.S. and Foreign Commercial Service, "Honduras Country Commercial Guide FY 2002," found at <http://www.usatrade.gov/Website/CC...rl/CCG-HONDURAS2002-CH-1:-00634E1B>, retrieved Oct. 8, 2002.

¹² The World Bank, International Finance Corporation, "Country Page for Honduras," found at <http://wbln0018.worldbank.org/ifce...BD3C2852567DA006F7330?Open Document>, retrieved Oct. 8, 2002.

¹³ Foundation for Investment and Growth of Exports, *Destination Honduras 2003*, p. 120.

¹⁴ It takes 1 day to truck apparel from assembly plants in Managua, Nicaragua, to Puerto Cortes. Representative of a Honduran textiles manufacturer, interview by USITC staff, Feb. 21, 2003.

¹⁵ The newer port at Santo Tomas is supplanting the older facilities at nearby Puerto Barrios.

¹⁶ U.S. and Foreign Commercial Service, "Honduras: Industry Sector Analysis, Textile Machinery and Fabrics."

¹⁷ U.S. Department of State telegram 139, "Honduras Maquila Update - Prospects for the Textile Industry After Quotas," prepared by U.S. Embassy, Tegucigalpa, May 7, 2002.

wage.¹⁸ In addition, workers are offered a variety of social services such as subsidized transportation and meals and free legal and medical services in the maquiladoras.¹⁹ The average salary of maquiladora workers was \$3,718 in 2002, compared with the average per capita income in Honduras of \$850 that year.²⁰ Nonetheless, the maquiladoras had experienced a series of conflicts between labor and management of non-U.S. firms over such issues as the right of workers to establish unions and the inclusion of unions in the decision-making process.²¹

The national electrical grid in Honduras is heavily dependent on hydroelectric sources of energy. Low reservoir capacities and growing demand for electricity have resulted in frequent power outages and rolling brownouts. To ensure a stable supply of electricity, many industrial parks and textile mills have built their own power plants which use relatively expensive bunker fuel, driving up costs of production in the textile and apparel sector.²²

Investment

The cumulative investment position in the Honduran textile and apparel sector in 2001 totaled \$1.4 billion, of which \$751 million was foreign direct investment (FDI) and \$670 million was local investment. The United States was the major foreign investor, accounting for 26 percent (\$370 million) of the 2001 FDI total, followed by Korea with 10 percent (\$146 million). Honduras has attracted FDI to its 24 industrial parks during the past 10 years because of its low labor costs, proximity to its export market, modern infrastructure, and various financial incentives.²³ The industrial parks typically employ more than 5,000 workers each and provide a wide range of services to tenants, which must grant workers all benefits established in Honduran labor legislation.²⁴

Honduras permits remittance of dividends and repatriation of capital and grants foreign investors unfettered access to local credit markets. Foreign investors are granted a permanent waiver from income, sales, and corporate taxes and fees.²⁵ Nonetheless, there have been numerous cases involving possible expropriation claims by U.S. citizens. Dispute resolution within the legal system is reportedly slow and generally unsatisfactory.²⁶

¹⁸ U.S. Department of State telegram 3351, "The State of Honduran Maquila Sector in 1999," prepared by U.S. Embassy, Tegucigalpa, Sept. 28, 1999.

¹⁹ Ibid.

²⁰ Mario Canahuati, written submission to the Commission, p. 2.

²¹ U.S. Department of State telegram 3351, "The State of Honduran Maquila Sector in 1999."

²² Representative of a Honduran textile manufacturer, interview by USITC staff, Naco, Honduras, Feb. 21, 2003.

²³ "Honduras Losing Shares on U.S. Apparel Market," *Emerging Textiles*, found at <http://www.emergingtextiles.com>, retrieved on June 5, 2002.

²⁴ U.S. and Foreign Commercial Service, "Honduras: Industry Sector Analysis, Textile Machinery and Fabrics."

²⁵ "Honduras Industrial Parks," *Destination Honduras 2002*.

²⁶ U.S. and Foreign Commercial Service, "Honduras Country Commercial Guide FY2002," found at <http://www.usatrade.gov/Website/CC...riCCG-HONDURAS2002-CH-1:-00634E1B>, retrieved Oct. 8, 2002.

Many foreign firms have established facilities in Honduras. At the end of 2002, members of the Honduran Apparel Manufacturers Association included 157 apparel producers, 9 textile mills, and numerous suppliers of equipment, components, and services to the industry. Apparel producers employed 90,000 workers and textile mills, an estimated 4,500. U.S.-owned companies accounted for 54 percent of the apparel industry workforce; Korea, 17 percent; Honduras, 15 percent; Canada, 5 percent; and other Asian sources, 10 percent.²⁷ The largest textile mill in Honduras is a U.S.-Honduran joint venture.

In addition to the significant role played by Korean investors, a number of other Asian firms also make apparel in Honduras. The Shanghai Textile Holding Group established a company in Honduras to process suiting materials from China into finished goods for export to North America; it plans to open research and development centers in the United States, processing centers in Honduras to improve products, and retail chain stores to sell its products.²⁸ Companies based in Canada, Korea, and Taiwan have also built textile mills in Honduras, enhancing efforts by apparel producers in Honduras to become full package suppliers. In October 2002, the China Institute of Taiwan and the Honduran Apparel Manufacturers' Association signed a cooperation agreement to set up a textile research institute in Honduras.²⁹

In terms of outward investment, Karims Group of Honduras, which operates seven apparel plants in Honduras, recently purchased U.S.-based Quitman Knitting Mills of Quitman, MS, which has knitting, dyeing, and finishing facilities for knitted goods and a capacity of 175,000 pounds weekly. According to an official of Karims Group, "(t)he Quitman acquisition means we are now a vertical business and will be able to offer more competitive pricing and quicker turnaround to our current customers."³⁰ Karims will now be able to offer full package service to its uniform and private label customers.

Government Policies

The growth of the textile and apparel sector began in the mid-1980s following implementation of U.S. trade preferences for CBERA countries and Honduran incentives to attract FDI, including establishment of the EPZ program in 1987. Honduran industry officials interviewed by Commission staff stated that the key to survival of the apparel industry in Honduras following quota elimination in 2005 is for enactment of the U.S. free-trade agreement being negotiated with the five Central American countries (CAFTA), which is discussed in the "overview" at the beginning of this appendix.

Honduras offers foreign investors exemption from all export taxes, local sales, and excise taxes, and taxes on profits and profit repatriation, and permits unrestricted capital

²⁷ Honduran Apparel Manufacturers Association, *Directory 2002-2003*.

²⁸ "A Base in Honduras," *Textile Asia*, Feb. 2001, p. 55.

²⁹ "A Hand to Honduras," *Textile Asia*, Oct. 2002, p. 78.

³⁰ "American Markets," *Textile Asia*, May 2002, p. 86.

repatriation and currency conversion.³¹ Other incentives include the 1984 Temporary Import Regime (RIT), which permitted firms to import inputs free of duty, provided the final products were exported out of Central America. In 1997, the Government amended the RIT to allow firms to export to other Central American countries and also granted companies a 10-year income tax holiday. In 1998, the Government expanded the FTZ area and its benefits to include the entire country. As a result of these incentives, the maquiladora sector grew to become the third-most important economic sector in 1977 after coffee and bananas.³²

Honduras has had limited success in diversifying its manufacturing base from textile and apparel production into other export sectors. Honduras has created a Competitiveness Council to address investment climate issues and improve economic diversification, as well as deal with such issues as strengthening the judicial system and resolving land tenancy problems. Although Honduras has few FDI restrictions and performance requirements,³³ the challenge to improve the investment climate is significant. Some examples of problems are the need to strengthen the banking system and contend with high interest, short-term loans. In addition, the judicial system reportedly continues to be weak, and it is difficult to enforce contracts. Land disputes, land tenancy, and agrarian reform reportedly have discouraged investment.

Foreign Trade

Honduras' trade surplus in textiles and apparel rose from \$603 million in 1997 to \$879 million in 2001, reflecting increases of 45 percent in both imports, to \$1.7 billion, and exports, to \$2.6 billion (table I-20, found at the end of this country profile). The United States is Honduras' major trading partner, accounting for most of the imports (apparel inputs) and for almost all of the exports (table I-21). The United States supplies most of the cotton fabrics and almost all of the cotton yarn used by the Honduran textile and apparel sector, while Korea, Taiwan, and China primarily provide manmade-fiber woven fabrics.

U.S. imports of textiles and apparel from Honduras rose by 49 percent during 1997-2002 to 1.1 billion square meters equivalent (SMEs) valued at \$2.4 billion (table I-22). The imports consisted almost entirely of apparel, for which Honduras was the third-largest source in 2002 after Mexico and China. The Honduran shipments are concentrated in basic garments, particularly knit tops (e.g., T-shirts) and underwear, which together accounted for 72 percent of the total quantity of U.S. sector imports from Honduras in 2002. U.S. imports of such garments from other major foreign suppliers are highly constrained by quotas. Honduras is the largest, or among the largest, foreign suppliers of men's and women's knit tops and underwear of cotton and manmade fibers. Quick turnaround times are an important competitive advantage of Honduras.

³¹ U.S. Department of State telegram 3351, "The State of the Honduran Maquila Sector in 1999."

³² Ibid.

³³ U.S. Department of State telegram 2684, "Honduras 2003 Country Commercial Guide," prepared by U.S. Embassy, Tegucigalpa, Sept. 24, 2002.

Table I-20
Honduras: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of textile and apparel workers (1,000)	87	110	120	125	110
Installed spinning capacities:					
Short-staple spindles (1,000)	(¹)	(¹)	(¹)	(¹)	(¹)
Long-staple spindles (1,000)	(¹)	(¹)	(¹)	(¹)	(¹)
Open-end rotors (1,000)	(¹)	(¹)	(¹)	(¹)	(¹)
Installed weaving capacities:					
Shuttleless looms (number)	(¹)	(¹)	(¹)	(¹)	(¹)
Shuttle looms (number)	(¹)	(¹)	(¹)	(¹)	(¹)
Cumulative investment (million dollars)	(¹)	(¹)	(¹)	(¹)	1,421.5
Local investment	(¹)	(¹)	(¹)	(¹)	670.1
United States	(¹)	(¹)	(¹)	(¹)	370.2
Korea	(¹)	(¹)	(¹)	(¹)	145.5
Foreign trade:					
Exports:					
Textiles (million dollars)	12.9	14.6	14.8	13.3	12.3
Apparel (million dollars)	1,755.9	1,987.3	2,288.6	2,525.4	2,558.7
Total (million dollars)	1,768.8	2,001.9	2,303.4	2,538.7	2,571.0
Imports:					
Textiles (million dollars)	352.0	382.4	399.3	512.8	642.3
Apparel (million dollars)	814.1	1,029.4	1,105.4	1,320.5	1,049.7
Total (million dollars)	1,166.1	1,411.8	1,504.7	1,833.2	1,692.0
Trade balance:					
Textiles (million dollars)	-339.1	-367.7	-384.5	-499.4	-630.0
Apparel (million dollars)	941.8	957.8	1,183.2	1,204.9	1,509.1
Total (million dollars)	602.7	590.1	798.7	705.5	879.1

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data from Honduran Maquila Association; the International Textiles Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002 and selected back issues; trade data are United Nations data as reported by Honduras' trading partners.

Table I-21
Honduras: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	6	5	7	6	4
European Union	(¹)	1	(¹)	(¹)	(¹)
Canada	(¹)	(¹)	(¹)	(¹)	1
Subtotal	6	6	7	6	5
All other:					
El Salvador	2	2	1	2	3
Costa Rica	2	2	2	1	2
Guatemala	1	1	1	1	1
Other	3	4	4	3	2
Subtotal	7	9	8	7	8
Grand total	13	15	15	13	12
Apparel (SITC 84):					
Quota markets:					
United States	1,726	1,945	2,243	2,463	2,486
European Union	3	4	4	20	16
Canada	16	24	26	24	34
Subtotal	1,745	1,973	2,274	2,507	2,536
All other	11	14	15	18	22
Grand total	1,756	1,987	2,289	2,525	2,559
Textiles and apparel:					
Quota markets:					
United States	1,731	1,950	2,250	2,470	2,490
European Union	3	5	5	20	16
Canada	16	24	27	24	35
Subtotal	1,751	1,979	2,281	2,514	2,541
All other	18	23	22	25	30
Grand total	1,769	2,002	2,303	2,539	2,571
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	45	40	46	48	38
Apparel	99	99	99	99	99
Average	99	99	99	99	99

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table I-22

Textiles and apparel: U.S. general imports from Honduras, by specified product categories,¹ 1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
—1,000 square meters equivalent—							
0	Textiles and apparel, total	735,175	808,461	958,257	1,045,195	1,032,289	1,098,852
1	Apparel	725,982	798,962	942,795	1,028,084	1,020,661	1,090,189
30	Cotton textiles and apparel	517,536	580,865	682,679	744,782	727,807	786,747
60	Manmade-fiber textiles and apparel	215,767	225,624	275,188	299,925	303,439	311,149
239	Babies' apparel	11,857	19,016	18,397	19,704	18,677	16,971
332	Cotton hosiery	469	1,017	3,031	8,577	11,012	26,369
338	Cotton knit shirts, men/boys	57,460	96,099	127,772	145,463	147,954	167,928
339	Cotton knit shirts, women/girls	31,940	32,102	37,924	71,089	90,843	93,103
340	Cotton not knit shirts, men/boys	25,797	30,278	31,988	30,522	21,589	15,291
341	Cotton not knit blouses	712	1,348	990	816	1,609	2,639
347	Cotton trousers, men/boys	36,872	36,899	40,882	43,530	41,876	33,925
348	Cotton trousers, women/girls	43,931	44,375	34,261	37,450	40,450	36,171
349	Cotton brassieres	2,690	1,899	1,582	861	882	2,035
350	Cotton robes	3,973	2,253	3,116	1,390	5,849	7,993
351	Cotton nightwear	6,389	9,490	12,097	29,598	28,768	29,190
352	Cotton underwear	282,907	297,011	358,256	346,950	306,512	340,607
634	Other manmade coats, men/boys	581	542	3,542	3,759	2,907	4,966
635	Manmade-fiber coats, women/girls	3,267	2,462	2,288	2,003	1,968	3,068
636	Manmade-fiber dresses	3,144	1,509	3,282	2,033	1,760	311
638	Manmade knit shirts, men/boys	78,227	81,302	106,060	123,476	102,278	123,155
639	Manmade knit shirts, women/girls	5,473	7,654	8,717	21,133	42,713	17,148
640	Manmade not knit shirts, men/boys	14,351	12,373	12,407	15,272	16,540	17,636
641	Manmade-fiber not knit blouses	1,592	1,962	1,643	1,387	1,552	2,045
642	Manmade-fiber skirts	1,859	1,319	2,255	2,674	1,412	307
647	Manmade-fiber trousers, men/boys	11,819	8,995	10,190	11,762	12,709	12,358
648	Manmade-fiber trousers, women/girls	8,506	5,959	5,348	6,252	8,196	15,500
649	Manmade-fiber brassieres	10,583	12,809	14,685	13,752	12,651	16,628
650	Manmade-fiber robes	3,093	2,300	3,093	2,549	1,362	3,372
651	Manmade-fiber nightwear	4,418	3,645	4,562	8,691	14,867	16,204
652	Manmade-fiber underwear	48,858	57,258	68,855	49,946	54,211	52,566
659	Other manmade-fiber apparel	11,378	12,018	13,526	17,049	15,877	18,573

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Jamaica¹

Overview

Jamaica has a small but diversified export-oriented economy, the mainstays of which are primary agricultural products, bauxite mining, and tourism. The manufacturing sector, including textiles and apparel, accounted for about 18 percent of Jamaica's gross domestic product (GDP), 34 percent of the labor force, and 18 percent of the exports.² The textile and apparel sector, once a key segment of Jamaica's economy, began to decline in size during the mid-1990s, with employment decreasing by nearly 50 percent from its peak in 1995 to approximately 17,000 workers (2 percent of total Jamaican employment) in 2002.³ The decline of the sector reflected a decrease in U.S. apparel imports from Jamaica from a high of \$532 million in 1995 to \$125 million in 2002. The decline in U.S. trade with Jamaica largely reflected the high cost of doing business in the country as a result of high employee turnover, low productivity, inflexible labor laws, and the added costs of securing shipments to prevent drug contamination⁴ and pilferage of goods.⁵ Other factors contributing to the decline in Jamaica's apparel exports to the United States include a shift in trade to Mexico following implementation of NAFTA in 1994, the appreciation of the Jamaican dollar, and an underdeveloped infrastructure.⁶

Industry Profile

Jamaica's textile and apparel sector consists almost entirely of apparel firms, many of which produce underwear from U.S. inputs (see "overview" at the beginning of this appendix for information on U.S. production-sharing measures). Between 1995 and 1999, the number of apparel firms declined from 350 to 170, while employment decreased from 35,000 to 18,000

¹ Prepared by Gail Burns, Office of Industries.

² GDP and employment data are for 2000, published in "Demographic Statistics 2001," Statistical Institute of Jamaica (STATIN). Export data are based on United Nations data as reported by Jamaica's trading partners (see table 1-1 in chapter 1 of this report).

³ U.S. Department of State telegram 2641, "2000 Trade Act Report," prepared by U.S. Embassy, Kingston, Oct. 13, 2000.

⁴ Jamaica is a major transit point for South American cocaine en route to the United States and the largest Caribbean producer and exporter of marijuana. U.S. Department of State, Bureau of Western Hemisphere Affairs, "Background Note: Jamaica," Mar. 2003, found at <http://www.state.gov/r/pa/ei/bgn/2032.htm>, retrieved June 23, 2003. Costs related to pilferage and drug contamination of shipments have driven up the cost of apparel production—that is, apparel firms have been assessed large fines as a result of drug traffickers hiding contraband in cargo containers. U.S. Department of State telegram 1240, "Impact of CBI Enhancement on Jamaica," prepared by U.S. Embassy, Kingston, May 24, 2000.

⁵ U.S. Department of State telegram 1240, "Impact of CBI Enhancement on Jamaica," prepared by U.S. Embassy, Kingston, May 24, 2000.

⁶ Ibid.

workers (table I-23, found at the end of this country profile).⁷ About 90 of the plants in 1999 exported almost exclusively to the United States; the majority of these plants were foreign-owned and located in free-trade zones. The remainder sold their goods locally or to other countries in the Caribbean Basin.⁸

In response to the decline of the apparel industry in recent years, in January 2002, Jamaica announced plans to fund plant modernization in an effort to help firms move from apparel assembly to “full package” operations.⁹ Full package operations add more value to the product and require manufacturers to design products, source fabrics, cut and assemble the fabrics into finished garments, and package the products for retail sale. Nevertheless, the Government of Jamaica believes that the future of the apparel industry exists with firms that mass produce basic garments, and it hopes that the CBTPA will forestall the industry’s complete collapse.¹⁰ According to industry observers in Jamaica, unless the Government adopts measures that will enable firms to reduce production costs (e.g., tax incentives and labor reforms), apparel companies in Jamaica likely will continue to relocate to lower cost countries in the region such as the Dominican Republic and Guatemala.

The textile and apparel workforce in Jamaica consists largely of females (particularly those who are heads of households) with little education and minimal qualifications for other employment. The Jamaican labor system reportedly is an added impediment to the apparel industry. Unlike workers in the service industry, apparel workers must receive extra compensation for working weekends and the income is taxed at a higher rate than standard wages.¹¹

Government Policies

The Government of Jamaica encourages foreign investment by offering incentives such as remittance facilities to assist in repatriating funds to the country of origin and exemption from corporate taxes and customs duties on imports of raw materials, machinery, and equipment for 10 years under the Export Industry Encouragement Act. The Jamaican Free Zones Act permits investors to operate solely with foreign exchange in certain activities such as warehousing, manufacturing, assembling, and packaging operations. Jamaica has four active FTZs, one of which is owned by the government.¹²

Jamaica has a bilateral textile agreement with the United States that provides preferential market access for apparel assembled from U.S.-formed and -cut fabrics. Quotas, however, generally are not filled. Jamaica also has a bilateral textile agreement with Canada that governs access levels for underwear. Jamaica is a signatory to the Lomé Convention, which

⁷ U.S. Department of State telegram 989, “Jamaica’s Garment Industry—The End of an Era?” prepared by U.S. Embassy, Kingston, Apr. 26, 2000, para. 2.

⁸ “General Manufacturing,” Jamaica Promotions Corp., found at <http://www.investjamaica.com>, retrieved Dec. 10, 2002.

⁹ “Paulwell Promises Funds for Apparel Sector,” *Observer Reporter*, found at <http://www.pnpjamaica.com/innewsjan24a.htm>, retrieved Nov. 15, 2002.

¹⁰ U.S. Department of State telegram 989, “Jamaica’s Garment Industry.”

¹¹ *Ibid.*

¹² “General Manufacturing,” Jamaica Promotions Corp.

provides for preferential treatment of Jamaican apparel exports to the European Union. In addition, Jamaica is a member of the Caribbean Common Market (CARICOM), which allows duty-free-trade for items produced in CARICOM countries.

Foreign Trade

Jamaica's trade surplus in textiles and apparel declined continuously during 1997-2001 to \$91 million, reflecting declines of 49 percent in exports, to \$272 million and 46 percent in imports, to \$181 million (table I-23). The United States is Jamaica's major trading partner in textiles and apparel, nearly all of which involves the import of apparel inputs from the United States and the export of finished apparel to the United States. Jamaica's only other significant source of imported apparel inputs was China, whose shipments peaked at \$37 million in 1999, before falling to \$31 million in 2000.

The United States accounted for 70 percent of Jamaica's exports of textiles and apparel in 2001, and the European Union accounted for almost all of the remainder (table I-24). Based on official U.S. statistics, U.S. textile and apparel imports from Jamaica declined by 56 percent during 1997-2002 to 85 million square meters equivalent (table I-25). The imports are highly concentrated in underwear (87 percent of the total in 2002).

Table I-23
Jamaica: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of apparel establishments	(¹)	(¹)	170	(¹)	170
Number of apparel workers	(¹)	(¹)	18,000	(¹)	² 17,000
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	2.6	1.3	1.0	1.1	0.5
Apparel (<i>million dollars</i>)	<u>555.6</u>	<u>502.5</u>	<u>435.7</u>	<u>352.3</u>	<u>271.2</u>
Total (<i>million dollars</i>)	558.1	503.9	436.7	353.4	271.8
Imports:					
Textiles (<i>million dollars</i>)	56.9	62.1	57.1	50.1	47.7
Apparel (<i>million dollars</i>)	<u>332.9</u>	<u>273.9</u>	<u>254.4</u>	<u>194.7</u>	<u>133.1</u>
Total (<i>million dollars</i>)	389.8	336.0	311.5	244.8	180.8
Trade balance:					
Textiles (<i>million dollars</i>)	-54.3	-60.7	-56.1	-49.0	-47.1
Apparel (<i>million dollars</i>)	<u>222.7</u>	<u>228.6</u>	<u>181.3</u>	<u>157.6</u>	<u>138.1</u>
Total (<i>million dollars</i>)	168.3	167.9	125.2	108.6	91.0

¹ Not available.

² Full-time equivalents.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data from U.S. Department of State telegram 989, "Jamaica's Garment Industry—The End of an Era?" prepared by U.S. Embassy, Kingston, Apr. 26, 2000. Trade data are United Nations data as reported by Jamaica's trading partners.

Table I-24
Jamaica: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	1	1	(¹)	1	(¹)
European Union	(¹)	(¹)	(¹)	(¹)	(¹)
Canada	(¹)	(¹)	(¹)	(¹)	(¹)
Subtotal	1	1	(¹)	1	(¹)
All other:					
Honduras	(¹)	(¹)	(¹)	0	(¹)
Venezuela	(¹)	0	(¹)	(¹)	(¹)
Moldova	0	0	0	0	(¹)
Other	1	(¹)	1	(¹)	(¹)
Subtotal	1	(¹)	1	(¹)	(¹)
Grand total	3	1	1	1	1
Apparel (SITC 84):					
Quota markets:					
United States	480	429	349	272	190
European Union	63	59	78	75	78
Canada	5	5	2	2	2
Subtotal	547	493	429	349	270
All other	8	9	7	3	1
Grand total	556	503	436	352	271
Textiles and apparel:					
Quota markets:					
United States	481	430	350	273	190
European Union	63	59	78	75	78
Canada	5	5	2	2	2
Subtotal	548	494	430	350	270
All other	10	10	7	4	2
Grand total	558	504	437	353	272
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	44	68	47	62	61
Apparel	98	98	98	99	99
Average	98	98	98	99	99

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table I-25
Textiles and apparel: U.S. general imports from Jamaica, by specified product categories,¹
1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
<i>1,000 square meters equivalent</i>							
0	Textiles and apparel, total	194,424	171,281	148,803	126,331	102,637	85,189
1	Apparel	193,737	170,972	148,300	125,724	102,218	84,485
30	Cotton textiles and apparel	159,219	134,502	104,704	81,500	68,589	67,187
60	Manmade-fiber textiles and apparel	35,046	36,643	44,083	44,830	34,046	18,000
239	Babies' apparel	331	323	455	242	93	66
331	Cotton gloves	705	581	429	291	68	53
338	Cotton knit shirts, men/boys	19,612	18,269	8,376	4,850	3,933	1,544
339	Cotton knit shirts, women/girls	2,601	1,467	1,636	607	220	390
340	Cotton not knit shirts, men/boys	3,820	3,972	2,175	396	(²)	2
341	Cotton not knit blouses	184	354	414	26	5	24
347	Cotton trousers, men/boys	2,087	2,501	2,343	1,803	615	17
348	Cotton trousers, women/girls	5,012	4,544	2,721	66	24	69
349	Cotton brassieres	109	55	46	48	3	0
351	Cotton nightwear	1,381	1,617	880	441	819	312
352	Cotton underwear	118,961	97,444	82,921	71,560	62,023	63,745
632	Manmade-fiber hosiery	16,665	19,272	19,354	17,018	9,629	561
638	Manmade knit shirts, men/boys	3,069	400	213	84	98	99
640	Manmade not knit shirts, men/boys	458	853	1,026	1,173	1,734	1,461
641	Manmade-fiber not knit blouses	395	384	316	514	325	459
647	Manmade-fiber trousers, men/boys	1,318	1,390	980	883	1,138	930
648	Manmade-fiber trousers, women/girls	416	338	403	703	144	329
651	Manmade-fiber nightwear	2,378	1,553	192	21	105	0
652	Manmade-fiber underwear	69	3,528	13,234	17,282	15,982	10,414
659	Other manmade-fiber apparel	6,848	6,385	7,593	6,586	4,376	2,958

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

² Less than 500 square meters equivalent.

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Nicaragua¹

Overview

Nicaragua is one of the poorest countries in the Western Hemisphere, with real gross domestic product (GDP) per capita of \$437 in 2001, unemployment currently at 15 to 20 percent, and underemployment at an estimated 40 percent. The textile and apparel sector is a major source of jobs and export earnings for Nicaragua, accounting for 2 to 3 percent (or about 46,000 workers) of the country's total viable workforce and 37 percent (\$397 million) of its exports in 2001.

Nicaragua benefits from competitively priced labor and proximity to markets along the U.S. West Coast. However, the movement of goods to and from the U.S. East Coast is hindered by an underdeveloped transportation infrastructure (ports and roads).² There currently are no all-weather roads between Pacific and Atlantic coasts, and the unpaved portions of some roads are only open during the country's dry season (December-April). Most of the paved roads in Nicaragua are in the western portion of the country, along the Pacific coast. As a result, it has been estimated that the cost of shipping a single container of apparel from Nicaragua to U.S. East Coast ports is roughly \$1,000 greater than that for Honduras or Costa Rica. Commercial ocean freight into and out of the country is limited to the Pacific coast port of Corinto (110 miles northwest of Managua), which was recently dredged to accommodate larger vessels, as well as the port cities of Puerto Limón in Costa Rica and Puerto Cortés in Honduras on the Caribbean Sea.

Industry Profile

Industry structure and performance

Nicaragua's textile and apparel sector consists largely of apparel assembly operations that are carried out in government-sponsored free-trade zones (FTZs). During the past 10 years, FTZ exports rose from \$2 million to nearly \$350 million, most of which consisted of apparel sent to the United States. FTZ employment is estimated at 46,000 workers (out of a total national workforce estimated at 1.5 million). The growth in FTZ exports was largely attributable to the low cost and high quality of the workforce (low absenteeism and worker turnover), tax and investment incentives, and proximity of Nicaragua to U.S. markets vis-a-vis competitors in Asia.³ Because textile production has been negligible, apparel firms

¹ Prepared by John Cutchin, Office of Industries.

² "Infrastructure Situation: Good/Services Distribution," Nicaragua Country Commercial Guide FY 2002, found at <http://www2.usatrade.gov/Website/C.../CCG-NICARAGUA2002-CH-2:-00530F1E>, retrieved Nov. 6, 2002.

³ A representative of a major U.S. apparel retailer indicated that rising labor costs in Mexico prompted a major supplier of denim jeans to shift production from Mexico to Nicaragua (interview by USITC staff, Mar. 12, 2003).

have relied on imports from the United States and Asia for their fabric requirements. Taiwan and Korean firms are the largest foreign investors in Nicaragua.

Approximately 80 percent of Nicaraguan apparel production occurs in the government-sponsored Nicaraguan Free-Trade Zone Corporation, where about 37,000 apparel production workers are employed. Another 5,000 people are employed by privately run FTZs. FTZs are concentrated along the more heavily populated Pacific coast in Managua, Masaya, and Granada. Of the 46 companies currently operating in the FTZs, 32 are involved in apparel production.

Nicaraguan textile production had been negligible until recently when a large textile firm based in Taiwan invested \$105 million in a textile processing plant in Nicaragua, and reportedly initiated operations in the third quarter of 2002.⁴ The firm currently imports unfinished denim fabrics from Asia and dyes and finishes the fabrics in the new plant. The firm reportedly is seeking to increase the operations of the new plant to also include procurement of yarn and eventually cotton, from within Nicaragua or the region. The facility is expected eventually to have a monthly production capacity of 2 million yards of fabric. The Taiwan firm already has several factories in Nicaragua producing jeans for various major U.S. brands and retailers. The only other significant textile manufacturer in Nicaragua currently produces underwear fabric. The manufacturer reportedly imports approximately 7,000 pounds of unprocessed yarn from El Salvador and Guatemala per month to produce the fabric and the underwear, of which 90 percent is sold domestically and 10 percent is exported to Honduras.

Factors of production

Raw materials

Two-thirds of U.S. apparel imports from Nicaragua did not qualify for duty-free treatment under the CBTPA or reduced duties under HTS 9802.00.80 (see table I-3, found at the beginning of this appendix). Imports of such apparel likely were made from non-U.S. and nonregional fabric. Reportedly, approximately 65 to 70 percent of Nicaragua's apparel exports to the United States in 1999 contained fabric from Taiwan, Korea, and Hong Kong,⁵ another 15 to 18 percent contained U.S.-sourced fabric; and the remaining 15 to 18 percent were made of fabric manufactured in other CBERA countries, chiefly El Salvador and Guatemala. Efforts currently are under way to secure cotton from Nicaraguan or other regional sources for the production of denim to supplement the use of imported fabric.⁶

⁴ "Taiwanese Groups to Expand Central American Facilities," *Emerging Textiles.com, Textile and Clothing Trade Information*, July 2, 2002, found at <http://www.emergingtextiles.com/?q=-art&s=020702-coun>, retrieved Nov. 21, 2002; and representatives of the Nicaraguan Textile and Apparel Association, interview by USITC staff, Mar. 2003.

⁵ U.S. Department of State telegram 2789, "Textiles: Regional Fabric Information," prepared by U.S. Embassy, Managua, Sept. 22, 1999.

⁶ Representative of a Nicaraguan Trade Association, telephone interview by USITC staff, Mar. 20, 2003.

Labor

Approximately 13 percent of Nicaragua's workforce is employed in manufacturing, including apparel. In addition, there reportedly is a large contingent of young people who have been educated in the United States and other countries and are available to serve as bilingual managers.⁷ A sizable pool of unskilled labor is currently available; many of these workers are young, and only about a third of the population is literate. Several Taiwan investors have reported that, although local workers have become proficient in assembling single lines of standard garments, their productivity declines significantly when required to assemble fashion goods, where quick changes are more prevalent.⁸

Wage rates of apparel production workers in Nicaragua are the lowest of any CBERA apparel supplier except Haiti. The average hourly compensation (including social benefits) of apparel production workers in Nicaragua in 2002 was \$0.92, compared with \$0.49 in Haiti, and between \$1.48 and \$1.65 in Honduras, Guatemala, El Salvador, and the Dominican Republic.⁹ The lower wages reportedly more than offset the lower productivity levels of workers in Nicaragua, compared with those in Honduras and El Salvador. The minimum wage for labor in the manufacturing sector (including apparel) was established at \$36.60 per month in November 1997; however, the majority of urban workers, including those in apparel, earn well above minimum rates. Nicaraguan labor law specifies an 8-hour workday and the legal standard maximum work week is 48 hours, with one day per week of rest. An added advantage to employers in Nicaragua is the relatively low incidence of employee turnover (less than 8 percent per year) and absenteeism, which is currently averaging less than 5 percent per month.¹⁰

The Government protects the right of workers to form labor unions, and nearly half of the labor force is a union member. Union strikes are permitted and collective bargaining within the private sector is becoming increasingly common. Union membership is not mandatory and Nicaraguan firms have reportedly had good relationships with the unions; however, union membership has declined in recent years. No major work stoppages or disruptions have been recorded in the FTZs during the past 5 years.

⁷ "Why Nicaragua: People," ProNicaragua, Investment Promotion Agency, found at http://www.pronicaragua.org/why_nicaragua.html, retrieved Mar. 21, 2003.

⁸ U.S. Department of State telegram, "Explaining Low Wages and Weak Unions in Nicaragua's Textile Manufacturing Sector - Reasons Omitted by Labor Activist," prepared by U.S. Embassy, Managua, June 2000.

⁹ Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers," (New York, NY), Nov. 2002.

¹⁰ Corporación de Zonas Francas, Absenteeism and Turnover Study, 2002.

Technology

There reportedly were only two state-of-the-art apparel facilities operating in Nicaragua in 2000.¹¹ In general, apparel producers in Nicaragua employ varying levels of equipment and computer software technology that as on par, or slightly lower, than comparable technology used in Honduras and El Salvador.¹² Much of the actual production cost, scheduling computer software and pattern cutting equipment technology that promotes the efficiency of apparel assembly operations in Nicaragua is, in fact, said to reside outside the region, primarily in the United States and Taiwan.

Investment

Nicaragua's sizable foreign debt (nearly \$6 billion, compared with a GDP of \$2.4 billion in 2000)¹³ has limited FDI in the country by raising concerns among prospective investors as to the long-term economic stability of the domestic economy. Nevertheless, recent political and economic reforms undertaken by the newly elected President Enrique Bolanos have begun to improve investor optimism. A recent study by the Inter-American Institute on Human Rights concluded that Nicaragua was the safest country in Central America and one of the safest in the world. This level of public safety has become a major attraction for investors seeking to locate operations. In recent years, companies in Taiwan and Korea have invested in Nicaraguan apparel facilities and currently account for approximately 70 percent of the companies in the textile and apparel sector. Nevertheless, the weakness of the judicial system (and protections of the law) in Nicaragua is reportedly a significant factor in deterring increased FDI in textile and apparel facilities. In particular, investors have complained about the unpredictability of contract enforcement and Nicaragua's cumbersome legal system, as well as occasional requests for bribes.¹⁴

In an effort to encourage FDI, Nicaragua has adopted a Foreign Investment Law, which includes guarantees of equal treatment to local and foreign investors. The law also guarantees expedited transfer of funds abroad and foreign currency conversion through local banks, access to local financing, freedom to make investments (except for activities currently limited by law), and the protection of property and safety (by recognizing and guaranteeing the protection of the property of local and foreign investors, and the right of investors to freely dispose of assets, capital, and profits).

¹¹ "Sourcing Update - Latin America: Nicaragua Looking to Grow New Industry Roots," *Bobbin*, July 2000, p. 29.

¹² This statement and the information that follows is based upon a telephone conversation with a representative of ANITEC, the Nicaraguan textile and apparel trade association, Apr. 30, 2003.

¹³ U.S. and Foreign Commercial Service, "Nicaragua Country Commercial Guide FY 2002," Major Economic and Political Trends, found at <http://www.usatrade.gov/Website/CC...1/CCG-NICARAGUA2002-CH-1:-0052FDE7>, retrieved Apr. 30, 2003.

¹⁴ U.S. Department of State telegram 1488, "Nicaragua: Impact of CBI Enhancement," prepared by U.S. Embassy, Managua, May 25, 2000.

Government Policies

The Government of Nicaragua is seeking to: improve the domestic investment climate through the creation of a Trade Promotion Commission and a Public-Private Competitiveness Commission; improve transport capabilities; and encourage industrial diversification into higher value products for niche sectors. Companies, whether located in an FTZ or running as a stand-alone operation (called a ZOFA), may apply for incentives under Nicaragua's Free-Trade Zone Law. These benefits include the right to remit 100 percent of the profits earned in the country and to repatriate capital invested in the country within 3 years of the date of the original investment. The law also permits 100-percent foreign ownership. The U.S. Embassy in Nicaragua has not been aware of any repatriation problems encountered by U.S. or foreign investors since 1990.

The Free-Trade Zone Law also provides a 100-percent exemption from income taxes for the first 10 years of activities in an approved FTZ. The law also makes approved operations exempt from import duties, municipal taxes, and other fees and taxes. Companies operating in the FTZs are also exempt from all import duties, levies, and sales taxes on the importation of raw materials, supplies, machinery, equipment, and parts. In addition, because of its low per capita income (less than \$500 per year), Nicaragua has received a special WTO designation that will allow the country to extend its FTZ regime through 2010, while most other Latin American nations will have to end such tax benefits.¹⁵

Foreign Trade

Nicaragua's trade surplus in textiles and apparel more than doubled during 1997-2001 to \$207 million, reflecting an increase of 105 percent in exports, to \$397 million, and 67 percent in imports, to \$190 million (table I-26, found at the end of this country profile). The imports consisted of apparel inputs and the exports consisted of apparel destined almost entirely to the United States (table I-27). More than 95 percent of the apparel exports originated in the FTZ. In 2002, only 30 percent of U.S. apparel imports from Nicaragua entered free of duty under the CBTPA, compared with 52 percent for the entire CBERA region, reflecting the use of Asian fabrics.

U.S. imports of textiles and apparel from Nicaragua rose by 152 percent during 1997-2002 to 120 million square meters equivalent (SMEs) (table I-28). The imports consisted almost entirely of apparel, particularly pants (49 percent of the 2002 total), knit shirts (21 percent), and woven shirts (12 percent). Imports of these products from major suppliers are highly constrained by quotas.

¹⁵ U.S. Department of State telegram 1488, "World Trade Without Quotas: Nicaragua Apparel Industry," prepared by U.S. Embassy, Managua, May 25, 2002.

Table I-26
Nicaragua: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of apparel establishments	(¹)	(¹)	(¹)	(¹)	32
Installed spinning capacities:					
Short-staple spindles (<i>number</i>)	40,000	40,000	40,000	40,000	40,000
Installed weaving capacities:					
Shuttleless looms (<i>number</i>)	150	150	150	150	150
Shuttle looms (<i>number</i>)	500	500	500	500	500
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	3.2	2.2	2.6	2.7	1.7
Apparel (<i>million dollars</i>)	190.8	242.5	289.8	351.8	395.5
Total (<i>million dollars</i>)	194.0	244.7	292.4	354.6	397.2
Imports:					
Textiles (<i>million dollars</i>)	82.8	90.1	107.3	139.0	128.0
Apparel (<i>million dollars</i>)	31.1	50.4	51.9	72.0	61.8
Total (<i>million dollars</i>)	113.9	140.5	159.2	211.0	189.8
Trade balance:					
Textiles (<i>million dollars</i>)	-79.6	-87.9	-104.6	-136.3	-126.4
Apparel (<i>million dollars</i>)	159.7	192.1	237.9	279.8	333.7
Total (<i>million dollars</i>)	80.1	104.2	133.2	143.6	207.4

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data estimated by the U.S. International Trade Commission from industry sources; the International Textiles Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002 and selected back issues; and trade data are United Nations data as reported by Nicaragua's trading partners.

Table I-27
Nicaragua: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	(¹)	(¹)	1	1	1
European Union	(¹)	(¹)	(¹)	(¹)	(¹)
Canada	(¹)	(¹)	(¹)	(¹)	(¹)
Subtotal	1	1	1	2	1
All other:					
Guatemala	1	(¹)	(¹)	(¹)	(¹)
Costa Rica	1	1	1	1	(¹)
El Salvador	(¹)	(¹)	(¹)	(¹)	(¹)
Other	1	(¹)	1	(¹)	(¹)
Subtotal	3	2	2	1	1
Grand total	3	2	3	3	2
Apparel (SITC 84):					
Quota markets:					
United States	187	237	284	346	391
European Union	1	(¹)	(¹)	(¹)	(¹)
Canada	3	4	5	5	3
Subtotal	190	242	289	351	394
All other	1	(¹)	1	1	2
Grand total	191	243	290	352	396
Textiles and apparel:					
Quota markets:					
United States	187	238	285	347	391
European Union	1	1	1	1	1
Canada	3	4	5	5	3
Subtotal	191	243	290	352	395
All other	3	2	2	2	2
Grand total	194	245	292	355	397
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	20	28	37	55	63
Apparel	100	100	100	100	100
Average	98	99	99	99	99

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table I-28
Textiles and apparel: U.S. general imports from Nicaragua, by specified product categories,¹
1997-2002

Cat.		<i>1,000 square meters equivalent</i>					
No.	Description	1997	1998	1999	2000	2001	2002
0	Textiles and apparel, total	47,765	56,597	69,381	87,513	97,724	120,441
1	Apparel	47,341	55,782	66,129	82,596	95,677	120,137
2	Textiles	424	815	3,252	4,917	2,047	304
11	Yarns	0	0	0	0	49	0
12	Fabrics	0	(²)	1	(²)	3	4
14	Other miscellaneous articles	424	815	3,252	4,916	1,995	300
30	Cotton textiles and apparel	43,643	50,066	58,317	66,620	77,243	90,995
60	Manmade-fiber textiles and apparel	4,122	6,506	10,916	20,529	20,159	29,072
239	Babies' apparel	76	76	111	249	580	2,320
335	Cotton coats, women/girls	6	0	2	0	0	1,065
338	Cotton knit shirts, men/boys	2,173	4,810	8,246	8,482	5,280	5,633
339	Cotton knit shirts, women/girls	2,759	2,427	3,711	6,568	7,905	11,413
340	Cotton not knit shirts, men/boys	7,603	11,151	13,523	10,431	8,165	8,110
341	Cotton not knit blouses	1	7	4	24	59	126
342	Cotton skirts	109	12	73	154	518	1,751
347	Cotton trousers, men/boys	13,811	15,731	19,123	24,449	29,286	30,751
348	Cotton trousers, women/girls	7,412	10,136	13,270	13,917	19,185	20,669
350	Cotton robes	0	34	0	(²)	93	1,164
351	Cotton nightwear	1,665	1,479	1	2,069	4,995	5,469
352	Cotton underwear	6,873	3,879	0	62	1,012	1,581
638	Manmade knit shirts, men/boys	69	118	19	189	1,831	6,763
639	Manmade knit shirts, women/girls	93	0	80	957	546	1,236
640	Manmade not knit shirts, men/boys	1,267	1,347	2,483	6,415	6,022	5,190
641	Manmade-fiber not knit blouses	26	11	0	27	719	1,516
647	Manmade-fiber trousers, men/boys	788	1,423	1,093	1,290	2,659	3,978
648	Manmade-fiber trousers, women/girls	488	1,059	1,341	1,045	1,650	3,470
649	Manmade-fiber brassieres	958	1,388	2,108	3,436	3,287	3,743

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

² Less than 500 square meters equivalent.

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

APPENDIX J
ANDEAN COUNTRIES

Overview

On August 6, 2002, the President signed into law the Trade Act of 2002. Title XXXI of the Act, the “Andean Trade Promotion and Drug Eradication Act” (ATPDEA), renewed the Andean Trade Preference Act (ATPA), and amended the ATPA to provide preferential treatment for certain articles previously excluded from such treatment.¹ Section 3103(a)(2) of the ATPDEA amended section 204(b) of the ATPA to provide duty-free and quota-free treatment to imports of qualifying textile and apparel articles from designated ATPDEA beneficiary countries, effective on October 31, 2002. The President designated Bolivia, Colombia, Ecuador, and Peru as ATPDEA beneficiary countries.²

The ATPA was enacted in 1991 to expand economic alternatives for Bolivia, Colombia, Ecuador, and Peru in their fight against drug production and trafficking. The program, which had expired on December 4, 2001, provided duty-free access to the U.S. market for most goods originating in the Andean countries and reduced duties on leather apparel and certain other leather goods such as luggage. The Andean countries had expressed concern that the implementation of U.S. trade preferences for CBERA countries in 2000 had weakened their competitiveness in the U.S. apparel market and led to a loss of apparel trade to CBERA countries.³

The ATPDEA authorized duty-free and quota-free treatment for textile and apparel articles made in Andean countries from fabrics that were formed (including dyed, printed, and finished) in the United States of U.S. yarns, as well as specified quantities of apparel made from “regional fabrics” formed in the Andean countries. The key textile and apparel provisions in the ATPDEA are summarized in figure J-1, found at the end of this overview.

Andean textile and apparel exports rose by 15 percent during 1997-2001 to \$1.6 billion (table J-1). The Andean countries’ major trading partners for textiles and apparel are the United States and the European Union (EU); intra-Andean country trade is also significant. The EU grants duty-free treatment to qualifying Andean textile and apparel articles under its Generalized System of Preferences until 2004.

U.S. imports of textiles and apparel from the Andean countries rose from \$633 million in 1997 to a high of \$892 million in 2000, and then fell in 2001 and 2002, to \$800 million (table J-2). Sector imports from the Andean countries in 2002 came almost entirely from Peru (49 percent of the total value) and Colombia (46 percent). Peru replaced Colombia as the major Andean supplier of sector goods in 2001.

An important development in U.S.-Andean sector trade in recent years was the declining significance of U.S. apparel imports involving production sharing, in which U.S. firms ship garment parts to an offshore market for sewing and then re-import the assembled garments

¹ Textiles and apparel subject to textile agreements (e.g., articles of cotton, wool, and manmade fibers covered by the former Multifiber Arrangement) are excluded by law from duty-free treatment under ATPA.

² Presidential Proclamation 7616 of October 31, 2002, “To Implement the Andean Trade Promotion and Drug Eradication Act,” *Federal Register* (67 F.R. 67283), Nov. 5, 2002, p. 67283.

³ See the “overview” at the beginning of appendix I of this report for information on U.S. trade preferences for CBERA countries.

under HTS heading 9802.00.80.⁴ The share of the total value of U.S. apparel imports from the Andean region entered under HTS heading 9802.00.80 declined from 43 percent in 1997 to 17 percent in 2002. Colombia accounted for most of these imports during 1997-2002. The decline in apparel imports entering under HTS heading 9802.00.80 likely reflected a shift in Colombia's sector trade from apparel assembly-only operations to "full package" apparel programs in an effort to increase its competitiveness (see the profile of Colombia's textile and apparel sector in this appendix for further information on this issue).

Cotton apparel accounted for the vast majority (75 percent) of U.S. textile and apparel imports from the Andean countries in 2002; cotton knit shirts and blouses accounted for 57 percent of total U.S. cotton apparel imports, followed by cotton pants at 24 percent.

U.S. imports of cotton pants and knit tops from major world suppliers, especially those in Asia, are highly constrained by quotas. The Andean countries will therefore face increased global competition in their leading apparel exports following quota elimination in 2005. Because the ATPDEA went into effect late in 2002, very little textile and apparel trade was reported under the new ATPDEA provisions by the end of the year.

Table J-1
Andean countries: World exports of textiles and apparel, 1997-2001

Country	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Colombia	737	699	664	788	835
Peru	521	500	528	632	621
Ecuador	66	57	55	60	70
Bolivia	32	33	40	46	39
Total	1,356	1,289	1,288	1,526	1,566

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table J-2
Textiles and apparel: U.S. general imports from Andean countries, 1997-2002

Country	1997	1998	1999	2000	2001	2002
	<i>1,000 dollars</i>					
Peru	221,360	246,018	323,987	405,650	383,783	395,306
Colombia	381,296	391,962	408,515	443,766	376,326	369,643
Bolivia	12,403	17,142	15,662	19,172	18,372	18,723
Ecuador	17,894	14,407	19,289	23,087	24,704	15,855
Total	632,953	669,529	767,453	891,675	803,185	799,527

Source: Compiled from official statistics of the U.S. Department of Commerce.

⁴ HTS heading 9802.00.80 provides a duty exemption for U.S. components that are returned to the United States as parts of goods assembled abroad. In general, the duty is assessed only on the value added abroad.

Figure J-1

Key textile and apparel provisions in the Andean Trade Promotion and Drug Eradication Act (ATPDEA)

Articles eligible to enter free of duty and quota	Criteria
Apparel assembled in one or more Andean beneficiary countries from fabrics wholly formed in the United States	*From U.S. yarn only *Requires U.S. thread if fabric is cut in region *Knit and woven fabrics must be dyed, printed, and finished in the United States
Apparel assembled from components knit-to-shape in the United States	*From U.S. yarn only
Apparel assembled from regional fabrics or regional components formed or from components knit-to-shape	*From U.S. or regional yarn *Subject to a cap
Apparel assembled from Andean fabrics or fabric components formed or components knit-to-shape of llama, alpaca, or vicuna.	*From Andean yarn
Apparel assembled from components knit-to-shape in the region	*From U.S. yarn only *Subject to cap
Size of regional cap	Maximum 2 percent of the aggregate square meter equivalents of all apparel articles imported into the United States in the preceding 12-month period, increased in equal increments in each succeeding 1-year period to a maximum of 5 percent for the period beginning October 1, 2006.
Certain brassieres cut and sewn or otherwise assembled in the United States, or one or more Andean countries, or both	*Total costs of U.S. fabric components in preceding 1-year period must be at least 75 percent of the aggregate declared customs value of the fabric (exclusive of all findings and trimmings) contained in all brassieres entered in that period.
Apparel assembled in Andean countries from yarns or fabrics deemed to be in "short supply" in the United States, as identified in annex 401 of NAFTA	*Such yarns and fabrics include fine-count cotton fabrics for nightwear and certain underwear; linen; silk; cotton velveteen and fine-wale corduroy fabrics; certain hand-woven Harris Tweed wool fabrics; certain woven wool fabrics made with fine animal hair; certain lightweight, high-thread count polyester-cotton woven fabrics; and certain lightweight, high-thread count woven fabrics for use in men's and boys' shorts.
Certified handloomed, handmade, and folklore articles	*Originating in Andean countries
Textile luggage assembled in Andean countries from U.S. fabrics	*Must be of U.S. yarn
Duration	*December 31, 2006

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

Overview

Bolivia's textile and apparel sector grew at an average annual rate of 22 percent during 1996-2000 and accounted for 22 percent of the country's industrial labor force in 2000.² According to United Nations data, textiles and apparel represent a small share of Bolivia's total merchandise exports, accounting for 3 percent (\$39 million) of the total in 2001 (the export shares for textiles and apparel of the countries covered by the study are shown in chapter I of this report, table 1-1 and figure 1-2). The implementation of the ATPDEA in October 2002 has sparked optimism about opportunities for increased exports to the U.S. market.

Industry Profile

Although considered to be still in its infancy, Bolivia's textile and apparel sector is viewed as capable of competing in the global market because of its high quality and competitively priced products.³ Production is based on cotton, wool, and specialty fine hairs from indigenous llamas and alpaca sheep.

Industry structure and performance

Bolivia's textile and apparel sector consists mostly of small establishments, most of which are located in La Paz, Cochabamba, and Santa Cruz.⁴ Bolivian government data reportedly show that 97 percent of the apparel factories are small; 2 percent are medium-size plants, and 1 percent are large. Bolivia also has some vertically integrated mills. The Bolivian Chamber of Industry reported 235 legally registered textile companies operating in 1999. When including companies in the informal sector, the number rises to 3,500.⁵ Another source reports that Bolivia had a total of 10,000 apparel factories in 2000.⁶ Employment data vary widely with the number of sector workers in 1999 ranging from 36,000 to 70,000 workers.

¹ Prepared by Laura Rodriguez, Office of Industries.

² U.S. Department of State telegram 3788, "Bolivians Propose Tariff and Quota Free Access to U.S. Textiles Market," prepared by U.S. Embassy, La Paz, Aug. 31, 2000. The telegram states that because much of the apparel trade occurs in the "informal economy," it is difficult to compile credible data on the Bolivian textile and apparel sector.

³ U.S. Department of State telegram 3788, "Bolivians Propose Tariff and Quota Free Access."

⁴ "Bolivia, Brazil, Chile," *Apparel Industry*, Sept. 2000, vol. 61, issue 9, p. 48, found at <http://web22.epnet.com>, retrieved Nov. 4, 2002.

⁵ Embassy of Bolivia, "Estudio técnico de los sectores textil y madera en el marco ATPDEA," Apr. 30, 2003.

⁶ "Bolivia, Brazil, Chile," *Apparel Industry*, Sept. 2000, p. 48.

Bolivia is a landlocked country with no seaports, and its underdeveloped transportation and communications infrastructure hampers access to export markets.⁷ Hence, most products must be shipped via air.⁸ Bolivia's textile and apparel sector has been affected by the country's recent economic downturn. Industry sources report that many manufacturing establishments, including textile and apparel enterprises, have experienced financial difficulties and resistance from banks in obtaining more credit, hampering the expansion of export-oriented production. Only a small number of Bolivia's producers are considered large enough to react quickly to the market opportunities offered by the ATPDEA. Nevertheless, some leading apparel producers are increasing their capacity, purchasing more fabric, and seeking new contracts to sell high-end, designer-label apparel to U.S. department stores.⁹

Factors of production

Bolivia has domestic sources of raw cotton as well as fine animal hair, including alpaca, angora, and llama hair. However, domestic cotton output, price, and quality are insufficient to meet textile production needs,¹⁰ and there are shortages of intermediate products such as thread and fabric.¹¹ Cotton production has declined in recent years because a sharp drop in international cotton prices has prompted farmers to shift to more profitable crops.¹² The United States, Mexico, and Peru are the principal suppliers of raw cotton and other fibers to Bolivia. Apparel producers rely on imports for their thread and fabric requirements, because Bolivian spinning mills reportedly cannot produce sufficient quantities at the appropriate level of quality to meet local demand.¹³ Cotton yarns and fabrics come primarily from the United States, Peru, China, Chile, and Taiwan. There are no import-licensing requirements or unduly restrictive tariffs that specifically hinder the supply of imported inputs.¹⁴ Bolivia's poor road system increases delivery time, and reliance on air transport increases the cost of imported inputs.

In 2001, about 70,000 workers were employed by Bolivian textile and apparel producers (table J-3).¹⁵ Bolivian workers are considered skilled and have a tradition of producing

⁷ "Bolivia," *Caribbean/Latin America Profile 2003* (Miami: Caribbean Publishing Co.), p. D-8.

⁸ U.S. Department of State telegram 3008, "Bolivians Want Their Piece of the ATPDEA Pie," prepared by U.S. Embassy, La Paz, Aug. 19, 2002.

⁹ U.S. Department of State telegram 2877, "ATPA Scores Big in Bolivia," prepared by U.S. Embassy, La Paz, Aug. 9, 2002.

¹⁰ Embassy of Bolivia, "Estudio técnico de los sectores textil y madera en el marco ATPDEA."

¹¹ Bolivia has only three producers of thread. Bolivian Government, written submission to the Commission, Feb. 21, 2003.

¹² *Ibid.*, and U.S. Department of State telegram 3788, "Bolivians Propose Tariff and Quota Free Access."

¹³ Bolivia imports 75 to 80 percent of the thread used in textile production from Peru. *Ibid.*

¹⁴ Textile and apparel imports are subject to a tariff of 10 percent ad valorem, the same duty rate assessed on all imported goods except capital goods, books, and publications. Export Advantage, "Bolivia: Import Tariffs and Taxes," Jan. 1, 2003, found at <http://web.ita.doc/tacgi/overseas.nsf>, retrieved Jan. 30, 2003.

¹⁵ U.S. Department of State telegram 2877, "ATPA Scores Big in Bolivia," prepared by U.S. Embassy, La Paz, Aug. 9, 2002.

apparel of good design.¹⁶ Bolivia's textile and apparel wages, which account for about 20 to 30 percent of production cost,¹⁷ are lower than in the other Andean countries, which the government considers to be a competitive advantage.¹⁸ However, Bolivia's wage rates are higher than those of major Asian supplying countries such as China. Bolivian apparel wage rates in 2002 were \$0.80 per hour, compared with \$0.68 per hour for China (see table 3-1 in chapter 3 of this report for data on hourly compensation in the textile and apparel sector of selected countries covered by this study).

Industry sources estimate Bolivia's textile and apparel sector to be operating at 50 percent capacity.¹⁹ International Textile Machinery Federation data show that Bolivia's installed spinning capacity (short-staple and long-staple spindles and open-end rotors) is substantially less than that of its Andean neighbors. Views are mixed concerning the condition of manufacturing equipment. Some industry sources report that Bolivia's sector "lacks leading-edge machinery" and does not meet the technical standards and certifications demanded by the international market. Other sources note that the technology is up-to-date.²⁰

Investment

Although Bolivian government officials estimate that the ATPDEA's tariff benefits could lead to \$200 million in foreign direct investment (FDI) and up to 50,000 new jobs over the next 5 years,²¹ information concerning how much may be directed to the textile and apparel sector is not readily available.²² Bolivian textile and apparel producers are seeking to attract new FDI to expand existing plant capacity and to establish new facilities in order to boost exports to the U.S. market.²³

Government Policies

In 1990, Bolivia established a new investment code that grants equal treatment to foreign investors and Bolivian nationals. No restrictions are imposed on property ownership, imports, repatriation of profits, dividends, interest, or royalties beyond the normal tax obligations applicable to domestic businesses and Bolivian individuals. Joint ventures are encouraged and investment insurance is allowed. Foreign-trade zones were also created with no tariffs or taxes imposed on imported inputs for producing export goods (through the

¹⁶ Mercedes Cortazar, "The Bolivian Industry Moves Toward Legality," *Apparel Industry International*, Sept. 1999, found at <http://www.aiimag.com>, retrieved Sept. 19, 2000.

¹⁷ Embassy of Bolivia, "Estudio técnico de los sectores textil y madera en el marco ATPDEA."

¹⁸ U.S. Department of State telegram 2877, "ATPA Scores Big in Bolivia."

¹⁹ Ibid.

²⁰ Cortazar, "The Bolivian Industry Moves Toward Legality."

²¹ U.S. Department of State telegram 2877, "ATPA Scores Big in Bolivia."

²² Bolivia's energy sector has attracted most of the country's FDI. See "Bolivia-Economic Summary," Caribbean/Latin America Profile, Caribbean Publishing Co., 2002.

²³ Ibid., and U.S. Department of State telegram 3008, "Bolivians Want Their Piece of the ATPDEA Pie."

Temporary Import and Export Regimen, or RITEX). Industry sources report that Bolivia currently has six foreign-trade zones, including an underutilized one located in El Alto.²⁴

Aside from ATPDEA preferences, which is discussed in the “overview” at the beginning of this appendix, Bolivia receives trade preferences from its other major trading partners. Bolivia is a full member of the Andean Community²⁵ and an associate member of Mercosur, which immediately gave duty-free status to 1,000 Bolivian products in Brazil, Argentina, Chile, Uruguay, and Paraguay.²⁶ Bolivia has free-trade agreements with Mexico and Chile and a preferential trade arrangement with the European Union (EU) that will grant duty-free access to the EU market for textiles and apparel as part of the EU’s Generalized System of Preferences until 2004.²⁷

Foreign Trade

Bolivia’s textile and apparel trade deficit widened significantly from \$4 million in 1997 to \$41 million in 2001, as imports doubled to \$80 million and exports rose by 22 percent to \$39 million (table J-3). Textiles accounted for 74 percent of the imports in 2001, and they came primarily from Peru (16 percent), China (16 percent), Brazil (13 percent), and Taiwan (13 percent). Thread and fabrics were among the principal textile products imported into Bolivia. Much of the increase in textile imports during 1997-2001 was accounted for by surges in imports from China, which rose more than twelvefold to \$9.4 million. Apparel imports almost tripled during 1997-2001 to \$20 million. According to United Nations data, key suppliers of apparel in 2001 were China (31 percent), Chile (12 percent), and Brazil (11 percent). Bolivia’s imports of apparel from China rose from \$128,000 in 1997 to \$6.4 million in 2001, while imports of apparel from Chile more than tripled to \$2.4 million.

Bolivia’s exports of textiles and apparel grew by 22 percent during 1997-2001 (table J-4). In 2001, apparel accounted for 72 percent of Bolivian sector exports. The major export market for Bolivian apparel was the United States (64 percent of the total in 2001). Bolivia is not subject to textile or apparel quotas in the United States or the EU.

Official U.S. statistics show that U.S. imports of textiles and apparel from Bolivia grew by 241 percent during 1997-2002 to 5.3 million square meters equivalent (SMEs) (table J-5). Nevertheless, Bolivia accounted for less than 0.5 percent of the total quantity of U.S. textile and apparel imports in 2002. The trade-weighted average duty rate on U.S. imports of sector products from Bolivia was 17.3 percent ad valorem in 2002. The principal sector import from Bolivia was apparel, such as cotton knit shirts, sweaters, and pants.

²⁴ U.S. Department of State telegram 3008, “Bolivians Want Their Piece of the ATPDEA Pie.”

²⁵ The Andean Community, comprising Bolivia, Colombia, Ecuador, Peru, and Venezuela, is a Customs Union (i.e., the goods of its member countries circulate unimpededly throughout its territory free of duties, while imports from outside the Community pay a common tariff). See “Who Are We--Andean Community,” found at <http://www.comunidadanina.org/ingles/who.htm>, retrieved Apr. 24, 2003.

²⁶ “Bolivia - Economic Summary,” *Caribbean/Latin America Profile*, Caribbean Publishing Co., 2002, p. D-10.

²⁷ Director of Marketing, Colombia Trade Bureau, facsimile to USITC staff, Apr. 1, 2003.

Table J-3
Bolivia: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	5.1	5.6	14.5	15.7	11.0
Apparel (<i>million dollars</i>)	26.5	27.2	26.0	30.1	27.6
Total (<i>million dollars</i>)	31.7	32.8	40.5	45.6	38.6
Imports:					
Textiles (<i>million dollars</i>)	28.7	31.2	32.1	57.0	59.5
Apparel (<i>million dollars</i>)	7.2	10.9	14.1	26.7	20.4
Total (<i>million dollars</i>)	35.8	42.0	46.2	83.7	79.9
Trade balance:					
Textiles (<i>million dollars</i>)	-23.5	-25.5	-17.7	-41.3	-48.5
Apparel (<i>million dollars</i>)	19.4	12.0	12.0	3.4	7.2
Total (<i>million dollars</i>)	-4.2	-9.2	-5.7	-37.9	-41.3

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Trade data are United Nations data as reported by Bolivia.

Table J-4
Bolivia: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	(¹)	(¹)	(¹)	(¹)	(¹)
European Union	(¹)	(¹)	(¹)	(¹)	(¹)
Canada	(¹)	0	(¹)	0	(¹)
Subtotal	(¹)	(¹)	(¹)	(¹)	(¹)
All other:					
Colombia	(¹)	1	6	5	4
Peru	2	3	6	6	4
Venezuela	0	0	(¹)	1	1
Other	3	1	3	3	2
Subtotal	5	6	14	16	11
Grand total	5	6	14	16	11
Apparel (SITC 84):					
Quota markets:					
United States	12	17	16	20	18
European Union	3	2	3	3	2
Canada	(¹)	(¹)	(¹)	(¹)	(¹)
Subtotal	16	20	19	23	20
All other	11	7	7	7	7
Grand total	27	27	26	30	28
Textiles and apparel:					
Quota markets:					
United States	12	17	16	20	18
European Union	3	2	3	3	3
Canada	(¹)	(¹)	(¹)	(¹)	(¹)
Subtotal	16	20	19	23	20
All other	16	13	22	22	18
Grand total	32	33	40	46	39
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	2	1	(²)	1	1
Apparel	59	73	72	77	73
Average	50	61	46	51	53

¹ Less than \$500,000.

² Less than 0.05 percent.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table J-5

**Textiles and apparel: U.S. general imports from Bolivia, by specified product categories,¹
1997-2002**

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	1,567	2,320	2,351	3,423	3,525	5,349
1	Apparel	1,552	2,298	2,333	3,372	3,092	3,454
2	Textiles	16	22	18	51	433	1,894
30	Cotton textiles and apparel	1,374	2,154	2,050	2,513	2,670	3,146
60	Manmade-fiber textiles and apparel	38	8	178	810	766	2,067
338	Cotton knit shirts, men/boys	720	1,095	1,135	1,576	1,544	1,794
339	Cotton knit shirts, women/girls	115	338	360	396	320	214
345	Cotton sweaters	97	217	284	280	263	248
347	Cotton trousers, men/boys	7	63	22	5	234	178
348	Cotton trousers, women/girls	1	29	11	54	8	33
351	Cotton nightwear	116	81	103	71	20	25
352	Cotton underwear	4	0	1	0	0	160
669	Other manmade-fiber manufactures	0	0	0	0	346	1,838

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

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

Colombia¹

Overview

Colombia's textile and apparel sector is one of the nation's key industries, accounting for 9 percent of the country's manufacturing GDP, 24 percent of manufacturing employment, and 7 percent of total exports in 2001. The sector has stagnated since the late 1990s, as it lost ground to countries that benefited from preferential access to the U.S. apparel market, particularly Mexico and the Caribbean Basin countries. Although the Colombian Government implemented economic reforms during the early 1990s to open Colombia's economy to more foreign investment (such as tariff reductions, financial deregulation, privatization of state-owned enterprises, and a more flexible foreign exchange rate), the resulting surge in imports of apparel caused a number of apparel producers to go out of business.² In 2001, Colombia lost its place to Peru as the leading Andean supplier of textiles and apparel to the United States, the principal market for Colombian apparel exports.

Colombia has a strategic geographic location close to the United States, especially to Miami, and is at a midpoint location between North and South America. It is also the only South American country with ports on both the Pacific Ocean and the Caribbean Sea (Barranquilla is the main port on the Atlantic Coast, Cartagena is in the Industrial Zone along the Caribbean Sea, and Buenaventura is on the Pacific Coast). Colombia's mountainous terrain, however, makes land transportation difficult. Thirteen highway projects are under way to alleviate this challenge.

Industry Profile

Industry structure and performance

Colombia's textile and apparel sector is concentrated in Medellin and Bogota, which account for almost one-half and about 35 percent of sector production, respectively.³ The Government of Colombia reported that in 2000, the textile industry had 354 establishments and the apparel industry had more than 5,000 establishments, including 25 maquiladoras (table J-6).⁴ Many of the maquiladoras operate in Colombia's free-trade zones. In 2001, the

¹ Prepared by Laura Rodriguez, Office of Industries.

² U.S. and Foreign Commercial Service, "Colombia - Country Commercial Guide FY 2002," found at <http://www2.usatrade.gov>, retrieved Oct. 30, 2002.

³ "Colombia: Local Industry and Market," *Export Advantage*, found at <http://web.ita.doc.gov/tacgi/overseas.nsf>, retrieved Jan. 23, 2003.

⁴ Maquilas are plants in developing countries that assemble imported goods such as cut garment parts from the United States and return the goods to the originating country for further processing or packaging and distribution. Numerous subcontractors also function as apparel maquilas. Director of Marketing, Colombia Trade Bureau, facsimile to USITC staff, Feb. 7, 2003.

Colombian textile and apparel sector reportedly produced an estimated 800 million square meters of fabrics and approximately \$1.1 billion of apparel.⁵

Anticipation of enactment of the ATPDEA prompted the Colombian textile and apparel sector to increase export production capacity for the U.S. market. Dyeing and finishing capacity that had been directed principally to the domestic market has been expanded to boost exports. Colombia's textile and apparel sector has also been implementing programs to ensure compliance with labor, social, and environmental codes, criteria increasingly used by U.S. companies in selecting foreign partners.⁶

Colombia's apparel industry is known as a high-quality, just-in-time provider, particularly for women's underwear, babies' apparel, and swimwear.⁷ Recognizing that global competition will intensify after quotas are eliminated in 2005, Colombia's apparel industry has been shifting its focus from basic garments to higher end, fashion items at competitive prices and offering full-package programs that involve much greater coordination between textile and apparel producers.⁸ Efforts to expand and strengthen the linkages between the textile and apparel industries have therefore become a priority.⁹

Colombia's apparel producers are known for their dependability and quality control (their facilities meet ISO 9000 or ISO 9002-4 certification requirements - i.e., internationally recognized standards for world class production).¹⁰ Colombian apparel producers offer a 4- to 6-week garment production and delivery cycle and rapid transportation--3 days by sea or 3 hours by air. Transportation efficiency may be boosted if the apparel industry implements plans to take advantage of the highly efficient and sophisticated airfreight infrastructure established by Colombia's cut flower export industry.¹¹

Factors of production

Raw material

Colombian textile fiber consumption in 2000 consisted almost entirely of cotton (50 percent of the total, or 84,218 metric tons) and manmade fibers (48 percent).¹² Although Colombia has domestic supplies of cotton, internal crop and rural security problems coupled with growing international competition caused Colombia's cotton production to decline during

⁵ "Colombia: Local Industry and Market."

⁶ Ibid.

⁷ U.S. Department of State telegram 3809, "Colombia's Textile Industry After Quotas: Stagnant or Worse," prepared by U.S. Embassy, Bogota, Apr. 26, 2002.

⁸ Ibid. Full package programs typically refer to the type of sourcing arrangements that can provide the entire range of garment manufacturing from apparel design to all steps of textile production to distribution of the finished garment or any combination of these operations.

⁹ Director of Marketing, Colombia Trade Bureau, interview by USITC staff, Dec. 5, 2002.

¹⁰ Ibid.

¹¹ President, JCPenney Purchasing Corp., interview by USITC staff, Mar. 5, 2003.

¹² "Colombia: Local Industry and Market."

the 1990s.¹³ Consequently, cotton fiber imports now account for more than 65 percent of Colombia's cotton consumption. In addition, over 90 percent of the synthetic fibers used by Colombia's textile industry is also imported, primarily from the United States.¹⁴

Labor

Colombia has an ample supply of highly skilled textile and apparel workers. Colombia's apparel workers reportedly produce high-quality needlework on par with Asian competitors such as Hong Kong. Worker training is a priority in the apparel industry and the Colombian Government and private companies jointly hold permanent training programs designed to hone garment production skills. Employment in the textile and apparel sector totaled an estimated 600,000 workers, which includes direct and indirect jobs along the entire production chain (table J-6). Managers of both textile and apparel companies are local.¹⁵ Because firms in Colombia's textile and apparel sector range from small, family-owned firms to very large establishments, hourly wage rates for apparel and textile workers vary widely. According to government officials, apparel worker monthly wages in 2001 were estimated to average between \$206.10 (the legal minimum wage for a 48-hour week, including health and other benefits) and up to 10 to 15 percent more.¹⁶ Another source reported that textile worker wages in 2002 averaged \$1.82 per hour (including fringe benefits).¹⁷ One U.S. importer of apparel from Colombia reported that an apparel worker in Colombia earns about \$160 per month (including benefits), whereas a textile worker typically earns about \$240 per month.¹⁸

Technology

Colombia had about one-half of the total installed capacity of all the Andean countries in terms of short staple spindles, and the second-largest capacity in terms of long-staple spindles.¹⁹ Colombia's apparel industry currently uses 75 percent of its installed capacity. Colombia's textile companies are actively seeking to upgrade their technology and redesign their production systems in order to raise their productivity levels.²⁰ Views are mixed concerning the actual level of manufacturing technology currently used by Colombia's textile and apparel sector. Some industry sources report that textile and apparel equipment

¹³ U.S. and Foreign Commercial Service, "Colombia: The Textile Sector: Market Briefs Update."

¹⁴ U.S. Department of State telegram 3809, "Colombia's Textile Industry After Quotas."

¹⁵ Information in this paragraph is mainly from the Director of Marketing, Colombia Trade Bureau, facsimile to USITC staff, Feb. 7, 2003.

¹⁶ Another source estimates wage rates for assembly workers to average under \$1 per hour. Doreen Hemlock, "Apparel Trade Seen as Tool Against Violence," *South Florida Sentinel*, Feb. 2, 2002, found at <http://www.sun-sentinel.com/business/local/sfl-sbcolombia02feb02>, retrieved Feb. 27, 2003.

¹⁷ Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002."

¹⁸ Representative of a U.S. apparel company, teleconference by USITC staff, Feb. 7, 2003.

¹⁹ ITMF, *International Textile Machinery Shipment Statistics*, 2001.

²⁰ Jerry Haar and Sylvia Reyes, "Trade Liberalization and Market Competitiveness of the Colombian Apparel Industry," *Multinational Business Review*, Fall 2002, p. 16.

urgently needs refurbishing to comply with U.S. buyers' requirements.²¹ Colombian Government officials rank the current level of Colombia's manufacturing technology as fairly high--at about a 4.0 on a scale of 5 for most apparel production and about 3.8 for textile production.²²

Investment

Most firms in Colombia's textile and apparel sector are owned by Colombians.²³ Colombian producers of manmade fibers reportedly are foreign-owned or have foreign capital investment--Dupont (USA), ENKA de Colombia, S.A.(Mexico), and Bayer (Germany), which produce fibers, and Coats Cadena (UK), which produces yarns and threads. Colombia's textile and apparel sector is trying to attract foreign direct investment in order to finance the expansion of production capacity for products in which it is particularly competitive, such as fabrics (twills, sheeting, corduroy, denim, and poplin). Colombia still faces challenges, however, in overcoming investors' concerns about security dangers and their perception of Colombia as a high-risk country.²⁴

Government Policies

Domestic policies

The Colombian Government over the years has implemented a number of programs and incentives designed to improve the textile and apparel sector's global competitiveness. The Vallejo Plan, established in the 1960s, is a special import program that allows the tariff-free importation of raw materials for use in finished products that are to be exported.²⁵ Free-trade zones were also established that permit (1) exemption from income tax on all export earnings; (2) exemption from all customs duties and value-added taxes on goods and services brought into the zone; and (3) the right to exchange, hold, and negotiate foreign currency and to open domestic or foreign bank accounts in foreign currency. The free-trade zones also allow the exemption from income tax on all export earnings.²⁶ More recently, the Colombian Government has streamlined customs procedures, privatized and expanded free trade zones, and expanded foreign lines of credit and working capital for exports. The Government's

²¹ "Colombia Could Take Advantage of U.S. Duty-Free Treatment," *EmergingTextiles.com*, Aug. 22, 2002, found at <http://www.emergingtextiles.com>, retrieved Aug. 28, 2002.

²² In the apparel industry, the level of technology used in producing lingerie and other highly value-added products is, however, higher--averaging 4.5. Colombia's garment producers also use advanced Gerber fabric cutting systems extensively. In the textile industry, a higher level of technology--averaging 4.5 is used in knit fabric production.

²³ Except as noted, information in this paragraph is from Director of Marketing, Colombia Trade Bureau, interview by USITC staff, Dec. 7, 2002, and facsimile to USITC staff, Feb. 7, 2003.

²⁴ U.S. Department of State, "Background Note: Colombia," Apr. 4, 2002; found at <http://www.state.gov>, retrieved June 25, 2003; "Colombia - Economic Outlook," *Caribbean/Latin American Profile 2003* (Miami, FL: Caribbean Publishing Co.), p. D-28; and ***.

²⁵ Ramiro Botero Henao, "Colombia," *Apparel Industry International*, Sept. 1999, found at <http://www.aiimag.com/aiieng/archives/0999/sept99stor4.html>, retrieved Sept. 2000.

²⁶ President, ProExport Colombia, slide presentation sent to USITC staff, Dec. 7, 2002.

trade bureau, ProExport, promotes textile and apparel exports by facilitating business relationships between U.S. manufacturers, retailers, and buyers, and Colombian textile and apparel producers.²⁷

Trade policies

As a result of the implementation of the ATPDEA in October 2002, Colombia's apparel exports to the United States are predicted to grow by \$200 million in 2003 and 2004 (see the "overview" at the beginning of this appendix for information on ATPDEA).²⁸ In recent years, Colombia has entered into several multilateral and bilateral free-trade agreements to promote and facilitate trade. The most significant of these agreements are those with the Andean Community (ANCOM), whose members include Venezuela, Ecuador, Peru, and Bolivia; the Latin American Integration Association (LAIA) with Argentina, Brazil, Mexico, Chile, Paraguay, Uruguay, El Salvador, Costa Rica, Guatemala, Nicaragua, Honduras, and Cuba; the G-3 (Colombia, Mexico, and Venezuela); and the Colombia-Chile bilateral agreement. These agreements established measures such as assigning a common external tariff and eliminating duties on products manufactured and traded within the region. Colombia exports a significant portion of its textile and apparel products to its Latin American neighbors and therefore these agreements have been important for these export sales.

Colombia's textile and apparel sector benefits from duty-free access to the EU market under the EU Generalized System of Preferences until 2004.²⁹ To expand export sales to the EU market, ProExport has brought specialists from Spain, Italy, Germany, and France to train Colombian manufacturers in design, cutting, and sewing. Training, market research, production adaptation, and trade missions have also been set up with positive results, especially in the United Kingdom, where Colombia's textile and apparel exports have doubled. The EU market remains a challenge, however, because of its distance and competition from significant international producers in Eastern Europe.

Foreign Trade

Colombia's trade surplus in textiles and apparel rose by 7 percent during 1997-2001 to \$208 million, as Colombia's exports grew by 13 percent to \$835 million and imports rose by 15 percent to \$627 million (table J-6). The United States is Colombia's largest trading partner in sector goods, and apparel exports to the United States accounted for most of the trade between the two countries. Colombia has had a trade surplus with the United States for many years.

²⁷ Jerry Haar and Silvia Reyes, "Trade Liberalization and Market Competitiveness of the Colombian Apparel Industry, *Multinational Business Review*, Fall 2002, p. 16.

²⁸ "Colombia Could Take Advantage of U.S. Duty-Free Treatment."

²⁹ Information in the paragraph is mainly from Director of Marketing, Colombia Trade Bureau.

Imports

Textiles accounted for 88 percent (\$553 million) of Colombia's imports in 2001. The United States was the leading supplier of yarn and fabric to Colombia during 1997-2001, although its share of Colombian textile imports declined from 26 percent to 17 percent in the period. United Nations trade data show that other leading suppliers of yarn and fabric to Colombia in 2001 were Brazil (11 percent), Taiwan (8 percent), and Korea (6 percent). Colombia's imports of apparel fell by 28 percent during 1997-2001 to \$75 million. Leading suppliers of apparel to Colombia in 2001 were the United States (\$24 million) and China (\$18 million) with respective shares of 32 and 24 percent. In contrast to the 59-percent decline in Colombia's apparel imports from the United States to \$24 million during 1997-2001, Colombia's apparel imports from China more than quintupled to \$18 million.

Exports

The United States was Colombia's leading export market with a 39-percent market share in 2001 (table J-7). U.S. imports of textiles and apparel from Colombia rose 16 percent during 1997-2000 to 117 million square meters equivalent (SMEs), and then fell 18 percent in 2001 to 96 million SMEs (table J-8). In 2002, sector imports from Colombia partially recovered, rising 14 percent to 110 million SMEs.

The leading U.S. apparel imports from Colombia were women's and men's cotton pants, cotton knit shirts, men's and boys' wool coats and trousers, and babies' garments. The trade-weighted average duty on U.S. imports of textiles and apparel from Colombia was 15.4 percent ad valorem, lower than that of its Andean neighbors. Colombia's lower trade-weighted average duty may be attributed in part to Colombia's use of larger quantities of U.S. inputs--which accounted for almost half of the total value of 9802 apparel imports used by Colombia in the production of apparel for export to the United States. About 51 percent or \$176 million of U.S. textile and apparel imports from Colombia in 2001 involved apparel production-sharing trade, down significantly from 74 percent or \$257 million in 1997. It is likely that part of this decline in 9802 apparel imports from Colombia reflected a shift in Colombia's textile and apparel trade to full-package trade.

Colombia faces U.S. import quotas on cotton printcloth and men's and boys' wool suits. The quota on cotton printcloth has had very low or zero quota fill rates in recent years. The quota on the wool suits, however, slightly exceeded a 90 percent fill rate in 2001. The EU imposes no quotas on imports from Colombia.

Table J-6
Colombia: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Textile and apparel share of manufacturing value-added (percent)	11	12	12	(¹)	(¹)
Number of establishments:					
Textiles	(¹)	(¹)	(¹)	354	(¹)
Apparel	(¹)	(¹)	(¹)	5,000	(¹)
Total	(¹)	(¹)	(¹)	5,354	(¹)
Number of textile and apparel workers	(¹)	(¹)	(¹)	600,000	(¹)
Installed spinning capacities:					
Short-staple spindles (1,000)	950	950	950	950	950
Long-staple spindles (1,000)	35	35	37	37	37
Open-end rotors (1,000)	25	25	25	25	25
Installed weaving capacities:					
Shuttleless looms (number)	4,000	4,000	4,000	4,000	4,000
Shuttle looms (number)	8,500	8,500	8,500	8,500	8,500
Purchases of large circular knitting machines	(¹)	62	62	100	80
Average total labor cost per operator hour	(¹)	(¹)	(¹)	\$1.92	² \$1.82
Foreign trade:					
Exports:					
Textiles (million dollars)	290.7	265.2	235.5	264.7	260.8
Apparel (million dollars)	446.4	433.6	428.9	523.2	574.3
Total (million dollars)	737.1	698.8	664.4	788.0	835.1
Imports:					
Textiles (million dollars)	440.5	466.5	412.4	557.0	552.6
Apparel (million dollars)	102.9	87.6	81.4	79.0	74.5
Total (million dollars)	543.3	554.1	493.8	636.1	627.1
Trade balance:					
Textiles (million dollars)	-149.8	-201.3	-176.8	-292.3	-291.7
Apparel (million dollars)	343.6	346.0	347.5	444.2	499.8
Total (million dollars)	193.8	144.8	170.7	151.9	208.1

¹ Not available.

² Represents 2002 data for spinning and weaving and includes social benefits (Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002," Reston, VA).

Note.—Because of rounding, figures may not add to totals shown.

Source: Establishment and employment from Director of Marketing, Colombia Trade Bureau, facsimile to USITC staff Feb. 7, 2003; other industry data from International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues, except as noted. Trade data are United Nations data as reported by Colombia.

Table J-7
Colombia: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	65	64	70	64	57
European Union	33	30	25	23	23
Canada	1	1	1	3	5
Subtotal	99	95	96	89	85
All other:					
Venezuela	79	65	63	68	70
Ecuador	35	36	19	33	42
Mexico	8	13	13	24	19
Other	70	56	44	51	45
Subtotal	191	171	139	176	175
Grand total	291	265	236	265	261
Apparel (SITC 84):					
Quota markets:					
United States	243	227	238	275	269
European Union	29	29	27	25	24
Canada	1	1	1	1	2
Subtotal	273	257	266	301	295
All other	174	177	162	222	280
Grand total	446	434	429	523	574
Textiles and apparel:					
Quota markets:					
United States	308	291	308	338	327
European Union	62	58	53	47	47
Canada	2	2	2	4	6
Subtotal	372	351	363	390	380
All other	365	348	302	398	455
Grand total	737	699	664	788	835
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	34	36	41	34	33
Apparel	61	59	62	58	51
Average	51	50	55	50	46

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table J-8
Textiles and apparel: U.S. general imports from Colombia, by specified product categories,¹ 1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	100,347	96,070	112,570	117,338	96,518	109,619
1	Apparel	84,315	83,069	94,217	92,804	75,973	82,922
2	Textiles	16,032	13,002	18,353	24,534	20,545	26,697
30	Cotton textiles and apparel	46,061	46,719	59,396	60,245	58,145	64,936
40	Wool textiles and apparel	6,095	4,791	3,931	3,980	3,686	3,732
60	Manmade-fiber textiles and apparel	47,455	43,585	48,786	52,374	34,379	40,758
239	Babies' apparel	5,905	5,825	4,667	6,266	4,036	3,687
332	Cotton hosiery	1,365	1,768	3,305	3,769	3,575	6,459
338	Cotton knit shirts, men/boys	1,686	2,831	3,573	4,197	4,090	2,839
339	Cotton knit shirts, women/girls	812	1,094	1,009	2,382	1,100	880
347	Cotton trousers, men/boys	6,360	9,228	12,200	13,675	12,612	13,810
348	Cotton trousers, women/girls	3,831	4,077	4,997	8,575	9,188	10,055
352	Cotton underwear	14,346	11,851	19,045	8,583	11,109	14,265
361	Cotton sheets	371	1	1,240	2,723	3,534	2,888
363	Cotton terry and other pile towels	1,726	1,919	2,200	2,249	2,512	3,139
369	Other cotton manufactures	1,670	1,244	1,011	1,408	1,051	1,283
433	Wool suit-type coats, men/boys	1,701	1,816	1,801	2,138	1,787	1,613
443	Wool suits, men/boys	572	508	379	429	561	606
447	Wool trousers, men/boys	511	658	722	822	684	972
632	Manmade-fiber hosiery	507	2,213	2,956	3,283	653	318
635	Manmade-fiber coats, women/girls	2,136	1,691	653	833	497	438
636	Manmade-fiber dresses	1,317	972	2,378	2,703	1,529	2,921
647	Manmade-fiber trousers, men/boys	898	1,680	1,115	1,357	1,257	844
648	Manmade-fiber trousers, women/girls	1,382	1,801	1,911	1,887	1,856	1,117
651	Manmade-fiber nightwear	959	828	1,319	1,192	795	3,298
652	Manmade-fiber underwear	19,181	15,289	12,992	8,406	3,366	4,290
659	Other manmade-fiber apparel	4,374	5,016	7,100	8,923	7,448	5,065
666	Other manmade-fiber furnishings	5,747	3,446	5,231	7,053	7,140	8,832

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

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

Ecuador¹

Overview

The textile and apparel sector in Ecuador is small, but sector products are among the country's top export priorities.² The sector accounted for about 3 percent of its gross domestic product (GDP), 19 percent of manufacturing (GDP), and an estimated 4 percent of the labor force in 2002.³ The sector accounted for only 2 percent of Ecuador's total exports in 2001. The country's economy is based largely on oil production, with oil revenues accounting for more than 40 percent of Ecuador's exports in 2001 and 34 percent of the country's fiscal revenues.⁴

Industry Profile

Industry structure and performance

Ecuador's textile and apparel sector is largely vertically integrated, with spinning, weaving, cutting, and sewing operations usually managed by the same firm. Ecuador is an especially strong producer of spun yarn with 98 percent of its yarn spun from cotton imported from the United States. The sector produces spun yarns, fabrics, household items, and apparel, and its products are known for their "high quality, innovative designs, and low cost."⁵ Ecuador's textile industry is small; production totaled only 42,000 tons in 2001 and was targeted principally for the domestic market. Textile production is concentrated in the Sierra region with 57 percent of textile firms in Quito, 17 percent in Cuenca, 14 percent in Ambato, and 11 percent in Guayaquil. Ecuador's apparel industry is highly fragmented and consists of many family-owned operations located principally in Quito, Cuenca, and Ambato.⁶

Data on the number of firms and workers in Ecuador's textile and apparel sector vary widely and are not always current, partly reflecting the predominance of family-owned firms. Estimates for the number of firms range from 320 companies for the entire textile and apparel sector in 1999 to 1,000 factories for the apparel industry alone in 2000 (reportedly, 5 percent of these apparel factories were large operations, 70 percent were medium-sized,

¹ Prepared by Laura Rodriguez, Office of Industries.

² According to the U.S. Embassy in Quito, Ecuador's export priorities are petroleum, followed by (in order) agricultural, fishery, forestry, and textile and apparel products, among others. See U.S. Department of State telegram 3693, "Ecuador's Export Priorities," prepared by U.S. Embassy, Quito, Oct. 31, 2002. Labor force data are from U.S. Department of State telegram 1926, "Ecuador's Textile Industry," prepared by U.S. Embassy, Quito, June 5, 2002.

³ GDP data are from the Embassy of Ecuador, written submission to the Commission, Feb. 4, 2003.

⁴ U.S. Department of State telegram 3693, "Ecuador's Export Priorities."

⁵ "Textiles --Sector Overview," found at <http://www.ecuadorexports.com/textiles.htm>, retrieved Dec. 31, 2002.

⁶ "Ecuador: Best Prospects for Textile Industry," *International Market Insight Reports*, Aug. 2, 1999, found at <http://proquest.umi.com>, retrieved Nov. 4, 2002.

and 25 percent were small).⁷ Estimates for the number of textile and apparel workers range from 20,000 to 100,000.⁸

Ecuador has an extensive system of all-weather roads linking populated parts of the country and has several ports, including the Port of Guayaquil on the Pacific Ocean that handles most of the country's trade. Plans are underway to upgrade the airports of Quito and Guayaquil to facilitate trade and to repair the ports and many roads damaged by flooding and landslides related to El Niño. The damage reportedly caused losses in Ecuador's agricultural sector, contributed to a slowdown in Ecuador's GDP in the late 1990s, and increased Ecuador's foreign debt, which reached \$16 billion by April 1999. Ecuador's railroad system has reportedly been inoperative for a decade, following damage by a major earthquake.⁹ Improving the country's infrastructure is considered critical for boosting investor confidence.¹⁰ Eliminating corruption and inefficiency in Ecuador's customs service are also viewed as priorities for enhancing trade.¹¹

Factors of production

Most Ecuadorian textile production centers on cotton and cotton-blended fabrics as well as some wool. Because Ecuador's domestic cotton production meets only 10 percent of demand, the Ecuadorian textile and apparel sector must import the vast majority of its cotton consumption.¹² The United States is the largest supplier of cotton and other fibers to Ecuador. Other leading suppliers include Mexico, Peru, Korea, and Colombia.

A key competitive advantage of Ecuador's textile and apparel sector reportedly is its ample supply of skilled workers who are capable of producing quality items delivered on time.¹³ Manufacturing wage rates in Ecuador are generally low (Ecuador's minimum wage, including benefits, ranges from \$140 to \$160 per month),¹⁴ with average earnings for

⁷ "Costa Rica, Dominican Republic, Ecuador," *Apparel Industry*, Sept. 2000, vol. 61, issue 9, p. 52, found at <http://web22.epnet.com>, retrieved Nov. 4, 2002.

⁸ Embassy of Ecuador, "Ecuador's Textile Sector and Trade Preferences," *Ecuador in Brief*, vol. 1, No. 3, July-Sept. 2001, p. 5, and U.S. Department of State telegram 1926, "Ecuador's Textile Industry," prepared by U.S. Embassy, Quito, June 5, 2002.

⁹ U.S. and Foreign Commercial Service, "Ecuador - Economic Trends and Outlook," *Ecuador Country Commercial Guide FY 2002*, found at <http://www2.usatrade.gov>, retrieved Oct. 30, 2002.

¹⁰ "Preparing Infrastructure for International Trade," *Special International Report - Washington Times*, Apr. 21, 1999, found at <http://www.ecuadornumismatics.com/...ly/dollarization/washtimes/30.html>, retrieved Dec. 31, 2002.

¹¹ U.S. and Foreign Commercial Service, "Ecuador - Country Commercial Guide FY 2002."

¹² Unfavorable weather conditions caused by El Niño during the late 1990s led to declines in Ecuador's domestic cotton production. U.S. and Foreign Commercial Service, "Best Prospects for Non-Agricultural Foods and Services," *Ecuador Country Commercial Guide FY 2002*, found at <http://www2.usatrade.gov>, retrieved Oct. 30, 2002.

¹³ "Ecuador: Textile Industry," Corporation for the Promotion of Exports and Investments (CORPEI), found at <http://www.corpei.org>, retrieved Dec. 30, 2002, and "Why Invest in Ecuador," *Special International Report - Washington Times*, Apr. 21, 1999, found at <http://www.ecuadornumismatics.com>, retrieved Dec. 31, 2002.

¹⁴ "Ecuador," *Caribbean/Latin America Profile 2003*, p. D-38.

Ecuadorian textile and apparel workers below \$1.00 per hour.¹⁵ Since Ecuador adopted the dollar as its national currency in 2000, however, labor rates (as well as utility and raw material costs) have risen, making textile and apparel products less competitive relative to those in Colombia and Venezuela, which have been among Ecuador's leading export markets for textiles and apparel and whose currencies declined sharply in 2002.¹⁶

Ecuador's installed capacity of short-staple and long-staple spindles and of open-end rotors is smaller than that of regional competitors Peru and Colombia, which have much larger industries, but is more than triple that of Bolivia. Information about the overall level of manufacturing technology in Ecuador's textile and apparel sector is not readily available. Industry sources report, however, that some companies are continuously striving to improve their manufacturing processes through the use of state-of-the-art technology.¹⁷

Investment

To date, Ecuador's textile and apparel sector appears to have received little foreign investment; most foreign direct investment is directed to Ecuador's oil sector.¹⁸ The World Bank has approved grants for the Government of Ecuador to support and promote the export initiatives of medium and small Ecuadorian enterprises; however, the manufacturing sector (including textiles and apparel) received less than 2 percent of the \$7.9 million invested in this project during October 1999-March 2001.¹⁹

The enactment of the ATPDEA in August 2002 was positively viewed by Ecuadorian textile producers and is expected to benefit Ecuador's textile and apparel sector by increasing access to the U.S. market.²⁰ Information is not yet readily available concerning the types of business arrangements that may emerge between U.S. and Ecuadorian firms or the amount of foreign direct investment that may result from implementation of the ATPDEA.

Government Policies

Since 1990, the Ecuadorian Government has implemented a number of initiatives designed to increase Ecuador's ability to attract foreign investment and enhance trade. The Government established free-trade zones (FTZs) and implemented a maquila program to

¹⁵ International Labor Organization, "Wages in Manufacturing - Earnings Per Hour/Dollars," found at <http://laborsta.ilo.org/cgi-bin/brokersv8.exe>, retrieved Oct. 21, 2002. The latest available data on wage rates in Ecuador's textile and apparel sector were for 1997, when average hourly earnings were \$0.83 for textile workers and \$0.47 for apparel workers.

¹⁶ Scott Wilson, "Dollar Looms Over Ecuador Election," *Washington Post*, Oct. 20, 2002, p. A 26.

¹⁷ "Ecuador: Textile Industry," CORPEI, found at <http://www.corpei.org>, retrieved Dec. 30, 2002.

¹⁸ U.S. Department of State telegram 3046, "Ecuador: Input for Draft 2000 Triennial Report to Congress for Ecuador," prepared by U.S. Embassy, Quito, Aug. 31, 2002.

¹⁹ Embassy of Ecuador, "The Matching Grants Program for Export Promotion," *Ecuador in Brief* - vol. 1, No. 2, July-Sept. 2201, p. 4.

²⁰ U.S. Department of State telegram 2525, "Tuna Types Aside, Ecuador is Satisfied with ATPA," July 31, 2002, and telegram 3693, "Ecuador's Export Priorities," Oct. 31, 2002, prepared by U.S. Embassy, Quito.

grant duty-free treatment for goods imported on a temporary basis to be manufactured, assembled, converted, or repaired and re-shipped abroad. Ecuador has five FTZs that encourage the export of finished and semiprocessed goods; the primary FTZ is in San Lorenzo, near the Colombian border. The FTZs provide for the duty-free import of raw materials and machinery that are used in the production of exported goods. In addition, all business transactions that occur in the FTZ are tax-exempt and free from currency controls.²¹ The maquila program also exempts such goods from Central Bank import permit requirements. Ecuador's maquila operations are concentrated in the textile and fishing industries.

The Investment Promotion and Guarantee Law passed in December 1997 helps to protect the rights of foreign investors and ensure treatment similar to that of Ecuadorian nationals. Direct foreign investment may be made in any manufacturing sector without prior authorization, and foreign investors are able to transfer abroad the net profits from their investments.²² Adoption of the dollar in January 2000 further enhanced the ability of the country to attract foreign investment by eliminating foreign currency risks. Ecuador adopted the U.S. dollar as its national currency in 2000 to reduce inflation and to stabilize and bolster its economy, which had experienced large currency devaluations, low oil prices, depleted banana crops, and damage caused by El Niño. The Ecuador Government also began a program of comprehensive economic reform to temper the inflation that had plagued the economy during the late 1990s.²³

Ecuador benefits from preferential access to the U.S. market for textiles and apparel under the ATPDEA (see "overview" at the beginning of this appendix for information on the U.S. legislation). Ecuador is a member of the Andean Community,²⁴ and has bilateral free-trade agreements with Colombia and Chile. Ecuador benefits from preferential access for most of its primary exports to the European Union (EU) under its Generalized System of Preference Program.²⁵

²¹ "Ecuador," *Caribbean/Latin America Profile 2003* (Miami, FL: Caribbean Publishing Ltd., 2002), p. D-38.

²² "Investment Guide - Investment in Ecuador," found at www.ecuadorexports.com/investment.htm, retrieved Dec. 31, 2002 and "Why Invest in Ecuador - A Special International Report," *The Washington Times*, found at <http://www.ecuadornumismatics.com>.

²³ U.S. Department of State telegram 3046, "Ecuador: Input for Draft 2000 Triennial Report to Congress."

²⁴ The Andean Community is made up of Bolivia, Colombia, Ecuador, Peru, and Venezuela, and is a Customs Union—the goods of its member countries circulate unimpededly throughout its territory free of duties, while imports outside the subregion pay a common tariff. See "Who Are We - Andean Community," found at <http://www.comunidadanina.org/ingles/who.htm>, retrieved Apr. 24, 2003.

²⁵ "Ecuador," *Caribbean/Latin America Profile 2003*, p. D-38.

Foreign Trade

Ecuador's textile and apparel trade deficit more than doubled during 1997-2001 to \$113 million, as imports rose by 57 percent, to \$184 million, while exports fluctuated within a relatively narrow range, increasing by 6 percent during the period to \$70 million (table J-9). Ecuador's textile and apparel sector relies on imports for its yarn and fabric requirements. Ecuador's exports of sector goods consist primarily of textile products. Unlike its Andean neighbors, for which apparel accounts for a substantial share of their sector exports, apparel accounted for a relatively small share, 36 percent, of Ecuador's sector exports in 2001. Ecuador's key trading partners include Colombia, the United States, China, Taiwan, and Korea.

Imports

The growth in Ecuador's imports of sector goods during 1997-2001 was accounted for by textile products, imports of which rose by 60 percent to \$137 million. According to United Nations data, the leading foreign suppliers of textiles to Ecuador in 2001 were Colombia (32 percent), the United States (14 percent), and China (8 percent). Ecuador's imports of apparel rose by 46 percent during 1997-2001 to \$47 million. Leading foreign suppliers of apparel in 2001 were Colombia (46 percent), China (14 percent), Peru (11 percent), and the United States (5 percent).

Exports

Ecuador's exports of sector goods consist primarily of textiles, which accounted for 64 percent of the total in 2001 (table J-10). Apparel accounted for the remainder (36 percent) of the sector exports. According to United Nations data for 2001, Ecuador's leading textile export markets were Colombia (64 percent), the United States (9 percent), Venezuela (7 percent) and Peru (4 percent); Ecuador's major apparel export markets were the United States (48 percent) and the EU (16 percent). The United States and the EU do not maintain quotas on imports of textiles and apparel from Ecuador.

U.S. imports of textiles and apparel from Ecuador fluctuated widely during 1997-2002, rising by 5 percent to 14.9 million SMEs (table J-11). In terms of value, however, imports of sector goods declined by 11 percent during 1997-2002 to \$16 million. Apparel accounted for 66 percent of the quantity but 84 percent of the value of sector imports from Ecuador in 2002. The product categories with the greatest growth during 1997-2002 included manmade-fiber hosiery, cotton knit shirts, and cotton trousers. The trade-weighted average U.S. duty on imports of sector goods from Ecuador in 2001 was 11.2 percent ad valorem (7.4 percent for textiles and 11.8 percent for apparel).

U.S. imports of apparel from Ecuador entering under production-sharing arrangements (as assembled goods) under HTS heading 9802.00.80²⁶ more than doubled (34 percent of total

²⁶ This program provides a duty exemption for U.S. components returned to the United States in the form of finished articles. In general, the duty is assessed only on the value-added abroad.

U.S. apparel imports from Ecuador in 2001), during 1997-2001, to \$7.8 million, and then declined by 60 percent in 2002 to \$31 million, or 16 percent of U.S. apparel imports from Ecuador. Knit apparel dominated 9802.00.80 apparel imports from Ecuador in 2001, with a 93-percent share; woven apparel, accounted for only 7 percent of the total. These shares had changed significantly from 1997, when knit apparel imports from Ecuador accounted for 42 percent and woven apparel accounted for 48 percent of total U.S. imports of apparel from Ecuador. In 2002, U.S. apparel imports from Ecuador under HTS heading 9802.00.80 consisted almost entirely of apparel reported in category 659 (other manmade-fiber apparel).

Table J-9
Ecuador: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Installed spinning capacities:					
Short-staple spindles (<i>number</i>)	200,000	200,000	200,000	200,000	200,000
Long-staple spindles (<i>number</i>)	35,000	35,000	35,000	35,000	35,000
Open-end rotors (<i>number</i>)	9,000	9,000	9,200	9,000	9,000
Installed weaving capacities:					
Shuttleless looms (<i>number</i>)	1,000	1,000	(¹)	1,000	1,000
Shuttle looms (<i>number</i>)	3,000	3,000	(¹)	3,000	3,000
Purchases of large circular knitting machines	(¹)	21	11	33	27
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	42.6	34.5	36.8	40.3	44.9
Apparel (<i>million dollars</i>)	23.5	22.1	18.6	19.8	25.5
Total (<i>million dollars</i>)	66.2	56.6	55.4	60.1	70.4
Imports:					
Textiles (<i>million dollars</i>)	85.3	109.4	74.9	112.8	136.9
Apparel (<i>million dollars</i>)	32.0	39.1	19.2	22.7	46.8
Total (<i>million dollars</i>)	117.3	148.5	94.2	135.5	183.7
Trade balance:					
Textiles (<i>million dollars</i>)	-42.6	-74.8	-38.1	-72.5	-92.0
Apparel (<i>million dollars</i>)	-8.5	-17.1	-0.7	-3.0	-21.4
Total (<i>million dollars</i>)	-51.1	-91.9	-38.8	-75.4	-113.3

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues. Trade data are United Nations data as reported by Ecuador.

Table J-10
Ecuador: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	8	2	4	4	4
European Union	2	1	1	1	1
Canada	(¹)	(¹)	(¹)	(¹)	(¹)
Subtotal	10	3	5	5	5
All other:					
Colombia	22	22	19	23	29
Venezuela	2	1	2	2	3
Peru	(¹)	1	3	3	2
Other	8	6	8	8	7
Subtotal	33	31	32	36	40
Grand total	43	35	37	40	45
Apparel (SITC 84):					
Quota markets:					
United States	10	8	7	6	12
European Union	7	6	5	4	4
Canada	1	1	(¹)	(¹)	(¹)
Subtotal	17	14	12	10	16
All other	6	8	7	9	9
Grand total	24	22	19	20	25
Textiles and apparel:					
Quota markets:					
United States	18	10	10	11	16
European Union	8	6	6	4	5
Canada	1	1	(¹)	(¹)	(¹)
Subtotal	27	17	16	15	21
All other	39	39	39	45	50
Grand total	66	57	55	60	70
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	24	9	12	12	10
Apparel	73	64	63	52	64
Average	41	31	29	25	30

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table J-11
Textiles and apparel: U.S. general imports from Ecuador, by specified product categories,¹ 1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
<i>1,000 square meters equivalent</i>							
0	Textiles and apparel, total	14,176	10,307	12,513	16,397	18,004	14,919
1	Apparel	6,731	8,075	7,686	9,881	11,972	9,838
2	Textiles	7,445	2,233	4,827	6,517	6,032	5,081
11	Yarns	2,011	4	1,523	1,297	472	126
12	Fabrics	5,332	1,911	2,599	2,422	1,927	1,070
14	Other miscellaneous articles	102	317	704	2,798	3,634	3,884
30	Cotton textiles and apparel	11,580	7,518	7,366	8,007	7,281	4,877
60	Manmade-fiber textiles and apparel	1,579	2,013	4,484	7,623	9,948	9,414
338	Cotton knit shirts, men/boys	120	299	844	1,028	1,022	618
339	Cotton knit shirts, women/girls	109	6	326	351	401	126
347	Cotton trousers, men/boys	483	261	1,194	2,188	1,876	1,079
348	Cotton trousers, women/girls	37	21	92	118	255	275
351	Cotton nightwear	3,436	4,540	716	205	1,127	1,331
632	Manmade-fiber hosiery	7	2	4	757	1,286	2,521
659	Other manmade-fiber apparel	740	1,636	3,428	3,683	4,358	2,793
666	Other manmade-fiber furnishings	5	2	218	1,492	3,060	3,823

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

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

Overview

Peru's textile and apparel sector accounted for 15.4 percent of manufacturing GDP in 2000, up from 12 percent in 1998. Peru's textile and apparel sector is vertically integrated from fiber to finished product. Textile and apparel manufacturing is a major source of employment for Peru--almost 10 percent of the population depends on the textile industry, which directly accounted for an estimated 150,000 workers in 2002.² Peru's textile and apparel sector has a unique competitive advantage in its domestic supplies of high-quality pima and tanguis cotton and wool produced from the hair of its indigenous alpaca, llama, and vicuna.

Peru's domestic market for textile and apparel is small and, therefore a significant share of Peru's textile and apparel production is exported. The United States has been Peru's largest export market in recent years. In 2001, 80 percent (\$382 million) of Peru's apparel exports were shipped to the United States. In 2001, Peru supplanted Colombia as the largest Andean supplier of textiles and apparel to the United States for the first time, accounting for 48 percent of the Andean textile and apparel exports to the United States.

Despite the relative strength of Peru's textile and apparel sector, it has been facing growing challenges in recent years. Government measures to open Peru's economy during the 1990s led to such increased competition from low-cost Asian imports that concern was voiced that the textile industry could shrink if safeguards were not imposed.³ U.S. trade preferences granted to Mexico and the Caribbean Basin countries under NAFTA and the CBTPA, respectively, further increased competition faced by Peru's textile and apparel products in the U.S. market. Finally, severe weather conditions arising from the 1997-98 El Niño damaged Peru's cotton crops and reduced Peru's cotton production, causing cotton demand to far exceed supply. Significant portions of Peru's infrastructure were also damaged and many roads, highways, bridges, and other transportation channels are still under repair.

Peru's textile and apparel sector has been anticipating new trade opportunities resulting from preferential access to the U.S. apparel market following implementation of the ATPDEA in October 2002. Industry sources in Peru have estimated that the ATPDEA could boost Peru's textile industry growth by 40 percent per year and generate 32,000 direct and 78,000 indirect new jobs (in cotton agriculture and related services and sectors) over the next 3 years.⁴

¹ Prepared by Laura Rodriguez, Office of Industries.

² Peruvian Government, written submission to the Commission, Feb. 3, 2003.

³ "Peruvian Textiles: Men of the Cloth," *Business Latin America*, Oct. 26, 1998, found at <http://db.eiu.com>, retrieved Nov. 4, 2002.

⁴ U.S. Department of State telegram 5903, "Report Card on ATPA and Peru," prepared by U.S. Embassy, Lima, Oct. 4, 2000.

Industry Profile

Industry structure and performance

Peru has an integrated textile and apparel sector—from the production of raw material inputs (cotton, alpaca, llama, and vicuna) and textile processing to apparel sewing and product delivery. The sector has a significant impact on the country's economy, partly because it is linked to the agricultural sectors for cotton cultivation and livestock for supplying fleece.⁵ Peru's largest apparel producers are in the Department of Lima; a few factories are in Arequipa. The Zarate Industrial Zone in Lima is the center of several leading clothing makers and suppliers of other textile inputs. The knitwear segment of the apparel industry has grown the most rapidly in recent years.⁶

Most of Peru's estimated 11,000 textile and apparel establishments are classified as micro-establishments with fewer than 10 employees, whereas only 13 establishments have more than 200 workers (table J-11, found at the end of this country profile).⁷ The portion of the industry involved in textile and apparel exports is highly concentrated. Industry sources reported that, in 2000, Peru had an estimated 900 textile and apparel exporting firms, of which 30 were vertically integrated firms that accounted for 70 percent of Peru's textile and apparel exports. Of these firms, 18 were large companies with annual exports of more than \$10 million each.⁸ In contrast, 875 small companies (with exports of less than \$1 million each) accounted for 9 percent of total textile and apparel exports. The degree of industrial integration is reportedly higher in Peru than anywhere in the Western Hemisphere, including the apparel cities in Mexico.⁹ Industry sources report that the level of interaction between large and small textile and apparel firms is high. Large companies often subcontract to small- and medium-sized firms, which, in turn, subcontract to micro-establishments for both domestic and export production.¹⁰ The capacity of Peru's apparel industry has expanded by double-digit growth in recent years, and was facilitated by the rise in Peru's imports of textile machinery, which totaled \$65 million in 2000.¹¹ According to the Government, because Peru's textile and apparel sector is highly informal, it is very difficult to measure the industry's production and consumption levels.¹²

Despite Peru's proximity to the United States, Peru's transportation and shipping costs are higher than those of its regional competitors. A few years ago, the Peruvian Government

⁵ Expoamerica, "Inclusion of Textiles and Apparel in the Andean Trade Preference Act: Contribution to the Battle Against Coca Production and Illegal Drug Trafficking," Sept. 2000, p. 17.

⁶ Mercedes Cortazar, "Economic Crisis Strangles Peru's Industry," *Apparel Industry Internacional*, July 1999, found at <http://www.aiimag.com/aiieng/archives/0799/jul99stor5.html>.

⁷ Peruvian Government, written submission to the Commission, Feb. 3, 2003.

⁸ Olga G. West, "Peru Moda to Focus on Expanding Market Horizons," *Bobbin*, May 2000, pp. 12-13.

⁹ U.S. and Foreign Commercial Service, "International Market Insight - Peru," 2001, found at <http://www.USATrade.gov>, retrieved Jan. 7, 2002.

¹⁰ Expoamerica, p. 13.

¹¹ U.S. and Foreign Commercial Service, "International Market Insight--Peru," 2001.

¹² Peruvian Government, written submission to the Commission, Feb. 3, 2003.

began to implement an extensive road reconstruction program (supported by bilateral and multilateral lending) that has improved the distribution of goods and services to and from Lima.¹³ Severe weather conditions caused by the 1997-98 El Nino, however, disrupted distribution networks by damaging roads, highways, bridges, water treatment plants, and schools. Political turmoil and a downturn in Peru's economy have delayed repairs that are estimated to total \$1 billion. Currently, expensive air transportation is the only way to convey goods in areas not served by the Pan America or Central Highways. Peru's voice and data communications are generally reliable; and although privatization of electrical utilities is incomplete, generating capacity in general and thermal capacity in particular has increased substantially. Peru no longer has frequent power outages that used to disrupt production. Industry sources report that water supply infrastructure in Lima and throughout Peru, however, needs to be expanded and improved and Peru's ports need to be modernized. Another challenge for Peru's textile and apparel sector has been financing costs reported to be among the highest in the region. High interest rates on loans and short, restrictive repayment periods have financially strained Peru's weaving mills.¹⁴

Peru's textile and apparel companies have been seeking to increase their presence in the global marketplace in recent years. Many are implementing new quality control programs and restructuring their production operations to increase efficiencies and reduce costs.¹⁵ In addition, before the implementation of the ATPDEA, Peruvian manufacturers had started emphasizing higher value-added products because they could not compete on price with textile and apparel products from Mexico and the Caribbean Basin countries that benefit from duty-free and quota-free preferential arrangements or with low-cost products from Asian suppliers.¹⁶

Factors of production

Raw materials

Peru's textile and apparel sector is founded on cotton production and on fine animal hair from llama, alpaca, and vicuna rearing. Peru has a distinct competitive advantage in its domestic supplies of high-quality pima and tanguis cotton. Cotton cultivation occurs primarily in the coastal valleys of northern Peru, and the wool of alpaca, llama and vicuna is raised in the mountains of southern Peru. Pima and tanguis cotton have unique properties that are sought for the production of high-end, niche garments. Peru's pima cotton reportedly rivals high-quality Egyptian cotton and is renowned for not only being the longest-staple cotton in the world, but also for its softness that, according to some U.S.

¹³ Except as noted, information in this paragraph is from U.S. and Foreign Commercial Service, "Peru Country Commercial Guide FY 2002 - Economic Trends and Outlook," found at <http://www2.usatrade.gov>, retrieved Nov. 4, 2002.

¹⁴ "The Andean Region: A Vision of Integration," *Apparel Industry*, Sept. 1999, vol. 60, Issue 9, p. SS-22.

¹⁵ West, pp. 12-13.

¹⁶ *Exporameric*, p. 13.

apparel producers, “rivals silk.”¹⁷ Tanguis cotton is valued for its durability and its ability to absorb color--requiring 15-20 percent less dye to achieve the same color intensity as the next closest cotton. Because tanguis also conducts moisture well, the fabric made from tanguis cotton wicks moisture away from the body and resists fading.¹⁸ Peru’s alpaca wool is known for its fineness, sheen, and strength, and the fleeces offer a wide variety of natural colors, which makes alpaca wool an attractive alternative for clothing manufacturing.¹⁹ Ten percent of Peru’s alpaca production is accounted for by baby alpaca, known for its consistent quality and price stability, and which European customers view favorably as an alternative to cashmere.²⁰ International demand for Peru’s pima cotton and alpaca and vicuna wool has increased during the past 10 years, which reportedly has helped Peru’s textile and apparel sector to grow 25 percent annually.²¹

Peru’s cotton industry has faced some serious challenges in the past few years. El Niño devastated much of Peru’s cotton production--reducing both the quantity and quality of the cotton. Production of high-quality cotton has also fallen as some Peruvian producers have switched to products yielding higher profits.²² Peru’s cotton-growing industry is operating at only 50-percent capacity, and Peru’s textile and apparel sector therefore increasingly relies on cotton imports to meet its textile production requirements.²³ The United States accounts for most of Peru’s raw cotton imports to cover the shortfall in Peru’s cotton production in recent years.²⁴ In 2001, the United States exported about 690,000 net kilos of pima cotton to Peru.

Peru’s production of synthetic fibers (primarily nylon, acrylic, and polyester) rose from 46.5 million pounds in 1997 to 63.7 million pound in 2001.²⁵ Peru’s petrochemical industry is concentrated in Lima and the industry’s leading export markets are in Latin America.²⁶

¹⁷ Gloria Rojas, “Factory Profiles: Export Success for Copertex-Incotex and Diseno y Color,” *Apparel Industry Internacional*, Sept. 1997, found at <http://www.aiimag.com/aiimag.com/aieng/archives/997/story4.html>, retrieved Mar. 2, 1999.

¹⁸ U.S. Department of State telegram 5669, “Peru’s Tanguis and Pima Cotton: An ATPA Factsheet,” prepared by U.S. Embassy, Lima, Oct. 11, 2001; and Rojas, “Factory Profiles.”

¹⁹ *Exporamerica*, p. 14.

²⁰ Alpaca production is estimated to total 4.5 million kilos a year --70 percent is exported in its greasy form to be processed at a destination, often for use in ready-made knitwear. See “Peru: Drive to Sell Baby Alpaca in Europe,” June 13, 2002, found at [wysiwyg://http://just-style.com](http://just-style.com), retrieved June 13, 2002.

²¹ West, pp. 12-13.

²² Eduardo Orozco, “Peru’s Prized Cotton Industry Unravels,” Reuters, Mar. 2001, found at <http://just-style.com>, retrieved Mar. 2, 2001.

²³ U.S. Department of State telegram 2590, “Peru After Textile Quotas,” prepared by U.S. Embassy, Lima, May 21, 2002.

²⁴ U.S. and Foreign Commercial Service, “International Market Insight-Peru,” 2001.

²⁵ Fiber Economics Bureau, Inc., *Fiber Organon*, May 2002, p. 80.

²⁶ Banco Wiese Sudameris, “Reporte Sectorial-Textiles y Confecciones--Claras Ventajas Competitivas...Pero Hay Que Invertir Para Mantenerlas,” Departamento de Estudios Economicos, May 19, 2001.

Labor

Some sources report that although labor is abundant, there is a shortage of skilled workers in the Peruvian workforce.²⁷ Like its neighbors in South and Central America, however, Peru's manufacturing wage rates are competitive; in 2002, the average hourly wage for spinning and weaving was \$1.63 per hour including benefits.²⁸ Manufacturing industries employed about 963,000 workers, or about 14 percent of Peru's total labor force in 2000.²⁹ Peru's textile and apparel sector is a vital source of employment and accounted for 32 percent of all manufacturing jobs in the same year. Almost 10 percent of the population depended on the textile industry which directly accounted for an estimated 150,000 workers in 2002.³⁰ Within the textile and apparel sector, fifteen percent of the workers is employed in textiles manufacturing and 85 percent is employed in apparel manufacturing.³¹ Peru's textile and apparel sector strongly supported the passage of the ATPDEA because industry representatives estimated that the trade preferences being granted to textile and apparel products would more than double the sector's growth to about 40 percent per year and would generate about 110,000 direct and indirect jobs per year.³² Such job creation is perceived as critical because of Peru's high unemployment rate and as an alternative to the illicit drug production industry.

Technology

Information concerning the level of Peru's textile and apparel manufacturing technology is limited and inconsistent. Some sources report that the textile and apparel industry's use of cutting-edge technology is a leading incentive for foreign investors.³³ Compared with its regional competitors, Peru was the leading recipient of new spindles (for both short-staple and long-staple cotton) and open-end rotors during 1992-2001. However, in overall installed capacity for these machines, Peru ranks second after Colombia. Further, Peru has more than three times as many shuttle looms as shuttleless looms which are more efficient. In addition, according to one source, outdated technology and inefficient industrial engineering practices have contributed to relatively low productivity in Peru's textile and apparel sector.³⁴ Efforts are being made, however, to enhance the level of technology and to expand production capacity, particularly for exports, in order to take full advantage of opportunities generated

²⁷ Mercedes Cortazar, "Peru Not Giving in to El Niño," *Apparel Industry International*, Aug. 1998.

²⁸ Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002," Reston, VA.

²⁹ International Labor Organization, "Total Employment - Peru," found at <http://laborsta.ilo.org/cgi-bin/brokerv8.exe>, retrieved Oct. 22, 2002.

³⁰ Peruvian Government, written submission to the Commission, Feb. 3, 2003.

³¹ Exporamerica, pp. 11-12.

³² U.S. Department of State telegram 2426, "Exporamerica Renews Push for Apparel in ATPA," prepared by U.S. Embassy, Lima, Apr. 24, 2000.

³³ "Paraguay, Peru, Puerto Rico," *Apparel Industry*, Sept. 2000, vol. 61, issue 9, p. 60, found at <http://web19.epnet.com>, retrieved Nov. 4, 2002.

³⁴ U.S. Department of State telegram 1287, "Department of Labor Wage Study for the Apparel Industry," prepared by U.S. Embassy, Lima, Mar. 2, 1999.

by the ATPDEA.³⁵ In 2000, Peru's imports of textile machinery totaled \$65 million. Industry representatives also acknowledge that state-of-the-art technology is essential for improving fabric quality and variety in order to offer higher-end textile and apparel products.³⁶ Consequently, ongoing investment in new technology is likely to continue to be a priority for Peru's textile and apparel sector in coming years.

Investment

Currently, 90 percent of Peru's textile and apparel firms are owned by Peruvians.³⁷ Since 1990, the Government of Peru has implemented economic reforms to open the country's economy and to attract foreign investment. Reforms included privatizing most state-owned enterprises, strengthening the financial system, and setting up a legal framework to promote and protect foreign investment (see Government policies section). Peru's mining and energy sectors together have received a major share of Peru's foreign private investment over the years.³⁸ During 1997-2001, total foreign investment in Peru grew by about 11 percent annually to reach \$9.7 billion in 2001.³⁹ Continuing to attract more foreign investment remains a priority for the Peruvian government and for industry representatives.⁴⁰ It is not known how much, if any, foreign investments funds have specifically targeted the textile and apparel sector.⁴¹

In addition to foreign investment, Peru has received multilateral assistance. The World Bank approved a program to loan an average of \$230 million per year between September 2002 and June 2006 to fund projects to boost Peru's fiscal revenues and exports and eliminate obstacles to private sector development.⁴² Information is not readily available, however, that shows if any portion of the World Bank funds has been allocated to the textile and apparel sector.

Government Policies

Domestic policies

Peru's economy has been dominated for many years by exports of gold and base metals such as copper and tin. To diversify the national economy, the Government of Peru has

³⁵ Peru Marketplaces, "Textiles and Apparel - News," found at <http://www.perumarketplaces.com/ing/noticias>, retrieved Nov. 15, 2002.

³⁶ Mercedes Cortazar, "Peru Not Giving in to El Niño."

³⁷ Embassy of Peru, counselor, interview by USITC staff, Jan. 8, 2003.

³⁸ World Trade Organization, "Peru: May 2000," found at <http://www.wto.org/english>, retrieved Oct. 16, 2002.

³⁹ U.S. and Foreign Commercial Service, "Peru Country Commercial Guide FY 2002."

⁴⁰ World Trade Organization - "Trade Policy Review: Peru 2000," press release, May 22, 2000, found at <http://www.wto.org>, retrieved Oct. 16, 2002.

⁴¹ Embassy of Peru, counselor, interview by USITC staff, Jan. 8, 2003.

⁴² The World Bank Group, "Country Assistance Strategy: Peru," found at <http://Inweb18.worldbank.org/External/lac>, retrieved Oct. 25, 2002.

increasingly focused on textile and apparel production, among other sectors. To encourage foreign investment, a number of economic reforms were implemented during the 1990s, including lowering tariffs and establishing a legal framework to promote and protect foreign investment by treating national and foreign investors equally. The major laws governing foreign investment in Peru include the “Foreign Investment Promotion Law (Legislative Decree (DL) 662 of Sept. 1991) and Framework Law for Private Investment Growth (DL 757 of November 1991).⁴³ Although the economic reforms helped to boost Peru’s GDP, employment, and trade, they also led to a deluge of low-cost textile and apparel imports into Peru’s small domestic market. Consequently, Peru’s textile and apparel companies lost sales and saw their profit margins shrink. These developments have prompted Peruvian textile and apparel producers to focus increasingly on high-end products in order to survive.⁴⁴

Trade policies

Peru is a member of the Andean Community (ANCOM)⁴⁵ and will be fully integrated into the free-trade-area of the bloc by 2005. Peru, does not, however, comply with the common external tariff (CET), which is currently 13 percent. As part of the Andean Community, Peru is participating in talks with Mercosur about establishing a free-trade area between the two blocs. However, most tariffs are not expected to be eliminated until 2015.⁴⁶ Also part of the Latin American Integration Association (ALADI), Peru has signed bilateral trade agreements with Argentina, Brazil, Chile, Cuba, Mexico, Paraguay, and Uruguay. Peru has not established free-trade zones comparable to those of its Andean neighbors or special import programs that allow the tariff-free import of raw materials for use in finished products to be exported.⁴⁷

ATPDEA provisions granting preferential treatment for apparel made in Andean countries from regional fabric was considered particularly important for Peru, because its vertically integrated textile and apparel sector uses few U.S. textile inputs. Peru’s textile and apparel sector predicted that including tanguis and pima cotton in the ATPDEA would generate about 140,000 new jobs in textile processing by 2006. Peruvian President Alejandro Toledo announced that the ATPDEA would generate no fewer than 1 million jobs total.⁴⁸ The Peruvian Government is currently working with Peru’s National Institution of Export Promotion (PROMPEX) on an operational plan that establishes policies and procedures and strengthens partnerships between Peruvian and U.S. firms to increase exports to the United States. In September 2002, the Peruvian Government issued its first set of actions to promote exports and reduce duties from 7 percent to 4 percent on more than 1,000 tariff lines.

⁴³ “Peru,” *Caribbean/Latin America Profile*, p. D-58.

⁴⁴ U.S. Department of State telegram 2590, “Peru After Textile Quotas.”

⁴⁵ The Andean Community comprises Bolivia, Colombia, Ecuador, Peru, and Venezuela, and is a Customs Union—the goods of member countries circulate unimpededly throughout its territory free of duty, while imports outside the region pay a common tariff. See “Who Are We - Andean Community,” found at <http://www.comunidadanina.org/ingles/who.htm>, retrieved Apr. 24, 2003.

⁴⁶ “Peru,” *Caribbean/Latin America Profile*, p. D-58.

⁴⁷ Embassy of Peru, counselor, interview by USITC staff, Jan. 8, 2003.

⁴⁸ “U.S. Duty-Free Treatment Could Boost Peru’s Textile Industry.”

Foreign Trade

Peru's trade surplus in textiles and apparel increased by 23 percent during 1997-2001 to \$374 million, as the 19-percent increase in Peru's exports exceeded the 13-percent growth of its imports (table J-12). The United States and the EU were Peru's major trading partners, and apparel exports to these markets accounted for most of Peru's trade with them.

Imports

Peru's imports of textiles and apparel rose by during 1997-2001 13 percent to \$248 million (table J-12). Textiles accounted for almost three-fourths (71 percent) of Peru's imports in 2001 and totaled \$175 million, up by 15 percent since 1997. United Nations data show leading suppliers of textiles to Peru included Korea (19 percent), China (13 percent) the United States (10 percent), and Brazil (9 percent). Apparel accounted for 29 percent of Peru's sector imports.⁴⁹ Peru's imports of apparel rose by 11 percent during 1997-2001 to \$72.4 million. Leading suppliers of apparel to Peru in 2001 were China (\$39.8 million), the EU (\$8.2 million), and the United States (\$4.2 million) with respective totals of 55 percent, 11 percent, and 6 percent. Peru's imports of apparel from China almost quadrupled during 1997-2001, whereas apparel imports from the EU and the United States declined by 45 percent and 58 percent, respectively.

Exports

Peru's exports of textiles and apparel grew by 19 percent during 1997- 2001 to \$621 million (table J-13). Apparel accounted for 81 percent of Peru's sector exports in 2001. The United States accounted for 62 percent of Peru's exports for textiles and apparel in 2001. Peru's textiles and apparel exports to the United States rose by 71 percent during 1997-2001 to \$387 million. For the first time, Peru became the leading Andean supplier of textiles and apparel to the U.S. market in 2001, accounting for 48 percent of U.S. sector imports from the ATPA countries. The leading apparel imports from Peru were cotton knit shirts (including T-shirts), sweaters, robes, nightwear, and trousers (table J-14).

U.S. imports of textiles and apparel from Peru are not subject to quotas. The trade-weighted average duty on U.S. imports of textiles and apparel from Peru was 17.2 percent ad valorem. Peru's high trade-weighted average duty may be attributed in part to Peru's minimal use of U.S. textile inputs. Peru has only a few apparel maquiladoras (i.e., assembly operations owned by or under contract to U.S. or other foreign apparel producers) engaged in production-sharing operations (see section on "trade policies"). Consequently, U.S. imports of textiles and apparel from Peru entering under HTS heading 9802.00.80 in 2001 totaled only \$712,000, or less than 1 percent of total U.S. sector imports from Peru.

Peru's second-largest market for sector exports in 2001 was the EU, which accounted for 12 percent (\$77 million) of Peru's textile and apparel exports, down from 25 percent in 1997. Peru is the only ATPA country whose textile and apparel products are subject to quotas in

⁴⁹ Based on import statistics provided by the Peruvian Government in a written submission to the Commission, Feb. 3, 2003. The data include wool and tops, manmade filament tow, made-up fishing nets, and other miscellaneous textile manufactures.

the EU market. In 2002, the quota fill rates for EU imports of cotton yarn and cotton fabrics from Peru were less than 10 percent. The sharp decline in the EU share of Peru's exports during 1997-2001, however, may be attributed in part to increased competition from low-cost products from Asian suppliers.

Table J-12
Peru: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of textile and apparel establishments	(¹)	(¹)	(¹)	(¹)	11,000
Number of textile and apparel workers	(¹)	(¹)	(¹)	150,000	150,000
Installed spinning capacities:					
Short-staple spindles (<i>number</i>)	700,000	700,000	700,000	700,000	700,000
Long-staple spindles (<i>number</i>)	70,000	70,000	70,000	70,000	70,000
Open-end rotors (<i>number</i>)	17,500	17,500	18,00	18,000	18,000
Installed weaving capacities:					
Shuttleless looms (<i>number</i>)	1,350	1,350	1,350	1,350	1,350
Shuttle looms (<i>number</i>)	5,000	5,000	5,000	5,000	5,000
Purchases of large circular knitting machines					
(<i>number</i>)	(¹)	145	74	123	85
Total labor cost per operator hour	(¹)	(¹)	(¹)	\$1.74	² \$1.63
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	195.6	163.9	114.4	128.1	115.1
Apparel (<i>million dollars</i>)	325.8	336.4	413.7	504.1	506.3
Total (<i>million dollars</i>)	521.3	500.3	528.1	632.3	621.4
Imports:					
Textiles (<i>million dollars</i>)	153.0	156.3	138.5	164.9	175.2
Apparel (<i>million dollars</i>)	65.2	61.1	51.1	58.7	72.4
Total (<i>million dollars</i>)	218.3	217.5	189.6	223.6	247.6
Trade balance:					
Textiles (<i>million dollars</i>)	42.5	7.6	-24.0	-36.8	-60.1
Apparel (<i>million dollars</i>)	260.6	275.3	362.6	445.4	433.9
Total (<i>million dollars</i>)	303.1	282.8	338.6	408.6	373.8

¹ Not available.

² Represents 2002 data for production workers in the spinning and weaving segment.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; and Werner International Management Consultants, Reston, VA. Trade data are United Nations data as reported by Peru.

Table J-13

Peru: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	29	32	19	24	14
European Union	49	36	28	25	19
Canada	5	5	3	2	2
Subtotal	82	73	50	50	35
All other:					
Venezuela	16	13	7	13	13
Chile	18	15	14	13	12
Colombia	16	10	5	10	10
Other	63	54	39	43	44
Subtotal	113	91	65	78	80
Grand total	196	164	114	128	115
Apparel (SITC 84):					
Quota markets:					
United States	198	227	313	390	373
European Union	80	72	61	57	58
Canada	3	4	5	5	5
Subtotal	282	303	379	452	436
All other	44	34	35	52	70
Grand total	326	336	414	504	506
Textiles and apparel:					
Quota markets:					
United States	226	259	331	414	387
European Union	129	108	89	81	77
Canada	9	9	8	7	7
Subtotal	364	376	429	502	472
All other	158	124	100	130	150
Grand total	521	500	528	632	621
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	42	45	43	39	31
Apparel	86	90	92	90	86
Average	70	75	81	79	76

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table J-14
Textiles and apparel: U.S. general imports from Peru, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	45,198	44,597	58,315	70,461	58,281	63,474
1	Apparel	22,529	28,125	43,973	53,142	50,529	56,678
2	Textiles	22,669	16,472	14,342	17,319	7,752	6,797
30	Cotton textiles and apparel	41,609	40,080	55,240	66,464	55,435	60,898
40	Wool textiles and apparel	2,488	2,618	2,010	2,067	1,292	1,139
60	Manmade-fiber textiles and apparel	1,060	1,896	1,054	1,913	1,538	1,400
239	Babies' apparel	402	649	896	1,556	1,921	2,431
300	Carded cotton yarn	4,076	4	567	538	203	155
301	Combed cotton yarn	12,169	9,405	8,714	9,511	3,016	1,952
338	Cotton knit shirts, men/boys	7,066	8,854	13,375	17,226	15,144	17,306
339	Cotton knit shirts, women/girls	4,520	6,479	10,965	16,430	18,222	19,824
345	Cotton sweaters	441	578	575	976	1,028	1,008
347	Cotton trousers, men/boys	1,276	1,026	1,119	1,501	2,250	1,995
348	Cotton trousers, women/girls	812	513	1,510	2,078	2,270	1,952
350	Cotton robes	2,080	2,653	5,290	3,472	216	2,347
351	Cotton nightwear	2,505	3,482	5,416	4,781	4,590	4,315
352	Cotton underwear	840	1,009	1,689	986	1,022	598
359	Other cotton apparel	277	255	239	315	350	6327
400	Wool yarns	1,741	1,849	1,247	988	579	576

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

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

APPENDIX K
SUB-SAHARAN AFRICA

Overview

Sub-Saharan Africa (SSA) is a relatively small supplier of textiles and apparel to the global market, accounting for less than 1 percent of world exports in 2001. However, SSA textile and apparel exports have been growing in recent years, particularly to the United States, largely reflecting duty-free and quota-free access to the U.S. market under the provisions of the African Growth and Opportunity Act (AGOA). SSA production and exports tend to be concentrated in a few countries: Mauritius, Madagascar, South Africa, Lesotho, and Kenya. Swaziland has recently increased production and exports, and other countries, such as Namibia, are in the process of making investments in new production to take advantage of AGOA eligibility.¹

The majority of SSA sector production and exports consists of apparel. In 2002, U.S. textile and apparel imports from SSA consisted almost entirely of apparel. South Africa and Mauritius are the only SSA countries with an established textile sector. South Africa is the largest SSA exporter of textiles; principal markets include the European Union (EU), the United States, and other African countries. Other countries with textile capacity include Madagascar, which has a fully integrated supply chain for producing trousers from heavy-weight fabrics, and Zambia, which exports cotton yarn to other SSA countries.²

Notwithstanding its small share of world exports, the SSA region is an important source of apparel for a number of U.S. apparel companies. ***³***⁴

Products and Importance of Quotas

SSA apparel exports are concentrated in garments characterized by long production runs, low labor content, and few styling changes, such as basic trousers, T-shirts, sweaters, and woven shirts. U.S. imports of such basic products from major suppliers are highly constrained by quotas. Apparel producers in South Africa, Mauritius, and Lesotho indicated that most apparel factories in these and other SSA countries were set up to benefit from quota-free access to the U.S. and EU markets.⁵ These companies indicated that U.S. and EU quotas on cotton trousers and T-shirts from other supplying countries, especially those in Asia, have encouraged foreign investors to produce apparel in SSA.⁶ Another expanding area of exports, particularly for South Africa, Lesotho, and Kenya, is manmade-fiber sportswear,

¹ In mid-2001, the Malaysian group Ramatex announced that it would set up a fully integrated garment-manufacturing plant in Namibia. Jozef de Coster, "Opportunities for Textiles and Clothing in Sub-Saharan Africa," *Textile Outlook International*, Sept.-Oct. 2002, p. 166.

² Numerous companies in Mauritius, which imports cotton yarn, indicated that South Africa and Zambia were the main sources for yarn imported from SSA countries. Representatives of textile/apparel companies, interviews by USITC staff, Mauritius, Feb. 24-26, 2003.

³ ***.

⁴ ***.

⁵ Industry representatives, interviews by USITC staff, Mauritius, South Africa, and Lesotho, Feb. 24-Mar. 8, 2003.

⁶ Ibid.

for which major world suppliers are also subject to U.S. and EU quotas.⁷ In addition, South Africa and, until 2002, Madagascar⁸ have been expanding exports of wool suits, another quota-constrained product.

SSA apparel exports of quota products are significant. According to United Nations data, 72 percent of the total value of SSA apparel exports in 2001 consisted of outergarments, which includes shirts, sweaters, and pants. Cotton pants, knit tops, and cotton trousers accounted for 73 percent of the total value of U.S. apparel imports from SSA in 2002.⁹ During 1997-2002, U.S. imports of these garments from SSA grew by 196 percent, compared to 86-percent growth in U.S. imports of other SSA apparel. Other apparel articles of which imports from SSA have been increasing include manmade-fiber shirts and pants, which accounted for 13 percent of the total value of U.S. apparel imports from SSA in 2002 and which increased by 550 percent during 1997-2002.

Important South African textile exports include filament yarns, cotton fabrics, and miscellaneous industrial textiles. The South African textile sector is protected by duties ranging from 7.5 percent to 30 percent ad valorem. A major concern expressed by this industry is that South African tariffs of 22 percent on cotton textiles would not be adequate to protect the sector from a surge in Chinese exports following the phaseout of quotas in 2005.¹⁰

Preferential Trade Programs—AGOA and the Cotonou Agreement

SSA countries receive preferential trade benefits from the EU under the Cotonou Agreement and the United States under AGOA. The Cotonou Agreement provides duty-free and quota-free access for textiles and apparel from Africa, Caribbean, and Pacific (ACP) countries originating in the region.¹¹ An exception is South Africa, which does not receive trade benefits under the Cotonou Agreement but has an FTA with the EU.

The AGOA, signed into law on May 18, 2000, authorizes preferential treatment for qualifying textiles and apparel from eligible countries in SSA for 8 years beginning on October 1, 2000. The textile and apparel trade benefits are available to 38 countries that the President designated as AGOA beneficiary countries, provided that these countries satisfy certain customs-related requirements, including adoption of procedures to prevent unlawful transshipments and the use of counterfeit documents. As of June 1, 2003, 19 countries had met these requirements.¹²

⁷ Industry representative, interview by USITC staff, South Africa, Mar. 3, 2003.

⁸ The exports from Madagascar largely consist of production for firms in Mauritius.

⁹ Data presented in this appendix on U.S. imports of textiles and apparel from SSA countries are official statistics of the U.S. Department of Commerce (the data are available on the website of its Office of Textiles and Apparel (OTEXA), found at <http://otexa.ita.doc.gov/catss.htm>).

¹⁰ Representative of the Textile Federation of South Africa, interview by USITC staff, South Africa, Feb. 27, 2003.

¹¹ Some African countries, for example Lesotho and Madagascar, also qualify for additional trade preferences under the EU “Everything But Arms” program.

¹² Kenya, Mauritius, Botswana, Ethiopia, Lesotho, Madagascar, Malawi, Rwanda, South Africa, Swaziland, Uganda, Namibia, Zambia, Tanzania, Cameroon, Mozambique, Ghana, Senegal, and Cape Verde.

AGOA extends duty-free and quota-free treatment to apparel assembled in SSA countries from U.S.-origin fabrics, as well as specified quantities of apparel made from “regional fabrics” that are produced in SSA countries from U.S. or SSA yarns. Aggregate duty-free U.S. imports of apparel made in designated SSA countries from regional fabrics were initially subject to an annual “cap” that began on October 1, 2000, in a quantity equal to 1.5 percent of total U.S. apparel imports in the preceding 12-month period. That limit was to rise in each of the seven succeeding 1-year periods by equal increments to reach 3.5 percent of total U.S. apparel imports in the final 1-year period beginning on October 1, 2007; after that period, this benefit terminates. A special rule allowed apparel entered under the “cap” from “lesser-developed” SSA countries to be made of third-country fabrics or yarns (other than of U.S. or SSA origin) for the first 4 years, through September 30, 2004.¹³ Under an amendment signed into law by the President on August 6, 2002 (the Trade Act of 2002), the scheduled “cap” on such regional fabric doubles. For the 12-month period that began on October 1, 2002, the import cap was increased from the original level of 2.1 percent to a new level of 4.2 percent of total U.S. apparel imports, rising in each of the five succeeding 1-year periods in equal increments to a level equivalent to 7.0 percent of U.S. apparel imports (rather than 3.5 percent) in the final 1-year period beginning on October 1, 2007. However, none of the new increase in the cap can be used for apparel made in lesser-developed SSA countries from third-country fabrics, so that under the amendment, the duty-free benefits for such apparel are kept at the original limits (2.1 percent and 2.4 percent for the 1-year periods beginning on October 1 of 2002 and 2003, respectively). In addition, the amendment allows Botswana and Namibia to use third-country fabrics or yarns when shipping apparel under the regional cap (a provision otherwise available only to lesser-developed SSA countries) through September 2004.¹⁴

In 2002, U.S. imports of apparel entered under AGOA amounted to 71 percent by value of total U.S. imports of textiles and apparel from SSA. Imports under AGOA using foreign fabrics amounted to 75 percent of AGOA apparel imports, while imports using regional fabric from U.S. or regional yarn accounted for 22 percent. Less than 0.5 percent of the AGOA apparel shipments was made from U.S.-cut fabric and yarn.¹⁵ The largest AGOA suppliers included Lesotho (40 percent of AGOA apparel imports), Kenya (15 percent), Mauritius (13 percent), and Swaziland (9 percent). Mauritius and South Africa supplied 98 percent of AGOA apparel imports using regional fabrics.

¹³ The AGOA defines a lesser-developed SSA country as one that had a per capita gross national product of less than \$1,500 in 1998, as measured by the World Bank. All but six SSA countries (Botswana, Gabon, Mauritius, Namibia, Seychelles, and South Africa) meet the definition of a lesser-developed country.

¹⁴ The House report on H.R. 3009 states that, although Botswana and Namibia do not qualify as lesser-developed countries, they do not have fabric-making capacity and, thus, need the ability to use third-country fabrics for a limited period to aid in the development of their textile and apparel industries. See U.S. House of Representatives, Andean Trade Promotion and Drug Eradication Act, 107th Cong., 1st sess., Report 107-290, Nov. 14, 2001, p. 21.

¹⁵ The remaining AGOA apparel imports consisted of knit-to-shape apparel and apparel of fabrics not available in commercial quantities in the United States.

Kenya¹

Overview

The implementation of AGOA spurred the revitalization of Kenya's textile and apparel sector, creating alternative employment opportunities for the largely agrarian society. The sector has attracted Asian investment in apparel production for export to the United States; apparel accounted for 84 percent of Kenya's exports of sector goods in 2001. U.S. imports of sector goods from Kenya tripled during 2000-02 to \$125 million, almost all of which entered under the AGOA provisions for lesser developed SSA beneficiary countries. Textiles and apparel accounted for less than 10 percent of Kenya's total annual exports. The apparel industry has been Kenya's leading source of new jobs, which increased by 21,000 during 2000-02. Total employment for the textile and apparel sector accounted for 16 percent of all manufacturing jobs in 1999, behind only the food processing sector. According to Kenyan sources, if the AGOA third-country fabric provision is extended beyond September 2004, sector employment could grow to as many as 200,000 workers. If the provision is not extended, Kenyan Government officials claim that foreign investors will close their plants in Kenya.

Industry Profile

Kenya's textile and apparel sector deteriorated during the early to mid-1990s following import liberalization, which exposed the sector to both foreign competition and an influx of imported used clothing; the collapse of the local cotton-processing industry; weak domestic economic activity, which reduced demand for apparel; and quota restriction in the U.S. market.² Competition from foreign suppliers reportedly adversely affected the cotton-processing industry, which consisted mostly of old and inefficient ginning facilities. This industry was also affected by uncertain supplies of raw cotton because of domestic weather-related problems; competition for domestic land from other cash crops such as tea, coffee, and maize; and the use of low-quality seeds. The problems disrupted cotton supplies for local textile mills.

The available data show that, from 1997 through 1999, the number of textile mills in Kenya fell from 94 to 63, but employment rose from 25,500 to 27,200 workers (table K-1). However, reports indicate that rising unemployment following the closure of local cotton and textile firms caused much civil unrest. Most mills in operation in 1999 were either knitting mills (42) or spinning, weaving, and finishing mills (11). According to a 2002 report, Kenya had 51 textile mills, a total workforce of 128,000, and fabric production capacity of 83

¹ Prepared by Selamawit Legesse, Office of Industries.

² U.S. quotas on Kenya's products were eliminated soon after AGOA implementation in Oct. 2002. For information on the quotas, see USITC, *Likely Impact of Providing Quota-Free and Duty-Free Entry to Textiles and Apparel from Sub-Saharan Africa* (inv. No. 332-379), USITC Pub. 3056, Sept. 1997, p. 2-25.

million square meters annually.³ The number of apparel factories rose by 105 during 1997-99 to 613 plants, and apparel employment totaled about 7,400 workers in 1997-99 according to UNIDO data (table K-1). According to a Government source, the apparel industry reportedly employed about 23,000 workers.⁴ The apparel industry has a skilled workforce but the available supply of labor has declined in recent years as a result of the HIV/AIDS epidemic.⁵ In addition, workers in EPZ apparel factories have expressed concern over their low pay, which averages \$1.90 per day.⁶

Following implementation of AGOA in 2000, Kenya began to attract foreign direct investment (FDI) in apparel export production, especially in its export processing zones (EPZs). This FDI reportedly totals about \$60 million, and is mostly from India, China, Sri Lanka, and Mauritius.⁷ Several apparel factories that closed during the 1990s have reopened. Foreign investors have opened 6 new plants and have plans to open another 18 soon.⁸ Sri Lankan firms reportedly plan to expand their apparel operations in the EPZs by investing \$2.4 million in 2003 and adding about 4,000 new jobs, and opening another 10 plants and creating another 10,000 jobs in the near future.⁹

Government Policies

Kenya began to adopt export-oriented programs in 1990 with the implementation of the EPZ and Manufacture Under Bond (MUB) programs, and the establishment of the Investment Promotion Center (IPC) to facilitate the FDI process.¹⁰ Among the incentives offered to producers of goods for export are exemptions from payment of import duties or value added taxes on plant, equipment, raw materials, or intermediate inputs. The producers also benefit from a 10-year tax holiday and a 25-percent tax cut for the second 10-year period.¹¹ In June 2001, Kenya eliminated the 2.5-percent import duty on inputs and raw materials (e.g., textile fibers) used in the manufacturing sector, and also reduced import duties on a number of raw

³ "African Regional Center for Computing," *Manufacturing*, found at <http://www.arcc.or.ke/manu.htm>, retrieved Jan. 8, 2003.

⁴ Official of Embassy of Kenya, facsimile to USITC staff, Nov. 7, 2002.

⁵ About 13 percent of the adult population is HIV-positive. See USAID, *Kenya*, found at <http://www.usaid.gov/country/afr/ke>, retrieved Jan. 8, 2003.

⁶ See *Textiles Worker Unrest: Agoa Success Wearing Thin*, found at <http://allafrica.com/stories/200301280519-.html>, retrieved Feb. 11, 2003.

⁷ "African Governments to WTO: We Need More Time to Compete," *Daily News Record: Textile News*, Jan. 27, 2003.

⁸ Lina Ochieng, Commercial Attaché, Embassy of the Republic of Kenya, interview by USITC staff, Washington, DC, Jan. 3, 2003.

⁹ Ibid.

¹⁰ The Government of Kenya has submitted a grant proposal to the U.S. Trade and Development Agency for a feasibility study on improving ginning and cotton seed production in Kenya.

¹¹ The World Bank Group, *A Review of the Role and Impact of Export Processing Zone*, found at <http://www1.worldbank.org/wbiiep/trade/othertrade/files/MadaniEPZ.pdf>, retrieved Jan. 31, 2003.

materials and capital goods from 5 percent to 3 percent ad valorem in the 2001-02 budget. Import duties on fabrics range from 25 to 35 percent ad valorem.¹²

Kenya receives trade preferences through the Common Market for Eastern and Southern Africa (COMESA), AGOA, GSP, the East African Co-operation (EAC), the Intergovernmental Authority on Development (IGAD), and as a signatory to the Lomé Convention, which allows Kenya's industrial exports to enter the EU free of duty until 2008.¹³

Certain Kenyan imports reportedly are subject to government approvals; foreign investors have limited access to domestic credit markets and are excluded from certain privatization activity; and all imports with an f.o.b. value of more than \$5,000 are subject to preshipment inspection for quality, quantity, and price, and require a Clean Report of Findings by a government-appointed inspection agency. Kenya also imposes import declaration fees and certain penalty fees,¹⁴ as well as high import duties and VAT on certain products.

Foreign Trade

Kenya's trade deficit in textiles and apparel narrowed from \$66 million in 1997 to \$13 million in 2001, reflecting an increase in exports of 25 percent, to \$83 million, and a decrease in imports of 27 percent, to \$97 million (table K-1). Textiles and apparel accounted for 5 percent of Kenya's total exports and imports in 2001.

Kenya's imports of sector goods are believed to consist mainly of fabrics and other inputs for use in apparel export production and, to a lesser extent, used clothing. The major import sources are China, India, Indonesia, and Pakistan, while the United States is a major import source for used clothing. Official U.S. statistics show that U.S. exports of used clothing to Kenya totaled \$6.5 million in 2002. Kenya also imports significant quantities of textile fibers, which totaled \$66 million in 2001, compared with \$82 million in 1998. Most of the fiber shipments came from the EU, especially the United Kingdom, and the United States.

Kenya's exports of sector goods in 2001 consisted mostly of apparel (\$73 million), 69 percent of which went to the United States (table K-2). Official U.S. statistics show that U.S. imports of textiles and apparel from Kenya roughly tripled in quantity and value during 1997-2002, to 36.5 million square meters equivalent (SMEs) valued at \$126 million, representing less than 1 percent of total U.S. textile and apparel imports in 2002 (table K-3). Almost all of the imports from Kenya that year entered under the AGOA provision that provides duty-free treatment to apparel made in Kenya and other lesser-developed SSA beneficiary countries from third-country fabrics. The garments consisted mostly of cotton

¹² Kenya reduced its ad valorem rates from the maximum of 60 percent in 1992 to 25 percent in 1999. See U.S. and Foreign Commercial Service, "Kenya Country Commercial Guide FY 2002," found at <http://www2.usatrade.gov/Website/C...CGurl/CCG-KENYA2002-CH-2:-004CCF88>, retrieved Nov. 6, 2002.

¹³ World Trade Organization, "Trade Policy Reviews: First Release, Secretariat and Government Summaries -- Kenya: January 2000," found at www.wto.org/english/tratop_e/tp124_e.htm, retrieved Oct. 17, 2002.

¹⁴ U.S. and Foreign Commercial Service, "Kenya Country Commercial Guide FY 2002."

and manmade-fiber pants (63 percent of the total import volume in 2002) and cotton and manmade-fiber shirts and blouses (16 percent both knit and woven).

Table K-1
Kenya: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Textiles	94	59	63	(¹)	(¹)
Apparel	508	605	613	(¹)	(¹)
Total	602	664	676	(¹)	(¹)
Number of employees:					
Textiles	25,539	25,492	27,190	(¹)	(¹)
Apparel	7,304	7,395	7,402	(¹)	(¹)
Total	32,843	32,887	34,592	(¹)	(¹)
Installed spinning capacities:					
Short-staple spindles (1,000)	105.0	105.0	105.0	105.0	105.0
Long-staple spindles (1,000)	4.0	4.0	4.0	4.0	4.0
Open-end rotors (1,000)	1.2	1.2	1.2	1.2	1.2
Installed weaving capacities:					
Shuttleless looms (number)	270	270	270	270	270
Shuttle looms (number)	1,500	1,500	1,500	1,500	1,500
Production index (1990=100):					
Textiles	59	59	(¹)	(¹)	(¹)
Apparel	38	39	(¹)	(¹)	(¹)
Foreign trade:					
Exports:					
Textiles (million dollars)	26.8	13.2	12.4	13.2	10.9
Apparel (million dollars)	39.7	43.1	47.4	50.4	72.5
Total (million dollars)	66.5	56.3	59.8	63.6	83.4
Imports:					
Textiles (million dollars)	98.3	92.3	89.2	83.2	78.3
Apparel (million dollars)	34.3	43.2	27.1	19.8	18.4
Total (million dollars)	132.6	135.5	116.3	102.9	96.7
Trade balance:					
Textiles (million dollars)	-71.5	-79.0	-76.8	-70.0	-67.4
Apparel (million dollars)	5.4	-0.1	20.3	30.6	50.6
Total (million dollars)	-66.1	-79.2	-56.5	-39.3	-13.3

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Sources: Industry data from the United Nations Industrial Development Organization, *International Yearbook of Industrial Statistics 2002*; and International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues. Trade data are United Nations data as reported by Kenya's trading partners.

Table K-2
Kenya: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	1	(¹)	(¹)	(¹)	(¹)
European Union	7	3	1	3	1
Canada	1	(¹)	(¹)	(¹)	(¹)
Subtotal	8	3	2	3	1
All other:					
Uganda	5	3	4	3	4
Tanzania	3	2	1	1	2
Burundi	1	(¹)	1	2	1
Other	10	4	5	4	4
Subtotal	19	10	11	10	10
Grand total	27	13	12	13	11
Apparel (SITC 84):					
Quota markets:					
United States	34	37	42	47	69
European Union	3	2	3	2	2
Canada	(¹)	(¹)	(¹)	(¹)	(¹)
Subtotal	37	40	45	49	71
All other	3	3	3	2	2
Grand total	40	43	47	50	73
Textiles and apparel:					
Quota markets:					
United States	34	37	42	47	69
European Union	9	5	4	5	2
Canada	1	1	(¹)	(¹)	(¹)
Subtotal	44	44	46	52	72
All other	22	13	13	12	12
Grand total	67	56	60	64	83
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	29	26	13	22	7
Apparel	92	93	94	97	98
Average	67	77	77	81	86

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table K-3
Textiles and apparel: U.S. general imports from Kenya, by specified product categories,¹ 1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	1,000 square meters equivalent					
0	Textiles and apparel, total	11,305	10,223	12,573	12,670	18,573	36,514
1	Apparel	10,467	10,201	12,467	12,556	18,521	35,184
30	Cotton textiles and apparel	10,797	10,084	12,178	12,078	16,518	24,427
60	Manmade-fiber textiles and apparel	503	119	390	480	1,985	11,931
338	Cotton knit shirts, men/boys	30	0	6	7	1	295
339	Cotton knit shirts, women/girls	(²)	(²)	(²)	1	5	1,093
340	Cotton not knit shirts, men/boys	4,204	3,614	4,505	2,752	1,098	1,272
341	Cotton not knit blouses	35	6	40	8	17	187
347	Cotton trousers, men/boys	2,482	2,963	2,897	3,788	4,584	6,591
348	Cotton trousers, women/girls	1,984	2,803	4,547	5,277	10,027	13,334
638	Manmade knit shirts, men/boys	(²)	0	0	14	21	938
639	Manmade knit shirts, women/girls	0	0	1	0	0	1,442
640	Manmade not knit shirts, men/boys	99	105	198	84	413	74
641	Manmade-fiber not knit blouses	0	0	0	0	60	475
642	Manmade-fiber skirts	1	0	1	0	2	212
647	Manmade-fiber trousers, men/boys	0	1	0	85	144	1,173
648	Manmade-fiber trousers, women/girls	0	0	21	167	67	2,010
650	Manmade-fiber robes	0	0	0	0	568	923
651	Manmade-fiber nightwear	0	0	0	0	644	665
652	Manmade-fiber underwear	0	0	1	0	0	679

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

² Less than 500 square meters equivalent.

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Lesotho¹

Overview

Lesotho is a least developed country with a per capita gross domestic product (GDP) of \$440 in 2000.² The country is landlocked within the Republic of South Africa and has few natural resources. Lesotho has little large-scale manufacturing other than the apparel industry, which is based on its low-cost labor supply. Lesotho has a population of 2.1 million. Expatriate remittances account for 30 percent of Lesotho's GDP.

Unemployment is extensive, with estimates ranging from 40 percent to 60 percent. For workers not emigrating to South Africa to seek jobs, the vast majority (98 percent) of the manufacturing labor force of 45,000 is employed in the apparel industry, virtually the only source of manufacturing employment.³

Implementation of the AGOA in October 2000 helped spur foreign direct investment (FDI) in Lesotho's apparel industry due to the legislation's preferential terms, making Lesotho the leading apparel exporter to the United States from sub-Saharan Africa (SSA) since 2001. FDI in apparel production has come almost entirely from firms in Taiwan, which currently import all necessary inputs into Lesotho to make apparel for export.⁴ Lesotho offers an abundant supply of low-cost labor, access to excellent port facilities of South Africa (transit time to Durban is 4 to 5 hours), and investment incentives. However, investment incentives from neighboring SSA countries could redirect part of these foreign FDI flows.

Industry Profile

Lesotho currently produces only apparel made from imported inputs. Production consists almost entirely of basic trousers, particularly 5-pocket denim blue jeans, and knit tops such as T-shirts. Investors from Taiwan are currently building a state-of-the-art denim fabric mill, and have announced plans recently for the construction of a yarn spinning plant and knitted fabric mill. The denim fabric mill under construction—scheduled for completion in October 2004—is expected to be the most advanced, state-of-the-art fabric mill in sub-Saharan Africa.

¹ Prepared by Edward C. Wilson, Office of Economics.

² World Bank, "Sub-Saharan Africa – Lesotho – Country Brief," Sept. 2002, found at <http://lnweb18.worldbank.org>, retrieved Oct. 28, 2002, and U.S. Department of State, Bureau of African Affairs, *Background Note: Lesotho*, Aug. 2002, found at <http://www.state.gov>, retrieved Jan. 28, 2003.

³ Cotton Board and Cotton Incorporated, "Special Report - Sub-Saharan African Trade," *Cotton Importer Update*, special ed., Mar. 2001, pp. 2-3, found at <http://www.cottonboard.org>, retrieved Jan. 7, 2003. The Cotton Board is based in Memphis, TN, and Cotton Incorporated is based in Raleigh, NC.

⁴ Acting Chief Executive, Lesotho National Development Corp., interview by USITC staff, Maseru, Lesotho, Mar. 6, 2003.

It will be fully vertically integrated with several apparel manufacturing factories.⁵ The same firm building the denim fabric mill recently announced plans to build another mill with partners to produce knit yarns and fabric.

Industry structure and performance

Investment in Lesotho has increased significantly since the AGOA went into effect in 2000. The Lesotho National Development Corp. (LNDC) reported that there were 43 firms operating in the Lesotho apparel industry as of February 2003 (table K-4). Many of these firms are newly established operations drawn by the market-access preferences of the AGOA program, as well as larger firms that incorporated in Lesotho prior to the AGOA.⁶ Taiwan firms dominate the manufacture and export of jeans and T-shirts.⁷ In March 2001, based on surveys from 50 percent of the industry, the Cotton Board reported that total apparel capacity in Lesotho was approximately 21 million pairs of trousers and 35 million knitted shirts.⁸ The Board estimated average capacity per firm at 5 million pairs of trousers and 4 million knitted shirts.

Factors of production

The apparel industry in Lesotho relies almost entirely on imports for its yarn and fabric inputs. Future yarn and fabric supply for the apparel industry is a concern of the Government of Lesotho, which considers it possible that Asian investors in Africa may relocate apparel production to Asia following the elimination of textile and apparel quotas in 2005.⁹ Foreign investors in Lesotho report that there is insufficient water supply for apparel production, as well as irregular electricity supply.¹⁰

Lesotho has an abundant supply of unskilled, low-cost labor, with low turnover on the order of 10 to 15 percent. Companies reportedly train unskilled workers to work sewing machines fairly easily, reporting that workers can achieve a productivity level comparable to 70-80 percent of that found in Asian factories for basic apparel items such as jeans. This productivity reportedly falls to about 50 percent of Asian standards if pattern styles change.¹¹

⁵ U.S. Department of State telegram 282, "World Textile Trade Without Quotas," prepared by U.S. Embassy, Maseru, Lesotho, Apr. 29, 2002. Vertical integration in the textile and apparel sector has reportedly been impeded by the South African Customs Union rebate item 470.03 that extends tariff relief to imported raw materials used for export. This encourages exports, but not integration.

⁶ Acting Chief Executive, LNDC, interview by USITC staff.

⁷ Cotton Board and Cotton Incorporated..

⁸ Ibid. While the report does not specify per what period, these amounts are presumably per year.

⁹ U.S. Department of State telegram 282, "World Textile Trade Without Quotas."

¹⁰ Lesotho's only significant natural resource is water; however, the water supply currently is insufficient to support much economic activity. In 1986, the Lesotho Highlands Water Project began a multibillion dollar, 30-year project to make Lesotho essentially self-sufficient in water and electricity generation. U.S. Department of State, *Background Note: Lesotho*.

¹¹ Industry officials, interview by USITC staff, Maseru, Lesotho, Mar. 7, 2003. The international standard productivity for trousers/jeans was reported to be 18 minutes per piece, with Lesotho workers requiring 32 minutes per piece.

The acceptance of piece work is increasing in Lesotho's apparel factories, a practice currently not acceptable in the South African apparel industry.¹² The standard apparel wage in Lesotho is approximately \$80 to \$100 per month, compared with \$200 to \$250 per month in urban areas in South Africa.¹³ The large firms exporting blue jeans from Lesotho reported that their workers earned an average of \$100 to \$130 per month, including bonuses and overtime.¹⁴

There is a union movement in Lesotho led by the Lesotho Clothing and Allied Workers Union.¹⁵ Union apparel workers in Lesotho are demanding a minimum taxable wage of \$128 (M880).¹⁶ Asian investors locating facilities in sub-Saharan Africa are concerned about higher labor costs under unionized labor. The union leadership has said that working conditions in Lesotho have improved, with current work shifts of approximately 10 hours with a 1 hour lunch.¹⁷ Although the union aims to improve its members' working conditions further, its overriding concern is to avoid causing foreign investors to relocate their facilities to other countries that would deprive union members of jobs.¹⁸

Investment

The LNDC, as the government parastatal agency charged with constructing and leasing factory shell space and providing utility services for water, electricity, and transport, received 15 new factory requests and 7 requests for expanded facilities in early 2001.¹⁹ Six months later, this backlog had been reduced to 11 new factory and 4 space expansion requests.²⁰ In 2003, demand for new and expanded space in Lesotho continues to outpace the LNDC's ability to provide facilities. With manufacturing locations in the two industrial zones near Maseru essentially full,²¹ the Chinese government has received permission from the LNDC to construct a third new zone—the Botha-Bothe Industrial Estate—in order to avoid possible funding delays due to the LNDC backlog. Construction on the new industrial park began in May 2002, with completion scheduled for March 2003.²²

¹² Cotton Board and Cotton Incorporated.

¹³ Bharat Textile News, "Lesotho: Call for Workers' Strike Still on," found at <http://bharattextile.com>, retrieved Dec. 11, 2002. The Government of Lesotho sets the minimum wage at \$80 per month (Maloti 552), compared to South Africa's minimum wage of \$112 per month (Rand 768). Maloti and rand are equivalent currencies, trading at par value (comparison calculated at R 6.8571 per USD 1.00).

¹⁴ Industry officials, interview by USITC staff, Maseru, Lesotho, Mar. 7, 2003.

¹⁵ Jozef de Coster, "Opportunities for Textiles and Clothing in Sub-Saharan Africa," *Textile Outlook International*, Textiles Intelligence Ltd., Sept.-Oct. 2002.

¹⁶ Bharat Textile News.

¹⁷ Jason Beaubien, "African Nation Benefits from Free-Trade Program," National Public Radio, Mar. 12, 2003, found at <http://discover.npr.org>, retrieved Mar. 12, 2003.

¹⁸ Ibid.

¹⁹ U.S. Department of State telegram 1332, "AGOA Stimulates Industrial Expansion in Lesotho," prepared by U.S. Embassy, Maseru, Lesotho, Nov. 22, 2000.

²⁰ U.S. Department of State telegram 335, "Prime Minister Officiates at AGOA-driven USD 106 Million Textile Investment," prepared by U.S. Embassy, Maseru, Lesotho, June 29, 2001.

²¹ Cotton Board and Cotton Incorporated. The two industrial parks are the Thetsane Industrial Estate and the Maputsoe Industrial Estate.

²² Jozef de Coster.

CGM Industrial of Taiwan purchased a LNDC factory shell in August 2000 and began construction of a new \$20 million facility. CGM reportedly plans to relocate its operations from South Africa to Lesotho. Another Taiwan firm, C&Y Garments, completed a \$1 million expansion of its facilities in 2001.²³ Teboho Textiles and Embroidery purchased its factory shell after leasing it for 10 years, after which the firm reportedly began a \$1 million expansion of its facilities in 2001.²⁴

Significant investments underway in Lesotho involve the Nien Hsing Textile Co. Ltd. of Taipei, Taiwan, and its subsidiaries and its affiliated companies. In 1991, Nien Hsing Textile established its first overseas subsidiary: C&Y Garments, located in Lesotho. According to a trade source, in February 2000, Nien Hsing Textile merged with Chih Hsing Textile of Taiwan to form the world's largest denim and jeans manufacturer, with plants in Taiwan, Lesotho, Nicaragua, and Mexico.²⁵ In June 2001, Nien Hsing Textile began construction of a \$100 million vertically integrated denim fabric mill and two apparel factories, to be operated through its affiliate, Nien Hsing International Lesotho (PTY) Ltd. The fabric mill was originally scheduled for completion in June 2004 (more recent estimates suggest September or October 2004),²⁶ while its two affiliated apparel factories are scheduled for completion in June 2003.

In November 2002, Nien Hsing Textile reported that it would invest \$50 million to build a new yarn spinning plant near Maseru.²⁷ Nien Hsing reported that other Taiwan firms will join this investment, adding an additional \$10 million to build a separate weaving mill and dyeing factory. The new plants are to serve the needs of the current cutting and sewing factories already in Lesotho, but could be expanded later to serve other factories in the region.

In January 2003, the Cotton Board reported that Nien Hsing International and Precious Garments had formed a strategic partnership to build a knitted fabric mill, scheduled to

²³ U.S. Department of State telegram 335, "Prime Minister Officiates at AGOA-driven USD 106 Million Textile Investment."

²⁴ Ibid.

²⁵ "News Briefs," *Pacific Trade Winds*, Feb. 2000, p. 3.

²⁶ U.S. Department of State telegram 66, "Cotton Board Visits Lesotho; Finds Good Working Conditions and Market Possibilities," prepared by U.S. Embassy, Maseru, Lesotho, Jan. 31, 2003.

²⁷ U.S. Department of State telegram 748, "AGOA Lesotho: Taiwanese Companies to Invest USD 60 Million in Spinning and Weaving Plants," prepared by U.S. Embassy, Maseru, Lesotho, Nov. 29, 2002.

begin construction in April 2003.²⁸ Major knit fabric manufacturer Shining Century PTY Ltd. also reported to the Cotton Board representatives that it was seeking alternative sources of fabric to its current Asian supply in order to meet AGOA rules of origin requirements after 2004.

The Nien Hsing International denim mill under construction is to supply 2 million square yards per month (1.83 million square meters)²⁹ that is intended to supply "the three [believed to be Taiwan] garment factories," with little leftover for local or export sale.³⁰ As noted earlier, the Nien Hsing facility under construction will be the largest vertically integrated mill and factory facility in sub-Saharan Africa, with the most advanced machinery and technical expertise for spinning, weaving, dyeing, finishing, and sewing.

A major advantage for foreign investors in Lesotho is that access to South African road and transport facilities is seamless.³¹ Transit time to Durban is 4 to 5 hours although port strikes at Durban have interrupted on-time delivery efforts and encouraged manufacturers to seek more reliable alternatives. Shipping by road to Port Elizabeth is farther, but more dependable. The government is considering extending rail access or establishing an air cargo hub near the industrial zones.

Government Policies

Domestic policies

The Government seeks FDI, offering incentives such as a 6-year tax holiday³² for investments in industrial zones that provide reliable access to services (e.g., water, electricity, and transportation). The Lesotho International Finance Corp., a government-owned parastatal, assists with financing for large capital infrastructure projects in Lesotho; there is no government export credit insurance program or other type of export assistance.³³ According to a WTO report, the Government of Lesotho had encouraged the expansion of the apparel industry into more value-added finishing (e.g., production of zippers, collar supports, trimmings, elastic braids, and buttons).³⁴

²⁸ U.S. Department of State telegram 66, "Cotton Board Visits Lesotho." A representative of Shining Century, a knit shirt manufacturer, reported that Lesotho Fancy Knitting Co. was another firm that would be involved in this fabric mill investment. Representative of Shining Century, interview by USITC staff, Maseru, Lesotho, Mar. 8, 2003.

²⁹ U.S. Department of State telegram 1332, "AGOA Stimulates Industrial Expansion in Lesotho."

³⁰ Information in the paragraph is from U.S. Department of State telegram 335, "Prime Minister Officiates at AGOA-driven Textile Investment."

³¹ Cotton Board and Cotton Incorporated.

³² British Broadcasting Corporation, "US Trade 'Exploits' Lesotho Workers," *BBC News*, Mar. 15, 2002, found at <http://news.bbc.co.uk>, retrieved Oct. 29, 2002.

³³ Cotton Board and Cotton Incorporated.

³⁴ World Trade Organization (WTO), "The Kingdom of Lesotho," *Trade Policy Review*, WT/TPR/S/36, Apr. 6, 1998, p. 71.

The Government considers that the apparent decision by Taiwan firms to remain in Lesotho once the third-country fabric provision of the AGOA legislation expires in October 2004 is based on Lesotho's favorable investment location within the South African Customs Union (SACU).³⁵ The Government is involved in discussions with other SACU members regarding a regional integration framework for textile and apparel production that would be designed to capitalize on each SACU member's best resources. The Government sees such a framework as possibly concentrating cotton production in Zimbabwe; yarn-spinning production in Botswana, Swaziland, and South Africa; and fabric and apparel production in Lesotho.³⁶

Trade policies

Lesotho qualifies for preferential market access in both the United States and the EU under various agreements. Legislation passed by the EU in June 2000 under the Cotonou Agreement provides Lesotho with quota- and tariff-free access to its textile and apparel markets. However, government officials in Lesotho report that it has been difficult to export to the EU market due to the rules of origin, which require double-stage processing.³⁷ The origin rules reportedly have limited Lesotho's exports to the EU, because Lesotho does not produce fabric and, in the past, South African fabric has not qualified under origination.³⁸

The AGOA legislation passed by the United States in October 2000 provides Lesotho with quota- and tariff-free access to U.S. textile and apparel markets. FDI in Lesotho production of yarns and fabrics will enable Lesotho to not only supply apparel to U.S. markets, but also supply apparel inputs to other sub-Saharan African firms seeking to qualify for AGOA preferences. The pending denim fabric mill, planned knit fabric mill, and associated apparel factories operated by Nien Hsing and affiliates would permit them to continue exporting apparel to the United States under the AGOA.³⁹

Foreign Trade

Lesotho posted a trade surplus in textiles and apparel of \$169 million in 2001, up from \$109 million in 2000 (table K-4). Imports totaled \$65 million in 2001 and are believed to consist of inputs for use in the production of apparel for export. Lesotho's exports totaled \$234 million in 2001 and consisted almost entirely of apparel destined for the United States (table K-5).

³⁵ U.S. Department of State telegram 335, "Prime Minister Officiates at AGOA-driven USD 106 Million Textile Investment."

³⁶ U.S. Department of State telegram 282, "World Textile Trade Without Quotas."

³⁷ Representative of the Ministry of Trade and Industry, interview by USITC staff, Lesotho, Mar. 6, 2003.

³⁸ One producer in Lesotho indicated that certain garments made from South African fabric will qualify for preferences under the Cotonou Agreement in 2003. That producer indicated his company may look at the EU market for additional sales when this provision becomes effective. Under the EU-South African TDCA, full cumulation between South African and ACP countries will take place in 2006.

³⁹ U.S. Department of State telegram 335, "Prime Minister Officiates at AGOA-driven USD 106 Million Textile Investment."

Imports

At present, potential for U.S. textile exports to Lesotho appears remote due to the higher price of U.S. textiles compared to Asian textiles.⁴⁰ However, the economic growth in Lesotho generated by the substantial increase in Lesotho's apparel exports to the United States has resulted in a doubling of other U.S. exports to Lesotho, growing from \$0.8 million in 2001 to an estimated \$2.0 million by 2003.⁴¹

Exports

According to official U.S. trade data, U.S. imports of sector goods from Lesotho consisted almost entirely of apparel, particularly cotton garments (table K-6). U.S. apparel imports from Lesotho rose from 21.3 million SMEs in 1997 to 84 million SMEs in 2002, making it the largest source of U.S. apparel imports from sub-Saharan Africa. The major apparel products from Lesotho in 2002 were cotton pants and cotton knit shirts and blouses. Imports of these products from major suppliers are highly constrained by quotas.

⁴⁰ Cotton Board and Cotton Incorporated.

⁴¹ U.S. Department of State telegram 180, "Nomination of DCM Daniel Bellegarde for Charles E. Cobb Award for Initiative and Success in Trade Development, 2003," prepared by U.S. Embassy, Maseru, Lesotho, Mar. 12, 2003.

Table K-4
Lesotho: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of apparel establishments	(¹)	(¹)	(¹)	(¹)	² 43
Number of apparel workers	(¹)	(¹)	(¹)	(¹)	³ 45,000
Production of selected products:					
Knitted T-shirts and sport shirts (1,000 units)	(¹)	(¹)	(¹)	35,000	(¹)
Trousers, including jeans (1,000 units)	(¹)	(¹)	(¹)	21,000	(¹)
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	(¹)	(¹)	(¹)	0.2	0.2
Apparel (<i>million dollars</i>)	(¹)	(¹)	(¹)	152.5	233.5
Total (<i>million dollars</i>)	(¹)	(¹)	(¹)	152.7	233.7
Imports:					
Textiles (<i>million dollars</i>)	(¹)	(¹)	(¹)	41.1	62.0
Apparel (<i>million dollars</i>)	(¹)	(¹)	(¹)	3.1	3.1
Total (<i>million dollars</i>)	(¹)	(¹)	(¹)	44.2	65.1
Trade balance:					
Textiles (<i>million dollars</i>)	(¹)	(¹)	(¹)	-40.9	-61.8
Apparel (<i>million dollars</i>)	(¹)	(¹)	(¹)	149.4	230.4
Total (<i>million dollars</i>)	(¹)	(¹)	(¹)	108.5	168.6

¹ Not available.

² Preliminary 2002 data.

³ Data from Trade Minister of Lesotho.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data from the Lesotho National Development Corporation, except as noted. Trade data are United Nations data as reported by Lesotho's trading partners.

Table K-5
Lesotho: Exports of textiles and apparel, by selected markets, 1997-2001

Item an market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	(¹)	(¹)	(¹)	(²)	(²)
European Union	(¹)	(¹)	(¹)	(²)	(²)
Canada	(¹)	(¹)	(¹)	0	0
Subtotal	(¹)	(¹)	(¹)	(²)	(²)
All other:					
Saudi Arabia	(¹)	(¹)	(¹)	(²)	(²)
Botswana	(¹)	(¹)	(¹)	(²)	(²)
Singapore	(¹)	(¹)	(¹)	0	(²)
Other	(¹)	(¹)	(¹)	(²)	(²)
Subtotal	(¹)	(¹)	(¹)	(²)	(²)
Grand total	(¹)	(¹)	(¹)	(²)	(²)
Apparel (SITC 84):					
Quota markets:					
United States	(¹)	(¹)	(¹)	146	224
European Union	(¹)	(¹)	(¹)	2	3
Canada	(¹)	(¹)	(¹)	4	6
Subtotal	(¹)	(¹)	(¹)	152	233
All other	(¹)	(¹)	(¹)	(²)	(²)
Grand total	(¹)	(¹)	(¹)	152	234
Textiles and apparel:					
Quota markets:					
United States	(¹)	(¹)	(¹)	146	224
European Union	(¹)	(¹)	(¹)	2	3
Canada	(¹)	(¹)	(¹)	4	6
Subtotal	(¹)	(¹)	(¹)	152	233
All other	(¹)	(¹)	(¹)	(²)	(²)
Grand total	(¹)	(¹)	(¹)	153	234
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	(³)	(³)	(³)	(³)	(³)
Apparel	(³)	(³)	(³)	100	100
Average	(³)	(³)	(³)	(³)	(³)

¹ No data reported.

² Less than \$500,000.

³ Not applicable.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table K-6
Textiles and apparel: U.S. general imports from Lesotho, by specified product categories,¹
1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	21,312	23,955	25,804	34,366	50,913	84,393
1	Apparel	21,312	23,955	25,804	34,365	50,900	84,154
30	Cotton textiles and apparel	19,803	21,092	24,363	30,217	42,618	59,835
60	Manmade-fiber textiles and apparel	1,509	2,863	1,441	4,149	8,295	24,558
338	Cotton knit shirts, men/boys	582	1,058	1,587	2,391	5,029	7,119
339	Cotton knit shirts, women/girls	5,201	5,879	6,577	8,057	10,115	16,257
347	Cotton trousers, men/boys	8,990	8,013	9,010	9,974	11,174	16,418
348	Cotton trousers, women/girls	2,255	4,968	6,188	8,658	14,754	17,196
638	Manmade knit shirts, men/boys	378	1,090	329	1,742	2,704	9,437
639	Manmade knit shirts, women/girls	399	971	496	1,150	1,974	4,688
647	Manmade-fiber trousers, men/boys	276	344	63	616	1,305	3,371
648	Manmade-fiber trousers, women/girls	312	337	152	289	1,909	4,651

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Madagascar¹

Overview

Prior to the political turmoil in 2002, Madagascar's apparel industry was one of the fastest growing industries in sub-Saharan Africa (SSA),² primarily as a result of investors leaving Mauritius to seek lower-cost labor and LDBC status under the AGOA program.³ Approximately half of all Madagascar exports are textile and apparel products. Major export markets are the United States and the EU, primarily because of market access preferences under the AGOA program and Cotonou Agreement, respectively. Recent investment has targeted the textile sector to supply fabric regionally. Generally, Madagascar is competitive in woven shirts, and the country's average labor costs are low enough to compete in the U.S. market.⁴ Recent political turmoil may inhibit future investment, although to what extent is highly uncertain.

Madagascar is expected to encounter significant competition in global markets from exporting countries whose shipments will become duty-free in 2005, largely reflecting high administrative costs, relatively low labor productivity, limited supply of skilled workers, and long lead time requirements for locally produced fabric. Although the government has historically taken a hands-off approach to the industry's development, the recent change in leadership may alter this approach.

Industry Profile

Industry structure and performance⁵

As of 2001, there were 230 companies in the export processing zone (EPZ), of which 140 were apparel companies, employing between 80,000 and 100,000 workers. From 1997 to 2000, the number of textile and apparel firms increased by 24 percent, and the number of employees increased by 83 percent (table K-7). The industry has suffered several major setbacks recently, including the global economic slowdown, September 11 fallout, and political turmoil. Following a disputed presidential election in December 2001, blockades of the ports and roads effectively halted clothing production for most of 2002.

¹ Prepared by Nannette Christ, Office of Economics.

² Niki Tait, "Prospects for the Textile and Clothing Industry in Madagascar," *Textile Outlook International*, Mar.-Apr. 2002, p. 131.

³ The industry was seriously damaged as a result of the political turmoil which began in late-2001 and continued into 2002; therefore the majority of this discussion deals with the industry prior to these events. The future state of the industry in light of these events is highly uncertain.

⁴ Industry official, interview by USITC staff, Mauritius, Feb. 25, 2003.

⁵ This section is primarily based on information from Niki Tait, "Prospects for the Textile and Clothing Industry in Madagascar," pp. 131-157.

Cotona (part of Groupe Socota) is the only significant local fabric producer. It supplies 30 percent of local demand for woven fabric. Two companies, SAMAF and Festival, supply jersey fabrics. These local producers require 6 to 7 weeks lead time, giving them little or no advantage over imported fabric from Pakistan, India, and Asia. In 1988, Floreal Knitwear, part of CIEL (Mauritius) began operations as the first apparel firm in Madagascar. Prior to the political turmoil, it was the largest apparel employer in Madagascar with over 12,000 employees. The main apparel product is fully fashioned knitwear. Some of this knitwear, such as sweaters made from fine wool or cashmere, benefits from AGOA. Sweaters account for 40 to 60 percent of output, and other products include trousers, jeans, woven shirts, and T-shirts. Most product is “cut, make, trim” (CMT) for parent companies abroad.

Factors of production⁶

A substantial additional cost to conducting business in Madagascar involves service and overhead costs. For example, rent is relatively expensive; the administrative cost of importing and exporting goods quite high; and bribery is an expected cost of business. These costs have been estimated to represent as much as 10 to 20 percent of CMT costs. Transportation costs are also significant; shipping facilities tend to be in disrepair, cargo space is limited, the road network is inadequate, and the customs service is inefficient.

Aside from cotton, almost all other fiber and production inputs are imported. Madagascar’s geographic location and inadequate infrastructure result in relatively high trade and transport costs.

One of the main attractions to apparel investors is Madagascar’s relatively low-cost labor. In 2002, the average hourly compensation (including fringe benefits) of apparel production workers in Madagascar was \$0.33, compared with \$0.38 in Kenya and India, \$0.41 in Pakistan, \$0.68 in China, \$1.25 in Mauritius, and \$1.38 in South Africa.⁷ The local workforce is known for its high-quality hand skills, which are an advantage in producing hand embroidered and smocked apparel. Productivity, however, is estimated to be lower than in Mauritius and significantly lower than China. The only training facility external to firms is Formaco, established by the French Government. Consequently, although labor costs in Madagascar can be up to 30 percent lower than those in Mauritius, lower productivity levels and labor rules weighted in favor of the workforce reduce this advantage to only 5 to 8 percent. In addition, there is a lack of locally trained supervisors, middle managers, and technical staff, requiring companies to use expatriate management.

Madagascar’s textile and apparel sector is relatively low-tech by international standards. The textile industry employs mostly low-tech shuttle looms (table K-7). In the apparel industry, approximately 90 percent of fully fashioned knitwear is made on hand knitting machines with the limited automatic machinery used for higher quality products.

⁶ Except as noted, this section is primarily based on Tait, pp. 131-137.

⁷ Jassin-O’Rourke Group, “Global Competitiveness Report: Selling to Full Package Providers,” New York, NY. For information on labor costs in the textile and apparel industries of countries covered by the Commission study, see table 3-1 in chapter 3 of this report.

Investment

The EPZ was established in 1990 to increase investment. Incentives include a grace period on corporate taxes, customs duty exemptions, VAT drawback scheme, and a 10-percent tax on dividends.⁸ Recent increases in investment in Madagascar's textile and apparel sector are related to changes in the Mauritian currency. As the Mauritian textile and apparel sector expanded and labor costs increased, companies sought alternative production locations with relatively lower cost labor. These early investors were followed by French and Asian investors (primarily from China, Hong Kong, Malaysia, Pakistan, and Singapore). For example, in 2000/01 Crystal of Hong Kong invested in a factory employing 2,000 employees to make sweaters and 8,000 employees to make woven and knitted products. More recently, Middle Eastern firms (Saudi Arabia and UAE) have invested in Madagascar to access the U.S. market through the AGOA program. Other investment sources include Sri Lanka and India. Mauritius was one of the largest single investment sources with approximately 30 percent of EPZ investment prior to the political turmoil. Because of the possible lapse of AGOA's third-country fabric benefit, some investment had targeted spinning and dyeing factories.⁹ In 1999, entrepreneurs invested approximately \$51 million in the textile and apparel industry.¹⁰

AGOA was a major impetus for sector investment. For example, the foreign investment in the EPZ textile sector from January to June 2001 was approximately \$62 million, three-times the total for 2000.¹¹ However, much of the investment was short-term, and could be moved should Madagascar lose its competitive advantage, such as AGOA LDBC status, or, as occurred, experience political turmoil. The political turmoil in 2002 led to significant disinvestment. For example, Novel Denim announced in March 2002 that it would transfer its woven and knit operations from Madagascar to Mauritius and South Africa.¹²

Government Policies

Domestic policies

Although the Government emphasized export promotion and established the EPZ, it has taken a relatively minimal role in the sector's development. Historically, the Government had not established a strategy with regard to the sector, and conducted little marketing.¹³ In response to the extensive disinvestment caused by the recent political turmoil, the

⁸ Oliver Cadot and John Nasir, "Madagascar: Incentives and Obstacles to Trade," *World Bank Findings*, No. 202, Mar. 2002.

⁹ Tait, pp. 141 and 156.

¹⁰ Cadot and Nasir, "Madagascar: Incentives and Obstacles to Trade."

¹¹ U.S. Department of State telegram 1177, "Madagascar July 2001 Commercial Notes," prepared by U.S. Embassy, Antananarivo, July 2001.

¹² EmergingTextiles.com, "Novel Denim Reports Loss after Madagascar's Troubles," Aug. 12, 2002, found at <http://www.emergingtextiles.com>, retrieved Dec. 12, 2002.

¹³ Tait, p. 149.

government has since begun to court investors. The Malagasy Government sent a trade mission to Mauritius, and is eliminating EPZ duties and refunding the VAT.¹⁴

Trade policies

Madagascar has liberalized its trade regime significantly in recent years. For example, export restraints and foreign exchange controls have been eliminated.¹⁵ Madagascar is a member of the Common Market for Eastern and Southern Africa and the Indian Ocean Commission regional integration agreements. Madagascar is eligible for preferential treatment under the U.S. AGOA program, the EU “Everything But Arms” program, and the GSP programs of the United States, EU, Canada, Japan, and other countries.¹⁶

Foreign Trade

Madagascar’s trade surplus in textiles and apparel rose from \$92 million in 1997 to \$262 million in 201 (table K-7), reflecting increases of 53 percent in imports, to \$195 million, and 108 percent in exports, to \$458 million. Textile imports increased by 47 percent and apparel imports rose by 164 percent. Main import sources for textile and apparel were Mauritius and China. Madagascar’s exports of sector goods consisted almost entirely of apparel, shipments of which rose by 114 percent during 1997-2001 to \$443 million (table K-8), reflecting AGOA preferences. In 2001, the trade-weighted average duties on U.S. imports from Madagascar were 5 percent ad valorem for textiles, 8 percent for apparel, and 8 percent for textiles and apparel.

U.S. imports of sector goods from Madagascar rose from 4.6 million square meters equivalent (SMEs) in 1997 to 37.5 million SMEs in 2001, and then fell significantly to 22.2 million SMEs in 2002 (table K-9). The imports consisted almost entirely of apparel, particularly cotton shirts, blouses, pants, robes, and underwear. U.S. imports of most of these garments from major suppliers are highly constrained by quotas. Most of the growth in Madagascar’s apparel exports was accounted for by the United States, along with the EU, accounted for almost all of Madagascar’s sector exports during 1997-2001.

¹⁴ Industry representative, interview by USITC staff, Mauritius, Feb. 25, 2003.

¹⁵ World Trade Organization (WTO), “Trade Policy Review: Madagascar: Feb. 2001,” Feb. 21, 2001, press release, found at <http://www.wto.org>, retrieved Oct. 16, 2002.

¹⁶ See the “overview” at the beginning of this appendix for more information on AGOA and the EU trade preferences program for sub-Saharan African countries.

Table K-7
Madagascar: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Estimated number of textile and apparel establishments . . .	185	200	227	230	(¹)
Estimated number of textile and apparel workers	41,000	45,000	60,000	75,000	(¹)
Installed spinning capacities:					
Short-staple spindles (<i>number</i>)	75,000	69,000	58,000	58,000	58,000
Open-end rotors (<i>number</i>)	5,000	5,000	4,200	4,800	4,800
Installed weaving capacities:					
Shuttleless looms (<i>number</i>)	270	300	250	250	250
Shuttle looms (<i>number</i>)	1,350	650	700	680	680
Production index for textiles and apparel (1990=100)	59	59	(¹)	(¹)	(¹)
Average total labor cost per operator hour	(¹)	(¹)	(¹)	\$0.37	² \$0.33
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	13.3	15.0	12.4	15.6	14.7
Apparel (<i>million dollars</i>)	206.7	248.6	295.0	370.3	443.0
Total	219.9	263.7	307.4	385.9	457.8
Imports:					
Textiles (<i>million dollars</i>)	121.9	131.8	138.0	162.2	179.7
Apparel (<i>million dollars</i>)	5.9	12.4	15.9	23.6	15.6
Total	127.8	144.2	153.8	185.8	195.3
Trade balance:					
Textiles (<i>million dollars</i>)	-108.7	-116.8	-125.6	-146.6	-165.0
Apparel (<i>million dollars</i>)	200.7	236.2	279.1	346.7	427.4
Total	92.1	119.5	153.6	200.1	262.4

¹ Not available.

² Represents 2002 data for apparel production workers.

Note.—Because of rounding, figures may not add to totals shown.

Source: Establishment and employment data estimated by USITC staff based on information in Niki Tait, "Prospects for Textile and Clothing Industry in Madagascar," *Textile Outlook International*, Mar.-Apr. 2002, fig. 4, p. 142; other industry data compiled from the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues. Trade data are United Nations data as reported by Madagascar's trading partners.

Table K-8
Madagascar: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	(¹)	(¹)	(¹)	(¹)	(¹)
European Union	8	8	8	6	7
Canada	(¹)	(¹)	(¹)	(¹)	(¹)
Subtotal	8	8	8	6	7
All other:					
Mauritius	5	7	4	5	7
Taiwan	0	0	(¹)	1	(¹)
Singapore	0	0	0	(¹)	(¹)
Other	(¹)	(¹)	(¹)	3	(¹)
Subtotal	5	7	5	9	8
Grand total	13	15	12	16	15
Apparel (SITC 84):					
Quota markets:					
United States	17	24	49	116	189
European Union	185	218	240	247	242
Canada	(¹)	1	1	1	2
Subtotal	203	243	289	363	433
All other	4	6	6	7	10
Grand total	207	249	295	370	443
Textiles and apparel:					
Quota markets:					
United States	17	24	49	116	189
European Union	193	225	247	253	248
Canada	(¹)	1	1	1	2
Subtotal	211	250	297	370	439
All other	9	13	10	16	18
Grand total	220	264	307	386	458
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	63	52	62	41	46
Apparel	98	98	98	98	98
Average	96	95	97	96	96

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table K-9
Textiles and apparel: U.S. general imports from Madagascar, by specified product categories,¹
1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	4,633	5,280	9,247	20,511	37,486	22,165
1	Apparel	4,625	5,280	9,244	20,495	37,479	22,161
30	Cotton textiles and apparel	4,547	4,887	8,354	18,351	32,244	18,195
60	Manmade-fiber textiles and apparel	17	5	114	569	3,307	3,656
338	Cotton knit shirts, men/boys	39	24	37	309	1,992	2,439
339	Cotton knit shirts, women/girls	47	167	513	1,128	3,281	2,500
340	Cotton not knit shirts, men/boys	1,041	1,182	2,178	3,236	3,483	615
341	Cotton not knit blouses	19	39	35	27	59	55
345	Cotton sweaters	0	328	278	1,108	3,504	1,695
347	Cotton trousers, men/boys	1,033	1,446	2,624	4,552	6,343	3,524
348	Cotton trousers, women/girls	580	945	1,205	2,565	6,339	3,707
350	Cotton robes	0	0	12	962	2,700	1,215
351	Cotton nightwear	2	3	388	673	195	290
352	Cotton underwear	1,650	563	384	1,423	3,173	1,163
638	Manmade knit shirts, men/boys	0	0	0	0	132	748
639	Manmade knit shirts, women/girls	0	0	0	40	663	177
640	Manmade not knit shirts, men/boys	14	0	0	0	(²)	275
641	Manmade-fiber not knit blouses	0	0	0	2	70	28
647	Manmade-fiber trousers, men/boys	(²)	0	0	0	826	595
648	Manmade-fiber trousers, women/girls	0	0	4	6	64	206
652	Manmade-fiber underwear	0	0	102	140	305	250
659	Other manmade-fiber apparel	0	0	(²)	145	158	1,021

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

² Less than 500 square meters equivalent.

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

Mauritius¹

Overview

Mauritius' four main export products are T-shirts, men's woven shirts, trousers, and sweaters. Its major export markets are the EU and the United States, driven primarily by preferential access to these markets.² In the future, Mauritius will be able to source yarn from Asia without losing the EU preference.³ However, the apparel industry is maturing as labor costs rise and companies demand shorter turn-around times, and exports have declined as a result of the global economic slowdown and investment in other sub-Saharan countries. In addition, in terms of labor cost, investment levels, productivity, and infrastructure costs, Mauritius is expected to face significant competition primarily from Asian countries after the removal of quotas. According to various observers, China has more skilled and productive workers, and AGOA preferences will not be enough to offset this advantage.⁴ In addition, the industry faces the structural problems of its small size and long distance to U.S. and EU markets, especially as most goods are first shipped to South Africa for transport.⁵

Mauritius' proactive government recognizes this vulnerability and has initiated various programs to counter the probable negative impact of these changes, including increasing investment incentives, encouraging export diversification into textiles and non-apparel industries, facilitating industry restructuring, and developing promotional campaigns aimed at expanding its customer base. In addition, the government is actively supporting the continuation of tariff preferences, as well as coordinating a regional strategy involving investment and coordination with other sub-Saharan African countries. The country's ability to achieve its goal of becoming a regional hub providing a service-based role in the textile and apparel industry will likely determine the impact of quota removal and Mauritius' future participation in the industry.

¹ Prepared by Nannette Christ, Office of Economics.

² See the "overview" at the beginning of this appendix for more information on trade preference programs for sub-Saharan Africa.

³ Executive Director, CIEL Textile Group, interview by USITC staff, Mauritius, Feb. 24, 2003.

⁴ President, American Chamber of Commerce, Mauritius; Director, Investment Promotion, Mauritius Board of Investment; Executive Director, CIEL Textile Group; Managing Director, Noblesse & Cie Ltee; and Managing Director, Socota Textile Mills Ltd; interviews by USITC staff, Mauritius, Feb. 24-25, 2003.

⁵ Secretary General, Mauritius Chamber of Commerce and Industry, interview by USITC staff, Mauritius, Feb. 24, 2003.

Industry Profile

Industry structure and performance

Mauritius' manufacturing is concentrated in an EPZ. Within the EPZ, the textiles and apparel sector represents 83 percent of exports, 88 percent of employment, and 55 percent of the number of enterprises.⁶ Overall, employment in the textiles and apparel sector accounted for about 16 percent of the total labor force.⁷ During 2001-02, 286 companies were in the textiles and apparel sector, of which 47 were involved in spinning, weaving, dyeing, and knitting (table K-10). Between 1997 and 2001, the number of EPZ textile and apparel firms decreased by 26 percent, due primarily to the global economic slowdown as well as redirected investment from Mauritius to other SSA countries.

Factors of production

Raw materials

There is one cotton yarn mill in operation in Mauritius, and four others are planned. There are also four fabric mills producing woven fabric; 2 producing lightweight woven fabrics for shirts, and 2 producing denim for trousers.⁸ Mauritius imports yarn from Asia, South Africa, Tanzania, and Zambia. Locally produced yarn can cost 19 to 27 percent more than yarn from certain foreign sources.⁹ The industry's yarn requirement is about 40,000 tons per year, much of which must be imported.¹⁰ Mauritius has no indigenous supply of fibers.

Labor

When the textile and apparel industry in Mauritius was first established, Mauritius had an abundant supply of relatively low-cost labor. However, as the industry grew, its size relative to the entire economy increased, resulting in increased labor costs. In 2002, the average hourly compensation (including fringe benefits) for apparel production workers in Mauritius was \$1.25, compared with less than \$0.40 in Madagascar, Kenya, Bangladesh, and India, and \$0.68 in China.¹¹ According to one industry representative, Mauritius has 80 percent of

⁶ Niki Tait, "Prospects for the Textile and Clothing Industry in Mauritius," *Textile Outlook International*, May-June 2002, p. 145; Secretary General, Mauritius Chamber of Commerce and Industry, Ministry of Industry and International Trade, interview by USITC staff, Mauritius, Feb. 24, 2003.

⁷ Secretary General, Mauritius Chamber of Commerce and Industry, Ministry of Industry and International Trade, interview by USITC staff, Mauritius, Feb. 24, 2003.

⁸ Secretary General, Mauritius Chamber of Commerce and Industry, and industry representative, interview by USITC staff, Mauritius, Feb. 24 and 26, 2003.

⁹ Secretary General, Mauritius Chamber of Commerce and Industry.

¹⁰ Tait, p. 145.

¹¹ Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package providers," New York, NY. For information on labor costs in the textile and apparel industries of countries covered by the Commission study, see table 3-1 in chapter 3 of this report.

the production efficiency of China for a standard shirt.¹² Almost one-half of the Mauritius workforce has less than a primary education compared to Singapore and South Korea, where 39 percent and 10 percent of the population has less than a primary education.¹³ In addition, in recent years wages have been increasing substantially faster than productivity.¹⁴ The Government and the industry are responding to this in a number of ways. For the government's part, sector-specific programs are offered by the Industrial and Vocational Training Board, the Export Processing Zones Development Authority (EPZDA), the Chamber of Commerce and Industry, and the University of Mauritius. Within the industry, some companies have imported expatriate labor, which is permissible as long as it does not represent more than 33 percent of the total workforce. However, this option, may be short-lived as foreign workers have recently begun to request increased wages and better working conditions.¹⁵ Other companies have invested abroad, such as in Madagascar, which has lower cost labor and "lesser developed" beneficiary country status under AGOA.¹⁶

Investment

Domestic and international investment has played a key role in the development of the textile and apparel sector in Mauritius. The earliest foreign investors were primarily from Hong Kong, attracted by the preferential access to the EU market through the Cotonou Agreement, while more recent investors have been attracted by preferential access to the U.S. market through the AGOA program. Recently, established companies are investing in the spinning and weaving industries to diversify away from apparel. There is currently one established cotton spinner, and four more are being developed (one is from Italy and three are joint ventures with Indian firms).¹⁷ Investment in the textile sector is also driven by the scheduled expiration of third-country fabric provision under AGOA for "lesser developed" beneficiary countries (see "overview" at the beginning of this appendix for information on the AGOA provision). In the EPZ, textile and apparel investments are 60 percent local and 40 percent foreign.¹⁸

Hong Kong is currently the largest source of foreign investment in the textile and apparel industry, accounting for over 20 percent of EPZ textile and apparel investment. France, the United Kingdom, Germany, Taiwan, and China are other major investment sources.¹⁹ In addition, companies from India, Italy, and Dubai have expressed interest in investing in the textile sector. For example, Indian Government officials announced plans to set up an

¹² Industry representative, interview by USITC staff, Mauritius, Feb. 24, 2003.

¹³ EIU Viewswire, "Mauritius: Economy: News analysis: Searching for a New Growth Path," Dec. 28, 2000, found at <http://www.viewswire.com>, retrieved Oct. 8, 2002.

¹⁴ Ibid. Also, companies surveyed stated that Chinese expatriate employees are 20- to 30-percent more productive (Tait, p. 140).

¹⁵ Emergingtextiles.com, "Mauritius Intends Becoming a Regional Hub," Apr. 4, 2002, found at <http://www.emergingtextiles.com>, retrieved Sept. 12, 2002.

¹⁶ U.S. Department of State telegram 884, "Impact of Post-2004 Quota Elimination on Mauritius Textile and Apparel Industry," prepared by U.S. Embassy, Mauritius, July 30, 2002.

¹⁷ Secretary General, Mauritius Chamber of Commerce, and industry representative, interview with USITC staff, Mauritius, Feb. 24 and 26, 2003.

¹⁸ Secretary General, Mauritius Chamber of Commerce and Industry.

¹⁹ EIU Viewswire, "Mauritius: Business: Industry Overview: Manufacturing," Sept. 11, 2002, found at <http://www.viewswire.com>, retrieved Oct. 8, 2002.

investment fund of approximately \$34 million aimed at increasing textile investment and providing technical training.²⁰

To access LDBC AGOA benefits and lower-cost labor, Mauritian companies themselves have made significant foreign direct investments in the textile and apparel sectors of other SSA countries, such as Botswana, Lesotho, Madagascar, and Mozambique. However, Madagascar, Mauritius' largest investment destination, experienced significant political turmoil in 2002, leading to the closure of some companies, halting investment plans, and redirecting investment to Mauritius.²¹

Government Policies

Domestic policies

Given the probable increase in competition after the removal of quotas in 2005, Government and sector participants have been encouraging and facilitating technology transfer and investment to increase productivity and decrease costs. The primary organizations responsible for these activities are the EPZDA, the Clothing Services Center (CSC, technical arm of the EPZDA), the Mauritius Industrial Development Authority (MIDA), and the Mauritius Board of Investment (MBI). In addition to increasing the industry's competitiveness, government and industry have focused on moving up the value-chain of textile and apparel activities. One strategy has been the "Made in Mauritius" promotional campaign, which provides a one-stop-shop for purchasers.

The textile industry is also attempting to expand textile production, which is relatively more capital-intensive and less reliant on labor. The government hopes to become a center for more capital-intensive activities, such as spinning, weaving, and dyeing.²² Another major objective of the government is to transform Mauritius into a regional hub for the textile and apparel industry in Africa, which would provide value-added services in the areas of design, testing, management, logistics, procurement, and marketing. This effort aims at making Mauritius the "Hong Kong or Singapore of Africa," whereby Mauritius would become a bridge or gateway for cross-border investment and trade between sub-Saharan Africa and the world. As was the intent when the EPZ was first established, the Government is again emphasizing "moving away" from heavy reliance on a small number of sectors, this time the textile and apparel sector, and diversifying exports. For example, the government is encouraging the production of watches and clocks, jewelry, optical products, and leather goods.²³

²⁰ EmergingTextiles.com, "To Take Full Advantage of AGOA, Mauritius Tries Boosting Textile Investment," Sept. 11, 2002, found at <http://www.emergingtextiles.com>, retrieved Sept. 12, 2002.

²¹ Tait, p. 151; for example, in Mar. 2002, Novel announced that it would relocate its Madagascar operations to Mauritius and South Africa.

²² "Textile Industry Adapts to Higher Labor Costs and is Poised for the Future," *International Special Reports*, Mar. 20, 2000, found at <http://www.internationalspecialreports.com>, retrieved Oct. 29, 2002.

²³ Tait, p. 153.

Trade policies

Two major aspects of Mauritius' trade policies are the quota- and duty-free access to the U.S. market and EU market it enjoys under the AGOA program and Cotonou Agreement, respectively. Mauritius is a member of various regional organizations, including the Common Market for Eastern and Southern Africa, the Southern African Development Community, the Indian Ocean Commission, and the Indian Ocean Rim Association for Regional Cooperation. It is a signatory to the WTO and Abuja Treaty of African Economic Community. Mauritius also benefits from the GSP schemes of Australia, Austria, Canada, EU, Japan, Switzerland, and the United States.²⁴ In 2002, Mauritius and South Africa completed an agreement which included the progressive removal of import tariffs in the textile and apparel sector. Duties would be lowered to 15 percent in 2002, then reduced to 10 percent in 2003 and 4 percent in 2004; duty-free entry will be effective from January 1, 2005.²⁵ Mauritius' trade is also facilitated by an efficient customs department and the use of electronic data exchange.²⁶

Foreign Trade

Mauritius' textile and apparel imports decreased by 18 percent during 1997-2001 (textile imports decreased by 18 percent and apparel imports decreased by 14 percent (table K-10)). Main import sources for textiles and apparel in 2000 were India (28 percent) and China (23 percent).

Mauritius' textile and apparel exports decreased by 2 percent during 1997-2001 (textile exports increased by 19 percent and apparel exports decreased by 4 percent) (table K-11). Main export destinations for textiles and apparel in 2001 were the EU (60 percent) and the United States (28 percent). The trade-weighted average duties on U.S. sector imports from Mauritius for 2001 were 6.3 percent ad valorem for textiles, 14.8 percent ad valorem for apparel, and 14.8 percent ad valorem for both textiles and apparel. The leading U.S. imports from Mauritius were cotton apparel, particularly pants and shirts (table K-12).

²⁴ U.S. and Foreign Commercial Service, "Mauritius Country Commercial Guide FY2002: Trade Regulations, Customs and Standards," found at <http://export.gov>, retrieved Nov. 21, 2002.

²⁵ EmergingTextiles.com, "To Take Full Advantage of AGOA, Mauritius Tries Boosting Textile Investment."

²⁶ Tait, p. 152.

Table K-10
Mauritius: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Textiles	52	50	48	45	47
Apparel	332	352	361	240	239
Total	384	402	409	285	286
Number of workers:					
Textiles	5,517	5,326	5,537	4,672	4,858
Apparel	67,495	72,348	77,031	75,329	72,145
Total	73,012	77,674	82,568	80,001	77,003
All operations in EPZs:					
Number of firms	480	495	512	518	522
Number of workers	83,391	90,116	91,374	90,682	87,607
Investment (<i>million MRs</i>)	1,245	1,445	1,710	1,702	1,610
Installed long-staple spinning capacity (number of spindles)					
	1,000	1,000	1,000	1,000	1,000
Purchases of large circular knitting machines (number of machines)					
	(¹)	86	53	49	53
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	79.9	79.0	79.9	80.7	94.8
Apparel (<i>million dollars</i>)	892.2	970.3	920.3	947.5	860.5
Total (<i>million dollars</i>)	972.1	1,049.3	1,000.2	1,028.2	955.3
Imports:					
Textiles (<i>million dollars</i>)	447.7	468.1	417.2	411.1	367.0
Apparel (<i>million dollars</i>)	21.5	18.4	18.0	18.3	18.4
Total (<i>million dollars</i>)	469.2	486.6	435.2	429.4	385.4
Trade balance:					
Textiles (<i>million dollars</i>)	-367.7	-389.2	-337.3	-330.3	-272.2
Apparel (<i>million dollars</i>)	870.7	951.9	902.3	929.2	842.1
Total (<i>million dollars</i>)	502.9	562.7	565.0	598.9	569.9

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Establishment and employment data from the United Nations Industrial Development Organization, *International Yearbook of Industrial Statistics 2002*, p. 444, and Niki Tait, "Prospects for the Textile and Clothing Industry in Mauritius," *Textile Outlook International*, May-June 2002, table 8, p. 138. Data on spinning capacity and knitting machine purchases from the International Textile Manufacturers Federation, *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues. Trade data are United National data as reported by Mauritius.

Table K-11
Mauritius: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	(¹)	(¹)	(¹)	(¹)	(¹)
European Union	11	9	8	3	7
Canada	(¹)	(¹)	0	0	(¹)
Subtotal	12	10	8	4	7
All other:					
Madagascar	47	55	57	53	63
Zimbabwe	6	3	2	4	5
Malta and Gozo	(¹)	(¹)	(¹)	4	5
Other	15	11	13	16	16
Subtotal	68	69	72	77	88
Grand total	80	79	80	81	95
Apparel (SITC 84):					
Quota markets:					
United States	197	256	258	283	271
European Union	665	682	633	637	568
Canada	9	11	10	10	8
Subtotal	871	949	901	931	846
All other	21	21	20	17	15
Grand total	892	970	920	948	861
Textiles and apparel:					
Quota markets:					
United States	197	257	259	283	271
European Union	676	691	640	641	574
Canada	9	11	10	10	8
Subtotal	883	959	908	934	853
All other	90	90	92	94	103
Grand total	972	1,049	1,000	1,028	955
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	14	12	10	5	7
Apparel	98	98	98	98	98
Average	91	91	91	91	89

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table K-12
Textiles and apparel: U.S. general imports from Mauritius, by specified product categories,¹
1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	34,222	37,566	38,950	40,115	41,116	47,064
1	Apparel	34,209	37,271	38,387	39,771	41,072	46,901
30	Cotton textiles and apparel	28,165	32,218	32,821	35,236	37,517	45,090
60	Manmade-fiber textiles and apparel	5,204	3,555	4,943	4,200	2,910	1,659
338	Cotton knit shirts, men/boys	1,339	1,505	1,481	1,301	1,692	2,703
339	Cotton knit shirts, women/girls	1,882	1,757	1,841	1,464	2,992	3,813
340	Cotton not knit shirts, men/boys	5,391	6,250	7,302	9,228	7,563	8,486
341	Cotton not knit blouses	466	795	806	871	153	191
347	Cotton trousers, men/boys	6,534	9,389	8,964	9,348	9,201	10,582
348	Cotton trousers, women/girls	5,707	8,054	8,893	8,702	11,251	14,059
350	Cotton robes	9	0	0	48	409	382
351	Cotton nightwear	1,184	512	433	490	359	1,004
352	Cotton underwear	967	517	31	17	2	327
638	Manmade knit shirts, men/boys	671	1,146	619	496	272	144
639	Manmade knit shirts, women/girls	1,257	1,510	2,089	1,874	1,312	232
647	Manmade-fiber trousers, men/boys	123	46	85	935	126	63
648	Manmade-fiber trousers, women/girls	937	0	342	335	470	137

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

South Africa¹

Overview

The textile and apparel sector in South Africa has been undergoing restructuring since international anti-apartheid trade sanctions were lifted in the early 1990s. In 2001, the sector accounted for 1.2 percent of the country's GDP (down from 1.5 percent in 1997), and was the second-largest source of government revenue (after the mining sector) and the sixth-largest source of manufacturing employment with 15 percent of the total.² Textiles and apparel accounted for 2 percent, or \$471 million, of South Africa's total exports in 2001.³

The Government of South Africa encourages foreign direct investment (FDI) by allowing 100-percent foreign ownership, eliminating foreign exchange controls, and extending tax allowances to foreign firms, among other investment-sector promotion activities. Although some foreign investors have found the lower wages in other sub-Saharan African (SSA) countries more attractive, others have found that South Africa's more developed export infrastructure and the availability of higher skilled labor offset some of the country's additional production costs. South Africa benefits from AGOA preferences, but is ineligible for AGOA preferential treatment for apparel made from "third-country" fabrics or yarns (other than of U.S. or SSA origin).⁴

Industry Profile

The textile and apparel sector in South Africa is vertically integrated from the production of natural fibers (e.g., cotton and wool) and manmade fibers (e.g., polyester) through the manufacture of intermediate inputs (mainly yarns and fabrics) to the production of finished goods, including apparel, home textiles, and industrial textiles. The sector benefits from South Africa having the most advanced transportation, telecommunications, and utilities infrastructure in SSA. South Africa's geographic location provides ready access for imports of raw materials from neighboring countries and ocean access to foreign markets.

¹ Prepared by Edward C. Wilson, Office of Economics.

² Textile Federation of South Africa, *South African Textile Statistics & Economic Review 2001/2002* (Bruma, South Africa), pp. 13-14.

³ Based on United Nations trade data for SITC 65 (textiles) and SITC 84 (apparel).

⁴ See "overview" at the beginning of this appendix for information on the AGOA third-country fabric and yarn provision, a provision set aside only for "lesser-developed" beneficiary countries, as well as Botswana and Namibia.

Industry structure and performance

The structure and performance of South Africa's textile and apparel sector reflect previous isolation from foreign trade and competition because of international sanctions, and ongoing adjustment to socioeconomic and policy changes, and structural changes currently underway in the economy. The sector has restructured extensively in recent years, marked by "the closure of a number of companies with a resultant loss of employment" and major changes in ownership of textile firms, with these firms "now being mostly in the hands of a few large corporations."⁵ The significant depreciation of the South African currency (rand) during the latter part of 2001 improved the competitiveness of South African producers in export markets, but also increased the cost of imported inputs used by the sector.⁶

Textiles

South African textile shipments (excluding those of knitting mills) fluctuated within a narrow range during 1997-2001, averaging about R10 billion (rand) annually.⁷ Total textile production fell by 10 percent during 1997-99, and then partially recovered, increasing by 4 percent in 2001 (table K-13, found at the end of this country profile). Consumption of textile fibers fell by 12 percent during 1997-2000, and then rose by 8 percent in 2001 (data for 2000-01 are preliminary). In 2001, manmade fibers accounted for about two-thirds of South African fiber consumption and cotton accounted for 25 percent. Capacity utilization in the textile industry also fluctuated in a narrow range during 1997-2001, ranging from a low of 79 percent in 1998 to a high of 84 percent in 1999; in 2001, it averaged 81 percent. During 1997-2001, employment declined by 30 percent in the textile industry (excluding knitting mills), to 53,372 workers, and by 42 percent in the knitting mill segment, to 10,701 workers. Textile firms are located largely in the industrial areas of the East Cape, West Cape, and Natal.

Apparel

South African apparel shipments (including those of the knitting mills) grew by 20 percent during 1997-2001 to R11.1 billion.⁸ Of the shipments in 2001, the knitting mills (fabrics and articles) accounted for 17 percent (R1.8 billion) of the total and other apparel accounted for 83 percent (R9.2 billion). Capacity utilization in the apparel industry average about 86 percent in 2000 and 2001.

The apparel industry consists of many small firms with a workforce totaling about 122,500 employees in 2001. Industry sources indicated that there were about 1,300 apparel firms operating in South Africa in 2001, but also estimated that an additional 2,000 small, emerging companies may be operating largely in decentralized areas with easy access to low-

⁵ Textile Federation, *South African Textile Statistics*, pp. 4-5.

⁶ *Ibid.*, p. 8.

⁷ Information in the paragraph is mainly from the Textile Federation, *South African Textile Statistics*, pp. 4-17.

⁸ Information in the paragraph is from the Textile Federation, *South African Textile Statistics*, p. 23.

cost labor.⁹ Employment in the apparel industry fluctuated within a narrow range during 1997-2001, totaling about 122,500 workers in 2001 (table K-13). Apparel companies have sought to adapt to import competition largely by cutting employment to maintain productivity,¹⁰ but labor unions have resisted this approach.¹¹ Employment at apparel firms is thus fairly rigid, leaving management unable to retrench their business through job cuts when necessary and thus less willing to take on full-time employees when the need arises. Officially, unemployment is registered at around 30 percent, whereas unofficial estimates suggest 45 percent is more likely.

Production of knit and woven garments in the “formal” segment of the South African apparel industry averaged more than 364 million pieces per year in 1999 and 2000.¹² Apparel firms produce primarily for the local market, as their small size prevents achieving economies of scale, reinforcing inefficiencies resulting from small-lot order and recurring equipment adjustments,¹³ and hindering these firms from supplying apparel items in the large volumes sought by medium-sized high-end retailers in the United States and Europe. The industry is still in a state of flux as it seeks more viable product specialties to meet the competitive challenge in its domestic market from lower cost imports. Nonetheless, as South African apparel firms develop export markets, there is some sense that the industry may be slowly consolidating, aiming toward higher end production.¹⁴

Factors of production

Raw materials

The textile and apparel sector has access to a relatively abundant supply of raw materials.¹⁵ South Africa produces cotton and manmade fibers, exports surplus wool, and is the world’s leading producer of mohair. Data on cotton for crop year 2000/01 show that South African cotton consumption was divided almost equally between domestic production (29,600 tons) and imports (29,700 tons). South Africa reportedly grows primarily short-staple cotton and relies on imports (mostly from Zimbabwe, Zambia, and Mozambique) for its long-staple cotton requirements.¹⁶ A few large firms produce manmade fibers (mainly polyester staple

⁹ Cotton Board and Cotton Incorporated, “Special Report - Sub-Saharan African Trade,” *Cotton Importer Update*, special ed., Mar. 2001, pp. 2-3, found at <http://www.cottonboard.org>, retrieved Jan. 7, 2003.

¹⁰ Andrew Mollett, “Prospects for the Textile and Clothing Industry in South Africa,” *Textile Outlook International*, Textiles Intelligence Unit, May 2001.

¹¹ Information in remainder of paragraph is from an industry official, interview by USITC staff, Durban, Mar. 1, 2003.

¹² Statistics South Africa, “Manufacturing statistics: textiles, clothing, leather and leather products, footwear, wood and wood products, furniture, paper and paper products and printing,” Stat. rel. P3051.2, Dec. 6, 2001, found at <http://www.statssa.gov.za>, retrieved Jan. 28, 2003.

¹³ U.S. Department of Commerce, “AGOA-related Opportunities – Textiles/Clothing” (Industry Sector Analysis (ISA) 77115), Dec. 9, 2001, found at <http://www.buyusainfo.net>, retrieved Jan. 13, 2003.

¹⁴ Mollett (2001), p. 3.

¹⁵ Information in the paragraph is mainly from the Textile Federation, *South African Textile Statistics*, pp. 6-15.

¹⁶ The South African Government requires that local cotton supplies be exhausted before foreign cotton can be imported.

and filament, polypropylene, nylon, and acrylic) and supply about two-thirds of domestic manmade-fiber consumption.¹⁷ Wool production rose from 50,100 tons in crop year 1997-98 to 54,300 tons in 1998-99, and then fell to 48,600 tons in 2000/01.¹⁸ In 2001, South African consumption of wool and mohair totaled about 5,500 tons. The 1999/2000 mohair auction in the East Cape brought sales of \$20 million, of which 80 to 90 percent is typically exported. South Africa supplies around 60 percent of the world mohair market.¹⁹

Labor

The Cotton Board identified four labor-management patterns in the South African apparel industry, based on size and type of firm. Small firms have low-cost, unskilled, nonunion labor. They also typically operate outside of formal labor and taxation channels. Due to lack of management skills, small firms face the difficulty of marshaling their labor resources to achieve scale-economy production.

Medium-sized firms have high cost, skilled, unionized labor. They often utilize the most current technology, and have the most experience in exporting. However, poor labor-management relations often lead to demands for wage increases that exceed both productivity increases and export price advantages conferred by a depreciating currency (the rand). Medium-sized firms are typically located in major urban industrial areas of Cape Town, Durban, and Johannesburg.

Large firms also have high-cost, skilled labor. However, the competitiveness of these firms relies more on both collaborative labor-management relations and on these firms' large production capacity and commensurate economies of scale. The large firms are considered to be the only ones capable of meeting the volume requirements of major U.S. retail importers.²⁰

Transnational firms have low-cost, unskilled, nonunion labor. These firms set up large-scale operations, typically in the decentralized regions where wages are typically 50 percent lower than in urban areas. Transnationals are often from Hong Kong and Taiwan, and use Chinese management and work practices, including payment on a piece-work basis, a practice not generally accepted by urban textile workers.

The hourly compensation (including social costs) of production workers in South Africa's spinning and weaving segment for 2002 averaged \$2.17, compared with \$1.33 in Mauritius, \$0.62 in Kenya, \$0.69 in the coastal region of China, and \$0.57 in India.²¹ In the apparel industry, average hourly compensation for production workers in South Africa was \$1.38, compared with \$1.25 in Mauritius, less than \$0.40 in Kenya, Madagascar, Bangladesh, India,

¹⁷ U.S. Department of Commerce, "AGOA-related Opportunities – Textiles/Clothing."

¹⁸ South Africa has about 21 million sheep with wool production in 1999/2000 of 49.8 million kilograms and an average yield (wool clip) of 60.3 percent. Textile Federation, *South African Textile Statistics*, p. 6.

¹⁹ U.S. Department of Commerce, "AGOA-related Opportunities – Textiles/Clothing."

²⁰ Ibid.

²¹ Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002," Reston, VA. Labor cost data for other countries covered by the Commission study are provided in table 3-1 of chapter 3 of this report.

and Indonesia, and \$0.68 in China.²² Where labor unions are active, the average urban wage in the textiles and apparel sector is roughly \$200 to \$250 per month.²³

Technology

The South African textile industry generally has been hampered by relatively old plants and equipment; investment in new technology was impeded by surcharges levied for balance-of-payments on imported machinery (as well as other goods) during 1989-93.²⁴ Installed yarn and fabric production capacity fell between 1997 and 2001, when the number of short-staple spindles fell from 610,000 to 169,000 and the number of shuttleless looms declined from 3,650 to 1,020 (table K-13). Nonetheless, some textile and apparel firms have made large capital investments since 1995 to improve operations.

Investment

Domestic investment

Industrialists have considered the South African textile and apparel sector chronically short of investment over the past decade. The 1992 Swart Report by the government recommended investments in technology totaling R2.7 billion (\$337.5 million) over 8 years to increase value-added operations in wool production, and improve financing opportunities for small textile and apparel firms.²⁵ A 1998 reassessment of this needed upgrade by textile industry leaders considered capital projects ranging from R3 billion to R10 billion (\$375 million to \$1,250 million) over 5 to 10 years, in anticipation of U.S. market-access preferences under AGOA.²⁶ The bulk would be for new machinery—particularly for spinning, weaving, finishing, dyeing, and printing—to be equally divided between modernizing existing facilities, and adding new capacity.

The economic restructuring and trade liberalization begun in the 1990s led to a surge of lower priced imports, as well as illegal imports of used clothing, which in turn led to a number of bankruptcies among South African firms.²⁷ Other South African firms adjusted by relocating out of the country, citing high labor and energy costs, and import dumping in

²² Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers," New York, NY, Nov. 2002.

²³ U.S. Department of Commerce, "AGOA-related Opportunities – Textiles/Clothing." The minimum wage in urban South Africa is \$112 per month.

²⁴ Ibid.

²⁵ Andrew Mollett, "Outlook for Textiles and Clothing in South Africa," *Textile Outlook International*, The Economist Intelligence Unit/Textiles Intelligence Ltd., July 1995, p. 130.

²⁶ U.S. Department of Commerce, "South Africa - Textile and Apparel Industry."

²⁷ EmergingTextiles.com, "South Africa's Apparel Get Effective Duty-free Entry into the US," Mar. 13, 2001, found at <http://www.emergingtextiles.com>, retrieved Dec. 12, 2002.

the local market from China and Turkey.²⁸ Still other firms adjusted through consolidations, as well as shifting into middle- and upper-end products, and developing export markets.

Foreign investment

In recent years, economic forces and government policies together had a mixed effect on foreign direct investment (FDI) in South Africa. The 1997 Asian financial crisis slowed Japanese and Taiwan FDI in South Africa, which, in turn, hampered sector restructuring plans.²⁹ Since the implementation of AGOA in October 2000, textile manufacturing has received substantial FDI, especially in the East Cape.³⁰ Asian firms have returned to that area, reopening many plants closed during the 2000 recession.³¹ One source estimates that Taiwan firms own approximately 30 percent of the knitting fabric mills.³² In November 2002, Novel Denim Co.(Hong Kong) reportedly indicated that it would invest in a new apparel factory at Cape Town, with production capacity of 225,000 units per month.³³ Novel had previously built a vertically integrated textile complex in that city. Its decision to invest in a second factory reportedly was based on the past steady depreciation of the rand,³⁴ good infrastructure, and possible further labor instability at a production facility in Madagascar.

²⁸ For example, a trade source reported that Waverley Blankets announced in June 2001 its decision to accept relocation incentives offered by the Government of Botswana. See Economist Intelligence Unit (EIU), "South Africa – Textiles Giant Waverley Relocates," Nov. 22, 2000, found at <http://www.viewswire.com>, retrieved Oct. 8, 2002. This use of investment incentives by Botswana began a debate within the Southern African Development Community (SADC) on the need to harmonize investment incentives and develop guidelines for regional industrial policy as part of the SADC Trade Protocol.

²⁹ U.S. Department of Commerce, "South Africa - Textile and Apparel Industry."

³⁰ EIU, "South Africa – Investment Prospects," Mar. 7, 2001, found at <http://www.viewswire.com>, retrieved Oct. 8, 2002.

³¹ U.S. Department of Commerce, "AGOA-related Opportunities – Textiles/Clothing."

³² Brian Brink, Director, Textile Federation of South Africa, interview by USITC staff, Pretoria, Feb. 27, 2003.

³³ EmergingTextiles.com, "South Africa Still Expecting Rebound in Textile Production," Feb. 8, 2002, found at <http://www.emergingtextiles.com>, retrieved Dec. 12, 2002.

³⁴ At least until 2002. The rand depreciated steadily from around 3.5 rand per U.S. dollar in 1994 to over 11.5 rand in the first quarter of 2002. Since then, however, the rand has strengthened to around 7.7 by late April 2003.

Government Policies

Domestic policies

In April 2002, the Department of Trade and Industry (DTI)³⁵ released the Integrated Manufacturing Strategy (IMS), which aims to boost South African competitiveness during 2002-14 through privatization and managed liberalization to improve the energy, transport, and telecommunications infrastructure, while promoting economic growth and export expansion specifically in seven sectors,³⁶ including textiles and apparel.³⁷

Trade policies

In 1992, based on recommendations of the Swart Report, the Government implemented 10-year phased tariff reductions for the South African Customs Union (SACU). Import duties were reduced to 7.5 percent ad valorem for polyester fibers, 15 percent for yarns (filament and spun), 22 percent for fabrics (woven and knitted), 30 percent for textiles, and 40 percent for apparel.³⁸ These tariffs are to be in effect in South Africa as of September 1, 2002³⁹ and apply to intra-SACU trade as well.

These tariff reductions have led to escalating import penetration by low-cost Asian textiles and apparel, which has exacerbated unemployment in South Africa among domestic firms that have adjusted to the increased import competition largely by cutting jobs. Nonetheless, the tariff reductions have reduced costs for textile and apparel producers that use imported inputs.

The Government sought to mitigate the effects of import competition by instituting various export incentive programs, particularly when import penetration reached its current level of around 40 percent of the domestic market beginning in the mid-1990s.⁴⁰ Introduced in 1993, the main incentive program in operation is the Duty Credit Certificate Scheme (DCCS),⁴¹ which aims “to influence and encourage textile and clothing manufacturers to compete internationally, without government subsidies.”⁴² The DCCS offers qualifying exporters a credit against customs duties on imported inputs based on certain export performance measures audited by the government regarding export growth, productivity, and training.

³⁵ EIU, “South Africa – GEAR Strategy Modified,” Mar. 30, 2001.

³⁶ EIU, “South Africa – A Draft Manufacturing Strategy is Launched,” June 27, 2002, found at <http://www.viewswire.com>, retrieved Oct. 8, 2002.

³⁷ Department of Trade and Industry of South Africa, *Accelerating Growth and Development: the Contribution of an Integrated Manufacturing Strategy* (no date), found at <http://www.dti.gov.za>, retrieved Feb. 11, 2003. The budget reportedly has R 500 million (\$62.5 million) to invest over 10 years in the textile and apparel sector concerning logistics, innovation, skills, and research.

³⁸ Mollett (1995), pp. 126 to 128.

³⁹ Textile Federation, *South African Textile Statistics*, p. 5.

⁴⁰ *Ibid.*, p. 3.

⁴¹ Department of Trade and Industry, p. 3.

⁴² *Ibid.* Qualifying exporters receive roughly a 30-percent credit against customs duties for rand export sales, f.o.b. Industry official, interview by USITC staff, Durban, Mar. 1, 2003.

The DCCS was most recently extended for the period through March 31, 2005.⁴³ Although duty credit schemes have been considered important, they are reportedly being phased down.⁴⁴

In addition, the SACU extends tariff relief to imported raw materials used for exported items under the SACU rebate program 470.03.⁴⁵ Under the 407 program, the 22-percent import duty on fabrics can be rebated to firms that can prove that these fabric inputs were re-exported as part of the firm's apparel exports. A firm may not claim the DCCS export credit, however, if claiming the 407 rebate.

South Africa is not subject to import quotas under the WTO Agreement on Textiles and Clothing in the U.S., EU, or Canadian markets. South Africa benefits from preferential access to the U.S. market under AGOA and the EU market under the EU-South Africa Free Trade Agreement.⁴⁶ This agreement provides a gradual phase down of EU tariffs on textile imports from South Africa over 6 years. In exchange, South Africa is reducing its tariffs on textile imports from the EU over 8 years to one-half of South Africa's standard most-favored-nation tariff rate.

Foreign Trade

South Africa's trade deficit in textiles and apparel narrowed from \$434 million in 1997 to \$237 million in 2001 (table K-13). The apparel trade balance improved from a deficit of \$32 million in 1997 to a surplus of \$37 million in 2001, reflecting an increase in exports. The trade deficit in textiles narrowed from \$402 million in 1997 to \$275 million in 2001, possibly reflecting reduced domestic demand as currency devaluation made imported textiles relatively more expensive in domestic markets.⁴⁷

Both the textile and apparel industries are oriented toward the domestic market. Only a few firms export, most of which are Asian-owned.⁴⁸ Apparel exports have been induced by the U.S. AGOA program, with exports not starting until 2002. Despite the greater need for the apparel industry to focus on exports as a strategy to survive increased foreign competition in 2005, the textile industry may be the more advanced in its restructuring to date.⁴⁹ South African apparel firms at present are reportedly having difficulty in building export markets

⁴³ Ibid.

⁴⁴ Brian Brink, interview by USITC staff.

⁴⁵ U.S. Department of State telegram 282, "World Textile Trade Without Quotas," prepared by U.S. Embassy, Maseru, Lesotho, Apr. 29, 2002. The SACU 407 rebate program is thought to encourage exports from SACU countries, but not to encourage regional economic integration between SACU members.

⁴⁶ Despite the EU preferences, South Africa cannot export easily to EU markets because of competition there from India and Bangladesh, whose apparel goods enter the EU free of quota. Industry official, interview by USITC staff, Durban, Feb. 28, 2003.

⁴⁷ From first quarter 2002 to first quarter 2003, however, the rand went from roughly 11.5 to 8.4 rand per U.S. dollar, an appreciation of more than 25 percent.

⁴⁸ Industry official, interview by USITC staff, Durban, Feb. 28, 2003. Eight firms reportedly account for most of South Africa's apparel exports.

⁴⁹ Miriam Velia, researcher, interview by USITC staff, University of Natal, Durban, Mar. 2, 2003.

even with the market access preferences under the AGOA. The apparel industry cites shortages of or higher prices for inputs such as cotton fiber, yarns, and fabric, due to higher demand for these inputs brought on by the AGOA program. The textile industry has plans to expand spinning and weaving in response,⁵⁰ but presently apparel firms are losing orders for lack of sufficient inputs such as fabrics.⁵¹

Imports

South Africa's imports of textiles decreased by 25 percent during 1997-2001 to \$508 million (table K-13). The EU is the largest foreign supplier of textiles to South Africa, providing roughly one-quarter of South Africa's textile imports, with Korea, Taiwan, and China as other significant suppliers. South Africa's imports of apparel remained fairly stable during 1997-2001, totaling \$200 million in 2001. China is by far the largest supplier of apparel to South Africa, followed by India, Malawi, the EU, and Hong Kong.

Exports

South Africa's textile exports fell from \$273 million in 1997 to \$230 million in 1998, and remained between \$230 million and \$240 million in the years 1999-2001 (table K-14). In 2001, the EU was South Africa's major export market for textiles (28 percent), followed by the United States (13 percent). Mauritius was another important export market for South African textiles (10 percent), as well as Brazil and Australia (5 percent each). Of \$238 million in apparel exports in 2001, the United States was South Africa's major overseas market (61 percent), followed by the EU (22 percent).

In 2001, 43 percent of South Africa's textile exports went to quota markets (the EU, the United States, and small amounts to Canada) and 83 percent of South Africa's apparel exports went to these markets. Whereas the percentage share of South African textile exports going to quota markets remained fairly stable from 1997 to 2001, the share of apparel exports to these markets increased from 65 percent in 1997 to 83 percent in 2001. On average, South Africa is dependent on quota markets for roughly two-thirds of its textile and apparel export revenues.

U.S. imports of textiles and apparel from South Africa fluctuated between 40 and 50 million square meters equivalent (SMEs) during 1997-99 (table K-15). Following implementation of the AGOA in October 2000, textile and apparel imports from South Africa rose from 55 million SMEs in 2000 to 75 million SMEs in 2002. Apparel accounted for two-thirds of the imports and textiles the remaining one-third. Apparel was the major growth category during 1997-2002, increasing from 23 million SMEs to 50 million SMEs. The principal apparel imports were cotton pants and knit tops.

⁵⁰ Brian Brink, interview by USITC staff.

⁵¹ Miriam Velia, interview by USITC staff.

Table K-13
South Africa: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of employees:					
Textiles	75,845	58,267	53,997	55,476	53,372
Knitting mills (fabrics and apparel)	18,556	14,569	11,661	11,150	10,701
Apparel	125,005	119,657	122,380	125,237	122,513
Total	219,406	192,493	188,038	191,863	186,586
Index of physical volume of production (1995=100):					
All manufacturing	103.9	101.2	101.2	106.0	109.4
Textiles	101.5	91.4	91.2	93.5	94.8
Apparel	94.1	87.3	88.7	82.7	78.8
Installed spinning capacities:					
Short-staple spindles (1,000)	610	524	524	228	169
Long-staple spindles (1,000)	64	70	70	65	65
Open-end rotors (1,000)	23	25	25	14	14
Installed weaving capacities:					
Shuttleless looms (number)	3,650	2,930	2,930	1,330	1,020
Shuttle looms (number)	530	400	400	260	(¹)
Production:					
Spun yarns (1,000 tons)	99	87	90	93	93
Fabrics (million square meters)	657	557	580	556	525
Woven fabrics (million square meters)	487	414	415	420	386
Knitted fabrics (million square meters)	170	143	165	136	139
Carpets (million square meters)	29	30	27	32	30
Fiber consumption:					
Manmade fibers (1,000 tons)	168.9	167.0	163.3	² 161.5	² 177.2
Cotton (1,000 tons)	83.0	75.0	73.0	² 59.0	² 66.5
Wool (1,000 tons)	9.8	8.7	10.5	² 11.0	² 5.5
Other (1,000 tons)	12.2	12.4	11.5	² 10.2	² 11.9
Total (1,000 tons)	273.9	263.2	258.3	² 241.6	² 261.1
Foreign trade:					
Exports:					
Textiles (million dollars)	272.8	229.9	234.7	240.2	233.3
Apparel (million dollars)	169.0	150.3	178.9	217.9	237.7
Total (million dollars)	441.8	380.2	413.6	458.1	471.0
Imports:					
Textiles (million dollars)	675.1	595.1	559.8	567.2	507.9
Apparel (million dollars)	200.7	189.8	198.0	222.4	200.3
Total (million dollars)	875.8	784.9	757.8	789.6	708.2
Trade balance:					
Textiles (million dollars)	-402.3	-365.2	-325.1	-327.0	-274.7
Apparel (million dollars)	-31.7	-39.5	-19.1	-4.5	37.4
Total (million dollars)	-434.0	-404.7	-344.3	-331.4	-237.3

¹ Not available.

² Preliminary.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data from the Textile Federation of South Africa, *South African Textile Statistics & Economic Review 2001/2002* (Bruma, South Africa); Statistics South Africa; International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and selected back issues; and Mollett (2001). Trade data are United Nations data as reported by South Africa.

Table K-14
South Africa: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	30	29	27	33	31
European Union	73	82	78	71	65
Canada	5	4	4	3	4
Subtotal	108	114	109	106	101
All other:					
Mauritius	4	4	9	16	24
Brazil	15	10	8	13	11
Australia	15	14	14	13	11
Other	131	89	95	93	87
Subtotal	165	116	126	134	132
Grand total	273	230	235	240	233
Apparel (SITC 84):					
Quota markets:					
United States	48	61	79	117	144
European Union	61	57	67	60	52
Canada	1	1	(¹)	(¹)	1
Subtotal	109	119	146	178	197
All other	60	32	33	40	41
Grand total	169	150	179	218	238
Textiles and apparel:					
Quota markets:					
United States	78	90	106	150	176
European Union	134	139	145	131	117
Canada	6	4	4	3	5
Subtotal	217	233	255	284	298
All other	224	147	159	174	173
Grand total	442	380	414	458	471
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	40	50	46	44	43
Apparel	65	79	82	81	83
Average	53	65	64	62	63

¹ Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table K-15
Textiles and apparel: U.S. general imports from South Africa, by specified product categories,¹
1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	49,959	41,659	45,383	55,181	59,319	74,614
1	Apparel	23,209	22,185	25,737	37,925	47,602	50,461
2	Textiles	26,750	19,474	19,645	17,255	11,717	24,153
11	Yarns	20,932	13,284	13,537	9,815	2,627	1,909
12	Fabrics	2,925	4,811	4,736	5,809	6,506	18,677
30	Cotton textiles and apparel	22,020	19,044	23,693	33,267	41,939	37,712
40	Wool textiles and apparel	1,263	1,013	1,121	1,728	2,992	2,899
60	Manmade-fiber textiles and apparel	26,653	21,571	20,442	20,031	14,280	33,947
222	Knit fabric	416	371	1,022	1,266	1,719	2,084
223	Nonwoven fabric	104	483	390	262	1,217	8,686
229	Special purpose fabric	1,669	3,138	2,947	3,587	2,827	2,484
239	Babies' apparel	44	83	66	256	1,006	1,436
338	Cotton knit shirts, men/boys	2,243	2,501	3,300	4,855	7,108	6,749
339	Cotton knit shirts, women/girls	3,798	3,835	4,100	9,094	9,685	8,408
340	Cotton not knit shirts, men/boys	7,233	4,622	4,003	3,998	3,569	1,289
341	Cotton not knit blouses	137	19	50	94	163	193
347	Cotton trousers, men/boys	1,468	1,675	3,033	5,374	7,516	7,114
348	Cotton trousers, women/girls	692	680	2,559	2,697	6,486	5,734
351	Cotton nightwear	3,687	1,522	1,954	2,330	1,221	1,341
352	Cotton underwear	26	1	44	8	128	519
433	Wool suit-type coats, men/boys	60	76	140	224	348	895
443	Wool suits, men/boys	312	412	227	84	177	312
447	Wool trousers, men/boys	27	31	56	34	125	550
635	Manmade-fiber coats, women/girls	(²)	27	172	586	419	2,516
647	Manmade-fiber trousers, men/boys	474	722	163	1,172	1,615	1,539
648	Manmade-fiber trousers, women/girls	249	15	220	879	934	2,439
652	Manmade-fiber underwear	0	0	0	0	660	2,001

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov>.

APPENDIX L
EGYPT, ISRAEL, JORDAN, AND
TURKEY

Overview

Textiles and apparel constitute Egypt's third-largest industrial sector, behind chemicals and food processing.² The textile and apparel sector accounts for about one-quarter of manufacturing employment,³ 3 percent of gross domestic product (GDP),⁴ and 23 percent of total exports.⁵

Egypt's textile and apparel sector historically has been centered around the production of cotton. The government has directed or controlled cotton production, primarily by setting a minimum price for cotton to support farmers. In addition, the government has maintained ownership of textile and apparel plants, mainly to provide stable employment. These policies have had adverse effects on competitiveness, both locally and globally.

In response to increasing global competition, the Egyptian textile and apparel sector has been the target of recent privatization efforts. In addition, there have been efforts to improve technology, attract foreign investment, diversify into manmade fiber-based products, and develop export markets.

Egypt has maintained high trade barriers, both in terms of tariffs and quotas, on its textiles and apparel imports. Absolute quotas on certain sector products were changed to tariffs as a result of the Uruguay Round. In general, sector trade increased during 1997-2001. Exports of fibers and apparel increased, while those of textiles declined. Imports of fibers and textiles declined, while those of apparel rose. Egypt maintained a positive balance of trade in the sector during 1997-2001.

The competitive posture of Egypt's textile and apparel sector is positively influenced by the country's high-quality raw cotton, relatively abundant labor and low labor costs, and location relative to major markets, mainly the United States and the EU. Negative factors include inefficient public sector ownership and other government involvement; high raw-material (mainly cotton) costs owing to government-set minimum prices and high import tariffs; excess employment because of government policy; and low productivity resulting from excess employment and outdated technology reportedly. The Egyptian Government and industry are taking steps to correct these deficiencies.

¹ Prepared by Douglas Newman, Office of Industries.

² Institute of National Planning, *Egypt Human Development Report 2000/2001*, Cairo, 2001, p. 51.

³ United Nations Industrial Development Organization (UNIDO), *UNIDO Country Industrial Statistics: Egypt*, found at <http://www.unido.org/data/stats/showstat.cfm?cc=EGY-b>, retrieved Jan. 13, 2003.

⁴ U.S. Department of State telegram 4106, "Egypt's Textile Industry After Quotas," prepared by the U.S. Embassy, Cairo, Apr. 30, 2002, p. 4. Based on estimated sector output of \$2.5 billion.

⁵ See table 1-1 in chapter 1 of this report for data on textile and apparel export market shares for each supplying country covered by this study. Export data are for 2001.

Industry Profile

Industry structure and performance

The Egyptian textile and apparel sector is dominated by cotton fibers and goods. Egypt has a long history and tradition of cotton production, particularly of high-quality, long-staple varieties. Downstream industries are oriented toward production of cotton items.

The textile and apparel sector comprises cotton growing; yarn spinning; fabric weaving, dyeing, and finishing; and the production of garments and other goods. The sector consists of 42 public companies and more than 2,000 private companies that are members of the Egyptian Textile Manufacturers Federation (ETMF), and thousands of small, private operations not in the ETMF.⁶ The public companies are controlled by the Textile Industries Holding Company. Efforts to privatize the sector have been under way since the mid-1990s. Sector employment is estimated at about 500,000,⁷ with about 131,000 officially reported in public companies in 2001 (table L-1 found at the end of this country profile). The textile and apparel sector accounts for roughly 14 percent of Egypt's manufacturing output,⁸ manufacturing accounted for about 19 percent of Egypt's GDP of \$98.5 billion in 2001.⁹

Government involvement in the Egyptian textile industry is extensive but varies somewhat by sector. For example, the Egyptian Government provides production subsidies to cotton farmers and sets grower and export prices. Government-owned firms have dominated the industry since the 1960s, when private firms were nationalized. There are 31 public companies organized into 3 public holding companies—the Holding Company for Spinning and Weaving (12 affiliates); the Holding Company for Textiles Manufacturing and Trade (12 affiliates); and the Holding Company for Cotton and International Trade (7 affiliates).¹⁰ In addition, there are several firms with mixed ownership, usually including banks or foreign governments. According to a 1998 report, public ownership declines as the level of processing increases, from 90 percent in spinning to 60 percent in weaving, 40 percent in knitting, and 30 percent in apparel.¹¹

⁶ British Trade International, *Textiles, Interior Textiles & Carpets Market in Egypt*, found at <http://www.tradepartners.gov.uk/textiles/egypt-/opportunities/opportunities.shtml>, retrieved Feb. 10, 2003; American Chamber of Commerce in Egypt, *Egyptian Textile Industry & GATT: Potential & Uncertainty*, Business Studies and Analysis Center, Cairo, July 1998, p. 1.

⁷ Hanaa Kheir-El-Din and Hoda El-Sayed, *Potential Impact of a Free Trade Agreement with the EU on Egypt's Textile Industry*, The Egyptian Center for Economic Studies, Cairo, Working Paper No. 15, July 1997, p. 1. See also U.S. Department of State telegram 4106, "Egypt's Textile Industry After Quotas," prepared by the U.S. Embassy, Cairo, Apr. 30, 2002.

⁸ Institute of National Planning, *Egypt Human Development Report 2000/2001*, Cairo, 2001, p. 51.

⁹ The World Bank Group, Egypt, Arab Rep. at a glance, found at http://www.worldbank.org/cgi-bin/sendoff.cgi?page=%2Fdata%2Fcountrydata%2Faag%2Fegy_aag.pdf, retrieved Feb. 7, 2003.

¹⁰ American Chamber of Commerce in Egypt, p. 4.

¹¹ Ibid, and Embassy of Egypt, "A Memorandum on Egyptian Export of Yarn, Textile and Ready-Made Garments During 2002," (sourced from the Egyptian Chamber of Textile Industries,) received June 6, 2003.

The Government of Egypt has been pursuing a policy of privatization in the textile and apparel sector for several years. Although a few firms have been privatized, the process has been slower than anticipated, mainly the result of the poor financial condition of the firms. Many firms are undergoing restructuring measures, such as plant closures and renovations, equipment upgrades, and labor reductions, to prepare for privatization.¹²

The Egyptian textile and apparel sector traditionally has relied mainly on domestically produced cotton for inputs. However, owing to government-set prices on raw cotton that are above world prices, firms have been importing cotton under a duty drawback system for products that are exported.¹³ Egypt also imports manmade fibers for use as inputs. Recent data are not available on aggregate production in the Egyptian textile and apparel sector. The value of such production totaled about \$2.4 billion in 1997.¹⁴

Egyptian production of raw cotton has been in a decades-long decline. Production trended downward, from 374,000 metric tons in 1997 to 223,000 metric tons in 2000 before recovering in 2001 to 315,000 metric tons.¹⁵ Virtually all Egyptian cotton production is of long-staple varieties. The primary reason for the decline in production is government-set cotton prices that usually are significantly higher than world prices.¹⁶ Consumption of cotton by domestic textile mills declined by 8 percent during 1997-2001 (table L-1). Also, production is affected by relative returns to growers for cotton and alternative crops, such as rice and wheat, and government-guaranteed purchases and subsidies for cotton. Favorable cotton prices and returns resulted in the rebound in production in 2001.¹⁷

Egyptian production of yarns decreased steadily during 1997-2001 by nearly a third (table L-1). The decline was driven by production of cotton yarn, which declined nearly 50 percent during the period to 125,000 metric tons in 2001. Production of yarn from manmade fibers increased 42 percent during the period to 78,700 metric tons in 2001. The decline in cotton yarn production resulted from relatively high domestic cotton prices and inefficiencies in the dominant publically owned sector.

Egyptian production of fabrics also declined during 1997-2001, by slightly more than 50 percent (table L-1). The bulk of production and of the decline was accounted for by cotton woven fabric, which accounted for 78 percent of total production in 2001. As with yarns, high domestic cotton prices and public-sector inefficiencies contributed to the decline.

Egyptian production of apparel is estimated to have totaled \$4.3 billion in 2001, up 44 percent from 1999 (table L-1). The Egyptian apparel industry is dominated by private firms, which are more efficient than publically owned operations. Also, this industry utilizes

¹² Carana Corp. Privatization Coordination Support Unit, *Privatization in Egypt Quarterly Review July-Sept. 2000*, Cairo, p. 13.

¹³ British Trade International, *Textiles, Interior Textiles & Carpets Market in Egypt*, American Chamber of Commerce in Egypt, p. 10.

¹⁴ American Chamber of Commerce in Egypt, p. 1. Data source is the Egyptian Textile Manufacturers Association; data converted from 8 billion Egyptian pounds using an exchange rate of 1 U.S. dollar=0.29487 Egyptian pounds.

¹⁵ USDA, FAS, psd online, found at <http://www.fas.usda.gov/psd>, retrieved Jan. 22, 2003.

¹⁶ USDA, FAS, *Egypt, Cotton and Products Annual, 2001*, GAIN Report #EG1013, May 31, 2001, p. 2.

¹⁷ Ibid, GAIN Report #EG2012, May 29, 2002, p. 2.

a variety of inputs and is not as dependent as the spinning and weaving industries on high-priced, domestically produced cotton.

Egyptian consumption of fibers increased by 4 percent during 1997-2001. Cotton fiber accounted for the bulk of consumption, 53 percent in 2001. Declines in yarn and fabric production contributed to the negative trend in consumption during the period.

In 1997, exports accounted for about 37 percent of the value of production in the Egyptian textile and apparel sector.¹⁸ Exports of raw cotton accounted for about 27 percent of domestic production in 2001.¹⁹

Egypt is a relatively small global producer of textiles and apparel. In 2000, Egypt accounted for about 2 percent of the value added by developing countries in the textile industry and less than that in the apparel, leather, and footwear industries; this share is even smaller for the global total.²⁰

Although Egypt is a relatively small global producer of all cotton, accounting for about 1.5 percent of the quantity of world production in 2001, it is the leading global producer of long-staple, or extra-fine, cotton. In 2001, Egypt produced an estimated 39 percent of the quantity of total global production of extra-fine cotton.²¹

The Egyptian textile and apparel sector produces a wide range of products serving a variety of market and price segments. Egyptian cotton generally is regarded as premium quality. However, some Egyptian yarns and fabrics have been considered to be of low quality.²²

Factors of production

The Egyptian textile and apparel sector enjoys access to high-quality raw materials and an ample, low-cost supply of labor. However, the sector has been lacking in the application of new technology, a situation that is of concern and is being addressed by the sector.

Raw materials

The sector supply chain has traditionally originated with raw cotton. As noted above, Egypt is a major producer of high-quality, long-staple cotton varieties. However, Egyptian cotton is relatively high in price and accounts for a large share of finished good production costs, as much as about two-thirds.²³ Also, according to the government, the industry does not use all of its high quality cotton to produce “special and distinguished kinds of spinning and

¹⁸ American Chamber of Commerce in Egypt, p. 1.

¹⁹ International Cotton Advisory Committee, *Extra-Fine Cotton This Month*, Dec. 10, 2002.

²⁰ UNIDO, *International Yearbook of Industrial Statistics 2002*, Vienna, 2002, p. 49.

²¹ International Cotton Advisory Committee, *Extra-Fine Cotton This Month*, Dec. 10, 2002.

²² U.S. Department of State telegram 4106, “Egypt’s Textile Industry After Quotas,” prepared by the U.S. Embassy, Cairo, Apr. 30, 2002, pp. 6 and 9.

²³ Bharat Textile.com, “Egypt’s Textile Industry Suffers from Excessive State Intervention,” found at <http://www.bharattextile.com/newsitems/1974817>, retrieved Dec. 11, 2002.

textiles.”²⁴ In addition, there is insufficient production of short and medium staple cotton.²⁵ As a result, downstream segments—mainly participants in a drawback program for end products that are exported—also import yarns and fabrics. Although the manmade fiber-based segment is small compared with the cotton-based segment, Egypt has been increasing its production of manmade fibers in recent years.

Government policies have had a major impact on the availability and cost of raw materials to the Egyptian textile and apparel sector. High government-set raw cotton prices and import bans and high tariffs on inputs have diminished the competitiveness of the sector. Although import bans have been lifted, high tariffs still limit access to critical inputs such as yarns and fabrics.

Labor

The Egyptian textile and apparel sector has access to an ample supply of labor. The sector is a major employer, accounting for about one-quarter of total manufacturing employment.²⁶ Egyptian labor costs are among the lowest in the world. For example, one survey estimated hourly labor costs in the Egyptian spinning and weaving segment at \$1.01 in 2002, compared with \$15.13 in the United States and \$18.91 in Germany, among major markets, and \$2.13 in Turkey, a proximate competitor.²⁷ Of the countries surveyed, such labor costs were lower in several major textile and apparel producing countries in Asia, including Bangladesh, China, India, Indonesia, and Pakistan. Another survey estimated hourly labor costs at \$0.80 in Egypt’s textile industry in 2001 and \$0.77 in its apparel industry in 2002.²⁸

Although labor costs are low, production inefficiencies have mitigated potential advantages. The current privatization effort is addressing this situation. The restructuring and privatization of the public companies is resulting in a substantial reduction in the labor force. The number of textile and apparel workers in the public sector fell by 26 percent to 131,000 during 1997-2001.²⁹ Restructuring plans for two large, public, spinning and weaving companies in 2000 called for the reduction of nearly 10,000 jobs.³⁰ These reductions are occurring in concert with efforts to improve and update technology in the sector in order to attract investment.

²⁴ Embassy of Egypt, “A Memorandum on Egyptian Exports of Yarn, Textile and Ready-Made Garments during 2002,” received June 6, 2003.

²⁵ Ibid.

²⁶ UNIDO, *UNIDO Country Industrial Statistics: Egypt*.

²⁷ Werner International, *Spinning and Weaving Labor Cost Comparisons 2002*.

²⁸ International Textile Manufacturers Federation, *Country Statements 2002*, Zürich, Sept. 2002, p. 40, and Jassin - O’Rourke Group, *Global Competitiveness Report: Selling to Full Package Providers*, New York, NY, Nov. 15, 2002.

²⁹ ITMF, *Country Statements 2002*, and prior years.

³⁰ Carana Corp., p. 13.

Technology

The Egyptian textile and apparel sector has been utilizing outdated technology, particularly in the government-owned spinning and weaving segment. Most of Egypt's spinning machines consist of ring spinning frames with short-staple spindles as opposed to open-end frames (table L-1). Most of the spinning sector (90 percent of which is owned by the government) uses old equipment.³¹ In the weaving and knitting segment, 10 percent of the machinery is relatively new, that is, no more than 5 years old.³² The weaving segment comprises a large share of outdated shuttle looms as opposed to more efficient and versatile shuttleless looms, which has contributed to low product quality and production inefficiencies that have limited Egypt's competitiveness. A protected domestic market has contributed to this situation. However, the sector is upgrading its technology, largely in response to restructuring and privatization efforts. For example, restructuring plans of two large, public, spinning and weaving companies in 2000 included approximately \$51 million in investments to renovate and upgrade production facilities.³³ Another indication of the level of technology employed by the sector is the type of machinery used and the ratio of recent machinery shipments to the installed capacity. Although short-staple spindles still dominate the spinning sector and shuttle looms account for the bulk of weaving machines, recent shipments (1992-2000) of these types of machines accounted for a negligible share of their installed capacity. Shipments of long-staple spinning machines during 1992-2000 accounted for two-thirds of installed capacity in 2000 while shipments of shuttleless looms during the period accounted for more than three-fourths of such capacity. In the dyeing and finishing segment, 97 percent of the machinery is reportedly over 20 years old.³⁴ Reportedly, about 40 percent of the apparel sector uses modern equipment.³⁵

Investment

Foreign investment in Egypt's textile and apparel sector is regulated by the General Authority for Investment and the free zones (GAFI) under Investment Incentives and Guarantees Law 8 of 1997.³⁶ Under this law, which also provides investment incentives, foreign investors are permitted 100-percent ownership and can repatriate profits and capital. Also, the law provides guarantees against confiscation, sequestration and nationalization. Incentives include tax holidays and exemptions.³⁷

Barriers to foreign investment in Egypt are structural. Foreign investors in Egypt have identified the following obstacles to establishing and operating a business in Egypt: political

³¹ Embassy of Egypt, "A Memorandum on Egyptian Exports of Yarn, Textile and Ready-Made Garment During 2002," received June 6, 2003.

³² Ibid.

³³ Ibid.

³⁴ Embassy of Egypt, "A Memorandum on Egyptian Exports of Yarn, Textile and Ready-Made Garment During 2002," received June 6, 2003.

³⁵ Ibid.

³⁶ U.S. Department of State, *Investment Climate Report Egypt July 2002*, prepared by the U.S. Embassy, Cairo, found at <http://www.usembassy.egnet.net/invclrep.pdf>, retrieved Feb. 19, 2003, p. 2.

³⁷ United Nations Conference on Trade and Development (UNCTAD), *Investment Policy Review Egypt*, 1999, pp. 27-33.

stability, availability of business information, predictability of macroeconomic conditions, tax regime, dispute settlements, labor laws, labor skills, business establishment procedures, adequacy of investment incentives, customs procedures, tariff levels, scope and pace of privatization, distribution channels, unofficial payments, access to credit, and land tenure policy.³⁸

There has been an increase in foreign investment in Egyptian textile and apparel plants in recent years, particularly in the manmade-fiber segment. The largest project is a \$650 million plant to produce polyester products, including chips, yarn, and fabric, which will be the largest such plant in the Middle East region and will include investors from Saudi Arabia.³⁹ Other recent investment activity include a \$33 million polyester fabric plant;⁴⁰ a \$35 million yarn, textiles, and garment factory, with investors from the United Arab Emirates;⁴¹ and a knitwear plant with British investors.⁴²

Government Policies

Government policies have had a major impact on the structure and competitiveness of the Egyptian textile and apparel sector. Domestic and trade policies designed to protect the domestic industry and provide employment have stifled growth and productivity. Recognizing the need to respond to increasing competition in domestic and export markets, the government has undertaken major policy reforms in recent years, including privatization of public enterprises and import liberalization.

Domestic policies

Domestic policies directed at the textile and apparel sector in Egypt have focused on setting prices for cotton as well as state ownership of much of the spinning, weaving, and apparel segments. The government-mandated minimum price for cotton often has been higher than the world price; Egypt exports a large share of its cotton, particularly extra-long-staple varieties. As noted above, this also creates artificially high input prices for domestic downstream industries.

The Egyptian Government currently is privatizing publically owned textile and apparel plants. However, after an initial batch of sales, the process has slowed. The most efficient firms were sold first, and the remaining facilities are unattractive to investors. Also, inflated

³⁸ Ibid., p. 24.

³⁹ Saudi Egyptian Petrochemical Co., news, found at <http://www.sepco-eg.com>, retrieved Nov. 15, 2002.

⁴⁰ Aroq Limited, Just-style.com, "EGYPT: New \$33m Fabric Plant To Be Built," June 25, 2002, found at http://just-style.com/news_print.asp?art=25399, retrieved June 27, 2002.

⁴¹ Aroq Limited, Just-style.com, "Egypt: New \$35m Textile Plant Announced," May 14, 2002, found at http://just-style.com/news_print.asp?art=24775, retrieved Oct. 25, 2002.

⁴² Aroq Limited, Just-style.com, "EGYPT: UK Knitter Cloverbrook To Open Fabric Plant," Oct. 9, 2002, found at http://just-style.com/news_print.asp?art=25399, retrieved Oct. 25, 2002.

asset valuations deterred private investors.⁴³ Restructuring efforts are under way to improve the marketability of the remaining firms.

Trade policies

Egypt maintains relatively high tariffs on imports of textiles and apparel. Until recently, there were bans on imports of most textiles and apparel. As a result of the Uruguay Round, Egypt committed to lift these restrictions. However, tariffs were set at high levels. Textile imports were liberalized in 1998 at a tariff rate of 54 percent ad valorem,⁴⁴ while apparel imports were liberalized in 2002 with specific rates as high as \$300 per item.⁴⁵ Ad valorem equivalents for apparel duties range between 100 percent and 2,500 percent.⁴⁶ The duty on imports of raw cotton is 30 percent ad valorem.⁴⁷ However, qualified textile and apparel enterprises may receive duty drawbacks on imports of inputs, provided the finished products are exported.

Major nontariff barriers to Egyptian imports of textiles and apparel include untimely and burdensome customs procedures, customs surcharges, and marketing requirements for fabric.⁴⁸ These barriers affect downstream exporters, because delays in obtaining inputs affect the exporters' ability to meet deadlines for international orders.⁴⁹

Foreign Trade

The Egyptian trade balance for textiles and apparel improved by about 2 percent during 1997-2001, reaching a surplus of \$485 million in 2001 (table L-1). The balance improved for apparel (31 percent) but deteriorated for textiles (61 percent). Apparel accounts for the major share of the trade surplus (88 percent in 2001), followed by textiles (12 percent).

Textiles, the leading import category, are used as inputs by downstream producers. Imports declined during 1997-2001, reflecting financial difficulties in the Egyptian textile and apparel sector, as well as general economic conditions.

Egyptian exports of apparel increased from \$594 million to \$683 million during 1997-2001, reflecting the relative efficiency and competitiveness of this industry compared with

⁴³ Al-Ahram Weekly Online, "Privatisation Phase Out?," 14-20 Feb. 2002, Issue No. 573, found at <http://weekly.ahram.org.eg/2002/573/ec6.htm>, retrieved Nov. 21, 2002.

⁴⁴ World Trade Organization (WTO), *Trade Policy Review Egypt, Report by the Secretariat*, WT/TPR/S/55, May 18, 1999, p. 86.

⁴⁵ U.S. Department of State telegram 21518, *2003 National Trade Estimate Report For Egypt*, prepared by the U.S. Embassy, Cairo, Dec. 16, 2002, pp. 3-4; U.S. Department of State telegram 1307, *January Surprise: Egypt Replaces Ban On Garment Imports With Exorbitant Tariffs*, prepared by the U.S. Embassy, Cairo, Feb. 5, 2002, pp. 2-3.

⁴⁶ U.S. Department of State telegram 1533, *EU Concludes That Egypt In Breach Of WTO Commitments On Garment Tariffs*, prepared by the U.S. Embassy, Cairo, Feb. 12, 2002, p. 3.

⁴⁷ Al-Ahram Weekly Online, "Inadequate Remedies," 5-11 Apr. 2001, Issue No. 528, found at <http://weekly.ahram.org.eg/2001/528/ec2.htm>, retrieved Nov. 21, 2002.

⁴⁸ U.S. Department of State telegram 21518, *2003 National Trade Estimate Report For Egypt*, prepared by the U.S. Embassy, Cairo, Dec. 16, 2002, p. 5.

⁴⁹ Al-Ahram Weekly Online.

spinning and weaving (table L-1). During the same period, textile exports fell from \$635 million to \$446 million (table L-1), again reflecting industry financial difficulties.

Imports

Egyptian imports of textiles and apparel increased during 1997-2000, before falling to \$644 million in 2001, owing to adverse economic conditions (table L-1). Textiles were the primary import category for most of the period, accounting for 60 percent of the total in 2001. Following were imports of apparel (40 percent).

Egyptian imports of textiles fluctuated during the period under review and ranged between \$387 million in 2001 and \$505 million in 2000. Primary imported products included synthetic filament yarn and cotton woven fabrics. According to UN trade data as reported by Egypt, the EU was the leading source, providing 18 percent of the total in 2001, followed by China (15 percent), Korea (14 percent), and Taiwan (13 percent). The United States remained a relatively minor supplier of Egyptian textile imports during the period.

Egyptian imports of apparel during 1997-2001 peaked at \$365 million in 1999 before falling to \$257 million in 2001. Men's trousers; shawls and scarves; women's nightdresses and pajamas; and women's trousers constituted most of the imports. UN trade data show China was, by far, the major source in 2001, accounting for 57 percent of the total, followed by Turkey (12 percent), the EU (10 percent), and Indonesia (10 percent). There was a general shift to Asian suppliers, as imports from North American sources declined during 1997 - 2001. The United States was a small supplier during the period.

Exports

Exports of textiles and apparel from Egypt fluctuated during 1997-2001, and totaled about \$1.1 billion in 2001 (table L-2). Apparel accounted for the largest share of such exports in 2001 (61 percent), followed by textiles (39 percent). Exports of apparel trended upward during the period under review, while textile exports declined. Exports of textiles exceeded those of apparel in 1997 before trailing the remainder of the period. These trends, in part, reflect lower productivity in the textile industry, which is mostly publicly owned, compared with the more efficient apparel industry, which increasingly is privately owned.⁵⁰

Egyptian exports of textiles declined irregularly by 30 percent during 1997-2001, totaling \$446 million in 2001. Primary products included cotton yarn and linen products and manmade fiber textile floor coverings. UN trade data show major export markets in 2001 included the EU (53 percent of the total) and the United States (29 percent). Exports to the EU declined by 46 percent during the period under review, while those to the United States rose by 56 percent.

Egyptian exports of apparel increased irregularly by 15 percent during 1997-2001, reaching \$683 million in 2001. Primary products included trousers, t-shirts, knit pullovers, and shirts. Principal export markets in 2001 included the United States (60 percent of the total) and the

⁵⁰ Hanaa Kheir-El-Din and Hoda El-Sayed, p. 3.

EU (37 percent). Exports increased to most major markets, with no significant shifts during the period under review.

Official U.S. trade data show that U.S. imports of textiles and apparel from Egypt increased irregularly by 35 percent during 1997-2002 to 265 million square meters equivalent (SMEs) (table L-3), or about 1 percent of total U.S. textile and apparel imports. The imports were almost equally divided between textile and apparel imports in 2002. The principal product category in 2002 was cotton products, which accounted for 86 percent of the total. Manmade fiber products accounted for almost all of the remainder. The 2001 trade-weighted average duty for U.S. imports of textiles from Egypt was 6.3 percent ad valorem, and for apparel, it was 17.2 percent ad valorem.

The primary imported articles from Egypt under quota in 2002 were carded cotton yarn (28 percent of total textiles and apparel imports from Egypt), and cotton trousers and shorts (23 percent). Although most products from Egypt accounted for a relatively minor share of total U.S. imports of textiles and apparel under quota from all sources, carded cotton yarn from Egypt represented 11 percent of this total in 2002, demonstrating the importance of cotton to Egypt's exports.

U.S. quotas on imports of textiles and apparel from Egypt generally were not filled during 1997-2002. Products with the largest quota fill rates in 2002 included cotton knit shirts and blouses (categories 338/339, 74 percent); and carded and combed cotton yarns (categories 300/301, 67 percent). The EU maintains quotas on imports from Egypt of cotton yarn, not put up for retail sale; and of woven fabrics of cotton, other than gauze, terry fabrics, pile fabrics, chenille fabrics, tulle and other net fabrics. During 1997-2001, the quota fill rate for these products declined from 81 percent to 30 percent for yarn and from 76 percent to 19 percent for woven fabrics.⁵¹

⁵¹ European Commission, DG Trade, Système Intégré de Gestion de Licenses, found at <http://sigl.cec.eu.int/query.html>, retrieved Dec. 31, 2002.

Table L-1
Egypt: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Textile and apparel share of manufacturing value-added (percent)	13	12	12	(¹)	(¹)
Number of establishments:					
Textiles and apparel	(¹)	(¹)	(¹)	(¹)	2,830
Apparel	(¹)	(¹)	(¹)	(¹)	1,661
Total	(¹)	(¹)	(¹)	(¹)	4,491
Number of textile and apparel workers	(¹)	(¹)	(¹)	(¹)	375,874
Apparel production (million dollars)	(¹)	(¹)	3,000	3,600	4,320
Yarn production index (1997=100)	(¹)	(¹)	(¹)	72.2	75.7
Fabric production index (1997=100)	(¹)	(¹)	(¹)	77.9	68.8
Installed spinning capacities:					
Short-staple spindles (1,000)	2,988.0	2,600.0	2,450.0	2,600.0	(¹)
Long-staple spindles (1,000)	85.0	85.0	98.0	98.0	(¹)
Open-end rotors (1,000)	41.2	40.0	39.0	41.0	(¹)
Installed weaving capacities:					
Cotton system:					
Shuttleless looms	2,560	2,600	2,600	2,600	(¹)
Shuttle looms	13,150	12,000	10,000	8,000	(¹)
Wool weaving looms	(¹)	(¹)	(¹)	1,230	(¹)
Production of selected products:					
Yarns:					
Cotton (metric tons)	245,000	228,000	212,000	180,000	125,000
Manmade fibers (metric tons)	55,500	61,100	62,800	63,400	78,700
Total (metric tons)	300,500	289,100	274,800	243,400	203,700
Fabrics:					
Cotton woven (metric tons)	65,100	48,200	39,100	35,800	28,400
Other woven (metric tons)	12,000	2,000	1,000	1,000	7,000
Knitted (metric tons)	1,000	760	820	800	1,000
Total (metric tons)	78,100	50,960	40,920	37,600	36,400
Mill fiber consumption:					
Cotton (1,000 metric tons)	225.0	184.7	171.1	185.5	207.4
Manmade fibers (1,000 metric tons)	150.3	146.9	167.0	165.9	183.6
Wool (1,000 metric tons)	2.6	2.6	3.0	3.9	3.4
Total (1,000 metric tons)	377.9	334.2	341.1	355.3	394.4
Foreign trade:					
Exports:					
Textiles (million dollars)	634.6	544.7	429.4	504.1	445.6
Apparel (million dollars)	594.3	686.5	657.0	726.9	683.1
Total (million dollars)	1,228.8	1,231.2	1,086.4	1,231.1	1,128.7
Imports:					
Textiles (million dollars)	483.1	496.3	453.4	504.6	386.9
Apparel (million dollars)	268.3	318.9	364.5	330.6	256.7
Total (million dollars)	751.4	815.1	817.9	835.2	643.6

See footnote at end of table.

Table L-1—Continued**Egypt: Statistical profile of textile and apparel sector and foreign trade, 1997-2001**

Item	1997	1998	1999	2000	2001
Foreign trade—Continued					
Trade balance:					
Textiles (<i>million dollars</i>)	151.4	48.4	-24.0	-0.5	58.6
Apparel (<i>million dollars</i>)	326.0	367.7	292.5	396.3	426.4
Total (<i>million dollars</i>)	477.4	416.1	268.4	395.9	485.1

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data compiled from the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 24/2001, *Country Statements 2001*, and selected back years; Embassy of Egypt, "A Memorandum on Egyptian Exports of Yarn, Textile, and Ready-Made Garments During 2002," received June 6, 2002; and U.S. Department of Commerce, International Trade Administration, ITA Export Advantage; mill consumption data from Geerdes International, Inc., Richmond, VA; and trade data are United Nations data as reported by Egypt's trading partners.

Table L-2
Egypt: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	81	107	92	114	126
European Union	436	330	259	300	237
Canada	4	5	5	6	7
Subtotal	521	442	355	420	371
All other:					
Turkey	17	13	14	11	12
Korea	10	1	6	9	9
Japan	7	6	6	7	6
Other	79	82	49	58	48
Subtotal	113	102	74	84	75
Grand total	635	545	429	504	446
Apparel (SITC 84):					
Quota markets:					
United States	329	383	355	434	410
European Union	227	258	277	272	251
Canada	6	8	9	9	9
Subtotal	562	649	641	714	670
All other	33	37	16	13	13
Grand total	594	687	657	727	683
Textiles and apparel:					
Quota markets:					
United States	410	490	447	548	536
European Union	663	588	535	572	488
Canada	10	13	14	15	16
Subtotal	1,083	1,091	996	1,134	1,041
All other	146	140	90	97	88
Grand total	1,229	1,231	1,086	1,231	1,129
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	82	81	83	83	83
Apparel	95	95	98	98	98
Average	88	89	92	92	92

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table L-3
Textiles and apparel: U.S. general imports from Egypt, by specified product categories,¹
1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	196,114	247,368	200,977	254,105	282,441	264,762
1	Apparel	93,145	108,716	114,364	132,403	126,367	129,070
2	Textiles	102,969	138,651	86,613	121,702	156,074	135,691
30	Cotton textiles and apparel	170,523	221,271	175,548	216,821	246,969	228,082
60	Manmade-fiber textiles and apparel	24,006	24,250	24,997	36,332	34,600	35,781
237	Playsuits	685	933	126	37	129	80
239	Babies' apparel	1,178	1,505	2,502	3,500	3,110	3,006
300	Carded cotton yarn	42,963	65,670	39,098	47,424	81,343	73,178
301	Combed cotton yarn	15,864	28,805	9,247	8,001	13,585	11,862
335	Cotton coats, women/girls	552	216	721	450	208	3,413
336	Cotton dresses	2,345	1,482	2,042	4,483	3,127	1,639
338	Cotton knit shirts, men/boys	9,369	8,415	6,209	6,326	6,405	8,078
339	Cotton knit shirts, women/girls	9,024	11,701	7,838	10,593	9,251	9,933
340	Cotton not knit shirts, men/boys	9,472	11,859	12,162	9,320	7,508	9,077
347	Cotton trousers, men/boys	13,399	15,487	16,866	23,909	22,776	28,702
348	Cotton trousers, women/girls	9,478	13,604	20,048	28,313	31,875	31,063
351	Cotton nightwear	9,776	10,754	13,564	10,547	6,729	6,073
352	Cotton underwear	3,480	4,086	5,070	3,750	2,373	2,978
360	Cotton pillowcases	11	123	763	2,837	2,661	2,271
361	Cotton sheets	109	767	3,602	8,313	6,870	4,994
362	Cotton bedspreads and quilts	88	2,508	733	2,063	1,628	1,372
363	Cotton terry and other pile towels	2,221	2,497	2,380	1,674	1,221	1,760
369	Other cotton manufactures	14,599	16,510	14,390	15,197	20,168	16,285
634	Other manmade coats, men/boys	2,218	6,751	5,315	4,250	4,529	3,995
635	Manmade-fiber coats, women/girls	3,486	3,560	2,188	4,201	3,980	2,619
638	Manmade knit shirts, men/boys	1,306	1,054	1,843	2,423	2,898	3,606
640	Manmade not knit shirts, men/boys	232	85	440	2,329	1,823	1,335
647	Manmade-fiber trousers, men/boys	323	954	1,276	1,526	3,299	4,686
648	Manmade-fiber trousers, women/girls	159	385	696	787	2,081	2,163
665	Manmade-fiber floor coverings	1,302	2,117	2,425	2,514	3,236	5,108

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

Source: Compiled from official statistics of the U.S. Department of Commerce, found at <http://otexa.ita.doc.gov/>.

Overview

The textile and apparel sector in Israel has declined in relative importance since at least 1997. Between 1997 and 2001, sector production fell by 10 percent to \$2.6 billion and sector employment decreased by 22 percent to 31,000 workers (table L-4, found at the end of this country profile). During the first half of 2002, 6,000 employees in the sector were laid off. According to industry sources, the key reason for the decline has been the high cost of manufacturing in Israel, which, although partially offset by the use of advanced technology and production of high quality products, has pushed domestic firms offshore to more cost-competitive countries. Israel's domestic market base has experienced an influx of inexpensive textile and apparel goods from East Asia, particularly China.

Since 1997, textile and apparel goods as a share of total exports have remained steady at 4 percent. Israel's textile and apparel sector benefits from preferential access to both the European and U.S. markets. The Textile and Apparel Manufacturing Association of Israel contends that quota removal in 2005 would be detrimental to the Israeli industry by rewarding countries with lower labor costs, and that about 60 percent of Israeli textile and apparel exports to the United States could be threatened when quotas are removed.²

Industry Profile

Industry structure and performance

Israel's textile and apparel sector is characterized by a few large, vertically integrated companies and many small firms.³ The vertically integrated firms are integrated, from product design and development through spinning yarn, fabric production and finishing, cutting and sewing, packaging, and shipping. For almost all textile segments, dyeing, printing, and finishing is carried out in Israel. In the apparel industry, Israeli firms tend to concentrate on niche and high-end products in order to remain competitive in the global

¹ Prepared by Judith-Anne Webster, Office of Industries.

² Ramzi Gabbay, Chairman, Textile and Apparel Manufacturing Association of Israel (TAMA), Tel Aviv, Israel, written submission to the Commission, Jan. 30, 2003, and Moshe Nahum, Director, Division of Foreign Trade and International Relations, TAMA, Israel, Tel Aviv, Israel, e-mail correspondence to USITC staff, Feb. 11, 2003.

³ Except as noted, information in the paragraph is from Moshe Nahum, Director, Division of Foreign Trade and International Relations, TAMA, Tel Avia, e-mail correspondence USITC staff, Feb. 11 and Mar. 9, 2003.

marketplace.⁴ Few Israeli companies have established independent brand names, but they frequently manufacture products for companies with prestige labels. According to the Israeli Export Institute, more than 90 percent of sector exports consist of branded merchandise.⁵ Israel's leading textile and apparel products are knitted products, such as underwear, T-shirts, sweaters, jogging suits, and hosiery; men's suits, swimwear, towels, and bed linen.

Factors of production

Raw materials

Israel's apparel industry relies on imports for most of its yarn and woven fabric requirements. There is some local production of woven fabrics. The majority of the knitted fabrics used by the Israel apparel industry are made in Israel, while the fibers are imported. Israel imports much of the raw materials needed for the apparel industry from the EU. However, in recent years, cost-competitive Asian countries such as China and India have grown in importance as raw material suppliers to the Israeli market.

Labor

The number of workers in Israel's textile and apparel sector decreased from 40,000 in 1997 to 31,300 in 2001 (table L-4 found at the end of this country profile). This decline was most apparent in the apparel industry, which lost almost 5,000 workers. Labor costs in Israel are relatively high, particularly in comparison to other Middle Eastern and Asian countries. According to labor cost data compiled by Werner International for 2002, average hourly compensation (including fringe benefits) for production workers in Israel's spinning and weaving segment was \$8.17, compared with \$1.01 in Egypt, compensation, \$2.13 in Turkey, and less than \$1 in China, India, and Pakistan. One reason for these high labor costs is compulsory education laws in Israel, which require at least 12 years of education, making Israeli textile and apparel workers more educated and skilled than their counterparts in competing countries.⁶

These wage rates make it difficult for manufacturers in Israel to compete in world markets. According to an industry source, many customers of Israeli textile firms, particularly in the EU and the United States, have put pressure on Israeli firms to cut prices, owing to competition from lower-cost countries.⁷ In response, the industry in Israel has been

⁴ Israeli Textiles and Apparel, Israel Ministry of Foreign Affairs, found at <http://www.us-israel.org/jsource/Economy/eco7.html>, retrieved Nov. 26, 2001; and "Clothing and Textiles," Up Israel, found at <http://www.lupinfo.com/country-guide-study/israel/israel86.html>, Dec. 1998, retrieved Dec. 2, 2002.

⁵ Israeli Textiles and Apparel, Israel Ministry of Foreign Affairs, found at <http://www.us-israel.org/jsource/Economy/eco7.html>, retrieved Nov. 26, 2001.

⁶ Moshe Nahum, Mar. 9, 2003.

⁷ "Cheaper Next Door," *Textile Asia*, June 2001, p. 100.

downsizing and/or moving operations offshore, as it has faced increasingly stiff competition from low-wage manufacturers in Turkey, China, and the Dominican Republic.⁸

Technology

The use of new technologies is one of Israel's key competitive advantages and helps the country retain market share despite its high labor costs. Elbit Vision Systems produces I-Tex (which automatically inspects raw fabrics), a technology used by Israeli firms to ensure high quality.⁹ Tefron's use of computerized robotic manufacturing methods has also resulted in international recognition of the firm as a leader in the implementation of new manufacturing technologies. Complete apparel production –from thread to completed garment– is a one-step operation replacing traditional finishing and cutting methods, as well as conventional sewing processes.¹⁰ Elyon, one of Israel's largest firms, uses General Sewing Data software as well as other programs enabling methods analysis, time and motion simulations, and product costing.

Investment

High production costs have made it difficult for Israel's textile and apparel sector to attract investment. Israeli firms have disinvested in many cases and moved operations to more cost-competitive markets, particularly for labor-intensive manufacturing. Delta Galil Industries Ltd., an Israeli-based producer of apparel sold under brands such as Ralph Lauren, Donna Karan, Calvin Klein, Hugo Boss, and Nike, has shifted most of its production to low-cost countries Jordan, Egypt, Turkey, Romania, and Bulgaria, and has recently begun to produce in the Western Hemisphere and the Far East.¹¹ More than 75 percent of the firm's manufacturing takes place in lower labor cost countries. Tefron, a manufacturer of intimate and leisure apparel, continues to shift sewing production from both Israel and the United States to several manufacturing facilities situated around the world.¹² Currently, 10 percent of the company's production is in Jordan, with management aiming to increase this figure to 50 percent.¹³ The recently developed QIZ program, which allows duty and quota-free exports from Jordan to the United States, along with low wage rates, makes Jordan an attractive country from which to produce textile and apparel goods.

⁸ "Unemployment High, Skills Low," EIU Viewwire, Feb. 21, 2002, found at http://www.viewswire.com/index.asp?layout=display_article&search_text=textiles&doc_id=179980, retrieved Dec. 3, 2002.

⁹ "Order from Russia," *Textile Asia*, Mar. 2002, p. 82.

¹⁰ "Israeli Textiles and Apparel," Israel Ministry of Foreign Affairs, found at <http://www.us-israel.org/jsource/Economy/eco7.html>, retrieved Nov. 26, 2001.

¹¹ Information on Delta Galil in the paragraph is from its website, found at <http://www.deltagalil.com>, retrieved Dec. 3, 2002.

¹² "Profitable at last," *Textile Asia*, June 2002, p. 86.

¹³ "Israeli Textiles and Apparel," Israel Ministry of Foreign Affairs, found at <http://www.us-israel.org/jsource/Economy/eco7.html>, retrieved Nov. 26, 2001.

Government Policies

Domestic policies

The Ministry of Industry and Trade (MIT) reportedly is considering the introduction of a \$2 million fund to support Israel's textile and apparel sector.¹⁴ The grant is one of several measures that may be established to prevent the contraction of the sector and the subsequent loss of thousands of jobs. Other government proposals include temporary wage cuts for production workers in the sector and the exemption of minimum wages on piecework and sewing, both of which would serve as an incentive for companies to carry out such operations in Israel. Another suggested measure for consideration by MIT is allowing factories to depreciate equipment and machinery within 2 years in order to improve profitability.

Trade policies

Israel benefits from preferential market access in the European Union under the Israel-EEC Preferential Agreement, signed in 1977, and the United States under the 1985 United States-Israel Free Trade Area Agreement. Under this Free-Trade Agreement (FTA), the United States and Israel phased out all tariffs on eligible bilateral trade in apparel, textile, and other industrial products by 1995. In October 1996, U.S. legislation to implement the U.S. -Israel FTA¹⁵ was amended to give the president authority to proclaim duty-free treatment for imported goods made in "qualifying industrial zones" (QIZs) along the border of Israel with Egypt and Jordan.¹⁶ The President subsequently issued Proclamation 6955 to provide for such duty-free treatment and to delegate to the United States Trade Representative (USTR) the authority to designate an area as a QIZ.¹⁷ In general, the goods must be produced in and imported directly from the QIZ, and the value added in the QIZ must be no less than 35 percent of the total value of the article.¹⁸ Under the QIZ program between Israel and Jordan,¹⁹ goods manufactured in designated areas in Jordan that contain a minimum amount of Israeli input (8 percent f.o.b. value for apparel) and meet U.S. rules of origin can enter

¹⁴ Information in the paragraph is from "Ministry Introducing Apparel Designer Fund To Support Textile Sector," June 10, 2002, found at <http://www.bharattextile.com/newsitems/1977806>, retrieved Jan. 7, 2003.

¹⁵ The United States-Israel Free Trade Area Implementation Act, Public Law 99-47 approved June 11, 1985, 19 U.S.C. 2112.

¹⁶ Public Law 104-234, approved October 2, 1996.

¹⁷ President, Proclamation 6955 of November 13, 1996, "To Provide Duty-Free Treatment to Products of the West Bank and the Gaza Strip and Qualifying Industrial Zones," published in the *Federal Register* of November 18, 1996 (61 F.R. 58759).

¹⁸ The trade benefits are intended to create economic opportunities for the Palestinian people in the West Bank and Gaza Strip and to promote economic cooperation among Israel, Jordan, Egypt, and the Palestinian Authority. Statement by the White House Press Secretary, "Free Trade Area Extended to West Bank and Gaza Strip," Oct. 3, 1996, found at <http://www.library.whitehouse.gov/cgi-bin/web>, retrieved Jan. 13, 1998.

¹⁹ To date, Israel and Egypt have not proposed any special manufacturing zones as QIZs.

the U.S. customs territory free of duty and quota.²⁰ According to the Textile and Apparel Manufacturing Association of Israel, the Israeli textile and apparel sector has not benefited directly from the QIZ program as the Jordanian industry is mainly buying low-value products such as buttons.²¹ However, the Israeli sector has indirectly benefited as the program has promoted political stability between the two countries and given Israeli firms pursuing low-cost manufacturing the opportunity to move production to Jordan and still have duty- and quota-free access to the U.S. market.

Foreign Trade

Israel's trade balance in textiles and apparel fluctuated during 1997-2001, changing from a trade deficit of \$65 million in 1997 to a trade surplus of an estimated \$15 million in 2001 (table L-4). Israel's major trading partners are the United States and the EU.

Imports

Israel's imports of textiles and apparel remained stable during 1997-2001 at, about \$1.1 billion annually (table L-4). Imports of textiles, primarily used as inputs for Israel's apparel industry, grew during the period due, in part, to the departure of many textile producers from Israel to more cost-competitive production markets. Approximately 43 percent of Israeli textile imports come from the EU. India surpassed the United States in 2000 as the second-largest supplier of textiles to Israel. The share of Israel's apparel imports accounted for by the EU, Canada, and United States declined from a combined 85 percent in 1997 to 49 percent in 2000, while China and Hong Kong increased their respective shares, reflecting the recent shift toward greater reliance on East Asian sources.

Exports

Israeli exports of textiles and apparel remained fairly stable at \$1.2 billion during 1997-2001 (table L-5). According to a trade source, Israeli textile exports declined by 12 percent in the first half of 2002, compared with the first half of 2001, to \$466 million.²² Most of Israel's exports of sector goods during 1997-2000 went to the United States and the EU. United Nations trade data as reported by Israel show that Israel's exports to the United States and to Jordan during 1997-2002, grew largely attributable to preferential access to the U.S. market under the U.S.-Israel FTA and QIZ program with Jordan.

Based on official U.S. trade statistics, the quantity of U.S. imports of textiles and apparel from Israel doubled during 1997-2002 to 534 million square meters equivalent (SMEs)

²⁰ U.S. Department of State telegram 2013, "World Textile Trade Without Quotas," prepared by U.S. Embassy, Amman, Apr. 23, 2002.

²¹ Moshe Nahum, Mar. 9, 2003.

²² "Textile Exports Slump, Thousands Lose Jobs," found at <http://www.cybergt.com/quota/10-02/17-03.html>, retrieved Dec. 2, 2002.

(table L-6), In terms of value, however, imports of sector goods from Israel rose from \$408 million in 1997 to a high of \$651 million in 2000, and then fell to \$620 million in 2002. Apparel accounted for 22 percent (119 million SMEs) of the quantity but 67 percent (\$416 million) of the value of sector imports from Israel in 2002. Israel's apparel shipments in 2002 were concentrated in cotton and manmade-fiber knit tops, underwear, brassieres, and pants, particularly for women and girls.

The single-largest category of sector imports from Israel by quantity during 1997-2002 was nonwoven fabrics, which accounted for 55 percent (293 million SMEs) of the total quantity but 10 percent (\$60 million) of the total value, in 2002.

Other leading textile imports from Israel were knit fabrics and cotton terry towels, bed linens, and bedspreads. In 2002, Israel ranked among the 10 largest foreign suppliers of cotton sheets, bedspread, and towels, to the U.S. market.

The trade-weighted average U.S. duty on imports of textiles and apparel from Israel in 2001 was only 1.2 percent ad valorem, reflecting the fact that almost all of the sector imports from Israel enter free of duty under the U.S.-Israel FTA.

Table L-4
Israel: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Textiles	787	840	861	723	715
Apparel	1,309	1,266	1,147	943	817
Total	2,096	2,106	2,008	1,666	1,532
Number of workers:					
Textiles	22,100	22,700	22,500	22,000	19,000
Apparel	17,900	15,000	13,600	13,000	12,300
Total	40,000	37,700	36,100	35,000	31,300
Installed spinning capacities:					
Short-staple spindles	35,000	35,000	35,000	(¹)	(¹)
Long-staple spindles	15,000	15,000	15,000	(¹)	(¹)
Open-end rotors	9,000	9,000	9,000	(¹)	(¹)
Installed weaving capacities:					
Shuttleless looms	1,100	1,100	1,100	(¹)	(¹)
Shuttle looms	800	800	800	(¹)	(¹)
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	440.7	470.3	475.2	488.2	² 450.0
Apparel (<i>million dollars</i>)	605.3	653.1	732.1	730.0	² 700.0
Total (<i>million dollars</i>)	1,046.0	1,123.5	1,207.3	1,218.2	² 1,150.0
Imports:					
Textiles (<i>million dollars</i>)	768.7	766.0	753.9	754.6	² 585.0
Apparel (<i>million dollars</i>)	341.9	364.9	357.0	473.6	² 550.0
Total (<i>million dollars</i>)	1,110.6	1,130.9	1,110.9	1,228.2	² 1,135.0
Trade balance:					
Textiles (<i>million dollars</i>)	-328.0	-295.7	-278.6	-266.4	² -135.0
Apparel (<i>million dollars</i>)	263.4	288.2	375.1	256.4	² 150.0
Total (<i>million dollars</i>)	-64.6	-7.4	96.5	-10.0	² 15.0

¹ Not available.

² Estimated by the Commission based on the percentage change in world imports from Israel from 2000 to 2001.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data are from the Israel Central Bureau of Statistics; the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002 and selected back issues; and trade data are United Nations data as reported by Israel, except as noted.

Table L-5
Israel: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	135	166	175	196	(¹)
European Union	235	239	231	209	(¹)
Canada	3	5	6	8	(¹)
Subtotal	373	410	412	414	(¹)
All other:	68	61	63	74	(¹)
Grand total	441	470	475	488	(¹)
Apparel (SITC 84):					
Quota markets:					
United States	284	357	395	448	(¹)
European Union	293	266	287	234	(¹)
Canada	4	6	6	8	(¹)
Subtotal	580	629	688	690	(¹)
All other	25	24	44	40	(¹)
Grand total	605	653	732	730	(¹)
Textiles and apparel:					
Quota markets:					
United States	419	524	571	644	(¹)
European Union	527	504	518	444	(¹)
Canada	7	11	12	16	(¹)
Subtotal	953	1,039	1,101	1,103	(¹)
All other	93	85	107	115	(¹)
Grand total	1,046	1,123	1,207	1,218	(¹)
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	85	87	87	85	(¹)
Apparel	96	96	94	94	(¹)
Average	91	92	91	91	(¹)

¹ No data reported.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table L-6
Textiles and apparel: U.S. general imports from Israel, by specified product categories,¹ 1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	266,001	298,416	359,775	476,367	517,174	533,959
1	Apparel	56,644	73,504	90,892	112,146	112,286	118,874
2	Textiles	209,357	224,912	268,882	364,221	404,888	415,085
30	Cotton textiles and apparel	64,376	78,425	82,600	96,100	100,321	115,136
60	Manmade-fiber textiles and apparel	199,515	217,048	273,181	377,001	414,386	416,610
222	Knit fabric	25,626	25,900	36,631	41,930	45,510	50,162
223	Nonwoven fabric	147,903	154,672	175,811	261,822	292,117	292,885
229	Special purpose fabric	1,986	1,179	603	2,559	12,314	8,457
335	Cotton coats, women/girls	314	196	814	393	1,198	3,334
336	Cotton dresses	2,024	1,327	818	712	806	1,429
338	Cotton knit shirts, men/boys	1,486	2,062	2,090	2,039	2,382	2,000
339	Cotton knit shirts, women/girls	7,260	9,060	10,645	9,720	7,205	7,320
345	Cotton sweaters	1,375	1,981	1,074	738	732	2,136
347	Cotton trousers, men/boys	222	453	513	608	1,704	898
348	Cotton trousers, women/girls	4,665	6,486	6,987	10,062	11,769	9,541
349	Cotton brassieres	1,335	1,091	1,446	1,426	1,537	1,533
350	Cotton robes	1,185	856	906	500	372	2,302
351	Cotton nightwear	3,696	2,706	3,422	2,908	4,031	4,541
352	Cotton underwear	19,994	25,781	25,069	33,141	31,813	33,168
360	Cotton pillowcases	567	649	715	910	1,407	1,317
361	Cotton sheets	5,561	6,475	5,800	6,973	9,443	13,626
362	Cotton bedspreads and quilts	2,604	2,862	2,881	2,291	2,691	3,887
363	Cotton terry and other pile towels	2,368	2,984	3,830	4,026	4,782	4,354
369	Other cotton manufactures	5,256	6,903	9,056	10,414	10,671	10,088
632	Manmade-fiber hosiery	2,513	2,588	2,802	1,372	571	449
638	Manmade knit shirts, men/boys	115	233	428	2,468	2,086	335
639	Manmade knit shirts, women/girls	1,870	1,771	4,221	4,620	5,049	5,211
645	Manmade-fiber sweaters, men/boys	418	488	961	1,530	2,613	1,873
647	Manmade-fiber trousers, men/boys	78	90	43	133	377	500
648	Manmade-fiber trousers, women/girls	388	449	709	2,412	2,317	1,062
649	Manmade-fiber brassieres	18	72	459	1,079	1,170	1,146
651	Manmade-fiber nightwear	14	27	44	246	642	4,929
652	Manmade-fiber underwear	1,272	5,691	14,219	23,616	21,479	24,897
659	Other manmade-fiber apparel	2,014	3,217	6,319	4,728	4,192	2,422
666	Other manmade-fiber furnishings	2,499	7,533	10,708	9,989	6,922	2,980

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

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

Overview

Jordan's textile and apparel sector has grown significantly following implementation of U.S. legislation in 1996 that provided for the establishment of "qualified industrial zones" (QIZs) encompassing portions of Israel and Jordan from which goods can enter the United States free of duty.² Sector employment has more than doubled, helping an economy with historically high unemployment. Jordanian exports of textiles and apparel increased from \$37 million in 1997 to \$316 million in 2001, and the sector share of total exports increased from 3 percent to 17 percent. According to data of the Jordanian government as published in the trade press, Jordan's exports of sector goods increased significantly in the first 10 months of 2002 compared with the corresponding period of 2001, to \$398 million, or 22 percent of total Jordanian exports.³

Jordan's apparel industry is export oriented due to its small domestic customer base. Because the Jordanian textile industry is small, the apparel industry relies on imports for its inputs, which come mainly from Israel, Hong Kong, and the European Union. The sector benefits from relatively low wages. Foreign direct investment in the sector has increased substantially in the last three years, particularly from Asian firms seeking to benefit from duty- and quota-free access to the U.S. market.

Industry Profile

Industry structure and performance

The number of firms in Jordan's textile and apparel sector rose by 29 percent during 1997-2000 to 2,183, 95 percent of which were apparel producers (table L-7). Jordanian textile production is limited because it consumes large amounts of water, a scarce resource in Jordan.⁴ With the exception of one small spinning and knitting mill near Amman, the apparel industry consists almost entirely of cut-sew-pack operations. There is no vertical integration

¹ Prepared by Judith-Anne Webster, Office of Industries.

² The trade benefits provided by the U.S. legislation were, among other things, intended to promote economic cooperation among Israel, Jordan, Egypt, and the Palestinian Authority. Statement by the White House Press Secretary, "Free Trade Area Extended to West Bank and Gaza Strip," Oct. 3, 1996, found at <http://www.library.whitehouse.gov/cgi-bin/web>, retrieved Jan. 13, 1998.

³ "Textile Exports Jump," BharatTextile.com, Dec. 14, 2002, found at <http://www.bharattextile.com/newsitems/1980350>, retrieved Feb. 10, 2003.

⁴ "Sector Report: Apparel and Textiles," Export and Finance Bank of Jordan, Apr. 4, 2002.

in the industry, and opportunities for increasing vertical integration are limited because the scarcity of water eliminates many potential expansion options (e.g., dyeing).⁵

Factors of Production

Raw materials

Jordan's apparel industry relies almost entirely on imports for its yarn and fabric requirements, primarily for China and Pakistan.⁶ According to industry representatives, the importation of apparel inputs enables Jordanian apparel manufacturers to obtain the best price and benefit from Jordan's proximity to supplying countries such as Egypt that produce high-quality fibers.⁷

Labor

The competitive labor cost in Jordan is considered to be a key factor providing Jordan an advantage that attracts FDI. According to labor cost data for 2002, the average hourly compensation (including fringe benefits) for apparel production workers in Jordan was \$0.81, compared with \$0.77 in Egypt, \$0.68 in China, and less than \$0.50 in such Asian countries as Bangladesh, India, and Pakistan.⁸ A report by Jordan's Finance and Export Bank indicates that average monthly salaries for Jordanian textile and apparel workers are \$113 to \$141 per month for tailors and trainees, \$353 to \$423 for supervisors, and \$1,128 to \$1,141 for factory managers.⁹

The textile and apparel sector in Jordan accounts for 2.2 percent of the country's workforce. The number of workers in the sector more than doubled, from 7,667 workers in 1997 to 16,561 workers in 2001 (table L-7). According to an April 2002 report prepared by the U.S. Embassy in Amman, the number of workers in the Jordanian textile and apparel sector is 26,000, of whom 22,000 are apparel workers employed by QIZ exporters.¹⁰ The Embassy report indicates that the sector accounts for about 3 percent of all jobs filled in Jordan (labor force of 1 million, minus 150,000 unemployed). Jordan's work force is considered to be

⁵ U.S. Department of State telegram 2013, "World Textile Trade Without Quotas," prepared by the U.S. Embassy, Amman, Apr. 23, 2002.

⁶ Ibid.

⁷ Jordan K. Speer, "Middle East Marks the Map," July 4, 2001, Bobbin Publishing Group, found at http://juststyle.com/features_detail.asp?art=406, retrieved Dec. 10, 2002.

⁸ See table 3-1 in chapter 3 of this report for data on hourly compensation in the textile and apparel industries of countries covered by the study. Data on hourly compensation for apparel production workers are from Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers," New York, NY.

⁹ "Textile and Apparel Industries Have Seen Unprecedented Growth," BharatTextile.com, found at <http://www.bharattextile.com/newsitems/1978642>, retrieved Nov. 7, 2002.

¹⁰ U.S. Department of State telegram 2013, "World Textile Trade Without Quotas."

well-trained, a factor which has reportedly encouraged investment in the sector.¹¹ As the bulk of Jordan's labor force consists of skilled workers, Jordan's growing textile and apparel workforce is supplemented by unskilled workers from Pakistan, India, China, and other nations who reportedly are increasingly finding work in the textile and apparel sector in Jordan, where they can expect to be paid more for fewer hours worked than in their domestic industries.¹²

Technology

Jordanian apparel companies are typically at a technological disadvantage compared to other foreign companies, such as those in Israel, which employ computer-based logistics programs that Jordanian firms lack. Further, the majority of Jordanian manufacturers reportedly experience underutilized capacity and limited communication and coordination with associated companies and factories.¹³ Jordanian companies are trying to improve in this regard by adopting computer-based design and logistics software.¹⁴

Investment

Investment in Jordan's QIZs, of which there are 11, totals \$85 million to \$100 million, and it is expected to reach \$180 million to \$200 million when all projected are completed.¹⁵ The investment has come from around the world, particularly from Asian countries. For example, Pakistani companies reportedly have invested \$30 million in up to 20 QIZ production facilities in Jordan and employ approximately 5,000 Jordanians.¹⁶ These new investments followed earlier investments by such companies as Boscan International, a large Hong Kong firm, which reportedly entered Jordan in early 2000.¹⁷ Additionally, Jordan's apparel industry has benefited from multilateral investment. For example, Jordan-based El-Zay, a manufacturer of high-quality men's suits, received funding from the International Finance Corporation to help restructure its debt and diversify its product line by manufacturing men's outerwear.¹⁸ The growing investment trend is expected to continue as Jordan offers numerous advantages in addition to QIZ duty- and quota-free access to the U.S. market, including

¹¹ "Jordan - A Success Move," Jordan Investment Board, found at <http://www.jordaninvestment.com/LastBroshurs/textappe/mainpage.htm>, retrieved Dec. 4, 2002.

¹² "Textile and Apparel Industries Have Seen Unprecedented Growth."

¹³ *Ibid.*

¹⁴ "Jordan - A Success Move."

¹⁵ Office of the United States Trade Representative, 2003 *Trade Policy Agenda and 2002 Annual Report*, Mar. 2003, p. 164.

¹⁶ "Foreign Textile Firms Benefit from New Industrial Zones," Just-Style.com, Oct. 31, 2001, found at http://just-style.com/new_print.asp?art=21853, retrieved Oct. 25, 2002.

¹⁷ "QIZ's Attract Hong Kong Garment Exporters," BharatTextile.com, Nov. 30, 1999, found at <http://www.bahrattextile.com/newitems/1975031>, retrieved Dec. 11, 2002.

¹⁸ The World Bank Group, "Hashemite Kingdom of Jordan: Update," Second Quarter 2002, p. 15, found on the World Bank website at <http://www.worldbank.org>, retrieved Dec. 4, 2002.

exemptions from income taxes; competitive rates for rent and electricity; and low labor rates.¹⁹

According to a report prepared by the U.S. Embassy in Amman, the elimination of quotas under the WTO Agreement on Textiles and Clothing in 2005 likely will have a major impact of Jordan's textile and apparel sector, including its ability to attract new investment, because the benefits of its free-trade agreement (FTA) with the United States may not be enough to surpass the competitive advantages of other textile and apparel producing countries.²⁰ Further, the political uncertainty in the region reportedly has caused some hesitation on the part of investors. For example, one supplier of cotton pants to the U.S. market reportedly scaled back its expansion plan in the region due to the potential for conflict. However, those companies that have been established in Jordan for several years are more solidified and thus likely to maintain their operations.²¹

Government Policies

Jordan has an FTA with the EU and benefits from preferential access to the U.S. market through the U.S.-Jordan Free Trade Agreement (FTA) and the QIZ program. The U.S.-Jordan FTA went into effect in December 2001 and will eliminate tariffs on bilateral trade in textiles and apparel in goods within 10 years. The impact of the FTA on the textile and apparel sector is unclear at this time due to its recent implementation. By contrast, the QIZ program has been a successful initiative, increasing production and employment in the sector. Under the United States-Israel Free Trade Area Implementation Act, products made in QIZs encompassing portions of Israel and Jordan are eligible to enter the United States free of duty, provided the product is imported directly from the QIZ, the value added in the QIZ is not less than 35 percent of the total value of the article, and contains a specified minimum amount of Israeli input (8 percent f.o.b. value for apparel).²² According to a Hong Kong-based representative of a firm sourcing apparel from Jordan for the U.S. market, because many of the inputs used in the production of apparel in Jordan are shipped through the port of Haifa, the cost of the "carry bags" purchased at the port to ship the inputs to Jordan meet the 8 percent Israeli content requirement.²³

The Jordanian Government has also taken other steps to improve the textile and apparel sector. For example, in late 2002, the Ministry of Trade and Industry, along with support from the Italian government, established a Center for Garment Design and Training Services,

¹⁹ Jordan K. Speer, "Middle East Marks the Map," July 4, 2001, Bobbin Publishing Group, found at http://just-style.com/features_detail.asp?art=406, retrieved Dec. 10, 2002.

²⁰ U.S. Department of State telegram 2013, "World Textiles Trade Without Quotas."

²¹ "Middle East Gains Global Ground," July 2 2001, found at http://www.just-style.com/features_detail.asp?art=404&app=1&fotw=sct, retrieved Dec. 10, 2002.

²² For further information on the QIZ program, see the U.S. International Trade Commission (USITC), "Textiles and Apparel: New U.S. Trade Program Likely to Spur Imports from Israel and Jordan," *Industry Trade and Technology Review*, USITC Pub. 3099, Mar. 1998, pp-1-8.

²³ Industry representative, interview by USITC staff, Hong Kong, Feb. 23, 2003.

offering training programs for workers in the sector.²⁴ Further, the Jordanian Investment Board actively promotes QIZs as a viable opportunity for investors as well as preferential access to U.S. and European markets.²⁵

Foreign Trade

Jordan's total trade in textiles and apparel (imports plus exports) increased significantly, from \$186 million in 1997 to \$686 million in 2001. However, Jordan is not a large apparel consumer and exports most of its apparel production. Jordan's trade deficit in sector goods narrowed from \$112 million in 1997 to \$53 million in 2001, reflecting a sevenfold increase in exports, to \$316 million, and a 148-percent gain in imports, to \$370 million, (table L-7). The growth in Jordanian imports of textiles and apparel during 1997-2001 was concentrated in textiles used as inputs for apparel products made in the QIZs. The leading supplier in 2001 was Israel, which accounted for 47 percent of Jordanian textile imports.

The substantial growth in Jordan's exports of textiles and apparel during 1997-2001 was accounted for almost entirely by the United States (table L-8). Based on official U.S. trade statistics, U.S. imports of textiles and apparel from Jordan rose from 1.3 million square meter equivalent (SMEs) valued at \$3.7 million in 1997 to 91.3 million SMEs valued at \$386 million in 2002. Sector imports consisted almost entirely of apparel, and were concentrated in garments for which major suppliers are highly constrained by quotas, particularly pants and knit tops of cotton and manmade fibers (table L-9). The trade-weighted average U.S. duty on sector imports from Jordan in 2001 was 2.0 percent ad valorem, one of the lowest of the supplying countries covered by the study.

²⁴ "Proper Way To Enhance Garment and Textile Sectors Discussed In Seminar," Bharat Textile.com, Aug. 22, 2002, found at <http://www.bharattextile.com/newsitems/1978758>, retrieved Feb. 6, 2003.

²⁵ "Jordan Woos Indian Knitwear Investors," BharatTextile.com, Oct. 8, 2001, found at <http://www.bharattextile.com/newsitems/1975717>, retrieved Feb. 6, 2003.

Table L-7
Jordan: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of establishments:					
Textiles	98	99	122	100	(¹)
Apparel	1,599	1,614	2,045	2,083	(¹)
Total	1,697	1,713	2,167	2,183	(¹)
Number of workers:					
Textiles	958	791	817	489	(¹)
Apparel	6,709	7,230	12,108	16,072	(¹)
Total	7,667	8,021	12,925	16,561	(¹)
Foreign trade:					
Exports:					
Textiles (<i>million dollars</i>)	24.8	31.9	35.7	28.1	29.8
Apparel (<i>million dollars</i>)	12.5	46.6	49.5	105.1	286.5
Total (<i>million dollars</i>)	37.3	78.5	85.1	133.2	316.2
Imports:					
Textiles (<i>million dollars</i>)	109.9	126.4	112.5	169.8	303.7
Apparel (<i>million dollars</i>)	39.0	62.1	64.2	62.6	65.9
Total (<i>million dollars</i>)	148.8	188.5	176.7	232.4	369.6
Trade balance:					
Textiles (<i>million dollars</i>)	-85.1	-94.5	-76.8	-141.6	-273.9
Apparel (<i>million dollars</i>)	-26.5	-15.5	-14.7	42.5	220.7
Total (<i>million dollars</i>)	-111.5	-110.0	-91.6	-99.2	-53.3

¹ Not available.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data are from the Jordanian Department of Statistics. Trade data are United Nations data as reported by Jordan.

Table L-8
Jordan: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	1	1	1	1	2
European Union	2	1	2	2	1
Canada	(¹)	(¹)	(¹)	(¹)	0
Subtotal	3	2	3	3	3
All other	22	29	33	25	27
Grand total	25	32	36	28	30
Apparel (SITC 84):					
Quota markets:					
United States	1	1	2	44	208
European Union	4	12	13	10	7
Canada	(¹)	(¹)	(¹)	(¹)	1
Subtotal	5	14	16	54	215
All other	8	33	34	51	71
Grand total	13	47	49	105	286
Textiles and apparel:					
Quota markets:					
United States	1	2	3	44	210
European Union	6	14	15	12	7
Canada	(¹)	(¹)	(¹)	(¹)	1
Subtotal	8	16	18	56	218
All other	30	62	67	77	98
Grand total	37	78	85	133	316
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	11	7	7	11	9
Apparel	38	29	31	51	75
Average	25	18	19	30	42

¹Less than \$500,000.

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table L-9
Textiles and apparel: U.S. general imports from Jordan, by specified product categories,¹
1997-2002

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		<i>—1,000 square meters equivalent—</i>					
0	Textiles and apparel, total	1,331	2,610	1,365	20,314	62,667	91,328
1	Apparel	1,064	1,709	906	9,340	43,713	87,678
2	Textiles	267	901	458	10,973	18,954	3,650
30	Cotton textiles and apparel	664	483	465	6,662	31,625	52,391
60	Manmade-fiber textiles and apparel	567	2,115	861	13,331	30,765	38,097
335	Cotton coats, women/girls	(²)	0	(²)	1	137	1,747
338	Cotton knit shirts, men/boys	39	75	30	305	2,679	6,259
339	Cotton knit shirts, women/girls	102	0	0	744	4,664	14,646
345	Cotton sweaters	0	0	0	0	2,477	2,610
347	Cotton trousers, men/boys	1	87	328	1,109	2,725	2,522
348	Cotton trousers, women/girls	158	0	28	1,671	8,371	16,739
351	Cotton nightwear	5	2	4	31	1,569	2,291
352	Cotton underwear	0	1	0	81	1,053	249
359	Other cotton apparel	18	2	9	411	3,207	3,153
634	Other manmade coats, men/boys	134	363	88	35	222	4,673
635	Manmade-fiber coats, women/girls	1	299	(²)	14	176	2,314
638	Manmade knit shirts, men/boys	0	0	5	835	2,259	4,557
639	Manmade knit shirts, women/girls	0	0	0	339	3,639	3,703
647	Manmade-fiber trousers, men/boys	59	172	70	161	692	1,406
648	Manmade-fiber trousers, women/girls	23	130	0	850	1,729	5,954
651	Manmade-fiber nightwear	0	0	0	92	428	1,107
652	Manmade-fiber underwear	0	0	0	0	570	3,069
659	Other manmade-fiber apparel	25	26	20	941	4,491	4,914
666	Other manmade-fiber furnishings	16	592	43	1,074	633	2,051
670	Manmade-fiber handbags/luggage	0	0	182	8,059	14,626	1,327

¹ To administer the U.S. textiles and apparel quota programs, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified for statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

² Less than 500 square meters equivalent.

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

Turkey¹

Overview

Turkey ranks among the world's largest exporters of textiles and apparel, and the textile and apparel industry is the country's largest industrial sector, with 10 percent of its gross domestic product and 21 percent of industrial output and total employment.² The textile and apparel sector is also its largest source of export earnings, accounting for 33 percent of the total in 2001. Since implementation of the European Union (EU)-Turkey customs union agreement (1996), Turkey has benefited from duty-free and quota-free access to the EU textile and apparel market.

Turkey has a modern and diverse textile and apparel infrastructure, with production capacity in all sectors of the supply chain, and a relatively flexible, low-cost, and highly skilled workforce. Turkey's strategic geographical location between Europe and Asia enables Turkish producers to ship goods to both markets quickly,³ and at reduced shipping costs. Flexible manufacturing also results in shorter lead times and ability to quickly increase production runs. Turkey also has liberal foreign exchange regulations that facilitate transfer of capital, while its use of a noneuro currency may mitigate adverse effects during periods in which the euro strengthens relative to the dollar.

Industry Profile

Turkey is the world's seventh-largest exporter of apparel and 14th-largest exporter of textiles, reflecting its large, modern, and integrated production capacity; a relatively low-cost and skilled workforce; and capacity to respond quickly to changes in fashions and retailer demands. Nearly 70 percent of Turkish textile and apparel production occurs in or near Istanbul. Turkey's diversified textile and apparel sector produces products in every segment of the supply chain, including fiber, yarn, fabric, apparel, and home textiles. Although Turkey is a leading producer of high-quality cotton and has the sixth-largest synthetic fiber capacity in the world, with production of nearly 430 million meters⁴ in 2000, as textile output has increased, it has become a major world importer of textile fibers, principally cotton and manmade fibers and filaments. The Turkish industry tends to be cotton oriented, with cotton-spinning capacity accounting for nearly 80 percent of its total spinning capacity.⁵ The Turkish manmade-fiber segment has also experienced rapid growth in recent years. Most of the raw materials for synthetic fibers and yarns are produced locally although the main

¹ Prepared by Vincent DeSapio, Office of Industries.

² "The Turkish Textile Industry," The Istanbul Textile & Apparel Exporters' Association, 2001, at http://www.itkib.org.tr/eng/Fuarlar/fact_sheet..htm, retrieved Jan. 28, 2003.

³ Cargoes can be delivered to European destinations by road within 4 to 11 days and to European coasts within 10 to 11 days by ship.

⁴ Umit Sevim, "The Turkish Fabric Industry," Export Promotion Center of Turkey, 2002, p. 2.

⁵ "The Cotton Industry in Turkey," Aegean Exporters' Unions General Secretariat, found at <http://www.fao.org/es/ESC/esce/escr/cotton/China-e/cap52TUR.htm>, retrieved Oct. 23, 2002.

raw material for acrylic fibers is imported. Turkey's production of synthetic fiber and apparel accounts for the sixth-largest synthetic fiber capacity in the world, with estimated production of nearly 450 million meters in 2001.⁶

Turkey is the world's third-largest producer of mohair and the eighth-largest producer of wool textiles and apparel; it exports wool, fine hair, yarn, and fabric. In 2000, production of woven wool fabrics totaled 81 million meters.⁷

The home textile industry in Turkey has shown steady growth in production and exports during 1997-2001, due to a rise in both domestic and external demand, and accounts for nearly 3 percent of Turkey's total exports in 2001. Production of home textiles in Turkey increased by 45 percent during this period to 242,000 metric tons (table L-10).⁸ Principal exports include carpeting,⁹ bed linens, bed spreads, table linens, towels, and bathrobes. Major markets include Germany, which absorbed 26 percent of Turkish exports of home textiles in 2001; the United States, accounting for 21 percent of exports; and France and the United Kingdom, each with 11 percent of exports.¹⁰

Industry structure and performance

Textiles

Turkish textile manufacturers tend to be small, independent firms that operate in specific segments of the textile supply chain. The number of integrated firms increased during the 1990s although still representing a small segment of the entire industry. The integrated firms typically handle tasks ranging from fiber processing, spinning and weaving to dyeing, printing and finishing operations, and many also own apparel and home textiles manufacturing facilities. The 41 largest textile companies in Turkey account for nearly 55 percent of all production capacity, and they ranked among the 500 largest textile firms in the world in 2000.¹¹

Home textile producers are mainly located in Istanbul, Denizli, Bursa, Izmir, and Gaziantep. Larger producers in terms of production volume have integrated their production, which ranges from yarn and fabric production to product design, dyeing, finishing and sewing. Small and medium-size producers tend to be concentrated in rural areas near such cities as Denizli, Mugla, and Kastamonu.¹²

⁶ Sevim, p. 1.

⁷ Ibid, p. 2.

⁸ Umit Sevim, "Home Textiles in Turkey," Export Promotion Center of Turkey, 2002, p. 3.

⁹ Nearly 60 percent of carpet produced in Turkey consists of tufted, felt carpets, and kilims; 35 percent consists of machine-made carpets; and the remainder consists of handmade carpets.

¹⁰ Umit Sevim, "Home Textiles in Turkey," p. 3.

¹¹ Ibid, "The Turkish Fabric Industry," p. 1.

¹² Umit Sevim, "Home Textiles in Turkey," p. 1.

Apparel

The apparel industry occupies a key role in the Turkish economy and accounted for 23 percent of Turkey's exports in 2001. In 2000, 21 Turkish firms were among the 400 largest apparel firms in the world, with 5 of these firms integrated from yarn production to finished apparel.¹³ Almost 70 percent of Turkey's apparel production is exported. Although the number of large integrated firms making apparel increased during the 1990s, the vast majority of firms that produce apparel in Turkey are small- and medium-sized.

Factors of production

Raw materials

Cotton.—The Turkish textile and apparel industries are afforded a competitive advantage because the cotton grown in the Aegean region of Turkey is considered among the highest quality in the world.¹⁴ Turkey was the sixth-leading world producer of cotton in 2000, with production rising to 791,000 metric tons from 614,000 metric tons in 1994. Cotton is Turkey's leading industrial crop,¹⁵ accounting for 11 percent of the total value of field crops.¹⁶ The growth of Turkish cotton production and consumption stems largely from Turkey's rapidly expanding textile and apparel sector. The rise in textile output in Turkey since 1985 has stimulated an increase in cotton imports as domestic cotton production became insufficient to satisfy the needs of the textile industry. In 1997, the share of imported cotton used in Turkish textile mills totaled nearly 36 percent.¹⁷

Spun yarn.—Turkey is the sixth-largest producer of spun yarn in the world. In 2000, Turkish spinning mills produced 1.3 million tons of spun yarn, accounting for nearly 5 percent of the world total. By the year 2010, Turkish spun yarn production is expected to reach 1.8 million tons, fueled by anticipated large increases in raw cotton production under the Southeastern Anatolian Project (GAP) (see "Government Policies" below¹⁸). Most of the increase in Turkish spun yarn production is expected to be consumed internally to meet Turkey's expanded production of textiles and apparel. However, Turkey is also a major exporter of spun yarns to eastern and western Europe, including Italy, Portugal, and Spain. Increased

¹³ Information provided by the Turkish Clothing Manufacturers Association, Dec. 30, 2002.

¹⁴ A large share of Turkish cotton is sold in the Cotlook A Index category of the Liverpool stock market.

¹⁵ Turkish cotton is generally planted during early to mid spring while harvesting begins in mid-August and continues until November. Most Turkish cotton is cultivated in three main areas: the Aegean region; the Southeastern Anatolia; and in Cukurova. Aegean cotton is generally considered to be superior in quality and is often preferred by the textile industry. (see "The Cotton Industry in Turkey.")

¹⁶ Ibid.

¹⁷ Ibid.

¹⁸ "Turkey's Spun-yarn Output Set To Climb As Western Europe Suffers Further Setbacks," Textiles Intelligence Ltd., 2001, found at <http://www.textilesintelligence.com/til/press.cfm?prid=289>, retrieved Oct. 31, 2002.

Turkish exports of spun yarn into Western Europe has come at the expense of producers in Western Europe where spun yarn production has declined by nearly 20 percent between 1990 and 2000, due partly to implementation of the EU-Turkey customs union agreement and low Turkish export prices.¹⁹

Labor

Low labor costs, as well as the high flexibility and high skill levels²⁰ of Turkish labor, are important competitive advantages for Turkey's textile and apparel sector. The average hourly labor cost per operator hour in the Turkish spinning and weaving segment in 2002 was \$2.13, compared with \$0.57 in India, \$0.69 in the coastal region of China, \$13.93 in Italy, \$4.78 in Portugal, and \$15.13 in the United States.²¹ Turkish labor costs as a percentage of textiles output averaged nearly 10 percent in 1997 compared with 1998 averages of 10 percent in India, 14 percent in Portugal, 12 percent in Italy, and a 1999 average of 17 percent in the United States.²² Labor costs in the Turkish apparel industry accounted for 9 percent of total output in 1997, compared with 1998 totals of 6 percent for India, 12 percent for Italy, 18 percent for Portugal, and a 1999 total of 17 percent for the United States.²³

Technology

Since the implementation of the EU-Turkey customs union agreement, the country's textile and apparel manufacturing capacity has been significantly modernized. The technological level of Turkey's capital equipment is considered to be among the best in the world. Turkey is also one of the leading importers of textile and apparel machinery in the world, with annual imports peaking at \$2.4 billion in 1997, before declining to \$920 million in 2000.²⁴

In 2001, installed weaving capacity of Turkish textile mills included 30,000 shuttle looms and 16,000 shuttleless looms, which are the more advanced technologically and the primary type of loom imported since 1995 (table L-10). This compares with 578,400 shuttle looms and 82,900 shuttleless looms in China, and 129,400 shuttle looms and 11,800 shuttleless

¹⁹ Ibid.

²⁰ According to industry sources, because of Turkey's long-standing commercial relations with Germany during the last 20 years, many of Turkey's mill employees have been trained in German mills.

²¹ Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002" (Reston, VA). The labor cost data also include social benefits. *Country Statements 2001*, International Textile Manufacturers Federation (ITMF).

²² *International Yearbook of Industrial Statistics 2002*, United Nations Industrial Development Organization, Vienna, 2002, pp. 70-73.

²³ Ibid.

²⁴ *Textile and Apparel from Turkey: A Summary of Turkey's Potential*, General Secretariat of Istanbul Textile and Apparel Exporters Associations, Nov. 2001, at <http://www.itkib.org.tr/Res800/Arge/English/default.htm>, retrieved Dec. 10, 2002.

looms in India in 2001.²⁵ Nearly all of the 19,400 looms shipped to Turkey during the last 10 years have been shuttleless looms, with most of this capacity having been added since 1995, attesting to the increasing efficiency of Turkish textile weaving capacity. Similarly, nearly one-half of Turkey's spinning capacity has been added within the last 10 years. Installed cotton-spinning capacity of Turkish mills included nearly 5.7 million short-staple spindles in 2001, compared to India's installed capacity of 38 million short-staple spindles and Egypt's installed capacity of 2.6 million short-staple spindles.²⁶ Turkey reportedly accounts for about one-fourth of the installed cotton-spinning capacity in Europe.²⁷

Investment

Shortly before the implementation of the EU-Turkey customs union agreement, significant investments were announced by domestic and foreign investors to modernize Turkish technology and infrastructure to enable Turkey to compete with highly automated textile industries in Western Europe and in other world markets.²⁸ As a result of this investment, the largest European capacity for the production of yarn, weaving, dyeing and finishing goods exists in Turkey.²⁹ According to official Turkish Government data, 265 textile and apparel firms in Turkey participated in joint ventures with foreign partners as of April 2002. Germany was the leading foreign investor with 69 foreign partnerships, followed by Britain with 28 partnerships, and the Netherlands with at least 22 partnerships. Joint ventures were established due to local manufacturers' interest in establishing licensing and technology agreements with foreign firms in order to increase Turkey's global competitiveness.³⁰ At the same time, the level of foreign direct investment in the Turkish textile and apparel sectors has declined since 1996, and the country suffers from low levels of capital investment.³¹

Government Policies

The Government of Turkey has sought to create economic incentives for projects whose goals are to "reduce inequality among regions, spread capital ownership, create employment, make use of advanced technology and increase competitiveness."³² These incentives are

²⁵ International Textile Manufacturers Federation, *International Textile Machinery Shipment Statistics*, 2002.

²⁶ Ibid.

²⁷ *Textile and Apparel from Turkey: A Summary of Turkey's Potential*.

²⁸ Total investment in the textile and apparel sector in Turkey exceeds \$150 billion, of which more than \$50 billion has been invested during the last 10 years ("Turkish Textile and Apparel Sector," Foreign Economic Relations Board, July 2002, p. 2).

²⁹ "Turkish Textile and Apparel Industry Position For EU-Turkey Customs Union and EU-Third Country Trade Relations," Turkish Textile Employers' Association, 2001.

³⁰ "Turkish Textile and Apparel Sector," Foreign Economic Relations Board, July 2002, p. 13.

³¹ Siemon Smid and Fatma Taskesen, "Textile, Apparel and Leather Sector in Turkey," PWC Consulting, Sept. 2002, p. 13.

³² "Turkish Textile and Apparel Sector," p. 14.

mainly provided in the form of investment allowances, exemption from various taxes,³³ and credits from a newly created Investment Fund. The apparel and cotton fabric industry has received various incentives from the Government of Turkey, totaling \$600,000³⁴ in 2001 (10 percent of all incentives provided by the government in that year). The EU-Turkey customs union agreement forced the Government of Turkey to eliminate certain export subsidies that had the effect of reducing the cost of imported goods for Turkish firms producing for export.³⁵ The level of state subsidies to promote individual sectors of the Turkish economy are considered to be low in comparison to Turkish GDP.³⁶

Domestic policies

The government has also taken measures to stimulate domestic cotton production to meet the growing needs of the domestic textile industry. The Agricultural Sales Cooperative Unions (ASCUs), quasi-governmental entities, buy cotton produced by member farmers at government-announced prices. Cotton production is expected to increase in the near future due to the implementation of the GAP, a rural and urban development project whose aim is to improve living standards in southeastern Anatolia. The GAP consists of a series of dams, power stations, tunnels and canals to generate electricity and to irrigate the area surrounding the Tigris and Euphrates Rivers.³⁷ Upon completion of the GAP, Turkey's cotton production is anticipated to double from 1998 levels. However, the major challenges to increasing cotton production in Turkey in the past reportedly have been a shortage of farm labor, which has resulted in higher labor costs for harvesting; the high cost of capital, since cotton production is more capital-intensive than other crops; and the growing trend among textile firms to blend synthetic fibers with cotton to reduce costs.

Trade policies

Since implementation of the EU-Turkey customs union agreement, Turkey and the EU have eliminated all customs duties on imports of industrial products between the two regions. In addition, the EU has eliminated all quantitative quota restrictions on Turkish textile and apparel goods. As a condition of the EU-Turkey customs union agreement, common customs

³³ Turkey has established 19 free-trade zones, which permit the duty-free entry of textile products. The most prominent of these are located in Mersin, Istanbul (AHL, Tuzla, and Catalca), Antalya, Ismi, Adana, and Corlu. Incentives offered by these free-trade zones include--100-percent exemption from Turkish income and corporate taxes, exemption from the European value-added tax on the purchase of machinery and equipment, exemption from banking and credit charges; and exemption from customs tariffs on imports into the zones.

³⁴ Derived using a 2001 average foreign exchange rate of 1,669,000 Turkish lire per U.S. dollar.

³⁵ *Textile and Apparel from Turkey: A Summary of Turkey's Potential*.

³⁶ Smid and Taskesen, p. 26.

³⁷ Cotton is currently cultivated on about 80 percent of a newly irrigated area in the Harran Plateau in southeastern Anatolia. According to the initial implementation plan, cotton production is projected to reach 1.3 million short tons by 2005 and Turkey would again become a net exporter of cotton (See "The Cotton Industry in Turkey.")

tariffs are applied on industrial goods imported from third countries.³⁸ In accordance with the EU-Turkey customs union agreement, the Government of Turkey has signed free-trade agreements (FTAs) with third countries, including Israel in 1997; Romania, the Czech Republic, Slovakia, Lithuania, Hungary, and Estonia in 1998; Bulgaria in 1999; and Poland, Macedonia, Latvia and Slovenia in 2000. Agreements with Bosnia Herzegovina and Croatia were signed in 2002 and are awaiting parliamentary approval for implementation.³⁹ Since 1996, Turkish import duties on goods from third countries have dropped from 25-30 percent to 6 percent ad valorem in 2000.⁴⁰ As part of its EU-Turkey customs union obligations and the EU bilateral and unilateral control systems, Turkey imposes quantitative textile import quotas, subject to monitoring, on certain countries.⁴¹

Foreign Trade

Turkey's trade surplus in textiles and apparel rose by 5 percent during 1997-2001 to \$8.4 billion, reflecting an increase of 5 percent in exports, to \$10.6 billion, and a decline in imports of 15 percent, to \$2.2 billion (table L-10). Apparel accounted for 63 percent of sector exports in 2001, while textiles accounted for 86 percent of sector imports in 2001. Turkish exports of textiles and apparel increased sharply immediately after implementation of the EU-Turkey customs union agreement in 1996. Although Turkey has concentrated on producing higher value-added textile and apparel products in recent years, T-shirts, singlets, and related garments are still the principal apparel items exported by Turkey.

Imports

Major textile materials imported by Turkey include fibers, yarns, and fabrics, while major apparel items imported include knitted and woven ready-made garments. Turkey has largely imported intermediate textile inputs for use in the manufacture and export of finished apparel items. Cotton textiles, in the form of fiber, yarn, and woven fabric, accounted for 34 percent of Turkey's total textile imports in 2000, followed by manmade staple fibers, yarns and fabrics with 22 percent and manmade filaments, yarns and fabrics with 21 percent of total textile imports.⁴²

³⁸ "Turkish Textile and Apparel Industry Position."

³⁹ Correspondence received from Fikret Artan, First Commercial Counselor, Embassy of the Republic of Turkey, Office of the Commercial Counselor, Washington, DC, Dec. 30, 2002.

⁴⁰ U.S. Department of State telegram ITC488, "EU Customs Union - Istanbul's Textile Sector," p. 3.

⁴¹ Textile quotas, subject to EU monitoring, were applied on textile imports from Belarus, China, Indonesia, South Korea, Macau, Malaysia, Egypt, Pakistan, Sri Lanka, Taiwan, and Vietnam in 2000 as part of the EU bilateral control system and on textile imports from Argentina, Brazil, the Philippines, India, Hong Kong, Uzbekistan, Peru, Singapore, Thailand, North Korea, and Yugoslavia, under the EU's unilateral control system in 2001.

⁴² *Textile and Apparel from Turkey: A Summary of Turkey's Potential.*

According to UN trade data as reported by Turkey, EU nations supplied 47 percent of all Turkish textile and apparel imports in 2001. EU nations supplied 46 percent of all Turkish textile imports in 2001, led by Italy with 16 percent and followed by South Korea and China, with 8 percent and 7 percent, respectively, of total textile imports. The EU was the leading supplier of apparel to Turkey in 2001 with 56 percent of the total, again led by Italy with 23 percent and followed by China with 14 percent of total apparel imports. Turkish textiles and apparel imports from EU nations nearly tripled following the EU-Turkey customs union agreement. Turkish imports of textiles from the United States declined 24 percent during 1997-2001 to \$59 million in 2001 while Turkish imports of apparel from the United States during this period declined 89 percent to \$4 million. Imports from the United States consisted largely of manmade and artificial fibers and fabrics.

Exports

The EU was the largest export market for Turkish textiles and apparel during 1997-2001, absorbing 65 percent of Turkish exports in 2001 (table L-11). Turkey's textile and apparel exports to the EU increased by 6 percent during 1997-2001 to \$6.9 billion. Turkish products are competitive in the EU due to a combination of favorable prices, high product quality, quick response times, and integration within the EU. Turkey was the second-leading apparel supplier (71 percent of its exports) and the fifth-leading textile supplier (51 percent of its exports) to the EU in 2001. Germany was Turkey's single-largest market for textile and apparel exports in 2001, accounting for 27 percent of the total, followed by the United States with 14 percent of the total. Turkish exports of textiles to the United States increased 44 percent during 1997-2001 to \$412 million in 2001, while Turkish apparel exports to the United States increased 62 percent during the period to \$1 billion as Turkey concentrated on diversifying its export representation beyond the EU. Although the EU is Turkey's principal foreign market, the younger demographic age of the United States as compared with Europe serves as an important factor for Turkey to consider when developing a marketing strategy for future apparel exports.⁴³

Principal apparel products exported by Turkey consist of T-shirts, singlets, and related garments; women's and girls' garments such as suits, jackets, blazers, and men's or boy's suits, ensembles, jackets, blazers, and trousers. Knitted apparel accounted for 51 percent of Turkey's total apparel exports in 2000, followed by woven apparel (35 percent) and made-up articles (14 percent).⁴⁴ Major textile products exported in 2000 consisted of woven cotton fabrics; cotton fabrics blended with manmade fibers; and woven synthetic fabrics and their blends with cotton or wool. Based on official U.S. imports statistics, between 1997 and 2002, textiles and apparel imports from Turkey increased annually from 395 million SMEs to 1.1 billion SMEs; U.S. imports of textiles from Turkey totaled 721 million SMEs in 2002 and accounted for 68 percent of the total (table L-12).

The United States applied quotas on 22 categories of textile and apparel products exported from Turkey in 2002. Turkey competes with other major suppliers (such as China and India)

⁴³ Information provided by the Turkish Clothing Manufacturers Association, Dec. 30, 2002.

⁴⁴ *Textile and Apparel from Turkey: A Summary of Turkey's Potential.*

that currently are also constrained by U.S. import quotas in those categories principally supplied by Turkish producers. Turkey filled between 95 and 100 percent of its quota in seven product categories in 2002, largely in cotton-related articles.⁴⁵ Turkey was the second-leading foreign supplier (behind China) to the United States of cotton robes and dressing gowns in 2002, third-leading supplier of yarn containing 85 percent or more by weight of synthetic staple fiber, and the fifth-leading supplier of cotton sheets.

On the basis of interviews by Commission staff with U.S. retailers and other importers of textiles and apparel, Turkey's principal competitive advantages in the U.S. market as compared with its major competitors in certain Asian countries, including India and some ASEAN suppliers, are shorter lead times from order placement to delivery of goods to east coast U.S. ports, partly reflecting faster shipping times. For example, shipments from India reportedly take 45 to 60 days, but shipments from Turkey reportedly take about 14 to 18 days. In addition, the quality of Turkish goods is high, due in part to the country's skilled workforce and state-of-the-art manufacturing equipment, while prices for apparel and textile items are competitive with those of many of the major world exporters. Industry sources report that Turkey is skilled in making tailored clothing and can manufacture apparel on a short turnaround basis. According to the U.S. importers, Turkey's major competitive disadvantage in the U.S. market is that the quality of its apparel items is probably somewhat below that of similar goods from Hong Kong or China and that Turkish apparel prices are also higher. These same U.S. customers for Turkish apparel and textiles indicated that when quotas are eliminated in 2005, there might be some shift in supply patterns from Turkey to China and Hong Kong because of the anticipated reduction in the prices of goods from these two Asian suppliers.

⁴⁵ Textile and apparel categories in which Turkey filled its quotas in 2002 were cotton and manmade-fiber knit shirts and blouses; cotton dressing gowns, robes etc.; cotton and manmade fiber nightwear and pajamas; cotton and manmade-fiber underwear; cotton sheets; women's and girls' wool slacks, and shorts; and yarn containing 85 percent or more by weight of synthetic staple fiber.

Table L-10
Turkey: Statistical profile of textile and apparel sector and foreign trade, 1997-2001

Item	1997	1998	1999	2000	2001
Number of textile establishments (1,000)	49	49	49	49	49
Number of textile workers¹ (1,000)	478	481	488	501	503
Production of selected products:					
Yarns (1,000 metric tons)	866	898	913	1,005	(²)
Fabrics (1,000 metric tons)	450	440	420	480	(²)
Apparel (1,000 metric tons)	237	242	223	243	(²)
Home textiles (1,000 metric tons)	167	183	252	233	242
Installed spinning capacity:					
Short-staple spindles (1,000 spindles)	5,382	5,679	5,465	5,554	5,737
Long-staple spindles (1,000 spindles)	743	743	743	743	743
Open-end rotors (1,000)	388	418	415	430	460
Installed weaving capacity:					
Shuttleless looms	18,000	16,000	16,000	16,000	16,000
Shuttle looms	40,000	30,000	30,000	30,000	30,000
Average total textile labor cost per operator hour³ ..	\$3.30	\$3.30	\$4.30	\$4.20	(²)
Mill fiber consumption:					
Cotton (1,000 metric tons)	781.9	909.2	972.1	985.6	1,075.2
Manmade fibers (1,000 metric tons)	772.2	826.6	906.6	990.0	1,012.0
Wool (1,000 metric tons)	49.3	53.7	53.8	46.0	46.6
Total (1,000 metric tons)	1,603.4	1,789.5	1,932.5	2,021.6	2,133.8
Foreign trade:					
Exports:					
Textiles (million dollars)	3,181.4	3,344.8	3,275.6	3,483.7	3,759.8
Apparel (million dollars)	6,868.3	7,260.6	6,715.7	6,719.1	6,841.2
Total (million dollars)	10,049.7	10,605.4	9,991.3	10,202.7	10,601.0
Imports:					
Textiles (million dollars)	2,320.8	2,314.5	1,903.9	2,119.6	1,916.6
Apparel (million dollars)	233.1	240.7	202.4	261.4	237.0
Total (million dollars)	2,553.9	2,555.2	2,106.2	2,381.0	2,153.7
Trade balance:					
Textiles (million dollars)	860.6	1,030.3	1,371.7	1,364.0	1,843.2
Apparel (million dollars)	6,635.2	7,019.9	6,513.3	6,457.7	6,604.2
Total (million dollars)	7,495.8	8,050.2	7,885.1	7,821.7	8,447.3

¹ Employment data for apparel are not available.

² Not available.

³ Data for 1997-2000, which include social charges, are from the International Textile Manufacturers Federation, *Country Statements 2002*, and selected back issues. According to data of Werner International, the average compensation (including fringe benefits) of production workers in Turkey's spinning and weaving industry was \$2.13 per hour in 2002.

Note.—Because of rounding, figures may not add to totals shown.

Source: Industry data from the Turkish State Institute of Statistics and State Planning Organization; International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and *Country Statements 2002*, and selected back issues; Geerdes International, Inc., Richmond, VA, facsimile to USITC staff, Feb. 4, 2003. Trade data are United Nations data as reported by Turkey.

Table L-11
Turkey: Exports of textiles and apparel, by selected markets, 1997-2001

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States	219	251	318	387	386
European Union	1,535	1,717	1,739	1,758	1,874
Canada	28	44	24	28	25
Subtotal	1,782	2,012	2,081	2,173	2,286
All other:					
Unspecified	255	288	191	232	263
Russia	138	90	55	58	89
Israel	59	74	90	88	86
Other	947	882	859	933	1,036
Subtotal	1,399	1,333	1,195	1,311	1,474
Grand total	3,181	3,345	3,276	3,484	3,760
Apparel (SITC 84):					
Quota markets:					
United States	651	755	846	1,062	1,067
European Union	4,553	4,886	4,771	4,873	5,004
Canada	16	22	27	36	44
Subtotal	5,220	5,664	5,644	5,971	6,115
All other	1,648	1,597	1,071	748	726
Grand total	6,868	7,261	6,716	6,719	6,841
Textiles and apparel:					
Quota markets:					
United States	870	1,006	1,164	1,449	1,453
European Union	6,087	6,604	6,510	6,630	6,879
Canada	45	65	51	64	70
Subtotal	7,002	7,675	7,725	8,144	8,401
All other	3,047	2,930	2,266	2,059	2,200
Grand total	10,050	10,605	9,991	10,203	10,601
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles	56	60	64	62	61
Apparel	76	78	84	89	89
Average	66	69	74	76	75

Note.—Because of rounding, figures may not add to totals shown.

Source: Compiled from United Nations data.

Table L-12
Textiles and apparel: U.S. general imports from Turkey, by specified product categories,¹
1997-2002

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	394,563	511,904	711,634	866,479	871,097	1,068,237
1	Apparel	174,149	202,582	229,945	297,708	305,709	346,887
2	Textiles	220,414	309,322	481,689	568,771	565,388	721,349
11	Yarns	58,724	60,688	123,779	114,127	86,880	81,081
12	Fabrics	80,089	110,913	135,608	143,462	156,646	238,209
14	Other miscellaneous articles	81,601	137,720	222,303	311,182	321,862	402,060
30	Cotton textiles and apparel	235,242	321,321	432,675	491,290	496,787	565,718
31	Cotton apparel	160,987	186,409	209,984	271,930	273,946	299,803
32	Cotton textiles	74,256	134,912	222,691	219,359	222,842	265,916
40	Wool textiles and apparel	2,742	2,896	2,601	3,626	4,904	5,130
60	Manmade-fiber textiles and apparel	156,070	186,992	275,485	370,151	366,863	494,895
61	Manmade-fiber apparel	11,317	13,990	17,961	22,528	25,938	40,801
62	Manmade-fiber textiles	144,753	173,001	257,524	347,623	340,925	454,094
80	Silk blend/veg fiber textiles/apparel	509	695	872	1,413	2,543	2,493
219	Duck fabric of cotton/manmade fiber	17,312	31,374	33,454	31,573	35,173	53,849
223	Nonwoven fabric	0	1,339	5,134	9,417	14,655	58,689
239	Babies' apparel	2,522	3,181	4,150	6,168	5,688	7,552
300	Carded cotton yarn	14,336	19,579	56,799	40,074	23,030	20,925
301	Combed cotton yarn	2,256	4,983	25,873	23,098	18,879	5,595
332	Cotton hosiery	2,319	2,754	2,907	6,912	10,093	15,489
338	Cotton knit shirts, men/boys	13,245	14,731	12,606	11,109	11,086	16,107
339	Cotton knit shirts, women/girls	17,248	21,127	24,704	28,664	27,462	29,879
340	Cotton not knit shirts, men/boys	2,923	2,173	3,084	3,612	3,903	7,011
341	Cotton not knit blouses	1,806	1,671	2,271	3,424	4,001	4,550
347	Cotton trousers, men/boys	9,468	8,301	10,744	17,293	13,799	11,874
348	Cotton trousers, women/girls	23,329	32,661	37,807	51,627	49,695	47,635
350	Cotton robes	21,094	25,274	25,508	35,722	36,227	42,755
351	Cotton nightwear	35,863	41,085	49,754	55,168	50,172	54,947
352	Cotton underwear	14,311	16,201	20,265	32,128	34,551	34,021
361	Cotton sheets	8,589	11,426	11,269	15,675	13,475	14,284
362	Cotton bedspreads and quilts	3,495	30,400	40,184	45,045	55,975	63,903
363	Cotton terry and other pile towels	1,027	1,286	2,501	4,547	6,559	10,366
369	Other cotton manufactures	12,085	20,099	28,062	32,320	32,283	52,510
600	Textured filament yarn	35,904	25,202	21,957	28,451	11,271	13,643
604	Yarn of synthetic staple fiber	2,075	6,964	9,777	14,458	25,953	25,126
619	Polyester filament fabric, lightweight	6,327	12,064	17,011	35,478	42,497	48,345
666	Other manmade-fiber furnishings	24,831	37,319	95,465	135,912	127,479	140,201
669	Other manmade-fiber manufactures	29,918	34,737	41,918	73,705	81,378	115,560

¹ To administer the U.S. textile and apparel quota program, articles are grouped under 3-digit category numbers, which cover many 10-digit statistical reporting numbers under which goods are classified from statistical purposes in the Harmonized Tariff Schedule of the United States (HTS). The 1-digit and 2-digit numbers represent specific levels of import aggregation for articles covered by the quota program (e.g., the number "1" represents total imports of apparel, while "31" represents total imports of cotton apparel).

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