# 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 frm 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.

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[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 |
|---|---|---|---|---|---|
| | | | *Million dollars* | | |
| 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.

# Indonesia[1]

## *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

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[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 old[10] 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

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[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.

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[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.

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[16] "Indonesian Textile Industry, Challenge to Improve Prices," *Asian Textile Business*, July 2002, p. 13.

[17] European Commission DG Trade, Systèmè 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 |
|---|---|---|---|---|---|
| | *Million dollars* | | | | |
| 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 |
| | *Percent* | | | | |
| 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. No. | Description | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|
| | | | | *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. No. | Description | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|
| | | *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*.

# Malaysia[1]

## *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.

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[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 Structure[5]

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]

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[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

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[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 (*million dollars*) | 1,289.3 | 1,090.9 | 1,116.9 | 1,265.6 | 1,051.3 |
| Apparel (*million dollars*) | 2,337.9 | 2,298.9 | 2,249.4 | 2,252.7 | 2,061.1 |
| Total (*million dollars*) | 3,627.2 | 3,389.8 | 3,366.3 | 3,518.3 | 3,112.4 |
| Imports: | | | | | |
| Textiles (*million dollars*) | 1,222.3 | 922.3 | 1,012.0 | 1,111.0 | 931.9 |
| Apparel (*million dollars*) | 155.8 | 107.9 | 125.1 | 149.0 | 165.8 |
| Total (*million dollars*) | 1,378.1 | 1,030.2 | 1,137.1 | 1,260.0 | 1,097.7 |
| Trade balance: | | | | | |
| Textiles (*million dollars*) | 67.0 | 168.6 | 104.9 | 154.6 | 119.4 |
| Apparel (*million dollars*) | 2,182.1 | 2,191.0 | 2,124.3 | 2,103.6 | 1,895.3 |
| Total (*million dollars*) | 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 |
|---|---|---|---|---|---|
| | *Million dollars* | | | | |
| 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 |
| | *Percent* | | | | |
| 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. No. | Description | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|
| | | (*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/.*

# Philippines[1]

## *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 force[2] 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 workers[3] (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.

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[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 production[5] 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

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[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

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[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]

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[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]

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[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, "OSEDC Region III Soaring High," news release, Jan. 13, 2003, found at *http://www.gteb.gov.ph/NEWS/03/Jan/osedc,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

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[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 shipping[43] and cargo handling in ports[44] 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

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[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_nhcruz-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.phividec authority.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

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[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.baharattextile.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

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[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://wwwl.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.comewsitems/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,

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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.hp/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 by12 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.

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[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** *(percent)* | 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 (*1,000*) | 950,000 | 950,000 | 950,000 | 950,000 | 950,000 |
| Long-staple spindles (*1,000*) | 13,000 | 13,000 | 13,000 | 13,000 | 13,000 |
| Open-end rotors (*1,000*) | 50,000 | 50,000 | 50,000 | 50,000 | 50,000 |
| **Installed weaving capacities:** | | | | | |
| Shuttleless looms for the cotton sector (*number*) | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 |
| Shuttle looms for the cotton sector (*number*) | 7,000 | 7,000 | 7,000 | 7,000 | 7,000 |
| **Purchases of large circular knitting machines** (*number)* | ([1]) | 31 | 125 | 49 | 30 |
| **Foreign trade:** | | | | | |
| Exports: | | | | | |
| Textiles (*million dollars*) | 312.6 | 268.9 | 240.9 | 281.2 | 238.4 |
| Apparel (*million dollars*) | 2,371.1 | 2,372.1 | 2,299.3 | 2,595.3 | 2,443.7 |
| Total (*million dollars*) | 2,683.7 | 2,641.0 | 2,540.0 | 2,876.5 | 2,682.1 |
| Imports: | | | | | |
| Textiles (*million dollars*) | 1,314.8 | 1,194.1 | 1,237.1 | 1,249.0 | 1,151.6 |
| Apparel (*million dollars*) | 84.4 | 69.7 | 66.5 | 74.0 | 68.9 |
| Total (*million dollars*) | 1,399.2 | 1,263.8 | 1,303.5 | 1,323.0 | 1,220.5 |
| Trade balance: | | | | | |
| Textiles (*million dollars*) | -1,002.2 | -925.2 | -996.2 | -967.8 | -913.2 |
| Apparel (*million dollars*) | 2,286.7 | 2,302.4 | 2,232.8 | 2,521.3 | 2,374.8 |
| Total (*million dollars*) | 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, Manilla, 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 |
|---|---|---|---|---|---|
| | *Million dollars* | | | | |
| 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 |
| | *Percent* | | | | |
| 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. No. | Description | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|
| | | (*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/.*

# Thailand[1]

## *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]

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[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 Thongrung, "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 fibers[9]) 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

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[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

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[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

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[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]

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[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 certification[44] 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

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[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]

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[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]

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[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 production[63] 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

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[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 industries[75] 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

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[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

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[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]

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[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 Sectretariat, *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

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[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 |
|---|---|---|---|---|---|
| | *Million dollars* | | | | |
| 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 |
| | *Percent* | | | | |
| 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. No. | Description | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|
| | | (*1,000 square meters equivalent*) | | | | | |
| 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. No. | Description | 1997 | 1998 | 1999 | 2000 | 2001 | 2002 |
|---|---|---|---|---|---|---|---|
| | | (*1,000 square meters equivalent*) | | | | | |
| 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/.*