

**APPENDIX L**  
**EGYPT, ISRAEL, JORDAN, AND**  
**TURKEY**

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## *Overview*

Textiles and apparel constitute Egypt's third-largest industrial sector, behind chemicals and food processing.<sup>2</sup> The textile and apparel sector accounts for about one-quarter of manufacturing employment,<sup>3</sup> 3 percent of gross domestic product (GDP),<sup>4</sup> and 23 percent of total exports.<sup>5</sup>

Egypt's textile and apparel sector historically has been centered around the production of cotton. The government has directed or controlled cotton production, primarily by setting a minimum price for cotton to support farmers. In addition, the government has maintained ownership of textile and apparel plants, mainly to provide stable employment. These policies have had adverse effects on competitiveness, both locally and globally.

In response to increasing global competition, the Egyptian textile and apparel sector has been the target of recent privatization efforts. In addition, there have been efforts to improve technology, attract foreign investment, diversify into manmade fiber-based products, and develop export markets.

Egypt has maintained high trade barriers, both in terms of tariffs and quotas, on its textiles and apparel imports. Absolute quotas on certain sector products were changed to tariffs as a result of the Uruguay Round. In general, sector trade increased during 1997-2001. Exports of fibers and apparel increased, while those of textiles declined. Imports of fibers and textiles declined, while those of apparel rose. Egypt maintained a positive balance of trade in the sector during 1997-2001.

The competitive posture of Egypt's textile and apparel sector is positively influenced by the country's high-quality raw cotton, relatively abundant labor and low labor costs, and location relative to major markets, mainly the United States and the EU. Negative factors include inefficient public sector ownership and other government involvement; high raw-material (mainly cotton) costs owing to government-set minimum prices and high import tariffs; excess employment because of government policy; and low productivity resulting from excess employment and outdated technology reportedly. The Egyptian Government and industry are taking steps to correct these deficiencies.

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<sup>1</sup> Prepared by Douglas Newman, Office of Industries.

<sup>2</sup> Institute of National Planning, *Egypt Human Development Report 2000/2001*, Cairo, 2001, p. 51.

<sup>3</sup> United Nations Industrial Development Organization (UNIDO), *UNIDO Country Industrial Statistics: Egypt*, found at <http://www.unido.org/data/stats/showstat.cfm?cc=EGY-b>, retrieved Jan. 13, 2003.

<sup>4</sup> U.S. Department of State telegram 4106, "Egypt's Textile Industry After Quotas," prepared by the U.S. Embassy, Cairo, Apr. 30, 2002, p. 4. Based on estimated sector output of \$2.5 billion.

<sup>5</sup> See table 1-1 in chapter 1 of this report for data on textile and apparel export market shares for each supplying country covered by this study. Export data are for 2001.

## *Industry Profile*

### **Industry structure and performance**

The Egyptian textile and apparel sector is dominated by cotton fibers and goods. Egypt has a long history and tradition of cotton production, particularly of high-quality, long-staple varieties. Downstream industries are oriented toward production of cotton items.

The textile and apparel sector comprises cotton growing; yarn spinning; fabric weaving, dyeing, and finishing; and the production of garments and other goods. The sector consists of 42 public companies and more than 2,000 private companies that are members of the Egyptian Textile Manufacturers Federation (ETMF), and thousands of small, private operations not in the ETMF.<sup>6</sup> The public companies are controlled by the Textile Industries Holding Company. Efforts to privatize the sector have been under way since the mid-1990s. Sector employment is estimated at about 500,000,<sup>7</sup> with about 131,000 officially reported in public companies in 2001 (table L-1 found at the end of this country profile). The textile and apparel sector accounts for roughly 14 percent of Egypt's manufacturing output,<sup>8</sup> manufacturing accounted for about 19 percent of Egypt's GDP of \$98.5 billion in 2001.<sup>9</sup>

Government involvement in the Egyptian textile industry is extensive but varies somewhat by sector. For example, the Egyptian Government provides production subsidies to cotton farmers and sets grower and export prices. Government-owned firms have dominated the industry since the 1960s, when private firms were nationalized. There are 31 public companies organized into 3 public holding companies—the Holding Company for Spinning and Weaving (12 affiliates); the Holding Company for Textiles Manufacturing and Trade (12 affiliates); and the Holding Company for Cotton and International Trade (7 affiliates).<sup>10</sup> In addition, there are several firms with mixed ownership, usually including banks or foreign governments. According to a 1998 report, public ownership declines as the level of processing increases, from 90 percent in spinning to 60 percent in weaving, 40 percent in knitting, and 30 percent in apparel.<sup>11</sup>

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<sup>6</sup> British Trade International, *Textiles, Interior Textiles & Carpets Market in Egypt*, found at <http://www.tradepartners.gov.uk/textiles/egypt-/opportunities/opportunities.shtml>, retrieved Feb. 10, 2003; American Chamber of Commerce in Egypt, *Egyptian Textile Industry & GATT: Potential & Uncertainty*, Business Studies and Analysis Center, Cairo, July 1998, p. 1.

<sup>7</sup> Hanaa Kheir-El-Din and Hoda El-Sayed, *Potential Impact of a Free Trade Agreement with the EU on Egypt's Textile Industry*, The Egyptian Center for Economic Studies, Cairo, Working Paper No. 15, July 1997, p. 1. See also U.S. Department of State telegram 4106, "Egypt's Textile Industry After Quotas," prepared by the U.S. Embassy, Cairo, Apr. 30, 2002.

<sup>8</sup> Institute of National Planning, *Egypt Human Development Report 2000/2001*, Cairo, 2001, p. 51.

<sup>9</sup> The World Bank Group, Egypt, Arab Rep. at a glance, found at [http://www.worldbank.org/cgi-bin/sendoff.cgi?page=%2Fdata%2Fcountrydata%2Faag%2Fegy\\_aag.pdf](http://www.worldbank.org/cgi-bin/sendoff.cgi?page=%2Fdata%2Fcountrydata%2Faag%2Fegy_aag.pdf), retrieved Feb. 7, 2003.

<sup>10</sup> American Chamber of Commerce in Egypt, p. 4.

<sup>11</sup> Ibid, and Embassy of Egypt, "A Memorandum on Egyptian Export of Yarn, Textile and Ready-Made Garments During 2002," (sourced from the Egyptian Chamber of Textile Industries,) received June 6, 2003.

The Government of Egypt has been pursuing a policy of privatization in the textile and apparel sector for several years. Although a few firms have been privatized, the process has been slower than anticipated, mainly the result of the poor financial condition of the firms. Many firms are undergoing restructuring measures, such as plant closures and renovations, equipment upgrades, and labor reductions, to prepare for privatization.<sup>12</sup>

The Egyptian textile and apparel sector traditionally has relied mainly on domestically produced cotton for inputs. However, owing to government-set prices on raw cotton that are above world prices, firms have been importing cotton under a duty drawback system for products that are exported.<sup>13</sup> Egypt also imports manmade fibers for use as inputs. Recent data are not available on aggregate production in the Egyptian textile and apparel sector. The value of such production totaled about \$2.4 billion in 1997.<sup>14</sup>

Egyptian production of raw cotton has been in a decades-long decline. Production trended downward, from 374,000 metric tons in 1997 to 223,000 metric tons in 2000 before recovering in 2001 to 315,000 metric tons.<sup>15</sup> Virtually all Egyptian cotton production is of long-staple varieties. The primary reason for the decline in production is government-set cotton prices that usually are significantly higher than world prices.<sup>16</sup> Consumption of cotton by domestic textile mills declined by 8 percent during 1997-2001 (table L-1). Also, production is affected by relative returns to growers for cotton and alternative crops, such as rice and wheat, and government-guaranteed purchases and subsidies for cotton. Favorable cotton prices and returns resulted in the rebound in production in 2001.<sup>17</sup>

Egyptian production of yarns decreased steadily during 1997-2001 by nearly a third (table L-1). The decline was driven by production of cotton yarn, which declined nearly 50 percent during the period to 125,000 metric tons in 2001. Production of yarn from manmade fibers increased 42 percent during the period to 78,700 metric tons in 2001. The decline in cotton yarn production resulted from relatively high domestic cotton prices and inefficiencies in the dominant publically owned sector.

Egyptian production of fabrics also declined during 1997-2001, by slightly more than 50 percent (table L-1). The bulk of production and of the decline was accounted for by cotton woven fabric, which accounted for 78 percent of total production in 2001. As with yarns, high domestic cotton prices and public-sector inefficiencies contributed to the decline.

Egyptian production of apparel is estimated to have totaled \$4.3 billion in 2001, up 44 percent from 1999 (table L-1). The Egyptian apparel industry is dominated by private firms, which are more efficient than publically owned operations. Also, this industry utilizes

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<sup>12</sup> Carana Corp. Privatization Coordination Support Unit, *Privatization in Egypt Quarterly Review July-Sept. 2000*, Cairo, p. 13.

<sup>13</sup> British Trade International, *Textiles, Interior Textiles & Carpets Market in Egypt*, American Chamber of Commerce in Egypt, p. 10.

<sup>14</sup> American Chamber of Commerce in Egypt, p. 1. Data source is the Egyptian Textile Manufacturers Association; data converted from 8 billion Egyptian pounds using an exchange rate of 1 U.S. dollar=0.29487 Egyptian pounds.

<sup>15</sup> USDA, FAS, psd online, found at <http://www.fas.usda.gov/psd>, retrieved Jan. 22, 2003.

<sup>16</sup> USDA, FAS, *Egypt, Cotton and Products Annual, 2001*, GAIN Report #EG1013, May 31, 2001, p. 2.

<sup>17</sup> Ibid, GAIN Report #EG2012, May 29, 2002, p. 2.

a variety of inputs and is not as dependent as the spinning and weaving industries on high-priced, domestically produced cotton.

Egyptian consumption of fibers increased by 4 percent during 1997-2001. Cotton fiber accounted for the bulk of consumption, 53 percent in 2001. Declines in yarn and fabric production contributed to the negative trend in consumption during the period.

In 1997, exports accounted for about 37 percent of the value of production in the Egyptian textile and apparel sector.<sup>18</sup> Exports of raw cotton accounted for about 27 percent of domestic production in 2001.<sup>19</sup>

Egypt is a relatively small global producer of textiles and apparel. In 2000, Egypt accounted for about 2 percent of the value added by developing countries in the textile industry and less than that in the apparel, leather, and footwear industries; this share is even smaller for the global total.<sup>20</sup>

Although Egypt is a relatively small global producer of all cotton, accounting for about 1.5 percent of the quantity of world production in 2001, it is the leading global producer of long-staple, or extra-fine, cotton. In 2001, Egypt produced an estimated 39 percent of the quantity of total global production of extra-fine cotton.<sup>21</sup>

The Egyptian textile and apparel sector produces a wide range of products serving a variety of market and price segments. Egyptian cotton generally is regarded as premium quality. However, some Egyptian yarns and fabrics have been considered to be of low quality.<sup>22</sup>

## **Factors of production**

The Egyptian textile and apparel sector enjoys access to high-quality raw materials and an ample, low-cost supply of labor. However, the sector has been lacking in the application of new technology, a situation that is of concern and is being addressed by the sector.

### *Raw materials*

The sector supply chain has traditionally originated with raw cotton. As noted above, Egypt is a major producer of high-quality, long-staple cotton varieties. However, Egyptian cotton is relatively high in price and accounts for a large share of finished good production costs, as much as about two-thirds.<sup>23</sup> Also, according to the government, the industry does not use all of its high quality cotton to produce “special and distinguished kinds of spinning and

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<sup>18</sup> American Chamber of Commerce in Egypt, p. 1.

<sup>19</sup> International Cotton Advisory Committee, *Extra-Fine Cotton This Month*, Dec. 10, 2002.

<sup>20</sup> UNIDO, *International Yearbook of Industrial Statistics 2002*, Vienna, 2002, p. 49.

<sup>21</sup> International Cotton Advisory Committee, *Extra-Fine Cotton This Month*, Dec. 10, 2002.

<sup>22</sup> U.S. Department of State telegram 4106, “Egypt’s Textile Industry After Quotas,” prepared by the U.S. Embassy, Cairo, Apr. 30, 2002, pp. 6 and 9.

<sup>23</sup> Bharat Textile.com, “Egypt’s Textile Industry Suffers from Excessive State Intervention,” found at <http://www.bharattextile.com/newsitems/1974817>, retrieved Dec. 11, 2002.

textiles.”<sup>24</sup> In addition, there is insufficient production of short and medium staple cotton.<sup>25</sup> As a result, downstream segments—mainly participants in a drawback program for end products that are exported—also import yarns and fabrics. Although the manmade fiber-based segment is small compared with the cotton-based segment, Egypt has been increasing its production of manmade fibers in recent years.

Government policies have had a major impact on the availability and cost of raw materials to the Egyptian textile and apparel sector. High government-set raw cotton prices and import bans and high tariffs on inputs have diminished the competitiveness of the sector. Although import bans have been lifted, high tariffs still limit access to critical inputs such as yarns and fabrics.

### *Labor*

The Egyptian textile and apparel sector has access to an ample supply of labor. The sector is a major employer, accounting for about one-quarter of total manufacturing employment.<sup>26</sup> Egyptian labor costs are among the lowest in the world. For example, one survey estimated hourly labor costs in the Egyptian spinning and weaving segment at \$1.01 in 2002, compared with \$15.13 in the United States and \$18.91 in Germany, among major markets, and \$2.13 in Turkey, a proximate competitor.<sup>27</sup> Of the countries surveyed, such labor costs were lower in several major textile and apparel producing countries in Asia, including Bangladesh, China, India, Indonesia, and Pakistan. Another survey estimated hourly labor costs at \$0.80 in Egypt’s textile industry in 2001 and \$0.77 in its apparel industry in 2002.<sup>28</sup>

Although labor costs are low, production inefficiencies have mitigated potential advantages. The current privatization effort is addressing this situation. The restructuring and privatization of the public companies is resulting in a substantial reduction in the labor force. The number of textile and apparel workers in the public sector fell by 26 percent to 131,000 during 1997-2001.<sup>29</sup> Restructuring plans for two large, public, spinning and weaving companies in 2000 called for the reduction of nearly 10,000 jobs.<sup>30</sup> These reductions are occurring in concert with efforts to improve and update technology in the sector in order to attract investment.

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<sup>24</sup> Embassy of Egypt, “A Memorandum on Egyptian Exports of Yarn, Textile and Ready-Made Garments during 2002,” received June 6, 2003.

<sup>25</sup> Ibid.

<sup>26</sup> UNIDO, *UNIDO Country Industrial Statistics: Egypt*.

<sup>27</sup> Werner International, *Spinning and Weaving Labor Cost Comparisons 2002*.

<sup>28</sup> International Textile Manufacturers Federation, *Country Statements 2002*, Zürich, Sept. 2002, p. 40, and Jassin - O’Rourke Group, *Global Competitiveness Report: Selling to Full Package Providers*, New York, NY, Nov. 15, 2002.

<sup>29</sup> ITMF, *Country Statements 2002*, and prior years.

<sup>30</sup> Carana Corp., p. 13.

## Technology

The Egyptian textile and apparel sector has been utilizing outdated technology, particularly in the government-owned spinning and weaving segment. Most of Egypt's spinning machines consist of ring spinning frames with short-staple spindles as opposed to open-end frames (table L-1). Most of the spinning sector (90 percent of which is owned by the government) uses old equipment.<sup>31</sup> In the weaving and knitting segment, 10 percent of the machinery is relatively new, that is, no more than 5 years old.<sup>32</sup> The weaving segment comprises a large share of outdated shuttle looms as opposed to more efficient and versatile shuttleless looms, which has contributed to low product quality and production inefficiencies that have limited Egypt's competitiveness. A protected domestic market has contributed to this situation. However, the sector is upgrading its technology, largely in response to restructuring and privatization efforts. For example, restructuring plans of two large, public, spinning and weaving companies in 2000 included approximately \$51 million in investments to renovate and upgrade production facilities.<sup>33</sup> Another indication of the level of technology employed by the sector is the type of machinery used and the ratio of recent machinery shipments to the installed capacity. Although short-staple spindles still dominate the spinning sector and shuttle looms account for the bulk of weaving machines, recent shipments (1992-2000) of these types of machines accounted for a negligible share of their installed capacity. Shipments of long-staple spinning machines during 1992-2000 accounted for two-thirds of installed capacity in 2000 while shipments of shuttleless looms during the period accounted for more than three-fourths of such capacity. In the dyeing and finishing segment, 97 percent of the machinery is reportedly over 20 years old.<sup>34</sup> Reportedly, about 40 percent of the apparel sector uses modern equipment.<sup>35</sup>

## Investment

Foreign investment in Egypt's textile and apparel sector is regulated by the General Authority for Investment and the free zones (GAFI) under Investment Incentives and Guarantees Law 8 of 1997.<sup>36</sup> Under this law, which also provides investment incentives, foreign investors are permitted 100-percent ownership and can repatriate profits and capital. Also, the law provides guarantees against confiscation, sequestration and nationalization. Incentives include tax holidays and exemptions.<sup>37</sup>

Barriers to foreign investment in Egypt are structural. Foreign investors in Egypt have identified the following obstacles to establishing and operating a business in Egypt: political

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<sup>31</sup> Embassy of Egypt, "A Memorandum on Egyptian Exports of Yarn, Textile and Ready-Made Garment During 2002," received June 6, 2003.

<sup>32</sup> Ibid.

<sup>33</sup> Ibid.

<sup>34</sup> Embassy of Egypt, "A Memorandum on Egyptian Exports of Yarn, Textile and Ready-Made Garment During 2002," received June 6, 2003.

<sup>35</sup> Ibid.

<sup>36</sup> U.S. Department of State, *Investment Climate Report Egypt July 2002*, prepared by the U.S. Embassy, Cairo, found at <http://www.usembassy.egnet.net/invclrep.pdf>, retrieved Feb. 19, 2003, p. 2.

<sup>37</sup> United Nations Conference on Trade and Development (UNCTAD), *Investment Policy Review Egypt*, 1999, pp. 27-33.

stability, availability of business information, predictability of macroeconomic conditions, tax regime, dispute settlements, labor laws, labor skills, business establishment procedures, adequacy of investment incentives, customs procedures, tariff levels, scope and pace of privatization, distribution channels, unofficial payments, access to credit, and land tenure policy.<sup>38</sup>

There has been an increase in foreign investment in Egyptian textile and apparel plants in recent years, particularly in the manmade-fiber segment. The largest project is a \$650 million plant to produce polyester products, including chips, yarn, and fabric, which will be the largest such plant in the Middle East region and will include investors from Saudi Arabia.<sup>39</sup> Other recent investment activity include a \$33 million polyester fabric plant;<sup>40</sup> a \$35 million yarn, textiles, and garment factory, with investors from the United Arab Emirates;<sup>41</sup> and a knitwear plant with British investors.<sup>42</sup>

## ***Government Policies***

Government policies have had a major impact on the structure and competitiveness of the Egyptian textile and apparel sector. Domestic and trade policies designed to protect the domestic industry and provide employment have stifled growth and productivity. Recognizing the need to respond to increasing competition in domestic and export markets, the government has undertaken major policy reforms in recent years, including privatization of public enterprises and import liberalization.

### **Domestic policies**

Domestic policies directed at the textile and apparel sector in Egypt have focused on setting prices for cotton as well as state ownership of much of the spinning, weaving, and apparel segments. The government-mandated minimum price for cotton often has been higher than the world price; Egypt exports a large share of its cotton, particularly extra-long-staple varieties. As noted above, this also creates artificially high input prices for domestic downstream industries.

The Egyptian Government currently is privatizing publically owned textile and apparel plants. However, after an initial batch of sales, the process has slowed. The most efficient firms were sold first, and the remaining facilities are unattractive to investors. Also, inflated

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<sup>38</sup> Ibid., p. 24.

<sup>39</sup> Saudi Egyptian Petrochemical Co., news, found at <http://www.sepco-eg.com>, retrieved Nov. 15, 2002.

<sup>40</sup> Aroq Limited, Just-style.com, "EGYPT: New \$33m Fabric Plant To Be Built," June 25, 2002, found at [http://just-style.com/news\\_print.asp?art=25399](http://just-style.com/news_print.asp?art=25399), retrieved June 27, 2002.

<sup>41</sup> Aroq Limited, Just-style.com, "Egypt: New \$35m Textile Plant Announced," May 14, 2002, found at [http://just-style.com/news\\_print.asp?art=24775](http://just-style.com/news_print.asp?art=24775), retrieved Oct. 25, 2002.

<sup>42</sup> Aroq Limited, Just-style.com, "EGYPT: UK Knitter Cloverbrook To Open Fabric Plant," Oct. 9, 2002, found at [http://just-style.com/news\\_print.asp?art=25399](http://just-style.com/news_print.asp?art=25399), retrieved Oct. 25, 2002.

asset valuations deterred private investors.<sup>43</sup> Restructuring efforts are under way to improve the marketability of the remaining firms.

## **Trade policies**

Egypt maintains relatively high tariffs on imports of textiles and apparel. Until recently, there were bans on imports of most textiles and apparel. As a result of the Uruguay Round, Egypt committed to lift these restrictions. However, tariffs were set at high levels. Textile imports were liberalized in 1998 at a tariff rate of 54 percent ad valorem,<sup>44</sup> while apparel imports were liberalized in 2002 with specific rates as high as \$300 per item.<sup>45</sup> Ad valorem equivalents for apparel duties range between 100 percent and 2,500 percent.<sup>46</sup> The duty on imports of raw cotton is 30 percent ad valorem.<sup>47</sup> However, qualified textile and apparel enterprises may receive duty drawbacks on imports of inputs, provided the finished products are exported.

Major nontariff barriers to Egyptian imports of textiles and apparel include untimely and burdensome customs procedures, customs surcharges, and marketing requirements for fabric.<sup>48</sup> These barriers affect downstream exporters, because delays in obtaining inputs affect the exporters' ability to meet deadlines for international orders.<sup>49</sup>

## ***Foreign Trade***

The Egyptian trade balance for textiles and apparel improved by about 2 percent during 1997-2001, reaching a surplus of \$485 million in 2001 (table L-1). The balance improved for apparel (31 percent) but deteriorated for textiles (61 percent). Apparel accounts for the major share of the trade surplus (88 percent in 2001), followed by textiles (12 percent).

Textiles, the leading import category, are used as inputs by downstream producers. Imports declined during 1997-2001, reflecting financial difficulties in the Egyptian textile and apparel sector, as well as general economic conditions.

Egyptian exports of apparel increased from \$594 million to \$683 million during 1997-2001, reflecting the relative efficiency and competitiveness of this industry compared with

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<sup>43</sup> Al-Ahram Weekly Online, "Privatisation Phase Out?," 14-20 Feb. 2002, Issue No. 573, found at <http://weekly.ahram.org.eg/2002/573/ec6.htm>, retrieved Nov. 21, 2002.

<sup>44</sup> World Trade Organization (WTO), *Trade Policy Review Egypt, Report by the Secretariat*, WT/TPR/S/55, May 18, 1999, p. 86.

<sup>45</sup> U.S. Department of State telegram 21518, *2003 National Trade Estimate Report For Egypt*, prepared by the U.S. Embassy, Cairo, Dec. 16, 2002, pp. 3-4; U.S. Department of State telegram 1307, *January Surprise: Egypt Replaces Ban On Garment Imports With Exorbitant Tariffs*, prepared by the U.S. Embassy, Cairo, Feb. 5, 2002, pp. 2-3.

<sup>46</sup> U.S. Department of State telegram 1533, *EU Concludes That Egypt In Breach Of WTO Commitments On Garment Tariffs*, prepared by the U.S. Embassy, Cairo, Feb. 12, 2002, p. 3.

<sup>47</sup> Al-Ahram Weekly Online, "Inadequate Remedies," 5-11 Apr. 2001, Issue No. 528, found at <http://weekly.ahram.org.eg/2001/528/ec2.htm>, retrieved Nov. 21, 2002.

<sup>48</sup> U.S. Department of State telegram 21518, *2003 National Trade Estimate Report For Egypt*, prepared by the U.S. Embassy, Cairo, Dec. 16, 2002, p. 5.

<sup>49</sup> Al-Ahram Weekly Online.

spinning and weaving (table L-1). During the same period, textile exports fell from \$635 million to \$446 million (table L-1), again reflecting industry financial difficulties.

## **Imports**

Egyptian imports of textiles and apparel increased during 1997-2000, before falling to \$644 million in 2001, owing to adverse economic conditions (table L-1). Textiles were the primary import category for most of the period, accounting for 60 percent of the total in 2001. Following were imports of apparel (40 percent).

Egyptian imports of textiles fluctuated during the period under review and ranged between \$387 million in 2001 and \$505 million in 2000. Primary imported products included synthetic filament yarn and cotton woven fabrics. According to UN trade data as reported by Egypt, the EU was the leading source, providing 18 percent of the total in 2001, followed by China (15 percent), Korea (14 percent), and Taiwan (13 percent). The United States remained a relatively minor supplier of Egyptian textile imports during the period.

Egyptian imports of apparel during 1997-2001 peaked at \$365 million in 1999 before falling to \$257 million in 2001. Men's trousers; shawls and scarves; women's nightdresses and pajamas; and women's trousers constituted most of the imports. UN trade data show China was, by far, the major source in 2001, accounting for 57 percent of the total, followed by Turkey (12 percent), the EU (10 percent), and Indonesia (10 percent). There was a general shift to Asian suppliers, as imports from North American sources declined during 1997 - 2001. The United States was a small supplier during the period.

## **Exports**

Exports of textiles and apparel from Egypt fluctuated during 1997-2001, and totaled about \$1.1 billion in 2001 (table L-2). Apparel accounted for the largest share of such exports in 2001 (61 percent), followed by textiles (39 percent). Exports of apparel trended upward during the period under review, while textile exports declined. Exports of textiles exceeded those of apparel in 1997 before trailing the remainder of the period. These trends, in part, reflect lower productivity in the textile industry, which is mostly publicly owned, compared with the more efficient apparel industry, which increasingly is privately owned.<sup>50</sup>

Egyptian exports of textiles declined irregularly by 30 percent during 1997-2001, totaling \$446 million in 2001. Primary products included cotton yarn and linen products and manmade fiber textile floor coverings. UN trade data show major export markets in 2001 included the EU (53 percent of the total) and the United States (29 percent). Exports to the EU declined by 46 percent during the period under review, while those to the United States rose by 56 percent.

Egyptian exports of apparel increased irregularly by 15 percent during 1997-2001, reaching \$683 million in 2001. Primary products included trousers, t-shirts, knit pullovers, and shirts. Principal export markets in 2001 included the United States (60 percent of the total) and the

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<sup>50</sup> Hanaa Kheir-El-Din and Hoda El-Sayed, p. 3.

EU (37 percent). Exports increased to most major markets, with no significant shifts during the period under review.

Official U.S. trade data show that U.S. imports of textiles and apparel from Egypt increased irregularly by 35 percent during 1997-2002 to 265 million square meters equivalent (SMEs) (table L-3), or about 1 percent of total U.S. textile and apparel imports. The imports were almost equally divided between textile and apparel imports in 2002. The principal product category in 2002 was cotton products, which accounted for 86 percent of the total. Manmade fiber products accounted for almost all of the remainder. The 2001 trade-weighted average duty for U.S. imports of textiles from Egypt was 6.3 percent ad valorem, and for apparel, it was 17.2 percent ad valorem.

The primary imported articles from Egypt under quota in 2002 were carded cotton yarn (28 percent of total textiles and apparel imports from Egypt), and cotton trousers and shorts (23 percent). Although most products from Egypt accounted for a relatively minor share of total U.S. imports of textiles and apparel under quota from all sources, carded cotton yarn from Egypt represented 11 percent of this total in 2002, demonstrating the importance of cotton to Egypt's exports.

U.S. quotas on imports of textiles and apparel from Egypt generally were not filled during 1997-2002. Products with the largest quota fill rates in 2002 included cotton knit shirts and blouses (categories 338/339, 74 percent); and carded and combed cotton yarns (categories 300/301, 67 percent). The EU maintains quotas on imports from Egypt of cotton yarn, not put up for retail sale; and of woven fabrics of cotton, other than gauze, terry fabrics, pile fabrics, chenille fabrics, tulle and other net fabrics. During 1997-2001, the quota fill rate for these products declined from 81 percent to 30 percent for yarn and from 76 percent to 19 percent for woven fabrics.<sup>51</sup>

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<sup>51</sup> European Commission, DG Trade, Système Intégré de Gestion de Licenses, found at <http://sigl.cec.eu.int/query.html>, retrieved Dec. 31, 2002.

**Table L-1**  
**Egypt: Statistical profile of textile and apparel sector and foreign trade, 1997-2001**

Item	1997	1998	1999	2000	2001
<b>Textile and apparel share of manufacturing value-added (percent)</b> .....	13	12	12	( <sup>1</sup> )	( <sup>1</sup> )
<b>Number of establishments:</b>					
Textiles and apparel .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	2,830
Apparel .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1,661
Total .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	4,491
<b>Number of textile and apparel workers</b> .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	375,874
<b>Apparel production (million dollars)</b> .....	( <sup>1</sup> )	( <sup>1</sup> )	3,000	3,600	4,320
<b>Yarn production index (1997=100)</b> .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	72.2	75.7
<b>Fabric production index (1997=100)</b> .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	77.9	68.8
<b>Installed spinning capacities:</b>					
Short-staple spindles (1,000) .....	2,988.0	2,600.0	2,450.0	2,600.0	( <sup>1</sup> )
Long-staple spindles (1,000) .....	85.0	85.0	98.0	98.0	( <sup>1</sup> )
Open-end rotors (1,000) .....	41.2	40.0	39.0	41.0	( <sup>1</sup> )
<b>Installed weaving capacities:</b>					
Cotton system:					
Shuttleless looms .....	2,560	2,600	2,600	2,600	( <sup>1</sup> )
Shuttle looms .....	13,150	12,000	10,000	8,000	( <sup>1</sup> )
Wool weaving looms .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1,230	( <sup>1</sup> )
<b>Production of selected products:</b>					
Yarns:					
Cotton (metric tons) .....	245,000	228,000	212,000	180,000	125,000
Manmade fibers (metric tons) .....	55,500	61,100	62,800	63,400	78,700
Total (metric tons) .....	300,500	289,100	274,800	243,400	203,700
Fabrics:					
Cotton woven (metric tons) .....	65,100	48,200	39,100	35,800	28,400
Other woven (metric tons) .....	12,000	2,000	1,000	1,000	7,000
Knitted (metric tons) .....	1,000	760	820	800	1,000
Total (metric tons) .....	78,100	50,960	40,920	37,600	36,400
<b>Mill fiber consumption:</b>					
Cotton (1,000 metric tons) .....	225.0	184.7	171.1	185.5	207.4
Manmade fibers (1,000 metric tons) .....	150.3	146.9	167.0	165.9	183.6
Wool (1,000 metric tons) .....	2.6	2.6	3.0	3.9	3.4
Total (1,000 metric tons) .....	377.9	334.2	341.1	355.3	394.4
<b>Foreign trade:</b>					
Exports:					
Textiles (million dollars) .....	634.6	544.7	429.4	504.1	445.6
Apparel (million dollars) .....	594.3	686.5	657.0	726.9	683.1
Total (million dollars) .....	1,228.8	1,231.2	1,086.4	1,231.1	1,128.7
Imports:					
Textiles (million dollars) .....	483.1	496.3	453.4	504.6	386.9
Apparel (million dollars) .....	268.3	318.9	364.5	330.6	256.7
Total (million dollars) .....	751.4	815.1	817.9	835.2	643.6

See footnote at end of table.

**Table L-1—Continued****Egypt: Statistical profile of textile and apparel sector and foreign trade, 1997-2001**

<b>Item</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>
<b>Foreign trade—Continued</b>					
Trade balance:					
Textiles ( <i>million dollars</i> ) . . . . .	151.4	48.4	-24.0	-0.5	58.6
Apparel ( <i>million dollars</i> ) . . . . .	326.0	367.7	292.5	396.3	426.4
Total ( <i>million dollars</i> ) . . . . .	477.4	416.1	268.4	395.9	485.1

<sup>1</sup> Not available.

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

Source: Industry data compiled from the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 24/2001, *Country Statements 2001*, and selected back years; Embassy of Egypt, "A Memorandum on Egyptian Exports of Yarn, Textile, and Ready-Made Garments During 2002," received June 6, 2002; and U.S. Department of Commerce, International Trade Administration, ITA Export Advantage; mill consumption data from Geerdes International, Inc., Richmond, VA; and trade data are United Nations data as reported by Egypt's trading partners.

**Table L-2**  
**Egypt: Exports of textiles and apparel, by selected markets, 1997-2001**

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States .....	81	107	92	114	126
European Union .....	436	330	259	300	237
Canada .....	4	5	5	6	7
Subtotal .....	521	442	355	420	371
All other:					
Turkey .....	17	13	14	11	12
Korea .....	10	1	6	9	9
Japan .....	7	6	6	7	6
Other .....	79	82	49	58	48
Subtotal .....	113	102	74	84	75
Grand total .....	635	545	429	504	446
Apparel (SITC 84):					
Quota markets:					
United States .....	329	383	355	434	410
European Union .....	227	258	277	272	251
Canada .....	6	8	9	9	9
Subtotal .....	562	649	641	714	670
All other .....	33	37	16	13	13
Grand total .....	594	687	657	727	683
Textiles and apparel:					
Quota markets:					
United States .....	410	490	447	548	536
European Union .....	663	588	535	572	488
Canada .....	10	13	14	15	16
Subtotal .....	1,083	1,091	996	1,134	1,041
All other .....	146	140	90	97	88
Grand total .....	1,229	1,231	1,086	1,231	1,129
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles .....	82	81	83	83	83
Apparel .....	95	95	98	98	98
Average .....	88	89	92	92	92

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

Source: Compiled from United Nations data.

**Table L-3**  
**Textiles and apparel: U.S. general imports from Egypt, by specified product categories,<sup>1</sup>**  
**1997-2002**

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total . . . . .	196,114	247,368	200,977	254,105	282,441	264,762
1	Apparel . . . . .	93,145	108,716	114,364	132,403	126,367	129,070
2	Textiles . . . . .	102,969	138,651	86,613	121,702	156,074	135,691
30	Cotton textiles and apparel . . . . .	170,523	221,271	175,548	216,821	246,969	228,082
60	Manmade-fiber textiles and apparel . . . . .	24,006	24,250	24,997	36,332	34,600	35,781
237	Playsuits . . . . .	685	933	126	37	129	80
239	Babies' apparel . . . . .	1,178	1,505	2,502	3,500	3,110	3,006
300	Carded cotton yarn . . . . .	42,963	65,670	39,098	47,424	81,343	73,178
301	Combed cotton yarn . . . . .	15,864	28,805	9,247	8,001	13,585	11,862
335	Cotton coats, women/girls . . . . .	552	216	721	450	208	3,413
336	Cotton dresses . . . . .	2,345	1,482	2,042	4,483	3,127	1,639
338	Cotton knit shirts, men/boys . . . . .	9,369	8,415	6,209	6,326	6,405	8,078
339	Cotton knit shirts, women/girls . . . . .	9,024	11,701	7,838	10,593	9,251	9,933
340	Cotton not knit shirts, men/boys . . . . .	9,472	11,859	12,162	9,320	7,508	9,077
347	Cotton trousers, men/boys . . . . .	13,399	15,487	16,866	23,909	22,776	28,702
348	Cotton trousers, women/girls . . . . .	9,478	13,604	20,048	28,313	31,875	31,063
351	Cotton nightwear . . . . .	9,776	10,754	13,564	10,547	6,729	6,073
352	Cotton underwear . . . . .	3,480	4,086	5,070	3,750	2,373	2,978
360	Cotton pillowcases . . . . .	11	123	763	2,837	2,661	2,271
361	Cotton sheets . . . . .	109	767	3,602	8,313	6,870	4,994
362	Cotton bedspreads and quilts . . . . .	88	2,508	733	2,063	1,628	1,372
363	Cotton terry and other pile towels . . . . .	2,221	2,497	2,380	1,674	1,221	1,760
369	Other cotton manufactures . . . . .	14,599	16,510	14,390	15,197	20,168	16,285
634	Other manmade coats, men/boys . . . . .	2,218	6,751	5,315	4,250	4,529	3,995
635	Manmade-fiber coats, women/girls . . . . .	3,486	3,560	2,188	4,201	3,980	2,619
638	Manmade knit shirts, men/boys . . . . .	1,306	1,054	1,843	2,423	2,898	3,606
640	Manmade not knit shirts, men/boys . . . . .	232	85	440	2,329	1,823	1,335
647	Manmade-fiber trousers, men/boys . . . . .	323	954	1,276	1,526	3,299	4,686
648	Manmade-fiber trousers, women/girls . . . . .	159	385	696	787	2,081	2,163
665	Manmade-fiber floor coverings . . . . .	1,302	2,117	2,425	2,514	3,236	5,108

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

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

## *Overview*

The textile and apparel sector in Israel has declined in relative importance since at least 1997. Between 1997 and 2001, sector production fell by 10 percent to \$2.6 billion and sector employment decreased by 22 percent to 31,000 workers (table L-4, found at the end of this country profile). During the first half of 2002, 6,000 employees in the sector were laid off. According to industry sources, the key reason for the decline has been the high cost of manufacturing in Israel, which, although partially offset by the use of advanced technology and production of high quality products, has pushed domestic firms offshore to more cost-competitive countries. Israel's domestic market base has experienced an influx of inexpensive textile and apparel goods from East Asia, particularly China.

Since 1997, textile and apparel goods as a share of total exports have remained steady at 4 percent. Israel's textile and apparel sector benefits from preferential access to both the European and U.S. markets. The Textile and Apparel Manufacturing Association of Israel contends that quota removal in 2005 would be detrimental to the Israeli industry by rewarding countries with lower labor costs, and that about 60 percent of Israeli textile and apparel exports to the United States could be threatened when quotas are removed.<sup>2</sup>

## *Industry Profile*

### **Industry structure and performance**

Israel's textile and apparel sector is characterized by a few large, vertically integrated companies and many small firms.<sup>3</sup> The vertically integrated firms are integrated, from product design and development through spinning yarn, fabric production and finishing, cutting and sewing, packaging, and shipping. For almost all textile segments, dyeing, printing, and finishing is carried out in Israel. In the apparel industry, Israeli firms tend to concentrate on niche and high-end products in order to remain competitive in the global

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<sup>1</sup> Prepared by Judith-Anne Webster, Office of Industries.

<sup>2</sup> Ramzi Gabbay, Chairman, Textile and Apparel Manufacturing Association of Israel (TAMA), Tel Aviv, Israel, written submission to the Commission, Jan. 30, 2003, and Moshe Nahum, Director, Division of Foreign Trade and International Relations, TAMA, Israel, Tel Aviv, Israel, e-mail correspondence to USITC staff, Feb. 11, 2003.

<sup>3</sup> Except as noted, information in the paragraph is from Moshe Nahum, Director, Division of Foreign Trade and International Relations, TAMA, Tel Avia, e-mail correspondence USITC staff, Feb. 11 and Mar. 9, 2003.

marketplace.<sup>4</sup> Few Israeli companies have established independent brand names, but they frequently manufacture products for companies with prestige labels. According to the Israeli Export Institute, more than 90 percent of sector exports consist of branded merchandise.<sup>5</sup> Israel's leading textile and apparel products are knitted products, such as underwear, T-shirts, sweaters, jogging suits, and hosiery; men's suits, swimwear, towels, and bed linen.

## **Factors of production**

### *Raw materials*

Israel's apparel industry relies on imports for most of its yarn and woven fabric requirements. There is some local production of woven fabrics. The majority of the knitted fabrics used by the Israel apparel industry are made in Israel, while the fibers are imported. Israel imports much of the raw materials needed for the apparel industry from the EU. However, in recent years, cost-competitive Asian countries such as China and India have grown in importance as raw material suppliers to the Israeli market.

### *Labor*

The number of workers in Israel's textile and apparel sector decreased from 40,000 in 1997 to 31,300 in 2001 (table L-4 found at the end of this country profile). This decline was most apparent in the apparel industry, which lost almost 5,000 workers. Labor costs in Israel are relatively high, particularly in comparison to other Middle Eastern and Asian countries. According to labor cost data compiled by Werner International for 2002, average hourly compensation (including fringe benefits) for production workers in Israel's spinning and weaving segment was \$8.17, compared with \$1.01 in Egypt, compensation, \$2.13 in Turkey, and less than \$1 in China, India, and Pakistan. One reason for these high labor costs is compulsory education laws in Israel, which require at least 12 years of education, making Israeli textile and apparel workers more educated and skilled than their counterparts in competing countries.<sup>6</sup>

These wage rates make it difficult for manufacturers in Israel to compete in world markets. According to an industry source, many customers of Israeli textile firms, particularly in the EU and the United States, have put pressure on Israeli firms to cut prices, owing to competition from lower-cost countries.<sup>7</sup> In response, the industry in Israel has been

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<sup>4</sup> Israeli Textiles and Apparel, Israel Ministry of Foreign Affairs, found at <http://www.us-israel.org/jsource/Economy/eco7.html>, retrieved Nov. 26, 2001; and "Clothing and Textiles," Up Israel, found at <http://www.lupinfo.com/country-guide-study/israel/israel86.html>, Dec. 1998, retrieved Dec. 2, 2002.

<sup>5</sup> Israeli Textiles and Apparel, Israel Ministry of Foreign Affairs, found at <http://www.us-israel.org/jsource/Economy/eco7.html>, retrieved Nov. 26, 2001.

<sup>6</sup> Moshe Nahum, Mar. 9, 2003.

<sup>7</sup> "Cheaper Next Door," *Textile Asia*, June 2001, p. 100.

downsizing and/or moving operations offshore, as it has faced increasingly stiff competition from low-wage manufacturers in Turkey, China, and the Dominican Republic.<sup>8</sup>

### *Technology*

The use of new technologies is one of Israel's key competitive advantages and helps the country retain market share despite its high labor costs. Elbit Vision Systems produces I-Tex (which automatically inspects raw fabrics), a technology used by Israeli firms to ensure high quality.<sup>9</sup> Tefron's use of computerized robotic manufacturing methods has also resulted in international recognition of the firm as a leader in the implementation of new manufacturing technologies. Complete apparel production –from thread to completed garment– is a one-step operation replacing traditional finishing and cutting methods, as well as conventional sewing processes.<sup>10</sup> Elyon, one of Israel's largest firms, uses General Sewing Data software as well as other programs enabling methods analysis, time and motion simulations, and product costing.

### **Investment**

High production costs have made it difficult for Israel's textile and apparel sector to attract investment. Israeli firms have disinvested in many cases and moved operations to more cost-competitive markets, particularly for labor-intensive manufacturing. Delta Galil Industries Ltd., an Israeli-based producer of apparel sold under brands such as Ralph Lauren, Donna Karan, Calvin Klein, Hugo Boss, and Nike, has shifted most of its production to low-cost countries Jordan, Egypt, Turkey, Romania, and Bulgaria, and has recently begun to produce in the Western Hemisphere and the Far East.<sup>11</sup> More than 75 percent of the firm's manufacturing takes place in lower labor cost countries. Tefron, a manufacturer of intimate and leisure apparel, continues to shift sewing production from both Israel and the United States to several manufacturing facilities situated around the world.<sup>12</sup> Currently, 10 percent of the company's production is in Jordan, with management aiming to increase this figure to 50 percent.<sup>13</sup> The recently developed QIZ program, which allows duty and quota-free exports from Jordan to the United States, along with low wage rates, makes Jordan an attractive country from which to produce textile and apparel goods.

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<sup>8</sup> "Unemployment High, Skills Low," EIU Viewwire, Feb. 21, 2002, found at [http://www.viewswire.com/index.asp?layout=display\\_article&search\\_text=textiles&doc\\_id=179980](http://www.viewswire.com/index.asp?layout=display_article&search_text=textiles&doc_id=179980), retrieved Dec. 3, 2002.

<sup>9</sup> "Order from Russia," *Textile Asia*, Mar. 2002, p. 82.

<sup>10</sup> "Israeli Textiles and Apparel," Israel Ministry of Foreign Affairs, found at <http://www.us-israel.org/jsource/Economy/eco7.html>, retrieved Nov. 26, 2001.

<sup>11</sup> Information on Delta Galil in the paragraph is from its website, found at <http://www.deltagalil.com>, retrieved Dec. 3, 2002.

<sup>12</sup> "Profitable at last," *Textile Asia*, June 2002, p. 86.

<sup>13</sup> "Israeli Textiles and Apparel," Israel Ministry of Foreign Affairs, found at <http://www.us-israel.org/jsource/Economy/eco7.html>, retrieved Nov. 26, 2001.

## ***Government Policies***

### **Domestic policies**

The Ministry of Industry and Trade (MIT) reportedly is considering the introduction of a \$2 million fund to support Israel's textile and apparel sector.<sup>14</sup> The grant is one of several measures that may be established to prevent the contraction of the sector and the subsequent loss of thousands of jobs. Other government proposals include temporary wage cuts for production workers in the sector and the exemption of minimum wages on piecework and sewing, both of which would serve as an incentive for companies to carry out such operations in Israel. Another suggested measure for consideration by MIT is allowing factories to depreciate equipment and machinery within 2 years in order to improve profitability.

### **Trade policies**

Israel benefits from preferential market access in the European Union under the Israel-EEC Preferential Agreement, signed in 1977, and the United States under the 1985 United States-Israel Free Trade Area Agreement. Under this Free-Trade Agreement (FTA), the United States and Israel phased out all tariffs on eligible bilateral trade in apparel, textile, and other industrial products by 1995. In October 1996, U.S. legislation to implement the U.S. -Israel FTA<sup>15</sup> was amended to give the president authority to proclaim duty-free treatment for imported goods made in "qualifying industrial zones" (QIZs) along the border of Israel with Egypt and Jordan.<sup>16</sup> The President subsequently issued Proclamation 6955 to provide for such duty-free treatment and to delegate to the United States Trade Representative (USTR) the authority to designate an area as a QIZ.<sup>17</sup> In general, the goods must be produced in and imported directly from the QIZ, and the value added in the QIZ must be no less than 35 percent of the total value of the article.<sup>18</sup> Under the QIZ program between Israel and Jordan,<sup>19</sup> goods manufactured in designated areas in Jordan that contain a minimum amount of Israeli input (8 percent f.o.b. value for apparel) and meet U.S. rules of origin can enter

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<sup>14</sup> Information in the paragraph is from "Ministry Introducing Apparel Designer Fund To Support Textile Sector," June 10, 2002, found at <http://www.bharattextile.com/newsitems/1977806>, retrieved Jan. 7, 2003.

<sup>15</sup> The United States-Israel Free Trade Area Implementation Act, Public Law 99-47 approved June 11, 1985, 19 U.S.C. 2112.

<sup>16</sup> Public Law 104-234, approved October 2, 1996.

<sup>17</sup> President, Proclamation 6955 of November 13, 1996, "To Provide Duty-Free Treatment to Products of the West Bank and the Gaza Strip and Qualifying Industrial Zones," published in the *Federal Register* of November 18, 1996 (61 F.R. 58759).

<sup>18</sup> The trade benefits are intended to create economic opportunities for the Palestinian people in the West Bank and Gaza Strip and to promote economic cooperation among Israel, Jordan, Egypt, and the Palestinian Authority. Statement by the White House Press Secretary, "Free Trade Area Extended to West Bank and Gaza Strip," Oct. 3, 1996, found at <http://www.library.whitehouse.gov/cgi-bin/web>, retrieved Jan. 13, 1998.

<sup>19</sup> To date, Israel and Egypt have not proposed any special manufacturing zones as QIZs.

the U.S. customs territory free of duty and quota.<sup>20</sup> According to the Textile and Apparel Manufacturing Association of Israel, the Israeli textile and apparel sector has not benefited directly from the QIZ program as the Jordanian industry is mainly buying low-value products such as buttons.<sup>21</sup> However, the Israeli sector has indirectly benefited as the program has promoted political stability between the two countries and given Israeli firms pursuing low-cost manufacturing the opportunity to move production to Jordan and still have duty- and quota-free access to the U.S. market.

## ***Foreign Trade***

Israel's trade balance in textiles and apparel fluctuated during 1997-2001, changing from a trade deficit of \$65 million in 1997 to a trade surplus of an estimated \$15 million in 2001 (table L-4). Israel's major trading partners are the United States and the EU.

### **Imports**

Israel's imports of textiles and apparel remained stable during 1997-2001 at, about \$1.1 billion annually (table L-4). Imports of textiles, primarily used as inputs for Israel's apparel industry, grew during the period due, in part, to the departure of many textile producers from Israel to more cost-competitive production markets. Approximately 43 percent of Israeli textile imports come from the EU. India surpassed the United States in 2000 as the second-largest supplier of textiles to Israel. The share of Israel's apparel imports accounted for by the EU, Canada, and United States declined from a combined 85 percent in 1997 to 49 percent in 2000, while China and Hong Kong increased their respective shares, reflecting the recent shift toward greater reliance on East Asian sources.

### **Exports**

Israeli exports of textiles and apparel remained fairly stable at \$1.2 billion during 1997-2001 (table L-5). According to a trade source, Israeli textile exports declined by 12 percent in the first half of 2002, compared with the first half of 2001, to \$466 million.<sup>22</sup> Most of Israel's exports of sector goods during 1997-2000 went to the United States and the EU. United Nations trade data as reported by Israel show that Israel's exports to the United States and to Jordan during 1997-2002, grew largely attributable to preferential access to the U.S. market under the U.S.-Israel FTA and QIZ program with Jordan.

Based on official U.S. trade statistics, the quantity of U.S. imports of textiles and apparel from Israel doubled during 1997-2002 to 534 million square meters equivalent (SMEs)

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<sup>20</sup> U.S. Department of State telegram 2013, "World Textile Trade Without Quotas," prepared by U.S. Embassy, Amman, Apr. 23, 2002.

<sup>21</sup> Moshe Nahum, Mar. 9, 2003.

<sup>22</sup> "Textile Exports Slump, Thousands Lose Jobs," found at <http://www.cybergt.com/quota/10-02/17-03.html>, retrieved Dec. 2, 2002.

(table L-6), In terms of value, however, imports of sector goods from Israel rose from \$408 million in 1997 to a high of \$651 million in 2000, and then fell to \$620 million in 2002. Apparel accounted for 22 percent (119 million SMEs) of the quantity but 67 percent (\$416 million) of the value of sector imports from Israel in 2002. Israel's apparel shipments in 2002 were concentrated in cotton and manmade-fiber knit tops, underwear, brassieres, and pants, particularly for women and girls.

The single-largest category of sector imports from Israel by quantity during 1997-2002 was nonwoven fabrics, which accounted for 55 percent (293 million SMEs) of the total quantity but 10 percent (\$60 million) of the total value, in 2002.

Other leading textile imports from Israel were knit fabrics and cotton terry towels, bed linens, and bedspreads. In 2002, Israel ranked among the 10 largest foreign suppliers of cotton sheets, bedspread, and towels, to the U.S. market.

The trade-weighted average U.S. duty on imports of textiles and apparel from Israel in 2001 was only 1.2 percent ad valorem, reflecting the fact that almost all of the sector imports from Israel enter free of duty under the U.S.-Israel FTA.

**Table L-4**  
**Israel: Statistical profile of textile and apparel sector and foreign trade, 1997-2001**

Item	1997	1998	1999	2000	2001
<b>Number of establishments:</b>					
Textiles .....	787	840	861	723	715
Apparel .....	1,309	1,266	1,147	943	817
Total .....	2,096	2,106	2,008	1,666	1,532
<b>Number of workers:</b>					
Textiles .....	22,100	22,700	22,500	22,000	19,000
Apparel .....	17,900	15,000	13,600	13,000	12,300
Total .....	40,000	37,700	36,100	35,000	31,300
<b>Installed spinning capacities:</b>					
Short-staple spindles .....	35,000	35,000	35,000	( <sup>1</sup> )	( <sup>1</sup> )
Long-staple spindles .....	15,000	15,000	15,000	( <sup>1</sup> )	( <sup>1</sup> )
Open-end rotors .....	9,000	9,000	9,000	( <sup>1</sup> )	( <sup>1</sup> )
<b>Installed weaving capacities:</b>					
Shuttleless looms .....	1,100	1,100	1,100	( <sup>1</sup> )	( <sup>1</sup> )
Shuttle looms .....	800	800	800	( <sup>1</sup> )	( <sup>1</sup> )
<b>Foreign trade:</b>					
Exports:					
Textiles ( <i>million dollars</i> ) .....	440.7	470.3	475.2	488.2	<sup>2</sup> 450.0
Apparel ( <i>million dollars</i> ) .....	605.3	653.1	732.1	730.0	<sup>2</sup> 700.0
Total ( <i>million dollars</i> ) .....	1,046.0	1,123.5	1,207.3	1,218.2	<sup>2</sup> 1,150.0
Imports:					
Textiles ( <i>million dollars</i> ) .....	768.7	766.0	753.9	754.6	<sup>2</sup> 585.0
Apparel ( <i>million dollars</i> ) .....	341.9	364.9	357.0	473.6	<sup>2</sup> 550.0
Total ( <i>million dollars</i> ) .....	1,110.6	1,130.9	1,110.9	1,228.2	<sup>2</sup> 1,135.0
Trade balance:					
Textiles ( <i>million dollars</i> ) .....	-328.0	-295.7	-278.6	-266.4	<sup>2</sup> -135.0
Apparel ( <i>million dollars</i> ) .....	263.4	288.2	375.1	256.4	<sup>2</sup> 150.0
Total ( <i>million dollars</i> ) .....	-64.6	-7.4	96.5	-10.0	<sup>2</sup> 15.0

<sup>1</sup> Not available.

<sup>2</sup> Estimated by the Commission based on the percentage change in world imports from Israel from 2000 to 2001.

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

Source: Industry data are from the Israel Central Bureau of Statistics; the International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002 and selected back issues; and trade data are United Nations data as reported by Israel, except as noted.

**Table L-5**  
**Israel: Exports of textiles and apparel, by selected markets, 1997-2001**

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States .....	135	166	175	196	( <sup>1</sup> )
European Union .....	235	239	231	209	( <sup>1</sup> )
Canada .....	3	5	6	8	( <sup>1</sup> )
Subtotal .....	373	410	412	414	( <sup>1</sup> )
All other: .....	68	61	63	74	( <sup>1</sup> )
Grand total .....	441	470	475	488	( <sup>1</sup> )
Apparel (SITC 84):					
Quota markets:					
United States .....	284	357	395	448	( <sup>1</sup> )
European Union .....	293	266	287	234	( <sup>1</sup> )
Canada .....	4	6	6	8	( <sup>1</sup> )
Subtotal .....	580	629	688	690	( <sup>1</sup> )
All other .....	25	24	44	40	( <sup>1</sup> )
Grand total .....	605	653	732	730	( <sup>1</sup> )
Textiles and apparel:					
Quota markets:					
United States .....	419	524	571	644	( <sup>1</sup> )
European Union .....	527	504	518	444	( <sup>1</sup> )
Canada .....	7	11	12	16	( <sup>1</sup> )
Subtotal .....	953	1,039	1,101	1,103	( <sup>1</sup> )
All other .....	93	85	107	115	( <sup>1</sup> )
Grand total .....	1,046	1,123	1,207	1,218	( <sup>1</sup> )
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles .....	85	87	87	85	( <sup>1</sup> )
Apparel .....	96	96	94	94	( <sup>1</sup> )
Average .....	91	92	91	91	( <sup>1</sup> )

<sup>1</sup> No data reported.

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

Source: Compiled from United Nations data.

**Table L-6**  
**Textiles and apparel: U.S. general imports from Israel, by specified product categories,<sup>1</sup> 1997-2002**

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total . . . . .	266,001	298,416	359,775	476,367	517,174	533,959
1	Apparel . . . . .	56,644	73,504	90,892	112,146	112,286	118,874
2	Textiles . . . . .	209,357	224,912	268,882	364,221	404,888	415,085
30	Cotton textiles and apparel . . . . .	64,376	78,425	82,600	96,100	100,321	115,136
60	Manmade-fiber textiles and apparel . . . . .	199,515	217,048	273,181	377,001	414,386	416,610
222	Knit fabric . . . . .	25,626	25,900	36,631	41,930	45,510	50,162
223	Nonwoven fabric . . . . .	147,903	154,672	175,811	261,822	292,117	292,885
229	Special purpose fabric . . . . .	1,986	1,179	603	2,559	12,314	8,457
335	Cotton coats, women/girls . . . . .	314	196	814	393	1,198	3,334
336	Cotton dresses . . . . .	2,024	1,327	818	712	806	1,429
338	Cotton knit shirts, men/boys . . . . .	1,486	2,062	2,090	2,039	2,382	2,000
339	Cotton knit shirts, women/girls . . . . .	7,260	9,060	10,645	9,720	7,205	7,320
345	Cotton sweaters . . . . .	1,375	1,981	1,074	738	732	2,136
347	Cotton trousers, men/boys . . . . .	222	453	513	608	1,704	898
348	Cotton trousers, women/girls . . . . .	4,665	6,486	6,987	10,062	11,769	9,541
349	Cotton brassieres . . . . .	1,335	1,091	1,446	1,426	1,537	1,533
350	Cotton robes . . . . .	1,185	856	906	500	372	2,302
351	Cotton nightwear . . . . .	3,696	2,706	3,422	2,908	4,031	4,541
352	Cotton underwear . . . . .	19,994	25,781	25,069	33,141	31,813	33,168
360	Cotton pillowcases . . . . .	567	649	715	910	1,407	1,317
361	Cotton sheets . . . . .	5,561	6,475	5,800	6,973	9,443	13,626
362	Cotton bedspreads and quilts . . . . .	2,604	2,862	2,881	2,291	2,691	3,887
363	Cotton terry and other pile towels . . . . .	2,368	2,984	3,830	4,026	4,782	4,354
369	Other cotton manufactures . . . . .	5,256	6,903	9,056	10,414	10,671	10,088
632	Manmade-fiber hosiery . . . . .	2,513	2,588	2,802	1,372	571	449
638	Manmade knit shirts, men/boys . . . . .	115	233	428	2,468	2,086	335
639	Manmade knit shirts, women/girls . . . . .	1,870	1,771	4,221	4,620	5,049	5,211
645	Manmade-fiber sweaters, men/boys . . . . .	418	488	961	1,530	2,613	1,873
647	Manmade-fiber trousers, men/boys . . . . .	78	90	43	133	377	500
648	Manmade-fiber trousers, women/girls . . . . .	388	449	709	2,412	2,317	1,062
649	Manmade-fiber brassieres . . . . .	18	72	459	1,079	1,170	1,146
651	Manmade-fiber nightwear . . . . .	14	27	44	246	642	4,929
652	Manmade-fiber underwear . . . . .	1,272	5,691	14,219	23,616	21,479	24,897
659	Other manmade-fiber apparel . . . . .	2,014	3,217	6,319	4,728	4,192	2,422
666	Other manmade-fiber furnishings . . . . .	2,499	7,533	10,708	9,989	6,922	2,980

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

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

## *Overview*

Jordan's textile and apparel sector has grown significantly following implementation of U.S. legislation in 1996 that provided for the establishment of "qualified industrial zones" (QIZs) encompassing portions of Israel and Jordan from which goods can enter the United States free of duty.<sup>2</sup> Sector employment has more than doubled, helping an economy with historically high unemployment. Jordanian exports of textiles and apparel increased from \$37 million in 1997 to \$316 million in 2001, and the sector share of total exports increased from 3 percent to 17 percent. According to data of the Jordanian government as published in the trade press, Jordan's exports of sector goods increased significantly in the first 10 months of 2002 compared with the corresponding period of 2001, to \$398 million, or 22 percent of total Jordanian exports.<sup>3</sup>

Jordan's apparel industry is export oriented due to its small domestic customer base. Because the Jordanian textile industry is small, the apparel industry relies on imports for its inputs, which come mainly from Israel, Hong Kong, and the European Union. The sector benefits from relatively low wages. Foreign direct investment in the sector has increased substantially in the last three years, particularly from Asian firms seeking to benefit from duty- and quota-free access to the U.S. market.

## *Industry Profile*

### **Industry structure and performance**

The number of firms in Jordan's textile and apparel sector rose by 29 percent during 1997-2000 to 2,183, 95 percent of which were apparel producers (table L-7). Jordanian textile production is limited because it consumes large amounts of water, a scarce resource in Jordan.<sup>4</sup> With the exception of one small spinning and knitting mill near Amman, the apparel industry consists almost entirely of cut-sew-pack operations. There is no vertical integration

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<sup>1</sup> Prepared by Judith-Anne Webster, Office of Industries.

<sup>2</sup> The trade benefits provided by the U.S. legislation were, among other things, intended to promote economic cooperation among Israel, Jordan, Egypt, and the Palestinian Authority. Statement by the White House Press Secretary, "Free Trade Area Extended to West Bank and Gaza Strip," Oct. 3, 1996, found at <http://www.library.whitehouse.gov/cgi-bin/web>, retrieved Jan. 13, 1998.

<sup>3</sup> "Textile Exports Jump," BharatTextile.com, Dec. 14, 2002, found at <http://www.bharattextile.com/newsitems/1980350>, retrieved Feb. 10, 2003.

<sup>4</sup> "Sector Report: Apparel and Textiles," Export and Finance Bank of Jordan, Apr. 4, 2002.

in the industry, and opportunities for increasing vertical integration are limited because the scarcity of water eliminates many potential expansion options (e.g., dyeing).<sup>5</sup>

## **Factors of Production**

### *Raw materials*

Jordan's apparel industry relies almost entirely on imports for its yarn and fabric requirements, primarily for China and Pakistan.<sup>6</sup> According to industry representatives, the importation of apparel inputs enables Jordanian apparel manufacturers to obtain the best price and benefit from Jordan's proximity to supplying countries such as Egypt that produce high-quality fibers.<sup>7</sup>

### *Labor*

The competitive labor cost in Jordan is considered to be a key factor providing Jordan an advantage that attracts FDI. According to labor cost data for 2002, the average hourly compensation (including fringe benefits) for apparel production workers in Jordan was \$0.81, compared with \$0.77 in Egypt, \$0.68 in China, and less than \$0.50 in such Asian countries as Bangladesh, India, and Pakistan.<sup>8</sup> A report by Jordan's Finance and Export Bank indicates that average monthly salaries for Jordanian textile and apparel workers are \$113 to \$141 per month for tailors and trainees, \$353 to \$423 for supervisors, and \$1,128 to \$1,141 for factory managers.<sup>9</sup>

The textile and apparel sector in Jordan accounts for 2.2 percent of the country's workforce. The number of workers in the sector more than doubled, from 7,667 workers in 1997 to 16,561 workers in 2001 (table L-7). According to an April 2002 report prepared by the U.S. Embassy in Amman, the number of workers in the Jordanian textile and apparel sector is 26,000, of whom 22,000 are apparel workers employed by QIZ exporters.<sup>10</sup> The Embassy report indicates that the sector accounts for about 3 percent of all jobs filled in Jordan (labor force of 1 million, minus 150,000 unemployed). Jordan's work force is considered to be

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<sup>5</sup> U.S. Department of State telegram 2013, "World Textile Trade Without Quotas," prepared by the U.S. Embassy, Amman, Apr. 23, 2002.

<sup>6</sup> Ibid.

<sup>7</sup> Jordan K. Speer, "Middle East Marks the Map," July 4, 2001, Bobbin Publishing Group, found at [http://juststyle.com/features\\_detail.asp?art=406](http://juststyle.com/features_detail.asp?art=406), retrieved Dec. 10, 2002.

<sup>8</sup> See table 3-1 in chapter 3 of this report for data on hourly compensation in the textile and apparel industries of countries covered by the study. Data on hourly compensation for apparel production workers are from Jassin-O'Rourke Group, "Global Competitiveness Report: Selling to Full Package Providers," New York, NY.

<sup>9</sup> "Textile and Apparel Industries Have Seen Unprecedented Growth," BharatTextile.com, found at <http://www.bharattextile.com/newsitems/1978642>, retrieved Nov. 7, 2002.

<sup>10</sup> U.S. Department of State telegram 2013, "World Textile Trade Without Quotas."

well-trained, a factor which has reportedly encouraged investment in the sector.<sup>11</sup> As the bulk of Jordan's labor force consists of skilled workers, Jordan's growing textile and apparel workforce is supplemented by unskilled workers from Pakistan, India, China, and other nations who reportedly are increasingly finding work in the textile and apparel sector in Jordan, where they can expect to be paid more for fewer hours worked than in their domestic industries.<sup>12</sup>

### *Technology*

Jordanian apparel companies are typically at a technological disadvantage compared to other foreign companies, such as those in Israel, which employ computer-based logistics programs that Jordanian firms lack. Further, the majority of Jordanian manufacturers reportedly experience underutilized capacity and limited communication and coordination with associated companies and factories.<sup>13</sup> Jordanian companies are trying to improve in this regard by adopting computer-based design and logistics software.<sup>14</sup>

### **Investment**

Investment in Jordan's QIZs, of which there are 11, totals \$85 million to \$100 million, and it is expected to reach \$180 million to \$200 million when all projected are completed.<sup>15</sup> The investment has come from around the world, particularly from Asian countries. For example, Pakistani companies reportedly have invested \$30 million in up to 20 QIZ production facilities in Jordan and employ approximately 5,000 Jordanians.<sup>16</sup> These new investments followed earlier investments by such companies as Boscan International, a large Hong Kong firm, which reportedly entered Jordan in early 2000.<sup>17</sup> Additionally, Jordan's apparel industry has benefited from multilateral investment. For example, Jordan-based El-Zay, a manufacturer of high-quality men's suits, received funding from the International Finance Corporation to help restructure its debt and diversify its product line by manufacturing men's outerwear.<sup>18</sup> The growing investment trend is expected to continue as Jordan offers numerous advantages in addition to QIZ duty- and quota-free access to the U.S. market, including

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<sup>11</sup> "Jordan - A Success Move," Jordan Investment Board, found at <http://www.jordaninvestment.com/LastBroshurs/textappe/mainpage.htm>, retrieved Dec. 4, 2002.

<sup>12</sup> "Textile and Apparel Industries Have Seen Unprecedented Growth."

<sup>13</sup> *Ibid.*

<sup>14</sup> "Jordan - A Success Move."

<sup>15</sup> Office of the United States Trade Representative, 2003 *Trade Policy Agenda and 2002 Annual Report*, Mar. 2003, p. 164.

<sup>16</sup> "Foreign Textile Firms Benefit from New Industrial Zones," Just-Style.com, Oct. 31, 2001, found at [http://just-style.com/new\\_print.asp?art=21853](http://just-style.com/new_print.asp?art=21853), retrieved Oct. 25, 2002.

<sup>17</sup> "QIZ's Attract Hong Kong Garment Exporters," BharatTextile.com, Nov. 30, 1999, found at <http://www.bahrattextile.com/newitems/1975031>, retrieved Dec. 11, 2002.

<sup>18</sup> The World Bank Group, "Hashemite Kingdom of Jordan: Update," Second Quarter 2002, p. 15, found on the World Bank website at <http://www.worldbank.org>, retrieved Dec. 4, 2002.

exemptions from income taxes; competitive rates for rent and electricity; and low labor rates.<sup>19</sup>

According to a report prepared by the U.S. Embassy in Amman, the elimination of quotas under the WTO Agreement on Textiles and Clothing in 2005 likely will have a major impact of Jordan's textile and apparel sector, including its ability to attract new investment, because the benefits of its free-trade agreement (FTA) with the United States may not be enough to surpass the competitive advantages of other textile and apparel producing countries.<sup>20</sup> Further, the political uncertainty in the region reportedly has caused some hesitation on the part of investors. For example, one supplier of cotton pants to the U.S. market reportedly scaled back its expansion plan in the region due to the potential for conflict. However, those companies that have been established in Jordan for several years are more solidified and thus likely to maintain their operations.<sup>21</sup>

### ***Government Policies***

Jordan has an FTA with the EU and benefits from preferential access to the U.S. market through the U.S.-Jordan Free Trade Agreement (FTA) and the QIZ program. The U.S.-Jordan FTA went into effect in December 2001 and will eliminate tariffs on bilateral trade in textiles and apparel in goods within 10 years. The impact of the FTA on the textile and apparel sector is unclear at this time due to its recent implementation. By contrast, the QIZ program has been a successful initiative, increasing production and employment in the sector. Under the United States-Israel Free Trade Area Implementation Act, products made in QIZs encompassing portions of Israel and Jordan are eligible to enter the United States free of duty, provided the product is imported directly from the QIZ, the value added in the QIZ is not less than 35 percent of the total value of the article, and contains a specified minimum amount of Israeli input (8 percent f.o.b. value for apparel).<sup>22</sup> According to a Hong Kong-based representative of a firm sourcing apparel from Jordan for the U.S. market, because many of the inputs used in the production of apparel in Jordan are shipped through the port of Haifa, the cost of the "carry bags" purchased at the port to ship the inputs to Jordan meet the 8 percent Israeli content requirement.<sup>23</sup>

The Jordanian Government has also taken other steps to improve the textile and apparel sector. For example, in late 2002, the Ministry of Trade and Industry, along with support from the Italian government, established a Center for Garment Design and Training Services,

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<sup>19</sup> Jordan K. Speer, "Middle East Marks the Map," July 4, 2001, Bobbin Publishing Group, found at [http://just-style.com/features\\_detail.asp?art=406](http://just-style.com/features_detail.asp?art=406), retrieved Dec. 10, 2002.

<sup>20</sup> U.S. Department of State telegram 2013, "World Textiles Trade Without Quotas."

<sup>21</sup> "Middle East Gains Global Ground," July 2 2001, found at [http://www.just-style.com/features\\_detail.asp?art=404&app=1&fotw=sct](http://www.just-style.com/features_detail.asp?art=404&app=1&fotw=sct), retrieved Dec. 10, 2002.

<sup>22</sup> For further information on the QIZ program, see the U.S. International Trade Commission (USITC), "Textiles and Apparel: New U.S. Trade Program Likely to Spur Imports from Israel and Jordan," *Industry Trade and Technology Review*, USITC Pub. 3099, Mar. 1998, pp-1-8.

<sup>23</sup> Industry representative, interview by USITC staff, Hong Kong, Feb. 23, 2003.

offering training programs for workers in the sector.<sup>24</sup> Further, the Jordanian Investment Board actively promotes QIZs as a viable opportunity for investors as well as preferential access to U.S. and European markets.<sup>25</sup>

### ***Foreign Trade***

Jordan's total trade in textiles and apparel (imports plus exports) increased significantly, from \$186 million in 1997 to \$686 million in 2001. However, Jordan is not a large apparel consumer and exports most of its apparel production. Jordan's trade deficit in sector goods narrowed from \$112 million in 1997 to \$53 million in 2001, reflecting a sevenfold increase in exports, to \$316 million, and a 148-percent gain in imports, to \$370 million, (table L-7). The growth in Jordanian imports of textiles and apparel during 1997-2001 was concentrated in textiles used as inputs for apparel products made in the QIZs. The leading supplier in 2001 was Israel, which accounted for 47 percent of Jordanian textile imports.

The substantial growth in Jordan's exports of textiles and apparel during 1997-2001 was accounted for almost entirely by the United States (table L-8). Based on official U.S. trade statistics, U.S. imports of textiles and apparel from Jordan rose from 1.3 million square meter equivalent (SMEs) valued at \$3.7 million in 1997 to 91.3 million SMEs valued at \$386 million in 2002. Sector imports consisted almost entirely of apparel, and were concentrated in garments for which major suppliers are highly constrained by quotas, particularly pants and knit tops of cotton and manmade fibers (table L-9). The trade-weighted average U.S. duty on sector imports from Jordan in 2001 was 2.0 percent ad valorem, one of the lowest of the supplying countries covered by the study.

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<sup>24</sup> "Proper Way To Enhance Garment and Textile Sectors Discussed In Seminar," Bharat Textile.com, Aug. 22, 2002, found at <http://www.bharattextile.com/newsitems/1978758>, retrieved Feb. 6, 2003.

<sup>25</sup> "Jordan Woos Indian Knitwear Investors," BharatTextile.com, Oct. 8, 2001, found at <http://www.bharattextile.com/newsitems/1975717>, retrieved Feb. 6, 2003.

**Table L-7**  
**Jordan: Statistical profile of textile and apparel sector and foreign trade, 1997-2001**

Item	1997	1998	1999	2000	2001
<b>Number of establishments:</b>					
Textiles .....	98	99	122	100	( <sup>1</sup> )
Apparel .....	1,599	1,614	2,045	2,083	( <sup>1</sup> )
Total .....	1,697	1,713	2,167	2,183	( <sup>1</sup> )
<b>Number of workers:</b>					
Textiles .....	958	791	817	489	( <sup>1</sup> )
Apparel .....	6,709	7,230	12,108	16,072	( <sup>1</sup> )
Total .....	7,667	8,021	12,925	16,561	( <sup>1</sup> )
<b>Foreign trade:</b>					
Exports:					
Textiles ( <i>million dollars</i> ) .....	24.8	31.9	35.7	28.1	29.8
Apparel ( <i>million dollars</i> ) .....	12.5	46.6	49.5	105.1	286.5
Total ( <i>million dollars</i> ) .....	37.3	78.5	85.1	133.2	316.2
Imports:					
Textiles ( <i>million dollars</i> ) .....	109.9	126.4	112.5	169.8	303.7
Apparel ( <i>million dollars</i> ) .....	39.0	62.1	64.2	62.6	65.9
Total ( <i>million dollars</i> ) .....	148.8	188.5	176.7	232.4	369.6
Trade balance:					
Textiles ( <i>million dollars</i> ) .....	-85.1	-94.5	-76.8	-141.6	-273.9
Apparel ( <i>million dollars</i> ) .....	-26.5	-15.5	-14.7	42.5	220.7
Total ( <i>million dollars</i> ) .....	-111.5	-110.0	-91.6	-99.2	-53.3

<sup>1</sup> Not available.

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

Source: Industry data are from the Jordanian Department of Statistics. Trade data are United Nations data as reported by Jordan.

**Table L-8**  
**Jordan: Exports of textiles and apparel, by selected markets, 1997-2001**

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States .....	1	1	1	1	2
European Union .....	2	1	2	2	1
Canada .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	0
Subtotal .....	3	2	3	3	3
All other .....	22	29	33	25	27
Grand total .....	25	32	36	28	30
Apparel (SITC 84):					
Quota markets:					
United States .....	1	1	2	44	208
European Union .....	4	12	13	10	7
Canada .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1
Subtotal .....	5	14	16	54	215
All other .....	8	33	34	51	71
Grand total .....	13	47	49	105	286
Textiles and apparel:					
Quota markets:					
United States .....	1	2	3	44	210
European Union .....	6	14	15	12	7
Canada .....	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	( <sup>1</sup> )	1
Subtotal .....	8	16	18	56	218
All other .....	30	62	67	77	98
Grand total .....	37	78	85	133	316
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles .....	11	7	7	11	9
Apparel .....	38	29	31	51	75
Average .....	25	18	19	30	42

<sup>1</sup>Less than \$500,000.

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

Source: Compiled from United Nations data.

**Table L-9**  
**Textiles and apparel: U.S. general imports from Jordan, by specified product categories,<sup>1</sup>**  
**1997-2002**

Cat. No.	Description	1997	1998	1999	2000	2001	2002
		<i>—1,000 square meters equivalent—</i>					
0	Textiles and apparel, total . . . . .	1,331	2,610	1,365	20,314	62,667	91,328
1	Apparel . . . . .	1,064	1,709	906	9,340	43,713	87,678
2	Textiles . . . . .	267	901	458	10,973	18,954	3,650
30	Cotton textiles and apparel . . . . .	664	483	465	6,662	31,625	52,391
60	Manmade-fiber textiles and apparel . . . . .	567	2,115	861	13,331	30,765	38,097
335	Cotton coats, women/girls . . . . .	( <sup>2</sup> )	0	( <sup>2</sup> )	1	137	1,747
338	Cotton knit shirts, men/boys . . . . .	39	75	30	305	2,679	6,259
339	Cotton knit shirts, women/girls . . . . .	102	0	0	744	4,664	14,646
345	Cotton sweaters . . . . .	0	0	0	0	2,477	2,610
347	Cotton trousers, men/boys . . . . .	1	87	328	1,109	2,725	2,522
348	Cotton trousers, women/girls . . . . .	158	0	28	1,671	8,371	16,739
351	Cotton nightwear . . . . .	5	2	4	31	1,569	2,291
352	Cotton underwear . . . . .	0	1	0	81	1,053	249
359	Other cotton apparel . . . . .	18	2	9	411	3,207	3,153
634	Other manmade coats, men/boys . . . . .	134	363	88	35	222	4,673
635	Manmade-fiber coats, women/girls . . . . .	1	299	( <sup>2</sup> )	14	176	2,314
638	Manmade knit shirts, men/boys . . . . .	0	0	5	835	2,259	4,557
639	Manmade knit shirts, women/girls . . . . .	0	0	0	339	3,639	3,703
647	Manmade-fiber trousers, men/boys . . . . .	59	172	70	161	692	1,406
648	Manmade-fiber trousers, women/girls . . . . .	23	130	0	850	1,729	5,954
651	Manmade-fiber nightwear . . . . .	0	0	0	92	428	1,107
652	Manmade-fiber underwear . . . . .	0	0	0	0	570	3,069
659	Other manmade-fiber apparel . . . . .	25	26	20	941	4,491	4,914
666	Other manmade-fiber furnishings . . . . .	16	592	43	1,074	633	2,051
670	Manmade-fiber handbags/luggage . . . . .	0	0	182	8,059	14,626	1,327

<sup>1</sup> 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).

<sup>2</sup> Less than 500 square meters equivalent.

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

## *Overview*

Turkey ranks among the world's largest exporters of textiles and apparel, and the textile and apparel industry is the country's largest industrial sector, with 10 percent of its gross domestic product and 21 percent of industrial output and total employment.<sup>2</sup> The textile and apparel sector is also its largest source of export earnings, accounting for 33 percent of the total in 2001. Since implementation of the European Union (EU)-Turkey customs union agreement (1996), Turkey has benefited from duty-free and quota-free access to the EU textile and apparel market.

Turkey has a modern and diverse textile and apparel infrastructure, with production capacity in all sectors of the supply chain, and a relatively flexible, low-cost, and highly skilled workforce. Turkey's strategic geographical location between Europe and Asia enables Turkish producers to ship goods to both markets quickly,<sup>3</sup> and at reduced shipping costs. Flexible manufacturing also results in shorter lead times and ability to quickly increase production runs. Turkey also has liberal foreign exchange regulations that facilitate transfer of capital, while its use of a noneuro currency may mitigate adverse effects during periods in which the euro strengthens relative to the dollar.

## *Industry Profile*

Turkey is the world's seventh-largest exporter of apparel and 14th-largest exporter of textiles, reflecting its large, modern, and integrated production capacity; a relatively low-cost and skilled workforce; and capacity to respond quickly to changes in fashions and retailer demands. Nearly 70 percent of Turkish textile and apparel production occurs in or near Istanbul. Turkey's diversified textile and apparel sector produces products in every segment of the supply chain, including fiber, yarn, fabric, apparel, and home textiles. Although Turkey is a leading producer of high-quality cotton and has the sixth-largest synthetic fiber capacity in the world, with production of nearly 430 million meters<sup>4</sup> in 2000, as textile output has increased, it has become a major world importer of textile fibers, principally cotton and manmade fibers and filaments. The Turkish industry tends to be cotton oriented, with cotton-spinning capacity accounting for nearly 80 percent of its total spinning capacity.<sup>5</sup> The Turkish manmade-fiber segment has also experienced rapid growth in recent years. Most of the raw materials for synthetic fibers and yarns are produced locally although the main

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<sup>1</sup> Prepared by Vincent DeSapio, Office of Industries.

<sup>2</sup> "The Turkish Textile Industry," The Istanbul Textile & Apparel Exporters' Association, 2001, at [http://www.itkib.org.tr/eng/Fuarlar/fact\\_sheet..htm](http://www.itkib.org.tr/eng/Fuarlar/fact_sheet..htm), retrieved Jan. 28, 2003.

<sup>3</sup> Cargoes can be delivered to European destinations by road within 4 to 11 days and to European coasts within 10 to 11 days by ship.

<sup>4</sup> Umit Sevim, "The Turkish Fabric Industry," Export Promotion Center of Turkey, 2002, p. 2.

<sup>5</sup> "The Cotton Industry in Turkey," Aegean Exporters' Unions General Secretariat, found at <http://www.fao.org/es/ESC/esce/escr/cotton/China-e/cap52TUR.htm>, retrieved Oct. 23, 2002.

raw material for acrylic fibers is imported. Turkey's production of synthetic fiber and apparel accounts for the sixth-largest synthetic fiber capacity in the world, with estimated production of nearly 450 million meters in 2001.<sup>6</sup>

Turkey is the world's third-largest producer of mohair and the eighth-largest producer of wool textiles and apparel; it exports wool, fine hair, yarn, and fabric. In 2000, production of woven wool fabrics totaled 81 million meters.<sup>7</sup>

The home textile industry in Turkey has shown steady growth in production and exports during 1997-2001, due to a rise in both domestic and external demand, and accounts for nearly 3 percent of Turkey's total exports in 2001. Production of home textiles in Turkey increased by 45 percent during this period to 242,000 metric tons (table L-10).<sup>8</sup> Principal exports include carpeting,<sup>9</sup> bed linens, bed spreads, table linens, towels, and bathrobes. Major markets include Germany, which absorbed 26 percent of Turkish exports of home textiles in 2001; the United States, accounting for 21 percent of exports; and France and the United Kingdom, each with 11 percent of exports.<sup>10</sup>

## **Industry structure and performance**

### *Textiles*

Turkish textile manufacturers tend to be small, independent firms that operate in specific segments of the textile supply chain. The number of integrated firms increased during the 1990s although still representing a small segment of the entire industry. The integrated firms typically handle tasks ranging from fiber processing, spinning and weaving to dyeing, printing and finishing operations, and many also own apparel and home textiles manufacturing facilities. The 41 largest textile companies in Turkey account for nearly 55 percent of all production capacity, and they ranked among the 500 largest textile firms in the world in 2000.<sup>11</sup>

Home textile producers are mainly located in Istanbul, Denizli, Bursa, Izmir, and Gaziantep. Larger producers in terms of production volume have integrated their production, which ranges from yarn and fabric production to product design, dyeing, finishing and sewing. Small and medium-size producers tend to be concentrated in rural areas near such cities as Denizli, Mugla, and Kastamonu.<sup>12</sup>

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<sup>6</sup> Sevim, p. 1.

<sup>7</sup> Ibid, p. 2.

<sup>8</sup> Umit Sevim, "Home Textiles in Turkey," Export Promotion Center of Turkey, 2002, p. 3.

<sup>9</sup> Nearly 60 percent of carpet produced in Turkey consists of tufted, felt carpets, and kilims; 35 percent consists of machine-made carpets; and the remainder consists of handmade carpets.

<sup>10</sup> Umit Sevim, "Home Textiles in Turkey," p. 3.

<sup>11</sup> Ibid, "The Turkish Fabric Industry," p. 1.

<sup>12</sup> Umit Sevim, "Home Textiles in Turkey," p. 1.

## *Apparel*

The apparel industry occupies a key role in the Turkish economy and accounted for 23 percent of Turkey's exports in 2001. In 2000, 21 Turkish firms were among the 400 largest apparel firms in the world, with 5 of these firms integrated from yarn production to finished apparel.<sup>13</sup> Almost 70 percent of Turkey's apparel production is exported. Although the number of large integrated firms making apparel increased during the 1990s, the vast majority of firms that produce apparel in Turkey are small- and medium-sized.

## **Factors of production**

### *Raw materials*

*Cotton.*—The Turkish textile and apparel industries are afforded a competitive advantage because the cotton grown in the Aegean region of Turkey is considered among the highest quality in the world.<sup>14</sup> Turkey was the sixth-leading world producer of cotton in 2000, with production rising to 791,000 metric tons from 614,000 metric tons in 1994. Cotton is Turkey's leading industrial crop,<sup>15</sup> accounting for 11 percent of the total value of field crops.<sup>16</sup> The growth of Turkish cotton production and consumption stems largely from Turkey's rapidly expanding textile and apparel sector. The rise in textile output in Turkey since 1985 has stimulated an increase in cotton imports as domestic cotton production became insufficient to satisfy the needs of the textile industry. In 1997, the share of imported cotton used in Turkish textile mills totaled nearly 36 percent.<sup>17</sup>

*Spun yarn.*—Turkey is the sixth-largest producer of spun yarn in the world. In 2000, Turkish spinning mills produced 1.3 million tons of spun yarn, accounting for nearly 5 percent of the world total. By the year 2010, Turkish spun yarn production is expected to reach 1.8 million tons, fueled by anticipated large increases in raw cotton production under the Southeastern Anatolian Project (GAP) (see "Government Policies" below<sup>18</sup>). Most of the increase in Turkish spun yarn production is expected to be consumed internally to meet Turkey's expanded production of textiles and apparel. However, Turkey is also a major exporter of spun yarns to eastern and western Europe, including Italy, Portugal, and Spain. Increased

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<sup>13</sup> Information provided by the Turkish Clothing Manufacturers Association, Dec. 30, 2002.

<sup>14</sup> A large share of Turkish cotton is sold in the Cotlook A Index category of the Liverpool stock market.

<sup>15</sup> Turkish cotton is generally planted during early to mid spring while harvesting begins in mid-August and continues until November. Most Turkish cotton is cultivated in three main areas: the Aegean region; the Southeastern Anatolia; and in Cukurova. Aegean cotton is generally considered to be superior in quality and is often preferred by the textile industry. (see "The Cotton Industry in Turkey.")

<sup>16</sup> Ibid.

<sup>17</sup> Ibid.

<sup>18</sup> "Turkey's Spun-yarn Output Set To Climb As Western Europe Suffers Further Setbacks," Textiles Intelligence Ltd., 2001, found at <http://www.textilesintelligence.com/til/press.cfm?prid=289>, retrieved Oct. 31, 2002.

Turkish exports of spun yarn into Western Europe has come at the expense of producers in Western Europe where spun yarn production has declined by nearly 20 percent between 1990 and 2000, due partly to implementation of the EU-Turkey customs union agreement and low Turkish export prices.<sup>19</sup>

### *Labor*

Low labor costs, as well as the high flexibility and high skill levels<sup>20</sup> of Turkish labor, are important competitive advantages for Turkey's textile and apparel sector. The average hourly labor cost per operator hour in the Turkish spinning and weaving segment in 2002 was \$2.13, compared with \$0.57 in India, \$0.69 in the coastal region of China, \$13.93 in Italy, \$4.78 in Portugal, and \$15.13 in the United States.<sup>21</sup> Turkish labor costs as a percentage of textiles output averaged nearly 10 percent in 1997 compared with 1998 averages of 10 percent in India, 14 percent in Portugal, 12 percent in Italy, and a 1999 average of 17 percent in the United States.<sup>22</sup> Labor costs in the Turkish apparel industry accounted for 9 percent of total output in 1997, compared with 1998 totals of 6 percent for India, 12 percent for Italy, 18 percent for Portugal, and a 1999 total of 17 percent for the United States.<sup>23</sup>

### *Technology*

Since the implementation of the EU-Turkey customs union agreement, the country's textile and apparel manufacturing capacity has been significantly modernized. The technological level of Turkey's capital equipment is considered to be among the best in the world. Turkey is also one of the leading importers of textile and apparel machinery in the world, with annual imports peaking at \$2.4 billion in 1997, before declining to \$920 million in 2000.<sup>24</sup>

In 2001, installed weaving capacity of Turkish textile mills included 30,000 shuttle looms and 16,000 shuttleless looms, which are the more advanced technologically and the primary type of loom imported since 1995 (table L-10). This compares with 578,400 shuttle looms and 82,900 shuttleless looms in China, and 129,400 shuttle looms and 11,800 shuttleless

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<sup>19</sup> Ibid.

<sup>20</sup> According to industry sources, because of Turkey's long-standing commercial relations with Germany during the last 20 years, many of Turkey's mill employees have been trained in German mills.

<sup>21</sup> Werner International Management Consultants, "Spinning and Weaving Labor Cost Comparisons 2002" (Reston, VA). The labor cost data also include social benefits. *Country Statements 2001*, International Textile Manufacturers Federation (ITMF).

<sup>22</sup> *International Yearbook of Industrial Statistics 2002*, United Nations Industrial Development Organization, Vienna, 2002, pp. 70-73.

<sup>23</sup> Ibid.

<sup>24</sup> *Textile and Apparel from Turkey: A Summary of Turkey's Potential*, General Secretariat of Istanbul Textile and Apparel Exporters Associations, Nov. 2001, at <http://www.itkib.org.tr/Res800/Arge/English/default.htm>, retrieved Dec. 10, 2002.

looms in India in 2001.<sup>25</sup> Nearly all of the 19,400 looms shipped to Turkey during the last 10 years have been shuttleless looms, with most of this capacity having been added since 1995, attesting to the increasing efficiency of Turkish textile weaving capacity. Similarly, nearly one-half of Turkey's spinning capacity has been added within the last 10 years. Installed cotton-spinning capacity of Turkish mills included nearly 5.7 million short-staple spindles in 2001, compared to India's installed capacity of 38 million short-staple spindles and Egypt's installed capacity of 2.6 million short-staple spindles.<sup>26</sup> Turkey reportedly accounts for about one-fourth of the installed cotton-spinning capacity in Europe.<sup>27</sup>

## **Investment**

Shortly before the implementation of the EU-Turkey customs union agreement, significant investments were announced by domestic and foreign investors to modernize Turkish technology and infrastructure to enable Turkey to compete with highly automated textile industries in Western Europe and in other world markets.<sup>28</sup> As a result of this investment, the largest European capacity for the production of yarn, weaving, dyeing and finishing goods exists in Turkey.<sup>29</sup> According to official Turkish Government data, 265 textile and apparel firms in Turkey participated in joint ventures with foreign partners as of April 2002. Germany was the leading foreign investor with 69 foreign partnerships, followed by Britain with 28 partnerships, and the Netherlands with at least 22 partnerships. Joint ventures were established due to local manufacturers' interest in establishing licensing and technology agreements with foreign firms in order to increase Turkey's global competitiveness.<sup>30</sup> At the same time, the level of foreign direct investment in the Turkish textile and apparel sectors has declined since 1996, and the country suffers from low levels of capital investment.<sup>31</sup>

## ***Government Policies***

The Government of Turkey has sought to create economic incentives for projects whose goals are to "reduce inequality among regions, spread capital ownership, create employment, make use of advanced technology and increase competitiveness."<sup>32</sup> These incentives are

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<sup>25</sup> International Textile Manufacturers Federation, *International Textile Machinery Shipment Statistics*, 2002.

<sup>26</sup> Ibid.

<sup>27</sup> *Textile and Apparel from Turkey: A Summary of Turkey's Potential*.

<sup>28</sup> Total investment in the textile and apparel sector in Turkey exceeds \$150 billion, of which more than \$50 billion has been invested during the last 10 years ("Turkish Textile and Apparel Sector," Foreign Economic Relations Board, July 2002, p. 2).

<sup>29</sup> "Turkish Textile and Apparel Industry Position For EU-Turkey Customs Union and EU-Third Country Trade Relations," Turkish Textile Employers' Association, 2001.

<sup>30</sup> "Turkish Textile and Apparel Sector," Foreign Economic Relations Board, July 2002, p. 13.

<sup>31</sup> Siemon Smid and Fatma Taskesen, "Textile, Apparel and Leather Sector in Turkey," PWC Consulting, Sept. 2002, p. 13.

<sup>32</sup> "Turkish Textile and Apparel Sector," p. 14.

mainly provided in the form of investment allowances, exemption from various taxes,<sup>33</sup> and credits from a newly created Investment Fund. The apparel and cotton fabric industry has received various incentives from the Government of Turkey, totaling \$600,000<sup>34</sup> in 2001 (10 percent of all incentives provided by the government in that year). The EU-Turkey customs union agreement forced the Government of Turkey to eliminate certain export subsidies that had the effect of reducing the cost of imported goods for Turkish firms producing for export.<sup>35</sup> The level of state subsidies to promote individual sectors of the Turkish economy are considered to be low in comparison to Turkish GDP.<sup>36</sup>

## **Domestic policies**

The government has also taken measures to stimulate domestic cotton production to meet the growing needs of the domestic textile industry. The Agricultural Sales Cooperative Unions (ASCUs), quasi-governmental entities, buy cotton produced by member farmers at government-announced prices. Cotton production is expected to increase in the near future due to the implementation of the GAP, a rural and urban development project whose aim is to improve living standards in southeastern Anatolia. The GAP consists of a series of dams, power stations, tunnels and canals to generate electricity and to irrigate the area surrounding the Tigris and Euphrates Rivers.<sup>37</sup> Upon completion of the GAP, Turkey's cotton production is anticipated to double from 1998 levels. However, the major challenges to increasing cotton production in Turkey in the past reportedly have been a shortage of farm labor, which has resulted in higher labor costs for harvesting; the high cost of capital, since cotton production is more capital-intensive than other crops; and the growing trend among textile firms to blend synthetic fibers with cotton to reduce costs.

## **Trade policies**

Since implementation of the EU-Turkey customs union agreement, Turkey and the EU have eliminated all customs duties on imports of industrial products between the two regions. In addition, the EU has eliminated all quantitative quota restrictions on Turkish textile and apparel goods. As a condition of the EU-Turkey customs union agreement, common customs

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<sup>33</sup> Turkey has established 19 free-trade zones, which permit the duty-free entry of textile products. The most prominent of these are located in Mersin, Istanbul (AHL, Tuzla, and Catalca), Antalya, Ismi, Adana, and Corlu. Incentives offered by these free-trade zones include--100-percent exemption from Turkish income and corporate taxes, exemption from the European value-added tax on the purchase of machinery and equipment, exemption from banking and credit charges; and exemption from customs tariffs on imports into the zones.

<sup>34</sup> Derived using a 2001 average foreign exchange rate of 1,669,000 Turkish lire per U.S. dollar.

<sup>35</sup> *Textile and Apparel from Turkey: A Summary of Turkey's Potential*.

<sup>36</sup> Smid and Taskesen, p. 26.

<sup>37</sup> Cotton is currently cultivated on about 80 percent of a newly irrigated area in the Harran Plateau in southeastern Anatolia. According to the initial implementation plan, cotton production is projected to reach 1.3 million short tons by 2005 and Turkey would again become a net exporter of cotton (See "The Cotton Industry in Turkey.")

tariffs are applied on industrial goods imported from third countries.<sup>38</sup> In accordance with the EU-Turkey customs union agreement, the Government of Turkey has signed free-trade agreements (FTAs) with third countries, including Israel in 1997; Romania, the Czech Republic, Slovakia, Lithuania, Hungary, and Estonia in 1998; Bulgaria in 1999; and Poland, Macedonia, Latvia and Slovenia in 2000. Agreements with Bosnia Herzegovina and Croatia were signed in 2002 and are awaiting parliamentary approval for implementation.<sup>39</sup> Since 1996, Turkish import duties on goods from third countries have dropped from 25-30 percent to 6 percent ad valorem in 2000.<sup>40</sup> As part of its EU-Turkey customs union obligations and the EU bilateral and unilateral control systems, Turkey imposes quantitative textile import quotas, subject to monitoring, on certain countries.<sup>41</sup>

## ***Foreign Trade***

Turkey's trade surplus in textiles and apparel rose by 5 percent during 1997-2001 to \$8.4 billion, reflecting an increase of 5 percent in exports, to \$10.6 billion, and a decline in imports of 15 percent, to \$2.2 billion (table L-10). Apparel accounted for 63 percent of sector exports in 2001, while textiles accounted for 86 percent of sector imports in 2001. Turkish exports of textiles and apparel increased sharply immediately after implementation of the EU-Turkey customs union agreement in 1996. Although Turkey has concentrated on producing higher value-added textile and apparel products in recent years, T-shirts, singlets, and related garments are still the principal apparel items exported by Turkey.

## **Imports**

Major textile materials imported by Turkey include fibers, yarns, and fabrics, while major apparel items imported include knitted and woven ready-made garments. Turkey has largely imported intermediate textile inputs for use in the manufacture and export of finished apparel items. Cotton textiles, in the form of fiber, yarn, and woven fabric, accounted for 34 percent of Turkey's total textile imports in 2000, followed by manmade staple fibers, yarns and fabrics with 22 percent and manmade filaments, yarns and fabrics with 21 percent of total textile imports.<sup>42</sup>

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<sup>38</sup> "Turkish Textile and Apparel Industry Position."

<sup>39</sup> Correspondence received from Fikret Artan, First Commercial Counselor, Embassy of the Republic of Turkey, Office of the Commercial Counselor, Washington, DC, Dec. 30, 2002.

<sup>40</sup> U.S. Department of State telegram ITC488, "EU Customs Union - Istanbul's Textile Sector," p. 3.

<sup>41</sup> Textile quotas, subject to EU monitoring, were applied on textile imports from Belarus, China, Indonesia, South Korea, Macau, Malaysia, Egypt, Pakistan, Sri Lanka, Taiwan, and Vietnam in 2000 as part of the EU bilateral control system and on textile imports from Argentina, Brazil, the Philippines, India, Hong Kong, Uzbekistan, Peru, Singapore, Thailand, North Korea, and Yugoslavia, under the EU's unilateral control system in 2001.

<sup>42</sup> *Textile and Apparel from Turkey: A Summary of Turkey's Potential.*

According to UN trade data as reported by Turkey, EU nations supplied 47 percent of all Turkish textile and apparel imports in 2001. EU nations supplied 46 percent of all Turkish textile imports in 2001, led by Italy with 16 percent and followed by South Korea and China, with 8 percent and 7 percent, respectively, of total textile imports. The EU was the leading supplier of apparel to Turkey in 2001 with 56 percent of the total, again led by Italy with 23 percent and followed by China with 14 percent of total apparel imports. Turkish textiles and apparel imports from EU nations nearly tripled following the EU-Turkey customs union agreement. Turkish imports of textiles from the United States declined 24 percent during 1997-2001 to \$59 million in 2001 while Turkish imports of apparel from the United States during this period declined 89 percent to \$4 million. Imports from the United States consisted largely of manmade and artificial fibers and fabrics.

## Exports

The EU was the largest export market for Turkish textiles and apparel during 1997-2001, absorbing 65 percent of Turkish exports in 2001 (table L-11). Turkey's textile and apparel exports to the EU increased by 6 percent during 1997-2001 to \$6.9 billion. Turkish products are competitive in the EU due to a combination of favorable prices, high product quality, quick response times, and integration within the EU. Turkey was the second-leading apparel supplier (71 percent of its exports) and the fifth-leading textile supplier (51 percent of its exports) to the EU in 2001. Germany was Turkey's single-largest market for textile and apparel exports in 2001, accounting for 27 percent of the total, followed by the United States with 14 percent of the total. Turkish exports of textiles to the United States increased 44 percent during 1997-2001 to \$412 million in 2001, while Turkish apparel exports to the United States increased 62 percent during the period to \$1 billion as Turkey concentrated on diversifying its export representation beyond the EU. Although the EU is Turkey's principal foreign market, the younger demographic age of the United States as compared with Europe serves as an important factor for Turkey to consider when developing a marketing strategy for future apparel exports.<sup>43</sup>

Principal apparel products exported by Turkey consist of T-shirts, singlets, and related garments; women's and girls' garments such as suits, jackets, blazers, and men's or boy's suits, ensembles, jackets, blazers, and trousers. Knitted apparel accounted for 51 percent of Turkey's total apparel exports in 2000, followed by woven apparel (35 percent) and made-up articles (14 percent).<sup>44</sup> Major textile products exported in 2000 consisted of woven cotton fabrics; cotton fabrics blended with manmade fibers; and woven synthetic fabrics and their blends with cotton or wool. Based on official U.S. imports statistics, between 1997 and 2002, textiles and apparel imports from Turkey increased annually from 395 million SMEs to 1.1 billion SMEs; U.S. imports of textiles from Turkey totaled 721 million SMEs in 2002 and accounted for 68 percent of the total (table L-12).

The United States applied quotas on 22 categories of textile and apparel products exported from Turkey in 2002. Turkey competes with other major suppliers (such as China and India)

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<sup>43</sup> Information provided by the Turkish Clothing Manufacturers Association, Dec. 30, 2002.

<sup>44</sup> *Textile and Apparel from Turkey: A Summary of Turkey's Potential.*

that currently are also constrained by U.S. import quotas in those categories principally supplied by Turkish producers. Turkey filled between 95 and 100 percent of its quota in seven product categories in 2002, largely in cotton-related articles.<sup>45</sup> Turkey was the second-leading foreign supplier (behind China) to the United States of cotton robes and dressing gowns in 2002, third-leading supplier of yarn containing 85 percent or more by weight of synthetic staple fiber, and the fifth-leading supplier of cotton sheets.

On the basis of interviews by Commission staff with U.S. retailers and other importers of textiles and apparel, Turkey's principal competitive advantages in the U.S. market as compared with its major competitors in certain Asian countries, including India and some ASEAN suppliers, are shorter lead times from order placement to delivery of goods to east coast U.S. ports, partly reflecting faster shipping times. For example, shipments from India reportedly take 45 to 60 days, but shipments from Turkey reportedly take about 14 to 18 days. In addition, the quality of Turkish goods is high, due in part to the country's skilled workforce and state-of-the-art manufacturing equipment, while prices for apparel and textile items are competitive with those of many of the major world exporters. Industry sources report that Turkey is skilled in making tailored clothing and can manufacture apparel on a short turnaround basis. According to the U.S. importers, Turkey's major competitive disadvantage in the U.S. market is that the quality of its apparel items is probably somewhat below that of similar goods from Hong Kong or China and that Turkish apparel prices are also higher. These same U.S. customers for Turkish apparel and textiles indicated that when quotas are eliminated in 2005, there might be some shift in supply patterns from Turkey to China and Hong Kong because of the anticipated reduction in the prices of goods from these two Asian suppliers.

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<sup>45</sup> Textile and apparel categories in which Turkey filled its quotas in 2002 were cotton and manmade-fiber knit shirts and blouses; cotton dressing gowns, robes etc.; cotton and manmade fiber nightwear and pajamas; cotton and manmade-fiber underwear; cotton sheets; women's and girls' wool slacks, and shorts; and yarn containing 85 percent or more by weight of synthetic staple fiber.

**Table L-10**  
**Turkey: Statistical profile of textile and apparel sector and foreign trade, 1997-2001**

Item	1997	1998	1999	2000	2001
<b>Number of textile establishments (1,000)</b> .....	49	49	49	49	49
<b>Number of textile workers<sup>1</sup> (1,000)</b> .....	478	481	488	501	503
<b>Production of selected products:</b>					
Yarns (1,000 metric tons) .....	866	898	913	1,005	( <sup>2</sup> )
Fabrics (1,000 metric tons) .....	450	440	420	480	( <sup>2</sup> )
Apparel (1,000 metric tons) .....	237	242	223	243	( <sup>2</sup> )
Home textiles (1,000 metric tons) .....	167	183	252	233	242
<b>Installed spinning capacity:</b>					
Short-staple spindles (1,000 spindles) .....	5,382	5,679	5,465	5,554	5,737
Long-staple spindles (1,000 spindles) .....	743	743	743	743	743
Open-end rotors (1,000) .....	388	418	415	430	460
<b>Installed weaving capacity:</b>					
Shuttleless looms .....	18,000	16,000	16,000	16,000	16,000
Shuttle looms .....	40,000	30,000	30,000	30,000	30,000
<b>Average total textile labor cost per operator hour<sup>3</sup></b> ..	\$3.30	\$3.30	\$4.30	\$4.20	( <sup>2</sup> )
<b>Mill fiber consumption:</b>					
Cotton (1,000 metric tons) .....	781.9	909.2	972.1	985.6	1,075.2
Manmade fibers (1,000 metric tons) .....	772.2	826.6	906.6	990.0	1,012.0
Wool (1,000 metric tons) .....	49.3	53.7	53.8	46.0	46.6
Total (1,000 metric tons) .....	1,603.4	1,789.5	1,932.5	2,021.6	2,133.8
<b>Foreign trade:</b>					
Exports:					
Textiles (million dollars) .....	3,181.4	3,344.8	3,275.6	3,483.7	3,759.8
Apparel (million dollars) .....	6,868.3	7,260.6	6,715.7	6,719.1	6,841.2
Total (million dollars) .....	10,049.7	10,605.4	9,991.3	10,202.7	10,601.0
Imports:					
Textiles (million dollars) .....	2,320.8	2,314.5	1,903.9	2,119.6	1,916.6
Apparel (million dollars) .....	233.1	240.7	202.4	261.4	237.0
Total (million dollars) .....	2,553.9	2,555.2	2,106.2	2,381.0	2,153.7
Trade balance:					
Textiles (million dollars) .....	860.6	1,030.3	1,371.7	1,364.0	1,843.2
Apparel (million dollars) .....	6,635.2	7,019.9	6,513.3	6,457.7	6,604.2
Total (million dollars) .....	7,495.8	8,050.2	7,885.1	7,821.7	8,447.3

<sup>1</sup> Employment data for apparel are not available.

<sup>2</sup> Not available.

<sup>3</sup> Data for 1997-2000, which include social charges, are from the International Textile Manufacturers Federation, *Country Statements 2002*, and selected back issues. According to data of Werner International, the average compensation (including fringe benefits) of production workers in Turkey's spinning and weaving industry was \$2.13 per hour in 2002.

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

Source: Industry data from the Turkish State Institute of Statistics and State Planning Organization; International Textile Manufacturers Federation (Zurich), *International Textile Machinery Shipment Statistics*, vol. 25/2002, and *Country Statements 2002*, and selected back issues; Geerdes International, Inc., Richmond, VA, facsimile to USITC staff, Feb. 4, 2003. Trade data are United Nations data as reported by Turkey.

**Table L-11**  
**Turkey: Exports of textiles and apparel, by selected markets, 1997-2001**

Item and market	1997	1998	1999	2000	2001
	<i>Million dollars</i>				
Textiles (SITC 65):					
Quota markets:					
United States .....	219	251	318	387	386
European Union .....	1,535	1,717	1,739	1,758	1,874
Canada .....	28	44	24	28	25
Subtotal .....	1,782	2,012	2,081	2,173	2,286
All other:					
Unspecified .....	255	288	191	232	263
Russia .....	138	90	55	58	89
Israel .....	59	74	90	88	86
Other .....	947	882	859	933	1,036
Subtotal .....	1,399	1,333	1,195	1,311	1,474
Grand total .....	3,181	3,345	3,276	3,484	3,760
Apparel (SITC 84):					
Quota markets:					
United States .....	651	755	846	1,062	1,067
European Union .....	4,553	4,886	4,771	4,873	5,004
Canada .....	16	22	27	36	44
Subtotal .....	5,220	5,664	5,644	5,971	6,115
All other .....	1,648	1,597	1,071	748	726
Grand total .....	6,868	7,261	6,716	6,719	6,841
Textiles and apparel:					
Quota markets:					
United States .....	870	1,006	1,164	1,449	1,453
European Union .....	6,087	6,604	6,510	6,630	6,879
Canada .....	45	65	51	64	70
Subtotal .....	7,002	7,675	7,725	8,144	8,401
All other .....	3,047	2,930	2,266	2,059	2,200
Grand total .....	10,050	10,605	9,991	10,203	10,601
	<i>Percent</i>				
Share of exports going to quota markets:					
Textiles .....	56	60	64	62	61
Apparel .....	76	78	84	89	89
Average .....	66	69	74	76	75

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

Source: Compiled from United Nations data.

**Table L-12**  
**Textiles and apparel: U.S. general imports from Turkey, by specified product categories,<sup>1</sup>**  
**1997-2002**

Cat.		1997	1998	1999	2000	2001	2002
No.	Description	<i>1,000 square meters equivalent</i>					
0	Textiles and apparel, total	394,563	511,904	711,634	866,479	871,097	1,068,237
1	Apparel	174,149	202,582	229,945	297,708	305,709	346,887
2	Textiles	220,414	309,322	481,689	568,771	565,388	721,349
11	Yarns	58,724	60,688	123,779	114,127	86,880	81,081
12	Fabrics	80,089	110,913	135,608	143,462	156,646	238,209
14	Other miscellaneous articles	81,601	137,720	222,303	311,182	321,862	402,060
30	Cotton textiles and apparel	235,242	321,321	432,675	491,290	496,787	565,718
31	Cotton apparel	160,987	186,409	209,984	271,930	273,946	299,803
32	Cotton textiles	74,256	134,912	222,691	219,359	222,842	265,916
40	Wool textiles and apparel	2,742	2,896	2,601	3,626	4,904	5,130
60	Manmade-fiber textiles and apparel	156,070	186,992	275,485	370,151	366,863	494,895
61	Manmade-fiber apparel	11,317	13,990	17,961	22,528	25,938	40,801
62	Manmade-fiber textiles	144,753	173,001	257,524	347,623	340,925	454,094
80	Silk blend/veg fiber textiles/apparel	509	695	872	1,413	2,543	2,493
219	Duck fabric of cotton/manmade fiber	17,312	31,374	33,454	31,573	35,173	53,849
223	Nonwoven fabric	0	1,339	5,134	9,417	14,655	58,689
239	Babies' apparel	2,522	3,181	4,150	6,168	5,688	7,552
300	Carded cotton yarn	14,336	19,579	56,799	40,074	23,030	20,925
301	Combed cotton yarn	2,256	4,983	25,873	23,098	18,879	5,595
332	Cotton hosiery	2,319	2,754	2,907	6,912	10,093	15,489
338	Cotton knit shirts, men/boys	13,245	14,731	12,606	11,109	11,086	16,107
339	Cotton knit shirts, women/girls	17,248	21,127	24,704	28,664	27,462	29,879
340	Cotton not knit shirts, men/boys	2,923	2,173	3,084	3,612	3,903	7,011
341	Cotton not knit blouses	1,806	1,671	2,271	3,424	4,001	4,550
347	Cotton trousers, men/boys	9,468	8,301	10,744	17,293	13,799	11,874
348	Cotton trousers, women/girls	23,329	32,661	37,807	51,627	49,695	47,635
350	Cotton robes	21,094	25,274	25,508	35,722	36,227	42,755
351	Cotton nightwear	35,863	41,085	49,754	55,168	50,172	54,947
352	Cotton underwear	14,311	16,201	20,265	32,128	34,551	34,021
361	Cotton sheets	8,589	11,426	11,269	15,675	13,475	14,284
362	Cotton bedspreads and quilts	3,495	30,400	40,184	45,045	55,975	63,903
363	Cotton terry and other pile towels	1,027	1,286	2,501	4,547	6,559	10,366
369	Other cotton manufactures	12,085	20,099	28,062	32,320	32,283	52,510
600	Textured filament yarn	35,904	25,202	21,957	28,451	11,271	13,643
604	Yarn of synthetic staple fiber	2,075	6,964	9,777	14,458	25,953	25,126
619	Polyester filament fabric, lightweight	6,327	12,064	17,011	35,478	42,497	48,345
666	Other manmade-fiber furnishings	24,831	37,319	95,465	135,912	127,479	140,201
669	Other manmade-fiber manufactures	29,918	34,737	41,918	73,705	81,378	115,560

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

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