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Apparel

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PREFACE

In 1991 the United States International Trade Commission initiated its current *Industry and Trade Summary* series of informational reports on the thousands of products imported into and exported from the United States. Each summary addresses a different commodity/industry area and contains information on product uses, U.S. and foreign producers, and customs treatment. Also included is an analysis of the basic factors affecting trends in consumption, production, and trade of the commodity, as well as those bearing on the competitiveness of U.S. industries in domestic and foreign markets.[1]

This report on apparel primarily covers the period 1989 through 1993 and represents one of approximately 250 to 300 individual reports to be produced in this series during the first half of the 1990s. Listed below are the individual summary reports published to date on the chemicals and textiles sectors.

USITC publication number	*Publication date*	*Title*
Energy and Chemicals:		
2458	November 1991	Soaps, Detergents, and Surface–Active Agents
2509	May 1992	Inorganic Acids
2548	August 1992	Paints, Inks, and Related Items
2578	November 1992	Crude Petroleum
2588	December 1992	Major Primary Olefins
2590	February 1993	Polyethylene Resins in Primary Forms
2598	March 1993	Perfumes, Cosmetics, and Toiletries
2736	February 1994	Antibiotics
2739	February 1994	Pneumatic Tires and Tubes
2741	February 1994	Natural Rubber
2743	February 1994	Saturated Polyesters in Primary Forms
2747	March 1994	Fatty Chemicals
2750	March 1994	Pesticide Products and Formulations
2823	October 1994	Primary Aromatics
2826	November 1994	Polypropylene Resins in Primary Forms
Textiles and Apparel:		
2543	August 1992	Nonwoven Fabrics
2580	December 1992	Gloves
2642	June 1993	Yarn
2695	November 1993	Carpets and Rugs
2702	November 1993	Fur Goods
2703	November 1993	Coated Fabrics
2735	February 1994	Knit Fabric
2841	December 1994	Cordage
2853	January 1995	Apparel

[1] The information and analysis provided in this report are for the purpose of this report only. Nothing in this report should be construed to indicate how the Commission would find in an investigation conducted under statutory authority covering the same or similar subject matter.

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INTRODUCTION

The U.S. apparel industry is an important component of the U.S. economy, though it has declined considerably in size during the past two decades. At its peak in 1970, the industry employed 1.4 million workers, or 7.0 percent of U.S. manufacturing employment. In 1993 the industry employed 932,000 workers, or 5.2 percent of manufacturing employment, and accounted for about 1 percent of gross domestic product. U.S. apparel shipments totaled an estimated $50 billion in 1993, and had little real growth during 1989-93. Real consumer spending on apparel slowed considerably during the period, growing at an average annual rate of just 1.5 percent, or by less than half the rate during the 1980s.

The domestic industry faces growing competitive pressures from the ongoing globalization of garment production. In the last three decades, roughly half the productive capacity in the world apparel industry has moved from developed countries to developing countries. Major U.S. retailers and apparel producers have helped encourage this shift by their search for lower operating costs and fewer quota restrictions. During the last 10 years, notwithstanding quota restrictions and relatively high tariffs, U.S. apparel imports grew by 90 percent to $34 billion and doubled their share of the U.S. apparel market to more than 40 percent. Between 1989 and 1993 U.S. apparel imports rose by 38 percent. The structure of world apparel trade will become less restrictive as a result of agreements reached in the Uruguay Round of multilateral trade negotiations to phase out the international Multifiber Arrangement system of textile and apparel quotas and reduce tariffs.

A more recent development significantly affecting the domestic apparel industry has been the structural changes taking place in the U.S. retail industry and the subsequent growing concentration of retail sales volume among fewer but bigger retail firms. Large retailers, including mail-order catalog firms, have increasingly taken on functions traditionally performed by the producers such as product development, fabric selection and procurement, and arranging for garment production. The increased buying power of the retailers has also disrupted traditional producer-buyer relationships and forced the apparel industry to be more responsive to retailer demands in terms of price, service, delivery, and product diversification and differentiation. As consumers demand better value, timely fashions, and consistent quality, competition in the market has intensified and spurred many U.S. retailers and apparel producers to import directly.

To react quickly to retailer demands and changing fashions, a growing number of U.S. apparel firms have adopted quick response systems and other new technology and production methods to reduce the time and cost of producing garments and to increase product diversification and differentiation. Proximity to customers is an important advantage that domestic producers have over those in exporting developing countries, and these new technologies and production methods enable them to respond more quickly to retailer demands for small, frequent orders than can foreign competitors.

To preserve market share, U.S. apparel producers have also expanded production-sharing operations in Mexico and Caribbean countries. The region has become the fastest growing supplier of imported apparel in the 1990s, facilitated by the introduction of preferential U.S. quotas for garments assembled there of U.S. fabric. Between 1989 and 1993, U.S. apparel imports from the region grew by 130 percent and its share of total apparel imports rose from just under 10 percent to 16 percent. The region not only offers a competitively priced labor force, but its proximity allows U.S. producers greater control over production and shorter lead times, thereby increasing their competitive edge against low-cost imports from Asia.

This report examines recent developments in the apparel industry, particularly developments during 1989-93. It describes the industry structure, recent changes in industry activity, conditions of competition and efforts of the U.S. industry to meet the competitive challenges facing it, foreign industries and the globalization of apparel production, the recent performance of the U.S. industry in both domestic and foreign markets, and recent trends in U.S. foreign trade in apparel.

U.S. INDUSTRY PROFILE

U.S. producers of apparel are classified in the Standard Industrial Classification (SIC) system under SIC 22, Textile Mill Products, and SIC 23, Apparel and Other Textile Products. The firms in SIC 22 are vertically integrated knitting mills that produce knitwear, such as hosiery, underwear, and sweaters, directly from yarn or from fabric knit in the same mill. Firms in SIC 23 make apparel by cutting and sewing purchased materials. The cut-and-sew firms account for 85 percent of U.S. apparel shipments annually.

Industry Structure

Firms in the U.S. apparel industry fall into three broad groups: (1) cut-and-sew manufacturers and integrated knitting mills, (2) jobbers, and (3) contractors and commission knitters. Cut-and-sew manufacturers and integrated knitting mills perform all the entrepreneurial functions associated with the industry, such as product design, selection and procurement of materials, production of apparel in their own plant, and marketing of the finished goods. Jobbers perform all these functions, except for production of garments, which they contract out. Contractors and commission knitters produce garments

from materials owned by others. The distinctions among these three groups have become less clear over the years as firms combine sourcing strategies to reduce costs and risks. The manufacturers and integrated mills not only at times use contract operations to help fill sales orders and to minimize direct labor costs but also, during periods of slow production activity, perform contract work for other firms. The broader structure of the domestic industry and its principal raw materials, products, and channels of distribution are illustrated in figure 1.

The domestic industry is a highly competitive and fragmented sector of almost 18,000, mostly small establishments. In general, the smaller firms produce a limited number of garment styles for niche markets and the larger companies are horizontally diversified, making a wider range of goods for different market segments. Although concentration in the industry remains low overall, it is relatively high in segments such as men's trousers and men's underwear and nightwear, for which the 4 largest firms account for roughly 60 percent of the respective industry shipments.

The average plant size of apparel establishments is much smaller than that of other industries.[1] Two-thirds of the apparel establishments employ fewer than 20 workers; only 10 percent employ 100 or more. The scale of plants producing men's apparel is much larger than that of plants making women's apparel, largely because menswear is generally subject to fewer fashion changes and, thus, production is more standardized. Plants producing men's apparel employ an average of 122 workers, compared with just 35 workers in the plants producing women's apparel.

Barriers to entry and exit in the apparel industry are minimal, given the limited capital required, ready access to production equipment, and broad availability of raw materials. Moreover, the fragmented structure of market demand in the apparel industry affords new and smaller producers an opportunity to develop a market niche. However, the attrition rate in the industry is higher than for most other industries. The apparel industry accounted for 9.2 percent of all business failures in the manufacturing sector in 1993.[2]

Although the apparel industry is spread throughout the country, its presence is most significant in the South, where it employs a greater portion of the workforce than it does nationally. The South is also home to the textile mill industry, the main supplier of apparel raw materials. Apparel plants are also concentrated in California and in the Mid-Atlantic region, the traditional garment-producing center that encompasses New York, New Jersey, and Pennsylvania. Plants in these States tend to operate on a much smaller scale than those in the South, primarily reflecting the concentration of small contractors in and around the New York City metropolitan area that largely specialize in short production runs of women's fashions, particularly dresses.

Recent Trends

The U.S. apparel industry has undergone significant restructuring in the past decade in response to import competition, changing consumer preferences, and growing concentration of buying power in the retail sector. The recent restructuring in the industry partly reflects the goal of many firms to expand channels of distribution or to broaden their range of established brand names and, thereby, gain a competitive edge in domestic and foreign markets. Some firms have sought to integrate forward into retailing, including factory outlets, in order to obtain more control over their business and to seek sales growth. For example, VF Corp., the largest publicly held firm in the industry, has acquired a number of firms that fit its focus on brand-name apparel. VF's brands now include, among others, Lee, Wrangler, and Girbaud in jeanswear; Vassarette, Vanity Fair, and Barbizon in intimate apparel; Healthtex in playwear; and Jantzen, Red Kap, and JanSport in specialty goods. In 1994, VF acquired Nutmeg Industries, Inc., and H.H. Cutler Co., both of which produce imprinted sports apparel under licenses from the four major professional sports leagues.

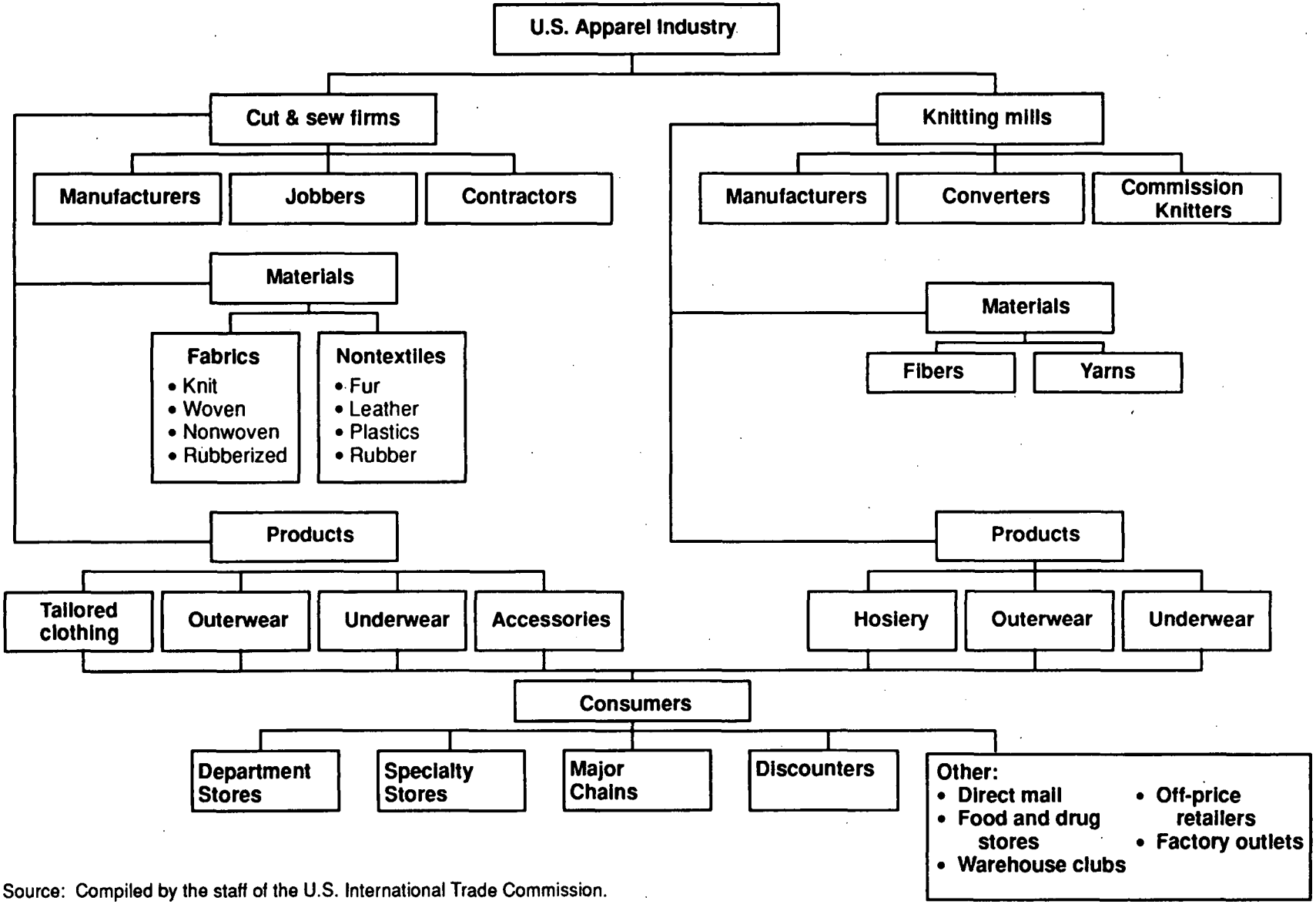
The restructuring contributed to the decline in industry employment, which fell below 1 million in 1990 and continued to decline to 932,000 in 1993 (table 1). Production workers account for 85 percent of the apparel labor force, compared with 70 percent for all manufacturing, largely reflecting the high labor intensity of apparel production. Production jobs require few skills, resulting in generally low wages. In 1993 the average hourly wage of apparel production workers of $7.10 was only 60 percent of the average wage for all manufacturing workers. Industry sources state that higher wages in other industries and greater employment opportunities in services industries have intensified competition for unskilled workers, thereby leading to labor shortages in some areas of the country.[3]

[1] Based on 1992 data as published by the U.S. Bureau of the Census, *County Business Patterns 1992 - United States*, CBP-92-1 (Washington, DC: U.S. Government Printing Office, Nov. 1994).

[2] The Dun & Bradstreet Corp., *Business Failure Record, 1992 (Final) and 1993 (Preliminary)*, (New York: 1994), p. 6.

[3] In a survey conducted annually by the domestic industry on labor trends, 60 percent of the responding plants in 1994 said that they did not have an adequate supply of experienced workers, compared with 43 percent in 1993. See American Apparel Manufacturers Association, *1994 Apparel Plant Wages Survey*, Arlington, VA, 1994.

Figure 1
U.S. apparel industry: Types of producers and principal raw materials, products, and consumers



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

Table 1
Structure of the U.S. apparel industry, 1989-93

Item	1989	1990	1991	1992	1993
Establishments (*number*)	18,004	18,263	18,800	[1]18,500	[1]17,900
Employees (*1,000*)	1,018	993	960	959	932
Production workers (*1,000*)	865	845	815	815	792
Value of shipments[2] (*million dollars*):					
Nominal value	45,900	45,800	47,000	[1]48,400	[1]49,900
Constant 1988 value	44,700	43,600	43,900	[1]44,200	[1]45,200
Production index[3] (*1987=100*)	95.0	92.2	92.9	95.0	94.9
New capital expenditures (*million dollars*)[3]	829	798	723	[1]760	[1]710
Capacity utilization (*percent*)[3]	80.3	77.9	77.6	80.0	80.1
Productivity (*1987=100*)[3]	101.9	102.0	102.4	[1]103.1	[1]105.6
Wages per hour (*dollars*)[3]	6.35	6.67	6.77	6.95	7.10
Labor costs/value added (*percent*)[3]	37.0	36.5	36.1	[1]36.4	[1]35.4

[1] USITC staff estimated data for 1992 and 1993 based on data for 1991, the latest year for which official statistics are available on a 4-digit SIC basis.

[2] USITC staff adjusted reported shipment data to eliminate double counting of contract receipts reported as shipments by both the contractor and the firm for which the work was done. Such contract receipts account for roughly 15 percent of annual shipments.

[3] Covers all of SIC 23.

Source: Compiled from official statistics of the U.S. Bureau of the Census, *Annual Survey of Manufactures*, 1991 and selected back issues, and *1992 Census of Manufactures (Preliminary Report)*; U.S. Bureau of Labor Statistics, *Employment and Earnings* and *Multifactor Productivity in U.S. Manufacturing and in 20 Manufacturing Industries, 1949-91*, July 1994; and Board of Governors of the Federal Reserve System, *Federal Reserve Statistical Release: Industrial Production and Capacity Utilization*.

Labor costs remain a major cost factor for the apparel industry, but their relative importance has diminished in recent years. Between 1989 and 1993, the ratio of labor costs to value-added fell from 37 percent to 35 percent. Nevertheless, it remained well above the 25-percent mark for all manufacturing. Labor intensity varies widely among apparel items. Garments that require high levels of production flexibility and management and sewing skills, such as fashion goods and tailored clothing, tend to have a higher labor intensity than high-volume commodity garments, such as trousers and jeans, as shown in figure 2.

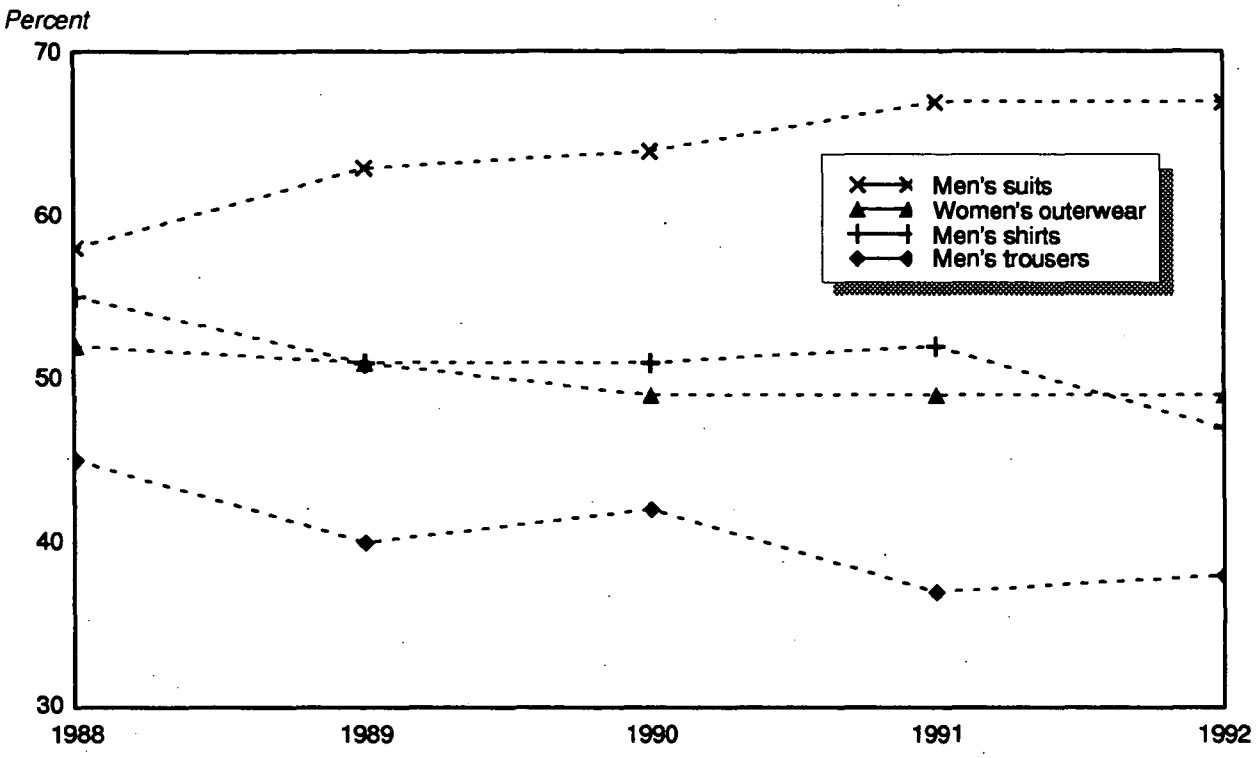
The diminishing labor intensity in the apparel industry partly reflects the adoption of new production technology and methods, especially by the larger firms. Nevertheless, expenditures on research and development (R&D) and on new plants and equipment in the apparel industry are small. Most R&D that has affected the industry, such as the development of electronically controlled machines and new fibers and fabrics, has been generated by the machinery and manmade-fiber industries. Capital spending on new plants and equipment in the U.S. apparel industry averaged an estimated $924 per production worker annually during 1989-93, compared with $4,269 in the allied textile mill industry and $8,314 for all manufacturing. The highly fragmented structure of the apparel industry, the frequent changes in fashion, and the difficulty in designing equipment to handle limp fabrics have limited the use of new technology in the industry. In addition, the limited capital availability and concern over import competition have been problems.

Foreign investment in the U.S. apparel industry is small, but growing. Between 1987 and 1992, the foreign-owned establishments' share of U.S. apparel employment rose from 1.1 percent to 2.8 percent, or to 29,000 workers.[4] In 1990 the 116 foreign-owned apparel manufacturing establishments had shipments of $1.7 billion, or slightly less than 3 percent of the industry's shipments. The majority of their investment was in the men's tailored clothing segment, in which the foreign-owned establishments accounted for 9 percent of 1990 shipments. The growth in foreign investment, which came mainly from Canada, Germany, and the United Kingdom, reportedly reflected higher rates of return on investment in the United States and reduced costs of acquisitions as a result of the depreciation of the dollar against most foreign currencies in the late 1980s.[5]

[4] U.S. Department of Commerce, Bureau of Economic Analysis (BEA), *Survey of Current Business*, "Foreign Direct Investment in the United States: 1992 Benchmark Survey Results," July 1994, pp. 154-171.

[5] BEA, *Survey of Current Business*, "Rates of Return on Direct Investment," Aug. 1992, pp. 79-87.

Figure 2
Labor intensity in major apparel segments, 1988-92[1]



[1] Labor intensity is the ratio of labor costs to value added by manufacture.

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

Productivity

Total factor productivity in the U.S. apparel industry is estimated to have increased at an average annual rate of 1.5 percent during 1991-93, following average annual growth of 0.5 percent during 1987-91 (figure 3).[6] The productivity growth during 1991-93 largely reflected estimated gains of 5.4 percent in capital productivity and 3.8 percent in labor productivity, following declines of 4.2 percent and 1.7 percent, respectively, during 1987-91. The improvement during 1991-93 stemmed from the industry's ongoing efforts to restructure and streamline operations. The improvement in material productivity partly resulted from the more efficient utilization of these inputs by the industry through the use of computer-aided cutting.

Financial performance

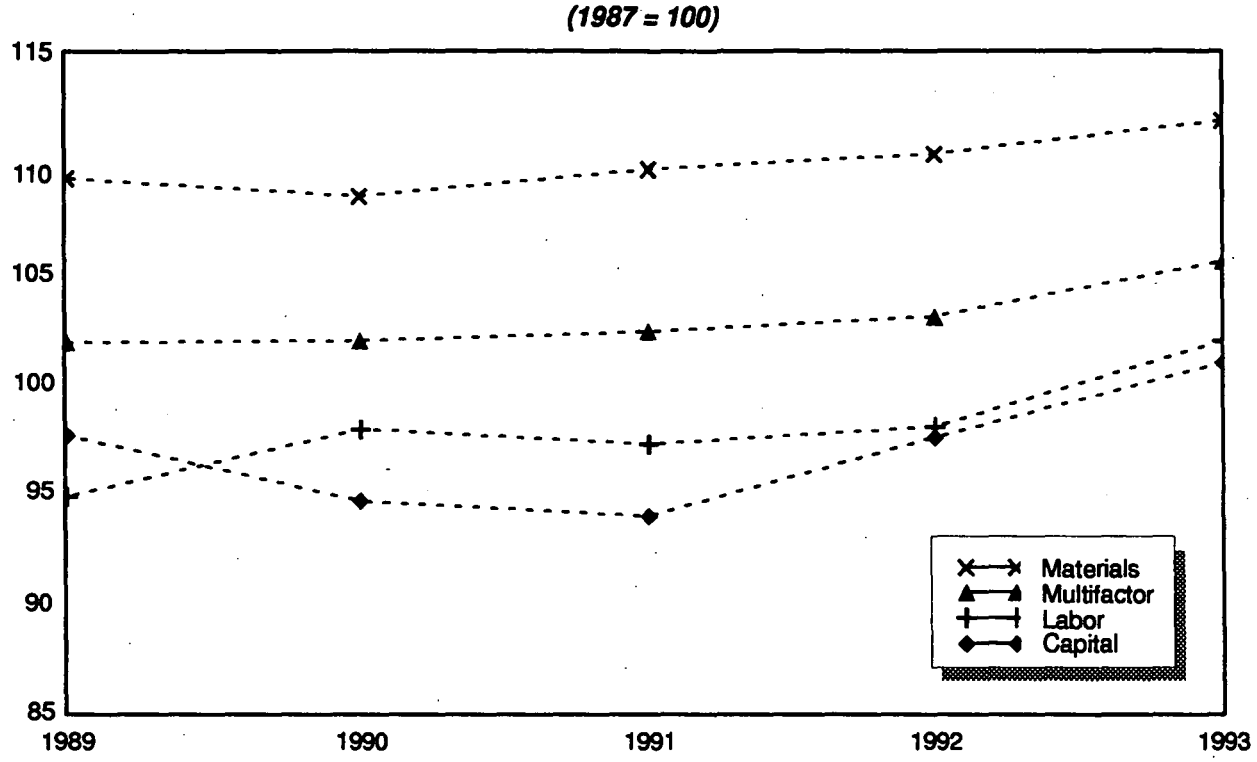
The financial performance of the U.S. apparel industry was comparable to the average for all manufacturing in 1992 and 1993, the first years for which the U.S. Bureau of the Census began to compile and publish such data on the apparel industry.[7] Operating income as a percent of sales in 1992 averaged 5.2 percent for both apparel and all manufacturing; in 1993, it fell slightly to 5.0 percent for apparel but rose to 6.0 percent for all manufacturing (table 2). Although the apparel industry's return on sales remained well below that of the textile mill industry, its return on assets compared favorably and was much higher than the average for all manufacturing.

The average before-tax return on sales and assets was higher in the apparel industry than in the textile mill industry and for all manufacturing. The apparel industry incurred net nonoperating income of $800 million in 1992 and a modest net nonoperating expense

[6] Based on unpublished data of the U.S. Bureau of Labor Statistics, *Multifactor Productivity in U.S. Manufacturing and in 20 Manufacturing Industries, 1949-91*, July 1994.

[7] The data compiled by the U.S. Bureau of the Census cover SIC 23, Apparel and Other Textile Products, and SIC 31, Leather and Leather Products. In addition to apparel, SIC 23 includes home furnishings, automotive trimmings, and other fabricated textile products. SIC 31 includes leather tanning, footwear, luggage, purses, and other leather products.

Figure 3
Apparel: Factor productivity indexes, 1989-93



Source: Data for 1992 and 1993 were estimated by the staff of the U.S. International Trade Commission; all other data were compiled from unpublished data of the U.S. Bureau of Labor Statistics, *Multifactor Productivity in U.S. Manufacturing and in 20 Manufacturing Industries, 1949-91*, July 1994.

Table 2
Profitability ratios: Apparel, textile mill products, and all manufacturing, 1992-93
(Percent)

Item	Return on sales—		Return on assets—		Return on equity—	
	1992	1993	1992	1993	1992	1993
Apparel:						
Operating income	5.2	5.0	10.2	9.8	28.8	25.5
Before-tax income	6.4	4.8	12.5	9.3	35.3	24.2
After-tax income	5.1	3.3	10.0	6.4	28.2	16.8
Textile mill products:						
Operating income	8.4	7.3	12.0	10.3	30.4	24.2
Before-tax income	5.4	4.1	7.7	5.8	19.5	13.6
After-tax income	3.4	2.3	5.0	3.3	12.5	7.7
All manufacturing:						
Operating income	5.2	6.0	5.5	6.3	14.6	17.3
Before-tax income	1.2	3.9	1.3	4.1	3.4	11.4
After-tax income	0.9	2.8	0.9	2.9	2.4	8.1

Source: U.S. Bureau of the Census, *Quarterly Financial Report for Manufacturing, Mining, and Trade Corporations*, First Quarter 1994 and various back issues.

of $190 million in 1993.[8] The textile mill industry and all manufacturing were impacted by significant nonoperating expenses during 1992-93 that lowered their returns on sales and assets.

[8] These items are nonrecurring income or expenses which may include, but are not limited to, gains or losses from sales of assets, costs of or income from acquisitions or restructuring, and interest income or expenses.

The ratio of debt to net worth for the apparel industry improved as a result of increased profit and retained earnings. The improvement also resulted from the retirement or refinancing of high-interest debt incurred during the leveraged buyouts of the 1980s. As net worth grew more than debt, the debt ratio in the capital structure and financial leverage decreased. This partly explains the decline in the industry's 1993 return

on equity. Nevertheless, the industry's before-tax return on equity remained higher than that of either the textile mill industry or all manufacturing.

Competitive Strategies

The U.S. apparel industry faces growing competitive pressures from the ongoing globalization of garment production and the increasing concentration of buying power in the U.S. retail industry among fewer but larger retailers. The restructuring taking place in the retail sector as a result of recent bankruptcies and consolidations has challenged existing apparel producer-buyer relationships and compelled producers to be more responsive to retailer demands. In addition, a number of mostly large retail and direct-mail catalog firms now do many of the functions traditionally performed by producers, such as design and styling. The growing bargaining power of these retail firms tends to reduce the flexibility of apparel producers in scheduling production and negotiating prices and delivery dates. As consumers demand better value, competition in the marketplace has intensified and retailers and domestic producers have increasingly turned to imports.

To meet these challenges, the U.S. apparel industry has implemented a number of strategies in recent years to sharpen its competitive edge and preserve its markets. Chief among these strategies are (1) the expansion of production-sharing operations in Mexico and the Caribbean Basin and the transfer of more labor-intensive operations to these lower wage areas and (2) the adoption of quick response systems and the attendant investment in new technology and the introduction of new manufacturing, marketing, and distribution methods.

Production Sharing

U.S. apparel producers have greatly expanded their use of production-sharing operations in Mexico and the Caribbean Basin during the past 5 years. The growth in these operations, facilitated by the liberalization of U.S. apparel quotas for the region, as discussed in "U.S. trade measures" later in this report, is part of a broader trend of globalization in garment production. Faced with growing competition from imports, many U.S. apparel producers have set up assembly operations in Mexico and the Caribbean Basin to avail themselves of low-cost labor in close proximity to the United States. This allows U.S. firms greater control over production and shorter delivery lead times than for goods from Asia. The competitive position of U.S. producers increasingly relies on their ability to react quickly to changes in fashion and retailer demands.

U.S. apparel producers have achieved a high level of efficiency in Mexico and the Caribbean countries in assembling high-volume commodity garments whose production involves standardized runs, low-skilled operations, and few styling changes. They ship ready-cut pieces of garments to the region for sewing, the most labor-intensive stage of production. Given the increased time lag involved, production sharing is geared to garments such as basic trousers and shorts, shirts and blouses, brassieres, and underwear that have reasonably predictable consumer demand. Although the Far East remains a major source for apparel requiring higher levels of production flexibility and management and sewing skills, production of these goods is gradually expanding in Mexico and the Caribbean countries.

U.S. apparel firms that use Mexico as a low-cost manufacturing base to compete with East Asian products in the North American market are expected to benefit in the long term from the North American Free Trade Agreement (NAFTA). The elimination of U.S. tariffs and quotas under NAFTA is expected to spur further investment by U.S. apparel producers in production sharing in Mexico. In addition, many large U.S. apparel producers that have adopted quick response programs in the United States could extend the programs to Mexico.

Quick Response

The changing dynamics of fashion merchandising are creating an ever increasing need to reduce the response time in meeting consumer preferences for apparel. This presents both a challenge and a competitive opportunity for U.S. apparel producers to maximize their inherent advantages of market proximity and efficient response to retailer needs. Although technology may improve productivity, it probably will not enable U.S. apparel producers to compete with low-wage countries in the low end of the domestic market. The competitive strength of the industry lies in its ability to improve product quality and develop market niches, strong brand names, and quick response to changes in market demand.

A growing number of U.S. apparel producers have adopted quick response (QR) programs that use computers to speed the flow of goods, services, and information between segments of the industry chain, linking apparel producers with textile suppliers and retailers. Adoption of innovative technology by U.S. apparel producers underscores the growing importance of QR as a competitive tool to lower costs and increase services. Technology and new production methods have allowed apparel firms to reduce the time to design and produce garments from several months to just a few days, and to increase product differentiation and diversification. These factors have made QR a

powerful tool for technologically aggressive U.S. apparel firms.[9]

The large retailers and apparel suppliers have generally been the driving force behind adoption of QR in the fiber-to-retail chain. Roughly 72 percent of textile and apparel manufacturers reportedly had QR programs with their suppliers in 1994, up from 60 percent a year earlier.[10] Additionally, 40 percent of vendors are managing their customers' inventories with point-of-sale data. The increasing competitive pressure coming from the large retailers is forcing U.S. apparel producers to adopt QR programs to deliver faster, more flexible service to retailers. With retailers reducing stocks and pushing inventory costs back up the supply chain, domestic suppliers with their market proximity can respond more quickly and efficiently to retailer demands for smaller, more frequent orders than can foreign producers.

Apparel firms with QR capabilities, strong brand-name recognition, and consumer loyalty will likely gain market share in the coming years as large retailers align themselves with reliable suppliers. These competitive advantages are generally associated with large, well-capitalized firms that have a merchandising-oriented, as opposed to a production-oriented, business strategy. The five major apparel suppliers, VF Corp., Liz Claiborne, Fruit-of-the-Loom, Levi Strauss, and Sara Lee (Hanes, Bali, Playtex, and Champion brands), have such advantages. For many of the thousands of small U.S. apparel producers, however, implementation of QR technology and new production methods is limited by the lack of sufficient production volume, lack of financial resources, and, according to several industry analysts, reluctance to change established business practices.[11]

QR strategies have two important integral parts: (1) electronic data interchange (EDI) links between apparel producers and their retail partners and (2) flexible manufacturing systems. Apparel suppliers and retailers use EDI "bar code" technology to send and receive information instantaneously regarding transactions and point-of-sale (POS) data, thereby replacing paper documents and the use of conventional mail. Perhaps the greatest value of EDI to apparel suppliers is immediate access to POS data for purposes of planning and automatic re-ordering. Retailers that scan merchandise bar codes at the point of sale obtain product data (e.g., garment style, fabric, color, and size) that help to analyze and forecast sales trends accurately. With daily or weekly access to such data, suppliers can adjust production schedules to meet the needs of their retail partners. The system also allows for "total pipeline visibility," or the ability to constantly monitor inventory levels in the store, the warehouse, or in transit.[12]

Technology-based QR programs require new structural forms of production to make small, recurring lots of various styles. QR techniques necessarily differ from the bundle system, which can lead to inconsistent quality and delays between steps in the production cycle.[13] One flexible system gaining acceptance is modular manufacturing.[14] This system uses specialized, electronically controlled equipment enabling small teams of workers to produce an entire garment. To minimize downtime and emphasize quality, firms cross-train workers to perform several tasks, and link pay and incentives to team performance. If a back-up arises in one operator's area, assistance is available from someone else in the group, thus reducing downtime.

Modular manufacturing enables producers to cut production schedules from a monthly to a weekly basis, allowing more flexibility in production and less inventory of finished goods. Since garments are continually moving through the group, inventory levels—materials, work-in-process, and finished goods—are kept at a minimum. With greater employee input and coordination throughout the manufacturing cycle, quality is generally more

[9] While a successful QR program has the capability to produce substantial cost and efficiency savings, the number of varying information systems currently in use may limit its effectiveness. See *Bobbin*, "The Inside Story of Bridging the QR Gap," Mar. 1993, p. 53.

[10] Kurt Salmon Associates, "Soft Goods Outlook for 1995," *Perspective*, Nov. 1994, p. 3.

[11] See, for example, "Stuck in the Past," *Apparel Industry Magazine*, Mar. 1994, pp. 42-48.

[12] American Apparel Manufacturers Association, Management Systems Committee, *EDI for Apparel: A Management Overview, 1992 Report*, p. 3.

[13] The bundle system is the traditional method of apparel production. Bundles of cut pieces pass manually from one work station to another, with each operator performing one step of the process, such as attaching collars. Workers operate independently and are paid on a piece-rate basis. However, workers spend a considerable amount of time handling, tying, and untying the bundles. According to Kurt Salmon Associates, only about 20 percent of production costs are attributable to sewing processes; no value is being added to the product during about 80 percent of the manufacturing process. See *Bobbin*, "QR Meets DFM (Demand Flow Manufacturing)," Jan. 1993, p. 2.

[14] Another form of flexible apparel manufacturing is the unit production system (UPS), in which a garment moves automatically by overhead transporters between work stations, reducing idle time and handling commonly found in the bundle method. "Using Simulation Before Implementing a Unit Production System," *Bobbin*, Nov. 1990, p. 16.

consistent. Production lots tend to be much smaller and so choices in style and fabric can be greater. The effective use of flexible manufacturing can reduce in-process inventories by 70 to 90 percent and direct labor costs by 20 to 30 percent.[15]

Ongoing Technological Developments

As U.S. apparel producers search for new ways to gain a competitive edge in the marketplace, advanced technology stands to take on greater importance in the coming years. In early 1993, the American Textile Partnership (AMTEX) and the U.S. Department of Energy (DOE) announced a historic cooperative R&D agreement designed to revitalize the textile and apparel sector through the transfer of government-developed technology.

AMTEX is using DOE research on computer-aided logistical support, originally conducted for the U.S. Department of Defense, in a multiphase project called Demand Activated Manufacturing Architecture (DAMA). When fully implemented, DAMA would link all of the roughly 26,000 firms in the fiber-textile-apparel-retail chain to access information from other firms through a common data infrastructure. This could, for example, allow a supplier to have access to inventory or consumption data of its customer so that new supplies could be shipped at the optimal time. It would also allow a firm to electronically transmit shipping information to a customer at the time that a shipment leaves its source. This information enables the final destination of each item to be determined so that it can be immediately forwarded when it arrives, facilitating QR and reducing costly time in inventory.

Other AMTEX projects include the Textile Resource Project, which will focus on minimizing solid waste throughout the textile and apparel sector; development of a computer-aided fabric evaluation system to inspect fabric within the loom or knitting machine to detect flaws and immediately correct their cause; and development of a faster machine for cutting fabric. In addition, AMTEX will focus on the development of an electronic fingerprinting device that can be imbedded in a garment or other product. This device will provide greatly enhanced information to control many operations during the life of a garment from its manufacture to its disposal. It could contain such information as the name of the manufacturer, date of manufacture, dye lot and color, size, and material content, and would be used, among other things, to prevent counterfeiting by authenticating the manufacturer and to provide cleaning and disposal information.

[15] Fredric K. Rosen, president and chief executive officer, Gerber Garment Technology, Inc., "Linking Manufacturing to Pre-Production Planning," remarks presented at conference of the American Apparel Manufacturers Association, Apparel Research Committee, Nov. 10, 1992.

FOREIGN INDUSTRY

Apparel production has become highly globalized as a result of changing competitive conditions in producing countries. During the past three decades, roughly half the productive capacity in the global apparel industry has moved to developing countries.[16] Unlike apparel producers in developed countries which rely heavily on their home markets, producers in many developing countries depend on export markets for growth. This pattern of development has enabled developing countries since the early 1970s to nearly double their share of world apparel exports to about 60 percent in the early 1990s (table 3). This trend has also furthered the deterioration in the apparel trade balance of developed countries, where structural adjustments, in response to greater competition from imported apparel, have led to decreases or slower growth in garment production.

The relative growth of developing countries in world apparel trade has occurred during a period of significant quota and tariff restrictions in major developed-country markets. The framework for apparel trade will become less restrictive as a result of agreements reached in the Uruguay Round of multilateral trade negotiations to phase out the international Multifiber Arrangement (MFA) system of textile and apparel quotas and reduce tariffs.[17] Such trade liberalization will likely spur further investment in developing countries for production of apparel for export, thereby continuing the globalization of garment production and adding to the competitive pressures facing the developed countries.

Globalization

The migration of apparel production to areas with lower labor costs began in the late 1950s and early 1960s, when first Japan and then the Big Three Asian producers—Hong Kong, Taiwan, and the Republic of Korea—became major exporters of low-cost apparel. Trade rather than domestic consumption has been the driving force behind the rapid growth of the apparel industries in the Big Three. At their peak in the early

[16] U. Hartmann, director, Gherzi Textile Organization (Zurich), "Trends in Textile Capacity," *Textile Asia*, July 1993, p. 70.

[17] For further discussion of the MFA and the Uruguay Round agreements, see "U.S. trade measures" later in this report.

Table 3
Apparel: World exports, by selected countries and country groups, 1989-93

(Million dollars)

Country/group	1989	1990	1991	1992	1993
Developed countries[1]	35,652	45,030	47,346	52,351	(2)
United States	2,087	2,479	3,215	4,093	4,808
Canada	318	328	404	527	662
Japan	565	566	580	638	642
European Union	29,629	37,889	39,458	43,206	(2)
Intra-EU exports	18,650	24,600	26,710	29,190	(2)
Extra-EU exports[3]	10,979	13,289	12,748	14,016	(2)
Other	3,053	3,768	3,689	3,887	(2)
Developing countries[1]	58,548	63,972	71,634	83,652	(2)
Latin America[4]	2,030	2,173	1,853	1,893	(2)
Far East	47,831	51,733	60,280	68,803	(2)
Hong Kong	13,994	15,406	17,959	20,060	[5]21,003
Domestic exports	9,214	9,266	9,761	9,969	9,289
Reexports	4,780	6,140	8,199	10,091	[5]11,714
China	8,165	9,669	12,800	16,704	18,441
Korea	9,096	7,879	7,417	6,770	6,166
Taiwan	4,735	3,987	4,480	4,114	(2)
Indonesia	1,146	1,646	2,265	3,164	3,502
Malaysia	1,070	1,315	1,529	1,877	(2)
Philippines	(2)	(2)	(2)	819	835
Singapore	1,393	1,588	1,741	1,810	1,549
Domestic exports	932	995	1,029	976	[6]771
Reexports	461	593	712	834	[6]778
Thailand	2,457	2,816	3,672	3,767	4,179
India	2,216	2,530	2,527	3,099	(2)
Pakistan	722	1,014	1,209	1,443	1,558
Macau	1,045	1,107	1,077	1,165	1,070
Sri Lanka	466	638	784	1,193	(2)
Bangladesh	548	585	790	1,046	(2)
Other	778	1,553	2,030	1,772	(2)
All other	8,687	10,066	9,501	12,956	(2)
Turkey	2,741	3,331	3,478	4,179	4,339
Tunisia	776	1,126	1,221	1,477	1,504
Other	5,170	5,609	4,802	7,300	(2)
Grand total	94,200	109,002	118,980	136,003	(2)

[1] The term "developed countries" corresponds with the term "developed economies" used by the United Nations (UN) for statistical reporting purposes. The term "developing countries," as used in this table, merely represents all other countries and has been adopted by USITC staff for statistical presentation purposes only. UN statistics for "developing economies" do not include data for Central Europe and the former Soviet Union, which together accounted for 2 percent, or $2,866 million, of world apparel exports in 1992.

[2] Not available.

[3] Data for extra-EU apparel exports were derived by subtracting intra-EU apparel exports, as published by the GATT, from total EU apparel exports, as compiled by the UN.

[4] Includes all countries of the Western Hemisphere except the United States and Canada.

[5] Estimated by USITC staff based on data in U.S. Department of State telegram, "SPR 0521: Textile Report—1993-1994 (Part One - Text), message reference No. 07847, prepared by U.S. Consul, Hong Kong, Aug. 19, 1994.

[6] Estimated by USITC staff based on data in U.S. Department of State telegram,"SPR 0521 - Industrial Outlook Report: Textile," message reference No. 06330, prepared by U.S. Embassy, Singapore, Oct. 7, 1994.

Source: Compiled from unpublished UN data for Standard International Trade Classification (SITC) division 84, articles of apparel and clothing accessories (Revision 3); United Nations, *Monthly Bulletin of Statistics* (New York: May 1994), pp. 316-19; and General Agreement on Tariffs and Trade, *International Trade 1993 - Statistics* (Geneva: 1993), pp. 71 and 101, and selected back issues.

1980s, the Big Three supplied almost 30 percent of world apparel exports. By 1992, their share had fallen to just under 16 percent.

The relative decline of the Big Three partly reflected their rising costs and limited quota growth in the major developed-country markets. The Big Three also faced growing competition from a new generation of low-cost exporting countries that emerged in the late 1970s and early 1980s and, at the time, were subject to fewer quota restrictions. Chief among these countries

were China, which first received most-favored-nation status from the United States in 1980, India, Pakistan, and members of the Association of South East Asian Nations (ASEAN)—Brunei, Indonesia, Malaysia, Philippines, Singapore, and Thailand.

Faced with these competitive challenges, apparel producers in the Big Three countries have upgraded the quality and styling of their export product mix during the past decade. They have also moved production of basic garments for export to lower cost countries such as China and the ASEAN countries. Firms in the Big Three countries, along with the global trading companies in Japan and many, mostly large apparel retailers and producers in the United States and the European Union (EU), have provided these developing countries with capital and technical assistance to produce apparel for export. They have also lessened the financial risks inherent in global trade by providing materials, coordinating production, and marketing the garments. It is estimated that firms in the Big Three countries control 75 percent of apparel production in the Far East.[18]

The relocation of apparel production offshore enabled producers in the Big Three countries to gain market share in developed countries where their home-country exports were subject to tight quota. It also helped enable China and the ASEAN countries to rank among the fastest growing exporters of apparel during the 1980s. Today China and the ASEAN countries (with the exception of Brunei), along with India and Pakistan, are highly export-oriented and are subject to extensive quotas in the major developed-country markets.

The growing trade restrictions on these Asian countries have created opportunities for other apparel suppliers to develop their export potential. In the past 5 years, a large number of new and smaller developing-country suppliers have expanded their share of world apparel trade to become more important sources, either for specific or multiple products. Bangladesh, Macau, and Sri Lanka are among the larger exporting countries in this group, which also includes countries in Central Europe and in South and Central America, where producers in the EU and the United States, respectively, have production-sharing arrangements.

The ongoing shift in world garment production is reflected in changes in the apparel trade balance of major producing countries. Recent changes in the trade balance show the relative decline of the apparel industry in the United States and the EU and its growing importance in developing countries. The U.S. and EU apparel trade deficits have widened considerably during the past decade, although the increase in the U.S. apparel trade deficit has slowed since 1989 (figure 4). The Big Three Asian countries still maintain significant trade surpluses in apparel, but their competitive advantage has leveled off since 1989. Countries with a substantial competitive edge include China and a group of smaller exporting Asian countries, consisting of India, Pakistan, and the ASEAN countries.

Hong Kong and Singapore are increasingly moving to a service-oriented economy and likely will continue to increase their roles as entrepôts[19] for the apparel industry in the Far East. The growing importance of this function is evident in the rapid growth of their apparel reexports. Apparel reexports for the first time exceeded domestic apparel exports for Hong Kong in 1992 and for Singapore in 1993 (table 3). All but a small portion of Hong Kong's apparel reexports come from China.

Production and Employment

World apparel production showed little growth during the 1980s before declining significantly during the early 1990s. Production rose by only 1 percent during 1980-89, and then fell by 14 percent during 1989-93 (table 4). The decline occurred during a period marked initially by heightened uncertainty brought on by the Persian Gulf crisis and then by sluggish economic activity in developed countries.

Disaggregated data reveal the shift taking place in world apparel production. During 1980-93, output decreased by 24 percent in the developed countries but increased by 39 percent in the developing countries. Apparel employment showed similar trends during 1980-90, falling by 19 percent in the developed countries, but rising by 110 percent in the developing countries. Today the apparel industry is a key source of output and job growth in many developing countries and provides them much-needed foreign exchange to foster further economic development. The industry also remains a major employer in the developed countries.

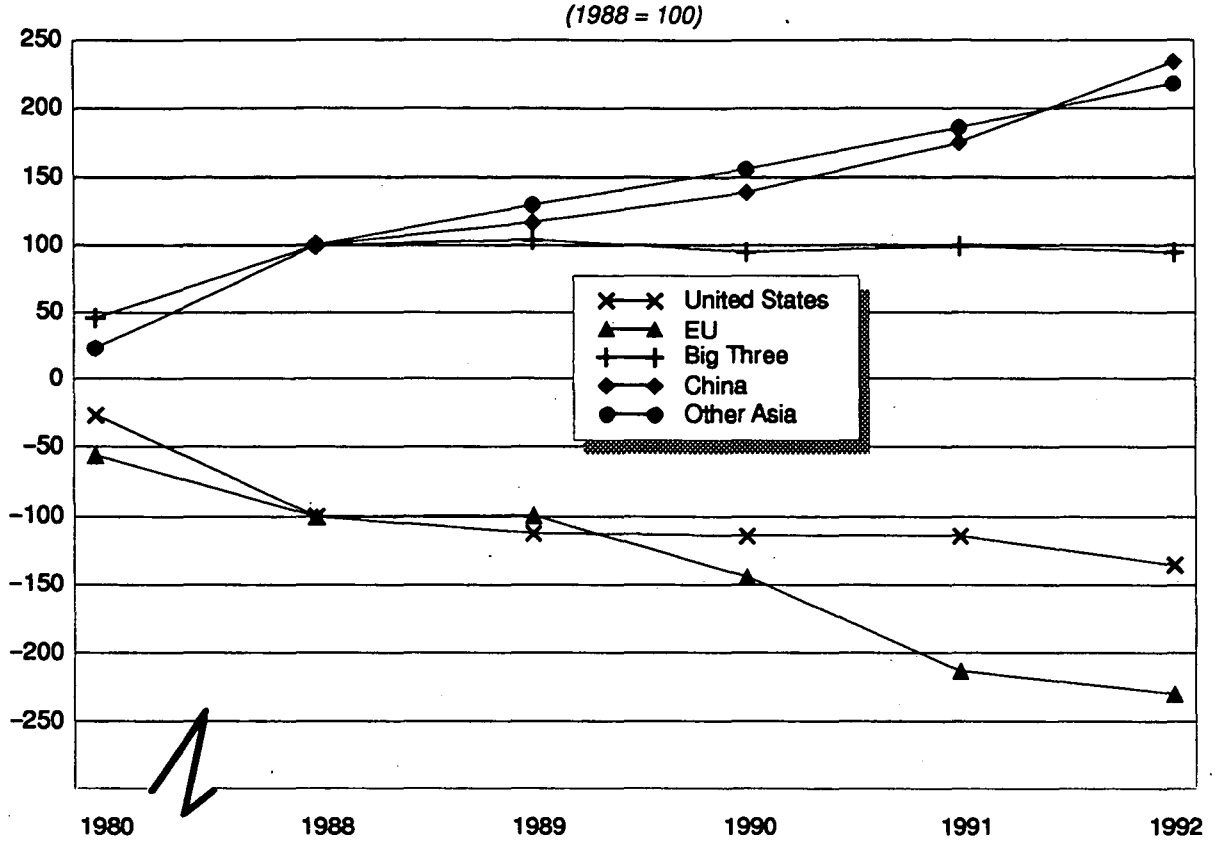
The expansion of the apparel industry in the developing countries has occurred primarily in Asia, where an established infrastructure of spinning, weaving and knitting, and dyeing and finishing operations exists. Asian apparel production grew by 114 percent during 1980-93.[20] Employment in the region rose by 130 percent during 1980-90. Labor productivity also improved in Asia. Firms in the Big Three Asian countries have not only invested in labor-saving equipment but also, along with companies

[18] Alan J. Braithwaite, "Far East Dragons Changing Their Spots," *Bobbin*, Nov. 1990, p. 66.

[19] An entrepôt is an intermediary center for the collection and distribution of merchandise.

[20] The gain in Asian production would have been much greater had China been included in the data contained in table 4. The United Nations Conference on Trade and Development does not include nonmarket countries in Asia in its calculation of world production, employment, and labor productivity indexes.

Figure 4
Apparel: Trade balance indexes for selected countries and country groups, 1980 and 1988-92



Note.—The Big Three includes Hong Kong, Taiwan, and the Republic of Korea. Other Asia includes India, Pakistan, and the ASEAN countries of Indonesia, Malaysia, Singapore, and Thailand. The other ASEAN countries, Brunei, whose apparel trade is very small, and the Philippines, were not included in the data for other Asia because data on their apparel trade were either incomplete or not available.

Source: Compiled from United Nations data for Standard International Trade Classification (SITC) division 84, articles of apparel and clothing accessories (Revision3), and supplemented by data published in General Agreement on Tariffs and Trade, *International Trade 1993 - Statistics* (Geneva: 1993), pp. 71 and 72, and The Economist Intelligence Unit, *Textile Outlook International* (United Kingdom: Textile Intelligence Ltd.), July 1994.

in the developed countries, have transferred technology and know-how to other developing countries in the region.

The decline in apparel production in the developed countries was widespread, although the decrease was greater in the EU than in North America (the United States and Canada). Between 1980 and 1993, EU apparel output decreased by 30 percent,[21] whereas North American production fell by 13 percent. Apparel employment declined more in North America than in the EU, however. This trend partly reflected the more widespread adoption of labor-saving equipment in North America and the corollary gain in labor productivity. Productivity of apparel workers in North America rose by 38 percent during 1980-89 before falling by a total of 11 percent over the next 2 years. Labor productivity among EU apparel firms, which employed an average of 17 persons in 1993,[22] has declined continually since 1985 to a level slightly below the 1980 level.

U.S. TRADE MEASURES

The principal U.S. trade measures for apparel are import tariffs and quotas. These restrictions are to be liberalized as a result of concessions by the United States in the Uruguay Round of multilateral trade negotiations. The Uruguay Round Agreement (URA) provides for the liberalization of world trade in textiles

[21] EU apparel output continued to decline in 1994. During January-August 1994, it fell by 4.7 percent from the corresponding period of 1993. L'Observatoire Européen du Textile et de l'Habillement (OETH), *Monthly Report: Textiles & Clothing*, vol. 3 (Brussels: OETH, Nov. 1994), p. 9.

[22] OETH, *Monthly Report: Textiles & Clothing* (Sept. 1994), p. 3.

Table 4
Apparel:[1] Indexes of world production, employment, and labor productivity, by specified country groups, selected years 1975-93

(1980=100)

Country group	1975	1985	1987	1988	1989	1990	1991	1992	1993
					Production[2]				
World	89	98.9	100.7	100.5	101.1	95.5	91.5	88.9	86.9
Developed countries	96	96.0	95.4	94.3	93.8	87.3	82.2	79.0	76.3
North America[3]	89	91.1	96.6	97.8	99.6	94.7	89.7	89.6	87.3
European Union	104	95.4	91.1	88.1	87.0	81.1	76.4	72.8	69.9
Developing countries	84	113.2	127.1	130.5	136.7	135.5	137.1	137.4	138.8
Latin America[4]	86	96.2	94.0	92.7	95.2	91.2	90.3	88.5	91.6
Asia	86	137.3	180.9	188.0	199.0	200.9	207.3	212.1	214.3
					Employment[2]				
World	87	106	115	126	134	146	[5]	[5]	[5]
Developed countries	105	86	85	83	82	81	79	[5]	[5]
North America[3]	97	77	76	75	71	70	68	[6]68	[6]66
European Union	117	86	85	82	81	80	78	[7]75	[7]73
Developing countries	70	123	142	166	186	210	[5]	[5]	[5]
Latin America[4]	86	109	111	116	120	128	[5]	[5]	[5]
Asia	66	125	147	176	201	230	[5]	[5]	[5]
					Labor productivity[2]				
World	96	108	114	119	121	115	[5]	[5]	[5]
Developed countries	94	109	109	109	111	105	100	[5]	[5]
North America[3]	92	118	128	131	138	130	123	[5]	[5]
European Union	92	111	108	106	107	101	96	[5]	[5]
Developing countries	48	105	115	122	124	117	[5]	[5]	[5]
Latin America[4]	103	84	84	83	84	78	[5]	[5]	[5]
Asia	124	109	124	131	133	126	[5]	[5]	[5]

[1] Also includes leather and footwear.

[2] As noted below, data in this table are from two different United Nations publications. Thus, production data for selected years 1985-93 may not be exactly comparable with production data for 1975 or with employment and labor productivity data for selected years 1975-91.

[3] Includes the United States and Canada.

[4] Includes all countries of the Western Hemisphere except the United States and Canada.

[5] Not available.

[6] Estimated by USITC staff based on official statistics of the U.S. Bureau of Labor Statistics.

[7] Estimated by USITC staff based on data published by L'Observatoire Européen du Textile et de l'Habillement (OETH) in *Monthly Report: Textiles & Clothing* (Brussels: OETH, Sept. 1994), p. 7.

Source: Production data for selected years 1985-93 from United Nations, Department for Economic and Social Information and Policy Analysis, *Monthly Bulletin of Statistics* (New York: Nov. 1994), pp. 254-65; all other data from United Nations Conference on Trade and Development, *Handbook of International Trade and Development Statistics - 1993*, TD/STAT.21 (Geneva: 1994), pp. 474-91, except as noted.

and apparel through the phaseout of quotas in place under the Multifiber Arrangement (MFA) over a 10-year period. In recognition of the quota phaseout, the United States agreed to cut tariffs on textile-based apparel by an average of 9 percent, compared with 34 percent for all goods. The URA, negotiated under the General Agreement on Tariffs and Trade (GATT), entered into force on January 1, 1995.[23]

Trade liberalization under the URA closely follows the implementation of the North American Free Trade Agreement (NAFTA) on January 1, 1994, by the United States, Canada, and Mexico.[24] Under NAFTA the United States immediately lifted quotas for slightly more than 90 percent of U.S. apparel imports from Mexico subject to limits, and eliminated tariffs on about 30 percent of the imports (based on trade in 1991, the base year for NAFTA negotiations). All other quotas on Mexican apparel are being phased out

[23] The United States implemented the URA through the enactment of the Uruguay Round Agreements Act, Public Law 103-465, approved on December 8, 1994. For more information on the URA, see U.S. International Trade Commission (USITC), *Potential Impact on the U.S. Economy and Industries of the GATT Uruguay Round Agreements* (investigation No. 332-353), USITC publication 2790, June 1994.

[24] The United States implemented NAFTA through the enactment of the North American Free Trade Agreement Implementation Act, Public Law 103-182, approved on December 8, 1993.

over a 10-year period, and almost all other U.S. tariffs on Mexican garments that meet NAFTA rules of origin will be removed within 6 years.

Tariff Measures

Apparel is classified for tariff purposes under approximately 600 subheadings of the Harmonized Tariff Schedule of the United States (HTS).[25] Most of these subheadings cover apparel of textile materials, such as of cotton, wool, manmade fibers, and silk. Apparel of nontextile materials, which include leather, rubber, plastics, and fur, account for less than 10 percent of U.S. apparel imports. Because of the large number of tariff subheadings, the rates of duty for apparel are trade-weighted on a product basis, as presented in table 5.

U.S. rates of duty for apparel in 1993 averaged 16.4 percent ad valorem. The average duty for apparel of textile materials was 19.3 percent ad valorem and for garments of nontextile materials, 6.2 percent. In the URA the United States agreed to reduce tariffs for textile-based apparel by an average of 9 percent, or by 1.8 percentage points, as shown in the following tabulation (in percent ad valorem):[26]

Item	Pre-URA rate	Post-URA rate
Cotton	16.6	15.0
Wool	18.4	15.4
Manmade fiber	25.5	23.7
Other	6.4	5.0
Average	19.3	17.5

As a result of negotiations with the EU during the Uruguay Round, the United States agreed to eliminate about 45 percent of the roughly 270 tariff peaks (that is, lower the tariffs below the 15-percent rate). Many of the tariff peaks offered for elimination were for wool apparel, for which the EU is a major supplier. The average U.S. tariff cut for wool apparel was 16.3 percent, compared with 9.6 percent for cotton garments and 7.1 percent for manmade-fiber apparel. The developing countries are major suppliers of the big-volume, cotton and manmade-fiber garments.[27]

Nontariff Measures

Bilateral quota agreements negotiated under the MFA governed most U.S. imports of apparel until it expired on December 31, 1994. The MFA covered textiles and apparel of cotton, other vegetable fibers, wool, manmade fibers, and silk blends; it did not cover items that are chiefly of silk or of nontextile materials. Most apparel imports were subject to the MFA. The United States had quotas on MFA products from more than 40 countries that supply about 80 percent of these MFA imports.

World textile and apparel trade had been governed by bilateral quotas negotiated under the MFA since 1974. Officially known as the Arrangement Regarding International Trade in Textiles, the MFA was intended to deal with market disruption in importing developed countries, while allowing exporting developing countries to expand their share of world trade in these goods. Under the MFA, developed countries negotiated bilateral agreements with exporting developing countries for the purpose of setting quotas and quota growth rates. These quotas were a departure from the GATT in that they were applied on a country-specific basis in contradiction to the nondiscrimination principle that all GATT member countries be treated equally when quotas or other trade restrictions are applied.[28] The URA Agreement on Textiles and Clothing requires members of the World Trade Organization to phase out their quotas over 10 years, after which sector trade will be fully integrated into the GATT and subject to the same rules as other sectors.

The URA Agreement on Textiles and Clothing also contains provisions for member countries to deal with circumvention of quotas by transshipment, rerouting, false declaration of country of origin, or falsification of official documents. The transshipment of apparel through third countries to avoid quotas is a growing problem for the United States.[29] Reportedly, textile and apparel transshipments from China, the country involved in the most significant amount of transshipment, total an estimated $2 billion annually.[30] In anticipation of adoption of the URA and to deal with current transshipments, the United States extended or renegotiated bilateral quota agreements expiring in 1993 and 1994 to include stronger anticircumvention language.[31] These agreements permitted the United

[25] See appendix A for an explanation of tariff and trade agreement terms.

[26] Data in the tabulation on U.S. tariff cuts were developed by the U.S. Department of Commerce, Office of Textiles and Apparel, based on trade in 1989, the base year for the URA tariff negotiations.

[27] In 1993, U.S. imports totaled $14.3 billion for cotton garments, $10.1 billion for manmade-fiber apparel, and $2.1 billion for wool clothing.

[28] See, for example, Office of the United States Trade Representative, *A Preface to Trade* (Washington, DC: U.S. Government Printing Office, 1982), p. 145.

[29] U.S. Department of State, "Textiles: New Policy to Combat Illegal Transshipment," Message Reference No. 172503, June 8, 1993.

[30] Office of the United States Trade Representative (USTR), "USTR Mickey Kantor Announces Chinese Textile Import Quotas to be Lowered," press release No. 93-80, Jan. 4, 1994.

[31] See, for example, Office of the United States Trade Representative, *1994 Trade Policy Agenda and 1993 Annual Report* (Washington, DC: U.S. Government Printing Office, 1994), p. 108.

Table 5[1]
Apparel: Average U.S. rates of duty, pre-Uruguay Round Agreement (URA) and post-URA, and U.S. imports and exports, 1993

Product[2]	Average rate of duty— Pre-URA	Post-URA	Imports	Exports
	— *Percent ad valorem* —		—— *Million dollars* ——	
Men's pants and shorts	18.6	17.3	2,719.0	942.0
Wool	22.2	17.2	87.0	4.9
Cotton	17.6	16.5	1,997.1	801.1
Manmade fibers	26.1	24.5	501.8	124.6
All other	3.0	1.8	133.1	11.4
Men's sport coats	20.1	17.0	279.0	55.9
Wool	22.0	17.4	118.3	5.9
Cotton	10.1	9.4	11.7	6.1
Manmade fibers	28.0	26.5	86.7	29.5
All other	9.9	6.9	62.3	14.4
Other men's coats	10.6	9.6	1,411.8	79.3
Wool	22.9	18.7	66.6	8.1
Cotton	9.9	9.3	513.7	17.0
Manmade fibers	10.6	9.9	762.4	33.8
All other	4.4	1.0	69.1	20.4
Men's suits	22.6	18.8	384.8	56.7
Wool	21.7	17.4	306.6	4.2
Manmade fibers	27.4	24.7	66.3	12.2
All other	11.3	8.7	11.9	40.3
Women's slacks and shorts	19.2	17.5	3,254.9	310.9
Wool	17.0	13.8	113.2	6.9
Cotton	17.4	16.2	1,985.8	242.4
Manmade fibers	28.5	26.8	841.7	49.7
All other	5.3	2.1	314.2	11.9
Women's blazers	18.9	16.0	881.3	104.2
Wool	21.8	17.4	288.1	33.3
Cotton	10.7	9.9	72.6	5.7
Manmade fibers	28.6	26.9	272.1	49.9
All other	6.7	3.7	248.5	15.3
Other women's coats	13.0	11.8	1,143.2	40.3
Wool	22.4	17.6	96.3	8.2
Cotton	9.9	9.3	393.5	4.9
Manmade fibers	14.9	13.9	581.9	19.9
All other	3.0	0.4	71.5	7.3
Women's suits	21.4	19.2	271.9	56.2
Wool	17.0	14.0	64.5	9.8
Cotton	17.1	14.8	4.0	7.3
Manmade fibers	28.4	26.8	152.0	23.5
All other	6.9	4.4	51.4	15.6
Women's dresses	14.2	12.7	1,081.7	105.3
Wool	17.0	13.6	33.8	4.1
Cotton	12.4	9.5	234.8	26.8
Manmade fibers	17.0	15.9	582.8	52.7
All other	7.5	6.8	230.3	21.7
Women's skirts	12.8	11.7	843.0	51.2
Wool	17.0	14.1	94.9	8.7
Cotton	8.7	8.2	251.9	12.6
Manmade fibers	17.0	15.8	343.1	20.2
All other	7.2	6.5	153.1	9.7
Men's shirts	21.1	19.3	3,504.8	294.0
Wool	22.4	16.9	6.2	1.8
Cotton	21.0	19.7	2,580.2	238.7
Manmade fibers	30.6	28.6	562.8	30.3
All other	6.6	1.5	355.6	23.2

See footnotes at end of table.

Table 5[1]—*Continued*
Apparel: Average U.S. rates of duty, pre-Uruguay Round Agreement (URA) and post-URA, and U.S. imports and exports, 1993

Product[2]	Average rate of duty— Pre-URA	Post-URA	Imports	Exports
	— *Percent ad valorem* —		—— *Million dollars* ——	
Women's shirts and blouses	17.3	16.1	3,051.7	122.8
Wool	18.4	14.5	10.7	1.4
Cotton	17.3	16.3	1,219.0	55.2
Manmade fibers	30.0	28.1	802.2	49.5
Silk	7.5	6.7	914.8	3.8
All other	7.1	6.7	105.0	12.9
Sweaters and sweatshirts	20.8	18.4	4,719.6	245.5
Wool	14.8	13.2	411.4	38.6
Cotton	20.7	16.5	1,710.2	162.7
Manmade fibers	32.9	30.9	1,547.6	31.8
All other	6.0	5.4	1,050.4	12.4
T-shirts and tank tops	22.3	18.0	738.1	482.4
Pajamas	12.0	11.0	716.9	66.4
Other underwear and robes	10.9	9.5	1,008.4	239.6
Headwear	7.8	6.4	778.4	108.6
Babies' garments	12.3	11.4	696.6	74.0
Foundation garments	18.8	16.8	639.0	315.7
Gloves	17.2	13.6	297.7	41.1
Swimwear	22.0	20.5	236.6	21.8
Hosiery	16.1	15.1	230.5	206.0
Ties	8.8	7.9	160.6	21.1
Scarves	9.9	4.5	144.9	7.4
Disposable apparel	10.8	1.8	212.1	15.3
Coated-fabric apparel	7.5	6.2	198.8	50.0
Rubber and plastic apparel	4.1	.7	727.9	148.8
Leather apparel	6.9	6.5	1,853.1	114.5
Fur apparel	5.8	4.0	158.6	55.0
All apparel	16.4	14.7	33,903.8	4,743.3

[1] The data were compiled at the 8-digit, tariff rate-line level of the HTS.

[2] The terms "men's" also includes boys', and "women's" includes girls'.

Source: Trade data compiled from official statistics of the U.S. Department of Commerce; average rates of duty compiled by staff of the U.S. International Trade Commission.

States to make plant visits to verify production capacity of a foreign producer, apply transshipments to quota of the true country of origin, and charge up to three times the amount of the transshipment against quota in the case of repeated circumvention by a given country.[32]

U.S. imports of apparel covered by the MFA are generally ineligible for duty-free entry under the Generalized System of Preferences (GSP), the Caribbean Basin Economic Recovery Act (CBERA), or the Andean Trade Preference Act (ATPA). Garments entered under these programs account for less than 5 percent of U.S. apparel imports annually and consist mostly of nontextile goods. Preferential tariffs also apply to apparel imports from Israel under the United States-Israel Free Trade Area Implementation Act and to those from Canada under the United States-Canada Free-Trade Agreement (CFTA), the duty phaseout schedules of which were incorporated and continued under NAFTA. Apparel imports from these two countries represent less than 2 percent of total apparel imports annually.

A "special access program" established in 1986 permits CBERA countries virtually unlimited access to the U.S. market for garments assembled from fabric made and cut in the United States. The program was established within the framework of the "807" tariff provision (now HTS heading 9802.00.80), which provides a partial duty exemption for products assembled abroad of U.S.-fabricated components.[33] The United States currently has agreements under the program with Costa Rica, the Dominican Republic,

[32] Jennifer Hillman, Chief Textile Negotiator, Office of the United States Trade Representative, in testimony before the Commerce, Consumer, and Monetary Affairs Subcommittee of the Committee on Government Operations, U.S. House of Representatives, Oct. 5, 1993.

[33] In general, the duty is assessed on the value added abroad (essentially the cost of sewing the garment parts together).

El Salvador, Guatemala, Haiti, and Jamaica that provide for guaranteed access levels (GALs) for their exports of qualifying apparel. A similar "special regime" had been in effect with Mexico for the 5 years prior to 1994, when NAFTA entered into force.

Trade-Related Investigations

The only trade-related investigations conducted by the U.S. International Trade Commission on apparel during the 1990s involved imports of manmade-fiber sweaters from Hong Kong, Taiwan, and the Republic of Korea. These investigations were conducted concurrently under the U.S. antidumping law (19 U.S.C. 1673 et seq.). The Commission ultimately made negative determinations in these investigations, finding that a domestic industry was not materially injured or threatened with material injury by reason of imports of the sweaters (investigations Nos. 731-TA-448-450 (Final) (Remand) USITC publication 2577 (Nov. 1992)). Although the Commission originally had made affirmative determinations in these investigations (USITC publication 2312 (Sept. 1990)), the Court of International Trade (CIT) remanded the determinations to the Commission for further proceedings.[34] After issuance of the Commission's remand determinations and extensive judicial proceedings, the Commission on July 6, 1994, published notice of the final court decision affirming its negative remand determinations.

FOREIGN TRADE MEASURES

U.S. exports of completed apparel (as opposed to apparel parts for assembly offshore) are relatively small, accounting for 5 percent of U.S. producers' apparel shipments in 1993. U.S. apparel producers largely compete in foreign markets with the same developing countries that supply the U.S. market. In general, competitive factors such as production costs, fashions, and marketing capability affect U.S. export levels more than foreign trade barriers.

The major markets for U.S. apparel exports are the developed countries, led by the EU, Japan, and Canada. Tariffs on apparel from the United States average from 5.3 to 14 percent ad valorem in the EU, from 11.2 to 16.8 percent in Japan, and 13.8 percent in Canada. In the URA, tariffs on U.S. apparel will be reduced by an average of 12 percent in the EU and by 34 percent in Japan. Canada, like Mexico, is phasing out its tariffs on U.S. goods under NAFTA.

The URA Agreement on Textiles and Clothing requires both developed and developing countries to reduce trade barriers on textiles and apparel in their home markets. Countries are called to reduce tariffs and bind rates in their respective tariff schedules, reduce or eliminate nontariff barriers, and facilitate customs, administrative, and licensing procedures. The United States sought market access commitments from URA signatories that are significant exporters of textiles and apparel to the United States. Developing countries such as Egypt, India, Pakistan, the Philippines, Thailand, and Turkey have agreed to open their markets to U.S. textile and apparel exports.

U.S. MARKET

The growth in consumer expenditures on apparel has slowed considerably in recent years, lagging behind the increase in overall consumer spending. Real annual growth in consumer apparel expenditures, after averaging 4.7 percent during 1980-89, compared with 3.1 percent for all consumer spending, slowed to just 1.5 percent during 1989-93, compared with 1.8 percent for all consumer spending. As a result, apparel's share of real personal consumption expenditures fell from 6.5 percent in 1989 to 4.9 percent in 1993. For the first 9 months of 1994, real consumer spending overall rose by 3 percent and that on apparel by 6 percent, compared with the corresponding months of 1993. However, growth of apparel sales is not expected to continue at this pace as sales of soft goods, including apparel, usually do not keep up with general economic growth.[35] Growth of personal consumption expenditures during the 1990s has been predicted at a nominal rate of only 1.5 percent.[36] Assuming that the growth in consumer apparel expenditures continues to lag behind that for all consumer spending, apparel spending likely will show little real growth during the rest of the 1990s.

Consumer Characteristics and Factors Affecting Demand

Numerous factors, including fashion trends, demographics, the state of the economy, and, increasingly, the retail environment, influence the demand for apparel. Consumer preferences have been shifting away from traditional apparel to more casual and athletic wear, forcing manufacturers to respond to these changes. Economic conditions have also led to more cautious buying on the part of consumers, who have become more demanding in terms of price, quality, fashion, and selection.

The changing demographics of the U.S. population are an important factor influencing demand. Persons

[34] *Chung Ling Co., Ltd., v. United States* 805 F. Supp. 45 (CIT 1992).

[35] Kurt Salmon Associates (KSA), *Perspective: Soft Goods Outlook for 1995*, New York, Nov. 1994, p. 2.

[36] Fernando B. Silva, Kurt Salmon Associates, "What Happened in the Eighties? What is the Outlook for the Nineties," presentation at KSA's Vision 90s CEO briefing, New York, Sept. 10, 1990, p. 7.

aged 35-54 constitute the population segment currently undergoing the greatest growth. This segment accounted for 25 percent of the U.S. population in 1990, and its share is expected to reach 28 percent in 1995. Households headed by persons in this age group not only have the highest family income, but they spend a higher proportion of their total expenditures on apparel than any other segment of the population.[37] These aging baby-boomers are becoming more value- and quality-conscious consumers. In fact, it has been asserted that quality has become an expectation of consumers rather than a selling point for retailers or manufacturers.[38]

The desire for value, not just price, has become increasingly important to apparel consumers and it has affected where they shop. Strong demand for basics, coupled with competitive prices, has resulted in rapid growth of apparel sales at discount stores and a decline in market share of department and specialty stores. Between 1991 and 1993, the share of retail apparel sales purchased at department and specialty stores fell by 3 percentage points.

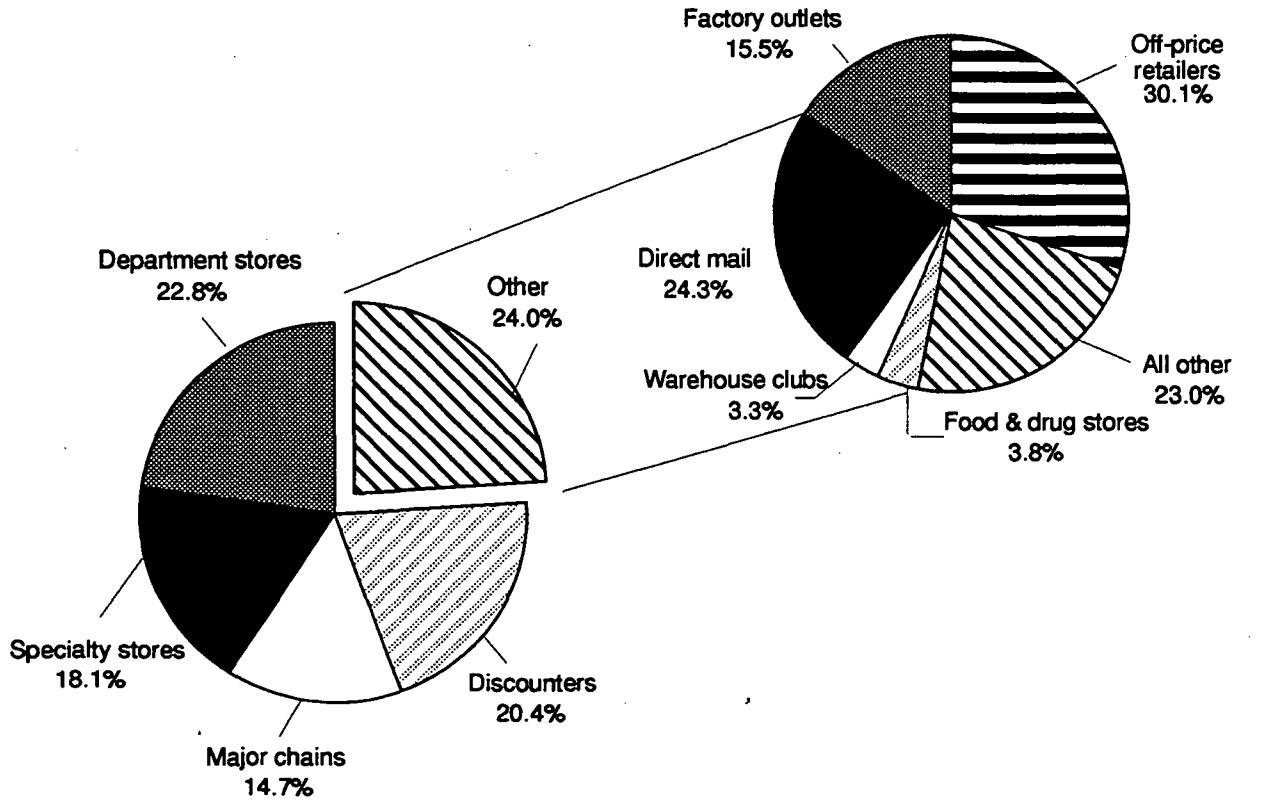
Price and value are not the only lure of the nontraditional retail outlets. As consumers are becoming more time conscious, they are seeking ways to spend less time shopping and take fewer shopping trips. Thus they are increasingly shopping from home via catalogs and TV or at retailers with a variety of goods such as discount, off-price, and outlet stores. The share of apparel sales accounted for by nontraditional channels is projected to double from the 13-percent level recorded in the early 1980s to a 26-percent market share by 2000.[39] In particular, the ongoing competition among communications and entertainment firms to control the interactive catalog and TV home shopping outlets suggests that this area has much potential. Figure 5 illustrates the distribution of apparel retail sales during January-September 1994.

[37] American Apparel Manufacturers Association, *Apparel Manufacturing Strategies*, Arlington, VA, 1994, p. 13.

[38] Thomas Gilreath, "Amory Takes QR/EDI to Top Level," *Bobbin*, Sept. 1994, p. 62.

[39] Silva, p. 3.

Figure 5
Apparel: Retail sales by type of outlet, January-September 1994



Source: Compiled by the staff of the U.S. International Trade Commission from unpublished data of the National Purchase Diary Research, Inc., Port Washington, NY.

Brand names, both manufacturers' national brands and retailers' private labels, have gained importance in the apparel market, as they help consumers identify apparel with certain desired features. Although designer labels and brands have always been important at higher price points, the emergence of mass-market brand names has had a significant effect on the apparel market, not only in the United States but throughout the world. With the global dissemination of U.S. movies and television programming, consumers around the world are aware of and want popular U.S. brand goods. Garments sold under the Levi Strauss, Liz Claiborne, or Calvin Klein labels, for example, are widely perceived by consumers as quality products. Industry analysts predict that brand names will remain an important factor in consumer purchasing decisions.

Consumption

Apparent U.S. consumption of apparel rose by about 15 percent during 1989-93 (table 6). In real terms the increase during the period was 9 percent—or 2.3 percent annually. The slow growth partly reflected the recessionary economic conditions that prevailed during part of the period and the lack of consumer confidence as the recession ended.[40] Also contributing to the slow growth in apparel consumption as the recession ended were increased consumer spending on health care and leisure activities, and increased debt reduction.

Imports account for a growing share of the U.S. apparel market. Between 1989 and 1993, their share of U.S. apparel consumption rose by 7 percentage points to 43 percent in terms of the customs import value and to 47 percent in terms of the landed, duty-paid import value, which more closely approximates the comparable value of U.S. producers' shipments. Import penetration varies widely among apparel products, ranging from less than 10 percent for hosiery to 82 percent for sweaters.

The products accounting for the largest shares of U.S. apparel consumption and the import penetration levels for each are shown in table 7. For the items with the lowest import penetration levels—dresses, underwear, and men's and boys' trousers—the U.S. industry has different advantages. For dresses, a high-fashion item, the ability of domestic producers to deliver and restock popular styles quickly is a critical factor affecting competitiveness. For underwear and trousers, while both are items less affected by fashion trends, the U.S. industry has achieved a high level of efficiency with automated production systems. In the case of jeans, U.S. brand names have a large share of the market.

Production

U.S. producers' shipments of apparel during 1989-93 rose by 9 percent when measured in current dollars and by only 1 percent in real terms. The industrial production index for SIC 23, as compiled by the Board of Governors of the Federal Reserve System, declined by less than 1 percent during the period. The apparel production index declined continuously from its base of 100 in 1987 to a low of 92.2 in 1990, partially recovered to 95.0 in 1992 before declining slightly in 1993 to 94.9. For the first 3 quarters of 1994, the index averaged 95.9 and was reported to be 98.5 in the third quarter alone.[41]

The decline in U.S. apparel production is a strong indication of the effects of increasing import penetration in a low-growth market. It also reflects the extent to which many U.S. apparel producers are increasing their use of production-sharing operations in Mexico and the Caribbean countries to meet domestic demand. This is evident in the growing share of U.S. producers' shipments made up of "807" imports for the leading garments produced in the United States (table 8), which together represented 72 percent of 1993 U.S. apparel shipments. Production sharing is particularly significant for foundation garments, mainly brassieres, because these items are high in labor content and low in weight. The other apparel items involved in production sharing are generally basic styles for which demand is relatively predictable and whose manufacture involves standardized runs, low-skilled operations, and few styling changes.

Imports

U.S. imports of apparel grew by 38 percent during 1989-93 to $34 billion (table 9).[42] In real terms, they rose by 35 percent during the period. Most of the apparel imports consisted of garments of textile materials. Garments covered by the MFA accounted for slightly more than 80 percent of total apparel imports in 1993.

Imports by Source

Changes taking place in U.S. apparel import sourcing closely mirror the ongoing shift in world garment production to areas of lower labor costs, as discussed in the "foreign industry" section earlier in this report. The Big Three Asian producers—Hong Kong, Taiwan, and the Republic of Korea—continued to decline in relative importance. U.S. imports of

[40] Kurt Salmon Associates, *Perspective: Soft Goods Outlook for 1995*," New York, Nov. 12, 1994, p. 2.

[41] Board of Governors of the Federal Reserve System, Industrial Output Section, fax dated Dec. 20, 1994.

[42] For the first 9 months of 1994 U.S. apparel imports were up by 7 percent over the comparable period of 1993.

Table 6
Apparel: U.S. shipments, exports of domestic merchandise, imports for consumption, and apparent U.S. consumption, 1989-93

Year	U.S. shipments[1]	U.S. exports[2]	U.S. imports— Customs value	U.S. imports— Landed duty-paid value	Apparent consumption— Customs value	Apparent consumption— Landed duty-paid value	Ratio of imports to consumption— Customs value	Ratio of imports to consumption— Landed duty-paid value
	Million dollars						*Percent*	
1989	45,900	2,047	24,535	30,346	67,807	74,200	36.2	40.9
1990	45,800	2,431	25,518	31,361	68,063	74,730	37.5	42.0
1991	47,000	3,161	26,250	32,207	69,254	76,046	37.9	43.4
1992	48,400	4,033	31,235	37,758	74,676	82,125	41.8	46.0
1993	49,900	4,743	33,904	40,522	78,049	85,679	43.4	47.3

[1] USITC staff estimated data for 1992 and 1993 based on data for 1991, the last year for which official statistics are available on a 4-digit SIC basis. USITC staff adjusted the reported shipment data to eliminate double counting of contract receipts reported as shipments by both the contractor and the firm for which the work was done. Such contract receipts account for roughly 15 percent of annual shipments.

[2] Includes garment parts for assembly abroad and reimportation as completed garments. These parts accounted for an estimated 55 to 60 percent of reported U.S. apparel exports during 1989-93.

Note.—Landed duty-paid value is cost, insurance, and freight (c.i.f.) plus calculated duties paid. This value is shown in addition to customs value as it more closely approximates the comparable value of shipments of domestically made apparel and thus provides a more realistic basis for calculating import penetration levels.

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

Table 7
Apparel: Apparent U.S. consumption and import penetration levels for selected items, 1993

Item	Consumption	Import share— Total	"807"
	Million dollars	*Percent*	
Men's and boys' shirts	12,660	51.5	4.2
Women's and girls' blouses and shirts	10,759	59.7	2.7
Men's and boys' trousers and shorts	9,535	30.5	11.8
Women's and girls' trousers and shorts	8,689	45.2	7.6
Dresses	5,667	21.1	1.7
Women's and girls' coats and jackets	4,790	58.9	8.2
Men's and boys' coats and jackets	4,544	56.3	3.4
Underwear	3,270	34.1	14.3

Source: U.S. Bureau of the Census, *Current Industrial Reports: Apparel*, MQ23A, Sept. 1994, table 6.

Table 8
Apparel: U.S. shipments of selected items in 1993 and share of total shipments produced under production-sharing arrangements (807), 1989 and 1993

Item	1993 shipments	Ratio of 807 imports to shipments— 1989	1993
	Million dollars	*Percent*	
Men's and boys' trousers and shorts	7,480	8.3	15.0
Men's and boys' shirts	6,823	3.4	7.8
Women's and girls' trousers and shorts	5,047	6.3	13.0
Women's and girls' blouses and shirts	4,580	4.4	6.4
Underwear	2,571	4.7	18.2
Men's and boys' coats and jackets	2,150	3.6	7.1
Women's and girls' coats and jackets	2,106	4.4	18.6
Foundation garments	1,579	21.5	32.1

Source: U.S. Bureau of the Census, *Current Industrial Reports: Apparel*, MQ23A, Sept. 1994, table 6, and Sept. 1991, table 11.

apparel from the Big Three, which have been limited by average annual quota growth of 1 percent since 1986, fell by 15 percent during 1989-93 to just under $8.9 billion. The share of U.S. apparel imports supplied by the Big Three dropped from 43 percent in 1989 to 26 percent in 1993 (figure 6).

The phaseout of quotas under the URA is expected to have a profound effect on the level of U.S. apparel imports. The exporting countries that now face a high proportion of binding quotas would no longer have this impediment to increasing their shipments to the United States. China is expected to benefit most from elimination of quotas once it becomes a member of the World Trade Organization. The ASEAN countries and emerging Asian suppliers are also likely to benefit. Although tight quotas are one reason for the declining competitiveness of the Big Three, U.S. imports from these countries are not likely to be substantially affected by quota elimination. Currently, their higher labor costs and competition for workers with other industries that pay higher wages than the apparel industry are important factors limiting their ability to increase shipments to the United States.

China

U.S. apparel imports from China more than doubled during 1989-93 to $6.2 billion, despite tight quotas and average quota growth of 3.3 percent a year. The growth partly reflected use of so-called flexibility provisions in the bilateral textile and apparel agreement. In addition, a large portion of the import growth consisted of silk apparel that was not covered by the MFA, namely garments that contain at least 70 percent by weight of silk. Between 1989 and 1993, imports of such Chinese silk garments grew by sevenfold to $1.9 billion, and accounted for nearly 30 percent of total apparel imports from China in 1993. This compares with $3.4 billion in imports of Chinese apparel covered by the MFA. Imports of leather, fur, rubber, and plastic apparel from China, which were not covered by the MFA and were much smaller than imports of silk apparel, also increased significantly.

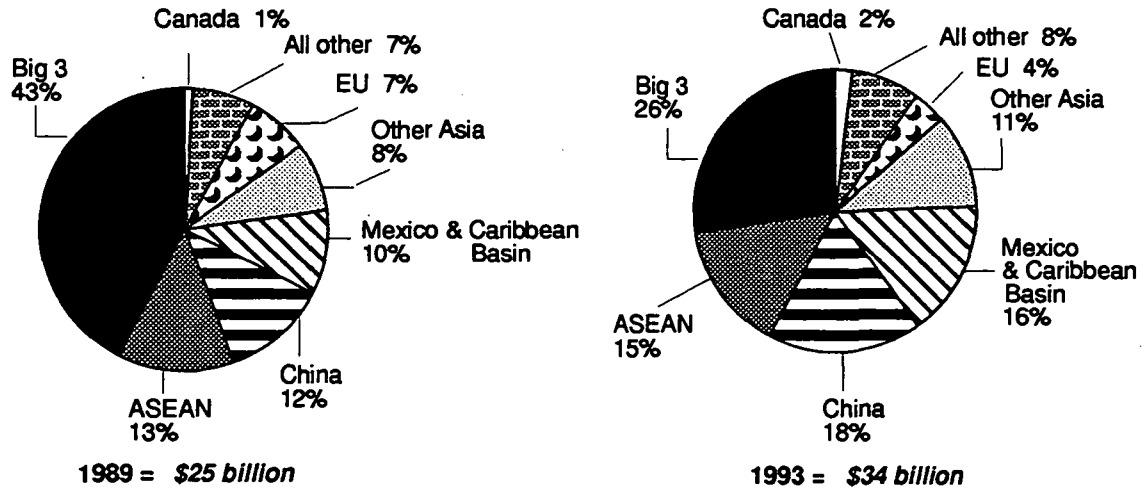
Table 9
Apparel: U.S. imports for consumption, customs value, by major sources, 1989-93

(Million dollars)

Source	1989	1990	1991	1992	1993
China	2,867.4	3,439.4	3,797.2	5,059.5	6,186.7
Big Three	10,438.2	9,806.6	9,519.2	9,547.3	8,888.7
Hong Kong	3,944.1	3,976.5	4,024.5	4,327.8	4,018.6
Korea	3,671.6	3,341.6	2,839.2	2,743.7	2,538.5
Taiwan	2,822.5	2,488.5	2,655.5	2,475.8	2,331.6
ASEAN	3,089.0	3,443.5	3,569.3	4,545.4	4,929.9
Brunei	5.0	7.9	11.7	15.7	22.6
Indonesia	576.7	644.7	620.7	930.3	1,113.5
Malaysia	572.9	604.1	697.6	888.0	972.6
Philippines	889.0	1,082.8	1,064.0	1,264.6	1,361.3
Singapore	624.5	620.8	601.4	643.8	517.3
Thailand	420.9	483.2	573.9	803.0	942.6
Caribbean Basin	1,768.7	1,984.9	2,533.3	3,292.2	4,015.0
Costa Rica	327.3	383.5	440.5	590.3	653.3
Dominican Republic	672.0	723.2	940.3	1,234.7	1,443.3
Guatemala	131.0	192.4	335.2	457.3	551.9
Honduras	86.7	112.6	196.6	367.8	509.6
Jamaica	223.2	234.8	251.5	291.6	388.1
All other	328.5	338.4	369.2	350.5	468.8
Mexico	590.2	709.4	908.0	1,180.7	1,415.0
Other Asia	1,867.8	2,133.0	2,204.8	3,172.0	3,576.9
Bangladesh	319.7	421.5	435.6	696.3	739.8
India	583.2	635.9	640.4	906.5	1,079.1
Macau	399.7	417.1	384.9	512.1	482.6
Pakistan	210.8	232.1	244.2	398.1	441.7
Sri Lanka	354.4	426.4	499.7	659.0	833.7
European Union	1,705.3	1,753.5	1,525.8	1,517.7	1,462.2
Italy	886.2	885.1	847.9	859.2	852.2
All other	819.1	868.4	677.9	658.5	610.0
Canada	260.3	247.3	315.6	441.8	562.1
Japan	234.3	164.1	142.7	138.7	127.1
Total above	22,821.2	23,681.7	24,515.9	28,895.3	31,163.6
All other	1,713.5	1,835.9	1,734.2	2,339.9	2,740.2
World	24,534.7	25,517.6	26,250.1	31,235.2	33,903.8

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

Figure 6
Apparel imports: Market shares by sources, 1989 and 1993



Note.—"Other Asia" includes only Bangladesh, India, Pakistan, Macau, and Sri Lanka.
Source: Compiled from official statistics of the U.S. Department of Commerce.

The United States and China negotiated a new 3-year textile and apparel agreement for MFA products. The new pact, which entered into force on January 1, 1994, limits annual quota growth for shipments of these goods from China to zero in 1994 and to 1 percent in 1995 and 1996. The United States also reached agreement with China in early 1994 to bring the chiefly silk apparel under quota for the first time. These Chinese silk garments, mainly shirts and blouses, have become a substitute for cotton and manmade-fiber apparel. U.S. imports of MFA apparel from China increased by 1 percent during the first 9 months of 1994; imports of all apparel from China were up by 2 percent during the period.

Mexico and the Caribbean countries

The introduction of special market access programs in the late 1980s for Mexico and the Caribbean countries, as discussed in the "U.S. trade measures" section earlier in this report, has enabled the region to become the fastest growing supplier of imported apparel in recent years. Between 1989 and 1993, U.S. apparel imports from Mexico and the CBERA countries rose by a combined 130 percent.

Most of the apparel imports from the region enter under the 807 tariff provision (predecessor to HTS heading 9802.00.80). In 1993 the 807 trade accounted for 93 percent of the apparel imports from Mexico and 81 percent from Caribbean countries. The rest of the imports from Caribbean countries is believed to be largely accounted for by Asian firms. Faced with tight U.S. quotas on their home-country exports, Asian firms now assemble garments in the Caribbean Basin for export to the United States. They ship fabrics to the region and perform the so-called cut, make, and trim operations there.

Quota and duty elimination under NAFTA likely will benefit U.S. apparel producers that use Mexico as a low-cost production base to compete with Asian goods in the North American market.[43] This trade liberalization could, in turn, lead to displacement of some U.S. apparel imports from the Far East, at least in the short term. Caribbean countries also have expressed concern that they will lose apparel investment and market share to Mexico due to NAFTA.[44] In response to their concerns, the Clinton administration in May 1994 proposed an "Interim Trade Program for the Caribbean Basin" that would give the Caribbean countries almost the same access to the U.S. apparel market as Mexico receives under NAFTA. Although the administration had expressed a desire to include this trade program in the Uruguay Round implementing legislation, the program was not included.[45]

The URA likely will reduce the competitive advantage that Mexico has under NAFTA and that Caribbean countries have under the special access program. The removal of quotas under the URA over a period of 10 years likely will spur further apparel investment in, and imports from, low-wage countries mainly in Asia whose shipments are now restricted. The expected growth in imports from Asia will add to the competitive pressures facing the apparel industry in the United States and its assembly operations in Mexico and the Caribbean countries.

Imports by Product

U.S. imports of apparel represent a cross section of clothing demand in the domestic market. In 1993, almost half of the imports consisted of shirts, blouses, trousers, and shorts. Generally, U.S. apparel imports tend to be concentrated in standard styles and fabrics for which a long lead time from ordering to importation is not a significant obstacle. All major product groups experienced import growth during 1989-93, with the exception of sweaters (table 10). The sharp decline in sweater imports during 1991-93 partly reflected the effect of the antidumping investigations on imports of manmade-fiber sweaters from Hong Kong, the Republic of Korea, and Taiwan[46] and a shift in consumer demand to competing garments such as sweatshirts and athletic jackets.

Unlike U.S. imports of apparel from the Far East, the 807 apparel imports from Mexico and the Caribbean countries are concentrated in fewer products, especially those high in labor content and low in weight. The principal garments made through production-sharing operations are trousers and shorts, shirts and blouses, foundation garments (mainly brassieres), underwear, and coats and jackets (mainly sport coats and blazers) (table 11). Mexico and the Caribbean countries as a group are the largest volume supplier of brassieres, underwear, cotton pants and knit shirts, manmade-fiber sleepwear, and men's and boys' manmade-fiber suits and sport coats.

[43] U.S. apparel imports from Mexico rose by 30 percent during the first 9 months of 1994.

[44] U.S. apparel imports from Caribbean countries were up by 10 percent during the first 9 months of 1994.

[45] On January 18, 1995, Congressmen Crane, Shaw, Gibbons, et al. introduced H.R. 553, the Caribbean Basin Trade Security Act. The stated purpose of the bill is "to provide, temporarily, tariff and quota treatment equivalent to that accorded to members of the North American Free Trade Agreement (NAFTA) to Caribbean Basin beneficiary countries."

[46] For information on these cases, see "trade-related investigations" in the "U.S. nontariff measures" section earlier in this report.

Table 10
Apparel: U.S. imports, by major items, 1989-93

(Million dollars)

Item	1989	1990	1991	1992	1993	Percent change 1989-93
Shirts and blouses	4,520	5,057	7,410	9,173	10,042	122.2
Women's and girls' trousers and shorts	2,484	2,692	2,737	3,342	3,354	35.0
Women's and girls' suits, skirts, and coats	2,259	2,612	2,635	3,011	3,244	43.6
Men's and boys' trousers and shorts	1,941	2,135	2,311	2,675	2,797	44.1
Sweaters	4,245	4,098	1,917	2,149	1,961	(53.8)
Nightwear, underwear, and robes	1,507	1,076	1,293	1,563	1,909	26.7
Leather apparel	1,310	1,354	1,226	1,411	1,418	8.2
Men's and boys' coats and jackets	1,023	1,130	1,039	1,285	1,563	52.8
Men's and boys' suits and sport coats	579	513	561	662	664	14.7
Foundation garments	338	366	444	557	639	89.1
Nonwoven-fabric apparel	43	153	183	220	212	393.0
Total above	20,249	21,186	21,756	26,050	27,803	37.3
All other	4,286	4,332	4,494	5,185	6,101	42.3
Total	24,535	25,518	26,250	31,235	33,904	38.2

Note.—Data in this table were compiled at the 10-digit statistical level of the HTS and thus differ from those in table 5, which were compiled at the 8-digit, tariff rate-line level.

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

Table 11
Apparel: U.S. imports, total and under HTS heading 9802.00.80, by principal items, 1993

Item	Total imports	9802.00.80 imports— Total	9802.00.80 imports— Duty-free	Ratio of total 9802.00.80 value to total imports	Ratio of duty-free value to total 9802.00.80 value
		1,000 dollars		*Percent*	
Trousers and shorts	6,151,401	1,816,450	1,062,821	29.5	58.5
Shirts and blouses	10,041,821	901,095	542,384	9.0	60.2
Foundation garments	639,049	484,477	324,309	75.8	66.9
Underwear	915,647	438,285	321,131	47.9	73.3
Coats and jackets	3,927,369	505,359	257,493	12.9	51.0
Disposable apparel	235,416	213,865	145,410	90.8	68.0
Pantyhose	112,629	97,746	91,708	86.8	93.8
Sleepwear	725,780	128,175	72,131	17.7	56.3
Babies' apparel	696,627	91,839	57,549	13.2	62.7
Skirts	856,952	136,429	55,011	15.9	40.3
Dresses	1,081,726	91,000	41,453	8.4	45.6
Suits	656,776	73,006	39,302	11.1	53.8
Gloves	1,349,071	43,158	22,771	3.2	52.8
Robes	266,634	40,742	22,073	15.3	54.2
All other	6,246,926	173,691	80,862	2.8	46.6
Total	33,903,824	5,235,317	3,136,408	15.4	59.9

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

FOREIGN MARKETS

Foreign Market Profile

The major world markets for apparel are the developed countries, led by the EU, North America (the United States and Canada), and Japan. The latest available data indicate that apparent consumption of apparel in 1990-91 totaled $110 billion in the EU, $104 billion in North America, and almost $45 billion in Japan. Import competition in these apparel markets is keen. The share of apparent consumption supplied by external imports averaged 29.4 percent in the EU, 42.0 percent in North America, and 27.3 percent in Japan.[47]

[47] Data in this paragraph from United Nations Conference on Trade and Development, *Handbook of International Trade and Development Statistics - 1993*, TD/STAT.21 (New York: 1994), p. 538.

The developed countries are also the destination for most of the world's apparel exports. In 1992 the developed countries accounted for 88 percent of total reported apparel imports, or $122 billion (table 12). The largest importers of apparel among the developed countries are the EU and the United States, which together accounted for almost 80 percent of developed-country apparel imports in 1992. Intra-EU trade that year accounted for 44 percent of EU apparel imports, or $27.8 billion.

U.S. Exports

U.S. exports of apparel more than doubled during 1989-93 to $4.7 billion (table 13). Slightly more than one-half of the increased exports during the period consisted of shipments to Mexico and countries in South and Central America that are involved in production-sharing arrangements with U.S. apparel producers. It is believed that most, if not almost all, of the apparel exports to these countries, which accounted for 55 percent of U.S. apparel exports during 1989-93, consisted of apparel parts for assembly and reexport to the United States as completed garments.

U.S. exports of apparel for consumption abroad during 1989-93 increased significantly to all major markets, especially to Japan and Canada, the leading individual developed-country markets. The increase in exports to Japan is attributable to the strong demand there for U.S. clothing and to the popularity of certain brand names that are also popular in the United States. For Canada, the increase is largely attributable to the effects of lowering tariffs under the CFTA and the resultant increased competitiveness of U.S. apparel in the Canadian market.

Japan and Canada are important markets for certain U.S. apparel items. In 1993, these two markets accounted for nearly 40 percent of U.S. exports of shirts and blouses, particularly imprinted T-shirts. Japan also accounted for 20 percent of U.S. exports of robes, nightwear, and underwear and 41 percent of U.S. exports of men's suits, coats, and jackets. Canada is an important export market for headwear, dresses, and hosiery.

The U.S. apparel industry traditionally has focused on the large domestic market, rather than foreign markets, for sales growth. U.S. producers serving foreign markets often do so from plants located abroad that are either wholly owned or operated as joint ventures, or through licensing agreements. Some U.S. producers have made aggressive efforts to expand operations beyond domestic borders. In fact, for many developing-country markets that permit only negligible imports of apparel to protect their domestic industries, manufacturing in the target country is the only way to gain access to that market. As foreign retailers, like their U.S. counterparts, increasingly demand quick response to orders, proximity of manufacturing to the market is becoming a worldwide necessity. U.S. producers that can differentiate their products with U.S. themes such as Western wear, surf wear, major league and college sports, and motorcycle-related apparel also tend to be successful in exporting.

Table 12
Apparel: World imports, by developed countries and country groups, 1989-93

(Million dollars)

Country/group	1989	1990	1991	1992	1993
United States	26,026	26,977	27,696	32,951	35,605
Canada	2,180	2,388	2,207	2,434	2,513
Japan	8,972	8,737	9,396	11,191	12,588
European Union	38,388	50,681	58,307	63,633	(1)
Intra-EU imports	17,900	23,700	25,440	27,790	(1)
Extra-EU imports[2]	20,488	26,981	32,867	35,843	(1)
EFTA countries[3]	8,414	10,487	10,586	10,979	9,691
Other[4]	873	975	1,080	1,233	1,407
Total	84,853	100,245	109,271	122,421	(1)

[1] Not available.

[2] Data for extra-EU apparel imports were derived by subtracting intra-EU apparel imports, as published by the GATT, from total EU apparel imports, as compiled by the United Nations.

[3] European Free Trade Association (EFTA) countries included Austria, Finland, Iceland, Liechtenstein, Norway, Sweden, and Switzerland.

[4] Includes Australia, Faroe Islands, Greenland, Israel, and New Zealand. South Africa was not included in the figures because data are available only for 1993 ($145 million).

Note.—The term "developed countries" corresponds closely with the classification "developed market economy countries," which is used by the United Nations for statistical reporting purposes.

Source: Compiled from unpublished United Nations data for Standard International Trade Classification (SITC) division 84, articles of apparel and clothing accessories (Revision 3), and published data of General Agreement on Tariffs and Trade, *International Trade 1993 - Statistics* (Geneva: 1993), pp. 72 and 101, and selected back issues.

Table 13
Apparel: U.S. exports of domestic merchandise, by major markets, 1989-93

(1,000 dollars)

Market	1989	1990	1991	1992	1993
Mexico	374,240	391,697	532,001	721,862	845,755
Japan	194,324	277,915	405,794	494,004	726,003
Dominican Republic	336,615	327,467	432,899	557,597	656,516
Canada	108,541	216,613	243,277	307,188	375,272
Costa Rica	145,904	153,593	195,966	276,968	319,550
Jamaica	113,545	108,786	132,768	169,198	247,401
Honduras	42,171	57,084	86,799	173,501	219,173
Guatemala	37,323	54,242	84,989	141,718	176,488
Belgium	34,310	94,012	103,494	98,595	106,858
Colombia	44,577	55,540	58,496	94,419	94,842
Germany	40,961	40,870	63,095	76,529	89,599
El Salvador	20,534	22,990	36,825	68,219	82,906
United Kingdom	44,585	86,878	91,868	95,900	74,606
France	40,070	56,586	67,348	69,970	63,715
All other	468,882	486,729	625,715	686,886	664,593
Total	2,046,582	2,431,002	3,161,334	4,032,554	4,743,277

Note.—Exports include cut parts sent abroad for assembly and subsequent return to the United States as finished garments.

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

U.S. TRADE BALANCE

The U.S. trade deficit in apparel widened from $22 billion in 1989 to $29 billion in 1993 (table 14). This deterioration resulted mainly from a 38-percent increase in imports. Exports more than doubled during the period, but from a much smaller base.

The widening of the U.S. apparel trade deficit largely reflected the growth in imports from China, which accounted for one-half of the increase in the deficit during 1989-93. The ASEAN and Caribbean countries accounted for a combined 46 percent of the increase in the U.S. apparel trade deficit during the period. Most of the trade deficit with the Caribbean countries reflected the net effect of U.S. exports there that consist largely of cut garment parts and U.S. imports of the completed garments.

Table 14
Apparel: U.S. exports of domestic merchandise, imports for consumption, and trade balance, by selected countries and country groups, 1989-93[1]

(Million dollars)

Item	1989	1990	1991	1992	1993
U.S. exports of domestic merchandise:					
China	3	5	8	5	7
Hong Kong	18	22	18	24	39
Korea	8	7	6	9	10
Taiwan	6	6	7	8	9
Mexico	374	392	532	722	846
Dominican Republic	337	327	433	558	657
Philippines	17	22	22	27	22
Italy	62	47	61	60	34
Indonesia	3	4	4	6	4
India	(2)	1	1	1	1
All other	1,219	1,598	2,069	2,613	3,114
Total	2,047	2,431	3,161	4,033	4,743
EU-12	259	377	465	506	450
OPEC	61	62	91	105	101
ASEAN	30	39	40	57	51
CBERA	850	859	1,110	1,487	1,816
Central Europe	1	3	6	5	4
U.S. imports for consumption:					
China	2,867	3,439	3,797	5,060	6,187
Hong Kong	3,944	3,977	4,025	4,328	4,019
Korea	3,672	3,342	2,839	2,744	2,538
Taiwan	2,823	2,489	2,655	2,476	2,332
Mexico	590	709	908	1,181	1,415
Dominican Republic	672	723	940	1,235	1,443
Philippines	889	1,083	1,064	1,265	1,361
Italy	886	885	848	859	852
Indonesia	577	645	621	930	1,113
India	583	636	640	907	1,079
All other	7,032	7,590	7,913	10,250	11,565
Total	24,535	25,518	26,250	31,235	33,904
EU-12	1,705	1,754	1,526	1,518	1,462
OPEC	663	756	724	1,132	1,342
ASEAN	3,089	3,444	3,569	4,545	4,930
CBERA	1,769	1,985	2,533	3,292	4,015
Central Europe	125	119	108	153	184
U.S. trade balance:					
China	(2,864)	(3,434)	(3,789)	(5,055)	(6,180)
Hong Kong	(3,926)	(3,955)	(4,007)	(4,304)	(3,980)
Korea	(3,664)	(3,335)	(2,833)	(2,735)	(2,528)
Taiwan	(2,817)	(2,483)	(2,648)	(2,468)	(2,323)
Mexico	(216)	(317)	(376)	(459)	(569)
Dominican Republic	(335)	(396)	(507)	(677)	(786)
Philippines	(872)	(1,061)	(1,042)	(1,238)	(1,339)
Italy	(824)	(838)	(787)	(799)	(818)
Indonesia	(574)	(641)	(617)	(924)	(1,109)
India	(583)	(635)	(639)	(906)	(1,078)
All other	(5,813)	(5,992)	(5,844)	(7,637)	(8,451)
Total	(22,488)	(23,087)	(23,089)	(27,202)	(29,161)
EU-12	(1,446)	(1,377)	(1,061)	(1,012)	(1,012)
OPEC	(602)	(694)	(633)	(1,027)	(1,241)
ASEAN	(3,059)	(3,405)	(3,529)	(4,488)	(4,879)
CBERA	(919)	(1,126)	(1,423)	(1,805)	(2,199)
Central Europe	(124)	(116)	(102)	(148)	(180)

[1] Import values are based on customs values; export values are based on f.a.s. value, U.S. port of export.

[2] Less than $500,000.

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

APPENDIX A
EXPLANATION OF TARIFF AND TRADE AGREEMENT TERMS

The ***Harmonized Tariff Schedule of the United States*** (HTS) replaced the Tariff Schedules of the United States (TSUS) effective January 1, 1989. Chapters 1 through 97 incorporate the internationally adopted Harmonized Commodity Description and Coding System through the 6-digit level of product description and have U.S. product subdivisions at the 8-digit level. Chapters 98 and 99 contain special U.S. classifications and temporary rate provisions, respectively.

Duty rates in the ***general*** subcolumn of HTS column 1 are most-favored-nation (MFN) rates, many of which have been eliminated or are being reduced as concessions resulting from the Uruguay Round of Multilateral Trade Negotiations. Column 1-general duty rates apply to all countries except those enumerated in HTS general note 3(b) (Afghanistan, Azerbaijan, Cuba, Kampuchea, Laos, North Korea, and Vietnam), which are subject to the rates set forth in column 2. Albania, Armenia, Belarus, Bosnia, Bulgaria, the People's Republic of China, Croatia, the Czech Republic, Estonia, Georgia, Hungary, Kazakhstan, Kyrgyzstan, Latvia, Lithuania, Macedonia, Moldova, Mongolia, Poland, Romania, Russia, Slovakia, Slovenia, Tajikistan, Turkmenistan, Ukraine, and Uzbekistan are accorded MFN treatment. Specified goods from designated MFN-eligible countries may be eligible for reduced rates of duty or for duty-free entry under one or more preferential tariff programs. Such tariff treatment is set forth in the special subcolumn of HTS column 1 or in the general notes. If eligibility for special tariff rates is not claimed or established, goods are dutiable at column 1-general rates. The HTS does not enumerate those countries as to which a total or partial embargo has been declared.

The ***Generalized System of Preferences*** (GSP) affords nonreciprocal tariff preferences to developing countries to aid their economic development and to diversify and expand their production and exports. The U.S. GSP, enacted in title V of the Trade Act of 1974 for 10 years and extended three times thereafter, applies to merchandise imported on or after January 1, 1976 and before the close of July 30, 1995. Indicated by the symbol "A" or "A*" in the special subcolumn, the GSP provides duty-free entry to eligible articles the product of and imported directly from designated beneficiary developing countries, as set forth in general note 4 to the HTS.

The ***Caribbean Basin Economic Recovery Act*** (CBERA) affords nonreciprocal tariff preferences to developing countries in the Caribbean Basin area to aid their economic development and to diversify and expand their production and exports. The CBERA, enacted in title II of Public Law 98-67, implemented by Presidential Proclamation 5133 of November 30, 1983, and amended by the Customs and Trade Act of 1990, applies to merchandise entered, or withdrawn from warehouse for consumption, on or after January 1, 1984. Indicated by the symbol "E" or "E*" in the special subcolumn, the CBERA provides duty-free entry to eligible articles, and reduced-duty treatment to certain other articles, which are the product of and imported directly from designated countries, as set forth in general note 7 to the HTS.

Free rates of duty in the special subcolumn followed by the symbol "IL" are applicable to products of Israel under the ***United States-Israel Free Trade Area Implementation Act*** of 1985 (IFTA), as provided in general note 8 to the HTS.

Preferential nonreciprocal duty-free or reduced-duty treatment in the special subcolumn followed by the symbol "J" or "J*" in parentheses is afforded to eligible articles the product of designated beneficiary countries under the ***Andean Trade Preference Act*** (ATPA), enacted as title II of Public Law 102-182 and implemented by Presidential Proclamation 6455 of July 2, 1992 (effective July 22, 1992), as set forth in general note 11 to the HTS.

Preferential or free rates of duty in the special subcolumn followed by the symbol "CA" are applicable to eligible goods of Canada, and those followed by the symbol "MX" are applicable to eligible goods of Mexico, under the ***North American Free Trade Agreement***, as provided in general note 12 to the HTS, implemented effective January 1, 1994 by Presidential Proclamation 6641 of December 15, 1993.

Other special tariff treatment applies to particular ***products of insular possessions*** (general note 3(a)(iv)), goods covered by the ***Automotive Products Trade Act*** (APTA) (general note 5) and the ***Agreement on Trade in Civil Aircraft*** (ATCA) (general note 6), ***articles imported from freely associated states*** (general note 10), ***pharmaceutical products*** (general note 13), and ***intermediate chemicals for dyes*** (general note 14).

The ***General Agreement on Tariffs and Trade 1994*** (GATT 1994), annexed to the Agreement Establishing the World Trade Organization, replaces an earlier agreement (the GATT 1947 [61 Stat. (pt. 5) A58; 8 UST (pt. 2) 1786]) as the

primary multilateral system of disciplines and principles governing international trade. Signatories' obligations under both the 1994 and 1947 agreements focus upon most-favored-nation treatment, the maintenance of scheduled concession rates of duty, and national (nondiscriminatory) treatment for imported products; the GATT also provides the legal framework for customs valuation standards, "escape clause" (emergency) actions, antidumping and countervailing duties, dispute settlement, and other measures. The results of the Uruguay Round of multilateral tariff negotiations are set forth by way of separate schedules of concessions for each participating contracting party, with the U.S. schedule designated as Schedule XX.

Officially known as "The Arrangement Regarding International Trade in Textiles," the ***Multifiber Arrangement*** (MFA) provides a framework for importing and exporting countries to negotiate bilateral agreements limiting textile and apparel shipments, or for importing countries to take unilateral action in the absence or violation of an agreement. These agreements establish quantitative limits on textiles and apparel of cotton, other vegetable fibers, wool, man-made fibers or silk blends in an effort to prevent or limit market disruption in the importing countries—restrictions that would otherwise be a departure from GATT provisions. The United States has bilateral agreements with many supplying countries, including the four largest suppliers: China, Hong Kong, the Republic of Korea, and Taiwan.