

INDIA'S APPAREL EXPORTS: THE CHALLENGE OF GLOBAL MARKETS

K. V. RAMASWAMY
GARY GEREFFI

I. INTRODUCTION

INDIA has initiated, since August 1991, a far-reaching structural adjustment program (SAP) to reduce policy-induced rigidities in the functioning of the economy and to achieve competitiveness in the international market. The SAP involves reducing state intervention in product and factor markets and correcting the import substitution bias that characterized India's industrial development strategy and policy. The policy reforms include industrial deregulation, reduction of tariffs and quantitative restrictions on imports, access to disembodied foreign technology, and liberalization of exchange rate and foreign direct investment policies.¹ The primary objective of policy changes has been to improve the efficiency of the manufacturing sector through increased competitive pressure and access to imported inputs at international prices. A comprehensive assessment of the impact of the 1991 reforms on industrial and trade performance is not yet available. However, India's penetration of world export markets is very low, at 0.60 per cent in 1996, relative to many other Asian developing countries. In particular, the share of manufactured exports in total exports has remained stagnant at around 74 to 75 per cent in the nineties. Consequently, the emphasis of government policy will continue to be on achieving export growth and integration with the world economy.

Given the emphasis on export growth performance, it is especially important to understand the nature of the global production system that shapes the insertion of third world countries, like India, into the international economy. In this paper we focus attention on the apparel sector in India. The reasons are twofold. First, the textiles and apparel complex, despite its status as a declining sector in developed countries, represents the leading edge of economic globalization for many third

We are grateful to Mr. Saumitra Chaudhuri and the anonymous referees of this journal for their extensive and critical comments. The usual disclaimers apply. Useful comments were also received from the conference participants at the NIPFP-Ford conference, November 6–7, 1998. The first author gratefully acknowledges the financial support from the Ford Foundation.

¹ The ongoing reforms are documented in the annual *Economic Surveys* of Government of India.

world countries including India. Second, the share of India in world clothing exports has not risen since 1994 (2.6 per cent) and in fact declined marginally in 1997 (2.3 per cent). The growth rate of exports (U.S. dollar value) is reported to be only 0.6 per cent in the year 1997–98 and 2.1 per cent in 1996–97 (Government of India 1999, p. S-90). The immediate cause of this lower export growth is apparently the slowdown in the import growth of India's major apparel markets, namely, the United States and the European Union (EU). A closer look at the industry reveals the absence of structural change and policy reforms. The policy reforms of the 1990s have not substantially impacted the apparel sector as it is still subject to entry restriction (licensing for large-scale plants) through product reservation, import controls, and foreign direct investment. Restructuring the apparel sector to meet the competitive challenges of the post-Uruguay Round world economy is of crucial importance

This paper presents a perspective that focuses on two themes: first, the process of globalization of apparel production and the changing competitive conditions in the global apparel market; second, the characteristics of India's apparel exports, the production structure that supports the export profile, and the effects of policy regulations. The paper is divided into five sections. Following this introduction Section II discusses the concept of globalization and trends in world apparel trade. Section III introduces the perspective of global commodity chains (GCC) to understand the linkages in the global apparel trade. Section IV discusses the main features of India's apparel sector and its strengths and weaknesses. Section V presents the conclusions and implications for policy.

II. GLOBALIZATION AND WORLD TRADE IN CLOTHING

The increasing interaction of domestic economies with the world economy is generally termed as "globalization." Globalization is reflected in the rising share of international trade in world output. The volume of world merchandise trade is estimated to have increased at an average annual rate of more than 6 per cent, during the period 1950–94, compared with an output growth of less than 4 per cent (WTO 1995). This means each 10 per cent increase in world output has on average been associated with a 16 per cent increase in world trade (WTO 1995, p. 15). The more interesting development has been the steady rise in the ratio of trade growth to output growth for manufactures, from an average of 1.3 in 1950–64 to 3.2 in 1984–94. It is clear that the pace of global integration has been mainly driven by the manufacturing sector (WTO 1995, p. 19).

The relatively new aspect that makes globalization different from earlier stages in the international division of labor, is the ability of producers to slice up the value chain. That is, breaking up of the production process into many geographically separated steps (Krugman 1995). A good is produced in a number of stages in a

variety of locations, adding value at each stage. Producers locate the different stages such that it improves access to resources and capabilities and facilitates penetration of newly expanding markets. In effect globalization promotes specialization in terms of the development of market niches. This process of slicing up of the value chain provides greater room for developing countries to specialize in the labor-intensive stages of the manufacturing process of a commodity, which as a whole might be capital-intensive. This increases opportunities for developing countries to participate and gain from trade. For example, production of semiconductor chips (integrated circuits used in a wide range of electronic products) is a capital-intensive process. It involves three basic stages excluding final testing, namely, the design and generation of photomasks, wafer fabrication, and assembly and packaging of the assembled device. The assembly stage is a labor-intensive activity using unskilled labor in which developing countries have comparative advantage.

In the apparel industry, globalization of production activities has meant that a garment can be designed in New York, produced by using the fabric made in the Republic of Korea, cut in Hong Kong, and assembled in China, for eventual distribution in the United Kingdom or the United States. Frontiers of nation-states no longer determine the business strategies of producer firms or the purchasing strategies of large distribution networks. The main factors which have contributed to the globalization of world apparel industry are the labor-intensive nature of apparel production technology, the loss of comparative cost advantage of developed countries,² dramatic decline in transport and communication costs, search for production sites with lower labor costs, and the shift in apparel exports from more restricted to less restricted among the developing countries due to the discriminatory nature of the restrictions imposed by the Multifibre Arrangement (MFA). It is reported that roughly half of the total production capacity in the apparel industry has shifted from developed countries to less developed countries over the past three decades.³ The fundamental factor which explains this relocation movement in the global apparel industry and the emergence of new producing countries is the international differences in hourly wage costs in the clothing industry as shown in Table I.

World clothing exports increased faster than total trade in manufactured exports between 1983 and 1993. It is also the second fastest growing product category next only to office and telecom equipment, perhaps the prime mover of global integration (GATT 1994). Particularly, the second half of the 1980s was a period of rapid growth in world exports of clothing (Table II). World exports of clothing increased

² It is important to note that technical progress has been slower in clothing production, and the developed countries have regained some strength in textile production due to progress in labor-saving technology.

³ This is based on the paper "Trends in Textile Capacity" by Udo Hartmann (1993) of Gherzi Textile Organization, Zurich.

TABLE I
INTERNATIONAL LABOR COST DIFFERENCES, 1981–93

Country/Region	(U.S.\$ per hour)		
	1981	1990*	1993*
United States	7.03	6.56	8.13
Mexico	3.06	0.92	1.08
Germany	8.17	7.23	17.22
Hong Kong	1.42	3.05	3.85
Taiwan	1.32	3.41	4.61
Republic of Korea	1.35	2.46	2.71
China	1.35	0.26	0.25
Indonesia	0.63	0.16	0.28
India	0.69	0.33	0.27

Sources: Extracted from Toyne et al. (1984) and ILO (1995).

* Wage costs + social security contribution.

TABLE II
GROWTH OF WORLD TRADE IN CLOTHING

	(Average annual percentage change)		
	1980–85	1985–90	1990–94
World	4	17	7
	1980–93	1990–94	
India	15	8	
China	21	25	
Indonesia	32	18	
Thailand	24	13	
Republic of Korea	6	–8	
Pakistan	n.a.	12	

Sources: GATT (1994, p. 84); WTO (1995, pp. 121, 124). Estimates for Pakistan are based on annual figures given in WTO (1995).

at the rate of 17 per cent between 1985 and 1990. This is higher than the world trade in manufactures of 15.5 per cent during the same period (WTO 1995, pp. 25, 121). The value of world apparel exports is estimated to have been \$166 billion in 1996 (WTO 1998, vol. 2, p. 132).⁴ Until the end of the 1980s the top four garment exporters were Hong Kong, Italy, Republic of Korea, and Taiwan. China emerged as a leading exporter in the second half of the 1980s and today occupies the number one position in the world. In 1995 China and Hong Kong together had a share of 21.2 per cent of the world markets, and they pose a formidable challenge to other developing countries (Appendix Table I). The United States and the EU together im-

⁴ The composition of world apparel exports consists of women's outerwear (26 per cent), men's outerwear (20 per cent), and knitted outerwear (22 per cent). These estimates are taken from Export-Import Bank of India (1995).

ported more than 70 per cent of world's clothing imports in 1996. In that year the United States and the EU imported clothing worth \$43.3 billion and \$80.9 billion respectively (WTO 1998, vol. 2, p. 133).⁵ Both of these markets have experienced structural changes in the composition of their major supplier countries/regions (Tables III and IV). The share of the big three suppliers of U.S. imports, namely, Taiwan, Hong Kong, and the Republic of Korea declined from 59 per cent in 1983 to 38 per cent in 1990 and to 18 per cent in 1996. The biggest gainers have been Mexico and the Central American countries which raised their combined share from 6 per cent in 1983 to more than 24 per cent in 1996. It is reported that in 1997 Mexico (\$5.9 billion) moved ahead of China (\$4.5 billion) as the largest supplier of apparel imports (USITC 1998). For the European Union, China and Turkey replaced Hong Kong and Republic of Korea as the largest suppliers in 1996.

The Multifibre Arrangement and Its Phaseout

The bulk of world trade in textiles and clothing is regulated by the Multifibre Arrangement (MFA), which came into force in 1974. This was in response to the rapid growth of textile exports, both cotton as well as man-made fiber, from the developing to the developed countries during the period 1962 to 1974. Under the MFA the developed countries negotiate bilateral agreements with individual trading partners in order to restrict the quantity of exports of specific product categories by their trading partners. The intention of MFA is to protect domestic producers in the developed countries from market disruption. The annual quotas are not to be lower than trade in a specified twelve-month period and they must be enlarged by not less than 6 per cent every year. It is important to note that the MFA provides for certain flexibility provisions in quota administration like the "swing provision" (switching of quotas among product categories), the carryover of the preceding year's quota, and carryforward of the following year's quota. Most studies agree that the MFA has been highly discriminatory and restrictions have become more comprehensive and severe over time (Goto 1989).⁶

The MFA is to be phased out under the Uruguay Round agreement in three stages by the end of the year 2005. The ATC (Agreement on Textiles and Clothing) specifies the phaseout program during which international trade in textiles and clothing will be gradually integrated into the GATT/WTO framework between 1995 and 2005. At the start of each phase of integration, importing countries must integrate a specified minimum portion of their textile and garment imports. This is to be based on total trade volume in 1990 for the items listed in the annex to the agreement, and

⁵ The figure for the EU includes intra-union imports.

⁶ It is interesting to note that the rapid growth of apparel exports from developing countries took place in spite of tariff and nontariff barriers (Goto 1989). This suggests that trade quotas were not stiff and the imposed quota growth of 6 per cent in volume was sufficiently high to facilitate growth in exports.

TABLE III
U.S. APPAREL IMPORTS BY MAJOR SUPPLIERS

Country/Region	(U.S.\$ million)					
	1983		1990		1996	
	Value	Share	Value	Share	Value	Share
China	759	7.8	3,439	13.5	6,340	15.2
Big Three	5,734	58.9	9,807	38.4	7,595	18.2
Hong Kong	2,249	23.1	3,976	15.6	3,998	9.6
Taiwan	1,800	18.5	2,489	9.8	2,066	4.9
Republic of Korea	1,685	17.3	3,342	13.1	1,531	3.7
Southeast Asia	806	8.4	3,436	13.5	5,886	14.1
South Asia	385	3.9	1,716	6.7	4,175	10.0
Of which:						
India	220	2.3	636	2.6	1,350	3.2
Central America	389	4.0	1,985	7.8	6,076	14.6
Mexico	199	2.0	709	2.8	3,850	9.2
Others	1,328	14.0	4,009	16.0	6,996	17.0
Total	9,731	100	25,518	100	41,679	100

Source: Authors' estimates based on the official statistics of the U.S. Department of Commerce, *U.S. Imports for Consumption*, customs value. Columns do not add up exactly due to round-off errors.

TABLE IV
EU APPAREL IMPORTS BY REGION, 1996

Country/Region	1996	
	1981	(%)
China	1.7	7.7
Hong Kong	10.5	5.6
Republic of Korea	6.2	0.8
Chinese Taipei	2.4	0.6
Central/Eastern		
Europe, CIS, and		
Baltic states	4.5	8.9
Southeast Asia	n.a.	4.4
India	2.3	3.3
Turkey	n.a.	6.1
European Union	47.2	44.5
Others	9.9	17.3
All	100	100

Sources: WTO (1995, p. 123; 1997, vol. 2, p. 109).

Note: "Others" includes intra-union imports. Southeast Asia denotes Philippines, Indonesia, Thailand, and Malaysia.

it provides for a progressive increase in quota growth rates for products remaining under quota.

The United States has published a list of products that it intends to integrate in each of the three stages. However, the objective is to defer the most sensitive products until the end of the ten-year period. Consequently, the most import-intensive items like shirts and women's outerwear, in which India has an advantage, will not have their quotas removed until 2005. However, the permitted quotas will be relatively more generous for developing countries like India with a permitted growth of 6–7 per cent per year. Imports from the “dominant” supplier economies like Hong Kong, China, and the Republic of Korea have restricted quota growth rates of 0–2 per cent per year (Majmudar 1996). The U.S. most favored nation (MFN) tariff rates on apparel will have higher tariff rates relative to all other MFN products in 2004 (Ramaswamy and Gereffi 1998).

III. GLOBAL COMMODITY CHAINS, EXPORT NETWORKS, AND U.S. IMPORTS

A. *Global Commodity Chains and Export Networks*

Who are the primary agents driving and organizing globalization process of apparel production? What are the implications for developing countries like India? To understand and analyze the implications of this globalization of production for specific countries, like India, it is useful to utilize the concept of commodity chains. This is essentially a network-centered view of the world economy.⁷ The concept recognizes that in the global economy, economic activity is not only international in scope, it also is global in organization. “Internationalization” refers to the geographic spread of economic activity across national boundaries. “Globalization” implies the functional integration of internationally dispersed activities. The GCC approach emphasizes the global coordination system that integrates the organization of international production networks (Gereffi 1995). Commodity chains are conceived as networks of business units involved from the stage of supplying raw materials to production, exporting, and finally marketing and retailing. It includes both forward as well as backward linkages from the production stage in the commodity chain. The business units may be subsidiaries of transnational corporations (TNCs) or independent companies of varying size. The apparel industry can be characterized as a buyer-driven commodity chain.⁸

Buyer-driven commodity chains (BDCCs) are found in those industries where

⁷ For initial formal discussions of the concept see Gereffi and Korzeniewicz (1994) and Gereffi (1994). The following discussion borrows heavily from Gereffi (1995). Also see Gereffi (1999) for a discussion on industrial upgrading in the apparel commodity chain.

⁸ The alternative is producer-driven chains in automobile and electronic industries. See Ramaswamy and Gereffi (1998).

large retailers, brand-name marketers, and trading companies play the key role in setting up decentralized production networks in a variety of exporting countries, typically located in the third world. Locally owned third world factories, which make the finished goods (rather than components or parts) for foreign buyers, mostly carry out production.⁹ The brand-name company or a large retailer that designs and orders the goods supplies the specifications.¹⁰ In BDCCs the main leverage is exercised by retailers and brand-name merchandisers at the marketing and retailing end of the chain. The essence of BDCCs is the separation of physical production activity from the design and marketing stages. The companies constituting the BDCCs are “manufacturers without factories.” For example, retailers like Wal-Mart, Sears Roebuck, and J.C. Penney, athletic footwear companies like Nike and Reebok, and fashion-oriented companies like Liz Claiborne and The Limited, do not manufacture the products that they design or sell. The sources of profit are a unique combination of high-value research, design, sales, marketing, and financial services. They link overseas factories and traders with evolving product niches in the main consumer markets.

The East Asian newly industrializing economies (NIEs) became successful exporters in the late 1960s and 1970s, primarily by mastering the dynamics of BDCCs. Apparel was a leading export sector for each of the four East Asian NIEs, namely, Hong Kong, Singapore, Republic of Korea, and Taiwan. Toys were the same for all except Singapore, as well as footwear for Korea and Taiwan. These economies moved from assembly to OEM (original equipment manufacturing) production in BDCCs. OEM is also known as specification contracting and has the following features: the supplying firm makes a product according to the design specified by the buyer; the product is sold under the buyer's brand name; the supplier and buyer are separated; and the supplier lacks control over distribution. East Asian firms became full range “package suppliers” for foreign buyers.¹¹

B. *Who Is Sourcing U.S. Apparel Imports?*

In 1994 approximately 44 per cent of all apparel sold in the United States was made outside the United States. This figure excludes imported fabric and yarn that went into apparel that was produced domestically within the United States.¹² The

⁹ In many instances they are wholly or jointly owned by U.S. firms located close to the United States (for example, in the Caribbean area) or in far-off areas like Mauritius. However, ownership of production facilities is not a significant feature of BDCCs.

¹⁰ BDCCs tend to be labor intensive at the manufacturing stage. Consequently, they are characterized by very competitive and decentralized factory systems.

¹¹ The supplier countries can be either CMT (cut, make, and trim) or package program suppliers. In the former case, the supplier gets the fabric and the trim from elsewhere or it is supplied by the buyer. In the latter locally produced fabric is used.

¹² The U.S. market can be divided into three categories: (1) fashion products (women's wear) with an average ten-week product life make up about 35 per cent of the market; (2) seasonal products

TABLE V
U.S. IMPORTERS AND THEIR BUYING CHARACTERISTICS

Type of Importers	Representative Firms	Characteristics of Buyer's Orders
Discounters/outlet stores	Wal-Mart, Kmart, Target	Low-priced store brand products. Huge orders.
Mass merchandisers	J.C. Penney, Sears, Woolworth	Good quality, medium-priced goods sold under private labels. Large orders.
Department stores/specialty stores	The Gap, The Limited, Bloomingdale's, May Department Stores	Top quality, high-priced national brands. Medium to large orders.
Brand-name marketers	Liz Claiborne, Calvin Kline, Tommy Hilfinger	Same as department stores.
Brand-name apparel manufacturers	VF Corporation, Sara Lee, Levi Strauss & Co.	National brands. Medium to large orders.

Source: Partly based on Gereffi (1994).

three principal firms sourcing U.S. apparel imports are: retailers, brand-name marketers, and brand-name apparel manufacturers. They have developed extensive global sourcing capabilities. Their characteristics as buyers are summarized in Table V.¹³ The American retail sector is under continuing transformation. Due to mergers and acquisitions, there has been a consolidation of buying power among retailers. The trend in the value of their sales and market shares for three selected years is shown in Table VI. In 1996 the top ten companies accounted for more than 70 per cent of retail sales. It was only 46.2 per cent in 1987.

U.S. retailers have increasingly turned to imports in order to satisfy consumer demands for better value. In 1975 only 12 per cent of the apparel sold by U.S. retailers was imported. By 1984 retailers had doubled their dependence on imported garments (AAMA 1984). In 1993 retailers accounted for 50 per cent of the total value of imports of the top 100 U.S. apparel importers. Initially, American retailers relied on apparel wholesale-importers to source their imports. Now most of them have their own buying offices in many parts of the world. They have started to promote Mexican goods through their North American networks (*Economist* 1997).

The other segment consists of brand-name marketers like Liz Claiborne (\$4 billion) and apparel manufacturers like VF Corporation (\$5 billion). In 1996 these

(cotton shirts) with a twenty-week product life make up about 45 per cent; and (3) basic or standardized products (blue jeans, children's wear) sold throughout the year make up the remaining 20 per cent of the market (*Standard & Poor's Industry Surveys*, vol. 2, July 1996).

¹³ Department stores are more upscale and sell relatively high quality and high-priced apparel. J.C. Penney is upgrading itself into a department store. Woolworth is diversifying. Mass merchandisers are facing severe price competition from discount stores.

TABLE VI
U.S. RETAILERS AND THEIR MARKET SHARE

	(U.S.\$ billion; %)					
	1987		1992		1996	
	Sales	Share	Sales	Share	Sales	Share
Discounters/outlet stores:						
Wal-Mart	16.0	5.9	55.5	19.1	93.6	26.1
Kmart	25.6	9.5	37.7	13.0	31.5	8.8
Mass merchandisers:						
Sears	28.1	10.4	32.0	11.0	38.0	10.6
Dayton Hudson	10.7	4.0	17.9	6.2	25.3	7.1
Woolworth	7.1	2.6	10.0	3.4	8.2	2.3
Department stores:						
J.C. Penney	16.4	6.1	19.1	6.6	29.0	8.1
May Department Stores	10.3	3.8	11.2	3.9	12.3	3.4
Dillard's	n.a.	n.a.	n.a.	n.a.	6.6	1.8
Specialty stores:						
Melville	5.9	2.2	10.4	3.6	11.5	3.2
The Limited	3.5	1.3	6.9	2.4	7.8	2.2
The Gap	1.1	0.4	3.0	1.0	4.5	1.3
Toys R Us	3.3	1.2	7.2	2.5	9.4	2.6
Others	142.4	52.7	79.7	27.4	80.3	22.4
Total retail sales	270.4	100	290.6	100	358.0	100

Source: Authors' estimates based on *Standard and Poor's Industry Surveys*, annual reports of corporations, and American Apparel Manufacturers Association data.

companies account for 30 per cent of the total wholesale volume and 44 per cent of the top 100 U.S. apparel importers. They can outsource by building factories abroad (foreign direct investment) or by establishing agents in foreign countries who own local factories, or by having the designed apparel made in locally owned factories. The first option does not seem to be growing in importance. This is indicated by the fact that the U.S. investment abroad in the apparel industry was just over 1 billion dollars in 1994 and 1.3 billion dollars in 1997.

The growth in the size of retailers and their consolidation over time has had several consequences. First, the retailers have acquired greater leverage over manufacturer-suppliers in setting prices and dictating product lines. Second, it has increased pressure on apparel suppliers to adopt order fulfillment practices and information systems like electronic data interchange that enable suppliers to fill retailer orders rapidly, efficiently, and flexibly.¹⁴ Lean retailers penalize suppliers if shipments do not accurately reflect retailer orders. Buyers expect more services as minimum performance standards. Third, retailers are offering a greater variety of apparel products in order to increase their market share. This drive by retailers (and

¹⁴ See the discussion in Abernathy et al. (1995).

their manufacturer-suppliers) to increase market shares through increasing product variety has led to higher demand uncertainty (Abernathy et al. 1995). As a result the demand uncertainty previously associated with fashion products has spread across product categories affecting basic products like men's shirts. Consequently, retailers are giving up the practice of ordering large quantities well in advance of the selling season. They prefer to order in smaller initial quantities and replenish as the season advances. This has led to shorter lead times for apparel suppliers and it is forcing them to develop capabilities to respond to this change. In effect market power is shifting from manufacturers to retailers.

A similar shift in power from manufacturers to distributors and retailers appears to be under way in the European Union as well. For example, in Germany, the EU's largest national market, the top five clothing retailers have a market share of 28 per cent. In the United Kingdom the top two clothing retailers (Marks & Spencer and the Burton group) control 25 per cent of the U.K. market. The Japanese also predict that there will be fewer clothing retailers in the year 2000 than in the 1980s (Gereffi 1999, p. 45). This will continue to provide retailers and designers unprecedented scope for reshaping international supply networks.

How do countries in BDCCs deal with the competition from low-cost suppliers? One of the important adjustment mechanisms for maturing export industries in East Asia has been the process of "triangle manufacturing" (Gereffi 1994). The essence of triangle manufacturing is that U.S. (or other overseas) buyers place their orders with NIE manufacturers from whom they have sourced in the past (e.g., Korean or Taiwan apparel firms). These manufacturers in turn shift some or all of the requested production to affiliated offshore factories in low-wage countries (e.g., China, Indonesia, or Bangladesh). The triangle is completed when the finished goods are shipped directly to the overseas buyers from the low-wage country using the allocated U.S. quota. The two primary reasons behind foreign direct investment in the textiles and clothing industry in the Southeast Asian countries of Indonesia, Malaysia, and Thailand were the rising labor costs in and quota restrictions on the big three suppliers: Hong Kong, Republic of Korea, and Taiwan.

The key asset of the East Asian NIEs is their close relationship with foreign clients which is based on the trust developed through numerous successful transactions.¹⁵ Another way to counter loss of competitiveness in mature products is to move from simple to more sophisticated items within an export niche. One important reason for the continued apparel export growth of Hong Kong, Taiwan, and Korea, even in the face of rising labor costs, is that they have upgraded the quality of their apparel products and moved to higher-value-added segments (see below for some evidence). Further they are in the process of making the transition from OEM

¹⁵ For an informative discussion of buyer-seller links in export development see Egan and Mody (1992).

to OBM (original brand name manufacturing) whereby manufacturers make goods for export and sell under their own label. The strategy is to carry out forward integration into retailing. Most of the leading Hong Kong apparel manufacturers now have their own brand names and retail chains for the clothing they make. There are Hong Kong-owned retail stores throughout East Asia, North America, and Europe (Gereffi 1994). With the restoration of Hong Kong to mainland China in July 1997, a combination of Hong Kong's marketing expertise and China's production capacity is likely to give the People's Republic of China an enormous clout in world clothing markets.

An important factor reinforcing and accelerating the reorganization of apparel commodity chains is the U.S. and EU tariff provisions relating to "offshore assembly processing" (OAP). The effect of OAP provisions, combined with the enactment of NAFTA (North American Free Trade Agreement) in 1994, is that the market shares in the U.S. textile and apparel market have shifted in favor of Mexico, Canada, and the Caribbean Basin Initiative (CBI) countries.¹⁶ Under NAFTA apparel and other textile articles assembled in Mexico from fabric both made and cut in the United States can enter duty free. Under the OAP tariff provisions (9802), the United States provides duty exemption for U.S.-made components returned to the United States as parts of articles assembled abroad. Duty is assessed on the value added and not on the value of the U.S. parts sent offshore for assembly. This has led to the rapid growth of what is known as "production sharing" arrangements. Under these arrangements parts made in the United States (or cloth cut to shape in the United States) are sent abroad to countries with low labor cost for assembly and imported back to the United States.¹⁷ Apparel is especially suited to production sharing because of relatively high U.S. duty rates, the value of U.S. components, and the high import volume.

Three-fourths of the U.S. imports from Mexico have been under special tariff provision 9802 and are free of duties and quotas (USITC 1997). Consequently, Mexico has emerged as the largest supplier by value (\$5.9 billion in 1997) of total U.S. imports of MFA products. More than 85 per cent of Mexican MFA exports consist of apparel goods. This suggests the potentially dramatic impact that improved market access can have on developing country exports. In the case of Mexico, the growth in U.S. apparel imports seems to have come at the expense of other Asian countries (see Table III above). Mexico is the number one supplier of men and women's cotton trousers which is part of the category of basic and standardized garments.

¹⁶ The CBI beneficiaries are: Antigua & Barbuda, Aruba, Bahamas, Barbados, Belize, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Haiti, Honduras, Jamaica, Montserrat, Netherlands Antilles, Panama, St. Kitts-Nevis, St. Lucia, St. Vincent & the Grenadines, Trinidad & Tobago, and British Virgin Islands.

¹⁷ Compare the labor costs in the United States and Mexico in Table I above.

In Europe OAP is known as “outward processing trade” (OPT). EU tariff schedules contain provisions similar to those of the United States and allow components made in European countries to be exported for further processing or assembly. Upon reimport, products are partially or totally exempted from duties. The principal imports of the EU under OPT are apparel and other textile products which accounted for 43 per cent of the total OPT trade in 1994. Germany accounted for over two-thirds of the EU’s OPT. Textile and apparel companies in Germany ship fabric mostly to Central Europe where it is cut and sewn into garments. There is potential and considerable scope for Eastern and Central European countries to increase their level of exports via OPT and establish market niches. Their labor costs are lower, and more importantly the trade with these countries will be liberalized well before 2005.

IV. INDIA’S GARMENT EXPORT AND PRODUCTION STRUCTURE: MAIN FEATURES

The remarkable export performance of India’s garment sector beginning in the late 1980s and its underlying production base are well documented (Chatterjee and Mohan 1993; Uchikawa 1998). In this study we focus on more recent years and summarize the main features.¹⁸

1. The garment sector’s exports in the year 1995–96 were worth \$3,675 million. They were worth just \$1,598 million in 1989–90 meaning they have more than doubled in the last five years. India’s share in world exports of clothing in 1994 was 2.6 per cent up from 1.5 per cent in 1980. However, its share in such exports has not improved since 1994 and declined marginally to 2.3 per cent in 1997.¹⁹ The value of its garment exports was \$3,753 million in 1996–97 and \$3,776 million in 1997–98, a growth rate of only 0.6 per cent (Government of India 1999, p. S-89).
2. India’s garment exports are predominantly cotton fiber-based which constitute

¹⁸ The garment industry has been classified in the United Nations International Standards Classification as including “those establishments, which cut, and/or stitch/make up garments out of woven or knitted fabrics without being involved in the manufacture of fabrics.” Thus, the term apparel or garments would include ready-made garments as well as knitwear/hosiery.

¹⁹ India’s exports closely follow the world trend. However, other Asian countries like China, Thailand, and Indonesia have achieved higher growth rates relative to India and have increased their share of world exports (see Table II). In 1980 Thailand and Indonesia had respectively 0.7 and 0.2 per cent share of world clothing exports. In 1994 their share had risen to 3.3 and 2.3 per cent respectively. During the same period Bangladesh, a country with zero exports in 1980, emerged as a new garment exporter and currently has a 0.9 per cent share of the world market. Its growth is largely attributed to its initial access to markets without quota restrictions, and its continued quota free access to the EU. Pakistan also penetrated world markets with significant growth rates in the 1990s. The estimate for the year 1997, cited in the text, is taken from World Trade Analyzer, a trade data bank maintained by Statistics Canada, Ottawa, using United Nations data.

71 per cent of total garment exports. Synthetic fiber garments had a 28 per cent share in 1992. Appendix Table II shows that garment exports are concentrated in only a few items. Women's outerwear made up a 40.8 per cent share in 1991 but declined to 38 per cent in 1994. Men's shirts had a 17.8 per cent share in 1994. These two items contribute more than 50 per cent of India's garment exports.

3. Since 1983 the two quota markets of the United States and the EU have been India's principal markets. The combined share of these two markets is 71 per cent; the share for restricted countries is 76 per cent, and non-quota countries share the remaining 24 per cent.²⁰ In recent years India has fully utilized the imposed quota levels (Chatterjee and Mohan 1993). The concentration in a few items noted above is also found in the two quota markets (Tables VII and VIII). In the U.S. market women's outerwear (842) makes up more than a 50 per cent share. In 1993 India exported more than a billion dollars worth of women's outerwear, and more than half of it went to the United States. The European Union data is based on a different classification system. However much the same sort of picture emerges, as shown in Table VIII. Women's outerwear (non-knit) has a 38 per cent share and men's outerwear (shirt non-knit) a 29 per cent share in the extra-EU imports of apparel from India.
4. Two items contributing more than 50 per cent of garment exports might appear to be high but this is not unusual. Appendix Table II presents data on the composition of garment exports for India and its comparator countries. The share of the top item ranges from 36 per cent for Malaysia (SITC category 848) to 21 per cent for Bangladesh (category 845). For Indonesia and China the top two items (men and women's outerwear) contribute more than 50 per cent of the value of their garment exports. This indicates that they have developed a market niche.
5. Appendix Table III presents the market shares for India and other comparator countries which are leading suppliers to the United States in seventeen product categories. A striking feature is the wide diversity of specialization by country. No single country dominates across product categories. This supports the proposition that globalization promotes specialization in the development of market niches. Specialization is not by fabric alone but by product. However, China and Hong Kong together are the number one suppliers in eight of the seventeen categories. This indicates their higher level of production capability to supply a variety of products to penetrate global markets.
6. Producers in developing countries face volume restrictions on their exports.

²⁰ See Chatterjee and Mohan (1993) and Export-Import Bank of India (1995) for a discussion of the diversification of garment exports relative to quota and non-quota countries. In the 1990s India has not been able to reduce its reliance on quota countries.

TABLE VII
U.S. APPAREL IMPORTS FROM INDIA AND THEIR SHARE IN INDIA'S EXPORTS, 1993

(U.S.\$ million)					
SITC Rev. 3 Groups		U.S. Apparel Imports from India		India's Total Apparel Exports	
		Value (1)	Share	Value (2)	Share of (1) in (2)
841	Men's shirts, etc., NK	144.1	13.5	578.9	24.9
842	Women's blouses, etc., NK	581.3	54.4	1,067.0	54.5
843	Men's shirts, etc., knitted	15.5	1.5	323.7	4.8
844	Women's blouses, etc., knitted	25.0	2.3	189.1	13.2
845	Other articles of apparel	185.1	17.3	281.8	65.7
848	Apparel and clothing accessories, excluding textiles	117.1	11.0	383.5	30.5
Total		1,068.2	100.0	2,977.0	35.9

Sources: U.S. Department of Commerce, *U.S. Foreign Trade Highlights, 1995*; United Nations international trade data, 1993.

Note: NK = non-knit.

TABLE VIII
EUROPEAN UNION APPAREL IMPORTS FROM INDIA, 1995

Product	Value (1,000 ECUs)	Share (%)	Market Share* (%)	Rank as a Supplier
Men's cotton shirts	259,801	29.3	15	1
MMF shirts	13,587	1.5	3	7
Cotton T-shirts	125,967	14.2	8	3
Women's cotton blouses	118,083	13.3	29	1
Women's MMF blouses	102,217	11.5	9	4
Women's MMF dresses	108,938	12.3	33	1
Men's cotton trousers	4,765	0.5	1	11
Others	154,073	17.4		
Total	887,431	100		

Sources: Based on Euro-Stat data; and *Foreign Trade Trends and Tidings*, June 1997.

Note: MMF denotes man-made fiber.

* India's share of total extra-EU imports of that product.

They can enlarge the value of their sales by moving up the market segments into higher quality lines in their product categories, for example, moving from cotton to blends. This quality upgrading brings about an increase in unit value. The classic case has been Hong Kong whose realized sales have risen while the quantity sold has declined. The base of competitiveness need not be only low cost and high volume but one based on quality, design, and service. Product quality can be conceived as the absence of defects and the degree to which a

garment conforms to specifications (Moore 1997).²¹ Production cost, quality, and design content together cause variations in unit values. We have estimated the unit values of four selected MFA categories for U.S. imports from India, China, Bangladesh, Pakistan, Indonesia, and Hong Kong. They are presented in Appendix Table IV.

- The prices (unit values in U.S. dollars per dozen) received by Hong Kong for cotton apparel are at the top of the distribution followed by China and Indonesia. The high prices received by Hong Kong indicate specialization, high design content, and the use of high quality fabrics. Chinese prices reflect the networking with Hong Kong traders who provide the marketing expertise. Unit value for Bangladesh and Pakistan are together with the lowest value for all products for all years. India is in the middle.
- Consistent with the views of industry observers,²² Indian apparel products do show an improvement in unit values for their main products except in cotton women's shirts. In 1996, excluding cotton women's shirts, Indian prices were above average. They were below the average in 1993.
- Unit values of different countries for the same product also provide information on the market segments of each supplier country. India is the large supplier of casual shirts and not formal/business shirts. This shows up in the large difference in unit prices between India and Hong Kong in the shirt market.

Production Structure

Large differences in consumption patterns have separated domestic and export markets for apparel. The consumption of traditional tailor-made garments, i.e., consumption of piece lengths later made into garments by neighborhood tailors, dominates the domestic market. The domestic market is price sensitive while insensitive to variations in quality. During the 1990s the demand for modern casual ready-made garments appears to have increased. Industry reports (*India Today* 1994) indicate a rapidly emerging market for brand-name apparel that is sensitive to quality, such as jeans/trousers, printed shirts, and T-shirts; and there has been the entry of several large established companies into ready-made garment manufacturing. However, export-oriented apparel production is largely divorced from production for the domestic market, and the above signs of change are only very recent. In this context it would be useful to describe some features of the manufacturing sector in India and the system of industrial regulations affecting it.

²¹ See Koshy (1997, chap. 4) for an extended discussion of quality issues in the garment industry.

²² "Indian garments are no longer in the basement. They haven't moved to the top floor either but have definitely reached the first floor," according to the director general of Apparel Export Promotion Council (AEPC) of India (*India Today*, May 15, 1994, p. 133). Mill-made poplin is being used instead of cheap sheeting and embroidery to embellish shirts.

India's manufacturing sector can be divided into two segments based on whether employment is registered or unregistered. The registered sector consists of factories registered under the Factories Act of 1948 and covers those factories employing ten or more workers and using powered machinery, and those employing twenty or more workers and using manually operated machinery. All other factories constitute the unregistered sector and are outside the purview of industrial and labor legislation. Government policy for promoting small-scale industries uses the value of capital investment to define small-scale factories.²³ Under this policy all industrial units with an investment in plant and machinery to a maximum of Rs 6 million (raised to Rs 30 million in 1997) are designated as small-scale units and are eligible for a variety of promotional measures like preferential credit, investment subsidies, etc. In addition the government has declared more than 800 products for exclusive production by small-scale factories. Under this reservation policy only small-scale units can undertake the production of the products, and large factories cannot enter these lines unless they commit themselves to meet certain export obligations. At present there are thirty-one textile products (National Industrial Classification [NIC] 26) reserved for production by small-scale factories. These cover a range of knitted and woven garments. Their share in the total value of production is more than 80 per cent (Ramaswamy 1994).

Production structure of the Indian apparel industry is segmented into two distinct categories:

- the unorganized sweatshop supplier who sells to the local merchant exporters,²⁴
- the organized factory-based manufacturer-exporter, such as Gokaldas Exports.²⁵

The bulk of India's apparel production takes place in small producers with manually operated sewing machines. The unregistered sector contributes more than 90 per cent of the value added of the garment sector (NIC 26). The share for factories with more than 200 workers in this product group is only 25 per cent in the segment-registered manufacturing.²⁶ Large units are found only in the export-processing zones or as 100 per cent EOUs (export-oriented units). This is a consequence of the government's reservation policy. Garment production for domestic use in India is reserved for small-scale producers. Large firms can produce the reserved items under license provided they undertake to export 75 per cent (reduced to 50 per cent

²³ For a description of the structure and growth of small-scale industries in India, see Ramaswamy (1994).

²⁴ In 1994, 90 per cent of the registered exporters were merchant exporters, and only 10 per cent were exporters with manufacturing facilities (Koshy 1997).

²⁵ Gokaldas Exports has forty factories and maintains its own dyeing facilities, laundries, and embroidery machines, and manufactures its own zippers, labels, cartons, chords, etc.

²⁶ Note that in 1992–93 the value of production in factories with more than 200 workers was Rs 3,800 million, and the total value of exports was Rs 69,000 million.

in 1997) of their production from the third year of production. Half of their export should go to non-quota areas. Given the cyclical nature of demand in export markets and the uncertain domestic demand for ready-made garments, large firms have been reluctant to invest in the garment industry.

The small-scale nature of Indian production has resulted in flexibility advantage. It can handle a wide range of orders, even as low as 500 pieces. Small-scale producer demand for specific fabrics for specific purpose is largely met by the power loom sector. The power looms have the advantage of shorter lead time in the delivery of fabrics, which is critical for apparel manufacturers supplying largely to fashion-oriented niche markets. However, as the industry attempted to produce standardized garments based on standardized cloth, it faced severe problems of quality fabric.²⁷ It has been difficult to procure certain types of heavy cotton fabrics and fabrics in required counts and widths (Uchikawa 1998, p. 85). Apparel producers could not import these fabrics due to quantitative restrictions and high tariffs. The nominal tariff rate on synthetic and cotton fabrics was as high as 156 per cent and 129 per cent in 1989–90. In the 1990s the tariff rates have been progressively reduced and at present the nominal tariff rate is 50 per cent on cotton and synthetic fabrics. However, the import licensing system has continued to operate under which exporters can import fabric to a limit of 20 per cent of the f.o.b. value of exports. In January 1995 the import of most of fabrics and textile products was allowed under OGL (open general license). The system of duty-free import of textile fabrics, components, and accessories for export production requires special import licenses. The value of goods that can be imported duty-free is determined either on the basis of the f.o.b. value of exports of the exporter (the value-based license) or the physical quantity of inputs required for per unit of output (the quantity-based license). In the latter case detailed input-output norms have been specified for obtaining duty exemptions on the imported items. Licensing always causes delays, a crucial factor for an industry specializing in fashion and seasonal garments.

A constraint often noted is the availability of good quality trimmings and embellishments such as laces, buttons, zip fasteners, thread interlinings, and packaging materials.²⁸ All these products are reserved for small-scale industry, and their production lacks international quality which has forced large exporters to vertically integrate (for example, Gokaldas Exports). Since 1993 exporters have been allowed, after obtaining a license, to import all trimmings by paying a duty of 40 per cent (raised to 75 per cent in 1994 but the current rate has been reduced again to 40 per cent). The license requirement for the import of these items was abolished in April

²⁷ "Most of the mills will not print the kind of designs that we want because they themselves export the best cotton fabric," according to the owner of the Shirt Company (*Business India*, July 5, 1993, p. 103). This company has been forced to make only white clothes.

²⁸ Current import policy lists twenty-one types of trimmings and embellishments which are exempt from duties for exporters.

TABLE IX
TRADE IN CLOTHING ACCESSORIES AND TRIMS, 1994

(U.S.\$ million)

	846: Clothing Accessories		656: Trimmings, Lace, Embroidery, Labels	
	Exports	Imports	Exports	Imports
China	856	321	183	289
Indonesia	81	52	61	47
Republic of Korea	642	87	316	57
Malaysia	72	32	8	28
Hong Kong	184	527	116	425
Thailand	106	14	61	52
Mexico	35	128	36	177
India	179	2	31	17

Source: United Nations, *International Trade Statistics*, SITC Revised 3 (UNITC).

1996. It is important to realize that trims and accessories add value to the final product. Leading exporting countries of garments are also large importers of trims and accessories (Table IX).

The reservation of clothing products and accessories for the small-scale sector has closed the entry for both large domestic firms and foreign direct investment into the apparel sector. This has severely restricted the flow of new investment and technology upgrading. Garment industries in China, Malaysia, Sri Lanka, and Mauritius have achieved rapid progress due to foreign investment.

V. CONCLUSION AND POLICY IMPLICATIONS

India has initiated economic policy reforms in order to improve efficiency and achieve international competitiveness. Apparel is India's leading export product and achieved rapid growth in the late 1980s and the first half of the 1990s. However, India's share of world apparel exports has not risen since 1994. The immediate cause is apparently the slowdown in the import growth of India's major markets, namely, the United States and the EU. A more significant observation is that the apparel industry has remained outside the industrial reforms of the 1990s. An important and difficult task is the restructuring of the Indian apparel industry to meet the competitive challenges of the post-Uruguay Round world. In this context we surveyed the recent developments in the globalization of the world apparel industry to better understand its implications for the Indian apparel industry.

The process of globalization involves the slicing up of the value chain and forces countries to become niche players in the global market. Specialization in the global apparel market is not based on fabric alone but on product. The strategy is to ensure

that players enter the most attractive export niches in which they have relative advantage. In the world apparel market the main leverage is exercised by retailers, brand-name marketers at the marketing and retailing end of the chain. They outsource to meet their customer demands and depend on package suppliers who can procure fabric, cut, make, trim, and pack the final product. They scout the world looking for low-cost suppliers and locations. Even brand-name manufacturers are turning more to outsourcing and tend to focus on design and marketing. The consolidation of market power in the buyers, product diversity, and the higher demand uncertainty in product markets put pressure on the apparel supplier countries to adopt information systems to fill their orders efficiently. Special tariff provisions, namely, off-shore assembly processing (OAP) and outward processing trade (OPT) have speeded up the globalization of the apparel trade. These provisions favor the countries in close proximity to the United States (Mexico) and the EU (Eastern Europe). Regional trade arrangements like NAFTA and the OAP provisions have led to the rapid growth of non-Asian suppliers to the U.S. apparel market. The rapid growth markets are the clothing segment, basic and standardized garments.

India is at present a niche player in the low-value market segment based on cotton fabrics and for seasonal and fashion garments. This reflects India's comparative advantage in cotton cloth and its flexibility advantage in meeting small orders. However, its future export growth potential depends on two factors: (1) its ability to move up the value chain in cotton garments, and (2) the diversification of its product lines to include basic and standard garments, and synthetic fiber garments. With the targets of enhancing quality, establishing new market niches, and moving up the value chain, the strategy should be concentrated on the restructuring of the production base. This requires new investment and access to imported inputs. Government policy should remove two impediments to investment: product reservation and foreign investment restrictions. This would facilitate the entry of large domestic and foreign firms into apparel products and accessories. Our analysis suggests two major policy initiatives. First, the removal of textile products (woven and knitted) and clothing accessories from the list of items reserved for small-scale industries. Second, the inclusion of the apparel industry in the list of industries for which automatic approval by the Reserve Bank of India (RBI) of foreign direct investment up to 51 per cent equity is permitted. The current rules require prior approval by the Indian government's Secretariat for Industrial Approvals (SIA).

Access to imported inputs, fabric, trimmings, and accessories appear to have become easier with their removal from the restricted list. The current fall in the international prices of MMF (man-made fiber) fabric should help the industry to change its fiber base to cotton blended with synthetics. The reforms would enable the garment industry to develop the capability of meeting the challenge from competitors in the global market.

REFERENCES

- Abernathy, Frederick H.; John T. Dunlop; Janice H. Hammond; and David Weil. 1995. "The Information-Integrated Channel: A Study of the U.S. Apparel Industry in Transition." *Brookings Papers on Economic Activity: Microeconomics*, 1995: 175–245.
- American Apparel Manufacturers Association (AAMA). 1984. *Apparel Manufacturing Strategies*. Arlington, Va.: American Apparel Manufacturers Association.
- Business India*. 1993. "Garment Exports: Out of the Closet," July 5: 101–3.
- Chatterjee, Somnath, and Rakesh Mohan. 1993. "India's Garment Exports." *Economic and Political Weekly* 28, no. 35 (August 28): Review of Industry and Management, M-95–119.
- Economist*. 1997. "The NAFTA Effect," July 5: 19–21.
- Egan, Mary Lou, and Ashoka Mody. 1992. "Buyer-Seller Links in Export Development." *World Development* 20, no. 3: 321–34.
- Export-Import Bank of India. 1995. *Indian Garment Exports: Implications of the MFA Phase-Out*. Occasional Paper no.34. Mumbai: Export-Import Bank of India.
- General Agreement on Tariffs and Trade (GATT). 1994. *International Trade: Trends and Statistics*. Geneva: GATT.
- Gereffi, Gary. 1994. "The Organization of Buyer-Driven Global Commodity Chains: How U.S. Retailers Shape Overseas Production Networks." In *Commodity Chains and Global Capitalism*, ed. Gary Gereffi and Miguel Korzeniewicz. Westport, Conn.: Praeger.
- . 1995. "Global Production Systems and Third World Development." In *Global Change, Regional Response: The New International Context of Development*, ed. Barbara Stallings. Cambridge and New York: Cambridge University Press.
- . 1999. "International Trade and Industrial Upgrading in the Apparel Commodity Chain." *Journal of International Economics* 48, no. 1: 37–70.
- Gereffi, Gary, and Miguel Korzeniewicz, eds. 1994. *Commodity Chains and Global Capitalism*. Westport, Conn.: Praeger.
- Goto, Junichi. 1989. "The Multifibre Arrangement and Its Effects on Developing Countries." *World Bank Research Observer* 4, no. 2: 203–27.
- Hamilton, Carl B., ed. 1990. *Textiles Trade and the Developing Countries*. Washington, D.C.: World Bank.
- Hartmann, Udo. 1993. "Trends in Textile Capacity." *Textile Asia*, July: 66–71.
- India, Government of, Ministry of Finance, Economic Division. 1998. *Economic Survey, 1997–98*.
- . 1999. *Economic Survey, 1998–99*.
- India Today*. 1994. "Special Survey: On the Cutting Edge," May 15: 125–39.
- International Labour Organisation (ILO). 1995. *Recent Developments in the Clothing Industry, Report I*. Geneva: ILO.
- Koshy, Darlie. 1997. *Garment Exports: Winning Strategies*. New Delhi: Prentice-Hall of India.
- Krugman, Paul. 1995. "Growing World Trade: Causes and Consequences." *Brookings Papers on Economic Activity*, 25th Anniversary Issue, vol. 1: 327–62.
- Majmudar, Madhavi. 1996. "The MFA Phase-Out and the EU Clothing Sourcing: Forecasts to 2005." *Textile Outlook International*, March: 31–61.

- Moore, Lynden. 1997. "US Imports of Clothing from Asian Developing Countries." *Journal of International Development* 9, no.3: 309–30.
- Ramaswamy, K. V. 1994. "Small-Scale Manufacturing Industries: Some Aspects of Size, Growth and Structure." *Economic and Political Weekly* 29, no. 9 (February 26): Review of Industry and Management, M-13–23.
- Ramaswamy, K. V., and Gary Gereffi. 1998. "India's Apparel Sector in the Global Economy: Catching Up or Falling Behind." *Economic and Political Weekly* 33, no.3 (January 17): 122–30.
- Rhee, Yung Whee. 1990. "The Catalyst Model of Development: Lessons from Bangladesh's Success with Garment Exports." *World Development* 18, no. 2: 333–46.
- Toyne, Brian, et al. 1984. *The Global Textile Industry*. London and Boston: George Allen & Unwin.
- Uchikawa, Shuji. 1998. *Indian Textile Industry: State Policy, Liberalization and Growth*. New Delhi: Manohar Publishers.
- United Nations. 1995. *International Trade Statistics Yearbook, 1994*. 2 vols. New York: United Nations.
- U.S. International Trade Commission (USITC). Various years. *Annual Statistical Report on US Imports of Textiles and Apparel*.
- World Bank, Country Department II, South Asia Region. 1996. *India: Country Economic Memorandum*. August. Washington, D.C.: World Bank.
- World Trade Organization (WTO). 1995. *International Trade: Trends and Statistics*. Geneva: WTO.
- . 1996. *Annual Report, 1996*. 2 vols. Geneva: WTO.
- . 1997. *Annual Report, 1997*. 2 vols. Geneva: WTO.
- . 1998. *Annual Report, 1998*. 2 vols. Geneva: WTO.

APPENDIX TABLE I
WORLD'S LEADING EXPORTERS OF GARMENTS, 1980–95

	Share of World Exports			Growth (%)	
	1980	1990	1995	1980–93	1990–95
1. Hong Kong	11.5	8.6	6.0	5	1
2. China	4.0	8.9	15.2	21	20
3. Italy	11.3	10.9	8.9	8	3
4. Germany	7.1	7.3	4.7	6	–1
5. Republic of Korea	7.3	7.3	3.1	6	–9
6. United States	3.1	2.4	4.2	11	21
7. France	5.7	4.3	3.6	5	4
8. Turkey	0.3	3.1	3.9	31	13
9. Thailand	0.7	2.6	2.9	24	10
10. Portugal	1.6	3.2	2.3	17	1
11. Chinese Taipei	6.0	3.7	2.1	3	–4
12. India	1.5	2.3	2.6	15	10
13. Indonesia	0.2	1.5	2.1	32	15
14. United Kingdom	4.6	2.8	2.9	5	9
15. Netherlands	2.2	2.0	1.8	8	5

Sources: GATT (1994, p. 84); and WTO (1996, p. 111).

APPENDIX

COMPOSITION OF CLOTHING EXPORTS OF

SITC Rev. 2 Groups		India		Pakistan		Bangladesh*	
		Value (\$ Million)	Share (%)	Value (\$ Million)	Share (%)	Value (\$ Million)	Share (%)
84	Clothing & accessories	3,711.9	100	1,618.0	100	1,245.7	100
842	Men's outerwear, non-knit	156.8	4.2	243.0	15.0	196.1	15.7
843	Women's outerwear, non-knit	1,409.2	38.0	185.0	11.4	162.3	13.0
8441	Men's shirts, non-knit	658.9	17.8	109.8	6.8	236.6	19.0
845	Outerwear, knit nonelastic	338.5	9.1	183.6	11.3	267.0	21.4
846	Under garments, knitted	480.3	12.9	320.5	19.8	136.5	11.0
847	Textile clothing accessories, nes	172.6	4.7	139.2	8.6	1.7	0.1
848	Headgear, non-textile clothing	429.9	11.6	390.5	24.1	19.2	1.5

Source: United Nations, *International Trade Statistics Yearbook*, 1994.

Note: Men's shirts (8441) is a subgroup of category "under garments, non-knit (844)." The data

* For 1993.

APPENDIX

MARKET SHARE FOR SEVENTEEN CATEGORIES OF

Category Description		All Countries (U.S.\$ Million)		
			India	Bangladesh
341	Cotton women's non-knit shirts	891.6	24.9	6.5
338	Cotton men's knit shirts	2,919.1	6.4	1.7
340	Cotton men's non-knit shirts	2,137.3	7.7	7.6
369	Cotton other manufactures	812.5	21.7	3.2
636	Man-made fiber dresses	904.6	8.7	0.9
359	Cotton other apparel	1,157.7	4.7	10.5
339	Cotton women's knit shirts	1,937.2	2.6	0.7
641	MMF women's non-knit shirts	555.1	9.0	2.8
642	MMF skirts	419.7	10.9	0.6
336	Cotton dresses	403.4	8.4	3.9
363	Cotton/terry towels	264.2	11.5	3.4
635	MMF women's coats	1,066.9	2.6	3.1
342	Cotton skirts	345.0	7.9	4.1
335	Cotton women's coats	354.4	6.3	4.5
345	Cotton sweaters	336.5	5.6	0.7
347	Cotton men's trousers	2,942.2	0.7	3.5
348	Cotton women's trousers	2,288.7	0.9	1.4

Source: U.S. International Trade Commission, April 1997.

Note: The classification is based on the Harmonized Tariff Schedule (HTS). MMF denotes man-

TABLE II

SELECTED ASIAN COUNTRIES, 1994

Indonesia		Malaysia		Republic of Korea		China	
Value (\$ Million)	Share (%)	Value (\$ Million)	Share (%)	Value (\$ Million)	Share (%)	Value (\$ Million)	Share (%)
3,272.9	100	2,075.8	100	5,692.6	100	23,793.5	100
823.6	25.2	199.5	9.6	667.2	11.7	5,464.7	23.0
860.6	26.3	210.9	10.2	1,035.0	18.2	6,613.2	27.8
247.5	7.6	192.6	9.3	484.4	8.5	1,638.6	6.9
578.0	17.7	405.3	19.5	1,468.4	25.8	3,908.3	16.4
425.9	13.0	243.9	11.7	652.8	11.5	2,332.3	9.8
76.2	2.3			547.5	9.6	664.9	2.8
194.5	5.9	755.0	36.4	804.3	14.1	2,452.8	10.3

for the group 844 is not presented.

TABLE III

MFA IMPORTS TO THE UNITED STATES, 1996

U.S. Imports						
Percentage Share by Country/Region						
Pakistan	Sri Lanka	Indonesia	Thailand	Philippines	China	Hong Kong
1.5	5.9	5.6	2.9	1.5	7.2	24.8
10.2	3.0	2.9	4.5	4.5	5.1	4.1
1.3	3.2	5.9	1.1	2.8	2.9	13.7
15.4	1.2	0.5	2.3	3.7	23.9	0.9
0.1	4.9	6.6	1.5	9.9	18.5	5.7
2.1	5.3	4.6	1.5	6.2	15.3	10.3
2.4	1.5	1.7	1.4	2.4	2.5	10.5
0.1	4.2	15.7	0.4	1.9	20.7	8.6
0.1	4.5	5.3	4.6	7.3	8.3	6.6
4.1	3.2	3.5	3.1	12.9	5.4	6.4
17.9	1.0	0.0	6.7	0.0	14.8	0.4
0.7	3.3	2.9	5.5	5.2	15.9	9.6
1.9	7.7	4.0	5.2	3.5	5.6	14.5
0.8	7.6	2.6	4.3	2.7	21.0	14.3
0.1	1.2	9.6	7.3	6.0	8.1	23.0
0.8	1.9	3.8	1.1	3.0	3.8	8.1
0.6	2.1	2.4	1.5	2.5	4.8	17.4

made fiber.

APPENDIX TABLE IV

U.S. IMPORTS FROM INDIA AND OTHER COMPARATOR COUNTRIES (UNIT VALUES)

(U.S.\$ per dozen)

		1993	1994	1995	1996	Average Price (1996)
India	338: Cotton men's knit shirts	42.5	50.0	54.6	62.1	50.1
	340: Men's & boys' shirts, NK	73.1	83.1	85.1	87.4	82.9
	341: Cotton women's shirts, NK	58.9	65.4	57.6	53.4	67.4
	636: MMF dresses	127.7	147.8	131.6	144.6	129.8
China	338: Cotton men's knit shirts	65.6	75.6	86.4	98.5	50.1
	340: Men's & boys' shirts, NK	83.1	80.8	82.4	94.3	82.9
	341: Cotton women's shirts, NK	85.9	80.4	79.1	95.0	67.4
	636: MMF dresses	286.8	254.5	282.0	304.7	129.8
Bangladesh	338: Cotton men's knit shirts	43.7	43.5	49.6	53.5	50.1
	340: Men's & boys' shirts, NK	54.3	55.7	63.9	61.2	82.9
	341: Cotton women's shirts, NK	41.8	47.1	45.4	46.7	67.4
	636: MMF dresses	63.7	59.9	55.7	61.6	129.8
Pakistan	338: Cotton men's knit shirts	43.2	44.7	49.9	57.9	50.1
	340: Men's & boys' shirts, NK	59.9	60.6	60.2	54.9	82.9
	341: Cotton women's shirts, NK	44.5	47.3	44.8	45.2	67.4
	636: MMF dresses	76.5	79.0	71.5	62.3	129.8
Indonesia	338: Cotton men's knit shirts	79.7	84.7	86.9	96.0	50.1
	340: Men's & boys' shirts, NK	83.5	89.6	93.2	95.5	82.9
	341: Cotton women's shirts, NK	65.5	60.5	61.7	68.1	67.4
	636: MMF dresses	91.2	97.1	114.5	130.8	129.8
Hong Kong	338: Cotton men's knit shirts	109.7	111.1	126.0	125.0	50.1
	340: Men's & boys' shirts, NK	115.9	114.0	117.7	114.0	82.9
	341: Cotton women's shirts, NK	97.2	87.7	89.9	93.3	67.4
	636: MMF dresses	202.2	223.0	247.7	230.3	129.8

Source: Authors' estimates based on annual statistical reports for U.S. imports.

Note: The classification is based on the Harmonized Tariff Schedule (HTS). Average price = unit value of U.S. imports from all countries. NK = non-knit. MMF = man-made fiber.