THE MULTIFIBER ARRANGEMENT AND THE MANAGEMENT OF INTERNATIONAL TEXTILE TRADE

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What began in 1957 as a temporary restriction on imports of Japanese cotton textiles into the United States has evolved over 30 years into a complex market-sharing agreement involving all major trading countries and all categories of textile and apparel trade. The Multifiber Arrangement (MFA) is a major experiment in the management of international trade. However, the use of discriminatory quotas in the MFA is a serious violation of the principles of General Agreement on Tariffs and Trade (GATT) that have governed most trade since World War II. The quotas involve substituting political forces for economic forces in the determination of trade. The arrangement has imposed high costs on consumers in importing countries, and it has interfered with the United States' foreign policy goal of promoting economic development in low-income countries. The MFA has also been criticized by proponents of textile protection for failing to restrain import growth sufficiently. The time is right to reevaluate this experiment in managed trade and to determine whether to continue the market-sharing approach of the MFA or to return textile trade to compliance with the general rules of the GATT.

Description and Purpose of the Arrangement

The Multifiber Arrangement, an agreement among 42 exporting and importing countries, regulates trade in textiles and apparel. The stated objectives of the MFA are the expansion and liberalization of textile trade and the avoidance of disruption in import markets. Since import restriction is the most frequently used remedy for market disruption, there is an inherent conflict between the objectives. The

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resulting system of managed trade is a compromise between the interests of various groups in exporting and importing countries. The interests of producers in importing countries have been served by authorizing a set of bilateral quotas, and exporters have been promised that trade would be permitted to grow at some minimum specified rate.

The MFA and the country quotas it authorizes clearly conflict with the basic principles of the GATT. The GATT prohibits the use of quotas and discrimination by country. In extraordinary circumstances when imports "threaten serious injury to domestic producers," the GATT's "safeguard clause" (Article XIX) permits import restrictions, but they must be temporary and nondiscriminatory. In addition, the country imposing import restrictions is obliged to compensate foreign suppliers by making equivalent trade concessions against other imports. The members have sought to legitimate the MFA by making it a negotiated exception to the GATT. The resulting system of managed trade makes textiles and apparel one of the extreme exceptions to the GATT code. Agricultural trade is the other extreme example of noncompliance with GATT principles. The MFA does place conditions on acceptable quotas and each MFA expires on a specific date. National quotas and their implementation are subject to review by the Textiles Committee of GATT. However, each successive MFA has been more permissive about quotas than its predecessor, and MFAs can be renewed indefinitely.

A key feature of the MFA is the notion of "market disruption," which refers loosely to the harm done to a domestic industry by cheaper imports. The term has not been precisely defined, and critics have referred to market disruption as "pseudo-economics" (Sampson 1987). Market disruption is crucial to the operation of the MFA, because it has been used to justify protection in situations when it would not be appropriate under the general principles of GATT. One problem is that if markets are said to be disrupted whenever cheap imports are available, all trade is disruptive and trade restrictions could always be justified. Conversely, if market disruption is used in a narrower sense, it must be distinguished from concepts such as dumping that are well established in the GATT code. For example, if the source of market disruption is covered by the GATT safeguards code, injured parties are entitled to some relief from imports, but the prescribed relief (temporary, nondiscriminatory tariffs with compensation) is milder than the quotas authorized by the MFA. The vagueness of the notion of market disruption is a fundamental shortcoming of the MFA, and it has led some spokesmen from exporting countries

to advocate abolishing the use of the idea in GATT (GATT 1988, p. 9).

A distinctive feature of the country quotas authorized by the MFA is that they have been used almost exclusively (Japan is the exception) against imports from low-income countries. Consequently, it looks like an agreement among affluent people to stifle economic growth in developing countries. Some of the leading textile exporters are high-income countries such as Italy, West Germany, and the United Kingdom, and their products are exempt from quotas. Indeed the existence of uncovered countries has been a major source of import growth in the United States (Hamilton 1988). The U.S. textile industry and Congress have favored eliminating exemptions and adopting global quotas, but the European Community has threatened retaliation.

History and Recent Developments

The present version of the Multifiber Arrangement (MFA-IV) took effect in 1986 and expires in 1991. The MFA is an international agreement permitting restrictions on textile trade that would otherwise violate the rules of GATT. The precise form of restrictions varies by importing country, and the system of import quotas imposed by the United States represents a continuation of the practice of protecting textiles and apparel at a higher rate than the average for all manufacturing. In 1983 the average tariff rate for all dutiable imports was 6 percent. For textiles and apparel, the trade-weighted average tariff rate was 21 percent (U.S. Congress, Congressional Budget Office 1986, p. 24). Thus, the MFA import quotas add protection to an industry that has already been favored by the tariff structure.

The precursor of the present system of import barriers was a five-year agreement, beginning in 1957, designed to restrict cotton textile imports to the United States from Japan. The immediate rationale for protection was a cotton policy that harmed American producers of cotton textiles. For 10 years beginning in 1956 a two-tier price policy for cotton made U.S. cotton more expensive inside the country than abroad (Keesing and Wolf 1980, chap. 2). To prevent U.S. cotton that had been dumped on the world market from returning as cotton textile imports, President Dwight Eisenhower invoked the power granted him by the Agricultural Act of 1956. He negotiated an agreement to restrict imports from Japan, the source of more than 60 percent of U.S. imports of cotton textiles at the time. Subsequent growth in U.S. textile imports from other countries and rising protectionist pressure in Europe led to the Short-term Arrangement on

Cotton Textiles in 1961, followed by the Long-term Arrangement regarding International Trade in Cotton Textiles, 1962–73.

The increasing importance of wool and synthetic fibers led to the first Multifiber Arrangement (MFA–I) that was in effect 1974–77. It was followed by MFA–II (1978–81), MFA–III (1982–86), and the present MFA–IV (1986–91). Thus, a program that began as a temporary limit on cotton textile trade between Japan and the United States has continued for more than 30 years. It has become increasingly comprehensive in terms of exporting countries subject to quotas, importing countries imposing quotas, and product coverage. The current arrangement now applies to virtually all natural and synthetic fabric, after adding silk, linen, and ramie. New quotas are added regularly and the United States has even imposed a quota on cotton diapers.[1] If 30 years of preferential treatment has not given the U.S. textile and apparel industry enough time to adjust to import competition, how many more years are needed?

Changes in the MFA could be considered in the Uruguay Round of negotiations. Some representatives of developing countries were encouraged to sign the 1986 extension of the MFA because the Ministerial Declaration on the Uruguay Round promised to begin negotiations to return textile trade to the GATT rules. Early versions of the MFA contained provisions favorable to exporters, such as a guarantee that quotas would grow by at least 6 percent per year, and flexibility to shift unused quotas among product categories and years. Recent versions have been less generous to exporters. The International Textiles and Clothing Bureau, a group of 19 developing countries that export textiles, has proposed the termination of the MFA and all associated bilateral agreements (GATT 1988, p. 9).

Representatives of developed countries have resisted major liberalization of textile trade, and producers in some textile importing countries now interpret the MFA as a license to permanently restrict imports as a share of the domestic market. The European Commission has expressed a willingness to discuss returning textiles to the GATT rules, but European national governments have shown little interest in liberalization.

In the United States the Reagan administration resisted Congress's efforts to increase textile protection. The administration did tighten enforcement of the quota system and support the 1986 renewal of the MFA. President Reagan vetoed textile quota bills in 1985 and 1988 (a veto sustained by Congress on October 5, 1988). For the first

[1]At the time the quota was imposed, the domestic industry consisted of 60 workers at one plant (Farnsworth 1988, p. 30).

time the 1988 bill would have imposed global quotas on imports of textiles and apparel, and it would have limited the growth of imports to 1 percent per year. The 1 percent growth rate would have applied to some developing countries whose imports have been growing at faster rates and to developed countries (except Japan) whose imports have been exempt from quotas.

The Textile Complex

Although textiles and apparel are frequently treated as a single industry, there are important economic differences among its component parts. Because of the differences, the United States may have a comparative advantage in producing textiles but not apparel. The end uses of the industry are conventionally divided into apparel, home furnishings, and industrial products. Apparel is more labor intensive than the other products, and technical change has occurred at a slower rate. Economies of large-scale production are less important in apparel, partly because changes in fashion prevent long production runs. Differences in labor intensity, scale, and technology have made the U.S. apparel industry more vulnerable to import competition than the rest of the textile complex.

In addition to classifying by end use, the textile complex can be divided into the production of fiber, fabric, and final products. Fiber is either natural (for example, cotton or wool) or synthetic. Since most synthetic fibers (polyester, nylon, acrylic, polypropylene) have a chemical base, they are usually produced by large chemical companies such as Dupont and Monsanto. Production of synthetic fiber is capital intensive, and major technical change has improved product quality and lowered cost. Consequently, the major exporters of synthetic fiber have been high-income countries. For example, in 1986 the United States was the world's tenth largest exporter of textiles (GATT 1987, p. 62). As the importance of synthetic fiber has increased, the MFA has evolved to cover both synthetic and natural fiber. The share of synthetic fiber in world fiber production increased from 22 percent in 1960 to 46 percent in 1988 (*Fiber Organon,* 1989, p.159). Thus, the United States and other high-income countries have some economic advantages in producing certain textiles that they lack in apparel production. The exemption of developed countries from import quotas reinforces this natural advantage. Economic differences between products can be seen by the fact that some developing countries, such as Hong Kong, are simultaneously importers of textiles and exporters of apparel. Movement toward liberalization of

world trade might be beneficial to U.S. textile production even if it is harmful to domestic production of apparel.

The Textile and Apparel Industry in the United States

The textile and apparel industry is the largest employer in U.S. manufacturing, with 1,803,000 employees in 1988. However, industry employment has been declining since both textiles and apparel experienced peak employment in 1973. Industry employment as a share of total manufacturing employment has also been declining. The share of textile employment declined from 8.7 percent in 1950 to 3.7 percent in 1988. Apparel decreased from 9.1 percent of manufacturing employment in 1963 to 5.6 percent in 1988. Thus, declining employment in textiles and apparel in the 1980s is a continuation of a longer trend, and it would be misleading to attribute all employment effects to imports.

As part of worldwide structural change, textile and apparel employment has declined even more in Western Europe and Japan. Changes in the structure of world employment have not been limited to textiles: The U.S. steel and automobile industries have experienced greater decreases in employment (U.S. Congress, Congressional Budget Office 1986). In spite of falling employment in these traditional manufacturing industries, the unemployment rate for all workers declined in the United States during the 1980s.

The textile and apparel industry is concentrated in the southeastern United States, but the degree of concentration is greater for textiles (Chmura 1985). In 1982, 5 percent of all American workers were employed in textiles, but the comparable percentages were 32 percent in North Carolina, 36 percent in South Carolina, and 22 percent in Georgia. Apparel employment was 8 percent of national employment in 1982, but it was 11 percent of employment in North Carolina, 14 percent in South Carolina, and 17 percent in Georgia. The Carolinas and Georgia employed 60 percent of the nation's textiles workers in 1982, but only 17 percent of U.S. apparel workers resided in those three states. Geographical concentration has led to concern that displaced workers would find it difficult to find alternative employment in the same region, and that state and local governments could lose major sources of tax revenue. However, economic growth and diversification have created enough new job opportunities to keep state unemployment rates in the Southeast below the national average.

Employees in textiles and apparel have been among the lowest paid U.S. workers, and earnings have fallen over time relative to all manufacturing employees. In textiles the average hourly earnings declined from 84 percent of national earnings in 1950 to 70 percent in 1983. In apparel, relative earnings declined from 82 percent in 1950 to 60 percent in 1985. The greater decline in apparel earnings reflects the difficulty of substituting capital for labor in apparel. As relative wages declined, the relative importance of female workers, black workers, and young workers increased.

Total output increased for both textiles and apparel while employment decreased. Increases in output per worker explain the divergent behavior of output and employment. Productivity grew in both sectors, but it grew faster than the all-manufacturing average in textiles and slower than that average in apparel (Cline 1987, p. 89). The pattern of productivity growth reflected greater investment and faster technical change in textiles.

Textile and Apparel Trade

The pattern of world trade supports the proposition that low wages are a bigger advantage to apparel producers than to textile producers. In 1986 the leading national exporters of textiles were West Germany and Italy, and 6 of the top 10 were high-income countries (United States was tenth). China, South Korea, Hong Kong, and Taiwan completed the top 10 (GATT 1987, p. 62). The discriminatory MFA quotas may have enhanced the exports of exempt countries.

The prominence of developing countries in apparel trade reflects the greater importance of cheap labor for clothing than textiles. In 1986 three of the four largest apparel exporters (Hong Kong, South Korea, and Taiwan) were developing countries, and China and Turkey also appear among the top 10 (GATT 1987, p. 66). All leading apparel importers (United States was first) were high-income countries except Hong Kong, whose import figures include re-exports.

Imports have become more important in the U.S. market for textiles and apparel, but there is some disagreement about the best way to measure the extent of import penetration. The main choice is between using a physical measure, such as square yards equivalent, or using a money value measure adjusted for inflation (see Cline 1987, pp. 47–51). Measuring the size of the domestic market is another problem, since consumption is not measured directly.

Table 1 shows import shares of the U.S. market for textiles and apparel, measured in terms of both real money value and physical volume. The physical volume measure consistently shows a higher

TABLE 1

IMPORTS RELATIVE TO DOMESTIC CONSUMPTION (PERCENT)

	Textiles		Apparel		
	Value Measure[a]	Volume Measure[b]	Value Measure[a]	Volume Measure[b]	Import Share of Fiber Consumed by U.S. Textile Mills
1973	4.8	17.3	8.1	27.7	—
1974	4.5	15.6	8.6	25.2	—
1975	3.8	14.2	9.5	23.3	—
1976	4.1	17.1	11.8	28.1	10.6
1977	3.9	16.4	11.3	26.6	10.3
1978	4.6	18.5	13.5	30.6	12.3
1979	4.3	15.2	14.1	25.5	10.6
1980	4.6	16.8	14.5	27.8	12.1
1981	5.2	20.0	15.4	32.3	14.0
1982	4.9	21.0	15.8	32.4	16.4
1983	5.0	25.2	17.2	37.9	17.1
1984	6.5	31.7	22.0	46.8	22.8
1985	7.1	33.2	24.0	48.0	23.4
1986	7.9	—	25.4	—	25.4
1987	—	—	—	—	27.0

[a]Imports and domestic consumption measured in terms of real money value, as calculated by Cline (1987).

[b]Imports and domestic consumption measured in terms of physical volume, as reported by the American Textile Manufacturers Institute.

SOURCES: Cline (1987, pp. 35, 40); U.S. Congress, Office of Technology Assessment (1987, p. 80); U.S. International Trade Commission (1988, p. A5).

import share. For example, in 1985 the import share for textiles was 7.1 percent using the value measure and 33.2 percent using the volume measure. For apparel the shares were 24.0 percent using value and 48.0 percent using volume. One explanation for the discrepancy is that the average imported product is cheaper than the average domestically produced product with the same square-yard equivalent.

However, when examining *changes* in shares over the period 1973–85, both measures show the same general pattern. Import shares increased by both measures and nearly all of the increase occurred from 1981 to 1985.[2] This period showed substantial dollar appreci-

[2]A third measure, the import share of fiber consumed by U.S. textile mills, also shows that nearly all of the increase occurred since 1980.

ation, and Cline (1987) has attributed much of the increase in imports to the strengthening of the dollar. In the case of textiles, the import share was nearly the same in 1980 (5 percent using value and 17 percent using volume) as in 1973. For apparel the import share also showed no change from 1973 to 1980 using the volume measure (28 percent), but the value share showed a sharp increase.

Data on sources of U.S. textile and apparel imports also indicate that cheap labor is more important for apparel than textiles. Over the 20-year period 1963–82, Japan's share of U.S. textile imports remained constant at 20 percent and India's share declined from 25 percent in 1963 to 5 percent in 1982 (GATT 1984). In 1982, 5 of the top 11 suppliers (Italy, United Kingdom, Canada, France, and West Germany) were high-income countries.

Conversely, in the case of U.S. imports of apparel, developing countries went from a position of moderate strength in 1963 to complete dominance in 1982. In 1963 Japan and Italy were the major suppliers and 6 of the top 10 were high-income countries. In 1982, 14 of the largest 16 suppliers were low-wage developing countries. Japan's share of U.S. apparel imports fell from 26 percent in 1963 to 3 percent in 1982, and Italy's share fell from 24 percent to 3 percent over the same period. It is generally agreed that high-wage developed countries have lost their comparative advantage for most types of apparel.

Implementation of the U.S. Import Quota System

Under the MFA the United States has negotiated 41 bilateral quotas (at the end of 1987) with exporting countries for various categories of textile and apparel products. With the exception of Japan, all developed countries were excluded from the quotas, but all major suppliers from developing countries were included. Some preference was given to Caribbean countries as part of President Reagan's Caribbean initiative.

The effects of quotas and tariffs must be combined to obtain the total rate of protection for textiles and apparel. The tariff equivalent of a quota is the tariff rate that would result in the same domestic price and quantity of imports as a given quota. For 1986 when U.S. tariff rates were 12 percent for textiles and 22.5 percent for apparel, Cline (1987, p. 191) estimated the combined effect of tariffs and quotas to be 28 percent for textiles and 53 percent for apparel. An important difference between tariffs and quotas is that the tariff revenue that would have gone to the U.S. government is transferred to foreign suppliers under quotas. This revenue is called quota rent,

and it is a major component of the cost of quotas. The quota rent could be kept in the country if the U.S. government auctioned the quotas.

The U.S. government has divided textile products into four broad categories with many subdivisions. The broad categories are cotton; wool; synthetic; and silk, linen, and ramie (added in 1986).[3] For each narrow category, import quotas have been established for each supplying country. Quotas are expressed in physical units rather than money value. A typical category is men's and boys' cotton knit shirts from Hong Kong. Management of textile imports has become so complex that a summary of country and product quotas required nearly 170 pages (U.S. Congress, Congressional Budget Office 1986).

The number and size of product and country quotas change over time. Quotas are monitored by an interagency committee (Committee for the Implementation of Textile Agreements), which includes representatives from the U.S. Trade Representative and the Departments of State, Labor, Treasury, and Commerce. The committee can issue "calls for consultation" with exporting countries if imports are deemed excessive, and the majority of these calls have resulted in quotas against previously unrestricted imports (Pelzman 1988a, p. 11). From 1972 to 1983 calls for consultation were not made without satisfying rigorous guidelines for proof of injury. Those guidelines were relaxed in December 1983, and the frequency of calls has increased (Pelzman 1988a, p. 10). As an interested party, the U.S. textile industry makes quota suggestions to the committee. Industry spokesmen have complained about gaps in the quota system and about a permissive administration that permitted a large increase in import share of the domestic market during the 1980s. Among the problems facing administrators of the program are verifying the country of origin and the product category of imports. A textile bureaucracy has grown to administer the program. The Commerce Department has the greatest responsibility, including deputy assistant secretary for textiles, but the State Department also has a deputy assistant secretary for textiles, and the U.S. Trade Representative has a special textile negotiator. In addition to these direct costs of administering the program, an additional burden is the time and money spent by domestic producers, consumers, and retailers trying to understand the program and influence it.[4]

[3]Each broad category has been subdivided in the following way: 41 cotton categories; 24 wool categories; 44 synthetic categories; and 25 silk, linen, and ramie categories.

[4]See Destler and O'Dell (1987) for a discussion of lobbying efforts designed to influence textile imports.

Some established quotas have not been binding, and many quotas have not been filled. Firms in countries with quotas may lack a cost advantage for those products. Cases in which binding import quotas have had economic effects can be divided into four types. In the first case, consumers switch from imports to domestically produced textiles and apparel; total imports decrease and employment increases in the domestic industry. In the second case, importers switch from suppliers in countries subject to quotas to suppliers in exempt countries; there is no effect on total imports or employment in the domestic industry.

In the third case, imports from quota countries decline, but there is an upgrading effect on product quality and price. An upgrading effect of quotas has also been observed for other products such as automobiles and dairy products (Cline 1987, Anderson 1988, and Teal et al.1986). In the fourth case, quotas induce buyers to switch their demands to products (domestic or imported) other than textiles and apparel. In this case, textile and apparel imports decrease, but there is no corresponding benefit for the domestic industry. In all four cases consumers are harmed, but domestic producers benefit only in the first case. The relative importance of the four cases determines the costs and benefits of quotas for workers and consumers, and quantitative estimates are provided in the next three sections of this paper.

Evidence indicating that certain quotas are binding comes from Hong Kong, where quotas are traded in an open market (Morkre 1979, Hamilton 1986). The price an exporter would be willing to pay for the right to sell in a given import market reflects the difference between the price he expects to receive for his product in that market and the price he could receive in a market not subject to a quota. For example, if a certain men's shirt sells for $13 in Hong Kong and $15 (net of transport cost and tariff) in the United States, a firm would be willing to pay up to $2 per shirt for a quota. The market value of a quota has been used to measure the price-enhancing effect of the quota system or its tariff equivalent.

Effect of Protection on Consumers

The cost of textile protection falls mainly on consumers. Protection raises the price of each category of imported and domestic textile product, and it distorts the mix of imported products toward more expensive varieties. Many studies of consumer costs have been done, and they vary in terms of product coverage, time period, analytical techniques, and other details. However, there is considerable agree-

ment about the main conclusion, namely, consumer costs are large relative to the value of jobs saved by quotas and tariffs.

The 1987 study by Cline is one of the most comprehensive and careful analyses, and its results will be summarized here. His estimates are near the middle range of cost estimates appearing in the literature. Cline and most other authors treat imported textiles and apparel as imperfect substitutes for domestically produced products. For example, a 10 percent rise in prices of imports would cause prices of substitute domestic products to rise by less than 10 percent. The estimated consumer costs have three components: the increase in prices of imports, the increase in prices of related American products, and the consumer loss due to the decrease in quantity of imports attributable to protection.

Cline's estimate of the consumer cost of import quotas and tariffs on textiles and apparel for 1986 was $20.344 billion (Table 2). The cost of apparel restrictions ($17.556 billion) far exceeded the cost of textile restrictions ($2.788 billion). These consumer costs result from a higher price for imports (21.9 percent higher for textiles and 34.6 percent higher for apparel), a higher price for domestic products (3.1 percent higher for textiles and 18.9 percent higher for apparel), and a smaller quantity of imports (29.8 percent lower for textiles and 56.7 percent lower for apparel). The total cost of $20.344 billion can be

TABLE 2

CONSUMER COST AND JOBS SAVED IN 1986

	Textiles	Apparel	Total
Consumer Cost ($ million)	2,788	17,556	20,344
Net Welfare Cost ($ million)	811	7,317	8,128
Jobs Saved Direct	20,700	214,200	234,900
Jobs Saved Indirect	32,706	167,100	199,806
Total Jobs Saved	53,406	381,300	434,706
Consumer Cost per Total Job Saved ($)	52,204	46,052	
Consumer Cost per Direct Job Saved ($)	134,686	81,973	
Earnings per Job per Year ($)	13,600	11,180	
Consumer Cost ÷ Earnings			
Total Jobs Saved	3.8	4.1	
Direct Jobs Saved	9.9	7.3	

SOURCE: Cline (1987, chap. 8).

translated into a cost of $238 per year for every American household. Only a fraction of this amount is recouped by American workers and firms. Most is transferred to foreign producers as quota rent or is a deadweight loss.

In addition to their effects on consumers of finished goods, quotas and tariffs also affect businesses that buy textiles and apparel as intermediate products. For example, quotas could harm the domestic auto industry by raising the cost of automobile interiors. Clothing quotas also increase costs of the retail clothing industry. The result is higher prices for buyers of clothing and fewer jobs in the retail sector.

The proposition that retailers shift cost changes onto consumers has been disputed by proponents of quotas (U.S. Congress, Office of Technology Assessment 1987, pp. 92–94). These proponents claim that retailers have absorbed the entire cost of more expensive imports and that eliminating quotas would return retail profits to their earlier level. This contention is inconsistent with theoretical notions about cost-shifting in a competitive market and with empirical evidence about retail-wholesale price relationships in many markets. For example, increases in retail gasoline prices from 1974 to 1980 reflected large increases in wholesale prices of oil, and retail gasoline price decreases after 1980 reflected similar decreases at the wholesale level. Consumers were not completely shielded from the wholesale price changes by offsetting changes in retail margins for gasoline. Retail clothing stores can be expected to shift cost changes to consumers in the same way as other competitive firms. Indeed, the retail clothing industry is one of the most competitive sectors in the U.S. economy.

In addition to making textiles and apparel more expensive, import quotas restrict consumers' choices. Because quotas are expressed in physical units (for example, men's cotton shirts), they provide foreign exporters an incentive to upgrade the mix of products that satisfy the quota. This distortion of the product mix has an adverse effect on retail stores and consumers who specialize in simple, low-price products. For example, discount stores and their customers would be harmed by the quotas more than exclusive shops selling designer clothing.

The present system of "voluntary" quotas administered by foreign countries is just as harmful to American consumers as a mandatory quota system administered by the United States. However, the voluntary quotas are more favorable for foreign suppliers, because they are able to sell their entire quota of imports for a higher price in the United States than they would receive in other markets. The value

of the benefits from selling in the United States at a premium price is reflected in the market for quota rights in Hong Kong (Hamilton 1986). Americans would appropriate this quota rent if the U.S. government administered mandatory quotas. If licenses were issued to American importers, they would be able to buy textiles and apparel at competitive world prices and resell them in the United States at higher prices. Alternatively, the U.S. government could capture this scarcity value by auctioning import licenses to the highest bidders or by imposing an equivalent tariff.

Because they have different effects on consumers with different income levels, textile quotas alter the distribution of national income. Consumer budget shares for apparel are smaller at higher income levels. For example in 1984, the quintile of households with the highest incomes received 48 percent of total income but accounted for 37 percent of apparel consumption (Cline 1987). The quintile with the lowest incomes received 3 percent of national income and accounted for 10 percent of apparel consumption. Thus, higher apparel prices caused by quotas have a greater relative effect on lower-income households. The distortion of the product mix away from simple, inexpensive product lines reinforces this discrimination against lower-income groups.

Import quotas also influence the distribution of income by protecting textile and apparel workers from temporary unemployment. Quotas also protect the value of equities held by shareholders of textile firms. In the distribution of income, apparel workers are in the second lowest quintile of incomes and textile workers are in the middle quintile. Stockholders of protected firms are concentrated in the higher-income quintiles. Cline (1987, p. 201) has concluded that import quotas have a regressive effect on the distribution of income.

Effect on Production and Employment in the Industry

Because of the MFA quotas and tariffs, producer prices of imported textiles and apparel have been higher than they would have been, and prices of domestic substitutes have also been higher. The increases attributable to protection have been 3.1 percent for textiles and 18.9 percent for apparel.[5] Industry employment in 1986 was 669,000 in textiles and 1,133,000 in apparel. Industry jobs saved directly

[5]Cline (1987) assumed unitary elasticity of domestic supply and that industry employment would decline by the same percentage as industry output.

(Table 2) by higher product prices were 20,700 in textiles and 214,200 in apparel (Cline 1987, p. 191).[6]

In an attempt to avoid understating jobs protected, Cline also calculated jobs saved indirectly in industries selling inputs to textiles and apparel. This practice is questionable because no adjustment is made for jobs destroyed in sectors buying textiles and apparel, such as automobiles and retail sales. Jobs saved indirectly are 32,706 in textiles and 167,100 in apparel (Table 2). The sum of direct and indirect job saving (53,406 for textiles and 381,300 for apparel) can be taken as an upper bound for the effect of protection on industry employment.

The consumer cost of protection can be compared with the number of jobs saved in the industry. The consumer cost per total job saved was $52,204 per year for textiles and $46,052 per year for apparel (Table 2). When only direct job saving is considered, the cost figures are $134,686 per year for textiles and $81,973 for apparel. The value of a job can be measured by actual earnings of workers in the industry. In 1986 the average textile worker earned $13,600 per year, and the average apparel worker earned $11,180 per year. Thus, when the upper-bound figure (total jobs) for jobs protected is used, the consumer cost is 3.8 times the value of jobs saved for textiles and 4.1 times the value of jobs saved for apparel. The comparable figures for direct jobs saved are 9.9 for textiles and 7.3 for apparel. The general conclusion that consumer costs are several times as great as worker benefits also emerges from other studies.[7] An implication of these results is that consumers should be able to compensate workers who would be displaced by freer trade in textiles and apparel in such a way that everyone would be better off than with the present system. For example, consumers of apparel who would gain $46,052 per year from freer trade should be willing to pay $15,000 per year in adjustment assistance to displaced apparel workers who would have earned $11,180 per year.

In fact, employment has declined in the U.S. textile and apparel industry in spite of the MFA quotas. Declining employment in the U.S. industry is part of a broader pattern of decline in textile employment that includes Western Europe and Japan, and the trend is likely to continue regardless of what happens to the MFA. Recent developments are part of the same trend that caused the industry to move from New England to the American Southeast in search of cheaper

[6]Hufbauer et al. (1986) found a greater employment effect (300,000) and DeMelo and Tarr (1988) found a smaller effect (150,000).

[7]See Cline (1987, p. 198) for a summary. Also see DeMelo and Tarr (1988).

labor. Decreases in industry employment present problems for individual workers and communities, but alternative employment is easier to find when the national economy is growing. Even though textile and apparel employment has declined, the national unemployment rate has declined from 9.5 percent in 1982 to less than 6 percent in 1988. Moreover, there has been high employment growth and low unemployment rates in textile and apparel states.

Net Cost of Textile Protection

To determine the prudence of textile protection, one must compare the costs borne by consumers with the benefits from avoiding temporary unemployment (Table 3). The average worker displaced from textiles was unemployed for 13.3 weeks and from apparel for 24.8 weeks. The foregone output of these workers can be valued at their average hourly earnings of $6.80 in textiles and $5.59 in apparel. The

TABLE 3

COSTS AND BENEFITS OF IMPORT RESTRICTIONS

	Textiles	Apparel
Benefits		
Benefits per Direct Job Saved ($)	3,590.00	5,046.00
Weeks Unemployed	13.3	24.8
Average Hourly Wage ($)	6.80	5.59
Average Hours per Week	39.7	36.4
Jobs Saved Direct	20,700	214,200
Total Benefits Direct Jobs ($ million)	74.3	1,080.0
Benefits per Indirect Job ($)	7,411.00	7,411.00
Weeks Unemployed	19.2	19.2
Average Hourly Wage ($)	9.53	9.53
Average Hours per Week	40.5	40.5
Jobs Saved Indirect	32,706	167,100
Total Benefits Indirect Jobs ($ million)	242.0	1,240.0
Total Benefits All Jobs ($ million)	316.3	2,320.0
Costs		
Welfare Cost per Year[a] ($ million)	811.0	7,320.0
Total Cost as Capital Value at 10% ($ million)	8,110.0	73,200.0
Total Cost/Total Benefit	25.7	31.6

[a]Consumer cost minus tariff revenue minus transfer to domestic producers.

SOURCE: Cline (1987, ch. 8).

benefit per job saved by protection is obtained by multiplying average hourly earnings by average hours worked per week and average weeks unemployed. The resulting benefits per job saved are $3,590 in textiles and $5,046 in apparel. Multiplying by the total number of jobs saved yields total benefits of $316 million for textiles and $2,320 million for apparel. Since unemployment associated with imports is temporary, the benefits from avoiding unemployment are received only one time. Conversely, consumer costs in the form of higher prices must be paid in every period.

To compare the annual consumer cost of import restrictions with the once-for-all benefit from avoiding unemployment, one must convert the consumer costs into a capital value. At a discount rate of 10 percent, consumer costs are $8,110 million for textiles and $73,200 million for apparel. The consumer costs are 25.7 times the benefits from avoiding unemployment for textiles, and costs are 31.6 times the benefits for apparel. Thus, import quotas are a very expensive way of avoiding unemployment in textiles and apparel. For example, consumers would be able to compensate displaced workers an amount equal to 10 times their forgone earnings under freer trade and still be better off than with import quotas.[8]

The precise results of all cost-benefit studies of textile import restrictions depend on the values of certain key parameters. The most important are the following: (1) the increase in the price of imports caused by the quotas (tariff equivalent), (2) substitutability between imports and domestic products, (3) the response of retail prices to import prices (pass-through), (4) the price responsiveness of domestic supply, and (5) the collective power of U.S. importers in the world textile market. Varying the combination of parameter values has resulted in differences in precise money values for costs and benefits. In spite of much experimentation with parameter values and types of economic models, no published studies have produced results showing benefits from textile import restrictions that exceed costs.[9]

However, import quotas would become much less costly to the country if the quota rents were appropriated by Americans rather than foreign suppliers.

[8]DeMelo and Tarr (1988) found consumer costs to be a larger multiple of benefits.

[9]The American Textile Manufacturer's Institute commissioned a study purporting to show that import quotas are cost effective. Cline has summarized the results, but the study has not been published and is not very accessible to researchers. A number of studies of textile quotas appear in Grennes (1988).

Effects on Textile Exporters

Textile quotas have been imposed almost exclusively against developing countries. The textile sector has played a key role in the development process, and the traditional pattern has been for new producers to successfully challenge suppliers in higher-income countries. Nearly all successful newly industrialized countries have become textile exporters. Officials in low-income countries recognize the MFA as a barrier to economic growth, and they have opposed its expansion. In the 1986 discussion of renewing the MFA, India, Pakistan, and Bangladesh all supported immediate termination of the MFA and restoration of the GATT rules to textile trade.

Bangladesh is an example of the contradictions inherent in the economic policies of the developed countries. Bangladesh is one of the poorest countries of the world with per capita income of $130 in 1986. In recognition of this poverty it received more than $10 billion in foreign aid in the last 10 years from various developed countries. For years efforts have been made to develop some export in addition to jute, which earned most of the country's foreign exchange. With the assistance of Korean investors, a clothing industry began to develop, but soon after Bangladesh became an exporter, MFA quotas were imposed by the United States, the United Kingdom, France, and Canada (Spinanger 1987). There is a clear conflict between the trade policies of these countries and their aid policies.

Under the MFA, exporting countries do receive some benefits that mitigate the damage done by quotas. Because exporters are allowed to administer the quotas, developing countries are able to appropriate the quota rent that Cline (1987) estimated to be $3,834 billion dollars in 1986.[10] The existence of quota rent has weakened the opposition to the MFA by developing countries, but the net effect of quotas on exporters has been adverse. According to a study by Irene Trela and John Whalley (1988), all textile exporters are harmed by quotas, including those receiving the most quota rent. It is possible that the orderly and limited set of restraints under the MFA are less harmful than unilateral and uncoordinated protection that might occur otherwise. However, recent behavior by Congress and the president indicate that U.S. import policy is not constrained by the MFA.

Reforming Textile Trade Policy

Future textile trade policy could become more protectionist. Each successive version of the MFA has been more comprehensive in

[10]Pelzman (1988b) estimated the value of quota rent to be $1.8 billion in 1986.

terms of products and countries covered. In the United States, import growth from major suppliers has been limited to 1 percent per year, and Congress has attempted to extend that limit to all suppliers. Congress acts as if it is not bound by the MFA promise of "expansion and liberalization of trade."

However, the case in favor of liberalizing trade in textiles and apparel is overwhelming. The MFA and the related national quotas are an extremely costly way to protect workers. Quotas impose costs on consumers and the retail sector that greatly exceed the benefits to workers. These quotas sharply conflict with the national policy of promoting growth in developing countries and are a prototypical special interest program whose existence has been promoted by effective lobbying. The lobbying effort has been made easier by the fact that the protected workers and firms are smaller in number and more geographically concentrated than textile consumers.

In spite of the political bias against consumers, lobbying by consumer and retailer groups helped to prevent Congress from overriding vetoes of the 1985 and 1988 U.S. textile trade bills (Destler and Odell 1987). The European Commission has also demonstrated its awareness of the potential gains from textile trade liberalization. Representatives of several developing countries that export textiles are strongly in favor of trade liberalization. The political potential for liberalization arises from the possibility of compensating workers in such a way that both consumers and textile workers benefit from freer trade. The potential for international agreement on textile trade would be greater if exporting countries made trade concessions in return for greater market access. Concessions by exporting countries could take many forms including lowering their own barriers to textile imports (Cline 1987). Thus, it may be in the interest of developing countries to abandon their traditional request for "special and differential treatment" in GATT negotiations.

It would seem appropriate for the U.S. government to recognize important economic differences between the textiles and apparel sectors. The potential for applying modern technology, the importance of large-scale production, and the capital intensity of textiles provide great potential for the U.S. textile industry, which is already a major exporter. However, the greater labor intensity of apparel and limited potential for technical innovation and economies of large-scale production would appear to place the U.S. apparel sector at a long-term disadvantage relative to lower-wage producers in developing countries. It may be in the interests of American trade negotiators to emphasize the potential benefits of worldwide trade liberalization for the U.S. textile sector. Liberalization could increase the

number of labor-abundant developing countries, like Hong Kong, that import textiles and export apparel.

Many reform proposals have been offered, but the primary goal of most reforms is to eliminate the special protection of the textile sector and bring textile trade back into compliance with the GATT rules. Basic reform requires abolishing the MFA and substituting nondiscriminatory tariffs for national quotas. Each country would agree to bind its textile tariffs, and the level of tariffs would be subject to the same negotiation process as tariffs on other products. To mitigate adjustment problems for textile importing countries, a conversion of quotas to tariffs should be phased-in over time and displaced workers should be compensated. If discussion of reform begins now, liberalization could begin to take effect when MFA–IV expires in 1991.

Three reform proposals exist to convert quotas into tariffs, but they differ in terms of the form of protection during the transition period. In one case a combination tariff-quota would be used during the transition. A second proposal would auction quotas for imports from countries now covered by the system. A third proposal would convert current country quotas into global quotas and auction them to the highest bidder. In all three cases, quotas would grow fast enough until they were no longer binding, and nondiscriminatory tariffs would be the only remaining form of protection.

Cline (1987, chap. 11) and Gary Sampson and Wendy Takacs (1988) have proposed a combination tariff-quota that would consist of a standard nondiscriminatory tariff on all imports plus a tariff surcharge on units in excess of the quota. Initial quotas would be set at current (or some base period) levels, and surcharges would be set equal to the tariff equivalent of current quotas, estimated by Cline (1987) to be 15 percent for textiles and 25 percent for apparel. Thus, the initial level of textile protection would be the same as the current level, the U.S. government would collect the same tariff revenue, and foreign suppliers would retain their quota rents. Gradually quotas would increase until they were no longer binding, and surcharges would decline to zero. The only function of the tariff surcharge is to permit imports beyond the quota if import demand is greater than expected. Once quotas became ineffective, the only remaining protection would be standard tariffs of 10 percent for textiles and 22.5 for apparel, which would be subject to GATT negotiation. Textile exporters currently exempt from quotas would retain their exemption. The value of quota rents would decline gradually during the transition from the current level to zero.

A second alternative proposed by C. Fred Bergsten et al. (1987) would retain quotas for those suppliers now subject to quotas and

would auction the quotas to the highest bidder. The equivalent of quota rents would be appropriated by the U.S. government and governments of other importing countries. Market forces would determine the value of a quota, and the market value would be the same as an accurate estimate of the tariff equivalent of quotas. Thus, the value of quota per unit should equal the initial tariff surcharge in the tariff-quota scheme. The size of quotas would increase over time until their auction value declined to zero. The additional revenue would be an advantage to governments of importing countries, but exporting countries might raise the question of compensation. However, the long-run benefits to exporters from trade liberalization would exceed the loss of transitional quota rents.

A third alternative proposed by Gary Hufbauer and Jeffrey Schott (1985) would convert current national quotas into global quotas and increase them gradually until they were no longer effective. Global quotas would grow and national quotas would decline and be transferred to the pool of global quotas. Global quotas would be auctioned, and quota rents would be transferred to importing countries. A distinguishing feature of the plan is that all exporting countries would be subject to quotas for the first time, which would cause problems for relations with the European Community.

All three proposals for the transition period achieve the main goal of converting national quotas into tariffs. The main differences are (1) whether to retain exemptions for certain textile suppliers during the transition period, and (2) whether to auction quotas or use tariff-quotas. My own preference is to retain exemptions and to auction quotas to the highest bidder. Exemptions would preserve some consumer protection, and it would avoid the issue of retaliation by the European Community. Given the concern about budget deficits, the revenue from auction quotas should be welcomed by Congress and the president. The 1988 textile trade bill contained a provision to auction a fraction of import quotas. A practical advantage of auction quotas is that the price of a quota would be market determined, whereas in the case of tariff-quotas the appropriate level of the tariff surcharge would require statistical estimation.

Although complete abolition of import quotas has strong economic justification, less extreme reforms still would be preferable to the status quo. If quotas were retained, the rate of growth could be increased and quotas could be auctioned. The scope for consumer choice would be increased by broadening import categories and reducing the number of categories. One possibility is reducing the number of categories to four: cotton; wool; synthetic; and silk, linen,

and ramie. Or a more sweeping change would consolidate the multitude of current categories into one broad textile and apparel category.

A variety of worker compensation schemes can be devised, and they are feasible because the gains to consumers from freer trade exceed the losses to workers. The total cost of worker compensation could be limited by restricting eligibility to workers employed in the industry at the beginning of the program. Identification of potential claimants could be accomplished by registering workers at that time. Practical considerations would probably limit the amount of time displaced workers could receive adjustment assistance, but consumer benefits from freer trade would be so large as to justify paying displaced workers their foregone earnings indefinitely. If trade liberalization were phased in, the rate of decline in industry employment need not exceed the rate of natural attrition resulting from employees retiring (2 percent per year in textiles and 2.2 percent per year in apparel) and quitting (1.8 percent per year in textiles and 2.5 percent per year in apparel). If we limit adjustment assistance to workers employed at the inception of the program, ineligible new workers would receive an explicit warning signal about the riskiness of industry employment. One problem with protection is that it sends the wrong signals to employers and employees. It leads to hiring people who become an adjustment problem later. For example, a large fraction of current textile and apparel employees were not employed (some were not even born) and would not have been employed in the industry in absence of protection that began in 1957.

If the MFA quota system were abolished, what grievance procedure would be available to U.S. producers of textiles and apparel? If imports are being dumped on the U.S. market, the U.S. Anti-Dumping Law is relevant. If foreign governments are subsidizing their exports to the United States, the GATT code on subsidies is applicable. However, if textile products are imported because of lower wages, high productivity, or superior quality, they are perfectly legal, and it would be inappropriate to deprive American consumers of the benefits. In general, textile producers should have access to the same safeguards procedure as all other industries. The notion of "market disruption," which has been used to justify textile protection, has not been useful; it should no longer be used in the GATT.

Conclusion

The Multifiber Arrangement has not been a successful experiment. Evidence since the MFA began in 1974 indicates that using the political process to determine market shares for textiles comes at a

high cost. The MFA was designed as a compromise between the interests of exporting and importing countries, but neither group has been well served by the MFA.

After more than 30 years of extraordinary protection, U.S. textile producers have had ample time to adjust to competition from imports. The MFA quotas have imposed high costs on U.S. consumers, costs that are far in excess of workers' gains. By retarding economic growth in low-income countries, the MFA conflicts with the foreign policy goals of the United States and other high-income countries. The MFA quotas have not served even domestic textile producers well. The complexity and uncertainty of the present discriminatory system make it difficult to understand, and the program has generated a wasteful bureaucracy.

Because the costs of MFA quotas are so large relative to worker benefits, it is time to change the direction of textile trade policy. The MFA should be abolished and nondiscriminatory tariffs should become the sole form of textile protection. Textile trade then would return to compliance with the GATT rules and trade would be determined by economic considerations rather than political forces.

To soften the impact on the domestic industry, tariffs should replace quotas only after a transition period, beginning in 1991 when MFA–IV expires. Auction quotas are a convenient device to use during the period of adjustment. The initial level of protection during the transition should be equal to the current level of protection under MFA quotas, and quotas should be increased gradually until the only binding protection is a nondiscriminatory tariff. The large excess of consumer cost over worker benefits implicit in the current MFA would permit adequate compensation of displaced workers.

There is no need for special rules concerning textile trade or a special textile bureaucracy in national governments or in the GATT. Grievances of domestic textile producers should be handled by the same agencies using the same rules that apply to other products. Problems related to "surges" of textile imports or "unfair" trade practices should be handled by the GATT's safeguard mechanism that permits temporary tariffs, provided exporters are compensated.

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