PROTECTING THE TEXTILE AND APPAREL INDUSTRIES

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This report analyzes the economic effects of legislation (H.R. 1562) that would provide further protection to the textile and apparel industries. It was requested by Congressman Sam M. Gibbons, Chairman of the Subcommittee on Trade of the House Committee on Ways and Means, and Congressman Philip M. Crane, the Ranking Minority Member of that Committee.

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PROTECTING THE TEXTILE AND APPAREL INDUSTRIES

INTRODUCTION AND SUMMARY

This paper discusses the effects of further protection for the textile and apparel industries, both on the industries themselves and on the economy as a whole. H.R. 1562 would place limits on imports of textiles and apparel that would go beyond the restraints already negotiated under the Multifiber Arrangement (MFA). The MFA specifies the means by which a country can limit imports of textile and apparel products that are made of cotton, man-made fibers, or wool. Currently, two-thirds of textile and apparel imports are covered by some type of quantitative restriction. In contrast, H.R. 1562 would limit imports of textile and apparel from all countries, save the European Community and Canada. It would also expand the types of textile and apparel products that are restricted, and further limit future growth of imports.

The effects of further restrictions on textile and apparel imports have recently been investigated in two other analyses--one by Data Resources, Incorporated, and one by the International Business and Economic Research Corporation. These analyses should be considered within the context of how an economy adapts to a decision to limit imports of a product. Initially, the reduction in the supply of imports increases the price of the restricted products. Most of the increased cost to consumers of protected products is transferred to textile producers and their suppliers and does not represent a net cost to the economy as a whole. The higher prices for imported products increase the demand for domestic substitutes, which increases their prices and, in turn, domestic output. In the short run, the higher prices result in increased returns to textile and apparel producers and possibly to their suppliers and employees as well. In the long run, the protected industries adjust to the restrictions, and the redistributive effects of the higher prices will be more widely diffused. Restraints on imports also reduce the number of employees and the amount of other resources that will leave the protected industries; they thereby reduce the costs of adjusting to increased import competition. For example, protection will allow some workers to avoid spells of unemployment and the costs of finding other jobs. But in the absence of protection, almost all of these workers would eventually find other employment.

Protection does more than benefit producers at the expense of consumers of the protected product; it also imposes an efficiency loss on the economy. By limiting the imports of a product, society's resources are diverted from other productive activities to producing more of the protected product. Domestic resources would be more productively employed in the other uses, because foreign producers can manufacture the imported product at lower costs. By discouraging the employment of resources in their most highly valued use, protection thus encourages the inefficient use of the economy's resources and reduces social welfare.

The loss of efficiency resulting from trade restraints continues as long as the restraints remain effective. Moreover, in the long run, consumers continue to pay higher prices for the protected products. On the other hand, the benefits of protection that come from enabling labor and capital to avoid adjustment costs are one-time savings; these benefits do not continue to be realized in the long run.

The DRI Analysis

An analysis by Data Resources, Incorporated (DRI) estimates the effects of "the absence of any U.S. action (against further textile and apparel imports)" on total output and employment in the textile and apparel industries and, in turn, on the economy as a whole. It is not an explicit simulation of the effects of H.R. 1562. DRI estimates that "action against" further textile and apparel imports would save 947,000 jobs in the textile and apparel industry by 1990. Moreover, DRI estimates that there would be 1.89 million more jobs overall in that year. Gross national product (GNP) in 1990 would be 0.8 percent higher. DRI's results were released in a three-page summary--neither DRI nor the client for whom the study was undertaken, Burlington Industries, made the complete analysis available to CBO.

These results were derived under what appear to be a number of restrictions. Specifically, DRI's analysis appears to have been limited to the positive effects associated with higher domestic textile and apparel production. These benefits exist, but there are concomitant costs as well. Protection for the textile and apparel industries would raise the U.S. price level and lower the purchasing power of U.S. consumers. Import restrictions would reduce the incomes of foreign textile and apparel exporters and, therefore, reduce their ability to buy U.S. goods and services. Changes in textile and apparel imports of the magnitude suggested by the DRI analysis could result in changes in the exchange rate that would penalize other U.S. exporters. Similarly, if DRI is correct in estimating greater employment in the protected industries, the resulting labor-market adjustments could lead to less employment in other industries.

These "feedback" effects appear to be omitted from the DRI analysis. It may be the case that the positive output and employment effects that DRI estimates would precede, in some instances, these economic losses. In the long run, however, the positive and negative effects of textile and apparel protection would be largely offsetting--import restrictions would change the composition of GNP more than its ultimate level. Moreover, the DRI analysis does not take account of possible retaliation by countries disadvantaged by H.R. 1562. Such retaliation would unambiguously lower income and welfare in the United States.

The IBERC Analysis

A second analysis, conducted by the International Business and Economic Research Corporation (IBERC) for the Retail Industry Action Coalition, addresses H.R. 1562's effects on prices, output, and employment in the textile and apparel industries and the retail sector. IBERC estimates smaller effects in the textile and apparel industries than does DRI. IBERC estimates that, in the first year following its enactment, H.R. 1562 would lead to a combined job savings in textile and apparel of about 71,000 employees. It further maintains that there would be no additional job savings in subsequent years. These job savings, in IBERC's view, would be almost offset by declines in employment in the retail sector. IBERC estimates that the employment benefits to textile and apparel workers would be worth about $300 million, while the cost to textile and apparel consumers of further protection would be approximately $2.9 billion, all in the first year following enactment. In addition, the economy would suffer a deadweight loss--the cost of using resources inefficiently--of about $474 million.

CBO's Analysis

The magnitude of these effects is uncertain, however, and relies on assumptions regarding the nature of the textile and apparel markets. To investigate the effect of alternative assumptions, IBERC's results were recalculated under a range of assumptions regarding textile and apparel supply and demand. Under this range of assumptions, the cost of the restrictions to consumers of textile and apparel products would range from $1.4 billion to $6.9 billion in the first year following implementation, while employment-related benefits would range from $0.2 billion to $0.9 billion.[1] IBERC's estimates of these costs and benefits--$2.9 billion and $0.3 billion, respectively--are at the low ends of these ranges. The deadweight efficiency losses resulting from the quotas would range from $183 million under the most favorable assumptions to $579 million under the least favorable ones.

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1. This estimate does not take account of possible changes in exchange rates and in the prices of other goods.

H.R. 1562 AND THE MULTIFIBER ARRANGEMENT

Recent developments in the U.S. textile and apparel industries have aroused widespread concern. Production has grown sluggishly, and total employment fell by 10 percent in textiles and 3.7 percent in apparel between 1980 and 1984. Technical progress and new investment have increased productivity, but at the cost of further declines in employment.

These industries' problems have been compounded--some have argued, caused--by a surge in imports. Between 1980 and 1984, textile and apparel imports rose by 108 percent, or 20.1 percent per year. This followed a period of eight years during which imports fell by 3 percent per year. 2/

Import competition is not a recent development in the two industries, and the import surge of the past four years has taken place despite a long-standing international system of protective quotas. But import growth between 1980 and 1984 has led to calls for increased protection to preserve output and employment in the face of foreign competition. This section provides background on the existing and proposed systems for protecting the textile and apparel industries.

History of Protection in Textiles

Restrictions on textiles have expanded from a single country's exports (Japan), a single fiber (cotton), and a relatively small number of textile products to a global system of restraints. Textiles were among the first manufacturing sectors to receive special protection. France, the United Kingdom, and the United States had Voluntary Export Restraints (VERs) in place against Japanese cotton textiles before World War II. By the mid-1950s, both the United States and the United Kingdom had again negotiated VERs with Japan for cotton textiles. In the early 1960s, however, several other newly industrializing countries--especially Hong Kong, Korea, and Taiwan--began to take advantage of the gap created by Japanese restraints.

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2. These figures are for imports in "square yards equivalent" (SYE), a measure of the physical quantity of imports that permits aggregation of various textile and apparel products. For example, a men's dress shirt might equal 2 SYE while a bed sheet might be 12 SYE. When computed in value terms, the growth rate of imports is slightly higher, reflecting a shift by foreign exporters into more highly valued output.

This spread of import competition led the United States to call a conference of textile importing and exporting countries, under the auspices of the General Agreement on Tariffs and Trade, or GATT, to negotiate a set of rules for trade in cotton textiles that would prevent "undue disruption of established industries." The Short Term Agreement Regarding International Trade in Cotton Textiles went into effect in 1961 and was followed by a Long Term Agreement (LTA) in 1962. The LTA was essentially a set of rules that countries were to follow in negotiating bilateral agreements. A key feature was that in situations of market disruption, as defined by the agreement, bilateral agreements could be negotiated to limit exports or restrict imports. 3/ Such measures were conceived as temporary, however, and restraints were to be set at no less than the previous year's import level with at least 5 percent per year growth to be allowed for the life of the restraint. Under the LTA, the United States and other developed countries entered into numerous bilateral agreements with the major exporters of cotton textiles. For the United States, the number of such agreements jumped from one (with Japan) in 1962 to 30 in 1972.

The Multifiber Arrangement 4/

Two related developments undermined the LTA and led directly to its successor, the Multifiber Arrangement, or MFA. The first was technological change in the textile industry, specifically the development of synthetic fibers. The second was the spread of synthetics production to the newly industrialized countries and Japan, as well as the strong demand for synthetics in the developed countries. Products of synthetic fibers or cotton/synthetic blends were not covered by agreements under the LTA, and the rapid

3. "Market disruption" was said to occur if there was: (a) rapid growth in imports of a given product; (b) prices substantially below those for domestic substitutes; and (c) serious damage (actual or threatened) to domestic producers.

4. The complete text of the MFA and some subsequent ammendments may be found in *The Multifiber Arrangement, 1980-84*, U.S. International Trade Commission Publication 1693, May 1985, Appendix A. The report also contains a valuable compilation of statistical materials on U.S. textile trade. A useful history of the Arrangement may be found in *Textile and Clothing Industries*, O.E.C.D. (Paris, 1983) Annex III.

growth of such imports was a cause for concern, especially in the United States. 5/ This led to new negotiations regarding these fibers.

In 1971 and 1972, the United States negotiated bilateral "voluntary" export restraint agreements covering wool and synthetic products with the major exporters--Japan, Hong Kong, Korea, and Taiwan. Since such agreements were outside the framework established by the LTA, a new agreement was needed, and the Arrangement Regarding International Trade in Textiles, also known as the Multifiber Arrangement, or MFA, was created as a result.

The MFA, which came into effect in 1974, attempted to balance the potentially conflicting needs of importers and exporters of textile products. Philosophically, however, it was conceived in the GATT tradition of trade liberalization. The MFA establishes rules for the operation of textile and apparel quotas. It defines the circumstances under which such restrictions are justified, and sets out procedures for establishing restraints. With certain exceptions, restraints are meant to be negotiated bilaterally between importing and exporting countries, to be temporary, and to cover only those products that threaten injury to domestic producers. In certain emergency situations, the MFA allows unilateral imposition of temporary trade restraints; these are considered to be a serious exception to the general principles of the Arrangement. Since its inception, the MFA has been renewed twice, and is currently scheduled to expire in 1986.

Under the guidelines of the MFA, the United States has negotiated bilateral agreements with 26 countries. Moreover, there are, as of 1985, four additional agreements with non-MFA countries and seven cases in which the United States has unilaterally imposed restraints, for a total of 37 restrained countries. Imports subject to these restraints amounted to about two-thirds of textile and apparel imports in 1984. 6/ In addition to quantitative restrictions under the MFA, textiles had the highest tariff protection of any of the major product groups in 1977, as illustrated in Table 1. Since 1977, textiles and apparel tariffs have been granted special exemptions under the subsequent "Tokyo rounds" of GATT-sponsored tariff reductions.

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5. In 1964, U.S. imports of cotton fiber clothing amounted to 415 million square yards equivalent (MM SYE), as compared with synthetic fiber clothing imports of 92 MM SYE. By 1972, the proportions were reversed: 545 MM SYE of cotton to 1606 MM SYE of synthetics. Between 1960 and 1979, the share of synthetics in world fiber production rose from 5 percent to over 36 percent. Source: Institute for International Economics, unpublished document, 1985.

6. U.S. International Trade Commission, "Memorandum to the Committee on Finance of the U.S. Senate on S.680" (August 1985).

TABLE 1. TRADE-WEIGHTED TARIFF RATES FOR U.S. IMPORTS, BY MAJOR TSUS CATEGORIES, 1977

Category	Tariff Rate (In percent)
Schedule 1: Animal and Vegetable Products	3.79
Schedule 2: Wood and Paper; Printed Matter	1.69
Schedule 3: Textile Fibers and Textile Products	22.85
Schedule 4: Chemicals and Related Products	1.09
Schedule 5: Non-metallic Minerals and Products	5.14
Schedule 6: Metals and Metal Products	3.55
Schedule 7: Miscellaneous	7.98
Average on All Products	3.73

SOURCE: Federal Trade Commission, *Staff Report on Effects of Restrictions on United States Imports* (1980).

An MFA agreement places limits on the volume of textiles and apparel that a country may export to the United States in a given year. The limits cover specific products (such as mens' cotton knit sweaters), as well as more general restraints (for example, cotton knits of all kinds). Only textile and apparel products of three fibers--cotton, wool, and synthetics--are controlled under MFA agreements. 7/

From the point of view of the United States and other importing countries, the purpose of MFA agreements has been to protect domestic produc-

7. Other fibers--notably silk, linen, and ramie, a cotton-like fiber--are exempt from MFA regulation.

tion and employment in the textile and apparel industries. But a major goal of the Arrangement has always been to insure access to markets for textile-exporting countries. Hence, the MFA specifies that bilateral agreements should include measures to alleviate some of the burdens that restrictions would otherwise impose on exporters. Subject to modification under special circumstances, restraint agreements are therefore supposed to allow for export growth of 6 percent per year for each commodity or commodity group. 8/ They are also supposed to be as narrow as possible in their product coverage and include so-called "flexibility" provisions. In the context of the MFA, "flexibility" means that exporters may "swing" some share of a quota from an underutilized category to one for which the quota is binding, or borrow and lend quotas between years for the same category.

The Import Surge

As demonstrated in Table 2, while imports for most textile and apparel products grew rapidly in the four years following 1980, they actually declined in the preceding eight years. Total imports rose by 20.1 percent per year from 1980 to 1984, as compared to a 3 percent per year *decrease* between 1972 and 1980 and an increase for the 12 years as a whole of only 4.2 percent per year.

The significant appreciation of the dollar--60 percent between January 1980 and March 1985--has certainly contributed to the surge of textile and apparel imports. 9/ But growth in textile and apparel imports has occurred despite the presence of MFA agreements limiting import growth to 6 percent per year, and significantly less than this rate for many categories of products from many countries.

There are four explanations for this phenomenon. First, 1980 was an unusually low year for imports, owing to the recession and the weak U.S. dollar. But growth in quotas occurs regardless of the behavior of actual imports over the course of a year--U.S. imports of a given product from a given country could fall by 10 percent in any one year, but the relevant quota would still rise by the amount negotiated in the agreement. Thus, growth in excess of a negotiated rate may occur if the initial level of

8. In fact, many of the agreements limit the rate of growth in certain categories to significantly less than 6 percent per year.

9. The textile import weighted average exchange rate appreciated by 51 percent between 1980 and 1984.

TABLE 2. ANNUAL PERCENTAGE GROWTH RATES OF TEXTILE IMPORTS: 1972 THROUGH 1980 AND 1980 THROUGH 1984

	Yarn	Fabric	Apparel	Made-Ups	Total
Cotton					
1972-1980	-8.9	-3.0	7.9	-1.3	1.0
1980-1984	30.4	21.0	14.6	28.2	19.3
Wool					
1972-1980	-3.2	1.9	2.7	-5.5	1.3
1980-1984	45.0	28.1	14.2	17.3	19.1
Synthetics					
1972-1980	-20.0	-5.4	1.3	3.9	-5.4
1980-1984	36.3	18.9	12.3	54.7	20.8
Total					
1972-1980	-18.4	-4.0	3.3	0.6	-3.0
1980-1984	35.4	20.3	13.2	41.5	20.1

SOURCE: Calculated from U.S. International Trade Commission Publication 1549.

NOTE: Growth rates calculated from imports in square yards equivalent.

imports has previously fallen short of the amount allowed under the agreement, creating "slack" in the quota. But such "excess" growth cannot be sustained. If imports start from a low base but grow more rapidly than the quota, they must eventually catch up to the maximum amount permitted under the quota, after which point they can grow only by the negotiated rate each year. Thus, it may be possible to find some years during which import growth rates exceeded the maximum allowable negotiated rate. But over the long run, import growth cannot exceed the negotiated rate. Moreover, despite recent rapid growth, total textile and apparel imports in 1984 were 81 percent of the level they would have reached if they had grown by 6 percent per year since 1972.

A second explanation focuses on the "flexibility" of quotas. Since importers can "swing" some share of a quota from an underutilized category to one where the quota is binding, or borrow and lend quotas between years, it is possible for the growth rate of imports in certain categories or certain years to exceed the negotiated rate. Borrowing from next year's quota, however, can only increase the growth rate of imports for one year (even if the borrowed quota is never "repaid"). Similarly, swing provisions cannot affect the long-run growth rate of imports, since they only transfer import rights among import categories.

Table 3 provides an example, using one specific product (cotton trousers), of how such flexibility provisions permitted "extra" imports in 1983. The countries listed are all those that used flexibility provisions for cotton trousers during 1983. Several major exporters are not listed in Table 3 and did not use these provisions, however, and for all cotton trousers imports the ITC calculates that "flexibility accounted for additional shipments of slightly over 1 percent" 10/ (rather than the 5.0 percent that was applicable for the set of countries listed in the table). The use of flexibility varies significantly by country and by product type, and it is difficult to generalize about the overall impact of these provisions. 11/

A third possibile source of import growth is panic buying in advance of expected quotas. Some allege that importers stocked up on products in strong demand, fearing that the rapid import growth that had already occurred would soon trigger the imposition of restrictions.

All of these are essentially transitory phenomena, which suggests that the import surge is unlikely to continue as long as current MFA agreements are in force. The most recent data are consistent with this interpretation. For the first six months of 1985, textile and apparel imports rose by only 1.3 percent over the corresponding period in 1984.

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10. U.S.I.T.C., *The Multifiber Arrangement*, Publication No. 1639 (May 1985), p. 78.

11. The above analysis should not be understood as implying that flexibility provisions have no effects on exporters or on their U.S. competitors. By allowing greater freedom to respond to rapidly-changing market conditions, the flexibility provisions do provide an advantage to exporters (and, conversely, a disadvantage to American firms producing similar products) as compared with a system of fixed quotas.

TABLE 3. COTTON TROUSERS: INCREASE IN IMPORTS PERMITTED BY FLEXIBILITY PROVISIONS, 1983 (In dozens of pairs, and percent)

Country	Original Restraint Level	Restraint Level Adjusted for Flexibility Provisions	Amount of Adjustment (In percent)	Actual Imports	Imports in Excess of Original Restraint Level		Type of Adjustment a/
					Quantity	Percent of Original Restraint	
China	1,782,477	1,871,601	5.0	1,871,601	89,124	5.0	SA
India	200,000	226,000	13.0	223,679	23,679	11.8	SA, CF
Korea	270,807	287,055	6.0	284,401	13,594	5.0	SA
Macau	314,259	331,196	5.4	321,578	7,319	2.3	S, U
Malaysia	173,536	192,625	11.0	157,979	0	0.0	CO
Philippines	501,884	558,402	11.3	531,950	30,066	6.0	CO, SA, U, CF
Singapore	248,077	292,730	18.0	291,908	43,831	17.7	S, CO
Taiwan	909,085	963,630	6.0	885,695	0	0.0	SA
Thailand	196,067	217,634	11.0	217,634	21,567	11.0	CO
Total	4,596,192	4,940,873	7.5	4,786,425	229,180	5.0	

SOURCE: Calculated from U.S. International Trade Commission Publication 1639, Table 41, p. 77.

a. SA = shift added; CF = carry forward granted; S = swing granted; CO = carryover; and U = carry-forward used.

A fourth possibility, however, is that growth occurred mostly from uncontrolled sources--that is, from countries, specific products, or fibers for which no restraints currently exist.

Unfortunately, it is extremely difficult to specify precisely how much of import growth has come from uncontrolled products. 12/ As a substitute for product-by-product examination of import growth, one might instead look at imports from "controlled" and "uncontrolled" countries. (Note that not all products from controlled countries are actually subject to restrictions; in this context, "controlled" merely means that the United States has a bilateral agreement or unilaterally imposed restriction governing *some* products from a given country.) An examination of the data for the period 1980 to 1984 reveals that imports from controlled sources amounted to approximately 83 percent of textile and apparel imports in 1984; and that of the total increase in imports between 1980 and 1984, 80 percent came from controlled countries and 20 percent from uncontrolled countries. Thus, although their share of total imports is still quite small, imports from uncontrolled countries have grown more rapidly than those from controlled countries--26 percent per year as opposed to 19 percent per year. 13/

H.R. 1562

A current legislative proposal--H.R. 1562--would strengthen the protection afforded by the MFA. This would be accomplished by expanding unilaterally the commodity and country coverage of trade restraints, reducing both the level and the maximum permissible growth rate of imports, and implicitly eliminating the flexibility found in current bilateral agreements. The bill would also establish restrictions on all products, in advance of a possible import "surge."

H.R. 1562 would expand the coverage of quantitative restrictions to include all textile and apparel products, of all fibers, from all countries (except the European Community and Canada). The bill establishes four classifications for textile and apparel exporters. "Major exporting

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12. As one group of authorities on the MFA put it, "the agreements are so opaque that... informed public debate is precluded." G. Curzon et al, *MFA Forever?* (London: Trade Policy Research Centre, 1981), p. 29.

13. Calculated from U.S. International Trade Commission, *The MFA, 1980-84*, USITC Publication 1693 (May 1985), p. 54.

countries" are those whose share of U.S. imports is greater than 1.25 percent of total imports of textiles and apparel. All other countries are classified as "exporting countries," with the exception of members of the European Community and Canada on one hand and Mexico and other countries in the Carribean region on the other. "Major" exporters together accounted for about 80 percent of total U.S. imports in 1983.

The bill would place limits on textile and apparel exports to the United States, establishing a procedure for calculating reference exports in 1984 and maximum allowable exports thereafter. The procedure varies depending on a country's classification as a "major" or "other" exporter and whether or not the country had an export restriction agreement with the United States.

If the country was a "major" exporter, 1984 reference exports would be calculated as follows. For each category of export products (for example, men's cotton shirts), the level of exports of the product in 1980 is assumed to have grown by 6 percent per year for four years (compared to the average growth rate of all textile and apparel imports of 20.1 percent per year during that period). For products covered by a bilateral agreement that restricts growth to a rate below 6 percent per year, the actual level of exports in 1984 would be observed. The smaller of these two amounts would be the 1984 reference level of exports. Allowable exports in 1985 would be 101 percent of 1984 reference exports, and for future years the permissible growth rate would be fixed at 1 percent per year. For other exporters, 1984 reference exports are calculated as 115 percent of actual 1984 exports in a given product category, unless such exports accounted for more than 40 percent of U.S. production of items in that category. In these "import sensitive categories"--roughly 40 percent of total imports by volume in 1983--reference exports would be 101 percent of actual exports in 1984. Exports from "other exporters" would be restricted to 6 percent growth per year in 1985 and thereafter, or 1 percent per year for "sensitive" products. (Note, however, that if an "other" exporter achieves a market share of more than 1.25 percent, it would be treated from then on as a "major exporter," with an allowable growth rate of no more than 1 percent per year.) Exports from members of the EC and Canada would not be restrained, and those

from Caribbean Basin countries would be accorded somewhat more favorable treatment. 14/

The rapid growth of imports over the last four years implies that for many products, and for most major suppliers, actual imports in 1984 exceeded the 1984 reference level established by the bill. Hence, the bill would require an overall decrease in the *level* of imports, as well as a decrease in their future rate of growth. In addition to the substantive changes described above, the bill would represent a significant change in the procedural form of protection. It would replace the current system of restraints (negotiated product by product and country by country) with a general system, unilaterally imposed by the United States. Although the bill would require differential treatment for "major exporters," "exporters," and other countries, it would not allow for distinctions among various products or among individual countries within a group.

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14. The more liberal treatment of imports from the Caribbean Basin would limit somewhat the quotas' adverse impact on United States producers who use Section 807 of the tariff schedule. Under Section 807, a United States firm that exports components ready for assembly without fabrication can subtract the value of the American components in calculating the duties when the assembled products are imported. Imports of these items, however, are generally limited by existing quotas. A number of domestic firms export cut fabrics and then import completed apparel under Section 807. Imports under Section 807 amounted to about 4 percent of total textile and apparel imports in 1984.

    For the year ending May 1985, 78 percent of the Section 807 imports were from Caribbean countries or Mexico. In addition, imports from Canada, which are not affected by the bill, accounted for 4 percent of Section 807 imports. The Caribbean countries and Mexico would be treated relatively favorably by H.R. 1562 in two ways. First, these countries would not be considered "major exporters" even if their aggregate quantity of textiles and textile products exceeded 1.25 of all imports of these products. Thus, under the provision of the bill, exports from these countries would not initially be reduced and would be permitted to grow at a rate of 6 percent per annum. Second, in no case would exports from the Caribbean countries and Mexico be considered "import sensitive products." For other countries, products for which the ratio of total imports to domestic production exceeded 40 percent would be considered import-sensitive, and the growth of exports of these products would be limited to 1 percent per year. Nevertheless, some domestic firms' Section 807 operations have grown quite rapidly and their future growth would undoubtedly be constrained by the provisions of the bill.

MACROECONOMIC EFFECTS: THE DRI ANALYSIS

DRI analyzed the effects of higher levels of textile and apparel imports by comparing two alternative simulations of its macroeconomic model, one in which the market share of textile and apparel imports was held constant over the next five years and one in which it was allowed to grow at a rate of 20 percent in the first year, declining to 10 percent in the fifth. This latter assumption was presumed to represent the rate of textile and apparel import growth without further restrictions.

Under these assumptions, DRI's simulations predict that restricting textile and apparel imports to the rate of growth of U.S. consumption would save 947,000 jobs in the textile and apparel industries by 1990, and that 1990 employment in the entire economy would be 1.89 million greater than under the assumed higher rate of import growth. As a result of higher textile and apparel output, gross national product would be 0.8 percent higher, while the federal deficit would be $24 billion lower in 1990, according to DRI.

The DRI simulations, however, appear to have been made under a number of restrictive assumptions that strongly influence the results. These can be divided into two groups: assumptions about textile and apparel import growth, and assumptions regarding the nature of the economy's response to higher import levels.

Import Growth

DRI assumed that textile and apparel imports would grow by an average of 15 percent annually over the next five years. This is an extreme assumption. DRI based this assumption on the fact that imports have grown at a fairly high rate--roughly 20 percent a year--since 1980. But, as discussed above, this growth rate is the product of several unique circumstances. Given these circumstances, it is unlikely that the DRI assumption would obtain.

The Response to Higher Import Levels

In the DRI simulations, higher textile and apparel import levels lead to correspondingly lower levels of domestic textile and apparel output and employment. This in turn reduces national income and leads to reductions in the production of other goods.

In assessing the economywide implications of higher import levels, the first step is to analyze the extent to which higher imports will affect domestic production. DRI assumes that apparel imports grow by 15 percent per year, and maintains that in such a case, imports' share of the apparel market would reach 80 percent of 1990. [15] Given that imports of apparel currently have a market share of about 33 percent, [16] DRI's analysis implies that domestic production would fall at a rate of more than 20 percent per year over the next five years, and, that consumption would fall by almost 5 percent over this period. DRI's results thus require that domestic production fall by *more* than the increase in imports, which is implausible. DRI's assumptions regarding the growth of imports and domestic production are crucial for many of DRI's results, and they are apparently imposed on the model, rather than being generated by it.

Whatever the magnitude of their negative effects on the domestic textile and apparel industries and on the rest of the economy, higher imports also have positive effects on GNP and employment. These positive effects may or may not immediately counterbalance the negative ones, but they do exist, and appear to have been excluded from DRI's analysis. In general, these effects concern the composition of the economy. If imports displace domestic textile and apparel production, then resources--both human and physical--will shift into the production of other goods and services, increasing output and employment in those sectors of the economy. Although there are costs associated with the movement of resources among sectors of the economy, it is this very process of displacement through which trade conveys benefits. This change in the composition of the U.S. economy resulting from increased textile and apparel imports has apparently been ignored in DRI's simulation.

The changes in the composition of the economy would result from at least four factors. First, higher import levels would raise the incomes of exporting nations. These higher incomes increase purchases of other U.S. goods and services that can be exported competitively. Second, higher levels of textile and apparel imports would lower textile and apparel prices in the United States, which would increase consumers' real incomes and could lead to larger purchases of other U.S. goods and services including

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15. The apparel market is presumably defined as apparent consumption of apparel, which is equal to domestic production plus imports less exports.

16. Measured in physical units. When measured in dollar value, imports' market share is only 17 percent, since imported apparel sells for less per square yard equivalent than domestic apparel.

textiles and apparel. Third, increased textile and apparel imports of the magnitudes suggested by DRI would have a depreciating effect on the dollar. A decline in the dollar's value would increase the competitiveness of other U.S. goods and services in world markets. Finally, labor markets may be sufficiently flexible over the long term that other sectors of the domestic economy would be able to employ the displaced workers.

Given the omission of these effects, the DRI results can at best be viewed as a partial depiction of the effects of increased imports. Moreover, since the omitted effects all move in the same direction--that is, they all concern themselves with the salutary effects of higher imports--very little confidence can be placed in DRI's central finding that without further restrictions on textile and apparel imports, increases in output and employment would be significantly slowed. It is more likely that the effects of trade restraints on domestic output and employment would be small, and perhaps negative in the long run.

INDUSTRY EFFECTS: THE IBERC ANALYSIS

The International Business and Economic Research Corporation (IBERC) has performed an analysis of the effects of H.R. 1562 on prices, output, and employment in the textile and apparel industries. This section first summarizes the results of that analysis. It then discusses the key assumptions underlying these results, and presents results derived using alternative values for these key assumptions. Under all assumptions, however, the costs to consumers of textile and apparel products of the quotas suggested by H.R. 1562 are found to substantially exceed their benefits.

Summary of IBERC's Results

Apparel Industry. The International Business and Economic Research Corporation (IBERC) estimated that H.R. 1562 would reduce imports of apparel by 20 percent, and increase imported apparel prices by 16 percent. It further predicted that this price increase would generate a 3 percent rise in demand for domestically produced apparel, and would avert a decline in domestic production and employment of 3 percent (36,141 employees).

IBERC calculated that consumers would pay $2.1 billion more for imported apparel, while the value of the jobs saved would be $106 million. These estimates apply to the first year in which the quotas are in effect. In future years, IBERC calculates that the additional amount consumers pay

for imported apparel because of the quotas would increase at the same rate that the economy expanded, which it assumes to be 3 percent over the next five years. All the quotas' benefits to labor would be realized in the first year, however.

Textile Industry. IBERC estimated that the quotas would reduce the amount of textile imports by 36 percent, which would result in a 33 percent increase in the price of imported textiles. This price increase would result in a 4.7 percent increase in the production of domestic textiles, and a parallel increase in employment of 35,272 employees. Because of the increased prices, consumers would pay $741 million more for imported textiles, while the value of the added employment would be $179 million. As in the case of the apparel industry, IBERC argues that the benefits of quotas would be realized in the first year, while the additional expenditures for imported textiles would increase at the same rate at which the economy grew.

Retail Industries. IBERC found that retail employment would decline because of the quotas. It estimated that the imposition of quotas on textile and apparel imports would result in a reduction of 57,931 jobs in the retail apparel industry and 3,577 jobs in the retail textile industry; it calculated the value of these job losses at $130 million and $8 million respectively.

Government Revenues. Because of the reduction in imports, IBERC calculates that U.S. government would collect $629 million less revenue from its tariffs on imported apparel and $166 million less from its tariffs on imported textiles.

IBERC's Methodology

IBERC's estimates of the effects of the proposed quotas on prices, output, and employment were based on a four-part calculation. First, IBERC translated the language of the bill into a percentage restriction on imports. Second, it estimated the increase in the price of imported textiles and apparel in response to restrictions on their supply and used these price increases to calculate the cost of the quotas to consumers. Third, it estimated the extent to which increased prices for imported textiles and apparel would increase the demand for domestically produced substitutes. Finally, it estimated by how much domestic producers would increase their production and hire more employees as demand for these products increased.

Quantity of Imports. In order to determine the effect of the quotas on the supply of imported textiles and apparel, IBERC assumed that if a country exported any goods in a product category during 1984, it would fill its quota

for that category in 1985 and all future years. IBERC also assumed that if a country did not export goods in a particular product category in 1984, it would not export any such products in 1985 or in the future. Countries in the European Community and Canada, whose exports to the United States are not constrained by H.R. 1562, were assumed not to increase their share of the U.S. market after the bill was passed. Under these circumstances, textile imports would decline by 36 percent and apparel imports by 20 percent under H.R. 1562's provisions in the first year following passage. It should be noted that IBERC's interpretation of the bill leads to a larger first-year import restriction than that assumed in the DRI model, but a smaller one after several years have passed.

Prices of Imported Textile and Apparel. To determine the effect of the reduced quantity of imports on their price, IBERC employed estimates from other analyses of the responsiveness of imported textile and apparel imports to changes in their price (the price elasticity of demand).[18] It cited estimates of the price elasticity of imported apparel of -1.24 and -3.77, and estimates of the price elasticity of imported textiles of -2.43, -1.10, and -0.73.[19] Selecting the less responsive estimate for apparel and the middle value for the elasticity of textiles, IBERC maintains that these values most accurately reflect short-run elasticities, which are relevant for an analysis of the effects of the quota in the first year.

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18. The elasticity of demand measures how the quantity demanded of a good changes in response to a change in its price. Its value is equal to the percentage change in the quantity demanded divided by the percentage change in the good's price. If this ratio is equal to -1.5, for example, then a 10 percent increase in the price of a good will lead to a 15 percent decrease in the quantity purchased. Were the ratio equal to -2.0, then the same 10 percent increase in price would lead to a reduction of 20 percent in the quantity purchased.

19. Margaret Buckler and Clopper Almon ("Imports and Exports in an Input-Output Model," *American Statistical Association*, proceedings of the Business and Economic Statistics Section, 1972, pp. 175-84) estimated the price elasticity of textile imports to be -1.10 and of apparel imports to be -3.77. Joe A. Stone ("Price Elasticities of Demand for Imports and Exports: Industry Estimates for the U.S., the E.E.C., and Japan," *The Review of Economics and Statistics*, vol. 61, no. 2, May 1979, p. 303) estimated that elasticities of imported textile and apparel were -0.73 and -1.24 respectively. William R. Cline and others in *Trade Negotiations in the Tokyo Round: A Quantitative Assessment* (Washington, D.C.: The Brookings Institution, 1978), p. 58, estimated the price elasticity of imported textiles to be -2.43.

With a price elasticity of demand of -1.24, the predicted 20 percent decline in the quantity of imported apparel would lead to a 16 percent increase in the price of imported apparel (-20 percent/-1.24 = 16 percent). Similarly, using an estimate of price elasticity of -1.10, the predicted 36 percent decline in imported textiles would result in a 33 percent increase in the price of imported textiles (-36 percent/-1.10 = 33 percent).

The Cost to Consumers. IBERC maintains that the cost of the quota would be a direct result of the increased prices that consumers must pay for imported products. For those who purchased the imported products at the higher price, the cost of the quota would be simply the additional expense, which would be equal to the resulting price differential multiplied by the quantity imported. This would be a simple income transfer from U.S. consumers to foreign producers. IBERC notes that there would also be a cost associated with those who would have purchased the product at the pre-quota price, but decided not to purchase it (or elected to purchase less of it) at the higher price. This cost is referred to as a "deadweight" or "efficiency" loss. IBERC included it as a cost to consumers, although in a competitive economy this deadweight loss is more accurately considered a cost to the entire economy--it is the cost of using resources inefficiently. As such, it would include the reduction in society's potential to produce goods because resources would be diverted into the production of additional domestic textile and apparel products that could have been imported at less expense. In short, the "efficiency loss" measures the misallocation of resources that would result from the imposition of quotas. IBERC estimated the cost to consumers as equal to $2,386 million for apparel and $950 million for textiles, of which $265 million and $209 million, respectively, would in fact be efficiency losses paid by the economy. 20/

20. The elasticity estimates that IBERC used measure the relationship between the changes in the price of imports and the changes in the quantities that the *importers* demand. In estimating the cost to consumers of the quotas, IBERC assumed that the increased prices to importers of textile and apparel (the wholesalers, retailers, and apparel manufacturers) would result in an equivalent increase in the price to consumers. Thus, it assumed that a given increase in the dollar amount of an item of apparel would result in an equivalent increase in the dollar amount in the retail price. In the case of apparel, this implies that retailers' gross margins would decline.

IBERC also assumed that the increased cost of textiles would result in an equivalent increase in the price of the final product. This implies that manufacturers using textile products as an input would not use less textiles per unit of output, but simply reduce the amount of the final product that they produced.

Changes in the Production of Domestic Goods. Higher prices for imported textiles and apparel lead to increases in the demand for substitutable domestic goods. The degree to which higher import prices trigger greater demand for domestic goods is called the cross-elasticity of demand for domestic apparel with respect to the price of imports. Since IBERC was not aware of any existing estimates of this cross-elasticity of demand, it derived one based on estimates of related variables. 21/ It concluded that the cross-elasticity of demand is 0.188, and that, therefore, a 16 percent increase in imported textile prices would result in a 3 percent increase (.16 x .188 = .03) in the demand for domestically produced apparel.

IBERC was also unaware of any comparable estimates of the responsiveness of domestic textile demand to the price of imported products. However, a previous study estimated directly the effect of changes in textile imports on the demand for domestically produced textiles. 22/ This study found that a 1 percent decrease in imports would result in a 0.26 percent increase in domestic production. IBERC considered this to be a long-run estimate and halved it to approximate the short-run effect. It concluded that a 36 percent reduction in textile imports would result in a 4.7 percent increase (.36 x .13 = .047) in domestic production.

Changes in Output and Employment. IBERC assumed that the prices of domestic textiles and apparel would not increase and that textile and apparel manufacturers would expand production at the same rate at which demand increased. Moreover, it assumed that employment would expand at the same rate as output. It therefore estimated that output and employment in the apparel industry would increase by 3 percent, and in the textile industry by 4.7 percent. It seems likely, however, that employment would increase at a lower rate than output. In that case, IBERC's assumption would slightly overstate the benefits of quotas.

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21. Specifically, the cross-elasticity of demand can be derived from the price elasticity of demand for domestically produced apparel, imports' share of total consumption, and the elasticity of substitution (which roughly corresponds to the percentage change in the share of imports from a given percentage change in the ratio of the imported apparel price to the domestic apparel price). However, the value of the elasticity of substitution that IBERC used was itself derived from the elasticity of demand for domestically produced apparel and the elasticity of demand for imported apparel.

22. Joseph Pelzman and Randolf C. Martin, "Direct Employment Effects of Increased Imports: A Case Study of the Textile Industry," *Southern Economic Journal*, vol. 48, 1981, pp. 412-426.

In IBERC's view, the primary benefit of H.R. 1562 would be to increase employment in the textile and apparel industries and, more specifically, to keep workers who would otherwise have been laid off employed in the industry. Workers who are laid off do not generally remain indefinitely out of work; they find other jobs. Consequently, protecting a job would allow a worker to be productively employed during what would otherwise be a spell of unemployment. Thus, the value of this benefit would be equal to the wages that employees would earn during what would otherwise have been a period of unemployment.

In the apparel industry a laid-off worker was unemployed for an average of 14.5 weeks in 1984. In the textile industry the average spell of unemployment was 19.7 weeks. IBERC assumed that unemployment in the textile and apparel industries was caused solely by workers being laid off and leaving the industry (although the data probably reflect temporary layoffs as well), and therefore that these spells of unemployment measured the time it took them to find other jobs. IBERC also assumed that the new jobs paid the wage earned in the apparel industry. It then concluded that the benefit of the increased employment resulting from the bill would be worth $106 million in the apparel industry and $179 million in the textile industry. 23/

Related Results

Retail Employment. IBERC estimated the effect of the quotas on retail apparel and textile employment, assuming that employment would decline in these sectors in proportion to the decline in total consumption that would result from the quotas (consumption being approximately equal to imports plus domestic production). It concluded that the loss from reduced retail apparel employment would be $130 million. 24/ The corresponding loss from the decline of employment in textile retailing would be $8 million.

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23. The cost to the workers might be significantly less since they would be entitled to unemployment compensation. The cost to a worker of being laid off would also include any possible negative difference between the income in the new job and what the worker would have earned in the textile or apparel industry.

24. Paralleling the case of the manufacturing industries, IBERC calculated the losses to be the wages forgone during an average spell of unemployment.

Government Revenues. Tariffs on imported textile and apparel products are relatively high. Reducing imports of textiles and apparel would affect the revenues that the government collects from these tariffs. IBERC assumed that the reduction in the government's tariff revenues would be proportional to the decline in the quantity of imports, concluding that a 20 percent reduction in apparel imports would produce a 20 percent decline, or $629 million, in tariff revenues, and that the predicted 36 percent decline in textile imports would mean a corresponding decline in tariff revenues of $166 million.

A Discussion of the Assumptions Underlying IBERC's Analysis

Prices of Domestic Goods. In calculating the cost of quotas on textile and apparel import, IBERC assumed there would be no increase in the price of domestically produced substitutes. This assumption could lead to a substantial underestimate of the costs of the quotas to consumers of textile and apparel products.

An increase in demand for a domestically produced good, whether the result of an import quota or some other factor, will drive up the price of the good. Higher prices for imports lead consumers to switch from imports to domestic products, and the higher demand for domestic products will bid up their prices. In fact, absent an increase in price, there would be no incentive for domestic manufacturers to expand output. 25/ In addition, if domestic textile and apparel prices rose in response to the quota, the amount purchased would be less than if they had remained unchanged as IBERC assumed. Thus, domestic output should rise in response to a quota, but by less than the amount that IBERC calculates. As IBERC recognized, ignoring these effects understates the quotas' effects on textile and apparel prices, and overstates the benefits to workers in the protected industries.

Prices and the Demand for Imports. IBERC's predicted change in the price of imported textiles and apparel resulting from the quotas followed directly from its assumption about the elasticity of demand. In selecting elasticities of demand to make these calculations, IBERC cited a number of estimates, and claimed that it chose those that reflected short-run effects. 26/ How-

25. For example, textile and apparel manufacturers generally have varying vintages of plants; the newer, more efficient plants tend to operate at higher levels of capacity. Only a rise in the price of textiles and apparel would make it profitable for firms to increase production at their less efficient facilities.

26. Long-run price elasticities are larger than short-run price elasticities, because it takes time for purchasers to respond completely to changes in the relative prices of goods.

ever, this distinction was made arbitrarily. IBERC used Buckler and Almon's estimate of the elasticity of imported textile demand, but not their estimate of the elasticity of imported apparel demand. Both estimates were derived in the same study, using the same methodology; if one is a short-run elasticity, the other is presumably also short-run. 27/ The assumption as to demand elasticity critically affects both the cost of quotas to consumers and the size of the resulting efficiency loss. As the responsiveness of import demand to price declines, the size of these effects will increase.

Increased Demand for Domestic Production. IBERC estimated that a decline of 301 million pounds of apparel imports would result in a 133 million pound increase in domestic production--that is, only 44 percent of the decline in imported apparel consumption would be translated into an increase in domestic production. This result stems from its estimate of the cross-elasticity of demand, which in turn stems from estimates of demand elasticities of domestically produced apparel and imported apparel that were made by different authors covering different time periods. In using these estimates IBERC assumed that domestic and imported apparel are not very substitutable.

In contrast, IBERC's estimate that the increase in domestic textile production would be equal to 80 percent of the decline in imported textiles was based on a direct estimate by Pelzman and Martin of this relationship. IBERC claimed that one-half of their original estimate would be appropriate for a short-run analysis. If the full value of the estimate is used, however,

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27. Buckler and Almon's estimate of the elasticity of demand for imported apparel is higher than the estimate IBERC used. See Buckler and Almon, *Imports and Exports*. If this higher value had been used, the estimated effect of the quotas on the price of imported apparel would have been lower. IBERC did use Buckler and Almon's estimate for the elasticity of demand for textiles.

    Buckler and Almon's estimates were derived by constraining the elasticity of demand for imported apparel or textiles to equal the absolute value of the cross-price elasticity of the imported product with respect to the price of the domestic product. Since this is an extreme assumption, Buckler and Almon's estimates should be interpreted with caution. See Morris Morkre, *Import Quotas on Textiles: The Welfare Effects of United States Restrictions on Hong Kong*, Bureau of Economics Staff Report to the Federal Trade Commission, August 1984, p. 66.

    IBERC used Joe A. Stone's estimate of the price elasticity of demand for imported apparel, but did not use his estimate of the elasticity of imported textiles. See Stone, *Price Elasticities of Demand*. However, Stone's estimate of the elasticity of imported textiles is smaller than the estimate IBERC used. Had they used Stone's value, its estimate of the cost of the quota to textile consumers would have been greater.

(that is, a 1 percent reduction in the quantity of imports results in a 0.26 percent increase in domestic production), then the increase in domestic production would be 60 percent *greater* than the reduction in imports--the quotas would increase total consumption of textiles. 28/ Such an outcome is extremely unlikely and casts doubt on IBERC's use of the Pelzman and Martin study to measure the effect on domestic production of such a large change in the quantity of textile imports.

The Costs of Unemployment. In its estimates of worker compensation, IBERC excluded employers' contributions to pensions, health insurance, and Social Security, and, therefore understated the job-related benefits of quotas. Moreover, employees incur job search costs that could also properly be included as a cost of being laid off. Finally, the data IBERC cited on the duration of unemployment include temporary as well as permanent lay-offs. It seems quite likely that workers who were permanently displaced would have a longer period of unemployment than workers who were seasonally or temporarily laid off.

Retail Unemployment. IBERC was correct in concluding that the imposition of the quotas would affect the retail sector, which sells textile and apparel products. But just as there are domestic industries that depend on the import trade, there are businesses that provide goods and services to the apparel and textile trade. If the costs to the former are included in the analysis, it would be appropriate to include the benefits to the latter as well.

Government Revenues. In estimating the impact of the quotas on government revenues, IBERC assumed that government revenues would decline in proportion to the quantity of imports. However, tariffs on textile and apparel products are *ad valorem* tariffs; the higher the price of the

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28. Pelzman and Martin concluded in *Direct Employment Effects* that a 1 percent reduction in the quantity of imported textiles would result in an 0.26 percent increase in domestic production. IBERC halved this estimate to reflect the limited response of the domestic industry in the short run.

    Textile imports in 1984 were 1,147 million pounds; a 36 percent reduction in these imports, which is the estimated effect of the bill, would imply a reduction of 413 million pounds. Using one-half of Pelzman and Martin's estimate, this reduction would lead to a 4.7 percent increase in domestic production (or 36 percent times .13). In 1984, domestic textile production was 7,109 million pounds. The resulting increase in domestic production would, therefore, be 334 million pounds (7,109 million times .047), or 80 percent of the decline in textile imports.

imported products, the greater the revenues collected on each item. Ignoring the increase in the price of imported products overestimates the reduction in government revenues resulting from the imposition of the quotas.

For example, IBERC estimated that the quotas would increase the price of imported apparel by 16 percent. It also estimated that the quantity of imported apparel would equal 80 percent of what it would have been absent the quota. In this case, the quotas would result in a 7 percent decline in consumer expenditures for imported apparel, and government revenues would be 93 percent of what they would have been absent the quota. This is roughly one-third the revenue loss that IBERC calculated. IBERC similarly overstated the reduction in tariff revenues in the textile industry.

The Long Run. In its analysis of the longer-term effects of the quotas, IBERC assumed that imports would grow at the same rate as the economy, which it assumed to be 3 percent per year. In that case the cost of the quotas to consumers of textiles and apparel, as well as the efficiency loss to the economy, would also grow by 3 percent. However, all the employment gains would be realized in the first year. In this calculation IBERC implicitly assumed that H.R. 1562 would change the level of imports in the first year, but not their future rate of growth. Under this assumption, textile imports would be 20 percent less than they would have been in each year the quotas were in effect. If the quotas limited the future growth of imports over and above the first-year reduction in their level, however, as it seems they would, both the costs and benefits of the quotas in future years would grow more rapidly than IBERC calculates.

First, under H.R. 1562, it is questionable whether foreign textile and apparel manufacturers would be permitted to increase their exports to the United States by 3 percent per year. "Major exporters," who account for the bulk of the sales of imported products, would be limited to a growth rate of 1 percent. [29] While others could grow more rapidly, they might not be able to grow fast enough to make up the difference. In addition, it is entirely possible that imports would grow significantly above 3 percent per year without the quotas during the next five years. Foreign firms can apparently produce a number of products more inexpensively than domestic manufacturers. Moreover, the current bilateral agreements negotiated under the MFA in many cases permit import growth in excess of 3 percent per year, and these agreements do not apply to all commodities and all countries.

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29. Of course, firms in major exporting countries would attempt to develop means of circumventing the quotas. For example, several Hong Kong apparel manufacturers are establishing factories in Europe; exports from Europe are not affected by the proposed quotas. See "Hong Kong's End Run Around U.S. Protectionism," *Business Week*, August 26, 1985, p. 45.

Because of both of these assumptions, IBERC may have understated the long-term costs of the quotas, both to consumers and to the economy as a whole.

So long as quotas restrict the quantity of imports, they would raise textile and apparel prices. If the quotas continue to limit the growth of imports, then the prices of textiles and apparel would increase more rapidly than they would have increased absent the quotas. If, for example, the quotas increase the price of imported textiles by 16 percent by the end of the first year, they would increase them by more than 16 percent by the end of the second year. The efficiency loss of the quotas would increase more than proportionately with this increase in price. These price increases would be cumulative--if a price rose by 2 percent in 1986 and by another 2 percent in 1987, the price in 1987 would be slightly more than 4 percent above that in 1985.

If the actual future growth of imports were to exceed the growth of imports with the quotas, future domestic production would increase more rapidly (or decrease more slowly) because of the quotas. Thus in each future year the quotas would increase domestic employment. Yet the saving of a job is a one-time saving. There is no additional benefit in 1987 for saving a job in 1986; those workers who would have been displaced in 1986 if a quota had not been imposed would presumably have found other employment a year later. Moreover, it is doubtful that the job savings from imposing the quotas would be anywhere near as large in subsequent years as they would be in the first year, since the major impact of the bill comes from its initial reduction in import quantities.

The efficiency loss to the economy as well as to consumers of textile and apparel products that would stem from the quotas would be cumulative, but the benefits would not. Consequently, the difference between benefits and costs to consumers and the economy would expand in future years, and this expansion would be greater than IBERC calculates.

An Alternative Calculation of the Impact of H.R. 1562

The conclusions of IBERC's analysis of the effects of H.R. 1562 depend on the assumptions underlying its study. To determine the sensitivity of IBERC's estimates, CBO estimated the effects of the proposed quotas under two different sets of assumptions. The first set of assumptions is favorable to the quotas--they produce estimates of the costs to the economy and to textile and apparel consumers that are relatively low, and estimates of the benefits that are relatively high. The second set of assumptions is unfavor-

able to the proposed quotas. These two sets of assumptions are given in Table 4. They were designed to provide an idea of the range into which the quotas' effects would probably fall.

The Alternative Assumptions. IBERC assumed that domestic textile and apparel prices would not change in response to quotas, but it is likely that they would. To incorporate these changes, information on the responsiveness of demand and supply to changes in price is needed. Several estimates exist for demand elasticities. Almon and others estimated that the elasticity of demand for domestic apparel was -0.909 and this estimate was used in the favorable case. 30/ Houthaker's estimate of -0.282 was used in the unfavorable case. 31/ Almon and others estimate an elasticity of -0.133 for textiles; it was used in both cases.

There are no published estimates of the responsiveness of domestic output to changes in price, that is, the supply elasticity. For each industry, therefore, the impact of domestic price and output was computed assuming supply elasticity of 10 in the favorable case (that is, that a 1 percent increase in price would elicit a 10 percent increase in output), and one-half in the unfavorable case. (The Council of Wage and Price Stability assumed that the elasticity of supply ranged between 0.5 and 5 in their 1977 study.) 32/ The true responsiveness of supply is likely to be in this range, although it is probably as high as 10 only in the long run. CBO also assumed that the average price of domestically produced products is equal to the average price of imports. This last assumption is probably conservative, especially in the case of apparel--domestic unit values are probably higher then those of imports. Consequently, the calculations using the alternative assumptions probably understate the cost to consumers of textile and apparel products of the increase in domestic prices.

As discussed previously, there are a number of published estimates of the sensitivity of demand for imported textiles and apparel to changes in

30. Clopper Almon, Jr. and Others, *1985: Interindustry Forecasts of the American Economy* (Lexington, Mass.: Lexington Books, 1974), p. 37.

31. H.S. Houthakker, "New Evidence on Demand Elasticities," *Econometrica 33*, Spring 1965, pp. 277-88.

32. Council on Wage and Price Stability, *Textiles/Apparel: A Study of the Textile and Apparel Industries* (Washington: Government Printing Office, 1973).

TABLE 4. ASSUMPTIONS USED TO CALCULATE EFFECTS OF IMPORT QUOTAS IN THE APPAREL AND TEXTILE INDUSTRIES

	IBERC	Favorable to Restraints	Unfavorable to Restraints
Apparel			
Elasticity of demand for imports	-1.24	-3.77	-1.24
Percentage increase in domestic demand	3	5.4	3
Elasticity of demand for domestic production	N/A	-0.909	-0.283
Elasticity of domestic supply	Infinite	10.0	0.5

	IBERC	Favorable to Restraints	Unfavorable to Restraints
Textiles			
Elasticity of demand for imports	-1.10	-2.43	-0.73
Percentage increase in domestic demand	4.7	4.7	4.7
Elasticity of demand for domestic production	N/A	-0.133	-0.133
Elasticity of domestic supply	Infinite	10.0	0.5

SOURCES: Cited in text.

NOTE: N/A = Not Applicable.

their prices. In the favorable cases the most elastic estimates were used; in the unfavorable cases, the least elastic estimates were used. These are given in Table 4.

IBERC calculated that 80 percent of the reduction in the textile imports would be translated into increased demand for domestic output, and that only 44 percent of the reduction in apparel imports would be translated

into increased demand. In the favorable case, CBO assumed that domestically produced apparel is a better substitute for imports than IBERC concluded and that, as with textiles, 80 percent of reduced apparel imports would be translated into increased demand for domestic apparel. In that case, demand for domestically produced apparel would increase by 5.4 percent rather than 3 percent. With textiles, IBERC's assumption was used in both the favorable and unfavorable cases.

In the favorable case it was assumed that the average spell of unemployment for a displaced textile and apparel worker was double the industry average, which includes some seasonal or temporary layoffs as well as permanently displaced workers. It was further assumed that non-wage compensation and search costs, which were excluded in IBERC's analysis, were equal to 25 percent of the average wage. In the unfavorable case, IBERC's assumption that displaced workers experienced the average spell of unemployment was used.

The Results Under the Alternative Assumptions. Using assumptions that are favorable to restraints leads to larger estimates of the benefits of the proposed quotas and lower estimates of the resulting price increases than IBERC calculated. In the unfavorable case, the opposite is true--the benefits of the restraints are smaller than IBERC's estimates and the costs to consumers and the economy are larger. Even in the favorable case, however, the costs to textile and apparel consumers of the increased prices still exceed the value of the jobs saved in the first year of the program, and the deadweight losses are not averted.

Apparel. Under favorable assumptions, H.R. 1562 creates increased costs to apparel consumers of $0.9 billion (compared to $2.1 billion in IBERC's analysis) and benefits of $0.4 billion (compared to $0.1 billion) in the apparel industry. In addition, the efficiency loss posed by the quotas declines from IBERC's estimate of $265 million to $87 million. In the favorable case, the estimated increase in the price of imports is substantially smaller than IBEC's estimate because the elasticity of demand for imported apparel products is assumed to be substantially larger (see Table 5). Consequently, the cost to consumers of apparel from the increased price of imports is one-third the amount that IBERC estimates. Unlike the IBERC analysis, prices of domestically produced apparel increase in the favorable case; this increase, however, is less than one-half of 1 percent. The 1.5 percent increase in apparel prices, which includes the increased price of domestically produced apparel, is less than one-half IBERC's estimated increase. Moreover, because of the higher demand for domestic production, the number of apparel jobs saved in the favorable case is 63 percent more than IBERC's estimate. In addition, the value of each job saved is more than twice as great.

TABLE 5. COMPARISONS OF COSTS AND BENEFITS OF QUOTAS ON APPAREL IMPORTS UNDER DIFFERENT ASSUMPTIONS (First-year effects)

	IBERC's Results	Alternative Assumptions	
		Favorable to Quotas	Unfavorable to Quotas
Transfer to Foreign Producers			
Percent change in quantity of imports	-20	-20	-20
Percent increase in import price	16.1	5.3	16.1
Transfer to foreign producers (In millions of dollars)	2,121	699	2,121
Redistributive Effects			
Percent increase in domestic price	0.0	0.48	3.8
Percent increase in domestic output	3.0	4.9	1.9
Transfer to domestic producers (In millions of dollars)	0.0	238	1,856
Percent increase in average price	3.3	1.5	6.4
Efficiency Loss (In millions of dollars)	265	87	265
Benefits to Apparel Employees			
Number of jobs saved	36,141	58,898	22,838
Total benefits a/ (In millions of dollars)	106	430	67

SOURCE: The International Business and Economic Research Corporation (IBERC) and Congressional Budget Office.

a. Derived by calculating the value of compensation for the number and duration of jobs saved.

By contrast, in the unfavorable case, average apparel prices, including imports and domestic production, are assumed to increase by 6.4 percent, which is nearly twice IBERC's estimate. The 1.9 percent increase in production is one-third less than IBERC's estimate. The smaller rise in production is, in large part, due to the assumption that supply is relatively unresponsive. In the unfavorable case, therefore, the costs to apparel consumers of the increased prices is 90 percent greater than IBERC's estimate ($4.0 billion versus $2.1 billion) and the value of the benefits is roughly 37 percent less ($67 million versus $106 million). As compared to the favorable case, the cost to apparel consumers is four times as great and the benefits are one-sixth as large. In addition, the efficiency losses posed by apparel quotas are equal to IBERC's estimate of $265 million in this unfavorable case.

Textiles. In the textile industry, the favorable assumptions lead to costs to textile and apparel consumers of $442 million (as opposed to IBERC's finding of $741 million), and estimates of benefits of the quotas that are more than double IBERC's estimates ($440 million versus $179 million). (See Table 6.) The increase in benefits is due entirely to the increased value of saving a job; there is actually a slight reduction in the estimated number of jobs saved. The costs to textile and apparel consumers of the restraints, despite the increased prices of domestic output, is 40 percent lower than IBERC's estimates. As with apparel this is largely due to the higher estimate of the elasticity of the demand for imports. Nevertheless, under the favorable assumptions the costs to textile and apparel consumers of the quotas still exceed the benefits in the first year of the program. Under the favorable case, the efficiency loss created by the quotas falls from IBERC's estimate of $209 million to $96 million.

In the unfavorable case, however, the average price of textile products increases by 11.3 percent, which is nearly four times the increase in prices that IBERC calculated, and six times greater than the price increase in the favorable case. This is due to a nearly 50 percent increase in imported prices and a 7.5 percent increase in domestic prices. Also, the number of jobs saved is nearly 20 percent less than IBERC estimated. Thus, under the unfavorable assumption, the cost of textile quotas to textile and apparel consumers rises from $740 million (under IBERC's assumptions) to $2.9 billion, while the quotas' benefits fall from $179 million to $141 million. The efficiency loss created by the quotas rises from IBERC's finding of $209 million to $314 million.

TABLE 6. COMPARISONS OF COSTS AND BENEFITS OF QUOTAS ON TEXTILE IMPORTS UNDER DIFFERENT ASSUMPTIONS (First-year effects)

	IBERC's Results	Alternative Assumptions	
		Favorable to Quotas	Unfavorable to Quotas
Transfer to Foreign Producers			
Percent change in quantity of imports	-36	-36	-36
Percent increase in import price	33	15	49
Transfer to foreign producers (In millions of dollars)	741	341	1,115
Redistributive Effects			
Percent increase in domestic price	0.0	0.45	7.5
Percent increase in domestic output	4.7	4.6	3.7
Transfer to domestic producers (In millions of dollars)	0	101	1,794
Percent increase in average price	2.9	1.8	11.3
Efficiency Loss (In millions of dollars)	209	96	314
Benefits to Textile Employees			
Number of jobs saved	35,272	34,638	27,861
Total benefits [a/] (In millions of dollars)	179	440	141

SOURCE: The International Business and Economic Research Corporation (IBERC) and Congressional Budget Office.

a. Derived by calculating the value of compensation for the number and duration of jobs saved.

OTHER ISSUES

In addition to the questions already discussed, the proposed regulation of textile and apparel imports raises some important issues that were not addressed by either DRI or IBERC.

First, the permanence of the new regulations would represent an important step away from the concept of "adjustment," one of the key notions underlying international trade relations. Under the framework of GATT, countries commit themselves to allowing free access to their domestic markets. When such access permits rapid import growth, which may then prove disruptive to a domestic industry, the country faces an adjustment problem. It may choose to slow down the process of adjustment by temporarily restraining imports, or it may decide to let the process occur at its own speed. Even the MFA, however, does not envisage that adjustment can be stopped altogether--that permanent protection should be instituted to prevent the decline of a domestic industry.

The bill contains no presumption that the protection it offers would be temporary and would be removed once the industries affected regained their competitive position. Rather, it assumes a longer-run inability to compete, and thus weakens the presumption that market forces should ultimately determine the allocation of resources. There have been many instances in which society has altered the process of adjustment to higher imports; but until now, there has generally been a presumption that such adjustment would eventually take place. Other countries, including many textile and apparel exporters, face similar adjustment problems in other sectors. If the U.S. were to abandon the notion that adjustment must eventually take place, the incentives for other countries to allow further import growth would be reduced, and U.S. exports could be expected to suffer as a result.

A second major feature of the bill would be its impact on developing countries. Institutions such as the World Bank and the International Monetary Fund, as well as the U.S. government, have long urged developing countries to follow an export-led growth strategy as the best means of achieving rapid development. The success of such a strategy depends critically on access by developing countries to markets for their exports (especially manufactured exports) in the developed world. By limiting access to the U.S. market for many developing country textile producers, the bill would place an important roadblock in their path to greater prosperity.

The United States has an interest in the further development of the poorer countries that extends beyond altruistic or humanitarian motives. As

such countries achieve higher levels of development, their demand for U.S. exports will increase. Moreover, many such countries are large debtors. In order to repay their international obligations, they must generate foreign exchange earnings by increasing exports (or decreasing imports). If the United States makes it more difficult for countries like Brazil and Indonesia to gain access to its market, it weakens their ability to service their debts.

The bill would also have subtle, but important, effects on economic well-being stemming from its curtailment of variety in the products that are consumed. Imported textile and apparel are not perfect substitutes for domestically produced items: important differences exist in style, fabrics, quality, etc. By restricting the range of choices available to U.S. consumers, the bill would prevent some people from finding the textile or apparel products most suited to their tastes. Moreover, since imported apparel generally tends to be of lower quality and of lower price than domestic apparel, the burden of the quotas would tend to fall disproportionately on the consumers of such products, predominantly the poorer segments of the population.

A further disadvantage to quotas is that they encourage foreign suppliers to upgrade the quality of their products. When restrictions are placed on the physical quantity of imports, producers have an incentive to supply items with a higher price per unit. Foreign products, especially in apparel, have traditionally been at the low end of the quality range; thus, over the long term, the quotas would tend to bring foreigners into more direct competition with U.S. producers in the higher-quality market niches.