INCREASING IMPORTS AND STRUCTURAL ADJUSTMENT OF THE JAPANESE TEXTILE INDUSTRY

IPPEI YAMAZAWA

I. ADJUSTMENT TO THE ADVANCED DEVELOPING COUNTRIES

INDUSTRIAL adjustment is one of the hot issues in economic policy discussion both at the national and international levels. It covers various aspects, depending on what causes the need for adjustment. Adjustment to the Advanced Developing Countries (ADCs) is one of its major aspects but it should be correctly seen against the global picture of all the aspects of the adjustment problem. Industrial adjustment is a process of moving to a new equilibrium after a change in economic conditions. It will be left to the market mechanism unless friction is produced in the adjustment process which, for some reason, may call for policy intervention. Thus changes in economic conditions and the reasons for the friction have to be identified correctly for any successful analysis of industrial adjustment.

In the 1970s, the Japanese economy encountered various external disturbances which may be grouped into two categories of causes, as follows: (a) The oil price increase necessitated the world economy to shift to slower economic growth and changed the comparative cost conditions of all oil-and-energy-using production activities. (b) The disparity of growth performance among developed countries and the efforts of the ADCs to catch up with the developed economies in industrial development brought about long-term changes in comparative advantage among trade partners. Japan became involved in trade friction with the United States and EC, and now faces the demand on the part of neighboring ADCs to increase her manufactured imports and to mitigate their persistent trade deficit.

The above two factors intermingled to bring ten or more industries into "structural depression," that is, a prolonged recession, in 1976–78. The following analysis will be focused on a single industry which has been typically affected by the catching-up of the ADCs. The textile industry is a good subject for study in this context.

The major reasons for weak autonomous adjustment to changing conditions are inability or inactive response by a majority of firms in the industry concerned

The author has especially benefited from discussion with Professors Kaoru Watanabe and Yoshie Yonezawa and with Mr. Tōkō Hirai, although he alone is responsible for the analysis and policy proposals in this article.

and the resistance of individual laborers or labor unions to move to new employment. The Japanese textile industry has long been confronted with increasing wages and difficulty in recruiting young labor in the face of the competition from ADC competitors. A group of big firms have been active in relocating production overseas, upgrading and differentiating their products in competition with the ADC competitors both at home and abroad, and switching over to other types of production. But the textile industry still suffers from prolonged maintenance of obsolete production capacities and the inability of many small-scale weavers to take on new jobs. The industry has also for the past two decades been receiving government-supplied adjustment assistance, which has been criticized for its ineffectiveness in promoting the necessary types of adjustment.

Successful adjustment assistance requires firstly the correct assessment of the broad direction of long-term changes in the country's comparative advantage, secondly the correct identification of the factors affecting autonomous adjustment in the industry concerned, and thirdly the creation of effective policies and environments for implementing the needed adjustment. The broad direction of long-term changes in comparative advantage can mean concentration on particular line of production at their own risk and profit. Surrounding factors characteristic of the Japanese textile industry, such as the traditional systems of production and distribution in "textile areas" (groups of cities and towns specializing in textile production) and the operation of a great number of small-scale weaving firms with family labor, should be duly considered in assessing the process of adjustment. International rules on government policy measures are in the process of being drawn up during various international discussions of the problem. The maintenance of freer trade environments and "positive adjustment policies" should be important points of reference in evaluating government policy.

Starting with the historical background of trade relationships between Japan and neighboring Asian countries, Section II will present an overview of the basic characteristics of the adjustment process in the Japanese textile industry. Section III will analyze the recent trend of increasing textile imports from the Asian ADCs and will discuss the contribution of rapid trade liberalization by the Japanese government. Section IV will identify two groups of firms, one surviving and the other disappearing, in the process of reorganizing the production system in textile areas in the face of difficulties in recruiting young laborers and competing with products from the ADCs. The last section will evaluate the adjustment assistance policy adopted by the Japanese government and propose an optimum combination of selective adjustment assistance with liberal import policies, which should lead to a new international industrial cooperation scheme that can be seen as a better alternative to the present textile trade arrangement under the Multi-Fiber Arrangement (MFA).

II. PROCESS OF ADJUSTMENT: OVERVIEW

The adjustment problem of the Japanese textile industry is better understood in the context of its history in the postwar period. Japan was the sole exporter

TABLE I

DEMAND-SUPPLY BALANCE OF JAPAN'S TEXTILE INDUSTRY, 1955–85

(1,000 ton and %)

	Domestic Demand (D)	Exports (X)	Domestic Output (S)	Imports (M)	X/S (%)	M/D (%)
1955	546	341	872	4	39.1	0.7
1960	743	487	1,270	4	38.3	0.5
1965	1,050	495	1,566	6	31.6	0.6
1970	1,444	610	2,036	63	30.0	4.3
1971	1,496	735	2,175	87	33.8	5.8
1972	1,528	719	2,130	143	33.8	9.4
1973	1,932	550	2,248	343	24.5	17.8
1974	1,431	622	1,948	211	31.9	14.7
1975	1,404	639	1,879	141	34.0	10.0
1976	1,533	637	2,000	169	31.8	11.0
1977	1,411	710	1,854	167	38.5	10.8
1978	1,738	568	1,975	317	28.8	18.2
1979	1,887	508	2,072	339	24.5	18.0
1980	1,898	595	2,213	281	26.9	14.8
1985	2,143	546	2,311	378	23.6	17.6

Sources: [4] and Ministry of International Trade and Industry, *Sangyō kōzō no chōki bijon* [Long-range vision of industrial structure] (1979).

Notes: 1. Includes all textiles for both clothing and industrial use, converted to a yarn basis.
2. The 1980 and 1985 figures are MITI estimates.
3. $D+X=S+M$ does not necessarily hold because of the change in inventory stock.

of textile products in the region in the early 1950s, but Asian ADCs have caught up and have become an important group of textile exporters to the world market. The Asian ADCs, in turn, are being pursued by China and the ASEAN countries in the 1980s. Competition between Japan and its Asian neighbors started first in the latter's home markets in the 1950s. It was intensified in the U.S. and other third country markets in the 1960s and began to be felt in Japan's own domestic market in the 1970s.

However, competition does not mean that the Japanese textile industry has been declining over the past thirty years. On the contrary, it has developed the synthetic textile sector as the new core of the industry, its production has increased threefold, and it has actively undertaken capacity investment overseas during the same period. Although its expansion may not be comparable to that of steel and automobile production, it nevertheless continued to expand steadily until the early 1970s.

The steady output expansion can be partly attributed to the steady growth of domestic demand. Table I shows the aggregate demand and supply of all textile products (both for clothing and industrial use) converted to a yarn basis.[1] The

[1] Textile materials are excluded from this table. If included, the overall textile trade balance decreased from a big surplus to a surplus as small as 36 million dollars (0.7 per cent of total exports) in 1978.

early 1970s marked the turning point after which domestic output stagnated and exports declined, while imports increased rapidly, even if one disregards the import rush of 1973.[2] Exports still exceeded imports and maintained a net small surplus, reflecting high export competitiveness in some lines of textile production. The 1980 and 1985 figures are forecasts made by the Ministry of International Trade and Industry (MITI) in 1978. Domestic demand is expected to remain unchanged, while both exports and production will turn downward as imports continue to increase.[3] If, however, the 1977–79 trend is extended, imports will easily exceed the forecast in the table.

The textile industry still occupies a big share of the Japanese economy. The number of enterprises totals 310 thousand, 150 thousand in the manufacturing sector and 160 thousand in the distribution sector. The number of persons engaged totals 2.56 million, 1.47 and 1.09 million in the manufacturing and distribution sectors, respectively. If immediate family members are included, ten million Japanese may be counted as still dependent on this industry.[4]

Many lines of textile production are labor-intensive and Japanese comparative advantage in these lines has been lost because Japan's labor wages have risen much faster than those of her neighbors. The deterioration in competitiveness was clearly reflected in the replacement of Japanese textile products by those from the Asian ADCs in the U.S. market. During the five years 1969–74, the Japanese share of imports of cotton fabric and clothing in the U.S. market declined from 29.4 per cent and 23.0 per cent to 8.2 per cent and 7.8 per cent respectively, whereas the Asian ADCs' share expanded from 37.7 per cent and 45.3 per cent to 52.5 per cent and 62.0 per cent respectively [6]. The tendency has also been accelerated in recent years. The Japanese share of imports of cotton and synthetic fibrics in the U.S. market decreased almost by 40 per cent (5.2 per cent to 3.0 per cent and 26.7 per cent to 16.3 per cent respectively) during the years 1977–79 [7].

The long-run trend of deteriorating competitiveness differs among various lines of textile production. Labor-intensive lines of standardized quality have rapidly lost competitiveness amid such drastic changes as the yen revaluation and continued wage increases in the 1970s, and they will continue to lose competitiveness hereafter. On the other hand, other lines of textile production are still competitive and maintain high export output ratios. There remains plenty of room for upgrading and differentiating the present products.

Table II gives the demand-supply trend for major textile products including forecasts for 1980 and 1985. Increasing import-demand ratio (M/D) and declining export-output ratio (X/S) are commonly observed for all products as well as for the aggregated textile products in Table II. However, the levels of M/D and X/S differ greatly among the products.

The declining M/D is especially noticeable for cotton yarn and fabric and

[2] The sharp import increase in 1973–74 will be investigated in Section III.

[3] Based on the interviews with representatives of individual textile firm associations.

[4] [2]. Figures are for 1974. The numbers of enterprises and persons engaged in textile manufacturing remained unchanged in 1978.

TABLE II

DEMAND AND SUPPLY OF INDIVIDUAL TEXTILE PRODUCTS

		Domestic Demand (D)	Export (X)	Domestic Production (S)	Import (M)	M/D (%)	X/S (%)
(1) Cotton yarn	1970	437	112	526	33	7.6	21.3
(thousand tons)	1975	465	75	461	67	14.4	16.3
	1980	603	69	508	164	27.2	13.6
	1985	641	62	503	200	31.2	12.3
(2) Synthetic yarn	1970	248	184	442	6	2.3	41.7
(staple)	1975	329	162	452	24	7.3	35.8
(thousand tons)	1980	502	132	530	104	20.7	24.9
	1985	617	113	572	158	25.5	19.7
(3) Filament fabric	1970	1,305	644	1,982	3	0.2	32.5
of synthetic &	1975	1,497	1,059	2,545	11	0.7	41.6
regenerated fiber	1980	890	1,131	1,983	38	4.2	57.0
(million m^2)	1985	1,135	1,003	2,080	58	5.1	48.2
(4) Fabrics of	1970	658	750	1,461	10	1.6	51.3
synthetic staple	1975	628	624	1,141	40	6.3	54.7
fiber (million m^2)	1980	683	567	1,210	40	5.8	46.9
(5) Cotton fabrics	1970	2,215	431	2,617	72	3.3	16.5
(million m^2)	1975	2,101	283	2,125	159	7.6	13.3
	1980	2,263	322	2,334	226	10.0	13.8
(6) Outer garment	1970	251	85	326	19	7.5	26.1
(million pieces)	1975	327	53	325	55	16.9	16.3
	1980	456	60	424	95	20.8	14.2
	1985	618	66	533	154	25.0	12.4
(7) Underwear	1970	479	13	493	5	1.1	2.6
(million pieces)	1975	427	40	391	36	8.4	10.2
	1980	539	50	480	64	11.9	10.4
	1985	567	60	459	113	20.0	13.1

Source: [4].
Note: The 1980 and 1985 figures are MITI estimates.

clothing. Domestic production has already been replaced by imports in the case of low count cotton yarn and plain white shirts. The 1979 M/D for cotton textiles as a whole reached a 30.2 per cent level. Decreasing X/S and increasing M/D are also expected for synthetic yarn due to higher oil prices, while a high X/S and a low M/D are expected to be maintained for synthetic fabric where the increase in raw material price is offset by high technology and superior quality.

For example, Japan occupied 82.6 per cent of the U.S. import of polyester filament fabrics in 1978, far exceeding West European and Korean shares. In particular, thin silk-like fabrics for ladies' wear are produced by a special technology and are only available from Japanese producers. These remain competitive in the U.S. market at higher retail prices due to the yen revaluation. Deteriorated price competitiveness has so far been offset by such non-price competitive factors as superior quality and design, as well as reliable supply at

specific delivery dates. On the other hand, standardized synthetic fabrics has lost out to Taiwanese products in the Philippine market where price competition prevails [3].

The decreasing exports and increasing imports are also attributed to changes in trade policy (Table III). The Japanese textile industry has encountered various changes in trade policy since the early 1960s. Three trade agreements—the Long-Term Arrangement on cotton textiles (LTA) in 1961, the voluntary restraint on export of synthetic and woolen textiles to the United States in 1971, and the MFA in 1974—tended to affect unfavorably Japanese exports to the U.S. market. On the other hand, textile imports have been encouraged by a series of tariff reductions as will be discussed in the next section.

The above policy changes have been considered by many textile producers as pressure from outside. One of them was related to a political decision of the government and another was attributed to the failure of government policy, although adjustment assistance was given to textile producers in order to compensate for those policy changes. The former was the voluntary restraint of export to the United States which was a compromise reached in exchange for the return of Okinawa, while the latter reflected the rapid appreciation of the yen after the government tried in vain to maintain cheap yen rates in 1973 and 1978.

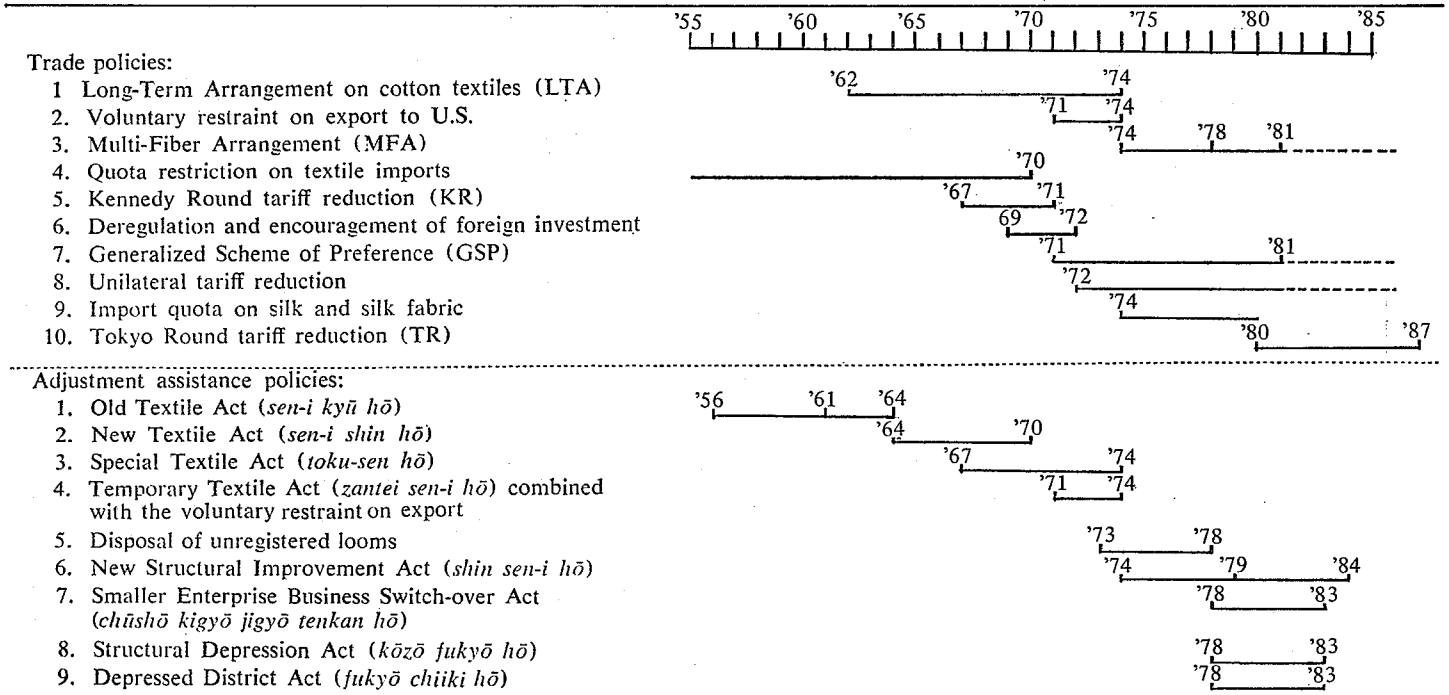
III. TEXTILE IMPORT AND TRADE LIBERALIZATION

Table IV shows the increase in import of textile products (excluding raw cotton and other primary textile materials) to Japan, classified by country of origin. Total import value increased by 450 per cent from 1966 to 1971, by 340 per cent from 1971 to 1976, and by 60 per cent between 1976 and 1978. Average annual growth rates at constant prices were 28 per cent, 18 per cent, and 15 per cent respectively for the periods in question. Import from developed countries occupied three quarters of total textile imports in 1966, 40 per cent in 1971, and a quarter in 1976–78. The increasing share of the ADCs was remarkable during the decade 1966–76. Korea supplied 38 per cent of textile imports to Japan in 1978, while China was the second largest single supplier. Imports from Singapore and other ASEAN countries increased rapidly but their combined share was still as small as 2.5 per cent in 1978.

The sharp increase in imports in 1973–74 requires some explanation. It should be regarded as an abnormal divergence from the steady increasing trend since the late 1960s. It was induced by speculative demand in the middle of the worldwide commodity boom before the oil shock and was aggravated by the complicated distribution system in the Japanese textile market. They have been linked with each other by a multi-layered distribution system so that there has been a weak connection between producers and final consumers. Producers tend to be led, not directly by final consumption, but by speculative demand induced by market prospect. The maintenance of obsolete but still well-working spindles and looms by small and medium firms in excess of the normal size called for

TABLE III

THE CHRONOLOGY OF ADJUSTMENT ASSISTANCE AND TRADE POLICIES AFFECTING THE TEXTILE INDUSTRY



Sources: [4] and others.

Note: Dotted lines for 3, 7, and 8 of trade policies indicate that their extention is expected.

TABLE IV
JAPAN'S IMPORTS OF TEXTILE PRODUCED BY COUNTRY

(U.S.$ 1,000)

	1966	1971	1976	1978
Total	68,721	382,934	1,699,240	2,730,815
1. Developed countries	49,778	152,701	411,165	745,899
	(72.4)	(39.9)	(24.2)	(27.3)
Asian ADCs (2–5)	7,252	146,732	956,261	1,470,470
	(10.6)	(38.3)	(56.3)	(53.8)
2. Korea	4,597	80,400	681,012	1,035,147
3. Taiwan	596	39,757	158,673	281,883
4. Hong Kong	2,018	26,031	108,342	144,076
5. Singapore	14	544	8,185	9,364
Other ASEAN (6–9)	222	3,803	37,144	54,945
	(0.3)	(1.0)	(2.2)	(2.0)
6. Thailand	147	2,722	22,518	29,291
7. Philippines	14	591	10,250	7,492
8. Malaysia	1	104	2,518	12,289
9. Indonesia	60	386	1,858	5,873
10. India	583	6,232	20,940	40,546
11. Pakistan	—	10,564	32,191	40,666
12. China	4,597	32,050	166,740	307,029
	(6.7)	(8.4)	(9.8)	(11.2)

Sources: Ministry of International Trade and Industry, *Tsūshō hakusho* [White paper on international trade], individual year issues.
Note: Includes only SITC 65+84. Figures in parentheses represent percentage shares of total imports.

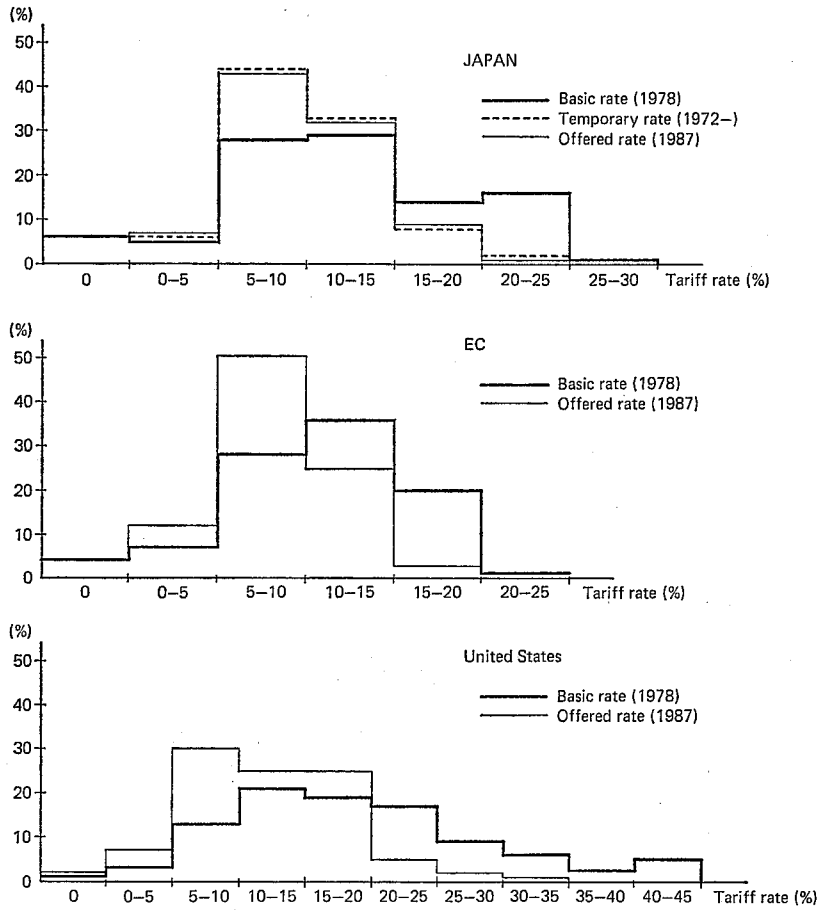
by final demand easily leads to overproduction and financial burden to those firms.

The sharp import increase was an undesirable development both for importers and exporters. Many importers, after rushing to rake up goods from various overseas sources, suffered losses in the big pileup of inventory and were discouraged about prospects of future import expansion. Exporters in the developing countries, on the other hand, were jolted by a sudden boom and a quick setback. Import increases in the late 1970s are regarded as a return to a steadier long-run tendency.

The increase in textile imports, especially from the Asian ADCs, is attributed to the liberal import policy of the Japanese government as well as to the rapid expansion of supply capacity of the Asian ADCs. Quota restriction was introduced on imports of silk and silk fabrics (mainly from Korea and China) in 1975, but it is regarded as an extention of sericulture protection and should be distinguished from liberal import policies with respect to other manufactures.

Japanese tariffs were reduced on three occasions. Tariffs on most manufactures were reduced by 35 per cent, on average, under the Kennedy Round (1967–71), and they were reduced unilaterally by 20 per cent in 1972. They will be further reduced under the Tokyo Round (1980–87) according to a

Fig. 1. Distribution of Tariffs on Textiles under Tokyo Round Tariff Reduction (Distribution by Number of Tariff Items)



Note: Under the TR, the reduction formula is applied to the basic tariff rates of each area in 1973. Japanese tariffs have often been reduced temporarily but their basic rates remained unchanged during the period 1972–80. The TR reduces the basic rates to what are close to the temporary rates already achieved by 1972. Japanese government has decided to maintain the temporary rates until the basic rates are reduced to their level in 1987.

harmonization formula by which higher tariffs will be reduced more than lower ones.

Figure 1 compares changes in the distribution of tariffs on textile under the TR agreement among Japan, United States, and EC. Tariffs on textiles are higher than those on other products in general but a clear downward shift of the distribution is observed for each area. The pre-TR tariff distribution of EC was concentrated narrowly within 5–20 per cent with a peak in the 10–15 per cent range. It shifts leftward so as to be included within the 0–15 per cent category

TABLE V
COMPARISON OF TARIFFS ON SELECTED TEXTILE PRODUCTS: JAPAN, EC, AND UNITED STATES (%)

	Japan				EC		U.S.	
	1965 Pre-KR	1978 Basic	1978 Temporary	1987* Offer	1978 Basic	1987* Offer	1978 Basic	1987* Offer
(1) Cotton yarn 55.05 (U.S. 301.30)†	5.0	3.5	2.8	2.8	7		8.0	6.5
(2) Synthetic yarn (staple) 56.05 (U.S. 310.40)	25.0	12.5	10.0	10.0	11	9	13.8	11.0
(3) Cotton fabric 55.09 (U.S. 321)	10.0	7.0	5.6	5.6	13	10	13.3	10.0
(4) Synthetic fabric (spun) 56.07 (U.S. 338.30)	25	10.0	8.0	8.0	16	11	25.6	14.8
(5) Synthetic fabric (filament) 51.04 (U.S. 338.30)	25	12.5	8.0	8.0	13	11	25.6	14.8
(6) Outer garments 61.01 & 02 (U.S. 380.84)	20	17.5	14.0	14.0	17	14	31–34	10–30
(7) Underwear 60.04, 61.03 (U.S. 378.60)	25	14.0	11.2	11.2	17	13	39.0	15.6

Source: Tariff tables of each country.
Note: There is listed only a representative tariff rate for each category, excluding those on fabrics or articles of clothing with lace, fur, precious metals, etc.
* Offered rates, not yet finally concluded.
† BTN code for Japan and EC, with U.S. tariff code in parentheses.

with a peak in the 5–10 per cent range. The U.S. tariff distribution contrasts with the EC's by its wide dispersion over 0–45 per cent with a broad peak in the 10–25 per cent range. It moves leftward, and will be close to the EC's pre-TR distribution by 1987.

The pre-TR distribution of Japan was between those of EC and United States, but its post-TR distribution resembles more closely the post-TR distribution of EC, with a peak in the 5–10 per cent range and three quarters of tariffs included within the 5–15 per cent range. It is worth noting that in Japan a substantial portion of the TR reduction has been accomplished in advance by the 1972 unilateral reduction. That is, Japanese textile tariffs had been reduced to the post-TR EC level by the early 1970s. Table V shows that Japan reduced tariffs on major textile products quickly, in advance of the EC and the United States, and maintained the lowest tariffs among the three through the 1970s.

Import increase from the ADCs is also attributed to the GSP which started in August 1971. A GSP quota is set for each manufactured import with a 50 per cent tariff exemption (in the case of textiles) until imports from the GSP beneficiaries reach the quota. The quota was determined initially based on 1968 imports and it increased greatly in 1977 when the base year was changed from 1968 to 1975. Table VI summarizes imports under the GSP of the twenty-eight major textile items in the 1972 and 1978 fiscal years. The total import of the twenty-eight items combined ((a) in Table VI) increased by 98 per cent while

TABLE VI

TEXTILE IMPORTS UNDER THE GSP

(Million yen, %)

	1972*	1978*
(a) Total imports †	331,650	656,544
(b) Imports from the GSP beneficiaries	68,050	283,808
(c) GSP quota	14,792	33,873
(d) Imports under the GSP	10,308	32,073
(d)/(c)	69.7%	94.7%
(b)/(a)	20.5%	43.2%
(d)/(b)	15.1%	11.3%

Sources: Ministry of Finance, *Nihon bōeki geppyō* [Japan's foreign trade statistics], 1972, 1978. Prime Minister's Office, *Kampō* [The official gazette], 1973, 1979.

* Fiscal years (April–March).

† The sum of twenty-eight major textile items (BTN 4 digit).

their import from the GSP beneficiaries (b) increased by 317 per cent during the six years. The quota of the twenty-eight items combined (c) increased by 129 per cent and had been fulfilled by 1978 (d/c), so that import under the GSP (d) increased by 210 per cent. Because imports from the GSP beneficiaries (b) outgrew the GSP quota (c), the share of GSP imports in the total imports from the beneficiaries (d/b) decreased.

Import from the GSP beneficiaries tend to be concentrated at the beginning of every fiscal year (April or May) so that the GSP quotas are filled quickly and are stopped for the rest of the year. The GSP has been of positive contribution in increasing imports from the developing countries, but leaves much room for improvement in terms of quota expansion.[5]

The GSP, introduced by Japan and the EC after 1971 and by the United States after 1976, has tended to promote the relocation of manufacturing production to the developing countries for export to developed country markets. A recent questionnaire survey of major textile firms shows the characteristics of their overseas investment as follows: 114 cases of foreign direct investment by Japanese textile firms (mostly by synthetic fiber producers and the larger spinners) were registered by the end of 1978, of which 86 were begun during the period 1970–75. Among the latter, 60 per cent or 59 cases, were concentrated in East and Southeast Asia.[6]

The proximity of production to promising markets was the main incentive

[5] Figures are obtained from Rhee Chong-yun, "Nihon no kōgyōhin yunyū to tokkei kanzei seido" [Japan's imports of manufactures under the general system of preference] to be published in the forthcoming issue of *Bōeki to kanzei* [Foreign trade and tariffs].

[6] Figures are based on a questionnaire survey conducted at the end of 1979 of sample firms selected from the 114 cases above. See Kaoru Watanabe and Keiichirō Isoda, "Sen-i sangyō ni okeru kaigai shinshutsu to sono senryaku" [Foreign investment strategy of the Japanese textile industry], in *Wagakuni kigyō no kaigai shihon shinshutsu ni kansuru kenkyū* [A study of Japanese firms' overseas investment], ed. Keiichirō Isoda (Osaka: Kansai Keizai Kenkyū Sentā, 1980).

to invest overseas, while lower wages and the GSP gave additional incentives. Sixty-two of the above-mentioned eighty-six firms produce more than half of their total output for local markets. Sixteen firms produce for the Japanese market and twenty-eight firms for other developed country markets, of which nine and eight produce primarily for export to the Japanese and to other developed-country markets respectively. Five firms produce 100 per cent for export to Japan. The import from overseas subsidiaries of Japanese textile manufacturers is expected to increase further in the 1980s in view of the fact that the ASEAN countries have started a steady export of their textile products to the world market.

Textile import to Japan increased through the 1970s, so that in 1977 it occupied 20 per cent of the synthetic fabric exports and about 10 per cent of the cotton fabric and clothing exports from the ADCs to all developed countries combined. The share going to Japan was about a quarter to a third of those to the EC and the United States. The difference is attributed to the relatively small size of the Japanese market and the severe competition within it, as will be discussed below, rather than to the trade policy of the Japanese government. The relatively large shares from Korea and Taiwan in total Japanese imports (in Table IV) are not so much due to any favorable bias as simply to their competitiveness on the Japanese market.

It is often contended, however, that exports to Japan are dominated by Japanese trading companies, thus making it difficult for outsiders to penetrate the Japanese market. It is true that a majority of developing-country exports to Japan are handled by Japanese importers. However, there are more than 2,000 importers in Japan's Textile Importer Association (Nihon Sen-i Yunyū Kumiai) and each of them tries to realize whatever profitable trade opportunity it can find anywhere, as was well reflected in the import rush of 1973. In that particular year competitive importers responded quickly to bullish speculative demand and imports more than doubled, while domestic production increased only moderately (Table I).

It should be noted in this context that the recent increase in imports of developing-country products to Japan has been accompanied by changes in channels of import and domestic distribution. The distribution system in the Japanese market has traditionally been characterized by "long and narrow" channels and high distribution cost resulting from small-scale retailers and multi-layered wholesalers. This complicated distribution system has tended to prevent European and American exporters from penetrating the Japanese market. Recently, however, such large-scale retailers as department stores or big supermarkets have grown in such a way as to by-pass existing channels and to import directly from abroad. Thirty-two per cent of imported consumption goods purchased by department stores and 20 per cent of those purchased by big supermarkets are imported directly and these figures are expected to increase in future. These changes provide "broad and short channels," thereby reducing distribution cost and promoting competition, and providing more chances for foreign exporters if they are competitive enough to penetrate the Japanese market. Asian ADCs,

in expanding the shares of their products in the Japanese market, have already taken advantage of this change.

IV. ADJUSTMENT IN "TEXTILE AREA"

Japanese textile manufacturing consists of scores of big firms specializing in fiber-making and spinning on the one hand, and a great number of small and medium firms specializing in weaving under subcontract with big spinners or trading companies on the other. Both fiber-makers and spinners have been suffering from deteriorating competitiveness and prolonged maintenance of excess capacity. Cotton spinners have given up the domestic production of some lower count yarn in the face of wage increase and catching-up by the ADCs. Synthetic fiber makers have suffered from higher material price (10–18 per cent higher than in the United States) and self-sufficiency in the ADCs and ASEAN.

There are, however, several alternatives available for these big firms to take in the adjustment to deteriorating competitiveness.

(1) Joint abolition of excess capacities under recession cartel.
(2) Modernization of their machines and equipments so as to be competitive with labor intensive production in the ADCs.
(3) Merger of marketing and other activities by groups of a few firms in order to avoid duplicated investment and improve work efficiency in these activities.
(4) Vertical integration of weaving and apparel-making through closer ties between weavers and apparel-makers so as to exploit possibilities for increased value-added, upgrading, and product differentiation.
(5) Relocation of their domestic production to overseas locations as mentioned in the preceding section.
(6) Diversification of business activities to other industries, such as fine chemicals and food processing.

These various alternatives differ in their adjustment effects and individual firms will find each of them suitable or unsuitable in differing degrees. Abolition of excess capacity is promoted as a temporary measure under the Structural Depression Act (*kōzō fukyō hō*) (1978–83). Some cotton spinning factories are competitive with fully automated, labor-saving production system. Two groups of firms have been preparing for establishing joint marketing firms. A few firms have been investing overseas extensively since the mid-1960s, while other firms have put more emphasis on diversifying their activities. The percentage share of non-textile proceeds to total proceeds ranges from 54 per cent for one fiber-maker and 25–38 per cent for six firms engaged in both fiber making and spinning, to less than 8 per cent for other spinning firms.

The latter are comprised of firms in "textile areas" in which individual firms specialize both in different processes of weaving, dyeing, and finishing, and in different varieties of textiles. A majority of them are small and medium-sized firms with neither sufficient marketing nor credit facilities. They are not integrated vertically so as to produce integrated textile firm groups but are linked

under subcontract with trading companies which provide credit and marketing facilities. There are sixty-four government-designed "textile areas" producing cotton and synthetic spun fabrics and they have organized the Japan Cotton and Staple Fiber Weavers' Association (Nihon Men Sufu Orimono Kōgyō Rengō-kai), which altogether produces 82.8 per cent (in 1975) of the total output of cotton and synthetic spun fabrics in Japan.[7] Therefore, it is necessary to understand the "textile area" organization and to predict how it will be adjusted to the catching-up of the ADCs.[8]

The following features characterize Japanese textile production in these areas, which is contrasted with the integrated production of all processes by the larger firms in the Asian ADCs:

(1) Accumulation of skills and know-how in weaving, dyeing, and finishing,
(2) Specialization by many competent small firms which are suited to the production of many varieties of quality goods in small lots,
(3) High capability of adjusting to changes in textile materials (from silk to cotton, and to synthetics) in types of products and in export markets,
(4) High dependence on export, as high as 80 per cent or more in some areas but 40–60 per cent on the average.

Adjustment assistance by the Japanese government has taken various forms, ranging from the abolition of excess capacity, modernization of machines and equipments, and switching-over to other lines of business, to more general retraining programs for displaced textile workers (see Table III).

Ministry of International Trade and Industry and the Textile Industry Council (Sen-i Kōgyō Shingi-kai) have long been concerned with the small and medium firms in textile areas. It has been dealing with the problem of excess capacity and the implementation of an abolition program in a series of textile industry acts since 1956. Abolition based on individual firms' own initiative has been insisted on in principle, but in reality the main promoter has been the MITI's purchase-and-scrap program. Subsidies totalling 52.5 billion yen were spent on this program under the first through the fifth acts, of which 48.9 billion yen was given in return for the industry's acceptance of voluntary restraint on textile exports to the United States.

On the other hand MITI started a series of structural improvement programs in 1967 (Special Textile Act in Table III). Under the guidance of prefectural governments, the weavers' associations in each "textile area" submitted a plan in which the optimum capacity of its area was specified and the new building

[7] Both cotton and synthetic spun fabrics are produced jointly by "cotton weavers" because of the common weaving technique. Other major organizations within the textile industry are the Japan Silk and Rayon Fiber Weavers' Association (Nihon Kinu Jinken Orimono Kōgyō Kumiai Rengō-kai) which is composed of small and medium weavers of silk, artificial silk, and synthetic filament fabrics; the Japan Spinners' Association (Nihon Bōseki Kyōkai); and the Japan Chemical Fibers Association (Nihon Kagaku Sen-i Kyōkai).

[8] The author has benefited from his visits to three textile areas, Mikawa, Banshū, and Tochio, and from interviews with people in the textile business there in 1979 and 1980. He has also benefited from his access to a questionnaire survey of weaving firms conducted in 1976 by the Small Business Promotion Corporation.

of modern looms was to be undertaken together with the scrapping of the obsolete ones of equivalent capacity. The number of looms scrapped and built was allocated among individual firms on the basis of the firms' applications and their prospective competence. The Japan Development Bank and the Smaller Business Finance Corporation provided individual firms with low interest long-term loans equivalent to 50–70 per cent of required expenditure under guarantee of the weavers' associations. Almost 70 per cent of the planned figures was achieved between 1967 and 1971. The program was extended until 1974. The program was renewed under the New Structural Improvement Act (*shin sen-i sangyō kōzō kaizen hō*) for 1974–79 and again extended for another five years in 1979. The program has contributed to the modernization of machines and equipments and to the new emphasis since 1974 on the assistance to R&D activities and the promotion of the modern apparel industry.

On the other hand, the switching-over to other lines of business has been less successful. Both loans and subsidies were given to small and medium weavers in order to promote the switchover as compensation for voluntary export restraint in 1971, but only 10 per cent of the planned figures was realized. The major direction of switchover planned for these small weaving firms was confined to related industries such as apparel-making and paper products.

Unlike the big textile firms mentioned earlier, small and medium firms in "textile areas" have only a limited access to other alternative adjustments. They cannot afford foreign investment independently and the introduction of a new industry to their areas is too big a job for individual firms.

Table VII shows the changes in the number of factories and persons engaged (including owners and their family workers as well as employees) in the textile industry as a whole for the past two decades. The number of persons engaged in both textile mills (spinning and weaving) and man-made fiber-making decreased by one third between 1970 and 1977 while apparel-makers continued to increase until 1975. In contrast, the number of factories decreased only slightly.

The change in firm structure underlying the aggregate changes mentioned above is shown in Table VIII. Although these tables are limited to small and medium weaving firms (cotton and synthetic spun fabrics) in "textile areas," they indicate a clear-cut tendency during the 1970s. Medium-sized firms with more than 100 looms and more than thirty persons decreased drastically in number, while small firms with 11–30 looms and 4–9 persons increased both in number of factories and looms. Family labor factories with 1–10 looms and less than four persons did not change much.

The prime-moving force underlying this change is the increasing difficulty in recruiting young female employees. Only a relatively small number of competent firms of medium size could maintain their scale of operation by introducing automatic, labor-saving looms and by reducing the number of their employees. Smaller firms, while maintaining their traditional production, maintained their levels of employment (family labor plus a few persons from the outside). The structural change in the weaving sector appears to contradict the aim of structural

TABLE VII

NUMBERS OF ESTABLISHMENTS AND PERSONS ENGAGED IN THE TEXTILE INDUSTRY, 1960–77

	1960	1965	1970	1975	1977
A. Number of establishments (thousand)					
(1) Total manufactures	487	558	653	734	714
(2) Total textiles*	102	119	146	157	150
(3) Textile mills	83	100	113	114	107
(4) Apparel and other finished products	19	19	33	43	42
(5) Man-made fiber†	(38)	(51)	(77)	(76)	(76)
B. Number of persons engaged (thousand persons)‡					
(1) Total manufactures	8,169	9,921	11,680	11,296	10,874
(2) Total textiles*	1,551	1,720	1,750	1,589	1,470
(3) Textile mills	1,264	1,327	1,264	996	892
(4) Apparel and other finished products	210	311	414	531	529
(5) Man-made fiber	76	82	72	63	50

Source: Ministry of International Trade and Industry, *Kōgyō tōkei hyō* [Census of manufactures], individual year issues.

* All figures are rounded numbers so that the sum of (3) + (4) + (5) does not make (2).

† Figures in parentheses are in simple numbers (not thousand).

‡ They include owners of the firms and their family workers as well as employees.

improvement programs to increase the scale of firms while reducing their number.

However, the aggregate figures alone do not tell us so much about the actual changes in the textile industry. Two groups should be identified among a large number of weaving firms in "textile areas." One consists of major medium-scale firms (e.g., in the last two categories of Table VIII-A), each with a score of subcontracting small firms (in the second to fourth categories), and they can be expected to survive the competition with ADC rivals and to continue to supply to home and foreign markets. The other is typically represented by small family labor factories (the first category in Table VIII-A) which will leave the industry sooner or later.

The competitiveness of the first group is expected on the following grounds, although straight-forward evidence is not readily available.

(1) Many old fashioned but still well-functioning weaving looms have long been maintained in "textile areas." The share of automatic machines (both automatic and super-automatic looms) was 36 per cent in 1978, while the same share is 80 per cent or more in Asian ADCs. The structural improvement programs have promoted the scrapping of old machines and the building of modern ones in each "textile area."

Table IX shows the age and type distribution of weaving looms in all "textile

TABLE VIII

A. SIZE OF DISTRIBUTION OF WEAVING FIRMS (BY NUMBER OF LOOMS)

Number of Looms	Number of Factories			Number of Registered Looms		
	1965	1970	1975	1965	1970	1975
1–10	10,148	11,188	10,746	45,386	51,599	51,852
	(61.4)	(63.7)	(58.1)	(13.6)	(16.3)	(16.0)
11–30	3,986	4,210	5,361	72,359	74,285	95,030
	(24.1)	(24.0)	(29.0)	(21.7)	(23.4)	(29.3)
31–50	1,089	997	1,231	42,575	38,997	48,326
	(6.6)	(5.7)	(6.6)	(12.8)	(12.3)	(14.9)
51–100	757	698	775	52,815	49,294	53,807
	(4.6)	(4.0)	(4.2)	(15.8)	(15.5)	(16.6)
101–300	465	390	338	75,468	63,688	53,886
	(2.8)	(2.2)	(1.8)	(22.6)	(20.1)	(16.6)
301–	91	83	44	44,755	35,960	19,577
	(0.6)	(0.5)	(0.2)	(13.4)	(12.5)	(6.5)
Total	16,536	17,566	18,495	333,358	317,532	323,941
	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)	(100.0)

B. SIZE OF DISTRIBUTION OF WEAVING FIRMS (BY NUMBER OF PERSONS ENGAGED)

Number of Persons	1965	1970	1975
–3	7,827 (57.5)	10,148 (61.3)	10,146 (58.3)
4–9	3,511 (25.8)	3,976 (24.0)	4,961 (28.5)
10–19	956 (7.0)	1,089 (6.6)	1,141 (6.6)
20–29	705 (5.2)	757 (4.6)	763 (4.4)
30–49	164 (1.2)	179 (1.1)	135 (0.8)
50–99	265 (2.0)	271 (1.6)	203 (1.2)
100–199	130 (1.0)	82 (0.5)	30 (0.2)
200–299	21 (0.15)	23 (0.14)	7 (0.04)
300–499	12 (0.09)	9 (0.05)	7 (0.04)
500–	29 (0.21)	23 (0.14)	17 (0.10)
Total	13,620(100.0)	16,557(100.0)	17,410(100.0)

Source: Calculated from unpublished data compiled by Japan Cotton and Staple Fiber Weavers' Association (Nihon Men Sufu Orimono Kōgyō Rengō-kai).

Notes: 1. Figures include only member firms of the association, excluding weavers of filament fabrics and spinning-weaving firms.

2. Figures in parentheses indicate percentage shares.

areas." Thirty-eight per cent of the looms were built during the first and second four-year plans of the programs. The percentage of automatic machines has been increasing and super-automatic looms have recently come to be preferred over automatic looms, while ordinary looms are still in demand. Participation in the programs tend to be concentrated among firms of relatively large size. In the Mikawa textile area, almost 100 per cent of the firms with more than forty looms participated in the program, while 59 per cent of the firms with twenty–forty looms, 31 per cent of the firms with eleven–twenty looms, and only 9 per cent of the smallest firms with less than eleven looms did so. Automatic machines are labor-saving to the extent that the number of looms operated by one worker

TABLE IX

COMPOSITION OF WEAVING LOOMS BY TYPE AND AGE

(Number and %)

Age \ Type	Ordinary Loom	Automatic Loom	Super-automatic Loom	Total
Built before 1960	117,661	22,838	0	140,499
	107,938	24,353	0	132,291
	(28.5)	(6.4)	(0)	(34.9)
1960–66	66,422	20,271	5,017	91,710
	64,063	22,401	7,988	94,452
	(16.9)	(5.9)	(2.1)	(24.9)
1967–70	27,822	22,836	19,946	70,604
	27,065	25,047	21,637	73,749
	(7.1)	(6.6)	(5.7)	(19.4)
1971–74	45,013	7,952	21,092	74,057
	39,131	8,692	24,129	71,952
	(10.3)	(2.3)	(6.4)	(19.0)
1975–76	3,451	1,001	1,733	6,185
	3,421	1,094	2,074	6,589
	(0.9)	(0.3)	(0.5)	(1.7)
Total	260,369	74,898	47,788	383,055
	241,618	81,589	55,828	379,033
	(63.7)	(21.5)	(14.7)	(100.0)

Source: See Table VIII.

Note: Figures in the first rows indicate simple numbers of existing looms classified by age and type, those in the second rows numbers of capacity equivalent looms, and those in parentheses their percentage distribution by age and type.

is more than doubled, thus enabling the bigger firms shown in Table VIII-A rapidly to reduce their employees so as to offset rising wages.

(2) While introducing modern machinery, major firms maintained subcontract relationships with a score of small weavers with high technology, allowing these to specialize in differentiated high-quality products in small lots, thus taking full advantage of long-accumulated skills and know-how in "textile areas." Ordinary looms are better fit for some production lines of differentiated products in small lots.

(3) A big quality market at home will give the major firm group additional advantage in competition with the ADC rivals. They are shifting their sales from the foreign to the domestic market where full development of apparel-making will provide them with a growing demand for high-quality fabrics of differentiated design and finishing. They expect a better chance of overcoming the disadvantage of higher labor cost by such non-price factors as high quality, differentiated finishing, and prompt delivery in the home market.

A typical firm of the second group can be described as follows. It is a family-labor factory in a small remodelled barn equipped with ten old-fashioned looms operated by three workers, the owner himself, his wife and his daughter. His daughter's husband either works at the town office or commutes to a nearby big city for a stable life-long job. The owner himself had worked at a bigger weaving

factory before he started his factory during the textile boom in 1953. He is now in his fifties or sixties, but does not expect his son-in-law to succeed him in his business. He has a small paddy field to grow rice, vegetable, and fruits enough for his family consumption plus a small cash income.

He is a skilled textile workman who can tell the exact cause of trouble with his machines just by listening to their sound and is never forgetful about maintaining his old machines in good condition. He weaves narrow yukata fabrics for the domestic market or simply designed yarn-dyed fabrics for export under subcontract. Yarns and designs are provided by his parent firm, and he finishes his job at a specified date and is paid a set wage per unit of woven fabric. If the wage is too low during a recession, he stops his machines and waits for another boom. He has not applied for the structural improvement program because he has no successor and he will not continue to work long enough to pay back the loan by himself. But he has no intention to quit his life-long business so long as he can afford to take care of his machines, say for another five or ten years.

The family-labor firms of this type occupy 60 per cent of the total, in terms of both factory number and persons engaged (Table VIII). We cannot expect them to undertake any positive adjustment but may only wait for a change in generation.

Firms of an intermediate-scale can move in the direction of either the first or the second type of firms. But the scale is not the decisive factor for survival. Many smaller firms with high skills will survive together with the group of major competitive firms by producing differentiated, high-quality products under subcontract relationships with the latter group. On the other hand, even a large firms will fail in the competition if it sticks to traditional ways of business in the face of weakened traditional leadership by trading companies and big spinning firms.

Displaced textile workers have been given adjustment assistance under the Reemployment Promotion Fund (*tokutei fukyō gyōshu rishoku-sha rinji sochi hō*) and Employment Stabilization Fund (*koyō antei shikin seido*). Governmental assistance, however, has been concentrated not so much on textile employees as on small and medium textile firms. It reflects the characteristics of the Japanese textile industry, in which young female workers have little difficulty in finding new jobs, whereas a large number of older workers, either employees or owners of small family firms, cannot change their lines of business easily and the rescue of individual firms as a whole is searched for.

Increasing dependence on older workers also affects the future prospects of competitive medium firms. The high level of accumulated high skills possessed by these older workers supports the present competitive production of Japan and it will continue to do so as long as they cannot change to other lines of work and remain in their present jobs. However, since the relatively unprofitable situation of the textile industry does not easily attract new human resources, the present competitiveness is bound to be affected in the long run.

V. DOMESTIC ASSISTANCE AND LIBERAL IMPORT POLICY

To conclude this study, two policy problems with regard to the Japanese industries need to be discussed. One is to evaluate whether past government assistance policy is consistent with the Positive Adjustment Policy (PAP) proposed by the OECD and to suggest directions for improvement, while the other is to confirm the desirability of maintaining a liberal import policy. The two tasks will be combined in the attempt to produce a desirable policy environment for the adjustment of the Japanese textile industry to the ADCs.

A. *Adjustment Assistance by the Japanese Government*

Adjustment assistance implemented in the Structural Depression Act and the Textile Industry Acts takes typically the form of intervention by MITI in the industry concerned, including the promotion of either hoarding or abolition of excess capacity and the reorientation of the industry to new directions. Big and sudden changes in economic conditions, prevention of chain-repercussion of business difficulties, competition for trade policy changes, and assistance to medium and small scale firms have been listed as the justification for such intervention. It was explained that collusive actions by individual firms, even if they are helpful, were prohibited under the Anti-trust Law and that the MITI's initiative was needed to exempt those relief actions from the Anti-trust Law.

The government's assistance is limited to medium and small-scale firms endowed with high skill and further development potential but equipped with obsolete machines and insufficient financial and managerial capability to make necessary adjustments by themselves. The modernization takes the form of automation, saving of labor, upgrading and differentiating existing products. Although process innovation is sometimes criticized as "defensive adjustment," labor-saving and upgrading are sometimes jointly achieved and cannot be distinguished clearly. These firms can well survive competition with the ADCs only if they are partly supported in their efforts to move in the right direction. Thus the program should be distinguished from a mere maintenance of uncompetitive firms under heavy government support. They will continue to be competitive mainly through non-price factors in markets for quality products.

However, we have to point out that the way of giving assistance has so far tended to aggravate the problem of excessive reliance on government by individual firms and to discourage autonomous adjustment at their own risk and profit. The government purchase and scrapping of weaving looms has tended to discourage their autonomous abolition by private firms in advance of government initiative, thus encouraging a prolonged maintenance of excess looms in the industry. The disposal program at the time of voluntary restraints on exports to the United States was no more than compensation for forfeited vested interests and its adjustment effect was limited relative to the amount of subsidy. The emphasis of government policy could better be shifted from direct to indirect assistance such as the promotion of R&D activities as well as autonomous business adjustment undertaken at the firms' own risk and profit.

Nevertheless, the emergence of a group of competitive firms is encouraging. It is promoted by competition in the domestic market, not so much with imported products as between domestic products. An interview survey reveals that textile firms are more concerned with products of rival firms than with imports. The competition in the domestic market has been intensified by the switchover by domestic producers from exports to the home market, although increasing imports contributed to maintaining competitive pressure there.

We should also understand another aspect of industrial adjustment wherein the possibility for changes in business and employment that can be effected by an older generation is limited. Thus we may have to wait for a generational change to complete successfully the process of industrial adjustment.

B. *Maintenance of a Liberal Import Policy*

The demand for import restriction has mounted in the 1970s, as textile imports increased under the liberal import policy. The big import rush of 1973 aggravated the demand for restrictions, a type of demand which seems to be resuming in the face of the recent rapid expansion of textile imports. It was reported very recently that the Japan Spinners' Association (Nihon Bōseki Kyōkai) started to investigate the "dumping import" of cotton yarn from Korea last July and requested the MITI to negotiate a bilateral agreement with Korea under the MFA [5]. The Japanese government has not changed its liberal policy so far.

The demand for import restriction has been based on the following grounds:[9]

(1) Import increases tend to offset domestic efforts to abolish excess capacity.
(2) Rationalization of textile production and reorientation of displaced labor and capital may be better achieved under conditions of orderly import expansion as observed in the U.S. textile industry under the LTA and MFA.
(3) Excessive import competition may erode important parts of the textile industry organization and lead to an eventual collapse of the entire textile industry in Japan (including the sectors with potential comparative advantage).

The above "grounds" may appear to be persuasive at first glance, but they cannot be justified for the following reasons:

(a) The prolonged maintenance of excess capacity is attributable not so much to import pressure as to the inherent characteristics of the Japanese textile industry. On the contrary, the competitive pressure of imports has promoted capacity disposal by encouraging textile firms to adjust autonomously.
(b) The Japanese textile industry will still continue to be competitive in many lines of textile production and it is not probable that another import rush will affect many domestic producers and cause large-scale unemployment under a liberal import policy. If another disturbing import rush is to be avoided, the best policy is the restructuring of the present system of textile

[9] The arguments for restriction of textile imports are neatly summarized in Emoto [1] and Hirai [2].

distribution, combined with a selective safeguard system with strict rules of application.

(c) It is true that the textile exports from developing countries are promoted by heavy subsidies and that their expansion with increasing subsidy expenditure will not be consistent with the efficient allocation of resources. However, it is competition in both national and international markets which corrects those policy distortions and leads to their eventual removal. Response with quota restrictions by developed countries will tend to reverse this correcting force.

The earlier stated recommendation, i.e., domestic adjustment assistance on a more rational basis combined with the maintenance of a liberal import policy, has a different orientation from the administered system of textile trade under the present MFA. The adoption of quota restrictions by Japan would further reduce competition in the textile trade, working especially against emerging textile exporters in the ASEAN and South Asia. Although textile exporters in these countries have increased their exports to the United States and EC at the cost of quota restrictions on Korea, Taiwan, and Hong Kong, they will soon reach their quotas and export growth will slow down. Import restriction is thus not a wise policy for Japan to adopt in view of her geographical proximity to the Asian ADCs and her close trade relationship with them.

With the slow increase of imports under the MFA by European and North American countries and with the viable competitiveness of textile industries in Japan and some other developed countries, the expansion of potential world imports appears to be limited and competition among the Asian ADC and LDC exporters will become more severe. But it is under conditions of this severe competition that the efficiency of textile production will be improved and mutual exports of textile products of different processing stages and different quality will be promoted in the region. Yet, at the same time, long-run projections of world demand and supply of textile products will be helpful for textile exporters in their effort at diversifying production lines and markets so as to achieve the desirable inter-industry specialization mentioned above.

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