Japan as a Market for U.S. Cotton

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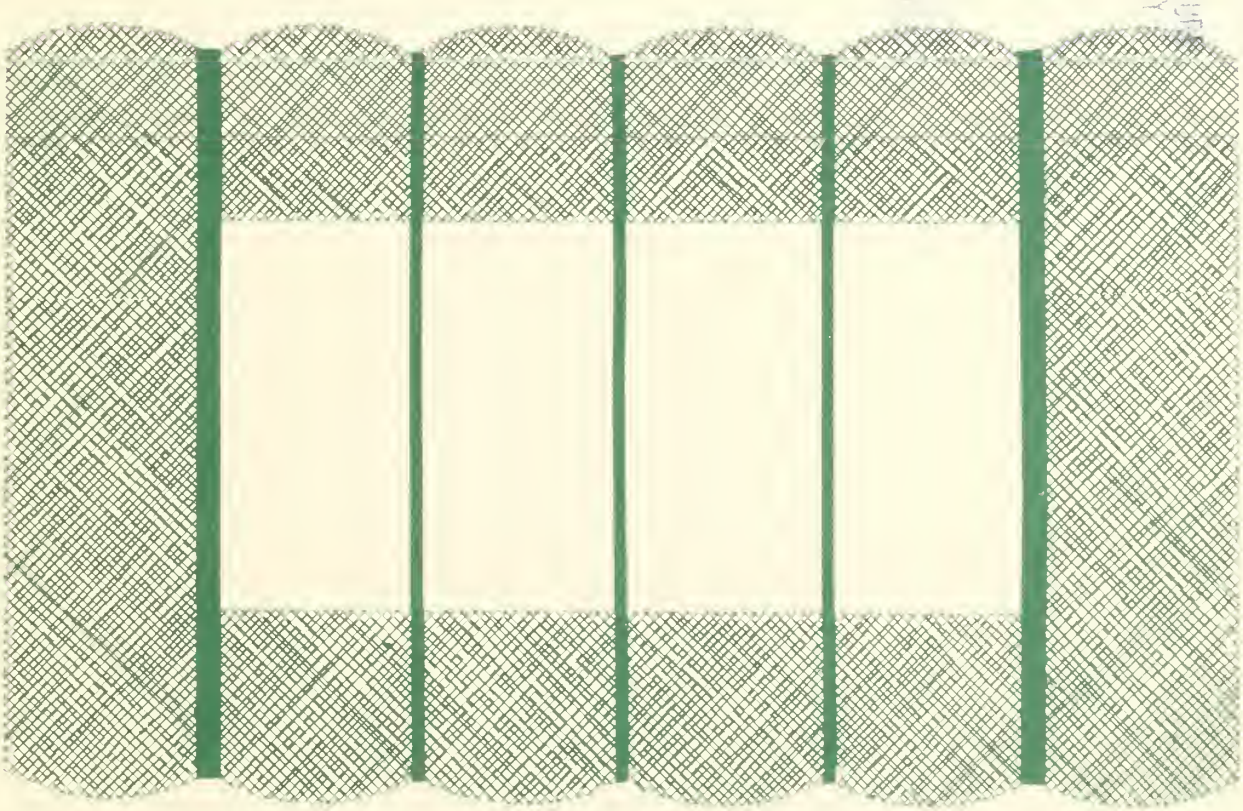

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JAPAN AS A MARKET FOR U.S. COTTON[1]

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Summary

Japan is the world's largest importer of cotton, although imports declined from 3.7 million bales in 1972/73 to 3.0 million in 1976/77, and may have been at about that level in 1977/78. Japan once again became the largest export market for U.S. cotton in 1976/77, after falling behind the Republic of Korea the season before. U.S. exports to Japan totaled slightly over 1 million bales valued at $339 million in 1976/77. Exports plus outstanding sales in 1977/78 through July 6 totaled 1.3 million bales, and 527,000 bales already had been sold by that date for delivery in 1978/79. Japan is also a large buyer of cotton from Latin America, the USSR, Pakistan, India, and Egypt.

Over 80 percent of the cotton imported into Japan is spun and woven into textiles that are absorbed by the Japanese market; the remainder is made into exported textiles. Japan is one of the world's largest consumers of cotton and other textiles. Per capita consumption of all fibers by Japan consumers doubled from the late 1950's to early 1970's and is one of the world's highest. In fact, Japan's per capita consumption of cotton, 7.5 kilograms, is well above the United States 4.7 kilograms, although its total for all fibers including manmade fibers, 17.3 kilograms, is below the United States figure of 23.6 kilograms.

The Japanese domestic market for textiles, however, has been stagnant since 1972, and the per capita offtake since then has been well below the 1970-1973 level. Factors responsible for the slump have been a slowdown in the rate of expansion of the Japanese economy, a rising proportion of exported goods and services in Japan's Gross National Product (GNP), leaving a reduced share for domestic consumption, and increased competition from other goods and services for the purchasing power of the Japanese consumer. From 1972 to 1976, personal expenditures for clothing at constant prices rose only 12 percent compared with 10 percent for food, 30 percent for fuel and light, 41 percent for rent, 27 percent for housing, and 38 percent for miscellaneous.

Japan became a net importer of cotton manufactures for the first time in 1973, again in 1974 and 1976, although not in 1977. Such imports averaged 120,000 tons per year in raw cotton equivalents during 1974-76, and consisted mostly of yarn from Pakistan and Korea, and fabrics from such countries as the People's Republic of China and Taiwan.

Japan's exports of cotton products averaged more than 200,000 metric tons annually in raw cotton equivalents during 1965-69, declined to between 100,000 to 125,000 tons annually from 1972 to 1976, then rose to 140,000 tons in 1977. Exports of cotton yarn are minor, but exports of cotton cloth—often over a billion square meters annually before 1969—fell to 247 million in 1973, but recovered to 398 million in 1977.

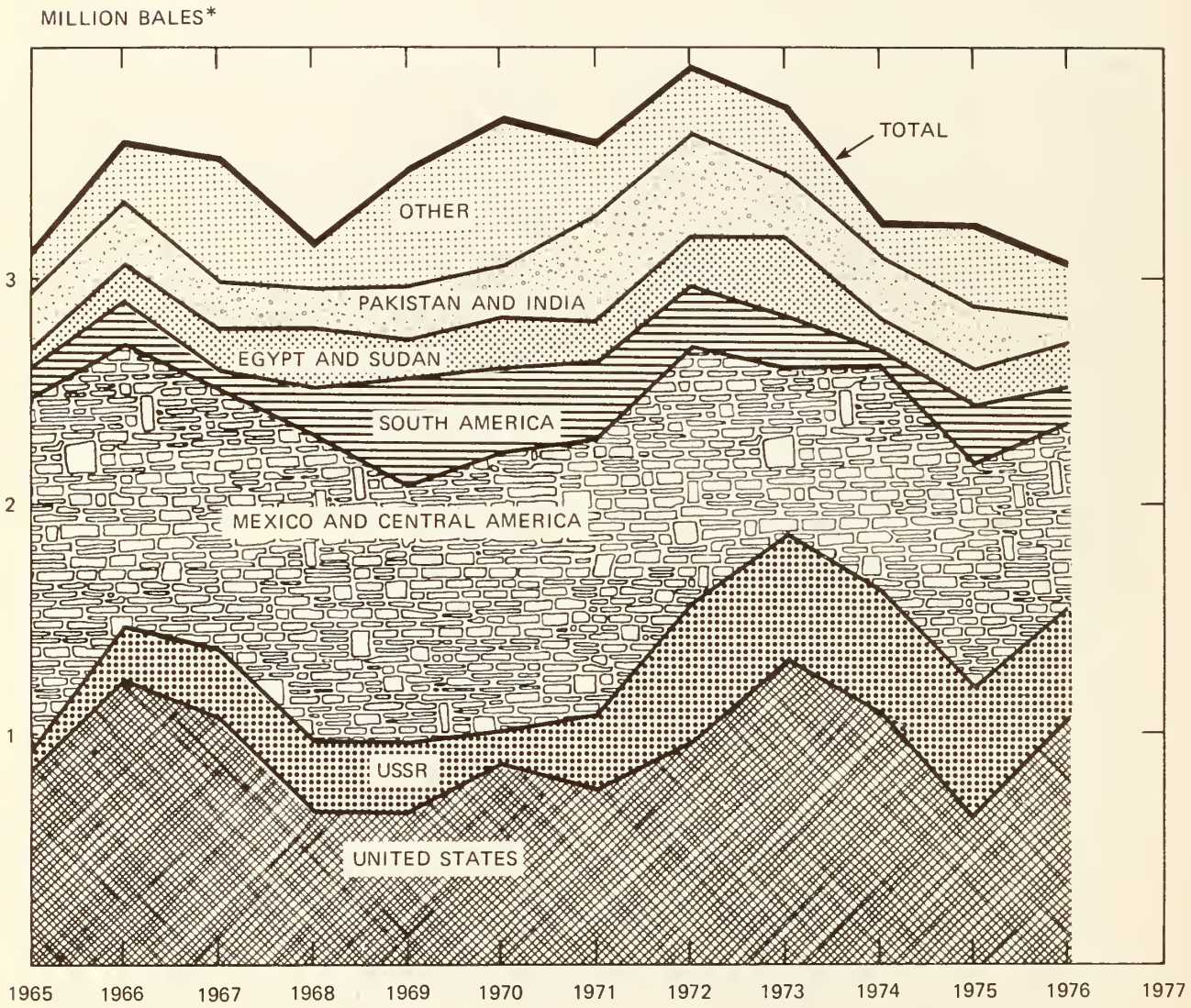
Cotton fabric exports go to a large number of destinations on all Continents. They have suffered under the impact of new domestic industries in many developing countries, the rising value of the yen, rising wages in Japan, competition from Hong Kong, Taiwan, and Korea in international markets, and a trend toward greater use of synthetics. Textile exports now account for only 18 percent of Japan's mill consumption of raw cotton compared with 29 percent during 1965-69.

Japan's spinning industry is having problems because of depressed internal demand, rising wage costs, and rapidly increasing competition from other countries both in the domestic and export markets. The number of spindles has been declining steadily since 1974, and the number of workers in mills belonging to the Japanese Spinning Association declined from 92,300 in 1972 to 68,500 in 1976. Average monthly wages rose from $61.57 in 1965 to 426.45 in 1977, and are now several times higher than in its neighboring competitor, Korea. The industry curtailed production from 1975 into 1978 through "depression cartels," and loans are being extended to mills so that they can restructure or go into other lines of business.

Cotton's proportion of fibers available for domestic use was 45.7 percent in 1976 compared with 43.8 percent in 1965-69. These percentages, much higher than in the United States, reflect the large proportion of Japan's fiber consumption in apparel and the Japanese preference for cotton goods. The programs

[1] This is one of a series of reports on the cotton situation in major cotton producing and consuming countries prepared in the Tobacco and Cotton Division of the Foreign Agricultural Services. Particular attention is invited in this connection to *"Developments in the Japanese Textile Industry"*, by Bernice M. Hornbeck and Horace G. Porter, Foreign Agricultural Service publication, FAS-M-262, May 1975.

FIGURE 1. IMPORTS OF COTTON INTO JAPAN



*480 LBS. NET.

of the Japan Cotton Promotion Institute cosponsored by Japanese cotton interests as well as by the International Institute for Cotton and Cotton Council International, have successfully encouraged this preference.

Several of the companies in Japan's large manmade fiber industry incurred deficits in 1977 and moves are on to curtail production and consolidate into fewer marketing and production companies. Reduced sales to the domestic textile industry, rising costs, and increased difficulty in competing in world markets with new industries in developing countries because of the "high yen" exchange rate relative to the dollar are cited as reasons. The industry also owns plants in many other countries. The industry's export sales prices are typically lower than prices set for domestic consumption.

Domestic offtake of cotton goods in Japan could rise from present levels if and when Japanese buyers feel they have sufficient income and assurance regarding the future. How much of such demand will be filled by imports depends in large part on Government decisions. Although less than 20 percent of Japanese mill consumption of cotton is exported in the form of textiles, such exports have shown surprising strength. Japan has one of the world's most technologically advanced textiles industries and the advantage of a large domestic market to absorb a heavy proportion of overhead costs.

Nevertheless, higher labor and other costs are making it more difficult for Japanese mills to meet competition in world markets. Summing up, Japan should continue to be a strong market for cotton, but expansion over the present level of imports will be difficult.

The Import Situation

Japan for many years has been the largest single export market for U.S. cotton. U.S. exports of cotton to Japan averaged 1,023,182 bales annually during 1970-71-1974/75, dropped to 672,000 bales[1] in 1975/76, and recovered to 1,024,200 bales during 1976/77. The final figure for 1977/78 is 1,077,051 bales. Stocks were at a low level when it was learned that the U.S. cotton crop might be down in 1978 and large purchases were booked in late December and early January. On August 6, 1978, the United States already had outstanding sales of 800,000 bales for export during 1978/79.

The World's Largest Importer of Cotton

Japan, for many years has been the world's largest importer of raw cotton by a wide margin. Annual imports since 1960 have ranged between 2.8 million and 3.9 million bales. Largest imports since World War II were 3.9 million bales in 1972/73 and 3.7 million in 1973/74. Thereafter cotton imports fell off to 3.0 million bales in 1976/77, and prospects according to Japanese merchants and spinners are for 2.9-3.0 million bales in 1977/78 (table 1).

The Most Important Supplier

The United States traditionally has been by far the largest source of supply of raw cotton for the large Japanese market, although it shares that market with at least 30 other countries. The U.S. share of the market rose from 27 percent during the 5 years ending July 31, 1970 to 35 percent in 1976/77. Next largest supplier was Mexico-Central America. However imports from this region fell from 38 percent to 26 percent of the total during the same years because of a decline in imports from Mexico, which greatly reduced its production and export of cotton during this period.

The USSR is now the third most important supplier of cotton to Japan. Its share rose from 7 percent in 1965/66-1969/70 to 18 percent in 1975/76, then declined a little to 16 percent in 1976/77. In terms of bales, imports from the USSR climbed from 243,000 bales to 556,000 and then moved down moderately to 486,000 bales.

Africa's proportion of the Japanese market raw cotton market has remained unchanged over the years at between 8 and 10 percent, largely from Egypt and the Sudan. Imports from Asia, mostly from Pakistan and India, have tended to range around 400,000 bales or 11-13 percent of imports. They fell to only 149,000 bales in 1976/77 largely because of India's embargo on cotton exports and shortages in Pakistan. South America's share has remained around 6-7 percent, but Argentina replaced Brazil in 1976/77 as the major supplier.

Factors in Japan's Choice of Growths

Japanese mills and merchants are free to purchase cotton from any supplier. Foreign exchange to purchase cotton is freely licensed and there are no duties.

There are obvious advantages for Japan in purchasing much of its cotton from the United States. First, Japan is a large-scale user of cotton and the United States has more cotton to offer for export than any other country. Second, the United States produces a wide range of staple lengths and grades in substantial quantities and thus is in a position to meet specific needs of individual mills, even though their requirements may be large. U.S. cotton has acquired a reputation for low trash content, high fiber strength, and other desirable qualities. Third, the United

[1] All bales in this report are 217.7 kilograms (480 lb net), unless otherwise noted.

Table 1. Imports of Raw Cotton into Japan by Country of Origin, 1973-77, Averages 1965-69, 1970-74 [1]

Country	Quantity							Percentages						
	Average 1965-69	Average 1970-74	1973	1974	1975	1976	1977[2]	Average 1965-69	Average 1970-74	1973	1974	1975	1976	1977[2]
	1,000 bales of 217.7 kilograms							*Percent*						
Total	3,342	3,613	3,728	3,228	3,220	3,037	2,484	100	100	100	100	100	100	100
United States	892	1,004	1,323	1,105	646	1,064	826	27	28	35	34	20	35	33
Mexico & Central America														
Mexico	676	469	437	418	310	188	323	20	13	12	13	10	6	13
Costa Rica	7	0	0	0	1	0	0	(3)	0	0	0	(3)	0	0
El Salvador	149	181	44	179	240	183	88	4	5	12	6	8	6	4
Guatemala	137	158	131	125	180	189	156	4	4	4	4	6	6	6
Honduras	21	9	18	6	21	12	1	1	(3)	(3)	(3)	(3)	(3)	(3)
Nicaragua	282	235	102	257	239	230	135	9	7	3	8	7	8	5
Subtotal	1,272	1,052	732	985	991	802	703	38	29	19	31	31	26	29
South America														
Argentina	12	15	5	5	80	140	71	(3)	1	(3)	(3)	2	5	3
Bolivia	0	18	13	2	30	10	2	0	(3)	(3)	(3)	1	(3)	(3)
Brazil	188	213	175	55	128	8	75	6	6	5	2	4	(3)	3
Colombia	7	9	6	5	4	1	0	(3)	(3)	(3)	(3)	(3)	(3)	0
Paraguay	8	2	(3)	1	18	12	34	(3)	(3)	(3)	(3)	1	1	1
Peru	14	6	21	(3)	4	10	3	1	(3)	1	(3)	(3)	(3)	(3)
Subtotal	229	254	220	68	264	181	182	7	7	6	2	8	6	7
Western Europe														
Greece	(3)	9	3	0	0	0	1	(3)	(3)	(3)	0	0	0	(3)
USSR	243	424	340	520	556	486	423	7	12	14	16	18	16	17
Africa														
Egypt	95	155	225	122	96	109	53	3	4	6	4	3	4	2
Sudan	65	69	108	8	67	59	59	2	2	3	(3)	2	2	2
Uganda	34	52	53	26	13	4	2	1	2	2	1	(3)	(3)	(3)
Kenya	2	(3)	1	0	0	0	0	(3)	(3)	(3)	0	0	0	0
Tanzania	41	21	12	14	4	4	2	2	1	(3)	(3)	(3)	1	(3)
Mozambique	12	33	31	24	8	0	0	(3)	1	1	1	(3)	0	0
Burundi	1	2	1	1	1	1	0	(3)	(3)	(3)	(3)	(3)	(3)	0
Cameroon	5	11	2	1	2	17	9	(3)	(3)	(3)	(3)	(3)	1	(3)
Central African Rep.	3	5	3	8	20	15	11	(3)	(3)	(3)	1	1	1	(3)
Chad	13	31	42	34	48	42	41	1	1	1	1	2	1	2
Dahomey	1	7	8	2	3	15	15	(3)	(3)	(3)	(3)	(3)	(3)	1
Mali	2	4	2	0	1	13	5	(3)	(3)	(3)	0	(3)	(3)	(3)
Nigeria	3	2	1	(3)	0	0	0	(3)	(3)	(3)	(3)	0	0	0
Upper Volta	1	2	(3)	(3)	3	14	3	(3)	(3)	(3)	(3)	(3)	(3)	(3)
Subtotal	291	394	489	240	266	293	210	9	11	13	8	8	10	9

Continued

Table 1. Imports of Raw Cotton into Japan by Country of Origin, 1973-77, Averages 1965-69, 1970-74[1] –Continued

Country	Quantity							Percentages						
	Average 1965-69	Average 1970-74	1973	1974	1975	1976	1977[2]	Average 1965-69	Average 1970-74	1973	1974	1975	1976	1977[2]
Asia & Oceania	*1,000 bales of 217.7 kilograms*							*Percent*						
Syria	63	29	6	2	10	12	12	2	1	(3)	(3)	(3)	(3)	(3)
Turkey	39	49	56	3	100	16	18	1	1	2	(3)	3	1	1
Iran	23	25	34	(3)	1	1	0	1	1	1	(3)	(3)	(3)	0
Southern Yemen	6	2	1	0	0	0	(3)	(3)	(3)	(3)	0	0	0	(3)
Pakistan	106	202	70	196	112	75	75	3	6	2	6	4	3	3
India	144	140	225	79	160	37	11	4	4	6	3	5	1	(3)
Burma	2	0	0	0	0	0	0	(3)	0	(3)	0	0	0	0
Australia	6	16	11	14	41	8	16	(3)	(3)	(3)	(3)	1	(3)	1
Subtotal	389	463	403	294	424	149	132	11	13	11	9	13	5	5
Other Countries	26	14	18	16	73	62	7	1	(3)	(3)	(3)	2	2	(3)

[1] Crops years beginning August 1.
[2] August-May only.
[3] Less than 0.5.

Compiled from Japan's foreign trade statistics.

States, as a supplier, has the advantage of nearness. California ports are closer to Japan than any other major source of cotton. Conversely, suppliers in the Middle East and elsewhere are nearer to European mills than to Japan. Fourthly, a high-speed transportation system utilizing modern container ships links U.S. and Japanese ports.

Over the years, institutional arrangements between Japan and the United States in the cotton trade have become well developed. A standard contract, recently renegotiated by cotton merchant associations of the two countries, facilitates the flow of cotton. There has been extensive cooperation in cotton promotion activities between the cotton organizations of the two countries.

Since 1951, U.S. Export-Import Bank loans have helped sell U.S. cotton to Japan. Quantities of cotton thus financed since 1965 are shown in table 2. Recent loans have been as follows:

- Loan announced June 1975: $75 million to Bank of Tokyo. Annual interest rate of 8 percent. Letters of credit to expire not later than July 31, 1976. As of that date, approximately $20.3 million not disbursed so availability of this amount was extended until october 29, 1976.
- Loan announced June 10, 1976: $50 million to Bank of Tokyo Annual interest rate of 9 percent. Available from August 1, 1976 to July 31, 1977.

Table 2.—U.S. Exports of Cotton to Japan Under Export-Import Bank Loans, 1965-1977 (Estimated)

Year[1]	Million dollars	Estimated running bales
1965	62	465
1966	72	657
1967	104	857
1968	167	520
1969	50	400
1970	67	569
1971	65	552
1972	72	461
1973	66	424
1974	75	305
1975	81	312
1976	[2] 55	197
1977	[2] 70	195
1978	75	250

[1] Fiscal years ending June 30, 1965-1975; 15 months ending September 30, 1976; years ending September 30, 1977 and 1978.

[2] A $50 million loan was approved June 10, 1976 to be available August 1, 1976 to July 31, 1977. The previous $75 million loan had an expiration date of July 31, 1976. As of that date, approximately $20.3 million was undisbursed, and the availability of this amount was extended until October 31, 1976.

Data supplied by Export-Import Bank.

- Loan announced October 25, 1977: $75 million to Bank of Tokyo. Annual interest rate 8 percent. Available from August 1, 1977 to July 31, 1978. As of June 30, 1978 only $17.4 million disbursed availability of loan was extended to December 31, 1978.

The Bank of Tokyo makes the proceeds available to banks, which in turn make the loans available to cotton mills. Apparently the loans have been valuable to the mills because they provide 12 months' financing, long enough to finance cotton from the time it is purchased overseas to the time when manufactured textiles are being sold. In contrast, usual foreign private financing of imports, by Japanese regulation, cannot exceed 4 months. Because of the rise in the price of cotton the loans will not finance as much cotton as in former years. The loans always have been repaid on time.

Sales of USSR cotton to Japan benefit from the fact that it is one of the major items available in the USSR to offer in exchange for the comprehensive list of manufactured goods sold by Japan to the USSR. In 1976, Japan's exports to the USSR valued at 667 billion yen, were nearly double its imports of 346 billion yen from that country. Japan's exports consisted of a large variety of metal products, machinery, transport and electrical equipment, and chemicals, and so fourth. Japan's imports from the Soviet Union were largely raw materials, including lumber, 37 percent; oil, 23 percent; cotton, 11 percent; and gems, 9 percent.

The price at which Soviet cotton is purchased in Japan is negotiated between Exportljon, the Soviet cotton monopoly, and the Japanese cotton trade. A trade report on December 2, 1977, spoke of "difficult negotiations in Japan with the visiting Russia delegation," which finally led to purchases of around 25,000 metric tons. Similar news reports in June 1978 spoke of a visiting Soviet delegation asking prices well above trade expectations and of sales of 20,000 tons for 1978/79 delivery, but no further business because of disagreement over prices. Sometimes Soviet cotton is purchased even though it is priced higher than other growths, but the loss may be offset by higher prices for goods moving in the opposite direction. Undoubtedly, Soviet cotton sales benefit from the fact that Soviet purchases of Japanese goods are tied to Japanese purchases of Soviet cotton. No such quid pro quo is involved in sales of U.S. and most other cotton growths to Japan.

By diversifying their sources of supply, Japanese mills are no doubt in a better bargaining position when they purchase cotton than if they bought entirely from one or two sources. Of course, price is the primary consideration, and imports of cotton from a country are likely to fall if prices become out of line with those of competitors.

Of interest is the fact that when Japanese purchases from the United States fell off in 1975/76 when U.S. supplies declined, Japan stepped up its imports from Turkey, Argentina, and Brazil, sources at a greater distance, but where supplies were available at the time.

Sources of U.S. Cotton Purchased by Japan

Of the 1,064,000 bales imported by Japan from the United States in 1976/77, nearly 40 percent is estimated to have been Acala cotton from the San Joaquin Valley and more than 30 percent cotton from Arizona and the Imperial Valley. All of this cotton, totaling 773,000 bales, was 1-1/32″ and over. Japan purchases little or no cotton of these staple lengths from farther east in the United States.

Japan also imported 297,000 bales of 13/32″ to 1″ cotton, comprising nearly 30 percent of its imports of U.S. cotton, nearly all from West Texas and Oklahoma.

Transportation of U.S. Cotton to Japan

Practically all U.S. cotton exported to Japan moves through Pacific ports, mainly in the Los Angeles and San Francisco Bay areas.

Formerly, Texas cotton was exported to Japan through gulf ports, but now nearly all is shipped from Texas, first to gulf ports and then by rail to the west coast at "mini bridge" rates, or beginning recently, by rail from west Texas to the west coast at "micro bridge" rates.

Most cotton shipped to Japan moves in containers and most is at conference rates. In 1976, 37 percent of the cotton imported into Japan arrived by U.S. registry ships, 23 percent by Japanese ships, and the remainder via ships of Liberia, Israel, and other registries, (table 3).

Imports by Staple Lengths

Japan's imports of cotton by staple lengths are shown in table 4. Three-fourths are in the medium-long staple group (1-1/32″ - 1-3/32″). The United States has about one-third of this market; Mexico and Central America another third; and the USSR most of the rest. Next most important group is the medium staples (13/16″ - 1″), accounting in 1976/77 for 13 percent of imports. The United States dominates as supplier in this group, accounting for 78 percent, with Pakistan. Argentina, and some of the countries in Africa as other sources.

Japan is the major import market for very short staple Desi types (under 13/16″), all from Pakistan and India. Japan recently has had difficulties purchasing its requirements, because of shortages in

Table 3.–Movement of U.S. Cotton to Japan by U.S. Port and Flag of Ship, 1975 and 1976[1]

(1,000 running bales)

Port	TOTAL		Via U.S. ships		Via Japanese ships		Via other ships	
	1975	1976	1975	1976	1975	1976	1975	1976
Atlantic ports								
Norfolk	0.3	–	(2)	–	–	–	0.3	–
Gulf ports								
Gulfport	2.5	–	(2)	–	2.5	–	–	–
New Orleans	37.7	.5	12.0	.1	25.7	.4	–	–
Galveston-Houston	84.4	18.4	31.9	5.6	52.5	12.8	–	–
Corpus Christi	.5	–	.5	–	–	–	–	–
Subtotal	115.4	18.9	44.4	5.7	80.7	13.2	.3	–
Pacific ports								
San Diego	8.6	.5	1.1	.5	–	–	7.5	–
Los Angeles Area	496.2	487.2	135.1	178.0	108.0	101.5	253.1	207.7
San Francisco bay area	239.7	256.1	94.6	99.4	70.1	58.4	75.0	98.3
Northwest	5.2	–	–	–	–	–	5.2	–
Subtotal	749.7	743.8	230.8	277.9	178.1	169.9	341.8	306.0
Total	875.1	[2] 763.7	275.2	[3] 283.6	258.8	173.1	341.1	306.0

[1] Calendar years.
[2] Less than 50 bales.
[3] Includes 949 bales Taiwan and 51 bales via Italy.

Source: Compiled from information supplied by *Japanese Cotton Traders Association.*

Table 4.—Imports of Cotton into Japan by Staple Lengths, 1971-76[1]

Staple Length (32nds of an inch) and Country of Origin	1972	1973	1974	1975	1976	1972	1973	1974	1975	1976
	1,000 bales of 478 lbs. net					*Percent*				
36 and longer (long and extra-long staples)										
United States	3	3	15	0	1	1	1	11	0	1
Peru	1	22	(2)	4	10	(2)	6	(2)	2	5
Egypt	185	219	112	98	109	65	62	83	57	60
Sudan	94	101	8	68	59	34	29	6	39	32
Others	1	8	–	3	3	(2)	2	–	2	2
Total	284	353	135	173	182	100	100	100	100	100
33-35 (Medium long staple)										
United States	601	812	856	523	773	22	33	34	21	35
Mexico	468	449	426	288	188	17	18	17	11	8
Guatemala	173	145	115	189	198	6	6	5	8	9
Nicaragua	224	112	246	238	220	8	5	10	9	10
El Salvador	246	22	181	252	166	8	1	7	10	7
Brazil	229	132	44	114	8	8	5	2	5	(2)
Uganda	55	52	23	13	4	2	2	1	1	(2)
Syria	10	6	0	10	12	(2)	(2)	0	(2)	1
Turkey	21	56	3	100	16	1	2	(2)	4	1
Iran	18	30	(2)	1	1	1	1	(2)	(2)	(2)
Pakistan	20	2	2	2	0	1	(2)	(2)	(2)	0
USSR	588	558	501	556	472	21	22	20	22	21
Others	138	124	103	228	170	5	5	4	9	8
Total	2,791	2,500	2,500	2,514	2,228	100	100	100	100	100
26-32 (Medium staples)										
United States	400	541	185	118	297	63	91	53	40	78
Brazil	25	15	5	13	1	4	3	1	4	(2)
Argentina	0	5	4	84	25	0	1	1	28	7
Pakistan	191	10	141	34	0	31	2	40	12	0
Others	10	19	17	46	56	2	3	5	16	15
Total	626	590	352	295	379	100	100	100	100	100
Under 26 (Short staple Desi types)										
Pakistan	100	45	83	51	73	42	16	53	25	67
India	139	231	74	151	36	58	84	47	75	33
Total	239	276	157	202	109	100	100	100	100	100
Grand Total	3,940	3,719	3,144	3,184	2,898	–	–	–	–	–

[1] Years beginning August 1.
[2] Less than 500 bales, or 0.5 percent.

Source: Compiled from reports of Japan Cotton Traders Association.

supplying countries. Such cotton is used widely in Japan for futons or sleeping mats and bedding.

At the other end of the staple length scale are the long and extra long staples, (1-1/8" and over) used in finer yarns and fabrics, which make up 6 percent of Japanese imports. Egypt and Sudan are the major suppliers, but occasionally small quantities are purchased from the United States.

Mill Consumption

Textile Industry Problems

Japan's spinning industry is one of the world's largest. Steady and rapid recovery after World War II culminated in record postwar operable spindleage of 11.6 million during 1970-1972. More than 97 percent of the spindleage was operating from 1968 through 1974. Mill consumption of fibers and the output of spun yarn were at a peak in 1973. Since then, because of a "consistently" depressed domestic textile market, rising competition from textiles produced in other countries both in the domestic and export markets, rapidly rising costs, and the need for investment in pollution prevention, the Japanese cotton textile industry has been in serious straits.

The industry had a "depression cartel" to curtail production in effect from January until May 1975 and many spinners continued to reduce output voluntarily thereafter. Business picked up for a time in 1976, but deteriorated toward the end of the year. The industry again was forced to resort to an

"anti-recession cartel" from April 9 to the end of June 1977, with the objective of limiting production to 75 percent of the December 1976 level. This cartel was extended several times and was still in effect from January through June 1978, but was discontinued at the end of June owing to a recovery in cotton yarn prices and pressure from users of cotton products.

In August, 1977 it was reported that there had been bankruptcies in textile firms in the preceeding 6 months with liabilities exceeding 10 billion yen ($33 million). In view of this situation and the industry's "serious structural problems." it was decided to make low interest rate loans available to the larger textile mills so that they could restructure or go into other lines of business. Loans totaling 42 billion yen ($140 million), it was hoped, would provide effective help in reducing the textile industry's excess equipment. Aid to small business was offered under the "Small and Medium Enterprise Modernization Promotion Law." Larger firms could also apply for loans from the Japan Development Bank.

By the end of 1977, the number of operable cotton system spindles in Japan was off 482,000 from 11,086,000 at the end of 1975 and only 80 percent were operating. The number of workers in cotton mills also had been declining. In 1977, mills belonging to the Japan Spinners Association had 55,000 workers compared with 92,300 in 1972. (table 5)

Wage rates in the Japanese spinning industry have been rising so rapidly, particularly in terms of dollars, that they are seriously undermining the international competitiveness of the industry. Average monthly wages rose from $61.57 in 1965 to $186.33 in 1972, $361.79 in 1976, and $426.45 in 1977. By July 1977, newly employed 15-year old junior high school female graduates were receiving a monthly wage of 70,000 yen ($265) plus twice yearly allowances totaling 200,000 to $300,000 yen, or $750 to $1,100. In contrast, in Korea 17-year old girls were beginning at $52 per month and being paid $62-73 after 6 months. It should be noted in connection with Japanese textile wages that "owing to the long serious recession", cotton textile workers won a wage increase of only 2.03 percent in their "spring offensive" in 1977, but with a commitment for a further increase in November.

Japan One of World's Largest Consumers of Cotton

Japan is the fifth largest mill consumer of raw cotton in the world, ranking after the People's Republic of China, the Soviet Union, the United States, and India. It is by far the largest consumer of the group of countries primarily depending on imports for cotton supplies. Mill consumption of cotton in Japan in calendar 1976 was a little higher than the average for 1965-69—730,000 metric tons compared with 724,000 tons—but well below the peak of 829,000 tons in 1973 (3.3 million, 3.3 million, and 3.8 million bales. There was a sharp decline to 670,000 tons (3.1 million bales) in 1977.

On a crop-year basis, Japan's aggregate consumption of cotton declined from 3.8 million bales in 1973/74 to 3.2 million bales in 1976/77 and is expected to decline to 2.9 million bales in 1977/78. The decline primarily is the result of efforts by the cartel (terminated in June 1978) to coordinate

Table 5.—Equipment, Number of Mills and Employees, Wages, and Electricity Consumption in Japanese Cotton Textile Industry, 1965, 1970, 1972-1977[1]

Item	1965	1970	1972	1973	1974	1975	1976	1977
Cotton system spindles,								
Operable, end of year, 1000								
All Japan	10,670	11,632	11,606	11,207	11,386	11,086	10,999	10,771
JSA	8,789	9,439	9,848	9,620	8,809	9,533	9,484	9,057
Spindle operation ratio, JSA, percent	96.3	97.4	97.1	97.6	92.1	79.2	88.8	80.3
Looms, cotton type,								
Operable, end of year, All Japan	400	374	322	324	357	351	344	322
Loom operation ratio, JSA	–	95.9	–	96.9	89.7	87.8	90.4	88.0
Number of mills, JSA	227	210	200	191	193	189	188	177
Cotton mill employees, JSA, 1,000	107.7	96.0	92.3	89.0	85.5	71.0	68.5	55.2
Wage, average JSA mills, monthly, U.S. dollars	61.57	120.00	186.33	274.24	312.27	332.75	361.79	426.45
Electricity consumption, JSA, million kwh	1,830	2,372	2,684	2,827	2,455	2,192	2,473	2,208

[1] Calendar years.

Source: Compiled from Annual Review of Japanese Cotton Textile Industry, 1977, published by Japan Spinners Association, Osaka, and earlier volumes, The Cotton Statistics Monthly, published by the Japan Cotton Traders Association, Osaka, and Statistics on Japanese Spinning Industry, 1976, published by Japan Spinners Association.

cutbacks in yarn production and to reduce spindle-age, resulting from difficult demand conditions. Use of wadding also has dropped because of a shortage of very short staple Desi cotton.

A word is necessary regarding Japanese consumption statistics. The great majority of cotton mills are members of the Japan Spinners Association, which regularly publishes data on the use of cotton and other fibers by member mills. There are, however, a number of mills that do not belong to the Association so JSA figures are not complete. Data from the latter mills, however, are included in figures published by the Ministry of International Trade and Industry. Then there is consumption of cotton in what is labeled "cotton manufactures" and "sanitary and medical use." Adding these figures together, the total is still substantially short of disappearance in Japan: that is, cotton imports adjusted for changes in stocks. The reason is that consumption of a number of small spinners and certain other users are not included and there may be some statistical errors. To conclude, cotton consumption of raw cotton in Japan is 30 to 35 percent larger than is indicated by often published and quoted figures. Disappearance statistics, as regularly compiled and published in Japan, are considered for the purposes of this study to be the best measure of cotton consumption (table 6).

Competition With Other Fibers at the Mill Level

Japan's aggregate consumption of principal fibers in textile mills rose from an annual average of 1.76

Table 6.–Consumption of Cotton by Growths in Japan, 1973-77[1]

(1,000 bales of 478 lb net[2])

Item/Country of Origin	1973	1974	1975	1976 (preliminary)	1977 (forecast)
Grand Total[3]	3,822.3	3,174.2	3,438.9	3,216.6	2,900.0
Less Adjustment[4]	441.4	539.2	480.6	373.6	346.0
Balance[5]	3,380.9	2,635.0	2,958.3	2,843.0	2,550.0
Spinning[6]	2,922.8	2,239.0	2,537.4	2,438.3	2,426.0
Other Spinning[7]	233.5	212.8	238.0	257.1	–
Cotton Manufactures[8]	170.5	143.3	144.0	119.9	–
Sanitary, Medical Use	54.1	39.9	38.9	27.7	124.0
Balance[5]	3,380.9	2,635.0	2,958.3	2,843.0	2,550.0
United States	1,096.5	958.2	706.4	902.0	–
Mexico	381.1	330.4	266.0	196.3	–
El Salvador	111.7	102.3	224.5	161.9	–
Guatemala	112.2	116.3	115.0	182.6	–
Nicaragua	153.5	144.4	197.6	216.6	–
Brazil	193.9	62.4	116.8	24.6	–
India	142.5	110.7	117.5	76.7	–
Pakistan	99.0	125.9	128.0	73.0	–
Turkey	37.6	18.8	62.4	38.9	–
USSR	533.7	345.6	530.4	475.8	–
Egypt	153.2	93.9	133.3	104.4	–
Sudan	82.8	26.2	55.7	60.1	–
Others	425.7	310.6	422.2	330.1	–

[1] Crop years beginning August 1.
[2] As given in Japanese statistics. To convert to U.S. statistical bales of 480 pounds multiply by 0.99583.
[3] Disappearance: Imports plus beginning stocks less ending stocks.
[4] Adjustment: Grand total less balance.
[5] Total of cotton reported consumed in Japanese industry. The figure is incomplete apparently because not all cotton users report.
[6] Members of Japan Spinners Association only.
[7] Nonmembers of JSA.
[8] As listed in Japanese statistics.

SOURCE: Data on consumption by growths is compiled from *Cotton World Statistics* of the International Cotton Advisory Committee as derived from Japanese reports to ICAC. Total, adjustment, and balance figures are from "Statistics on Japanese Spinning Industry 1976, page 191, published by Japan Spinners Association. Forecast for 1977 is based on November 1977 estimates of Japan Cotton Trade Association and Japan Spinners Association.

million metric tons in 1965-1969 to a peak of 2.24 million tons in 1973. Thereafter, the recession in the textile industry brought fiber consumption down to 1.75 million in 1975, after which there was a partial recovery in 1976, and a setback to 1.93 million.

Cotton has fared quite well in inter-fiber competition at the mill door in Japan. Cotton's proportion of aggregate mill consumption of all fibers declined from 41.2 percent during 1965-1969 to a low point of 35.5 percent in 1970, but then rebounded to 40.3 percent in 1975. There was then a setback to 35.3 percent by 1977, probably occasioned at least in part by higher prices for cotton than for manmade fibers. Still, this percentage was considerably higher than cotton's 30.2 percent share of mill fiber consumption in Western Europe in 1975 and 26.1 percent in the United States in 1977.

The proportion of the Japanese mill market taken by manmade fibers, including both continuous filament yarn and staple fiber, rose from 48.1 percent in 1965-69 to 54.7 percent in 1970, then declined to 50.5 percent in 1975, and recovered to 53.8 percent in 1976. Rayon's share declined substantially, but synthetics' share rose considerably. In 1976 actual consumption of synthetic fibers was scarcely larger than in 1970, while consumption of rayon was down substantially (table 7).

Competition among fibers at spinning mills is also reflected in statistics showing production of the various kinds of spun yarn in Japan (table 8). Production of cotton yarn, almost all 100 percent cotton, peaked in 1973, but by 1977 was down more than 20 percent. Japanese mills now are spinning more synthetic yarn than cotton yarn, but, significantly most of the spun synthetic yarn is blended with other fibers, usually with cotton. Assuming that the 168,000 tons of synthetics-blended-with-cotton yarn that were produced in 1976 had a cotton content of 35 percent, the quality of raw cotton involved would have been 69,000 tons or 318,000 bales (table 8).

Table 7.—Mill Consumption of Specified Textile Fibers, Japan, Average, 1965-69, 1970-74, Annually 1970-77

Calendar year	Cotton	Wool	Silk	Rayon			Synthetics			Grand Total
				Continuous	Staple	Total	Continuous	Staple	Total	
	1,000 metric tons									
Average:										
1965-69	724.3	164.5	24.4	112.4	269.4	381.8	204.6	260.8	465.4	1,760.4
1970-74	783.9	167.3	30.0	98.7	238.3	337.0	354.1	402.0	756.1	2,074.3
1970	757.5	182.7	28.5	107.8	245.2	353.0	353.8	460.4	814.2	2,135.9
1971	764.1	169.3	28.5	96.8	245.8	342.6	337.2	426.7	763.9	2,068.4
1972	799.2	181.3	34.2	94.2	229.7	323.9	323.6	339.3	662.9	2,001.5
1973	829.1	186.3	31.5	106.5	253.6	360.1	421.2	415.0	836.2	2,243.6
1974	769.5	117.0	25.1	88.2	217.2	305.4	334.6	368.9	703.5	1,920.1
1975	706.2	133.5	26.9	73.2	161.4	234.6	324.7	325.9	650.6	1,751.7
1976	729.7	156.8	24.6	77.8	155.5	233.3	410.5	372.5	783.0	1,927.4
1977[1]	670.0	140.0	20.2	64.4	139.3	203.7	436.5	426.0	862.5	1,896.4
	Percent									
Average:										
1965-69	41.2	9.3	1.4	6.4	15.3	21.7	11.6	14.8	26.4	100.0
1970-74	37.8	8.1	1.4	4.7	11.5	16.2	17.1	19.4	36.5	100.0
1970	35.5	8.5	1.3	5.0	11.5	16.5	16.6	21.6	38.2	100.0
1971	36.9	8.2	1.4	4.7	11.9	16.6	16.3	20.6	36.9	100.0
1972	39.9	9.1	1.7	4.7	11.5	16.2	16.2	16.9	33.1	100.0
1973	37.0	8.3	1.4	4.7	11.3	16.0	18.8	18.5	37.3	100.0
1974	40.1	6.1	1.3	4.6	11.3	15.9	17.4	19.2	36.6	100.0
1975	40.3	7.6	1.6	4.2	9.2	13.4	18.5	18.6	37.1	100.0
1976	37.9	8.1	1.3	4.0	8.1	12.1	20.8	19.3	40.6	100.0
1977[1]	35.3	7.4	1.1	3.4	7.3	10.7	23.0	22.5	45.5	100.0

[1] Preliminary and partly estimated.

SOURCE: Cotton—Estimates of International Cotton Advisory Committee, 1965-69. Thereafter, figures are from Japan Spinners Association, Statistics of Japanese Spinning Industry, 1976, page 191. Figures are calculated as imports adjusted for changes in stocks.
Wool—For clean virgin wool and fine hair adjusted for nonmill use as given by International Wool Secretariat.
Silk—Data are from FAO and Raw Silk Statistical Monthly of Japan.
Manmade Fibers—From June issues of Textile Organon. Data are residuals of production plus imports less exports. Figures do not include olefin or fiber glass.

Table 8.—Production of Spun Yarn in Japan, 1966, 1970 and 1972-77

Item	1966	1970	1972	1973	1974	1975	1976	1977
	1,000 metric tons							
Cotton	522	526	555	555	511	460	498	441
Linen, ramie and jute	105	109	69	63	53	31	33	32
Wool	164	182	196	198	136	142	159	130
Silk	–	([3])	3	3	2	3	3	3
Synthetic Spun:								
Polyester pure	–	–	–	13	14	14	22	24
Polyester blended	–	–	221	230	206	181	213	196
(Of which blended with cotton)	–	–	(154)	(164)	(138)	(119)	(148)	(134)
Total	–	–	233	243	220	195	235	220
Nylon pure	–	–	–	4	4	2	4	4
Nylon blended	–	–	3	3	3	2	1	1
Total	–	–	–	7	7	4	5	5
Acrylic, pure	–	–	–	172	157	161	169	158
Acrylic, blended	–	–	73	93	66	64	90	81
Total	–	–	–	225	223	225	259	239
All spun synthetics, pure	89	173	225	236	215	202	219	209
All spun synthetics blended	171	268	310	341	283	250	309	281
(Of which blended with cotton)	–	–	(177)	(194)	(161)	(134)	(168)	(150)
Total	260	441	535	577	498	452	528	490
Rayon spun, pure	–	–	–	154	124	95	104	85
Rayon spun, blended	–	–	–	28	20	13	15	13
Total	221	263	203	182	146	108	119	98
Grand Total	1,272	1,524	1,561	1,578	1,347	1,196	1,342	1,194
	Index Numbers 1970 = 100							
Cotton	99	100	106	106	97	87	95	84
Linen, ramie and jute	96	100	63	58	49	28	30	29
Wool	90	100	108	109	75	72	81	71
Silk	–	100	100	100	67	100	100	100
Synthetics, spun, pure	51	100	130	136	124	117	127	121
Synthetics, spun, blended	64	100	116	127	106	93	115	105
Total	59	100	121	131	113	102	120	111
Rayon spun	84	100	77	69	56	41	45	37
Grand Total	83	100	102	104	88	78	88	78
	Percent of Total							
Cotton	41	35	36	35	38	38	37	37
Linen, ramie and jute	8	7	4	4	4	3	3	3
Wool	13	12	13	13	10	12	12	11
Silk	1	([1])	([1])	([1])	([1])	([1])	([1])	([1])
Synthetics, spun, pure	7	11	14	15	16	17	16	17
Synthetics, spun, blended	13	18	20	21	21	21	23	24
Total	20	29	34	36	37	38	39	41
Rayon, spun	17	17	13	12	11	9	9	8
Grand Total	100	100	100	100	100	100	100	100

[1] No data.

Source: Compiled from *Statistics on Japanese Spinning Industry, 1976, and Monthly Report of Japan Spinners Association,* published by Japan Spinners Association; *Manmade Fibers of Japan, 1976/77,* published by Japan Chemical Fibers Association; Raw Silk Statistical Monthly, published by the Central Raw Silk Association of Japan.

Domestic Consumption of Textiles

Of Japan's large mill consumption of cotton, over 80 percent disappears into the domestic market. In the last few years this market also has absorbed a volume of imported cotton textiles roughly equal to Japan's export of such products.

With its population of 113 million and one of the highest per capita GNP's, Japan is one of the world's largest consumers of textiles. Aggregate consumption of textiles totaled an average of 1.8 million metric tons on a raw fiber basis during 1973 and 1974, compared with 5.1 million tons in the United States, 3.9 million in the entire European Community, 3.3 million in the Soviet Union, and 1.5 million in Latin America—all with much larger populations. In fact, Japan absorbed 7 percent of the entire world's percent in 1977, and the Organization for Economic availability of fibers for ultimate consumption—raw fiber consumption adjusted for the fiber equivalent of imports and exports of fiber manufacturers.)

Per capita consumption in Japan of all clothing type fibers (cotton, wool, silk, and manmade fibers) doubled from 7.7 kilograms annually in 1955-59 to 15.8 kilograms in 1970-74. Of these totals, 4.2 kilograms and 6.9 kilograms, respectively were cotton, and 6.1 and 15.9 kilograms respectively manmade fibers, according to FAO data.

Average per capita consumption of all fibers in 1973 and 1974 of 17.3 kilograms was below the 23.6 kilograms consumed in the United States, but above the EC's 15.1 kilograms, the USSR's 13.2 kilograms, and a world average of 6.8 kilograms. As for cotton only, Japan's 7.5 kilograms compared with 4.7 in the United States, 7.9 in the Soviet Union, 5.1 in the European Community, and 3.3 worldwide.

Relationship of Textile Consumption to Growth in GNP

Japan's economy has expanded at phenomenal rates during the last two decades, but to what extent did this expansion result in increased use of textiles and cotton? From 1963 to 1973, the GNP rose 10.2 percent and private consumption expenditures gained 8.7 percent annually, both at constant prices. Thus rapidly rising purchasing power sustained per capita gains in textile consumption. A 54 percent increase in per capita GNP and a 36 percent gain in per capita expenditures (at constant prices) from 1965-69 to 1971-73, fueled a 30 percent gain in the quantity of fibers made available for consumption per capita, in Japan.

From 1973 to 1978, Japan's rate of expansion in GNP slowed down. It was 6.3 percent in 1976, 5.3 percent in 1977, and the organization for Economic Cooperation and Development (OECD) projects only 5 percent in 1978. Even so, Japan continues to have perhaps the highest growth rate of any major industrialized country.

A rising proportion of Japan's GNP consists of products exported rather than products and services consumed domestically. The excess of exports over imports (goods, services, and factor income) climbed steeply from 768 billion yen in 1973 to 4,965 million in 1976[2], and was running at an annual rate of 6,378 billion yen in the second quarter of 1977. This export surplus rose from only 0.9 percent of the GNP in 1973 to 6.5 percent in the second quarter of 1977. Japan's surplus on current account was calculated by the OECD at $3.7 billion in 1976, $10 billion in 1977, and a projected $10 billion again in 1978[3].

Japan also continues to invest a large proportion of its income in capital formation: 38 percent in 1974 and 33 percent in 1976. The Japanese economy is said to have entered into a transition phase from a very high to a lower medium-term growth rate, and contrary to the past, the scope for a rapid rise in private plant and equipment investment is said to be limited[4].

Government expenditures have been rising moderately from 8.4 percent of the national income in 1974 to 9.1 percent in the second quarter of 1977.

After subtracting other claimants of Japan's income, slightly over 50 percent is left for personal consumption expenditures. Such expenditures climbed 1.4 percent in 1974, 6.2 percent in 1975, 4.4 percent in 1976, and 3 3/4 percent in 1977. A small gain of 4 1/4 percent is in prospect for 1978[5].

The slowdown in economic activity since 1973 was accompanied by a fall in the per capita availability of textiles for consumption by consumers to a level in 1975 that was no higher than in 1965-69. Although there was a gain in 1976, the per capita level was no higher than in 1970-72.

Data giving the breakdown in personal consumption expenditures in Japan indicate that while the total of such expenditures rose 22 percent from 1972 to 1976, expenditures on clothing rose only 12 percent. In comparison, the increase for food, beverages, and tobacco, was 10 percent on housing, 27 percent; fuel and light, 27 percent; and other, 37 percent[6]. In other words, a smaller proportion of Japan's spending money was being spent on clothing.

Available data indicate that purchases by Japanese consumers of most textile items fell off after 1973, and had not recovered through 1977. There were,

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[2] Bank of Japan, Economic Statistics Monthly, Dec. 1977, p. 170.

[3] OECD, Economic Outlook, Dec. 1977, p. 85.

[4] OECD Economic Outlook, Dec. 1977, p. 83.

[5] OECD Economic Outlook, Dec. 1977, p. 81.

[6] Bank of Japan, Economic Statistics Monthly, Dec. 1976 and 1977.

Table 9.—Indexes of Population Growth, Per Capita GNP, and Consumer Expenditures at Constant Prices, and Fiber Availability, Japan, 1967 and 1970-77

Calendar Year	Population	GNP per capita	Consumer expenditures per capita	Fiber availability per capita
1967[1]	100.0	100.0	100.0	100.0
1970	104.4	134.6	125.1	125.4
1971	105.7	142.7	132.5	115.8
1972	107.2	153.5	124.2	114.9
1973	108.7	166.2	152.3	158.6
1974	110.2	161.8	152.4	116.9
1975	111.6	163.6	159.7	100.5
1976	112.8	172.1	165.1	119.6
1977	113.9	179.2	(2)	(2)

[1] For fiber availability, average of 1965-69.
[2] Not available.

Source: Population data are from *UN Monthly Statistical Bulletin.* GNP and consumer expenditures are at 1970 prices and are based on data in OECD, *Economic Surveys, Japan, 1977.* Fiber availability as given in table 12.

however, exceptions. Sales of women's dresses and skirts, blouses, sweaters, and T-shirts, gained, as did men's T-shirts, and jeans; and boys' and girls' blouses, skirts, and jeans. These countertrend gains indicated the influence of fashion trends.

From the foregoing, it can be concluded that Japan may still have potential for a moderate-to-substantial expansion in consumption of textiles. Obviously, consumption in the last few years has been held back by pressures on the family budget. If Japan's income continues to rise, if more of this income is made available for personal expenditures, and if consumers become more assured of their personal economic security, recovery, and possibly new records, in consumption of fibers could be achieved.

Textile End Uses

However, Japan already has a relatively high level of per capita fiber consumption. It is difficult to analyze Japan's textile end-uses because of differing concepts and definitions and lack of complete data, but apparently per capita consumption of all fibers in apparel must now be at the U.S. level or not far below it. About half of the difference between Japan's and the U.S. per capita consumption of all fibers is in carpeting, which currently accounts for nearly one-fourth of U.S. fiber consumption, but very little of Japan's.

Much of the remaining difference is in industrial uses. From this analysis it must be concluded that while Japan's per capita consumption of fibers could grow moderately in the future because of gains in apparel and industrial uses, a large increase appears unlikely unless and until there is a major expansion in household uses, and particularly in carpeting. If this unlikely event were to occur, the gain would be in manmade fibers.

Competition Among Fibers at Consumer Level

Cotton has fared quite well in Japanese interfiber competition at the consumer level. Statistics on the availability of textile products to consumers, calculated on a yarn basis, show cotton yarn's proportion of the domestic supply of textile products was 32.3 percent during 1965-69. The proportion rose to over 35 percent in 1974 and 1975—following high prices for manmade fibers in 1974—but declined to 32.3 percent again in 1976 and to 32.1 percent in 1977 when cotton prices were high.

Wool yarn's proportion has remained around 10 to 11 percent in recent years and silk yarn's around 2 percent. The proportion of rayon and acetate yarns, however, has been continuously falling and in 1977 was 9 percent compared to 22 percent in 1965-69. Consumption of synthetic fiber yarns, on the other hand, has been rising: from 30 percent in 1965-69 to 47 percent in 1977 (table 10).

The domestic per capita supply of textile products for apparel and household use and industrial use (yarn basis) is given in table 11, which shows that the per capita supply of textiles has been off considerably since 1973. The table also indicates that practically all cotton is used in apparel and household items, but that a considerable proportion of synthetic textiles is used industrially.

Statistics on availability of textile products to consumers, calculated in terms of tonnages of the various kind of yarns, however, do not tell the entire story. If fiber consumption is put on a fiber basis instead of a yarn basis, the figures are larger for

Table 10.–Domestic Supply of Textile Products on a Yarn Basis, Japan, Average 1965-69, 1970-74, Annually 1970-77[1]

Calendar Year	Cotton	Wool	Silk	Rayon and acetate			Synthetic fibers			Grand total[3]
				Cont. Fil.	Spun	Total	Cont. Fil.	Spun[2]	Total	
	1,000 metric tons									
Average:										
1965-69[3]	373	135	23	53	201	254	156	190	346	1,152
1970-74	521	169	30	45	175	220	251	337	588	1,567
1970	437	160	30	48	213	261	268	248	516	1,448
1971	476	163	26	40	210	250	242	298	540	1,496
1972	541	171	34	39	170	209	214	325	539	1,528
1973	647	204	31	56	165	221	342	445	787	1,932
1974	505	149	28	42	117	159	189	369	558	1,430
1975	465	150	32	38	93	131	179	329	508	1,309
1976	495	151	31	37	110	147	288	400	688	1,534
1977	455	130	27	29	102	131	310	361	671	1,414
	Percent									
Average:										
1965-69	32.3	11.7	2.0	4.6	17.4	22.0	13.5	16.5	30.0	100.0
1970-74	33.2	10.8	1.9	2.9	11.2	14.0	16.0	21.5	37.5	100.0
1970	30.2	11.0	2.1	3.3	14.7	18.0	18.5	17.1	35.6	100.0
1971	31.8	10.9	1.7	2.7	14.0	16.7	16.2	19.9	36.1	100.0
1972	35.4	11.2	2.2	2.6	11.1	13.7	14.0	21.3	35.3	100.0
1973	33.5	10.6	1.6	2.9	8.5	11.4	17.7	23.0	40.7	100.0
1974	35.3	10.4	2.0	2.9	8.2	11.1	13.2	25.8	39.0	100.0
1975	35.5	11.5	2.4	2.9	7.1	10.0	13.7	25.1	38.8	100.0
1976	32.3	9.8	2.0	2.4	7.2	9.6	18.8	26.1	44.9	100.0
1977	32.1	9.2	1.9	2.1	7.2	9.3	21.9	25.6	47.5	100.0

[1] Production of yarn plus imports of yarn, fabrics, and other manufactures, less exports of these items.
[2] Includes a large proportion of blends with natural fibers.
[3] Includes from 1.5 to 3.1 percent of other fibers including linen and ramie.

Compiled from *"Statistics on Japanese Spinning Industry, 1976, p. 197"*.

cotton, wool, and other staple fibers that are spun because of the waste loss in spinning processes. Also, some of the cotton yarn made by smaller establishments is not counted and some raw cotton consumed in Japan, is not spun. Another problem is that over one-fourth of Japan's consumption of textile products is of spun synthetic products, a large proportion of which contains cotton.

A calculation of the availability for domestic consumption of the various fibers in Japan on a fiber basis is given in table 12. Cotton's proportion of the market rose considerably from 43.8 percent in 1965-69, to 47.1 percent in 1970-74 and to 51.4 percent in 1975. Although cotton's availability rose quantitatively from 1975 to 1976, availability of manmade fibers rose more rapidly and cotton's proportion fell to 45.7 percent. Despite this drop, cotton's percentage was higher than in 1965-69. This proportion compares with only 30.6 percent in the United States in 1976 (USDA data) and 35 percent in the European Community in 1974 (FAO data).

Consumption of cotton has benefited from the promotion activities of the Japan Cotton Promotion Institute, an organization formed a number of years ago by seven Japanese cotton textile associations that includes spinners, weavers, dyers, printers, merchants associations, and others. Such promotion activities often are cosponsored by the International Institute for Cotton, the world cotton promotion organization, which has an office in Japan, and by Cotton Council International, the U.S. organization to promote sales of U.S. cotton abroad.

In this connection, consumption in Japan also has benefited from fashion trends favoring denim and other cotton products in the 1970s[7].

As in other developed countries, competition from manmade fibers is severe. Although most apparel and household items are made of cotton, manmade fibers now have over 40 percent of the market in shirts, trousers, and raincoats, for men's use; blouses, slacks, dresses, skirts, and raincoats for women's use; and skirts, jackets, and jumpers, and so forth, for children's wear. However, considerable amounts of blends with cotton are involved, particularly in shirts and raincoats. As in the United States, blends have been introduced in sheets and pillowcases, replacing all-cotton products. Tire cord and fishing nets are practically all synthetic. The most important end uses of cotton in Japan, according to a survey made in 1974, are given in table 13.

[7] See International Institute for Cotton and Japan Cotton Promotion Institute. Marketing Plan for Japan; the Japanese market, 1977.

Table 11.–Domestic Per Capita Supply of Textile Products for Apparel and "Industries" Use on a Yarn Equivalent Basis by Fiber, Japan Averages 1965-69, 1970-74, Annually 1970-1977

Year	Cotton	Wool	Silk	Rayon and Acetate			Synthetic Fibers			Grand Total[2]
				Contin. Fil.	Spun	Total	Contin. Fil.	Spun[1]	Total	
TOTAL										
Average:										
1965-69	3.74	1.35	0.22	0.79	1.93	2.72	([3])	([3])	3.45	11.66
1970-74	4.86	1.33	.53	.69	1.64	2.34	2.35	3.14	5.49	14.66
1970	4.21	.29	1.54	.74	2.06	2.76	2.59	2.39	4.98	13.97
1971	4.53	1.56	.25	.64	2.00	2.69	2.30	2.84	5.14	14.25
1972	5.04	1.60	.32	.63	1.59	2.22	1.99	3.03	5.02	14.20
1973	5.95	1.88	.29	.83	1.52	2.35	3.15	4.09	7.24	17.91
1974	4.59	1.36	.26	.63	1.06	1.69	1.72	3.36	5.08	13.00
1975	4.16	1.34	.29	.53	.83	1.36	1.60	2.94	4.54	11.70
1976	4.38	1.34	.27	.50	.97	1.47	2.55	3.54	6.09	13.56
1977	3.99	1.14	.24	.41	.74	1.15	2.72	3.16	5.88	12.40
APPAREL										
Average:										
1965-69	3.46	1.33	.22	.69	1.88	2.57	.79	1.74	2.53	10.28
1970-74	4.64	1.33	.53	.63	1.57	1.60	1.06	2.89	3.99	12.76
1970	3.93	.29	1.54	.66	1.99	1.65	1.45	2.16	3.61	12.15
1971	4.30	1.55	.25	.57	1.94	2.51	1.13	2.62	3.75	12.48
1972	4.83	1.59	.32	.56	1.52	2.08	.72	2.81	3.53	12.35
1973	5.74	1.87	.29	.78	1.44	2.22	1.65	3.82	5.63	15.79
1974	4.40	1.35	.26	.59	.79	1.56	.38	3.07	3.45	11.05
1975	4.06	1.34	.29	.49	.75	1.24	.63	2.71	3.34	10.28
1976	4.27	1.38	.27	.46	.90	1.36	1.31	3.32	4.63	11.89
1977	3.90	1.14	.24	.39	.69	1.08	1.45	2.99	4.44	10.80
"INDUSTRIES"										
Average:										
1965-69	.28	.02	0	.10	.05	.15	([4])	([4])	.92	1.38
1970-74	.22	0	0	.06	.07	.13	([4])	([4])	1.52	1.90
1970	.28	0	0	.08	.07	.15	([4])	([4])	1.37	1.82
1971	.23	.01	0	.07	.06	.13	([4])	([4])	1.39	1.78
1972	.21	.01	0	.07	.07	.13	([4])	([4])	1.46	1.86
1973	.21	.01	0	.05	.08	.13	([4])	([4])	1.75	2.13
1974	.18	0	0	.04	.09	.13	([4])	([4])	1.63	1.94
1975	.10	0	0	.04	.08	.12	([4])	([4])	1.20	1.42
1976	.11	.01	0	.04	.07	.11	([4])	([4])	1.46	1.68
1977	.09	0	0	.02	.05	.07	([4])	([4])	1.44	1.60

[1] Includes large proportion blended with natural fibers.
[2] Includes small quantity of linen and ramie not shown separately.
[3] Data not available.
[4] Preliminary and partly estimated.

Source: Compiled from "Japan Cotton Statistics, 1977", published by Japan Cotton Traders Association, Osaka, and earlier volumes, and "Statistics on Japanese Spinning Industry, 1976", published by the Japan Spinners Association, p. 198.

Table 12.–Availability of Textile Fibers for Domestic Use, Japan, Average 1965-69, 1970-74, Annually 1973-1976

Fiber	Averages		1973	1974	1975 (est)	1976 (est)	Averages		1973	1974	1975 (est)	1976 (est)
	1965-69	1970-74					1965-69	1970-74				
	1,000 metric tons						*Percent*					
Total	1,206.1	1,632.8	2,062.6	1,594.1	1,342.0	1,616.7	100.0	100.0	100.0	100.0	100.0	100.0
Cotton	527.6	769.5	958.7	792.4	689.1	738.7	43.8	47.1	46.5	49.7	51.4	45.7
Wool	129.5	166.5	229.2	126.6	140.0	196.0	10.7	10.2	11.1	8.0	10.4	12.1
Manmade												
Rayon	255.8	267.4	312.8	276.3	188.1	182.9	21.2	16.4	15.2	17.3	14.0	11.3
Synthetic	293.2	429.4	561.9	398.8	324.8	499.1	24.3	26.3	27.2	25.0	24.2	30.9
Subtotal	549.0	696.8	874.7	675.1	512.9	682.0	45.5	42.7	42.4	42.3	38.2	42.2

Note: This table gives mill consumption data adjusted for the raw fiber equivalent of imports and exports of fiber manufactures. The adjustments through 1974 are from FAO's ESCR: FC/76/1 "Per Caput Fibre Consumption of 1973 to 1974", and earlier reports in the same series. Adjustments for 1975 and 1976 are estimated from Japan's foreign trade figures. See footnote to table 7 for sources of mill consumption data. These data have not been adjusted for changes in stocks.

Table 13.–Most Important End Uses of Cotton, Japan, 1974

Item	Metric tons of cotton	Percent of total
Underwear	68,100	13.5
Towels and "toweling blankets"	61,700	12.2
Fabrics and covers for "futon" or quilts and mattresses	59,100	11.7
Sheets and pillowcases	46,500	9.2
Sleepwear	19,400	3.8
Men's shirts	10,200	2.0
Kimonos	8,700	1.7
Men's slacks	8,300	1.6
Women's dresses	7,700	1.5
Women's blouses and T-shirts	5,500	1.1
Boys and girls shirts and blouses	4,300	0.9
Skirts	4,000	0.8
Subtotal	303,500	60.0
Retail piece goods	34,500	6.8
Canvas and duck	8,349	1.7
Belts	3,894	0.8
Industrial thread	8,291	1.6
Fastners	3,757	0.7
Thread and narrow fabric for "tatami"	2,131	0.4
Footwear	2,576	0.5
Vinyl coated fabrics	2,670	0.5
Undercloth for textile finishings	1,757	0.3
Wire covering material	9,209	1.9
Subtotal	42,634	8.4
Other Items	124,566	24.8
Total	505,200	100.0

Source: International Institute for Cotton and Japan Cotton Promotion Institute: Marketing Plan for Japan, the Japanese Market, 1977, ps. 80 and 17. Figures given are from a survey made by the two organizations.

The Textile Export Situation

Through the 1960s, Japan was the world's largest exporter of cotton cloth as well as of textiles generally. This situation has changed considerably, and in 1973, for the first time, Japan became a net importer of cotton manufactures. Imports declined in the recession after 1973, but in 1974 and again in 1976, though not in 1977, imports again exceeded exports (table 14). Japan's exports of cotton products averaged over 200,000 metric tons annually in raw cotton equivalents during 1965-69, but from 1972 to 1976 declined to between 100,000 to 125,000 tons annually. There was a moderate rise to around 140,000 tons in 1977.

Japan has been only a minor exporter of cotton yarn in recent years (table 16), and its former export of over a billion square meters of cotton cloth, most recently in 1968, had dwindled to 247 million in 1973 with some recovery to 398 million in 1977 (table 17). Exports of cotton products still go to a large number of destinations on all continents and have suffered under the impact of new domestic industries in developing countries; competition from Hong Kong, Taiwan, and Korea in international markets; and competition from synthetic products.

Textile exports accounted for only 21 percent of Japanese mill consumption of raw cotton in 1977 compared with 29 percent during 1965-69. Japan's exports of spun synthetic production, including a large proportion of polyester-cotton blends, also have been off somewhat in the last few years, but continue to be several times larger than Japan's import of such products.

U.S. import statistics show that in 1977, Japan was the most important source of textiles and textile manufactures imported into the United States, replacing Hong Kong, which was the leading source in 1976. Of the 972 million equivalent square yards imported from Japan in 1977, 411 million were manmade fiber yarns, largely continuous-filament synthetic yarns; 465 million other manmade fiber products; and only 81 million cotton products and 7 million, wool.

Japanese figures show a decline in exports of cotton cloth to the United States from over 100 million square meters annually during 1965-69 to under 30 million annually in 1975-77. Exports of

Table 14.—Imports and Exports of Cotton, Spun Synthetic and Spun Rayon Products, Japan, 1972-77
On a Yarn Equivalent Basis

1,000 metric tons[1]

Item	1972	1973	1974	1975	1976	1977
Cotton products						
Imports	98.0	182.8	89.9	67.3	87.3	68.6
Exports	103.6	73.8	70.3	74.4	83.0	93.6
Spun synthetic products[2]						
Imports	10.1	44.8	49.4	24.4	35.5	36.9
Exports	221.5	153.7	152.0	161.6	165.8	188.7
Spun rayon products						
Imports	1.8	9.4	10.8	4.2	2.4	2.2
Exports	38.4	26.5	25.2	26.5	20.1	25.3

[1] Imports and exports of all products converted to a yarn equivalent basis.
[2] Includes substantial quantities of part-cotton products.

Source: Compiled from *Statistics on Japanese Spinning Industry*, 1976, and manuscript data.

Table 15.—Imports and Exports of Cotton Manufactures in Raw Cotton Equivalents, Japan, Averages 1965-69, 1970-74, Annually 1970-77

(1,000 metric tons)

Calendar Year	Imports	Exports
Average:		
1965-69	13.0	209.7
1970-74	122.5	136.8
1970	44.9	151.8
1971	69.1	155.1
1972	121.7	153.1
1973	246.1	116.9
1974	130.5	107.2
1975	98.0	115.0
1976	134.0	125.0
1977[1]	105.0	140.0

[1] Preliminary.

Compiled from FAO: Per Capita Fibre Consumption, 1973 to 1974 (ESCR:FC 76/1) and earlier volumes. Estimated on basis of Japanese data after 1974. Includes cotton content and cotton manmade fiber blends.

Table 16.–Production, Imports, and Exports of Cotton Yarn in Japan, 1965-1977

(1,000 metric tons)

Item	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977
Production[1]	576.7	540.8	548.4	563.6	536.7	534.7	544.1	555.1	554.9	511.4	460.5	498.3	440.9
Imports total	0.1	0.1	10.4	14.2	2.6	12.9	26.0	41.3	50.0	26.9	27.0	399.7	27.0
Korea	–	–	–	–	0.1	3.0	12.4	11.5	8.2	14.9	10.5	14.8	15.5
Pakistan	–	–	9.9	13.4	2.1	7.4	12.3	29.0	35.7	6.0	10.0	17.3	6.0
China, P.R.	–	–	–	–	–	–	–	–	1.7	3.0	4.9	5.3	2.8
India	–	–	–	–	–	–	0.3	0.2	0.3	0.5	–	–	–
Other	0.1	0.1	0.5	0.8	0.4	2.5	1.0	0.6	4.1	2.5	1.6	2.3	2.2
Exports total	11.4	15.8	6.2	7.0	7.3	7.1	7.6	6.0	8.0	10.7	10.0	7.5	9.1
Hong Kong	–	0.4	0.3	0.4	0.8	0.6	0.6	0.5	1.0	2.7	2.2	2.7	0.5
Kenya	–	0.2	0.5	0.9	0.6	1.0	1.3	1.3	1.2	1.5	1.6	1.3	1.9
Thailand	–	1.0	1.2	1.1	1.8	1.5	1.9	1.5	1.0	1.8	0.7	0.1	0.1
Indonesia	–	6.0	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.2
Australia	–	0.6	0.7	0.6	0.5	0.6	0.7	0.6	0.4	0.4	0.1	0.1	0.1
Other	–	7.6	3.3	3.9	3.5	3.3	3.0	2.0	4.3	5.1	5.2	3.2	7.3
Balance	-11.3	-15.7	+4.2	+7.2	-4.7	+5.8	+18.4	+35.3	+42.0	+16.2	+17.0	+32.2	+17.9
Ending stocks	–	–	–	–	–	–	–	–	7.8	23.6	14.0	16.2	9.8

[1] Pure cotton yarns and yarns largely cotton but containing other fibers.

Source: Ministry of International Trade and Industry, Japan Cotton Statistics, 1976, page 38. Published by the Cotton Economics Research Institute and the Japan Cotton Traders Association, Osaka. "Statistics on Japanese Spinning Industry, 1976, p. 179.

Table 17.—Production, Imports, and Exports of Cotton Fabrics in Japan, 1966-1976, 1977 (Jan.-Oct.)

(Million square meters)

Item	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975	1976	1977 Jan-Oct
Production	2,913	2,825	2,744	2,780	2,616	2,482	2,264	2,380	2,164	2,124	2,237	2,266
Imports, total	4	12	32	41	72	100	273	687	182	158	142	106
South Korea	([1])	([1])	5	8	7	22	41	88	29	16	15	8
Taiwan	–	4	17	19	32	46	92	111	30	37	32	29
Hong Kong	([1])	([1])	([1])	1	13	6	5	27	3	([1])	([1])	([1])
U.S.A.	2	4	3	5	10	17	36	42	21	8	5	3
China, P.R. of	([2])	([2])	([2])	([2])	2	1	69	134	28	82	70	45
Other	2	4	7	5	8	8	30	285	71	15	20	21
Exports, total	993	802	666	550	429	409	376	247	288	283	312	398
Hong Kong	94	64	64	58	49	72	54	22	39	43	49	53
Korea, South	6	7	7	7	8	9	11	16	16	15	23	22
Thailand	55	39	18	13	11	8	8	6	7	4	2	3
Singapore	25	26	19	12	16	9	10	6	10	9	10	12
Indonesia	34	52	40	23	8	5	3	3	5	6	3	1
Iran	3	4	([2])	1	1	([2])	([2])	8	8	7	24	82
Other Asia	192	121	101	73	66	62	31	23	25	37	38	73
Total Asia	409	313	249	187	159	165	117	84	110	121	149	246
Europe, total	79	71	58	58	43	43	44	30	55	40	38	45
United States	119	103	104	108	73	62	86	35	34	24	28	28
Other America	102	80	51	41	30	30	22	7	9	10	11	14
Total America	221	183	155	149	102	92	108	42	43	34	39	42
Africa, total	171	117	97	58	44	32	33	24	28	35	31	23
Oceania	113	118	106	98	80	77	75	67	51	53	54	42
	1,000 metric tons (yarn equivalent)											
Production	–	–	–	–	–	–	555	555	511	460	498	409
Imports	–	–	–	–	–	–	48	108	33	23	19	15
Exports	–	–	–	–	–	–	64	40	41	44	49	57

[1] Less than 0.5. [2] Included in other.

Source: Compiled from "Statistics of Japanese Spinning Industry".

synthetic fabrics to the United States peaked at 50 million square yards in 1971, but were down to 26 million in 1976. Imports of textiles from Japan into the United States are the subject of a bilateral consultative agreement under which the U.S. Government can call for consultations should the level of imports exceed prescribed levels. This agreement is in conformity with the international Multifiber Arrangement, which sets basic requirements for such bilateral agreements.

With costs that are now much higher than those of some of its competitors, Japan has been having difficulty in the highly competitive, international textile business. Japanese textile manufacturers have the advantages of a large domestic market that provides a strong home base from which to operate and a level of technology second to none. Efforts are being made to concentrate on high technology and high-style products. The industry considers that its prospects for any expansion in exports of cotton textiles and apparel are not promising, but that prospects are a little better for higher quality goods such as printed and yarn-dyed fabrics than for coarse gray goods. On spun synthetic fabrics, Japan is said to have lost its competitive power because of weaving costs that are two to three times those in Korea and Taiwan. On synthetic filament fabrics, prospects are for not much change up or down; there has been, however, substantial rise in exports of this product to oil-exporting countries.

Textile Imports

In 1972 and 1973, imports of cotton fabrics, largely from other Far Eastern sources, and of yarn, mostly from Pakistan, soared to peak levels, many times what they had been in the past. Imports of cotton manufactures rose from an average of 13,000 metric tons in raw cotton equivalents during 1965-69, to a peak of 246,000 tons in 1973, but during 1974-77 receded to an average of 117,000 tons per year.

The rise in imports apparently was the result of a very strong domestic market and Government decisions to allow such imports. The decline since 1973 is associated with a depressed domestic market and the Japanese textile industry's production of goods at very low margins or even deficits. Exporters in other countries complain of Japan's nontariff measures, including administrative guidance and a trading company control system, which they say eliminate opportunities for the export of apparel to Japan.

The future of textile imports into Japan depends on the attitude of the Japanese Government. Since Japan is now a high-technology country it could choose to allow rising imports of cotton textiles, particularly from such countries as Korea and the PRC, in the interest of selling plants and machinery to those countries. Or it could elect to have a protectionist attitude in order to protect the domestic industry. The outcome could be a compromise in which imports will not rise much unless there is a considerable upturn in domestic market conditions.

Manmade Fiber Industry

Japan has one of the world's largest manmade fiber industries. In 1977, Japan produced nearly 1.7 million metric tons of manmade fiber or 13 percent of the world total of 12.3 million tons. (Both figures exclude glass fiber and olefin for which complete world and Japanese data are not available.) Japan's output compares with the 3.4 million tons produced in 1977 in the United States, 2.9 million in Western Europe, 2.1 million tons in Communist countries, and 2.2 million tons in the rest of the world.

Between one-fifth and one-fourth of Japan's production of manmade fiber is rayon and acetate. This is about the same proportion as in Western Europe, but considerably above the United States 11 percent. Japan's production of these fibers peaked in 1969 and again in 1973, but by 1976 had declined by 30 percent from the 1973 level. There was a small regain in 1977, no doubt because of high cotton prices (table 18). One-third of Japan's production of rayon and acetate is exported without processing. The USSR, the PRC, Afghanistan, Indonesia, and India were leading destinations in 1977. Exports to India at an average of 52 cents per pound, f.o.b., followed India's decision to import manmade fibers rather than cotton because of high prices for cotton.

More than three-fourths of Japan's manmade fiber production is synthetics. Production declined 20 percent from 1973 to 1975, but recovered in 1976, and set a new record in 1977. Polyester accounts for 45 percent of production; nylon, one-fourth; acrylics, one-fourth; and other fibers for the remaining 5 percent. Roughly 45 percent is continuous filament yarn and 55 percent staple fiber. More than one-third of the production of synthetic fibers is exported in unprocessed form. Among the leading destinations are the United States, the PRC, Indonesia, Korea, India, the Philippines, Iran and Taiwan.

Despite high levels of production, the Japanese manmade fiber industry has serious problems. The largest producer estimates that it lost $21 million during the April 1977-March 1978 fiscal year and the second largest estimates a loss of $17 million. All but one of seven synthetic fiber producers had deficits in ordinary profits from April through September 1977, with an aggregate loss of $66 million. Reduced

Table 18.—Japan: Production, Production Capacity, and Exports of Manmade Fibers, 1970-1977[1] and Specified Months, 1973-79

(In 1,000 metric tons)

Calendar year	Rayon and Acetate				Synthetics			
	Continuous filament yarn	Staple Fiber	Total	Total	Continuous filament yarn	Staple Fiber	Total	Total
	Production			Exports	Production			Exports
1970	135.9	356.1	492.0	139.3	436.9	533.1	970.0	216.6
1971	120.9	354.4	475.3	132.7	511.7	591.1	1,102.8	341.0
1972	119.0	367.9	486.9	163.0	482.6	571.0	1,053.6	395.3
1973	128.3	383.4	511.7	159.0	571.2	675.3	1,246.5	404.2
1974	115.6	328.7	444.3	115.5	505.0	620.5	1,125.5	431.9
1975	103.2	255.6	358.8	132.4	480.0	540.9	1,020.9	422.8
1976	109.3	250.3	359.6	127.1	553.7	650.4	1,204.1	431.9
1977	107.4	272.7	380.1	177.7	590.2	690.2	1,280.4	427.9
	Capacity				Capacity			
March 1973	141.0	415.0	556.0	–	563.0	664.5	1,227.5	–
March 1975	139.0	421.6	560.6	–	593.4	733.0	1,326.4	–
March 1976	139.0	374.0	513.0	–	617.4	733.0	1,350.4	–
March 1977	139.0	374.0	513.0	–	654.0	802.0	1,456.0	–
December 1978	139.0	315.0	454.0	–	654.0	802.0	1,456.0	–
March 1978	139.0	374.0	513.0	–	781.0	947.0	1,728.0	–
December 1979 (Projection)	128.1	374.0	502.1	–	791.0	952.0	1,743.0	–

[1] Excludes glass fiber and olefin.

Source: Compiled from June issues of Textile Organon.

operations in the domestic textile industry, rising costs, declining sales prices, and increased difficulty in competing in world markets because of the rising value of the yen—as well as new industries in developing countries—are cited as reasons for the industry's difficulties.

The industry attempted to organize a cartel to hold down production early in 1977, but could not reach agreement. In September 1977, however, the Ministry of International Trade and Industry asked producers of synthetic fibers to reduce their production by 5 percent during October-December 1977. In December, it was announced that the curtailment would be continued during January-March 1978. These reductions were said to be in addition to an already existing 20-25 percent cutback.

Productive capacity for producing rayon and acetate in Japan has been declining and capacity for synthetics rising only slowly if at all. A gain from 1976 to 1977 is said to have been a statistical correction. The $225 million that was being invested in synthetic fiber equipment in 1977—more than half for polyester fiber—was said to be the smallest amount in terms of purchasing power so spent in several years. It was largely for "scrapping and rebuilding," "rationalization," and automation. Plans call for spending $152 million in 1978.

Japanese synthetic fiber manufacturers say they are at a disadvantage compared with foreign competitors because of Japanese Government controls on naptha, the petroleum derivative from which are derived intermediates used in making synthetic fibers. In June 1977 naptha was said to cost 29,000 yen per kiloliter in Japan, the highest cost in the world, compared with 22,000 yen in the United States, 26,000 in Europe, and 24,000 in South Korea. The industry was asking for a Government subsidy to lower the price.

DMT (dimethyl terephthalate), the intermediate chemical from which polyester fiber has been made in the past, was priced at 115-117 yen per kilogram (about 38 cents) before the oil crisis. By May 1977, the price was up to 195 yen (about 71 cents), thereafter declining to 170 yen (70 cents) at the end of 1977.

Japanese producers, like producers elsewhere, are switching from DMT to TPA (terephtalic acid), which is said to cost as much as DMT but simplifies production processes.

Wages in Japanese manmade fiber plants have been rising rapidly. Before the oil crisis, the initial salary for female workers was 25,000 yen ($82) per month. In the summer of 1977, this salary had risen to 65,000 to 70,000 yen ($234-252) and was rising about 10,000 yen ($41) annually. In Korea and Taiwan, wages were said to be in the $70 to $90 range.

The cost of building a synthetic fiber plant is said to have risen 50 percent in the last 10 years.

Domestic prices for manmade fibers are negotiated between the producers and the spinners associations. The negotiated price for July-September 1977 was 350 yen per kilogram, the same as for April-June 1977, but in June 1978 the date was down to 330 yen. Because of the rising value of the yen, however, the equivalent price in U.S. cents per pound rose from 58 during the second quarter of 1977 to 73 in June and July 1978.

Cotton was priced much higher than polyester staple fiber in the Japanese domestic market from the beginning of 1976 until July 1977. The rapid decline in cotton prices in the fall of 1977 combined with the rising yen-versus-dollar exchange rate gave the price advantage to cotton at this time (figure 2 and table 19). Rayon staple fiber prices in recent years have nearly always been lower than cotton prices. These comparisons are on the basis of 1-1/16″ cotton; shorter staple cottons are, of course, priced lower. In mid-January 1978, the price of polyester staple fiber was the equivalent of 63.7 cents per pound; rayon staple fiber, 60.0 cents, U.S. Arizona SM 1-1/16″ cotton, 62.75 cents; and U.S. Orleans Texas SLM 15/16″ cotton, 54.50 cents.

Japanese manmade fiber producers sell for export at considerably lower than domestic prices. For instance, in competition with U.S. producers, they sold 30,000 tons of polyester staple fiber to the PRC in late 1977 for delivery during January-June 1978 at a price of 36 cents per pound f.o.b. The average value of Japan's polyester staple fiber exports to all destinations during January-June 1977 was 278 yen per kilogram, or 45 cents per pound, at first half 1978 average exchange rates. The average value of exports to the People's Republic of China, however, was 40 cents and to the USSR, 43 cents.

The break-even cost of producing polyester fiber in Japan in 1977 was said to be 350 yen per kilogram, (59 cents) or about the same as the domestic price. Because of losses in the industry, banks were said to be pressing Japanese manmade fiber producers to merge. It was reported at the end of 1977 that eight synthetics fiber producers would be merged into four groups. The move would entail further reductions in production capacity. Japanese producers also were reported to have asked the Government to take special measures on taxes and the high exchange rate to ease their situation.

The Japanese manmade fiber industry is dominated by seven large companies, which in addition to their holdings in Japan, are part or whole owners of

FIGURE 2. PRICES OF COTTON AND POLYESTER FIBER IN JAPAN

manmade fiber plants in Korea, Taiwan, Philippines, Malaysia, Indonesia, Thailand, India, Brazil, Venezuela, Portugal, Spain, and Ireland. In addition, Japanese manmade fiber producers have been active in selling synthetic fiber plants to some of the Communist countries.

The Japanese industry thus has contributed considerably to the expansion of manmade fibers in other countries as well as in Japan. Rising competition in world markets, in the view of some, has forced the Japanese industry to place greater emphasis on promotion activities in the domestic market.

Table 19.—Prices of Polyester Staple Fiber, Rayon Staple Fiber, and U.S. Cotton, Japan, Monthly, 1972-1978

(In cents per pound)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
Polyester Staple Fiber (domestic price)												
1972	44.1	44.6	37.4	37.2	37.2	37.7	37.6	37.7	37.7	37.7	37.7	37.6
1973	37.6	48.1	47.7	47.8	47.8	47.9	48.2	47.9	51.3	51.0	48.6	64.8
1974	60.5	62.9	64.2	81.9	81.7	79.8	80.1	74.9	75.7	75.8	75.6	57.3
1975	57.3	59.5	58.9	59.1	59.1	58.9	58.1	57.8	57.2	56.9	56.9	56.3
1976	56.7	57.1	57.5	57.5	57.4	57.4	58.8	59.6	60.0	58.7	58.3	58.7
1977	59.0	57.6	58.0	59.3	58.8	59.7	61.5	61.2	64.2	61.2	65.2	66.0
1978	63.7	64.2	65.5	–	67.5	69.3	73.5	–	–	–	–	–
Rayon Staple Fiber (domestic price)												
1972	24.8	26.0	26.0	26.0	26.1	26.4	26.3	26.4	26.4	26.4	26.4	27.5
1973	27.5	31.5	31.2	31.3	37.6	37.7	37.9	37.6	37.6	37.4	35.6	64.8
1974	42.4	62.9	64.2	65.5	65.3	63.8	64.1	59.9	50.0	45.5	33.3	33.2
1975	30.2	42.3	41.9	45.1	45.1	46.5	45.9	45.7	45.1	46.4	43.4	45.9
1976	46.2	46.5	46.9	54.5	54.4	49.9	60.3	64.3	64.7	63.3	63.0	58.7
1977	49.7	51.2	51.6	52.7	52.3	53.0	54.7	54.4	54.4	57.1	59.6	60.3
1978	60.0	60.4	61.6	64.5	61.6	65.1	69.0	–	–	–	–	–
Cotton (U.S. Arizona SM 1-1/16″)												
1972	37.0	36.8	36.0	36.0	36.0	35.0	33.4	31.8	30.7	31.9	34.3	35.7
1973	37.6	38.4	41.2	43.9	49.8	51.2	59.4	63.6	68.5	NQ	76.9	77.2
1974	84.3	67.0	(64)	(64)	61.0	56.0	NQ	NQ	NQ	49.0	47.8	46.0
1975	44.0	45.0	50.0	51.9	55.0	54.1	NQ	58.4	58.5	NQ	NQ	NQ
1976	64.2	66.7	66.1	65.0	67.8	76.7	81.8	78.2	79.0	83.0	83.0	80.2
1977	72.2	77.3	84.7	82.6	75.6	69.0	61.8	57.2	56.5	56.8	55.5	57.5
1978	63.6	65.8	68.6	69.2	70.8	70.8	67.6	–	–	–	–	–

NQ = No quotation.

SOURCE: Manmade fiber prices are from American Consulate, Osaka. Cotton prices are from *Japan Cotton Traders Association.*

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