UNITED STATES TARIFF COMMISSION

TEXTILES AND APPAREL

Report to the President on Investigation
No. 332-55 Under Section 332 of the
Tariff Act of 1930

VOLUME II

TC Publication 226
Washington, D.C.
January 1968

UNITED STATES TARIFF COMMISSION

Address all communications to

United States Tariff Commission

Washington, D.C. 20436

C O N T E N T S

GENERAL HEADINGS

Textiles and Textile Products, by Fiber Components

DETAILED HEADINGS

Textiles and Textile Products, by Fiber Components

CONTENTS

Page

CONTENTS

CONTENTS

TEXTILES AND TEXTILE PRODUCTS, BY FIBER COMPONENTS

A. Cotton and Cotton Products

During 1967 the United States, for the first time in more than a century, was surpassed in production of raw cotton by another country, but it continued to rank first in mill consumption and exports of cotton. The U.S.S.R., which became the leading producer in 1967, sells most of its cotton within Soviet-oriented areas. In recent years, while U.S. cotton growers have been subjected to increasingly stringent production controls in connection with the Government's price-support programs, cotton output has been increasing in many foreign countries. As more countries have become exporters of raw cotton, the U.S. share of annual free world exports, despite Government export incentive programs, has declined below 40 percent, approximately the level which in 1956 was considered this country's "fair historical share of the world market." 1/ The U.S. share of free world exports dropped to 20 percent in 1965 and rose to 30 percent in 1966. The increasing use of manmade fibers and paper to make products formerly made exclusively of cotton has also weakened the foreign markets for U.S. cotton, as well as the domestic markets.

The United States is a significant but declining exporter of cotton products. In 1961-66, annual U.S. exports of cotton products, measured in terms of the quantity of cotton actually

---

1/ H.R. Rept. No. 2197, 84th Cong., 2d sess. (1956), p. 4.

embodied in the articles plus the amount "wasted" in processing, were equivalent to about 5 percent of the quantity of raw cotton consumed by the domestic mills and from 8 to 12 percent of the annual exports of raw cotton.

Annual U.S. imports of raw cotton, nearly all subject to quota restrictions, are equivalent to less than 1 percent of domestic output. Since 1961, U.S. imports of cotton products have been subject to controls imposed under the provisions of the Arrangements Regarding International Trade in Cotton Textiles. Such imports have been rising in recent years, however, reaching an amount in 1966 equivalent in terms of cotton content to 11 percent of both U.S. raw cotton output and U.S. mill consumption. 1/ Imports of cotton products exceeded exports thereof in 1960 and in every year since 1962 as shown in the following tabulation (in thousands of bales of raw cotton content):

Year	Imports	Exports
1958	233.8	521.0
1959	360.3	492.5
1960	525.5	486.0
1961	393.5	496.6
1962	645.5	459.0
1963	634.0	432.9
1964	625.3	444.2
1965	751.2	362.1
1966	1,045.0	395.0

Yarn, carded fabrics, towels, and certain types of wearing apparel accounted for most of the increases in annual imports of

1/ During 1966, U.S. exports of raw cotton of 4.7 million bales approximated the decline in inventories.

cotton products during 1966 over the average in the 1958-60 period. Five countries supplied about three-fifths of that increase (measured in terms of estimated square yards of fabric)--Brazil, Hong Kong, Japan, Mexico, and Portugal. Japan, which has consistently been the leading supplier of cotton products to the United States, accounted for a smaller share of the increase than either Hong Kong or Mexico. Hong Kong, ranking second as a source of U.S. imports of cotton products, contributed more to the increase in annual imports than any other country. Mexico ranked third as a supplier of the 1966 imports of cotton products and second as a contributor to the increase in imports during 1966 above the 1958-60 average. Practically all of the increase in imports from Mexico occurred during 1966; in terms of quantity, the 1966 imports were more than ten times the 1965 imports. Imports from Portugal--the fourth largest supplier in 1966--have fluctuated since 1958, with peak levels in 1962 and 1966. Like Mexico, Brazil became a supplier of significance after 1964. During 1966 when Brazil ranked fifth, imports of cotton products therefrom were almost sixteen times as large as those in 1964. Other suppliers, listed in order of importance during 1966, were India, Taiwan, Pakistan, Spain, and Belgium. Belgium is the only country among these top 10 suppliers of U.S. imports of cotton products in which cotton consumption during 1966 was below the level of 10 years ago.

Of the 10 leading suppliers of cotton products to the United States during 1966, only Japan, Hong Kong, India, and Taiwan also ranked among the top 10 customers for U.S. raw cotton in that year; together they took 42 percent of the U.S. exports of raw cotton. On the other hand, 4 countries among the top 10 leading customers for U.S. cotton--Canada, Yugoslavia, the United Kingdom, and France--were not among the top 20 suppliers of U.S. imports of cotton products.

1. Raw cotton

Annual U.S. production of raw cotton during the 1958-66 period represented from 20 to 32 percent of total world output. In the crop year beginning August 1, 1966, world production amounted to about 47 million bales, or 6 million bales below the record production of the preceding year (table A-1-1). The reduction in world output from 1965 to 1966 was due primarily to the sharp decline in U.S. production. The 1966 U.S. crop of 9.6 million bales, which constituted about 30 percent of the free world crop, was smaller than any U.S. crop since 1946. Although the 1967 U.S. crop of raw cotton is expected to be even smaller--about 7.6 million bales--world output is expected to be only slightly below the previous year because of increases in other countries.

With the aid of Government programs, the United States has continued its historic role as leading exporter of raw cotton, but its exports thereof have been trending downward in absolute terms as well as in relation to world exports. In the 1965 crop year, U.S. exports of 2.9 million bales of raw cotton represented a record low of 20 percent of free world exports; in the 1966 crop year, U.S. exports of 4.7 million bales were 30 percent of the world total. Exports during the current 1967 season are expected to be about equal to those of 1966.

a. U.S. producers.--Of the some 320,000 U.S. farms producing raw cotton in 1964, approximately 116,000 were in the delta area of the Mississippi River, 120,000 in the Southeast, 64,000 in the

Southwest, and 18,000 in Missouri and Oklahoma. The Southwest, with only 20 percent of the cotton-growing farms, has the largest number of farms of 100 acres or more and in recent years has contributed more than half of the annual U.S. cotton crop. For many years Texas has been the largest cotton-producing State, accounting for one-fourth to one-third of the annual total. California is now the second largest producer, a position formerly held by either Mississippi or Arkansas. The Delta region, which includes Mississippi and Arkansas, as well as Louisiana and Tennessee, accounted for 35 percent of the crop in 1938 and 30 percent in 1966. The Southeast's share of the cotton crop has declined even more. Production in that area, which accounted for one-fourth of the crop in 1938, represented about one-eighth of the 1966 crop.

b. Employment and wages.--The available data relating to hired labor on cotton farms are fragmentary and not meaningful for the purposes of this report.

c. U.S. consumption.--Cotton is still the principal textile fiber consumed in the United States, but its share of annual U.S. mill consumption of textile fibers declined without interruption from 64.6 percent in 1960 to 51.4 percent in 1966. Cotton probably maintained the same share of total mill consumption of textile fibers in 1967 as in 1966.

The average annual mill consumption of cotton in the United States during the period 1935-39 was 3,284 million pounds (nearly 7 million bales). U.S. annual consumption since World War II has varied irregularly, but has been substantially above prewar levels (table A-1-2). During 1960-66 annual consumption averaged 4,265 million pounds and deviated from this average by 0.5 to 8.6 percentage points, the widest deviation being in 1966. Consumption during 1967 is estimated to have been 4,450 million pounds, or 4.3 percent above the 1960-66 average.

On a per capita basis, annual U.S. mill consumption of cotton averaged 25.5 pounds during 1935-39 (table A-1-2). The highest level of cotton consumption per person since World War II was in 1946--34 pounds. During 1946-66, the trend of annual per capita consumption was downward, reaching a low point of 21.3 pounds in 1963. It rose to 23.5 pounds in 1966 but is estimated at 22.3 pounds in 1967.

d. U.S. production.--Production of cotton in the United States during 1958-65 ranged between 11.5 million and 15.3 million bales, of which about 99 percent consisted of Upland cotton. 1/ The 1966 output of 9.6 million bales was approximately 5.4 million bales below the production in the preceding year (table A-1-1). Production during the current crop year (1967) is expected to be even smaller--around 7.6 million bales. Production declined during 1966 primarily because of acreage-diversion programs carried out under the provisions of the Food and Agriculture Act of 1965; adverse weather conditions resulted in larger reductions in the 1967 output. Acreage from which

1/ The term "Upland cotton" encompasses the many varieties of cotton developed from strains native to Mexico and Central America which make up one (Gossypium hirsutum) of three principal botanical groups of cotton. Upland cotton may vary in staple length from about 3/4-inch to 1-1/2 inches.

cotton was harvested declined from 13.6 million acres in 1965 to 9.6 million in 1966, and to about 8.5 million in 1967. During the 1966 and 1967 seasons, participating growers received direct payments on the projected yield of cotton for domestic use (65 percent of total allotment) and on the projected yield from diverted acreage; they were also eligible for price-support loans.

e. U.S. sales and inventories.--Official data on supply and distribution of U.S. supplies of raw cotton indicate that in the crop years 1958-67, disappearance of U.S. supplies of raw cotton ranged between 11.4 and 16.0 million bales (table A-1-3). The sharp decline in production since 1965, accompanied by a rise in annual disappearance, is expected to reduce the U.S. yearend carryover of raw cotton to about 6 million bales in the 1967 crop year, an amount almost 11 million bales below the record reached in the 1965 crop year.

Of the 12.4-million-bale carryover into the 1967 crop year, 6.5 million bales were privately owned--the largest amount of carryover so owned since 1946--and 6.0 million bales were held by the Commodity Credit Corporation (CCC)--the smallest quantity of CCC-owned cotton since 1962. Private firms have been purchasing heavily from current production in order to obtain desirable grades and staples which they anticipate will be in short supply due to the further decline in total cotton production. Much of the cotton in carryover stocks is reported to be of shorter staples than those most widely used by textile mills in recent years.

f. U.S. imports and exports.--Nearly all U.S. imports of raw cotton are subject to quota restrictions; see section on U.S. customs treatment. Imports of Upland cotton under 1-1/8 inches in staple length--the type of cotton that constitutes more than 90 percent of domestic output--are shown for the quota years 1961 to 1966, by country of origin, in table A-1-4. Corresponding data for imports of cotton of longer staple are shown in table A-1-5. Imports of harsh or rough cotton of less than 3/4 inch in staple length, which are not subject to quota restrictions, averaged 21,605 bales in the 1961-66 period.

Annual U.S. exports of raw cotton represented from 20 percent (in 1965) to 47 percent (in 1959) of total free world exports in the crop years 1958-66 (table A-1-6). They amounted to 4.7 million bales in crop year 1966, or some 1.8 million bales larger than the exports of the preceding year, and represented 30 percent of free world exports. During 1956-64 practically all exports of raw cotton were subsidized under the export incentive programs of the U.S. Department of Agriculture. Certain foreign aid and assistance programs (A.I.D., Export-Import Bank loans, and P.L. 480) have also encouraged exports of between 1 and 2 million bales annually in recent years.

Japan has consistently been the leading purchaser of U.S. cotton. Raw cotton from the United States accounted for 27 percent of Japanese imports during crop year 1965. U.S. shares of the 1965 imports of raw cotton by countries that took about 98 percent of the exports of U.S. cotton in that year ranged from about 2 percent for Portugal to 100 percent for South Korea (table A-1-7).

g. Prices.--During the 1958-66 period, the average annual prices received by farmers for cotton ranged from 20.90 cents per pound (in 1966) to 33.09 cents (in 1958) (table A-1-8). For Middling quality or better, the unusually large spread between the market prices and the Government loan levels during crop year 1967 (as shown in table A-1-9) was accounted for by the reduction in output and the increase in demand.

During 1966 and 1967, farmers received, in addition to receipts from sales of cotton, direct Government payments for participation in the acreage-diversion program administered by the Department of Agriculture. Under this program, the market price is supported at about the world level through a system of non-recourse loans. In addition, farmers received direct price support payments on 65 percent of their total allotments and diversion payments on acreage withdrawn from cotton production for soil-conserving purposes. In 1966, the average market price for Upland cotton amounted to 20.9 cents per pound, whereas the average price support payment amounted to 10.6 cents and the average diversion payment was 6.2 cents. 1/ Thus the average return per pound of cotton was about 37.7 cents in 1966, compared to 28 cents in 1965. However, because of the sharp reduction in production of cotton during 1966, total cash receipts during 1966 were some $365 million below those in 1965.

1/ These payments are based on the small output during these years; if the crops had been larger, the payments per pound would have been correspondingly smaller.

Between 1956 and 1964, Upland cotton was sold for export under various Government export programs at prices several cents per pound below those paid by domestic mills. Since May of 1964, when this so-called two-price system for cotton was abolished by legislation, domestic mills have been able to purchase cotton at prices approximately equal to export prices. Table A-1-10 shows that average prices paid for cotton by mills during the 1964 season were about 8 cents per pound below those paid during the preceding season. Average prices for raw cotton were even lower during 1965 and 1966 than during 1964. While prices for raw cotton declined, prices of cotton cloth increased, resulting in higher mill margins. Industry officials have indicated that the higher mill margins were largely absorbed by costs for modernization of textile plant and equipment and by increased wage rates.

h. Profitability and investment.--The readily available data are not meaningful for the purposes of this report.

i. U.S. customs treatment. 1/--All cotton under 1-1/8 inches in staple length (short staple cotton) is imported free of duty under TSUS item 300.10, but the volume of imports of such cotton (except

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. No imports of dutiable raw cotton have come from the Philippine Republic or "Communist" countries in recent years.

harsh or rough cotton of less than 3/4-inch staple) has been controlled since 1939 by an import quota of approximately 30,000 bales, allocated by country, for each year beginning September 20.

Cotton of longer staple lengths is dutiable at specific rates per pound according to staple lengths, as follows (in cents per pound):

TSUS item	Staple length	Rate of duty
300.15	1-1/8 or more but under 1-11/16 inches--------	3.5
300.20	1-11/16 inches or more------------------------	1.75

Imports of long-staple cotton (1-1/8 inches and longer) are limited by a global quota of approximately 95,000 bales for each year beginning August 1.

The tariff treatment of raw cotton was not affected by the tariff negotiations completed on June 30, 1967.

j. Foreign production and trade.--Production of raw cotton in the foreign free world (FFW) during the 1966 crop year amounted to 22.7 million bales, representing a decline of more than 800,000 bales below the preceding year (table A-1-1). This decline, which was the first interruption since 1959 in the upward trend in FFW cotton production, reflected crop reductions in Central America, Mexico, Argentina, Brazil, the United Arab Republic, and the Middle East. Production during the current 1967 crop year is expected to rise above the record level of the 1965 season, owing to large increases in the production of India, Pakistan, and Brazil.

Consumption of cotton in the FFW reached the record high level of 25.5 million bales in 1966, some one-half million above consumption in the previous season (table A-1-11). India, Japan, Pakistan, West Germany, France, Brazil, and Italy each consumed more than 1.0 million bales of cotton during 1966. Consumption during the 1967 season is expected to increase another 0.8 to 1.0 million bales above the record level of 1966.

While consumption in the FFW increased during 1966, production declined and exports from these sources were some 800,000 bales below the previous season. Thus, imports of U.S. raw cotton by consuming countries in the FFW increased by some 1.7 million bales during the 1966 season.

Table A-1-1.--Raw cotton: Production in the United States, Foreign free world, and Communist countries, by crop years, 1958-67

(In 1,000 bales 1/)

Crop year beginning Aug. 1--	United States	Foreign free world	Communist countries	Total
1958	11,512	17,447	15,653	44,612
1959	14,558	16,597	15,718	46,873
1960	14,272	18,979	13,154	46,405
1961	14,318	19,473	11,235	45,026
1962	14,867	21,903	11,020	47,790
1963	15,334	21,930	12,898	50,162
1964	15,182	22,902	13,808	51,892
1965	14,973	23,517	14,703	53,193
1966	9,575	22,653	15,143	47,371
1967 2/	7,618	23,810	15,543	46,971

1/ Bales of 500 pounds, gross weight.
2/ Preliminary.

Source: Official statistics of the U.S. Department of Agriculture.

Note.--"Foreign free world" and "Communist countries" are designations used by the U.S. Department of Agriculture.

Table A-1-2--U.S. population, and mill consumption of fibers (total and per capita), 5-year averages, 1930-39 and 1946-55, annual, calendar years 1956-67

Period (calendar years)	Population July 1	Cotton: Quantity consumed	Cotton: Per capita mill consumption	Wool: Quantity consumed	Wool: Per capita mill consumption	Manmade fibers: Quantity consumed	Manmade fibers: Per capita mill consumption	Flax and silk: Quantity consumed	Flax and silk: Per capita mill consumption	Total fibers: Quantity consumed	Total fibers: Per capita mill consumption
	Million	Million pounds	Pounds	Million pounds	Pounds	Million pounds	Pounds	Million pounds	Pounds	Million pounds	Pounds
-year averages:											
1930-34	124.8	2,689.1	21.5	270.2	2.2	171.7	1.4	85.1	0.7	3,216.0	25.8
1935-39	129.0	3,284.1	25.5	377.1	2.9	351.9	2.7	74.9	.6	4,088.0	31.7
1946-50	146.6	4,492.0	30.7	652.8	4.4	1,174.5	8.0	16.5	.1	6,335.8	43.2
1951-55	159.7	4,461.1	28.0	448.5	2.8	1,580.6	9.9	17.5	.1	6,507.6	40.8
nnual:											
1956	168.2	4,362.6	25.9	440.8	2.6	1,727.2	10.3	20.6	.1	6,551.2	38.9
1957	171.3	4,060.4	23.7	368.8	2.2	1,792.5	10.5	15.5	.1	6,237.2	36.4
1958	174.1	3,866.9	22.2	331.1	1.9	1,764.2	10.1	9.4	.1	5,971.5	34.3
1959	177.1	4,334.5	24.5	435.3	2.5	2,064.7	11.7	11.8	.1	6,846.3	38.7
1960	180.7	4,190.9	23.2	411.0	2.3	1,877.8	10.4	11.6	.1	6,491.4	35.9
1961	183.8	4,081.5	22.2	412.1	2.2	2,060.7	11.2	12.7	.1	6,567.0	35.7
1962	186.7	4,188.0	22.4	429.1	2.3	2,418.5	13.0	12.4	.1	7,048.0	37.8
1963	189.4	4,040.2	21.3	411.7	2.2	2,787.8	14.7	13.1	.1	7,252.8	38.3
1964	192.1	4,244.4	22.1	356.7	1.9	3,174.3	16.5	14.2	.1	7,789.6	40.6
1965	194.6	4,477.5	23.0	387.0	2.0	3,624.4	18.6	13.3	.1	8,502.2	43.7
1966	196.8	4,630.5	23.5	370.3	1.9	3,997.7	20.3	14.7	.1	9,013.2	45.8
1967 1/	199.1	4,450.0	22.3	325.0	1.6	3,860.0	19.4	15.0	.1	8,650.0	43.4

1/ Preliminary estimate.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Table A-1-3.--Raw cotton: U.S. supply and distribution, crop years 1958-67

(In thousands of bales 1/)

Crop year beginning Aug. 1--	Supply			Distribution	
	Beginning carryover	Production plus imports	Total	Ending carryover	Disappearance 2/
1958------	8,737	11,560	20,297	8,885	11,412
1959------	8,885	14,685	23,570	7,558	16,012
1960------	7,558	14,543	22,101	7,228	14,873
1961------	7,228	14,600	21,828	7,831	13,997
1962------	7,831	15,026	22,857	11,216	11,641
1963------	11,216	15,435	26,651	12,378	14,273
1964------	12,378	15,365	27,743	14,290	13,453
1965------	14,290	14,968	29,258	16,862	12,396
1966------	16,862	9,964	26,826	12,434	14,392
1967------	12,434	3/ 7,700	3/ 20,134	3/ 6,034	3/ 14,100

1/ Running bales of approximately 500 pounds, except that foreign cotton imported and consumed is reported in bales of 500 pounds, gross weight.

2/ Disappearance equals total supply minus ending carryover. It covers consumption, exports, and cotton burned or otherwise destroyed or unaccounted for.

3/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Table A-1-4.--Cotton less than 1-1/8 inches in staple length (other than harsh or rough cotton of less than 3/4 inch staple length): 1/ U.S. imports by country of origin, quota years 1961-66

(In bales of 500 pounds gross)

Country of origin	Quota year beginning September 20--					
	1961	1962	1963	1964	1965	1966
Egypt and Sudan----	1,633	1,631	1,309	-	-	1,633
Peru---------------	511	75	50	143	377	123
India and Pakistan-	4,174	170	332	-	-	-
Mexico-------------	18,507	18,507	18,507	5,771	3,267	18,507
Brazil-------------	1,289	1,289	1,250	-	-	-
All other----------	239	-	-	-	-	5
Total----------	26,353	21,672	21,448	5,914	3,644	20,268

1/ Excludes linters.

Source: Compiled from official statistics of the U.S. Bureau of Customs.

Table A-1-5.--Cotton 1-1/8 inches or longer in staple length: U.S. imports for consumption, by type and by country of origin, quota years 1961-66

(In bales of 500 pounds, gross weight)

Type of cotton and country of origin	Quota year beginning Aug. 1--					
	1961	1962	1963	1964	1965	1966
Extra long staple (1-3/8 inches or longer):						
Egypt	62,191	58,111	48,167	69,432	44,122	52,616
Peru	20,232	22,870	34,302	12,988	38,173	27,209
British West Indies	25	-	-	-	-	-
Sudan	15	1,500	-	60	185	1,256
Morocco	-	-	-	-	-	719
Mexico	-	-	-	-	-	681
	82,463	82,481	82,469	82,480	82,480	82,481
Ordinary long staple (1-1/8 up to 1-3/8 inches long):						
Harsh of 1-5/32 up to 1-3/8 inches long, total (all from Peru)	1,531	548	589	174	553	462
Other:						
Egypt	-	-	-	22	8,955	8,604
Sudan	-	-	3,892	5,524	365	86
Peru	-	-	-	126	192	-
Mexico	9,420	8,538	5,619	-	-	-
Total	10,951	9,086	10,100	5,846	10,065	9,152

Source: Compiled from official statistics of the U.S. Bureau of Customs.

Table A-1-6.--Raw cotton: Exports from the United States, the foreign free world and the total free world, crop years 1958-67

Crop year beginning Aug. 1--	United States	Foreign free world	Total free world	U.S. share of free world exports
	Million bales 1/	Million bales 1/	Million bales 1/	Percent
1958----------	2.8	8.7	11.5	24.3
1959----------	7.2	8.1	15.3	47.1
1960----------	6.6	8.5	15.1	43.7
1961----------	4.9	8.9	13.8	35.5
1962----------	3.4	11.0	14.4	23.6
1963----------	5.7	10.5	16.2	35.2
1964----------	4.1	10.7	14.8	27.7
1965----------	2.9	11.6	14.5	20.0
1966----------	4.7	11.0	15.7	29.9
1967----------	4.7	11.0	15.7	29.9

1/ U.S. exports reported in running bales of approximately 500 pounds; exports from countries in the foreign world reported in bales of 500 pounds, gross weight.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Note.--"Foreign free world" is designation used by the U.S. Department of Agriculture.

Table A-1-7.--Raw cotton: Imports into foreign importing countries, from all countries and from the United States, crop year Aug. 1, 1965, to July 31, 1966

Importing country	Total imports	Imports from the United States	
		Quantity	Percent of total
	1,000 bales 1/	1,000 bales 1/	
Austria	113	30	26.5
Belgium	343	47	13.7
Canada	435	276	63.4
France	1,230	134	10.9
Hong Kong	644	122	18.9
India	456	191	41.9
Italy	1,017	135	13.3
Japan	3,091	832	26.9
Netherlands	356	38	10.7
Portugal	379	8	2.1
South Korea	325	325	100.0
Spain	286	16	5.6
Switzerland	170	30	17.6
Taiwan	306	204	66.7
United Kingdom	968	165	17.0
West Germany	1,255	108	8.6
Yugoslavia	420	150	35.7
Other foreign countries	5,487	2/ 150	2.7

1/ 500 pounds each, gross weight.
2/ Estimated by the U.S. Tariff Commission.

Source: International Cotton Advisory Committee.

Table A-1-8.--Upland cotton: Average prices received by growers; ratios of prices received to average parity prices, and the support level expressed as a percent of parity price, 1958-67

Crop year beginning August 1--	Average price received	Ratio of average price to parity	Ratio support price to parity 1/	Cash receipts from crop
	Cents per pound	Percent	Percent	Million dollars
1958	33.09	86	81	2,104.2
1959	31.56	82	80; 65	2,517.8
1960	30.08	78	75; 60	2,384.2
1961	32.80	84	82	2,643.7
1962	31.74	79	82	2,648.3
1963	32.02	79	79	2,766.5
1964	29.62	72	72	2,537.4
1965	28.03	66	69	2,390.5
1966	20.90	2/	2/	3/ 1,251.6
1967	4/ 25.25	2/	2/	5/

1/ Prior to 1961, the support price was calculated for Middling 7/8-inch cotton; beginning with 1961, it was calculated for the average grade and staple of cotton produced during the 5 previous crop years. The support price is compared to the parity during the month just prior to announcement to determine the ratio of the support price to parity.

2/ Not meaningful, since cooperating farmers received, in addition to market prices, direct payments on the projected yields from domestic acreage allotments (65 percent of his total acreage allotment). In addition, he received payments on the projected yield of cotton on acreage diverted from cotton production and put to conserving uses.

3/ Not including compensatory payments which in 1966 amounted to $489 million in price support payments and $285 million in diversion payments.

4/ Average for August-November 1967.

5/ Not available.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Table A-1-9.--Raw cotton, Upland type: Support levels and, for Middling grade of specified lengths, loan rates and average U.S. spot market prices, crop years beginning Aug. 1 of 1958-67

Item	1958	1959	1960	1961	1962
Support level 1/--------percent--	81.0	2/80.0	3/75.0	82.0	82.0
Loan rate, 4/ Middling grade (gross weight)--					
7/8-inch long----cents per lb--	31.23	5/30.40	6/28.97	30.14	30.17
15/16-inch long--cents per lb--	33.63	5/32.60	6/30.77	31.49	31.22
1-inch long------cents per lb--	35.08	5/34.10	6/32.42	33.04	32.47
Average U.S. spot market price, Middling grade (gross weight)--					
7/8-inch long----cents per lb--	30.84	28.55	28.16	31.43	31.30
15/16-inch long--cents per lb--	32.96	30.26	29.43	32.43	32.26
1-inch long------cents per lb--	34.47	31.93	30.96	33.67	33.52
	1963	1964	1965	1966	1967
Support level 1/--------percent--	79.0	72.0	69.0	7/	7/
Loan rate, 4/ Middling grade (gross weight)--					
7/8-inch long----cents per lb--	30.27	27.70	8/26.70	8/18.65	8/16.65
15/16-inch long--cents per lb--	31.22	28.70	8/27.65	8/19.60	8/17.70
1-inch long------cents per lb--	32.47	30.00	8/29.00	8/21.00	8/20.25
Average U.S. spot market price, Middling grade (gross weight)--					
7/8-inch long----cents per lb--	30.88	28.44	27.25	19.22	9/19.13
15/16-inch long--cents per lb--	31.85	29.39	28.19	20.20	9/20.26
1-inch long------cents per lb--	33.18	30.73	29.60	22.08	9/23.00

1/ Also represents ratio of basic loan rate to parity price. Beginning in crop year 1961, the basic loan rate applied to the average quality of the crop, whereas previously it had applied to Middling 7/8-inch cotton.

2/ Ratio of basic "choice A" purchase price to parity price (see footnote 5); ratio of basic "choice B" loan rate to parity price was 65.0 percent.

3/ Ratio of basic "choice A" purchase price to parity price (see footnote 6); ratio of basic "choice B" loan rate to parity price was 60.0 percent.

4/ The loan rates are "average" rates; appropriate adjustments are made in these averages for cotton in various locations.

5/ CCC purchase price for 1959 "choice A" cotton (several cents higher than the CCC loan rate for 1959 "choice B" cotton).

6/ CCC purchase price for 1960 "choice A" cotton (several cents higher than the CCC loan rate for 1960 "choice B" cotton).

7/ Not meaningful, since farmers received direct payments in addition to price-support loans. In 1966, direct price support payments averaged 10.6 cents per pound and during 1967 they are estimated to have been 16.4 cents per pound. In addition, farmers received diversion payments amounting to 6.2 cents in 1966 and about 8.6 cents per pound in 1967.

8/ Premiums and discounts were applied to these rates for the spinning quality of cotton (micronaire).

9/ August-September 1967.

Table A-1-10--Unfinished cotton cloth and raw cotton: Average prices in the United States of 20 selected domestic cloth constructions, average cost of cotton to selected mill points, and mill margins, crop years 1958-66

(In cents)

Crop year beginning Aug. 1--	August	September	October	November	December	January	February	March	April	May	June	July	Average
						Unfinished cotton cloth 1/							
1958	55.80	55.82	55.96	56.78	57.58	57.89	59.11	60.09	60.59	61.04	61.54	61.95	58.68
1959	62.29	62.64	63.14	63.79	64.45	64.87	64.92	64.64	64.15	63.79	63.87	63.48	63.84
1960	62.86	61.90	60.64	59.98	58.61	58.06	57.78	57.64	57.46	57.54	57.60	57.88	59.00
1961	58.78	59.78	60.32	60.45	60.54	60.63	60.76	61.07	61.23	61.19	61.24	61.29	60.61
1962	61.12	60.93	60.71	60.68	60.67	60.55	60.47	60.49	60.26	60.00	60.11	60.28	60.52
1963	60.56	60.85	61.25	62.01	62.34	62.32	62.37	62.37	61.82	61.29	60.62	60.69	61.54
1964	60.83	60.96	61.33	61.60	62.52	63.13	63.28	63.42	63.89	64.65	64.85	65.30	62.98
1965	65.43	65.30	65.23	65.15	65.11	65.08	65.04	64.88	65.02	65.14	65.16	65.23	65.15
1966	65.37	65.33	65.33	65.21	64.93	64.77	64.64	64.40	63.94	63.32	62.04	61.81	64.26
						Raw cotton 2/							
1958	35.14	35.23	35.46	35.23	34.46	34.96	35.06	35.22	35.52	35.54	35.57	35.54	35.24
1959	34.25	33.50	32.83	33.09	33.70	33.69	33.45	33.29	33.46	33.53	33.48	33.36	33.47
1960	32.52	32.25	32.05	31.99	32.00	32.01	32.41	33.32	33.46	33.86	34.09	34.45	32.87
1961	34.84	35.16	35.35	35.46	35.58	35.78	35.82	35.98	35.85	36.13	36.34	36.19	35.71
1962	35.89	35.23	35.08	35.10	35.30	35.45	35.66	35.95	36.08	36.16	35.86	35.57	35.61
1963	35.33	35.19	35.11	35.27	35.37	35.47	35.55	35.58	35.63	35.67	35.76	35.60	35.46
1964	27.64	26.82	26.80	26.98	27.30	27.30	27.26	27.26	27.40	27.35	27.36	27.33	27.23
1965	27.12	26.73	26.61	26.57	26.34	26.30	26.27	26.30	26.31	26.42	26.44	26.48	26.49
1966	24.97	24.73	24.66	24.80	25.39	25.65	25.76	25.79	25.81	25.82	25.90	26.05	25.44
						Mill margin 3/							
1958	20.66	20.59	20.50	21.55	23.12	22.93	24.05	24.87	25.07	25.50	25.97	26.41	23.44
1959	28.04	29.14	30.32	30.70	30.75	31.18	31.47	31.35	30.69	30.26	30.39	30.12	30.37
1960	30.34	29.65	28.59	27.99	26.61	26.05	25.37	24.32	24.00	23.68	23.51	23.43	26.13
1961	23.94	24.62	24.97	24.99	24.96	24.85	24.94	25.09	25.38	25.05	24.90	25.10	24.90
1962	25.23	25.70	25.63	25.58	25.37	25.10	24.81	24.54	24.18	23.84	24.25	24.71	24.91
1963	25.23	25.66	26.14	26.74	26.97	26.85	26.82	26.79	26.19	25.62	24.86	25.09	26.18
1964	33.19	34.14	34.53	34.62	35.22	35.83	36.02	36.16	36.49	37.30	37.49	37.97	35.75
1965	38.31	38.57	38.62	38.58	38.77	38.78	38.77	38.58	38.71	38.72	38.72	38.75	38.66
1966	40.40	40.60	40.67	40.41	39.54	39.12	38.88	38.61	38.13	37.50	36.14	35.76	38.82

1/ Average wholesale value of the quantities of 20 selected all-cotton constructions obtainable from 1 pound of cotton.
2/ Average price per pound delivered to selected mill points for the qualities of cotton assumed to be used in the selected constructions.
3/ Difference between average wholesale value of cloth obtainable from 1 pound of cotton and the average cost of the raw cotton used.

Source: Official statistics of the U.S. Department of Agriculture.

Table A-1-11.--Raw cotton: Consumption in the foreign free world, by countries and areas, average for crop years 1960-64, annually for 1965 and 1966 crop years.

(In 1,000 bales 1/)

Areas and countries	Annual avg. 1960-64	1965	1966
North America 2/			
Mexico	537	610	680
Other	480	543	642
Total	1,017	1,153	1,322
South America			
Argentina	463	518	490
Brazil	1,265	1,200	1,200
Colombia	259	300	300
Other	338	419	416
Total	2,325	2,437	2,406
Western Europe			
Austria	121	116	104
Belgium	394	330	300
France	1,297	1,232	1,250
West Germany	1,366	1,301	1,200
Greece	156	203	210
Italy	1,016	1,003	1,100
Netherlands	359	326	315
Portugal	328	384	360
Spain	564	580	600
Sweden	111	91	82
Switzerland	194	185	185
United Kingdom	1,091	1,012	900
Yugoslavia	305	400	415
Other	168	156	166
Total	7,470	7,319	7,187
Asia and Oceania			
Australia	103	129	127
Hong Kong	535	662	720
India	5,051	5,025	5,060
Iran	217	185	225
Israel	84	115	105
Japan	3,261	3,215	3,255
Pakistan	1,200	1,310	1,325
Philippines	156	150	185
South Korea	296	340	360
Syria	78	100	100
Taiwan	254	296	350
Thailand	96	160	225
Turkey	553	650	670
Other	241	291	385
Total	12,125	12,628	13,002
Africa			
Nigeria	54	100	110
South Africa	140	200	220
U.A.R	641	780	800
Other	202	351	437
Total	1,037	1,431	1,567
Grand total	23,974	24,968	25,484

1/ Bales of 500 pounds, gross weight.

2. Yarns

The United States produces about one-fifth of the total world output of cotton yarn. During the 1960-66 period U.S. annual production ranged from 3.9 billion to 4.3 billion pounds (table A-2-1), of which from one-fifth to one-fourth was produced for sale to other mills. In 1966, when cotton yarns were in short supply, imports reached a record high of 89.5 million pounds and were equivalent to 2 percent of total apparent consumption, but to 8.5 percent of the consumption of sales yarn. Although imports declined by about 50 percent from 1966 to 1967, domestic producers' inventories of sales yarn in relation to unfilled orders increased significantly enough to depress prices. By the end of the year, however, yarn prices began increasing primarily because of higher prices for raw cotton.

In the manufacture of carded cotton yarn (used principally for low and medium count fabrics) mills must subject the cotton fiber to five processes--opening and picking, carding, drawing, roving, and spinning. In the manufacture of combed yarn (used principally for high count finely woven fabrics), the fiber is subjected, after carding, to an additional process of combing, which removes the shorter fibers and lays the longer ones parallel, making a stronger, cleaner, and more uniform product. Singles yarn, the spun product of the spindle, is identified according to the number of 840-yard hanks that weigh 1 pound. Number 1 cotton yarn measures 1 hank (840 yards) to the pound; number 100 yarn measures 100 hanks (84,000 yards) to the pound; the higher the yarn number, the finer the yarn and generally the higher the unit value. Finer yarns require better quality cotton than coarser yarns, more care in processing, and more time to spin. Yarn numbering over 60 is generally made from long-staple cotton. Plied yarn may be produced by twisting together two or more single yarns; cable yarns are made by twisting together three or more plied yarns.

a. U.S. producers.--Of the total number of mills producing cotton yarn, 183 establishments accounted for $605 million in shipments which represented 88 percent of the total value of shipments in 1963. These establishments are located primarily in the southeastern States, especially North Carolina. Most yarn establishments are part of large integrated textile concerns which utilize the yarn in their own weaving operations. With this portion of the U.S. output of cotton yarn--three-fourths to four-fifths--imported yarn is only indirectly competitive.

The number of spindles in U.S. cotton mills declined from 34.0 million in 1930 to 24.8 million in 1940, to 20.8 million in mid-1958, and to 19.3 million in 1966. Since 1960 there has been a sharp increase in the daily consumption of manmade fibers on the cotton spinning system. Such consumption of manmade fibers rose from 1.7 million pounds in September 1960 to 4.5 million pounds in September 1967. In 1960, 449,000 cotton spindles were used for 3.8 billion hours in the production of cotton yarns blended with other fibers, principally manmades. By 1966 the corresponding figures were 2.3 million spindles and 13.2 billion hours. During the

1960-66 period the number of spindles in the cotton system devoted to the production of yarns of 100 percent manmade fibers increased from 1.1 million (6.8 billion hours) to 1.4 million (9.8 billion hours).

The cotton spinning system has undergone a vast modernization program in recent years, with the result that over 50 percent of the spindles currently in place have been installed within the past 10 years. Similar changes were made in other machinery used in processing cotton into yarn. Because of this rapid modernization of plant and equipment, significantly larger quantities of yarn can be produced by spinning mills equipped during the past year than could be produced by mills, with the equivalent number of spindles, equipped during 1950 (table A-2-2).

b. Employment and wages.--The mills accounting for almost 90 percent of the value of cotton yarn shipments in 1963 employed 41,700 people and had a payroll of $136.6 million. In September 1965, average hourly wages paid workers in spinning mills (from carding to spinning) ranged from $1.62 for card tenders to $1.92 for drawing-in machine operators (table A-3-3). Since then, these wage rates have increased.

c. U.S. consumption.--Apparent domestic consumption of cotton yarn during the 1960-66 period ranged from 3.9 billion to 4.4 billion pounds, the highest level being in 1966 (table A-2-1). Domestic consumption of sales yarn during the period ranged from 0.8 billion to 1.1 billion pounds a year, the highest level also being in 1966.

Apparent consumption exceeded domestic production throughout the period, as imports were larger than exports in each year.

d. U.S. production.--U.S. annual production of cotton yarn during the 1960-66 period ranged from 3.9 billion to 4.3 billion pounds (table A-2-1). Cotton yarn represented nearly 75 percent of total production of spun yarns (all fibers) in 1960 and 66 percent in 1966. About 78 percent of cotton yarn production during 1966 was weaving yarn; 16 percent was machine-knitting yarn, and the remaining 6 percent included carpet yarns and other tufting yarns, hand-knitting yarns, cordage yarns, and thread yarns.

Almost one-fourth of the total output of cotton yarn during 1966 was produced under contract or for sale to another mill. More than half of the sales yarn in 1966 was machine-knitting yarn, the type of yarn which generally constitutes a large part of the imports. Annual production of cotton yarn for sale or on commission, by types, for 1960-66, was as follows (in millions of pounds):

Year	Total	Weaving yarn	Machine-knitting yarn	All other
1960	816	232	398	186
1961	805	211	420	174
1962	846	233	451	162
1963	833	236	439	158
1964	903	267	460	176
1965	977	270	528	179
1966	1,049	299	549	201

During 1960-66, yarn produced for sale or on commission represented less than 10 percent of the total output of cotton weaving yarn, about million square yards were equivalent to about 6 percent of apparent consumption and 7-1/2 percent of production of fabrics for sale. Since 1962 imports have been subject to restraints in accordance with the provisions of the LTA (see section on U.S. customs treatment). Imports were smaller in 1963 and 1964 than in 1962, but they increased sharply in 1965 and 1966. In terms of square yards, imports were 43 percent greater in 1966 than in 1962. Imports of fabrics containing cotton but in chief value of manmade fibers have also increased in recent years and are expected to continue to rise; such imports are not subject to the restraints of the LTA.

Unbleached fabrics constituted 73 percent of the imports in 1966 on a square yard basis, while finished fabrics (bleached, printed, dyed, or colored) constituted 27 percent (table A-3-9). Fabrics of average yarn number less than 40 accounted for 94 percent of the total; those of average yarn number 10-19 accounted for 49 percent. It is believed that the bulk of imports of unbleached cotton fabrics are further processed by U.S. finishing plants.

Imports increased in most major fabric constructions during the period 1963-66 as indicated in table A-3-10. Imports, by type of fabric, are discussed briefly below.

Duck.--Imports, like domestic production, rose sharply from 1965 to 1966 largely in response to military requirements. The increase in imports consisted chiefly of single-warp duck from Hong Kong and the Republic of and 20 million of fabrics of blended fibers, including cotton.

Available production data on fabrics other than broadwoven are shown in table A-3-6.

e. Sales and inventories.--Shipments by industry No. 2211 (cotton broadwoven fabric mills) were valued at $3.6 billion in 1966, up 17 percent from 1961 and about 30 percent from 1958 (table A-3-2). The proportion of these shipments accounted for by products other than broadwoven cotton fabrics is estimated to have increased from about 6 percent in 1958 to 10 percent in 1967. Shipments by the principal industries producing fabrics other than broadwoven are shown in table A-3-4.

Under current trade practices, fabrics may be woven from 6 to 12 months before the end-use product is scheduled for sale in retail outlets. Weaving mills, finishing plants, converters, apparel and furnishing manufacturers, and industrial consumers all hold inventories of cotton fabrics. Most of the stocks are usually in the possession of weaving mills and finishing plants, but in substantial part owned by piece goods converters. The yearend inventories of gray and finished cotton goods at mills and finishing plants combined averaged slightly over 2 billion linear yards during 1961-66 (table A-3-8).

f. U.S. imports and exports.--U.S. imports of cotton broadwoven fabrics (in terms of square yards) exceeded exports in 1962 for the first time in recent years and again, by a wider margin, in both 1965 and 1966 (table A-3-1). Imports in 1966 of about 690

A-3-6. The data are understated inasmuch as the production data from which they are derived do not include output fabricated into end products by producing firms.

d. U.S. production.--Annual production of all broadwoven cotton fabrics combined ranged from 10.7 to 11.4 billion square yards and averaged about 11.1 billion square yards during the period 1961-66 (table A-3-1). Trends in the annual production of the major types of fabrics followed various patterns during that period, as indicated in table A-3-7. Year-to-year changes in the linear-yard output were generally upward for duck and allied fabrics, sheeting and allied fabrics, colored yarn fabrics, and toweling, but were downward for print cloth, blanketing and other napped fabrics, and fine cotton fabrics. Production of cotton toweling, for example, increased without interruption from 576 million linear yards in 1961 to 713 million in 1965 (or by 24 percent) and then declined to 656 million in 1966. Production of fine cotton fabrics, however, declined without interruption from 1,667 million linear yards in 1961 to 1,151 million in 1966, or by 31 percent. Annual production of only one type of fine cotton fabric (namely, combed bedsheeting) was higher in 1966 than in 1961.

Production of cotton fabrics under military contracts increased significantly after 1964. The increases in duck production, which occurred mainly in 1965 and 1966, were attributable in part to military orders. Deliveries of fabrics to U.S. military forces during 1966 included 182 million square yards of cotton fabrics products largely because of competition from (1) woven fabrics of manmade fibers, (2) woven fabrics of cotton-manmade blends by weight chiefly of manmades, (3) Knit fabrics of cotton and other fibers, particularly manmade fibers, and (4) nontextile materials such as paper and plastics.

In 1966, wearing apparel accounted for an estimated 46 percent of domestic consumption of woven cotton fabrics; household uses, 35 percent; and industrial uses, 19 percent (table A-3-5). Apparel's share of total consumption of woven cotton fabrics declined during 1963-66, reversing the trend of earlier years. The decline from 1965 to 1966 reflected largely the gains by blended fabrics in "durable-press" garments. Substantial reductions in the price of polyester fibers in 1965-66 have encouraged additional use of these fibers in some of cotton's largest markets such as men's and boys' shirts and trousers and bedsheets. Furnishings' share of woven cotton fabric consumption has increased without interruption since 1962, whereas industrial products' share continued a long-term downward trend during 1961-64 but turned upward during 1965-66. Manmade fibers have not yet gained significant shares of the market for sheets, pillowcases, and towels, the principal types of furnishings made from cotton fabric. The great increase in the number of new motels and resort hotels in recent years has contributed to the rise in the consumption of bedroom furnishings.

Available data on the annual apparent U.S. consumption of the principal types of fabrics other than broadwoven are shown in table they were 8 percent fewer than in 1961 and 15 percent fewer than in 1958 (table A-3-2). Total wages paid to production workers in 1966 amounted to $854 million, about 23 percent above those paid in 1961 and 32 percent above those in 1958.

Wages averaged $1.46 per man-hour in 1958, $1.63 in 1961, and $2.01 in 1966. Hourly wage rates were increased by more than 5 percent in most plants in late 1967. The average straight-time hourly earnings of workers in cotton textile mills in September 1965 ranged from $1.49 for hand truckers to $2.27 for loom fixers (table A-3-3).

Data on total employment in the principal industries producing cotton fabrics other than broadwoven are shown in table A-3-4 for 1961, 1963, and 1965. For each of these industries, production workers constituted 80 to 90 percent of the reported total employment in 1963. Combined employment in these industries has been rising although in some fewer workers are employed now than 5 years ago.

c. U.S. consumption.--Annual apparent U.S. consumption of broadwoven cotton fabrics (including "captive" mill consumption in the fabrication of finished products) ranged from 10.7 to 11.6 billion square yards and averaged about 11.1 billion square yards during the period 1961-66 (table A-3-1). Apparent consumption is believed to have been slightly lower in 1967 than in 1966.

In recent years the trend of consumption of broadwoven cotton fabrics has not paralleled the upward trend in the end-use owned or controlled by U.S. producers is believed to be small.

Cotton fabrics other than broadwoven are important products of the six manufacturing industries listed below, for which the number of firms and number of establishments in 1963 were reported in U.S. Census data as follows:

Industry No.	Description	Firms	Establishments
		Number	Number
2241	Narrow fabrics	350	384
2256	Knit fabrics	487	518
2292	Lace goods	145	152
2293	Padding and upholstery filling	168	183
2299	Textile goods not elsewhere classified	127	137
2397	Schiffli embroideries	755	759

Very few of these firms are believed to use cotton exclusively. Most of them fabricate products from purchased yarn; those making batting and nonwoven fabrics manufacture such products directly from fiber. Of the 2,133 establishments, which are mostly in the East and South, only about a third employ 20 persons or more each. Establishments in several other industries--e.g., industry Nos. 2253 (knit outerwear mills) and 2254 (knit underwear mills)--also manufacture substantial quantities of certain types of cotton fabrics, most of which are consumed by the producers in the fabrication of end products.

b. Employment and wages.--In 1966 there were 195,000 production workers employed in cotton weaving mills (industry 2211) and they represented nearly 95 percent of the total employment;

The extent to which weaving mills process fabrics beyond the gray goods stage is indicated by the fact that their shipments of finished cotton fabrics and fabricated products in 1963 accounted for about 30 percent of the value of total shipments. Large quantities of fabric are further processed at separate finishing plants, many of which are owned by the cotton-weaving companies. Plants engaged primarily in finishing purchased cotton broadwoven fabrics or finishing such fabrics on a commission basis are included in industry No. 2261. In 1963, 220 companies operated 238 such plants (establishments), of which 104 were in the Middle Atlantic area; 58 in the South; 49 in New England; and 27 in other areas.

In 1966, about 7.5 billion linear yards of broadwoven cotton fabrics were finished, of which 3.5 billion were bleached and white finished, nearly 2.6 billion were plain dyed and finished, and 1.4 billion were printed and finished. About 80 percent of the total supply of gray fabrics, including domestic and imported--approximately 9.2 billion linear yards--was finished; the remainder was utilized without finishing, largely for industrial purposes. About 4.2 billion yards or 56 percent of the total yardage finished in 1963 was processed on a commission basis, for which commission receipts totaled $372 million. Comparable data on commission finishing in 1966 is not available.

Some U.S. firms which are producers of cotton broadwoven fabrics have financial interests in cotton weaving plants in Canada, Europe, and South America, but the total number of foreign plants

a. U.S. producers.--In 1963, 229 firms operated 407 establishments that specialized in producing broadwoven fabrics wholly or chiefly of cotton. The distribution of these establishments (industry No. 2211 in U.S. census data), by area, was as follows:

Area	Number of establishments
New England	24
Middle Atlantic	50
South Atlantic	267
East South Central	36
West South Central	16
North Central and West	14
Total	407

In 1963, nearly half of these establishments employed 250 to 1,000 persons each; three employed 2,500 persons or more each; and 57, fewer than 20 persons each. The leading States, in terms of both number of plants and employees, were South Carolina, North Carolina, Georgia, and Alabama; they accounted for about 85 percent of the total number of employees in cotton weaving mills.

The large textile companies, which account for the major part of the output of cotton fabrics, are vertically integrated; i.e., they perform spinning, weaving, and finishing operations. Several large firms also produce substantial quantities of such products as sheets, towels, blankets, and bedspreads. The degree to which cotton weaving mills spin their own yarn, usually at the same plant where the weaving facilities are located, is indicated by the fact that in 1963 they spent $1.5 billion for fibers (mostly raw cotton) and only $114 million for yarns (including intra-company transfers).

3. Fabrics

The term "cotton fabrics" is used here to include cloth and related merchandise wholly or chiefly (by weight or value) of cotton, regardless of the method of manufacture. Woven fabrics exceeding 12 inches in width (generally referred to as broadwoven) are by far the principal products in both U.S. production and imports. Other cotton fabrics of commercial importance are knit, tufted, braided, elastic, bonded, embroidered, and nonwoven fabrics, laces, netting, trimmings, batting, and machine belting; of these, knit fabrics are the most important.

Annual production of cotton broadwoven fabrics in the United States--about 11 billion square yards, weighing 3 billion pounds in 1961-66--exceeds that of any other country (table A-3-1). The ratio of U.S. imports to apparent consumption rose from nearly 3 percent in 1961 to 6 percent in 1966 and is believed to have declined slightly in 1967. Before 1965 the United States was generally a net exporter of cotton broadwoven fabrics, but in 1965 and 1966, when imports were larger, and exports were smaller, than in the preceding 4 years, imports were about 1-1/2 times the exports. The role of the United States in world output of the other products included here is not known. Total exports of such products are believed to exceed total imports, but for some products (especially v-belts, laces, and fish nets) imports supply a significant portion of domestic consumption.

Table A-2-4.--Combed yarn, wholly or in chief value of cotton: U.S. imports for consumption by principal sources, calendar years 1964-66

Country of origin	1964	1965	1966
	Quantity (pounds)		
Portugal	722,504	809,527	4,952,430
Brazil	-	132,549	3,921,104
Mexico	5,743	97,713	3,348,673
West Germany	-	-	1,874,613
Malta	-	122,614	1,424,582
Israel	37,755	228,556	1,799,409
Greece	232,325	-	1,546,786
Switzerland	185,325	222,008	795,033
Netherlands	-	205,686	1,149,488
Spain	-	4,718	1,170,358
Hong Kong	360	181,000	1,178,300
France	86,387	235,738	395,269
United Kingdom	37,535	37,082	250,478
Salvador	-	-	493,000
Italy	327	15,511	195,565
Taiwan	-	-	197,000
Egypt	602	2,275	100,333
All other	18,179	3,495	220,547
Total	1,327,042	2,298,472	25,012,968
	Value		
Portugal	$472,478	$515,236	$3,120,315
Brazil	-	64,308	2,638,352
Mexico	3,276	72,803	2,172,841
West Germany	-	-	1,224,675
Malta	-	101,792	1,110,298
Israel	24,040	115,004	1,021,343
Greece	120,703	-	935,688
Switzerland	387,287	470,220	926,695
Netherlands	-	172,187	804,514
Spain	-	2,506	684,632
Hong Kong	1,800	98,054	647,907
France	64,869	196,275	350,742
United Kingdom	122,862	125,641	273,632
Salvador	-	-	261,278
Italy	643	20,163	199,790
Taiwan	-	-	101,308
Egypt	1,586	2,030	54,046
All other	27,360	4,160	170,535
Total	1,226,904	1,960,379	16,698,591

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table A-2-3.--Carded yarn, wholly or in chief value of cotton: U.S. imports for consumption, by principal sources, calendar years 1964-66

Country of origin	1964	1965	1966
	Quantity (pounds)		
Mexico	636,216	1,481,263	22,191,620
Portugal	6,811,421	6,086,444	14,307,140
Brazil	1,122,800	4,904,317	13,652,534
Colombia	2,103,486	2,552,157	3,882,364
Spain	1,015,372	2,030,625	2,873,222
Greece	410,678	559,003	2,473,680
Israel	1,352,862	988,658	2,177,135
Hong Kong	306,350	258,600	1,052,320
Malta	-	-	272,865
Switzerland	1,376	4,945	297,234
Norway	-	-	204,952
Egypt	249,220	100,001	153,892
Netherlands	-	-	127,224
Italy	370	11,204	149,303
Taiwan	-	-	152,000
All other	913,468	194,125	529,421
Total	14,923,619	19,171,342	64,496,906
	Value		
Mexico	$247,865	$688,391	$9,895,629
Portugal	3,017,549	2,805,550	6,711,699
Brazil	385,625	1,910,821	5,778,862
Colombia	908,815	1,074,392	1,755,132
Spain	394,633	850,435	1,242,907
Greece	186,558	262,838	1,217,521
Israel	604,335	452,644	1,027,878
Hong Kong	129,807	109,693	538,854
Malta	-	-	188,981
Switzerland	1,871	11,382	169,731
Norway	-	-	89,206
Egypt	113,531	43,678	82,027
Netherlands	-	-	81,892
Italy	773	10,406	80,668
Taiwan	-	-	71,780
All other	394,504	89,036	204,156
Total	6,385,866	8,309,266	29,136,923

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table A-2-2.--Hourly capacity of the specified types of equipment in a cotton yarn mill of about 20,000 spindles, 1950 and 1966

Type of equipment	1950		1966	
	Units of equipment	Production	Units of equipment	Production
		Pounds per hour		Pounds per hour
Pickers	2	455	2	670
Cards	54	434	32	651
Breaker drawing frames	5	428	3	646
Finisher drawing frames	5	424	3	646
Roving frames:				
Warp spindles	252	238	240	357
Filling spindles	288	184	240	276
Spinning frames:				
31s warp spindles	10,080	236	10,416	354
41s filling spindles	10,752	182	11,424	273

Source: Saco-Lowell Shops, Greenville, S.C.

Table A-2-1.--Cotton yarn: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1961-66

Year	Production			Imports
	For sale or commission	For captive consumption	Total	
	Million pounds	Million pounds	Million pounds	Million pounds
1961----------	804.6	3,081.2	3,885.8	13.9
1962----------	845.6	3,132.8	3,978.4	28.5
1963----------	832.8	3,050.4	3,883.2	23.2
1964----------	902.9	3,222.4	4,125.3	16.3
1965----------	977.3	3,201.0	4,178.3	21.5
1966----------	1,049.2	3,226.2	4,275.4	89.5

Year	Exports	Apparent consumption	Ratio of imports to--	
			Production for sale or commission	Apparent consumption
	Million pounds	Million pounds	Percent	Percent
1961----------	7.3	3,892.4	1.7	0.4
1962----------	6.7	4,000.2	3.4	.7
1963----------	5.5	3,900.9	2.8	5.9
1964----------	6.7	4,134.9	1.8	3.9
1965----------	6.3	4,193.5	2.2	.5
1966----------	5.7	4,359.2	8.5	2.1

Source: Compiled from official statistics of the U.S. Department of Commerce.

India, with an output of 2 billion pounds, ranks first in the foreign free world and Japan is next with slightly more than 1 billion pounds. Pakistan, the United Kingdom, France, West Germany, and Italy each produce about one-half billion pounds per year.

Of the leading producers mentioned above, only West Germany supplied more than 1.0 million pounds of the 1966 U.S. imports of cotton yarns. Annual production in each of the two leading suppliers of U.S. imports in that year was between 200 and 300 million pounds. About 9 percent of Mexico's output in 1966 and about 12 percent of Portugal's were exported to the United States.

Foreign countries of the free world which imported significant quantities of cotton yarn during 1966 were: West Germany (63.2 million pounds), Hong Kong (36.6 million pounds), Belgium (34.2 million pounds), the United Kingdom (34.0 million pounds), the Netherlands (30.2 million pounds), Sweden (20.8 million pounds), Austria (17.4 million pounds), Canada (16.4 million pounds), and Denmark (12.8 million pounds).

Imports of cotton yarn, along with most other cotton products, have been subject to restraint since 1962 in accordance with the provisions of the LTA. Initially the United States requested a number of foreign exporters to limit shipments of cotton yarn under the provisions of article 3 of the LTA. In recent years there has been a shift on the part of the United States from the use of article 3 restraint actions to the use of comprehensive bilateral agreements pursuant to the provisions of article 4. These agreements generally regulate trade between the United States and the foreign exporter for a period of several years. By July 1967, such agreements existed with 22 countries, 21 of which included restraints on trade in cotton yarn. In addition, U.S. imports of yarn from Brazil were controlled pursuant to article 3 of the LTA.

Imports of cotton yarn during 1966 from Brazil, Portugal, Colombia, Spain, and Israel were permitted to exceed the limitations imposed under the LTA owing to the extraordinary demand for certain yarns required for production of articles for use in Viet-Nam. During 1966 imports of yarn from Mexico, which were not controlled under the LTA, were substantially larger than those in any previous year. During 1967, a bilateral agreement was concluded with Mexico containing maximum levels for exports of cotton yarn to the United States.

j. <u>Foreign production and trade</u>.--Production of cotton yarn in the foreign world has been about 18 billion pounds in recent years, of which the foreign free world accounted for about 11 billion.

TSUS item	Description	Rate of duty
302.--	Yarn, wholly of cotton, bleached, mercerized, colored, combed, or plied:	
	Nos. 1-59	8.66% to 20.95% ad val. depending on the yarn number
	Nos. 60 and over	4.7¢ per lb. + 21.2% ad val.

These rates became effective on January 1, 1968, and represent the first stage of U.S. concessions granted in the Kennedy Round negotiations concluded on June 30, 1967. The concessions are to become fully effective in five annual stages, the last on January 1, 1972. The rates in effect on December 31, 1967 (virtually all of which had been applicable since June 30, 1958) and the final stage of the concession rates are shown in the following tabulation:

TSUS item	Rate of duty	
	Dec. 31, 1967	Jan. 1, 1972
300.60	20% ad val.	14.5% ad val.
301.--		
Nos. 1-59	4.725% ad val. + 0.225% for each yarn number above 1	3.4% ad val. + 0.16% for each yarn number above 1
Nos. 60 and over	5¢ per lb. + 18% ad val.	3.6¢ per lb. + 13% ad val.
302.--		
Nos. 1-59	9.225% ad val. + 0.225% for each number above 1	6.65% ad val. + 0.16% for each number above 1
Nos. 60 and over	5¢ per lb. + 22.5% ad val.	3.6¢ per lb. + 16.25% ad val.

On cotton yarn imported under TSUS group 301.--, the duties computed on the basis of the applicable rates averaged 8.8 percent in 1965 and 9.2 percent in 1966; on yarn imported under 302.00, they averaged 16.0 percent in 1965 and 15.7 percent in 1966.

part of 1967 they declined again as the inventory unfilled order ratio increased. The BLS wholesale price index for cotton yarn for the 1961-66 period is as follows (1957-59=100):

1961------------------	99.0
1962------------------	100.3
1963------------------	97.8
1964------------------	94.8
1965------------------	93.6
1966------------------	98.1
1967 (Jan.-Aug.)------	95.2

h. Profitability.--Data are not available for cotton spinning mills.

i. U.S. customs treatment[1/].--The current rates of duty provided for yarn wholly or in chief value of cotton vary according to the fiber content, the yarn number, and the finish as shown in the following tabulation:

TSUS item	Description	Rate of duty
300.60	Yarn, in chief value but not wholly of cotton---------------------------	18.5% ad val.
301.--	Yarn, wholly of cotton, not bleached, mercerized, colored, combed, or plied:	
	Nos. 1-59---------------------------	4.46% to 16.75% ad val. depending on the yarn number
	Nos. 60 and over--------------------	4.7¢ per lb. + 17% ad val.

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of cotton yarn from the Philippine Republic and "Communist" countries have been negligible in recent years.

imports of combed yarn during 1966 were singles, amounting to 20.5 million pounds, compared to 1.6 million in 1965. Portugal was the chief foreign supplier of combed singles yarn. Imports of combed plied yarn increased from 648,714 pounds in 1965 to 4.5 million in 1966, with Mexico and Brazil being the chief suppliers.

Imports of combed yarn during 1966, by yarn counts, were as follows:

Yarn Nos.	Million pounds
1-19	6.5
20-29	8.4
30-39	6.0
40-49	1.9
50-59	1.7
Over 60	.5
Total	25.0

Annual U.S. exports of cotton yarn, which ranged from 5.5 million to 10.7 million pounds during 1960-65, amounted to 5.7 million pounds in 1966 and were probably about 5.5 million pounds in 1967. Shipments to Canada, the principal destination for U.S. exports of cotton yarn, amounted to 3.4 million pounds in 1966, or 59 percent of the total in that year. Other important export markets during 1966 were the Republic of South Africa (553,690 pounds), South Viet-Nam (292,300 pounds), and the Congo (245,124 pounds).

g. Prices.--Prices of cotton yarn, unlike those of fabric, declined when the two-price system for raw cotton was abolished in 1964, (thereby reducing costs for cotton to the mill). During 1966, because of rising demand for yarn and anticipation of shortages, yarn prices increased to their pre-1964 level, but during the first

1964-66, were as follows (in millions of pounds):

Item	1964	1965	1966
Carded yarn	14.9	19.2	64.5
Combed yarn	1.3	2.3	25.0
Total	16.2	21.5	89.5

Mexico was the chief source of imported carded yarn during 1966, supplying 22.2 million pounds compared to only 1.5 million pounds during 1965 (table A-2-3). Portugal and Brazil, also large suppliers during 1966, showed significant increases over 1965. Almost 84 percent of total imports of carded yarn in 1966 were singles grey yarn (53.9 million pounds); most of the remainder (9.0 million pounds) was carded plied yarn. Mexico was the largest supplier of carded singles yarn, while Brazil was the source of most of the carded plied yarn. Imports of carded yarn (both singles and plied), by yarn counts, in 1966 were as follows:

Yarn Nos.	Million pounds
1-9	7.7
10-19	26.8
20-29	18.9
30-39	10.7
Over 40	.4
Total	64.5

Portugal was the principal source of imports of combed cotton yarn during 1966, supplying 5.0 million pounds compared to only 810,000 pounds during 1965 (table A-2-4). Imports were also significant from Brazil and Mexico, each supplying between 3.3 million and 4.0 million pounds. Seven additional countries each supplied between 1 million and 1.9 million pounds. About 82 percent of

80 percent of the output of machine-knitting yarn, and about 75 percent of other types of cotton yarn (i.e., carpet yarn, thread yarn and so forth).

e. U.S. sales and inventories.--Annual sales of domestically produced cotton yarn generally approximate the quantities produced for sale or on commission (see preceding section). Inventories of sales yarns in relation to unfilled orders were larger on July 1, 1967, than on the corresponding date of 1966. Inventories of combed sales yarns were equivalent to 16 percent of the unfilled orders on July 1, 1967, and to 3 percent 1 year earlier. In 1965 the July-1 inventories of combed sales yarn had been equal to nearly 7 percent of the unfilled orders. Inventories of carded sales yarns were equivalent to 20 percent of the unfilled orders on July 1, 1967, and to 5 percent 1 year earlier. In 1965, the July-1 inventories of carded sales yarn had been equal to 7 percent of unfilled orders.

f. U.S. imports and exports.--Imports of cotton yarn during the 1958-65 period ranged between 0.8 million pounds and 28.5 million pounds. 1/ During 1966, they amounted to 89.5 million pounds and during 1967 they were probably about 35 million pounds. Imports of cotton yarn have been subject to restraint since 1962 in accordance with the provisions of the LTA (see discussion in section on U.S. tariff treatment). Annual imports of cotton yarn, by types, during

1/ Not including imports of cotton handwork yarn, cotton thread, and chenille yarns, imports of which amounted to around a half-million pounds during 1966.

Korea to fill civilian requirements that could not be met from domestic production. During 1967, imports of duck were equivalent to slightly more than a fourth of domestic output and are expected to be at about the same level during 1968.

Gingham.--Annual imports of ginghams, principally from Japan, reached a peak in 1965--nearly 63 million square yards--and declined to 59 million in 1966. During the period 1963-66 when demand in the apparel market shifted from fabrics of 100-percent cotton to blended fabrics in chief value of manmade fibers, production dropped about 52 percent (table A-3-7). 1/

Sheeting.--Although total imports of sheeting fabrics were 12 percent higher in 1966 than in 1963, imports of classes A, B, and C sheeting rose 85 percent and were equivalent to more than 10 percent of domestic production in 1966. Meanwhile, imports of soft-filled sheeting, like domestic production thereof, decreased. Nevertheless, imports of soft-filled sheeting were equivalent to about 20 percent of domestic production in 1966.

Printcloth.--Imports of printcloth fabric, which doubled from 1963 to 1966, consisted mostly

1/ Production data in table A-3-7 are in terms of linear yards and therefore were not used to compute the ratios of imports to production used in this discussion of imports.

of shirting fabrics in 1964-66. In 1966, total imports of printcloth fabrics were equivalent to only 5 percent of domestic production.

Sateens and twills.--Imports of both sateens and twills were substantially higher in 1966 than in earlier years. The ratio of imports to domestic production in 1966 was over 10 percent in the case of sateens and about 8 percent in the case of twills. Domestic production of twills has increased in recent years, whereas sateen production has declined.

Pile fabrics and other specialty fabrics.--Velveteens, velvets, plushes and similar pile fabrics account for most of the imports of specialty fabrics. Annual imports of velveteens have declined since 1963 but those of velvets, plushes and velours were 3 times larger in 1966 than in 1963. Combined imports of these pile fabrics increased from 5.8 million square yards in 1963 to 7.0 million in 1966, or by 21 percent. Imports were equivalent to nearly 45 percent of estimated domestic production in 1966. 1/ Imports of corduroy in 1966 were 466,000 square yards, more than double the amount imported in 1963, but equivalent to less than 1 percent of domestic production. Imports of jacquard figured upholstery fabrics declined by 27 percent

1/ Combined domestic production of velveteens, velvets, plushes, and velours declined by an estimated 20 percent from 1963 to 1966.

from 1963 to 1966; they amounted to 3.6 million square yards in 1966, or about 2 percent of the estimated domestic production in that year. Significant increases in imports have also occurred in coated fabrics and printers rubberized blankets; imports of certain miscellaneous specialty fabrics have declined.

Other fabrics.--Imports of yarn-dyed fabrics declined sharply in 1966, mostly as a result of reduced demand for Madras-type fabrics. Imports of typewriter-ribbon cloth, which had been the subject of an escape-clause investigation by the Tariff Commission in 1960, declined from 3.3 million square yards in 1961 to 1.6 in 1966.

Japan, Hong Kong, and India were the leading suppliers of U.S. imports of broadwoven cotton fabrics during the period 1963-66. They supplied about 57 percent of the total quantity and value in 1963, and 52 percent in 1966 (table A-3-11). Japan has been a major supplier for many years. In 1958, however, both Hong Kong and India supplied less than West Germany, Belgium, United Kingdom, and Korea. About 90 percent of U.S. imports came from 8 countries in 1958, from 12 countries in 1961, and from 16 in 1966. The shares of total U.S. imports of broadwoven cotton fabrics supplied by selected countries in the years 1958-66 were as follows (in percent of quantity measured in square yards):

Year	Japan	Hong Kong	India	West Germany	Pakistan	United Kingdom
1958----	73.4	1.6	1.0	2.3	-	5.0
1961----	35.2	27.3	4.1	2.2	3.1	1.3
1962----	29.3	23.5	7.1	1.6	3.3	.8
1963----	22.4	21.8	13.4	2.1	6.8	.7
1964----	25.7	23.4	9.2	2.0	6.0	.9
1965----	25.5	19.6	12.2	1.3	6.5	.7
1966----	20.3	22.8	9.8	2.0	7.6	.5

Annual U.S. exports of cotton broadwoven fabrics averaged about 440 million square yards during 1961-66. Tobacco cloth and similar fabrics, remnants (less than 10-yard lengths), and printcloth fabrics accounted for well over half of total U.S. exports of cotton fabrics in 1966; other important constructions were twills and denims.

The countries which were the principal markets for U.S. exports remained the same, for the most part, over the entire period 1961-66 (table A-3-12). About half of total annual exports during the period were to three countries--Canada, the Philippine Republic, and the Republic of South Africa--with Canada being by far the leading export market. In 1966, exports to Canada were comprised principally of tobacco cloth or similar fabrics, printcloth yarn fabrics, and twills. Half the exports to the Philippines in that year were fabric remnants.

g. Prices.--The annual average of the monthly wholesale price indexes (1957-59=100) for broadwoven cotton fabrics, which are published by the U.S. Bureau of Labor Statistics, ranged from 99.9 to 101.0 during 1961-65 but was 103.0 in 1966. The monthly index, which had reached 103.9 in October 1966, declined to 99.2 in September 1967.

The average monthly prices of 20 selected constructions of unfinished all-cotton fabrics (as computed by the U.S. Department of Agriculture) 1/ indicate that prices of these fabrics trended upward from mid-1961 to late 1966 and then declined sharply to mid-1967 (table A-1-10 in section on raw cotton).

The August wholesale price index for all narrow fabrics of cotton and for zipper tape (144 yards) was 82.5 in 1964, 83.9 in 1965, and 91.2 in 1966. The wholesale index for zipper tape (that for total narrow fabrics is not available) reached 92.2 in September 1967.

h. Profitability and investments.--Data on profitability are not available for either cotton-fabric weaving operations or for firms which are primarily cotton weavers. For nine textile companies that are primarily weavers and listed on the New York Stock Exchange, the ratio of annual profits to annual net sales ranged from 3 to 6 percent during 1962-66, whereas for all firms producing textile mill products, the corresponding ratio ranged from 2 to 4 percent. The ratio of profits of all textile mill firms to stockholders equity has ranged between 5 and 11 percent in recent years.

1/ These "prices" are the average wholesale values of the quantities of the selected constructions obtainable from 1 pound of cotton.

Shortly after the price to the mills of raw cotton was lowered in 1964, mill margins 1/ increased by more than one-third and continued a gradual increase through 1965 and most of 1966. Thus the mills' cost of materials decreased in 1964 and 1965 while the value of their shipments rose. Increasing labor costs, however, partly offset the lower cost of materials. Wage costs increased 10 percent from 1963 to 1964 and an additional 9 percent in 1965 and were equal to 24 percent of the value of shipments in the latter year (table A-3-2). In 1967, moreover, prices of most types of raw cotton rose sharply.

Annual expenditures by cotton weaving mills for new plant and equipment increased without interruption from $81 million in 1961 to $222 million in 1966 (table A-3-13). More than three-fourths of the expenditures in the period 1961-66 was for machinery and equipment; the remainder was for plant structures. Modernization of textile plants in recent years has been encouraged by a number of factors, including existing tax provisions that permit accelerated depreciation rates for machinery and tax credits for investments in new equipment. In older plants, the capital investment is usually less than $10,000 per employee, whereas in new or completely modernized plants the investment is often $30,000 or more per employee. Some new plants reportedly represent an investment of near $50,000 per employee.

1/ As compiled by the U.S. Department of Agriculture.

i. U.S. customs treatment. 1/--Most broadwoven cotton fabrics are dutiable under the provisions of subpart 3A of schedule 3 of the TSUS; narrow fabrics, fabrics of special construction (e.g., knit, pile, tufted, lace, and ornamented) and those for special purposes (e.g., tapestry and upholstery fabrics, belting, wadding, batting, and nonwoven fabrics) are dutiable under the provisions of part 4 of schedule 3.

The current rates of duty provided under subpart 3A of schedule 3 for cotton fabrics vary according to the fineness of the yarn contained therein (expressed in terms of the average yarn number), the finish, and the type of weave. In general, higher rates of duty are applicable to so-called countable cotton cloth of fine yarns than to that of coarser yarns. The rates also increase with the degree of processing. Higher rates are applicable to bleached but not colored fabrics, for example, than to fabrics of the same construction which are not bleached; also the rates applicable to colored fabrics are higher than those applicable to comparable bleached but not colored fabrics. Moreover, fancy or figured

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. In 1966, imports of cotton fabrics from the Philippine Republic amounted to nearly 6 million square yards, valued at $1.1 million (consisting almost entirely of countable cotton cloth) and negligible amounts from Communist countries. Imports from the Philippines, which were dutiable at 40 percent of the column 1 rates during calendar years 1965 through 1967, will be dutiable at 60 percent of the column 1 rates during the period 1968 through 1970.

fabrics are dutiable at higher rates than plain fabrics of the same average yarn number and finish; and fabrics in chief value but not wholly of cotton are dutiable at higher rates than similar fabrics wholly of cotton.

The ad valorem equivalent of the applicable duties on the 1966 imports of countable cotton cloth, which ranged on individual types of fabrics from less than 9 percent to over 40 percent, averaged about 16 percent, reflecting the fact that a large portion of the fabrics consisted of gray goods made from coarse yarns. For example, the 1966 duties applicable to plain, unbleached fabric of average yarn Nos. 10 to 19 (items 320.10-320.19), which accounted for about 30 percent of the total value of imports of countable cotton cloth in that year, averaged 11 percent.

In the tariff negotiations concluded on June 30, 1967--commonly referred to as the Kennedy Round--nearly all the rates applicable to countable cotton cloth were reduced by about 24 percent. The concessions are to be placed in effect in five annual stages. The first stage became effective on January 1, 1968. The only rates of duty not so affected by the Kennedy Round are those applicable to the following types of fabrics wholly of cotton: (1) colored fabrics of average yarn number 59 or coarser, certified to have been made on a hand loom (i.e., nonpower-driven) by a cottage industry; and (2) fabrics of average yarn number 51 to 140, suitable for making typewriter ribbon. The rates on certain hand-loom fabrics described in (1) are to be reduced by more than 24 percent, whereas the rates of the typewriter-ribbon fabrics described in (2) are not subject to concessions in the Kennedy Round. During the period September 23, 1960 through October 11, 1967, typewriter-ribbon cloth was subject, pursuant to "escape-clause" action by the President, to higher rates of duty than other fabrics of similar construction. These "escape-clause" rates, however, were allowed to expire on October 11, 1967. Cotton typewriter-ribbon cloth, thus became dutiable on October 12, 1967 at the rates in effect prior to September 23, 1960, the effective date of the "escape-clause" rates, and will continue to be dutiable at the pre-escape-clause rates.

The rates provided in part 4 of schedule 3 for cotton fabrics are mostly of the ad valorem type. In 1967 these rates ranged from 10 percent on coated and filled fabrics such as artists' canvas (item 355.50), oil cloths (item 356.10), and window hollands (item 356.30) to 65 percent on certain types of lace fabrics (in item 351.46). In the tariff negotiations concluded on June 30, 1967, nearly all the rates on the cotton fabrics considered here were reduced, but only a few by 50 percent, the maximum permitted. Most of the reductions will be placed in effect in five stages, the first stage on January 1, 1968, and the subsequent stages at annual intervals. When all the concessions become fully effective, the range of ad valorem rates discussed here (in the absence of other modifications) will be from 7 percent on certain coated and filled fabrics (items 356.20 and 356.25) to 45 percent on certain lace fabrics (item 351.46).

For the eight TSUS items in part 4 of schedule 3 under which the import entries of cotton fabrics were valued at $1 million or more in either 1965 or 1966, the rates in effect on January 1 of 1968 and the final stage of the Kennedy Round concession rates are as follows (in percent ad valorem):

Item No.	Rate of duty: Jan. 1, 1968	Rate of duty: Final stage concession rate
346.20------------	30.0	1/
346.24------------	22.5	1/
346.35------------	34.0	30.0
347.33------------	16.5	13.3
351.40------------	27.0	25.0
355.65------------	10.0	8.5
357.05------------	26.0	22.5
358.06------------	14.0	8.0

1/ The rates on cotton velveteens (items 346.15 through 346.24) were not reduced in the Kennedy Round negotiations.

Imports of cotton fabrics, along with most other cotton products, have been subject to restraint since 1962 in accordance with the provisions of the LTA. At first the United States imposed restraints on imports of cotton fabrics under article 3, but these have been largely superseded by comprehensive bilateral agreements negotiated pursuant to article 4. These agreements are usually operative during a period of several years. Each of the 22 agreements in effect in July 1967 included restraints on U.S. imports of cotton fabrics. Many of the agreements provided specific restraints by type of fabric (e.g., gingham, sheeting, and print cloth), while others imposed a limitation on the total imports of cotton products, including fabrics. During 1967, U.S. imports of certain cotton fabrics from Brazil and Malaysia--countries not parties to bilateral agreements--were limited by restraints imposed under article 3.

During 1966 and 1967 the United States allowed entries of specified quantities of fabrics from several countries in excess of the basic limitations imposed in their respective agreements. Colombia, Korea, and Singapore accounted for the bulk of such allowances. The total was slightly more than 12 million square yards in 1966 and may be about 8 million in 1967. These "overshipments" are not to be included in the moving "base" from which agreed annual increases are to be computed.

Before agreements were negotiated with some countries that have recently become important suppliers of cotton products, the United States had permitted the imports of certain cotton products to rise to substantial amounts. Such amounts are then considered in determining the "base" used for the computation of the annual limitations. The first-year limitation on fabrics under the agreement negotiated with Mexico in 1967, for example, amounted to 21 million square yards. 1/

Annual imports from some of the countries that participate with the United States in bilateral agreements under the LTA have not always reached the maximum amounts permitted in each of the categories included in their respective agreements. Accordingly, many of the new or renegotiated agreements provide for some substitution of products in one category for those in another and also for carryover of "shortfalls" in one year to subsequent years.

1/ Imports from Mexico in 1966 amounted to 33.5 million square yards.

j. Foreign production and trade.--The U.S.S.R., Japan, mainland China, and India are the leading foreign producers of cotton fabrics. U.S. production is slightly larger than total production in Western Europe and twice the production in Japan.

During the 1960's, annual production of cotton fabrics in the foreign world, as in the United States, has been fluctuating within narrow limits. Exports of the major industrialized countries as a group have declined, while their imports have increased. For most other countries exports have increased while imports have been held at a low level. For some countries, particularly Hong Kong, most of the imports are for further processing and re-export.

Most foreign countries have both old and new equipment. Probably the most modern textile weaving plants in the foreign world are in Canada, Sweden, Denmark, Japan, Italy, and Hong Kong. Some countries with small recently established or expanded industries also have very modern plants, e.g., Colombia, Israel, Bolivia, Iraq, the Congo (Kinshasa), and Paraguay. Among the major producers, India has the lowest proportion of modern equipment. Modern textile machinery is obtainable from manufacturers in the United States, Japan, and many European countries. Textile mills in the United States use both domestic and foreign machinery.

The number of looms in place world-wide has declined in recent years, without a corresponding decline in fabric output. In many countries there is considerable capacity for increased production with existing plants by working additional shifts. Textile mills generally work less than two shifts in Europe but three shifts in the United States. In Hong Kong, Colombia, the United Arab Republic, and several other countries, however, utilization of weaving machinery usually equals or exceeds that in the United States.

Table A-3-1.--Broadwoven fabrics of cotton: 1/ U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1961-66

Year	Mill production 2/			Imports
	For sale	For captive consumption 3/	Total	
	Million sq. yds.	Million sq. yds.	Million sq. yds.	Million sq. yds.
1961	9,546	1,537	11,083	270
1962	9,671	1,664	11,335	483
1963	8,996	1,716	10,712	479
1964	9,118	1,911	11,029	438
1965	9,397	2,015	11,412	582
1966	9,064	1,864	10,928	691

Year	Exports	Apparent consumption (total)	Ratio of imports to--	
			Production of fabrics for sale	Apparent consumption
	Million sq. yds.	Million sq. yds.	Percent	Percent
1961	484	10,869	3.9	2.5
1962	428	11,390	5.0	4.2
1963	508	10,683	5.3	4.5
1964	502	10,965	4.8	4.0
1965	375	11,619	6.2	5.0
1966	418	11,201	7.6	6.2

1/ Includes, in addition to "countable cotton cloth," pile fabrics, jacquard upholstery fabrics, and other specially broadwoven goods.

2/ Converted from linear yards to square yards by using factors derived from data in U.S. Census publication Current Industrial Reports M22T.1(63)-1 Supplement.

3/ Consists of fabrics converted by the producers to finished articles such as bedsheets and towels.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table A-3-2.--Specified data relating to the operations of cotton weaving mills (industry No. 2211), 1958 and 1961-66

Year	Number of companies	Number of establishments: Total	Number of establishments: With 20 employees or more	All employees: Number	All employees: Payroll	Production workers: Number	Production workers: Man-hours	Production workers: Wages
					1,000 dollars		1,000	1,000 dollars
1958	325	496	395	243,419	724,481	228,609	443,255	646,678
1961	1/	1/	1/	228,194	785,494	212,671	427,027	695,045
1962	1/	1/	1/	223,622	805,211	208,274	425,540	712,884
1963	229	407	350	208,993	771,573	195,530	403,379	688,374
1964	1/	1/	1/	203,630	821,980	190,675	406,804	728,062
1965	1/	1/	1/	205,370	885,234	191,191	413,545	789,017
1966	1/	1/	1/	208,629	959,935	195,196	423,961	853,963

Year	Cost of materials	Value added by manufacture	Value of shipments	Capital expenditures	Yearend inventories
	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars
1958	1,622,758	1,078,592	2,748,584	48,441	589,864
1961	1,746,731	1,282,267	3,032,269	80,943	674,405
1962	1,893,490	1,346,310	3,188,490	114,815	718,148
1963	1,823,772	1,256,753	3,104,053	113,366	625,846
1964	1,756,170	1,404,284	3,171,333	138,159	565,343
1965	1,751,720	1,624,462	3,350,024	168,540	570,148
1966	1,852,412	1,730,257	3,561,914	222,034	590,574

1/ Not available.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table A-3-3.--Number and average straight-time hourly earnings 1/ of workers in selected occupations in U.S. cotton textile mills, September 1965

Occupation and sex	Number of workers	Average hourly earnings	Occupation and sex	Number of workers	Average hourly earnings
Battery hands	9,724	$1.56	Twister tenders, ring-frame	2,398	$1.66
Men	463	1.48	Men	1,712	1.69
Women	9,261	1.56	Women	686	1.58
Card grinders (all men)	1,746	2.03	Tying-in machine operators (1,485 men and 25 women)	1,510	2.03
Card tenders (4,246 men and 86 women)	4,332	1.62	Warper tenders	1,795	1.71
Carpenters, maintenance (all men)	605	2.04	Men	714	1.74
Comber tenders	945	1.72	Women	1,081	1.69
Men	666	1.73	High speed (300 y.p.m. and over)	1,614	1.71
Women	279	1.71	Men	648	1.72
Doffers, spinning-frame	10,712	1.85	Women	966	1.71
Men	10,688	1.85	Slow speed (under 300 y.p.m.)	181	1.72
Women	124	1.81	Men	66	1.94
Drawing-frame tenders	3,395	1.70	Women	115	1.60
Men	2,740	1.72	Weavers	19,075	2.00
Women	655	1.62	Men	9,242	2.02
Drawing-in machine operators	378	1.92	Women	9,833	1.99
Men	236	2.02	Box looms	1,853	2.00
Women	142	1.77	Men	1,089	2.03
Electricians, maintenance (all men)	687	2.21	Women	764	1.96
Inspectors, cloth, machine	5,401	1.63	Dobby looms	3,546	2.04
Men	831	1.69	Men	1,987	2.02
Women	4,570	1.62	Women	1,559	2.07
Janitors (excluding machinery cleaners)	5,238	1.45	Jacquard looms	1,121	2.16
Men	4,408	1.45	Men	837	2.19
Women	830	1.44	Women	284	2.09
Loom fixers (all men)	10,331	2.27	Plain looms	12,555	1.97
Box looms	685	2.30	Men	5,329	1.98
Jacquard looms	362	2.38	Women	7,226	1.97
Plain and dobby looms	9,284	2.26	Winders, yarn 2/	16,402	1.63
Machinists, maintenance (all men)	1,160	2.18	Men	200	1.74
Slasher tenders (1,857 men and 8 women)	1,865	1.93	Women	16,202	1.63
Slubber tenders	5,102	1.87	Automatic spooler (6,062 women and 67 men)	6,129	1.67
Men	4,548	1.87	Cone and tube, automatic (1,806 women and 30 men)	1,836	1.63
Women	554	1.85	Cone and tube, nonautomatic (6,646 women and 16 men)	6,662	1.60
Standard (404 men and 27 women)	431	1.82	Filling, automatic (1,308 women and 53 men)	1,361	1.60
Long draft	4,671	1.87	Filling, nonautomatic (52 women and 1 man)	53	1.83
Men	4,144	1.87			
Women	527	1.86			
Spinners, ring-frame (18,776 women and 186 men)	18,962	1.70			
Truckers, hand (including bobbin boys)	6,740	1.49			
Men	6,523	1.49			
Women	217	1.51			

1/ Excludes premium pay for overtime and for work on weekends, holidays, and late shifts.
2/ Includes data for workers in classification in addition to those shown separately.

Source: U.S. Department of Labor, Industry Wage Survey, Cotton Textiles, September 1965, Bulletin No. 1506, 1966, table 9.

Table A-3-4.--Specified data relating to the operations of the principal industries producing certain special construction and special purpose cotton fabrics, 1961, 1963 and 1965

Industry No. 1/	Principal products 2/	1961	1963	1965
2241	Narrow fabric mills:			
	Employees----------------number--	23,810	23,495	23,666
	Value added by manufacture---------1,000 dollars--	171,831	172,942	193,150
	Shipments--------------do--------	341,245	352,150	384,956
	Yearend inventories----do--------	56,952	55,753	61,243
2256	Knit fabric mills:			
	Employees----------------number--	20,380	24,355	28,823
	Value added by manufacture---------1,000 dollars--	190,197	244,853	328,980
	Shipments--------------do--------	615,130	799,623	1,021,759
	Yearend inventories----do--------	64,521	96,942	125,511
2292	Lace goods:			
	Employees----------------number--	5,546	5,096	4,459
	Value added by manufacture---------1,000 dollars--	33,303	33,047	33,494
	Shipments--------------do--------	62,529	53,906	54,937
	Yearend inventories----do--------	10,074	8,201	10,974
2293	Padding and upholstery filling:			
	Employees----------------number--	7,177	6,937	6,993
	Value added by manufacture---------1,000 dollars--	61,437	65,588	78,467
	Shipments--------------do--------	149,688	154,555	176,175
	Yearend inventories----do--------	19,660	16,549	15,735
2299	Textile goods, not elsewhere classified:			
	Employees----------------number--	6,770	7,176	7,943
	Value added by manufacture---------1,000 dollars--	59,225	78,258	84,594
	Shipments--------------do--------	136,061	168,926	187,144
	Yearend inventories----do--------	24,195	25,938	26,670
2397	Schiffli machine embroideries:			
	Employees----------------number--	5,717	6,143	5,659
	Value added by manufacture---------1,000 dollars--	45,497	55,411	48,496
	Shipments--------------do--------	77,850	97,020	90,036
	Yearend inventories----do--------	3/	5,900	4,969

1/ As identified in Standard Industrial Classification Manual, 1967.
2/ Data shown relate to total operations.
3/ Not available.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table A-3-5.--U.S. consumption of woven cotton fabrics, by end-use markets, 1961-66

(In percent)

Year	Apparel	Furnishings	Industrial products	Total
1961	50.9	31.2	17.9	100.0
1962	51.7	31.2	17.1	100.0
1963	51.4	31.6	17.0	100.0
1964	50.4	33.6	16.0	100.0
1965	48.4	34.7	16.9	100.0
1966 1/	45.5	35.5	19.0	100.0

1/ Preliminary.

Source: Compiled from data of the National Cotton Council of America.

Table A-3-6.--Selected cotton fabrics: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1963-66 and January-June 1967

(Quantity in thousands of pounds)

Year	Production	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	Lace and netting				
1963	3,753	1/	1/	1/	1/
1964	1/	343	1/	1/	1/
1965	1/	459	284	1/	1/
1966	1/	542	223	1/	1/
1967 (Jan.-June)	1/	347	88	1/	1/
	Knit cloth for sale				
1963	2/ 163,500	297	2,463	161,334	0.2%
1964	2/ 184,800	391	2,425	182,766	.2%
1965	2/ 196,500	235	2,109	194,626	.1%
1966	2/ 200,400	282	1,749	198,962	.1%
1967 (Jan.-June)	1/	150	861	1/	1/
	Narrow fabrics				
1964	68,968	1,578	1,763	68,778	2.4%
1965	72,626	1,907	2,199	72,334	2.6%
1966	85,992	2,283	1,909	86,366	2.6%
1967 (Jan.-June)	1/	1,371	976	1/	1/
	Belts and belting				
1964	3/ 37,736	1,561	2/ 3,203	36,094	4.32%
1965	3/ 39,655	1,649	2/ 3,648	37,656	4.37%
1966	3/ 42,344	4/ 2,268	2/ 3,979	40,633	5.58%
1967 (Jan.-June)	1/	1,010	2/ 2,123	1/	1/
	Webs, wadding, batting and nonwoven fabrics				
1963	413,000	1/	1/	1/	1/
1964	2/ 415,000	63	1/	1/	1/
1965	2/ 417,000	151	4,215	412,936	5/
1966	420,000	262	3,762	416,500	5/
1967 (Jan.-June)	1/	293	1,974	1/	1/

1/ Not available.
2/ Partly estimated.
3/ Compiled from published reports of the National Cotton Council of America. Data for 1966 include about 8,329 thousand pounds of v-belts.
4/ Includes 489 thousand pounds of v-belts of which 142 thousand were original motor vehicle equipment of Canadian origin and entered duty free under TSUS item 358.03.
5/ Negligible.

Source: Compiled from official statistics of the U.S. Department of

Table A-3-7.--U.S. production of cotton broadwoven fabrics, by type, 1961-66

(1,000 linear yards)

Item	1961	1962	1963	1964	1965	1966
Duck and allied fabrics	223,154	226,087	212,788	233,716	247,854	284,707
Sheeting and allied fabrics:						
Osnaburgs	219,764	225,173	238,910	262,655	303,052	1/ 350,000
Sheetings, A,B,C, and soft-filled	895,947	891,074	862,290	867,909	922,144	855,504
Drills	190,719	213,854	199,729	228,417	246,719	230,248
Four leaf twills	257,723	290,720	292,536	350,254	344,034	311,767
Bedsheetings	308,296	342,450	335,582	359,855	365,130	382,423
Other	556,648	591,614	365,304	459,662	453,851	1/ 524,562
Total	2,429,097	2,554,885	2,394,351	2,528,752	2,634,930	2,654,504
Print cloth-yarn fabrics:						
Plain print cloth	1,505,941	1,381,965	1,255,530	1,228,611	1,204,250	1,053,392
Tobacco and cheese cloth	905,306	966,237	932,354	960,651	1,085,235	1,140,616
Carded broadcloths	471,676	465,187	347,025	376,597	389,379	361,953
Other	341,583	373,177	444,566	397,514	440,808	507,062
Total	3,224,506	3,186,566	2,979,475	2,963,373	3,119,672	3,063,023
Colored yarn fabrics:						
Denims	238,199	241,206	248,219	271,340	257,785	295,668
Other	178,011	174,556	187,642	223,662	220,814	129,465
Total	416,210	425,762	435,861	495,002	478,599	425,133
Toweling:						
Terry	376,316	410,305	418,550	467,195	515,400	421,961
Other	199,736	205,715	198,989	190,485	197,162	234,472
Total	576,052	616,020	617,539	657,680	712,562	656,433
Blanketing and other napped fabrics:						
Blanketing	40,357	33,796	25,633	34,018	41,815	34,624
Other	138,897	139,265	124,433	131,027	134,233	119,251
Total	179,254	173,061	150,066	165,045	176,048	153,875
Fine cotton fabrics:						
Combed broadcloths	313,934	254,921	208,527	211,659	1/ 186,000	1/ 170,000
Lawns and organdies	221,767	177,385	147,872	134,372	161,014	153,061
Combed bedsheetings	187,705	200,981	234,185	268,231	285,479	225,561
Ginghams	195,726	209,261	205,279	185,083	184,817	99,158
Colored yarn shirting, etc.	115,807	123,612	136,723	133,469	130,233	108,857
Other	631,881	658,146	587,295	513,984	1/ 457,890	1/ 397,645
Total	1,666,820	1,624,306	1,519,881	1,446,798	1,405,433	1,151,282
Other woven cotton fabrics:						
Bedspread fabrics	31,653	35,066	39,866	48,295	50,932	41,001
Drapery and upholstery fabrics	129,237	131,518	116,360	121,026	119,671	112,159
Corduroys	171,284	154,630	153,666	165,800	155,862	134,707
Other	121,157	120,594	139,439	140,625	136,212	163,576
Total	453,331	441,808	449,331	475,746	462,677	451,443
Grand total	9,168,424	9,248,495	8,759,292	8,966,112	9,237,775	8,840,747

1/ Estimated.

Source: U.S. Department of Commerce, Current Industrial Reports, "Cotton Broad-woven Goods."

Table A-3-8.--Inventories of woven cotton fabrics, by location, December 31 of 1961-66 and July 31, 1967

(Million linear yards)

Date	Weaving mills	Finishing plants		Total
	Gray goods	Gray goods	Finished goods	
December 31:				
1961	1/ 660	397	971	2,028
1962	680	391	999	2,070
1963	619	382	983	1,984
1964	661	383	963	2,007
1965	676	405	1,015	2,096
1966	766	396	965	2,127
July 31, 1967	860	393	904	2,157

1/ Estimated.

Source: U.S. Department of Commerce, Current Industrial Reports, Series M22A.

Table A-3-9.--Countable cotton cloth: U.S. imports for consumption, by TSUS item numbers, 1966

Yarn No. group	Fabrics of 100 percent cotton						Fabrics in chief value of cotton but containing silk or manmade fibers						Total
	Not fancy or figured			Fancy or figured			Not fancy or figured			Fancy or figured			
	TSUS 320.-- Unbleached	TSUS 321.-- Bleached	TSUS 322.-- Colored	TSUS 323.-- Unbleached	TSUS 324.-- Bleached	TSUS 325.-- Colored	TSUS 326.-- Unbleached	TSUS 327.-- Bleached	TSUS 328.-- Colored	TSUS 329.-- Unbleached	TSUS 330.-- Bleached	TSUS 331.-- Colored	
	Quantity (1,000 pounds)												
01-9	20,562	511	520	355	116	38	-	1	77	-	-	11	22,190
10-19	96,936	4,561	9,236	2,246	100	2,973	3,971	4	126	24	-	484	120,660
20-29	21,188	342	2,529	700	48	4,391	110	-	44	105	52	459	29,969
30-39	9,221	1,073	6,152	1,191	171	8,817	5	1/	62	24	10	391	27,117
40-49	446	81	1,268	87	23	475	-	-	23	-	-	5	2,409
50-59	1,818	14	192	25	5	314	-	-	1	-	-	5	2,373
60-69	581	17	78	11	6	29	-	-	1/	-	-	1	722
70-79	248	4	47	46	9	14	-	-	1/	-	-	1/	368
80-139	912	168	143	48	31	54	-	-	1	-	-	1	1,358
Over 139	10	10	6	1	1	1	-	-	-	-	-	1/	30,028
Total	151,922	6,781	20,171	4,710	510	17,106	4,086	5	334	153	62	1,357	207,196
	Quantity (1,000 square yards)												
01-9	41,048	1,024	892	793	151	77	-	2	314	-	-	14	44,317
10-19	270,522	9,773	21,857	5,400	230	8,648	9,483	8	287	67	-	1,409	327,684
20-29	85,600	931	10,758	1,878	127	19,907	476	-	131	252	111	1,667	121,839
30-39	43,143	4,925	28,330	4,519	536	49,097	28	1	241	102	21	2,092	133,035
40-49	1,932	369	5,661	385	83	2,386	-	-	81	-	-	11	10,908
50-59	12,356	76	1,105	75	23	1,756	-	-	1	-	-	12	15,403
60-69	5,500	116	505	56	26	106	-	-	1/	-	-	2	6,311
70-79	1,350	17	211	222	43	69	-	-	1/	-	-	1/	1,913
80-139	4,643	937	884	236	180	265	-	-	3	-	-	3	7,149
Over 139	53	63	41	6	5	3	-	-	-	-	-	1	172
Total	466,147	18,231	70,244	13,570	1,404	82,314	9,987	11	1,058	421	132	5,211	668,731
	Value (1,000 dollars)												
01-9	8,359	415	621	169	179	45	-	1	73	-	-	13	9,874
10-19	44,166	2,948	12,921	1,071	131	3,383	1,700	6	199	15	-	549	67,089
20-29	11,446	288	2,756	620	72	5,459	65	-	98	142	65	582	21,595
30-39	6,219	942	8,679	1,101	251	11,947	3	1/	123	31	21	467	29,784
40-49	473	108	2,524	112	50	1,037	-	-	74	-	-	31	4,408
50-50	2,365	37	695	26	12	817	-	-	5	-	-	17	3,973
60-69	1,114	50	309	32	15	122	-	-	1/	-	-	6	1,649
70-79	366	10	158	88	27	41	-	-	1	-	-	1	693
80-139	1,519	481	627	106	111	172	-	-	6	-	-	7	3,028
Over 139	36	45	31	3	7	3	-	-	-	-	-	-	1,253
Total	76,063	5,324	29,321	3,328	855	23,026	1,768	7	579	188	86	1,673	142,218

1/ Less than 500.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Because of rounding, figures may not add to totals.

Table A-3-10.--Broadwoven cotton fabrics: U.S. imports for consumption by principal types, 1963-66

(In 1,000 square yards)

Type	1963	1964	1965	1966
Countable cotton cloth: 1/				
Duck:				
Single warp	40,013	35,365	44,486	81,153
Ply warp	1,673	1,989	6,014	8,723
Total	41,686	37,354	50,500	89,876
Gingham	52,806	50,273	62,733	59,271
Lawn	723	906	463	1,866
Poplin or broadcloth	25,389	22,342	36,452	51,468
Printcloth:				
Shirting, 80x80	2,671	9,350	16,204	14,032
Shirting, other	10,747	12,526	46,757	38,989
Other printcloth	15,103	593	1,164	5,015
Total	28,521	22,469	64,125	58,036
Sheeting:				
Osnaburg	10,305	8,412	12,010	19,761
Classes A, B, C	42,406	37,478	62,151	78,956
Soft-filled	84,535	67,824	57,146	64,515
Combed bedsheeting	153	-	167	2,240
Other	21,144	20,085	17,302	12,146
Total	158,543	133,799	148,766	177,618
Shirting, jaquard or dobby	7,106	3,294	1,362	2,485
Table damask	31	176	139	103
Sateens and twills:				
Sateens	7,994	9,569	13,187	18,183
Denim	36	15	-	140
Other twills	40,777	34,902	49,956	63,955
Total	48,807	44,486	63,143	82,278
Voile	139	294	2,228	5,669
Napped fabric:				
Yarn dyed	3,008	4,697	5,571	3,454
Other	14,847	18,484	18,960	18,835
Total	17,855	23,181	24,531	22,289
Typewriter ribbon cloth	2,118	1,821	1,521	1,648
Other	75,163	77,420	107,540	116,123
Total, countable cotton cloth	458,887	417,815	563,513	668,730
Cotton fabric of special construction or for special purposes: 2/				
Corduroy	202	273	347	466
Velveteens	5,232	5,514	4,656	4,749
Velvets, plushes, and velours	535	574	1,080	1,743
Coated, filled or laminated with rubber or plastic	3/	2,242	2,350	3,459
Tracing cloth	526	515	541	430
Upholstery fabric	4,901	3,843	3,066	3,577

1/ Includes the fabrics provided for in subpart 3A of schedule 3 of the TSUS.

2/ Includes the principal cotton fabrics provided for in part 4 of schedule 3 of the TSUS.

3/ Not available.

Source: Compiled from official statistics of the U.S. Department of

Table A-3-11.--Countable cotton cloth: U.S. imports for consumption, 1958 and 1961-66

Country of origin	1958	1961	1962	1963	1964	1965	1966
	Quantity (1,000 pounds)						
Japan	21,032	17,984	30,114	23,230	23,838	31,181	30,244
Hong Kong	692	25,312	36,998	35,830	35,463	39,586	55,838
India	318	2,979	9,019	16,474	11,018	18,808	20,889
West Germany	899	2,072	2,507	3,865	3,390	3,145	6,018
Pakistan	12	2,744	4,041	8,048	6,451	10,573	15,457
Mexico	377	361	146	972	1,156	2,251	11,768
Taiwan	25	3,015	12,105	6,061	7,214	9,366	9,772
Portugal	185	1,886	5,892	3,219	1,935	2,108	4,693
Canada	10	181	155	190	416	3,300	5,536
Belgium & Luxembourg	1,736	685	1,531	2,423	2,913	5,402	4,805
Spain	9	1,971	2,445	5,337	4,233	3,967	5,365
Netherlands	795	1,463	1,499	1,702	1,146	1,009	2,306
Switzerland	460	435	513	272	277	511	1,235
Colombia	-	6	1,075	697	2,184	4,143	4,569
Korea, Republic of	1,868	2,313	3,743	7,301	6,857	6,262	5,755
United Kingdom	1,363	711	810	687	877	931	797
Brazil	5	59	1/	498	106	8,490	4,169
Yugoslavia	-	148	5,065	4,328	3,520	2,346	3,795
France	271	3,279	3,507	1,194	776	543	651
Italy	450	454	296	270	330	373	605
Egypt (U.A.R.)	121	1,340	4,665	8,452	6,713	4,630	2,722
Singapore	-	-	-	-	-	-	2,736
Israel	15	17	22	63	21	51	1,902
Malaysia	-	-	-	-	-	561	2,299
Philippines, Rep. of	-	-	-	-	6	1,040	2,232
All other	619	628	1,181	1,472	1,622	450	1,038
Total	31,262	70,043	127,329	132,585	122,462	161,027	207,196

See footnotes at end of table.

Table A-3-11.--Countable cotton cloth: U.S. imports for consumption, 1958 and 1961-66--Continued

Country of origin	1958	1961	1962	1963	1964	1965	1966
	Quantity (1,000 square yards)						
Japan	103,507	89,563	135,817	102,795	107,313	143,487	135,928
Hong Kong	2,220	69,387	109,246	99,886	97,658	110,569	152,141
India	1,329	10,378	32,775	61,594	38,623	68,967	65,172
West Germany	3,291	5,624	7,494	9,649	8,537	7,603	13,312
Pakistan	28	7,894	15,097	31,234	24,820	36,477	51,040
Mexico	1,121	903	487	2,327	3,093	5,988	33,474
Taiwan	127	10,952	43,967	21,459	23,326	30,911	33,119
Portugal	1,004	8,180	26,252	14,111	8,057	9,236	17,613
Canada	34	707	498	177	422	13,258	12,073
Belgium & Luxembourg	5,217	1,606	5,034	8,312	11,261	22,004	20,889
Spain	34	6,483	7,910	19,502	12,671	11,413	17,978
Netherlands	3,153	4,170	4,431	4,292	2,900	2,231	5,555
Switzerland	2,739	3,148	3,194	1,505	1,741	4,030	9,416
Colombia	-	11	3,214	2,137	6,359	14,002	16,012
Korea, Republic of	4,792	4,966	8,316	16,099	18,089	14,408	14,027
United Kingdom	7,022	3,377	3,733	3,232	3,635	3,997	3,302
Brazil	14	294	2/	2,766	639	32,278	13,370
Yugoslavia	-	430	13,767	14,245	12,940	6,956	11,452
France	577	17,137	19,236	3,891	1,914	1,273	1,446
Italy	1,539	1,602	1,088	942	975	1,006	1,438
Egypt (U.A.R.)	584	5,004	17,172	32,030	24,408	17,221	9,568
Singapore	-	-	-	-	-	-	8,124
Israel	30	73	69	284	47	107	4,799
Malaysia	-	-	-	-	-	1,419	7,758
Philippines, Rep. of	-	-	-	-	25	2,952	5,878
All other	2,634	2,814	5,255	6,418	8,362	1,720	3,847
Total	140,996	254,703	464,052	458,887	417,815	563,513	668,731

See footnotes at end of table.

Table A-3-11.--Countable cotton cloth: U.S. imports for consumption, 1958 and 1961-66--Continued

Country of origin	1958	1961	1962	1963	1964	1965	1966
	Value (1,000 dollars)						
Japan	21,564	21,188	32,386	27,440	28,088	35,594	36,942
Hong Kong	408	11,663	16,443	17,033	16,365	18,998	26,720
India	438	2,001	6,814	13,037	11,205	18,691	9,876
West Germany	1,570	3,573	4,094	6,244	5,613	5,214	9,197
Pakistan	15	1,055	1,780	3,479	2,929	4,654	6,826
Mexico	141	163	91	483	637	1,155	5,704
Taiwan	29	1,439	5,589	2,967	3,489	4,910	4,692
Portugal	198	1,718	5,163	2,699	1,905	2,392	3,935
Canada	24	146	144	168	322	2,370	3,725
Belgium & Luxembourg	1,859	671	1,190	1,910	2,587	3,884	3,644
Spain	25	1,349	1,359	2,781	2,313	2,407	3,406
Netherlands	1,526	2,638	2,566	2,557	1,734	1,448	3,232
Switzerland	1,579	1,358	1,499	938	1,005	1,507	3,091
Colombia	-	3	506	349	1,066	2,156	2,556
Korea, Republic of	733	962	1,527	2,920	2,842	2,718	2,493
United Kingdom	4,398	2,417	2,583	2,289	2,284	2,382	2,148
Brazil	10	53	3/	224	49	3,993	2,053
Yugoslavia	-	51	1,973	1,866	1,635	1,066	1,803
France	661	2,764	3,086	1,730	1,547	1,319	1,573
Italy	1,483	1,285	917	776	931	959	1,398
Egypt (U.A.R.)	283	1,047	2,778	4,468	3,369	2,548	1,371
Singapore	-	-	-	-	-	-	1,248
Israel	11	29	22	37	25	45	1,172
Malaysia	-	-	-	-	-	239	1,135
Philippines, Rep. of	-	-	-	-	11	520	1,057
All other	1,171	1,222	1,591	1,395	1,303	775	1,221
Total	38,126	58,795	94,101	97,790	93,254	121,944	142,218

1/ Less than 500 pounds. 2/ Less than 500 square yards. 3/ Less than $500.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table A-3-12.--Cotton broadwoven goods: U.S. exports of domestic merchandise by principal markets, 1961-66

Country	1961	1962	1963	1964	1965	1966
	Quantity (1,000 square yards)					
Canada	217,228	185,256	176,946	183,898	143,557	178,950
Philippine Republic	35,145	29,102	94,424	55,101	44,549	49,094
South Africa	17,664	20,826	21,194	19,741	14,804	16,671
Italy	1,721	2,444	13,147	17,755	14,841	13,674
Dominican Republic	5,187	16,685	14,226	16,482	10,536	18,018
Australia	13,254	14,706	9,776	9,594	8,626	7,369
France	5,220	3,508	9,315	8,953	5,422	7,273
Belgium and Luxembourg	1,434	1,419	2,386	3,634	4,443	5,600
Jamaica	5,016	4,963	5,101	5,955	4,924	6,243
Congo	1,136	13,764	6,160	16,342	7,651	4,699
United Kingdom	26,540	10,727	5,640	6,537	2,684	2,689
Venezuela	20,199	12,439	9,334	10,409	5,129	3,398
All other	118,862	96,667	128,847	135,184	93,569	88,615
Total	468,606	412,506	496,496	489,585	360,735	402,293
	Value (1,000 dollars)					
Canada	46,104	40,576	36,490	38,471	35,443	47,289
Philippine Republic	12,353	9,394	16,804	13,620	10,804	9,593
South Africa	6,235	6,932	7,410	7,338	5,998	4,630
Italy	688	1,194	2,727	3,350	3,619	4,136
Dominican Republic	1,602	4,930	3,669	4,047	2,373	3,630
Australia	5,245	5,136	3,835	3,791	3,506	3,371
France	1,594	1,733	2,573	2,656	2,146	3,194
Belgium and Luxembourg	553	672	1,039	2,017	2,167	2,532
Jamaica	1,525	1,482	1,443	1,833	1,431	1,800
Congo	403	4,120	1,530	3,141	2,363	1,635
United Kingdom	6,252	3,533	1,831	2,160	1,490	1,596
Venezuela	5,508	3,418	2,820	3,998	2,017	1,442
All other	39,450	30,174	35,300	36,856	30,153	27,806
Total	127,512	113,294	117,471	123,278	103,510	112,654

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table A-3-13.--Expenditures for new plant and new equipment by cotton-weaving firms, 1958 and 1961-66

(In thousands of dollars)

Year	Total	Plant Structures	Machinery and equipment
1958	48,686	7,010	41,669
1961	80,943	13,157	67,786
1962	114,815	20,789	94,026
1963	113,366	22,230	91,136
1964	138,159	23,247	114,912
1965	168,540	29,138	139,402
1966	222,034	1/ 42,034	1/ 180,000

1/ Estimated.

Source: U.S. Department of Commerce, Annual Survey of Manufacturers.

Note.--The above expenditures by cotton-weaving firms include only those for their establishments classified under industry No. 2211.

4. Apparel

About 45 percent of the U.S. consumption of cotton fiber in recent years has been in the form of wearing apparel. Industry estimates indicate the cotton content of the garments fabricated by U.S. apparel producers in 1965 was about 2 billion pounds (table A-4-1). The principal articles of wearing apparel made wholly or in major part of cotton are utility or work clothing, knit underwear, knit and woven sportswear (including shirts, blouses, slacks, and outershorts), and children's and infants' dresses. Other articles of apparel made from cotton or cotton blends include diapers (generally 100-percent cotton), handkerchiefs, headwear, neckwear (neckties, scarves, and dickies), men's and boys' dress shirts, hosiery, nightwear, outdoor jackets, and athletic uniforms, and women's and children's blouses and nightwear.

Official data on production and consumption of wearing apparel are not generally available in terms of fiber content. The United States, however, appears to be among the leading producing and consuming countries of wearing apparel containing cotton, and is also a large importer of such apparel, particularly knit outerwear, brassieres, raincoats, men's and boys' shirts, trousers and outer shorts, and women's and children's blouses, slacks, and shorts.

a. U.S. producers.--Thousands of U.S. firms make wearing apparel, but few are believed to use cotton exclusively. Most of the firms are small and many specialize in particular types of garments (e.g., blouses, men's shirts, slacks, and dresses). The number of such firms, however, has been declining in recent years through attrition, mergers, or acquisitions. The number of apparel firms with annual sales volume of $100 million or more has been steadily increasing from 1960 to date. A few large apparel firms fabricate a wide range of products and are also integrated vertically, i.e., they own or have a financial interest in fabric-manufacturing facilities and/or retail outlets. Producers of nationally advertised brands usually own a number of plants. Some large-size producing operations are owned partly by chain-store companies.

The types of cotton garments that have been predominant in U.S. imports in recent years are important products of the seven manufacturing industries listed below. The number of firms and establishments in these industries in 1963 were reported by the Bureau of the Census as follows:

Industry No. 1/	Description	Firms	Establishments
		Number	Number
2253	Knit outerwear	1,175	1,185
2321	Men's and boys' shirts (except work) and nightwear	659	834
2327	Men's and boys' separate trousers	669	735
2331	Women's blouses	1,130	1,175
2361	Girls', children's, and infants' dresses and blouses	630	667
2342	Corsets and allied garments	296	351
2385	Waterproof outergarments	223	341
		4,782	5,288

1/ As identified in Standard Industrial Classification Manual, 1967.

Of these 5,288 establishments, which are located mainly in the Middle Atlantic, South Atlantic, and South Central States, 79 percent had less than 100 employees each in 1963; 19 percent, 100 to 499 employees each; and about 2 percent had 500 or more employees each. The knit outerwear industry consists of mills that produce apparel directly from yarn (domestic or imported) and also from knit fabric (principally from that produced in the same establishments), whereas the establishments in the other industries considered here are commonly known as cut-and-sew industries and are of three types, namely, "regular" or inside factories, contract factories, and apparel jobbers. The regular factories produce apparel by cutting and sewing, generally from purchased woven or knit textile fabrics and materials such as rubber or plastic coated fabrics and plastic sheets. A few of them utilize fabrics woven by establishments operated by the same firm. The contract factories, on the other hand, manufacture apparel from materials owned by others, whereas the apparel jobbers generally perform entrepreneurial functions of a manufacturing company, such as buying materials, designing and preparing samples, arranging for the manufacture of the garments, and selling the finished apparel. Custom tailors and dressmakers not operating on a factory basis and establishments which purchase and resell finished garments but do not perform the functions of the apparel jobbers are not included in the foregoing data.

In 1963, contract factories in the six cut-and-sew industries considered here 1/ represented 47 percent of the total number of establishments, but accounted for 32 percent of the value added by manufacture. In industry No. 2331 (women's blouses), contract factories accounted for 72 percent of the total number of factories and 49 percent of the total value added.

b. Employment and wages.--Data on employment in the seven U.S. apparel industries experiencing the most competition from imports of cotton apparel in recent years are shown in table A-4-2. For each of these industries production workers constituted 85 to 92 percent of the reported total employment in 1963. Combined total employment in the seven industries rose from 359,477 in 1961 to 418,880 in 1965, or by 17 percent. The only industry among these seven to show a decline in employment during 1961-65 was industry No. 2342 (corsets and allied garments). This decline in employment was accompanied by a 16 percent increase in value of shipments. The rise in value of shipments reflected in part the use of new types of materials that are more expensive than those used formerly.

Production workers' average hourly and weekly earnings in the industries considered here have trended upward since 1961. For example, from 1961 to 1965, average hourly earnings (computed by U.S. Department of Labor) rose by 10 percent in industry No. 2342 (corsets and allied garments), and by 14 percent in industry No. 2321 (men's and boys' shirts and nightwear).

1/ Not including the knit outerwear mills (industry No. 2253).

In July 1967, production workers' average hourly earnings in the six industries for which data are available were as follows:

Industry No.	Amount	Percentage increase over 1965 annual average
2253	$2.09	11
2321	1.72	12
2327	1.72	12
2331	1.90	10
2361	1.87	12
2342	1.92	8

c. U.S. consumption.--U.S. consumption of cotton in wearing apparel increased from 2,018 million pounds in 1962 to 2,056 million in 1965, reflecting primarily the rise in the consumption of knit cotton outerwear from 217 million pounds to 243 million pounds (table A-4-3). The increasing popularity of sportswear and other casual types of garments suitable for leisure activities have contributed to the rise in both U.S. imports and production of knit cotton outerwear. Other factors contributing to the recent level of the annual consumption of cotton in wearing apparel have been innovations in knitting (particularly the use of false twist yarns and the double-knit process), the use of cotton knits as the face fabric in fabric-to-fabric and fabric-to-foam laminates, and the development of wash-and-wear woven fabrics wholly of cotton and of blends of cotton and manmade fibers.

Table A-4-4 shows the trend of U.S. consumption of the principal types of cotton wearing apparel imported in recent years.

d. U.S. production.--Total U.S. production of cotton wearing apparel increased only slightly since 1961; in terms of cotton consumed, the annual output rose from 1,940 million pounds in 1962 to 1,954 million pounds in 1965, or by less than 1 percent (table A-4-3). The increases in the domestic output of certain categories of garments from 1962 to 1965, however, were substantial. The output of men's and boys' knit cotton shirts, for example, rose from 12.8 million dozen to 14.1 million, or by 11 percent, and that of men's and boys' separate trousers and outer shorts increased from 8.3 million dozen to 10.0 million dozen, or by 20 percent.

Table A-4-4 shows U.S. production in 1962, 1965, and 1966 for the two types of apparel mentioned above as well as for several other types of which U.S. imports have been important in recent years.

Men's and boys' knit cotton shirts and women's, girls, and infants trousers and shorts were the only articles included in the table, for which the domestic output was higher in 1966 than in 1965.

e. U.S. sales and inventories.--Data on sales (shipments) and inventories of apparel are not available by fiber content. The value shown in table A-4-2 of shipments and yearend inventories of the principal industries where cotton apparel import competition is greatest relate to the full line of merchandise produced.

f. U.S. imports and exports.--Since 1962, U.S. imports of cotton wearing apparel have been subject to restraints in accordance with the provisions of the LTA (see section on U.S. customs treatment). Measured in terms of estimated cotton content, imports of cotton wearing apparel, increased by 30 percent from 1962 to 1965 and were equivalent to 6 percent of apparent domestic consumption in 1965 (table A-4-3). Annual U.S. exports of cotton wearing apparel also increased during the period 1962-65, but remained at less than 1 percent of annual production.

U.S. imports of cotton apparel consisted principally of knit outer shirts; brassieres; and certain types of garments, not knit, such as raincoats, men's and boys' dress and sport shirts and separate trousers and outer shorts, and women's and girls' blouses and trousers (including shorts). The quantity and value of imports of these types of garments are shown in table A-4-5 for the years 1962, 1964, and 1966. In terms of reported value, 1/ total imports of these garments rose from $100.3 million in 1962 to $126.2 million in 1966; the largest increases were in knit cotton outer shirts--from $7.7 million to $17.9--in men's and boys' shirts, not knit--from $19.7 million to $31.1 million--and in women's, girls', and infants' trousers and outer shorts, not knit--from $16.6 million to $22.6 million. The trend in imports measured in terms of number of garments differs considerably from that measured in terms of value. For four of the seven types of garments, the quantity imported declined from 1962 to 1966; for only one type--women's, girls', and infants' trousers and shorts--the quantity increased by a larger percentage than the value.

1/ Generally the market value in the foreign country; therefore it excludes U.S. import duties, freight, and transportation insurance. Data on the wholesale value of imports in the U.S. market are not available.

For six of the seven types of garments, therefore, the increases in the value of imports represented a rise in unit values. Among the factors contributing to these increases were rising production costs in the exporting countries, upgrading of quality and changes in style. Japan, Hong Kong, the Republic of Korea, Taiwan, and Jamaica have been the principal sources of cotton apparel in recent years (table A-4-5). Information from trade sources indicate that the quantity limitations imposed on U.S. imports of cotton wearing under the LTA have encouraged foreign producers, particularly in Japan and Hong Kong, to upgrade the quality of the apparel items for the U.S. market, thus enabling them to increase their dollar receipts while adhering to the quantity restraint levels.

g. Prices.--The wholesale price index (1957-59 = 100) for all apparel sold in the United States rose from 100.9 in 1961 to 105.0 in 1966. For selected types of cotton apparel, wholesale price indexes are shown in table A-4-6 for March and July of 1963 and 1965-67. In July 1966, the index for men's brand-name cotton broadcloth shirts was 110.0 and that for men's cotton twill raincoats was 105.7, whereas the indexes for the other listed garments were below the 1966 index for all apparel.

A consumer price index on cotton apparel is not published.

h. Profitability and investment.--Profit data compiled by the Industry Studies Department of Dun and Bradstreet from credit reports of selected apparel manufacturing corporations for 1964 are as follows:

Product	Firms reporting	Net profit on sales	Net profits on tangible net worth
Blouses and waists----------------	34	1.03	11.43
Children's and infants' outerwear-	64	.86	7.20
Overalls and work clothing--------	64	1.97	9.42
Men's shirts, underwear and pajamas------------------------	57	1.59	8.33
Men's and boys' trousers----------	35	.81	4.32

Data from the National Association of Bank Loan Officers and Credit Men indicate that for industry No. 2327 (men's and boys' shirts, except work, and nightwear) and industry No. 2327 (men's and boys' separate trousers) profits (after taxes) were equivalent in 1966 to 2.1 percent and 1.4 percent, respectively, of sales.

The annual capital expenditures during 1961-65 by seven industries where import competition on cotton apparel is largest are shown in table A-4-7. In each of those years, the capital expenditures by the knit outerwear industry (No. 2253) exceeded those by any other industry included in the table. The amount so spent by the knit outerwear industry in 1965--$24.2 million--was equivalent to almost 2 percent of the value of its shipments, whereas for the other industries considered here the ratio of expenditures to value of shipments ranged from nearly 1 percent to about 1.5 percent.

i. U.S. customs treatment 1/.--Nearly all U.S. imports of wearing apparel wholly or in chief value of cotton are dutiable under provisions of part 6 of schedule 3 of the Tariff Schedules of the United States (TSUS). Imports of cotton headwear and gloves, which accounted for only about 1 percent of the estimated cotton content of imported wearing apparel in 1966, are dutiable under the provisions of part 1 of schedule 7.

Most of the current rates on the cotton wearing apparel provided for in part 6 of schedule 3 of the TSUS became effective on January 1, 1968, and reflect the first stage of concessions granted by the United States in the negotiations concluded on June 30, 1967--generally referred to as the Kennedy Round. The majority of these concessions are to become fully effective in five annual stages, the last on January 1, 1972. Very few of the final stage rates represent 50-percent reductions of the base rates--the maximum permitted.

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of cotton apparel and accessories from the Philippine Republic have been significant for many years. They have consisted mainly of infants' apparel (e.g., diaper sets), handkerchiefs, brassieres, and girls' and infants' dresses, much of which were ornamented. The imports from the Philippines were dutiable at 40 percent of the column 1 rates during the calendar years 1965 through 1967 and will be dutiable at 60 percent of the column 1 rates during the years 1968 through 1970. Negligible amounts of cotton wearing apparel were imported from "Communist" countries in 1966.

For the seven types of cotton wearing apparel that have accounted for most of the imports in recent years, the rates in effect during the years 1966 and 1967 and the first and final stages of the Kennedy Round concessions are shown in the following tabulation (in percent ad valorem):

Type of cotton wearing apparel (TSUS item No.) 1/	Rate of duty		
	1966-67	Concession rate	
		First stage	Final stage
Brassieres:			
Lace, net, or ornamented (item 376.24)	32.0	2/	2/
Other (item 376.28)	23.0	22.0	18.0
Knit outerwear (items 380.06 and 382.06)	25.0	24.0	21.0
Raincoats, not knit, valued each--			
Not over $4 (in items 380.09 and 382.09)	20.0	19.0	16.5
Over $4 (in items 380.12 and 382.12)	10.0	9.5	8.0
Men's and boys' shirts, not knit (item 380.27)	25.0	24.0	21.0
Men's and boys' separate trousers and outer shorts, not knit (in item 380.39)	20.0	19.0	16.5
Women's and children's blouses, not knit (in item 382.33)	20.0	19.0	16.5
Women's and children's slacks and outer shorts, not knit (in item 382.33)	20.0	19.0	16.5

1/ Excludes lace, net, or ornamented apparel (except brassieres), for which the 1966-67 rate was 42.5 percent ad valorem. The first and final stage concession rates are 41 percent and 35 percent, respectively.
2/ No concession in the Kennedy Round.

The large volume of imports from Japan during 1955 and 1956 of men's and boys' cotton shirts and women's and girls' cotton blouses prompted U.S. producers to file applications for escape-clause investigations by the Tariff Commission. At the request of the applicants, however, the Commission terminated these investigations before completion because the Japanese Government, at the urging of the U.S.

Government, set up a system of voluntary export quotas to the United States of cotton textiles and wearing apparel for 5 years beginning January 1, 1957. During the period of the Japanese export controls, other countries shipped increasingly larger amounts of cotton articles to the United States.

Since 1962, U.S. imports of cotton wearing apparel as well as other cotton articles have been subject to restraints in accordance with the provisions of the LTA. At first the United States imposed restraints on imports of cotton wearing apparel under article 3, but these have generally been superseded by comprehensive bilateral agreements negotiated pursuant to article 4. These agreements are usually operative during a period of several years. Of the 22 agreements in effect in December 1967, 21 included restraints on U.S. imports of cotton wearing apparel.

j. Foreign production and trade.--Data are not available on production, imports, and exports of apparel, by fiber, for foreign countries.

Table A-4-1.--Estimated consumption of cotton by U.S. apparel producers, by type of garment produced, 1965

(In terms of raw cotton actually consumed, including amount "wasted")

Type of garment	Quantity	Percent of total
	Million pounds	
Men's and boys':		
Utility clothing	362.9	18.6
Knit underwear	160.2	8.2
Woven sport shirts	115.5	5.9
Separate slacks	108.5	5.5
Knit sport shirts	103.0	5.3
Business and dress shirts	91.4	4.7
Work and uniform shirts	65.5	3.3
Hosiery	59.0	3.0
Nightwear, woven and knit	54.0	2.8
Work gloves	53.0	2.7
Outdoor jackets and athletic uniforms	40.2	2.1
Other garments	66.5	3.4
Total	1,279.7	65.5
Women's, misses', children's, and infants':		
Dresses	157.0	8.0
Playsuits, sunsuits, etc	96.2	4.9
Blouses and shirts	73.5	3.8
Nightwear, woven and knit	67.3	3.4
Work clothing	58.8	3.0
Slacks	42.8	2.2
Other garments 1/	179.0	9.2
Total	674.6	34.5
Grand total	1,954.3	100.0

1/ Excludes handkerchiefs, headwear, neckwear, scarves, dickies, diapers, and miscellaneous items which consumed an estimated 53.2 million pounds in 1963, of which diapers accounted for 36.3 million pounds.

Source: Textile Economics Bureau, Textile Organon, January 1967, pp. 6-9.

Table A-4-2.--Specified data relating to the operations of the principal industries producing cotton wearing apparel, 1961, 1963, and 1965

Industry no. 1/	Principal products 2/	1961	1963	1965
2253	Knit outerwear:			
	Employees------------------------------number--:	64,217	68,570	72,884
	Value added by manufacture------1,000 dollars--:	399,512	463,585	541,372
	Shipments----------------------------do-------:	903,039	1,045,470	1,226,171
	Yearend inventories-------------------do-------:	113,662	135,470	172,772
2321	Men's, youths', and boys' shirts (except work shirts), collars and nightwear:			
	Employees------------------------------number--:	101,452	113,193	110,913
	Value added by manufacture------1,000 dollars--:	473,091	601,620	603,941
	Shipments----------------------------do-------:	1,135,200	1,312,692	1,323,586
	Yearend inventories-------------------do-------:	174,293	212,447	220,304
2327	Men's, youths', and boys' separate trousers:			
	Employees------------------------------number--:	55,653	73,848	84,392
	Value added by manufacture------1,000 dollars--:	246,287	383,134	440,829
	Shipments----------------------------do-------:	547,505	824,224	986,940
	Yearend inventories-------------------do-------:	82,071	135,074	157,511
2331	Women's, misses', and juniors' blouses, waists, and shirts:			
	Employees------------------------------number--:	44,713	57,595	60,237
	Value added by manufacture------1,000 dollars--:	255,634	300,525	308,345
	Shipments----------------------------do-------:	533,621	610,185	663,405
	Yearend inventories-------------------do-------:	33,805	49,944	59,108
2361	Girls', children's, and infants' dresses, blouses, waists, and shirts:			
	Employees------------------------------number--:	33,488	35,792	36,010
	Value added by manufacture------1,000 dollars--:	184,924	205,623	232,580
	Shipments----------------------------do-------:	459,392	443,343	492,938
	Yearend inventories-------------------do-------:	31,174	44,143	49,857
2342	Corsets and allied garments:			
	Employees------------------------------number--:	42,864	37,144	36,093
	Value added by manufacture------1,000 dollars--:	289,434	310,150	314,130
	Shipments----------------------------do-------:	554,415	593,912	647,067
	Yearend inventories-------------------do-------:	87,449	99,891	123,670
2385	Waterproof outergarments:			
	Employees------------------------------number--:	17,090	16,148	18,351
	Valued added by manufacture-----1,000 dollars--:	92,683	111,342	133,905
	Shipments----------------------------do-------:	215,083	235,540	277,093
	Yearend inventories-------------------do-------:	20,822	21,010	32,561

1/ As identified in Standard Industrial Classification Manual, 1967.
2/ Data shown relate to total operations.

Source: Compiled from official data of the U.S. Department of Commerce.

Table A-4-3.--Cotton wearing apparel, total and knit cotton outerwear: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1962, 1965, and 1966

Commodity	1962	1965	1966
Cotton apparel, total: 1/			
Production 2/---------------million pounds--:	1,940	1,954	3/
Imports--------------------------------do----:	92	120	123
Exports--------------------------------do----:	14	18	20
Apparent consumption-------------------do----:	2,018	2,056	3/
Ratio of imports to consumption----percent--:	5	6	3/
Knit cotton outerwear: 4/			
Production 5/---------------million pounds--:	210	234	273
Imports--------------------------------do----:	8	10	16
Exports--------------------------------do----:	1	1	1
Apparent consumption-------------------do----:	217	243	288
Ratio of imports to consumption----percent--:	4	4	6

1/ Data show estimated weight of cotton consumed in processing, including the amount wasted.

2/ Excludes handkerchiefs, headwear, neckwear, scarves, dickies, and diapers, which consumed an estimated 16.9 million pounds in 1963.

3/ Not available.

4/ Excludes knit hosiery, gloves, headwear (except infants'), neckties, mufflers, scarves, and shawls.

5/ Data are partly estimated based on yarns consumed, including the amount "wasted".

Source: Compiled by the staff of the U.S. Tariff Commission principally from data published in Textile Organon for January 1967, Cotton Counts Its Customers, September 1967, and from official statistics of the U.S. Departments of Agriculture and Commerce.

Table A-4-4.--Selected articles of cotton wearing apparel: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1962, 1965, and 1966

(In thousands of dozens)

Type of garment	1962	1965	1966
Men's and boys' knit cotton shirts:			
Production 1/	12,839	14,140	15,791
Imports	2,276	1,590	2,114
Exports	1/ 44	88	171
Apparent consumption	15,071	15,642	17,734
Ratio (percent) of imports to consumption	15	10	12
Men's and boys' business and dress shirts, not knit:			
Production 2/	9,333	9,802	6,001
Imports	856	1,317	1,278
Exports	117	152	160
Apparent consumption	10,072	10,967	7,119
Ratio (percent) of imports to consumption	8	12	18
Men's and boys' sport shirts, not knit:			
Production 1/	19,367	19,700	15,494
Imports	1,876	2,188	2,516
Exports	85	165	188
Apparent consumption	21,158	21,723	17,822
Ratio (percent) of imports to consumption	9	10	14
Men's and boys' separate trousers and outer shorts, not knit:			
Production 3/	8,300	10,000	9,750
Imports	1,729	1,574	1,598
Exports	4/	699	998
Apparent consumption	4/	10,875	10,350
Ratio (percent) of imports to consumption	4/	14	15
Women's, girls', and infants' slacks and shorts, not knit:			
Production 1/	11,095	12,944	13,242
Imports	2,589	3,594	3,566
Exports	1/ 13	65	65
Apparent consumption	13,671	16,473	16,743
Ratio (percent) of imports to consumption	19	22	21
Women's, girls', and infants, blouses, not knit:			
Production 1/	14,832	13,880	12,761
Imports	3,332	4,002	3,486
Exports	47	90	85
Apparent consumption	18,117	17,792	16,162
Ratio (percent) of imports to consumption	18	22	22
Brassieres:			
Production	5/	5/	5/
Imports	2,822	2,435	2,344
Exports	388	591	665
Apparent consumption	5/	5/	5/
Ratio (percent) of imports to consumption	5/	5/	5/
Raincoats of textile materials, not knit, except those in part rubber or plastic:			
Production 1/	661	357	263
Imports 6/	174	126	133
Exports 6/	4	4	5
Apparent consumption	831	479	391
Ratio (percent) of imports to consumption	21	26	34

1/ Data are partly estimated.
2/ Data partly estimated; includes knit tricot shirts of manmade fibers estimated to be 1,083 thousand and 718 thousand dozens in 1965 and 1966, respectively.
3/ Data are partly estimated; exclude work pants, dungarees, and waistband overalls, but include uniform trousers.
4/ Not available.
5/ Data are not available. Total production of brassieres of all fibers amounted to 17,541 thousand dozens in 1962; 19,390 in 1965; and 20,575, in 1966.
6/ Data relate to raincoats 3/4 length or longer.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table A-4-5.--Cotton wearing apparel: U.S. imports for consumption, of selected types of garments by principal sources, 1962, 1964, and 1966

(Quantity in thousands of dozens; value in thousands of dollars)

Item	1962		1964		1966	
	Quantity	Value	Quantity	Value	Quantity	Value
Men's and boys' knit outer shirts, total	2,276	7,683	1,407	5,618	2,114	17,859
Japan	802	2,417	347	1,181	624	7,300
Hong Kong	804	2,459	649	2,464	600	3,405
West Germany	16	228	29	446	106	2,469
Men's and boys' shirts, 1/ not knit, total	2,774	19,724	3,498	27,875	3,830	31,135
Japan	843	6,898	1,269	10,948	1,228	11,684
Hong Kong	1,181	8,720	1,171	9,772	1,170	10,237
Jamaica	329	1,680	406	2,332	392	2,070
Taiwan	352	1,625	253	1,362	278	1,556
Men's and boys' separate trousers and outer shorts, not knit, total	1,729	14,678	1,541	17,491	1,598	17,551
Hong Kong	852	7,654	843	9,470	777	8,923
Japan	528	4,728	442	5,276	394	4,759
Taiwan	215	1,295	182	1,811	116	979
Women's, girls', and infants' trousers and shorts, not knit, total	2,589	16,612	3,820	21,877	3,566	22,596
Hong Kong	1,188	6,066	1,890	9,976	1,600	9,415
Japan	940	7,429	1,368	9,762	1,235	9,369
Taiwan	141	1,049	214	988	213	921
Women's, girls', and infants' blouses, not knit, total	3,332	19,273	3,809	18,693	3,486	18,299
Japan	1,976	11,252	2,196	11,304	1,915	10,887
Hong Kong	1,015	5,931	1,149	5,097	975	4,625
Brassieres, total	2,822	8,723	2,740	8,736	2,344	8,060
Republic of the Philippines	1,104	4,318	1,150	4,499	1,252	4,833
Hong Kong	1,263	2,324	1,242	2,519	833	1,739
Jamaica	345	1,714	293	1,478	215	1,268
Raincoats, 2/ not knit, total	174	13,633	103	9,024	133	10,729
Japan	88	5,265	29	2,213	53	2,601
United Kingdom	10	1,733	7	1,276	6	1,310
Israel	30	2,425	14	1,254	12	1,131
Hong Kong	12	614	11	606	18	900

1/ Includes dress, sport, and work shirts.
2/ Excludes raincoats less than 3/4 length and excludes those in part or wholly of rubber or plastic.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table A-4-6.--U.S. wholesale price indexes of selected types of cotton apparel, March and July of 1963 and 1965-67 1/

Type of cotton garment	1963		1965		1966		1967	
	March	July	March	July	March	July	March	July
Men's T-shirts	104.1	104.1	104.2	104.2	104.5	104.9	106.1	108.6
Men's polo shirts	98.9	98.9	100.0	100.0	100.6	100.6	100.6	100.6
Men's brand-name broadcloth shirts	106.9	108.3	106.6	106.4	109.0	109.0	110.0	107.2
Men's shirts, popular quality	103.0	103.4	103.4	103.4	104.5	104.2	104.1	105.3
Brassieres, bandeaux style	100.0	100.0	98.3	98.3	98.3	98.3	111.6	115.6
Men's raincoats, twill	103.5	103.5	103.5	103.5	104.6	105.7	106.8	107.4

1/ For brassieres, bandeaux style, January 1961 = 100.0; for other types of garments shown here, 1957-59 = 100.0.

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table A-4-7.--Capital expenditures by selected wearing apparel industries, 1961-65

(In thousands of dollars)

Industry no. 1/	Apparel industry	1961	1962	1963	1964	1965
2253	Knit outerwear	11,856	13,037	17,277	16,683	24,151
2321	Men's and boys' shirts (except work) and and nightwear	5,831	7,674	8,833	7,783	11,755
2327	Men's and boys' separate trousers	3,235	3,570	6,215	9,156	14,461
2331	Women's, misses', and juniors' blouses	1,794	4,375	4,418	4,861	5,273
2361	Girls', children's, and infants' dresses and blouses	1,238	1,778	2,973	2,237	3,676
2342	Corsets and allied garments	2,497	3,237	3,514	4,679	5,770
2385	Waterproof outergarments	1,342	797	2,185	1,962	3,241

1/ As identified in Standard Industrial Classification Manual, 1967.

Source: Compiled from official statistics of the U.S. Department of Commerce.

5. Miscellaneous products

The cotton products considered here include sheets, pillowcases, towels, bedspreads, table linens, floor coverings, other furnishings for use in households and institutions, and an array of other finished articles such as tents, shipping bags, cordage, protective covers, emblems, and banners. In terms of cotton content (i.e., the estimated quantity of cotton fiber consumed in processing, including amount "wasted"), U.S. production in 1965 of these articles from both domestic and imported materials is estimated at about 1,507 million pounds, of which about 1 percent was exported. Imports, measured in the same manner, have been rising in recent years and were equivalent to about 2 percent of domestic consumption in 1965.

Of the products included here, sheets, pillowcases, and towels are by far the principal ones. Towels are generally made wholly of cotton. In 1967 many popular types and brands of sheets and pillowcases, which formerly were wholly of cotton, were made of 50 percent cotton and 50 percent manmade (polyester) fiber. In fabricating many of the other products (e.g., curtains, draperies, and textile bags), producers are utilizing substantial amounts of manmade fibers and also nontextile materials.

a. U.S. producers.--About 5,000 domestic concerns produce miscellaneous cotton products. Most of them engage primarily in cut-and-sew operations, utilizing all kinds of purchased textile fabrics and other materials such as artificial leather and plastic film and sheeting. Some of the smaller cut-and-sew concerns specialize in particular types of articles (such as table linens, draperies and curtains, and awnings) but very few are believed to use cotton exclusively.

A few large concerns made sheets, pillowcases, and towels from fabrics produced in their own establishments. These vertically integrated concerns, which are primarily producers of broadwoven cotton fabrics (i.e., part of industry No. 2211 in U.S. Census data), account for 85 percent of the total output of sheets, pillowcases, and towels. The firms that produce cotton cordage (in industry No. 2298) are also, in general, large size. They are primarily producers of rope, cable, and related products of other fibers. Cotton floor coverings are produced principally by the floor covering industry No. 2279 which is discussed in section B5 on miscellaneous wool products.

Miscellaneous articles of cotton are important products of the five cut-and-sew industries listed below, for which the number of firms and the number of establishments in 1963 were reported in U.S. Census data as follows:

Industry No.	Principal products	Firms	Establishments
		Number	Number
2391	Curtains and draperies	1,092	1/ 1,121
2392	Furnishings such as bedding, towels, and table linens	1,205	1,239
2393	Shipping and other industrial textile bags	175	192
2394	Canvas awnings, tents, and related products	869	881
2399	Fabricated textile products, not elsewhere classified, such as emblems, flags, hammocks, seat belts, and protective covers	1,027	1,044

1/ Includes about 300 small establishments such as custom drapery producers, interior decorators' workrooms, and similar items.

b. Employment and wages.--Data on total employment in the cut-and-sew industries are shown in table A-5-1 for 1961, 1963, and 1965. In these industries, production workers constituted from 80-87 percent of the total employment in 1963. Whereas total employment increased from 1961 to 1965 in four of these industries (7 percent in industry 2392 and 19-20 percent in industries 2391, 2394, and 2399), it declined by 24 percent in the textile-bag industry (No. 2393). New packaging techniques, which utilize materials other than textiles, have adversely affected the textile-bag industry. Wages paid to production workers declined by 13 percent in industry No. 2393 and rose by 14 percent in No. 2391, by 16 percent in Nos. 2392 and 2394, and by 11 percent in No. 2399.

c. U.S. consumption.--U.S. consumption of furnishings and other miscellaneous products of cotton (considered collectively and also individually for virtually all the types of products considered here) approximates domestic production inasmuch as both imports and exports are small relative to production. In terms of estimated cotton content, U.S. consumption of the articles considered here rose from about 1,390 million pounds in 1961 to about 1,510 million pounds in 1965. With respect to sheets, pillowcases, and towels, the principal products, the rise in annual consumption was more pronounced than that for all products combined. In terms of product weight, domestic consumption of sheets, pillowcases, and towels increased from 461 million pounds in 1961 to 591 million in 1965 (or by 28 percent) and then to 636 million in 1966 (table A-5-2).

d. U.S. production.--In terms of product weight, total domestic production of cotton sheets, pillowcases, and towels by all producers rose by 35 percent from 1961 to 1966.

e. U.S. sales and inventories.--Sales (shipments) by the five cut-and-sew industries that use significant amounts of cotton to make miscellaneous products are shown in table A-5-1 for the years 1961, 1963, and 1965.

Shipments of cotton sheets, pillowcases, towels, and washcloths by both the textile mills and the cut-and-sew establishments in industry No. 2392 in 1963-65 were as follows (in thousands of dollars):

	1963	1964	1965
Cotton sheets and pillowcases--	328,824	355,857	397,866
Cotton towels and washcloths---	226,447	252,724	273,958

f. U.S. imports and exports.--During the period 1961-66, U.S. imports of cotton sheets, pillowcases, and towels (measured in terms of product weight) rose sharply from 1961 to 1962 and again from 1965 to 1966 (table A-5-2). The 1966 imports were equivalent to approximately 3 percent of domestic consumption. Table A-5-3 shows that the value of U.S. imports of sheets and pillowcases rose from $5.0 million in 1965 to $9.6 million in 1966. The corresponding increase in towels (not pile or tufted) was from $2.7 million to $3.3 million. Light weight shop towels (about 11 to the pound), valued about 4 cents each, accounted for 75 percent of the value of the 1966 imports of towels.

Other miscellaneous cotton products (or groups of related products) of which imports were valued more than $1 million in both 1965 and 1966 are also shown in table A-5-3. Japan and Hong Kong were the principal suppliers of imports of furnishings, particularly sheets, pillowcases, towels, and tablecloths.

In recent years restraints imposed under the provisions of the Long Term Arrangement Regarding International Trade in Cotton Textiles have checked the rate of increase in U.S. imports of the cotton products considered.

g. Prices.--The U.S. wholesale price index for a selected group of cotton furnishings and the consumer price indexes for cotton muslin sheets and for cotton bedspreads are shown in table A-5-4.

h. Profitability and investment.--Profit data for these producers are not available for inclusion in this report. The expenditures for new plant and equipment by producers of furnishings and miscellaneous made-up articles fabricated largely from purchased cotton fabric were $20 million a year in 1963 and 1964 and $27 million in 1965.

i. U.S. customs treatment. 1/--Most of the cotton articles considered here are dutiable under provisions of schedule 3 of the TSUS. Furnishings, for example, are provided for in part 5 of that schedule; tents and shipping bags under part 7, and cordage under part 2. The rates for cotton products in the parts of schedule 3 just mentioned are virtually all of the ad valorem type and in 1967 ranged from 7 percent on imitation oriental rugs (item 360.25) to 65 percent on furnishings fabricated from a certain type of machine-made lace (item 365.31). The 1967 rates for the six TSUS items under which the import entries of cotton products were valued at more than $1 million in 1965, however, ranged from 7 percent on imitation oriental rugs (item 360.25) to 20 percent on towels (item 366.27) and on articles not elsewhere enumerated (item 386.50).

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of miscellaneous cotton products from the Philippine Republic have been small and those from Communist countries have been negligible in recent years.

In the tariff negotiations concluded on June 30, 1967--commonly referred to as the Kennedy Round--nearly all the rates on the cotton products considered here were reduced, but only a few by 50 percent, the maximum permitted. Most of the reductions will be placed in effect in five annual stages. The first stage became effective on January 1, 1968. When all the concessions become fully effective, the range of ad valorem rates discussed here (in the absence of other modifications) will be from 6 percent on imitation oriental rugs (item 360.25) to 40 percent on certain lace or ornamented articles (in items 365.31, 365.50, and 386.05 1/). For the six TSUS items referred to in the preceding paragraph, the first and final stages of the Kennedy Round concession rates are as follows (in percent ad valorem):

Item No.	First stage	Final stage
360.25	6.5	6.0
363.30	11.5	9.5
364.12	15.5	15.0
366.27	19.0	15.0
366.42	16.5	13.5
386.50	18.5	14.0

Imports of cotton furnishings and related products, along with most other cotton products, have been subject to restraint since 1962 in accordance with the provisions of the LTA. Initially the United States requested a number of foreign exporters to limit shipments of cotton products under the provisions of article 3 of the LTA. In recent years the United States shifted to comprehensive

1/ Item No. 386.05 changed to 386.04 on Jan. 1, 1968.

bilateral agreements pursuant to the provisions of article 4. These agreements generally regulate all trade in cotton textiles between the United States and the foreign exporter for a period of several years. Most of the 22 agreements in effect in July 1967 included restraints on trade in cotton furnishings and related products. In addition, U.S. imports of shop towels and carded sheets from Malaysia--not a party to the LTA--were controlled pursuant to article 3 of the LTA.

j. Foreign production and trade.--Data on foreign production of and trade in miscellaneous cotton products are not available for inclusion in this report.

Table A-5-1.--Specified data relating to the operations of the principal industries producing cotton furnishings and other made-up articles from purchased fabrics, 1961, 1963, and 1965

Industry No. 1/	Principal products 2/	1961	1963	1965
2391	Curtains and draperies:			
	Employees--------------number--	19,602	21,968	23,388
	Value added by manufacture-------1,000 dollars--	111,806	132,712	144,894
	Shipments------------do--------	263,535	311,048	349,308
	Yearend inventories--do--------	31,290	34,686	32,696
2392	Furnishings, n.e.c.:			
	Employees--------------number--	39,167	38,723	42,093
	Value added by manufacture-------1,000 dollars--	246,668	269,405	305,479
	Shipments------------do--------	706,946	698,977	816,715
	Yearend inventories--do--------	97,618	96,273	107,564
2393	Textile bags:			
	Employees--------------number--	8,884	7,561	6,753
	Value added by manufacture-------1,000 dollars--	59,913	57,096	45,826
	Shipments------------do--------	221,038	203,245	191,221
	Yearend inventories--do--------	26,887	28,260	24,300
2394	Canvas products:			
	Employees--------------number--	10,713	10,901	12,733
	Value added by manufacture-------1,000 dollars--	65,014	69,836	82,712
	Shipments------------do--------	149,015	159,886	183,872
	Yearend inventories--do--------	27,303	28,240	39,872
2399	Textile products not elsewhere classified:			
	Employees--------------number--	18,660	21,384	22,423
	Value added by manufacture-------1,000 dollars--	125,849	141,675	167,159
	Shipments------------do--------	273,805	332,621	387,515
	Yearend inventories--do--------	35,572	48,720	52,142

1/ As identified in Standard Industrial Classification Manual, 1967.
2/ Data shown relate to total operations.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table A-5-2.--Sheets, pillowcases, and towels of cotton: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1961-66

(Quantity in millions of pounds, product weight)

Year	Production	Imports	Exports	Apparent consumption	Ratio of imports to consumption
					Percent
1961	461	5	5	461	1.2
1962	493	11	5	499	2.2
1963	508	9	6	511	1.7
1964	555	10	8	557	1.9
1965	587	12	8	591	2.1
1966	623	21	8	636	3.2

Source: Production estimated from data published by the National Cotton Council of America; imports and exports compiled from official statistics of the U.S. Department of Commerce.

Table A-5-3.--Selected furnishings and related made-up articles of cotton: U.S. imports, by principal sources, 1964-66

(In thousands of dollars)

Abbreviated description (TSUS item number) and source	1964	1965	1966
Imitation oriental rugs (360.25):			
Belgium	911	862	995
Italy	129	208	178
France	-	-	18
All other	6	20	12
Total	1,046	1,090	1,203
Sheets and pillowcases (363.01, -.30):			
Japan	3,697	4,054	4,319
Hong Kong	50	66	2,567
India	127	351	1,332
Malaysa	-	7	995
All other	56	536	363
Total	3,930	5,014	9,576
Tapestries, pile, jacquard-figured (364.12 pt.):			
Italy	627	1,084	1,213
France	44	31	40
All other	36	4	1
Total	707	1,119	1,254
Towels, not pile or tufted (366.27):			
Hong Kong	1,578	1,504	1,797
Singapore	-	-	453
Japan	246	212	188
Malaysia	163	574	183
All other	431	425	652
Total	2,418	2,715	3,273
Tablecloths and napkins:			
Damask (366.42):			
Japan	2,823	2,897	3,023
Belgium	564	623	619
Italy	145	126	238
United Kingdom	273	257	215
All other	264	246	242
Total	4,069	4,149	4,337
Other than damask (366.45, -.46, -.47):			
Hong Kong	20	33	542
Pakistan	28	130	415
Japan	176	187	221
Korea	465	296	200
All other	222	246	198
Total	911	832	1,576
Bedspreads (363.05 pt., -.50 pt., -.51 pt., -.55):			
Italy	229	309	464
Japan	224	328	357
India	543	176	410
Spain	63	84	164
All other	137	290	150
Total	1,196	1,187	1,545
Cotton articles, not specially provided for, not knit or pile (386.50):			
Japan	1,154	961	1,287
United Kingdom	196	183	263
West Germany	158	216	259
All other	778	600	634
Total	2,286	1,960	2,443

Source: Compiled from official statistics of the U.S. Department of

Table A-5-4.--U.S. wholesale price index for cotton housefurnishings and consumer price indexes for muslin sheets and bedspreads, 1961-66

(1957-59=100)

Year	Wholesale price index, cotton housefurnishings 1/	Consumer price index	
		Muslin sheets	Bedspreads
1961	102.5	102.9	109.2
1962	104.3	103.2	107.9
1963	102.9	103.6	107.9
1964	103.3	104.5	105.5
1965	103.0	104.6	105.8
1966	104.3	104.8	107.2

1/ Sheets, pillowcases, towels, blankets, and jacquard-woven bedspreads.

Source: Compiled from official statistics of the U.S. Bureau of Labor Statistics.

The United States is a deficit producer of raw wool, and imports large quantities to meet industrial requirements for this textile raw material. This country is one of the world's leading producers of wool manufactures, but is only a minor exporter of these products.

During the 1958-66 period annual production of wool textiles (except nonwoven wool felts) averaged about one-half billion pounds. 1/ During this period annual production fluctuated no more than 8 percent from the average; during 1966, it declined about 4 percent below the average.

Total U.S. imports of raw wool far exceed domestic output each year, much of which consist of types not produced in the United States. Imports of wool products during 1961-66 are estimated to have ranged from 70 million pounds (in 1961) to 96 million pounds (in 1965); in 1966 imports amounted to 89 million pounds. Imports and exports of products in chief value of wool 2/ during 1961-66 period are as follows (in millions of pounds of raw wool content):

Year	Imports	Exports
1961	70.3	2.6
1962	89.2	2.6
1963	88.1	2.7
1964	85.6	3.3
1965	96.3	6.3
1966	88.6	5.8

1/ Based on production of yarns principally of wool, reused or reprocessed wool by weight.
2/ Derived from statistics published by the U.S. Department of Agriculture.

Imports of woven wool fabrics and wool knit wearing apparel increased from about 39 percent of wool product imports during 1961 to 57 percent in 1966. During the same period, imports of wool floor coverings declined from 40 percent in 1961 to 17 percent in 1966. Imports of wool yarn accounted for 8 percent of 1961 wool product imports; during 1966, they amounted to 15 percent.

Japan is by far the leading supplier of wool products, accounting for about one-third of U.S. imports of wool products during 1966. Italy has also furnished significant quantities of imports, accounting for about 15 percent in 1966. The United Kingdom and Hong Kong were next in importance, each furnishing about 12 percent of total imports. Australia furnished about 8 percent of the total in 1966.

1. Raw wool

World production of raw wool during 1967 was about 6.0 billion pounds (grease basis 1/), of which the United States accounted for approximately 229 million pounds (3.8 percent), the foreign free world, 4.5 billion pounds (75.9 percent), and the Communist countries 1.2 billion pounds (20.3 percent). From 1966 to 1967, world output increased by about 131 million pounds, whereas U.S. production declined by 6 million pounds (table B-1-1).

1/ In this report, quantity data on production of raw wool are designated "grease basis" to mean the weight of the wool in its natural condition as separated from the animal or skin; quantity data on consumption, imports, and exports are designated (except in the section on foreign production and trade) "clean content" to mean the weight of the wool free of all foreign matter. The meaning of "clean content" for tariff purposes is defined in headnote (c) to subpart C of Part 1 of schedule 3 of the TSUS.

The wool produced in the United States consists almost entirely of the type used in the manufacture of wearing apparel. Output in recent years has met between two-fifths and three-fifths of the domestic requirements for apparel-type wools and virtually none of the domestic requirements for carpet-type wools. During the 2-year period 1965-66, when annual U.S. mill consumption of raw wool averaged about 379 million pounds (clean content), annual imports of apparel-type raw wool averaged about 163 million pounds and those of carpet-type wool, 112 million.

a. U.S. producers.--Of the 217,658 farms or ranches reporting production of shorn wool in 1964, 1/ 194,607 produced less than 1,000 pounds each and only 321 supplied 50,000 pounds or more. Iowa ranked first in number of farms (25,532)--nearly all of which produced less than 1,000 pounds each--but accounted for only 4 percent of the 1964 output. Texas, with 16,223 wool-producing farms, ranked first in number of pounds produced (38.8 million pounds). Wyoming, California, Colorado, Montana, and South Dakota, and Utah produced between 10 and 20 million pounds each in 1964.

b. Employment and wages.--Available data relating to hired labor on sheep ranches are too fragmentary for use in this report.

c. U.S. consumption.--Since World War II the trend of U.S. annual consumption of raw wool has been downward; following a record high of 737.5 million pounds in 1946, it decreased to 325.0 million

1/ In recent years from 85 to 90 percent of the total U.S. production of raw wool has consisted of shorn wool; the remainder has consisted of wool pulled from the skins of slaughtered animals.

pounds in 1967, the lowest level of the 1946-67 period (table B-1-2). 1/ On a per capita basis, annual mill consumption of wool averaged 2.9 pounds during the 1935-39 period and in 1946 attained its highest level of 5.2 pounds. By 1967, it had declined to 1.6 pounds.

The decline in mill consumption of wool reflects principally developments in two important consumer markets, namely wearing apparel and carpets. In both of these markets, wool lost ground to manmade fibers but consumption patterns have been different. Table B-1-2 shows U.S. mill consumption of apparel-type wool (used principally in the production of wearing apparel, but also of house-furnishings) and of carpet-type wool (which is used almost exclusively in floor coverings) for the years 1950-66. In 1966, U.S. mill consumption of carpet wool amounted to 103.6 million pounds, its lowest level since 1951, whereas U.S. mill consumption of apparel wool totaled 266.6 million pounds, a higher level than attained in 7 of the preceding 9 years in the 1957-65 period. The difference in the consumption patterns for the two types of wool reflects in part consumer acceptance of products containing manmade fibers. Producers of floor coverings have found increasing acceptance of

---

1/ These consumption statistics are for shorn and pulled wool only. To the extent that they do not include consumption of imported wool tops, waste, shoddy, and yarn waste and rags to be garnetted into shoddy, these figures are understated. In 1966, imports of wool tops amounted to 10.3 million pounds; imports of spinnable waste (noils, top waste, and other soft wastes) amounted to 28 million pounds; imports of wool shoddy amounted to 0.9 million pounds; and imports of yarn waste and rags amounted to 19 million pounds. Also excluded from the consumption figures are wool-like hairs (mohair, vicuna, alpaca, etc.) consumption of which amounts to between 20 and 30 million pounds per year.

articles wholly of manmade fiber; use of blends containing wool in floor coverings has not been significant. For the wearing apparel markets, however, consumption of wool in garments wholly of wool (except linings and trimmings) has declined but this decline has been offset somewhat by the use of blends containing wool. Wool and noncellulosic fibers generally compete on the basis of price, but for certain types of garments a substantial amount of wool continues to be preferred because of the warmth, and the appearance that this fiber usually imparts to the finished product.

d. U.S. production.--During the 1958-67 period, production of raw wool 1/ ranged between 229 million and 323 million pounds (grease basis) of which about 15 percent was "pulled" wool from the skins of slaughtered sheep.

Since 1954 U.S. wool growers have been guaranteed a specified average annual return on their sales of shorn wool following legislation aimed at encouraging "the annual domestic production of approximately 300 million pounds of shorn wool, grease basis, at prices fair to both producers and consumers in a manner which will have the least adverse effects upon foreign trade." 2/ Under the price support program administered by the U.S. Department of Agriculture (discussed in section on prices), annual U.S. production of shorn wool has never reached the goal stated in the legislation

1/ Not including production of mohair which ranged between 21 and 32 million pounds during the 1958-66 period.

2/ The National Wool Act of 1954 which was extended in 1958, 1961, and again in 1965 (7 U.S.C. 1781).

and has declined in every season since reaching a peak in 1960. Output in 1967 was smaller than that in any year of the 1950-65 period.

About 75 percent of the domestic production of wool is of grades 56s and finer, and most of the remainder is of grades 50s to 54s. 1/ Less than 5 percent is of grades 48s and coarser. The vary small amount of domestic wool that is 46s or coarser--grades generally used for making floor coverings--is used in the manufacture of other products.

e. U.S. sales and inventories.--In the United States, as in other wool-producing countries, growers' sales of wool each year generally approximate their production and therefore growers' year-end inventories are negligible.

In wool-importing countries, however, processors' inventories are of some significance. Stocks of wool in the United States, held by dealers and manufacturers, by types, January 1, 1960-66, were as follows (in millions of pounds):

Year	Apparel wool	Carpet wool	Total
1960	100.7	50.7	151.4
1961	91.3	40.7	132.0
1962	87.4	44.5	131.9
1963	77.7	40.6	118.3
1964	72.7	41.1	113.8
1965	72.9	30.4	103.3
1966	89.5	27.1	116.6

1/ Wools are generally classified (according to fiber diameter) into various numerical grades, ranging from 36s (very coarse) to 80s (very fine).

f. U.S. imports and exports.--In 1962-66, total annual imports of raw wool ranged between 212.3 million pounds (in 1964) and 277.2 million (in 1963 and 1966), whereas annual exports were less than 1 million pounds. 1/ The following tabulation shows that apparel wool and carpet wool shared almost equally in total imports during the 5-year period 1962-66 (in millions of pounds, clean content. 2/

Year	Apparel wool	Carpet wool	Total
1962------------	125.7	143.5	269.2
1963------------	109.1	168.1	277.2
1964------------	98.4	113.9	212.3
1965------------	162.6	108.9	271.6
1966------------	162.6	114.6	277.2
1962-66-----	658.4	649.1	1,307.5

Australia, by far the principal supplier of U.S. imports of apparel wool, accounted for 40 percent of the weight (clean content), of total imports of such wool during 1966 (table B-1-3). Other important suppliers of U.S. imports were the Republic of South Africa, New Zealand, Uruguay, and Argentina. Most of the imports of apparel wool are of grades finer than 58s. In 1966, imports of these grades totaled 104 million pounds, an amount equivalent to about three-fourths of U.S. mill consumption of such grades.

1/ The trade data shown apply only to pulled or shorn wool. The import figures do not include between 5.0 million and 8.4 million pounds (clean content) of wool-like hair (vicuna, camel hair, etc.). The export figures do not include between 2.7 million and 12.5 million pounds (clean content) of mohair.

2/ In the discussion on imports, the term "apparel wool" refers to dutiable imports of wool and the term "carpet wool" refers to duty-free imports (see section on U.S. tariff treatment).

New Zealand was the principal supplier of carpet wool, accounting for about 45 percent of the weight (clean content) of total imports of such wool during 1966 (table B-1-4). Argentina was the second leading supplier of this type of wool, with 29 percent of the 1966 imports. Nearly all the duty-free imports of wool are used to make carpet yarn and consist primarily of types of wool not produced in the United States.

g. Prices.--In the U.S. market, prices of raw wool generally fluctuate directly with those in foreign markets. After reaching record levels during the Korean conflict, wool prices have trended downward, owing in large measure to competition from manmade fibers. At Boston, however, landed duty-paid prices of foreign wool have generally been higher than prices for comparable domestic wool.

During 1955-67, annual average market prices received by U.S. farmers for shorn raw wool (grease basis) ranged from 36.4 cents per pound to 53.7 cents (table B-1-5). Under the National Wool Act of 1954 (previously mentioned), the price of shorn wool is supported through a system of direct incentive payments which provided (when combined with the market price) an average annual return of 62 cents per pound during 1955-65. 1/ The average support price was increased to 65 cents in 1966 and to 66 cents in 1967, but it declined from 106 percent of parity during 1955 to 76 percent of parity during 1967.

1/ The prices of "pulled" wool and mohair are supported "at such levels, in relationship to the support price for shorn wool, as the Secretary determines will maintain normal marketing for pulled wool, and as the Secretary shall determine is necessary to maintain approximately the same percentage of parity for mohair as for shorn wool."

h. Profitability and investment.--The readily available data are not meaningful for the purposes of this report.

i. U.S. customs treatment. 1/--Under the provisions of the Tariff Act of 1930, as originally enacted, duty-free status was accorded to certain named (and similar) unimproved wools and to other unimproved wools and improved wools not finer than 40s, when imported under bond for use in the manufacture of felt or knit boots, floor coverings, heavy fulled lumbermen's socks, camel hair belting, and press cloth. On July 18, 1958, duty-free status was temporarily extended to other unimproved wools and to improved wools finer than 40s but not finer than 46s when imported for use in the manufacture of the articles specified above (Public Law 83-418). On August 30, 1960, the action was made permanent; moreover, the duty was suspended on the named and similar unimproved wools and other unimproved and improved wools not finer than 46s when imported for use in paper-makers' felt (Public Law 86-557). In the TSUS, item 306.00 in subpart C, part 1, of schedule 3 continues the duty-free status for certain wools, as described above.

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of raw wool from the Philippine Republic have been small and those from Communist countries have been negligible in recent years.

The wools and hair not accorded duty-free status under item 306.00 are subject to the duties provided for in items 306.10 through 306.84 of subpart C, part 1, of schedule 3. For the 1966 imports of dutiable wool, the ad valorem equivalent of the applicable rates of duty averaged 27 percent.

In the tariff negotiations concluded on June 30, 1967--known as the Kennedy Round--the rates on dutiable wools (except those finer than 44s, if in the grease or washed, scoured, or carbonized) were reduced by 50 percent, the maximum amount permitted. These reductions are to be placed in effect in 5 annual stages, the first stage became effective on January 1, 1968. If the duty on the 1966 imports of these wools had been assessed on the basis of the final stage of the negotiated rates rather than the 1966 rates, the ad valorem equivalent of the duties on all imports of dutiable wools would have been reduced by 1 percentage point.

The types of imported wool not affected by Kennedy Round reductions are the types which represent virtually all of the domestic production of wool and a substantial portion of the imports. The rates on the wools 44s and finer (except on the skin) will remain at 25.5 cents to 38 cents per pound, depending on condition.

j. Foreign production and trade.--Production of raw wool in the foreign free world during 1967 reached the highest level on record--4.5 billion pounds, grease basis, an amount 102 million pounds above the 1966 level. Australia, by far the leading wool-growing country, produced 1.8 billion pounds during 1967, or 40 percent of the output in the FFW. New Zealand ranked second as a FFW producer during 1967 with 735 million pounds and was followed by Argentina with 436 million pounds.

The chief wool-exporting countries during 1966 were Australia, 1.4 billion pounds (actual weight); New Zealand, 611 million pounds; and Argentina, 316 million pounds. The principal countries importing raw wool during 1966 were Japan, 633 million pounds (actual weight); the United Kingdom, 522 million; the United States, 376 million; France, 346 million; Italy, 300 million; West Germany, 216 million; and Belgium, 206 million. The largest consumers in the free world during 1966, in descending order, were the United Kingdom, Japan, the United States, France, and Italy.

Table B-1-1.--Raw wool: Production in the United States, foreign free countries, and the Communist countries, 1958-67

(In millions of pounds, grease basis)

Year	United States	Foreign free countries	Communist countries 1/	Total
1958	295	4,051	1,012	5,358
1959	319	4,181	1,113	5,613
1960	323	4,145	1,120	5,588
1961	320	4,231	1,144	5,695
1962	297	4,218	1,148	5,663
1963	281	4,303	1,148	5,732
1964	255	4,326	1,101	5,682
1965	241	4,338	1,138	5,717
1966	235	4,443	1,179	5,857
1967 2/	229	4,545	1,214	5,988

1/ Except Yugoslavia which is included with foreign free countries.
2/ Preliminary.

Source: Data from reports of the Commonwealth Secretariat, London, as published by the U.S. Department of Agriculture.

Table B-1-2.--Raw wool: U.S. mill consumption, by types, 1950-66

Year	Apparel-type wool		Carpet-type wool		Total
	Quantity	Percent of total	Quantity	Percent of total	
	Million pounds 1/		Million pounds 1/		Million pounds 1/
1950	436.9	68.8	197.9	31.2	634.8
1951	382.1	78.9	102.0	21.1	484.2
1952	346.8	74.4	119.6	25.6	466.4
1953	358.0	72.5	135.9	27.5	494.0
1954	269.6	70.2	114.5	29.8	384.1
1955	281.2	68.0	132.6	32.0	413.8
1956	296.7	67.3	144.1	32.7	440.8
1957	240.9	65.3	127.9	34.7	368.8
1958	212.0	64.0	119.1	36.0	331.1
1959	264.9	60.9	170.4	39.1	435.3
1960	246.4	60.0	164.6	40.0	411.0
1961	263.1	63.8	149.1	36.2	412.1
1962	280.2	65.3	148.9	34.7	429.1
1963	251.3	61.0	160.4	39.0	411.7
1964	233.9	65.6	122.8	34.4	356.7
1965	274.7	71.0	112.3	29.0	387.0
1966	266.7	72.0	103.6	28.0	370.3

1/ Clean content.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

Table B-1-3.--Dutiable wool, including carbonized: U.S. imports for consumption, by countries, 1962 through 1966

Country	1962	1963	1964	1965	1966
	Quantity-clean content (1,000 pounds)				
Australia	51,750	44,476	43,639	71,503	65,814
Republic of South Africa	29,694	19,624	18,013	21,660	21,560
New Zealand	15,952	16,106	15,492	20,557	25,074
Uruguay	12,748	11,806	2,705	22,387	18,836
Argentina	10,078	12,180	12,068	17,561	21,385
All other	5,523	4,899	6,498	8,969	9,888
Total	125,745	109,091	98,415	162,637	162,557
	Value (1,000 dollars)				
Australia	44,298	38,586	46,274	65,778	64,078
Republic of South Africa	28,027	20,183	22,011	21,896	22,610
New Zealand	11,108	12,045	13,840	14,761	18,066
Uruguay	11,624	11,302	2,838	19,828	17,192
Argentina	6,776	9,715	10,761	12,962	16,268
All other	4,611	4,030	6,163	7,868	8,594
Total	106,444	95,861	101,887	143,093	146,808

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-1-4.--Duty-free wool: U.S. imports for consumption, by countries, 1962-66

Country	1962	1963	1964	1965	1966
	Quantity-clean content (1,000 pounds)				
New Zealand	49,797	66,483	46,189	47,002	52,126
Argentina	47,363	41,697	23,206	29,568	33,464
United Kingdom	6,426	10,768	6,817	9,214	8,559
Syria	3,269	5,612	4,746	2,474	4,124
Pakistan	12,044	10,695	6,377	6,172	3,583
Lebanon	2,392	3,611	2,551	1,899	2,170
Iraq	5,435	6,619	5,126	3,180	1,753
Ireland	1,365	1,092	477	1,281	1,608
India	1,272	1,371	4,262	881	1,347
All other	14,130	20,115	14,181	7,272	5,891
Total	143,493	168,063	113,932	108,943	114,625
	Value (1,000 dollars)				
New Zealand	29,814	44,854	37,109	30,055	32,274
Argentina	29,043	28,474	18,455	18,796	20,116
United Kingdom	4,324	7,503	5,380	6,286	6,120
Syria	2,158	4,069	3,777	1,683	2,844
Pakistan	7,739	7,370	4,721	4,124	2,257
Lebanon	1,553	2,563	2,098	1,445	1,507
Iraq	3,929	4,830	4,290	2,478	1,335
Ireland	1,004	852	449	963	1,210
India	824	919	3,153	599	765
All other	8,742	13,316	10,701	4,747	3,755
Total	89,130	114,750	90,133	71,176	72,183

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-1-5.--Shorn wool: U.S. support price, farmers' average market price, rate of direct Government payments, 1955-67

Year	Support price: Amount	Support price: Percent of parity price	Farmers' average market price	Direct Government payment as a percent of market price 1/
	Cents per pound		Cents per pound	
1955	62	105.8	42.8	44.9
1956	62	100.3	44.3	40.0
1957	62	93.8	53.7	15.5
1958	62	86.7	36.4	70.3
1959	62	86.2	43.3	43.2
1960	62	83.9	42.0	47.6
1961	62	82.4	42.9	44.5
1962	62	83.5	47.7	30.0
1963	62	80.0	48.5	27.8
1964	62	78.0	53.2	16.5
1965	62	74.2	47.1	31.6
1966	65	75.3	52.1	24.8
1967 2/	66	76.4	2/ 42.0	2/ 57.0

1/ Direct payment is calculated for each farmer, by multiplying the payment rate times the average price which he receives for his wool.
2/ Estimated.

Source: Compiled from official statistics of the U.S. Department of Agriculture.

2. Yarns

The United States produces slightly more than 10 percent of the world output of wool yarn. During the 1960-66 period, U.S. annual production ranged from 479 million pounds to 549 million pounds (table B-2-1), of which slightly more than a third was produced for sale to other mills. During 1966 when imports of wool yarn were larger than in any preceding year, they were equivalent to about 2.5 percent of total apparent domestic consumption, but to 7 percent of the production of sales yarn. In recent years exports have been much smaller than imports.

There are two systems of manufacturing wool yarn--the woolen and the worsted. About three-fourths of the wool yarn produced in the United States is spun on the woolen system, on which yarn is spun directly from carded sliver. Additional operations, including combing, are necessary to prepare the carded sliver for spinning on the worsted system. Worsted yarn (used principally for the production of light, smoothe, and durable fabrics) is a more standardized product, and is a more important article of commerce than woolen yarn (used principally for the production of heavier, softer, but less durable fabrics).

a. U.S. producers.--Most U.S. facilities for producing wool yarn are owned and operated by large integrated textile companies which utilize nearly all their output of yarn in the production of wool fabric. In 1965 there were 1.2 million wool yarn spindles in the United States, 0.7 million on the worsted system, and 0.5 million on the woolen system. Establishments accounting for 82 percent of the value of wool yarn shipments in 1963 numbered 144 in 1963 and are located primarily in Maine, New Hampshire, Massachusetts, Rhode Island, Pennsylvania, North Carolina, Georgia, and South Carolina.

b. Employment and wages.--The mills reporting wool yarn as their primary product employed 17,233 persons in 1963; 16,280 persons in 1964; and 15,605 persons in 1965. They had payrolls of $66.0 million in 1963; $65.6 million in 1964; and $64.3 million in 1965.

c. U.S. consumption.--During 1960-66 annual apparent domestic consumption of wool yarn ranged from 486 million in 1964 to 559 million pounds in 1965 (table B-2-1). Domestic consumption of sales yarn during the period ranged from 151 million to 200 million, the highest level also in 1965. Apparent consumption exceeded domestic production throughout the period, as imports were larger than exports in each year.

d. U.S. production.--U.S. production of wool yarn during the 1960-66 period ranged between 479 million and 549 million pounds (table B-2-1). Wool yarn represented about 10 percent of total U.S. production of spun yarns of all fibers in 1960; it accounted for about 8 percent in 1966. About three-fourths of wool yarn is produced on the woolen system and about one-fourth on the worsted spinning system. About 54 percent of the total output of wool yarn during 1966 was weaving yarn; 20 percent was machine knitting yarn and the remaining 26 percent included carpet yarns and other tufting yarns, handknitting yarns, and yarns for making sewing and embroidery thread.

About 36 percent of total production of wool yarn during 1966 was for commission or sale to another mill. About half of the production of sale yarn in 1966 was machine knitting yarn. Annual production of wool yarn for sale or on commission, by types, in 1960-66 was as follows (in millions of pounds):

Year	Total	Weaving yarn	Machine-knitting yarn	All other
1960----------	147	25	63	59
1961----------	162	33	65	64
1962----------	168	31	65	72
1963----------	167	27	75	65
1964----------	160	26	74	60
1965----------	189	29	96	64
1966----------	178	29	88	61

In 1966 yarn for sale or commission represented about 11 percent of the total production of wool weaving yarn, about 90 percent of the output of machine-knitting yarn, and 47 percent of the production of other types of wool yarn.

Manmade fibers represented about 16 percent of the fiber consumption by the woolen and worsted spinning systems in 1960 and 29 percent in 1966. The manmade fiber utilized in these spinning systems amounted to 110.6 million pounds in 1960 and 215.2 million pounds in 1966.

e. U.S. sales and inventories.--The value of yearend inventories of wool yarn in the hands of producers reporting such yarn as their primary product declined from $69.5 million in 1963, to $63.6 million in 1964, and to $58.7 million in 1965. Annual shipments from these mills range between $400 and $500 million.

f. U.S. imports and exports.--Annual imports of wool yarn ranged between 5.3 million pounds and 12.1 million pounds during the 1961-66 period. The highest level was reached during 1966--12.1 million pounds, valued at $23.5 million (table B-2-2). 1/ The chief source of imports during 1966 was Japan with 6.0 million pounds. Other important sources of supply were Belgium, France, the United Kingdom, Italy, and Uruguay, each with between 0.6 million and 1.0 million pounds during 1966.

Imports of angora rabbit hair yarn, the only type of "wool" yarn for which import data are separately reported, increased from 284,714 pounds in 1964 to 389,084 pounds in 1966 (table B-2-3). Belgium, the principal source, accounted for 83 percent of the 1966 imports.

Exports of wool yarn are small, amounting to less than 275,000 pounds in each year of the 1962-66 period. During 1966 they amounted to 273,053 pounds, valued at $747,409, with the Philippine Republic accounting for about 38 percent of the total.

g. Prices.--Prices of wool yarn trended upward during the 1961-66 period, but declined during the first 8 months of 1967 almost to the 1961 level. The U.S. wholesale price index for wool yarn, 1961-66, as computed by the Bureau of Labor Statistics, are as follows (1957-59=100):

1/ Not included in these import statistics for wool yarn are imports of colored yarn, cut into lengths not over 3 inches and packaged into containers not over 6 ounces in weight. Imports of such packages of yarn amounted to 367,198 pounds during 1965 and 485,450 pounds during 1966. Yarns of this type are used mainly by handicapped persons to make rugs and are duty free (see section on U.S. customs treatment).

1961-------------	94.4
1962-------------	97.9
1963-------------	101.5
1964-------------	103.6
1965-------------	102.3
1966-------------	104.4
1967 (Jan.-Aug.)-	94.9

h. Profitability and investments.--Separate data are not available for wool spinning operations.

i. U.S. customs treatment 1/.--The current rates of duty provided for yarns wholly or in chief value of wool are as follows:

TSUS item	Description	Rate of duty
	Yarns of wool or hair:	
307.60	Yarns of wool, colored, and cut into uniform lengths of not over 3 inches, in immediate packages or containers not over 6 ounces in weight including the weight of the immediate package or container...............	Free
	Other:	
307.62	Of angora rabbit hair............	36¢ per lb. + 9% ad val.
307.64	Other............................	30¢ per lb. + 15% ad val.

The duty-free treatment of the yarns provided for in item 307.60 has been in effect since 1957 (Public Law 284). The current rate applicable to yarns of angora rabbit hair became effective on January 1, 1968, and represents the first stage of a U.S. concession granted

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. There have been no imports of wool yarn from the Philippine Republic or "Communist" countries in recent years.

in the Kennedy Round negotiations concluded on June 30, 1967. The concession is to become fully effective in five annual stages, the last (20 cents a pound plus 5 percent ad valorem) on January 1, 1972. From July 1, 1963 through December 31, 1967, the rate of duty on yarns of angora rabbit hair had been 40 cents a pound plus 10 percent ad valorem. The current rate on other wool yarns (except those duty free under item 307.60) has been in effect since June 1951 and also reflects a concession granted by the United States in the General Agreement on Tariffs and Trade.

Based on the imports in 1966, the ad valorem equivalent of the applicable rates of duty was 18.3 percent for yarns of angora rabbit hair and 30.5 percent for the yarns entered under item 307.64.

j. Foreign production and trade.--The United Kingdom is the leading world producer of wool yarn, accounting for slightly over 11 percent of total world output in 1966. Almost three-fifths of U.K. production is of woolen-yarn (315 million pounds) representing the largest output of such yarn outside the United States. Other important producers of woolen-yarn during 1966 were Italy, with 290 million pounds; West Germany, with 113 million; France, with 107 million; and Japan, with 101 million.

Japan is the leading world producer of worsted yarn with 262 million pounds during 1962. Other important foreign producers of worsted yarn during 1966 were the United Kingdom, with 221 million pounds; France, with 214 million; Italy, with 195 million; West Germany, with 156 million; and Belgium, with 105 million.

The principal foreign countries participating in trade in wool yarn are shown as follows with the amounts that each exported and imported during 1966 (in millions of pounds):

Country	Imports	Exports
Belgium	16	62
France	4	51
West Germany	69	8
Japan	1	31
Netherlands	29	15
United Kingdom	4	30
Italy	2	24

Table B-2-1.--Wool yarns: U.S. production, imports, exports, and apparent consumption, 1960-66

(In thousands of pounds)

Year	Production: For sale or commission	Production: For captive consumption	Production: Total	Imports
1960	146,607	376,997	523,604	5,152
1961	162,473	343,412	505,885	5,429
1962	167,583	356,279	523,862	8,892
1963	167,388	369,706	537,094	9,802
1964	159,558	319,050	478,608	7,808
1965	189,160	359,621	548,781	10,890
1966	177,891	315,304	493,194	12,481

Year	Exports	Apparent consumption	Ratio of imports to--: Production for sale or commission	Ratio of imports to--: Apparent consumption
			Percent	Percent
1960	281	528,475	3.5	1.0
1961	232	511,082	3.3	1.1
1962	221	532,533	5.3	1.7
1963	229	546,667	5.9	1.8
1964	228	486,188	4.9	1.6
1965	185	559,486	5.8	1.9
1966	273	505,402	7.0	2.5

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-2-2.--Wool yarns (except angora rabbit hair): U.S. imports for consumption, by countries of origin, calendar years, 1964, 1965, and 1966

Country of origin	1964	1965	1966
	Quantity (pounds)		
Japan	2,402,331	3,720,337	5,987,010
Belgium	893,280	1,171,996	996,970
France	736,690	937,031	864,889
United Kingdom	744,428	1,240,946	984,412
Italy	1,321,506	1,164,775	648,887
Uruguay	60,828	260,928	857,065
West Germany	327,889	505,225	370,211
Switzerland	308,520	578,209	336,048
Netherlands	301,725	258,183	302,093
Canada	108,797	336,574	252,651
Ireland	80,628	235,247	114,786
Brazil	17,301	28,099	147,286
Republic of Korea	217	403	108,280
Spain	7,850	16,854	57,480
All other	211,702	99,547	63,792
Total	7,523,692	10,554,354	12,091,860
	Value (dollars)		
Japan	4,617,151	6,518,678	10,320,311
Belgium	2,435,834	3,079,523	2,631,767
France	2,172,192	2,510,244	2,235,649
United Kingdom	2,012,813	2,956,585	2,216,047
Italy	4,526,897	3,155,349	1,583,138
Uruguay	68,123	310,730	1,034,292
West Germany	824,777	1,067,885	843,731
Switzerland	814,165	1,372,738	699,083
Netherlands	668,701	556,436	652,774
Canada	222,848	573,754	413,541
Ireland	160,460	372,694	241,147
Brazil	24,601	37,503	182,643
Republic of Korea	380	534	142,102
Spain	20,163	31,318	108,582
All other	515,754	257,814	164,428
Total	19,084,859	22,801,785	23,469,235

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-2-3.--Angora rabbit hair yarns: U.S. imports for consumption, by countries of origin, calendar years 1964, 1965, and 1966

Country of origin	1964	1965	1966
	Quantity (pounds)		
Belgium	202,935	248,902	324,349
France	75,899	77,003	46,652
United Kingdom	745	3,742	8,647
Iran	-	-	9,436
Netherlands	-	4,536	-
All other	5,135	970	-
Total	284,714	335,153	389,084
	Value (dollars)		
Belgium	825,199	1,032,322	1,364,783
France	661,946	740,262	432,203
United Kingdom	6,576	19,503	41,216
Iran	-	-	16,987
Netherlands	-	20,104	-
All other	22,278	5,861	-
Total	1,515,999	1,818,052	1,855,189

Source: Compiled from official statistics of the U.S. Department of Commerce.

3. Fabrics

The term "wool fabrics" is used here to include cloth and related merchandise principally of wool (including reused or reprocessed wool) by weight, regardless of the method of manufacture. Woven fabrics exceeding 12 inches in width (generally referred to as broadwoven) are by far the principal products in both U.S. production and imports. Other wool fabrics of commercial importance include knit fabrics, felts, narrow fabrics (not over 12 inches in width), tufted fabrics, elastic fabrics, and lace. Of these, knit fabrics and felts are the most important.

The United States, one of the free world's largest producers of broadwoven wool fabrics, is a leading importer, but a minor exporter, of such fabrics. For many years, wool broadwoven fabrics have accounted for a small portion of the annual U.S. production of all broadwoven fabrics made in the United States from cotton, wool, or manmade fibers. The ratio of U.S. imports of broadwoven wool fabrics to domestic consumption rose from 7 percent in 1961 to 15 percent in 1965 and then declined to 12 percent in 1966. During January-June 1967, imports were equivalent to about 11 percent of domestic consumption (table B-3-1).

The role of the United States in world output of the other fabrics included here is not known. With respect to knit wool fabrics and pressed wool felts, the principal "other" fabrics, imports exceed exports.

a. U.S. producers.--In U.S. Census data industry Number 2231 includes the establishments primarily engaged in (1) weaving fabrics over 12 inches in width, wholly or chiefly by weight of wool, mohair, or similar animal fibers, (2) dyeing and finishing woven wool fabrics or dyeing wool, tops, or yarn, and (3) shrinking or sponging wool goods for the trade. In 1958 industry Number 2231 included 411 companies operating 469 establishments; by 1963, the latest year for which such data are available, there were 304 firms with 361 establishments (table B-3-2). In 1958, the woolen and worsted looms in place were 17,310, of which 83 percent were in the establishments of industry Number 2231; 13 percent were in industry Number 2221 (manmade fiber and silk mills); and the remainder in industry Number 2221 (cotton mills). By 1963, when 13,723 looms were in place, about 75 percent were in industry Number 2231; and in 1965, there were 12,784 looms of which only 70 percent were in that industry.

The shift of the facilities for producing broadwoven wool fabrics from the New England and Middle Atlantic regions to the South is illustrated by the following Census data on the distribution of U.S. production of such fabrics by regions and States in 1955 and 1965 (in percent):

Region and State	1955	1965
New England:		
Maine----------------------	8	13
New Hampshire--------------	9	12
Massachusetts--------------	22	11
Rhode Island---------------	6	6
Connecticut----------------	3	2
Vermont--------------------	2	1
Total------------------	50	45
Middle Atlantic:		
Pennsylvania---------------	6	3
New York-------------------	2)	1
New Jersey-----------------	2)	
Total------------------	10	4
North Central 1/-------------	6	2
South:		
South Carolina-------------	4	15
North Carolina-------------	9	8
Virginia-------------------	5	6
All other 2/---------------	14	19
Total------------------	32	48
West 3/----------------------	2	1
Grand total------------	100	100

1/ Includes Ohio, Illinois, Wisconsin, Minnesota, Iowa, and Missouri.
2/ Includes Georgia, Maryland, West Virginia, Tennessee, Alabama, and Texas.
3/ Includes Utah, Washington, Oregon, and California.

According to Census data, 20 of 304 companies involved in the weaving and finishing of broadwoven wool fabrics in 1963 accounted for 71 percent of the total value of shipments; of these 20, 4 accounted for 51 percent. The concentration of shipments probably increased in subsequent years. Of the 361 establishments in 1963, the latest year for which data are available, 112 had less than 20 employees each and 17 had 500 or more.

Wool fabrics other than broadwoven are important products of the four manufacturing industries listed below, for which the number of firms and number of establishments in 1963 were reported in Census data as follows:

Industry No.	Description	Firms	Establishments
		Number	Number
2241	Narrow fabrics	350	384
2256	Knit fabrics	487	518
2291	Felt goods	28	36
2299	Textile goods not elsewhere classified	127	137

Very few of these firms are believed to use wool exclusively. Most of them fabricate products from purchased yarn; those making felt goods manufacture such products directly from fiber. Of these 1,075 establishments, which are mostly located along the East coast and in the South, 544 employed 20 persons or more each in 1963. Establishments in several other industries--e.g., industry Number 2253 (knit outerwear mills)--also manufacture substantial quantities of certain types of wool fabrics, most of which are utilized by the producers in the fabrication of end products.

b. Employment and wages.--Annual employment in the wool fabric industry fluctuated over the past decade, but the general trend was decidedly downward (table B-3-3). According to Bureau of Labor

Statistics data, which differ somewhat from those of the Bureau of the Census, there was a decline of 13,100 in total employment and 12,600 in production workers between 1958 and 1966, decreases of 23 percent and 25 percent, respectively. The data available for the first 9 months of 1967 indicate that average employment for the year may be somewhat lower than that in 1966.

Both the average weekly earnings and the average hourly earnings increased between 1958 and 1966, the former by 35 percent and the latter by 29 percent. Earnings continued to rise during 1967; in September of that year weekly earnings were 7 percent higher, and hourly earnings 5 percent higher than those in September 1966.

A recent survey conducted by the Bureau of Labor Statistics of straight-time earnings of production and related workers during November 1966 in wool yarn and broadwoven fabric mills shows an average of \$1.90 an hour. 1/ Approximately 2 percent of the 41,765 workers covered by the survey earned less than \$1.40 per hour and 6 percent earned \$2.50 or more.

Data on total employment in the principal industries producing wool fabrics other than broadwoven are shown in table B-3-4 for 1961, 1963, and 1965. For each of those industries, production workers constituted 80 to 90 percent of the reported total employment in 1963.

1/ A report of the survey appears in Monthly Labor Review, June 1967. The survey covered mills employing 20 workers or more, primarily engaged in manufacturing yarn and broadwoven fabrics (12 inches or more in width), wholly or chiefly by weight of wool, mohair, or similar animal fibers.

Combined employment in these industries has been rising. In the narrow fabric mills, however, total employment was slightly smaller in 1963 and 1965 than in 1961.

c. U.S. consumption.--The domestic consumption of wool fabrics consists predominantly of apparel fabrics; nonapparel fabrics are estimated to account for less than 15 percent of the total. Total annual consumption has fluctuated considerably in recent years, ranging in the period 1961-66 from 247 million pounds in 1964 to 295 million pounds in 1962 (table B-3-1). It amounted to 272 million pounds in 1966 and is estimated to have decreased below that level in 1967.

The U.S. consumption of wool fabrics has trended downward for many years in spite of the increase in population and in personal income. This downward trend has been caused to a considerable extent by the increasing use of manmade fibers for apparel-type fabrics formerly made wholly or chiefly of wool. Such fabrics are suitable for the lighter-weight clothing that has become increasingly popular and have the easier-care qualities currently demanded by consumers. The manmade fibers have several advantages over wool, which include large readily available supplies of raw materials, expandable fiber-producing facilities, and relatively stable prices. These facts, together with rapid advances in the techniques of producing manmade fibers plus the utilization of such fibers for imparting characteristics adaptable to particular uses, would seem to portend further encroachment upon what used to be traditional markets for wool.

The fluctuations in consumption resulted in part from efforts on the part of importers to avoid the incidence of the high rate of duty on low-priced fabrics wholly or in chief value of wool. They imported fabrics made from reused or reprocessed wool blended with just enough more expensive fibers (e.g., flax, rabbit hair, or silk) to make the latter the component of chief value and thus the fabrics were dutiable at considerably lower rates than if wool had been the fiber of chief value. For want of a better term, these fabrics became known as loophole fabrics. Two of the rate-avoidance practices, which involved woven fabrics principally of wool by weight but in chief value of flax, or of rabbit hair, were eliminated by congressional action (P.L. 89-241, effective December 7, 1965, and P.L. 89-405, effective June 19, 1966). Such imported fabrics accounted for nearly 6 percent of total broadwoven wool fabric consumption in 1965 and 2 percent in 1966.

Domestic consumption of wool apparel fabrics, as shown in table B-3-5, closely followed the trend of total wool fabric consumption. In the period 1961-66 the ratio of imports to consumption, on a yardage basis, ranged from 9 percent in 1961 to 17 percent in 1965, and was about 14 percent in 1966 and in January-June 1967. The types of loophole fabrics which were dealt with by legislation accounted for about 26 percent of the imports and 5 percent of the consumption in 1965, and 12 percent of the imports and 2 percent of the consumption in 1966.

Available data on the annual apparent U.S. consumption of the principal types of fabrics other than broadwoven are shown in table B-3-6. The data, particularly for knit wool fabrics, are believed to be understated inasmuch as the production data from which they are derived do not include output fabricated into end products by producing firms.

d. U.S. production.--Fabrics for apparel account for 90 to 95 percent of the total domestic production of broadwoven wool fabrics.[1/] Fabrics for women's and children's apparel, nearly all woolens, predominate; they comprised slightly more than 60 percent of the total in 1966. Blanketing, woven wool felts, and upholstery fabrics are the principal nonapparel fabrics produced.

In the period 1961-66, the annual domestic output of broadwoven wool fabrics ranged from 255 million linear yards in 1964 to 310 million linear yards in 1962 (table B-3-7).[1/] Production was slightly lower in 1966 than in 1965, and was expected to decline further in 1967. During recent years domestic production of apparel fabrics (both woolens and worsteds) has trended downward whereas that of nonapparel fabrics has moved upward. From 1961 to 1966, the U.S. output of woolens declined by 14 percent and that of worsteds by 11 percent. Factors contributing to the decline in the domestic production of apparel fabrics of wool are the increasing demand for fabrics of manmade fiber-wool blends and the sizable imports of both woolens and worsteds.

1/ Not including woven wool felts, which are reported in pounds only. The production of such fabrics averaged 8.9 million pounds annually during 1961-66 and was at a peak for the period of 10.9 million pounds

In recent years worsted-type fabrics of manmade fiber-wool blends, which are often made in the same plants and on the same machinery as all-wool worsteds, have afforded strong competition to the wool worsteds in the men's wear market, particularly for summer-weight suitings, sportscoatings, and separate slacks. A large portion of the mixed-fiber fabrics are blends of polyester fibers and wool, the annual domestic output of which is estimated at 40 to 50 million linear yards. Imports of worsted wool fabrics in 1966 are estimated to to have been equivalent to nearly 50 percent of the domestic production of worsteds.

Available production data on wool fabrics other than broadwoven are shown in table B-3-6.

e. U.S. sales and inventories.--Meaningful data on total U.S. sales of wool fabrics are not available. Some idea of the trend of sales, however, may be derived from the annual value of total shipments and receipts by industry Number 2231, as shown in table B-3-2. Shipments of fabrics, including blankets, accounted for nearly 85 percent of the total value of shipments and receipts of the industry in 1958 and are estimated to have been about 75 percent in 1963. Between 1958 and 1963, shipments of secondary products (mainly wool yarns, scouring and combing mill products, and fabrics of manmade fibers and silk) increased from $58 million to $138 million. Although later data are not available, it is believed that shipments of such secondary products continued to increase in subsequent years. The value of the industry's total shipments and receipts were $156 million greater (about 15 percent) in 1966 than in 1963.

Yearend inventories of finished woolen and worsted broadwoven apparel fabrics 1/ were between 16 and 18 million linear yards in 4 of the years 1961-66 (table B-3-8). Inventories of such fabrics were 0.8 million linear yards larger on August 31, 1967, than on the corresponding date of 1966. Unfilled orders at yearend were larger in the years 1962-65 than in 1961, but declined sharply in 1966. Unfilled orders were nearly 11 percent smaller on August 31, 1967, than a year earlier.

Available data on sales (shipments) and inventories by industries producing wool fabrics other than broadwoven are shown in table B-3-4.

f. U.S. imports and exports.--The trend of imports of wool fabrics was upward between 1961 and 1965, reflecting to a considerable extent the substantial rise in imports of fabrics preponderantly wool by weight but in chief value of other fibers. Imports of broadwoven wool fabrics rose from 19.8 million pounds in 1961 to 41.8 million pounds in 1965, and then declined to 32.2 million pounds in 1966 (table B-3-1). They amounted to 14.4 million pounds in January-June 1967, as compared with 21.3 million pounds in the corresponding period of 1966. 2/ At their peak in 1965, imports of broadwoven wool fabrics

1/ In weaving and finishing plants.
2/ Imports of knit fabrics and pressed felts are shown in table B-3-6.

were equivalent to 15 percent of apparent consumption. In 1966, when imports were smaller, and domestic production larger, than in the preceding year, the ratio of imports to apparent consumption declined to slightly less than 12 percent. Available data indicate that this ratio was probably at about the same level in 1967 as in 1966.

U.S. exports of wool fabrics have been of negligible significance for many years, usually representing only a fraction of 1 percent of domestic production.

Apparel fabrics are estimated to have comprised more than 95 percent of the total imports of broadwoven wool fabrics in recent years; the remainder has consisted mainly of upholstery fabrics, but has also included coated fabrics, billiard cloths, and fabrics for machine clothing. Although official statistics do not provide a complete breakdown between imports of woolen and of worsted apparel fabrics, the available data indicate that imports of worsteds have been increasing and, on a square-yard basis, may have constituted more than 60 percent of the total 1966 imports of wool apparel fabrics. The great bulk of the imports of worsted fabrics are in chief weight, as well as in chief value, of wool and are used in the manufacture of men's wear. It is estimated that in 1966 imported wool worsteds were equivalent to nearly 50 percent of the domestic output of such fabrics. Japan, the principal source of imports of wool fabrics for apparel in recent years, supplied 56 percent of the total yardage imported in 1966 (table B-3-9). Ninety-five percent or more of the Japanese fabrics are men's wear worsteds, including substantial quantities of wool-silk blends and of all-wool fine-yarn fancies. In 1966, the duty-paid value per linear yard of the Japanese fabrics averaged about $3.75, indicating an average landed value (including freight, insurance, brokerage, commission, etc.) of about $4.00 per linear yard, which is believed to be higher than the average wholesale price of most domestic wool worsteds. In terms of square yards, imports of worsteds from Japan were probably equivalent to more than 40 percent of the domestic production of men's wear wool worsteds.

For a number of years Italy has ranked second in importance to Japan, on both a poundage and a square-yard basis. A very large proportion of the imports from Italy, however, have consisted of fabrics valued not more than $2 per pound, so that on a value basis Italy has ranked third. On such fabrics in chief value of wool the U.S. rates of duty were increased substantially, effective January 1, 1961. Thereafter the Italian producers of the low-priced fabrics devised ways of avoiding the high rate of duty. For example, they blended more expensive fibers (flax, rabbit hair, and silk) with reused or reprocessed wool so that, although the fabrics were mostly wool by weight, they were in chief value of the other fibers and thus subject to lower rates of duty.

During 1964-65, large quantities of fabrics imported from Italy contained a high percentage of reused or reprocessed wool by weight but were in chief value of flax and therefore were dutiable at

10 percent ad valorem. These imports were discontinued after Public Law 89-241 raised the duty on such fabrics to 30 cents per pound plus 45 percent ad valorem, effective December 7, 1965. In the last half of 1965 and the first half of 1966 substantial quantities of Italian fabrics made principally of reused or reprocessed wool, but in chief value of rabbit hair, were dutiable at 17.5 percent ad valorem. After Public Law 89-405 established a rate of 30 cents per pound plus 50 percent ad valorem on these fabrics (effective June 19, 1966), imports ceased. More recently importers of Italian fabrics have been avoiding the high rate of duty on low-priced fabrics in chief value of wool by importing (1) woven fabrics with a high wool content but in chief value of silk at a rate of 35 percent ad valorem, (2) bonded or laminated fabrics principally of wool but in chief value of flax at a rate of 13.5 percent ad valorem, and (3) bonded or laminated fabrics in chief value of rabbit hair at a rate of 17.5 percent ad valorem. Bills have been introduced in the Congress to close these latest so-called loopholes, but no legislation has been enacted thus far.

In recent years the United Kingdom has been the second most important supplier of wool fabrics, on a value basis, and third on a yardage basis. The British imports are usually high-styled expensive fabrics averaging over $5 per linear yard (duty-paid), and compete directly with a limited segment of the domestic production of wool apparel fabrics.

Substantial quantities of wool fabrics from Korea, mostly men's wear worsteds, began to appear in the United States market in 1964 and have increased in each succeeding year; they increased from 201,000 square yards in 1964 to 1,489,000 square yards in 1966 and were greater in the first 9 months of 1967 than in the full year of 1966.

g. Prices.--The annual average U.S. wholesale price index (1975-59=100) for broadwoven wool fabrics rose from 98.1 in 1961 to 106.4 in 1966, or by about 8.5 percent (table B-3-10). The monthly index remained fairly stable during 1966, and was only slightly higher during January-August 1967 than during the same period of 1966.

The annual average U.S. wholesale price index for knit outerwear fabrics of wool increased from 97.1 in 1961 to 107.7 in 1965 and declined to 107.1 in 1966. During January-August 1967 the monthly index was 107.2.

h. Profitability and investment.--Available data on net income of corporations in the wool weaving and finishing industry are shown in table B-3-11. The number of returns showing net income during 1959-64 varied from 49 percent to 81 percent of the total number of returns reported. The total net income of the reporting corporations during 1959-64 ranged from $18 million in 1960 to $63 million in 1964.

According to the Bureau of the Census, the yearend gross book value of depreciable assets for the wool weaving and finishing industry was as follows (in millions of dollars): 1962, 284.9; 1963, 299.1; and 1964, 309.1.

New capital expenditures by the wool weaving and finishing plants (industry No. 2231) in the years 1961-66 ranged from $15.5 million in 1963 to $32 million in 1966, and were less than 3 percent of the value of annual shipments (table B-3-2). Such expenditures in 1966 were nearly double those in the previous year.

i. U.S. customs treatment.[1/]--Most broadwoven wool fabrics are dutiable under the provisions of subpart C of part 3 of schedule 3 of the TSUS; narrow fabrics, fabrics of special construction regardless of width (e.g., knit, pile, tufted, lace, and ornamented), and those for special purposes (e.g., tapestry and upholstery fabrics, belting, and felts) are dutiable under the provisions of part 4 of schedule 3.

Imports of most fabrics wholly or in chief value of wool are dutiable at compound rates, consisting of a specific component (in cents per pound) and an ad valorem component. The specific components were designed to compensate the domestic manufacturer for the import duties on raw wool which raise the level of prices paid by him for that material; and the ad valorem components to protect him against lower manufacturing costs abroad.

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before December 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of wool fabrics from the Philippine Republic and "Communist" countries have been negligible in recent years.

The major portion of the imports of woven apparel fabrics wholly or in chief value of wool are valued over $2 per pound and are subject to a rate of duty of 37.5 cents per pound plus 38 percent ad valorem (item 336.60). The ad valorem equivalent of this rate, which has been in effect since January 1, 1961, is about 47 percent, based on the imports in 1966.

Imports of woven fabrics chiefly wool by weight but in chief value of other fibers are dutiable at the rates applicable to the fiber component of chief value. Currently, such fabrics in chief value of silk are dutiable at a rate of 31 percent ad valorem if not jacquard-figured (item 337.50) and 33.5 percent ad valorem if jacquard-figured (item 337.55). Most of the imports of bonded or laminated fabrics, if in chief value of wool, are dutiable at 32 percent ad valorem (item 359.30); if in chief weight of wool but in chief value of vegetable fibers other than cotton, at 12 percent ad valorem (item 359.20); and if in chief weight of wool but in chief value of rabbit hair, at 15.5 percent ad valorem (item 359.60).

The current rates applicable to the imported fabrics of blended fibers classified under items 337.50, 337.55, 359.20, and 359.60 became effective on January 1, 1968, and reflect concessions granted by the United States in the negotiations concluded on June 30, 1967--generally referred to as the Kennedy Round. These concessions are to become fully effective in 5 annual stages, the last on January 1, 1972.

The rates applicable to these four TSUS items during 1966 1/ and the final stage concession rates are shown below (in percent ad valorem):

TSUS item	Rate of duty	
	1966	Final stage concession rate
337.50	35.0	17.5
337.55	37.5	18.5
359.20	13.5	6.5
359.60	17.5	8.5

The rates of duty on a number of other special types of wool fabrics were also reduced pursuant to the Kennedy Round negotiations. Excluded from such reductions are principally the rates on broadwoven wool fabrics in items 336.50, 336.55, and 336.60, which comprise the bulk of the imports, the rate on knit wool fabrics (item 345.30), and the rates on woven or knit wool fabrics, coated or filled (items 355.70 and 356.30).

j. Foreign production and trade.--Production of woven wool fabrics by the countries that together account for most of the world output are shown in table B-3-12. The table, however, does not include data for mainland China, which is believed to be an important producer. The U.S.S.R. is by far the largest producer, followed by

1/ See discussion on imports from Italy in section on U.S. imports and exports.

the United States and Japan. In the period 1962-66 the gap between U.S. and Japanese output was considerably reduced, principally because of the decline in U.S. production.

Italy is the world's leading exporter of woven wool fabrics by a wide margin (table B-3-13). The United Kingdom has consistently been the second largest exporter, and through 1964 Belgium was third and Japan fourth. Subsequently, Belgian exports dropped off substantially and Japanese exports increased, with the result that Japan became the third ranking exporter in 1965. The EEC countries 1/ accounted for about two-thirds of the total exports in 1966. As stated previously, U.S. exports of woven wool fabrics are negligible.

West Germany is the principal importer of woven wool fabrics (table B-3-13). In recent years the United States, the United Kingdom, and the Netherlands have alternated in the next three positions of importance. About half of the imports were taken by the EEC countries in 1965-66.

1/ Belgium, France, Italy, Luxembourg, Netherlands, and West Germany; exports from Luxembourg, which are not shown separately in table B-3-13, are believed to be negligible.

Table B-3-1.--Broadwoven fabrics, principally wool, reused wool, or reprocessed wool by weight: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, annual 1961-66 and January-June 1966 and 1967

Period	Production 1/	Imports 2/	Exports 3/	Apparent consumption	Ratio of imports to consumption
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	Percent
Annual:					
1961	250,271	19,755	440	269,586	7.3
1962	271,453	23,935	528	294,860	8.1
1963	251,109	24,621	589	275,141	8.9
1964	225,161	22,741	648	247,254	9.2
1965	235,328	41,820	830	276,318	15.1
1966	240,791	32,203	661	272,333	11.8
January-June:					
1966	134,476	21,296	404	155,368	13.7
1967	4/116,241	14,442	335	130,348	11.1

1/ Converted from linear yards to pounds by using the factors from data in U.S. Census publication Current Industrial Reports, M22T.3(63)-1 Supplement. Includes woven wool felts.

2/ Partly estimated. Includes broadwoven fabrics wholly or in chief value of wool in parts 3 and 4 of schedule 3 of the TSUS. Also includes so-called loophole fabrics, principally wool by weight but in chief value of other fibers, which are provided for in parts 3 and 4 of schedule 3. Does not include woven wool fabrics shipped from the Virgin Islands to mainland United States as products of the Islands.

3/ Partly estimated.

4/ Preliminary.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table B-3-2.--Specified data relating to the operations of wool weaving and finishing mills (industry No. 2231), 1958 and 1961-66

Year	Number of companies	Number of establishments: Total	Number of establishments: With 20 employees or more	All employees: Number	All employees: Payroll	Production workers: Number	Production workers: Man-hours	Production workers: Wages
					1,000 dollars		1,000	1,000 dollars
1958-----	411	469	311	55,952	206,094	49,053	98,662	166,189
1961-----	1/	1/	1/	51,150	207,541	44,800	90,043	164,073
1962-----	1/	1/	1/	50,017	214,079	44,175	90,790	169,446
1963-----	304	361	249	47,429	202,892	41,627	85,034	160,188
1964-----	1/	1/	1/	44,409	198,871	38,448	81,010	156,219
1965-----	1/	1/	1/	44,054	210,847	38,565	80,873	164,103
1966 2/--	1/	1/	1/	44,348	221,140	38,567	81,204	170,745

Year	Cost of materials	Value added by manufacture, adjusted	Value of shipments	New capital expenditures	Yearend inventories
	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars
1958-----	576,617	336,618	929,040	9,702	170,110
1961-----	587,789	363,618	950,870	15,870	172,712
1962-----	643,613	396,389	1,036,376	18,153	178,162
1963-----	629,471	386,622	1,010,692	15,539	187,457
1964-----	649,571	371,885	1,026,506	19,027	179,088
1965-----	692,064	409,007	1,095,852	17,249	175,988
1966 2/--	731,891	446,183	1,166,811	32,017	185,664

1/ Not available.
2/ Preliminary.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-3-3.--U.S. weaving and finishing mills, wool (industry No. 2231): Employment and earnings data, 1958-66, and January-September 1966 and 1967

Period	All employees	Production and related workers				
		Number	Average weekly earnings	Average hourly earnings	Average weekly hours	Average weekly over-time hours
	Thousands	Thousands				
1958	57.3	51.1	$64.71	$1.59	40.7	3.1
1959	60.4	53.9	70.64	1.67	42.3	4.2
1960	55.6	49.2	69.83	1.72	40.6	3.1
1961	51.9	45.8	72.28	1.75	41.3	3.3
1962	52.2	46.3	77.17	1.82	42.4	4.2
1963	49.6	43.7	75.40	1.83	41.2	3.4
1964	45.0	39.5	76.86	1.87	41.1	3.4
1965	44.2	38.8	83.69	1.96	42.7	4.4
1966	44.2	38.5	87.54	2.05	42.7	4.7
1966:						
January	44.1	38.6	85.80	2.00	42.9	4.7
February	44.5	39.1	87.44	2.01	43.5	5.2
March	44.9	39.4	87.23	2.01	43.4	5.1
April	44.8	39.3	87.03	2.01	43.3	5.3
May	45.2	39.6	89.76	2.04	44.0	5.5
June	45.5	39.9	90.90	2.08	43.7	5.2
July	46.7	40.4	88.39	2.07	42.7	5.0
August	46.4	40.4	88.60	2.07	42.8	4.3
September	45.1	39.3	87.78	2.09	42.0	4.3
1967:						
January	42.7	37.0	87.57	2.10	41.7	4.0
February	43.0	37.3	86.73	2.10	41.3	3.6
March	43.0	37.2	86.73	2.10	41.3	3.5
April	43.2	37.5	87.99	2.10	41.9	3.9
May	43.2	37.4	90.10	2.12	42.5	4.4
June	45.9	39.8	91.16	2.13	42.8	4.5
July	44.8	38.7	91.81	2.14	42.9	4.9
August	44.9	38.9	93.09	2.14	43.5	5.0
September	45.1	39.1	93.73	2.19	42.8	4.7

Source: U.S. Bureau of Labor Statistics.

Note.--These employment data differ somewhat from those published by the Bureau of the Census and shown in table B-3-2.

Table B-3-4.--Specified data relating to the operations of the principal industries producing certain special construction and special purpose fabrics and articles of wool, 1961, 1963, and 1965

Industry No. 1/	Principal products 2/	1961	1963	1965
2241	Narrow fabric mills:			
	Employees--------number--	23,810	23,495	23,666
	Value added by manufacture--------1,000 dollars--	171,831	172,942	193,150
	Shipments--------do--------	341,245	352,150	384,956
	Yearend inventories--------do--------	56,952	55,753	61,243
2256	Knit fabric mills:			
	Employees--------number--	20,380	24,355	28,823
	Value added by manufacture--------1,000 dollars--	190,197	244,853	328,980
	Shipments--------do--------	615,130	799,623	1,021,759
	Yearend inventories--------do--------	64,521	96,942	125,511
2291	Felt goods, n.e.c.:			
	Employees--------number--	4,120	4,851	5,510
	Value added by manufacture--------1,000 dollars--	45,487	55,903	72,297
	Shipments--------do--------	101,274	130,906	165,842
	Yearend inventories--------do--------	14,943	19,907	23,208
2299	Textile goods, n.e.c.:			
	Employees--------number--	6,770	7,176	7,943
	Value added by manufacture--------1,000 dollars--	59,225	78,258	84,594
	Shipments--------do--------	136,061	168,926	187,144
	Yearend inventories--------do--------	24,195	25,938	26,670

1/ As identified in Standard Industrial Classification Manual, 1967.
2/ Data shown relate to total operations.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-3-5.--Broadwoven apparel fabrics, principally wool, reused wool, or reprocessed wool by weight: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, annual 1961-66 and January-June 1966 and 1967

Period	Production 1/	Imports 2/	Exports	Apparent consumption	Ratio of imports to consumption
	1,000 sq. yds.	1,000 sq. yds.	1,000 sq. yds.	1,000 sq. yds.	Percent
Annual:					
1961----------	448,226	43,264	661	490,829	8.8
1962----------	481,981	53,557	790	534,748	10.0
1963----------	438,302	56,001	882	493,421	11.3
1964----------	395,715	52,720	970	447,465	11.8
1965----------	412,693	85,012	1,241	496,464	17.1
1966----------	400,557	67,151	988	466,720	14.4
January-June:					
1966----------	226,251	42,522	604	268,169	15.9
1967----------	3/192,584	32,309	500	224,393	14.4

1/ Converted from linear yards to square yards at the rate of 1.6 square yards per linear yard, the factor used in U.S. Census publication Current Industrial Reports, series M22T.3(63)-1 Supplement.

2/ Partly estimated. Includes the broadwoven apparel fabrics wholly or in chief value of wool provided for in parts 3 and 4 of schedule 3 of the TSUS. Also includes so-called loophole fabrics, principally wool by weight but in chief value of other fibers, which are provided for in parts 3 and 4 of schedule 3. Does not include woven wool apparel fabrics shipped from the Virgin Islands to mainland United States as products of the Islands.

3/ Preliminary.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table B-3-6.--Selected wool fabrics: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1964-66 and January-June 1967

(Quantity in thousands of pounds)

Year	Production 1/	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
	Knit fabrics for sale				
1964	20,245	751	176	20,820	3.6
1965	21,000	1,360	207	22,154	6.1
1966	21,500	1,223	117	22,606	5.4
1967 (Jan.-June)	2/	726	50	2/	2/
	Pressed felts				
1964	23,000	175	101	23,074	0.8
1965	24,000	279	168	24,111	1.2
1966	28,000	247	2/	2/	2/
1967 (Jan.-June)	2/	96	2/	2/	2/

1/ Partly estimated.
2/ Not available.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table B-3-7.--Finished broadwoven fabrics, principally wool, reused wool, or reprocessed wool by weight: 1/ U.S. production, by types, 1961-66 and January-June 1966 and 1967

(In thousands of linear yards)

Type	1961	1962	1963	1964	1965	1966	Jan.-June 1966	Jan.-June 1967 2/
Apparel fabrics:								
Government orders	4,254	8,563	3,779	2,465	5,354	11,198	4,391	5,746
Other than Government orders:								
Woolens:								
Men's and boys'	46,197	49,835	39,407	34,915	39,330	33,943	19,410	15,504
Women's and children's	158,775	165,642	160,110	150,469	147,850	141,770	79,571	68,757
Total woolens	204,972	215,477	199,517	185,384	187,180	175,713	98,981	84,261
Worsteds:								
Men's and boys'	56,776	61,150	57,768	46,586	55,823	52,777	33,214	25,518
Women's and children's	14,139	16,048	12,875	12,887	9,576	10,660	4,821	4,840
Total worsteds	70,915	77,198	70,643	59,473	65,399	63,437	38,035	30,358
Total apparel fabrics	280,141	301,238	273,939	247,322	257,933	250,348	141,407	120,365
Nonapparel fabrics:								
Blanketing	4,458	5,928	7,571	5,247	6,820	10,362	5,327	5,363
Other nonapparel fabrics	2,284	2,695	2,895	2,625	2,590	4,164	1,964	1,942
Total nonapparel fabrics	6,742	8,623	10,466	7,872	9,410	14,526	7,291	7,305
Grand total	286,883	309,861	284,405	255,194	267,343	264,874	148,698	127,670

1/ Does not include woven wool felts, which are reported in pounds only.
2/ Preliminary.

Source: Bureau of the Census, Current Industrial Reports, Series M22T.

Table B-3-8.--Woolen and worsted broadwoven apparel fabrics (finished): Closing inventories and unfilled orders of wool fabric weaving and finishing plants, annual 1961-65 and by months January 1966-August 1967 1/

Date 2/	Woolens			Worsteds			Total		
	Inventories	Unfilled orders	Ratio of inventories to unfilled orders	Inventories	Unfilled orders	Ratio of inventories to unfilled orders	Inventories	Unfilled orders	Ratio of inventories to unfilled orders
	Million linear yards	Million linear yards	Percent	Million linear yards	Million linear yards	Percent	Million linear yards	Million linear yards	Percent
1961	12.9	30.3	42.6	4.5	32.4	13.9	17.4	62.7	27.8
1962	15.9	33.4	47.6	4.3	29.4	14.6	20.2	62.8	32.2
1963	17.9	47.1	38.0	5.1	25.2	20.2	23.0	72.3	31.8
1964	12.4	39.1	31.7	4.1	34.9	11.7	16.5	74.0	22.3
1965	12.6	49.9	25.3	4.2	40.9	9.7	16.8	90.8	18.5
1966:									
January	13.3	53.9	24.7	5.0	39.2	12.8	18.3	93.1	19.7
February	14.2	56.2	25.3	6.4	36.8	17.4	20.6	93.0	22.2
March	17.8	59.2	30.1	6.4	32.9	19.5	24.2	92.1	26.3
April	17.9	54.7	32.7	6.1	25.1	24.3	24.0	79.8	30.1
May	16.4	53.2	30.8	5.7	26.1	21.8	22.1	79.3	27.9
June	13.6	46.7	29.1	5.2	23.4	22.2	18.8	70.1	26.8
July	12.3	39.3	31.3	4.8	23.0	20.9	17.1	62.3	27.4
August	11.7	34.1	34.3	4.2	24.1	17.4	15.9	58.2	27.3
September	11.4	26.2	43.5	3.9	25.3	15.4	15.3	51.5	29.7
October	9.0	22.5	40.0	3.4	24.7	13.8	12.4	47.2	26.3
November	10.2	24.6	41.5	4.5	26.4	17.0	14.7	51.0	28.8
December	12.1	26.3	46.0	5.1	26.9	19.0	17.2	53.2	32.3
1967:									
January	15.1	30.7	49.2	5.8	27.9	20.8	20.9	58.6	35.7
February	16.0	33.4	47.9	5.8	28.8	20.1	21.8	62.2	35.0
March	17.9	33.7	53.1	5.5	29.6	18.6	23.4	63.3	37.0
April	18.5	32.1	57.6	5.3	23.2	22.8	23.8	55.3	43.0
May	19.5	34.2	57.0	5.4	23.2	23.3	24.9	57.4	43.4
June	16.0	32.0	50.0	5.2	21.4	24.3	21.2	53.4	39.7
July	13.7	30.8	44.5	4.4	24.1	18.3	18.1	54.9	33.0
August	12.6	27.9	45.2	4.1	24.2	16.9	16.7	52.1	32.1

1/ Includes inventories billed and held for others.
2/ End of the period shown.

Source: U.S. Department of Commerce, Current Industrial Reports, series M22A.

Table B-3-9.--Apparel fabrics, principally wool, reprocessed wool, or reused wool by weight: U.S. imports for consumption, by principal sources, specified years 1961 to 1966 and January-September 1966 and 1967 1/

Source	1961	1963	1965	1966	January-September 1966	January-September 1967
	Quantity (1,000 pounds)					
Japan	6,079	10,623	15,516	14,609	12,038	11,487
United Kingdom	5,052	4,820	5,426	4,330	3,733	3,024
Italy	6,068	6,531	17,573	9,941	9,354	3,987
Republic of Korea	-	1	685	654	563	788
France	658	529	479	519	438	362
Uruguay	231	168	374	490	422	444
All other	881	1,096	822	645	571	474
Total	18,969	23,768	40,875	31,188	27,119	20,566
	Quantity (1,000 square yards)					
Japan	14,896	27,389	40,380	37,749	30,879	29,678
United Kingdom	11,516	11,048	13,160	9,685	8,248	6,402
Italy	13,089	13,720	26,251	14,710	13,628	7,159
Republic of Korea	-	1	1,587	1,489	1,273	1,780
France	1,126	840	737	801	676	500
Uruguay	536	365	764	1,006	871	935
All other	1,839	2,509	2,044	1,623	1,456	1,153
Total	43,002	55,872	84,923	67,063	57,031	47,607
	Value (1,000 dollars)					
Japan	22,735	42,158	64,158	57,696	47,366	44,875
United Kingdom	22,351	21,434	26,215	19,887	16,721	13,000
Italy	11,546	11,929	18,858	12,936	11,731	6,127
Republic of Korea	-	2	2,171	2,055	1,774	2,467
France	2,163	1,793	1,656	1,815	1,536	1,321
Uruguay	764	484	1,000	1,289	1,124	1,130
All other	3,257	3,639	2,934	2,395	2,107	1,724
Total	62,816	81,439	116,992	98,073	82,359	70,644
	Unit value (per pound) 2/					
Japan	$3.74	$3.97	$4.14	$3.95	$3.93	$3.91
United Kingdom	4.42	4.45	4.83	4.59	4.48	4.30
Italy	1.90	1.83	1.07	1.30	1.25	1.54
Republic of Korea	-	3.24	3.17	3.14	3.15	3.13
France	3.29	3.39	3.46	3.49	3.50	3.65
Uruguay	3.31	2.87	2.67	2.63	2.67	2.55
All other	3.70	3.32	3.57	3.72	3.69	3.64
Average	3.31	3.43	2.86	3.14	3.04	3.43
	Unit value (per square yard) 2/					
Japan	$1.53	$1.54	$1.59	$1.53	$1.53	$1.51
United Kingdom	1.94	1.94	1.99	2.05	2.03	2.03
Italy	.88	.87	.72	.88	.86	.86
Republic of Korea	-	1.36	1.37	1.38	1.39	1.39
France	1.92	2.13	2.25	2.27	2.27	2.64
Uruguay	1.43	1.32	1.31	1.28	1.29	1.21
All other	1.77	1.45	1.44	1.47	1.45	1.49
Average	1.46	1.46	1.38	1.46	1.44	1.48

1/ Partly estimated. Includes broadwoven apparel fabrics in chief value of wool and so-called loophole apparel fabrics principally wool by weight but in chief value of other fibers, all of which are provided for in parts 3 and 4 of the TSUS. Does not include apparel fabrics in chief value of wool in part 4 of schedule 3 (e.g., pile fabrics and ornamented fabrics), imports of which are relatively small and for which official statistics are not available prior to Aug. 31, 1963. Also, does not include woven apparel fabrics shipped from the Virgin Islands to mainland United States as products of the Islands.

2/ Based on unrounded figures.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table B-3-10.--Broadwoven fabrics and knit outerwear fabrics, of wool: U.S. wholesale price index, annual 1961-65 and by months, January 1966-August 1967

(1957-59=100)

Period	Broadwoven fabrics	Knit outerwear fabrics
1961	98.1	97.1
1962	99.3	98.6
1963	100.2	99.6
1964	102.3	107.7
1965	105.1	106.6
1966:		
January	106.0	106.8
February	106.0	106.9
March	106.0	106.9
April	106.4	106.9
May	106.6	106.9
June	106.6	106.9
July	106.6	106.9
August	106.5	106.9
September	106.5	107.7
October	106.4	108.2
November	106.5	107.4
December	106.6	106.9
Average	106.4	107.1
1967:		
January	106.8	107.2
February	106.8	107.2
March	106.8	107.2
April	106.7	107.2
May	106.7	107.2
June	106.7	107.2
July	106.6	107.2
August	106.6	107.2

Source: U.S. Department of Labor, Bureau of Labor Statistics.

Table B-3-11.--Receipts and net income of active corporations weaving and finishing wool fabrics, 1959-64 1/

	Number of returns	Total receipts	Net income
		Million dollars	Million dollars
All returns:			
1959	184	774	47
1960	364	680	18
1961	262	782	26
1962	300	1,112	32
1963	342	1,133	55
1964	218	1,136	63
Returns showing net income:			
1959	149	721	50
1960	179	512	31
1961	150	641	35
1962	207	926	47
1963	221	989	63
1964	141	1,070	68

Source: U.S. Treasury Department, Internal Revenue Service, Statistics of Income.

Table B-3-12.--Finished woven wool fabrics: 1/
Production, by specified countries, 1962-66

(In millions of square yards)

Country	1962	1963	1964	1965	1966
U.S.S.R	560.9	563.0	564.5	557.3	608.8
United States 2/	504.4	460.8	412.8	430.6	427.8
Japan 3/	402.8	429.8	423.1	412.3	418.7
United Kingdom 4/	360.8	360.4	358.3	355.8	332.8
Italy	257.7	253.2	234.1	206.5	260.6
France	216.5	236.0	229.5	193.0	219.5
West Germany 2/	198.7	177.7	177.8	185.3	178.5
Poland	135.4	137.7	147.3	148.8	149.2
All other	517.8	544.4	543.6	544.4	553.1
Total 5/	3,155.0	3,163.0	3,091.0	3,034.0	3,149.0

1/ Includes apparel and nonapparel fabrics, and blankets produced by producers of wool textiles.

2/ Data relate only to fabrics (except woven felts) containing by weight 50 percent or more of virgin or reprocessed wool.

3/ Figures include not only fabrics produced in the wool industry, but also fabrics predominantly of wool produced in other industries, which were as follows (in millions of square yards): 1962, 73.4; 1963, 86.8; 1964, 95.7; 1965, 100.9; 1966, 108.9.

4/ Data relate to deliveries.

5/ Estimated.

Source: International Wool Study Group.

Table B-3-13.--Woven wool fabrics (including blankets): Exports and imports, by specified countries, 1963-66

(In millions of pounds)

Country	1963	1964	1965	1966
	Exports			
West Germany	9.38	8.89	9.18	10.74
United Kingdom	50.71	50.09	50.89	47.58
United States	.79	.99	1.02	.77
Netherlands	13.26	13.12	13.63	1/ 13.24
France	14.98	14.40	13.51	16.43
Belgium	30.36	28.67	16.93	1/2/14.22
Denmark	1.39	1.55	1.49	1.40
Sweden	1.66	2.06	2.03	2.33
Canada	.02	.03	.12	.03
Italy	118.88	122.64	133.04	137.29
Japan 3/	20.59	21.71	27.02	24.12
All other	10.80	12.48	11.64	13.35
Total 4/	272.82	276.63	280.50	281.50
	Imports			
West Germany	56.63	55.05	64.40	65.04
United Kingdom	21.98	18.27	20.10	27.89
United States	22.69	20.34	26.45	25.58
Netherlands	20.21	21.88	19.90	22.15
France	14.14	15.62	13.47	14.66
Belgium	10.67	10.65	11.49	1/2/13.03
Denmark	6.99	7.98	8.11	11.12
Sweden	8.48	8.37	9.60	9.51
Canada	10.42	10.78	10.41	9.05
Italy	7.30	6.25	4.32	4.81
Japan 3/	3.03	3.71	2.68	2.82
All other	35.31	36.49	34.67	38.34
Total 4/	217.85	215.39	225.60	244.00

1/ Excludes velvets and woven felts.
2/ Provisional.
3/ Includes wool-silk mixture fabrics.
4/ Estimated.

Source: International Wool Study Group.

4. Apparel

Wearing apparel is the dominant product form in which wool is used. The principal articles of apparel made from wool (or blends, by weight, principally of wool) are men's and boys' sweaters, suits, slacks, coats, outdoor jackets, and uniforms; women's, misses' and children's coats, jackets, sweaters, skirts, dresses, suits, and slacks; and infants' wear. Industry estimates indicate that the wool consumed in the manufacture of these articles by U.S. apparel producers totaled about 334 million pounds in 1965 and represented 94 percent of the total used in apparel production (table B-4-1). Other articles of apparel made from wool or wool blends include sport shirts and shorts, robes, nightwear, hosiery, mufflers, gloves, and underwear.

Official country data on production and consumption of wearing apparel are not generally available in terms of fiber content. It appears, however, that the United States is among the leading producing and consuming countries of wearing apparel containing wool.

a. U.S. producers.--Small firms specializing in particular types of garments (e.g., coats, suits and coats, and dresses) predominate in the manufacture of apparel. Their number has been declining in recent years as a consequence of attrition and consolidations. Mergers and acquisitions, which were first marked in women's wear and later in men's outerwear, were generally accompanied by diversification of product lines. Many of the larger apparel-producing firms, which are generally in the South, operate modern plants and have financial resources sufficient for increased outlays on both research and improvement of plant and equipment. A few of these large firms own fabric-producing facilities and some of them operate retail outlets.

Very few apparel firms are believed to use wool exclusively. Apparel by weight principally of wool is an important part of the output of the five manufacturing industries for which the number of firms and of establishments in 1963 were reported in U.S. Census data as follows:

Industry No.	Description	Firms	Establishments
		Number	Number
2253	Knit outerwear	1,175	1,185
2311	Men's, youths', and boys' suits, coats, and overcoats	1,031	1,112
2327	Men's, youths', and boys' separate trousers	667	735
2337	Women's suits, coats, and skirts	2,481	2,516
2363	Children's coats and suits	269	285
	Total	5,623	5,833

These establishments are located mainly in the Middle Atlantic, South Atlantic, and South Central States. Knit outerwear mills produce apparel directly from yarn (domestic and imported) and also from knit fabric (produced principally in the same establishments), whereas the other establishments considered here produce clothing by cutting and sewing, generally from purchased woven or knit textile fabrics and materials such as leather, rubberized fabrics, plastics, and furs. A few of the "cut-and-sew" establishments are operated by firms that also operate weaving plants and utilize the fabrics produced. As indicated in the discussion of U.S. producers of cotton wearing apparel, there are three types of establishments in the cut-and-sew apparel industries. In the industries that produce a substantial amount of high-style garments, such as industry No. 2337, contract factories (producing apparel from materials owned by others) and apparel jobbers (generally performing only the entrepreneurial functions of a manufacturing company) are important. Custom tailors and dressmakers not operating on a factory basis and establishments which purchase and resell finished garments, but do not perform the functions of jobbers, are not included in the foregoing data.

b. Employment and wages.--Data on total employment in the principal industries producing wool apparel are shown in table B-4-2 for 1961, 1963, and 1965. For each of these industries, production workers constituted at least 85 percent of reported total employment in 1963. Combined total employment in the five industries rose from 337,367 persons in 1961 to 389,268 in 1965, or by 15 percent.

Average hourly and weekly earnings of production workers in the principal industries producing wool apparel, computed by the U.S. Department of Labor, have trended upward since 1961. For production workers in industry No. 2253 (knit outerwear), for example, average hourly earnings rose by 13 percent from 1961 to 1965 and average weekly earnings by 14 percent. The corresponding increases in wages for industry No. 2311 (men's and boys' suits and coats) were about 13 percent and 21 percent, whereas those for industry No. 2337 (women's suits, coats, and skirts) were 6 percent and 9 percent. In July 1967, production workers' average hourly and weekly earnings in these industries were:

Industry No.	Average hourly earnings		Average weekly earnings	
	Amount	Increase over 1965 annual average	Amount	Increase over 1965 annual average
		Percent		Percent
2253	$2.09	11	$77.12	8
2311	2.40	11	89.52	9
2337	2.59	8	92.98	14

c. U.S. consumption.--U.S. consumption of wool wearing apparel increased from 354 million pounds (wool content) in 1961 to 390 million pounds in 1965, reflecting primarily the substantial rise in the consumption of knit wool outerwear from 51 million pounds to 96 million pounds (table B-4-3). Increased popularity of sweaters for both men and women and greater acceptance of dresses and women's suits made from double-knit fabrics, originally introduced into the U.S. market by importers of European products, have contributed to a rise in both imports and domestic production of knit outerwear including that containing wool. Other innovations, such as the use (principally by domestic producers) of fabric-to-fabric laminates, fabric-to-foam laminates, and textured yarns, have also pushed upward the level of U.S. consumption of knitwear.

d. U.S. production.--U.S. production of wearing apparel containing wool has been increasing in recent years. Total production of men's and boys' suits and coats--in large measure believed to be all wool or partly wool--increased from 88 million units in 1961 to 111 million in 1965; production of women's, girls', and infants' suits, coats, skirts, and jackets, not knit--many believed to be in part of wool--rose from 185 million units in 1961 to 200 million in 1965; and that of knit wool outerwear from 44 million pounds (estimated weight of yarn content) to 70 million pounds. The knit apparel items that contributed significantly to the rise in production of knit wool outerwear were sweaters of all types and women's garments, particularly suits, skirts, blouses, dresses, and jackets. Production of sweaters--about a third wholly or chiefly of wool--increased from 12.7 million dozen in 1961 to 14.7 million dozen in 1965.

e. U.S. sales and inventories.--U.S. sales (shipments) of wearing apparel containing wool have increased since 1961. For example, the value of shipments of men's and boys' tailored suits and coats and nontailored jackets--in which more wool than any other fiber is consumed--increased from $1.3 billion in 1961 to $1.7 billion in 1965; shipments of knit outerwear 1/--in which more cotton and manmade fibers than wool are consumed--increased from $903 million to $1.2 billion in 1965. Data are not available on the amount of outerwear made from knit fabrics in cut-and-sew plants,

1/ Plus small amounts of other products.

but it is estimated that the combined value of the 1963 shipments by these plants and by knitting mills amounted to $1.3 billion.

Manufacturers of wearing apparel generally practice tight inventory control primarily because of the possibility of style changes and the high costs of storage. Yearend inventories in 1965 for producers of men's and boys' tailored suits and nontailored jackets were valued at $351 million, of which $143 million represented finished articles and the remainder, articles in process.

f. U.S. imports and exports.--From 1961 to 1965, U.S. production of wool wearing apparel (measured in terms of estimated wool content) increased by about 5 percent, but U.S. imports rose by 150 percent. The ratio of imports of wool wearing apparel to domestic consumption thereof, in terms of estimated wool content, rose from 4 percent in 1961 to 9 percent in 1965 (table B-4-3). Annual U.S. exports of wool wearing apparel also increased during the period 1961-65, but remained at less than 1 percent of annual production.

The sharpest increase in imports, as in production, was in knit outerwear, 1/ which in terms of estimated wool content accounted for about four-fifths of the 1965 imports of wool apparel. The rise in the ratio of imports of knit wool outerwear to domestic consumption, from 14 percent in 1961 to 27 percent in 1965, is shown in table B-4-3. However, this rise is not meaningful as a measure of the

1/ In this section, the term "knit outerwear" includes only the knit articles provided for in subpart F of part 6 of schedule 3 of the TSUS (see section on U.S. tariff treatment).

increase in import competition experienced by the domestic producers who make knitwear from all fibers.

In the period 1962-66, sweaters accounted for more than half of both the quantity (in pounds of actual product weight) and value of the total imports of knit wool outerwear. About 85 percent of the domestic shipments of all sweaters in that period were by the knit outerwear mills (industry No. 2253) 1/ the remainder was by industries in SIC Major Industry Group 23 (viz, SIC industry nos. 2329, 2339, and 2369). In 1965 (the latest year for which complete data available) production of sweaters by all domestic producers totaled 14.7 million dozens and imports amounted to 2.9 million (including 2.2 million in chief value of wool). Thus, if exports are assumed to be negligible, the ratio of imports of sweaters to apparent domestic consumption (in terms of number of garments) was about 16 percent in 1965. Sweaters by weight chiefly of wool accounted for about 30 percent of total domestic production, whereas sweaters in chief value of wool accounted for 75 percent of the imports. Thus for wool sweaters, the ratio of imports to consumption in 1965 was about 32 percent. Table B-4-4 shows that U.S. imports of sweaters have increased significantly since 1965. The rise has been in sweaters in chief value of manmade fibers, the principal type of sweaters produced in the United States at the present time.

1/ Although sweaters are the principal product of some of the producers in this industry, total shipments by all producers include many other articles such as knit shirts, women's suits, dresses, skirts, blouses, swimwear, and hats.

Imports of knit wool outerwear other than sweaters, consisting almost entirely of articles for women and girls, increased more sharply in recent years than imports of wool sweaters. Imports of knit skirts in chief value of wool, for example, rose from 49,000 dozens, valued at $3.9 million, in 1964 to 177,000 dozens, valued at $12.6 million, in 1966. The corresponding increase in knit wool blouses was from 43,000 dozens ($2.8 million) to 138,000 dozens ($6.7 million). Nearly all the imports classified as "other" knit wool outerwear in the official statistics consisted of women's suits. Imports of these "other" articles were valued at $28.2 million in 1964 and $35.7 million in 1965.

Italy, Hong Kong, the United Kingdom, and Japan were the principal suppliers of the U.S. imports of knit wool outerwear (including sweaters) during 1961-66. Taiwan and Korea, included in "all other" in table B-4-5, will probably be more important suppliers in the future.

Table B-4-6 shows the principal wool garments made from woven fabrics imported during 1964-66.

g. Prices.--In recent years the trend in domestic prices of wearing apparel containing wool has been generally upward at both wholesale and retail levels. Wholesale price indexes (1957-59=100) for selected types of garments wholly or in major part of wool are shown in table B-4-7.

h. Profitability and investments.--As already indicated in the section of this volume on cotton wearing apparel, data on profitability and investments in the wearing apparel industries are not available on the basis of principal fiber consumed. Available data indicate, however, that in terms of profits-to-sales ratios the wearing apparel industries rank below most other manufacturing industries. For the knit outerwear mills (industry No. 2253), for example, net profits represented 1.6 percent of net sales in 1965 and 1.5 percent in 1966; and for producers of women's suits, coats, and skirts (industry No. 2337), the corresponding percentages were 1.3 and 1.1. The wearing apparel industries also rank below many other manufacturing industries in terms of capital investment measured both in absolute amounts and in relation to the number of employees.

For the years 1962-65, annual investments in new plants and equipment by the three industries that produce substantial quantities of wool apparel were:

(In millions of dollars)

Industry No.	Description	1962	1963	1964	1965
2253	Knit outerwear----------------	13.0	17.3	16.7	24.2
2311	Men's and boys' suits, coats, and overcoats-------	5.6	6.9	10.8	8.6
2337	Women's suits, coats, and skirts---------------------	6.5	12.3	3.4	10.8

i. U.S. customs treatment 1/.--Nearly all U.S. imports of wearing apparel wholly or in chief value of wool are dutiable under provisions of part 6 of schedule 3 of the Tariff Schedules of the United States (TSUS). Imports of wool headwear and gloves, which accounted for only about 2 percent of the estimated wool content of imported wearing apparel in 1966, are dutiable under the provisions of part 1 of schedule 7.

U.S. import duties for wool wearing apparel, as those for other products in chief value of wool, are intended to protect the processors, so that in general the rates of duty vary according to the amount of processing required: the greater the amount of processing, the higher the rate. For some types of wool wearing apparel, however, higher rates of duty are provided for low-priced articles than for higher priced articles. For ornamented apparel, the prevailing rate is 42.5 percent ad valorem. Many of the rates of duty have both ad valorem and specific components, the specific components being compensatory for the rates on raw wool.

For the 1966 imports of the wool apparel provided for under subpart F of part 6 of schedule 3, which in terms of estimated wool

---

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of wool wearing apparel from the Philippine Republic and "Communist" countries have been virtually nil in recent years.

content constituted about 95 percent of the wearing apparel imported in that year, the ad valorem equivalent of the applicable rates of duty averaged 29.7 percent. The only wool articles in this subpart of schedule 3 on which concessions were granted in the tariff negotiations concluded on June 30, 1967, are sweaters, not ornamented, wholly of cashmere and valued over $18 per pound (reported under TSUS items 380.60 and 382.57 in 1966 and 1967). This concession is to be placed in effect in five annual stages: the first stage became effective on January 1, 1968. If the duty on the 1966 imports of such sweaters had been assessed on the basis of the final stage of the negotiated rate (37.5 cents per pound plus 15.5 percent ad valorem) rather than the 1966 rate (37.5 cents per pound plus 20 percent ad valorem), the ad valorem equivalent of the duties for all the imports in subpart F would have been reduced by 0.1 percentage point.

The current (1968) rate applicable under subpart 6F of schedule 3 to wool knitwear, not ornamented, valued over $5 per pound (except sweaters of cashmere, valued over $18 per pound, and infants' wear) is 37.5 cents per pound plus 20 percent ad valorem, whereas for knitwear (except infants' wear) not ornamented, valued not over $5 per pound, the current rate is 37.5 cents per pound plus 30 percent ad valorem. The current rate for infants' wear, regardless of value, is 37.5 cents per pound plus 32 percent ad valorem.

j. Foreign production and trade.--Italy is the leading European exporter of woven and knit outerwear combined. Its annual exports of such articles are reported to be valued about $300 million and to consist mostly of knitwear. U.S. trade statistics show that annual imports of knit outerwear in chief value of wool from Italy averaged nearly $70 million during 1964-66 (table B-4-5).

In response to rising wage rates at home and to increasing competition in export markets, particularly from articles produced in the Orient, knitwear producers in Italy recently have added motor controls to many of their hand machines. The use of these semi-automatic machines permits much more styling and special effects than can usually be achieved on fully automatic machinery and is more economical for the short runs required to fill special orders for individual buyers. A number of U.S. firms (including some large retail outlets and resident buyers) have purchasing offices in Italy where they cooperate with the producers in styling "exclusive" articles for the U.S. market.

In Hong Kong, the second ranking source of U.S. imports of knit wool outerwear, hand-knitting machines are used almost exclusively. Much of the knitwear produced for sale in the United States is hand-embroidered or ornamented with sequins or beads. Because of the low wage rates in Hong Kong, such articles are usually available at prices which producers elsewhere cannot meet. In general, both knitting mills and cut-and-sew plants in Hong Kong are small-size operations.

Since about 1961 Japan has enlarged and modernized its knitting plants. Many plants in Japan are equipped with jacquard knitting machines. A shortage of labor has forced wage rates upward, and they are currently considerably above those in Hong Kong. Since 1965 Japan has been producing increasingly more knit outerwear of manmade fibers than of wool for export to the United States. Japan's production of acrylic fibers, which is sold principally to local knit outerwear mills, has been expanded at a rapid rate.

Table B-4-1.--Estimated consumption of wool by U.S. apparel producers, by types of garment produced, 1965

(In terms of raw wool consumed, including amount "wasted")

Type of garment	Quantity	Percent of total
	Million pounds	
Men's and boys'--		
Sweaters	40.6	11.4
Suits	39.4	11.1
Slacks	18.0	5.0
Separate coats	13.0	3.7
Overcoats and topcoats	10.8	3.0
Outdoor jackets	10.0	2.8
Uniforms	8.9	2.5
Other garments	13.3	3.7
Total	154.0	43.2
Women's, misses', children's, and infants'--		
Coats and jackets	72.8	20.4
Sweaters	35.2	9.9
Skirts	31.6	8.9
Dresses	28.0	7.9
Suits	13.4	3.8
Slacks	12.0	3.4
Other garments	9.0	2.5
Total	202.0	56.8
Grand total	356.0	100.0

Source: Textile Economics Bureau, Textile Organon, January 1967, pp. 6-9.

Table B-4-2.--Specified data relating to the operations of the principal industries producing wool wearing apparel, 1961, 1963, and 1965

Industry No. 1/	Principal products 2/	1961	1963	1965
2253	Knit outerwear:			
	Employees------number--	64,217	68,570	72,884
	Value added by manufacture-1,000 dollars--	399,512	463,585	541,372
	Shipments------do------	903,039	1,045,470	1,226,171
	Yearend inventories------do------	113,662	135,470	172,772
2311	Men's, youths', and boys' suits, coats, and overcoats:			
	Employees------number--	125,200	122,679	128,035
	Value added by manufacture-1,000 dollars--	723,053	831,910	941,965
	Shipments------do------	1,425,233	1,526,019	1,756,542
	Yearend inventories------do------	230,523	288,671	351,174
2327	Men's, youths', and boys' separate trousers:			
	Employees------number--	55,653	73,848	84,392
	Value added by manufacture-1,000 dollars--	246,287	383,134	440,829
	Shipments------do------	547,505	824,224	986,940
	Yearend inventories------do------	82,071	135,074	157,511
2337	Women's suits, coats, and skirts:			
	Employees------number--	78,536	88,332	92,525
	Value added by manufacture-1,000 dollars--	538,683	637,869	712,350
	Shipments------do------	1,240,614	1,522,725	1,653,718
	Yearend inventories------do------	88,655	126,778	139,826
2263	Girls', children's, and infants' coats and suits:			
	Employees------number--	13,761	11,848	11,432
	Value added by manufacture-1,000 dollars--	67,182	72,735	75,237
	Shipments------do------	171,869	162,929	169,525
	Yearend inventories------do------	14,334	16,364	15,403

1/ As identified in Standard Industrial Classification Manual, 1967.
2/ Data shown relate to total operations.

Source: Compiled from official data of the U.S. Department of Commerce.

Table B-4-3.--Wool wearing apparel, total and knit wool outerwear: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1961, 1965, and 1966

Commodity	1961	1965	1966
Wool apparel, total: 1/			
Production 2/----------------million pounds--	340	356	3/
Imports----------------------------do--------	14	35	33
Exports----------------------------do--------	4/	1	1
Apparent consumption---------------do--------	354	390	3/
Ratio of imports to consumption--------------------percent--	4	9	3/
Knit wool outerwear: 5/			
Production-------------------million pounds--	44	70	3/
Imports----------------------------do--------	7	26	25
Exports----------------------------do--------	4/	4/	4/
Apparent consumption---------------do--------	51	96	3/
Ratio of imports to consumption--------------------percent--	14	27	3/

1/ Data show estimated weight of wool consumed in processing, including the amount "wasted".

2/ Excludes headwear, neckwear, scarves, and miscellaneous articles, in which an estimated 4 million pounds of wool were consumed in 1963.

3/ Not available.

4/ Less than one-half million pounds.

5/ Excludes headwear and footwear except infants'; also excludes hosiery, gloves, neckties, mufflers, scarves, and shawls. Production data show estimated weight of yarn consumed in processing, including amount "wasted"; import and export data show weight of articles as reported in the official U.S. trade statistics.

Source: Compiled by the staff of the U.S. Tariff Commission principally from data published in Textile Organon for January 1967 and from official statistics of the U.S. Departments of Agriculture and Commerce.

Table B-4-4.--Sweaters: U.S. imports for consumption, total and in chief value of specified fibers, 1963-66 and January-August 1967

	Quantity		Value	Unit value
	1,000 dozens	1,000 pounds	1,000 dollars	Per dozen
Sweaters, total:				
1963	1/ 1,375	2/	1/ 66,593	$48.43
1964	1,752	16,854	80,644	46.03
1965	2,903	25,980	106,981	36.85
1966	3,480	24,402	103,146	29.64
1967 (Jan.-Aug.)	2,744	18,172	72,281	26.34
Sweaters in chief value of wool: 3/				
1963	1,189	11,197	62,113	$52.24
1964	1,380	13,739	70,980	51.43
1965	2,192	20,025	88,777	40.50
1966	1,912	16,160	75,834	39.66
1967 (Jan.-Aug.)	955	8,356	43,325	45.37
Sweaters in chief value of manmade fibers:				
1963	112	4/ 1,013	3,236	$28.89
1964	236	2,457	7,405	31.38
1965	501	4,765	14,281	28.50
1966	1,392	7,390	23,527	16.90
1967 (Jan.-Aug.)	1,676	9,346	26,969	16.09

1/ Excludes sweaters in chief value of silk.
2/ Not available.
3/ Excludes infants' sweaters of wool which, are not separately reported.
4/ Includes estimate for ornamented sweaters.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table B-4-5.--Knit wool outerwear: U.S. imports for consumption, by principal sources, 1961-62 and 1964-66

Source	1961	1962	1964	1965	1966
	Quantity (1,000 pounds)				
Italy	3,549	5,970	11,902	12,902	9,839
Hong Kong	559	1,166	3,372	8,907	9,580
United Kingdom	608	861	962	1,171	1,219
Japan	1,435	1,586	592	795	896
Austria	193	220	296	325	338
France	197	405	279	248	230
West Germany	160	172	190	223	210
All other	476	850	1,171	1,658	220
Total	7,177	11,230	18,764	26,229	24,518
	Value (1,000 dollars)				
Italy	24,206	40,294	70,525	70,753	67,059
Hong Kong	3,206	7,329	16,528	37,395	41,712
United Kingdom	6,902	8,742	9,480	11,282	11,921
Japan	9,135	8,678	3,149	4,415	4,510
Austria	1,959	2,241	3,042	3,313	3,381
France	1,751	2,911	2,405	2,345	2,516
West Germany	1,277	1,274	1,502	1,741	1,798
All other	3,752	6,283	8,435	11,496	13,958
Total	52,188	77,752	115,066	142,740	146,855
	Unit value (per pound) 1/				
Italy	$6.82	$6.75	$5.93	$5.48	$6.81
Hong Kong	5.73	6.29	4.90	4.20	4.35
United Kingdom	11.35	10.16	9.86	9.64	9.78
Japan	6.37	5.47	5.32	5.56	5.03
Austria	10.16	10.19	10.30	10.19	10.01
France	8.90	7.18	8.62	9.45	10.92
West Germany	7.97	7.41	7.90	7.80	8.56
All other	7.87	7.39	7.20	6.93	6.33
Average	7.27	6.92	6.13	5.44	5.99

1/ Calculated from unrounded data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Includes only the knit apparel in chief value of wool that is provided for in subpart 6F of schedule 3 of the TSUS; knit gloves, hats, mufflers and other miscellaneous articles of apparel in chief value of wool, are provided for elsewhere in the TSUS and imports thereof are small in relation to the imports shown here.

Table B-4-6.--Wool outerwear, not knit: 1/ U.S. imports for consumption, by specified types of garments, 1964-66

Type of garment	Quantity			Value		
	1964	1965	1966	1964	1965	1966
	1,000 units	1,000 units	1,000 units	1,000 dollars	1,000 dollars	1,000 dollars
Men's and boys'--						
Suits valued per lb.--						
Not over $4	1	1	2/	8	5	1
Over $4	104	171	214	2,285	3,399	4,247
Coats valued per lb.--						
Not over $4	113	133	106	987	1,244	967
Over $4	89	120	181	2,053	2,598	3,317
Trousers and outer shorts valued per lb.--						
Not over $4	344	47	18	426	149	76
Over $4	413	526	597	3,061	3,821	4,354
Total listed types	1,064	998	1,116	8,820	11,216	12,962
Women's, girls', and infants'--						
Suits valued per lb.--						
Not over $4	69	26	11	207	98	44
Over $4	48	50	50	1,400	1,438	1,499
Coats and jackets valued per lb.--						
Not over $4	179	289	338	1,667	2,736	3,115
Over $4	147	173	219	3,169	3,862	4,821
Skirts valued per lb.--						
Not over $4	95	6	210	78	12	251
Over $4	58	103	104	387	600	659
Total listed types	596	647	932	6,908	8,746	10,389

1/ Excludes ornamented articles, imports of which were small during 1964-66.
2/ Less than 500 units.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-4-7.--Wool wearing apparel: U.S. wholesale price indexes (1957-59 = 100) for selected types of garments, January and June of 1963 and 1965-67

Type of garment	1963		1965		1966		1967	
	Jan.	June	Jan.	June	Jan.	June	Jan.	June
Men's worsted suits:								
Better grade	106.5	111.4	116.6	123.4	123.4	124.7	124.7	126.2
Medium grade	107.5	113.0	113.7	118.6	120.0	120.4	121.0	121.9
Popular grade	104.3	106.3	110.0	113.6	115.2	115.5	118.8	119.5
Men's suits, polyester/ worsted, light weight	109.0	1/	115.6	115.6	122.9	1/	123.9	1/
Boys' woolen suits	103.5	103.5	105.0	105.0	105.8	111.1	111.1	111.1
Men's topcoats:								
Worsted	102.5	104.3	107.3	107.6	111.2	111.2	117.4	118.7
Woolen	96.6	98.8	101.4	103.2	105.8	106.2	105.3	107.4
Men's woolen sport coats	105.9	105.9	115.8	119.8	122.5	122.5	122.5	127.6
Boys' woolen sport coats	101.5	102.9	103.0	105.1	105.1	105.1	105.1	105.1
Men's worsted flannel trousers	100.5	103.4	103.8	106.4	107.1	108.0	108.0	109.3
Boys' woolen or worsted trousers	96.8	97.4	97.4	97.4	97.8	97.8	1/	89.8
Women's woolen untrimmed coats	1/	100.4	1/	108.5	1/	107.9	1/	1/
Women's worsted suits	104.1	104.1	109.8	115.4	119.5	119.5	119.5	119.5

1/ Not available.

Source: Compiled from statistics of the U.S. Department of Labor.

5. Miscellaneous products

Housefurnishings and associated articles account for the great bulk of miscellaneous wool products, the most significant of which in domestic production are floor coverings and blankets. Among the other miscellaneous wool articles are wall hangings, flags, dusting and polishing cloths, and paint-roller refills. Wool's share of the total quantity of textile fibers utilized by domestic producers in the fabrication of nearly all these articles has declined in recent years and is currently far smaller than that of manmade fibers. Of the total yarn consumed in the U.S. production of woven, knitted, and tufted carpets and rugs, for example, wool's share is estimated to have dropped from about 34 percent in 1962 to about 15 percent in 1966. In domestic production of blankets, the decline in wool's share of total fiber consumption is believed to have been less pronounced.

International production and trade data relating to floor coverings and blankets of wool or chiefly of wool are incomplete. The United States, which is a net importer of these articles, is probably one of the leading producing nations and a leading consumer of wool floor coverings. U.S. exports of both floor coverings and blankets (regardless of fiber content) are small. Inasmuch as blankets in chief value of wool are produced primarily by the wool-weaving mills (industry No. 2231 which is discussed in the section of this report on wool fabrics) 1/ and annual imports of such articles (valued at

1/ Blankets not made in weaving mills are produced principally by the cut-and-sew concerns in industry No. 2392, which is discussed in the section on miscellaneous products of cotton.

about $1 million in recent years) supply only a small part of domestic consumption (table B-5-1), the remainder of the discussion on miscellaneous wool products relates to wool rugs, imports of which are more significant than blankets in terms of value and in relation to domestic consumption.

a. U.S. producers.--Most of the U.S. output of wool floor coverings are machine-woven articles produced by firms that are principally manufacturers of woven carpets and rugs (identified as industry No. 2271 in U.S. Census data). Some wool carpets are produced by the domestic fabricators of tufted carpets (industry No. 2272) and some (principally braided rugs) by other firms that specialize in floor coverings (industry No. 2279), but for these two industries, wool is a minor fiber. In the manufacture of tufted carpets, for example, the ratio of wool yarn to total yarn utilized declined from about 18 percent in 1962 to 7 percent in 1966. In recent years, tufted products with pile surfaces chiefly of man-made fibers have accounted for the great bulk of the total domestic output of floor coverings. The numbers of firms and establishments in these three manufacturing industries in 1963 were reported in U.S. Census data as follows:

Industry No.	Description	Firms (number)	Establishments (number)
2271	Woven carpets and rugs----------	56	64
2272	Tufted carpets and rugs---------	167	181
2279	Carpets and rugs, not elsewhere classified----------	103	104

About one-half of the establishments that produce woven carpets and rugs were located in the Northeast and North Central States and 23 were in the South. Forty of these 64 establishments employed an average of fewer than 50 persons each.

The establishments that produced tufted carpets and rugs, were concentrated in the South, 101 of them in Georgia. Of these establishments, 123 employed an average of fewer than 100 persons each and 94 employed fewer than 50 persons.

Most of the establishments that produce miscellaneous types of floor coverings are scattered along the eastern seaboard. They are generally small-size operations--in 1963, 41 of them employed fewer than 5 persons each and only 15 employed 50 or more persons.

b. Employment and wages.--Data on employment in the three industries producing carpets and rugs are shown in table B-5-2. Production workers in each of these industries represented about 85 percent of the total workers in 1963. Combined employment in the three industries increased from 33,997 in 1961 to 41,331 in 1966, or by 22 percent. In the rug-weaving establishments, the principal U.S. producers of wool rugs, however, employment declined from 1961 to 1966 by about 41 percent.

c. U.S. consumption.--Annual U.S. consumption of wool floor coverings has declined sharply in recent years. This development can be traced back to the period immediately following World War II when the tufting process was successfully adopted by U.S. rug producers. By the middle 1950's tufted rugs principally of manmade fibers were rapidly becoming the predominant type of floor covering in the United States. Continuing improvements in fibers and yarns and in manufacturing techniques have led to better quality and more versatile tufted floor coverings. Recent developments in building construction and style changes in interior decorating have contributed to the growth of the U.S. market for tufted carpets of manmade fibers. Such floor coverings are well suited for use wall-to-wall both in single family and in modern high-rise multiple dwellings as well as in commercial establishments, partly on the basis of price and partly on the basis of performance. The principal market remaining for woven carpets is largely in commercial installations although tufted carpets are making rapid inroads into this market also.

d. U.S. production.--Domestic production of wool floor coverings has trended downward during the last decade or so. Measured in terms of the annual utilization of wool by the carpet-weaving mills, which are the principal producers, production of all woven wool carpets decreased by 35 percent from 1963 to 1966.

Domestically woven wool rugs consist mainly of pile rugs mostly velvets, Wiltons, and Axminsters. Before World War II wool rugs of these types dominated the U.S. carpet market.

e. U.S. sales and inventories.--The value of sales (shipments) of woven carpets and rugs and that of braided and tubular floor coverings--the types which account for most of the domestic output of wool floor coverings--have been trending downward in recent years. U.S. Census data on the value of shipments and yearend inventories for manufacturers of machine-woven, tufted (molstly of manmade fibers), and miscellaneous (including braided and knitted) floor coverings are shown for 1961, 1963, and 1965-66 in table B-5-2.

f. U.S. imports and exports.--The reported value 1/ of U.S. imports of wool floor coverings declined from $35.5 million in 1964 to $30.9 million in 1966. Although official data on U.S. exports of such articles are not available for the years 1964-66, they are believed to have been less than a half of 1 percent of domestic production.

On the basis of the import data shown in table B-5-3, it appears that increases in the value of imports from 1964 to 1966 occurred only in the categories of floor coverings that consisted almost entirely of types not made by domestic producers. Imports of woven rugs with hand-inserted pile, consisting mostly of orientals from Asian countries, rose from $10.1 million in 1964 to $14.6 million in 1966; imports of "wool floor coverings, not specially provided for," consisting principally of druggets and other foreign specialties, increased from $1.3 million to $1.6 million.

The value of imports of woven rugs with machine-inserted pile, consisting principally of Wiltons, velvets, and similar rugs (the principal types produced by domestic industry No. 2271) declined by 10 percent from 1964 to 1966. The decline in imports of the other

1/ Generally the market value in the foreign country; therefore it excludes U.S. import duties, freight, and transportation insurance.

two categories of wool floor coverings was even greater--21 percent for the types which include the tufted rugs made by industry No. 2272 and 53 percent for rugs of braided or similar construction which are made principally by industry No. 2279. The decline in imports of braided and similar rugs in chief value of wool was offset by the sharp increase in imports of the same type of rugs in chief value of manmade fibers (from $2.0 million in 1964 to $13.6 million in 1966).

g. Prices.--Indexes of wholesale prices (1957-59=100) for Wiltons, velvets, and all soft-surface floor coverings declined by 1, 3, and 4 points, respectively, between June 1966 and January 1967 (table B-5-4). These declines reflect price reductions instituted by several mills, following compliance with a Federal Trade Commission ban on volume rebates. Between January and June 1967, the price indexes for these types of floor coverings declined further, reflecting decreases in raw material costs which the producers chose to pass on to their customers.

h. Profitability and investments.--The annual net income of the producers of textile carpets and rugs during 1959-64, is shown in table B-5-5. The gross book value and depreciable assets for all floor covering mills and for groups thereof are shown in table B-5-6. Financial data supplied to the U.S. Tariff Commission by 17 U.S. producers of Wilton and velvet carpets and rugs are shown in table B-5-7. 1/ In 1966 these 17 producers accounted for more than 90

1/ The data apply only to plants wherein Wiltons and velvets were produced.

percent of the value of U.S. producers' sales of such floor coverings. The principal products for a number of them, however, are machine-tufted carpets and rugs, often manufactured in separate plants.

i. U.S. customs treatment. 1/--Carpets and rugs, together with other furnishings, are provided for in part 5 of schedule 3 of the TSUS. Some miscellaneous articles of wool are provided for in part 7 of schedule 3 (e.g., fabric samples, flags, and paint-roller refills) and some in schedule 7 (e.g., luggage and handbags in part 1).

The tariff rates on floor coverings vary primarily on the basis of the manufacturing process used. Wilton (including brussels) and velvet (including tapestry) floor coverings and those of like character or description (in item 360.45), for example, are currently dutiable at the escape-clause rate of 40 percent ad valorem, regardless of fiber content, as provided in temporary item 922.50 of part 2 of the appendix to the TSUS. The escape-clause rates became effective after the close of business on June 17, 1962, pursuant to Presidential Proclamation No. 3458 of March 27, 1962, following a

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of miscellaneous wool products from the Philippine Republic or Communist countries have been negligible in recent years.

finding of "injury" by the Tariff Commission. The escape-clause rate, which was to terminate not later than October 11, 1967, was extended by Presidential action until January 1, 1970, when the trade-agreement rate of 21 percent ad valorem may be restored. 1/

For other wool floor coverings except antiques, 2/ the 1967 rates of duty ranged from 11.25 percent ad valorem (item 360.05) to 42.5 percent ad valorem (item 361.05). In the tariff negotiations concluded on June 30, 1967, the rates (except for braided and similar rugs provided for in items 361.07 and 361.10) were reduced by 50 percent, the maximum amount permitted. The reductions are to become effective in five annual stages. The first stage became effective on January 1, 1968. If the duty on the 1966 imports of wool floor coverings (except Wiltons and velvets, but including the braided and similar rugs in items 361.07 and 361.10) had been assessed on the basis of the final stage of the negotiated rates rather than the applicable rates, the ad valorem equivalent of the duties would have been 14 percent or about 10 percentage points below the average ad valorem equivalent of the applicable rates.

j. Foreign production and trade.--Meaningful data are not available for inclusion in this report.

1/ The President's action was taken in accordance with the provisions of sec. 351(c) of the Trade Expansion Act of 1962.

2/ Imported articles which are 100 or more years old are entitled in whole or in part to free entry as antiques under the provisions of items 766.20 and 766.25 of the TSUS. Under the Automotive Products Trade Act of 1965 (P.L. 89-283, effective Jan. 18, 1965), moreover, imports of certain machine-made flooring coverings (including Wiltons and velvets) imported from Canada as original motor-vehicle equipment are duty free, but imports of wool rugs eligible for such treatment (reported under item 361.90) are believed negligible.

Table B-5-1.--Wool blankets: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1961-66

(In thousands of pounds, product weight)

Year	Production	Imports	Exports	Apparent consumption	Ratio imports to consumption
					Percent
1961	7,267	296	88	7,475	4.0
1962	9,663	337	173	9,827	3.4
1963	12,341	380	89	12,632	3.0
1964	8,553	397	1/	2/ 9,950	4.0
1965	11,117	514	1/	2/ 11,631	4.4
1966	16,890	478	1/	2/ 17,368	2.8

1/ Not available; believed to be negligible (no more than one-half of 1 percent of production).
2/ Production plus imports.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Production data shown above were converted from linear yards to a weight basis.

Table B-5-2.--Specified data relating to the operations of the principal industries producing wool floor coverings, specified years 1961-66

Industry No. 1/	Principal products 2/	1961	1963	1965	1966 3/
2271	Woven carpets:				
	Employees---number	16,410	13,357	10,584	9,676
	Value added by manufacture---1,000 dollars	141,960	120,004	108,732	115,678
	Shipments---do	334,339	312,493	283,166	283,798
	Yearend inventories---do	96,571	84,831	72,053	72,621
2272	Tufted carpets and rugs:				
	Employees---number	14,787	19,854	26,620	28,212
	Value added by manufacture---1,000 dollars	180,791	259,343	376,364	398,178
	Shipments---do	542,486	801,804	1,165,314	1,206,422
	Yearend inventories---do	74,829	116,256	189,506	205,313
2279	Carpets and rugs, not elsewhere classified:				
	Employees---number	2,800	2,445	3,017	3,443
	Value added by manufacture---1,000 dollars	14,636	15,595	23,785	30,601
	Shipments---do	37,910	29,585	48,168	75,446
	Yearend inventories---do	7,371	3,904	3,804	16,821

1/ As identified in Standard Industrial Classification Manual, 1967.
2/ Data shown relate to total operations.
3/ Preliminary.

Source: Compiled from official data of the U.S. Department of Commerce.

Table B-5-3.--Wool floor coverings: 1/ U.S. imports for consumption, by categories and principal sources, 1964-66

(Value in thousands of dollars)

Abbreviated description (TSUS item number) and source	1964	1965	1966
Pile or tufts inserted during weaving or knitting:			
Hand inserted (360.05, -.10, -.15)--			
Iran	6,181	7,099	8,444
India	2,325	2,489	2,999
Pakistan	351	511	730
All other	1,260	2,037	2,427
Total	10,117	12,136	14,600
Machine inserted (360.40, -.45, 922.50)--			
Belgium	2,342	1,973	2,238
United Kingdom	700	538	764
Italy	267	537	485
All other	1,286	1,134	667
Total	4,595	4,182	4,154
Pile or tufts inserted in a pre-existing base (360.65, -.70, -.75 pt., -.80 pt.)--			
Japan	3,802	3,251	2,694
Hong Kong	300	347	319
Portugal	57	101	200
All other	236	311	247
Total	4,395	4,010	3,460
Braided or similar construction (361.05 pt., -.07, -.10, -.15 pt.)--			
Japan	15,013	10,886	6,816
Portugal	3	69	70
Republic of Korea	4	5	58
All other	119	154	150
Total	15,139	11,114	7,094
Wool floor coverings not specially provided for (361.42, -.44, -.46, -.48)--			
Iran	219	91	410
India	124	67	198
Japan	344	206	179
All other	599	671	782
Total	1,286	1,035	1,569
Grand total	35,532	32,479	30,877

1/ The floor coverings included in the first two categories shown here are believed to have had pile wholly or chiefly of wool and were in chief value of wool, although the official data do not so indicate; those in the third category had pile with over 50 percent by weight of wool or were in chief value of wool; those in the fourth category were 50 percent by weight of wool or were in chief value of wool; and those in the last category were in chief value of wool.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table B-5-4.--U.S. wholesale price indexes (1957-59 = 100) of specified types of soft-surface floor coverings, January and June 1961-67

Year and month	Wiltons	Velvets	All soft-surface floor coverings
1961:			
January	99	99	98
June	99	98	98
1962:			
January	99	95	96
June	97	95	96
1963:			
January	97	92	94
June	97	91	94
1964:			
January	108	98	99
June	108	98	97
1965:			
January	105	96	95
June	105	96	95
1966:			
January	106	98	94
June	106	98	94
1967:			
January	105	95	90
June	102	94	89

Source: Compiled from official statistics of the U.S. Bureau of Labor Statistics.

Table B-5-5.--Receipts and net income of active corporations producing woven, tufted, and braided carpets and rugs, 1959-64 1/

	Number of returns	Total receipts	Net income
		Million dollars	Million dollars
All returns:			
1959	166	805	45
1960	184	675	15
1961	271	862	11
1962	276	851	20
1963	262	1,010	19
1964	235	1,814	41
Returns showing net income:			
1959	105	768	47
1960	116	490	24
1961	214	646	23
1962	185	788	25
1963	150	811	29
1964	154	1,096	46

1/ Derived from a sample of income tax returns for accounting periods ending in the 12-month interval beginning July 1 of the year shown.

Source: U.S. Treasury Department, Internal Revenue Service, Statistics of Income.

Table B-5-6.--Floor covering mills: Gross book value and depreciable assets, total, and by Census Bureau industries, 1962-64

(In millions of dollars)

Industry	1962	1963	1964
Floor covering mills, total	248	258	282
Woven carpets and rugs	137	135	138
Tufted carpets and rugs	104	116	136
Carpets and rugs, n.e.c	8	7	8

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Because of rounding, figures may not add to totals shown.

Table B-5-7.--Financial data relating to the operations of 17 U.S. producers of Wilton and velvet carpets and rugs, 1963-66 1/

(Values in thousands of dollars)

Item	1963	1964	1965	1966
	All products 2/			
Net sales	333,140	352,594	375,215	383,034
Cost of goods sold	275,987	290,982	307,408	314,736
Gross profit	57,153	61,612	67,807	68,298
Administrative and selling expense	42,000	42,441	45,538	45,949
Net operating profit	15,153	19,171	22,269	22,349
Ratio (percent) of net operating profit to net sales	4.5	5.4	5.9	5.8
	Wilton and velvet carpet and rugs			
Net sales	157,064	151,494	148,270	149,971
Cost of goods sold	129,910	124,960	121,842	122,841
Gross profit	27,154	26,534	26,428	27,130
Administrative and selling expense	20,877	18,973	19,604	19,489
Net operating profit	6,277	7,561	6,824	7,641
Ratio (percent) of net operating profit to net sales	4.0	5.0	4.6	5.1
Ratio (percent) of Wilton and velvet sales to sales of all products	47.1	43.0	39.5	39.1

1/ 1963 data relate only to 16 producers.
2/ All products made in the plants in which Wilton and velvet carpets and rugs were produced.

Source: Compiled from data supplied to the U.S. Tariff Commission by domestic producers.

Manmade fibers may be classified into two broad categories: (1) Cellulosic, which includes rayon (principally viscose and cuprammonium) and acetate (also diacetate and triacetate), and (2) noncellulosic, which includes acrylic (including modacrylic), azlon, glass, lastrile, nytril, olefin (principally polypropylene and polyethylene), polyester, saran, spandex, vinal, vinyon, and fluorocarbon. In 1966 the bulk of the world output of manmade fibers consisted of cellulosic fibers (mainly viscose and acetate). However, the annual world production of noncellulosic fibers (mainly nylon, polyester, and acrylic) has been increasing; it is expected to exceed the annual world output of cellulosic fibers by 1970.

End products of manmade fibers are generally manufactured in four broad stages: (1) The extrusion of fibers from polymers, (2) the processing of the fibers into yarn, (3) the processing of yarn into fabric, and (4) the processing of fabric into end products. There is considerable vertical integration among producers of products of manmade fiber; some extruders also manufacture yarns and fabrics, some yarn-producers make fabrics, and some fabric producers manufacture made-up goods. Many independent concerns conduct ancillary operations, such as the processing of waste, dyeing and finishing, and fabric and apparel designing.

According to the Textile Organon, a publication of the Textile Econonics Bureau, Inc., there were 888 manmade-fiber extruding plants in the world in 1967, compared with 543 in 1961. 1/ In 1967 about a fourth of the plants produced cellulosic fibers compared with more than 40 percent in 1961. In 1967 the United States had the largest number of plants (153) of any individual country; Japan was second (105); and the U.S.S.R. was third (56). The European Economic Community had 163 plants in 1967. In 1966 the United States accounted for over one-fourth of the world output of manmade fibers; the European Economic Community was second (accounting for about one-fifth), Japan, third, and the U.S.S.R., fourth.

The annual U.S. consumption of manmade fibers and manmade fiber products about doubled from 1961 to 1966. Domestic consumption was furnished predominantly by domestic production. Annual imports of manmade fibers and products thereof also increased from 1961 to 1966. Annual exports were larger in volume than imports from 1961 to 1965, but were less than imports in 1966.

1/ The Textile Economics Bureau, Inc., counts the machinery and equipment at one location devoted to the production of a manmade fiber as one "plant"; hence, more than one "plant" may be located under one roof. The data include those "plants" extruding producers' twist yarns (see subsequent section).

1. Manmade fibers

Both cellulosic and noncellulosic manmade fibers are produced--and used commercially--in a variety of forms, which may be grouped in the following five categories: (1) Monofilaments; (2) strips and plexiform filaments; (3) grouped filaments; (4) staple and other noncontinuous fibers; and (5) manmade fibers, processed but not spun. Not included here are the filaments for producers' twist yarn; 1/ this product is discussed in the subsequent section.

Many forms of manmade fibers have been recently developed. Although monofilaments have been produced for years, they are now manufactured with round, elliptical, flat, rectangular, or trilobal cross sections; other forms of monofilaments (known as slub, crepe, crimped, and thick-and-thin forms) are now produced by controlling the flow of the polymer during the extrusion process. Plexiform filaments, consisting of a network or plexus of fine fibers, are being used mostly experimentally. Grouped filaments may now be extruded in bi- or tri-component structures, as well as in a variety of forms that result from controlling the flow of the polymer. New types of staple have been developed recently to blend more effectively than before with natural fibers; other types have also been developed to help provide "durable press" and "washable" properties.

Waste of manmade fibers results from the operations both of extruders of manmade yarns and of mills processing manmade fibers. Much

1/ Producers' twist yarns are manufactured in the United States in great volume. Annual U.S. production of such yarns are roughly equivalent in volume to annual U.S. output of the manmade fibers classified here.

of such waste can be processed ("advanced") so that it may be used in the manufacture of textile products.

In recent years the United States has been the world's largest producer and consumer of manmade fibers. It has exported substantial quantities of monofilaments; it has imported large quantities of staple and grouped filaments. In the 1960's the U.S. balance of trade in manmade fibers changed from an export balance to an import balance.

Certain data on the operations of concerns producing manmade fibers are given in table C-1-1. As noted on the table, the data shown are for concerns whose primary business was the production of the fibers discussed here, as well as concerns whose primary business was the manufacture of producers' twist yarns. Since the statistics for the two groups of concerns cannot be segregated, the aggregate data are included in this section.

a. U.S. producers.--Currently about 60 firms in the United States extrude manmade fibers (or sheet from which strips are produced); many of them produce fibers in more than one of the aforementioned categories, i.e., monofilaments, grouped filaments, etc. The numbers of domestic firms that currently produce manmade fibers in each category are shown in the following tabulation:

Type of companies	Monofilaments	Grouped filaments	Staple and other noncontinuous fibers	Strips
Primary companies 1/	41	35	28	15
Secondary companies	-	-	2/ 40	3/ 30
Total	41	35	68	45
Primary companies that manufacture more than one product listed in this tabulation	14	32	26	7

1/ Concerns that extrude manmade fibers as monofilaments, grouped filaments, strips, or sheeting.
2/ Concerns that manufacture noncontinuous manmade fibers from monofilaments, grouped filaments or waste and do not extrude manmade fibers.
3/ Concerns that manufacture strips from sheeting and do not extrude manmade fibers.

Data on the number and location of plants that extrude manmade fiber and producers' twist yarn are given in table C-1-2.

Manmade fibers which are processed but not spun are manufactured by over 300 companies, but less than 100 of these concerns produce such fibers for sale in commercial trade channels. Currently producers' and mill wastes are further processed by almost 100 firms.

The companies extruding monofilaments, grouped filaments, strips, or sheeting for strips are usually large corporations with diversified interests. The secondary companies manufacturing staple or strips are mostly medium-sized, many being diversified. The firms that sell advanced waste and manmade fibers, processed but not spun, are also mainly medium sized; however, these firms rarely have other manufacturing interests.

b. Employment and wages.--Currently more than 150,000 workers are employed in manufacturing manmade fibers. More than half work in extrusion plants; the remainder work in plants that advance the extruded manmade fibers into usable forms for further manufacturing. Although statistical data are not available, aggregate employment, output per production worker, and output per man-hour are known to have increased materially during the 1960's. Average hourly wages have increased from less than $2.00 in 1961 to about $2.50 in 1967.

c. U.S. consumption.--The annual U.S. consumption of manmade fibers more than doubled between 1961 and 1966 (table C-1-3). The consumption of fiber in all five categories identified above--monofilaments, grouped filaments, staple, strips, and manmade fibers processed but not spun--was substantially larger in 1966 than in 1961.

In recent years aggregate annual imports of manmade fibers have generally supplied less than 10 percent of U.S. consumption of such fiber (table C-1-3). For most categories of manmade fibers, however, imports of the fiber concerned have accounted for 3 percent or less of U.S. consumption in most recent years. The share of annual U.S. consumption of monofilaments, strips, and staple supplied by imports thereof--the three categories in which the "import share" has been the largest--was as follows:

(Percent)

Year	Mono-filaments	Strips	Staple and other noncontinuous manmade fibers
1961	4	3	6
1962	6	3	7
1963	3	2	11
1964	1	3	11
1965	2	4	9
1966	2	2	11

The annual domestic consumption of rayon staple, the type of fiber considered here that is consumed in the largest quantities, increased markedly from 1961 to 1966. The share of the consumption supplied by imports ranged from 8 percent to 16 percent during those years (table C-1-4).

d. U.S. production.--The annual domestic production of manmade fibers more than doubled between 1961 and 1966. The annual output of fibers in all five categories was materially larger in 1966 than in 1961.

e. U.S. sales and inventories.--Statistical data are not available for inclusion in this report on U.S. sales and inventories of manmade fibers. A significant amount of the domestic output consists of "captive" production, i.e., the fiber concerned is used within the same concern that produced it. The bulk, however, is sold by producers to others. For example, almost all monofilament produced in the United States, which currently consists largely of nylon, is sold by the producers. The bulk of the grouped filaments produced in the United States is sold, although large quantities are consumed by some producing companies for manufacture into tire cord. Strips, which consist principally of slit sheets of cellulose, vinyl, and olefin derivatives, is practically all sold by the producers. Almost all noncontinuous manmade fibers produced (largely rayon, polyester and acrylic staple), is sold to others by the producers.

f. U.S. imports and exports.--Annual U.S. imports for consumption of manmade fibers nearly quadrupled between 1961 and 1966; they supplied 9 percent of domestic consumption in the latter year, compared with 6 percent in the former.

The very great bulk of U.S. imports of manmade fibers in the 1960's was accounted for by imports of staple fiber (largely rayon staple) and waste. Together imports of these products accounted for 97 percent of total U.S. imports of manmade fiber in 1961 and 98 percent, in 1966. Imports of other types of manmade fibers were small, in absolute amounts and in relation to U.S. consumption of the respective fibers.

Most of the individual types of manmade fibers imported into the United States have been similar to domestically produced fibers. The chief directly competitive monofilaments imported have been 15 denier nylon used in women's hosiery, vinal monofilaments used in apparel, nylon monofilaments used in fishing lines and tennis racquets, rayon monofilaments used as artificial horsehair, and polyester and nylon monofilaments used in brush bristles. The major directly competitive grouped filaments imported have been viscose filaments used in tire cord, off-grade nylon filaments used in apparel, and acetate tow used in cigarette filters. The chief directly competitive types of noncontinuous manmade fibers imported are shown in the following tabulation:

Type	Description	Use
Viscose staple-----	1.5 denier, bright luster------------	Apparel
Viscose staple-----	8 denier, bright luster--------------	Carpets or upholstery
Viscose staple-----	14 denier, bright luster, crimped----	Carpets
Viscose staple-----	15 denier, bright luster, crimped----	Carpets
Acrylic staple-----	3 denier, semidull luster------------	Apparel
Acrylic staple-----	15 denier, crimped-------------------	Carpets
Polyester staple--	1.5 denier, semidull luster, crimped	Apparel
Polyester staple--	2.25 denier, semidull luster, crimped	Apparel
Nylon staple-------	3 denier, semidull luster, crimpset--	Apparel
Nylon staple-------	6 denier, semidull luster, crimpset--	Apparel
Nylon staple-------	18 denier, crimpset------------------	Carpets

U.S. imports of monofilaments have come in recent years mainly from West Germany, Italy, and Japan; grouped filaments from the Netherlands and West Germany; and strips from Switzerland and Japan. Imports of noncontinuous manmade fibers have entered principally from Japan and West Germany, but several other countries have been major suppliers of certain types. Rayon staple has been imported mainly from West Germany, France, Austria, and Sweden; nylon staple from Japan; polyester staple from Japan and West Germany; acrylic staple from Japan, West Germany, and the United Kingdom; and other manmade fiber staple from Japan, West Germany, and Italy. Imports of rayon waste have come mostly from Canada and India; nylon waste from Canada, Switzerland, West Germany, and the U.S.S.R.; polyester waste from West Germany and Canada; acrylic waste from the United Kingdom; and other manmade fiber waste from Canada, Italy, and the United Kingdom. Advanced wastes have been imported largely from West Germany and Canada, and manmade fibers, processed but not spun, from Canada and Japan.

Aggregate annual U.S. exports of manmade fibers and wastes thereof, although larger in quantity than imports of such products in 1961, have been materially smaller than annual imports since then. The volume of exports was equivalent to about one-half of the volume of imports in 1966. Nevertheless, the United States has had an export balance of trade for some categories of fiber. For example, annual exports of monofilaments exceeded imports in 1964-66 and exports of grouped filaments exceeded imports in 1961-66; exports of strips were slightly larger than imports in 1961 and 1966. Monofilaments have been shipped mainly to Canada, the Netherlands, and South Vietnam; nylon grouped filaments have gone principally to Canada; polyester grouped filaments, to the U.S.S.R., the Netherlands, and Italy; acrylic grouped filaments to Spain and the Netherlands; and acetate grouped filaments, to Australia, the Philippine Republic, and Belgium.

Annual U.S. exports of staple and other noncontinuous manmade fibers have been less than imports since 1962; in 1966 exports were one-fourth as large as imports. Rayon staple has been exported mostly to the Congo and Canada; acetate staple to Canada; nylon staple to Canada and the Netherlands; acrylic and modacrylic staple to Canada, Mexico, the U.S.S.R., the Netherlands, Australia, and West Germany; and other manmade fiber staple to the United Kingdom and Canada.

Annual U.S. exports of waste of manmade fibers have exceeded imports since 1963; the principal markets have been Italy, the Republic of South Africa, Japan, Canada, and the Netherlands. U.S. exports of manmade fibers, processed but not spun, have greatly exceeded imports since 1961; they have been shipped principally to Italy, Peru, and Canada.

g. Prices.--Because of the large number of individual types of manmade fibers and the variety of factors that affect the price of each, the prices of individual manmade fibers rarely, if ever, all follow the same trend during a given period of time. Rather, the prices of some manmade fibers are likely to be increasing, while the prices of others are stable and the prices of still others are declining.

Extensive information is published in trade journals on the list prices of manmade fibers. Sales of such fibers, however, are often made at other than list prices. The Bureau of Labor Statistics, however, publishes wholesale price indexes for four selected manmade fibers; the indexes for recent years are shown in table C-1-5. The Bureau does not publish price indexes for any monofilaments, strips, waste, or processed but not spun manmade fibers.

h. Profitability and investment.--Data on the profitability and investments of U.S. producers of manmade fiber are not available for inclusion in this report.

i. U.S. customs treatment. 1/--U.S. imports of the manmade fibers considered here are dutiable under provisions of schedule 3, part 1,

1/ The rates of duty discussed are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates.

of the TSUS. Some types of manmade fibers are dutiable at ad valorem rates; some are dutiable at specific rates, and some at compound rates.

Based on imports in 1966, the average ad valorem equivalents of the individual rates of duty in the TSUS applicable to manmade fibers ranged from about 2 percent to 51 percent. However, the great bulk of U.S. imports in that year--91 percent--were dutiable at 15 percent ad valorem.

All of the U.S. duties on manmade fibers were the subject of concessions in the Kennedy Round of tariff negotiations completed in June 1967, in Geneva. These concessions, amounting on each tariff item to 50 percent of the present duty, will become effective in five annual stages; the first stage went into force on January 1, 1968.

j. Foreign production and trade.--The annual world production of manmade fibers has increased markedly in the 1960's. Output in 1967 likely was more than double that in 1960.

Annual world production of monofilaments is estimated to have increased from 60 million pounds in 1961 to 190 million pounds in 1966. The United States, the world's largest producer, has in recent years accounted for about 40 percent of the output. Important foreign producers are Japan, Italy, West Germany, and the United Kingdom. World production consists mainly of nylon monofilaments; olefin monofilaments probably are second in importance. The leading foreign exporters in 1966 were Italy, West Germany, the United Kingdom, and Japan. Exports from these countries are generally increasing; those from Japan, West Germany, and Italy have shown the greatest increase in recent years.

The leading world importers of monofilaments in 1966 were West Germany, the United Kingdom, France, Sweden, South Africa, and India. Imports of monofilaments into these countries have been increasing; the first 3 named, however, were on an export basis in 1966.

Annual world production of grouped filaments is estimated to have increased from 280 million pounds in 1961 to 850 million pounds in 1966. The United States, the world's largest producer, accounted annually for about 45 percent of that output. The leading foreign countries producing grouped filaments in 1966 were Japan, West Germany, the United Kingdom, the U.S.S.R., and Italy. The principal importing countries in 1966, other than the United States, were believed to be Communist China, West Germany, the U.S.S.R., Belgium, the United Kingdom, and the Republic of South Africa. The leading foreign exporting countries in the same year were probably West Germany, Japan, Italy, the United Kingdom, France, and the Netherlands.

World production of staple is estimated to have increased from about 4 billion pounds in 1961 to almost 7 billion pounds in 1966. 1/ Cellulosic staple, predominantly viscose, was the leading type produced in the world in 1966, followed by acrylic (including modacrylic), polyester, and nylon. The United States was the world's leading producer of staple in 1966, accounting for almost a fourth of the world output. Japan was the second (20 percent of the total); other important world producers were West Germany, the United Kingdom, the U.S.S.R., and Italy.

1/ Staple probably constitutes about 95 percent of the world production and trade of the noncontinuous manmade fibers considered here.

The foremost world exporters of staple in 1966 probably were Japan, West Germany, Italy, the United Kingdom, and France. The leading world importers in 1966 probably were the U.S.S.R. and the United States. Communist China, the Republic of South Africa, the United Kingdom, and West Germany also imported substantial quantities.

Data are not available on the world production of and trade in other forms of manmade fibers, e.g., strips, and manmade fibers, processed but not spun.

Table C-1-1.--Manmade fibers: General statistics for the cellulosic and noncellulosic fibers industries, 1961-65

Description	1961	1962	1963	1964	1965
Cellulosic manmade fibers:					
All employees:					
Number	33,071	35,082	30,089	31,891	33,957
Payroll ($1,000)	171,695	183,782	167,045	182,876	197,981
Production workers:					
Number	25,575	27,303	24,016	25,474	27,219
Man-hours (1,000)	50,098	53,762	48,116	51,963	54,319
Wages ($1,000)	118,094	128,549	120,508	132,487	141,818
Value added by manufacture ($1,000)	358,417	413,709	378,533	483,542	507,615
New capital expenditures ($1,000)	29,776	26,555	38,129	83,700	72,977
Noncellulosic manmade fibers:					
All employees:					
Number	28,956	31,833	41,426	44,318	50,883
Payroll ($1,000)	186,443	214,361	275,838	304,636	354,784
Production workers:					
Number	20,386	23,257	28,388	30,722	35,994
Man-hours (1,000)	40,230	46,473	57,245	62,323	72,818
Wages ($1,000)	111,832	131,369	161,058	180,579	214,645
Value added by manufacture ($1,000)	668,061	793,155	896,744	1,043,091	1,119,055
New capital expenditures ($1,000)	117,550	118,351	170,225	163,583	366,337

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--These data include statistics on concerns manufacturing producers' twist yarns, as well as those producing the manmade fibers discussed in the foregoing section.

Table C-1-2.--Manmade fibers: Number of extruding plants in the United States, 1967

Region and State	Viscose	Cupram-monium	Acetate	Acrylic	Nylon	Olefin	Poly-ester	Textile glass	Other	Total
New England:										
Massachusetts	1	-	-	-	-	2	-	-	1	4
Rhode Island	-	-	-	-	-	1	-	1	3	5
Vermont	1	-	-	-	-	-	-	-	-	1
Total	2	-	-	-	-	3	-	1	4	10
Middle Atlantic:										
New Jersey	-	-	-	-	1	3	-	-	1	5
New York	1	-	-	-	1	5	1	2	1	11
Pennsylvania	1	-	1	-	4	2	1	1	1	11
Total	2	-	1	-	6	10	2	3	3	27
South Atlantic:										
Delaware	-	-	-	-	1	-	-	-	-	1
Florida	-	-	-	1	1	1	-	-	1	4
Georgia	-	-	1	-	1	5	-	-	-	7
Maryland	-	-	1	-	1	1	1	-	1	5
North Carolina	1	-	-	-	4	1	6	4	2	18
Puerto Rico	-	-	-	-	1	-	-	-	-	1
South Carolina	-	-	1	1	7	4	5	2	1	21
Virginia	1	-	2	2	4	2	-	-	2	13
West Virginia	2	-	-	1	1	-	1	-	1	6
Total	4	-	5	5	21	14	13	6	8	76
East South Central:										
Alabama	2	-	-	1	1	1	1	-	-	6
Kentucky	-	-	-	-	-	-	-	-	1	1
Tennessee	2	1	1	1	5	5	4	1	-	20
Total	4	1	1	2	6	6	5	1	1	27
Other States:										
California	-	-	-	-	-	3	-	1	-	4
Indiana	-	-	-	-	-	-	-	1	-	1
Iowa	-	-	-	-	1	1	-	-	-	2
Kansas	-	-	-	-	-	-	-	-	1	1
Louisiana	-	-	-	-	-	1	-	-	-	1
Ohio	1	-	-	-	-	-	1	2	-	4
Total	1	-	-	-	1	5	1	4	1	13
Grand total	13	1	7	7	34	38	21	15	17	153

Source: Textile Organon, published by the Textile Economics Bureau, Inc.

Note.--The data in this table include plants manufacturing producers' twist yarns, as well as the manmade fibers discussed in the foregoing section.

Table C-1-3.--Manmade fibers, and wastes: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1961-66

Year	Production 1/	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity (1,000 pounds)				
1961	909,315	52,450	64,629	897,136	6
1962	1,136,439	80,448	70,030	1,146,857	7
1963	1,368,933	138,602	72,936	1,434,599	10
1964	1,561,325	149,780	84,939	1,626,166	9
1965	1,909,390	145,143	73,680	1,980,853	7
1966	2,115,290	199,711	97,205	2,217,796	9
	Value (1,000 dollars)				
1961	654,566	16,224	47,094	623,696	3
1962	803,860	27,163	45,273	785,750	3
1963	953,436	34,712	43,739	944,409	4
1964	1,197,752	41,875	59,905	1,179,722	4
1965	1,424,194	54,159	49,909	1,428,444	4
1966	1,613,094	65,178	57,756	1,620,516	4

1/ Quantity partially estimated from Textile Organon figures; value partly estimated from list prices published in Modern Textiles magazine.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Note.--The statistics shown do not include data on the quantity of filaments extruded in the process of manufacturing producers' twist yarns. If such data were included, the quantity of U.S. production would be about double that shown.

Table C-1-4.--Rayon staple fiber: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1961-66

Year	Production	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity (1,000 pounds)				
1961----------	387,524	33,599	1,290	419,833	8
1962----------	483,800	48,789	2,015	530,574	9
1963----------	563,225	108,875	1,422	670,678	16
1964----------	576,471	98,457	952	673,976	15
1965----------	628,560	70,787	5,720	693,627	10
1966----------	639,424	101,021	7,050	733,395	14
	Value (1,000 dollars)				
1961----------	126,255	7,200	515	132,940	5
1962----------	154,284	9,367	622	163,029	6
1963----------	157,703	20,176	480	177,399	11
1964----------	224,824	19,648	360	244,112	8
1965----------	245,138	14,283	1,912	257,509	6
1966----------	236,587	18,511	2,191	252,907	7

Source: Compiled and partly estimated from official statistics of the U.S. Department of Commerce.

Table C-1-5.--Wholesale price index for staple and tow (a grouped filament) of selected manmade fibers, 1962-67

(December 1965 = 100, unless otherwise noted)

Description	Wholesale price index as of June--					
	1962	1963	1964	1965	1966	1967
Acrylic tow, 3 denier	-	-	-	-	100.0	100.0
Viscose staple, 1.5 denier 1/	84.9	85.1	89.9	89.8	89.9	-
Polyester staple, 1.5 denier 2/	-	-	92.0	78.9	78.9	61.0
Acrylic carpet staple, 15 denier	-	-	-	-	100.0	91.5

1/ 1957-1959 = 100.
2/ December 1963 = 100.

Source: Compiled from official statistics published by the Bureau of Labor Statistics.

2. Yarns

Yarns of manmade fibers may be grouped into four categories: (1) Yarns wholly of continuous fibers (including producers' twist yarns 1/); (2) spun yarns, i.e., yarns wholly of staple or other non-continuous fibers (fiber in short lengths); (3) sewing thread; and (4) miscellaneous yarns such as handwork, chenille, continuous-noncontinuous combination, and core-spun yarns.

In recent years the United States has been one of the world's largest producers of yarns of manmade fibers. The U.S. output of yarns wholly of continuous fibers has been larger than that of any other country, and the U.S. output of spun yarns and sewing thread have been among the world's largest. In recent years the United States has become a significant importer of yarns of continuous manmade fibers. It has ranked as a major exporter of such yarns as well as a major exporter of spun yarns; the U.S. foreign trade in the other yarns of manmade fibers has been small.

In recent years a number of technological developments have influenced the variety and volume of yarns of manmade fibers consumed in the United States. As described in the preceding sections on manmade fibers, filaments of continuous manmade fibers have recently been produced in a variety of new shapes and forms; the use of such filaments in the production of yarns has resulted in numerous new types of yarn. Yarns have recently been subjected to a process known as texturing

1/ Yarns made of continuous manmade filaments which are grouped and given slight twists in the manufacturing process.

which gives them added bulk or elasticity. Spun yarns are now formed from continuous grouped filaments by a number of direct processing techniques. Also developed recently are special spun yarns to blend with yarns of natural fibers, as well as core-spun yarns of manmade fibers, produced by winding a yarn of continuous or noncontinuous manmade fiber around an untwisted monofilament or grouped filament.

a. U.S. producers.--Yarns of manmade fibers are produced or processed in almost 900 plants in the United States; the plants are owned by about 650 firms. Producers' twist yarns are manufactured in 64 plants; 240 other plants twist, ply, and/or texture such yarns. About 400 plants manufacture spun yarns and some 50 plants make sewing thread. Approximately 100 plants not covered above produce the yarns grouped in the aforementioned miscellaneous category. Most of the plants producing or processing yarns of manmade fibers are situated in the Southeastern States.

The plants manufacturing producers' twist yarns are generally owned by large corporations with diversified interests. Those that twist, ply, and texture these yarns are mostly owned by medium-sized companies without other manufacturing interests. The firms producing spun yarns are also mainly medium-sized; some of these companies manufacture other products. The companies producing sewing thread are generally medium-sized; few of them manufacture products other than sewing thread. Most of the companies producing the miscellaneous yarns of manmade fibers considered here are small; a large share of the output of such yarns, however, is concentrated in a few large or medium-sized corporations.

b. Employment and wages.--It is estimated that more than 175,000 workers were employed in the manufacture of yarns of manmade fibers in 1966. About half of these were employed in plants producing spun yarns; one-fifth of them in plants that twisted, plied, and textured yarns of continuous manmade fibers; and another one-fifth, in manufacturing the miscellaneous yarns mentioned previously. The remaining tenth were employed in plants manufacturing producers' twist yarn (a highly automated process) and sewing thread.

In view of the marked increase in annual U.S. production of yarns of manmade fibers during the 1960's, employment in yarn-making establishments probably increased materially in those years; data on such employment are not available. According to trade reports, output per man-hour increased in the 1960's; hence, the employment in yarn-making establishments probably did not increase commensurately with production.

c. U.S. consumption.--The annual U.S. consumption of yarns of manmade fibers more than doubled between 1961 and 1966; it increased from 1.7 billion to 3.5 billion pounds in those years. Such consumption was supplied almost wholly by domestic output; imports of yarns of manmade fibers were equivalent to less than 1 percent of U.S. consumption in each of those years. The growth in consumption occurred in all four categories of yarns considered here, but the consumption of yarns wholly of continuous manmade fibers probably increased more than that of other yarns classified in the other categories identified above (table C-2-1).

d. U.S. production.--Along with the growth in U.S. consumption, the annual domestic production of yarns of manmade fibers also doubled between 1961 and 1966; it increased from 1.7 billion pounds in 1961 to 3.6 billion pounds in 1966. Materially more than half of the output in those years consisted of producers' twist yarns. Spun yarns accounted for most of the remainder.

e. U.S. sales and inventories.--The bulk of the yarns of manmade fiber production in the United States is sold by the producers to others, but a substantial portion is used by the company manufacturing it. Most of the output of producers' twist yarns, for example, is sold to companies who further process them; a large portion of the output, however, is used within the producing companies, chiefly to manufacture tire cord and tire cord fabric, or textured yarns. Most of the production of spun yarns is consumed within the plant manufacturing it. Sewing thread is rarely used within the plant making it. Handwork yarns and chenille yarns are almost always sold to others by the producing company, but most continuous-noncontinuous combination yarns are consumed within the producing companies.

Aggregate data on U.S. sales and inventories of yarns of manmade fibers are not available, but data on U.S. sales of certain individual types of such yarns are published. These data are given in the following tabulations; sales of the yarns involved in 1966 were equivalent to about a fifth of the U.S. output of all yarns of manmade fiber in that year.

U.S. sales of textured yarn of manmade fiber for the period 1961-66 were as follows (in thousands of pounds):

Year	Nylon	Rayon and acetate	Other	Total
1961	81,646	7,489	583	81,646
1962	115,078	8,446	886	124,410
1963	125,348	8,382	1,685	135,415
1964	169,715	8,020	3,928	181,663
1965	207,219	12,723	5,753	225,695
1966				

Source: Compiled from official statistics of the U.S. Department of Commerce.

U.S. sales of spun yarns of manmade fibers for the period 1961-66 are shown in the following tabulation (in thousands of pounds):

Year	Rayon and/or acetate	Other man-made fibers	Total
1961	113,106	108,371	221,477
1962	144,016	151,487	295,503
1963	165,983	183,345	349,328
1964	194,476	213,529	408,005
1965	213,987	238,283	452,270
1966	225,757	269,177	494,934

Source: Compiled from official statistics of the U.S. Department of Commerce.

U.S. sales of sewing thread of manmade fibers of reporting members of The Thread Institute 1/ for the period 1961-66 are shown below (in thousands of pounds):

1/ These data are believed to account for almost all of the domestic output.

Year	Home consumption	Industrial	Weight goods	Total
1961	36	3,615	637	4,288
1962	29	4,430	687	5,146
1963	26	4,708	974	5,708
1964	30	5,549	1,132	6,711
1965	29	7,225	1,210	8,464
1966	16	7,081	1,388	8,485

f. U.S. imports and exports.--Annual U.S. imports of yarns of manmade fibers were more than three times larger in 1966 than in 1961; however, as noted earlier, they were equivalent in each of those years to materially less than 1 percent of domestic consumption. The imports have come mainly from Italy, Canada, West Germany, Japan, Switzerland, and France.

In recent years a variety of yarns of manmade fibers have been imported into the United States--both cellulosic and noncellulosic yarns, singles and plied, and yarns of continuous and noncontinuous manmade fibers. The predominant yarns imported have been composed wholly of manmade fibers but some have been mixtures of manmade and natural fibers. They have been intended for use in tires, apparel, carpets, and industrial applications. Most of the yarns imported have been similar to domestic products; they generally could be used on the same machinery as the domestic yarns, and usually were equal in quality to their domestic counterparts.

The yarns most directly competitive of continuous manmade fibers that are imported in substantial quantities include 1650 denier high tenacity viscose, 200 denier solution-dyed acetate, 40 denier dull luster and 70 denier semidull luster nylon, 840 denier high tenacity nylon, 3700 denier textured nylon, 40 denier dull luster and 250 denier bright luster polyester, 70 denier high tenacity polyester, and 1100 denier high tenacity polyester. The most directly competitive yarns of noncontinuous manmade fibers that are imported include singles and plied viscose yarns and singles and plied acrylic yarns. The major imported sewing threads include those composed of nylon, polyester, and high tenacity viscose fibers, and the major imported yarns of mixed manmade and natural fibers include acrylic-wool and polyester-cotton combination yarns in chief value of manmade fibers.

In the period 1961-66, annual U.S. exports of domestic yarns of manmade fibers were generally several times larger than annual imports of such yarns. Annual exports increased from 1961 to 1964, but then declined sharply in 1965 and 1966. They were equivalent in those years to 2 to 5 percent of the domestic production of such yarns. Producers' twist yarns account for the bulk of the U.S. exports. The principal markets in the years concerned were Belgium and Luxembourg, Canada, the United Kingdom, the Netherlands, the Korean Republic, and India.

g. Prices.--Because of the large number of individual yarns of manmade fibers produced in the United States and the variety of factors that affect the price of each, the prices of the individual yarns rarely, if ever, all follow the same trend during a given period of time. Rather, the prices of some yarns of manmade fibers are likely to be increasing, while the prices of others are stable, and the prices of still others are declining.

The Bureau of Labor Statistics publishes indexes of wholesale prices for a number of yarns of manmade fibers; the indexes for recent years are shown in table C-2-2. Except for two of the yarns for which data are shown, the indexes indicate that prices of each of the yarns were either stable or increased slightly during the period 1962-67. The prices of one nylon filament yarn (15 denier) decreased markedly; the wholesale price index for that yarn (1957-59 = 100) declined from 74 in June 1962 to 52 in June 1967. The index of the wholesale prices of certain acrylic knitting yarn (December 1964 = 100) declined from 102 in June 1965 to 99 in June 1967. The wholesale price indexes published by the Bureau are not comprehensive; no index is published, for example, for any yarn of polyester fiber.

h. Profitability and investment.--Data are not available on the profitability of the U.S. producers of yarns of manmade fibers, either for all producers in the aggregate or for producers of individual yarns such as producers' twist yarns, spun yarns, and sewing thread. The economic climate has been such, however, to persuade domestic interests to establish 22 new plants for the manufacture of producers' twist yarns in the 7 years 1961-67. The number of plants producing other types of yarn of manmade fiber remained about unchanged in those years; there was, however, investment in new machinery and equipment in the great majority of such establishments in those years.

i. U.S. customs treatment.[1]--Yarns of manmade fibers are classified in schedule 3, part 1, of the TSUS. Some of the rates of duty applicable to such yarns are ad valorem, some are specific, and some are compound.

Based on the duties collected in 1966, the average ad valorem equivalents of the individual rates of duty on yarns of manmade fibers ranged from 22 to 50 percent. The various rates of duty applicable to yarns of continuous manmade fibers were equivalent on the average to from 23 percent to 32 percent ad valorem; those on spun yarns, from 30 percent to 35 percent ad valorem; those on miscellaneous yarns (including sewing thread), from 22 percent to 50 percent ad valorem. Yarns of continuous manmade fibers accounted for nearly 75 percent of the total imports of manmade fiber yarns in 1966; some of these yarns (those provided for in TSUS No. 310.01) were dutiable at 25¢ per pound (equal on the average to 31 percent ad valorem on the basis of duties collected on the 1966 imports) and some (TSUS No. 310.02) were dutiable at 22.5 percent ad valorem.

As a result of tariff concessions negotiated by the United States during the Kennedy round, the rates of duty applicable to almost all manmade fiber yarns will be reduced by 50 percent. These reductions

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates.

will become effective in five annual stages, the first of which occurred on January 1, 1968. Two tariff items, those pertaining to manmade fiber yarns put up for handwork and to sewing threads (310.90 and 310.91), were not subject to concessions negotiated during the Kennedy round.

j. Foreign production and trade.--In recent years, most of the world trade in yarns of manmade fibers considered here consisted of trade in producers' twist yarns. Considerable data are available on world production of and trade in such yarns, but none is available for inclusion here on world production of and trade in other yarns of manmade fibers (e.g., spun yarns and sewing thread).

In 1967 more than 300 foreign companies, some government-owned, manufactured producers' twist yarns. The companies operated about 400 plants, which were located in about 50 countries.

World production of producers' twist yarns of manmade fiber increased from 3.8 billion pounds in 1961 to 6.6 billion pounds in 1966. The United States was the leading producer of these yarns in 1966, accounting for almost a third of the world output in that year. The European Economic Community (EEC) was the second largest world producer in 1966; it accounted for about a fifth of the world output in that year. Japan was third, accounting for approximately a tenth of the world output in 1966.

The foremost world exporter of producers' twist yarns in 1966 was the EEC; it exported almost four times more producers' twist yarns than the second leading exporter, Japan. The United States ranked third as an exporter of these yarns in 1966.

The EEC was by far the largest world importer of producers' twist yarns in 1966; it imported over five times more than the second leading importing country, the Republic of Korea. Communist China was the third largest importer of producers' twist yarns. The United States ranked 16th in the world as an importer of producers' twist yarns in 1966.

Table C-2-1.--Yarns, including sewing thread, of manmade fibers: U.S. production, imports for consumption, and exports of domestic merchandise, 1961-66

Year	Production 1/	Imports	Exports	Apparent consumption
	Quantity (1,000 pounds)			
1961	1,748,674	5,720	87,152	1,667,242
1962	2,109,872	7,880	113,696	2,004,056
1963	2,303,175	7,451	101,462	2,209,164
1964	2,648,808	9,129	120,265	2,537,672
1965	2,983,532	15,351	102,125	2,896,758
1966	3,568,568	19,843	71,868	3,516,543
	Value (1,000 dollars)			
1961	1,933,748	5,230	95,242	1,843,736
1962	2,341,003	7,866	123,057	2,225,812
1963	2,569,542	8,553	111,558	2,466,537
1964	2,873,503	10,446	138,983	2,744,966
1965	3,288,111	15,771	112,239	3,191,643
1966	4,188,424	19,345	78,152	4,129,617

1/ Quantity partly estimated from Textile Organon figures; value partly based on list prices published in Modern Textiles magazine for continuous yarns covered here.

Source: Compiled from official statistics of the U.S. Department of Commerce unless otherwise noted.

Note.--The ratio (percent) of imports to consumption has been under 1 percent in every year of the period 1961-66. See text.

Table C-2-2.--Wholesale price index for filament and spun yarns, 1962-67

(1957-1959 = 100, unless otherwise noted)

Description	Wholesale price index as of June--					
	1962	1963	1964	1965	1966	1967
Filament yarns:						
Viscose filament yarn, 100 denier	99.8	99.8	99.8	99.8	102.9	102.9
Viscose filament yarn, 150 denier	97.8	97.8	97.8	97.8	100.1	100.9
Viscose filament yarn, 300 denier	102.9	102.9	102.9	102.9	105.6	105.8
Viscose filament yarn, 1100 denier	89.0	89.0	89.0	89.0	-	-
Viscose filament tire yarn, 1650 denier	-	-	-	-	89.0	89.0
Acetate filament yarn, 75 denier	97.2	97.2	97.2	97.2	97.2	97.2
Acetate filament yarn, 100 denier	97.7	97.7	97.7	97.7	97.7	97.7
Acetate filament yarn, 150 denier	96.9	96.9	96.9	96.9	96.9	96.9
Nylon filament yarn, 15 denier	74.0	74.0	66.4	62.6	59.1	52.1
Nylon filament yarn, 40 denier	100.0	100.0	100.0	100.0	100.0	100.0
Nylon filament yarn, 70 denier	100.0	100.0	100.0	100.0	100.0	100.0
Nylon tire yarn, 840 denier 1/	-	-	-	-	100.0	100.0
Spun yarns:						
Rayon viscose, weaving, 30/ 1, 1.5 denier	93.1	92.4	94.9	94.4	98.0	93.7
Acrylic, knitting, 2/20, 3-6 denier 2/	-	-	-	101.7	102.3	98.8

1/ December 1965 = 100 2/ December 1964 = 100

Source: Compiled by U.S. Tariff Commission from official statistics of the Bureau of Labor Statistics.

3. Fabrics

This section encompasses fabrics and related textiles wholly or chiefly of manmade fibers. These articles are classified here in two groups: (1) Woven fabrics exceeding 12 inches in width (referred to as broadwoven), and (2) "other" fabrics and related articles. The broadwoven fabrics are by far the principal products considered here, accounting for the great bulk of U.S. production of, and foreign trade in, such commodities. "Other" fabrics and articles of manmade fibers include such items as knit, tufted, narrow, lace, nonwoven, and embroidered fabrics, as well as netting, nonelastic braids and other trimmings, webs, wadding, batting, felts and articles made therefrom, fish nets, machine belts, hose for conducting liquids and gases, and elastic yarns, cordage, braids, and fabrics.

The United States is a leading world producer of broadwoven fabrics of manmade fibers. Annual output in the United States has expanded markedly in recent years, increasing from 3.3 billion square yards in 1961 to 5.8 billion square yards in 1966. U.S. imports of such fabrics, however, expanded at a more rapid rate than domestic production; hence, imports were equivalent to 4 percent of domestic consumption in 1966 compared with 1 percent in 1961. The United States was a net exporter of broadwoven fabrics of manmade fibers until 1965; since then the volume of annual imports of such fabrics has exceeded annual exports.

U.S. production and exports of most of the "other" products of manmade fibers considered here have been much larger than imports;

U.S. imports of a few such articles, however, such as V-belts, fish nets, and lace, probably supply a significant share of domestic consumption.

a. U.S. producers--Establishments primarily engaged in weaving fabrics over 12 inches in width, wholly or chiefly of silk and man-made fibers, are classified in the Standard Industrial Classification Manual as "Broad Woven Fabric Mills, Man-Made Fiber and Silk (industry No. 2221). The weaving of silk fabrics is believed to account for a relatively minor part of the aggregate operations of such establishments. In 1963 the industry was composed of 277 companies operating 355 establishments and employing 88,157 persons; the corresponding figures for 1958 are 324 companies operating 401 establishments, and employing 81,688 employees (table C-3-1). The geographical distribution of the establishments in 1963 was as follows:

Area	Number of establishments
New England	68
Middle Atlantic	133
South	147
North Central and West	7
	355

More than half (186) of these establishments employed over 100 persons each; 121 employed more than 250 persons each; and 14 employed more than 1,000 persons each. In 1963, 4 of the largest companies accounted for 39 percent of the total value of shipments of the industry; 8 companies accounted for 48 percent, 20 for 64 percent, and 50 for 82 percent.

Some of the weaving establishments have finishing facilities, but the bulk of the fabrics requiring finishing processes are shipped by the weaving mills to plants specializing in these operations. Plants primarily engaged in finishing purchased manmade fiber and silk broadwoven fabrics or finishing such fabrics on a commission basis are included in industry No. 2262. In 1963 this industry comprised 193 companies operating 205 establishments and employing 19,528 persons; corresponding data for 1958 are 185 companies, 197 establishments, and 16,185 employees (table C-3-2). These establishments were located mainly in the Middle Atlantic area, with most of the remainder in New England and the South.

The "other" fabrics and articles of manmade fibers considered here are important products of several industries separately identified in the U.S. census. Data on the number of U.S. producers in six of these industries have been given in the earlier section of this report on cotton fabrics. In the aggregate, more than 2,100 establishments were classified in 1963 within the scope of these industries. Most of the establishments were located along the east coast, especially in the Northeast and the South. About two-thirds of them employed fewer than 20 persons each. Most of the establishments purchase the yarns or fibers used in their manufacturing operations; a considerable number of them are believed to use manmade fibers exclusively. Establishments in several other industries--e.g., industry Nos. 2253 (knit outerwear mills) and 2254 (knit underwear mills)--also produce substantial quantities of fabrics of manmade fibers, most of which are consumed by them in the fabrication of end products.

b. Employment and wages.--According to Bureau of the Census data, the number of production workers employed in manmade fiber weaving mills (industry 2221) has increased in each year since 1961, from 71,042 in that year to 92,282 in 1966 (table C-3-1). Production workers accounted for about 90 percent of the total employment by the mills. Aggregate annual wages paid production workers increased from $249 million in 1961 to $417 million in 1966. Hourly wages paid production workers averaged $1.69 in 1961 and $2.07 in 1966. Available data indicate that employment in January-October 1967 may have averaged somewhat lower than in the corresponding period of 1966, but that hourly earnings increased.

The number of production workers in plants primarily engaged in the finishing of manmade fiber fabrics (industry 2262) increased from 13,758 in 1961 to 20,536 in 1966. Such workers accounted for about 85 percent of the total employment of the plants. Aggregate annual wages paid production workers rose from $61 million to $108 million over the same period, and average hourly wages rose from $2.05 to $2.36.

Data on the aggregate employment and wages paid in plants producing the "other" fabrics and related articles considered here generally are not available. However, data for plants producing certain special construction and special purpose fabrics and articles of manmade fibers are published. Aggregate employment and wages in the plants producing such special products have increased moderately in recent years (table C-3-3 and C-3-4).

c. U.S. consumption.--The annual U.S. consumption of broadwoven fabrics of manmade fibers rose from 3.2 billion square yards in 1961 to 5.9 billion square yards in 1966, an increase of 87 percent (table C-3-5). In recent years U.S. consumption of such fabrics has been furnished principally by domestic production; the share supplied by imports, however, increased from 1 percent in 1961 to 4 percent in 1966. During the 1960's the major increases in the U.S. consumption of broadwoven fabrics of manmade fibers were accounted for by nylon filament fabrics, glass fabrics, spun rayon and acetate fabrics, spun rayon- or acetate-cotton blends, polyester-cotton blends, polyester-rayon blends, and spun-filament blends of rayon and acetate.

Aggregate data on U.S. consumption of the products other than broadwoven fabrics considered here are not available. The annual consumption of most such products, however, is believed to have increased during the 1960's. Available data on the U.S. consumption of knit fabrics, narrow fabrics and fish netting and fishing nets are shown in table C-3-6.

d. U.S. production.--The annual U.S. production of broadwoven fabrics of manmade fibers rose from 3.3 billion square yards in 1961 to 5.8 billion square yards in 1966, an increase of nearly 80 percent (table C-3-5). The principal fabrics produced in 1966 were polyester-cotton blends, acetate taffetas, spun rayon-cotton blends, spun-filament combinations of rayon or acetate, rayon and/or acetate spun-yarn fabrics, polyester filament fabrics, household fabrics of glass fibers, polyester-rayon blends, and nylon taffetas. Almost all domestic broadwoven fabrics of manmade fibers are shipped to other companies which use the fabrics in the manufacture of apparel, household articles, and industrial products.

Aggregate data on the U.S. output of the products other than broadwoven fabrics considered here are not available. Annual U.S. production of most such products is believed, however, to have increased materially during the 1960's. Available data pertaining to the domestic output of certain products are shown in table C-3-6.

e. U.S. sales and inventories.--Data are not available on the sales of broadwoven fabrics of manmade fiber. An indication of the trend of sales of broadwoven fabrics, however, may be derived from data on the aggregate value of shipments of the weaving mills identified above (industry 2221) and the finishing plants identified above (industry 2262). The value of annual shipments by the weaving mills was 69 percent greater in 1966 than in 1961, having increased to $2.2 billion from $1.3 billion in the respective years; the value of shipments by the finishing plants was 104 percent greater in 1966 than in 1961, having increased to $250 million from $135 million between those years.

The inventories of manmade-fiber broadwoven fabrics in the gray (unfinished) held by weaving mills and the unfilled orders for such fabrics are shown in table C-3-7. Inventories have increased in recent years. At the end of September 1967 they were about 8 percent higher than at the close of 1966, 33 percent higher than at the close of 1965, and 53 percent higher than at the close of 1964. The domestic production of broadwoven fabrics of manmade fibers, however, also increased over this period. Unfilled orders of the weaving mills decreased between 1964 and 1966, but began to increase in 1967; in September 1967 unfilled orders were 20 percent higher than at the close of 1966. The ratio of inventories to unfilled orders increased sharply between 1964 and 1966; it tended to increase slightly in January-June 1967, but then declined through September.

Aggregate data on the sales of the products other than broadwoven fabrics considered here are not available. Annual U.S. shipments of most such products are believed, however, to have increased, but shipments of lace and embroidery declined. Inventories were generally larger in 1965 than in 1964.

f. U.S. imports and exports.--U.S. imports for consumption of broadwoven fabrics of manmade fibers were more than 6 times larger in quantity in 1966 than in 1961. Aggregate U.S. imports of such fabrics in 1966 amounted to 264 million square yards, compared with 40 million square yards in 1961. As noted above, the share of annual U.S. consumption of broadwoven fabrics of manmade fibers supplied by imports increased from 1 percent in 1961 to 4 percent in 1966 (table C-3-5).

In recent years most types of imported broadwoven fabrics of manmade fibers have been similar to domestically produced fabrics. The imported fabrics most competitive with domestic fabrics have been acetate and triacetate twills; viscose taffetas, satins, and crepes; nylon taffetas; polyester taffetas and crepes; spun rayon twills, challis, linen types, and suitings; spun rayon-cotton ginghams and furnishing fabrics; polyester-cotton ginghams, batiste, broadcloths, poplins, and lawns; polyester-wool suitings; polyester-rayon ginghams, batiste, and suitings; acrylic challis and muslin; and nylon-rayon stretch fabrics.

Since 1961 Japan has been the leading supplier of U.S. imports of broadwoven fabrics of manmade fibers; that country accounted for over 70 percent of the U.S. imports of such fabrics in 1966. Other important foreign suppliers have been Italy, Hong Kong, West Germany, the Netherlands, and Austria.

The annual U.S. exports of broadwoven fabrics of manmade fibers exceeded annual U.S. imports in quantity in the early 1960's, but such exports were less than imports in 1965 and 1966. Throughout the 1960's, however, annual exports of such fabrics have been greater in value than imports thereof (table C-3-5). During 1961-66 U.S. exports of broadwoven fabrics of manmade fibers were equivalent annually to about 1 to 3 percent of the domestic production of such fabrics. The principal markets for the U.S. exports have been Canada, the Republic of South Africa, the United Kingdom, Australia, West Germany, South Vietnam, Honduras, and Denmark. Exports have consisted principally of finished polyester-filament fabrics, finished rayon or acetate filament-spun fabrics, and coated fabrics of manmade fibers.

Aggregate data on U.S. imports and exports of the articles considered here other than broadwoven fabrics are not available. Data for certain types of fabrics and articles are shown in table C-3-6. Annual U.S. imports of most of the fabrics and articles for which data are available have increased in recent years; annual U.S. production of comparable products also increased, and the United States has been on a substantial export basis for such products.

g. Prices.--The U.S. wholesale prices index (1957-59=100) for broadwoven fabrics of manmade fibers has declined materially in recent years. The index, as published by the Bureau of Labor Statistics, has been as follows (as of August of the year shown):

1962	95.6
1963	95.0
1964	99.9
1965	98.1
1966	88.8
1967	82.8

Comprehensive data on the wholesale prices in the United States of the fabrics (other than broadwoven) and related articles of man-made fibers considered here are not available. The prices indexes that are published for certain of the products are shown in table C-3-8. The price index for knit goods declined sharply in 1966; the index for narrow fabrics increased substantially during the 1960's.

h. Profitability and investment.--Data on the aggregate annual net income in 1959-64 of certain corporations engaged in producing broadwoven fabrics of manmade fibers are shown in table C-3-9. In each of the 6 years shown (except 1959) about three-fourths of the corporations for which data were reported showed net income and one-fourth showed a net loss. The total annual amount of net income for all the reporting corporations ranged from $55.4 million in 1960 to $100.9 million in 1963; it was $97 million in 1964.

Census data indicate that the gross book value of depreciable assets, as of the end of the year, for the manmade-fiber broadwoven-fabric industry (industry No. 2221) was as follows: 1962, $685.1 million; 1963, $715.4 million; and 1964, $766.4 million. Annual expenditures for new plant and equipment by establishments classified as part of that industry increased from $29 million in 1961 to $128 million in 1966 (table C-3-1); the ratio of such expenditures to the value of annual shipments rose from 2 percent in 1961 to nearly 6 percent in 1966. Annual capital expenditures by the plants primarily engaged in finishing broadwoven fabrics of manmade fibers (industry No. 2262) increased from 7 million in 1961 to $33 million in 1966 (table C-3-2); the ratio of such expenditures to the value of annual shipments increased from 2 percent in 1961 to 6 percent in 1966.

Data on the profits and losses experienced by U.S. producers of the "other" fabrics and related articles of manmade fibers considered here are not available. Annual expenditures for new plant and equipment by concerns classified in the seven industry groups that produce such fabrics and articles increased from $36 million in 1962 to $59 million in 1965. The capital expenditures by concerns in each of the seven industry groups were larger in 1965 than in 1962, except for those classified as producers of lace goods (table C-3-4).

i. U.S. customs treatment. [1]--Broadwoven fabrics of manmade fibers are dutiable under the provisions of schedule 3, part 3, of the TSUS. Based on imports in 1966, the average ad valorem equivalent of the individual rates of duty ranged from 21 percent to 65 percent. The great bulk of U.S. imports of such fabrics were dutiable at the rate of 25 cents per pound plus 22.5 percent ad valorem; this rate was equivalent, on the average, to 38 percent, based on imports in 1966. Most U.S. rates of duty applicable to broadwoven fabrics of manmade fibers were reduced by half in the Kennedy round of tariff negotiations. The specific part of the compound rate identified above (applicable to most imports of such broadwoven fabrics) was reduced by about half, but the ad valorem part was not modified at the Kennedy round. The reductions in duty agreed to by the United States at the Kennedy round will become effective in 5 annual stages; the first such stage went into force on January 1, 1968.

The "other" fabrics and related articles of manmade fibers considered here are subject to a wide range of U.S. import duties. The United States granted concessions on most of these fabrics and articles at the Kennedy round of tariff negotiations, generally agreeing to reduce the respective rates of duty by about a half. The United States did not grant concessions, however, on knit fabrics, fish

---

1/ The rates of duty discussed below are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates.

netting, and the most important classes of lace of manmade fiber. The concessions that were granted will become effective in 5 annual stages; the first such stage went into force on January 1, 1968.

J. Foreign production and trade.--Data are not available for inclusion in this report on the foreign production of, and trade in, either the broadwoven fabrics of manmade fibers or the "other" fabrics and related articles of manmade fibers considered here. These fabrics and articles are produced in many countries of the world. The principal foreign producers probably are the member countries of the European Economic Community, the United Kingdom, Japan, and Canada.

C-3-1.--Specified data relating to the operations of mills weaving fabrics of manmade fibers and of silk (industry No. 2221), 1958 and 1961-66

Year	Number of companies	Number of establishments: Total	Number of establishments: With 20 employees or more	All employees: Number	All employees: Payroll	Production workers: Number	Production workers: Man-hours	Production workers: Wages
					1,000 dollars		1,000	1,000 dollars
1958	324	401	310	81,688	276,655	74,452	150,649	233,965
1961	1/	1/	1/	79,212	299,553	71,042	147,839	249,304
1962	1/	1/	1/	82,950	337,191	74,401	160,082	281,056
1963	277	355	300	88,157	366,045	79,750	171,378	306,464
1964	1/	1/	1/	94,392	417,313	84,994	187,451	347,758
1965	1/	1/	1/	94,423	443,532	85,154	188,738	370,827
1966 2/	1/	1/	1/	102,502	498,201	92,282	201,890	417,388

Year	Cost of materials	Value added by manufacture, adjusted	Value of shipments	New capital expenditures	Yearend inventories
	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars
1958	741,931	468,583	1,225,509	15,043	230,392
1961	834,814	501,080	1,328,107	29,061	252,470
1962	963,654	578,237	1,531,365	32,872	272,532
1963	1,072,259	661,535	1,722,356	35,798	303,248
1964	1,221,392	786,933	2,000,978	50,761	340,428
1965	1,284,211	826,914	2,115,937	97,868	342,840
1966 2/	1,365,272	885,745	2,240,919	128,124	353,325

1/ Not available.
2/ Preliminary.

Source: Bureau of the Census, 1963 Census of Manufactures and Annual Survey of Manufactures.

Table C-3-2.--Specified data relating to the operations of plants primarily engaged in finishing fabrics of manmade fibers and silk (industry No. 2262), 1958 and 1961-66

Year	Number of companies	Number of establishments		All employees		Production workers		
		Total	With 20 employees or more	Number	Payroll	Number	Man-hours	Wages
					1,000 dollars		1,000	1,000 dollars
1958------	185	197	132	16,185	74,297	13,650	29,296	57,615
1961------	1/	1/	1/	16,454	79,863	13,758	29,873	61,121
1962------	1/	1/	1/	17,875	89,160	15,072	33,055	67,980
1963------	193	205	138	19,528	105,975	16,222	36,524	81,391
1964------	1/	1/	1/	20,421	117,645	17,231	38,418	90,630
1965------	1/	1/	1/	22,030	130,966	18,606	42,016	98,484
1966 2/---	1/	1/	1/	24,903	144,634	20,536	45,800	108,140

Year	Cost of materials	Value added by manufacture, adjusted	Value of shipments	New capital expenditures	Yearend inventories
	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars	1,000 dollars
1958------	95,261	114,825	210,568	3,607	10,541
1961------	135,239	135,012	269,397	6,476	1/
1962------	151,052	149,248	300,535	8,499	1/
1963------	151,086	176,819	323,701	13,890	30,988
1964------	145,935	194,065	338,474	10,195	33,189
1965------	228,492	215,708	441,072	12,514	35,996
1966 2/---	304,156	250,382	550,346	32,798	45,426

1/ Not available.
2/ Preliminary.

Source: 1963 Census of Manufactures and Annual Survey of Manufactures.

Table C-3-3.--Certain special construction and special purpose fabrics and articles of manmade fibers: 1/ Production workers, wages, value added by manufacture and value added per production worker, 1963-65

Year	Production workers	Wages	Value added by manufacture	Value added per production worker
	Thousands	Million dollars	Million dollars	
1963	68	272	717	$10,610
1964	67	284	748	11,113
1965	71	300	839	11,836

1/ Narrow fabrics (industry no. 2241), knit fabrics (2256), felt goods (2291), lace goods (2292), padding and upholstery filling (2293), textile goods, n.e.c. (2299), schiffli embroideries (2397).

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table C-3-4.--Specified data relating to the operations of the principal industries producing certain special construction and special purpose fabrics and articles of manmade fibers, 1961, 1963 and 1965

Industry No. 1/	Principal products 2/	1961	1963	1965
2241	Narrow fabric mills:			
	Employees--------number--	23,810	23,495	23,666
	Value added by manufacture--------1,000 dollars--	171,831	172,942	193,150
	Shipments--------do--------	341,245	352,150	384,956
	Yearend inventories--------do--------	56,952	55,753	61,243
2256	Knit fabric mills:			
	Employees--------number--	20,380	24,355	28,823
	Value added by manufacture--------1,000 dollars--	190,197	244,853	328,980
	Shipments--------do--------	615,130	799,623	1,021,759
	Yearend inventories--------do--------	64,521	96,942	125,511
2291	Felt goods, n.e.c.:			
	Employees--------number--	4,120	4,851	5,510
	Value added by manufacture--------1,000 dollars--	45,487	55,903	72,297
	Shipments--------do--------	101,274	130,906	165,842
	Yearend inventories--------do--------	14,943	19,907	23,208
2292	Lace goods:			
	Employees--------number--	5,546	5,096	4,459
	Value added by manufacture--------1,000 dollars--	33,303	33,047	33,494
	Shipments--------do--------	62,529	53,906	54,937
	Yearend inventories--------do--------	10,074	8,201	10,974
2293	Padding and upholstery filling:			
	Employees--------number--	7,177	6,937	6,993
	Value added by manufacture--------1,000 dollars--	61,437	65,588	78,467
	Shipment--------do--------	149,688	154,555	176,175
	Yearend inventories--------do--------	19,660	16,549	15,735
2299	Textile goods, n.e.c.:			
	Employees--------number--	6,770	7,176	7,943
	Value added by manufacture--------1,000 dollars--	59,225	78,258	84,594
	Shipments--------do--------	136,061	168,926	187,144
	Yearend inventories--------do--------	24,195	25,938	26,670
2397	Schiffi machine embroideries:			
	Employees--------number--	5,717	6,143	5,659
	Value added by manufacture--------1,000 dollars--	45,497	55,411	48,496
	Shipments--------do--------	77,850	97,020	90,036
	Yearend inventories--------do--------	3/	5,900	4,969

1/ As identified in Standard Industrial Classification Manual, 1967.
2/ Data shown relate to total operations.
3/ Not available.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table C-3-5.--Broadwoven fabrics of manmade fibers: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1961-66

Year	Production 1/	Imports	Exports	Apparent consumption	Ratio of imports to consumption
	1,000 sq. yds.	1,000 sq. yds.	1,000 sq. yds.	1,000 sq. yds.	Percent
1961	3,251,683	40,470	138,685	3,153,468	1
1962	3,735,246	69,770	139,593	3,665,423	2
1963	4,178,215	81,835	159,956	4,100,094	2
1964	4,852,108	93,903	189,720	4,756,291	2
1965	5,419,914	170,003	163,026	5,426,891	3
1966	5,799,758	263,617	173,141	5,890,234	4

1/ Quantity converted from linear yards by using factors derived from data in U.S. Census publication Current Industrial Reports, M22T.2(63)-1 Supplement.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table C-3-6.--Selected fabrics (other than broadwoven) and related articles of manmade fiber: U.S. production, imports for consumption, exports of domestic merchandise, apparent consumption, and ratio of imports to consumption, specified years 1964-66 and January-June 1967

(In thousands of pounds)

Year	Production	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
	Knit fabrics				
1964	1/ 231,000	793	5,783	226,010	0.4
1965	1/ 255,000	2,526	5,177	252,349	1.0
1966	1/ 272,000	3,273	5,530	269,743	1.2
1967 (Jan.-June)	2/	2,610	3,358	2/	2/
	Narrow fabrics				
1964	55,000	3,102	2/	2/	2/
1965	59,000	3,666	3/ 3,185	59,481	6.2
1966	67,000	3,338	3/ 3,051	67,287	5.0
1967 (Jan.-June)	2/	1,742	3/ 2,896	2/	2/
	Fish netting and fishing nets				
1964	4/ 1,808	153	2/	1,961	7.8
1965	4/ 2,109	259	2/	2,368	12.3
1966	4/ 2,541	416	2/	2,957	14.1
1967 (Jan.-June)	2/	385	2/	2/	-
	Lace and netting				
1964	2/	232	2/	2/	2/
1965	2/	254	1,444	2/	2/
1966	2/	318	1,449	2/	1/ 3.0
1967 (Jan.-June)	2/	284	839	2/	2/
	Webs, wadding, batting, felts, and nonwoven fabrics				
1964	95,000	56	2/	2/	2/
1965	122,000	69	4,826	117,243	0.1
1966	2/	155	5,980	2/	2/
1967 (Jan.-June)	2/	44	3,002	2/	2/

1/ Partly estimated.
2/ Not available.
3/ Understated, not all products separately classified.
4/ Derived from statistics published by National Cotton Council of America.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table C-3-7.--Manmade fiber broadwoven fabrics in the gray: 1/ Weaving mills' closing inventories and unfilled orders, annual 1964-66 and by months January-September 1967

As of the end of--	Owned by weaving mills	Inventories billed and held for others	Total	Unfilled orders	Ratio of owned inventories to unfilled orders
	Million linear yards	Million linear yards	Million linear yards	Million linear yards	Percent
1964	217.6	168.9	386.5	1,161.2	18.7
1965	250.3	191.2	441.5	999.2	25.0
1966	308.3	225.3	533.6	737.9	41.8
1967:					
January	303.0	224.6	527.6	717.6	42.2
February	312.6	192.0	504.6	736.6	42.4
March	314.6	189.4	504.0	686.0	45.9
April	303.3	193.7	497.0	708.2	42.8
May	335.7	175.1	510.8	737.6	45.5
June	347.1	179.9	527.0	735.5	47.2
July	333.4	194.5	527.9	799.1	41.7
August	335.8	174.8	510.6	864.5	38.8
September	333.3	167.1	500.4	883.0	37.7

1/ Not including blanketing, silk, paper, and other specialty fabrics.

Source: Current Industrial Reports, series M22A.

Table C-3-8.--Narrow fabrics and knit goods of manmade fibers: Wholesale price indexes, 1962-67

(1957-59 = 100)

August	Narrow fabrics		Knit goods					
						Tricot knit		
	Total	Rayon satin ribbon	Total	Rayon and/or acetate	Noncellulosic	Acetate finished	Nylon Gray	Nylon finished
1962-----	95.6	109.8	93.9	1/	1/	96.3	99.6	84.1
1963-----	109.8	109.8	89.3	1/	1/	95.5	81.2	87.5
1964-----	109.8	109.8	92.1	1/	1/	101.1	95.5	80.0
1965-----	120.8	120.8	92.9	1/	1/	118.7	92.7	74.3
1966-----	120.8	120.8	78.5	1/	1/	90.7	77.3	65.9
1967-----	1/	133.3	77.8	106.8	65.5	104.3	68.7	59.8

1/ Not available.

Source: Compiled from official statistics of the U.S. Department of Labor.

Table C-3-9.--Receipts and net income of active corporations weaving broadwoven fabrics of manmade fibers and silk, 1959-64 1/

	Number of returns	Total receipts	Net income
		1,000 dollars	1,000 dollars
All returns:			
1959	333	1,151,166	55,350
1960	209	1,273,309	65,063
1961	253	1,280,467	57,636
1962	116	1,279,215	74,691
1963	163	1,679,808	100,927
1964	224	1,528,666	96,954
Returns showing net income:			
1959	215	1,074,996	59,886
1960	159	1,207,560	67,207
1961	200	1,224,954	60,309
1962	85	1,241,358	76,049
1963	126	1,609,213	104,390
1964	163	1,474,688	98,710
1965			

1/ Derived from a sample of income tax returns for accounting periods ending in the 12-month interval beginning July 1 of the year shown.

Source: U.S. Treasury Department, Internal Revenue Service, Statistics of Income.

4. Apparel

The United States probably is the world's largest producer and consumer of wearing apparel containing manmade fibers. In recent years more than a billion pounds of such fibers have been used annually in the United States in the production of wearing apparel. Manmade fibers accounted for about a fourth of the aggregate quantity of textile fibers consumed in U.S. apparel production in 1949 and about a third in 1965. Currently, about a third of the manmade fibers consumed in apparel production is used to produce men's and boys' apparel, and two-thirds, women's, misses', girls', children's, and infants' apparel. Manmade fibers used in the domestic production of apparel currently accounts for about a third of all manmade fiber used by U.S. industry.

In the decade from the mid-1950's to the mid-1960's, the consumption of manmade fibers in the production of wearing apparel in the United States more than doubled. Aggregate annual consumption of all manmade fibers in wearing apparel increased from 500 million pounds in 1956 to 1,174 million pounds in 1965. The great bulk of such increased consumption resulted from the expanding use of noncellulosic manmade fibers; the domestic consumption of such fiber in the production of wearing apparel rose from about 202 million pounds in 1956 to 742 million pounds in 1965. The use of cellulosic (rayon and acetate) fibers in wearing apparel increased from about 298 million pounds in 1956 to 432 million pounds in 1965.

The principal articles of men's and boys' apparel made wholly or in part of manmade fibers include slacks, sweaters, sport shirts, business and dress shirts, hose, and utility clothing; those of women's, misses' and children's apparel include dresses, underwear, sweaters, slacks, blouses, shirts, skirts, full-length hosiery, nightwear, loungewear, brassieres, girdles, and play clothes. Data on the use of manmade fibers in the production of various articles of apparel are shown in table C-4-1.

Annual imports of apparel of manmade fibers have increased in most years of the 1960's. In 1965 (the latest year for which data are available), the manmade fiber content of imported apparel wholly or in chief value of manmade fibers is estimated to have been equivalent to 2.6 percent of the aggregate manmade fiber content of all apparel consumed in the United States in that year. U.S. imports of some apparel items have increased rapidly in recent years; these include sweaters, knit shirts (dress and sport), dress and sport shirts of woven fabric, slacks and outer shorts, mufflers, scarves, shawls, and gloves.

Aggregate data generally are not available respecting the characteristics and operations of U.S. concerns that produce apparel of manmade fibers. Considerable information is published, however, pertaining to producers of specific classes of wearing apparel (e.g., women's blouses). Most such producers, however, manufacture apparel of both manmade and natural fibers, and the available data relate to the totality of their operations. The available statistics respecting a number of subgroups of the apparel industry are given in the earlier sections of this report on cotton and wool apparel. The particular subgroups which are of greatest interest here (because imports of competitive apparel of manmade fibers are substantial) are the following: Knit outerwear (Census Industry No. 2253); men's and boys' shirts (except work) and nightwear (No. 2321); men's and boys' separate trousers (No. 2327); women's blouses (No. 2331); and girls', childrens' and infants' dresses and blouses (No. 2361). Data are not generally available on the operation of domestic producers of certain other apparel articles of manmade fibers that are imported in substantial quantities--mufflers, scarves, and shawls, and women's, misses' and girls' trousers and shorts. Where available, data on U.S. producers of gloves of textile materials are given in the following sections.

a. U.S. producers.--As just noted, the available data on the number and location of U.S. producers of certain types of apparel of manmade fibers are shown in the earlier sections on cotton and wool apparels, except for data on glove producers.

In 1963 about 80 U.S. concerns were classified in the Census as knitting mills, n.e.c. (a class which includes producers of knit gloves) and about 170 concerns were classified as producers of cut-and-sewn fabric dress and work gloves. 1/ These concerns were located mainly in the Middle Atlantic (particularly New York) and the North and South Central States.

1/ Producers recorded under Census Industry Nos. 2259 and 2381, respectively.

b. Employment and wages.--As noted above, data on the employment and wages paid in certain subgroups of the apparel industries are shown in the earlier sections on cotton and wool apparel, except for data on glove producers.

Average annual employment by U.S. concerns classified in the Census as knitting mills, n.e.c. (which includes producers of knit gloves) decreased from 3,734 persons in 1961 to 3,516 persons in 1965; employment by concerns classified as producers of cut-and-sewn gloves declined from 15,687 persons in 1961 to 14,868 persons in 1965. 1/ Data on average hourly earnings of production workers in glove plants are not available.

c. U.S. consumption.--Annual U.S. consumption of manmade fibers in wearing apparel increased from 493 million pounds in 1956 to 810 million pounds in 1962, and then to 1,198 million pounds in 1965. During the last decade a number of commercial and technical developments stimulated the use of manmade fibers in wearing apparel. The growing popularity of sweaters and other knitwear of acrylic fiber and, to a lesser extent, nylon fiber contributed to the rise in the use of manmade fibers in knit outerwear. The development of wash-and-wear fabrics of manmade fibers or manmade fibers blended with natural fibers, and the more recent development of durable press or permanent press treatments for such fabrics, have resulted in a marked increase in the consumption of manmade fibers (particularly polyester fiber)

1/ Producers recorded under Census Industry Nos. 2259 and 2381, respectively.

in apparel. Further, the development of textured yarns, elastomer yarns, special yarns for particular apparel uses, fabric-to-fabric laminates, foam-to-fabric laminates, and soil-release fabric treatments have all stimulated the increased use of manmade fibers in apparel. Many of these developments have been adopted by foreign manufacturers. In some instances, the use of manmade fibers in the production of wearing apparel has resulted in part from decreases in fiber prices, particularly when the price reductions were sufficient to permit changes in traditional wholesale and retail price brackets for the end product.

Statistics on apparent consumption of selected apparel articles of which imports have been substantial are given in table C-4-3.

d. U.S. production.--U.S. production of wearing apparel of manmade fibers, expressed in terms of the quantity of manmade fiber used (including waste), is estimated to have increased from 806 million pounds in 1962 to 1,174 million pounds in 1965 (table C-4-2). The largest increases in production during this period were in the output of knit outerwear, particularly sweaters and knit shirts; men's and boys' dress shirts, not knit; and in trousers and outer shorts, not knit. U.S. production of most apparel items of which imports of similar articles of manmade fibers are substantial increased during the 1960's. However, U.S. output of men's and boys' sport shirts, not knit, and women's, girls', and infants' blouses, not knit, were smaller in 1966 than in 1961; the decline in output was slight and reflected competition from other types of garments such as knit sport shirts, sweaters, and dresses, both domestic and imported.

e. U.S. sales and inventories.--Aggregate data on U.S. sales (shipments) and inventories of wearing apparel of manmade fibers are not available. However, data respecting the total sales and inventories of the producers of certain types of apparel of manmade fibers (types of which imports are substantial) are shown in the sections on cotton and wool apparel, except for data on glove producers.

The value of annual shipments of knit gloves is estimated to have increased from $14.5 million in 1961 to $15.1 million in 1965; the value of annual shipments of cut-and-sewn gloves is estimated to have declined from $216 million in 1961 to $155 million in 1965. Data on inventories held by the producers of knit gloves are not available; the value of year-end inventories held by producers of cut-and-sewn gloves were equivalent to 14 percent of the value of shipments in 1961 and 18 percent in 1965.

f. U.S. imports and exports.--Between 1962 and 1966, annual U.S. imports of apparel of manmade fibers, measured in terms of the manmade fiber content, increased about three times. The ratio of annual imports of such apparel to annual domestic consumption thereof, again in terms of manmade fiber content, rose from 1 percent in 1962 to 3 percent in 1965 (data on the ratio for 1966 are not available).

The annual imports of certain types of apparel wholly or in chief value of manmade fibers have increased markedly in recent years, and have supplied sharply increased shares of U.S. consumption of the products concerned. For example, the manmade fiber content of imports of knit outerwear 1/ increased from 1.4 million pounds in 1962 to 10.3 million pounds in 1965; the quantity of manmade fibers used annually by U.S. apparel producers in manufacturing knit outerwear rose from 87 million pounds in 1962 to 105 million pounds in 1965. As a result, while imports of these products were equivalent to 2 percent of consumption in 1962, they were equivalent to 9 percent in 1965 (table C-4-2). The manmade fiber content of imports of knit outerwear increased to 15.9 million pounds in 1966 and to 17.7 million pounds in in the first eight months of 1967; the manmade fiber content of such imports in 1966 and 1967 probably was equivalent to more than 10 percent of the manmade fiber content of the domestic output of knit outerwear. Imports of sweaters and knit shirts accounted for the major portion of the increase in imports; recent developments in the U.S. market for sweaters are discussed in the earlier section of this report on wool apparel.

Annual imports of men's and boys' dress and business shirts wholly or in chief value of manmade fibers increased from 112,000 dozens in 1962 to 1 million dozens in 1966 (table C-4-3); the share of U.S. consumption of such shirts supplied by imports was about the same--12 to 13 percent--in both years. The imported shirts wholly or in chief value of manmade fibers were principally of polyester and cotton; imports of such shirts reflected the high demand in the

---

1/ In this section, the term "knit outerwear" includes only the knit articles provided for in subpart F of part 6 of schedule 3 of TSUS (see section on U.S. tariff treatment).

United States for shirts with wash-and-wear and durable- or permanent-press properties.

Annual U.S. imports of several other apparel articles wholly or in chief value of manmade fibers have increased markedly in recent years: Men's and boys' sport shirts, not knit; gloves; men's and boys' and women's, girls', and infants' trousers and outer shorts, not knit; and blouses, not knit (see tables C-4-3 and C-4-4).

Data on the average unit values of imports of selected apparel items of manmade fibers are shown in table C-4-8. These unit values are not in terms of U.S. wholesale values (i.e., they do not include duty, transportation and insurance costs, importer's markup, etc.); they reflect, moreover, changes in composition as well as changes in prices. From 1962 through 1966, the average unit values of imports of most of the selected apparel items declined.

During the 1960's, the chief foreign supplier of U.S. imports of apparel of manmade fibers have been Japan, Hong Kong, the Republic of Korea, Italy, Taiwan, and France. Data respecting U.S. imports of such articles, by country of origin, are given in tables C-4-5 and C-4-6.

Annual U.S. exports of wearing apparel of manmade fibers have been stable in recent years. The manmade fiber content of such exports ranged from 6 million to 8 million pounds in 1962-66.

g. Prices.--Extensive data on the trend of prices of apparel of manmade fibers in the United States in recent years are not available for inclusion in this report. The Bureau of Labor Statistics publishes wholesale price indexes for a few apparel items pertinent to this section. In the period 1962-67, the prices of some of these items of wearing apparel containing manmade fibers have increased and the prices of others have been unchanged (table C-4-7).

Data on the trend of wholesale prices in the United States of imported apparel of manmade fibers are not available for inclusion in this report. Data on the average unit values of U.S. imports of selected apparel were discussed briefly in the preceding section on U.S. imports and exports.

h. Profitability and investments.--Extensive data are not available for inclusion in this report on the profitability of, and investments in, U.S. concerns producing apparel of manmade fiber. Most of the information that is available is shown in the earlier sections of this report on cotton and wool apparel.

Data on capital expenditures for new plant and equipment by producers of gloves--not shown earlier--are as follows: For knitting mills, n.e.c. (Census Industry No. 2259) which includes producers of knit gloves, capital expenditures for new plant and equipment totaled $320,000 in 1963 and $545,000 in 1965; for the producers of cut-and-sewn gloves (Census Industry No. 2381), the corresponding figures were $1.1 million in 1963 and $1.4 million in 1965.

i. U.S. customs treatment. 1/--U.S. imports of most wearing apparel wholly or in chief value of manmade fibers are dutiable under provisions of part 6 of schedule 3 of the Tariff Schedules of the United States (TSUS); imports of headwear (other than infants' knit headwear) and gloves are dutiable under provisions in part 1 of schedule 7.

Most types of wearing apparel of manmade fibers are dutiable at one of two compound rates--25 cents per pound plus $27\frac{1}{2}$ percent ad valorem or 25 cents per pound plus $32\frac{1}{2}$ percent ad valorem. Ornamented wearing apparel, however, is dutiable at 42.5 percent ad valorem, and body-supporting garments at either 22 percent or 32 percent ad valorem. Concessions were granted in the recent Kennedy round of GATT negotiations on a few types of wearing apparel of manmade fiber, namely: Certain mufflers, scarves, and shawls; body-supporting garments, not ornamented; and gloves of lace, net, or ornamentation.

1/ The rates of duty discussed are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before December 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. The main apparel items of manmade fibers imported from the Philippine Republic in 1966 were gloves, brassieres, dresses, boys' shirts, infants' diaper sets, and women's, girls' and infants' underwear. Imports from the Philippines, which were dutiable at 40 percent of the column 1 rates during the calendar years 1965 through 1967, will be dutiable at 60 percent of the column 1 rates during the period 1968 through 1970. Imports of apparel of manmade fibers from "Communist" countries in 1966 were negligible.

Generally the United States agreed to reduce its rate of duty on the products covered by about a fourth; these reductions are to become effective in five annual stages, the first of which went into force on January 1, 1968.

j. Foreign production and trade.--Statistical data generally are not available on the foreign production of, and trade in, apparel of manmade fibers. Some data respecting foreign knit outerwear mills, however, are shown in the wool section.

Table C-4-1.--Estimated consumption of manmade fibers by U.S. apparel producers, by type of garment produced, 1965

(In millions of pounds of manmade fiber content, i.e. the raw manmade fibers or filament yarns consumed in processing, including amount wasted)

Type of garment	Consumption	Ratio (percent) to total consumption
Men's and boys':		
Slacks	99.5	8.5
Sweaters	59.9	5.1
Sport shirts, woven	46.0	3.9
Hose	34.1	2.9
Business and dress shirts	25.4	2.2
Sport shirts, knit	20.4	1.7
Utility clothing	17.5	1.5
Other garments	80.9	6.9
Total	383.7	32.7
Women's, misses', children's, and infants':		
Dresses	215.0	18.3
Underwear, knit	78.7	6.7
Sweaters	65.5	5.6
Slacks	65.5	5.6
Blouses and shirts	48.0	4.1
Skirts	39.4	3.4
Full-length hosiery	38.5	3.3
Nightwear, woven and knit	29.9	2.5
Loungewear	29.6	2.5
Brassieres and other foundation garments	26.6	2.3
Playsuits, sunsuits, shorts	25.2	2.1
Other garments	127.9	10.9
Total	789.8	67.3
Grand total	1,173.5	100.0

1/ Excludes headwear, scarves, mufflers, and miscellaneous items for which reliable estimates were not available; estimated amount consumed in 1963 was 0.2 million pounds.

Source: Textile Economics Bureau, Textile Organon, January 1967.

Table C-4-2.--Manmade fibers wearing apparel, total and knit manmade fibers outerwear: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1962, 1965, and 1966

Commodity	1962	1965	1966
Manmade fibers apparel, total: 1/			
Production 2/----------------million pounds--:	806	1,174	3/
Imports----------------------------do---------:	10	31	38
Exports----------------------------do---------:	6	7	8
Apparent consumption---------------do---------:	810	1,198	3/
Ratio of imports to consumption-----percent--:	1	3	3/
Knit manmade fibers outerwear: 4/			
Production-------------------million pounds--:	87.0	105.0	3/
Imports----------------------------do---------:	1.4	10.3	15.9
Exports----------------------------do---------:	0.7	1.2	1.2
Apparent consumption---------------do---------:	87.7	114.1	3/
Ratio of imports to consumption-----percent--:	2	9	3/

1/ Data show estimated weight of manmade fibers consumed in processing, including the amount "wasted".

2/ Excludes handkerchiefs, headwear, neckwear, scarves, dickies, and diapers because reliable estimates are not available; the amount consumed in these excluded items was estimated to be less than 200,000 pounds in 1963.

3/ Not available.

4/ Excludes headwear and footwear except infants'; also excludes hosiery, gloves, neckties, mufflers, scarves, and shawls. Production data show estimated weight of yarn consumed in processing, including the amount "wasted"; import and export data show weight of articles as reported in official U.S. trade statistics.

Source: Compiled by the staff of the U.S. Tariff Commission principally from data published in the Textile Organon for January 1967 and from official statistics of the U.S. Department of Agriculture and Commerce.

Table C-4-3.--Selected manmade fibers wearing apparel: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1962, 1965, and 1966.

(In thousands of dozens)

Type of garment	1962	1965	1966
Sweaters:			
Production 1/	7,820	8,000	7,925
Imports 2/	67	501	1,392
Exports	3/	46	53
Apparent consumption	5/ 7,887	8,455	9,264
Ratio (percent) of imports to consumption	1	6	15
Men's and boys' knit shirts:			
Production 1/ 4/	1,093	2,279	2,137
Imports 4/	6	907	1,243
Exports	3/	19	31
Apparent consumption	5/ 1,099	3,167	3,349
Ratio (percent) of imports to consumption	1	29	37
Men's and boys' business and dress shirts, not knit:			
Production 1/ 6/	814	2,459	6,529
Imports	112	293	998
Exports	3/	47	54
Apparent consumption	5/ 926	2,705	7,473
Ratio (percent) of imports to consumption	12	11	13
Men's and boys' sport shirts, not knit:			
Production 1/	3/	3/	3/
Imports	59	159	515
Exports	3/	41	62
Apparent consumption	3/	3/	3/
Ratio (percent) of imports to consumption	3/	3/	3/
Men's and boys' trousers and outershorts, not knit:			
Production 1/ 7/	5,580	7,350	7,917
Imports	8/ 151	565	347
Exports	3/	44	61
Apparent consumption	5/ 5,731	7,871	8,203
Ratio (percent) of imports to consumption	3	7	4

See footnotes at end of table.

Table C-4-3.--Selected manmade fibers wearing apparel: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1962, 1965, and 1966--Continued

(In thousands of dozens)

Type of garment	1962	1965	1966
Women's, girls', and infants' slacks and shorts, not knit:			
Production	9/	9/	9/
Imports	63	449	401
Exports	3/	3/	3/
Apparel consumption	3/	3/	3/
Ratio (percent) of imports to consumption	3/	3/	3/
Women's, girls', and infants' blouses, not knit:			
Production 1/	3,070	5,300	5,350
Imports	51	535	708
Exports	3/	44	48
Apparent consumption	5/ 3,121	5,791	6,010
Ratio (percent) of imports to consumption	2	9	12
Gloves:			
Production 1/	2,509	2,289	2,183
Imports	1,562	2,687	2,740
Exports	3/	3/	3/
Apparent consumption	5/ 4,071	5/ 4,976	4,923
Ratio (percent) of imports to consumption	38	54	56

1/ Partially estimated.
2/ Excludes infants' sweaters, which are not separately reported.
3/ Not available.
4/ Includes estimates for knit tricot dress shirts in production statistics; import data include knit shirts whether dress or sport.
5/ Production plus imports.
6/ Includes knit tricot dress shirts (not separately reported), estimated to be 1,083,000 dozens in 1965 and 718,000 dozens in 1966 by the National Cotton Council.
7/ Excludes work pants, dungarees, and waistband overalls, but includes uniform trousers.
8/ Excludes ornamented not separately reported.
9/ Data not available for manmade fibers; however, production of garments of wool and of manmade fibers amounted to 2,715,000 dozens in 1962, 3,738,000 dozens, in 1965, and 3,955,000 dozens in 1966.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

Table C-4-4.--U.S. imports for consumption of selected apparel items of manmade fibers, 1962-66 and January-August 1967

(Quantity in unit specified below; value in thousands of dollars)

Type of garment	1962	1963	1964	1965	1966	Jan.-Aug. 1967
	Quantity					
Sweaters, total--1,000 lb--	1/ 564	1/ 976	2,457	4,765	7,390	9,346
1,000 doz--	67	112	236	501	1,392	1,676
Men's and boys'--1,000 lb--	2/	2/	71	87	173	252
1,000 doz--	2/	2/	7	14	29	55
Women's, girls', and infants'--1,000 lb--	2/	2/	2,386	4,678	7,217	9,094
1,000 doz--	2/	2/	229	487	1,363	1,621
Knit shirts, 3/ total--1,000 lb--	5	212	925	3,698	4,612	3,912
1,000 doz--	6	117	290	1,053	1,470	1,379
Men's and boys'--1,000 lb--	2/	174	734	3,412	4,078	2,943
1,000 doz--	2/	97	167	907	1,243	1,032
Other knit outerwear 4/--1,000 lb--	906	962	999	1,840	3,890	4,458
Men's and boys' dress shirts, not knit--1,000 doz--	53	49	119	293	998	1,551
Men's and boys' sport shirts, not knit--do--	59	62	81	159	515	936
Men's and boys' trousers and outer shorts, not knit--do--	1/ 17	5/ 151	305	565	347	337
Women's, girls', and infants' trousers and shorts, not knit--do--	63	76	306	449	401	221
Women's, girls', and infants' blouses, not knit--do--	51	58	262	535	708	506
Mufflers, scarves, and shawls, not ornamented--do--	2/	2/	4,676	6,993	8,218	3,375
Gloves--1,000 doz. prs--	1,562	1,828	2,453	2,686	2,740	590
	Value					
Sweaters, total--	1,629	3,236	7,405	14,281	23,527	26,969
Men's and boys'--	2/	2/	268	384	883	1,506
Women's, girls' and infants'--	2/	2/	7,137	13,897	22,644	25,463
Knit shirts, 3/ total--	19	434	1,818	11,070	12,293	9,606
Men's and boys'--	2/	405	1,635	10,773	11,529	8,097
Other knit outerwear 4/--	5,318	6,492	6,947	9,369	18,038	17,174
Men's and boys' dress shirts, not knit--	645	615	1,625	3,084	10,729	14,779
Men's and boys' sport shirts, not knit--	437	502	710	963	5,361	8,668
Men's and boys' trousers and outer shorts, not knit--	1/ 868	5/ 1,667	2,698	4,320	3,114	3,221
Women's, girls', and infants' trousers and shorts, not knit--	1,193	2,033	4,221	5,055	4,398	1,686
Women's, girls', and infants' blouses, not knit--	393	574	1,931	3,101	4,474	3,235
Mufflers, scarves, and shawls, not ornamented--	2/	2/	8,946	9,819	7,186	4,116
Gloves--	6,498	7,784	10,823	11,220	11,605	3,322

1/ Excludes ornamented items.
2/ Not reported separately.
3/ Includes dress shirts, not reported separately.
4/ Excludes knit hosiery, gloves, headwear (except infants'), neckties, mufflers, scarves, and shawls; includes dresses, skirts, suits, coats, and infants' outerwear.
5/ Includes partial estimate for ornamented.

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table C-4-5.--Knit manmade fiber outerwear: U.S. imports for consumption, by principal sources, 1962-66

Country	1962	1963	1964	1965	1966
	Quantity (1,000 pounds)				
Japan	828	1,226	2,713	4,942	8,779
Hong Kong	163	228	349	2,069	2,280
Italy	149	171	260	406	555
Taiwan	1	157	496	824	1,476
France	39	84	169	110	68
United Kingdom	17	27	31	66	54
Switzerland	9	17	17	24	39
All other	234	282	346	1,862	2,642
Total 1/	1,440	2,192	4,381	10,303	15,893
	Value (1,000 dollars)				
Japan	2,736	3,741	7,861	16,777	29,353
Hong Kong	715	936	1,064	6,897	6,838
Italy	651	1,430	2,392	2,653	4,179
Taiwan	4	218	636	1,350	2,473
France	548	1,203	1,925	1,164	929
United Kingdom	129	203	268	494	438
Switzerland	127	207	205	309	433
All other	2,056	2,224	1,819	5,075	9,215
Total 1/	6,966	10,162	16,170	34,719	53,858
	Unit value (per pound)				
Japan	$3.30	$3.05	$2.90	$3.39	$3.34
Hong Kong	4.38	4.10	3.00	3.33	3.00
Italy	4.37	8.35	9.21	6.53	7.54
Taiwan	3.07	1.39	1.28	1.64	1.68
France	13.92	14.36	11.41	10.54	13.75
United Kingdom	7.41	7.46	8.66	7.45	8.14
Switzerland	14.43	12.39	12.05	13.02	11.09
All other	8.79	7.89	5.25	2.73	3.49
Average	4.84	4.64	3.69	3.37	3.39

1/ Includes estimates for ornamented outerwear in 1962-63.
2/ Calculated from unrounded data.

Source: Compiled from official data of the U.S. Department of Commerce, except as noted.

Table C-4-6.--U.S. imports for consumption of selected apparel of manmade fibers, by principal sources, 1964-66

(Quantity in unit specified; value in thousands of dollars)

	Quantity			Value		
	1964	1965	1966	1964	1965	1966
Sweaters---------1,000 dozens--:						
Total, all countries-------:	236	501	1,392	7,405	14,281	23,527
Japan------------------------:	202	384	1,130	6,350	11,268	17,541
Korea, Republic of-----------:	2	32	91	11	755	1,956
Italy------------------------:	13	42	51	497	1,067	1,579
Hong Kong--------------------:	3	21	50	101	602	1,104
Shirts, knit-----1,000 dozens--:						
Total, all countries-------:	290	1,053	1,470	1,818	11,070	12,293
Hong Kong--------------------:	67	473	479	855	5,931	4,954
Korea, Republic of-----------:	1	92	312	19	1,076	2,491
Japan------------------------:	19	183	213	204	2,397	2,323
Taiwan-----------------------:	187	263	356	592	1,064	1,332
Other knit outer-wear-----------1,000 pounds--:						
Total, all countries-------:	999	1,840	3,890	6,947	9,369	18,038
Japan------------------------:	373	353	2,470	1,306	3,112	9,489
Italy------------------------:	166	166	259	1,865	1,528	2,528
France-----------------------:	154	101	57	1,754	1,044	818
Men's and boys' dress and sport shirts, not knit-----------1,000 dozens--:						
Total, all countries-------:	200	451	1,513	2,335	4,005	16,089
Hong Kong--------------------:	109	97	673	1,423	1,176	7,173
Japan------------------------:	50	137	553	489	1,386	6,498
Korea, Republic of-----------:	8	147	212	28	967	1,860
Men's and boys' separate trousers and outer shorts, not knit-------1,000 dozens--:						
Total, all countries-------:	305	565	347	2,698	4,320	3,114
Taiwan-----------------------:	244	289	185	1,633	1,714	1,007
Japan------------------------:	35	26	43	687	588	836
Korea, Republic of-----------:	9	243	96	44	1,690	733
Women's, girls', and infants' trousers and shorts, not knit-----------1,000 dozens--:						
Total, all countries-------:	306	449	401	4,221	5,055	4,398
Japan------------------------:	82	168	164	2,104	3,815	3,292
Taiwan-----------------------:	116	222	201	363	592	419
Hong Kong--------------------:	70	9	9	1,129	122	143
Women's, girls', and infants' blouses, not knit-----------1,000 dozens--:						
Total, all countries-------:	262	535	708	1,931	3,101	4,474
Japan------------------------:	137	372	432	915	1,921	2,717
Hong Kong--------------------:	84	80	162	758	791	1,291
Taiwan-----------------------:	6	40	78	16	90	150
Mufflers, scarfs and shawls---------1,000 dozens--:						
Total, all countries-------:	4,676	6,693	8,218	10,480	10,944	8,240
Japan------------------------:	4,424	6,410	8,034	8,376	9,264	6,887
Gloves------1,000 dozen pairs--:						
Total, all countries-------:	2,453	2,687	2,740	10,823	11,220	11,605
Japan------------------------:	1,186	1,301	1,312	4,287	4,738	4,998
Philippine Republic----------:	565	509	606	3,376	2,873	3,325
Hong Kong--------------------:	533	666	627	1,914	2,418	2,263

Table C-4-7.--Wholesale price indexes for selected apparel of manmade fibers, March and July, 1962-67

(1957-59=100)

	1962		1963		1964		1965		1966		1967	
	March	July	March	July	March	July	March	July	March	July	March	July
Women's sweaters, acrylic fiber	93.5	93.5	93.5	93.5	93.5	93.5	93.5	93.5	95.3	95.3	93.5	93.5
Blouses, chiefly manmade fiber	106.8	111.1	105.4	111.8	111.8	111.8	111.8	111.8	111.8	111.8	111.8	110.1
Men's suits, Dacron/worsted	106.8	1/	109.0	1/	115.8	1/	115.6	1/	122.9	1/	123.9	1/
Men's rayon trousers	97.3	98.0	96.1	97.3	96.5	96.5	97.6	99.2	99.2	99.2	101.1	101.1
Boys' trousers, rayon and acetate	104.7	104.7	103.8	104.7	103.8	105.1	104.7	105.2	106.8	105.2	104.3	104.3
Men's sport shirts, spun viscose	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.2	98.0	98.0	3/	98.0

1/ Seasonal commodity; no price index available this month.
3/ Not available.

Source: Compiled from official statistics of the U.S. Department of Labor.

Table C-4-8.--Comparison of average unit value 1/ of imports for consumption of selected apparel items in chief value of manmade fibers, 1962 and 1966

Apparel item	Average unit value 1962	Average unit value 1966	Percent change 1966 over 1962
	Per dozen		
Sweaters	$24.31	$16.90	-30
Knit shirts	3.80	2.67	-30
Men's and boys' dress and business shirts, not knit	12.17	10.75	-12
Men's and boys' sport shirts, not knit	7.42	10.41	+40
Trousers and outer shorts, not knit:			
Men's and boys'	2/ 11.04	9.00	-18
Women's, girls' and infants'	18.96	10.97	-42
Women's, girls' and infants' blouses, not knit	7.71	6.32	-18
Mufflers, scarves and shawls	1.91	0.87	-54
Gloves	4.16	4.24	+ 2

1/ F.o.b. value.
2/ Based on 1963 data.

Source: Compiled from official statistics of the U.S. Department of Commerce.

5. Miscellaneous products

The products wholly or chiefly of manmade fibers considered here consist largely of furnishings for use in households and institutions. Floor coverings of manmade fibers constitute by far the principal product discussed here. Curtains, draperies, and blankets are of major significance. Also included is an array of other finished articles such as luggage, shipping bags, cigarette filters, cordage, and tents. Blends of cotton and manmade fibers are used for many of these products.

In recent years rugs and carpets with the tufts of manmade fibers inserted into a preexisting base 1/ have accounted for the great bulk of the domestic production and consumption of textile floor coverings. Imports of tufted floor coverings of manmade fibers have been very small. Imports of carpets and rugs of braided or similar construction 2/ which are in substantial part of manmade fibers have been rising sharply, however, in terms of both quantity and value. In 1965 and 1966 such braided rugs ranked first, in terms of value, among the imports of miscellaneous products of manmade fibers.

a. U.S. producers.--About 5,000 domestic concerns produce miscellaneous products of manmade fibers. Most of them engage primarily in "cut-and-sew" operations utilizing all kinds of domestic and

1/ For convenience, floor coverings of such construction are hereafter described as tufted.

2/ The term "braided or similar construction" is used here to describe floor coverings composed of braids, cords, fabric strips, and similar textile materials in continuous lengths, sewn or otherwise bound together but not woven.

imported textile fabrics, as well as other materials such as artificial leather, and plastic film. Some of the smaller cut-and-sew concerns specialize in particular types of articles (e.g., table linens, awnings, or draperies and curtains); very few are believed to use manmade fibers or products thereof exclusively. Miscellaneous articles of manmade fibers are important products of four of the five cut-and-sew industries discussed in section A-5 of this report on miscellaneous cotton products, viz, Census industry Nos. 2391, 2392, 2393, and 2399. The available data on their operation are given in that section.

A few large concerns make blankets from fabrics produced in their own establishments. These vertically integrated concerns, which are primarily producers of broadwoven fabrics of manmade fibers (Census industry No. 2221), account for virtually all the output of blankets of manmade fibers. Tablecloths, doilies, curtains, and other articles wholly of lace are produced principally by lace mills (Census industry No. 2292). The data that are available on the operations of these concerns are discussed in section C-3 of this report on fabrics of manmade fibers. The firms that produce cordage of manmade fibers are primarily producers of rope, cable, and related products of other fibers (Census industry No. 2298); the available data on their operations are given in section D-5, miscellaneous products of miscellaneous fibers.

Rugs and carpets of manmade fibers are produced principally by the firms that produce a variety of textile floor coverings (Census industry Nos. 2272 and 2279); the available data on their operations are discussed in the section B-5 on miscellaneous wool products.

b. Employment and wages.--Data on the number of persons employed and aggregate wages paid by the principal cut-and-sew producers are given in the earlier section on miscellaneous cotton products; corresponding data relating to the producers of floor coverings are given in the section on miscellaneous wool products.

c. U.S. consumption.--The annual U.S. consumption of miscellaneous products made from manmade fibers has risen in recent years. The sharpest increase has probably occurred in the consumption of domestically produced floor coverings of tufted construction. The U.S. consumption of tufted floor coverings expanded markedly in the 1960's, and the share of the total that was made of manmade fibers increased materially. In 1966 manmade fibers accounted for 87 percent of the total consumption of pile yarns in the domestic manufacture of tufted floor coverings, compared with 66 percent in 1962.

The annual consumption of floor coverings of braided or similar construction has also risen in recent years (by 42 percent from 1962 to 1966), but is still small compared with that of tufted rugs and carpets. Of the 1966 consumption of floor coverings of braided or similar construction of all fibers, imports of floor coverings of that type (mostly of manmade fibers) were equivalent to about 80 percent. Domestic shipments of such products reached a peak of 47 million square feet in 1965; they were about a fourth smaller in 1966 than in 1965.

d. U.S. production.--In terms of the content of manmade fibers, i.e., the estimated amount consumed in processing, including the amount "wasted", total U.S. output in 1965 of miscellaneous products made from manmade fibers was about 1,420 million pounds; more than a third of the total--563 million pounds--was utilized in the production of floor coverings.

e. U.S. sales and inventories.--The available data on sales and inventories of the producers of floor coverings are given in section B-5 of this volume, and those on sales and inventories of the "cut-and-sew" concerns, in section A-5.

f. U.S. imports and exports.--Aggregate data on U.S. imports and exports of the miscellaneous products of manmade fibers considered here are not readily available. Imports of floor coverings of braided or similar construction made of manmade fibers have been much larger in value in recent years than entries of other products considered here. Imports of such floor coverings increased sharply from 1964 to 1966 (table C-5-1). The increase in value was about equivalent to a decline in the value of imports of similar rugs made of wool and cotton. Annual imports of such rugs of manmade fibers, however, increased by 72 million square feet between 1964 and 1966, whereas annual imports of wool and cotton rugs combined declined by 45 million square feet.

Under only four tariff items were imports of miscellaneous products of manmade fibers (other than floor coverings) valued at $1 million or more in either 1965 or 1966. Imports under those four items combined were valued at about $5 million in 1966; they included a wide variety of articles not enumerated by name in the TSUS.

g. Prices.--The U.S. wholesale price indexes for certain floor coverings and blankets of manmade fibers were reported by the U.S. Bureau of Labor Statistics as follows (as of June of the years shown):

	Tufted broadloom floor coverings of manmade fibers (1957-59=100)	Blankets of manmade fibers chiefly rayon (Dec. 1962=100)
1962	92.0	1/
1963	86.7	100.0
1964	82.1	102.4
1965	81.5	99.6
1966	78.3	97.4
1967	1/	99.1

1/ Not available.

The wholesale price indexes for additional specific types of floor coverings of manmade fibers in June 1967 were as follows (these indexes are not comparable to the earlier series shown above):

Type	Base	Price index
Woven broadloom, acrylic	Dec. 1966=100	91.7
Tufted broadloom, nylon	1957-59=100	75.0
Tufted broadloom, acrylic	Dec. 1966=100	94.9

h. Profitability and investment.--Data on the profitability of concerns producing the miscellaneous products of manmade fibers considered here generally are not available. Certain data on the profitability of concerns producing carpets and rugs (all fibers) are given in section B-5, miscellaneous wool products.

During recent years the expenditures for new plant and equipment by producers of the articles considered here have been substantial. Data on such expenditures by the producers of cordage, floor coverings, and three specified "cut-and sew" products, i.e., companies that produce substantial quantities of furnishings and other miscellaneous products from materials of manmade fibers, are shown in table C-5-2.

i. U.S. customs treatment.1/--Most of the articles of manmade fibers considered here are dutiable under provisions of schedule 3 of the TSUS. The U.S. rates of duty applicable in 1967 to imports of floor coverings, lace products, and ornamented products of manmade fibers were of the ad valorem type; they ranged from 16 percent on floor coverings of braided and similar construction (item 361.15) to 65 percent on furnishings fabricated from a certain type of machine-made lace (item 365.31). Virtually all the other products of manmade fibers considered here were dutiable at compound rates, i.e., rates that had both specific and ad valorem components. In 1967 the major portion of these imports were dutiable at 25 cents per pound plus 30 percent ad valorem, which was equivalent to about 40 percent ad valorem.

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates.

In the GATT tariff negotiations concluded on June 30, 1967, nearly all the rates of duty on products considered here were reduced--many by 50 percent, the maximum permitted. Most of the reductions will be placed in effect in five stages; the first stage went into force on January 1, 1968, and the subsequent stages will become effective at annual intervals. When the final stage becomes effective, the range of ad valorem rates on products discussed here (in the absence of other modifications) will be from 8.5 percent on floor coverings not specially provided for (item 361.56) to 40 percent on certain lace or ornamented articles (in items 365.31 and 365.50). On floor coverings of braided or similar construction (1967 TSUS item 361.15) the final stage of the concession rate will be 12 percent ad valorem for the products "with over 50 percent by weight of the fibers, exclusive of any core, being cotton, manmade fibers, or cotton and manmade fibers." 1/ For similar floor coverings of other fiber composition, 2/ the final stage of the concession rate will be 8 percent ad valorem, i.e., 50 percent of the 1967 rate.

j. Foreign production and trade.--Data on foreign production of and trade in miscellaneous products of manmade fibers are not available for inclusion in this report.

1/ Floor coverings of this description will be under new TSUS item No. 361.18.
2/ New TSUS item No. 361.20.

Table C-5-1.--Floor coverings of braided or similar construction: U.S. imports for consumption, by type of fiber, 1964-66

Fiber and TSUS item number	1964	1965	1966
Manmade (361.05 pt., -.15 pt.)--			
Quantity----------------1,000 sq. ft--	10,938	34,456	83,350
Value------------------1,000 dollars--	1,973	5,861	13,592
Unit value----------cents per sq. ft--	18	17	16
Wool (361.05 pt., -.07, -.10, -.15 pt.)-			
Quantity----------------1,000 sq. ft--	80,521	62,753	39,605
Value------------------1,000 dollars--	15,139	11,114	7,094
Unit value----------cents per sq. ft--	19	18	18
Cotton (361.05 pt., 361.15 pt.)--			
Quantity----------------1,000 sq. ft--	5,359	981	1,064
Value------------------1,000 dollars--	707	122	137
Unit value----------cents per sq. ft--	13	12	13
All other (361.05 pt., -.15 pt.) 1/--			
Quantity----------------1,000 sq. ft--	17,747	18,442	14,730
Value------------------1,000 dollars--	2,942	2,293	1,760
Unit value----------cents per sq. ft--	17	12	12
Total--			
Quantity----------------1,000 sq. ft--	114,565	116,632	138,749
Value------------------1,000 dollars--	20,762	19,390	22,584
Unit value----------cents per sq. ft--	18	17	16

1/ Mostly floor coverings made from waste textile materials of unidentified fibers.

Source. Compiled from official statistics of the U.S. Department of Commerce.

Table C-5-2.--Expenditures for new plant and equipment by specified industries, 1963, 1964, and 1966

(In thousands of dollars)

Industry No.	Principal products	1963	1964	1966
	Floor coverings:			
2271	Woven carpets and rugs	4,151	7,630	5,569
2272	Tufted carpets and rugs	11,512	26,708	26,906
2279	Carpets and rugs, not elsewhere classified	462	872	2,296
2298	Cordage and twine	2,689	2,767	9,796
2391	Curtains and draperies	2,936	2,977	3,849
2392	House furnishings, not elsewhere classified	8,384	9,302	15,393
2393	Textile bags	1,878	1,243	4,075

Source: Compiled from official statistics of the U.S. Department of Commerce.

This section deals with fibers other than cotton, wool and man-made, and products made from such other fibers. The two principal types of fibers covered here are silk and vegetable fibers other than cotton. There is no commercial production of such fibers in the United States; however, there is some silk waste production. Other miscellaneous fibers and yarn materials include animal hair (including human hair) other than of the camel, cashmere goat, angora rabbit, etc., and nonfibrous materials used for textile products, such as paper and metal. All are of minor commercial importance.

The vegetable fibers covered here are those which can be spun or used for stuffing, as distinguished from straw and other fibrous vegetable materials chiefly used in the manufacture of brushes and brooms. Most of the vegetable fibers considered here are divided into three groups, depending on the part of the vegetable plant from which they are obtained, as follows:

Leaf fibers (also known as hard fibers) principally abaca, sisal and hennequen.

Stalk (bast) fibers (also known as soft fibers) principally flax, jute, hemp, ramie and sunn.

Seed fibers, such as coir and kapok, which are of less importance than the preceding two types.

The United States is a major consumer, but not a producer of silk and the miscellaneous vegetable fibers covered by this section. Because of U.S. dependence on imported supplies of these fibers, national stockpiles were established; but some of these holdings have been sold off in recent years.

1. Raw fibers and waste

a. U.S. producers.--There is no domestic production of vegetable fibers other than cotton or of raw silk. The only materials covered by this section which are produced in the United States are paper and metal (e.g., tinsel wire) used for yarns based on these materials, and the silk waste resulting from domestic silk manufacture.

b. Employment and wages.--No data.

c. U.S. consumption.--Consumption of the significant types of fibers covered by this section is approximately equal to imports, since there is no domestic production, and exports (re-exports) are negligible (tables D-1-1 and D-1-2).

d. U.S. production.--There is no domestic production of the raw fibers covered here; but annual production of silk waste since 1961 has ranged from a low of 177,000 pounds in 1966 to a high of 290,000 pounds in 1965.

e. U.S. sales and inventories.--In recent years, sales of miscellaneous fibers have approximated imports, except for releases from the U.S. Government stockpiles. Since 1950 sizable stockpiles of abaca and sisal fibers have been maintained. In 1965 approximately 3,400 long tons (nearly all sisal) were released from the stockpiles for commercial sale, and in 1966 about 20,000 long tons (mostly sisal). The objectives for abaca and sisal fibers to be retained in national stockpiles are approximately 22,000 and 89,000 long tons respectively; current stockpile levels are still above these figures.

Raw silk and silk noils were removed in 1965 from the list of strategic and critical materials to be held in national stockpiles. Stockpile releases amounted to 114,000 pounds of raw silk and 639,000 pounds of silk noils in 1965 and 330,000 pounds of silk noils in 1966.

Stocks of raw silk held by domestic companies amounted to about 438,000 pounds at the end of December 1966 and 363,000 pounds at the end of November 1967.

f. U.S. imports and exports.--U.S. imports of the miscellaneous vegetable fibers covered in this section totalled approximately 186,000 long tons in 1966, with an aggregate value of $36 million. The types of fibers imported were primarily sisal, jute and abaca (table D-1-1).

From 1961 to 1966 the United States was the world's largest importer of raw silk and silk waste. Silk waste is generally a byproduct resulting from the manufacture of silk products. Imports of raw silk and silk waste aggregated 6.7 million pounds with a value of $27.3 million in 1961, but only 4.6 million pounds with a value of $23.5 million in 1966 (table D-1-2). Raw silk has been imported primarily from Japan, but with substantial supplies also coming from South Korea and Italy. Silk waste was imported not only from these countries, but from other Western European countries with substantial production of silk products.

Exports (re-exports) of the fibers covered in this section have been minor.

g. Prices.--Price statistics for miscellaneous vegetable fibers are not available. The prices of raw silk have fluctuated widely in recent years, due to the variety of factors influencing both supply (such as climatic variations, and the availability of labor) and demand (primarily changes in fashion). Speculation has contributed to the intensity of these fluctuations. The following tabulation shows average monthly prices per pound for AAA grade raw silk, based on 20 and 22 denier:

1961------	$5.20
1962------	5.92
1963------	7.18
1964------	5.73
1965------	6.82
1966------	8.06

High prices for silk recently have reportedly discouraged the manufacture and consumption of some silk products.

h. Profitability and investment.--No data.

i. U.S. customs treatment. 1/--With the exception of flax, crin vegetal, and hemp, all of the raw miscellaneous vegetable fibers (unprocessed) are duty-free. The pre-Kennedy Round rates of duty on flax and on other fibers in processed form, based on 1966 imports,

---

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before December 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of dutiable fibers covered by this section from the Philippine Republic and "Communist" countries have been negligible in recent years.

ranged from an equivalent of about 1 percent ad valorem to 10 percent ad valorem. Of the 18 dutiable TSUS items, 15 were reduced on the Kennedy Round negotiations. Five of these were reduced by 25 percent; the balance was reduced by 50 percent.

Unprocessed raw silk and silk waste are duty free. Processed raw silk, silk noils containing over 50% of fibers over 2 inches in length and other types of advanced waste were dutiable at rates ranging from 14 to 20 percent ad valorem in 1967; these rates were reduced by 50 percent in the Kennedy Round negotiations.

The first stage of the scheduled Pre-stage Kennedy Round reductions became effective on January 1, 1968.

j. Foreign production and trade.--World production of miscellaneous vegetable fibers in 1966 aggregated approximately 3 million long tons. About one-third of this production was jute, one-fifth flax and one-fifth sisal. U.S. imports amounted to about 6 percent of total world output. Indian and Pakistan are the world's largest jute producers; sisal is produced primarily in Tanzania, Brazil, Kenya and Angola; hennequen in Mexico; and flax in the U.S.S.R., and France, Belgium and the Netherlands.

World production of raw silk totaled about 60 million pounds in 1966. Japan, mainland China, the U.S.S.R., India, and the Republic of Korea were the leading producers of raw silk in 1966. Japan, the United States, Italy, France, mainland China and the U.S.S.R. were the most important consumers of raw silk.

Table D-1-1.--Vegetable fibers (except cotton), raw, waste, and processed but not spun: U.S. imports for consumption, 1961 and 1966

Fiber	1961	1966	1961	1966
	Quantity		Value	
	Long tons	Long tons	1,000 dollars	1,000 dollars
Abaca	28,055	33,406	11,178	9,159
Coir	182	2,386	36	243
Crin vegetal	82	263	7	28
Flax	2,170	4,495	1,078	2,199
Hemp	61	344	33	2,172
Jute	22,249	51,058	7,502	10,461
Kapok	10,208	13,073	3,114	3,562
Ramie	12	44	14	27
Sisal and henequen	103,308	78,979	18,641	9,999
Sunn	617	1,889	122	339
Other	1,417	534	429	113
Total	168,361	186,471	42,154	36,202

Source: Compiled from official statistics of the U.S. Department of Commerce.

Table D-1-2.--Raw silk and wastes: U.S. imports for consumption, 1961-66

Year	Quantity	Value
	1,000 pounds	1,000 dollars
1961	6,689	27,313
1962	6,476	27,179
1963	6,392	27,757
1964	6,691	23,180
1965	6,304	21,229
1966	4,623	23,475

Source: Compiled from official statistics of the U.S. Department of Commerce.

Note.--Exports of both domestic and foreign raw silk and wastes are reported in the official exports statistics of the U.S. Department of Commerce. It is believed that nearly all the exports reported as domestic merchandise are "re-exports" of imported raw silk. During the period 1961-66, total exports ranged from 20,000 pounds in 1964 to 390,000 pounds in 1966.

2. Yarns

Miscellaneous-fiber yarn is not an important type of domestic production. Except for silk, most of the yarn produced is consumed by the producers in their own finished products, particularly in the manufacture of twine and other types of cordage.

a. U.S. producers.--Jute and flax comprise all or almost all of the production in the United States. About a dozen producers account for the total output; none of them rely on soft fiber yarns as their main type of production. The two principal producers are located in Massachusetts; they use nearly all of their output for their own production of advanced products, including twines, thread and fabric.

The cordage industry produces most of the output of hard (leaf) fiber yarns, and uses almost all of it for its own output of cordage.

In 1966 it is estimated that spun silk was manufactured by less than 10 firms; thrown silk yarns by about 20 firms; and silk sewing threads and handwork yarns by under 20 firms. Most of these products were manufactured in the Middle and South Atlantic States.

Miscellaneous yarns, such as paper yarns, metallic yarns, and hair yarns are manufactured by a small number of mills.

b. Employment and wages.--Separate figures on employment and wages are not available for the production of miscellaneous vegetable-fiber yarns, since these functions are generally integrated with the production of other yarns and end-products by the same producers.

Fewer than 10,000 workers were employed in 1966 in the production of all domestic silk products, from yarn to fabrics.

c. U.S. consumption.--Consumption of miscellaneous vegetable-fiber yarns, for which separate figures are not available, can be approximated from the domestic production of the major finished products in which such yarns are incorporated. On this basis, though fluctuating somewhat from year to year, consumption appears to have been relatively stable.

Consumption of silk yarn declined from 7.7 million pounds valued at $40.5 million in 1961 to 4.0 million pounds valued at $28.1 million in 1966.

On the basis of figures relating to end-products, it is believed that the minor consumption of miscellaneous yarns, such as paper and metallic yarns, has increased somewhat in recent years.

d. U.S. production.--Production of hard (leaf) fiber yarns by the cordage industry is estimated to have been slightly over 100 million pounds in 1966. This is believed to be about one-third less than production in 1962, representing a steady decline since the earlier year.

Production of silk yarns declined from 7.2 million pounds valued at $37.9 million in 1961 to 3.4 million pounds valued at $25.0 million in 1966.

Separate figures are not available on the domestic production of paper, metallic or similar miscellaneous yarns.

e. U.S. sales and inventories.--Separate figures on sales and inventories are not available--see figures in preceding section on value of production.

f. U.S. imports and exports.--Aggregate U.S. imports of yarns of vegetable fibers (except cotton) were 14.3 million pounds, with a value of $6.5 million in 1966. The value of such imports had increased every year between 1961 and 1966. Although coir yarn accounted for over half of the total weight of imports in 1966, flax yarns accounted for over 80 percent of the value. Almost all 1966 imports of coir yarn came from India, the world's main producing country of such yarn; imports of flax yarns came mainly from the United Kingdom, and France, of hard fiber yarns from Ireland. Imports of jute yarns came principally from Japan and Portugal.

Imports of silk yarns increased from under 700,000 pounds in 1961 valued at $3.0 million to 1.1 million pounds valued at $5.6 million in 1963; by 1966 they had declined to under 600,000 pounds valued at $3.3 million. The imports were principally from Japan.

Imports of miscellaneous yarns such as paper and metallic have been negligble in recent years.

The only major U.S. export of the yarns discussed in this section involved silk yarns. It is estimated that such exports declined from 114,000 pounds valued at $440,000 in 1961 to 58,000 pounds valued at $239,000 in 1966.

g. Prices.--Imports during 1966 of coir yarn had an average foreign value of 12 cents per pound, in comparison with 25.5 cents per pound for soft fiber imports.

Prices of silk yarns were influenced by the fluctuations and upward trend of prices for raw silk during the period 1961-66.

h. Profitability and investment.--Separate figures are not available concerning profitability and investment in the production of the types of yarn dealt with by this section.

i. U.S. customs treatment.1/--Coir yarn, which is used mainly for tying hop vines, is the only vegetable-fiber yarn which is free of duty. Other yarns of vegetable fibers (other than cotton) were dutiable at rates ranging from 8 to 25 percent ad valorem in 1967. Thirteen of the 15 TSUS dutiable items were reduced by 50 percent during the Kennedy Round negotiations; the other two items were reduced by 37½ percent.

Silk yarns were dutiable at rates ranging from 10 percent ad valorem to 27.5 percent ad valorem prior to the Kennedy Round. All of these rates except one were reduced by 50 percent during the Kennedy Round negotiations.

The first stage of the scheduled five-stage Kennedy Round reductions was effective on January 1, 1968.

j. Foreign production and trade.--India is presently the main country for the production of coir and jute yarns. Japan, the United States, Italy, France, mainland China and the U.S.S.R. were the leading world manufacturers and traders of silk yarns in 1966.

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of yarns covered by this section from the Philippine Republic and "Communist" countries have been negligible in recent years.

3. Fabrics

The major portion of the consumption of miscellaneous-fiber fabrics is supplied by imports. The principal fabrics involved are untreated jute, broadwoven silk, and a variety of special-purpose fabrics of flax and other miscellaneous vegetable fibers.

a. U.S. producers.--Only one domestic producer of broadwoven fabrics of vegetable fibers other than cotton appears to be in operation at the present time. This plant, located in Massachusetts, weaves fabrics for its own linen towels. If there is any production of other broadwoven vegetable fiber fabrics (except cotton) it is presumed to be negligible.

Silk broadwoven fabrics were produced by less than 50 domestic mills during 1966. Most of the producers were located in the Middle and South Atlantic States.

As a minor portion of their production, a number of mills produce fabrics of miscellaneous vegetable fibers other than broadwoven. The principal products in this group are jute webbing and sisal pads, but there is also believed to be minor domestic production of knit, tufted, narrow, braided, elastic, lace, net and embroidered fabrics as well as braids, cords, trimmings, padding, felts, etc. There are no separate figures as to the volume involved or the number of domestic producers concerned.

A small number of U.S. producers make paper fabrics, mostly for automobile seat covers, shopping bags, and shoe uppers.

b. Employment and wages.--Complete separate data on employment and wages in the production of fabrics of miscellaneous vegetable fibers are not available. Employment in the production of linen fabrics in recent years has averaged under 500 persons.

Employment in the production of silk fabrics is discussed in 2b. Separate data are not available on wages.

c. U.S. consumption.--Except for the minor production of linen fabrics (see section 3a) consumption of miscellaneous broadwoven vegetable fabrics is presumed to be about equal to imports.

Consumption of broadwoven silk fabrics decreased from 75.5 million square yards in 1961 to 53.0 million square yards in 1966. However, because of increases in the average value per yard consumed, the aggregate value of consumption is estimated to have increased slightly, from $65.1 million in 1961 to $65.5 million in 1966. Imports have exceeded domestic production since 1961 (table D-3).

d. U.S. production.--Information on the production of miscellaneous vegetable fiber fabrics is given in section 3a.

The production of broadwoven silk fabrics declined from 30.0 million square yards in 1961 to 23.8 million square yards in 1966. However, because of the rise in the value per square yard, the total value of domestic production actually increased, from $31.3 million in 1961 to $32.8 million in 1966 (table D-3).

e. U.S. sales and inventories.--Separate figures on sales and inventories are not available--see preceding sections.

f. U.S. imports and exports.--Woven fabric, wholly of jute, not bleached, colored or flame resistant, is often the largest single TSUS textile item in terms of total value of U.S. imports. Such imports had an aggregate value of $162 million in 1966. The development of the tufting process for the manufacture of pile floor coverings greatly increased the demand for imported jute fabrics; other uses include bags and sacking. Imports of jute fabrics (burlap) increased from 781 million yards in 1961 to 903 million yards in 1966. Jute fabric suitable for covering cotton bales is the second most important import of jute fabric. Demand for this product varies with the size of the U.S. cotton crop.

Imports of woven fabrics of flax aggregated 5 million square yards in 1966.

Silk broadwoven fabric imports declined from 47.2 million square yards valued at $35.7 million (equivalent to 63 percent of the quantity of domestic consumption) in 1961 to 30.2 million square yards (equivalent to 57 percent of the quantity of domestic consumption) valued at $34.3 million in 1966 (table D-3). Most of the imports were similar or identical to domestic counterparts.

Imports of fabrics of micellaneous vegetable fibers also include such special products as jute webbing and sisal pads, as well as braids, knit, tufted and similar fabrics. Imports have been increasing according to industry estimates, but many of the products are being displaced by manmade fiber products. Exports are believed to be small.

The only substantial exports of fabrics covered by this section are of broadwoven silk. Exports declined from 1.5 million square yards valued at $1.9 million in 1961 to 1.0 million square yards with a value of $1.7 million in 1966 (table D-3).

During 1965 and 1966 significant imports of low-priced fabrics in chief value of the fibers covered here (such as flax or rabbit hair) but chiefly wool by weight resulted from the fact that such fabrics paid a much lower rate of duty than fabrics in chief value of wool. Through legislation 1/ rates of duty applying to fabrics in chief value of flax or rabbit hair and containing over 17 percent of wool by weight were increased and the imports thereof ceased.

Other than in 1965 and 1966, the principal import of broadwoven textile fabrics of miscellaneous fibers were woven fabrics in chief weight of paper. Such imports declined from a total value of $129,000 in 1964 to $76,000 in 1966 largely because headwear of the type for which such fabrics were imported began to be imported in finished form.

g. Prices.--Data on price trends for individual fabrics of miscellaneous fibers are not available. However, the average foreign value of certain categories of imports in 1961 and 1966 were as follows (in cents per pound):

1/ Public Laws 89-241 (effective December 7, 1965) and 89-405 (effective June 19, 1966); see discussion of imports of wool fabrics in section 3f of part B of this report.

	1961	1966
Jute fabrics, not blended, colored or flame-resistant	15.1	15.6
Jute fabrics bleached colored or flame-resistant	21.2	26.2
Linen fabrics weighing over 4 ounces per square yard	94.7	84.5
Fabrics suitable for covering cotton bales	18.9	14.9

The above figures are influenced by changes in the composition of imports between the years shown, and do not indicate wide year-to-year variations in values which occurred in certain instances during the intervening years.

h. Profitability and investment.--Separate figures are not available on profitability and investment in the production of miscellaneous-fiber textiles.

i. U.S. customs treatment 1/.--Certain miscellaneous fabrics, such as bale coverings and abaca fishnets were duty-free prior to the Kennedy Round. Most others were reduced by 50 percent in the Kennedy

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before December 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of fabrics covered by this section from the Philippine Republic have been minor in recent years; those from the "Communist" countries, negligible.

Round negotiations. The principal dutiable items not reduced in the Kennedy Round were webs, wadding, batting, nonwoven fabrics, sisal pads, and felts and bonded fabrics of vegetable fibers other than cotton.

Silk broadwoven fabrics had rates of duty in 1967 ranging from 21 percent to 37.5 percent ad valorem. These rates were reduced by 50 percent in the Kennedy Round.

The first stage of the scheduled five-stage Kennedy Round reductions became effective on January 1, 1968.

j. Foreign production and trade.--In 1964 India accounted for about 1.3 million tons of the 2.2 million-ton world production of jute fabrics; Pakistan, for about 0.3 million tons. About one-third of the exports of these countries during 1964 went to the United States.

Japan, the United States, Italy, France, China and the U.S.S.R. are among the leading nations in the world in the production and export of silk fabrics.

Table D-3.--Broadwoven fabrics of silk: U.S. production, imports for consumption, exports of domestic merchandise, and apparent consumption, 1961-66

(Quantity in thousands of square yards; value in thousands of dollars)

Year	Production	Imports	Exports	Apparent consumption	Ratio (percent) of imports to consumption
	Quantity				
1961	29,794	47,200	1,538	75,456	63
1962	31,324	52,475	1,169	82,630	64
1963	23,463	30,525	1,152	52,836	58
1964	25,998	34,480	1,044	59,434	58
1965	25,299	29,093	1,168	53,224	55
1966	23,840	30,154	1,027	52,967	57
	Value				
1961	1/ 31,313	35,661	1,905	65,069	55
1962	1/ 34,738	41,781	1,662	74,857	56
1963	1/ 26,771	28,875	1,539	54,107	53
1964	1/ 31,458	33,231	1,520	63,169	53
1965	1/ 34,457	31,124	1,928	63,653	49
1966	1/ 32,828	34,269	1,662	65,475	52

1/ Partly estimated by Tariff Commission staff.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.

4. Apparel

Flax and silk account for almost all of the miscellaneous fibers used in apparel. Silk apparel is almost entirely a luxury product, whereas flax is used largely for blending purposes, both in domestically produced and imported articles. Neither fiber, however, is very important in the total apparel market.

a. U.S. producers.--Separate figures are not available on the number of apparel producers engaged in the production of apparel of the miscellaneous fibers covered in this section.

b. Employment and wages.--Separate figures are not available on the employment and wages for workers engaged in the production of apparel of the miscellaneous fibers covered by this section.

c. U.S. consumption.--Consumption of the apparel covered by this section has been increasing during the past decade, but comparable figures are not available to equate domestic production with imports and exports. Silk apparel remains a relatively minor part of total apparel consumption, catering to a limited high-priced market.

d. U.S. production.--About 22 million pounds of miscellaneous-fiber textiles (almost entirely silk and flax) were consumed by domestic apparel manufacturers in 1963, as compared with about 17.5 million in 1958 (table D-4). Most of this increase was accounted for by the greater use of flax fabrics, which increased from 43 percent of the total quantity of such textiles in 1958 to 52 percent in 1963. The preceding figures are believed to provide a fair indication of the increased physical volume of production of apparel based on these fibers.

The major silk-using types of apparel, in order of their importance, were dresses, men's robes and neckties, blouses and skirts, women's accessories, and men's and women's suits. The major flax-using types of apparel were dresses, blouses and shirts, men's and women's suits, and women's accessories and diapers. Flax is blended with other fibers in the domestic production of men's apparel.

e. U.S. sales and inventories.--Separate figures on sales and inventories of apparel of miscellaneous fibers are not available.

f. U.S. imports and exports.--Imports of apparel of miscellaneous fibers increased from 2.8 million pounds valued at $21 million in 1964 to 5.0 million pounds valued at $26.6 million in 1966. Silk apparel--mainly women's and girls' scarves, dresses, blouses and dressing gowns and men's and boys' neckties--comprised over 60 percent of the value of these imports in 1966, a slightly smaller proportion than in 1964, although silk apparel imports actually decreased in aggregate quantity (weight) between the two years. The difference is accounted for by the rapid rise in the average value of silk apparel imports.

Imports of apparel of miscellaneous vegetable fibers have consisted mainly of men's and boys' slacks of flax or ramie blended with other fibers and of linen handkerchiefs.

Sources of U.S. imports of wearing apparel of miscellaneous fabrics in recent years have been primarily Japan, Hong Kong and Italy.

Exports of miscellaneous fiber apparel are minor, and considerably smaller than imports.

g. Prices.--Separate price statistics are not available for apparel of miscellaneous fibers.

h. Profitability and investment.--Separate figures are not available on profitability and investment in the production of apparel of miscellaneous fibers.

i. U.S. customs treatment. 1/--With the exception of two items of headwear and gloves, the rates of duty applying to all apparel of miscellaneous fibers were reduced in concessions granted by the United States in the Kennedy Round negotiations. Most of these reductions were of 50 percent, the maximum permitted; a small number ranged between 15 and 33 percent. The first stage of the scheduled five-stage reductions became effective on January 1, 1968.

j. Foreign production and trade.--Japan, Hong Kong and Italy are the world's largest producers and exporters of silk apparel products. These countries are also major exporters of apparel of miscellaneous vegetable fibers.

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before December 31, 1973, are subject, as provided in general headnote 3(e), to fractional parts of column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of apparel of miscellaneous fibers from the Philippine Republic have been relatively small (consisting primarily of linen handkerchiefs) and those from Communist countries have been negligible in recent years.

Table D-4-1.--Estimated consumption of textile materials other than cotton, wool, and manmade fibers by U.S. apparel producers, by type of garment produced, 1958 and 1963 1/

(In millions of pounds of raw fiber actually consumed, including the amount "wasted")

Type of garment	Silk		Flax		Total	
	1958	1963	1958	1963	1958	1963
Men's and boys' wear:						
Robes and neckties	1.8	1.9	2/	2/	1.8	1.9
Suits	0.4	0.4	0.2	0.4	0.6	0.8
Separate slacks	0.3	0.3	0.3	0.3	0.6	0.6
Separate coats	2/	2/	0.3	0.4	0.3	0.4
Sport shirts, woven	0.1	0.1	-	-	0.1	0.1
Other furnishings	-	-	0.4	0.4	0.4	0.4
Total	2.6	2.7	1.2	1.5	3.8	4.2
Women's, misses', children's, and infants' wear:						
Dresses	3.4	3.9	4.1	6.0	7.5	9.9
Blouses and shirts	1.1	1.3	1.0	1.8	2.1	3.1
Accessories and diapers	1.5	1.3	0.4	0.6	1.9	1.9
Skirts	0.2	0.2	0.3	0.6	0.5	0.8
Suits	0.3	0.3	0.2	0.4	0.5	0.7
Coats and jackets	0.2	0.2	2/	0.2	0.2	0.4
Slacks	2/	2/	0.2	0.3	0.2	0.3
Nightwear, woven	0.2	0.2	-	-	0.2	0.2
Underwear, woven; Underwear, knit	0.2	0.1	-	-	0.2	0.1
Apparel lace	0.1	0.1	0.1	2/	0.2	0.1
Nightwear, knit	0.1	0.1	-	-	0.1	0.1
Total	7.3	7.7	6.3	9.9	13.6	17.6
Grand total	9.9	10.4	7.5	11.4	17.4	21.8

1/ Data are not available for later years.
2/ Less than 50,000 pounds.

Source: Textile Economics Bureau, Textile Organon, January 1967, p. 17.

5. Miscellaneous products

Cordage (primarily of hard-leaf fiber) and shipping bags (primarily of jute) are the major products covered in this section; other significant products include floor coverings and linen towels. Imports have supplied a growing proportion of the U.S. consumption of many of these products in recent years, but in the manufacture of some of these greater use is being made of materials other than miscellaneous fibers.

a. U.S. producers.--About 3,000 establishments produce a wide range of miscellaneous products from vegetable fibers (other than cotton), silk, and other miscellaneous fibers. Among the most important products have been cordage, shipping bags and sacks, floor coverings, other furnishings (particularly towels), linen fire and industrial hose, sisal pads, fish netting, and machine belts. Other products include such items as shopping bags, tablecloths, hammocks, etc.

Of the 3,000 establishments, only the 260 cordage and bag establishments use more of the miscellaneous fibers than other fibers such as cotton and manmade.

b. Employment and wages.--In 1965 there were 102,000 production workers, with annual wages aggregating $365 million, in the establishments producing the types of products covered by this section from all fibers. Separate data are not available on employment and wages for the production of these products only from miscellaneous fibers. In the establishments referred to, the value added per production worker ranged from just over $8,000 per year in the production of bags to over $15,000 per year in the production of floor coverings.

c. U.S. consumption.--Consumption figures are available for certain of the products discussed in this section. Consumption of hard-fiber cordage increased from 445.4 million pounds in 1958 to 478.2 million pounds in 1962; but then declined to 406.5 million pounds in 1965 (table D-5). Increasing use of high-strength non-cellulosic manmade fiber cordage accounted for the decline. Consumption of linen towels in recent years has been relatively stable, averaging 1.5 million pounds per year. Consumption of bags and sacks of miscellaneous vegetable fiber is believed to be declining because of increasing competition from manmade fiber and paper sacks, and the growing use of bulk shipping techniques.

d. U.S. production.--Production (in terms of sales) of hard-fiber cordage declined from 176.6 million pounds in 1958 to 116.9 million pounds in 1965 (table D-5). Production of towels of miscellaneous vegetable fibers (mostly linen) increased from 477,000 pounds in 1961 to an estimated 750,000 pounds in 1966.

e. U.S. sales and inventories.--The value of sales in 1965, as reflected by shipments of all merchandise (largely vegetable fibers except cotton) was $167 million for the cordage industry (SIC 2298) and $191 million for the industry producing bags and sacks (SIC 2393). Both values represented small increases over 1964 levels. Yearend inventories for 1965 were valued at $42 million for the cordage industry and $24 million for the bags and sack industry.

f. U.S. imports and exports.--Total imports of miscellaneous products of the fibers covered by this section were valued at $58.4 million in 1966, a decline from $67.8 million in 1964. About 77 percent of this value was represented by imports of cordage in 1966, which had accounted for an even larger share of total imports in 1964. Floor coverings and other furnishings of miscellaneous vegetable fibers were second in importance. Only about 3 percent of the 1966 imports were of such special textile materials as paper and metallized yarns; less than one percent were of silk.

On a quantity basis, imports of cordage of hard fibers accounted for 71 percent of domestic consumption of such cordage in 1965, as compared with 61 percent in 1958 (table D-5). Imports of linen towels and toweling dropped from 69 percent of domestic consumption in 1961 to 55 percent of domestic consumption in 1966, but in the first 10 months of 1967 there was a sharp rise in imports of towels of vegetable fibers except cotton containing not over 100 yarns per square inch, which corresponds to the type made by the single producer of such towels in the United States. Imports of bags and sacks of miscellaneous textile fibers have aggregated less than one percent of the quantity of domestic consumption.

Exports of products in the categories discussed in this section for which figures are available have been of minor importance in recent years.

g. Prices.--The price index for miscellaneous textile products (1957-1959=100) increased from 113.1 in 1961 to 126.8 in 1964; then declined to 116.5 in 1966.

h. Profitability and investment.--Separate data on the profitability of the production of items covered by this section are not available. Expenditures for new plant and equipment by the cordage industry rose from $2.8 million in 1964 to $5.0 million in 1965; by the producers of bags and sacks from $1.2 million in 1964 to $1.6 million in 1965.

i. U.S. customs treatment 1/.--The generally low rates of duty for hard-fiber cordage were not further reduced in the Kennedy Round. There is a six-million pound quota for imports of hard-leaf cordage from the Philippines, and substantial imports of such cordage (items 315.35 and 315.50). Binder and baler twines were duty-free before the Kennedy Round. The 1967 rates of duty for other miscellaneous vegetable fiber cordage averaged about 22 percent ad valorem; they were reduced by 50 percent in the Kennedy Round negotiations.

The rate of duty on coir mats, which was equivalent to over 40 percent ad valorem in 1967, was reduced by 50 percent in the Kennedy Round negotiations; other coir floor coverings were reduced from a low rate of duty to free. The rates of duty on housefurnishings and other made-up articles of miscellaneous fibers, which averaged about

1/ The rates of duty discussed here are the column 1 rates of the TSUS, which apply to products of all countries except the Philippine Republic and those countries listed as "Communist" in general headnote 3(e) of the TSUS. Imports of Philippine articles entered on or before Dec. 31, 1973, are subject, as provided in general headnote 3(c), to fractional parts of the column 1 rates of duty, whereas imports from "Communist" countries are dutiable at the column 2 rates which are generally higher than the column 1 rates. Imports of miscellaneous products of miscellaneous fibers from the Philippine Republic have been small except for cordage (see text) and miscellaneous vegetable-fiber furnishings (item 366.84) and those from Communist countries have been negligible in recent years.

19 percent ad valorem in 1967, were reduced by 50 percent in the Kennedy Round negotiations. Sisal pads, dutiable in 1967 at 20 percent ad valorem under TSUS item 355.05, will be continued at the same rate under item 355.04.

The first stage of the five-stage Kennedy Round reductions became effective on January 1, 1968.

j. Foreign production and trade.--Separate information is not available on foreign production and trade for the articles covered by this section.

Table D-5.----Cordage of hard fibers: U.S. sales, imports for consumption, exports of domestic merchandise, and apparent consumption, 1958-66 and January-October 1967

Year	Sales 1/	Imports	Exports 2/	Apparent consumption	Ratio of imports to consumption
	1,000 pounds	1,000 pounds	1,000 pounds	1,000 pounds	Percent
1958	176,600	271,309	2,495	445,414	61
1959	174,600	292,178	1,615	465,163	63
1960	140,000	256,084	1,228	394,856	65
1961	136,600	273,562	1,467	408,695	67
1962	147,500	332,391	1,602	478,289	69
1963	140,500	328,503	1,548	467,455	70
1964	135,200	281,834	1,500	415,534	68
1965	3/ 116,900	289,783	4/	406,483	71
1966	5/	319,064	4/	6/	6/
1967 (Jan.-Oct.)	6/	258,156	6/	6/	6/

1/ Sales by private cordage manufacturers reported by quantity only; additional quantities aggregating about 15 million to 17 million pounds annually were produced by State prison cordage mills.

2/ Export figures include a minute amount of soft fiber binder twine and possibly a trace of braided rope which is not considered cordage in this study.

3/ Total includes an estimation for the last 4 months of 1965 for binder and baler twines.

4/ Export figures are reported in a large comprehensive class and cannot be segregated.

5/ Not available. Quantity of sales, not including binder and baler twines, was 70,224 thousand pounds.

6/ Not available.

Source: Compiled from official statistics of the U.S. Department of Commerce, except as noted.