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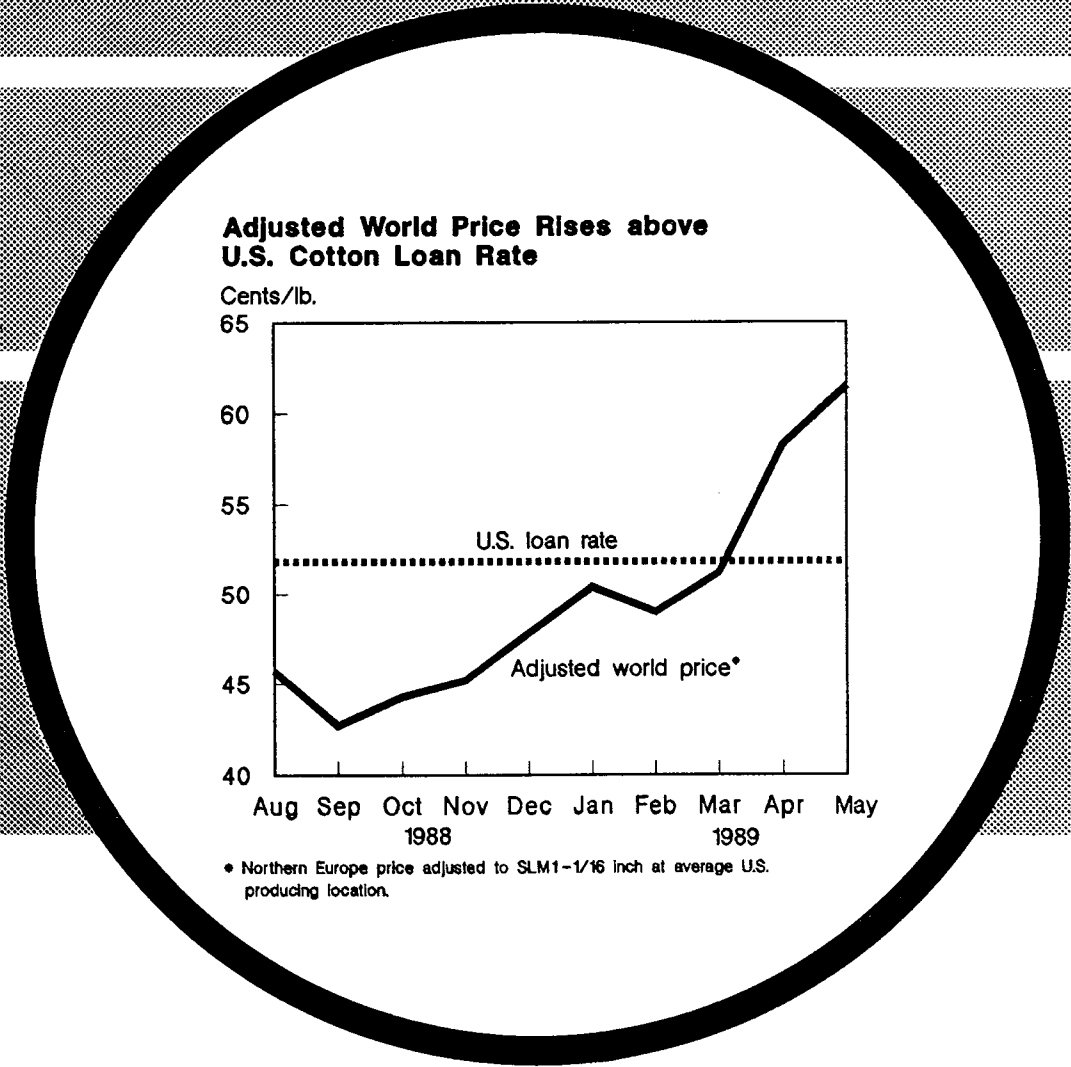
CWS-56  
May 1989

# Cotton and Wool

## Situation and Outlook Report

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Demand prospects for U.S. cotton in 1989/90 indicate off-take could increase 1.8 million bales from the current marketing year's estimated 13.2 million. Domestic mill use is expected to rise to 7.5 million bales, a 200,000-bale increase. Declining textile inventories, increased denim production, and competitive cotton prices should boost consumption next season. However, the continuing growth of cotton textile imports will likely limit domestic gains.

U.S. cotton exports in 1989/90 are expected to exceed this season's level because of reduced foreign supplies and stronger foreign mill demand. The initial U.S. cotton export forecast equals 7.5 million bales, implying an increase in the U.S. share of world cotton trade. Next season, the United States could capture about a 29-percent share, compared with 24 percent in 1988/89.

Foreign consumption in 1989/90 is forecast to rise 2.5 percent (about the historical growth rate) to 77.5 million bales. Major foreign producers are expected to maintain their consumption growth, primarily because of continued expansion in their populations and incomes. Rising consumption is also expected among foreign cotton importers. Foreign imports are projected to go up 600,000 bales to 25.5 million. Despite improved demand, foreign exports will probably drop nearly 1 million bales to 18 million because of tight supplies.

The 1989 U.S. cotton crop is projected at 13.5 million bales, 12 percent below last year. The March U.S. planting intentions survey indicated 11.0 million acres could be planted this year, down 12 percent from 1988. Participation in the 25-percent upland cotton acreage reduction program for 1989 is estimated at 87 percent, down slightly from 1988. The preliminary 1989 U.S. upland cotton base is estimated at 14.6 million acres, compared with 14.5 million in 1988 and in 1987.

Foreign production in 1989/90 is projected at 69 million bales, virtually unchanged from this year. Except for the Soviet Union, gains are likely in most of the major producers—China, India, Pakistan, Brazil, Egypt, and Australia. Production may drop in areas where the 1988/89 crop was especially good—Mexico, Turkey, Greece, Spain, and the French-speaking countries of West Africa—but good returns in 1988/89 should still encourage large crops here too. Growth is expected in yields, but foreign area is forecast to drop about 1.5 percent to 29 million hectares.

Domestic mill use will likely decrease in 1988/89 after 3 straight years of rising cotton consumption. Larger textile inventories, slower denim business, and increased demand for more fine-count yarn products are contributing to the

decline. Lower cotton prices relative to manmade fibers have led to higher consumption rates since January. For the first 9 months of the 1988/89 marketing year, the seasonally adjusted rate for annual consumption averaged 7.3 million bales. However, the consumption rate for January-April rose nearly 600,000 bales over last November. During the last 4 months, consumption rates have averaged 7.6 million bales. In addition, cotton share of fibers used on the cotton system increased to over 69 percent of total fibers in March, the highest level since 1971. In April, it equaled 70 percent. Based on increased usage the past few months and continued lower cotton prices relative to manmade fibers, mill use is expected to reach 7.3 million bales, only 300,000 bales below last season.

Foreign consumption, at 75.6 million bales in 1988/89, changed little from 1987/88. Slack demand for textile products, particularly denims, cut the cotton demand of major importers in Asia and Western Europe. Consumption among foreign cotton producers, however, generally continued rising because their population and income growth remains strong. Foreign stocks are expected to drop about 1 million bales by the end of 1988/89. Very competitive prices early in the season enabled foreign exporters to capture a large share of exports, pulling forecast year-end stocks to the lowest level in 5 years. Sharp gains in world prices and reduced foreign offerings (despite higher prices in the last 2 months) suggest foreign supplies are tight. Stocks to use ratios have dropped to 33.6 percent, the lowest since 1982/83.

U.S. prices for 1988-crop cotton delivered on the Northern European market have averaged 5-7 cents per pound above foreign quotations in the A index for most of this season. Nevertheless, during March, foreign competitors' prices began to rise faster than U.S. prices. Since April, Memphis Territory cotton has been included in the A index. Similarly, for coarse count cotton, Orleans/Texas prices have been included in the B index since mid-March. Total 1988/89 exports of U.S. cotton are forecast at 5.9 million bales, down 10 percent from last season. Export commitments (shipments plus outstanding sales) for 1988/89 have lagged last season's by 1-2 million bales through March. However, competitive U.S. prices and large stocks have increased export sales. At the beginning of May, 1988/89 upland commitments totaled 6.1 million bales, compared with 6.7 million the previous year.

U.S. cotton stocks at the end of the 1988/89 marketing year are estimated at 8.1 million bales, twice the desired amount specified in the 1985 Food Security Act. Reduced export demand and lower cotton prices earlier this season have resulted in record Commodity Credit Corporation loan entries. Producers have placed 11.2 million bales of 1988-

crop cotton under Government loan. The previous record for one crop year was set in 1963, when 8.1 million bales were entered. About half of the 1988 cotton crop placed under loan in the West and Delta has been redeemed, but only one-third of the crop under loan in the Southern Plains has been repaid.

U.S. production of shorn wool in 1988 was 89 million pounds, greasy, 5.4 percent above 1987. The weighted aver-

age price was \$1.38 per pound, up 50 percent from 1987. The support price was \$1.78 in 1988 and the payment rate was 29 cents per pound. Sheep producers will receive about \$40 million in Federal price support payments on shorn and pulled wool for 1988. The support price for 1989 marketings will be \$1.77 per pound. Mill consumption for the first quarter was 39 million pounds, clean, 14 percent above the fourth quarter and 2 percent above a year earlier.

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## Textiles and the Economy

In early 1989, the U.S. economy continues to expand. Real Gross National Product jumped 4.3 percent (\$43.1 billion) in first-quarter 1989, compared with a 2.4-percent (\$24.0 billion) advance in the previous quarter and a 3.4-percent (\$33.1 billion) increase for first-quarter 1988. The expansion in the economy was largely attributable to higher demand for equipment and increases in exports—two areas in which growth had diminished in the second half of 1988.

The composite index of leading economic indicators decreased 0.7 percent in March—following a 0.3-percent decline in February and a 0.8-percent rise in January. Real disposable personal income increased 2 percent in first-quarter 1989, compared with a 1-percent gain in fourth-quarter 1988. Personal savings as a percentage of disposable personal income was 5.8 percent in the first 3 months of 1989—up sharply from the previous quarter's 4.3 percent rate, and above the 1987 and 1988 annual averages of 3.2 and 4.2 percent, respectively.

In first-quarter 1989, real personal consumption expenditures advanced a slight \$7.4 billion, after increasing \$22.4 billion in the previous quarter; compared with first-quarter 1988, expenditures in 1989 have risen \$73.8 billion. Expenditures on nondurable goods increased \$4 billion, compared with \$2.9 billion in fourth-quarter 1988. Durable expenditures, however, have declined \$4.6 billion in the first 3 months, contrasted to a \$6.1-billion advance in the last quarter. The first-quarter decrease in durables represents the first drop in expenditures since fourth-quarter 1987.

In March, U.S. merchandise exports reached a seasonally adjusted \$30.8 billion—a record. Combined with imports of \$39.6 billion, the nominal merchandise trade deficit was an unexpectedly low \$8.8 billion. U.S. trade in agricultural commodities continues to yield net trade surpluses, with March 1989 exports exceeding previous March exports for corn, wheat, rice, and soybeans by 61, 55, 28 and 13 percent in value, respectively. March raw cotton exports dropped 28 percent in value from the previous March level. For the calendar year through March, cumulative 1989 exports of all merchandise increased 17 percent and imports rose 7 percent by value over the comparable 1988 period.

During the first quarter of 1989, U.S. imports (square meter equivalent basis) of cotton, wool, manmade fiber, silk blends, and non-cotton vegetable fiber textiles and apparel increased 8.5 percent over their first-quarter 1988 levels. This increase represents a 7-percent rise in apparel imports and a 10-percent rise in textile imports. Cotton imports were up 4.5 percent, and manmade fiber imports were up 10.3 percent. By value, cotton imports decreased 5 percent, while manmade fiber imports rose 12 percent.

U.S. industrial production increased 0.4 percent in April as the index rose to 141.1 percent of the 1977 annual average. This was 4.2 percent above last April. In March, the latest month for which data are available, clothing production decreased 0.6 percent, the second straight monthly decline, but first-quarter figures exceeded those of a year ago by 1.8 percent. Output of textile materials rose 2.2 percent in March; first-quarter figures show only a slight (0.4 percent) advance over the first quarter a year earlier.

During the first quarter of 1989, U.S. industries operated at 83.9 percent of capacity—down slightly from the 84.1 percent rate of the previous quarter. Most of the downturn is attributable to lower utilization rates among durable manufacturing industries—particularly iron and steel and automobiles. Lower operating rates were observed in lumber and furniture and other building-related industries.

Nondurable manufacturing industries continued to operate at an average rate of 86.4 percent of capacity. Among nondurable manufacturing industries, the rate of capacity utilization remained high for textile mill products, at 91.3 percent for March. While the rate for the textile mill products industry has risen through the first 3 months of this year, most industries have slackened their rates since January. Nonetheless, most industries continued to operate at a higher rate than during the first quarter of last year.

In April, the U.S. unemployment rate for the civilian labor force climbed 0.3 to 5.3 percent, the highest level since January but the average rate since June 1988. In 1989, the national unemployment rate and the monthly unemployment figures for textile mill products and apparel industries moved similarly, except in April when the apparel industry's unemployment declined. In March, unemployment in the textile

mill products sector fell to 3.4 percent, the lowest observed in the 1980's, while the apparel sector held solid an 8.5-percent unemployment rate. By April, unemployment in the textile products sector rose to 4.9 percent, paralleling the national rate, but the apparel sector decreased slightly to 8.3 percent.

The Consumer Price Index for all urban consumers (CPI-U) rose 0.7 percent in April, exceeding the first quarter monthly average of 0.5 percent. After a 0.2-percent decline in February in the CPI-U for apparel and upkeep, increases of 1.4 and 0.3 percent were reported for March and April, respectively. For the 3 months ending in April, the apparel and upkeep index compounded at an annual rate equaled 5.9 percent, compared with 3.4 percent for a 6-month period ending in April.

## U.S. Cotton Situation and Outlook

### Upland Cotton Situation

#### Final Acreage Revised Up, Yields Down

Upland cotton production in 1988 totaled 15.1 million bales, 4 percent above the 1987 crop and the largest since 1981's 15.6 million (table A). Harvested area, at 11.8 million acres, was 19 percent above 1987. Abandonment in 1988 equaled 4.6 percent of the planted area, compared with 3.6 percent the previous year. Yields averaged 616 pounds per harvested acre, down 86 pounds from the 1987 record of 702 pounds, but 69 pounds above the 1986 yield.

The 1988 upland crop began with dry conditions generally prevailing, but moisture conditions slowly improved. All States reported lower yields than in 1987, except for New Mexico, North Carolina, South Carolina, and Virginia. Final production exceeded the initial crop estimate made last August by over 500,000 bales.

Planted acreage was 12.3 million, up 2.1 million acres from the previous season. Participation in the 12.5-percent acreage reduction program (ARP) is projected at 89 percent,

Table A--Final 1988 and 1987 upland cotton acreage, yield, and production 1/

| Region        | Planted           | Harvested | Yield     | Production  |
|---------------|-------------------|-----------|-----------|-------------|
|               | ---1,000 acres--- |           | lbs./acre | 1,000 bales |
| Southeast 2/: |                   |           |           |             |
| 1987          | 832               | 823       | 571       | 979         |
| 1988          | 1,047             | 988       | 515       | 1,061       |
| Delta 3/:     |                   |           |           |             |
| 1987          | 2,810             | 2,784     | 791       | 4,587       |
| 1988          | 3,435             | 3,277     | 689       | 4,707       |
| Southwest 4/: |                   |           |           |             |
| 1987          | 5,121             | 4,801     | 498       | 4,982       |
| 1988          | 6,061             | 5,736     | 462       | 5,518       |
| West 5/:      |                   |           |           |             |
| 1987          | 1,506             | 1,491     | 1,264     | 3,927       |
| 1988          | 1,777             | 1,753     | 1,038     | 3,791       |
| Total:        |                   |           |           |             |
| 1987          | 10,269            | 9,899     | 702       | 14,475      |
| 1988          | 12,320            | 11,754    | 616       | 15,077      |

1/ Based on May Crop Production Report. 2/ Alabama, Florida, Georgia, North Carolina, South Carolina, and Virginia. 3/ Arkansas, Louisiana, Missouri, Mississippi, and Tennessee. 4/ Kansas, Oklahoma, and Texas. 5/ Arizona, California, and New Mexico.

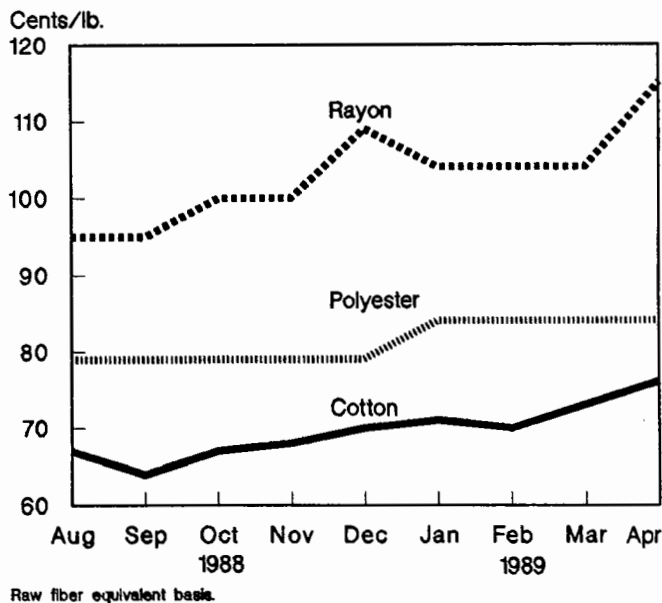
down slightly from 1987, when 93 percent of the upland base was enrolled. Participants idled 1.6 million acres under the ARP, and an additional 626,000 acres were enrolled under the 50/92 provision of the 1985 farm bill. Of the total acreage idled, 55 percent (1.2 million acres) were in the Southern Plains.

### Cotton/Polyester Price Spread Narrows

Domestic mill use will likely decrease this season after 3 consecutive years of rising cotton consumption. Larger textile inventories, slower denim business, and increased demand for more fine-count yarn products are contributing to the decline. Lower cotton prices relative to manmade fibers have led to higher consumption rates since January. The mill-delivered price of strict low middling (SLM) 1-1/16 inch cotton, on a raw fiber equivalent basis, averaged 76 cents per pound in April, compared with 84 cents for polyester and \$1.15 for rayon (figure 1). Although the cotton/polyester price spread has narrowed during the past 3 months, several companies have announced price increases for polyester staple during May and June.

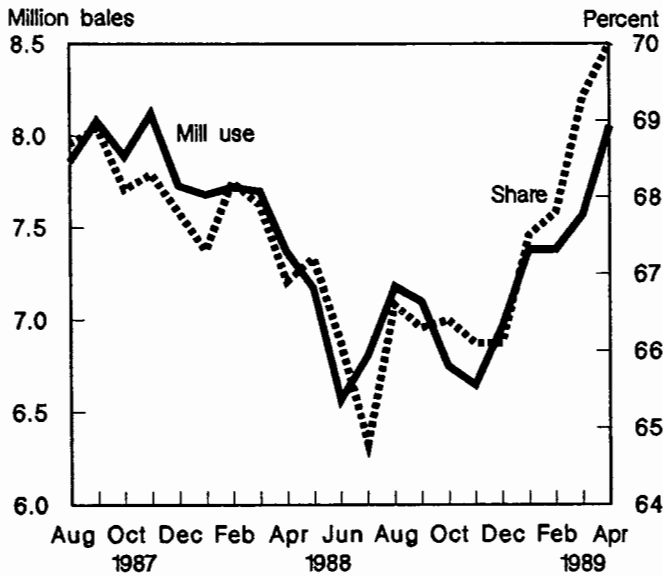
For the first 9 months of the 1988/89 marketing year, the seasonally adjusted rate for annual upland consumption averaged 7.2 million bales. However, the consumption rate for January through April increased nearly 600,000 bales over last November (figure 2). During the last 4 months, consumption rates have averaged 7.6 million bales. In addition, cotton's share of fibers used on the cotton system increased to over 69 percent of total fibers in March, the highest level since 1971. In April, cotton's share equaled 70 percent. Based on increased usage the past few months and continued

Figure 1  
Cotton Remains Lowest Priced Fiber



Raw fiber equivalent basis.

**Figure 2**  
**Upland Mill Use and Share of Fibers**  
**on the Cotton System Increase**



Mill use is the seasonally adjusted annual rate.

lower cotton prices relative to manmade fibers, upland mill use is expected to reach 7.2 million bales, only 300,000 bales below last season.

**U.S. Export Prospects Increasing**

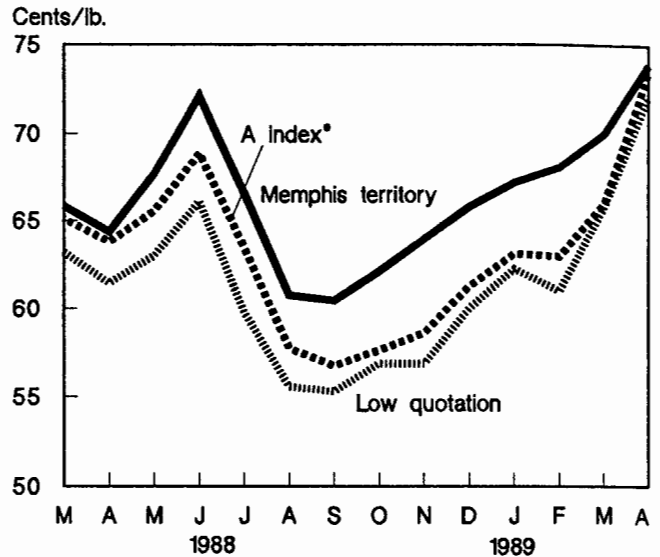
U.S. prices for 1988-crop cotton delivered on the Northern European market have averaged 5-7 cents per pound above foreign quotations in the A index for most of this season. However, during March, foreign competitors' prices began to rise faster than U.S. prices because of dwindling supplies (figure 3). Since April, Memphis Territory cotton has been included in the A Index. Similarly, for coarse count cotton, Orleans/Texas prices have been included in the B Index since mid-March (figure 4). As a result, U.S. export prospects are improving.

Total 1988/89 exports of upland cotton are forecast at 5.6 million bales, a decrease of 11 percent from last season (table B). Export commitments (shipments plus outstanding sales) for 1988/89 have lagged last season's by 1-2 million bales through March. However, competitive U.S. prices and large stocks have increased export sales. At the beginning of May, 1988/89 upland commitments totaled 6.1 million bales, compared with 6.7 million the previous year (figure 5).

**Cotton Prices Continue To Rise**

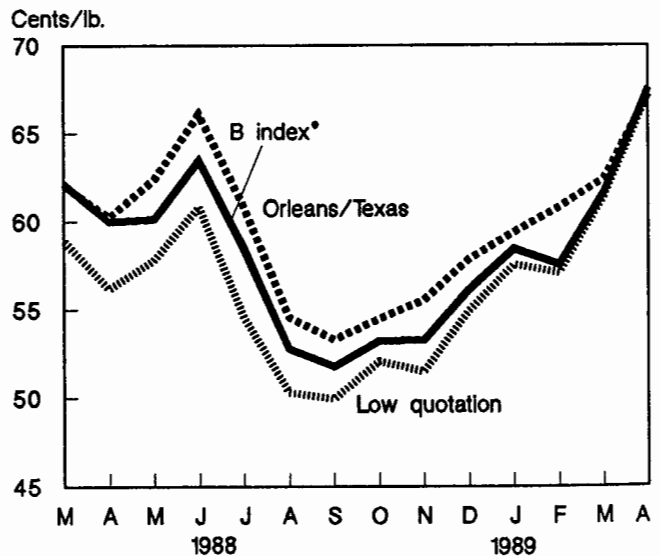
U.S. upland cotton prices generally declined last season, and continued to fall through August. The adjusted world price (U.S. equivalent of world prices) remained below the U.S. upland loan rate of 51.8 cents per pound for base quality during the first 7 months of the 1988/89 marketing year. During the last week in March, the adjusted world price (AWP) rose

**Figure 3**  
**U.S. A-Type Cotton Prices and**  
**Foreign Quotes Move Back In Line**



\* Average of the cheapest five types of M1-3/32 inch staple length offered on the European market.

**Figure 4**  
**U.S. Coarse Count Cotton Prices**  
**Are Competitive**



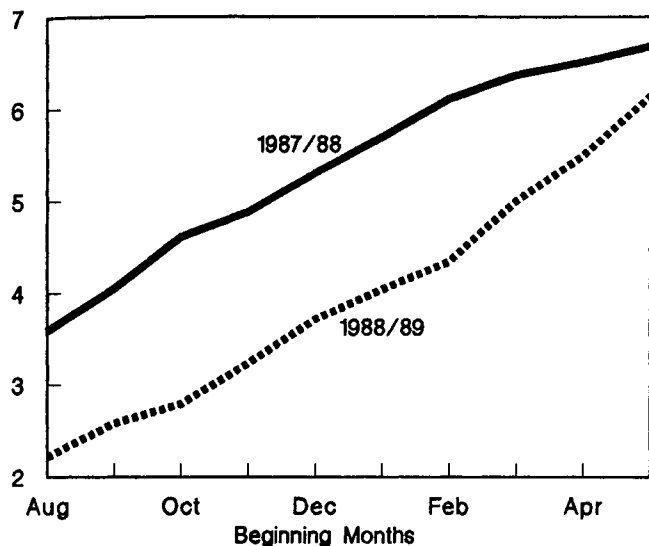
\* Average of the cheapest three types of coarse count cottons offered on the European market.

above the loan rate. Since March, the AWP increased to over 62 cents per pound (table C).

The U.S. average spot price and July futures have followed a similar pattern. However, the spread between futures, basis July, and the AWP has decreased from 9-11 cents per pound earlier the season to 5 cents in May. Similarly, the spread between the average spot price and the AWP has narrowed

Figure 5  
Upland Export Sales Pace Quilckens

Million bales



Shipments plus outstanding sales.

from 10 cents per pound during late August to nearly 2 cents in May. Prior to March, when the AWP was below the base quality loan rate, the Commodity Credit Corporation (CCC) did not require payment of interest and paid the warehouse charges when upland cotton pledged as loan collateral was redeemed with cash. After March, when the AWP exceeded the loan rate, CCC required payment of that portion of interest and accrued warehouse charges determined necessary to permit the loan collateral to be redeemed at the AWP. As a result, these price relationships have changed recently.

### Large Carryover Supplies

U.S. upland cotton stocks are expected to increase for the second consecutive season. Last season carryover supplies increased 776,000 bales, and this year excess production may boost stocks by an additional 2.3 million bales. Upland stocks at the end of the 1988/89 marketing year are estimated at 8.1 million bales, twice the desired level specified in the 1985 Food Security Act.

Reduced export demand and lower cotton prices earlier this season have resulted in record CCC loan entries. Producers have placed 11.2 million bales of 1988-crop cotton under Government loan (table D). The previous record for one crop year was set in 1963, when 8.1 million bales were entered. About half of the 1988 cotton crop placed under loan in the West and Delta has been redeemed, but only one-third of the crop under loan in the Southern Plains has been repaid.

Table B--U.S. cotton export shares to selected countries

|           | 1986/87 | 1987/88 | 1988/89 |
|-----------|---------|---------|---------|
|           | Percent |         |         |
| Japan     | 56      | 47      | 39      |
| Korea     | 77      | 76      | 70      |
| Taiwan    | 56      | 57      | 15      |
| Hong Kong | 5       | 7       | 7       |
| Italy     | 20      | 27      | 19      |
| France    | 15      | 9       | 4       |
| Germany   | 23      | 33      | 17      |
| Portugal  | 11      | 7       | 5       |
| Indonesia | 43      | 35      | 32      |
| Thailand  | 24      | 20      | 11      |
| China     | 0       | 0       | 1/ 53   |
| World     | 26      | 28      | 24      |

1/ Based on May 25, 1989, Export Sales report and May World Agricultural Supply and Demand Estimates.

Table C--U.S. cotton prices, 1988/89

| Month and day | Average spot market price 1/ | July futures price 1/ | Adjusted world price 2/ |
|---------------|------------------------------|-----------------------|-------------------------|
|               | Cents/lb.                    |                       |                         |
| Aug. 4        | 57.23                        | 54.97                 | 48.27                   |
| 11            | 57.27                        | 54.80                 | 47.49                   |
| 18            | 56.08                        | 52.10                 | 43.24                   |
| 25            | 51.93                        | 49.90                 | 41.62                   |
| Sept. 1       | 50.93                        | 52.00                 | 41.80                   |
| 8             | 51.08                        | 53.35                 | 42.67                   |
| 15            | 52.06                        | 54.35                 | 43.61                   |
| 22            | 51.66                        | 52.15                 | 42.95                   |
| 29            | 50.42                        | 51.70                 | 42.19                   |
| Oct. 6        | 50.56                        | 52.45                 | 43.25                   |
| 13            | 52.07                        | 55.75                 | 44.07                   |
| 20            | 52.13                        | 54.00                 | 44.70                   |
| 27            | 53.51                        | 56.18                 | 45.07                   |
| Nov. 3        | 53.99                        | 56.70                 | 44.92                   |
| 10            | 53.61                        | 56.85                 | 45.08                   |
| 17            | 52.73                        | 55.25                 | 45.87                   |
| 23            | 52.74                        | 54.88                 | 44.90                   |
| Dec. 1        | 54.31                        | 56.90                 | 45.96                   |
| 8             | 54.78                        | 58.06                 | 47.37                   |
| 15            | 55.02                        | 58.55                 | 48.66                   |
| 22            | 55.25                        | 59.30                 | 49.02                   |
| 29            | 54.07                        | 57.90                 | 49.33                   |
| Jan. 5        | 54.27                        | 58.20                 | 48.91                   |
| 12            | 55.55                        | 59.65                 | 50.72                   |
| 19            | 56.11                        | 59.35                 | 51.11                   |
| 26            | 56.48                        | 59.70                 | 50.90                   |
| Feb. 2        | 56.09                        | 59.70                 | 50.08                   |
| 9             | 54.49                        | 58.31                 | 49.05                   |
| 16            | 54.74                        | 58.25                 | 47.71                   |
| 23            | 55.50                        | 59.70                 | 47.37                   |
| Mar. 2        | 55.39                        | 61.00                 | 48.83                   |
| 9             | 56.91                        | 62.50                 | 49.44                   |
| 16            | 57.48                        | 62.55                 | 51.05                   |
| 23            | 58.58                        | 62.70                 | 52.80                   |
| 30            | 58.96                        | 62.61                 | 53.72                   |
| Apr. 6        | 60.25                        | 64.27                 | 56.32                   |
| 13            | 62.33                        | 65.67                 | 58.53                   |
| 20            | 62.02                        | 65.73                 | 58.87                   |
| 27            | 61.56                        | 64.89                 | 59.50                   |
| May 4         | 63.54                        | 67.20                 | 59.76                   |
| 11            | 64.09                        | 67.63                 | 61.95                   |
| 18            | 64.19                        | 67.81                 | 61.97                   |
| 25            | 63.75                        | 67.15                 | 62.24                   |

1/ Spot and July futures prices are for SLM 1-1/16 inch cotton, the U.S. base quality. 2/ Adjusted world price is the Northern European price adjusted to SLM 1-1/16 inch at average U.S. producing location. Adjusted world prices are applicable for the week following the date shown.

Table D--Cotton loan statistics 1/

| Region             | Loans made          |         |          | Loans repaid |         |         | Loans outstanding |       |         | Loans forfeited |      |      |
|--------------------|---------------------|---------|----------|--------------|---------|---------|-------------------|-------|---------|-----------------|------|------|
|                    | 1986                | 1987    | 1988     | 1986         | 1987    | 1988    | 1986              | 1987  | 1988    | 1986            | 1987 | 1988 |
|                    | 1,000 running bales |         |          |              |         |         |                   |       |         |                 |      |      |
| Southeast 2/       | 550.2               | 281.0   | 665.4    | 546.1        | 240.2   | 264.2   | 2.5               | 40.0  | 401.2   | 1.6             | 0.8  | --   |
| Delta 3/           | 2,553.8             | 1,811.5 | 3,992.4  | 2,530.4      | 1,766.9 | 2,122.7 | 18.2              | 41.5  | 1,869.7 | 5.1             | 3.1  | --   |
| Southern Plains 4/ | 1,860.5             | 2,195.9 | 4,611.7  | 1,848.6      | 1,829.2 | 1,591.3 | 7.4               | 364.8 | 3,020.4 | 4.6             | 1.9  | --   |
| West 5/            | 1,204.2             | 1,073.4 | 1,931.2  | 1,200.7      | 956.0   | 962.1   | 3.1               | 117.4 | 969.1   | 0.4             | 6/   | --   |
| United States      | 6,168.7             | 5,361.8 | 11,200.8 | 6,125.8      | 4,792.3 | 5,769.3 | 31.2              | 563.7 | 5,431.5 | 11.7            | 5.8  | --   |

-- = 0.

1/ Producer and cooperative loans through April 30, 1989. Regional statistics do not reflect a backlog of loan repayments of 1987 and 1988 crops. 2/ Alabama, Florida, Georgia, North Carolina, South Carolina, and Virginia. 3/ Arkansas, Louisiana, Mississippi, Missouri, and Tennessee. 4/ Kansas, Oklahoma, and Texas. 5/ Arizona, California, and New Mexico. 6/ Less than 100 bales have been forfeited.

### Lower Acreage and Program Participation in 1989/90

The U.S. planting intentions survey conducted in March indicated 10.8 million acres of upland cotton could be planted this year (table E). Upland acreage was 12.3 million in 1988 and 10.3 million in 1987. Participation in the 25-percent ARP for 1989 is estimated at 87 percent, down slightly from 1988. The preliminary 1989 U.S. upland cotton base is estimated at 14.6 million acres, compared with 14.5 million in 1988 and in 1987. Since 1986, almost 1.2 million acres of upland cotton base have been enrolled in the 10-year Conservation Reserve Program (CRP).

Participants in the 1989 upland cotton program will be eligible for target price protection of 73.4 cents per pound. Lower target prices, increasing spot prices, and the larger ARP required for the 1989/90 marketing year reduced program enrollment.

A regional breakdown of prospective planting indicates that growers in the Southeast intend to plant 933,000 acres, 11 percent below last year. In the Southeast, total cotton acreage (planted plus idled under annual program) has risen in recent years. The cotton base in the Southeast is above 1.2 million acres, a 43-percent increase from 1982 (table F). The boll weevil eradication has been partly responsible for the higher acreage.

Delta cotton growers intend to plant 3.1 million acres, down 10 percent. Cotton planted plus diverted acreage has risen in the 1980's as the acreage of competing crops, primarily soybeans, has been reduced (figure 6).

Cotton growers in the Southern Plains revealed plans to plant 3.1 million acres, 12 percent below last year. Cotton planted plus considered planted has dropped in recent years. Since 1982, this region's cotton base has dropped by 1.6 million acres. As a result, most of the base in the Southern Plains has been accounted for in the past 2 years.

Table E--Estimated upland cotton acreage, 1988-89

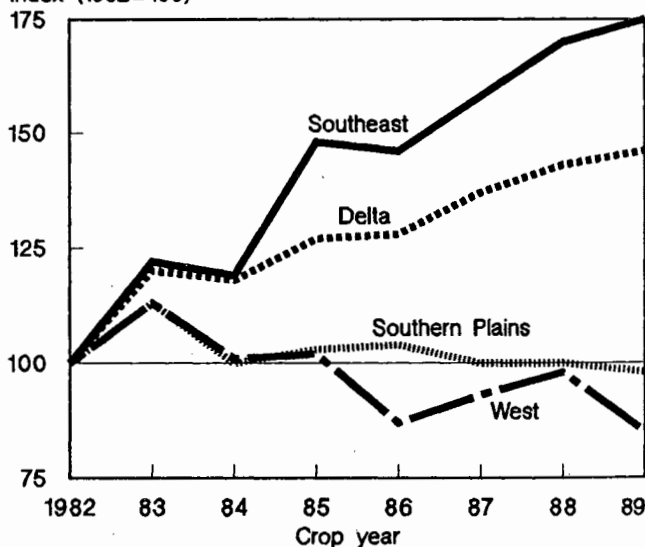
| Region 1/       | 1988   | Indicated 1989 2/ | Percentage decrease |
|-----------------|--------|-------------------|---------------------|
|                 |        |                   |                     |
| Southeast       | 1,047  | 933               | 11                  |
| Delta           | 3,435  | 3,090             | 10                  |
| Southern Plains | 6,061  | 5,331             | 12                  |
| West            | 1,777  | 1,400             | 21                  |
| Total           | 12,320 | 10,754            | 13                  |

1/ Southeast: AL, GA, SC, NC, VA, FL; Delta: MS, LA, AR, TN, MO; Southern Plains: TX, OK, KS; West: CA, NM, AZ.  
2/ Based on March 31, 1989 Prospective Plantings report.

Figure 6

### Cotton Acreage Continues Upward in Southeast and Delta

Index (1982=100)



Planted plus diverted acreage.

Upland cotton growers in the West indicated they would plant 1.4 million acres, 21 percent less than last year. The largest percentage decrease could occur in California, where prospective acreage is down 22 percent. Although the region's acreage base has declined slightly, growers are expected to underplant their permitted acreage by 19 percent in 1989.



| Year    | ----Southeast 1/---- |                            | -----Delta 2/----- |                            | -Southern Plains 3/- |                            | -----West 4/----- |                            |
|---------|----------------------|----------------------------|--------------------|----------------------------|----------------------|----------------------------|-------------------|----------------------------|
|         | Acreage base         | Percentage of base used 5/ | Acreage base       | Percentage of base used 5/ | Acreage base         | Percentage of base used 5/ | Acreage base      | Percentage of base used 5/ |
|         | 1,000 acres          |                            |                    |                            |                      |                            |                   |                            |
| 1982    | 850                  | 84                         | 3,252              | 85                         | 8,884                | 82                         | 2,322             | 90                         |
| 1983    | 881                  | 99                         | 3,348              | 99                         | 8,869                | 93                         | 2,331             | 101                        |
| 1984    | 926                  | 92                         | 3,462              | 94                         | 8,825                | 83                         | 2,351             | 90                         |
| 1985    | 1,000                | 106                        | 3,584              | 98                         | 8,868                | 85                         | 2,372             | 90                         |
| 1986    | 1,088                | 96                         | 3,706              | 95                         | 8,534                | 89                         | 2,237             | 82                         |
| 1987    | 1,094                | 104                        | 3,673              | 103                        | 7,640                | 95                         | 2,264             | 86                         |
| 1988    | 1,143                | 107                        | 3,714              | 106                        | 7,398                | 98                         | 2,229             | 92                         |
| 1989 6/ | 1,219                | 103                        | 3,856              | 104                        | 7,284                | 98                         | 2,209             | 81                         |

1/ Alabama, Florida, Georgia, North Carolina, South Carolina, and Virginia. 2/ Arkansas, Louisiana, Mississippi, Missouri, and Tennessee. 3/ Kansas, Oklahoma, and Texas. 4/ Arizona, California, and New Mexico. 5/ Includes planted plus diverted acres. 6/ Estimated, based on March 31, 1989 Prospective Plantings report and preliminary Program Enrollment report. Total acreage bases in 1987 and 1988 are reduced by base acres accepted into the Conservation Reserve Program with signed contracts.

Annual variability in cotton yields makes preseason production forecasts hazardous at best. Already this season, lower water quotas in California, lack of moisture in parts of Texas, and cool, wet weather in the Delta may have impacted yields. During the 1984-88 period, yields per planted acre ranged from 460 to 677 pounds, averaging 618. Assuming actual acreage is close to the March planting intentions of 10.8 million, yield experience of the past 5 years suggests production could range from about 10.3 million to 15.2 million bales. The initial USDA forecast has pegged 1989 upland production at 13 million bales.

#### **Cotton Use Expected To Increase Next Season**

Demand prospects for U.S. cotton in 1989/90 indicate off-take could rise 1.6 million bales above the current year's estimated 12.9 million. Domestic mill use of upland cotton is expected to reach 7.4 million bales, a 200,000-bale increase. Declining textile inventories, greater-denim production, and competitive cotton prices should boost consumption next season. However, the continuing growth of cotton textile imports will likely limit gains.

U.S. upland cotton exports are expected to exceed this season's level because of reduced foreign supplies and stronger foreign mill demand in importing countries. The initial U.S. upland export forecast equals 7.1 million bales, up 26 percent, which implies an increase in the U.S. share of world cotton trade. Next season, the United States could capture about a 29-percent share, compared with 24 percent in 1987/88.

Proposed changes in the upland cotton program should also promote larger off-take next season. A proposed rule to alter the upland cotton AWP formula and the 18-month loan program was published in the Federal Register on May 25. Under the new rule, the Secretary of Agriculture would be allowed to further adjust the AWP if it were determined that such an adjustment was necessary to accurately reflect the

prevailing world market price of upland cotton adjusted to U.S. quality and location.

The AWP could be altered on the basis of some or all of the following data, as available: weekly U.S. cotton export sales; U.S. price levels for SLM 1-1/16 inch cotton as quoted in the designated spot markets relative to the formula calculated AWP; and price quotations for the Memphis and California/Arizona territories as quoted for middling 1-3/32 inch cotton c.i.f. Northern Europe, relative to price quotes for other such growths, c.i.f. Northern Europe. In addition, the AWP could be altered on the basis of other data determined by the Secretary, such as a comparison of available actual prices received for cotton grades, quoted prices for such grades, and the estimated volume of cotton available for sale from foreign cotton exporters.

The proposed rule would also reinstate the assessment and payment of interest and warehouse storage charges for producers seeking an 8-month extension of the 10-month cotton loan. Beginning with the 1989 crop, producers would have to either prepay 8 months' storage charges to a warehouse or provide documentation from a warehouse that the CCC would not be held responsible for such storage charges. If the loan were extended, the producer would pay CCC interest, which would be assessed beginning with the first month of such an extension.

These changes should improve the effectiveness of the upland cotton program. By assuring competitive prices in domestic and foreign markets and providing an incentive to redeem cotton from Government loan, prospects for U.S. exports will likely be enhanced next season.

Total upland cotton use may approach 14.5 million bales in the 1989/90 marketing year. Therefore, year-ending stock levels are expected to decrease to 6.6 million bales, representing about a 120-day mill supply.

## ELS Cotton Situation

### ELS Plantings Up, Demand Strong

Extra-long staple (ELS) cotton production in 1988 totaled a record 334,200 bales, up 17 percent from 1987's previous record outturn (table G). This season, harvested acreage was 189,100—up 38 percent from 1987, while yield-per-harvested acre, at 848 pounds, was 152 pounds per acre lower than last season's record.

In 1988, only 10,694 acres (10.2 percent) of the ELS cotton base was enrolled in the program. Eligible producers will not receive deficiency payments under the 1988-crop ELS cotton program because the national average market price exceeded the established target price of 95.7 cents per pound. The national average price received by producers from August 1988 through March 1989 was 115 cents per pound.

Interest in growing ELS cotton in the United States outside of traditional production areas has increased because of strong foreign demand and high prices. In April the USDA designated 20 additional counties in California, Mississippi, and Texas as suitable for growing ELS cotton for marketing year 1989. With the additional counties, a total of 59 counties have been so designated. The Agricultural Act of 1949, as amended, defines ELS cotton for program purposes as any pure strains of the Barbados species, or hybrid thereof, that is ginned on a roller type gin and is grown in a county designated by the CCC as a county where ELS cotton is produced.

ELS cotton is also a new addition to the San Joaquin Valley region of California. The State recently allowed growers there to plant an additional 18,200 acres (in addition to the 1,800 acres planted in 1988), bringing the total to 20,000 acres.

The U.S. planting intentions survey conducted in March indicated that 291,000 acres of ELS cotton could be planted in 1989. ELS planted acreage totaled 189,600 in 1988 and 137,900 in 1987 (figure 7). Since 1984, ELS planted acreage has increased at a compound annual rate of about 30 percent. If actual plantings approach March indications and yields are on trend, 1989 ELS production could range between 500,000-550,000 bales. Participation in the 5-percent acreage reduction program for 1989 is estimated at 2 percent. The low enrollment is attributable to market prices well in excess of target prices. The preliminary 1989 ELS cotton base is estimated at 123,259 acres compared with 105,000 in 1988 and 86,000 in 1987.

Demand for ELS cotton should remain strong in 1989/90, with stable to slightly increasing domestic mill use and strong export demand. Domestic mill use may reach 75,000

bales and exports could approach 400,000 bales in 1989/90. At the beginning of May, export commitments for 1988/89 reached 284,000 bales (figure 8). Adjusted for potential rollover and cancellations, exports for the entire 1988 season could be about 275,000 bales. Preseason export sales for 1989 ELS cotton are currently well above the 1988 level. In mid-May, outstanding sales of 1989 ELS cotton were 214,000 bales, compared with 111,000 at the same time last year—a 93-percent increase. Domestic mill use of ELS cotton in 1988/89 is projected at 70,000 bales, which, when combined with projected exports, could cause 1988/89 ending stocks to fall to 40,000 bales—their lowest level in several years.

Table G--Final 1988 and 1987 ELS cotton acreage, yield, and production 1/

| State       | Planted           | Harvested | Yield     | Production  |
|-------------|-------------------|-----------|-----------|-------------|
|             | ---1,000 acres--- |           | lbs./acre | 1,000 bales |
| Arizona:    |                   |           |           |             |
| 1987        | 91.0              | 90.8      | 1,126     | 213.0       |
| 1988        | 128.0             | 128.0     | 904       | 241.0       |
| Texas:      |                   |           |           |             |
| 1987        | 32.0              | 31.0      | 787       | 50.8        |
| 1988        | 42.0              | 41.5      | 769       | 66.5        |
| New Mexico: |                   |           |           |             |
| 1987        | 14.0              | 13.9      | 642       | 18.6        |
| 1988        | 17.8              | 17.8      | 634       | 23.5        |
| California: |                   |           |           |             |
| 1987        | 0.9               | 0.9       | 1,173     | 2.2         |
| 1988        | 1.8               | 1.8       | 853       | 3.2         |
| Total:      |                   |           |           |             |
| 1987        | 137.9             | 136.6     | 1,000     | 284.6       |
| 1988        | 189.6             | 189.1     | 848       | 334.2       |

1/ Based on May Crop Production Report.

Figure 7

### American Pima Acreage Continues To Rise

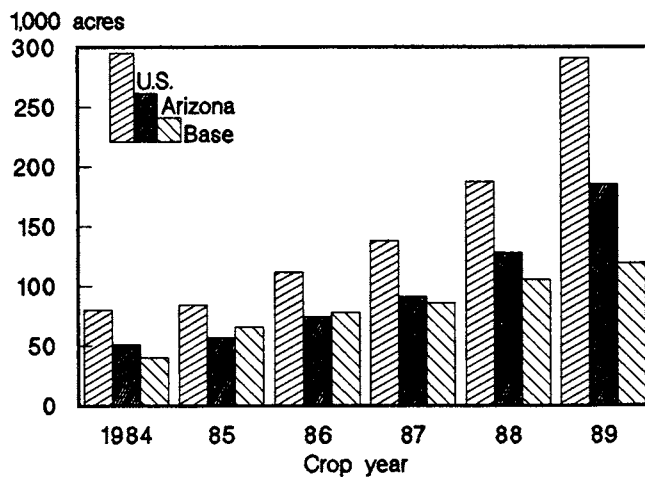
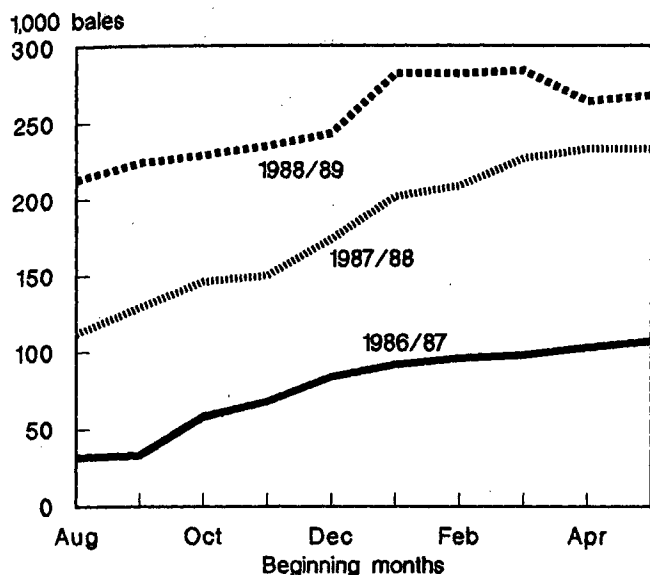


Figure 8

## Record ELS Export Commitments



Shipments plus outstanding sales.

Foreign Production To Rise  
Amid Tight Supplies

According to International Cotton Advisory Committee (ICAC) estimates, 1988/89 foreign ELS production could approach 4.65 million bales, up about 4.5 percent from the previous season (table H). Projections for 1989/90 call for a further increase of 7.2 percent, for a total of almost 5 million bales. Much of the 1989/90 increase is attributable to larger projected outturns in Egypt and Israel over the previous season.

Consumption of ELS cotton in foreign producing countries is estimated at about 3.9 million bales in 1988/89, up 5 percent from 1987/88. According to ICAC estimates, domestic consumption among foreign producers may fall by slightly more than 1 percent in 1989/90. Foreign production is still largely consumed within the producing countries; however, with production projected to rise modestly in 1989/90 and consumption projected to fall slightly, foreign producers should have more ELS available for export.

Table H--ELS cotton supply and use in foreign producing countries

| Year beginning<br>August 1 | 1985  | 1986  | 1987  | 1988<br>prel. | 1989<br>proj. | 1990<br>proj. |
|----------------------------|-------|-------|-------|---------------|---------------|---------------|
| 1,000 bales                |       |       |       |               |               |               |
| <b>BEGINNING STOCKS:</b>   |       |       |       |               |               |               |
| Egypt, L. Stpl.            | 7     | 71    | 2     | 12            | 5             | 21            |
| India                      | 278   | 173   | 89    | 134           | 105           | 159           |
| Israel                     | 5     | 5     | 5     | 5             | 5             | 12            |
| Peru                       | 34    | 15    | 45    | 22            | 15            | 22            |
| PRC                        | 19    | 16    | 25    | 32            | 25            | 37            |
| Sudan                      | 209   | 201   | 283   | 136           | 112           | 103           |
| USSR                       | 34    | 80    | 81    | 67            | 67            | 67            |
| Other producers            | 20    | 28    | 38    | 33            | 21            | 19            |
| Subtotal                   | 606   | 589   | 568   | 441           | 355           | 440           |
| Egypt, ELS                 | 72    | 62    | 10    | 9             | 3             | 7             |
| Total                      | 678   | 651   | 578   | 450           | 358           | 447           |
| <b>PRODUCTION:</b>         |       |       |       |               |               |               |
| Egypt, L. Stpl.            | 1,558 | 1,324 | 1,218 | 1,036         | 1,333         | 1,386         |
| India                      | 1,014 | 1,169 | 991   | 1,121         | 1,154         | 1,277         |
| Israel                     | 33    | 73    | 58    | 85            | 143           | 167           |
| Peru                       | 102   | 129   | 49    | 106           | 112           | 129           |
| PRC                        | 173   | 198   | 257   | 243           | 257           | 253           |
| Sudan                      | 309   | 341   | 195   | 216           | 250           | 266           |
| USSR                       | 1,008 | 1,076 | 1,245 | 1,432         | 1,262         | 1,436         |
| Other producers            | 40    | 47    | 59    | 41            | 42            | 40            |
| Subtotal                   | 4,237 | 4,357 | 4,072 | 4,280         | 4,553         | 4,954         |
| Egypt, ELS                 | 417   | 502   | 379   | 369           | 430           | 447           |
| Total                      | 4,654 | 4,859 | 4,451 | 4,649         | 4,983         | 5,401         |
| <b>CONSUMPTION:</b>        |       |       |       |               |               |               |
| Egypt, L. Stpl.            | 1,172 | 1,062 | 1,030 | 955           | 1,000         | 1,100         |
| India                      | 1,108 | 953   | 925   | 1,000         | 1,025         | 1,100         |
| Israel                     | 8     | 10    | 10    | 2             | 0             | 0             |
| Peru                       | 69    | 48    | 51    | 57            | 55            | 55            |
| PRC                        | 160   | 170   | 200   | 200           | 200           | 200           |
| Sudan                      | 61    | 41    | 11    | 40            | 45            | 45            |
| USSR                       | 1,030 | 1,116 | 1,300 | 1,466         | 1,342         | 1,470         |
| Other producers            | 36    | 39    | 44    | 47            | 42            | 40            |
| Subtotal                   | 3,644 | 3,439 | 3,571 | 3,767         | 3,709         | 4,010         |
| Egypt, ELS                 | 110   | 231   | 148   | 150           | 155           | 160           |
| Total                      | 3,754 | 3,670 | 3,719 | 3,917         | 3,864         | 4,170         |
| <b>EXPORTS:</b>            |       |       |       |               |               |               |
| Egypt, L. Stpl.            | 346   | 350   | 195   | 105           | 330           | 300           |
| India                      | 11    | 300   | 22    | 150           | 75            | 100           |
| Israel                     | 25    | 63    | 48    | 83            | 137           | 137           |
| Peru                       | 51    | 52    | 20    | 55            | 50            | 40            |
| PRC                        | 15    | 20    | 50    | 50            | 45            | 45            |
| Sudan                      | 256   | 218   | 331   | 200           | 215           | 200           |
| USSR                       | 9     | 11    | 33    | 55            | 20            | 55            |
| Other producers            | 26    | 29    | 52    | 38            | 33            | 30            |
| Subtotal                   | 739   | 1,043 | 751   | 736           | 905           | 907           |
| Egypt, ELS                 | 316   | 303   | 233   | 225           | 270           | 285           |
| Total                      | 1,055 | 1,346 | 984   | 961           | 1,175         | 1,192         |

Source: International Cotton Advisory Committee, Washington, D.C.

Foreign producers are expected to export 736,000 bales of ELS cotton in 1988/89, down about 2 percent from the previous season. However, foreign exports in 1989/90 are projected to rise 169,000 bales to 905,000—an increase of 23 percent. Strong demand in importing countries is expected to absorb the greater production and reduced consumption among foreign producers, keeping stocks relatively tight. Among individual foreign exporters, Egypt and Israel are expected to substantially increase 1989/90 exports. Based upon current estimates, the U.S. share of world exports could rise to 25 percent in 1989/90 from 22 percent in 1988/89.

## Foreign Cotton Situation and Outlook

### Foreign Stocks Lowest In 5 Years

In 1988/89, foreign cotton production rose 3 million bales to 68.8 million (table I). Much of the growth came from increased area, particularly in China, French-speaking West Africa, and along the Mediterranean. Yields were exceptional in the Soviet Union, Mexico, Greece, and the French-speaking countries of West Africa; yields also rose in Pakistan, India, Australia, and Turkey. But poor weather reduced yields in China, Brazil, Egypt, Spain, Argentina, Paraguay, and Peru.

At 75.6 million bales, foreign consumption in 1988/89 changed little from 1987/88. Slack demand for textile products, particularly denims, cut the cotton demand of major importers in Asia and Western Europe. Consumption among foreign cotton producers, however, generally continued rising because population and income growth there remains strong.

Although year-end world stocks will rise because of tremendous gains in the United States, foreign stocks are expected to drop about 1 million bales by the end of 1988/89. Very competitive prices early in the season enabled foreign exporters to capture a large share of exports, pulling expected year-end stocks to the lowest level in 5 years. Sharp gains in world prices and reduced foreign offerings (despite higher prices in the last 2 months) suggest foreign supplies are tight. Stocks to use ratios have dropped to 33.6 percent, the lowest since 1982/83.

### Prices Rise Sharply, Exceeding the Previous 4 Seasons

World prices, represented by the A Index of c.i.f. quotes on the Northern European market, have risen sharply since February. Although prices had been generally moving upward since September, gains of 6 cents per pound in March alone doubled the gains of the first 6 months and brought prices back near the levels of the previous 4 seasons. Since then, prices rose another 5 cents per pound in April and 3 cents in May to reach 78 cents per pound, above the levels of the same period in each of the previous 4 seasons. Because 1989 cotton futures prices are also equal to or greater than those in the same period in the previous 4 seasons, prices could be attractive to some producers in 1989/90.

### Foreign Production Unchanged in 1989/90

Foreign production in 1989/90 is projected at 69 million bales, virtually unchanged from this year. Except for the Soviet Union, gains are likely in most of the major producers—China, India, Pakistan, Brazil, Egypt, and Australia. Production may drop in areas where 1988/89 was especially good—Mexico, Turkey, Greece, Spain, and the French-

Table I--World cotton supply and use, 1988/89 and 1989/90 1/

| Beginning August 1    | United States | Major importers 2/ | Major exporters 3/ | Other | Total foreign | World |
|-----------------------|---------------|--------------------|--------------------|-------|---------------|-------|
| Million 480-lb. bales |               |                    |                    |       |               |       |
| <b>1988/89:</b>       |               |                    |                    |       |               |       |
| <b>Supply--</b>       |               |                    |                    |       |               |       |
| Beginning stocks      | 5.8           | 5.6                | 13.1               | 7.8   | 26.5          | 32.2  |
| Production            | 15.4          | 1.6                | 46.6               | 20.6  | 68.8          | 84.3  |
| Imports               | 4/            | 16.8               | 2.5                | 5.6   | 24.9          | 24.9  |
| <b>Use--</b>          |               |                    |                    |       |               |       |
| Mill Use              | 7.3           | 17.5               | 38.3               | 19.8  | 75.6          | 82.9  |
| Exports               | 5.9           | 1.2                | 11.6               | 5.9   | 18.7          | 24.6  |
| Ending stocks         | 8.1           | 5.3                | 12.1               | 8.0   | 25.4          | 33.5  |
| <b>1989/90:</b>       |               |                    |                    |       |               |       |
| <b>Supply--</b>       |               |                    |                    |       |               |       |
| Beginning stocks      | 8.1           | N/A                | N/A                | N/A   | 25.4          | 33.5  |
| Production            | 13.5          | N/A                | N/A                | N/A   | 69.0          | 82.5  |
| Imports               | 4/            | N/A                | N/A                | N/A   | 25.5          | 25.5  |
| <b>Use--</b>          |               |                    |                    |       |               |       |
| Mill use              | 7.5           | N/A                | N/A                | N/A   | 77.5          | 85.0  |
| Exports               | 7.5           | N/A                | N/A                | N/A   | 18.0          | 25.5  |
| Ending stocks         | 6.7           | N/A                | N/A                | N/A   | 24.1          | 30.8  |

N/A = Not available.

1/ Based on May 11, 1989, World Agricultural Supply and Demand Estimates report, 1989/90 projected. Totals may not add and stocks may not balance because of rounding, a small quantity of cotton destroyed, and unaccounted differences. 2/ Eastern Europe, Japan, Hong Kong, Republic of Korea, and Taiwan. 3/ Australia, China, Central America, Egypt, Mexico, Pakistan, Sudan, Turkey, and the USSR. 4/ Less than 50,000 bales.

speaking countries of West Africa—but good returns in 1988/89 should still encourage large crops here too.

Growth is expected in yields; on balance foreign area is forecast to drop about 1.5 percent to 29 million hectares. Northern Hemisphere producers account for the majority of foreign area. Governments announce area policies and farmers make planting decisions several months prior to April planting. In the short run, most do not respond directly to changes in world prices; even if they did, world prices did not begin to rise sharply early enough for adjustments to be made in 1989/90. Some Equatorial and Southern producers may raise area in response to higher world prices since they do not plant until July and September, respectively; but these producers account for only a very small proportion of foreign area, and increases here will not be sufficient to offset decreases in the North.

China's plans called for increased cotton area in 1989/90, but early planting surveys suggest this year's incentives—10-percent higher cotton prices, improved allocation of low cost bonus fertilizer, and taxes on higher value product production—will not be sufficient to offset incentives for grain production, so cotton area may drop somewhat. Still, with a return to more normal weather and improved incentives, yields may rise.

Area in Pakistan is constrained by the availability of irrigation and is unlikely to rise except where cotton displaces another crop, such as rice. But yields in Pakistan are expected to continue their recent steady gains as stable domestic returns continue to encourage the spread of improved cultivation practices and varieties.

Egypt's recent problems with cotton have stemmed from late sowing and poor care of the crop; incentives such as higher prices were insufficient to promote cotton relative to other crops. Area here is also limited; area targets for 1989/90 approximate those of 1988/89. Domestic 1989/90 seed cotton prices were increased again. But in 1989 the Government finally decided to try to halt the recent declines in cotton by offering additional incentives to producers, including: subsidized prices on seed, fertilizer, and pesticides for cotton sown before April 15; a large bonus for cotton delivered before September 15; and a smaller bonus for deliveries between September 15 and October 15. These incentives apparently are having the desired effect: much more cotton than in recent years is being sown in a timely manner. Thus, normal 1989/90 weather should improve yields.

In India, 1989/90 support prices in rupees have been substantially increased. Coupled with the satisfactory returns being obtained in 1988/89, domestic prices are expected to continue to encourage farmers to grow cotton.

But the Soviet Union, whose plans called for a second year of somewhat reduced area, now also appears likely to have reduced yields because freezing temperatures in early May destroyed much of the 1989/90 cotton plantings. Considerable replanting will now be necessary, leaving the 1989/90 crop vulnerable to all the problems that entails, such as insufficient seed, lower quality seed, insufficient labor, higher costs, a late season, and early fall frosts. Even if weather remains normal for the rest of the season, production likely will fall.

Mexico will also have a substantially lower cotton crop in 1989/90. To increase grain area, the Government sharply reduced 1989/90 domestic cotton prices and area planting quotas, resulting in much less area currently being planted.

The large Southern Hemisphere producers, Brazil and Australia, are just harvesting the 1988/89 crop and have yet to make plans for 1989/90. Brazil is expected to recover from this year's dry sowing conditions and plant a more normal area in 1989/90, which could mean a larger crop. In recent seasons Australia has responded to relatively high world prices just prior to planting by increasing area, also suggesting a greater harvest.

#### ***Normal Growth Expected In 1989/90 Consumption***

Foreign consumption in 1989/90 is forecast to go up 2.5 percent, about the historical rate of growth, to 77.5 million bales. Consumption growth is expected to continue among major foreign producers, primarily because of continued expansion of domestic population and incomes.

Although producers such as China, India, and Pakistan are among the largest growing exporters of textiles, exports still account for a relatively small proportion of their total textile use, so their cotton consumption tends to be less affected by cycles in world textile demand than by domestic demand. Each of these producers, however, has seen its consumption growth slow when its domestic supplies tighten.

Cotton importers in Western Europe and Asia are closely tied to fashion trends in their major textile markets, the developed countries. Cotton demand will probably rise in Asia and may also increase in Western Europe in 1989/90.

As denim demand rises in 1989/90, cotton use in Taiwan, South Korea, Hong Kong, and Southeast Asia, is particularly likely to rebound because they produce a higher percentage of lower quality textiles. Cotton consumption in Thailand and Indonesia, recently the most rapidly growing textile exporters, will also be boosted by continued expansion of capacity.

Europe and Japan may increase cotton use in 1989/90 if yarn demand improves and yarn prices rise. Projections of contin-

ued world economic growth, particularly in the developed economies, suggest yarn demand will improve in major markets. Because demand for yarn in 1988/89 has been weak and inventories accumulated, mills in these countries have hesitated to build cotton stocks; they may therefore need to rebuild stocks as yarn demand improves. This would generate an added boost to import demand.

On the other hand, as cotton prices have gone up, the gap between cotton and polyester is narrowing rapidly even though the cotton/rayon gap remains wide. Polyester prices in Europe now average only 14 cents above cotton, compared with 31 cents as recently as February, while polyester prices in Asia are now just below cotton prices, a drop of 15 cents since February. This could mean more polyester substitution would limit the gain in cotton consumption.

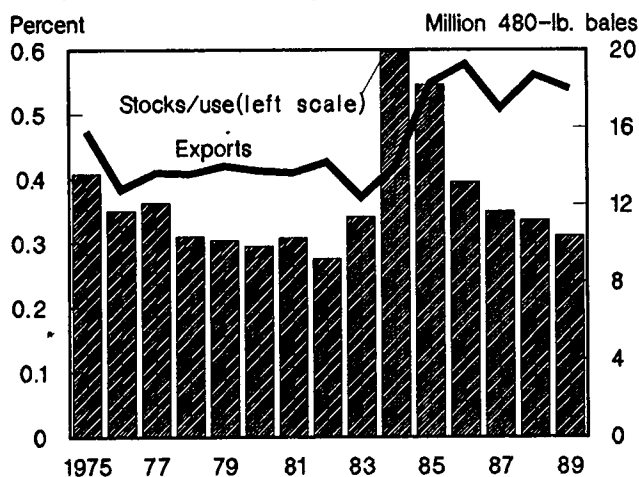
#### **Falling Supplies Expected To Reduce Foreign Exports**

Rising consumption, particularly among cotton importers, will probably also boost import demand in 1989/90. Foreign imports are projected to go up 600,000 bales to 25.5 million. Despite improved demand, foreign exports, while remaining substantial, are expected to drop nearly 1 million bales to 18 million.

Foreign exports will not be large enough to cut foreign stocks to the lows of the 1978/79-1982/83 period because the near record U.S. stocks will temper foreign exports (figure 9). U.S. prices are competitive again, so the United States has an opportunity to reduce its stocks and increase its market share by raising 1989/90 exports. Larger U.S. exports will reduce prospects for further foreign export growth in 1989/90.

Nevertheless, foreign cotton producers will likely export as much as possible in 1989/90, reducing stocks and stocks to

**Figure 9  
Foreign Cotton Exports Expected Strong Despite Further Supply Contraction**



use ratios still further from the current low levels. Many foreign exporters, such as China and Pakistan, use cotton to fill a critical need for foreign exchange. In other countries, such as the French-speaking countries of West Africa and Sudan, cotton is practically their only export. Still others, such as Australia, Paraguay, and Israel, consume very little cotton domestically, exporting nearly all their supply. All exporters of course are interested in taking maximum advantage of cotton exports when prices are relatively high as well as maintaining their market share if at all possible.

## **U.S. Wool Situation and Outlook**

### **U.S. Wool Crop Up In 1988**

Recent data indicate that U.S. shorn wool production in 1988 was 89.2 million pounds, greasy basis, up 5.4 percent from 1987. Revised data indicate the 1987 wool crop of 84.7 million pounds, greasy, to be the smallest on record, dating back to 1909. The average 1988 fleece weight was 7.78 pounds and the total value was \$124.6 million. The number of sheep shorn was 11.5 million, up 5 percent from 1987 and the largest number since 1984.

USDA has estimated that sheep producers will receive about \$40 million in Federal price support payments on shorn and pulled wool for the 1988 marketing year. Similar payments in 1987 were \$84.5 million. The 1988 support price for shorn wool was \$1.78 per pound, determined in accordance with the National Wool Act of 1954, as amended. The 1989 support price is \$1.77 per pound for shorn wool.

The 1988 national average market price for shorn wool, \$1.38 per pound, was 40 cents less than the support price. The 1988 payment rate of 29 percent (40 divided by 138) brings the average price received by all producers up to the support price. The payment rate is applied to the net proceeds received by producers for wool marketed during the marketing year. Hence, if a producer sold wool in 1988 for a total of \$1,000, the incentive payment would be \$290. In accordance with price support regulations, the CCC will not make payments on the amount of a producer's sales proceeds that exceed four times the national average price for shorn wool (\$5.52 per pound, greasy) for 1988 marketings.

Producers will receive \$1.60 per cwt in Federal payments for unshorn lambs that were sold or slaughtered during the 1988 marketing year.

Raw wool mill consumption in the first quarter of 1989, 39.1 million pounds, clean, was 14 percent above the fourth quarter and 2 percent above a year earlier (table J). Raw wool mill consumption in 1989 is forecast to be 137 million pounds, 5 percent below last year (table K). Woolen system mill consumption in the first quarter, 14.3 million pounds, was 4 percent more than the fourth quarter, but more than 4

percent below the average of the first and second quarters. Traditionally, woolen system wool use in the first 6 months exceeds that of the second half of the year.

First quarter worsted mill consumption, 21.1 million pounds, clean, was up more than 20 percent from the previous quarter and 15 percent above a year earlier. In the worsted system, mill use of raw wool coarser than 60's, 7.7 million pounds, in the first quarter was the largest quarterly use in 15 years. Use of these grades rose because their price was lower than the 60's and finer grades. The carpet industry used 3.7 million pounds of raw wool in the first quarter, 24 percent above the previous quarter but 19 percent below a year earlier.

U.S. prices of clean mill-delivered territory raw wool, reflecting the general pattern of world prices, declined from their season's high reached in the November-January period to an April-May plateau. The 64's at \$3.75 per pound were 18 percent below the November-January average, while the 60's at \$2.63 declined almost 7 percent. The 58's at \$2.38 per pound were off 2 percent, while the 56's at \$2.18 declined 0.4 percent. The simple average price received by farmers for raw wool, greasy, in May was \$1.39 per pound, up from \$1.35 in April, and \$1.30 in March. The weighted average price in 1988 was \$1.38 per pound, more than the 50 percent above 1987 (table L).

Domestic clean mill-delivered prices of Australian raw wool have experienced monthly declines since January, after

reaching highs last winter. The 70's at \$5.58 per pound, clean, in May declined 30 percent from the season's high; the 64's, at \$4.04, declined 19 percent. The more medium grades had similar price declines. The 58's at \$2.93 per pound were off 23 percent, while the 56's at \$2.58 went down 17 percent.

Table K--Wool supply and disappearance, clean content

| Item                | 1984  | 1985  | 1986  | 1987  | 1988  | 1989 1/ |
|---------------------|-------|-------|-------|-------|-------|---------|
| Million lbs.        |       |       |       |       |       |         |
| Stocks, January 1   | 58.9  | 51.6  | 50.6  | 46.8  | 45.4  | 45      |
| Production          | 51.1  | 47.1  | 45.5  | 45.5  | 47.8  | 49      |
| Imports             | 94.2  | 79.5  | 97.0  | 105.1 | 96.7  | 85      |
| Diff. unacc.        | -10.0 | -9.6  | -8.8  | -8.2  | 0     | 0       |
| Total supply        | 194.2 | 168.6 | 184.3 | 189.2 | 189.9 | 179     |
| Mill use            | 142.1 | 116.6 | 136.7 | 142.8 | 144.2 | 137     |
| Exports             | 0.5   | 1.4   | 0.8   | 1.0   | 1.2   | 1       |
| Total use           | 142.6 | 118.0 | 137.5 | 143.8 | 145.4 | 138     |
| Stocks, December 31 | 51.6  | 50.6  | 46.8  | 45.4  | 44.5  | 41      |

1/ Estimated by USDA. All projections are rounded.

Source: USDA and Bureau of the Census.

Table L--Average U.S. farm prices per pound for shorn wool, greasy basis 1/

| Month     | 1984 | 1985 | 1986 | 1987  | 1988  | 1989  |
|-----------|------|------|------|-------|-------|-------|
| Cents     |      |      |      |       |       |       |
| January   | 58.4 | 59.2 | 52.2 | 58.7  | 84.8  | 107.0 |
| February  | 67.1 | 58.7 | 54.4 | 69.1  | 109.0 | 123.0 |
| March     | 79.3 | 61.0 | 61.9 | 78.7  | 140.0 | 130.0 |
| April     | 87.9 | 67.9 | 70.0 | 99.7  | 153.0 | 135.0 |
| May       | 86.5 | 68.5 | 73.7 | 106.0 | 166.0 | 139.0 |
| June      | 86.6 | 69.8 | 75.5 | 108.0 | 161.0 |       |
| July      | 82.3 | 64.0 | 67.5 | 87.0  | 134.0 |       |
| August    | 78.5 | 60.2 | 65.9 | 83.1  | 122.0 |       |
| September | 74.3 | 59.5 | 57.6 | 93.6  | 113.0 |       |
| October   | 80.2 | 66.6 | 69.7 | 95.5  | 123.0 |       |
| November  | 67.5 | 58.5 | 64.0 | 84.1  | 119.0 |       |
| December  | 69.4 | 56.8 | 59.4 | 81.4  | 116.0 |       |
| Average   | 79.5 | 63.3 | 66.8 | 91.7  | 138.0 |       |

1/ Weighted market average price.

Source: Agricultural Prices, National Agricultural Statistics Service, USDA.

Table J--U.S. mill consumption of raw wool, scoured basis

| Year        | Apparel wool | Carpet wool | Total   |
|-------------|--------------|-------------|---------|
| 1,000 lbs.  |              |             |         |
| Jan.-Dec.:  |              |             |         |
| 1984        | 128,982      | 13,088      | 142,070 |
| 1985        | 106,051      | 10,562      | 116,613 |
| 1986        | 126,768      | 9,960       | 136,728 |
| 1987        | 129,677      | 13,092      | 142,769 |
| 1988        | 128,317      | 15,826      | 144,143 |
| Jan.-Mar.:  |              |             |         |
| 1984        | 36,623       | 3,438       | 40,061  |
| 1985        | 26,846       | 3,000       | 29,846  |
| 1986        | 32,465       | 2,583       | 35,048  |
| 1987        | 33,801       | 2,828       | 36,629  |
| 1988        | 33,723       | 4,527       | 38,250  |
| 1989        | 35,402       | 3,673       | 39,075  |
| Apr.-June:  |              |             |         |
| 1984        | 36,252       | 3,940       | 40,192  |
| 1985        | 27,882       | 2,537       | 30,419  |
| 1986        | 33,653       | 2,387       | 36,040  |
| 1987        | 34,175       | 3,333       | 37,508  |
| 1988        | 33,337       | 3,867       | 37,204  |
| July-Sept.: |              |             |         |
| 1984        | 29,326       | 2,721       | 32,047  |
| 1985        | 25,025       | 2,887       | 27,912  |
| 1986        | 30,106       | 2,739       | 32,845  |
| 1987        | 30,041       | 3,748       | 33,789  |
| 1988        | 30,001       | 4,462       | 34,463  |
| Oct.-Dec.:  |              |             |         |
| 1984        | 26,781       | 2,989       | 29,770  |
| 1985        | 26,298       | 2,138       | 28,436  |
| 1986        | 30,544       | 2,251       | 32,795  |
| 1987        | 31,660       | 3,183       | 34,843  |
| 1988        | 31,256       | 2,970       | 34,226  |

Source: Bureau of the Census.

Table M--U.S. imports of dutiable and duty-free raw wool for consumption, clean content

| Year        | Dutiable | Duty-free | Total   |
|-------------|----------|-----------|---------|
| 1,000 lbs.  |          |           |         |
| Jan.-Dec.:  |          |           |         |
| 1985        | 50,164   | 29,308    | 79,472  |
| 1986        | 66,090   | 30,901    | 96,991  |
| 1987        | 74,054   | 31,066    | 105,120 |
| 1988        | 72,323   | 24,418    | 96,741  |
| Jan.-Mar.:  |          |           |         |
| 1985        | 15,169   | 7,397     | 22,536  |
| 1986        | 19,749   | 6,910     | 26,658  |
| 1987        | 20,434   | 5,805     | 26,239  |
| 1988        | 26,763   | 6,753     | 33,516  |
| 1989        | 20,166   | 8,815     | 28,981  |
| Apr.-June:  |          |           |         |
| 1985        | 9,661    | 7,951     | 17,612  |
| 1986        | 16,744   | 7,401     | 24,145  |
| 1987        | 21,829   | 9,126     | 30,954  |
| 1988        | 19,150   | 5,965     | 25,115  |
| July-Sept.: |          |           |         |
| 1985        | 11,573   | 7,158     | 18,731  |
| 1986        | 12,922   | 8,235     | 21,157  |
| 1987        | 13,974   | 9,761     | 23,735  |
| 1988        | 9,940    | 6,141     | 16,081  |
| Oct.-Dec.:  |          |           |         |
| 1985        | 13,790   | 6,803     | 20,593  |
| 1986        | 16,676   | 8,355     | 25,032  |
| 1987        | 17,818   | 6,374     | 24,192  |
| 1988        | 16,470   | 5,558     | 22,028  |

Source: Bureau of the Census.

Table N--Raw wool imports by region 1/

| Region                         | Duty-free |      |      |      | Dutiable |      |         |      | Total |      |      |      |
|--------------------------------|-----------|------|------|------|----------|------|---------|------|-------|------|------|------|
|                                | 1986      | 1987 | 1988 | 1989 | 1986     | 1987 | 1988    | 1989 | 1986  | 1987 | 1988 | 1989 |
|                                |           |      |      | 1Q   |          |      | Percent | 1Q   |       |      |      | 1Q   |
| New England                    | 34        | 30   | 30   | 15   | 25       | 16   | 13      | 11   | 28    | 20   | 17   | 12   |
| Middle Atlantic                | 33        | 38   | 34   | 36   | 2        | 2    | 1       | 1    | 12    | 12   | 10   | 12   |
| South Atlantic<br>and other 2/ | 33        | 32   | 36   | 49   | 73       | 82   | 86      | 88   | 60    | 67   | 73   | 76   |
| Total                          | 100       | 100  | 100  | 100  | 100      | 100  | 100     | 100  | 100   | 100  | 100  | 100  |

1/ Imports entered through customs districts in the respective regions. 2/ Includes customs districts along the Gulf, the Mexican border, the Pacific Coast, and the Canadian border.

Source: Bureau of the Census.

Imports of clean raw wool in the first quarter of 1989 were 29 million pounds, clean, 14 percent below a year earlier but 32 percent above the fourth quarter (table M). Dutiable wool imports were 20 million pounds, 75 percent of the year-earlier quantity. About 93 percent came from three countries: Australia, 83 percent; New Zealand, 6 percent; and Uruguay, 4 percent. Demand for the finest grades (finer than 58's) in the first quarter of 17.5 million pounds was 61 percent of total wool imports, compared with almost 74 percent a year earlier and 65 percent of the first quarter average of the 5 previous years. Duty-free imports of 8.8 million pounds rose 31 percent above a year earlier and 29 percent above the average first quarter of the previous 5 years. More than 97 percent came from three countries: New Zealand, 86 percent; the United Kingdom, 8 percent; and Argentina, 3 percent. The first quarter quantity is the largest first quarter duty-free raw wool import level in 16 years. It reflects greater use of the medium grade wools when prices of the finer grades have been at record highs.

The share of raw wool imports entering the United States through the New England and Middle Atlantic customs districts declined from 45 percent in 1985 to 24 percent in the first quarter of 1989 (table N). Conversely, the percentage entering through the South Atlantic and other districts has risen from 55 percent in 1985 to 76 percent in 1989. The share of duty-free raw wool entering through the New England and Middle Atlantic customs districts exceeded the share of the dutiable, even though the overall share of duty-free wool is declining. In the first quarter of 1989, about 51 percent of the duty-free came through the New England and Middle Atlantic regions, compared with 12 percent of the dutiable. In contrast, most of the dutiable raw wool (88 percent) entered through the South Atlantic and other customs districts, compared with only 49 percent of the duty-free.

## Foreign Wool Situation and Outlook

### Record Wool Production

The latest information indicates that world sheep numbers at the commencement of the 1988/89 season to be a record high 1.15 billion, 2.1 percent above a year earlier. Most of

this increase was concentrated in Australian and Chinese flocks. Farmers in Australia experienced better economic returns from sheep than from cattle and wheat. Government programs to stimulate sheep numbers have succeeded in China. Unfavorable weather has held down flock size in the Soviet Union, but recent better weather and economic incentives may reverse that trend. New Zealand flock numbers have stagnated or declined because of drought and low sheep meat prices. High wool prices, combined with favorable weather, caused larger sheep numbers in South Africa, Argentina, and Uruguay.

The 1988/89 world wool clip is estimated to be almost 4.1 billion pounds, clean, a record high and 5.6 percent more than the average of the previous 5 years. Australia accounted for half the increase, in addition to significant gains in Argentina and China. Merino wools accounted for 45 percent of the world clip; medium wool, 28 percent; and coarse types, 27 percent. The breakout for the average clips of the 5 previous years was 43, 28, and 29 percent, respectively.

World supplies of raw wool in the 1988/89 season at 4.24 billion pounds, clean, were somewhat static due to the unusually low carryin. The current season's world supply was 0.3 percent below the average of the previous 5 years. The carryin, 150 million pounds, was 39 percent of the past 5 year average. This low carryin reflects the unprecedented decline in Australian stocks during the previous 2 seasons.

Raw wool exports of the 5 leading exporting countries account for about 85 percent of the wool being internationally traded. Australia made up 66 percent; New Zealand, 23 percent; Argentina, 5 percent; South Africa and Uruguay, 3 percent each. In the 1987/88 season, they were 1.8 billion pounds, clean, 4.4 percent below the previous year. Most of this decline reflected a smaller demand for the coarser and medium grade New Zealand wool, partly because of the over-valued NZ dollar. Depletion of Australian stocks rather than a softening in the demand for merino wool also contributed to the decline.

Total raw wool imports by 34 major wool textile manufacturing countries in calendar 1988, 2.89 billion pounds (greasy),



were down 4.2 percent from the preceding year. While almost all these countries experienced declines, 3 countries experienced the most: Japan, with 65.2 million pounds; Taiwan, with 30.2 million; and the United Kingdom, with 26.2 million. China was the only country whose imports, 76.9 million pounds, showed a significant increase.

Mill consumption of 30 major wool textile manufacturing in calendar 1988, 3.49 billion pounds, clean, increased 1.8 percent over the preceding year. Of the 13 countries having larger mill use in 1988, China had the only significant increase, 100.9 million pounds. Of the 17 countries having declines, the Soviet Union had the largest, 6.8 million pounds.

### **Large Australian Production**

The latest data indicate that the number of sheep in Australia as of March 1988 was 163 million. Wool production in 1988/89 was 2.07 billion pounds, greasy, of which shorn wool made up 1.92 billion. The Australian Bureau of Agriculture and Resource Economics has forecast that sheep numbers will reach 169 million in March 1989, an increase of 3.7 percent from a year earlier. Wool production in 1989/90 has been estimated at 2.16 billion pounds, greasy, with shorn at 2.0 billion, 4.5 percent above the 1988/89 season. This growth results from the favorable returns to wool production compared with those from competing farm enterprises. The yield per fleece in 1988/89 rose to a record 10.1 pounds; a small increase of 0.6 percent is forecast for 1989/90.

After reaching a season high of A1081 cents in October, the Australian market indicator (a weighted average index of 13 wool categories) declined 12 percent to A949 cents in December. Demand strengthened in the third quarter when the market indicator averaged about A971 cents, the stock level rose to 62,370 bales, 8.7 percent above the end of December, and the Australian Wool Corporation (AWC) purchased an average of about 3 percent of quarterly supplies. After the Easter recess, demand softened, causing the market indicator to decline to A913 cents in April and A898 in May. Stocks doubled to 131,538 bales at the end of May and the AWC purchased 12-20 percent of the weekly offerings. This decline resulted from the smaller purchases by the Soviet Union and Far Eastern countries and greater mill use of the lower priced medium grade wools and noncellulosic fibers.

Exports of Australian raw wool in the first 7 months of the season dropped to 994 million pounds, 11 percent below a year earlier. Five countries bought 62 percent of the total: Japan, 20 percent; the Soviet Union, 14 percent; Italy and China, 10 percent each; and France, 9 percent.

New Zealand sheep numbers are projected to decline from 64.6 million at the end of the 1988/89 season to 63.8 million at the end of the 1989/90 season, a decline of 1.2 percent.

Sheep flocks have been declining for several years, reflecting the relatively low profit from sheep meat.

Wool production in New Zealand for the 1988/89 season was 551 million pounds, but is forecast to decline 4 percent to 529 million pounds in the 1989/90. The smaller wool output will result from lower sheep numbers and a smaller wool clip per head due to drought conditions.

The New Zealand market indicator reached a record high of NZ720 cents in October and declined to NZ664 cents in December. In the third quarter the market indicator, reflecting moderate wool demand, ranged between NZ669 cents and NZ679 cents. The New Zealand Wool Board (NZWB) weekly purchases varied from 12 to 17 percent.

NZWB stocks declined from 91,000 bales at the season's beginning to 70,000 at the year's end. Due to slower demand, stocks rose to 93,260 bales in April. Stocks eased to 85,000 bales in mid-May.

New Zealand raw wool exports in the first 7 months of the season totaled 411 million pounds, 10 percent above a year earlier. Four countries accounted for 56 percent of these exports: China, 33 percent; Japan and the Soviet Union, 8 percent each; and the United Kingdom, 7 percent.

The South African market indicator reached a record high of SA2,363 cents in early October and then declined to SA1,998 cents in December. At the same time the South African Wool Board stocks more than doubled, ending the year at 13,910 bales. In the third quarter, demand eased, and the market indicator declined from SA2,206 cents in January to SA2,087 cents in March. Stocks rose 15 percent, reaching 15,967 bales in mid-March. In late April, the market indicator declined to SA1878 cents, and stocks rose 67 percent to 26,600 bales. In April the trade purchased 74 percent of the offerings, compared with an average of 91 percent in the third quarter.

## **Mohair**

### **Hair Price Down**

Mohair production in 1988 equaled 17.3 million pounds, greasy, with a value of \$32.8 million. The weighted average price was \$1.89 per pound, 28 percent below 1987. More than 2.3 million goats were clipped, with an average clip of 7.5 pounds. Texas production dropped 5 percent from a year earlier to 15.4 million pounds. The number of Texas angora goats clipped, 2 million, was the same for both years. The average Texas clip was 7.7 pounds in 1988, down from 8.1 pounds in 1987.

Mohair producers will receive about \$50 million in Federal price support payments for the 1988 marketing year. Similar

Table O--U.S. mohair supply and disappearance

| Item                | 1984   | 1985   | 1986   | 1987   | 1988   | 1989 1/ |
|---------------------|--------|--------|--------|--------|--------|---------|
| Million lbs.        |        |        |        |        |        |         |
| Stocks, January 1   | 1,250  | 1,020  | 1,304  | 1,540  | 1,747  | 1,373   |
| Production          | 9,250  | 10,990 | 13,510 | 13,990 | 13,170 | 13,500  |
| Imports             | 5      | 20     | 13     | 7      | 59     | 10      |
| Diff. unacc.        | -1,035 | -1,035 | 1,436  | 352    | 975    | 0       |
| Total supply        | 9,470  | 10,995 | 16,263 | 15,889 | 15,951 | 14,883  |
| Mill use            | 700    | 700    | 100    | 100    | 200    | 200     |
| Exports             | 7,750  | 8,991  | 14,623 | 14,042 | 14,378 | 13,500  |
| Total use           | 8,450  | 9,691  | 14,723 | 14,142 | 14,578 | 13,700  |
| Stocks, December 31 | 1,020  | 1,304  | 1,540  | 1,747  | 1,373  | 1,183   |

1/ Estimated by USDA. All projections are rounded.

Source: USDA and Bureau of the Census.

payments in 1987 totaled \$35.3 million. The 1988 support price was \$4.69, and in 1989 it is \$4.59. The 1988 national average market price for mohair, \$1.89, was \$2.80 less than the support price. The 1988 payment rate of 148.1 percent (280 divided by 189) brings the average mohair price received by all producers up to the support price. The payment rate is applied to the net proceeds received by producers for the mohair marketed during the marketing year. For every \$1,000 of mohair sales, a producer would receive \$1,481 in the form of a Government payment. In accordance with the price support regulations, the CCC will not make payments on the amount of producer's sales proceeds that exceed four times the average mohair price (\$7.56 per pound, greasy) for 1988 marketings.

U.S. mohair exports in the first quarter were 1.3 million pounds, clean, 40 percent of a year earlier and 31 percent of the fourth quarter. The value of the first quarter shipments totaled \$3.3 million, with an average price of \$2.50. About 85 percent went to four countries: the United Kingdom, 41 percent; India, 25 percent; Spain, 12 percent; and Italy, 7 percent. Exports this year will likely fall 6 percent from last year to 13.5 million pounds (table O).

Sales this spring have been slow with prices per pound at last year's level: kid, \$4.25; young goat, \$2.25; and adult, \$1.40, down from \$1.75 last year.

South Africa's current stock has been estimated at 13 million pounds, 30 percent more than last December. This inventory consisted of 10 percent kid, 15 percent young goat, and 75 percent adult. The cumulative clearance for the first four summer season sales was 70 percent.

## Manmade Fibers

### Production Up From 1987

Production of nonglass manmade fibers in the first quarter was 2.32 billion pounds, 0.6 percent less than the fourth quarter but 3.5 percent above a year earlier. End-of-April stocks

in producers' plants rose 2 percent from a year earlier and almost 9 percent from the year-end levels. Most of the inventory increase since December was in nylon and polyester filament and nylon and acrylic staple. Mill consumption in the first quarter was 2.16 billion pounds, 2.8 percent below the previous quarter but 3.3 percent above a year earlier. Plants producing nonglass manmade fibers operated in the first quarter at 89 percent of capacity, the same as a year earlier. Staple fiber plants operated at an average capacity of 90 percent, while filament plants operated at 89 percent. To obtain the desired return on investment, producers must operate at 85 to 90 percent of capacity.

Fourth quarter consumption data for the major fiber groups are shown in appendix table 18. The carpet market remains the largest single manmade fiber market, accounting for a third of domestic shipments. At 460 million pounds, nylon continues to be the most popular carpet fiber, 1.6 percent below the third quarter. Preliminary first quarter data indicate that nylon in carpets has risen to 462 million pounds. The lack of growth in carpet shipments of the past 3 quarters reflects sluggishness in the construction industry.

In the fourth quarter, woven textiles remained the second largest manmade fiber market (26 percent). About 630 million pounds were used in weaving operations, up 11.6 percent from the third quarter and the largest amount in almost 8 years. Good economic conditions and buying in advance of price increases were believed to be the major reasons behind the increase. Polyester fibers enjoyed the largest increase, up 18 percent. Major end uses for staple were sheets, curtains, and coated fabric substrates. Blouses and drapery fabric provided uses for filaments.

The knit market took about 367 million pounds, up more than 12 percent above the third quarter. Knit applications of polyester fibers increased 25 percent. Staple fibers went into underwear, active sportswear, and topweight apparel. Filaments were used in industrial and home furnishing fabrics and robes or loungewear.

Table P--Reported spot prices of raw materials for manmade fibers, 1988/89

| Product            | Jan.      | Feb.      | March     | April     | May       | June      | July      | Aug.      |
|--------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| 1988               |           |           |           |           |           |           |           |           |
| Para-xylene 1/     | 17.5      | 17.5      | 17.5      | 17.5-21.5 | 21.5      | 22.8-23.5 | 23.5-25.5 | 23.5-25.5 |
| Propylene 1/       | 18        | 18        | 17        | 17        | 17        | 17        | 17        | 17        |
| Ethylene glycol 1/ | 22        | 26-28     | 30-32     | 30-32     | 27-27.5   | 30-32     | 42-45     | 40-45     |
| Cyclohexane 2/     | 1.054     | NA        | 1.199     | 1.260     | 1.219     | 1.219     | 1.219     | 1.219     |
| Acrylonitrile 1/   | 37-38     | NA        | NA        | NA        | 36        | 36        | 36        | 36        |
| Caprolactam 1/     | 85        | 85        | 85        | 85        | 85        | 85-87     | 87-90     | 87-90     |
| Benzene 2/         | 0.85-0.93 | 0.95-1.20 | 1.12-1.20 | 1.02-1.12 | 1.00-1.05 | 1.03-1.10 | 1.04-1.10 | 1.09-1.13 |
|                    | Sept.     | Oct.      | Nov.      | Dec.      | Jan.      | Feb.      | March     | April     |
|                    |           |           |           | 1988      | 1989      |           |           |           |
| Para-xylene 1/     | 25.5-26.5 | 25.5-26.5 | 25.5-26.5 | 26-27     | 28        | 28        | 28.5      | 29.5      |
| Propylene 1/       | 16.5-17   | 17        | 18        | 19        | 20        | 20        | 20        | 21        |
| Ethylene glycol 1/ | 40-45     | 45-50     | 44-48     | 44-48     | 44-66     | 44-66     | 44-66     | 44-66     |
| Cyclohexane 2/     | 1.3017    | 1.3017    | 1.3017    | 1.3017    | 1.75545   | 1.8792    | 1.63      | 1.63      |
| Acrylonitrile 1/   | 36        | 36        | 36        | 39        | 39        | 39        | 40        | 40        |
| Caprolactam 1/     | 87-90     | 87-90     | 87-90     | 85        | 85        | 85-91     | 89-91     | 89-90     |
| Benzene 2/         | 1.11-1.19 | 1.16-1.24 | 1.26-1.78 | 1.73-1.85 | 1.85-1.92 | 1.50-1.75 | 1.50-1.55 | 1.50-1.53 |
|                    |           |           |           |           |           |           |           | May       |
|                    |           |           |           |           |           |           |           | 29.5      |
|                    |           |           |           |           |           |           |           | 20        |
|                    |           |           |           |           |           |           |           | 44-66     |
|                    |           |           |           |           |           |           |           | 1.59-1.63 |
|                    |           |           |           |           |           |           |           | 40        |
|                    |           |           |           |           |           |           |           | 89-90     |
|                    |           |           |           |           |           |           |           | 1.30-1.50 |

N/A = Not available.

1/ Cents per pound. 2/ Dollars per gallon.

Source: Chemical Marketing Reporter.

Prices of the raw materials used to make non-cellulosic fibers tended to be firm in the first quarter, but then declined in the second quarter (table P). Rising stocks and weakening demand caused the lower prices.

Prices of para-xylene and cyclohexane generally reflect the pricing pattern of benzene from which both are derived. Polyester plastic use in containers has been experiencing excess capacity and slower demand. Higher first-quarter prices caused it to exceed the prices of aluminum in the con-

tainer market. Another factor in the lower benzene price was a moderating demand as an octane enhancer in gasoline blending.

The price of acrylonitrile and its precursor have remained constant in 1989 due to modest demand. Propylene prices have varied little because of extensive capacity expansion, while at the same time, some maintenance shutdowns and steady sales have tended to keep supply and demand in balance.

# Raw Fiber Equivalent of U.S. Textile Trade, by Country and Fiber, 1988

by  
Edward H. Glade, Jr. and John V. Lawler\*

**Abstract:** In 1988, U.S. textile imports declined from record highs set a year earlier, while textile exports expanded. The raw fiber equivalent of cotton textile imports fell nearly 10 percent, wool textile imports were down 12 percent, and manmade fiber textile imports dropped 4 percent. Textile exports of cotton, wool, and manmade products increased an average of 19 percent.

**Keywords:** Textile imports and exports, trade, raw fiber equivalents.

This article continues an annual series of studies measuring the raw fiber equivalents of imported textile products, by country of origin. Results covering data on cotton textile products for calendar years 1982-87 have been published in previous issues of the *Cotton and Wool Situation and Outlook*.

This article also describes raw fiber equivalents of wool and manmade fiber textile imports for the fourth year. In addition, this article extends the series to include the raw-fiber equivalents of textile exports, by fiber and by country of origin, for the first time. By measuring both imports and exports on a raw fiber equivalent basis, estimates of net domestic fiber consumption can be made.

The equivalent domestic fiber production displaced by imports can also be determined by type of product, country of origin or destination, and type of fiber, all of which are presented for 1988 in appendix tables 19 through 26.

## Aggregate Trade

During 1988, overall U.S. textile trade improved as the total volume of imported textile products declined, while U.S. textile exports grew significantly. The U.S. trade balance in cotton textiles narrowed to about -1.8 billion pounds from the record high of -2.0 billion set in 1987. Cotton textile imports totaled 2.1 billion pounds in 1988, compared with 2.3 billion a year earlier. Exports of cotton textiles, on the other hand, increased more than 10 percent to about 330 million pounds on a raw fiber equivalent basis (table A-1).

Wool textile imports dropped about 12 percent in 1988; wool exports have nearly doubled since 1986. The trade balance of manmade fiber textiles narrowed, with imports falling about 4 percent and exports expanding 16 percent.

## Regional Trade

Despite the improvement during 1988, U.S. textile trade for all fibers combined showed a negative balance of about 3.1 billion raw fiber equivalent pounds (table A-2). Imports of textile products were almost 4 times as great as exports. The negative trade balance of cotton textile products made up 59 percent of the total, with cotton textile imports 6.4 times as great as exports. The manmade fiber textile imbalance equaled 34 percent, with imports 2.5 times as great as exports. The wool textile imbalance was 7 percent, with imports nearly 8 times greater than exports.

About 85 percent of the negative trade balance for textiles resulted from imbalanced trade with Asian countries. Imports of Asian textile products totaled 2,855 million pounds, 10.5 times greater than the exports to those countries. These imports constituted almost 70 percent of textile products entering the United States. Imports of cotton textiles from Asia, equaling 1,533 million pounds, made up 37 percent of all 1988 textile imports and were the biggest source of the imbalance. Cotton textiles from Asia comprised 72 percent of all U.S. cotton textile imports, and were 25.5 times greater than U.S. cotton textile exports to it.

Manmade fiber textile imports from Asian countries (1,191 million pounds) also played an important role in this imbalance, being 6 times greater than the U.S. exports to that region. Asia provided the second largest market for U.S. textile products, 273 million pounds or 26 percent of all 1988 textile exports. Manmade fiber textile products made up 197 million pounds of these shipments. In addition, Asian shipments comprised 29 percent of all U.S. exports of manmade fiber textiles.

The largest market for U.S. textile products in 1988 was the Western Hemisphere; about 54 percent (565 million pounds) of all U.S. textile exports went to this region. The trade with these countries in manmade fiber textiles provided the United States with the only positive trade balance for tex-

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files. The Western Hemisphere was the second largest source of total textile imports, 673 million pounds (16 percent).

Western European countries ranked third in 1988 textile trade with the United States. Eastern European and African countries were minor factors for U.S. textile trade.

Textile trade data for 1986 and 1987 support the pattern described here for 1988. Asian countries constituted the major source of textile imports in those years also, while Western Hemisphere countries provided the most important markets for U.S. textile exports.

Table A-1--U.S. textile trade and trade balance, by fiber, 1986-88

| Fiber                          | Exports | Imports | Trade balance |
|--------------------------------|---------|---------|---------------|
| Mil. lbs. raw fiber equivalent |         |         |               |
| Cotton:                        |         |         |               |
| 1986                           | 274.6   | 1,910.4 | -1,635.8      |
| 1987                           | 298.0   | 2,335.7 | -2,037.7      |
| 1988                           | 330.2   | 2,118.6 | -1,788.4      |
| Wool:                          |         |         |               |
| 1986                           | 16.0    | 275.6   | -259.6        |
| 1987                           | 23.4    | 276.1   | -252.7        |
| 1988                           | 30.6    | 242.4   | -211.8        |
| Manmade fiber:                 |         |         |               |
| 1986                           | 517.3   | 1,702.9 | -1,185.6      |
| 1987                           | 591.9   | 1,805.3 | -1,213.4      |
| 1988                           | 684.8   | 1,735.7 | -1,050.9      |
| Total fiber:                   |         |         |               |
| 1986                           | 807.9   | 3,888.9 | -3,081.0      |
| 1987                           | 913.3   | 4,417.1 | -3,503.8      |
| 1988                           | 1,045.6 | 4,096.7 | -3,051.1      |

Table A-2--U.S. textile trade and trade balance, by region and fiber, 1988

| Region/fiber                   | Exports | Imports    | Trade balance |
|--------------------------------|---------|------------|---------------|
| Mil. lbs. raw fiber equivalent |         |            |               |
| Western Hemisphere:            |         |            |               |
| Cotton                         | 184.6   | 382.1      | -197.5        |
| Wool                           | 8.5     | 28.9       | -20.4         |
| Manmade fiber                  | 371.9   | 261.7      | 110.2         |
| Total                          | 565.0   | 672.7      | -107.7        |
| Western Europe:                |         |            |               |
| Cotton                         | 77.1    | 84.2       | -7.1          |
| Wool                           | 5.8     | 68.7       | -62.9         |
| Manmade fiber                  | 96.5    | 153.0      | -56.5         |
| Total                          | 179.4   | 305.9      | -126.5        |
| Eastern Europe:                |         |            |               |
| Cotton                         | 1.3     | 33.2       | -31.9         |
| Wool                           | -1      | 12.2       | -12.1         |
| Manmade fiber                  | 1.1     | 22.5       | -21.4         |
| Total                          | 2.5     | 67.9       | -65.4         |
| Asia:                          |         |            |               |
| Cotton                         | 60.2    | 1,532.7    | -1,472.5      |
| Wool                           | 15.8    | 131.0      | -115.2        |
| Manmade fiber                  | 196.9   | 1,191.1    | -994.2        |
| Total                          | 272.9   | 2,854.8    | -2,581.9      |
| Africa:                        |         |            |               |
| Cotton                         | 7.0     | 86.4       | -79.4         |
| Wool                           | 4       | 1.5        | -1.1          |
| Manmade fiber                  | 18.3    | 21.5       | -3.2          |
| Total                          | 25.7    | 109.4      | -83.7         |
| World:                         |         |            |               |
| Cotton                         | 330.2   | 2,118.6    | -1,788.4      |
| Wool                           | 30.6    | 242.3      | -211.7        |
| Manmade fiber                  | 684.7   | 1/ 1,735.8 | -1,051.1      |
| Total                          | 1,045.5 | 4,096.7    | -3,051.2      |

1/ Includes 86.0 million pounds of manmade fiber unaccounted.

# Recent Trends in Quota Shipments for Cotton Textiles

by  
Leslie A. Meyer\*

**Abstract:** Through trade agreements, the United States has established quota limits on cotton textile products with various international competitors. This article examines the number of quotas filled for cotton textile products in 18 selected countries during 1987 and 1988. The total number of quotas above 75-percent filled in 1987 reached 46 percent, but fell to 15 percent in 1988.

**Keywords:** Cotton, trade agreements, textile products, quotas.

## Brief History of Trade Agreements <sup>1/</sup>

The history of textile and apparel trade regulation dates from the late 1950's and has progressed uninterrupted into what is today the most systematically and comprehensively protected sector in the world. As early as 1962, an international regime was in place that limited volume growth of cotton textile and apparel imports to 5 percent annually. The history of these import regulations for the United States has closely paralleled world regulatory efforts, and can be developed from the early 1960's without substantial omissions.

Controls over the sector began in 1961 with the Short-Term Arrangement on Cotton Textiles; in 1962, the Long-Term Arrangement on Cotton Textiles (LTA) was approved. The LTA expired in 1973, and the first Multi-Fiber Arrangement (MFA) was then negotiated, becoming effective on January 1, 1974. The original MFA expired in 1978, but the agreement was extended in 1978, 1982, and 1986; the most recent extension will not expire until July 31, 1991.

The MFA is a system of bilateral trade agreements between the United States and its international competitors; it expanded the LTA to include synthetic textile trade and also imposed an annual quota growth of 6 percent on imports from various developing countries. The MFA's primary aims are: expanding trade in textile products; progressively reducing trade barriers; and liberalizing world trade in textile products. In addition, the MFA attempts to advance the economic and social development of developing countries and the equitable treatment of all participating countries, while avoiding disruptive effects in individual markets and on individual production lines. These market disruptions are based on the existence of serious damage or actual threat to domestic producers; disruptions result from a sharp increase of imports of particular products and the offering of these prod-

ucts at prices substantially below the prevailing domestic prices for comparable quality goods. If an importing country experiences these disruptive effects, it seeks the removal of the disruption through consultation with the exporting country and the MFA's governing surveillance body.

## Data Description

The objectives here are to calculate and present the percentage of quotas filled by the major exporters of cotton textiles into the United States and to examine them for changes between 1987 and 1988. Tables B-1 and B-2 present the percent-filled data of 18 countries for numerous cotton textile items. Each trade item is placed in one of four categories: yarn, fabric, apparel, or other. In 1987, these countries accounted for about 80 percent of total U.S. cotton textile imports.

In some instances, shipments were made under quotas covering both cotton and other textile fibers. In these cases, the cotton fiber import could not be identified. Also, some items were combined and covered by a single quota level in which cotton shipments for a specific item were not uniquely identifiable. When either of these conditions was observed, no data were reported.

The agreement period for each country is January 1 through December 31, with the exception of Brazil (April 1 - March 31), and Indonesia and Turkey (July 1 - June 30). Comparisons are valid among two or more countries having the same agreement period, but only to the extent to which quotas are filled; specific quantity amounts are not represented. More importantly, however, comparisons between the 1987 and 1988 percentages indicate substantial changes in the trend.

## Trade Patterns

The changes in trade patterns from 1987 to 1988 indicate a sharp decline in the quotas being filled. China and Hong Kong, for example, filled nearly all their quotas in 1987, while in 1988, this number dropped substantially. Also, Brazil, Indonesia, and Turkey, whose agreement periods do not

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1/ Material for this section was taken substantially from *The Future of World Trade in Textiles and Apparel* (Institute for International Economics, Washington, D.C.), 1987.

Table B-1--1987 U.S. cotton textile quota fill for various exporting countries 1/

| Category item           | Singapore | Poland | Macau | Romania | Mexico | Taiwan | Korea | China | Malaysia | Pakistan | Hong Kong | Japan | Thailand | Philippines | India | Brazil | Indonesia | Turkey |
|-------------------------|-----------|--------|-------|---------|--------|--------|-------|-------|----------|----------|-----------|-------|----------|-------------|-------|--------|-----------|--------|
| Percent-filled          |           |        |       |         |        |        |       |       |          |          |           |       |          |             |       |        |           |        |
| Yarn:                   |           |        |       |         |        |        |       |       |          |          |           |       |          |             |       |        |           |        |
| Carded yarn             | 0         | 0      | 0     | --      | 61     | --     | 1     | 49    | 41       | --       | --        | 8     | 100      | --          | --    | 112    | --        | 108    |
| Combed yarn             | 0         | 0      | 0     | --      | 36     | 70     | 88    | 22    | 59       | --       | --        | 7     | --       | --          | --    | 11     | --        | 0      |
| Fabric:                 |           |        |       |         |        |        |       |       |          |          |           |       |          |             |       |        |           |        |
| Sheeting                | 35        | 64     | 0     | 70      | 95     | 98     | 88    | 99    | 80       | 96       | 100       | 42    | 100      | --          | 100   | 100    | 100       | 98     |
| Poplin/broadcloth       | 0         | 0      | 0     | 0       | 0      | 92     | 81    | 100   | 22       | --       | 50        | 96    | 100      | --          | --    | 100    | 100       | --     |
| Printcloth              | 10        | 17     | 0     | 78      | 30     | 91     | 80    | 100   | 41       | 100      | 100       | 43    | 100      | --          | 100   | 100    | 100       | --     |
| Twills/sateens          | 0         | 0      | 21    | 0       | 92     | 99     | 98    | 100   | --       | 68       | --        | 76    | 100      | --          | --    | 100    | 100       | 95     |
| Apparel 2/:             |           |        |       |         |        |        |       |       |          |          |           |       |          |             |       |        |           |        |
| Handkerchiefs           | 0         | 0      | 4     | 0       | 0      | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Gloves                  | 100       | 0      | --    | 0       | --     | 100    | 67    | 100   | 80       | 100      | 99        | 42    | 35       | 100         | --    | --     | 100       | --     |
| Hosiery                 | 0         | 0      | 0     | 0       | 0      | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| MB suit-type coats      | 10        | 6      | 0     | 11      | 17     | 4      | 22    | 67    | 0        | --       | 9         | 33    | --       | 48          | --    | --     | --        | --     |
| Other MB coats          | 100       | 5      | 54    | 49      | 100    | 96     | 75    | 100   | 89       | 93       | 93        | 38    | 32       | 89          | --    | --     | 100       | --     |
| WGI coats               | 100       | 27     | 84    | 97      | 100    | 99     | 99    | 100   | 86       | 94       | 104       | 20    | 63       | 100         | 76    | --     | 100       | 77     |
| Dresses                 | 51        | 7      | 76    | 6       | 46     | 89     | 95    | 100   | 82       | 94       | 102       | --    | 27       | 76          | 80    | 100    | 100       | --     |
| Playsuits               | 89        | 1      | 66    | 0       | 17     | 86     | 74    | 100   | 62       | 53       | 98        | 93    | 23       | 42          | 40    | 100    | 100       | 100    |
| MB knit shirts          | 99        | 8      | 100   | 100     | 26     | 72     | 75    | 97    | 60       | 100      | --        | 23    | 65       | 69          | 4     | 7      | 50        | --     |
| WGI knit shirts/blouses | 72        | 25     | 100   | 100     | 44     | 25     | 24    | 100   | 34       | 100      | --        | 38    | 35       | 32          | 9     | 93     | 63        | 100    |
| MB non-knit shirts      | 98        | 41     | 100   | 85      | 56     | 97     | 100   | 100   | 83       | 97       | 102       | 9     | 94       | 88          | 87    | --     | 100       | --     |
| WGI non-knit blouses    | 100       | 44     | 100   | 21      | 31     | 96     | 71    | 100   | 86       | 100      | 103       | 5     | 96       | 40          | 100   | --     | 100       | 100    |
| Skirts                  | 97        | 0      | 99    | 44      | 67     | 99     | 98    | 100   | 56       | 100      | 108       | 50    | 75       | 55          | 100   | --     | 104       | 130    |
| Sweaters                | 14        | 0      | 100   | 0       | 87     | 97     | 100   | 100   | 95       | --       | 108       | --    | --       | 53          | --    | --     | 100       | --     |
| MB trousers             | 88        | 1      | 40    | 35      | 76     | 78     | 47    | 48    | 59       | 16       | 75        | 4     | 51       | 40          | 24    | --     | 74        | 68     |
| WGI trousers            | 97        | 99     | 59    | 48      | 67     | 77     | 48    | 52    | 37       | 84       | 94        | 72    | 49       | 61          | 76    | --     | 46        | 100    |
| Brassieres/body support | 0         | 0      | 20    | 0       | 5      | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Dressing gown           | 4         | 0      | 54    | 0       | 50     | 57     | 44    | 100   | --       | 83       | 100       | 12    | --       | --          | --    | 100    | 100       | 86     |
| Nightwear               | 15        | 0      | 39    | 0       | 100    | 82     | 84    | 100   | 18       | 98       | 100       | --    | --       | 27          | --    | --     | 100       | --     |
| Underwear               | 6         | 0      | 87    | 25      | 24     | 99     | 90    | 100   | --       | 100      | 100       | --    | --       | 17          | --    | 100    | --        | --     |
| MB down-filled coats    | 1         | --     | --    | --      | 0      | 9      | 15    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| WGI down-filled coats   | 1         | --     | --    | --      | 0      | 4      | 26    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Other apparel           | 62        | 13     | 57    | 13      | --     | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | 17     | --        | --     |
| Other:                  |           |        |       |         |        |        |       |       |          |          |           |       |          |             |       |        |           |        |
| Pillowcases             | 0         | 0      | 0     | 45      | 0      | 92     | --    | 98    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Sheets                  | 0         | 0      | 0     | 100     | 0      | 84     | --    | 100   | --       | --       | --        | --    | --       | --          | --    | 100    | --        | 74     |
| Bedspreads/quilts       | 0         | 8      | 0     | 0       | 0      | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Terry/other pile towels | 0         | 2      | 0     | 0       | 91     | 93     | 40    | 100   | 56       | 100      | --        | --    | --       | --          | 94    | 100    | --        | --     |
| Other manufactures      | 32        | 3      | 14    | 2       | --     | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |

1/ Dashes indicate no quota for individual item or shipments not uniquely identifiable. Zeros indicate a quota level but no shipments.  
 2/ Items designated MB and WGI represent men and boys and women, girls, and infants, respectively.

Source: U.S. Dept. of Commerce.

Table B-2--1988 U.S. cotton textile quota fill for various exporting countries 1/

| Category item           | Singapore | Poland | Macau | Romania | Mexico | Taiwan | Korea | China | Malaysia | Pakistan | Hong Kong | Japan | Thailand | Philippines | India | Brazil | Indonesia | Turkey |
|-------------------------|-----------|--------|-------|---------|--------|--------|-------|-------|----------|----------|-----------|-------|----------|-------------|-------|--------|-----------|--------|
| Percent-filled          |           |        |       |         |        |        |       |       |          |          |           |       |          |             |       |        |           |        |
| Yarn:                   |           |        |       |         |        |        |       |       |          |          |           |       |          |             |       |        |           |        |
| Carded yarn             | 0         | 0      | 0     | 0       | 66     | --     | 0     | 6     | 13       | --       | --        | 0     | 84       | --          | 15    | 51     | --        | 27     |
| Combed yarn             | 0         | 0      | 0     | 0       | 21     | 97     | 92    | 51    | 42       | --       | --        | 13    | 84       | --          | 7     | 16     | --        | 1      |
| Fabric:                 |           |        |       |         |        |        |       |       |          |          |           |       |          |             |       |        |           |        |
| Sheeting                | 11        | 74     | 0     | 0       | 22     | 56     | 57    | 56    | 25       | 31       | 35        | 35    | 71       | --          | 86    | 56     | 24        | 8      |
| Poplin/broadcloth       | 0         | 5      | 0     | 2       | 0      | 33     | 59    | 62    | 46       | 0        | 44        | 68    | 77       | --          | 5     | 22     | 47        | 0      |
| Printcloth              | 0         | --     | 0     | 100     | 0      | 45     | 16    | 59    | 21       | 47       | 34        | 27    | 66       | --          | 46    | 12     | 44        | 5      |
| Twills                  | 0         | 0      | 0     | 0       | 28     | 47     | 61    | 39    | 12       | 53       | 18        | 16    | 35       | --          | --    | 28     | 24        | 8      |
| Sateens                 | 0         | 13     | 0     | 0       | 0      | 14     | 11    | 34    | 24       | --       | 29        | 59    | 40       | --          | --    | 4      | 0         | 0      |
| Apparel 2/:             |           |        |       |         |        |        |       |       |          |          |           |       |          |             |       |        |           |        |
| Handkerchiefs           | 2         | 0      | 5     | 0       | 0      | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Gloves                  | 55        | 0      | --    | 0       | 0      | 75     | 34    | 79    | 63       | 88       | 80        | 28    | 29       | --          | --    | --     | 30        | --     |
| Hosiery                 | 0         | 0      | 0     | 0       | 0      | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| MB suit-type coats      | 0         | 10     | 0     | 0       | 7      | 2      | 11    | 48    | 1        | --       | 8         | 4     | --       | 4           | --    | --     | --        | --     |
| Other MB coats          | 66        | 4      | 44    | 52      | 72     | 73     | 63    | 97    | 66       | 53       | 73        | 5     | 24       | 72          | --    | 10     | 42        | --     |
| WGI coats               | 76        | 47     | 76    | 31      | 58     | 77     | 80    | 87    | 65       | 46       | 78        | 7     | 66       | 54          | 75    | 33     | 40        | 56     |
| Dresses                 | 64        | 81     | 93    | 1       | 48     | 57     | 59    | 72    | 24       | 48       | 76        | --    | 25       | 65          | 66    | 15     | 22        | 6      |
| Playsuits               | 60        | 33     | 67    | 0       | 17     | 58     | 35    | 78    | 34       | 67       | 66        | 52    | 5        | 28          | 32    | 6      | 11        | 10     |
| MB knit shirts          | 77        | 14     | 93    | 48      | 10     | 56     | 48    | --    | 60       | 71       | --        | 14    | 54       | 51          | 3     | 5      | 25        | --     |
| WGI knit shirts/blouses | 55        | 33     | 89    | 10      | 32     | 27     | 22    | --    | 24       | 85       | --        | 20    | 30       | 20          | 13    | 55     | 13        | --     |
| MB non-knit shirts      | 81        | 41     | 90    | 15      | 59     | 79     | 75    | 90    | 74       | 62       | 83        | 5     | 81       | 69          | 83    | --     | 56        | --     |
| WGI non-knit blouses    | 73        | 47     | 62    | 15      | 24     | 62     | 38    | 64    | 55       | 74       | 60        | 2     | 52       | 19          | 96    | --     | 14        | 32     |
| Skirts                  | 79        | 2      | 82    | 19      | 41     | 64     | 75    | 86    | 45       | 57       | 72        | 24    | 59       | 31          | 81    | 27     | 16        | 10     |
| Sweaters                | 23        | 0      | 92    | 0       | 31     | 86     | 77    | 80    | 82       | --       | 80        | --    | --       | 81          | --    | --     | 18        | --     |
| MB trousers             | 100       | 14     | 40    | 28      | 60     | 83     | 39    | 47    | 48       | 11       | 65        | 3     | 50       | 42          | 23    | 7      | 29        | --     |
| WGI trousers            | 76        | 14     | 50    | 52      | 33     | 54     | 32    | 43    | 40       | 74       | 80        | 27    | 50       | 35          | 73    | 60     | 23        | --     |
| Brassieres/body support | 0         | 0      | 29    | 0       | 4      | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Dressing gown           | 34        | 1      | 44    | 0       | 17     | 23     | 18    | 94    | --       | 37       | 81        | 6     | --       | --          | --    | 66     | 41        | 49     |
| Nightwear               | 19        | 0      | 54    | 0       | 11     | 79     | 74    | 87    | 37       | 97       | 97        | --    | --       | 17          | --    | --     | 61        | --     |
| Underwear               | 10        | 0      | --    | 29      | 24     | 64     | 90    | 89    | --       | 70       | 87        | --    | --       | 16          | --    | --     | --        | --     |
| MB down-filled coats    | 1         | --     | --    | 0       | 0      | 6      | 14    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| WGI down-filled coats   | 0         | --     | --    | 0       | 0      | 2      | 11    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Other apparel           | 43        | 5      | 37    | 1       | --     | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Other:                  |           |        |       |         |        |        |       |       |          |          |           |       |          |             |       |        |           |        |
| Pillowcases             | 0         | 0      | 0     | 49      | --     | 49     | --    | 71    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Sheets                  | 0         | 0      | 0     | 93      | --     | 91     | --    | 85    | --       | --       | --        | --    | --       | --          | --    | 52     | --        | 27     |
| Bedspreads/quilts       | 0         | 14     | 0     | 11      | --     | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |
| Terry/other pile towels | 0         | 16     | 0     | 0       | 47     | 63     | 16    | 70    | 76       | 94       | --        | --    | 75       | --          | 62    | 53     | --        | --     |
| Other manufactures      | 3         | 1      | 13    | 0       | --     | --     | --    | --    | --       | --       | --        | --    | --       | --          | --    | --     | --        | --     |

1/ Dashes indicate no quota for individual item or shipments not uniquely identifiable. Zeros indicate a quota level but no shipments.

2/ Items designated MB and WGI represent men and boys and women, girls, and infants, respectively.

Source: U.S. Dept. of Commerce.



follow a calendar year, had filled most of their quotas by December 31, 1987, whereas in 1988, the number filled for the same period was generally less than one-half. The other countries demonstrated similar patterns with the exception of Poland, the only country in the sample to have filled a larger share of its quotas in 1988 than in 1987.

Table B-3 presents the combined quota numbers and the percentage filled for the 18 countries in 1987 and 1988. In 1987, 148 quotas are over 90-percent filled, representing 36 percent of the total number of quotas. In contrast, only 16 quotas are over 90-percent filled in 1988, representing 4 percent of the total. Similarly, 57 percent of the total number of quotas for 1987 are over half-filled, whereas in 1988, they comprise about 37 percent of the total.

In addition, 1987 and 1988 numbers for countries having quota limits but not shipping any items were similar. However, the opposite was true for quotas being completely filled. In 1987, 24 percent of the total number of quotas were filled, while less than 1 percent were entirely filled for

Table B-3--Quota numbers and percent filled

| Percent filled | 1987   |            | 1988   |            |
|----------------|--------|------------|--------|------------|
|                | Number | Percent 1/ | Number | Percent 1/ |
| Over 90        | 148    | 36         | 16     | 4          |
| 76 - 90        | 40     | 10         | 47     | 11         |
| 51 - 75        | 46     | 11         | 93     | 22         |
| 26 - 50        | 52     | 13         | 87     | 20         |
| 0 - 25         | 122    | 30         | 188    | 44         |
| Total 2/       | 408    | 100        | 431    | 100        |

1/ Represents percent of total quotas.

2/ Totals may not add due to rounding.

Source: Calculated from U.S. Dept. of Commerce data.

the 1988 period. The variation in these quota numbers suggests that some economic factors (such as exchange rates and textile prices) have reduced levels of cotton textile shipments into the United States and that quotas, at least in 1988, did not represent the constraining factor that they did in 1987.

# Factors Influencing U.S. Trade in Cotton and Manmade Fiber Textile Manufactures: Future Implications

by  
Scott Sanford and Bob Skinner\*

**Abstract:** This is the second of two articles investigating the relationship between U.S. textile product imports and the value of the dollar. Regression techniques are used to identify factors influencing the seasonally adjusted level of monthly cotton textile imports. The procedure is extended to exports and manmade fiber trade in order to project future U.S. textile trade balances in these items.

**Keywords:** Seasonal adjustment, exchange rates, trade balance, textiles, cotton.

Monthly levels of textile imports and exports are closely monitored and reported by Government agencies and textile industry analysts. Thus, detailed information concerning the quantity and timing of shipments of imports (or exports) by country of origin (or destination) is readily available. In the first part of this study (Sanford), country detail was used to calculate real trade-weighted exchange rates which were preferred as a determinant of monthly trade patterns. Here, regression analysis and statistical techniques are employed to assess the validity of this premise.

Analysts have long noted that many monthly economic time series exhibit a systematic pattern of peaks and troughs over time. Trade data, in particular, are noted for this property. The use here of trade data for an industry (textiles) that is well known for its cyclical and seasonal patterns suggests that an appropriate initial step should address these factors. What follows is an attempt to identify seasonal patterns among monthly data for cotton and manmade fiber textile imports and exports. It is hoped that by identifying and isolating the seasonal pattern, attention may be properly focused on determination and measurement of factors influencing the seasonally adjusted data series.

## Seasonal Adjustment

The original data for this study are four monthly time series of varying lengths representing U.S. textile trade measured in pounds by fiber type—cotton imports (January 1980-December 1988), cotton exports (January 1980-December 1988), manmade imports (May 1982-December 1988), and manmade exports (January 1983-December 1988). These data, after seasonal adjustment, are used in a regression model as the dependent variables. The appropriateness of using a seasonally adjusted dependent variable versus using the original series and accounting for seasonality in the model specification is a subject of debate. Among forecasts of 111 time series, seasonally adjusted data were found to

perform somewhat better than methods that handled seasonality directly (Makridakis and Hibon). Forecasts of five time series using seasonally adjusted data indicated better performance in four of the series, and worse performance in one series (Plosser). Other analysts have put forth cogent arguments for direct estimation of seasonality, citing the facility of this approach in estimation of forecast error variances and production of forecast intervals (Bell and Hillmer). Since the objectives of this analysis do not include a testing of alternative methodology or the construction of forecast intervals, we have chosen to use seasonally adjusted data.

The statistical package used here is XIIARIMA/88, which performs three basic functions: forecasting, seasonal adjustment, and composition of original and seasonally adjusted data (Dagum). The package allows automatic fitting of several ARIMA models that have been shown to perform well for many economic time series, as well as fitting of user-specified models. Inability to identify an ARIMA model that fits the series well indicates that the series is either deterministic or practically a purely random process. In each of the four series analyzed here, a suitable model was identified. The seasonally adjusted monthly data are presented in table C-1.

## Regression Model and Results

Once a seasonally adjusted dependent variable was identified, a regression model was estimated in order to project future textile trade patterns. The model specified for each of the four data series may be written:

$$\log SAS_t = b_0 + b_1 \log RTWER_{t-6} + b_2 \log LEI_{t-6} + b_3 \log CP_{t-6}$$

where:

$SAS_t$  is the raw fiber equivalent of textile trade in pounds for month  $t$ ,

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$RTWER_{t-6}$  is the real trade-weighted exchange rate lagged 6 months,

$LEI_{t-6}$  is the index of leading economic indicators lagged 6 months, and

$CP_{t-6}$  is the ratio of cotton/polyester fiber prices lagged 6 months.

The index of leading economic indicators ( $LEI$ ), designed to predict monthly movements in aggregate economic activity, is a composite of 11 indicators. It is generally held to reflect the direction of economic activity about 6 months into the future. As an explanatory variable the  $LEI$  is particularly attractive because it seems to make theoretical sense, has a lead of sufficient length, and is readily available. Thus, the model specification implies that textile trade at time  $t$  is a function of past expectations of the status of the general economy at time  $t$ , the value of the U.S. dollar versus foreign currencies, and the relative costs of cotton versus manmade fiber. The model was estimated with data in logarithmic form so that the resulting coefficients are elasticities. The procedures followed in obtaining real trade-weighted exchange rates were outlined in the earlier companion article (see "Real Trade-Weighted Exchange Rates for the Raw

Fiber Equivalent of U.S. Imports of Cotton and Manmade Fiber Products," CWS-54). These indexes and the weights used to calculate them are presented in tables C-2 and C-3, respectively.

The decision to include or exclude an individual country in calculation of the indexes is a matter of judgement based upon availability and/or reliability of information on consumer prices and nominal exchange rates. China is included among those countries in the import index, and the Dominican Republic is excluded from the export index. For some countries, particularly those with large weights, shifts from month to month in individual nominal exchange rates can cause substantial movements in the overall monthly exchange rate index. The cotton/polyester price ratio is based upon the ratio of the A index to the average reported polyester price for the United Kingdom, West Germany, and Italy (6).

The estimated equations and related statistical information are presented in table C-4. Overall, this relatively simple model specification performed well for the textile trade data. In the original estimation, the intercept term in equation (2) and the price coefficient in equation (4) were not statistically different from zero. Thus, in these two cases, the insignifi-

Table C-1--Seasonally adjusted monthly data

| Calendar Year           | Jan.    | Feb.    | Mar.    | Apr.    | May     | June    | July    | Aug.    | Sept.   | Oct.    | Nov.    | Dec.    |
|-------------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 1,000 pounds            |         |         |         |         |         |         |         |         |         |         |         |         |
| <b>Cotton exports:</b>  |         |         |         |         |         |         |         |         |         |         |         |         |
| 1980                    | 43,739  | 52,195  | 48,381  | 43,943  | 44,186  | 42,428  | 43,198  | 43,030  | 43,053  | 40,506  | 38,505  | 39,754  |
| 1981                    | 36,274  | 32,438  | 36,908  | 34,920  | 32,856  | 30,879  | 28,278  | 27,899  | 26,245  | 26,511  | 28,993  | 24,669  |
| 1982                    | 21,827  | 23,909  | 21,346  | 22,166  | 23,385  | 22,980  | 23,452  | 17,715  | 20,133  | 19,505  | 18,400  | 18,396  |
| 1983                    | 22,149  | 18,895  | 18,235  | 17,886  | 16,243  | 17,021  | 16,665  | 18,020  | 18,955  | 18,463  | 19,231  | 18,340  |
| 1984                    | 18,129  | 17,030  | 17,031  | 15,463  | 18,052  | 18,891  | 18,608  | 15,840  | 16,534  | 17,837  | 16,478  | 16,186  |
| 1985                    | 18,917  | 16,952  | 17,640  | 18,952  | 16,382  | 16,518  | 17,373  | 19,143  | 20,131  | 17,668  | 17,721  | 15,556  |
| 1986                    | 17,551  | 19,987  | 20,288  | 22,345  | 23,537  | 21,337  | 21,568  | 26,206  | 23,461  | 23,908  | 26,974  | 26,810  |
| 1987                    | 21,378  | 28,079  | 23,891  | 22,961  | 23,634  | 24,910  | 29,307  | 24,841  | 24,332  | 25,248  | 25,285  | 24,597  |
| 1988                    | 25,067  | 25,205  | 27,380  | 25,729  | 26,298  | 26,867  | 27,372  | 26,504  | 31,709  | 28,168  | 28,196  | 31,115  |
| <b>Cotton imports:</b>  |         |         |         |         |         |         |         |         |         |         |         |         |
| 1980                    | 59,753  | 64,369  | 68,977  | 69,557  | 67,347  | 76,772  | 71,301  | 63,871  | 75,628  | 64,440  | 61,398  | 66,482  |
| 1981                    | 75,866  | 77,462  | 77,699  | 80,410  | 76,780  | 73,171  | 80,074  | 83,891  | 79,226  | 92,456  | 86,863  | 81,386  |
| 1982                    | 70,722  | 68,713  | 64,309  | 64,992  | 76,743  | 77,546  | 67,976  | 88,836  | 78,751  | 72,734  | 85,461  | 81,978  |
| 1983                    | 89,652  | 81,278  | 85,132  | 85,760  | 88,355  | 92,051  | 93,209  | 96,333  | 97,767  | 106,268 | 102,297 | 109,309 |
| 1984                    | 117,475 | 124,339 | 127,256 | 134,909 | 108,611 | 117,164 | 146,828 | 121,499 | 127,416 | 118,810 | 110,340 | 106,110 |
| 1985                    | 105,050 | 126,349 | 130,751 | 122,988 | 143,565 | 129,661 | 132,853 | 117,686 | 150,481 | 142,117 | 149,691 | 168,433 |
| 1986                    | 159,318 | 151,283 | 163,666 | 161,945 | 157,111 | 156,464 | 173,474 | 167,934 | 159,956 | 165,295 | 179,065 | 161,750 |
| 1987                    | 181,437 | 193,179 | 184,270 | 192,404 | 188,376 | 198,018 | 197,109 | 194,945 | 188,441 | 204,248 | 193,579 | 206,280 |
| 1988                    | 188,515 | 177,485 | 167,469 | 167,343 | 170,038 | 178,574 | 166,020 | 176,992 | 171,891 | 177,148 | 180,095 | 189,741 |
| <b>Manmade exports:</b> |         |         |         |         |         |         |         |         |         |         |         |         |
| 1983                    | 41,853  | 40,224  | 41,290  | 41,499  | 37,615  | 37,851  | 36,194  | 35,160  | 37,950  | 36,443  | 37,765  | 37,216  |
| 1984                    | 38,711  | 40,954  | 38,246  | 36,452  | 39,732  | 44,400  | 42,134  | 43,053  | 42,369  | 44,041  | 38,048  | 39,744  |
| 1985                    | 39,422  | 31,439  | 38,735  | 34,857  | 38,660  | 37,299  | 38,728  | 40,934  | 38,091  | 37,900  | 38,527  | 34,282  |
| 1986                    | 44,336  | 38,492  | 38,941  | 42,885  | 42,311  | 38,888  | 43,703  | 41,238  | 42,168  | 44,088  | 48,981  | 54,558  |
| 1987                    | 42,391  | 48,716  | 47,526  | 50,108  | 48,322  | 51,149  | 45,408  | 48,608  | 51,410  | 51,965  | 53,273  | 52,472  |
| 1988                    | 51,160  | 56,972  | 59,343  | 54,799  | 56,511  | 55,873  | 56,035  | 58,632  | 58,779  | 57,831  | 57,152  | 61,294  |
| <b>Manmade imports:</b> |         |         |         |         |         |         |         |         |         |         |         |         |
| 1982                    | N/A     | N/A     | N/A     | N/A     | 66,674  | 74,669  | 66,868  | 85,087  | 77,878  | 74,865  | 81,529  | 78,578  |
| 1983                    | 83,999  | 72,979  | 78,020  | 81,169  | 84,439  | 86,442  | 84,094  | 92,210  | 93,311  | 113,829 | 101,510 | 102,891 |
| 1984                    | 105,416 | 120,790 | 113,072 | 121,982 | 110,324 | 101,923 | 142,911 | 101,199 | 110,687 | 104,401 | 95,373  | 97,090  |
| 1985                    | 93,126  | 100,268 | 106,185 | 93,996  | 112,591 | 102,573 | 109,493 | 99,025  | 141,040 | 123,169 | 129,234 | 129,899 |
| 1986                    | 149,707 | 132,115 | 139,108 | 137,987 | 139,477 | 136,367 | 147,395 | 139,899 | 135,589 | 140,471 | 158,826 | 148,686 |
| 1987                    | 142,914 | 153,116 | 146,848 | 163,438 | 153,402 | 152,619 | 155,631 | 149,519 | 146,838 | 152,752 | 134,024 | 149,655 |
| 1988                    | 147,368 | 139,050 | 135,670 | 135,779 | 140,778 | 146,414 | 138,681 | 149,576 | 148,148 | 148,747 | 154,846 | 151,777 |

N/A = Not available.

| Calendar Year           | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| <b>Cotton exports:</b>  |       |       |       |       |       |       |       |       |       |       |       |       |
| 1980                    | 99.7  | 99.7  | 102.5 | 103.3 | 100.7 | 99.6  | 97.9  | 98.6  | 98.3  | 98.8  | 100.2 | 101.4 |
| 1981                    | 100.7 | 103.3 | 103.1 | 104.1 | 107.0 | 109.0 | 110.9 | 112.4 | 110.1 | 108.6 | 107.6 | 107.3 |
| 1982                    | 107.1 | 111.7 | 120.5 | 120.5 | 118.0 | 121.7 | 121.9 | 123.1 | 125.7 | 128.3 | 127.4 | 122.5 |
| 1983                    | 123.8 | 123.8 | 123.3 | 123.6 | 123.6 | 125.0 | 125.2 | 126.5 | 126.8 | 125.3 | 131.1 | 132.7 |
| 1984                    | 132.7 | 130.4 | 129.2 | 130.3 | 131.9 | 131.3 | 133.6 | 134.5 | 137.5 | 138.8 | 137.0 | 138.4 |
| 1985                    | 138.6 | 140.4 | 142.4 | 137.2 | 137.9 | 136.8 | 135.2 | 137.2 | 138.9 | 135.1 | 133.4 | 132.7 |
| 1986                    | 131.7 | 129.6 | 128.0 | 127.9 | 126.6 | 127.7 | 126.7 | 125.3 | 126.2 | 126.0 | 126.8 | 126.0 |
| 1987                    | 123.1 | 121.9 | 121.9 | 120.7 | 120.3 | 121.5 | 121.4 | 121.5 | 119.8 | 119.0 | 115.4 | 114.3 |
| 1988                    | 112.9 | 112.7 | 111.0 | 109.9 | 110.0 | 111.0 | 113.0 | 114.2 | 114.3 | 112.4 | 109.9 | 108.7 |
| <b>Cotton imports:</b>  |       |       |       |       |       |       |       |       |       |       |       |       |
| 1980                    | 100.3 | 101.2 | 103.3 | 103.1 | 100.6 | 100.4 | 99.7  | 99.6  | 99.9  | 99.7  | 100.3 | 100.7 |
| 1981                    | 102.1 | 102.5 | 102.1 | 103.1 | 104.1 | 104.4 | 105.8 | 107.4 | 108.2 | 108.2 | 107.0 | 107.2 |
| 1982                    | 108.2 | 109.7 | 109.5 | 109.5 | 109.8 | 113.0 | 113.9 | 113.7 | 114.3 | 117.5 | 117.9 | 116.2 |
| 1983                    | 115.2 | 116.3 | 117.6 | 120.3 | 120.8 | 121.5 | 121.2 | 122.7 | 125.1 | 125.1 | 124.7 | 124.6 |
| 1984                    | 125.1 | 125.5 | 125.6 | 126.2 | 127.3 | 127.9 | 128.9 | 130.1 | 132.1 | 133.3 | 135.8 | 136.5 |
| 1985                    | 137.0 | 137.7 | 139.2 | 139.4 | 140.0 | 140.0 | 139.8 | 140.0 | 141.3 | 143.0 | 143.3 | 143.0 |
| 1986                    | 143.6 | 142.9 | 142.0 | 141.9 | 140.6 | 141.9 | 145.7 | 145.2 | 145.8 | 145.5 | 146.7 | 146.4 |
| 1987                    | 146.3 | 146.5 | 147.2 | 145.8 | 143.6 | 142.9 | 142.6 | 142.4 | 141.0 | 142.0 | 141.7 | 140.7 |
| 1988                    | 139.3 | 138.7 | 138.2 | 137.7 | 136.5 | 135.0 | 134.8 | 134.4 | 134.2 | 134.2 | 133.1 | 131.6 |
| <b>Manmade exports:</b> |       |       |       |       |       |       |       |       |       |       |       |       |
| 1980                    | 100.2 | 100.3 | 101.6 | 102.2 | 100.8 | 99.8  | 98.8  | 98.9  | 98.8  | 98.9  | 99.6  | 100.3 |
| 1981                    | 99.6  | 100.4 | 100.2 | 100.6 | 102.0 | 102.8 | 104.1 | 104.9 | 104.5 | 103.8 | 102.7 | 102.1 |
| 1982                    | 102.0 | 105.6 | 112.1 | 111.4 | 111.0 | 113.7 | 113.4 | 114.2 | 116.1 | 118.3 | 116.7 | 114.3 |
| 1983                    | 116.4 | 116.3 | 115.8 | 115.6 | 115.5 | 115.6 | 115.7 | 115.9 | 116.4 | 116.0 | 116.1 | 116.5 |
| 1984                    | 116.8 | 116.8 | 119.1 | 119.5 | 120.9 | 121.2 | 122.7 | 122.7 | 124.5 | 125.0 | 124.3 | 124.6 |
| 1985                    | 124.4 | 125.6 | 127.0 | 124.8 | 125.5 | 125.4 | 125.0 | 128.3 | 129.4 | 129.3 | 129.7 | 130.3 |
| 1986                    | 130.9 | 130.6 | 130.1 | 129.5 | 128.6 | 130.3 | 132.1 | 132.5 | 134.0 | 134.3 | 134.6 | 138.3 |
| 1987                    | 137.4 | 136.0 | 135.3 | 134.2 | 134.2 | 134.5 | 133.2 | 133.3 | 132.2 | 131.4 | 130.0 | 129.9 |
| 1988                    | 127.6 | 125.8 | 123.9 | 122.2 | 121.4 | 120.5 | 120.4 | 120.9 | 121.4 | 119.8 | 118.8 | 116.9 |
| <b>Manmade imports:</b> |       |       |       |       |       |       |       |       |       |       |       |       |
| 1980                    | 100.7 | 101.4 | 102.3 | 102.7 | 100.6 | 100.1 | 99.9  | 99.8  | 98.6  | 98.5  | 99.6  | 99.9  |
| 1981                    | 100.4 | 100.7 | 100.4 | 101.1 | 102.8 | 102.4 | 103.9 | 105.1 | 104.2 | 105.6 | 104.9 | 105.5 |
| 1982                    | 106.1 | 107.7 | 109.4 | 109.7 | 109.7 | 112.8 | 114.1 | 115.0 | 116.2 | 116.7 | 117.0 | 115.3 |
| 1983                    | 115.1 | 114.8 | 115.3 | 116.5 | 117.2 | 118.0 | 118.7 | 119.8 | 121.1 | 121.6 | 121.8 | 121.9 |
| 1984                    | 122.2 | 121.6 | 120.9 | 121.1 | 121.8 | 123.2 | 124.1 | 124.5 | 125.8 | 127.0 | 128.3 | 128.8 |
| 1985                    | 128.6 | 128.8 | 130.4 | 130.7 | 131.4 | 131.7 | 132.1 | 133.9 | 134.4 | 134.6 | 134.9 | 135.3 |
| 1986                    | 135.7 | 134.4 | 132.8 | 132.4 | 131.1 | 132.0 | 134.2 | 133.3 | 131.8 | 131.0 | 132.3 | 131.9 |
| 1987                    | 130.9 | 130.6 | 130.7 | 128.9 | 126.0 | 124.7 | 124.1 | 123.0 | 121.9 | 122.6 | 121.8 | 119.9 |
| 1988                    | 118.7 | 117.9 | 117.0 | 116.5 | 115.4 | 114.3 | 114.9 | 114.7 | 114.5 | 113.7 | 112.2 | 111.0 |

1/ Base 1980 = 100.

cant variable was dropped from the equation, and the resulting model reestimated. Since the intercept term was removed from equation (2), no adjusted  $R^2$  value is reported.

In each equation, coefficients for the real trade-weighted index (*RTWER*) and index of *LEI* are highly significant and carry the appropriate sign. The signs on the *RTWER* are positive for import data and negative for export data, indicating that as the value of the dollar increases, the quantity of imports will increase, while the quantity of exports will decrease. The magnitude of the *RTWER* coefficient for cotton imports indicates that a 1-percent rise in the real trade-weighted exchange rate index for cotton imports should result in an approximately proportionate increase in imports of 1.03 percent.

The signs for the cotton/polyester (*C/P*) price ratio coefficient are negative in all equations for which they are reported. This is expected in equations (1) and (3). For instance, as cotton fiber becomes more expensive than polyester fiber (that is, the value of the ratio increases), it is expected that textile producers will substitute the less expensive fiber, and U.S. imports and exports of cotton fiber prod-

Table C-3--Major U.S. trading partners and share of 1985/87 trade, by textile fiber type

| Manmade fiber exports  |           | Cotton fiber imports  |        |
|------------------------|-----------|-----------------------|--------|
| Country of destination | Weight 1/ | Country of origin     | Weight |
| Canada                 | .376      | Hong Kong             | .233   |
| Mexico                 | .185      | China                 | .208   |
| Saudi Arabia           | .120      | Taiwan                | .146   |
| China                  | .086      | Korea                 | .104   |
| United Kingdom         | .077      | India                 | .068   |
| Venezuela              | .045      | Pakistan              | .063   |
| Japan                  | .044      | Brazil                | .051   |
| Italy                  | .034      | Japan                 | .045   |
| Haiti                  | .033      | Thailand              | .040   |
| Dominican Republic     | ---       | Indonesia             | .040   |
| Cotton fiber exports   |           | Manmade fiber imports |        |
| Country of destination | Weight    | Country of origin     | Weight |
| Italy                  | .217      | Taiwan                | .302   |
| Mexico                 | .206      | Korea                 | .191   |
| Canada                 | .196      | China                 | .139   |
| Belgium                | .084      | Hong Kong             | .104   |
| United Kingdom         | .073      | Japan                 | .068   |
| Jamaica                | .072      | Italy                 | .053   |
| West Germany           | .063      | Mexico                | .051   |
| Haiti                  | .048      | Canada                | .035   |
| Japan                  | .041      | Philippines           | .030   |
| Dominican Republic     | ---       | Thailand              | .026   |

--- = Not included in weight calculations.

1/ Represents share of listed countries only and not total trade. Shares must sum to one.

Table C-4--Textile trade regression results

| Equation | Trade item      | Variable coefficient         |                 |                |                |     | R <sup>2</sup> | N |
|----------|-----------------|------------------------------|-----------------|----------------|----------------|-----|----------------|---|
|          |                 | Intercept                    | RTWER           | LEI            | CP             |     |                |   |
| (1)      | Cotton imports  | -1.33<br>(.312) <sup>a</sup> | 1.03<br>(.180)  | 1.68<br>(.183) | -.12<br>(.036) | .95 | 98             |   |
| (2)      | Manmade imports | N/A                          | .847<br>(.126)  | 1.58<br>(.126) | -.13<br>(.035) | N/A | 70             |   |
| (3)      | Cotton exports  | 18.26<br>(.633)              | -2.38<br>(.160) | .665<br>(.133) | -.25<br>(.055) | .74 | 98             |   |
| (4)      | Manmade exports | 2.69<br>(.802)               | -.874<br>(.295) | 2.52<br>(.231) | N/A            | .79 | 62             |   |

<sup>a</sup> Standard errors are in parentheses.  
N/A = Not available.  
All coefficients significant at 1% probability level.

ucts will decline. The sign in equation (2) is inappropriate; however, the coefficient was retained for prediction purposes.

The positive sign on the coefficients for the economic indicators variable (*LEI*) indicates that cotton and manmade fiber imports and exports tend to move in the same direction—as the economy strengthens, both imports and exports increase. This relationship is appropriate for imports, but the rationale for the positive signs for exports is perhaps more convoluted. Much of the United States' textile exports go to Canada and Caribbean nations. Indeed, much of the recent surge in exports is attributable to increased trade with these latter nations. Exports to these countries frequently return to the United States after undergoing manufacturing processes there. Thus, it is consistent that a strengthening domestic economy would enhance this circular trade. With respect to trade with Canada, a highly industrialized border-sharing neighbor, it is not unlikely that U.S. and Canadian economic growth move together—and that economic growth in Canada enhances U.S. exports of textiles to that nation. Among exports by fiber type, cotton textile exports appear less responsive to domestic economic conditions and more influenced by the value of the dollar, while the reverse appears to be the case for manmade fiber exports.

### Future Trends in U.S. Textile Trade

As earlier indicated, the seasonal adjustment routine used here produces extrapolated values of the individual trade series when an appropriate ARIMA model is identified. The forecasts presented are for calendar year 1989 (table C-5). According to these data, the quantity of cotton exports, cotton imports, manmade exports, and manmade imports should increase 15.1, 8.6, 5.1, and 10.3 percent, respectively. If these projections are realized, the total 1989 textile trade deficit in these manufactures could increase about 275 million

pounds over 1988. By fiber, the cotton trade deficit could increase 132 million pounds (275 thousand 480-pound bale equivalents); the manmade fiber trade deficit could increase 143 million pounds.

The regression estimates also permit prediction of trade levels. Since consumer price and exchange rate data reporting is lagged, currently available only through December 1988, real trade-weighted monthly exchange rates are available only through calendar year 1988. With the independent variables lagged 6 months, predictions can be made only through June 1989. The regression predictions are of monthly, seasonally adjusted trade levels. To get estimates of the original series, these values must be multiplied by the appropriate seasonal factors, presented in table C-6.

The monthly level and pattern of seasonal factors are noteworthy beyond their use here to reconstruct the original series. An individual monthly seasonal factor indicates the level of trade in that month relative to the average monthly trade for the entire year. For instance, the March seasonal factor for cotton exports, 109.7, indicates that March shipments usually equal about 109.7 percent of the year's average monthly shipments; the seasonal factors average 100 over the entire year. Variability among monthly seasonal factors is lowest for manmade fiber exports and highest for manmade fiber imports.

In each series in table C-6, the seasonal factor pattern tends to peak twice a year. However, the pattern for imports and exports differs: imports peak early in the year (January-February) and again at mid-year (July); export peaks follow imports by a couple of months. Within-year peaks reveal that exports are absolutely largest early in the year, while imports are absolutely largest at their second peak (July). As the seasonal factors indicate, import shipment patterns are

Table C-5--ARIMA forecasts of 1989 monthly cotton and manmade fiber textile trade

|                 | Jan.         | Feb.    | Mar.    | Apr.    | May     | June    | July    | Aug.    | Sept.   | Oct.    | Nov.    | Dec.    | 1989 total | Change from 1988 (%) |
|-----------------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|------------|----------------------|
|                 | 1,000 pounds |         |         |         |         |         |         |         |         |         |         |         |            |                      |
| Cotton exports  | 27,076       | 29,742  | 34,542  | 33,002  | 32,081  | 32,086  | 28,573  | 31,463  | 33,535  | 33,135  | 32,567  | 32,328  | 380,130    | +15.1                |
| Cotton imports  | 195,260      | 198,600 | 194,338 | 175,521 | 182,433 | 199,655 | 206,574 | 200,058 | 187,745 | 188,197 | 184,969 | 181,326 | 2,294,677  | + 8.6                |
| Manmade exports | 55,328       | 54,621  | 65,579  | 65,195  | 63,901  | 61,937  | 55,469  | 58,804  | 62,324  | 59,663  | 59,047  | 58,114  | 719,984    | + 5.1                |
| Manmade imports | 149,689      | 149,541 | 143,426 | 140,920 | 165,765 | 186,657 | 194,946 | 187,946 | 163,844 | 158,384 | 140,059 | 132,867 | 1,914,044  | +10.3                |

Table C-6--Average monthly seasonal factors

|                 | Jan.   | Feb.   | Mar.   | Apr.   | May    | June   | July   | Aug.   | Sept.  | Oct.   | Nov.  | Dec.  | Mean   | CV    |
|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|-------|-------|--------|-------|
| Cotton exports  | 90.67  | 94.14  | 109.70 | 107.54 | 103.98 | 105.59 | 89.07  | 98.61  | 101.09 | 104.73 | 98.20 | 97.19 | 100.04 | 6.57  |
| Cotton imports  | 105.89 | 105.60 | 104.23 | 89.81  | 98.66  | 108.11 | 109.33 | 106.93 | 99.32  | 95.79  | 92.34 | 83.91 | 100.00 | 8.11  |
| Manmade exports | 90.14  | 91.49  | 106.76 | 106.85 | 108.33 | 103.50 | 95.07  | 100.75 | 102.82 | 99.84  | 97.93 | 96.13 | 99.97  | 6.00  |
| Manmade imports | 95.42  | 98.16  | 95.58  | 90.62  | 104.14 | 119.25 | 119.78 | 116.84 | 102.17 | 95.36  | 84.65 | 78.21 | 100.02 | 13.25 |

CV = Coefficient of variation.

Table C-7--Regression forecasts of first-half 1989 monthly cotton and manmade fiber textile trade

|                 | Jan.         | Feb.    | Mar.    | Apr.    | May     | June    | 1989 6-month total | Change from 1988 (%) |
|-----------------|--------------|---------|---------|---------|---------|---------|--------------------|----------------------|
|                 | 1,000 pounds |         |         |         |         |         |                    |                      |
| Cotton exports  | 24,088       | 25,170  | 29,926  | 30,504  | 30,950  | 32,509  | 173,147            | +9.2                 |
| Cotton imports  | 191,211      | 196,200 | 194,469 | 168,270 | 184,040 | 172,435 | 1,106,625          | +3.4                 |
| Manmade exports | 54,665       | 56,651  | 65,409  | 66,460  | 68,112  | 66,822  | 378,119            | +10.6                |
| Manmade imports | 134,191      | 142,419 | 139,566 | 132,072 | 150,688 | 173,642 | 872,578            | +3.2                 |

consistent with seasonal clothing trends—early year shipment concentration for the coming spring/summer market, and mid-year shipment concentration for the fall/winter market.

The 1989 trade projections are compared with first-half 1988 levels to assess potential trade changes (table C-7). According to these estimates, first-half 1989 trade levels, compared with actual similar period 1988 levels for cotton exports, cotton imports, manmade exports, and manmade imports, will likely expand 9.2, 3.4, 10.6, and 3.2 percent, respectively. The most current available data for cotton and manmade fiber textile trade indicate that first-quarter 1989 imports were up 4.5 and 10.3 percent, respectively, over similar-period 1988 levels (square meter equivalent basis).

## Conclusions

Several inferences may be drawn from the results presented here. It has been shown that both textile imports and exports

are significantly influenced by real trade-weighted exchange rates. As the dollar strengthens, imports increase and exports decrease. General domestic economic conditions also influence the quantity of imports and exports. As the economy strengthens, imports and exports increase. Predictions of future trade patterns, whether by mathematical extrapolation or regression techniques, suggest that both imports and exports of textile products will rise in 1989.

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Table 1--Cotton: Acreage, production, and yield, by State

| State            | Planted acres         |        |        |         | Harvested acres |       |        |         | Lint yield per harvested acre |       |       |         | Production               |       |        |         |
|------------------|-----------------------|--------|--------|---------|-----------------|-------|--------|---------|-------------------------------|-------|-------|---------|--------------------------|-------|--------|---------|
|                  | Average 1984-88       | 1986   | 1987   | 1988 1/ | Average 1984-88 | 1986  | 1987   | 1988 1/ | Average 1984-88               | 1986  | 1987  | 1988 1/ | Average 1984-88          | 1986  | 1987   | 1988 1/ |
|                  | -----1,000 acres----- |        |        |         |                 |       |        |         | -----Pounds-----              |       |       |         | -----1,000 bales 2/----- |       |        |         |
| Alabama          | 336                   | 315    | 335    | 390     | 331             | 313   | 333    | 375     | 612                           | 506   | 572   | 486     | 420                      | 330   | 397    | 380     |
| Arizona 3/       | 336                   | 250    | 290    | 350     | 335             | 249   | 289    | 349     | 1,274                         | 1,301 | 1,410 | 1,190   | 883                      | 675   | 849    | 865     |
| Arkansas         | 535                   | 490    | 555    | 695     | 522             | 480   | 550    | 675     | 706                           | 602   | 786   | 742     | 772                      | 602   | 901    | 1,044   |
| California 3/    | 1,248                 | 1,000  | 1,150  | 1,350   | 1,237           | 990   | 1,140  | 1,335   | 1,099                         | 1,088 | 1,259 | 1,015   | 2,817                    | 2,245 | 2,989  | 2,824   |
| Florida          | 25                    | 20     | 30     | 33      | 23              | 19    | 29     | 29      | 692                           | 707   | 646   | 566     | 33                       | 28    | 39     | 34      |
| Georgia          | 251                   | 225    | 250    | 350     | 234             | 195   | 245    | 315     | 638                           | 455   | 662   | 564     | 309                      | 185   | 338    | 370     |
| Kansas           | 1                     | 1      | 1      | 1       | 1               | 1     | 1      | 1       | 359                           | 336   | 480   | 373     | 1                        | 1     | 1      | 1       |
| Louisiana        | 642                   | 580    | 605    | 735     | 618             | 570   | 600    | 645     | 681                           | 567   | 782   | 705     | 879                      | 673   | 977    | 948     |
| Mississippi      | 1,073                 | 1,020  | 1,020  | 1,230   | 1,054           | 1,000 | 1,010  | 1,190   | 733                           | 571   | 829   | 736     | 1,613                    | 1,190 | 1,745  | 1,825   |
| Missouri         | 185                   | 178    | 190    | 240     | 180             | 160   | 189    | 237     | 651                           | 588   | 838   | 620     | 245                      | 196   | 330    | 306     |
| New Mexico 3/    | 71                    | 63     | 66     | 77      | 61              | 50    | 62     | 69      | 646                           | 595   | 689   | 710     | 82                       | 62    | 89     | 102     |
| North Carolina   | 98                    | 82     | 96     | 126     | 97              | 81    | 95     | 124     | 580                           | 646   | 495   | 515     | 115                      | 109   | 98     | 133     |
| Oklahoma         | 415                   | 400    | 420    | 460     | 384             | 350   | 400    | 435     | 330                           | 288   | 415   | 334     | 265                      | 210   | 346    | 303     |
| South Carolina   | 122                   | 118    | 120    | 145     | 120             | 113   | 119    | 142     | 553                           | 370   | 428   | 473     | 137                      | 87    | 106    | 140     |
| Tennessee        | 399                   | 340    | 440    | 535     | 392             | 335   | 435    | 530     | 579                           | 567   | 700   | 529     | 474                      | 396   | 634    | 584     |
| Texas 3/         | 5,100                 | 4,850  | 4,700  | 5,600   | 4,500           | 3,450 | 4,400  | 5,300   | 422                           | 353   | 506   | 472     | 3,995                    | 2,535 | 4,635  | 5,215   |
| Virginia         | 2                     | 1      | 2      | 3       | 2               | 1     | 2      | 3       | 482                           | 554   | 373   | 510     | 2                        | 2     | 1      | 3       |
| Total:<br>Upland | 10,838                | 9,933  | 10,269 | 12,320  | 10,091          | 8,357 | 9,899  | 11,754  | 618                           | 547   | 702   | 616     | 13,041                   | 9,525 | 14,475 | 15,077  |
| American-Pima    | 121                   | 112    | 138    | 190     | 120             | 111   | 137    | 189     | 883                           | 890   | 1,000 | 848     | 222                      | 206   | 285    | 334     |
| United States    | 10,958                | 10,045 | 10,407 | 12,510  | 10,211          | 8,468 | 10,035 | 11,943  | 621                           | 552   | 706   | 619     | 13,263                   | 9,731 | 14,760 | 15,412  |

1/ Crop Production report, May 11, 1989. 2/ Bales of 480-pounds net weight. 3/ Upland only.

Table 2--U.S. cotton supply and use, by type, 1980/81-88/89

| Crop year                 | Area        |           |               | Supply                        |                  |         |        | Disappearance  |         |        |                        |               | Farm price<br>5/ |
|---------------------------|-------------|-----------|---------------|-------------------------------|------------------|---------|--------|----------------|---------|--------|------------------------|---------------|------------------|
|                           | Planted     | Harvested | Yield         | Beginning stocks<br>1/        | Production<br>2/ | Imports | Total  | Mill use<br>3/ | Exports | Total  | Unac-<br>counted<br>4/ | Ending stocks |                  |
|                           | 1,000 acres |           | Lbs./<br>acre | -----1,000 480-lb. bales----- |                  |         |        |                |         |        |                        |               | Cents/<br>lb.    |
| <b>ALL KINDS:</b>         |             |           |               |                               |                  |         |        |                |         |        |                        |               |                  |
| 1980                      | 14,534      | 13,215    | 404           | 3,000                         | 11,122           | 27      | 14,149 | 5,891          | 5,926   | 11,817 | 336                    | 2,668         | 74.7             |
| 1981                      | 14,330      | 13,841    | 542           | 2,668                         | 15,646           | 26      | 18,340 | 5,264          | 6,567   | 11,831 | 123                    | 6,632         | 54.3             |
| 1982                      | 11,345      | 9,734     | 590           | 6,632                         | 11,963           | 20      | 18,615 | 5,512          | 5,207   | 10,719 | 41                     | 7,937         | 59.4             |
| 1983                      | 7,926       | 7,348     | 508           | 7,937                         | 7,771            | 12      | 15,721 | 5,928          | 6,786   | 12,714 | -232                   | 2,775         | 66.4             |
| 1984                      | 11,145      | 10,380    | 600           | 2,775                         | 12,982           | 24      | 15,781 | 5,540          | 6,215   | 11,755 | 76                     | 4,102         | 57.8             |
| 1985                      | 10,685      | 10,229    | 630           | 4,102                         | 13,432           | 33      | 17,567 | 6,399          | 1,960   | 8,359  | 140                    | 9,348         | 56.3             |
| 1986                      | 10,045      | 8,468     | 552           | 9,348                         | 9,731            | 3       | 19,082 | 7,452          | 6,684   | 14,136 | 80                     | 5,026         | 52.4             |
| 1987 6/                   | 10,407      | 10,035    | 706           | 5,026                         | 14,760           | 2       | 19,788 | 7,617          | 6,582   | 14,199 | 182                    | 5,771         | 64.3             |
| 1988 7/                   | 12,510      | 11,943    | 619           | 5,771                         | 15,411           | 3       | 21,185 | 7,300          | 5,900   | 13,200 | 115                    | 8,100         | 8/               |
| <b>UPLAND:</b>            |             |           |               |                               |                  |         |        |                |         |        |                        |               |                  |
| 1980                      | 14,461      | 13,143    | 402           | 2,962                         | 11,018           | 26      | 14,006 | 5,828          | 5,893   | 11,721 | 329                    | 2,614         | 74.4             |
| 1981                      | 14,272      | 13,783    | 542           | 2,614                         | 15,566           | 18      | 18,198 | 5,216          | 6,555   | 11,771 | 140                    | 6,567         | 54.0             |
| 1982                      | 11,274      | 9,663     | 589           | 6,567                         | 11,864           | 12      | 18,443 | 5,457          | 5,194   | 10,651 | 52                     | 7,844         | 59.1             |
| 1983                      | 7,863       | 7,285     | 506           | 7,844                         | 7,676            | 8       | 15,529 | 5,861          | 6,750   | 12,611 | -225                   | 2,693         | 66.0             |
| 1984                      | 11,065      | 10,299    | 599           | 2,693                         | 12,852           | 21      | 15,566 | 5,491          | 6,125   | 11,616 | 74                     | 4,024         | 57.5             |
| 1985                      | 10,601      | 10,145    | 628           | 4,024                         | 13,277           | 33      | 17,334 | 6,338          | 1,855   | 8,193  | 148                    | 9,289         | 56.1             |
| 1986                      | 9,933       | 8,357     | 547           | 9,289                         | 9,525            | 3       | 18,817 | 7,385          | 6,570   | 13,955 | 80                     | 4,942         | 51.5             |
| 1987 6/                   | 10,269      | 9,899     | 702           | 4,942                         | 14,475           | 2       | 19,419 | 7,565          | 6,345   | 13,910 | 209                    | 5,718         | 63.7             |
| 1988 7/                   | 12,320      | 11,754    | 616           | 5,718                         | 15,077           | 3       | 20,798 | 7,230          | 5,625   | 12,855 | 117                    | 8,060         | 8/               |
| <b>EXTRA-LONG STAPLE:</b> |             |           |               |                               |                  |         |        |                |         |        |                        |               |                  |
| 1980                      | 72.5        | 71.7      | 698           | 38                            | 104.2            | 1       | 143    | 63             | 33      | 96     | 7                      | 54            | 108.0            |
| 1981                      | 58.6        | 58.0      | 659           | 54                            | 79.6             | 8       | 142    | 48             | 12      | 60     | -17                    | 65            | 96.9             |
| 1982                      | 70.9        | 70.5      | 672           | 65                            | 98.7             | 8       | 172    | 56             | 13      | 69     | -10                    | 93            | 101.0            |
| 1983                      | 63.0        | 62.7      | 725           | 93                            | 94.7             | 4       | 192    | 67             | 36      | 103    | -7                     | 82            | 107.0            |
| 1984                      | 80.1        | 79.6      | 786           | 82                            | 130.4            | 3       | 215    | 49             | 90      | 139    | 2                      | 78            | 92.8             |
| 1985                      | 84.0        | 83.6      | 891           | 78                            | 155.1            | 0       | 233    | 61             | 105     | 166    | -8                     | 59            | 91.8             |
| 1986                      | 111.5       | 111.1     | 890           | 59                            | 205.9            | 0       | 265    | 67             | 114     | 175    | 0                      | 84            | 89.9             |
| 1987 6/                   | 137.9       | 136.6     | 1,000         | 84                            | 284.6            | 0       | 369    | 52             | 237     | 289    | -27                    | 53            | 104.0            |
| 1988 7/                   | 189.6       | 189.1     | 848           | 53                            | 334.2            | 0       | 387    | 70             | 275     | 345    | -2                     | 40            | 8/               |

1/ Compiled from Bureau of the Census data and adjusted to an August 1 480-lb. net weight basis. Excludes preseason ginnings.  
2/ Includes preseason ginnings. 3/ Adjusted to August 1-July 31 marketing year. 4/ Difference between ending stocks based on Census data and preceding season's supply less disappearance. 5/ Season average, including allowance for unredeemed loans. 6/ Estimated.  
7/ Projected. 8/ USDA is prohibited by law from publishing cotton price forecasts.

Table 3--U.S. cotton supply and disappearance of all kinds, by months, 1985/86-88/89 1/

| Date                           | Supply              |                      |             |        |                |         | Disappearance   |                   |         |              |                  |                        |
|--------------------------------|---------------------|----------------------|-------------|--------|----------------|---------|-----------------|-------------------|---------|--------------|------------------|------------------------|
|                                | Beginning stocks 2/ |                      |             |        | Ginnings<br>5/ | Imports | Total<br>supply | Mill<br>use<br>6/ | Exports | Total<br>use | Unac-<br>counted | Ending<br>stocks<br>7/ |
|                                | At<br>mills         | Public<br>storage 3/ | Other<br>4/ | Total  |                |         |                 |                   |         |              |                  |                        |
| 1,000 480-lb. net weight bales |                     |                      |             |        |                |         |                 |                   |         |              |                  |                        |
| 1986/87:                       |                     |                      |             |        |                |         |                 |                   |         |              |                  |                        |
| Aug.                           | 812                 | 8,502                | 34          | 9,348  | 642            | 0       | 9,990           | 581               | 393     | 974          |                  | 9,016                  |
| Sept.                          | 696                 | 7,988                | 332         | 9,016  | 1,834          | 0       | 10,850          | 603               | 387     | 990          |                  | 9,860                  |
| Oct.                           | 610                 | 8,377                | 873         | 9,860  | 2,964          | 0       | 12,824          | 660               | 648     | 1,308        |                  | 11,516                 |
| Nov.                           | 590                 | 9,998                | 928         | 11,516 | 2,267          | 0       | 13,783          | 554               | 552     | 1,106        |                  | 12,677                 |
| Dec.                           | 606                 | 10,631               | 1,440       | 12,677 | 1,125          | 1       | 13,803          | 556               | 570     | 1,126        |                  | 12,677                 |
| Jan.                           | 650                 | 10,690               | 1,337       | 12,677 | 702            | 1       | 13,380          | 621               | 747     | 1,368        |                  | 12,012                 |
| Feb.                           | 670                 | 10,486               | 856         | 12,012 | 197            | 0       | 12,209          | 587               | 544     | 1,131        |                  | 11,078                 |
| Mar.                           | 741                 | 9,520                | 817         | 1,078  |                | 0       | 11,078          | 676               | 653     | 1,329        |                  | 9,749                  |
| Apr.                           | 731                 | 8,204                | 814         | 9,749  |                | 0       | 9,749           | 661               | 660     | 1,321        |                  | 8,428                  |
| May                            | 754                 | 7,164                | 510         | 8,428  |                | 0       | 8,428           | 642               | 488     | 1,130        |                  | 7,298                  |
| June                           | 745                 | 6,167                | 386         | 7,298  |                | 0       | 7,299           | 655               | 468     | 1,123        |                  | 6,176                  |
| July                           | 707                 | 5,054                | 415         | 6,176  |                |         | 6,176           | 656               | 575     | 1,231        | 80               | 5,026                  |
| Season                         | 812                 | 8,502                | 34          | 9,348  | 9,731          | 3       | 19,082          | 7,452             | 6,684   | 14,136       | 80               | 5,026                  |
| 1987/88:                       |                     |                      |             |        |                |         |                 |                   |         |              |                  |                        |
| Aug.                           | 713                 | 4,000                | 313         | 5,026  | 440            | 0       | 5,466           | 666               | 420     | 1,086        |                  | 4,380                  |
| Sept.                          | 678                 | 3,388                | 314         | 4,380  | 2,842          | 0       | 7,222           | 694               | 315     | 1,009        |                  | 6,213                  |
| Oct.                           | 607                 | 5,104                | 502         | 6,213  | 4,452          | 0       | 10,665          | 713               | 367     | 1,080        |                  | 9,585                  |
| Nov.                           | 557                 | 7,766                | 1,262       | 9,585  | 3,642          | 0       | 13,227          | 666               | 615     | 1,281        |                  | 11,946                 |
| Dec.                           | 569                 | 9,911                | 1,466       | 11,946 | 2,255          | 1       | 14,202          | 645               | 721     | 1,366        |                  | 12,899                 |
| Jan.                           | 664                 | 11,023               | 1,212       | 12,899 | 925            | 0       | 13,824          | 621               | 663     | 1,284        |                  | 12,540                 |
| Feb.                           | 750                 | 10,616               | 1,174       | 12,540 | 204            | 0       | 12,744          | 649               | 740     | 1,389        |                  | 11,355                 |
| Mar.                           | 811                 | 9,540                | 1,004       | 11,355 |                | 0       | 11,355          | 706               | 779     | 1,485        |                  | 9,870                  |
| Apr.                           | 827                 | 8,385                | 658         | 9,870  |                | 0       | 9,870           | 610               | 571     | 1,181        |                  | 8,689                  |
| May                            | 825                 | 7,277                | 587         | 8,689  |                | 0       | 8,689           | 630               | 517     | 1,147        |                  | 7,542                  |
| June                           | 790                 | 6,239                | 513         | 7,542  |                | 1       | 7,543           | 603               | 554     | 1,157        |                  | 6,386                  |
| July                           | 748                 | 5,281                | 357         | 6,386  |                | 0       | 6,386           | 477               | 320     | 797          | 182              | 5,771                  |
| Season                         | 713                 | 4,000                | 313         | 5,026  | 14,760         | 2       | 19,788          | 7,617             | 6,582   | 14,199       | 182              | 5,771                  |
| 1988/89:                       |                     |                      |             |        |                |         |                 |                   |         |              |                  |                        |
| Aug.                           | 737                 | 4,863                | 171         | 5,771  | 825            | 0       | 6,596           | 676               | 265     | 941          |                  | 5,655                  |
| Sept.                          | 677                 | 4,614                | 364         | 5,655  | 1,513          | 0       | 7,168           | 618               | 265     | 883          |                  | 6,285                  |
| Oct.                           | 607                 | 5,235                | 443         | 6,285  | 4,734          | 0       | 11,019          | 588               | 235     | 823          |                  | 10,196                 |
| Nov.                           | 589                 | 8,569                | 1,038       | 10,196 | 4,938          | 0       | 15,134          | 581               | 398     | 979          |                  | 14,155                 |
| Dec.                           | 580                 | 12,241               | 1,334       | 14,155 | 2,646          | 0       | 16,801          | 496               | 670     | 1,166        |                  | 15,635                 |
| Jan.                           | 614                 | 13,673               | 1,348       | 15,635 | 646            | 1       | 16,282          | 629               | 483     | 1,112        |                  | 15,170                 |
| Feb.                           | 654                 | 12,491               | 2,025       | 15,170 | 110            | 0       | 15,280          | 595               | 738     | 1,333        |                  | 13,947                 |
| Mar. 8/                        | 650                 | 11,227               | 2,070       | 13,947 |                | 1       | 13,948          | 712               | 629     | 1,341        |                  | 12,607                 |

1/ Compiled from Bureau of the Census data and adjusted to 480-lb. net weight bales. 2/ August stocks adjusted to an August 1 basis, excluding preseason ginnings. 3/ Adjusted to 480-lb. bales by use of monthly conversion factors for mill stocks. 4/ Primarily cotton on farms and in transit. Estimated by subtracting public storage and mill stocks from total stocks. 5/ August data include preseason ginnings. 6/ Adjusted to a calendar month. 7/ Supply less disappearance. End-of-season stocks adjusted by Bureau of the Census data. Differences primarily reflect varying bale weights. Monthly data are rounded. 8/ Preliminary and estimated.

Table 4--Index of prices of selected cotton growths and qualities, and price per pound U.S. cotton, c.i.f. Northern Europe, 1984-89 1/

| Year beginning August 1 | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Jan.  | Feb.  | Mar.  | Apr.  | May   | June  | July  | Average |
|-------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---------|
| Cents/pound             |       |       |       |       |       |       |       |       |       |       |       |       |         |
| "A" index 2/:           |       |       |       |       |       |       |       |       |       |       |       |       |         |
| 1984                    | 75.52 | 73.16 | 73.63 | 72.64 | 71.98 | 71.40 | 69.21 | 67.34 | 66.26 | 65.07 | 62.85 | 61.10 | 69.18   |
| 1985                    | 56.97 | 53.43 | 49.01 | 48.04 | 48.25 | 51.82 | 54.52 | 52.35 | 48.50 | 45.42 | 41.04 | 37.44 | 48.90   |
| 1986                    | 37.16 | 43.50 | 51.23 | 52.81 | 59.17 | 65.68 | 65.85 | 62.96 | 66.21 | 76.60 | 79.30 | 83.24 | 61.98   |
| 1987                    | 86.60 | 83.61 | 76.17 | 75.83 | 75.29 | 72.19 | 67.49 | 66.34 | 65.75 | 65.57 | 68.78 | 68.23 | 72.65   |
| 1988                    | 57.74 | 56.75 | 57.64 | 58.61 | 61.26 | 63.12 | 62.96 | 66.02 | 73.75 |       |       |       |         |
| Memphis 3/:             |       |       |       |       |       |       |       |       |       |       |       |       |         |
| 1984                    | 75.85 | 74.00 | 74.69 | 73.25 | 74.00 | 74.75 | 72.94 | 73.70 | 75.94 | 74.80 | 72.44 | 70.38 | 73.90   |
| 1985                    | 68.20 | 67.94 | 68.56 | 68.45 | 67.67 | 69.15 | 70.07 | 71.75 | 72.88 | 73.55 | 41.25 | 38.05 | 64.79   |
| 1986                    | 37.75 | 44.69 | 52.35 | 54.25 | 62.08 | 65.31 | 64.75 | 62.56 | 65.20 | 75.06 | 76.19 | 81.75 | 61.83   |
| 1987                    | 87.38 | 83.06 | 76.77 | 76.44 | 74.95 | 72.75 | 69.81 | 70.75 | 72.38 | 75.31 | 79.95 | 76.56 | 76.34   |
| 1988                    | 60.75 | 60.45 | 62.12 | 63.94 | 65.81 | 67.18 | 68.06 | 69.95 | 74.06 |       |       |       |         |
| Calif./Ariz. 3/:        |       |       |       |       |       |       |       |       |       |       |       |       |         |
| 1984                    | 75.90 | 74.38 | 75.19 | 74.00 | 74.08 | 74.25 | 72.13 | 72.94 | 75.81 | 73.70 | 71.94 | 70.63 | 73.75   |
| 1985                    | 68.55 | 67.38 | 68.25 | 68.15 | 67.17 | 68.45 | 69.19 | 70.75 | 72.25 | 73.25 | 40.25 | 35.95 | 64.13   |
| 1986                    | 36.69 | 45.44 | 54.55 | 57.00 | 65.75 | 69.25 | 68.44 | 64.69 | 67.75 | 78.75 | 80.63 | 86.65 | 64.63   |
| 1987                    | 91.81 | 87.81 | 80.95 | 79.19 | 78.25 | 76.25 | 73.50 | 74.80 | 76.13 | 78.62 | 81.80 | 76.75 | 79.65   |
| 1988                    | 64.19 | 64.10 | 65.94 | 66.13 | 67.31 | 69.12 | 69.94 | 72.10 | 76.56 |       |       |       |         |
| "B" index 4/:           |       |       |       |       |       |       |       |       |       |       |       |       |         |
| 1984                    | 69.26 | 66.11 | 65.18 | 64.50 | 63.48 | 61.96 | 58.58 | 54.55 | 54.78 | 54.98 | 52.21 | 48.98 | 59.55   |
| 1985                    | 47.03 | 45.35 | 43.61 | 41.42 | 40.83 | 43.15 | 45.14 | 43.19 | 40.88 | 38.70 | 33.03 | 28.77 | 40.93   |
| 1986                    | 27.75 | 32.55 | 40.19 | 43.95 | 52.32 | 60.88 | 61.41 | 58.00 | 61.33 | 71.40 | 72.90 | 76.96 | 54.97   |
| 1987                    | 81.55 | 78.44 | 70.77 | 71.73 | 71.08 | 68.15 | 64.21 | 62.69 | 61.30 | 59.50 | 63.73 | 61.50 | 67.89   |
| 1988                    | 52.76 | 51.75 | 53.24 | 53.28 | 56.17 | 58.45 | 57.55 | 61.64 | 67.56 |       |       |       |         |
| Orleans/Texas 5/:       |       |       |       |       |       |       |       |       |       |       |       |       |         |
| 1984                    | 68.65 | 66.44 | 66.25 | 65.40 | 65.08 | 65.94 | 63.88 | 62.15 | 62.69 | 62.40 | 61.13 | 60.50 | 64.21   |
| 1985                    | 60.90 | 61.00 | 61.69 | 61.65 | 61.58 | 61.50 | 61.75 | 62.07 | 62.13 | 63.85 | 31.32 | 27.80 | 56.44   |
| 1986                    | 28.00 | 32.56 | 41.55 | 44.82 | 53.17 | 59.12 | 60.81 | 57.50 | 60.10 | 68.94 | 70.56 | 75.40 | 54.38   |
| 1987                    | 80.94 | 77.44 | 71.40 | 70.69 | 69.65 | 68.19 | 65.56 | 66.95 | 67.38 | 69.87 | 72.30 | 66.25 | 70.55   |
| 1988                    | 54.56 | 53.30 | 54.50 | 55.56 | 57.87 | 59.93 | 60.81 | 62.40 | 67.18 |       |       |       |         |

1/ All prices are based on Thursday quotes. 2/ The "A" index is an average of the cheapest five types of M 1-3/32" staple length cotton offered on the European market. 3/ The Memphis and California/Arizona territories are based on middling 1-3/32". 4/ The "B" index is based on coarse grades of cotton varying in staple length from 1" to 1-3/32". 5/ Based on SLM 1" cotton.

Source: Cotton Outlook, Liverpool Cotton Services LTD.

Table 5--C.i.f. Northern Europe price quotations for principal growth of "A" type cotton, weekly, August 1988 to date

| Month & week     | California/ Arizona | Memphis Territory | Russia | China | Africa | Central America | Australia | Turkey | Paraguay | Mexico | Pakistan | "A" index 1/ |       |
|------------------|---------------------|-------------------|--------|-------|--------|-----------------|-----------|--------|----------|--------|----------|--------------|-------|
| U.S. cents/pound |                     |                   |        |       |        |                 |           |        |          |        |          |              |       |
| 1988:            |                     |                   |        |       |        |                 |           |        |          |        |          |              |       |
| Aug.             | 4                   | 65.00             | 61.75  | 59.25 | 62.50  | 63.50           | 59.00     | 61.25  | 75.00    | 64.00  | 60.75    | 56.75        | 59.40 |
|                  | 11                  | 66.75             | 63.25  | 59.50 | 63.00  | 62.50           | 59.75     | 61.00  | 75.00    | 63.75  | 61.00    | 57.50        | 59.75 |
|                  | 18                  | 63.75             | 60.25  | 57.75 | 60.25  | 59.25           | 55.50     | 58.00  | 75.00    | 60.00  | 58.00    | 55.25        | 56.90 |
|                  | 25                  | 61.25             | 57.75  | 55.75 | 58.25  | 58.00           | 53.50     | 56.50  | 70.00    | 58.50  | 56.00    | 52.75        | 54.90 |
| Sept.            | 1                   | 63.25             | 59.75  | 57.00 | 59.50  | 58.00           | 54.75     | 58.00  | 70.00    | 60.00  | 56.75    | 54.25        | 56.15 |
|                  | 8                   | 64.25             | 60.75  | 57.25 | 60.00  | 58.25           | 55.75     | 58.50  | 70.00    | 60.50  | 57.75    | 55.25        | 56.85 |
|                  | 15                  | 67.25             | 63.75  | 59.25 | 62.00  | 59.75           | 58.25     | 61.50  | 71.00    | 62.50  | 60.25    | 58.25        | 59.15 |
|                  | 22                  | 63.25             | 59.50  | 56.50 | 60.00  | 57.00           | 55.25     | NQ     | 64.00    | NQ     | 57.00    | 54.50        | 56.05 |
|                  | 29                  | 62.50             | 58.50  | 55.00 | 60.00  | 56.50           | 55.00     | NQ     | 63.00    | NQ     | 57.00    | 54.25        | 55.55 |
| Oct.             | 6                   | 64.25             | 60.25  | 57.00 | 62.50  | 57.50           | 56.25     | NQ     | 62.00    | NQ     | 57.75    | 56.25        | 56.95 |
|                  | 13                  | 66.00             | 62.00  | 57.50 | 63.50  | 57.50           | 57.00     | NQ     | 58.25    | NQ     | 58.50    | 58.00        | 57.65 |
|                  | 20                  | 66.50             | 62.50  | 58.25 | 64.00  | 57.00           | 57.50     | NQ     | 59.00    | NQ     | 58.50    | 58.25        | 57.90 |
|                  | 27                  | 67.00             | 63.75  | 57.50 | 64.25  | 58.00           | 58.00     | NQ     | 59.50    | NQ     | 59.50    | 57.25        | 58.05 |
| Nov.             | 3                   | 67.50             | 64.50  | 58.50 | 64.75  | 58.50           | 58.75     | NQ     | 58.50    | NQ     | 60.25    | 57.75        | 58.40 |
|                  | 10                  | 66.50             | 64.25  | 58.25 | 64.50  | 58.25           | 59.00     | NQ     | 59.50    | NQ     | 60.25    | 57.00        | 58.40 |
|                  | 17                  | 66.00             | 64.00  | 59.00 | 64.25  | 60.50           | 60.00     | NQ     | 61.25    | NQ     | 60.50    | 56.75        | 59.35 |
|                  | 24                  | 64.50             | 63.00  | 57.50 | 63.75  | 59.00           | 59.25     | NQ     | 61.25    | NQ     | 59.75    | 56.00        | 58.30 |
| Dec.             | 1                   | 66.50             | 64.75  | 60.00 | 65.25  | 59.00           | 60.75     | NQ     | 62.00    | NQ     | 60.75    | 58.50        | 59.80 |
|                  | 8                   | 67.50             | 66.00  | 60.75 | 66.00  | 60.00           | 62.00     | NQ     | 64.00    | NQ     | 62.50    | 60.75        | 61.20 |
|                  | 15                  | 67.50             | 66.00  | 61.00 | 65.50  | 60.50           | 62.50     | NQ     | 64.50    | NQ     | 62.75    | 61.75        | 61.70 |
|                  | 22                  | 67.75             | 66.50  | 62.00 | 66.75  | 61.00           | 63.00     | NQ     | 64.00    | NQ     | 63.25    | 62.50        | 62.35 |
| 1989:            |                     |                   |        |       |        |                 |           |        |          |        |          |              |       |
| Jan.             | 5                   | 66.25             | 64.50  | 61.00 | 66.75  | 61.00           | 62.75     | 65.50  | 65.25    | 61.75  | 62.50    | 60.50        | 61.35 |
|                  | 12                  | 70.00             | 68.00  | 63.00 | 69.75  | 62.25           | 65.25     | 68.75  | 68.50    | 64.75  | 65.00    | 63.50        | 63.70 |
|                  | 19                  | 70.75             | 68.75  | 63.50 | 70.00  | 63.25           | 65.25     | 69.25  | 69.00    | 65.25  | 65.00    | 63.75        | 64.15 |
|                  | 26                  | 69.50             | 67.50  | 63.00 | 69.50  | 63.00           | 64.00     | 68.00  | 69.00    | 63.75  | 63.75    | 63.00        | 63.30 |
| Feb.             | 2                   | 71.00             | 69.25  | 64.50 | 70.00  | 63.50           | 65.50     | 70.00  | 68.50    | 65.00  | 65.50    | 64.50        | 64.60 |
|                  | 9                   | 70.25             | 68.50  | 63.00 | 70.00  | 62.75           | 64.50     | 69.50  | 68.50    | 62.25  | 64.50    | 62.25        | 62.95 |
|                  | 16                  | 69.00             | 67.25  | 62.00 | 69.50  | 62.00           | 63.50     | 68.50  | 68.50    | 61.00  | 63.50    | 61.25        | 61.95 |
|                  | 23                  | 69.50             | 67.25  | 61.50 | 71.00  | 62.50           | 63.75     | 68.50  | 68.50    | 61.75  | 63.75    | 62.25        | 62.35 |
| Mar.             | 2                   | 70.75             | 68.50  | 63.00 | 71.00  | 63.00           | 63.50     | 70.00  | 69.00    | 63.25  | 64.75    | 66.50        | 63.50 |
|                  | 9                   | 71.50             | 69.00  | 64.00 | 71.00  | 63.50           | 64.25     | 70.75  | 70.00    | 64.50  | 66.00    | 67.50        | 64.45 |
|                  | 16                  | 72.25             | 70.25  | 66.00 | 72.50  | 66.00           | 65.00     | 72.00  | 71.75    | 67.00  | 65.25    | NQ           | 65.85 |
|                  | 23                  | 72.50             | 71.00  | 68.00 | 72.75  | 67.25           | 68.50     | 72.75  | 75.00    | 67.00  | 68.25    | NQ           | 67.80 |
|                  | 30                  | 73.50             | 69.95  | 68.00 | 73.00  | 68.00           | 69.50     | 72.50  | 75.00    | 67.75  | 69.25    | NQ           | 68.50 |
| Apr.             | 6                   | 75.75             | 72.75  | 72.00 | 75.00  | 71.00           | NQ        | 74.25  | NQ       | 70.75  | NQ       | NQ           | 72.15 |
|                  | 13                  | 76.25             | 74.00  | 74.00 | 76.50  | 72.75           | NQ        | 75.00  | NQ       | 72.25  | NQ       | NQ           | 73.60 |
|                  | 20                  | 77.25             | 75.00  | 75.00 | 77.50  | 73.25           | NQ        | 75.75  | NQ       | 74.00  | NQ       | NQ           | 74.60 |
|                  | 27                  | 77.00             | 74.50  | 75.75 | 77.50  | 73.50           | NQ        | 75.50  | NQ       | 74.00  | NQ       | NQ           | 74.65 |

NQ = No quotes.

1/ The "A" index is an average of the cheapest five types of M 1-3/32" staple length cotton offered on the European market.

Source: Cotton Outlook, Liverpool Cotton Services LTD.

Table 6--C.I.T. northern Europe price quotations for principal growth of coarse-count cotton, weekly,  
August 1988 to date

| Month<br>& week  | Orleans/<br>Texas | Pakistan | China | Russia | Turkey | Southern<br>Brazil | Argentina | "B"<br>index 1/ |       |
|------------------|-------------------|----------|-------|--------|--------|--------------------|-----------|-----------------|-------|
| U.S. cents/pound |                   |          |       |        |        |                    |           |                 |       |
| 1988:            |                   |          |       |        |        |                    |           |                 |       |
| Aug.             | 4                 | 61.75    | 51.50 | NQ     | 56.25  | 62.50              | NQ        | 56.50           | 54.60 |
|                  | 11                | 57.00    | 52.25 | NQ     | 56.50  | 62.00              | NQ        | 55.75           | 54.85 |
|                  | 18                | 54.00    | 50.00 | NQ     | 54.75  | 61.00              | NQ        | 52.00           | 52.00 |
|                  | 25                | 51.25    | 47.50 | NQ     | 52.75  | 60.00              | NQ        | 50.00           | 49.60 |
| Sept.            | 1                 | 53.00    | 49.00 | NQ     | 54.00  | 60.00              | NQ        | 51.00           | 51.00 |
|                  | 8                 | 53.50    | 50.00 | NQ     | 54.25  | 60.00              | NQ        | 51.00           | 51.50 |
|                  | 15                | 56.50    | 53.00 | NQ     | 56.25  | 61.00              | NQ        | 53.00           | 54.10 |
|                  | 22                | 52.00    | 49.00 | NQ     | 53.50  | 57.50              | NQ        | NQ              | 51.50 |
|                  | 29                | 51.50    | 48.75 | NQ     | 51.75  | 56.50              | NQ        | NQ              | 50.65 |
| Oct.             | 6                 | 53.25    | 50.75 | NQ     | 53.75  | 56.50              | NQ        | NQ              | 52.60 |
|                  | 13                | 54.25    | 52.50 | NQ     | 54.25  | 52.50              | NQ        | NQ              | 53.10 |
|                  | 20                | 54.75    | 53.00 | NQ     | 55.00  | 54.00              | NQ        | NQ              | 53.90 |
|                  | 27                | 55.75    | 52.00 | NQ     | 54.50  | 53.50              | NQ        | NQ              | 53.35 |
| Nov.             | 3                 | 56.00    | 52.50 | NQ     | 55.50  | 52.00              | NQ        | NQ              | 53.35 |
|                  | 10                | 55.50    | 51.75 | NQ     | 55.25  | 52.75              | NQ        | NQ              | 53.25 |
|                  | 17                | 55.75    | 51.50 | NQ     | 56.00  | 53.50              | NQ        | NQ              | 53.60 |
|                  | 24                | 55.00    | 50.75 | NQ     | 54.50  | 53.50              | NQ        | NQ              | 52.90 |
| Dec.             | 1                 | 56.75    | 53.25 | NQ     | 57.00  | 54.00              | NQ        | NQ              | 54.65 |
|                  | 8                 | 57.50    | 55.50 | NQ     | 57.75  | 55.50              | NQ        | NQ              | 56.15 |
|                  | 15                | 58.25    | 56.50 | NQ     | 58.00  | 55.50              | NQ        | NQ              | 56.65 |
|                  | 22                | 59.00    | 57.25 | NQ     | 59.00  | 55.50              | NQ        | NQ              | 57.25 |
| 1989:            |                   |          |       |        |        |                    |           |                 |       |
| Jan.             | 5                 | 58.25    | 55.25 | NQ     | 58.00  | 55.50              | NQ        | 57.50           | 56.10 |
|                  | 12                | 60.50    | 58.25 | NQ     | 59.75  | 59.75              | NQ        | 60.50           | 59.25 |
|                  | 19                | 61.00    | 58.75 | NQ     | 60.25  | 59.75              | NQ        | 60.75           | 59.60 |
|                  | 26                | 60.00    | 58.00 | NQ     | 60.00  | 59.50              | NQ        | 59.00           | 58.85 |
| Feb.             | 2                 | 62.00    | 58.50 | NQ     | 61.50  | 59.00              | NQ        | 59.25           | 58.90 |
|                  | 9                 | 61.00    | 57.00 | NQ     | 60.00  | 58.50              | NQ        | 57.50           | 57.65 |
|                  | 16                | 60.25    | 56.00 | NQ     | 59.00  | 57.50              | NQ        | 56.00           | 56.50 |
|                  | 23                | 60.00    | 57.00 | NQ     | 58.50  | 57.50              | NQ        | 57.00           | 57.15 |
| Mar.             | 2                 | 61.00    | 60.50 | NQ     | 60.00  | 58.00              | NQ        | 58.50           | 58.85 |
|                  | 9                 | 61.50    | 61.50 | NQ     | 61.00  | 58.50              | NQ        | 60.00           | 59.85 |
|                  | 16                | 62.50    | 63.50 | NQ     | 63.00  | 62.50              | NQ        | 62.50           | 62.50 |
|                  | 23                | 63.50    | 63.75 | NQ     | 64.50  | 67.00              | NQ        | 63.00           | 63.40 |
|                  | 30                | 63.50    | 63.75 | NQ     | 64.50  | 67.50              | NQ        | 63.50           | 63.60 |
| Apr.             | 6                 | 65.50    | 66.00 | NQ     | 68.50  | NQ                 | NQ        | 66.50           | 66.00 |
|                  | 13                | 66.25    | 66.50 | NQ     | 70.50  | NQ                 | NQ        | 67.50           | 66.75 |
|                  | 20                | 68.50    | 68.50 | NQ     | 71.50  | NQ                 | NQ        | 68.50           | 68.50 |
|                  | 27                | 68.50    | 69.00 | NQ     | 72.25  | NQ                 | NQ        | 69.50           | 69.00 |

NQ = No quotes.

1/ The "B" index is based on coarse grades of cotton varying in staple length from 1" to 1-3/32". It is an average of the cheapest three types of seven styles, so marked.

Source: Cotton Outlook, Liverpool Cotton Services LTD.

received by farmers for upland cotton, 1983/84-1988/89

| Year<br>beginning<br>August 1 | Average spot market prices per pound (net weight) 1/ |           |                |                |                |               | Prices received<br>by farmers<br>(net weight)<br>2/ |
|-------------------------------|--|-----------|----------------|----------------|----------------|---------------|---|
|                               | 15/16<br>inch  | 1<br>inch | 1-1/32<br>inch | 1-1/16<br>inch | 1-3/32<br>inch | 1-1/8<br>inch |   |
| Cents/pound                   |  |           |                |                |                |               |   |
| 1983/84                       | 62.54  | 66.32     | 70.71          | 73.11          | 73.55          | 75.37 3/      | 65.3  |
| 1984/85                       | 52.39  | 55.98     | 58.30          | 60.51          | 60.29          | 60.49 3/      | 58.7  |
| 1985/86                       | 52.16  | 55.81     | 57.87          | 60.01          | 59.62          | 59.77 3/      | 56.8  |
| 1986/87                       | 44.80  | 47.77     | 50.78          | 53.16          | 53.81          | 55.89 3/      | 51.5  |
| 1987/88:                      |  |           |                |                |                |               |   |
| August                        | 67.07  | 70.30     | 73.37          | 75.89          | 76.42          | 77.95         | 65.3  |
| September                     | 63.14  | 66.48     | 68.82          | 71.41          | 71.99          | 72.72         | 64.9  |
| October                       | 55.95  | 59.31     | 61.65          | 64.30          | 64.84          | 65.36         | 64.1  |
| November                      | 56.30  | 59.40     | 62.16          | 64.66          | 65.17          | 65.90         | 64.4  |
| December                      | 55.87  | 58.68     | 60.05          | 62.26          | 62.76          | 63.39         | 64.2  |
| January                       | 54.63  | 55.79     | 57.44          | 59.69          | 60.14          | 60.96         | 60.6  |
| February                      | 53.97  | 54.80     | 55.65          | 57.83          | 58.28          | 59.06         | 56.8  |
| March                         | 55.71  | 56.62     | 57.46          | 59.64          | 60.12          | 61.40         | 57.7  |
| April                         | 56.00  | 57.27     | 57.88          | 60.07          | 60.55          | 61.19         | 59.4  |
| May                           | 57.15  | 58.28     | 59.36          | 61.55          | 62.03          | 63.06         | 58.9  |
| June                          | 58.36  | 59.44     | 60.67          | 62.86          | 63.34          | 64.61         | 61.2  |
| July                          | 54.45  | 55.58     | 55.19          | 57.40          | 57.88          | 57.80         | 58.6  |
| Season                        | 57.38  | 59.33     | 60.81          | 63.13          | 63.63          | 64.45         | 63.7  |
| Loan rate 4/                  | 44.55  | 48.00     | 49.95          | 52.25          | 52.75          | 52.85         |   |
| 1988/89:                      |  |           |                |                |                |               |   |
| August                        | 49.97  | 51.58     | 52.61          | 55.20          | 55.69          | 56.43         | 52.6  |
| September                     | 41.53  | 45.30     | 47.40          | 51.25          | 51.80          | 52.96         | 51.8  |
| October                       | 41.60  | 45.83     | 48.17          | 52.20          | 52.66          | 54.38         | 54.2  |
| November                      | 43.05  | 47.41     | 49.46          | 53.40          | 53.80          | 54.86         | 56.5  |
| December                      | 44.89  | 48.75     | 50.84          | 54.80          | 55.20          | 56.18         | 55.3  |
| January                       | 47.41  | 50.17     | 51.88          | 55.67          | 56.07          | 57.25         | 53.9  |
| February                      | 46.89  | 50.02     | 51.69          | 55.37          | 55.77          | 57.31         | 52.9  |
| March                         | 48.83  | 52.21     | 53.79          | 57.59          | 58.04          | 59.58         | 56.3  |
| April                         | 53.91  | 56.63     | 57.84          | 61.43          | 61.94          | 63.53         | 59.0 5/   |
| Loan rate 4/                  | 45.30  | 48.15     | 49.65          | 51.80          | 52.30          | 52.45         |   |

1/ Spot market loan rates and prices are for cotton with micronaire readings of 3.5 through 4.9.  
 2/ Prices do not include an allowance for loans outstanding and Government purchases. 3/ Weighted market average. U.S. prices based on U.S. monthly prices weighted by monthly marketings during the period August through the following July. 4/ SLM 1-1/16" average location. 5/ Mid-month price.

Source: Agricultural Stabilization and Conservation Service, Agricultural Marketing Service, and National Agricultural Statistics Service.

upland cotton, basis grade 41 staple 34 (SLM 1-1/16"), net weight

| Grade                 | Code      | Staple length (inches)              |               |               |           |                |                |                |               |                            |
|-----------------------|-----------|-------------------------------------|---------------|---------------|-----------|----------------|----------------|----------------|---------------|----------------------------|
|                       |           | 13/16 (26)<br>through<br>29/32 (29) | 15/16<br>(30) | 31/32<br>(31) | 1<br>(32) | 1-1/32<br>(33) | 1-1/16<br>(34) | 1-3/32<br>(35) | 1-1/8<br>(36) | 1-5/32<br>(37) &<br>longer |
|                       |           | Points/pound                        |               |               |           |                |                |                |               |                            |
| <b>WHITE:</b>         |           |                                     |               |               |           |                |                |                |               |                            |
| SM & better           | (11 & 21) | - 710                               | - 585         | - 415         | - 250     | - 85           | + 190          | + 240          | + 250         | + 380                      |
| MID PLUS              | (30)      | - 730                               | - 610         | - 440         | - 275     | - 100          | + 180          | + 225          | + 240         | + 365                      |
| MID                   | (31)      | - 740                               | - 615         | - 450         | - 295     | - 110          | + 165          | + 220          | + 230         | + 355                      |
| SLM PLUS              | (40)      | - 785                               | - 660         | - 500         | - 375     | - 195          | + 65           | + 115          | + 130         | + 220                      |
| SLM                   | (41)      | - 815                               | - 690         | - 530         | - 425     | - 255          | BASE           | + 45           | + 60          | + 100                      |
| LM PLUS               | (50)      | - 945                               | - 825         | - 650         | - 580     | - 415          | - 215          | - 185          | - 165         | - 150                      |
| LM                    | (51)      | -1,020                              | - 920         | - 760         | - 705     | - 530          | - 380          | - 325          | - 300         | - 275                      |
| SGO PLUS              | (60)      | -1,315                              | -1,250        | -1,220        | -1,185    | -1,040         | - 940          | - 915          | - 870         | - 810                      |
| SGO                   | (61)      | -1,395                              | -1,335        | -1,280        | -1,270    | -1,115         | -1,060         | -1,045         | - 995         | - 950                      |
| GO PLUS               | (70)      | -1,650                              | -1,635        | -1,630        | -1,680    | -1,425         | -1,420         | -1,415         | -1,370        | -1,350                     |
| GO                    | (71)      | -1,715                              | -1,700        | -1,700        | -1,650    | -1,495         | -1,495         | -1,495         | -1,460        | -1,440                     |
| <b>LIGHT SPOTTED:</b> |           |                                     |               |               |           |                |                |                |               |                            |
| SM & better           | (12 & 22) | - 775                               | - 650         | - 480         | - 360     | - 190          | + 55           | + 90           | + 115         | + 205                      |
| MID                   | (32)      | - 805                               | - 685         | - 520         | - 425     | - 260          | - 0            | + 45           | + 55          | + 95                       |
| SLM                   | (42)      | - 875                               | - 780         | - 630         | - 580     | - 425          | - 270          | - 240          | - 225         | - 225                      |
| LM                    | (52)      | -1,110                              | -1,025        | - 975         | - 975     | - 820          | - 820          | - 820          | - 820         | - 820                      |
| SGO                   | (62)      | -1,475                              | -1,440        | -1,435        | -1,435    | -1,280         | -1,280         | -1,280         | -1,275        | -1,275                     |
| <b>SPOTTED:</b>       |           |                                     |               |               |           |                |                |                |               |                            |
| SM & better           | (13 & 23) | -1,075                              | - 980         | - 910         | - 860     | - 690          | - 580          | - 550          | - 535         | - 530                      |
| MID                   | (33)      | -1,175                              | -1,080        | -1,005        | - 980     | - 825          | - 785          | - 755          | - 740         | - 685                      |
| SLM                   | (43)      | -1,300                              | -1,245        | -1,245        | -1,245    | -1,090         | -1,090         | -1,090         | -1,080        | -1,080                     |
| LM                    | (53)      | -1,505                              | -1,500        | -1,500        | -1,500    | 1,345          | -1,345         | -1,345         | -1,340        | -1,340                     |
| SGO                   | (63)      | -1,670                              | -1,670        | -1,670        | -1,670    | -1,515         | -1,515         | -1,515         | -1,510        | -1,510                     |
| <b>TINGED: 1/</b>     |           |                                     |               |               |           |                |                |                |               |                            |
| SM                    | (24)      | -1,650                              | -1,565        | -1,550        | -1,550    | -1,395         | -1,340         | -1,330         | -1,330        | -1,330                     |
| MID                   | (34)      | -1,725                              | -1,640        | -1,640        | -1,640    | -1,485         | -1,455         | -1,450         | -1,445        | -1,445                     |
| SLM                   | (44)      | -1,785                              | -1,740        | -1,740        | -1,740    | -1,585         | -1,585         | -1,585         | -1,585        | -1,585                     |
| LM                    | (54)      | -1,960                              | -1,955        | -1,955        | -1,955    | -1,800         | -1,800         | -1,800         | -1,800        | -1,800                     |
| <b>LIGHT GRAY:</b>    |           |                                     |               |               |           |                |                |                |               |                            |
| SM & better           | (16 & 26) | - 920                               | - 785         | - 630         | - 510     | - 350          | + 10           | + 45           | + 60          | + 90                       |
| MID                   | (36)      | -1,100                              | - 990         | - 835         | - 790     | - 635          | - 410          | - 360          | - 310         | - 295                      |
| SLM                   | (46)      | -1,550                              | -1,485        | -1,440        | -1,385    | -1,230         | -1,140         | -1,100         | -1,005        | - 970                      |
| <b>GRAY:</b>          |           |                                     |               |               |           |                |                |                |               |                            |
| SM & better           | (17 & 27) | -1,110                              | -1,000        | - 955         | - 810     | - 640          | 465            | - 430          | - 385         | - 395                      |
| MID                   | (37)      | -1,450                              | -1,380        | -1,350        | -1,330    | -1,175         | -1,130         | -1,090         | -1,015        | - 995                      |
| SLM                   | (47)      | -1,790                              | -1,775        | -1,775        | -1,745    | -1,590         | -1,585         | -1,565         | -1,535        | -1,525                     |

1/ Cotton classed as "Yellow Stained" ( Middling and better grades) will be eligible for loan, if otherwise eligible, at a discount 200 points greater than the discount applicable to the comparable quality in the color group "Tinged."

Source: USDA, Agricultural Stabilization and Conservation Service.



Table 9--CCC loan schedule of micronaire differences for 1989 crop

| Micronaire reading | Upland                    |                               | Micronaire reading | Extra long staple (American Pima) |
|--------------------|---------------------------|-------------------------------|--------------------|-----------------------------------|
|                    | Staples 32 (1") & shorter | Staples 33 (1-1/32") & longer |                    |                                   |
|                    | Points/pound              |                               |                    | Points/pound                      |
| 5.3 and above      | -285                      | -230                          | 3.5 and above      | 0                                 |
| 5.0 through 5.2    | -200                      | -145                          | 3.3 through 3.4    | -440                              |
| 3.5 through 4.9    | 0                         | 0                             | 3.0 through 3.2    | -1,900                            |
| 3.3 through 3.4    | -185                      | -220                          | 2.7 through 2.9    | -2,715                            |
| 3.0 through 3.2    | -365                      | -480                          |                    |                                   |
| 2.7 through 2.9    | -620                      | -775                          |                    |                                   |
| 2.6 and below      | -1,130                    | -1,185                        |                    |                                   |

Source: USDA, Agricultural Stabilization and Conservation Service.

Table 10--CCC schedule of loan rates for eligible qualities of 1989-crop extra long staple cotton (American Pima) stored in approved warehouses at all locations, micronaire 3.5 and above 1/

| Grade | Staple (inches) |                      |
|-------|-----------------|----------------------|
|       | 1-3/8 (44)      | 1-7/16 (46) & longer |
|       | Cents/pound     |                      |
| 01    | 88.15           | 88.45                |
| 02    | 88.00           | 88.30                |
| 03    | 87.15           | 87.45                |
| 04    | 81.00           | 81.25                |
| 05    | 61.45           | 61.55                |
| 06    | 47.65           | 47.80                |

1/ A micronaire premium of 175 points (1.75 cents) per pound is reflected in the loan rates for the eligible qualities; thus, the national average loan rate reflected in the above schedule is 83.15 cents per pound. Cotton with micronaire readings below the micronaire range "3.5 and above" will be subject to the discounts in the schedule of micronaire differences for ELS cotton in the above table.

Source: USDA, Agricultural Stabilization and Conservation Service.

Table 11--Fiber prices: Landed Group B mill points, cotton prices, and manmade staple fiber prices, f.o.b. producing plants, actual and estimated raw fiber equivalent, 1984 to 1989

| Calendar year         | Cotton 1/ |                         | Rayon 2/ |                         | Polyester 3/ |                         | Price ratios 4/   |                  |
|-----------------------|-----------|-------------------------|----------|-------------------------|--------------|-------------------------|-------------------|------------------|
|                       | Actual    | Raw fiber equivalent 5/ | Actual   | Raw fiber equivalent 5/ | Actual       | Raw fiber equivalent 5/ | Cotton/rayon      | Cotton/polyester |
| -----Cents/pound----- |           |                         |          |                         |              |                         | -----Percent----- |                  |
| 1984                  | 76        | 84                      | 84       | 88                      | 79           | 82                      | .95               | 1.02             |
| 1985                  | 66        | 73                      | 79       | 82                      | 66           | 69                      | .89               | 1.06             |
| 1986                  | 61        | 68                      | 76       | 79                      | 62           | 65                      | .86               | 1.05             |
| 1987                  | 73        | 81                      | 81       | 84                      | 66           | 69                      | .96               | 1.17             |
| 1988:                 |           |                         |          |                         |              |                         |                   |                  |
| January               | 69        | 77                      | 83       | 86                      | 69           | 72                      | .90               | 1.07             |
| February              | 66        | 73                      | 83       | 86                      | 69           | 72                      | .85               | 1.01             |
| March                 | 67        | 74                      | 87       | 91                      | 72           | 75                      | .81               | .99              |
| April                 | 68        | 76                      | 87       | 91                      | 72           | 75                      | .84               | 1.01             |
| May                   | 69        | 77                      | 89       | 93                      | 74           | 77                      | .85               | 1.00             |
| June                  | 71        | 79                      | 89       | 93                      | 74           | 77                      | .85               | 1.03             |
| July                  | 66        | 73                      | 91       | 95                      | 76           | 79                      | .77               | .92              |
| August                | 60        | 67                      | 91       | 95                      | 76           | 79                      | .71               | .85              |
| September             | 58        | 64                      | 91       | 95                      | 76           | 79                      | .67               | .81              |
| October               | 60        | 67                      | 96       | 100                     | 76           | 79                      | .67               | .85              |
| November              | 61        | 68                      | 96       | 100                     | 76           | 79                      | .68               | .86              |
| December              | 63        | 70                      | 105      | 109                     | 76           | 79                      | .64               | .89              |
| Average               | 65        | 72                      | 83       | 87                      | 74           | 77                      | .77               | .94              |
| 1989:                 |           |                         |          |                         |              |                         |                   |                  |
| January               | 64        | 71                      | 100      | 104                     | 81           | 84                      | .68               | .85              |
| February              | 63        | 70                      | 100      | 104                     | 81           | 84                      | .67               | .83              |
| March                 | 66        | 73                      | 100      | 104                     | 81           | 84                      | .70               | .87              |
| April                 | 69        | 76                      | 110      | 115                     | 81           | 84                      | .66               | .90              |

1/ SLM-1-1/16" at Group B mill points, net weight. 2/ 1.5 and 3.0 denier, regular rayon staple. 3/ Reported average market price for 1.5-denier polyester staple for cotton blending. 4/ Raw fiber equivalent. 5/ Actual prices converted to estimated raw fiber equivalent as follows: cotton, divided by 0.90; rayon and polyester, divided by 0.96.

Source: USDA, Agricultural Marketing Service and trade reports.

Table 12--Upland cotton and manmade staple fibers: Mill consumption on cotton-system spinning spindles

| Year<br>beginning<br>August 1 | Manmade                |                         |                    | Total     | Total<br>fibers | Cotton's<br>share of<br>fibers |
|-------------------------------|------------------------|-------------------------|--------------------|-----------|-----------------|--------------------------------|
|                               | Cotton                 | Rayon<br>and<br>acetate | Non-<br>cellulosic |           |                 |                                |
|                               | -----1,000 pounds----- |                         |                    |           |                 | Percent                        |
| 1984/85                       | 2,618,685              | 231,197                 | 1,336,595          | 1,567,792 | 4,186,477       | 62.6                           |
| 1985/86                       | 3,086,842              | 253,459                 | 1,465,228          | 1,718,687 | 4,805,529       | 64.2                           |
| 1986/87:                      |                        |                         |                    |           |                 |                                |
| August                        | 276,770                | 21,453                  | 116,348            | 137,801   | 404,183         | 65.9                           |
| September                     | 261,122                | 20,479                  | 116,978            | 137,457   | 398,579         | 65.5                           |
| October                       | 340,287                | 27,216                  | 148,697            | 175,913   | 516,200         | 65.9                           |
| November                      | 263,464                | 22,422                  | 116,704            | 139,126   | 402,590         | 65.4                           |
| December                      | 287,383                | 21,089                  | 124,745            | 145,834   | 433,217         | 66.3                           |
| January                       | 272,040                | 20,829                  | 111,041            | 131,870   | 403,910         | 67.4                           |
| February                      | 278,811                | 19,017                  | 115,407            | 134,424   | 413,235         | 67.5                           |
| March                         | 356,721                | 24,936                  | 147,977            | 172,913   | 538,634         | 67.9                           |
| April                         | 284,897                | 19,225                  | 116,906            | 136,131   | 421,028         | 67.6                           |
| May                           | 291,180                | 18,961                  | 116,363            | 135,324   | 426,504         | 68.3                           |
| June                          | 354,011                | 23,796                  | 142,649            | 166,445   | 520,456         | 68.0                           |
| July                          | 269,166                | 17,348                  | 108,007            | 125,355   | 394,521         | 68.2                           |
| Season                        | 3,544,852              | 256,711                 | 1,481,822          | 1,738,593 | 5,283,445       | 67.1                           |
| 1987/88:                      |                        |                         |                    |           |                 |                                |
| August                        | 302,388                | 20,768                  | 118,130            | 138,898   | 441,286         | 68.5                           |
| September                     | 375,691                | 25,497                  | 145,385            | 170,882   | 546,573         | 68.7                           |
| October                       | 309,556                | 21,219                  | 125,084            | 146,303   | 455,859         | 67.9                           |
| November                      | 302,378                | 21,311                  | 120,124            | 141,435   | 443,813         | 68.1                           |
| December                      | 304,295                | 24,375                  | 121,521            | 145,896   | 450,191         | 67.6                           |
| January                       | 283,354                | 19,748                  | 119,056            | 138,804   | 422,158         | 67.1                           |
| February                      | 293,937                | 21,066                  | 116,977            | 138,043   | 431,980         | 68.0                           |
| March                         | 366,159                | 26,421                  | 147,427            | 173,848   | 540,007         | 67.8                           |
| April                         | 276,738                | 22,231                  | 113,340            | 135,571   | 412,309         | 67.2                           |
| May                           | 273,904                | 20,457                  | 113,977            | 134,434   | 408,338         | 67.1                           |
| June                          | 328,733                | 27,654                  | 141,683            | 169,337   | 498,070         | 66.0                           |
| July                          | 214,264                | 18,066                  | 99,219             | 117,285   | 331,549         | 68.3                           |
| Season                        | 3,631,397              | 268,813                 | 1,481,923          | 1,750,736 | 5,382,133       | 67.7                           |
| 1988/89 1/:                   |                        |                         |                    |           |                 |                                |
| August                        | 278,411                | 22,571                  | 117,117            | 139,688   | 418,099         | 66.6                           |
| September                     | 334,445                | 28,218                  | 141,771            | 169,989   | 504,434         | 66.3                           |
| October                       | 266,339                | 23,050                  | 111,980            | 135,030   | 401,369         | 66.4                           |
| November                      | 251,815                | 22,207                  | 106,930            | 129,137   | 380,952         | 66.1                           |
| December                      | 273,513                | 24,663                  | 115,420            | 140,083   | 413,596         | 66.1                           |
| January                       | 273,501                | 22,982                  | 108,589            | 131,571   | 405,072         | 67.5                           |
| February                      | 282,007                | 22,202                  | 109,025            | 131,227   | 413,234         | 68.2                           |
| March                         | 370,032                | 29,542                  | 133,042            | 162,584   | 532,616         | 69.5                           |

1/ Preliminary.

Source: Bureau of the Census.

Table 13--Cotton and manmade fibers: Daily rate of mill consumption on cotton-system spinning spindles, unadjusted and seasonally adjusted

| Year                  | Aug.   | Sept.  | Oct.   | Nov.   | Dec.   | Jan.   | Feb.   | Mar.   | Apr.   | May    | June   | July   |
|-----------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>UPLAND COTTON</b>  |        |        |        |        |        |        |        |        |        |        |        |        |
| 480-lb. bales         |        |        |        |        |        |        |        |        |        |        |        |        |
| Unadjusted--          |        |        |        |        |        |        |        |        |        |        |        |        |
| 1984/85               | 22,204 | 21,125 | 22,168 | 20,205 | 17,571 | 20,732 | 21,731 | 21,599 | 21,785 | 22,792 | 21,818 | 19,187 |
| 1985/86               | 23,765 | 23,334 | 25,556 | 24,752 | 20,186 | 24,724 | 25,851 | 25,570 | 25,775 | 25,689 | 25,371 | 21,644 |
| 1986/87               | 27,748 | 27,200 | 28,357 | 27,444 | 23,949 | 28,338 | 29,043 | 30,381 | 29,676 | 30,331 | 29,501 | 28,038 |
| 1987/88               | 31,498 | 31,307 | 32,246 | 31,735 | 25,358 | 29,516 | 30,618 | 30,515 | 28,826 | 28,532 | 27,394 | 22,462 |
| 1988/89               | 29,001 | 27,870 | 27,743 | 26,232 | 22,793 | 28,485 | 29,312 | 30,841 | 1/     |        |        |        |
| Adjusted--            |        |        |        |        |        |        |        |        |        |        |        |        |
| 1984/85               | 21,536 | 20,899 | 20,718 | 19,848 | 20,338 | 20,608 | 20,755 | 20,768 | 21,274 | 21,811 | 22,038 | 22,389 |
| 1985/86               | 22,873 | 23,102 | 23,684 | 24,458 | 23,554 | 24,650 | 24,714 | 24,681 | 25,196 | 24,513 | 25,627 | 25,197 |
| 1986/87               | 26,604 | 26,931 | 26,232 | 26,905 | 28,208 | 28,197 | 27,819 | 29,439 | 29,010 | 29,053 | 29,773 | 32,717 |
| 1987/88               | 29,998 | 30,844 | 30,109 | 31,235 | 29,486 | 29,281 | 29,441 | 29,426 | 28,206 | 27,461 | 27,811 | 26,210 |
| 1988/89               | 27,620 | 27,297 | 25,953 | 25,819 | 26,815 | 28,372 | 28,269 | 29,570 | 1/     |        |        |        |
| <b>MANMADE STAPLE</b> |        |        |        |        |        |        |        |        |        |        |        |        |
| 1,000 pounds          |        |        |        |        |        |        |        |        |        |        |        |        |
| Rayon and acetate:    |        |        |        |        |        |        |        |        |        |        |        |        |
| Unadjusted--          |        |        |        |        |        |        |        |        |        |        |        |        |
| 1984/85               | 974    | 980    | 1,021  | 872    | 741    | 844    | 881    | 899    | 812    | 932    | 894    | 830    |
| 1985/86               | 957    | 931    | 1,078  | 1,028  | 819    | 974    | 978    | 900    | 948    | 1,003  | 974    | 931    |
| 1986/87               | 1,073  | 1,024  | 1,089  | 1,121  | 844    | 1,041  | 951    | 997    | 961    | 948    | 952    | 867    |
| 1987/88               | 1,038  | 1,020  | 1,061  | 1,066  | 975    | 987    | 1,053  | 1,057  | 1,092  | 1,023  | 1,106  | 903    |
| 1988/89               | 1,129  | 1,129  | 1,153  | 1,110  | 987    | 1,149  | 1,110  | 1,182  | 1/     |        |        |        |
| Adjusted--            |        |        |        |        |        |        |        |        |        |        |        |        |
| 1984/85               | 963    | 977    | 961    | 822    | 864    | 845    | 851    | 852    | 806    | 881    | 861    | 1,016  |
| 1985/86               | 946    | 927    | 1,017  | 971    | 957    | 976    | 945    | 853    | 940    | 948    | 936    | 1,141  |
| 1986/87               | 1,051  | 1,019  | 1,008  | 1,074  | 987    | 1,046  | 914    | 963    | 955    | 902    | 923    | 1,035  |
| 1987/88               | 1,010  | 1,015  | 984    | 1,003  | 1,144  | 977    | 1,033  | 1,026  | 1,090  | 998    | 1,110  | 1,011  |
| 1988/89               | 1,098  | 1,109  | 1,061  | 1,044  | 1,165  | 1,141  | 1,109  | 1,168  | 1/     |        |        |        |
| Noncellulosic 2/:     |        |        |        |        |        |        |        |        |        |        |        |        |
| Unadjusted--          |        |        |        |        |        |        |        |        |        |        |        |        |
| 1984/85               | 5,678  | 5,438  | 5,605  | 4,939  | 4,267  | 5,050  | 5,392  | 5,159  | 5,237  | 5,275  | 5,233  | 4,532  |
| 1985/86               | 5,369  | 5,498  | 5,915  | 5,868  | 4,805  | 5,565  | 5,951  | 5,719  | 5,679  | 5,721  | 5,582  | 4,962  |
| 1986/87               | 5,817  | 5,849  | 5,948  | 5,835  | 4,990  | 5,552  | 5,770  | 5,919  | 5,845  | 5,818  | 5,706  | 5,400  |
| 1987/88               | 5,907  | 5,815  | 6,254  | 6,006  | 4,861  | 5,953  | 5,849  | 5,897  | 5,789  | 5,699  | 5,667  | 4,961  |
| 1988/89               | 5,856  | 5,671  | 5,599  | 5,437  | 4,617  | 5,430  | 5,451  | 6,652  | 1/     |        |        |        |
| Adjusted--            |        |        |        |        |        |        |        |        |        |        |        |        |
| 1984/85               | 5,518  | 5,389  | 5,288  | 4,984  | 4,979  | 4,985  | 5,049  | 4,946  | 5,124  | 5,126  | 5,161  | 5,245  |
| 1985/86               | 5,208  | 5,444  | 5,580  | 5,933  | 5,613  | 5,494  | 5,567  | 5,483  | 5,557  | 5,554  | 5,500  | 5,743  |
| 1986/87               | 5,664  | 5,763  | 5,569  | 5,847  | 5,809  | 5,508  | 5,418  | 5,724  | 5,742  | 5,654  | 5,655  | 6,200  |
| 1987/88               | 5,757  | 5,690  | 5,878  | 5,935  | 5,626  | 5,983  | 5,508  | 5,725  | 5,457  | 5,555  | 5,644  | 5,644  |
| 1988/89               | 5,708  | 5,554  | 5,218  | 5,284  | 5,375  | 5,457  | 5,216  | 6,421  | 1/     |        |        |        |

1/ Preliminary. 2/ Includes nylon, acrylic and modacrylic, polyester, and other manmade staple fibers.

Source: Bureau of the Census.

Table 14--Cotton system spindles in place and active, and hours operated

| Date         | Spindles        |        | Percentage of active spindles used on |                     |                         | Daily average spindle hours operated |                     | Total fiber spun per spindle hour |
|--------------|-----------------|--------|---------------------------------------|---------------------|-------------------------|--------------------------------------|---------------------|-----------------------------------|
|              | In place        | Active | 100-percent cotton                    | 100-percent manmade | Other fibers and blends | Actual                               | Seasonally adjusted |                                   |
|              | -----1,000----- |        | -----Percent-----                     |                     |                         | Spindle hours                        |                     | Pounds                            |
| <b>1987:</b> |                 |        |                                       |                     |                         |                                      |                     |                                   |
| January      | 13,044          | 11,880 | 39.8                                  | 13.7                | 46.5                    | 321                                  | 316                 | .063                              |
| February     | 13,068          | 11,880 | 39.8                                  | 13.8                | 46.4                    | 342                                  | 320                 | .061                              |
| March        | 12,914          | 11,936 | 39.8                                  | 13.8                | 46.4                    | 343                                  | 332                 | .063                              |
| April        | 12,858          | 11,832 | 40.2                                  | 13.6                | 46.2                    | 331                                  | 323                 | .064                              |
| May          | 12,892          | 11,867 | 40.4                                  | 13.8                | 45.7                    | 323                                  | 310                 | .066                              |
| June         | 12,814          | 11,671 | 39.7                                  | 13.9                | 46.3                    | 310                                  | 311                 | .067                              |
| July         | 12,819          | 11,723 | 39.3                                  | 13.4                | 47.3                    | 292                                  | 341                 | .068                              |
| August       | 12,749          | 11,760 | 40.0                                  | 13.3                | 46.6                    | 322                                  | 314                 | .069                              |
| September    | 12,831          | 11,776 | 40.9                                  | 13.1                | 46.0                    | 318                                  | 317                 | .069                              |
| October      | 12,792          | 11,696 | 40.3                                  | 13.5                | 46.2                    | 335                                  | 316                 | .068                              |
| November     | 12,804          | 11,648 | 39.9                                  | 13.4                | 46.7                    | 328                                  | 326                 | .068                              |
| December     | 12,636          | 11,638 | 39.7                                  | 13.4                | 46.9                    | 272                                  | 316                 | .067                              |
| <b>1988:</b> |                 |        |                                       |                     |                         |                                      |                     |                                   |
| January      | 12,712          | 11,607 | 39.6                                  | 13.7                | 46.7                    | 308                                  | 305                 | .069                              |
| February     | 12,621          | 11,515 | 39.8                                  | 13.8                | 46.4                    | 319                                  | 298                 | .068                              |
| March        | 12,708          | 11,733 | 40.0                                  | 14.0                | 46.0                    | 321                                  | 307                 | .068                              |
| April        | 12,684          | 11,741 | 39.9                                  | 13.8                | 46.3                    | 334                                  | 325                 | .062                              |
| May          | 12,566          | 11,724 | 39.7                                  | 14.4                | 45.9                    | 324                                  | 314                 | .063                              |
| June         | 12,508          | 11,674 | 39.5                                  | 14.6                | 45.9                    | 313                                  | 315                 | .064                              |
| July         | 12,578          | 11,737 | 38.9                                  | 14.9                | 46.2                    | 252                                  | 291                 | .066                              |
| August       | 12,286          | 11,635 | 39.5                                  | 14.1                | 46.4                    | 299                                  | 292                 | .070                              |
| September    | 12,287          | 11,599 | 39.4                                  | 13.8                | 46.8                    | 301                                  | 300                 | .068                              |
| October      | 12,190          | 11,478 | 37.9                                  | 14.0                | 48.1                    | 299                                  | 283                 | .068                              |
| November     | 12,216          | 11,406 | 38.1                                  | 13.5                | 48.4                    | 300                                  | 298                 | .064                              |
| December     | 12,402          | 11,537 | 38.2                                  | 13.3                | 48.5                    | 251                                  | 290                 | .066                              |
| <b>1989:</b> |                 |        |                                       |                     |                         |                                      |                     |                                   |
| January      | 12,077          | 11,267 | 38.4                                  | 13.8                | 47.8                    | 288                                  | 286                 | .071                              |
| February     | 11,963          | 11,183 | 37.9                                  | 14.0                | 48.1                    | 293                                  | 275                 | .071                              |
| March 1/     | 11,929          | 11,112 | 38.6                                  | 14.1                | 47.3                    | 291                                  | 278                 | .074                              |

1/ Preliminary.

Source: Bureau of the Census.

Table 15--Mill consumption of cotton, wool, and manmade fibers, quarterly, 1984-89

| Year                     |       | Cotton  | Wool  | Cellulosic | Noncellulosic | Total manmade | Total fiber | Cotton's share of total fiber |
|--------------------------|-------|---------|-------|------------|---------------|---------------|-------------|-------------------------------|
|                          |       |         |       |            |               |               |             | Percent                       |
| -----Million pounds----- |       |         |       |            |               |               |             | Percent                       |
| 1984                     | 1Q    | 738.2   | 40.1  | 159.8      | 1,873.1       | 2,032.9       | 2,811.2     | 26.3                          |
|                          | 2Q    | 695.4   | 40.2  | 152.7      | 1,906.6       | 2,059.3       | 2,794.9     | 24.9                          |
|                          | 3Q    | 648.8   | 32.0  | 143.3      | 1,785.9       | 1,929.2       | 2,610.0     | 24.9                          |
|                          | 4Q    | 633.7   | 29.8  | 132.1      | 1,812.6       | 1,944.7       | 2,608.2     | 25.0                          |
|                          | Total | 2,716.1 | 142.1 | 587.9      | 7,378.2       | 7,966.1       | 10,824.3    | 25.1                          |
| 1985                     | 1Q    | 662.3   | 29.9  | 127.0      | 1,818.7       | 1,945.7       | 2,637.9     | 25.1                          |
|                          | 2Q    | 695.6   | 30.4  | 132.5      | 1,934.4       | 2,066.9       | 2,792.9     | 24.9                          |
|                          | 3Q    | 711.4   | 27.9  | 138.2      | 1,956.7       | 2,094.9       | 2,834.2     | 25.1                          |
|                          | 4Q    | 744.1   | 28.4  | 147.9      | 1,970.1       | 2,118.0       | 2,890.5     | 25.1                          |
|                          | Total | 2,813.4 | 116.6 | 545.6      | 7,679.9       | 8,225.5       | 11,155.5    | 25.2                          |
| 1986                     | 1Q    | 786.3   | 35.0  | 150.8      | 1,944.4       | 2,095.2       | 2,916.5     | 27.0                          |
|                          | 2Q    | 810.6   | 36.0  | 153.5      | 1,976.1       | 2,129.6       | 2,976.2     | 27.2                          |
|                          | 3Q    | 808.0   | 32.9  | 153.6      | 2,049.1       | 2,202.7       | 3,043.6     | 26.5                          |
|                          | 4Q    | 849.8   | 32.8  | 150.4      | 2,074.1       | 2,224.5       | 3,107.1     | 27.3                          |
|                          | Total | 3,254.6 | 136.7 | 608.3      | 8,043.7       | 8,652.0       | 12,043.3    | 27.0                          |
| 1987                     | 1Q    | 904.4   | 36.6  | 140.2      | 2,090.8       | 2,231.0       | 3,172.0     | 28.5                          |
|                          | 2Q    | 939.8   | 37.5  | 143.2      | 2,147.7       | 2,290.9       | 3,268.2     | 28.8                          |
|                          | 3Q    | 967.5   | 33.8  | 146.2      | 2,129.8       | 2,276.0       | 3,277.3     | 29.5                          |
|                          | 4Q    | 941.5   | 34.9  | 156.0      | 2,094.0       | 2,250.0       | 3,226.4     | 29.2                          |
|                          | Total | 3,753.2 | 142.8 | 585.6      | 8,462.3       | 9,047.9       | 12,943.9    | 29.0                          |
| 1988                     | 1Q    | 948.2   | 38.3  | 152.2      | 2,103.8       | 2,256.0       | 3,242.5     | 29.2                          |
|                          | 2Q    | 885.0   | 37.2  | 159.0      | 2,154.5       | 2,313.5       | 3,235.7     | 27.4                          |
|                          | 3Q    | 849.8   | 34.5  | 151.8      | 2,111.1       | 2,262.9       | 3,147.2     | 27.0                          |
|                          | 4Q 1/ | 799.3   | 34.2  | 149.9      | 2,235.0       | 2,384.9       | 3,218.4     | 24.8                          |
|                          | Total | 3,482.3 | 144.2 | 612.9      | 8,604.4       | 9,217.3       | 12,843.8    | 27.1                          |
| 1989                     | 1Q    | 928.9   | 39.1  | 156.7      | 2,199.7       | 2,356.4       | 3,324.4     | 27.9                          |

1/ Preliminary.

Source: Bureau of the Census and Fiber Organon.

Table 16--U.S. fiber consumption: Total and per capita, by type of fiber

| Year and fiber         | U.S. mill use  | Percent of fibers | Textile trade 1/         |         | Total domestic consumption 2/ | Percent of fibers | Per capita 3/    |                      |
|------------------------|----------------|-------------------|--------------------------|---------|-------------------------------|-------------------|------------------|----------------------|
|                        |                |                   | Exports                  | Imports |                               |                   | Mill use         | Domestic consumption |
|                        | Million pounds | Percent           | -----Million pounds----- |         |                               | Percent           | -----Pounds----- |                      |
| <b>COTTON:</b>         |                |                   |                          |         |                               |                   |                  |                      |
| 1986                   | 3,254.6        | 27.0              | 274.7                    | 1,910.5 | 4,890.4                       | 31.0              | 13.5             | 20.2                 |
| 1987                   | 3,753.2        | 29.0              | 298.0                    | 2,335.7 | 5,790.9                       | 33.8              | 15.4             | 23.8                 |
| 1988                   | 3,482.3        | 27.1              | 330.3                    | 2,118.7 | 5,270.7                       | 31.9              | 14.1             | 21.4                 |
| <b>WOOL:</b>           |                |                   |                          |         |                               |                   |                  |                      |
| 1986                   | 136.7          | 1.2               | 16.0                     | 275.6   | 396.3                         | 2.5               | 0.6              | 1.6                  |
| 1987                   | 142.8          | 1.1               | 23.4                     | 276.1   | 395.5                         | 2.3               | 0.6              | 1.6                  |
| 1988                   | 144.2          | 1.1               | 30.6                     | 242.4   | 356.0                         | 2.2               | 0.6              | 1.4                  |
| <b>MANMADE FIBERS:</b> |                |                   |                          |         |                               |                   |                  |                      |
| 1986                   | 8,652.7        | 71.8              | 517.3                    | 1,703.0 | 9,838.4                       | 62.4              | 35.8             | 40.7                 |
| 1987                   | 9,065.7        | 70.0              | 591.9                    | 1,805.4 | 10,279.2                      | 59.8              | 37.2             | 42.1                 |
| 1988                   | 9,217.3        | 71.8              | 684.7                    | 1,735.7 | 10,268.3                      | 62.2              | 37.5             | 41.7                 |
| <b>FLAX AND SILK:</b>  |                |                   |                          |         |                               |                   |                  |                      |
| 1986                   | 4.8            | 4/                | N/A                      | 632.2   | 637.0                         | 4.1               | 4/               | 2.6                  |
| 1987                   | 4.7            | 4/                | N/A                      | 702.7   | 707.4                         | 4.1               | 4/               | 2.9                  |
| 1988                   | 5.0            | 4/                | N/A                      | 608.7   | 613.7                         | 3.7               | 4/               | 2.5                  |
| <b>ALL FIBERS 5/:</b>  |                |                   |                          |         |                               |                   |                  |                      |
| 1986                   | 12,048.8       | 100.0             | 808.0                    | 4,521.3 | 15,762.1                      | 100.0             | 49.9             | 65.2                 |
| 1987                   | 12,966.4       | 100.0             | 913.3                    | 5,119.9 | 17,173.0                      | 100.0             | 53.2             | 70.4                 |
| 1988                   | 12,848.8       | 100.0             | 1,045.6                  | 4,705.5 | 16,508.7                      | 100.0             | 52.3             | 67.1                 |

N/A = Not available.

1/ Raw fiber equivalent of imports and exports of textile products. 2/ Total domestic consumption is U.S. mill consumption plus net textile product trade balance. 3/ July 1 population for 1984 = 237.0 million, 1985 = 239.3 million, 1986 = 241.6 million, 1987 = 243.9 million, and 1988 = 246.1. 4/ Less than 0.05 pounds or 0.1 percent. 5/ Includes flax and silk.

Source: Bureau of the Census.





Table 18--Domestic shipments of manmade fibers by major category, 1986-89 1/

| Fiber type      | 1986  |       |       |       | 1987  |       |       |       | 1988  |       |       |       | 1989     |
|-----------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|----------|
|                 | 1 q   | 2 q   | 3 q   | 4 q   | 1 q   | 2 q   | 3 q   | 4 q   | 1 q   | 2 q   | 3 q   | 4 q   | 1 q      |
| Million pounds  |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Woven products: |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Total           | 534.4 | 533.6 | 536.7 | 535.4 | 524.7 | 563.2 | 559.1 | 586.3 | 559.8 | 569.7 | 564.9 | 630.2 | --       |
| Polyester       | 326.2 | 319.0 | 319.8 | 312.7 | 314.4 | 334.0 | 316.2 | 329.8 | 317.5 | 328.7 | 319.1 | 377.4 | --       |
| Rayon           | 53.9  | 53.2  | 55.1  | 55.8  | 52.9  | 55.2  | 59.9  | 62.7  | 58.7  | 60.5  | 63.5  | 60.3  | --       |
| Olefin          | 66.9  | 76.2  | 78.6  | 85.3  | 77.8  | 85.4  | 90.4  | 102.0 | 94.2  | 92.3  | 90.5  | 95.7  | --       |
| Nylon           | 38.2  | 38.0  | 35.1  | 35.8  | 37.1  | 39.0  | 43.1  | 41.0  | 40.1  | 36.7  | 38.1  | 40.6  | --       |
| Acetate         | 32.8  | 32.1  | 32.0  | 31.4  | 26.7  | 32.1  | 31.8  | 34.4  | 32.5  | 36.3  | 36.9  | 40.6  | --       |
| Acrylic         | 16.4  | 15.1  | 16.1  | 14.4  | 15.8  | 17.5  | 17.7  | 16.4  | 16.8  | 15.2  | 16.8  | 15.6  | --       |
| Knit products:  |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Total           | 345.8 | 364.3 | 357.2 | 355.4 | 368.6 | 375.0 | 339.8 | 331.3 | 327.1 | 343.4 | 326.7 | 366.8 | --       |
| Polyester       | 167.8 | 165.5 | 171.5 | 183.0 | 181.5 | 196.2 | 182.5 | 190.9 | 173.2 | 183.8 | 175.0 | 219.6 | --       |
| Nylon           | 68.3  | 65.1  | 60.0  | 59.4  | 63.7  | 63.5  | 63.5  | 60.9  | 61.8  | 64.7  | 64.1  | 70.8  | --       |
| Acrylic         | 95.9  | 117.7 | 111.6 | 99.9  | 112.7 | 105.2 | 87.5  | 72.1  | 85.3  | 86.3  | 80.6  | 70.0  | --       |
| Acetate         | 12.0  | 14.3  | 12.3  | 11.2  | 9.1   | 8.4   | 5.2   | 6.3   | 5.9   | 7.9   | 5.9   | 5.2   | --       |
| Rayon           | 1.8   | 1.7   | 1.8   | 2.0   | 1.6   | 1.7   | 1.1   | 1.1   | 0.9   | 0.7   | 1.1   | 1.2   | --       |
| Carpets:        |       |       |       |       |       |       |       |       |       |       |       |       |          |
| Total           | 582.7 | 623.9 | 694.7 | 700.3 | 686.3 | 722.0 | 732.8 | 675.0 | 722.1 | 729.0 | 733.4 | 732.6 | --       |
| Nylon           | 387.1 | 406.4 | 476.4 | 449.3 | 458.7 | 474.7 | 476.7 | 411.0 | 452.5 | 443.6 | 467.6 | 460.0 | 462.0 2/ |
| Olefin          | 164.2 | 178.9 | 181.9 | 212.5 | 180.8 | 196.6 | 204.7 | 203.9 | 203.3 | 216.3 | 203.5 | 208.7 | --       |
| Polyester       | 31.3  | 38.4  | 36.9  | 38.4  | 46.8  | 50.7  | 51.4  | 60.1  | 66.1  | 69.0  | 62.3  | 63.8  | 60.0     |
| Rayon           | 0.1   | 0.2   | --    | 0.1   | --    | --    | --    | --    | 0.2   | 0.1   | --    | 0.1   | --       |

1/ Filament plus staple. 2/ USDA estimate. -- = Figures not available.

Source: Textile Organon.

Table 19--Raw cotton equivalent of U.S. Imports by country, 1968

| Country of origin          | Yarn, thread, and woven fabric |                                       |  |               | Primarily manufactured products |                        |                        |                        |                             |
|----------------------------|--------------------------------|---------------------------------------|--|---------------|---------------------------------|------------------------|------------------------|------------------------|-----------------------------|
|                            | Yarn                           | Sewing thread, crochet, knitting yarn | ---Woven fabric---<br>100 percent cotton | Blends        | Total semi-manufactured         | Pile fabrics and mfrs. | Table damask and mfrs. | Bed clothes and towels | Gloves, hosiery, and hdkfs. |
| 1,000 pounds               |                                |                                       |  |               |                                 |                        |                        |                        |                             |
| <b>Western Hemisphere:</b> |                                |                                       |  |               |                                 |                        |                        |                        |                             |
| Argentina                  | 3,335                          | 2                                     | 5,847                                    | 120           | 9,305                           | ---                    | ---                    | 527                    | ---                         |
| Belize                     | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | ---                    | ---                         |
| Bolivia                    | 1,049                          | ---                                   | ---                                      | ---           | 1,049                           | ---                    | ---                    | ---                    | ---                         |
| Brazil                     | 13,598                         | 172                                   | 22,141                                   | 378           | 36,289                          | 913                    | ---                    | 15,823                 | 278                         |
| Br. Virgin Islands         | 54                             | ---                                   | 53                                       | ---           | 107                             | ---                    | ---                    | ---                    | 588                         |
| Canada                     | 343                            | 31                                    | 5,260                                    | 2,388         | 8,022                           | 109                    | ---                    | 439                    | 131                         |
| Chile                      | ---                            | ---                                   | 942                                      | 326           | 1,268                           | ---                    | ---                    | 1                      | ---                         |
| Colombia                   | 2,689                          | 13                                    | 8,514                                    | 45            | 11,261                          | 144                    | ---                    | 1,135                  | 21                          |
| Costa Rica                 | 154                            | ---                                   | ---                                      | 13            | 166                             | ---                    | ---                    | ---                    | 274                         |
| Dominican Republic         | 96                             | ---                                   | 31                                       | 5             | 132                             | 16                     | ---                    | 4                      | 21                          |
| El Salvador                | 7,018                          | ---                                   | 423                                      | ---           | 7,441                           | 157                    | ---                    | 1,745                  | ---                         |
| Guatemala                  | 1,173                          | 6                                     | 424                                      | 356           | 1,958                           | 466                    | 1                      | 506                    | 852                         |
| Haiti                      | ---                            | ---                                   | ---                                      | 3             | 3                               | ---                    | ---                    | 21                     | 99                          |
| Honduras                   | ---                            | ---                                   | 920                                      | 639           | 1,559                           | ---                    | ---                    | ---                    | 4                           |
| Jamaica                    | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | 445                    | 102                         |
| Mexico                     | 8,762                          | 1                                     | 6,357                                    | 121           | 15,241                          | 68                     | ---                    | 1,431                  | 6                           |
| Panama                     | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | ---                    | 11                          |
| Paraguay                   | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | ---                    | ---                         |
| Venezuela                  | ---                            | 7                                     | 410                                      | ---           | 417                             | ---                    | ---                    | 20                     | ---                         |
| Peru                       | 1,257                          | 6                                     | 7,848                                    | 154           | 9,264                           | 2                      | ---                    | 229                    | ---                         |
| Uruguay                    | ---                            | ---                                   | 37                                       | ---           | 37                              | ---                    | ---                    | ---                    | 3                           |
| Other                      | 289                            | ---                                   | 65                                       | 135           | 489                             | ---                    | ---                    | 12                     | 3                           |
| <b>Total</b>               | <b>39,817</b>                  | <b>238</b>                            | <b>59,272</b>                            | <b>4,683</b>  | <b>104,008</b>                  | <b>1,875</b>           | <b>1</b>               | <b>22,338</b>          | <b>2,390</b>                |
| <b>Western Europe:</b>     |                                |                                       |  |               |                                 |                        |                        |                        |                             |
| Belgium/Lux                | 134                            | 34                                    | 329                                      | 1,024         | 1,522                           | 160                    | 4                      | 606                    | 4                           |
| France                     | 199                            | 1,250                                 | 5,154                                    | 657           | 7,260                           | 372                    | 25                     | 535                    | 43                          |
| Greece                     | 32                             | ---                                   | 705                                      | ---           | 737                             | ---                    | ---                    | 4                      | 4                           |
| Ireland                    | ---                            | ---                                   | ---                                      | 38            | 39                              | 92                     | 1                      | 437                    | ---                         |
| Italy                      | 759                            | 67                                    | 2,397                                    | 5,278         | 8,501                           | 75                     | 27                     | 153                    | 95                          |
| Netherlands                | 12                             | 21                                    | 686                                      | 628           | 1,347                           | 79                     | ---                    | 17                     | 8                           |
| Portugal                   | 5                              | 21                                    | 4,042                                    | 183           | 4,251                           | 9                      | 4                      | 4,846                  | 3                           |
| Spain                      | 1,443                          | 10                                    | 326                                      | 116           | 1,896                           | 1                      | 5                      | 2,561                  | 8                           |
| Switzerland                | 506                            | 49                                    | 883                                      | 111           | 1,550                           | 1                      | 4                      | 56                     | 34                          |
| United Kingdom             | 20                             | 12                                    | 1,938                                    | 313           | 2,284                           | 12                     | 105                    | 352                    | 96                          |
| West Germany               | 1,513                          | 58                                    | 1,679                                    | 1,014         | 4,264                           | 122                    | 75                     | 401                    | 33                          |
| Other                      | 16                             | 28                                    | 421                                      | 261           | 727                             | 8                      | 1                      | 138                    | 28                          |
| <b>Total</b>               | <b>4,639</b>                   | <b>1,550</b>                          | <b>18,560</b>                            | <b>9,623</b>  | <b>34,378</b>                   | <b>931</b>             | <b>251</b>             | <b>10,106</b>          | <b>353</b>                  |
| <b>Eastern Europe:</b>     |                                |                                       |  |               |                                 |                        |                        |                        |                             |
| Bulgaria                   | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | ---                    | ---                         |
| Czechoslovakia             | ---                            | ---                                   | 167                                      | 4             | 171                             | ---                    | 160                    | 2                      | 18                          |
| East Germany               | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | ---                    | ---                         |
| Hungary                    | 1,299                          | ---                                   | 3,035                                    | 117           | 4,451                           | ---                    | 118                    | 102                    | 3                           |
| Poland                     | ---                            | ---                                   | 1,175                                    | 64            | 1,239                           | 3                      | ---                    | 618                    | ---                         |
| Romania                    | ---                            | ---                                   | 12                                       | 357           | 369                             | ---                    | ---                    | 419                    | ---                         |
| U.S.S.R.                   | 11                             | ---                                   | 3,064                                    | ---           | 3,075                           | ---                    | ---                    | ---                    | ---                         |
| Yugoslavia                 | 1,217                          | ---                                   | 326                                      | 154           | 1,697                           | 1                      | ---                    | 20                     | ---                         |
| <b>Total</b>               | <b>2,527</b>                   | <b>---</b>                            | <b>7,779</b>                             | <b>696</b>    | <b>11,002</b>                   | <b>4</b>               | <b>278</b>             | <b>1,161</b>           | <b>21</b>                   |
| <b>Asia/Oceania:</b>       |                                |                                       |  |               |                                 |                        |                        |                        |                             |
| Bangladesh                 | ---                            | ---                                   | ---                                      | ---           | ---                             | 2                      | ---                    | 783                    | 292                         |
| Australia                  | ---                            | ---                                   | 13                                       | 233           | 246                             | ---                    | ---                    | 360                    | 1                           |
| China-Mainland             | 6,294                          | 425                                   | 50,379                                   | 8,001         | 65,099                          | 9,126                  | 549                    | 45,018                 | 12,333                      |
| Hong Kong                  | 7                              | ---                                   | 53,061                                   | 7,961         | 61,029                          | 272                    | 2                      | 3,014                  | 8,449                       |
| India                      | 1,976                          | 50                                    | 44,666                                   | 195           | 46,909                          | 253                    | 14                     | 7,708                  | 663                         |
| Iran                       | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | ---                    | ---                         |
| Iraq                       | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | ---                    | ---                         |
| Israel                     | 703                            | ---                                   | 267                                      | 75            | 1,045                           | 86                     | ---                    | 1,819                  | ---                         |
| Japan                      | 503                            | 11                                    | 13,148                                   | 3,218         | 16,879                          | 928                    | ---                    | 421                    | 1,088                       |
| Korea                      | 6,235                          | ---                                   | 20,501                                   | 5,875         | 32,611                          | 60                     | ---                    | 528                    | 936                         |
| Malaysia                   | 2,682                          | ---                                   | 3,451                                    | 4,288         | 10,420                          | ---                    | ---                    | 1,332                  | 600                         |
| Maldives Is.               | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | 6                      | ---                         |
| Pakistan                   | 299                            | ---                                   | 22,355                                   | 3,873         | 26,528                          | 6,484                  | 9                      | 37,959                 | 1,496                       |
| Philippines                | ---                            | ---                                   | 1,969                                    | 175           | 2,144                           | 11                     | ---                    | 3,096                  | 1,830                       |
| Singapore                  | ---                            | ---                                   | 229                                      | 4             | 233                             | ---                    | ---                    | 20                     | 208                         |
| Taiwan                     | 976                            | 4                                     | 33,076                                   | 9,228         | 43,285                          | 540                    | ---                    | 11,716                 | 1,085                       |
| Turkey                     | 5,032                          | 1                                     | 12,164                                   | 820           | 18,016                          | 49                     | ---                    | 1,887                  | 1                           |
| U Arab Em                  | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | 145                    | ---                         |
| Indonesia                  | ---                            | ---                                   | 8,196                                    | 11,806        | 20,002                          | ---                    | ---                    | 2,261                  | 892                         |
| Sri Lanka                  | ---                            | ---                                   | 1  | ---           | 1                               | 220                    | ---                    | 4,730                  | 1,458                       |
| Thailand                   | 14,694                         | 79                                    | 11,710                                   | 6,766         | 33,249                          | 1,446                  | ---                    | 4,682                  | 391                         |
| Macao                      | ---                            | ---                                   | 118                                      | ---           | 118                             | ---                    | ---                    | ---                    | ---                         |
| Burma                      | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | 75                     | ---                         |
| Nepal                      | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | ---                    | ---                         |
| Other                      | 101                            | ---                                   | 129                                      | 2             | 232                             | ---                    | ---                    | 13                     | 396                         |
| <b>Total</b>               | <b>39,504</b>                  | <b>570</b>                            | <b>275,333</b>                           | <b>62,519</b> | <b>377,926</b>                  | <b>19,476</b>          | <b>575</b>             | <b>127,582</b>         | <b>32,147</b>               |
| <b>Africa:</b>             |                                |                                       |  |               |                                 |                        |                        |                        |                             |
| Egypt                      | 6,526                          | 1                                     | 9,538                                    | ---           | 16,065                          | ---                    | ---                    | 274                    | 428                         |
| Ivory Coast                | ---                            | ---                                   | 853                                      | ---           | 853                             | ---                    | ---                    | ---                    | ---                         |
| Lesotho                    | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | ---                    | ---                         |
| Malawi                     | ---                            | ---                                   | 1,224                                    | ---           | 1,224                           | ---                    | ---                    | ---                    | ---                         |
| Morocco                    | ---                            | ---                                   | 82                                       | 19            | 101                             | ---                    | ---                    | 4                      | 26                          |
| South Africa               | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | ---                    | ---                         |
| Swaziland                  | ---                            | ---                                   | 1  | ---           | 1                               | ---                    | ---                    | ---                    | 180                         |
| Tanzania                   | 108                            | ---                                   | 686                                      | 17            | 811                             | ---                    | ---                    | ---                    | ---                         |
| Tunisia                    | ---                            | ---                                   | 716                                      | ---           | 716                             | ---                    | ---                    | ---                    | ---                         |
| Zimbabwe                   | ---                            | ---                                   | 488                                      | ---           | 488                             | ---                    | ---                    | ---                    | ---                         |
| Nigeria                    | ---                            | ---                                   | 1,420                                    | ---           | 1,420                           | ---                    | ---                    | ---                    | ---                         |
| Madagascar                 | ---                            | ---                                   | 762                                      | ---           | 762                             | ---                    | ---                    | ---                    | ---                         |
| Mauritius                  | ---                            | ---                                   | ---                                      | ---           | ---                             | ---                    | ---                    | 363                    | 12                          |
| Other                      | 64                             | ---                                   | 470                                      | 2             | 536                             | ---                    | ---                    | 61                     | 195                         |
| <b>Total</b>               | <b>6,698</b>                   | <b>1</b>                              | <b>16,240</b>                            | <b>38</b>     | <b>22,977</b>                   | <b>12</b>              | <b>---</b>             | <b>703</b>             | <b>839</b>                  |
| <b>World total</b>         | <b>93,189</b>                  | <b>2,361</b>                          | <b>377,182</b>                           | <b>77,720</b> | <b>550,451</b>                  | <b>22,301</b>          | <b>1,104</b>           | <b>161,893</b>         | <b>35,762</b>               |

Continued--

Table 10--Raw cotton equivalent of U.S. imports by country, 1988--Continued

| Country of origin          | Primarily manufactured products |                           |                                 |                |                |               |                              | Grand total      |
|----------------------------|---------------------------------|---------------------------|---------------------------------|----------------|----------------|---------------|------------------------------|------------------|
|                            | Other wearing apparel           | Lace fabrics and articles | Household and clothing articles | Misc. products | Floor covering | Knit fabric   | Total primarily manufactured |                  |
| 1,000 pounds               |                                 |                           |                                 |                |                |               |                              |                  |
| <b>Western Hemisphere:</b> |                                 |                           |                                 |                |                |               |                              |                  |
| Argentina                  | 5,794                           | ---                       | ---                             | 1              | ---            | 363           | 6,685                        | 15,990           |
| Belize                     | 3,558                           | ---                       | ---                             | ---            | ---            | ---           | 3,558                        | 3,558            |
| Bolivia                    | 260                             | ---                       | ---                             | ---            | ---            | ---           | 261                          | 1,310            |
| Brazil                     | 23,595                          | 59                        | 1,805                           | 427            | ---            | 720           | 43,620                       | 79,910           |
| Br. Virgin Islands         | 1,838                           | 4                         | 14                              | 38             | ---            | 24            | 2,505                        | 2,613            |
| Canada                     | 6,887                           | 290                       | 58                              | 1,324          | 135            | 610           | 9,962                        | 18,004           |
| Chile                      | 5,124                           | ---                       | ---                             | ---            | ---            | ---           | 5,124                        | 6,394            |
| Colombia                   | 6,252                           | 4                         | 13                              | 16             | ---            | ---           | 7,594                        | 18,856           |
| Costa Rica                 | 22,498                          | 4                         | 134                             | 5              | ---            | 16            | 22,930                       | 23,097           |
| Dominican Republic         | 43,898                          | 689                       | 134                             | 1,909          | ---            | ---           | 46,672                       | 46,804           |
| El Salvador                | 2,463                           | 4                         | 20                              | 65             | ---            | ---           | 4,453                        | 11,894           |
| Guatemala                  | 9,443                           | 9                         | 45                              | 631            | 17             | 390           | 12,360                       | 14,318           |
| Haiti                      | 12,919                          | 13                        | 104                             | 340            | 96             | ---           | 13,593                       | 13,596           |
| Honduras                   | 4,957                           | ---                       | 43                              | 265            | ---            | ---           | 5,269                        | 6,827            |
| Jamaica                    | 22,707                          | 11                        | 56                              | 6              | ---            | ---           | 28,328                       | 28,328           |
| Mexico                     | 45,257                          | 129                       | 188                             | 2,302          | 6              | ---           | 49,387                       | 64,627           |
| Paraguay                   | 3,666                           | ---                       | 7                               | 608            | ---            | ---           | 4,292                        | 4,292            |
| Paraguay                   | 1,670                           | ---                       | ---                             | ---            | ---            | ---           | 1,670                        | 1,670            |
| Venezuela                  | 2,154                           | ---                       | 2                               | 57             | ---            | ---           | 2,232                        | 2,649            |
| Peru                       | 3,063                           | 3                         | 12                              | 5              | ---            | 99            | 3,412                        | 12,677           |
| Uruguay                    | 2,773                           | ---                       | ---                             | 6              | ---            | ---           | 2,780                        | 2,817            |
| Other                      | 1,327                           | ---                       | 6                               | 3              | ---            | ---           | 1,332                        | 1,841            |
| <b>Total</b>               | <b>237,113</b>                  | <b>1,219</b>              | <b>2,641</b>                    | <b>8,008</b>   | <b>254</b>     | <b>2,222</b>  | <b>278,064</b>               | <b>382,072</b>   |
| <b>Western Europe:</b>     |                                 |                           |                                 |                |                |               |                              |                  |
| Belgium-Lux                | 165                             | 8                         | 72                              | 13             | 451            | 1             | 1,484                        | 3,006            |
| France                     | 2,371                           | 318                       | 54                              | 407            | 8              | 194           | 4,328                        | 11,588           |
| Greece                     | 4,849                           | 3                         | ---                             | 3              | 95             | ---           | 4,956                        | 5,693            |
| Ireland                    | 576                             | 5                         | 1                               | 2              | 141            | ---           | 1,253                        | 1,292            |
| Italy                      | 6,788                           | 74                        | 50                              | 703            | 13             | 276           | 8,253                        | 16,753           |
| Netherlands                | 378                             | 33                        | 10                              | 137            | 190            | ---           | 853                          | 2,200            |
| Portugal                   | 8,974                           | 1                         | 79                              | 3              | 141            | 2             | 14,062                       | 18,313           |
| Spain                      | 370                             | 21                        | 237                             | 36             | 91             | ---           | 3,329                        | 5,225            |
| Switzerland                | 155                             | 15                        | 16                              | 256            | 20             | 30            | 586                          | 2,136            |
| United Kingdom             | 2,598                           | 410                       | 477                             | 710            | 633            | 201           | 5,625                        | 7,909            |
| West Germany               | 870                             | 179                       | 89                              | 838            | 28             | 193           | 2,820                        | 7,093            |
| Other                      | 1,665                           | 16                        | 124                             | 64             | 80             | 111           | 2,239                        | 2,944            |
| <b>Total</b>               | <b>29,759</b>                   | <b>1,083</b>              | <b>1,209</b>                    | <b>3,202</b>   | <b>1,891</b>   | <b>1,008</b>  | <b>49,797</b>                | <b>84,172</b>    |
| <b>Eastern Europe:</b>     |                                 |                           |                                 |                |                |               |                              |                  |
| Bulgaria                   | 44                              | ---                       | 1                               | ---            | ---            | ---           | 46                           | 46               |
| Czechoslovakia             | 20                              | 31                        | 13                              | ---            | ---            | ---           | 244                          | 415              |
| East Germany               | 926                             | 3                         | ---                             | ---            | ---            | ---           | 930                          | 930              |
| Hungary                    | 1,242                           | 2                         | 27                              | ---            | 29             | ---           | 1,524                        | 5,974            |
| Poland                     | 4,159                           | ---                       | ---                             | 16             | ---            | ---           | 4,796                        | 6,035            |
| Romania                    | 9,776                           | ---                       | ---                             | ---            | 6              | ---           | 10,201                       | 10,569           |
| U.S.S.R.                   | 8                               | ---                       | ---                             | ---            | ---            | ---           | 8                            | 3,083            |
| Yugoslavia                 | 4,359                           | 1                         | 3                               | 87             | 1              | ---           | 4,473                        | 6,171            |
| <b>Total</b>               | <b>20,534</b>                   | <b>37</b>                 | <b>44</b>                       | <b>103</b>     | <b>36</b>      | <b>---</b>    | <b>22,222</b>                | <b>33,223</b>    |
| <b>Asia/Oceania:</b>       |                                 |                           |                                 |                |                |               |                              |                  |
| Bangladesh                 | 35,265                          | ---                       | 3                               | 1              | ---            | 11            | 36,356                       | 36,356           |
| Australia                  | 663                             | 1                         | 48                              | 34             | 88             | 10            | 1,205                        | 1,451            |
| China-Mainland             | 135,280                         | 2,963                     | 17,547                          | 16,204         | 839            | 3,499         | 243,356                      | 308,455          |
| Hong Kong                  | 213,376                         | 2,185                     | 595                             | 1,675          | 71             | 2,057         | 231,696                      | 292,725          |
| India                      | 37,966                          | 72                        | 9,297                           | 1,643          | 16,263         | 15            | 73,893                       | 120,802          |
| Iran                       | 2                               | ---                       | ---                             | ---            | 5              | ---           | 2                            | 2                |
| Iraq                       | ---                             | ---                       | ---                             | ---            | 7              | ---           | 7                            | 7                |
| Israel                     | 3,655                           | 1                         | ---                             | 95             | 4              | 843           | 6,503                        | 7,548            |
| Japan                      | 8,660                           | 19                        | 46                              | 259            | 866            | 49            | 12,337                       | 29,216           |
| Korea                      | 92,442                          | 100                       | 101                             | 3,856          | 217            | 353           | 98,991                       | 131,202          |
| Malaysia                   | 23,381                          | 3                         | 44                              | 9              | 1              | 169           | 25,541                       | 35,961           |
| Maldives Is.               | 1,266                           | ---                       | ---                             | ---            | ---            | ---           | 1,281                        | 1,281            |
| Pakistan                   | 28,215                          | 649                       | 449                             | 766            | 13             | 66            | 76,107                       | 102,634          |
| Philippines                | 45,780                          | 157                       | 559                             | 2,092          | 34             | ---           | 53,560                       | 55,704           |
| Singapore                  | 32,735                          | ---                       | ---                             | ---            | ---            | ---           | 32,979                       | 33,213           |
| Taiwan                     | 96,222                          | 555                       | 911                             | 11,576         | 4              | 843           | 123,452                      | 166,737          |
| Turkey                     | 28,466                          | 696                       | 540                             | 14             | 387            | 42            | 32,082                       | 50,098           |
| U Arab Em.                 | 7,263                           | ---                       | 18                              | ---            | ---            | ---           | 7,426                        | 7,426            |
| Indonesia                  | 33,899                          | ---                       | 82                              | 31             | ---            | 5             | 37,170                       | 57,172           |
| Sri Lanka                  | 29,471                          | ---                       | 30                              | 327            | ---            | ---           | 36,256                       | 36,257           |
| Thailand                   | 19,511                          | 14                        | 218                             | 1,616          | 100            | 195           | 28,171                       | 61,420           |
| Burma                      | 929                             | ---                       | ---                             | ---            | ---            | ---           | 1,004                        | 1,004            |
| Nepal                      | 4,095                           | ---                       | 1                               | 19             | 2              | ---           | 4,118                        | 4,118            |
| Macao                      | 24,768                          | ---                       | 29                              | 50             | ---            | 1             | 25,244                       | 25,362           |
| Other                      | 2,643                           | ---                       | 3                               | 13             | 115            | ---           | 2,827                        | 2,941            |
| <b>Total</b>               | <b>905,953</b>                  | <b>7,415</b>              | <b>30,521</b>                   | <b>40,279</b>  | <b>19,011</b>  | <b>8,174</b>  | <b>1,191,144</b>             | <b>1,569,071</b> |
| <b>Africa:</b>             |                                 |                           |                                 |                |                |               |                              |                  |
| Egypt                      | 4,702                           | ---                       | 14                              | 2              | 6              | ---           | 5,426                        | 21,491           |
| Ivory Coast                | 12                              | 1                         | 1                               | 3              | ---            | ---           | 16                           | 869              |
| Lesotho                    | 2,001                           | ---                       | ---                             | 2              | ---            | ---           | 2,003                        | 2,003            |
| Malawi                     | 740                             | ---                       | ---                             | ---            | ---            | ---           | 740                          | 1,964            |
| Morocco                    | 2,587                           | ---                       | ---                             | 1              | 5              | ---           | 2,623                        | 2,724            |
| South Africa               | 16                              | ---                       | ---                             | ---            | ---            | ---           | 16                           | 16               |
| Swaziland                  | 312                             | ---                       | ---                             | 26             | ---            | ---           | 519                          | 519              |
| Tanzania                   | 68                              | ---                       | ---                             | ---            | ---            | ---           | 68                           | 879              |
| Tunisia                    | 112                             | ---                       | 22                              | ---            | 5              | ---           | 134                          | 850              |
| Zimbabwe                   | 525                             | ---                       | 1                               | ---            | ---            | ---           | 527                          | 1,015            |
| Nigeria                    | 2                               | ---                       | ---                             | ---            | ---            | ---           | 2                            | 1,422            |
| Madagascar                 | ---                             | ---                       | ---                             | ---            | ---            | ---           | ---                          | 762              |
| Mauritius                  | 13,931                          | ---                       | ---                             | ---            | ---            | 7             | 14,326                       | 14,326           |
| Other                      | 413                             | ---                       | 3                               | 18             | ---            | ---           | 687                          | 1,226            |
| <b>Total</b>               | <b>25,421</b>                   | <b>2</b>                  | <b>41</b>                       | <b>52</b>      | <b>11</b>      | <b>7</b>      | <b>27,087</b>                | <b>50,066</b>    |
| <b>World total</b>         | <b>1,218,801</b>                | <b>9,754</b>              | <b>34,461</b>                   | <b>51,596</b>  | <b>21,232</b>  | <b>11,418</b> | <b>1,568,317</b>             | <b>2,115,775</b> |

--- = 0.

1/ Difference between official total and sum of subtotals. Totals may not add because of rounding.

Source: Bureau of the Census.

Table 20--Raw cotton equivalent of U.S. textile exports by country, 1988

| Country of destination | Yarn, thread, twine, and woven fabric |                                       |                   |                    |        | Primarily manufactured products |             |                          |        |
|------------------------|---------------------------------------|---------------------------------------|-------------------|--------------------|--------|---------------------------------|-------------|--------------------------|--------|
|                        | Yarn                                  | Sewing thread, crochet, knitting yarn | Twine and cordege | Broad woven fabric |        | Total semi-manufactured         | Knit fabric | Quilts, spreads, pillows | Towels |
|                        |                                       |                                       |                   | 100-percent cotton | Blends |                                 |             |                          |        |
| 1,000 pounds           |                                       |                                       |                   |                    |        |                                 |             |                          |        |
| Western Hemisphere:    |                                       |                                       |                   |                    |        |                                 |             |                          |        |
| Bahamas                | 10                                    | 3                                     | 4                 | 73                 | 410    | 500                             | 66          | 121                      | 60     |
| Barbados               | 26                                    | 224                                   | ---               | 434                | 45     | 729                             | 83          | 33                       | 21     |
| Belize                 | 1                                     | 95                                    | ---               | 15                 | 51     | 162                             | 1           | 6                        | ---    |
| Bermuda                | 4                                     | ---                                   | 1                 | 60                 | 11     | 76                              | 4           | 37                       | 54     |
| Br. Virgin Islands     | 5                                     | ---                                   | 48                | 139                | 61     | 254                             | 46          | 17                       | 28     |
| Canada                 | 6,580                                 | 194                                   | 34.7              | 12,757             | 1,094  | 20,973                          | 1,065       | 1,418                    | 1,581  |
| Chile                  | 1                                     | ---                                   | 29                | 721                | 321    | 1,072                           | ---         | 227                      | 6      |
| Colombia               | 49                                    | 136                                   | 4                 | 168                | 40     | 398                             | 126         | 35                       | 3      |
| Costa Rica             | 118                                   | 64                                    | 4                 | 1,034              | 49     | 1,268                           | 11          | 592                      | 15     |
| Cuba                   | ---                                   | ---                                   | ---               | ---                | ---    | ---                             | ---         | ---                      | ---    |
| Dominican Republic     | 277                                   | 268                                   | 55                | 5,521              | 110    | 6,230                           | 60          | 136                      | 24     |
| El Salvador            | 48                                    | 5                                     | 1                 | 95                 | 1      | 151                             | 24          | 1                        | ---    |
| Guatemala              | 97                                    | 34                                    | 3                 | 214                | 5      | 354                             | 10          | 11                       | 7      |
| Guyana                 | 18                                    | 1                                     | ---               | 16                 | 86     | 121                             | 2           | ---                      | ---    |
| Haiti                  | 132                                   | 378                                   | 24                | 624                | 60     | 1,218                           | 40          | 13                       | 1      |
| Honduras               | 46                                    | 60                                    | 6                 | 184                | 19     | 315                             | 22          | 9                        | ---    |
| Jamaica                | 131                                   | 110                                   | 22                | 1,151              | 129    | 1,542                           | 78          | 99                       | 122    |
| Mexico                 | 1,437                                 | 745                                   | 127               | 3,820              | 264    | 6,393                           | 536         | 1,664                    | 440    |
| N. Antilles            | 37                                    | 5                                     | 9                 | 192                | 65     | 308                             | 4           | 121                      | 99     |
| Nicaragua              | ---                                   | ---                                   | ---               | ---                | ---    | ---                             | ---         | ---                      | ---    |
| Panama                 | 44                                    | 29                                    | 22                | 314                | 55     | 464                             | 28          | 399                      | 10     |
| Paraguay               | 1                                     | ---                                   | 1                 | 2,599              | 1      | 2,602                           | 10          | 2                        | 3      |
| Trinidad               | 23                                    | 2                                     | 6                 | 159                | 48     | 238                             | 75          | 1                        | 3      |
| Venezuela              | 202                                   | 118                                   | ---               | 481                | 21     | 822                             | 94          | 763                      | 256    |
| Other                  | 119                                   | 3                                     | 10                | 503                | 176    | 811                             | 9           | 61                       | 24     |
| Total                  | 9,406                                 | 2,473                                 | 721               | 31,278             | 3,123  | 47,001                          | 2,394       | 5,768                    | 2,756  |
| Western Europe:        |                                       |                                       |                   |                    |        |                                 |             |                          |        |
| Belgium-Luxem.         | 772                                   | 6                                     | ---               | 9,217              | 6      | 10,000                          | 15          | 23                       | 123    |
| Denmark                | 2                                     | 1                                     | ---               | 228                | 76     | 307                             | 3           | 3                        | 33     |
| France                 | 144                                   | 42                                    | 2                 | 2,830              | 70     | 3,088                           | 203         | 429                      | 90     |
| Greece                 | ---                                   | 77                                    | 6                 | 165                | 17     | 265                             | 1           | 188                      | 277    |
| Ireland                | 4,524                                 | 340                                   | 5                 | 541                | 32     | 5,441                           | 1           | 9                        | ---    |
| Italy                  | 208                                   | 57                                    | 9                 | 12,495             | 166    | 12,934                          | 47          | 61                       | 134    |
| Netherlands            | 4                                     | ---                                   | ---               | 780                | 69     | 853                             | 9           | 64                       | 26     |
| Spain                  | 5                                     | 2                                     | 5                 | 273                | 1      | 286                             | 27          | 172                      | 12     |
| Sweden                 | 85                                    | 17                                    | 4                 | 216                | 11     | 333                             | 12          | 12                       | 258    |
| Switzerland            | 15                                    | 14                                    | ---               | 240                | 24     | 292                             | 19          | 9                        | 38     |
| United Kingdom         | 749                                   | 37                                    | 22                | 10,696             | 776    | 12,279                          | 21          | 147                      | 214    |
| W. Germany             | 526                                   | 33                                    | 13                | 2,566              | 146    | 3,283                           | 55          | 93                       | 205    |
| Other                  | 13                                    | 4                                     | 12                | 608                | 5      | 642                             | 14          | 50                       | 141    |
| Total                  | 7,047                                 | 629                                   | 79                | 40,855             | 1,397  | 50,007                          | 426         | 1,257                    | 1,550  |
| Eastern Europe:        |                                       |                                       |                   |                    |        |                                 |             |                          |        |
| Albania                | ---                                   | ---                                   | ---               | ---                | ---    | ---                             | ---         | ---                      | ---    |
| Bulgaria               | ---                                   | ---                                   | ---               | ---                | ---    | ---                             | ---         | ---                      | ---    |
| Czechoslovakia         | ---                                   | ---                                   | ---               | ---                | ---    | ---                             | ---         | ---                      | ---    |
| East Germany           | ---                                   | ---                                   | ---               | ---                | ---    | ---                             | ---         | ---                      | ---    |
| Hungary                | 1                                     | 2                                     | ---               | 130                | ---    | 134                             | 6           | ---                      | ---    |
| Poland                 | ---                                   | ---                                   | ---               | 284                | 1      | 284                             | ---         | ---                      | ---    |
| Romania                | ---                                   | ---                                   | ---               | ---                | ---    | ---                             | ---         | ---                      | ---    |
| U.S.S.R.               | ---                                   | ---                                   | ---               | 12                 | ---    | 12                              | ---         | ---                      | ---    |
| Yugoslavia             | 1                                     | ---                                   | ---               | 514                | 13     | 528                             | ---         | ---                      | ---    |
| Total                  | 2                                     | 2                                     | ---               | 940                | 14     | 958                             | 6           | ---                      | ---    |
| Asia/Oceania:          |                                       |                                       |                   |                    |        |                                 |             |                          |        |
| Australia              | 198                                   | 7                                     | 99                | 1,546              | 120    | 1,970                           | 122         | 114                      | 351    |
| China-Mainland         | 125                                   | ---                                   | ---               | 272                | 21     | 417                             | ---         | 9                        | 2      |
| Hong Kong              | 258                                   | 87                                    | 5                 | 1,192              | 92     | 1,635                           | 50          | 296                      | 226    |
| Iraq                   | ---                                   | ---                                   | ---               | ---                | ---    | ---                             | ---         | ---                      | ---    |
| Iraq                   | 2,518                                 | ---                                   | ---               | ---                | ---    | 2,518                           | ---         | ---                      | ---    |
| Israel                 | 1,754                                 | ---                                   | 76                | 572                | 123    | 2,525                           | 56          | 9                        | 16     |
| Japan                  | 214                                   | 50                                    | 57                | 1,979              | 104    | 2,404                           | 60          | 198                      | 1,051  |
| Jordan                 | 383                                   | ---                                   | ---               | 48                 | 1      | 432                             | ---         | 5                        | 1      |
| Korea                  | 247                                   | 68                                    | 5                 | 410                | 25     | 754                             | 67          | 9                        | 2      |
| Kuwait                 | ---                                   | ---                                   | ---               | 269                | 4      | 273                             | 8           | 148                      | 152    |
| Lebanon                | ---                                   | ---                                   | ---               | 120                | 66     | 186                             | 25          | 13                       | 3      |
| Malaysia               | 10                                    | ---                                   | 4                 | 255                | 11     | 280                             | 7           | 99                       | 12     |
| New Zealand            | 117                                   | 2                                     | 28                | 1,086              | 20     | 1,252                           | 9           | 14                       | 461    |
| Philippines            | 51                                    | ---                                   | ---               | 967                | 285    | 1,302                           | 391         | 7                        | ---    |
| Saudi Arabia           | 1                                     | 3                                     | ---               | 1,724              | 38     | 1,766                           | 12          | 1,601                    | 838    |
| Singapore              | 10                                    | ---                                   | 7                 | 819                | 24     | 860                             | 2           | 279                      | 251    |
| Taiwan                 | 41                                    | 1                                     | 2                 | 175                | 16     | 235                             | ---         | 45                       | 48     |
| U. Arab Em.            | 7                                     | ---                                   | ---               | 123                | 7      | 137                             | ---         | 377                      | 266    |
| Other                  | 19                                    | 3                                     | ---               | 268                | 22     | 312                             | 6           | 134                      | 76     |
| Total                  | 5,951                                 | 222                                   | 282               | 11,827             | 976    | 19,258                          | 815         | 3,356                    | 3,756  |
| Africa:                |                                       |                                       |                   |                    |        |                                 |             |                          |        |
| Benin                  | ---                                   | ---                                   | ---               | 405                | ---    | 405                             | ---         | ---                      | ---    |
| Burkina Faso           | ---                                   | ---                                   | ---               | 549                | ---    | 549                             | ---         | ---                      | ---    |
| Gambia                 | ---                                   | ---                                   | ---               | ---                | ---    | ---                             | ---         | 2                        | ---    |
| Ivory Coast            | ---                                   | ---                                   | ---               | 556                | ---    | 556                             | ---         | 132                      | ---    |
| Morocco                | 191                                   | ---                                   | 2                 | 109                | ---    | 302                             | ---         | ---                      | 17     |
| South Africa           | 35                                    | ---                                   | 1                 | 141                | 7      | 183                             | 37          | 3                        | ---    |
| Nigeria                | 9                                     | 38                                    | ---               | 207                | 78     | 331                             | 21          | ---                      | ---    |
| Other                  | 39                                    | 27                                    | 5                 | 394                | 153    | 617                             | ---         | 41                       | 14     |
| Total                  | 272                                   | 65                                    | 9                 | 2,363              | 237    | 2,946                           | 57          | 179                      | 31     |
| World total            | 22,678                                | 3,391                                 | 1,091             | 87,264             | 5,747  | 120,171                         | 3,698       | 10,559                   | 8,093  |

Continued--

Table 20--Raw cotton equivalent of U.S. textile exports by country, 1988--Continued

| Country of destination | Primarily manufactured products |                 |          |                                 |                     |                | Total manufactured | Grand total |
|------------------------|---------------------------------|-----------------|----------|---------------------------------|---------------------|----------------|--------------------|-------------|
|                        | House furnishings, misc.        | Wearing apparel |          | Household and clothing articles | Industrial products | Floor covering |                    |             |
|                        |                                 | Knit            | Non-knit |                                 |                     |                |                    |             |
| 1,000 pounds           |                                 |                 |          |                                 |                     |                |                    |             |
| Western Hemisphere:    |                                 |                 |          |                                 |                     |                |                    |             |
| Bahamas                | 11                              | 245             | 57       | 177                             | 50                  | 343            | 1,131              | 1,631       |
| Barbados               | 1                               | 872             | 14       | 10                              | 72                  | 115            | 1,221              | 1,951       |
| Belize                 | ---                             | 63              | 2,750    | ---                             | 52                  | ---            | 2,873              | 3,035       |
| Bermuda                | 9                               | 130             | 55       | 19                              | 8                   | 85             | 401                | 477         |
| Br. Virgin Islands     | 1                               | 53              | 583      | 13                              | 95                  | 70             | 907                | 1,161       |
| Canada                 | 284                             | 1,692           | 1,423    | 4,116                           | 5,576               | 4,466          | 21,620             | 42,593      |
| Chile                  | ---                             | 25              | 17       | 37                              | 444                 | 35             | 791                | 1,863       |
| Colombia               | 1                               | 857             | 1,190    | 101                             | 212                 | 89             | 2,613              | 3,011       |
| Costa Rica             | ---                             | 3,263           | 4,684    | 244                             | 250                 | 9              | 9,067              | 10,335      |
| Cuba                   | ---                             | ---             | ---      | ---                             | ---                 | ---            | ---                | ---         |
| Dominican Republic     | 5                               | 7,016           | 11,584   | 116                             | 4,592               | 51             | 23,585             | 29,815      |
| El Salvador            | 2                               | 94              | 930      | 79                              | 374                 | 2              | 1,506              | 1,657       |
| Guatemala              | ---                             | 595             | 1,505    | 127                             | 501                 | 71             | 2,826              | 3,180       |
| Guyana                 | ---                             | 101             | 667      | 6                               | 19                  | 4              | 799                | 920         |
| Haiti                  | ---                             | 3,693           | 5,119    | 211                             | 709                 | 18             | 9,803              | 11,021      |
| Honduras               | ---                             | 690             | 2,461    | 102                             | 438                 | 13             | 3,735              | 4,050       |
| Jamaica                | 22                              | 9,824           | 3,886    | 239                             | 341                 | 181            | 14,793             | 16,335      |
| Mexico                 | 121                             | 9,042           | 17,102   | 1,081                           | 3,573               | 526            | 34,085             | 40,478      |
| N. Antilles            | 18                              | 329             | 155      | 63                              | 59                  | 127            | 977                | 1,284       |
| Nicaragua              | ---                             | ---             | ---      | ---                             | ---                 | ---            | ---                | ---         |
| Panama                 | 12                              | 190             | 207      | 236                             | 110                 | 78             | 1,270              | 1,734       |
| Paraguay               | ---                             | 10              | 1        | 15                              | 86                  | 22             | 150                | 2,752       |
| Trinidad               | ---                             | 3               | 30       | 33                              | 79                  | 80             | 303                | 542         |
| Venezuela              | 19                              | 525             | 249      | 68                              | 260                 | 27             | 2,262              | 3,084       |
| Other                  | 8                               | 125             | 62       | 241                             | 229                 | 76             | 894                | 1,705       |
| Total                  | 516                             | 39,437          | 54,732   | 7,332                           | 18,189              | 6,489          | 137,612            | 184,613     |
| Western Europe:        |                                 |                 |          |                                 |                     |                |                    |             |
| Belgium-Luxem.         | 20                              | 2,081           | 489      | 72                              | 154                 | 121            | 3,098              | 13,099      |
| Denmark                | 13                              | 173             | 127      | 112                             | 51                  | 8              | 522                | 829         |
| France                 | 23                              | 929             | 1,566    | 115                             | 869                 | 99             | 4,323              | 7,411       |
| Greece                 | ---                             | 59              | 5        | 4                               | 118                 | 5              | 656                | 921         |
| Ireland                | 2                               | 250             | 21       | 26                              | 106                 | 10             | 425                | 5,866       |
| Italy                  | 26                              | 748             | 1,908    | 137                             | 282                 | 37             | 3,380              | 16,314      |
| Netherlands            | 5                               | 132             | 97       | 82                              | 421                 | 284            | 1,119              | 1,972       |
| Spain                  | ---                             | 150             | 1,482    | 47                              | 110                 | 13             | 2,014              | 2,300       |
| Sweden                 | 2                               | 780             | 324      | 125                             | 124                 | 71             | 1,707              | 2,041       |
| Switzerland            | 37                              | 105             | 84       | 36                              | 128                 | 189            | 644                | 936         |
| United Kingdom         | 23                              | 1,310           | 700      | 195                             | 1,241               | 2,085          | 5,935              | 18,214      |
| W. Germany             | 175                             | 479             | 210      | 175                             | 425                 | 528            | 2,343              | 5,627       |
| Other                  | 15                              | 131             | 55       | 39                              | 280                 | 174            | 898                | 1,540       |
| Total                  | 341                             | 7,325           | 7,069    | 1,166                           | 4,309               | 3,622          | 27,064             | 77,070      |
| Eastern Europe:        |                                 |                 |          |                                 |                     |                |                    |             |
| Albania                | ---                             | ---             | ---      | ---                             | ---                 | ---            | ---                | ---         |
| Bulgaria               | ---                             | ---             | ---      | ---                             | ---                 | ---            | ---                | ---         |
| Czechoslovakia         | ---                             | ---             | ---      | ---                             | 1                   | ---            | 1                  | 1           |
| East Germany           | ---                             | ---             | ---      | ---                             | ---                 | ---            | ---                | ---         |
| Hungary                | ---                             | ---             | 83       | 1                               | 10                  | 6              | 105                | 239         |
| Poland                 | ---                             | 43              | ---      | 65                              | 11                  | 2              | 121                | 405         |
| Romania                | ---                             | ---             | 1        | ---                             | 8                   | ---            | 8                  | 8           |
| U.S.S.R.               | ---                             | 44              | ---      | ---                             | ---                 | 2              | 46                 | 58          |
| Yugoslavia             | ---                             | 5               | ---      | 1                               | 1                   | 4              | 6                  | 534         |
| Other                  | ---                             | ---             | ---      | ---                             | ---                 | ---            | ---                | ---         |
| Total                  | ---                             | 92              | 84       | 67                              | 30                  | 14             | 288                | 1,245       |
| Asia/Oceania:          |                                 |                 |          |                                 |                     |                |                    |             |
| Australia              | 17                              | 47              | 72       | 173                             | 509                 | 459            | 1,864              | 3,833       |
| China-Hainland         | 5                               | 89              | 5        | 117                             | 20                  | 41             | 287                | 704         |
| Hong Kong              | 6                               | 242             | 174      | 348                             | 708                 | 873            | 2,922              | 4,557       |
| Iran                   | ---                             | ---             | ---      | ---                             | ---                 | ---            | ---                | ---         |
| Iraq                   | ---                             | ---             | ---      | ---                             | 79                  | 14             | 92                 | 2,610       |
| Israel                 | ---                             | 33              | 28       | 173                             | 213                 | 46             | 575                | 3,101       |
| Japan                  | 17                              | 5,780           | 4,371    | 599                             | 551                 | 2,290          | 14,918             | 17,322      |
| Jordan                 | ---                             | 2               | 6        | 15                              | 7                   | 22             | 57                 | 490         |
| Korea                  | 4                               | 26              | 12       | 1,912                           | 91                  | 131            | 2,253              | 3,007       |
| Kuwait                 | 5                               | 255             | 293      | 8                               | 24                  | 441            | 1,334              | 1,607       |
| Lebanon                | 4                               | 6               | 3        | 663                             | 37                  | 43             | 796                | 982         |
| Malaysia               | 1                               | ---             | 7        | 20                              | 19                  | 35             | 200                | 479         |
| New Zealand            | 214                             | 13              | 1        | 32                              | 186                 | 9              | 938                | 2,190       |
| Philippines            | ---                             | 60              | 288      | 228                             | 74                  | 77             | 1,126              | 2,429       |
| Saudi Arabia           | 22                              | 609             | 508      | 95                              | 125                 | 4,056          | 7,868              | 9,634       |
| Singapore              | 6                               | 138             | 22       | 158                             | 222                 | 674            | 1,754              | 2,614       |
| Taiwan                 | 2                               | 65              | 34       | 446                             | 143                 | 261            | 1,044              | 1,278       |
| U. Arab Em.            | 1                               | 483             | 241      | 8                               | 49                  | 472            | 1,898              | 2,036       |
| Other                  | 10                              | 264             | 111      | 74                              | 195                 | 166            | 1,036              | 1,348       |
| Total                  | 315                             | 8,114           | 6,176    | 5,069                           | 3,253               | 10,111         | 40,963             | 60,221      |
| Africa:                |                                 |                 |          |                                 |                     |                |                    |             |
| Benin                  | ---                             | ---             | ---      | ---                             | 3                   | ---            | 3                  | 409         |
| Burkina                | ---                             | ---             | ---      | ---                             | 52                  | ---            | 52                 | 601         |
| Gambia                 | ---                             | ---             | ---      | ---                             | 554                 | ---            | 557                | 557         |
| Ivory Coast            | ---                             | 1               | ---      | 51                              | 115                 | 3              | 302                | 858         |
| Morocco                | 5                               | ---             | 1        | ---                             | 82                  | ---            | 105                | 407         |
| South Africa           | 17                              | 8               | 10       | 40                              | 66                  | 49             | 229                | 412         |
| Nigeria                | ---                             | 26              | 6        | 1,797                           | 265                 | 26             | 2,141              | 2,473       |
| Other                  | 2                               | 50              | 21       | 67                              | 466                 | 42             | 703                | 1,320       |
| Total                  | 24                              | 86              | 38       | 1,954                           | 1,603               | 120            | 4,092              | 7,038       |
| World total            | 1,195                           | 55,054          | 68,101   | 15,626                          | 27,384              | 20,389         | 210,100            | 330,271     |

--- = 0.

Source: Bureau of the Census.

Table 21--Handmade fiber equivalent of U.S. imports by country, 1988

| Country of origin   | Semi-manufactured products |                       |            |                                |   |                    | Manufactured products   |                      |                                 |
|---------------------|----------------------------|-----------------------|------------|--------------------------------|---|--------------------|-------------------------|----------------------|---------------------------------|
|                     | Sliver tops & roving       | Yarns thrown or plied | Yarns spun | Sewing thread & handwork yarns | Rayon tire fabric including cord fabric | Broad woven fabric | Total semi-manufactured | Wearing apparel knit | Wearing apparel other than knit |
| 1,000 pounds        |                            |                       |            |                                |   |                    |                         |                      |                                 |
| Western Hemisphere: |                            |                       |            |                                |   |                    |                         |                      |                                 |
| Argentina           | ---                        | ---                   | 22         | ---                            | ---                                     | 117                | 139                     | 239                  | 372                             |
| Brazil              | ---                        | 341                   | 6,798      | 344                            | ---                                     | 587                | 8,070                   | 1,331                | 2,522                           |
| Br Virgin Islands   | ---                        | ---                   | ---        | ---                            | ---                                     | 2                  | 2                       | 983                  | 583                             |
| Canada              | 27                         | 4,836                 | 1,240      | 1,565                          | 10,296                                  | 15,973             | 33,937                  | 1,476                | 1,312                           |
| Chile               | ---                        | ---                   | ---        | ---                            | ---                                     | 545                | 545                     | 227                  | 710                             |
| Colombia            | ---                        | ---                   | ---        | ---                            | ---                                     | 643                | 643                     | 970                  | 2,895                           |
| Costa Rica          | ---                        | 3                     | 130        | 1                              | ---                                     | 72                 | 205                     | 4,169                | 6,749                           |
| Dominican Republic  | ---                        | ---                   | ---        | ---                            | ---                                     | 14                 | 15                      | 8,674                | 18,580                          |
| El Salvador         | ---                        | 37                    | 62         | 8                              | ---                                     | 2                  | 110                     | 342                  | 1,431                           |
| Guatemala           | ---                        | ---                   | ---        | ---                            | ---                                     | 248                | 248                     | 901                  | 2,326                           |
| Guyana              | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 8                    | 292                             |
| Heiti               | ---                        | ---                   | ---        | ---                            | ---                                     | 21                 | 21                      | 6,931                | 4,297                           |
| Honduras            | ---                        | ---                   | 238        | ---                            | ---                                     | 155                | 393                     | 1,311                | 2,119                           |
| Jamaica             | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 6,474                | 2,972                           |
| Mexico              | ---                        | 827                   | 5,936      | 159                            | ---                                     | 838                | 7,760                   | 6,930                | 42,215                          |
| Panama              | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 663                  | 439                             |
| Peru                | ---                        | ---                   | ---        | ---                            | ---                                     | 263                | 263                     | 480                  | 51                              |
| Uruguay             | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 88                   | 705                             |
| Other               | ---                        | ---                   | ---        | 6                              | ---                                     | 328                | 334                     | 365                  | 1,314                           |
| Total               | 27                         | 6,043                 | 14,427     | 2,084                          | 10,296                                  | 19,809             | 52,686                  | 42,566               | 91,886                          |
| Western Europe:     |                            |                       |            |                                |   |                    |                         |                      |                                 |
| Belgium-Luxem       | 322                        | 17                    | 15         | 116                            | 64                                      | 2,167              | 2,701                   | 31                   | 21                              |
| Denmark             | ---                        | ---                   | ---        | 1                              | ---                                     | 35                 | 36                      | 89                   | 9                               |
| France              | 203                        | 302                   | 459        | 149                            | 15                                      | 2,987              | 4,115                   | 461                  | 796                             |
| Greece              | ---                        | 8                     | 630        | ---                            | ---                                     | ---                | 638                     | 769                  | 598                             |
| Ireland             | ---                        | ---                   | 2          | 1                              | ---                                     | 114                | 117                     | 91                   | 313                             |
| Italy               | 55                         | 262                   | 2,469      | 42                             | ---                                     | 26,292             | 29,119                  | 1,759                | 4,677                           |
| Netherlands         | ---                        | 1,568                 | 118        | 26                             | ---                                     | 1,224              | 2,935                   | 32                   | 85                              |
| Portugal            | ---                        | ---                   | ---        | 1                              | ---                                     | 122                | 123                     | 2,060                | 771                             |
| Spain               | ---                        | ---                   | 272        | 41                             | 2                                       | 677                | 993                     | 107                  | 64                              |
| Sweden              | ---                        | ---                   | 45         | 4                              | ---                                     | 181                | 230                     | 49                   | 29                              |
| Switzerland         | 7                          | 14                    | 233        | 253                            | ---                                     | 850                | 1,357                   | 57                   | 67                              |
| United Kingdom      | 1,810                      | 795                   | 407        | 133                            | ---                                     | 1,333              | 4,478                   | 795                  | 672                             |
| West Germany        | 441                        | 392                   | 2,290      | 217                            | 133                                     | 8,506              | 11,978                  | 195                  | 417                             |
| Austria             | 5                          | 415                   | 323        | ---                            | ---                                     | 345                | 1,088                   | 65                   | 74                              |
| Finland             | ---                        | ---                   | 83         | 34                             | ---                                     | 128                | 245                     | 13                   | 21                              |
| Other               | ---                        | ---                   | 1          | ---                            | ---                                     | 6                  | 7                       | 176                  | 150                             |
| Total               | 2,844                      | 3,773                 | 7,348      | 1,018                          | 214                                     | 44,965             | 60,162                  | 6,749                | 8,763                           |
| Eastern Europe:     |                            |                       |            |                                |   |                    |                         |                      |                                 |
| Bulgaria            | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 9                    | 23                              |
| Czechoslovakia      | ---                        | ---                   | ---        | ---                            | ---                                     | 27                 | 27                      | 1                    | 125                             |
| East Germany        | ---                        | ---                   | ---        | 2                              | ---                                     | 14                 | 16                      | 208                  | 13                              |
| Hungary             | ---                        | ---                   | 1,162      | ---                            | ---                                     | 734                | 1,895                   | 563                  | 996                             |
| Poland              | ---                        | ---                   | ---        | ---                            | ---                                     | 387                | 387                     | 1,382                | 1,142                           |
| Romania             | 29                         | ---                   | 1,994      | ---                            | ---                                     | 369                | 2,392                   | 3,041                | 2,329                           |
| U.S.S.R.            | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 6                    | 10                              |
| Yugoslavia          | ---                        | ---                   | ---        | ---                            | ---                                     | 1,908              | 1,908                   | 765                  | 1,793                           |
| Total               | 29                         | ---                   | 3,156      | 2                              | ---                                     | 3,439              | 6,626                   | 5,975                | 6,431                           |
| Asia/Oceania:       |                            |                       |            |                                |   |                    |                         |                      |                                 |
| Bangladesh          | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 4,485                | 9,622                           |
| Australia           | ---                        | ---                   | 6          | 1                              | ---                                     | 106                | 112                     | 70                   | 139                             |
| China-Hainland      | ---                        | 238                   | 4,568      | 793                            | ---                                     | 7,831              | 13,430                  | 29,356               | 68,885                          |
| Hong Kong           | ---                        | 1                     | ---        | 528                            | ---                                     | 3,385              | 3,913                   | 49,657               | 50,232                          |
| India               | 162                        | ---                   | 37         | 1                              | ---                                     | 970                | 1,170                   | 1,325                | 18,273                          |
| Iran                | ---                        | ---                   | ---        | ---                            | ---                                     | 1                  | 1                       | ---                  | ---                             |
| Iraq                | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | ---                  | ---                             |
| Israel              | ---                        | 12                    | ---        | 30                             | 70                                      | 296                | 408                     | 1,538                | 588                             |
| Japan               | 971                        | 679                   | 2,591      | 62                             | 19                                      | 28,038             | 32,361                  | 1,705                | 3,402                           |
| Korea               | ---                        | 91                    | 1,942      | 541                            | 854                                     | 33,092             | 36,521                  | 76,174               | 70,940                          |
| Malaysia            | ---                        | ---                   | 1,168      | 264                            | ---                                     | 2,371              | 3,804                   | 8,825                | 8,647                           |
| Maldive Is          | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 283                  | 213                             |
| Pakistan            | ---                        | ---                   | 510        | 1                              | ---                                     | 5,506              | 6,017                   | 3,435                | 4,817                           |
| Philippines         | ---                        | ---                   | 135        | 212                            | ---                                     | 160                | 507                     | 20,670               | 16,965                          |
| Saudi Arabia        | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 7                    | 4                               |
| Singapore           | ---                        | 90                    | 968        | 184                            | ---                                     | 482                | 1,725                   | 24,636               | 7,706                           |
| Taiwan              | ---                        | 109                   | 317        | 955                            | ---                                     | 14,534             | 15,915                  | 108,741              | 88,042                          |
| Turkey              | 22                         | ---                   | 1,472      | 214                            | ---                                     | 1,167              | 2,876                   | 2,634                | 3,852                           |
| U Ara Em            | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 620                  | 1,338                           |
| Indonesia           | ---                        | ---                   | 676        | 52                             | ---                                     | 7,266              | 7,993                   | 8,603                | 18,395                          |
| Sri Lanka           | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 4,117                | 12,341                          |
| Thailand            | ---                        | 1,204                 | 3,721      | 817                            | ---                                     | 5,621              | 11,362                  | 6,239                | 5,018                           |
| Nepal               | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 138                  | 1,223                           |
| Macao               | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 7,748                | 7,936                           |
| Other               | ---                        | ---                   | ---        | ---                            | ---                                     | 3                  | 3                       | 322                  | 757                             |
| Total               | 1,155                      | 2,423                 | 18,113     | 4,654                          | 944                                     | 110,828            | 138,116                 | 361,328              | 399,335                         |
| Africa:             |                            |                       |            |                                |   |                    |                         |                      |                                 |
| Egypt               | ---                        | ---                   | 101        | ---                            | ---                                     | 1                  | 102                     | 774                  | 361                             |
| Lesotho             | ---                        | ---                   | ---        | ---                            | ---                                     | ---                | ---                     | 162                  | 77                              |
| Morocco             | ---                        | 23                    | ---        | ---                            | ---                                     | 44                 | 67                      | 36                   | 524                             |
| Mauritius           | ---                        | ---                   | 279        | ---                            | ---                                     | 61                 | 340                     | 874                  | 2,615                           |
| Other               | ---                        | ---                   | ---        | ---                            | ---                                     | 54                 | 54                      | 235                  | 310                             |
| Total               | ---                        | 23                    | 380        | ---                            | ---                                     | 160                | 562                     | 2,081                | 3,887                           |
| Residual            |                            |                       |            |                                |   |                    |                         |                      |                                 |
|                     | ---                        | ---                   | ---        | ---                            | ---                                     | -33                | -32                     | 24,332               | 37,701                          |
| World total         | 4,055                      | 12,262                | 43,423     | 7,758                          | 11,453                                  | 179,234            | 258,184                 | 443,031              | 548,003                         |

Continued--

Table 21--Handmade fiber equivalent of U.S. imports by country, 1988--Continued

| Country of origin   | Manufactured products |                         |                |               |                    |                |                    | Grand total      |
|---------------------|-----------------------|-------------------------|----------------|---------------|--------------------|----------------|--------------------|------------------|
|                     | Handkerchiefs         | Laces and lace articles | Narrow fabrics | Knit fabric   | Other manufactures | Floor covering | Total manufactured |                  |
| 1,000 pounds        |                       |                         |                |               |                    |                |                    |                  |
| Western Hemisphere: |                       |                         |                |               |                    |                |                    |                  |
| Argentina           | ---                   | 5                       | ---            | 163           | 1,765              | ---            | 2,544              | 2,683            |
| Brazil              | ---                   | 89                      | 199            | 15            | 3,325              | 411            | 7,892              | 15,962           |
| Br. Virgin Islands  | ---                   | 1                       | 1              | 10            | 24                 | ---            | 1,602              | 1,604            |
| Canada              | ---                   | 98                      | 1,062          | 1,318         | 14,111             | 13,782         | 33,160             | 67,097           |
| Chile               | ---                   | ---                     | ---            | ---           | ---                | ---            | 938                | 1,483            |
| Colombia            | ---                   | 290                     | 12             | 4             | 28                 | ---            | 4,199              | 4,843            |
| Costa Rica          | ---                   | ---                     | 62             | 631           | 174                | ---            | 11,785             | 11,990           |
| Dominican Republic  | ---                   | 229                     | 1              | ---           | 1,828              | ---            | 29,312             | 29,327           |
| El Salvador         | ---                   | 1                       | ---            | ---           | 210                | ---            | 1,984              | 2,093            |
| Guatemala           | ---                   | ---                     | 107            | 13            | 423                | ---            | 3,771              | 4,019            |
| Guyana              | ---                   | ---                     | ---            | ---           | ---                | ---            | 300                | 300              |
| Haiti               | 1                     | 414                     | 97             | 1             | 4,288              | 19             | 16,047             | 16,068           |
| Honduras            | ---                   | ---                     | ---            | ---           | 2                  | ---            | 3,433              | 3,825            |
| Jamaica             | ---                   | 1                       | ---            | ---           | 455                | ---            | 9,902              | 9,902            |
| Mexico              | ---                   | 474                     | 1,112          | 170           | 21,072             | 5,886          | 77,858             | 85,618           |
| Panama              | ---                   | ---                     | ---            | ---           | 18                 | ---            | 1,120              | 1,120            |
| Peru                | ---                   | ---                     | 1              | ---           | 1                  | ---            | 534                | 797              |
| Uruguay             | ---                   | 13                      | 22             | ---           | ---                | ---            | 828                | 828              |
| Other               | ---                   | 10                      | 9              | ---           | 89                 | ---            | 1,792              | 2,126            |
| <b>Total</b>        | <b>1,625</b>          | <b>2,685</b>            | <b>2,324</b>   | <b>47,815</b> | <b>20,100</b>      | <b>209,001</b> | <b>261,687</b>     |                  |
| Western Europe:     |                       |                         |                |               |                    |                |                    |                  |
| Belgium-Luxem       | ---                   | 11                      | 748            | 4             | 2,096              | 13,718         | 16,629             | 19,330           |
| Denmark             | ---                   | 56                      | 2              | 53            | 132                | 69             | 410                | 446              |
| France              | 1                     | 168                     | 785            | 226           | 1,446              | 37             | 3,919              | 8,035            |
| Greece              | ---                   | 13                      | 66             | ---           | 522                | 38             | 2,005              | 2,642            |
| Ireland             | ---                   | ---                     | 144            | 3             | 164                | 397            | 1,113              | 1,230            |
| Italy               | 4                     | 553                     | 704            | 576           | 3,504              | 674            | 12,451             | 41,570           |
| Netherlands         | ---                   | 50                      | 129            | 5             | 2,175              | 2,196          | 4,673              | 7,608            |
| Portugal            | 1                     | 9                       | 1,259          | 2,195         | 4,372              | 4              | 10,670             | 10,793           |
| Spain               | ---                   | 120                     | 25             | 93            | 6,674              | 257            | 7,340              | 8,333            |
| Sweden              | ---                   | 14                      | 28             | 37            | 5,363              | 56             | 5,576              | 5,806            |
| Switzerland         | ---                   | 261                     | 207            | 125           | 2,011              | 495            | 3,222              | 4,579            |
| United Kingdom      | ---                   | 184                     | 1,123          | 427           | 5,660              | 1,414          | 10,275             | 14,753           |
| West Germany        | ---                   | 429                     | 718            | 263           | 8,866              | 2,232          | 13,119             | 25,097           |
| Austria             | ---                   | 32                      | 51             | 11            | 207                | 11             | 451                | 1,539            |
| Finland             | ---                   | ---                     | 4              | 2             | 503                | 2              | 565                | 790              |
| Other               | ---                   | ---                     | 24             | 33            | 71                 | 3              | 457                | 464              |
| <b>Total</b>        | <b>6</b>              | <b>1,899</b>            | <b>6,017</b>   | <b>4,052</b>  | <b>43,766</b>      | <b>21,602</b>  | <b>92,854</b>      | <b>153,016</b>   |
| Eastern Europe:     |                       |                         |                |               |                    |                |                    |                  |
| Bulgaria            | ---                   | ---                     | ---            | ---           | ---                | ---            | 33                 | 33               |
| Czechoslovakia      | ---                   | ---                     | 10             | ---           | ---                | 1              | 138                | 164              |
| East Germany        | ---                   | ---                     | ---            | ---           | ---                | ---            | 221                | 237              |
| Hungary             | ---                   | 18                      | ---            | ---           | 1,332              | 5              | 2,914              | 4,810            |
| Poland              | ---                   | 21                      | ---            | 70            | 69                 | ---            | 2,684              | 3,071            |
| Romania             | ---                   | ---                     | ---            | ---           | 529                | 5              | 5,904              | 6,296            |
| U.S.S.R.            | ---                   | ---                     | ---            | ---           | ---                | ---            | 15                 | 15               |
| Yugoslavia          | ---                   | 1                       | ---            | 61            | 1,320              | 1              | 3,941              | 5,849            |
| <b>Total</b>        | <b>---</b>            | <b>40</b>               | <b>11</b>      | <b>131</b>    | <b>3,249</b>       | <b>12</b>      | <b>15,849</b>      | <b>22,475</b>    |
| Asia/Oceania:       |                       |                         |                |               |                    |                |                    |                  |
| Bangladesh          | ---                   | 4                       | ---            | ---           | 119                | 314            | 14,545             | 14,545           |
| Australia           | ---                   | 11                      | 1              | 3             | 504                | 2              | 731                | 843              |
| China-Mainland      | 248                   | 757                     | 471            | 102           | 92,824             | 879            | 193,522            | 206,951          |
| Hong Kong           | 6                     | 68                      | 132            | 79            | 6,609              | 4              | 106,788            | 110,701          |
| India               | ---                   | 2,338                   | 38             | ---           | 766                | 378            | 23,118             | 24,288           |
| Iran                | ---                   | ---                     | ---            | ---           | ---                | 2              | 2                  | 3                |
| Iraq                | ---                   | ---                     | ---            | ---           | 29                 | 3              | 33                 | 33               |
| Israel              | ---                   | 7                       | 20             | 142           | 3,124              | 3              | 5,422              | 5,830            |
| Japan               | 2                     | 1,306                   | 956            | 924           | 7,066              | 5,781          | 21,144             | 53,504           |
| Korea               | 256                   | 410                     | 1,264          | 2,093         | 42,238             | 953            | 194,328            | 230,849          |
| Malaysia            | ---                   | 15                      | 58             | 8             | 64                 | ---            | 17,618             | 21,421           |
| Maldives Is.        | ---                   | ---                     | ---            | ---           | ---                | ---            | 496                | 496              |
| Pakistan            | ---                   | 76                      | 27             | 19            | 1,780              | 27             | 10,162             | 16,199           |
| Philippines         | 7                     | 397                     | 84             | 132           | 5,363              | 65             | 43,683             | 44,190           |
| Saudi Arabia        | ---                   | ---                     | ---            | ---           | 1,497              | ---            | 1,508              | 1,508            |
| Singapore           | ---                   | ---                     | 37             | 215           | 31                 | ---            | 32,626             | 34,351           |
| Taiwan              | 59                    | 1,275                   | 2,962          | 1,203         | 89,274             | 218            | 291,773            | 307,688          |
| Turkey              | ---                   | 7                       | 11             | 11            | 1,783              | 119            | 8,417              | 11,292           |
| U Arab Em           | ---                   | 8                       | ---            | ---           | ---                | ---            | 1,966              | 1,966            |
| Indonesia           | ---                   | 49                      | 3              | 7             | 71                 | ---            | 27,127             | 35,121           |
| Sri Lanka           | ---                   | 17                      | ---            | ---           | 359                | ---            | 16,834             | 16,834           |
| Thailand            | 1                     | 10                      | 37             | 20            | 17,716             | 139            | 29,180             | 40,543           |
| Nepal               | ---                   | 19                      | ---            | ---           | 1                  | ---            | 1,380              | 1,380            |
| Hacao               | ---                   | 3                       | ---            | 2             | 8,319              | ---            | 24,008             | 24,008           |
| Other               | ---                   | ---                     | 18             | 2             | 35                 | 17             | 1,152              | 1,155            |
| <b>Total</b>        | <b>579</b>            | <b>6,773</b>            | <b>6,119</b>   | <b>4,962</b>  | <b>279,572</b>     | <b>8,904</b>   | <b>1,067,573</b>   | <b>1,205,691</b> |
| Africa:             |                       |                         |                |               |                    |                |                    |                  |
| Egypt               | ---                   | 1                       | ---            | ---           | 13                 | 86             | 1,235              | 1,336            |
| Lesotho             | ---                   | ---                     | ---            | ---           | ---                | ---            | 239                | 239              |
| Morocco             | ---                   | 3                       | ---            | ---           | 35                 | 37             | 635                | 702              |
| Mauritius           | ---                   | 3                       | ---            | ---           | 9                  | ---            | 3,501              | 3,841            |
| Other               | ---                   | ---                     | ---            | ---           | 203                | ---            | 750                | 804              |
| <b>Total</b>        | <b>---</b>            | <b>7</b>                | <b>---</b>     | <b>---</b>    | <b>260</b>         | <b>123</b>     | <b>6,360</b>       | <b>6,922</b>     |
| Residual            | 22                    | 78                      | ---            | 23,741        | ---                | 85,878         | 85,909             |                  |
| <b>World total</b>  | <b>587</b>            | <b>10,366</b>           | <b>14,910</b>  | <b>11,471</b> | <b>398,403</b>     | <b>50,742</b>  | <b>1,477,515</b>   | <b>1,735,700</b> |

--- = 0.

Totals may not add because of rounding.

Source: Bureau of the Census.

Table 22--Manmade fiber equivalent of U.S. textile exports by country, 1988

| Country of destination | Semi-manufactured products |           |                                  |   |                    | Primarily manufactured products |         |                         |           |
|------------------------|----------------------------|-----------|----------------------------------|---|--------------------|---------------------------------|---------|-------------------------|-----------|
|                        | Sliver tops and roving     | Spun yarn | Sewing thread and handwork yarns | Rayon tire fabric including cord fabric | Broad woven fabric | Total semi-manufactured         | Hosiery | Underwear and nightwear | Outerwear |
| 1,000 pounds           |                            |           |                                  |   |                    |                                 |         |                         |           |
| Western Hemisphere:    |                            |           |                                  |   |                    |                                 |         |                         |           |
| Bahamas                | 55                         | 15        | 5                                | 7                                       | 126                | 208                             | 26      | 16                      | 215       |
| Brazil                 | 59                         | 73        | 119                              | 558                                     | 1,444              | 2,254                           | 20      | 20                      | 19        |
| Br. Virgin Islands     | 7                          | 3         | 9                                | ---                                     | 264                | 282                             | ---     | 518                     | 706       |
| Canada                 | 2,194                      | 17,136    | 1,437                            | 13,956                                  | 30,054             | 64,778                          | 351     | 76                      | 3,668     |
| Chile                  | 30                         | 617       | 27                               | 4,207                                   | 1,571              | 6,451                           | 156     | 5                       | 32        |
| Colombia               | 64                         | 81        | 104                              | 391                                     | 919                | 1,559                           | 273     | 27                      | 2,150     |
| Costa Rica             | 28                         | 78        | 47                               | 1,402                                   | 7,201              | 8,756                           | 6       | 2,414                   | 4,779     |
| Dominican Republic     | 11                         | 646       | 168                              | ---                                     | 5,398              | 6,223                           | 2       | 2,023                   | 15,461    |
| Ecuador                | 375                        | 18        | 7                                | 674                                     | 369                | 1,442                           | ---     | 6                       | 17        |
| El Salvador            | 14                         | 31        | 24                               | ---                                     | 741                | 809                             | ---     | ---                     | 1,050     |
| Guatemala              | 100                        | 773       | 39                               | 1,719                                   | 781                | 3,411                           | 1       | 99                      | 1,970     |
| Guyana                 | ---                        | ---       | 3                                | ---                                     | 272                | 275                             | ---     | 11                      | 380       |
| Haiti                  | 62                         | 79        | 67                               | ---                                     | 481                | 689                             | 1       | 2,521                   | 6,322     |
| Honduras               | 39                         | 35        | 109                              | ---                                     | 560                | 744                             | 2       | 598                     | 1,597     |
| Jamaica                | 36                         | 112       | 122                              | 383                                     | 1,606              | 2,258                           | 2,051   | 1,570                   | 2,477     |
| Mexico                 | 2,305                      | 1,254     | 1,039                            | 1,462                                   | 27,585             | 33,645                          | 76      | 2,322                   | 18,004    |
| N. Antilles            | 9                          | 5         | 3                                | ---                                     | 289                | 306                             | 16      | 23                      | 169       |
| Panama                 | 66                         | 38        | 13                               | ---                                     | 1,480              | 1,598                           | 31      | 173                     | 114       |
| Paraguay               | ---                        | ---       | ---                              | ---                                     | 1,361              | 1,361                           | 3       | ---                     | 2         |
| Trinidad               | ---                        | 7         | 9                                | 3                                       | 556                | 574                             | ---     | ---                     | 33        |
| Venezuela              | 26                         | 2,382     | 653                              | 8,525                                   | 487                | 12,075                          | 91      | 24                      | 434       |
| Peru                   | 43                         | 1,669     | ---                              | 996                                     | 52                 | 2,759                           | ---     | ---                     | ---       |
| Other                  | 203                        | 223       | 17                               | 154                                     | 988                | 1,586                           | 20      | 30                      | 751       |
| Total                  | 5,726                      | 25,277    | 4,019                            | 34,437                                  | 84,363             | 154,042                         | 3,128   | 12,479                  | 60,337    |
| Western Europe:        |                            |           |                                  |   |                    |                                 |         |                         |           |
| Belgium                | 494                        | 351       | 401                              | 2                                       | 2,114              | 3,362                           | 24      | 20                      | 528       |
| Denmark                | 99                         | 142       | 1                                | ---                                     | 851                | 1,094                           | ---     | 2                       | 54        |
| France                 | 260                        | 1,119     | 127                              | 28                                      | 1,908              | 3,443                           | 115     | 56                      | 674       |
| Greece                 | ---                        | ---       | 1                                | ---                                     | 555                | 556                             | 28      | 11                      | 10        |
| Ireland                | 3                          | 2,293     | 91                               | ---                                     | 901                | 3,287                           | 1       | 63                      | 24        |
| Italy                  | 194                        | 441       | 23                               | 11                                      | 3,733              | 4,402                           | 54      | 16                      | 431       |
| Netherlands            | ---                        | 307       | 5                                | 14                                      | 1,472              | 1,798                           | 6       | 20                      | 154       |
| Portugal               | 2                          | 4         | 5                                | ---                                     | 373                | 384                             | ---     | ---                     | 3         |
| Spain                  | 63                         | 246       | 14                               | ---                                     | 546                | 868                             | 5       | 13                      | 130       |
| Sweden                 | 3                          | 1         | 10                               | 5                                       | 986                | 1,005                           | 59      | 59                      | 153       |
| Switzerland            | 13                         | 60        | 1                                | 150                                     | 224                | 5                               | 21      | 21                      | 95        |
| United Kingdom         | 619                        | 2,835     | 320                              | 33                                      | 12,980             | 16,788                          | 56      | 195                     | 754       |
| W. Germany             | 257                        | 1,191     | 30                               | 1                                       | 2,076              | 3,554                           | 275     | 148                     | 298       |
| Austria                | 20                         | 33        | 3                                | ---                                     | 236                | 291                             | 1       | 16                      | 11        |
| Cyprus                 | ---                        | 17        | ---                              | ---                                     | 75                 | 92                              | ---     | ---                     | 6         |
| Finland                | 1,532                      | 207       | 3                                | ---                                     | 59                 | 1,800                           | 12      | 4                       | 19        |
| Other                  | 56                         | ---       | 33                               | ---                                     | 251                | 339                             | 17      | 12                      | 46        |
| Total                  | 3,615                      | 9,247     | 1,068                            | 94                                      | 29,266             | 43,287                          | 659     | 656                     | 3,389     |
| Eastern Europe:        |                            |           |                                  |   |                    |                                 |         |                         |           |
| Bulgaria               | ---                        | ---       | ---                              | ---                                     | 2                  | 2                               | ---     | ---                     | ---       |
| Czechoslovakia         | ---                        | 17        | ---                              | ---                                     | ---                | 17                              | ---     | ---                     | ---       |
| Hungary                | ---                        | 58        | 13                               | ---                                     | 72                 | 142                             | ---     | ---                     | ---       |
| Poland                 | ---                        | ---       | ---                              | ---                                     | 267                | 267                             | 3       | ---                     | 32        |
| Romania                | ---                        | ---       | ---                              | ---                                     | 2                  | 2                               | ---     | ---                     | ---       |
| U.S.S.R.               | ---                        | 29        | ---                              | ---                                     | ---                | 29                              | ---     | ---                     | 3         |
| Yugoslavia             | 84                         | ---       | ---                              | ---                                     | 241                | 325                             | ---     | ---                     | ---       |
| Total                  | 84                         | 104       | 13                               | ---                                     | 584                | 785                             | 3       | ---                     | 36        |
| Asia/Oceania:          |                            |           |                                  |   |                    |                                 |         |                         |           |
| Australia              | 366                        | 1,450     | 223                              | 22                                      | 3,208              | 5,269                           | 28      | 42                      | 50        |
| China>Mainland         | 38                         | 4,683     | 1                                | 8,580                                   | 10,539             | 23,840                          | ---     | ---                     | 15        |
| Hong Kong              | 75                         | 710       | 204                              | 657                                     | 4,663              | 6,308                           | 76      | 32                      | 150       |
| India                  | 1                          | 57        | 4                                | 28                                      | 64                 | 153                             | ---     | ---                     | ---       |
| Iraq                   | ---                        | 214       | 84                               | ---                                     | 107                | 405                             | ---     | ---                     | ---       |
| Israel                 | 45                         | 1,576     | 24                               | 474                                     | 1,140              | 3,259                           | 24      | 9                       | 31        |
| Japan                  | 542                        | 474       | 47                               | 15                                      | 2,386              | 3,464                           | 440     | 277                     | 3,115     |
| Jordan                 | ---                        | 418       | 91                               | ---                                     | 208                | 716                             | ---     | 1                       | 4         |
| Korea                  | 122                        | 1,240     | 157                              | 6                                       | 3,858              | 5,383                           | 1       | 2                       | 26        |
| Kuwait                 | 2                          | 1         | ---                              | ---                                     | 532                | 535                             | 44      | 123                     | 441       |
| Lebanon                | ---                        | 23        | ---                              | ---                                     | 297                | 320                             | 2       | 5                       | 12        |
| Malaysia               | 6                          | 9         | ---                              | 82                                      | 244                | 341                             | 5       | 18                      | 1         |
| New Zealand            | 6                          | 245       | 107                              | 31                                      | 1,468              | 1,856                           | ---     | 1                       | 11        |
| Pakistan               | ---                        | 508       | ---                              | 129                                     | 39                 | 676                             | ---     | ---                     | ---       |
| Philippines            | 53                         | 203       | 15                               | 481                                     | 2,444              | 3,195                           | 3       | 794                     | 22        |
| Saudi Arabia           | 51                         | ---       | ---                              | 2                                       | 8,222              | 8,275                           | 43      | 176                     | 588       |
| Singapore              | 38                         | 6         | 3                                | ---                                     | 1,128              | 1,176                           | 17      | 9                       | 58        |
| Syria                  | ---                        | 348       | 69                               | ---                                     | 450                | 867                             | ---     | ---                     | ---       |
| Taiwan                 | 1,139                      | 341       | 80                               | 93                                      | 7,738              | 9,391                           | 37      | 81                      | 78        |
| Turkey                 | ---                        | 294       | ---                              | 4                                       | 75                 | 373                             | ---     | ---                     | 1         |
| U. Arab Em.            | 4                          | 12        | ---                              | 56                                      | 708                | 780                             | 40      | 25                      | 211       |
| Thailand               | ---                        | 140       | ---                              | 392                                     | 218                | 750                             | ---     | 3                       | 1         |
| Qatar                  | ---                        | ---       | ---                              | 4                                       | 85                 | 85                              | 4       | 6                       | 13        |
| Bahrain                | ---                        | 7         | ---                              | 4                                       | 254                | 265                             | 6       | 4                       | 100       |
| Oman                   | ---                        | ---       | ---                              | ---                                     | 245                | 245                             | 1       | 1                       | 1         |
| Other                  | ---                        | 19        | ---                              | 46                                      | 364                | 428                             | ---     | 4                       | 83        |
| Total                  | 2,489                      | 12,976    | 1,108                            | 11,103                                  | 50,684             | 78,355                          | 772     | 1,613                   | 5,014     |
| Africa:                |                            |           |                                  |   |                    |                                 |         |                         |           |
| Cameroon               | ---                        | ---       | ---                              | ---                                     | 221                | 221                             | ---     | ---                     | ---       |
| Egypt                  | ---                        | 270       | ---                              | ---                                     | ---                | 270                             | ---     | 1                       | 4         |
| Gabon                  | ---                        | ---       | ---                              | ---                                     | 17                 | 17                              | ---     | ---                     | ---       |
| Gambia                 | ---                        | ---       | ---                              | ---                                     | 44                 | 44                              | ---     | ---                     | ---       |
| Ghana                  | ---                        | 17        | ---                              | ---                                     | 240                | 258                             | ---     | ---                     | 17        |
| Ivory Coast            | ---                        | 19        | ---                              | ---                                     | 145                | 164                             | ---     | ---                     | ---       |
| Kenya                  | ---                        | 296       | ---                              | ---                                     | ---                | 296                             | ---     | ---                     | ---       |
| Liberia                | ---                        | ---       | 1                                | ---                                     | 27                 | 28                              | ---     | 2                       | 5         |
| Morocco                | ---                        | 50        | 3                                | 249                                     | 647                | 949                             | ---     | ---                     | 2         |
| Sierra Leon            | ---                        | ---       | ---                              | ---                                     | 222                | 222                             | ---     | ---                     | ---       |
| South Africa           | 19                         | 32        | 3                                | 1                                       | 1,030              | 1,084                           | ---     | 5                       | 12        |
| Zaire                  | ---                        | ---       | ---                              | 411                                     | 397                | 808                             | ---     | ---                     | ---       |
| Nigeria                | 28                         | 46        | ---                              | ---                                     | 803                | 877                             | ---     | 10                      | 4         |
| Senegal                | ---                        | ---       | ---                              | ---                                     | ---                | ---                             | ---     | ---                     | ---       |
| Other                  | ---                        | 18        | 12                               | 52                                      | 398                | 480                             | ---     | ---                     | 8         |
| Total                  | 47                         | 748       | 19                               | 713                                     | 4,191              | 5,717                           | 1       | 18                      | 52        |
| World total            | 11,961                     | 48,351    | 6,225                            | 46,347                                  | 169,308            | 282,193                         | 4,563   | 14,765                  | 68,831    |

Continued--



Table 22--Manmade fiber equivalent of U.S. textile exports by country, 1988--Continued

| Country of destination | Primarily manufactured products |             |                          |                                 |                | Total manufactured | Grand total |
|------------------------|---------------------------------|-------------|--------------------------|---------------------------------|----------------|--------------------|-------------|
|                        | House furnishings               | Knit fabric | Narrow and misc. fabrics | Other manufactures <sup>a</sup> | Floor covering |                    |             |
| 1,000 pounds           |                                 |             |                          |                                 |                |                    |             |
| Western Hemisphere:    |                                 |             |                          |                                 |                |                    |             |
| Bahamas                | 238                             | 11          | 2                        | 170                             | 590            | 1,268              | 1,476       |
| Brazil                 | 16                              | 21          | 205                      | 370                             | 6              | 676                | 2,930       |
| Br. Virgin Islands     | 16                              | 37          | 119                      | 172                             | 169            | 1,736              | 2,018       |
| Canada                 | 2,870                           | 7,929       | 16,816                   | 35,892                          | 24,389         | 91,990             | 156,769     |
| Chile                  | 136                             | 8           | 285                      | 1,700                           | 95             | 2,417              | 8,868       |
| Colombia               | 30                              | 192         | 2,014                    | 746                             | 222            | 5,654              | 7,213       |
| Costa Rica             | 312                             | 87          | 293                      | 540                             | 13             | 8,443              | 17,199      |
| Dominican Republic     | 138                             | 176         | 817                      | 2,120                           | 228            | 20,964             | 27,187      |
| Ecuador                | 16                              | ---         | 20                       | 378                             | 25             | 461                | 1,904       |
| El Salvador            | 2                               | 6           | 140                      | 185                             | 44             | 1,427              | 2,236       |
| Guatemala              | 7                               | 57          | 49                       | 239                             | 151            | 2,572              | 5,984       |
| Guyana                 | ---                             | 44          | 76                       | 230                             | 31             | 772                | 1,046       |
| Haiti                  | 29                              | 91          | 1,585                    | 630                             | 40             | 11,219             | 11,908      |
| Honduras               | 4                               | 45          | 33                       | 436                             | 38             | 2,753              | 3,497       |
| Jamaica                | 77                              | 457         | 536                      | 1,595                           | 425            | 9,188              | 11,446      |
| Mexico                 | 1,183                           | 242         | 17,621                   | 7,827                           | 1,248          | 48,526             | 82,171      |
| N. Antilles            | 157                             | 15          | 26                       | 97                              | 257            | 761                | 1,066       |
| Panama                 | 185                             | 19          | 83                       | 510                             | 502            | 1,616              | 3,214       |
| Paraguay               | 9                               | 21          | 1                        | 130                             | 58             | 225                | 1,586       |
| Trinidad               | 16                              | 77          | 14                       | 287                             | 344            | 760                | 1,334       |
| Venezuela              | 343                             | 84          | 110                      | 392                             | 70             | 1,549              | 13,622      |
| Peru                   | ---                             | ---         | 137                      | 76                              | ---            | 213                | 2,972       |
| Other                  | 137                             | 126         | 144                      | 622                             | 876            | 2,708              | 4,291       |
| Total                  | 5,921                           | 9,743       | 41,126                   | 55,341                          | 29,820         | 217,896            | 371,938     |
| Western Europe:        |                                 |             |                          |                                 |                |                    |             |
| Belgium-Luxem          | 63                              | 14          | 384                      | 3,670                           | 644            | 5,346              | 8,708       |
| Denmark                | 12                              | ---         | 67                       | 26                              | 122            | 283                | 1,377       |
| France                 | 392                             | 94          | 461                      | 984                             | 317            | 3,094              | 6,537       |
| Greece                 | 397                             | 37          | 44                       | 178                             | 158            | 864                | 1,420       |
| Ireland                | 33                              | 18          | 2,553                    | 402                             | 19             | 3,114              | 6,401       |
| Italy                  | 189                             | 75          | 263                      | 1,141                           | 288            | 2,459              | 6,861       |
| Netherlands            | 85                              | 19          | 96                       | 948                             | 1,973          | 3,301              | 5,099       |
| Portugal               | 1                               | ---         | 48                       | 373                             | 4              | 429                | 813         |
| Spain                  | 88                              | 31          | 95                       | 598                             | 44             | 1,004              | 1,872       |
| Sweden                 | 119                             | 12          | 88                       | 383                             | 696            | 1,569              | 2,574       |
| Switzerland            | 39                              | 54          | 121                      | 252                             | 349            | 935                | 1,160       |
| United Kingdom         | 368                             | 989         | 2,512                    | 6,669                           | 10,625         | 22,167             | 38,955      |
| W. Germany             | 323                             | 215         | 992                      | 2,236                           | 1,869          | 6,357              | 9,911       |
| Austria                | 3                               | 7           | 92                       | 404                             | 71             | 604                | 895         |
| Cyprus                 | 6                               | ---         | ---                      | 15                              | 404            | 431                | 523         |
| Finland                | 61                              | ---         | 205                      | 57                              | 257            | 614                | 2,414       |
| Other                  | 36                              | 3           | 32                       | 152                             | 317            | 615                | 954         |
| Total                  | 2,214                           | 1,567       | 8,053                    | 18,488                          | 18,159         | 53,185             | 96,473      |
| Eastern Europe:        |                                 |             |                          |                                 |                |                    |             |
| Bulgaria               | ---                             | ---         | ---                      | ---                             | ---            | ---                | 2           |
| Czechoslovakia         | ---                             | ---         | ---                      | 2                               | ---            | 2                  | 19          |
| Hungary                | ---                             | 8           | 23                       | 47                              | 17             | 94                 | 237         |
| Poland                 | ---                             | 1           | 11                       | 45                              | ---            | 92                 | 359         |
| Romania                | ---                             | 2           | ---                      | 32                              | ---            | 34                 | 36          |
| U.S.S.R.               | ---                             | ---         | ---                      | 13                              | 10             | 27                 | 56          |
| Yugoslavia             | ---                             | 9           | 2                        | 29                              | 4              | 44                 | 369         |
| Total                  | ---                             | 20          | 36                       | 167                             | 31             | 293                | 1,078       |
| Asia/Oceania:          |                                 |             |                          |                                 |                |                    |             |
| Australia              | 197                             | 368         | 387                      | 1,838                           | 952            | 3,862              | 9,132       |
| China-Mainland         | 6                               | 3           | 13                       | 159                             | 120            | 315                | 24,155      |
| Hong Kong              | 416                             | 497         | 1,534                    | 1,909                           | 4,944          | 9,559              | 15,867      |
| India                  | 14                              | ---         | 9                        | 94                              | 87             | 204                | 358         |
| Iraq                   | 1                               | ---         | 9                        | 9                               | 18             | 37                 | 442         |
| Israel                 | 11                              | 63          | 311                      | 1,008                           | 283            | 1,740              | 4,999       |
| Japan                  | 577                             | 305         | 1,381                    | 8,985                           | 11,749         | 26,829             | 30,294      |
| Jordan                 | 29                              | 49          | 3                        | 85                              | 737            | 909                | 1,625       |
| Korea                  | 37                              | 9           | 401                      | 1,351                           | 2,273          | 4,099              | 9,482       |
| Kuwait                 | 105                             | 37          | 2                        | 108                             | 4,868          | 5,728              | 6,263       |
| Lebanon                | 4                               | 112         | 71                       | 279                             | 684            | 1,169              | 1,489       |
| Malaysia               | 46                              | 83          | 29                       | 305                             | 384            | 870                | 1,212       |
| New Zealand            | 397                             | 59          | 218                      | 356                             | 24             | 1,067              | 2,923       |
| Pakistan               | ---                             | ---         | 87                       | 378                             | 3              | 469                | 1,145       |
| Philippines            | 65                              | 362         | 947                      | 581                             | 75             | 2,850              | 6,045       |
| Saudi Arabia           | 1,300                           | 199         | 76                       | 927                             | 33,131         | 36,439             | 44,715      |
| Singapore              | 401                             | 165         | 438                      | 520                             | 3,272          | 4,880              | 6,056       |
| Syria                  | ---                             | 35          | 214                      | 86                              | 9              | 343                | 1,210       |
| Taiwan                 | 76                              | 92          | 564                      | 639                             | 961            | 2,527              | 11,918      |
| Turkey                 | ---                             | ---         | 137                      | 9                               | 4              | 150                | 523         |
| U. Arab Em.            | 395                             | 37          | 7                        | 118                             | 8,118          | 8,950              | 9,750       |
| Thailand               | 6                               | 3           | 136                      | 82                              | 8              | 240                | 990         |
| Qatar                  | 43                              | ---         | ---                      | 7                               | 1,581          | 1,654              | 1,739       |
| Bahrain                | 12                              | ---         | 2                        | 33                              | 1,692          | 1,849              | 2,114       |
| Oman                   | 44                              | ---         | ---                      | 19                              | 948            | 1,015              | 1,260       |
| Other                  | 21                              | 66          | 33                       | 340                             | 245            | 794                | 1,224       |
| Total                  | 4,203                           | 2,543       | 7,009                    | 20,225                          | 77,170         | 118,549            | 196,910     |
| Africa:                |                                 |             |                          |                                 |                |                    |             |
| Cameroon               | ---                             | ---         | 6                        | 4                               | ---            | 10                 | 231         |
| Egypt                  | ---                             | ---         | ---                      | 81                              | 53             | 140                | 410         |
| Gabon                  | ---                             | ---         | ---                      | 430                             | 8              | 438                | 455         |
| Gambia                 | 1                               | ---         | ---                      | 1,006                           | ---            | 1,006              | 1,050       |
| Ghana                  | 1                               | ---         | ---                      | 21                              | 71             | 110                | 367         |
| Ivory Coast            | 60                              | ---         | 17                       | 181                             | 2              | 259                | 423         |
| Kenya                  | ---                             | ---         | ---                      | 2                               | 1              | 3                  | 299         |
| Liberia                | ---                             | ---         | ---                      | 21                              | 65             | 422                | 450         |
| Morocco                | 5                               | 16          | 90                       | 168                             | ---            | 283                | 1,231       |
| Sierra Leon            | ---                             | ---         | ---                      | 156                             | ---            | 136                | 358         |
| South Africa           | 117                             | 72          | 217                      | 578                             | 224            | 1,226              | 2,310       |
| Zaire                  | 1                               | ---         | 51                       | 82                              | ---            | 134                | 942         |
| Nigeria                | 45                              | 573         | 5,529                    | 1,305                           | 38             | 7,503              | 8,380       |
| Senegal                | 4                               | ---         | ---                      | 410                             | ---            | 414                | 479         |
| Other                  | 16                              | 38          | 64                       | 335                             | 20             | 479                | 479         |
| Total                  | 250                             | 700         | 5,995                    | 5,067                           | 484            | 12,563             | 18,279      |
| World Total            | 12,588                          | 14,574      | 62,219                   | 99,370                          | 125,676        | 402,588            | 684,781     |

--- = 0.

Source: Bureau of the Census.

Table 23--Raw wool equivalent of U.S. imports by country, 1968

| Country of origin   | Noils | Wastes | Tops and advanced wool | Yarns  | Moven fabrics | Wool blankets | Wearing apparel knit | Wearing apparel other than knit | Other manufac-tures | Carpet and rugs | Knit fabrics | Narrow and misc. fabrics | Total   |
|---------------------|-------|--------|------------------------|--------|---------------|---------------|----------------------|---------------------------------|---------------------|-----------------|--------------|--------------------------|---------|
| 1,000 pounds        |       |        |                        |        |               |               |                      |                                 |                     |                 |              |                          |         |
| Western Hemisphere: |       |        |                        |        |               |               |                      |                                 |                     |                 |              |                          |         |
| Argentina           | 124   | 703    | ---                    | 4      | 116           | ---           | 68                   | 766                             | 50                  | 2               | 13           | ---                      | 1,847   |
| Brazil              | 529   | 88     | ---                    | 731    | 1,625         | ---           | 160                  | 273                             | ---                 | 36              | ---          | ---                      | 3,442   |
| Canada              | 19    | 226    | 21                     | 789    | 485           | 1             | 225                  | 1,414                           | 561                 | 89              | 25           | 3                        | 3,857   |
| Colombia            | 107   | ---    | ---                    | ---    | 8             | ---           | 5                    | 930                             | ---                 | ---             | ---          | 3                        | 1,054   |
| Costa Rica          | ---   | ---    | ---                    | ---    | ---           | ---           | 81                   | 1,515                           | ---                 | ---             | ---          | ---                      | 1,596   |
| Dom. Republic       | ---   | ---    | ---                    | ---    | ---           | ---           | 306                  | 4,196                           | ---                 | 16              | ---          | ---                      | 4,518   |
| Ecuador             | ---   | ---    | ---                    | ---    | ---           | ---           | 284                  | 13                              | 18                  | 1               | ---          | ---                      | 317     |
| Haiti               | ---   | ---    | ---                    | ---    | 1             | ---           | 83                   | 261                             | 11                  | 4               | ---          | ---                      | 359     |
| Jamaica             | ---   | ---    | ---                    | ---    | ---           | ---           | 224                  | 160                             | ---                 | ---             | ---          | ---                      | 384     |
| Mexico              | ---   | ---    | ---                    | 139    | 172           | 36            | 108                  | 3,557                           | 54                  | 276             | ---          | ---                      | 4,342   |
| Peru                | 27    | ---    | 9                      | 17     | 127           | 3             | 164                  | 5                               | 69                  | 5               | ---          | ---                      | 427     |
| Uruguay             | 1,813 | 311    | ---                    | 10     | 963           | 6             | 648                  | 1,927                           | 110                 | ---             | 25           | ---                      | 5,814   |
| Other               | 17    | ---    | 108                    | 2      | 213           | 8             | 153                  | 448                             | ---                 | 19              | 2            | ---                      | 972     |
| Total               | 2,636 | 1,328  | 138                    | 1,692  | 3,710         | 54            | 2,509                | 15,465                          | 873                 | 448             | 65           | 6                        | 28,929  |
| Western Europe:     |       |        |                        |        |               |               |                      |                                 |                     |                 |              |                          |         |
| Belgium-Luxem       | 98    | 522    | 32                     | 3,085  | 29            | ---           | 10                   | 6                               | 12                  | 6,286           | 3            | 11                       | 10,093  |
| France              | 513   | 179    | 39                     | 1,333  | 319           | 25            | 243                  | 898                             | 16                  | 133             | 12           | 7                        | 3,718   |
| Greece              | ---   | ---    | ---                    | 293    | 1             | 3             | 55                   | 585                             | ---                 | 534             | ---          | ---                      | 1,471   |
| Ireland             | ---   | ---    | ---                    | 31     | 211           | 17            | 503                  | 150                             | 2                   | 1,735           | ---          | 2                        | 2,651   |
| Italy               | ---   | 369    | ---                    | 602    | 12,573        | 40            | 4,931                | 4,715                           | 43                  | 71              | 104          | 41                       | 23,491  |
| Netherlands         | ---   | 10     | ---                    | 38     | 144           | 1             | 11                   | 80                              | 10                  | 1,188           | ---          | 100                      | 1,583   |
| Portugal            | ---   | ---    | ---                    | 7      | 58            | ---           | 162                  | 113                             | 6                   | 97              | ---          | ---                      | 442     |
| Spain               | ---   | ---    | ---                    | 124    | 88            | 1             | 70                   | 64                              | 178                 | 1,518           | ---          | ---                      | 2,045   |
| Switzerland         | ---   | ---    | 26                     | 121    | 267           | 9             | 27                   | 82                              | 6                   | 277             | ---          | 10                       | 825     |
| United Kingdom      | 1,525 | 2,637  | 121                    | 1,768  | 3,605         | 237           | 2,634                | 1,268                           | 91                  | 3,430           | 8            | 155                      | 17,479  |
| West Germany        | 220   | 54     | 2                      | 1,103  | 442           | 11            | 215                  | 991                             | 82                  | 229             | 20           | 162                      | 3,529   |
| Other               | ---   | ---    | ---                    | 160    | 86            | 52            | 411                  | 225                             | 7                   | 449             | 10           | 7                        | 1,404   |
| Total               | 2,356 | 3,771  | 220                    | 8,665  | 17,823        | 396           | 9,273                | 9,177                           | 453                 | 15,947          | 154          | 495                      | 68,731  |
| Eastern Europe:     |       |        |                        |        |               |               |                      |                                 |                     |                 |              |                          |         |
| Bulgaria            | ---   | ---    | ---                    | ---    | 8             | ---           | ---                  | 172                             | ---                 | ---             | ---          | ---                      | 181     |
| Czechoslovakia      | ---   | ---    | ---                    | ---    | 291           | ---           | 119                  | 1,046                           | ---                 | 3               | ---          | ---                      | 1,459   |
| Hungary             | ---   | ---    | ---                    | ---    | 642           | ---           | 175                  | 1,802                           | ---                 | 32              | ---          | ---                      | 2,651   |
| Poland              | ---   | ---    | ---                    | ---    | 932           | 1             | 280                  | 1,287                           | 2                   | 14              | ---          | ---                      | 2,516   |
| Romania             | ---   | ---    | ---                    | ---    | 5             | 31            | 209                  | 1,097                           | ---                 | 730             | ---          | ---                      | 2,073   |
| U.S.S.R.            | ---   | ---    | ---                    | ---    | ---           | ---           | ---                  | ---                             | ---                 | 5               | ---          | ---                      | 6       |
| Yugoslavia          | ---   | ---    | ---                    | ---    | 735           | ---           | 143                  | 2,473                           | ---                 | 10              | ---          | ---                      | 3,361   |
| Total               | ---   | ---    | ---                    | ---    | 2,614         | 32            | 926                  | 7,877                           | 2                   | 795             | ---          | ---                      | 12,246  |
| Asia/Oceania:       |       |        |                        |        |               |               |                      |                                 |                     |                 |              |                          |         |
| Bangladesh          | ---   | ---    | ---                    | ---    | ---           | ---           | 280                  | 209                             | ---                 | ---             | ---          | ---                      | 489     |
| Australia           | 313   | 564    | 249                    | 112    | 67            | 34            | 138                  | 43                              | 2                   | 476             | ---          | 3                        | 2,002   |
| China-Hainland      | 10    | ---    | 22                     | 160    | 901           | 3             | 8,299                | 7,860                           | 133                 | 8,400           | ---          | ---                      | 25,788  |
| Hong Kong           | 38    | 91     | ---                    | ---    | 4             | 1             | 24,376               | 4,917                           | 6                   | 234             | 6            | ---                      | 29,674  |
| India               | ---   | ---    | ---                    | ---    | 51            | 1             | 171                  | 164                             | 24                  | 8,098           | ---          | ---                      | 8,509   |
| Iran                | ---   | ---    | ---                    | ---    | ---           | ---           | ---                  | ---                             | ---                 | 185             | ---          | ---                      | 185     |
| Iraq                | ---   | ---    | ---                    | ---    | ---           | 53            | ---                  | ---                             | 2                   | 41              | ---          | ---                      | 96      |
| Israel              | 100   | ---    | ---                    | ---    | 46            | 9             | 89                   | 165                             | 2                   | 52              | ---          | ---                      | 462     |
| Japan               | 23    | ---    | ---                    | 173    | 1,796         | 1             | 212                  | 1,063                           | 38                  | 1,751           | 163          | 2                        | 5,223   |
| Korea               | ---   | ---    | ---                    | 112    | 2,272         | ---           | 9,214                | 11,059                          | 48                  | 81              | ---          | ---                      | 22,786  |
| Malaysia            | ---   | ---    | ---                    | 40     | ---           | ---           | 877                  | 465                             | ---                 | 4               | ---          | ---                      | 1,386   |
| New Zealand         | 60    | 275    | 59                     | 1,086  | 108           | 77            | 28                   | 2                               | 13                  | 391             | ---          | 5                        | 2,105   |
| Pakistan            | ---   | ---    | ---                    | ---    | 1             | ---           | 41                   | 224                             | 3                   | 2,028           | ---          | ---                      | 2,297   |
| Philippines         | ---   | ---    | ---                    | ---    | ---           | ---           | 836                  | 896                             | ---                 | 145             | ---          | ---                      | 1,876   |
| Singapore           | ---   | ---    | ---                    | 3      | ---           | ---           | 1,162                | 364                             | ---                 | 5               | ---          | ---                      | 1,535   |
| Taiwan              | 22    | ---    | ---                    | 192    | 7             | ---           | 8,884                | 9,707                           | 5                   | 6               | 9            | 1                        | 18,834  |
| Turkey              | ---   | ---    | ---                    | 9      | 27            | ---           | 61                   | 128                             | 6                   | 714             | ---          | ---                      | 945     |
| Indonesia           | ---   | ---    | ---                    | ---    | ---           | ---           | 694                  | 625                             | ---                 | ---             | ---          | ---                      | 13,197  |
| Sri Lanka           | ---   | ---    | 10                     | ---    | ---           | ---           | 747                  | 810                             | ---                 | ---             | ---          | ---                      | 1,567   |
| Thailand            | ---   | ---    | ---                    | 122    | 1             | ---           | 522                  | 740                             | ---                 | 325             | ---          | ---                      | 1,711   |
| Macao               | ---   | ---    | ---                    | ---    | ---           | ---           | 1,397                | 980                             | ---                 | ---             | 1            | ---                      | 2,378   |
| Other               | ---   | ---    | ---                    | ---    | ---           | ---           | 52                   | 42                              | ---                 | 248             | ---          | ---                      | 343     |
| Total               | 566   | 930    | 340                    | 2,009  | 5,281         | 179           | 58,080               | 40,463                          | 282                 | 23,184          | 179          | 11                       | 143,388 |
| Africa:             |       |        |                        |        |               |               |                      |                                 |                     |                 |              |                          |         |
| Egypt               | 162   | 13     | ---                    | 1      | ---           | ---           | 1                    | ---                             | 3                   | 63              | ---          | ---                      | 243     |
| Morocco             | ---   | ---    | ---                    | ---    | ---           | ---           | 4                    | 11                              | ---                 | 96              | ---          | ---                      | 111     |
| Niger               | ---   | ---    | ---                    | ---    | ---           | 5             | ---                  | 4                               | ---                 | 6               | ---          | ---                      | 14      |
| South Africa        | ---   | ---    | ---                    | ---    | ---           | ---           | ---                  | ---                             | 1                   | ---             | ---          | ---                      | 1       |
| Swaziland           | ---   | ---    | ---                    | ---    | 1             | ---           | 10                   | ---                             | 3                   | 5               | ---          | ---                      | 19      |
| Tunisia             | ---   | ---    | ---                    | ---    | ---           | ---           | 8                    | ---                             | ---                 | 12              | ---          | ---                      | 20      |
| Uganda              | ---   | ---    | ---                    | ---    | ---           | ---           | 6                    | ---                             | ---                 | ---             | ---          | ---                      | 6       |
| Zimbabwe            | ---   | ---    | ---                    | ---    | ---           | ---           | ---                  | 7                               | ---                 | ---             | ---          | ---                      | 7       |
| Mauritius           | ---   | ---    | ---                    | 1      | ---           | ---           | 439                  | 61                              | ---                 | 10              | ---          | ---                      | 511     |
| Other               | ---   | ---    | ---                    | ---    | 2             | ---           | 8                    | 13                              | 1                   | 6               | ---          | ---                      | 28      |
| Total               | 162   | 13     | ---                    | 2      | 3             | 5             | 476                  | 96                              | 8                   | 198             | ---          | ---                      | 960     |
| World Total         | 5,720 | 6,042  | 698                    | 12,368 | 29,431        | 667           | 71,264               | 73,081                          | 1,621               | 40,572          | 399          | 512                      | 254,254 |

--- = 0.

Source: Bureau of the Census.

Table 24--Raw wool equivalent of U.S. textile exports by country, 1988

| Country of destination     | Noils and wastes | Tops and advanced wool | Yarns      | Broad woven fabrics | Wearing apparel |              |              | Other manufactures | Floor covering | Knit fabric | Total         |
|----------------------------|------------------|------------------------|------------|---------------------|-----------------|--------------|--------------|--------------------|----------------|-------------|---------------|
|                            |                  |                        |            |                     | Wool blankets   | Knit         | Non-knit     |                    |                |             |               |
| 1,000 pounds               |                  |                        |            |                     |                 |              |              |                    |                |             |               |
| <b>Western Hemisphere:</b> |                  |                        |            |                     |                 |              |              |                    |                |             |               |
| Argentina                  | ---              | ---                    | ---        | 15                  | ---             | ---          | ---          | 1                  | ---            | ---         | 16            |
| Bahamas                    | ---              | ---                    | ---        | 1                   | 1               | 7            | 20           | 4                  | ---            | ---         | 33            |
| Brazil                     | ---              | 43                     | ---        | 22                  | ---             | ---          | ---          | 2                  | 1              | ---         | 67            |
| Canada                     | 138              | 292                    | 27         | 391                 | 4               | 74           | 232          | 24                 | 192            | 43          | 1,442         |
| Chile                      | ---              | ---                    | 5          | 15                  | ---             | ---          | 3            | ---                | 5              | ---         | 30            |
| Colombia                   | ---              | ---                    | ---        | 22                  | 1               | 138          | 217          | 3                  | 164            | 3           | 556           |
| Costa Rica                 | ---              | ---                    | ---        | 9                   | ---             | 978          | 32           | ---                | 6              | ---         | 1,025         |
| Cuba                       | ---              | ---                    | ---        | ---                 | ---             | ---          | ---          | ---                | ---            | ---         | ---           |
| Dominican Republic         | 11               | 1                      | ---        | 29                  | ---             | 284          | 454          | 63                 | 18             | 3           | 864           |
| Ecuador                    | ---              | 7                      | ---        | 12                  | ---             | ---          | ---          | ---                | 1              | ---         | 20            |
| El Salvador                | ---              | ---                    | ---        | 3                   | ---             | 174          | ---          | ---                | 7              | ---         | 183           |
| Guatemala                  | ---              | 1                      | 2          | 25                  | ---             | 30           | 39           | ---                | 4              | 1           | 102           |
| Guyana                     | ---              | ---                    | ---        | 2                   | ---             | ---          | 23           | ---                | ---            | ---         | 24            |
| Haiti                      | ---              | ---                    | 2          | 60                  | ---             | 67           | 218          | ---                | 111            | ---         | 458           |
| Honduras                   | ---              | ---                    | 4          | 5                   | ---             | 18           | 33           | ---                | 9              | ---         | 69            |
| Jamaica                    | ---              | 15                     | ---        | 33                  | 1               | 64           | 199          | 32                 | 23             | 1           | 366           |
| Mexico                     | 110              | 545                    | 7          | 226                 | 14              | 485          | 182          | 97                 | 614            | 31          | 2,368         |
| N. Antilles                | ---              | 1                      | ---        | ---                 | 1               | 5            | 9            | ---                | 1              | ---         | 17            |
| Nicaragua                  | ---              | ---                    | ---        | ---                 | ---             | ---          | ---          | ---                | ---            | ---         | ---           |
| Panama                     | ---              | ---                    | ---        | 7                   | ---             | 21           | 20           | ---                | 17             | 3           | 72            |
| Venezuela                  | ---              | 671                    | ---        | 8                   | ---             | 2            | 15           | 2                  | 38             | ---         | 735           |
| Uruguay                    | ---              | 1                      | ---        | 1                   | ---             | 14           | ---          | 1                  | 1              | 4           | 22            |
| Other                      | 5                | 2                      | 1          | 10                  | 1               | 10           | 7            | ---                | 11             | 2           | 46            |
| <b>Total</b>               | <b>264</b>       | <b>1,579</b>           | <b>48</b>  | <b>896</b>          | <b>23</b>       | <b>2,370</b> | <b>1,705</b> | <b>222</b>         | <b>1,227</b>   | <b>91</b>   | <b>8,519</b>  |
| <b>Western Europe:</b>     |                  |                        |            |                     |                 |              |              |                    |                |             |               |
| Belgium-Luxem              | 11               | ---                    | ---        | 4                   | ---             | 2            | 10           | 2                  | 45             | 15          | 90            |
| Denmark                    | ---              | ---                    | ---        | 1                   | ---             | 2            | 2            | ---                | 4              | ---         | 13            |
| France                     | 104              | 144                    | ---        | 72                  | 1               | 58           | 39           | 3                  | 28             | 26          | 474           |
| Greece                     | ---              | ---                    | ---        | 1                   | 1               | 1            | 1            | ---                | 14             | ---         | 19            |
| Ireland                    | ---              | ---                    | ---        | 17                  | ---             | 2            | 1            | ---                | 26             | ---         | 47            |
| Italy                      | 295              | 1,138                  | 54         | 41                  | ---             | 104          | 56           | ---                | 82             | 9           | 1,786         |
| Netherlands                | 377              | 222                    | ---        | 3                   | ---             | 41           | 5            | ---                | 56             | 12          | 717           |
| Spain                      | ---              | ---                    | ---        | 4                   | ---             | 1            | 4            | 1                  | 12             | 3           | 26            |
| Sweden                     | ---              | 2                      | ---        | 5                   | ---             | 4            | 1            | ---                | 4              | 2           | 18            |
| Switzerland                | ---              | 5                      | ---        | 13                  | ---             | 8            | 12           | 3                  | 3              | 10          | 53            |
| United Kingdom             | 627              | 699                    | ---        | 84                  | 1               | 58           | 110          | 1                  | 118            | 13          | 1,716         |
| W. Germany                 | 63               | 475                    | 10         | 18                  | 1               | 10           | 25           | 2                  | 113            | 17          | 734           |
| Austria                    | ---              | ---                    | ---        | 9                   | ---             | 1            | 43           | ---                | ---            | ---         | 53            |
| Cyprus                     | ---              | ---                    | ---        | 21                  | ---             | ---          | 1            | ---                | ---            | ---         | 22            |
| Other                      | ---              | ---                    | ---        | 2                   | ---             | 3            | 4            | ---                | 5              | 1           | 15            |
| <b>Total</b>               | <b>1,477</b>     | <b>2,685</b>           | <b>64</b>  | <b>295</b>          | <b>4</b>        | <b>296</b>   | <b>314</b>   | <b>11</b>          | <b>511</b>     | <b>109</b>  | <b>5,783</b>  |
| <b>Eastern Europe:</b>     |                  |                        |            |                     |                 |              |              |                    |                |             |               |
| Czechoslovakia             | ---              | ---                    | ---        | ---                 | ---             | ---          | ---          | ---                | 2              | ---         | 2             |
| East Germany               | ---              | ---                    | ---        | ---                 | ---             | ---          | ---          | ---                | ---            | ---         | ---           |
| Hungary                    | ---              | ---                    | ---        | 8                   | ---             | ---          | ---          | ---                | ---            | ---         | 9             |
| Poland                     | ---              | ---                    | ---        | 3                   | ---             | 11           | ---          | ---                | 1              | ---         | 15            |
| U.S.S.R.                   | ---              | ---                    | ---        | ---                 | ---             | ---          | ---          | ---                | ---            | 1           | 1             |
| Yugoslavia                 | ---              | ---                    | ---        | 67                  | ---             | ---          | ---          | ---                | ---            | ---         | 68            |
| Other                      | ---              | ---                    | ---        | ---                 | ---             | ---          | ---          | ---                | ---            | ---         | ---           |
| <b>Total</b>               | ---              | ---                    | ---        | <b>78</b>           | ---             | <b>11</b>    | ---          | ---                | <b>3</b>       | <b>1</b>    | <b>141</b>    |
| <b>Asia/Oceania:</b>       |                  |                        |            |                     |                 |              |              |                    |                |             |               |
| Australia                  | ---              | 67                     | ---        | 72                  | ---             | 2            | 27           | 1                  | 40             | 2           | 211           |
| China-Mainland             | ---              | 861                    | ---        | 32                  | ---             | 13           | ---          | ---                | 24             | 1           | 930           |
| Hong Kong                  | 9                | 702                    | 2          | 71                  | 1               | 21           | 53           | 3                  | 126            | 6           | 997           |
| India                      | 126              | ---                    | ---        | ---                 | ---             | ---          | ---          | ---                | 1              | ---         | 127           |
| Iran                       | ---              | ---                    | ---        | ---                 | ---             | ---          | ---          | ---                | ---            | ---         | ---           |
| Iraq                       | ---              | 1,580                  | ---        | ---                 | ---             | ---          | ---          | ---                | 5              | ---         | 1,585         |
| Israel                     | ---              | 85                     | 1          | 13                  | ---             | 18           | 2            | 1                  | 43             | ---         | 162           |
| Japan                      | 109              | 5,640                  | 1          | 92                  | 1               | 372          | 706          | 5                  | 64             | 3           | 7,000         |
| Jordan                     | ---              | ---                    | ---        | 1                   | ---             | ---          | 1            | ---                | ---            | ---         | 33            |
| Korea                      | 502              | 1,575                  | ---        | 48                  | ---             | 1            | 1            | 1                  | 12             | ---         | 2,167         |
| Kuwait                     | ---              | ---                    | ---        | ---                 | ---             | ---          | 10           | ---                | ---            | 3           | 14            |
| Malaysia                   | ---              | ---                    | ---        | 62                  | 1               | ---          | ---          | ---                | 2              | 3           | 69            |
| New Zealand                | 2                | ---                    | ---        | 7                   | ---             | 9            | ---          | 1                  | 5              | ---         | 91            |
| Pakistan                   | ---              | 225                    | ---        | ---                 | ---             | ---          | ---          | ---                | ---            | ---         | 225           |
| Philippines                | ---              | 11                     | 296        | 24                  | ---             | ---          | ---          | ---                | 29             | 4           | 369           |
| Saudi Arabia               | ---              | ---                    | 1          | 18                  | 2               | 44           | 34           | 2                  | 27             | 43          | 170           |
| Singapore                  | ---              | ---                    | ---        | 52                  | 2               | 5            | ---          | ---                | 5              | ---         | 82            |
| Syria                      | ---              | 3                      | ---        | ---                 | ---             | ---          | ---          | ---                | 12             | ---         | 14            |
| Taiwan                     | ---              | 1,266                  | 2          | 107                 | ---             | 3            | 3            | ---                | 39             | 4           | 1,427         |
| U. Arab Em.                | ---              | ---                    | ---        | 1                   | ---             | 22           | 4            | ---                | 1              | ---         | 28            |
| Thailand                   | ---              | ---                    | ---        | 12                  | ---             | 1            | ---          | ---                | 4              | ---         | 17            |
| Qatar                      | ---              | ---                    | ---        | ---                 | ---             | 1            | 3            | ---                | ---            | ---         | 4             |
| New Caledonia              | ---              | ---                    | ---        | ---                 | ---             | 1            | 4            | ---                | ---            | ---         | 4             |
| Bahrain                    | ---              | ---                    | ---        | ---                 | ---             | 21           | 1            | ---                | ---            | ---         | 22            |
| Oman                       | ---              | ---                    | ---        | ---                 | ---             | ---          | ---          | ---                | ---            | ---         | 6             |
| Other                      | ---              | ---                    | ---        | 2                   | ---             | 1            | 2            | ---                | 6              | ---         | 9             |
| <b>Total</b>               | <b>748</b>       | <b>12,013</b>          | <b>303</b> | <b>616</b>          | <b>8</b>        | <b>536</b>   | <b>852</b>   | <b>50</b>          | <b>455</b>     | <b>70</b>   | <b>15,765</b> |
| <b>Africa:</b>             |                  |                        |            |                     |                 |              |              |                    |                |             |               |
| Ivory Coast                | ---              | ---                    | ---        | 2                   | ---             | ---          | ---          | ---                | 1              | ---         | 3             |
| Liberia                    | ---              | ---                    | ---        | ---                 | ---             | 1            | 3            | ---                | ---            | ---         | 4             |
| South Africa               | ---              | ---                    | ---        | 1                   | ---             | 2            | ---          | 10                 | 3              | ---         | 16            |
| Togo                       | ---              | ---                    | ---        | 3                   | ---             | ---          | ---          | ---                | ---            | ---         | 3             |
| Zaire                      | ---              | 18                     | ---        | ---                 | ---             | ---          | ---          | ---                | ---            | ---         | 18            |
| Nigeria                    | ---              | ---                    | ---        | 324                 | ---             | ---          | ---          | ---                | 42             | ---         | 365           |
| Mauritius                  | ---              | ---                    | ---        | ---                 | ---             | ---          | ---          | ---                | ---            | ---         | ---           |
| Other                      | ---              | ---                    | 1          | 7                   | ---             | 1            | ---          | ---                | 7              | ---         | 14            |
| <b>Total</b>               | ---              | <b>18</b>              | <b>1</b>   | <b>337</b>          | ---             | <b>4</b>     | <b>3</b>     | <b>10</b>          | <b>53</b>      | ---         | <b>426</b>    |
| <b>World total</b>         | <b>2,489</b>     | <b>16,294</b>          | <b>417</b> | <b>2,219</b>        | <b>37</b>       | <b>3,216</b> | <b>2,874</b> | <b>294</b>         | <b>2,259</b>   | <b>272</b>  | <b>30,597</b> |

--- = 0.

Source: Bureau of the Census.

Table 25--Raw fiber equivalent of U.S. imports for consumption of vegetable fibers other than cotton textile manufactures by country, 1988

| Country of origin          | Yarn          | Cord thread, crochet, knitting yarn | Woven fabric   | Knit fabric | Narrow and misc. fabric | Wearing apparel knit | Wearing apparel, non knit | Handkerchiefs | Bedding, drapes, and towels | Lace articles | Floor covering | Misc. products | Total          |
|----------------------------|---------------|-------------------------------------|----------------|-------------|-------------------------|----------------------|---------------------------|---------------|-----------------------------|---------------|----------------|----------------|----------------|
| 1,000 pounds               |               |                                     |                |             |                         |                      |                           |               |                             |               |                |                |                |
| <b>Western Hemisphere:</b> |               |                                     |                |             |                         |                      |                           |               |                             |               |                |                |                |
| Canada                     | 695           | 1,184                               | 493            | 5           | 378                     | 3                    | 38                        | ---           | 13                          | 11            | 3,031          | 591            | 6,441          |
| Mexico                     | 1,538         | 23,237                              | 1,808          | ---         | 8                       | 20                   | 18                        | ---           | ---                         | 2             | 7              | 2,821          | 29,467         |
| Haiti                      | ---           | 16,135                              | ---            | ---         | 905                     | ---                  | 1                         | ---           | 11                          | ---           | ---            | 470            | 17,521         |
| Dominican Republic         | ---           | ---                                 | ---            | ---         | ---                     | 68                   | 71                        | ---           | 3                           | ---           | ---            | 1,506          | 1,647          |
| Brazil                     | 276           | 116,637                             | 464            | ---         | 45                      | 14                   | 3                         | ---           | 20                          | 2             | ---            | 1,359          | 118,819        |
| Other                      | ---           | 18                                  | 134            | ---         | ---                     | 40                   | 114                       | ---           | 15                          | ---           | ---            | 70             | 596            |
| Total                      | 2,509         | 157,211                             | 2,899          | 5           | 1,336                   | 345                  | 245                       | ---           | 69                          | 15            | 3,038          | 6,817          | 174,491        |
| <b>Western Europe:</b>     |               |                                     |                |             |                         |                      |                           |               |                             |               |                |                |                |
| United Kingdom             | 991           | 267                                 | 869            | 1           | 41                      | 88                   | 37                        | 5             | 77                          | 8             | 75             | 3,638          | 6,096          |
| Belgium                    | 976           | 29                                  | 1,756          | ---         | 11                      | ---                  | 1                         | ---           | 14                          | 2             | 2,501          | 5              | 5,295          |
| West Germany               | 14            | 7                                   | 178            | 12          | 58                      | 6                    | 51                        | ---           | 2                           | 1             | 3,719          | 1,470          | 5,516          |
| Portugal                   | ---           | 15,935                              | 3              | ---         | ---                     | 3                    | 6                         | 3             | 43                          | 1             | 46             | ---            | 16,042         |
| Italy                      | 48            | 197                                 | 1,528          | ---         | 40                      | 136                  | 510                       | ---           | 44                          | 5             | 9              | 550            | 3,073          |
| Other                      | 168           | 167                                 | 455            | 4           | 18                      | 32                   | 257                       | 2             | 64                          | 26            | 180            | 127            | 1,503          |
| Total                      | 2,274         | 16,658                              | 5,149          | 18          | 258                     | 278                  | 950                       | 10            | 272                         | 52            | 7,493          | 6,470          | 39,886         |
| <b>Eastern Europe:</b>     |               |                                     |                |             |                         |                      |                           |               |                             |               |                |                |                |
| East Germany               | ---           | ---                                 | ---            | ---         | ---                     | ---                  | 1                         | ---           | ---                         | ---           | ---            | ---            | 1              |
| Poland                     | ---           | ---                                 | 2,473          | ---         | ---                     | ---                  | 149                       | ---           | 786                         | ---           | ---            | ---            | 3,409          |
| Romania                    | ---           | ---                                 | 275            | ---         | ---                     | 6                    | 1,181                     | ---           | 17                          | ---           | ---            | ---            | 1,479          |
| U.S.S.R.                   | ---           | ---                                 | 3              | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | 3              |
| Czechoslovakia             | ---           | ---                                 | 1,015          | ---         | ---                     | ---                  | ---                       | ---           | 24                          | ---           | ---            | ---            | 1,040          |
| Hungary                    | 109           | 109                                 | 97             | ---         | ---                     | 1                    | 291                       | ---           | ---                         | ---           | ---            | 1              | 607            |
| Bulgaria                   | ---           | ---                                 | 36             | ---         | ---                     | 1                    | ---                       | ---           | ---                         | ---           | ---            | ---            | 37             |
| Yugoslavia                 | ---           | ---                                 | 118            | ---         | ---                     | ---                  | 16                        | ---           | ---                         | 1             | ---            | ---            | 135            |
| Total                      | 109           | 109                                 | 4,016          | ---         | ---                     | 8                    | 1,638                     | ---           | 828                         | 1             | ---            | 1              | 6,709          |
| <b>Asia/Oceania:</b>       |               |                                     |                |             |                         |                      |                           |               |                             |               |                |                |                |
| Bangladesh                 | 10,095        | 814                                 | 106,513        | 2           | 905                     | 140                  | 662                       | ---           | 22                          | 16            | 833            | 3,245          | 123,082        |
| India                      | 2,322         | ---                                 | 63,571         | ---         | 529                     | 25                   | 283                       | ---           | 378                         | 1             | 1,159          | 13,224         | 81,491         |
| Sri Lanka                  | 1,555         | 1,099                               | ---            | ---         | ---                     | 53                   | 119                       | ---           | 1                           | ---           | 202            | ---            | 3,023          |
| Thailand                   | 2,166         | 2,591                               | 112            | ---         | ---                     | 1,563                | 354                       | ---           | 30                          | ---           | ---            | 3,998          | 10,814         |
| Philippines                | 405           | 16,554                              | 400            | ---         | 406                     | 398                  | 916                       | 4             | 730                         | 18            | 4              | 1,754          | 21,590         |
| Macao                      | ---           | ---                                 | ---            | 1           | ---                     | 1,609                | 55                        | ---           | ---                         | ---           | ---            | ---            | 1,664          |
| China-Mainland             | 1             | 92                                  | 1,184          | 7           | 7                       | 24,888               | 9,777                     | 1             | 1,347                       | 6             | 70             | 5,460          | 42,840         |
| Korea                      | ---           | ---                                 | 370            | 1           | 15                      | 11,915               | 1,555                     | ---           | 1                           | ---           | ---            | 3,733          | 17,590         |
| Hong Kong                  | 7             | 309                                 | 536            | 2           | 435                     | 9,988                | 5,574                     | ---           | 47                          | 6             | 14             | 925            | 17,394         |
| Taiwan                     | 3             | 193                                 | 123            | 41          | 171                     | 3,150                | 605                       | ---           | 173                         | 28            | 440            | 6,211          | 11,136         |
| Japan                      | 45            | 1                                   | 1,155          | ---         | 522                     | 15                   | 69                        | 1             | 1                           | ---           | 1              | 369            | 2,182          |
| Iraq                       | ---           | ---                                 | ---            | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | ---            |
| Iran                       | ---           | ---                                 | ---            | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | 1              |
| Israel                     | ---           | ---                                 | ---            | ---         | ---                     | 9                    | 3                         | ---           | 2                           | ---           | ---            | 27             | 41             |
| Other                      | 5             | 47                                  | 44             | 1           | 10                      | 15                   | 52                        | ---           | 144                         | 5             | 4              | ---            | 42             |
| Total                      | 16,713        | 21,850                              | 200,767        | 54          | 2,590                   | 54,710               | 22,817                    | 6             | 3,560                       | 80            | 2,713          | 39,039         | 336,321        |
| <b>Africa:</b>             |               |                                     |                |             |                         |                      |                           |               |                             |               |                |                |                |
| South Africa               | ---           | ---                                 | ---            | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | ---            |
| Tunisia                    | ---           | ---                                 | ---            | ---         | ---                     | 1                    | ---                       | ---           | ---                         | ---           | ---            | ---            | 1              |
| Tanzania                   | ---           | 10,643                              | ---            | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | 10,645         |
| Maritius                   | ---           | ---                                 | 2              | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | 2              |
| Lesotho                    | ---           | ---                                 | 288            | ---         | ---                     | 50                   | 18                        | ---           | ---                         | ---           | ---            | ---            | 356            |
| Sudan                      | 97            | 9                                   | ---            | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | 106            |
| Other                      | ---           | ---                                 | ---            | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | ---            |
| Total                      | 97            | 10,652                              | 290            | ---         | ---                     | 51                   | 18                        | ---           | ---                         | ---           | ---            | ---            | 11,001         |
| Residual                   | ---           | 3                                   | ---            | ---         | 1                       | 2                    | ---                       | 8             | ---                         | ---           | 1              | 6              | 21             |
| <b>World Total</b>         | <b>21,702</b> | <b>206,471</b>                      | <b>191,289</b> | <b>72</b>   | <b>4,184</b>            | <b>55,393</b>        | <b>25,528</b>             | <b>16</b>     | <b>4,718</b>                | <b>1,481</b>  | <b>13,244</b>  | <b>52,332</b>  | <b>568,429</b> |

--- = 0.

Source: Bureau of the Census.

Table 26--Silk equivalent of U.S. imports by country, 1988

| Country of origin          | Yarn       | Cord thread, crochet, knitting yarn | Woven fabric | Knit fabric | Narrow and misc. fabric | Wearing apparel knit | Wearing apparel, non knit | Handkerchiefs | Bedding, drapes, and towels | Lace articles | Floor covering | Misc. products | Total         |
|----------------------------|------------|-------------------------------------|--------------|-------------|-------------------------|----------------------|---------------------------|---------------|-----------------------------|---------------|----------------|----------------|---------------|
| 1,000 pounds               |            |                                     |              |             |                         |                      |                           |               |                             |               |                |                |               |
| <b>Western Hemisphere:</b> |            |                                     |              |             |                         |                      |                           |               |                             |               |                |                |               |
| Brazil                     | 22         | ---                                 | 20           | ---         | ---                     | 6                    | 12                        | ---           | ---                         | ---           | ---            | ---            | 60            |
| Canada                     | 9          | ---                                 | 100          | ---         | ---                     | 8                    | 118                       | ---           | ---                         | ---           | ---            | 7              | 243           |
| Colombia                   | ---        | ---                                 | 3            | ---         | ---                     | ---                  | 38                        | ---           | ---                         | ---           | ---            | ---            | 41            |
| Costa Rica                 | ---        | ---                                 | ---          | ---         | ---                     | 29                   | 3                         | ---           | ---                         | ---           | ---            | ---            | 32            |
| Dominican Republic*        | ---        | ---                                 | ---          | ---         | ---                     | 24                   | 119                       | ---           | ---                         | ---           | ---            | 2              | 144           |
| Guatemala                  | ---        | ---                                 | 16           | ---         | ---                     | ---                  | 3                         | ---           | ---                         | ---           | ---            | ---            | 19            |
| Honduras                   | ---        | ---                                 | 40           | ---         | ---                     | ---                  | 1                         | ---           | ---                         | ---           | ---            | ---            | 41            |
| Jamaica                    | ---        | ---                                 | ---          | ---         | ---                     | 12                   | ---                       | ---           | ---                         | ---           | ---            | ---            | 12            |
| Mexico                     | ---        | ---                                 | 4            | ---         | ---                     | 9                    | 11                        | ---           | ---                         | 1             | ---            | 1              | 27            |
| Panama                     | ---        | ---                                 | ---          | ---         | ---                     | ---                  | 14                        | ---           | ---                         | ---           | ---            | ---            | 14            |
| Other                      | ---        | ---                                 | 9            | ---         | ---                     | 5                    | 7                         | ---           | ---                         | 1             | ---            | 1              | 27            |
| Total                      | 31         | ---                                 | 192          | ---         | ---                     | 93                   | 326                       | ---           | ---                         | 2             | ---            | 11             | 660           |
| <b>Western Europe:</b>     |            |                                     |              |             |                         |                      |                           |               |                             |               |                |                |               |
| France                     | 18         | 2                                   | 62           | ---         | 6                       | 12                   | 159                       | 1             | 1                           | 6             | ---            | 5              | 271           |
| Italy                      | 95         | 1                                   | 2,380        | 1           | 8                       | 175                  | 1,517                     | 61            | 6                           | 1             | ---            | 16             | 4,261         |
| Netherlands                | ---        | ---                                 | 38           | ---         | ---                     | 6                    | 6                         | ---           | ---                         | 4             | ---            | 2              | 57            |
| Portugal                   | ---        | ---                                 | 12           | ---         | ---                     | 5                    | 29                        | 1             | ---                         | ---           | 1              | ---            | 48            |
| Spain                      | ---        | ---                                 | 5            | ---         | ---                     | 25                   | 50                        | ---           | ---                         | ---           | ---            | 4              | 85            |
| Switzerland                | 84         | 1                                   | 89           | ---         | 34                      | 5                    | 30                        | ---           | 1                           | ---           | ---            | ---            | 244           |
| United Kingdom             | 5          | 9                                   | 236          | ---         | ---                     | 43                   | 99                        | 3             | 2                           | 1             | ---            | 4              | 402           |
| West Germany               | 2          | 2                                   | 127          | ---         | 1                       | 3                    | 33                        | ---           | 10                          | ---           | ---            | 7              | 185           |
| Austria                    | ---        | ---                                 | 34           | ---         | ---                     | 2                    | 6                         | ---           | ---                         | ---           | ---            | ---            | 42            |
| Cyprus                     | ---        | ---                                 | 1            | ---         | ---                     | ---                  | 178                       | ---           | ---                         | ---           | ---            | ---            | 179           |
| Other                      | ---        | ---                                 | 13           | ---         | 1                       | 10                   | 17                        | ---           | ---                         | 5             | 2              | 1              | 49            |
| Total                      | 204        | 15                                  | 2,997        | 1           | 50                      | 286                  | 2,124                     | 66            | 20                          | 17            | 3              | 39             | 5,823         |
| <b>Eastern Europe:</b>     |            |                                     |              |             |                         |                      |                           |               |                             |               |                |                |               |
| Bulgaria                   | ---        | ---                                 | ---          | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | ---           |
| Czechoslovakia             | ---        | ---                                 | 3            | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | 1              | 4             |
| Hungary                    | ---        | ---                                 | 7            | ---         | ---                     | 1                    | 148                       | ---           | ---                         | ---           | ---            | ---            | 156           |
| Poland                     | ---        | ---                                 | 3            | ---         | ---                     | ---                  | 76                        | ---           | ---                         | ---           | ---            | ---            | 79            |
| Romania                    | ---        | ---                                 | 12           | ---         | ---                     | ---                  | 148                       | ---           | ---                         | ---           | ---            | ---            | 160           |
| Yugoslavia                 | ---        | ---                                 | 7            | ---         | ---                     | ---                  | 11                        | ---           | ---                         | ---           | ---            | ---            | 18            |
| Total                      | ---        | ---                                 | 32           | ---         | ---                     | 1                    | 383                       | ---           | ---                         | ---           | ---            | 1              | 417           |
| <b>Asia/Oceania:</b>       |            |                                     |              |             |                         |                      |                           |               |                             |               |                |                |               |
| Bangladesh                 | ---        | ---                                 | ---          | ---         | ---                     | 3                    | 47                        | ---           | ---                         | ---           | ---            | ---            | 50            |
| China-Mainland             | 380        | ---                                 | 1,384        | ---         | 17                      | 1,242                | 6,698                     | 63            | 59                          | 96            | 11             | 271            | 10,220        |
| Hong Kong                  | 5          | 1                                   | 713          | ---         | ---                     | 1,581                | 7,950                     | 15            | 37                          | 8             | 3              | 59             | 10,370        |
| India                      | ---        | ---                                 | 1,132        | ---         | 5                       | 15                   | 396                       | 1             | 11                          | ---           | 1              | 4              | 1,566         |
| Iran                       | ---        | ---                                 | ---          | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | ---           |
| Israel                     | ---        | ---                                 | ---          | ---         | ---                     | 9                    | 10                        | ---           | 13                          | ---           | ---            | ---            | 33            |
| Japan                      | 58         | 1                                   | 850          | ---         | 18                      | 44                   | 593                       | 1             | 12                          | ---           | ---            | 1              | 1,579         |
| Korea                      | 56         | ---                                 | 766          | ---         | 1                       | 2,127                | 3,329                     | 1             | ---                         | ---           | ---            | 18             | 6,298         |
| Malaysia                   | ---        | ---                                 | 214          | ---         | ---                     | 25                   | 1                         | ---           | ---                         | ---           | ---            | ---            | 241           |
| Pakistan                   | ---        | ---                                 | 80           | ---         | ---                     | 5                    | 6                         | ---           | ---                         | ---           | ---            | ---            | 93            |
| Philippines                | ---        | ---                                 | 10           | ---         | ---                     | 32                   | 200                       | ---           | 3                           | ---           | ---            | 4              | 249           |
| Singapore                  | ---        | ---                                 | 1            | ---         | ---                     | 4                    | 52                        | ---           | ---                         | ---           | ---            | 1              | 57            |
| Taiwan                     | 4          | ---                                 | 377          | ---         | 10                      | 81                   | 75                        | ---           | 36                          | ---           | ---            | 60             | 644           |
| Turkey                     | 5          | ---                                 | ---          | ---         | ---                     | 3                    | 1                         | ---           | ---                         | ---           | 1              | ---            | 20            |
| Indonesia                  | ---        | ---                                 | 623          | ---         | ---                     | 52                   | 42                        | ---           | ---                         | ---           | ---            | ---            | 716           |
| Sri Lanka                  | ---        | ---                                 | ---          | ---         | ---                     | 62                   | 12                        | ---           | ---                         | ---           | ---            | ---            | 75            |
| Thailand                   | ---        | ---                                 | 443          | ---         | ---                     | 114                  | 58                        | ---           | 6                           | 5             | ---            | 65             | 691           |
| Bahrain                    | ---        | ---                                 | ---          | ---         | ---                     | ---                  | 26                        | ---           | ---                         | ---           | ---            | ---            | 26            |
| Macao                      | ---        | ---                                 | ---          | ---         | ---                     | 78                   | 39                        | ---           | ---                         | ---           | ---            | 5              | 122           |
| Other                      | ---        | ---                                 | 14           | ---         | ---                     | 8                    | 10                        | ---           | ---                         | ---           | ---            | 2              | 34            |
| Total                      | 508        | 2                                   | 6,618        | ---         | 51                      | 5,485                | 20,311                    | 81            | 138                         | 148           | 16             | 492            | 33,501        |
| <b>Africa:</b>             |            |                                     |              |             |                         |                      |                           |               |                             |               |                |                |               |
| Ivory Coast                | ---        | ---                                 | 3            | ---         | ---                     | ---                  | 10                        | ---           | ---                         | ---           | ---            | ---            | 10            |
| Kenya                      | ---        | ---                                 | 1            | ---         | ---                     | 39                   | 5                         | ---           | ---                         | ---           | ---            | ---            | 7             |
| Morocco                    | ---        | ---                                 | 1            | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | 1              | 41            |
| South Africa               | ---        | ---                                 | ---          | ---         | ---                     | ---                  | ---                       | ---           | ---                         | ---           | ---            | ---            | ---           |
| Maritius                   | ---        | ---                                 | ---          | ---         | ---                     | 50                   | ---                       | ---           | ---                         | ---           | ---            | ---            | 51            |
| Other                      | ---        | ---                                 | 1            | ---         | ---                     | 2                    | 2                         | ---           | 1                           | ---           | ---            | ---            | 4             |
| Total                      | ---        | ---                                 | 6            | ---         | ---                     | 91                   | 17                        | ---           | 1                           | ---           | ---            | 1              | 113           |
| <b>World Total</b>         | <b>743</b> | <b>17</b>                           | <b>9,845</b> | <b>1</b>    | <b>101</b>              | <b>5,956</b>         | <b>23,161</b>             | <b>147</b>    | <b>159</b>                  | <b>167</b>    | <b>19</b>      | <b>544</b>     | <b>40,514</b> |

--- = 0.

Source: Bureau of the Census.

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