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OUTLOOK FOR U.S. COTTON

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Terry Townsend, Economic Research Service, USDA

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U.S. cotton stocks are forecast to rise 2 million bales to 4.8 million by the end of this season, and stocks could rise even further during 1985/86. Stocks are rising, despite restrictive acreage reduction requirements in the 1984 and 1985 cotton programs, because of record yields in 1984, and because both mill use and exports are declining. Mill use has trended lower since the mid-1960's, and slower economic growth coupled with growing textile imports will likely cause that trend to continue. Exports averaged 5.7 million bales during the past decade, but increased production in China will make it difficult to maintain that average.

Decline in Mill Use To Continue

U.S. mill use is forecast to decline to 5.3 million bales during 1984/85 and could decline even further during 1985/86. A decline in seasonally adjusted rates of mill use is normal following the rebuilding of inventories during an economic recovery. However, during this season and next, sluggish economic growth and competition from imported textiles will push mill use lower than would normally be expected.

Mill use peaked at a seasonally adjusted annual rate of 6.4 million bales in January 1984, and has since moved lower. However, the decline was roughly consistent with patterns of mill use during past economic cycles. From November 1983 to September 1984, the 5-month centered average of seasonally adjusted mill use declined by about 12 percent, despite extraordinary rates of economic growth during the first and second quarters of 1984. A comparable period in the last business cycle was January-December 1976 (figure 1). During that period, the 5-month centered average of seasonally adjusted rates fell by 11 percent.

From January 1977 to August 1978, cotton mill use fell by about 4 percent. The slower rate of decline, compared with 1976, reflected a leveling off of business conditions once mill use fell to the level of consumer purchases of cotton goods. Likewise, mill use during 1985 and 1986 will probably continue down, but at a slower rate than during 1984.

The U.S. economy grew steadily at about 5 percent per year during 1976-78, and that limited the rate of decline in cotton mill use. In contrast, the U.S. economy will probably grow by much less in 1986 than it has this year. Also, the cotton textile trade deficit rose by only 150,000 bales from 1976 to 1978. However, that deficit might expand by more than that during the next two years. Therefore, mill use could decline at a rate greater than 4 percent during the rest of this season and next.

One factor in cotton's favor this year, in comparision with the previous business cycle, is that cotton's share of mill use on the cotton system has held at 60-61 percent since 1977/78. During 1976-78, cotton's mill use share fell from about 66 percent to its present level. That factor alone caused a 350,000-bale decline in mill use during 1976/77.

If mill use at seasonally adjusted rates during October 1984-July 1985 falls at an annual rate of about 6 percent, mill use for the 1984/85 season will total 5.3 million bales. If the rate of decline during 1985/86 remains near 6 percent, mill use will fall to about 5 million bales.

Textile Trade Deficit Wider Yet

Cotton textile imports equalled 2.3 million raw fiber equivalent bales in 1983, up from 1.9 million in 1982, and an additional rise of 30 percent to 3 million bales is possible during 1984 (figure 2). If U.S. economic growth slows, textile imports may decline by several hundred thousand bales during 1985/86. Each 100-bale change in cotton textile imports probably causes a change of 50 to 75 bales in U.S. cotton mill use.

Cotton textile exports totaled 458,000 bales in 1983, but could decline to about 430,000 in 1984. Each 1-bale change in textile exports has a full 1-bale effect on U.S. mill use.

The fundamental reason why the United State has had a trade deficit in textiles since 1961, is that our wage rates are higher than wages in most other countries. Total labor costs in the United States averaged $8.60 per hour during the spring of this year. In contrast, textile industry labor costs in Japan averaged $6.28 an hour, Hong Kong averaged $1.65 an hour, India averaged $.71 an hour, and labor costs in China were estimated at $0.26 an hour. These wage rates do not account for differences in labor productivity, and U.S. workers are more productive than workers in many other countries. However, productivity in the United States is not high enough to offset the large wage rate differentials, and foreign producers have a unit-labor cost advantage.

The acceleration in textile imports during the last 2 years was caused primarily by the strength of the U.S. economy and the rise in the value of the dollar. During 1960-83, cotton textile imports rose at an annual rate of about 6 percent, and during that period, the U.S. economy grew at an average rate of 3.2 percent. Each 1-percentage point increase in real GNP above 3.2 percent was associated with an additional 4-percentage point increase in cotton textile imports. During 1984, the U.S. economy will grow by about 7 percent, or 4 percentage points faster than the 1960-83 average. Consequently, cotton textile imports might have been expected to rise by 22 percent in 1984, and the strenth of the U.S. dollar probably explains most of the increase additional to that.

Production in China Threatens U.S. Exports

U.S. cotton exports are forecast to slip from 6.8 to 6.1 million bales during 1984/85 due to rising production in several foreign countries. An additional decline in exports could occur in 1985/86.

At seasonally adjusted annual rates, exports averaged 6.6 million bales during May-October 1984. Shipments plus outstanding sales for the current season totaled 4.6 million bales as of the end of October, compared with 4.2 million at the end of October 1983. However, with the advent of the harvest season in Pakistan and the Soviet Union, competing exporters whose supplies should increase this season, the pace of U.S exports will probably decline.

U.S. exports in 1985/86 may fall below 6 million bales. Production in foreign countries other than China could rise to about 42 million bales, while consumption could rise to about 48 million, a difference of 6 million bales. However, while stocks in foreign countries might rise again during 1985/86, China's exports could rise by an even greater amount, thus forcing U.S. exports lower.

Record Yields in 1984/85

The 1984 crop is estimated at 13.3 million bales, with yields forecast to average 613 pounds. But the range around the November production estimate is still fairly large. Sampling errors and variability in harvest weather could still cause the crop to end up as low as 12.4 million bales or as high as 14.2 million. During the last 10 years, the November crop forecast has differed from the final estimate by about 300,000 bales, on average. However, even a crop of 12.4 million bales would cause ending stocks to rise this season.

Strong Participation in the 1985 Cotton Program Likely

Secretary Block announced the basic provisions of the 1985 upland cotton program on September 14. Several provisions stand out in major importance for determining the 1985 participation rate.

o The 1985 target price will remain 81 cents a pound, the same as in 1984, but the average loan rate for strict low middling 1-1/16-inch cotton will rise from 55 cents a pound to 57.3 cents.

o To be eligible for target price and loan rate protection, farmers may plant no more than 70 percent of their upland cotton base acreage, and the balance must be devoted to conserving uses.

o The 30-percent reduction is divided into 2 parts. On 10 percent of the farm's acreage base, a land diversion payment equal to 30 cents a pound times the farm's program yield will be made to farmers, regardless of whether the farmer actually plants cotton. No additional payment will be made on the remaining two-thirds of the conserving use acres.

The 1985 program will benefit producers in several ways (table 1). Because the formula used to calculate program yields allows farmers to drop low-yield years, program yields have averaged about 14 percent above actual yields. The nearly 20-cents-a-pound assumed deficiency payment rate and the 30-cents-a-pound paid land diversion rate are also attractive, especially in relation to current farm prices. The program also enables producers to reduce variable production expenses, and insulates a portion of farm income from weather and price risks.

Based on possible market prices of lint and cottonseed, and yields of 540 pounds per planted acre, a nonparticipating farmer could expect a gross income of $38,000 off 100 acres of cotton in 1985. A farmer participating in the cotton program and planting only 70 acres, would receive only $27,100 from the market, even assuming a yield higher than 540 pounds. However, expected deficiency and diversion payments, based on an average program yield of 630 pounds per acre, would bring the gross income of a participant up nearly equal to that of a nonparticipant.

Average variable costs per planted acre are estimated at $265, and the cost of maintaining an acre devoted to conserving use is estimated at $25. Because program participants will plant no more than 70 percent of their base acreage, variable expenses per 100 acres are reduced by over one-fourth. Consequently, the net income of a program participant could be 60 percent higher than the net income of a nonparticipant (the participant-nonparticipant ratio would be 1.60).

The United States operated, for the first time since 1972/73, acreage reduction programs for cotton during 1982/83 - 1984/85. During those years, program participation increased as the ratio of participant net returns over nonparticipant net returns increased (figure 3).

Participation in the 1982 program averaged 78 percent, meaning that 78 percent of the base acreage of 15.3 million was enrolled in the program. The participant-nonparticipant ratio for 1982 was 1.83. Participation in the 1983 acreage reduction program rose to 93 percent because the participant-nonparticipant ratio reached 2.13. The participant-nonparticipant ratio declined to 1.21 in 1984, and participation fell to 71 percent.

Table 1.--Comparison of net returns for cotton program participants and nonparticipants in 1985

	Participant	Nonparticipant
Income		
Planted acres	70	100
Lint yield	550	540
Market income	27,100	38,000
Program yield	630	
Deficiency payment	8,700	
Land diversion payment	1,900	
Total	37,700	38,000
Variable costs	19,300	26,500
Net returns	18,400	11,500
Ratio	1.60	

Based on an estimated participant-nonparticipant ratio of 1.60, 1985-program participation of 75-80 percent is indicated. While different assumptions can lead to different participant-nonparticipant ratios, use of a consistent set of assumptions to calculate the ratios for all years yields logical results. This methodology led to an estimate that the 1984-program participation rate would be about 70 percent. The actual 1984 participation rate was 71 percent.

If the participation rate in 1985 reaches 75-80 percent, total upland cotton plantings could be between 9.5 and 11 million acres. Assuming normal abandonment of planted acreage, production will depend on highly variable yields. If yields should again reach 1984's record 613 pounds per harvested acre, output would reach about 12.5 million bales. on the other hand, if yields fall back to 1983's drought reduced level of 504 pounds, a crop of 10 million bales would result.

Use-to-Supply Ratios Down

During 1970/71-1983/84, total use of U.S. cotton (mill use plus exports) averaged 12 million bales, and no trend either up or down was apparent. Total use fell to 9.8 million bales in 1974/75 because of the world recession, and use exceeded 15.7 million bales in 1979/80 because of record exports to China. Following both unusual years, total use tended back to the 12-million-bale level.

While disappearance of U.S. cotton may return to that level sometime in the future, exports and mill use will probably fall to 11.4 million bales this season, and to less than 11 million in 1985/86 (table 2). Consequently, the ratio of use to supply will probably decline. In the past, a decline in this ratio has coincided with weaker farm prices. The major factors affecting demand for U.S. cotton are slower economic growth, textile imports, and rising foreign production. These factors are likely to continue as problems for several years.

Table 2.--Cotton supply and use

	1983/84	1984/85 estimated	1985/86 forecast
Planted acres	7.9	11.1	9.5-11.0
		Million bales	
Beginning stocks	7.9	2.8	4.8
Production	7.8	13.3	10.0-12.5
Supply	15.7	16.1	14.8-17.3
Mill use	5.9	5.3	4.5-5.5
Exports	6.8	6.1	4.0-6.5
Use	12.7	11.4	8.5-12.0
Unaccounted	-0.2	0.1	0.1
Ending stocks	2.8	4.8	4.0-7.0
Use/supply	.81	.71	.55-.75

FIGURE 1

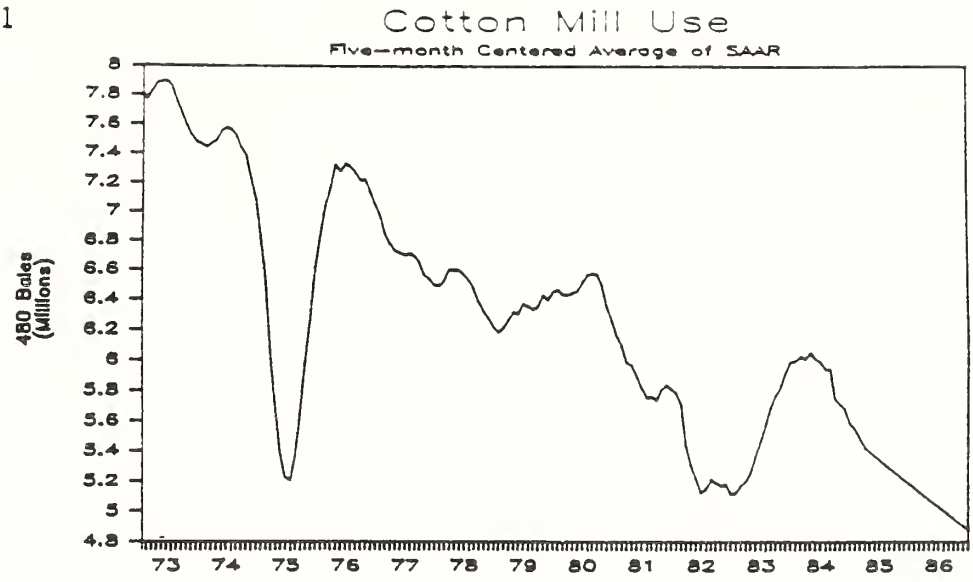

FIGURE 2

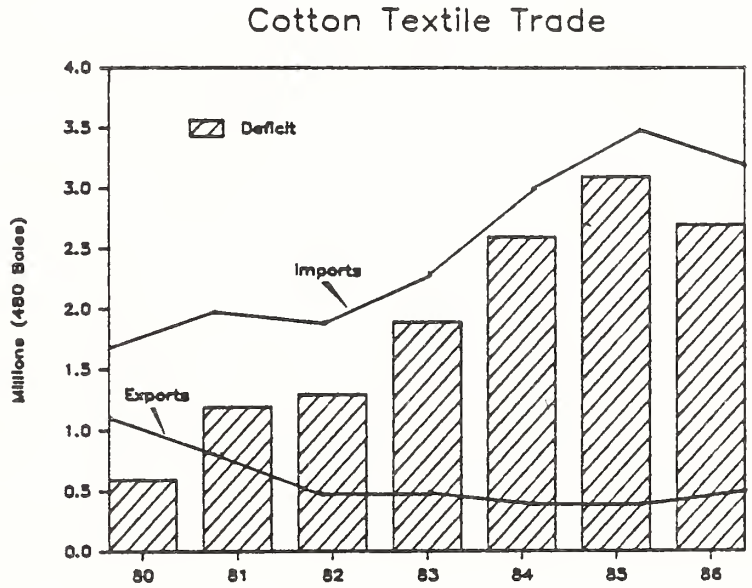

FIGURE 3