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MARKETING U.S. COTTON TO DOMESTIC AND FOREIGN OUTLETS IN 1977/78:

Practices and Costs

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U.S. Department of Agriculture
Economics, Statistics, and Cooperatives Service

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SUMMARY

The weighted average cost to assemble and distribute U.S. cotton to all outlets, domestic and foreign combined, averaged \$42.86 per bale for the 1977/78 season, up 11 percent from the 1974/75 level and nearly 60 percent above 1972/73. Marketing costs to domestic outlets averaged \$31.76 per bale, while costs to all foreign outlets averaged \$55.38. Transportation, the largest cost item, accounted for 28 percent of total cost for domestic marketings and nearly 54 percent for foreign shipments.

Data are compiled from cotton merchandising firms in the four major U.S. cotton growing regions during the 1977/78 season. Approximately 46 percent of all cotton marketed in the United States during this time was handled by these firms.

Transportation services and financing represent well over 50 percent of raw cotton's total marketing bill. Warehousing services, financing, and overhead expenses represented 46.2 percent of the total marketing bill during 1977/78, up 36.3 percent from 1974/75.

Total cost per bale for shipping cotton from each cotton production region to a specific domestic and foreign outlet ranged from a low of \$18.48 for shipments from the Southeast region to Group 200 mill points (mill locations in the eastern half of North and South Carolina) to a high of \$37.61 for cotton shipped from the Southwest to Group 200 mills.

Foreign marketing costs varied from a low of \$51.60 per bale for shipments from the Western region to Hong Kong to a high of \$62.31 for cotton shipped to "other foreign" destinations (primarily China and the Philippines) from the Southwest.

Similar cost estimates were developed for moving cotton from selected trading areas within each region to each of the major domestic and foreign market outlets. Trading areas exhibiting higher than average costs were the Lubbock area in the Southwest and the Phoenix area in the West.

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Marketing U.S. Cotton to Domestic and Foreign Outlets in 1977/78: Practices and Costs

Edward H. Glade, Jr., and Joseph L. Ghetti 1/

INTRODUCTION

This study develops current estimates of the total costs by function involved in marketing U.S. cotton from major production areas to specific domestic and foreign locations during the cotton marketing season of 1977/78. Similar estimates were made for the 1974/75 season. 2/

These estimates, and other related data, are used for measuring changes in marketing costs, analyzing alternative means of increasing cotton marketing efficiencies, and evaluating the effectiveness of existing and proposed policies and programs relating to the total cotton-fiber system. This cost information is currently being incorporated into analytical models of the cotton industry to assess the effects of proposed cotton dust standards and to evaluate costs associated with alternative means for controlling dust.

Only by adopting cost-cutting efficiencies and innovations has the cotton industry managed to keep marketing costs down. The development and industrywide adoption of universal density compression, for example, eliminated the need for and cost of compressing some bales two or even three times. This development has resulted in one universal cotton bale that is accepted by both domestic and foreign textile mills. Containerized shipments and new bale packaging materials are other ways of reducing marketing costs.

The introduction of cooperative purchasing of equipment and supplies by the warehousing industry is another instance of holding costs down. However, many of the largest costs involved in marketing U.S. cotton, such as transportation, insurance, and interest rates, are beyond the direct control of the cotton industry. Nevertheless, through unified industry action and cooperation cost increases have been tempered.

METHOD OF STUDY

Results reported here are based on an analysis of data for the 1977/78 season obtained from cotton merchandising firms located in the four major U.S. cotton growing

1/ Agricultural economists, National Economics Division, Economics, Statistics, and Cooperatives Service, Washington, D.C., and Delta Branch Experiment Station, Stoneville, Miss. respectively.

2/ Whitman M. Chandler, and Edward H. Glade, Jr., Cost of Merchandising U.S. Cotton, 1974/75 Season. Econ. Res. Serv., U.S. Dept. Agr., ERS-640, July 1976.

regions. These firms, which have extensive purchasing operations in each of the primary trading areas across the Cotton Belt, supply cotton to worldwide outlets. Approximately 46 percent of all cotton marketed in the United States was handled by those firms during the 1977/78 season.

The survey data record the volume of cotton marketed from each area to the specific domestic and foreign destinations. The total cost, by major cost item, was determined for each of these movements, and weighted averages of purchases, sales, and merchandising costs were computed by region and trading area, as well as for the United States.

Results of previous studies and numerous published and unpublished sources of data were used to insure the accuracy and completeness of the estimates.

Regions and Trading Areas

The four geographic regions and associated trading areas for which data were compiled represent the primary cotton markets, and in most cases conform to the official USDA spot markets for which cotton price quotations are established:

| <u>Region</u> | <u>State</u> | <u>Trading area</u> |
|---------------|--|---|
| Southeast | Alabama, Georgia, North Carolina, South Carolina | Atlanta Greenville-Augusta Montgomery |
| South Central | Arkansas, Louisiana Mississippi, Tennessee | Memphis Little Rock Greenwood |
| Southwest | Oklahoma and Texas (except Texas District 6) | Dallas Houston-Galveston Lubbock |
| West | Arizona, California, Texas District 6 | El Paso Fresno-Bakersfield Phoenix |

Market Outlets

Marketing costs were estimated for moving cotton from each specified region and trading area to four specific domestic mill locations and four major foreign port areas. These outlets are described below.

Domestic Markets

Group 201 mills comprise the primary mill locations in the western half of North and South Carolina; approximately 55 percent of all domestic shipments were to Group 201 mill points.

Group 200 mills comprise mill locations in the eastern half of North and South Carolina; 16 percent of all domestic shipments were to mills in the Group 200 area.

Alabama-Georgia mills are concentrated primarily in the Atlanta/Cartersville area of Georgia and the Anniston/Sylacauga area of Alabama; about 27 percent of the domestic marketings were to these areas.

New England mills are textile mills scattered throughout the New England States; only 1 percent of total domestic shipments were to New England destinations.

"Other domestic" mills are mills located in all other States, but primarily concentrated in California, Texas, and Tennessee.

Foreign Markets

Japan--total of shipments on a landed basis to Osaka; approximately 20 percent of U.S. cotton exports went to Japan.

Republic of Korea--total of shipments on a landed basis to Pusan; over 22 percent of total exports went to Korea.

Hong Kong--total of shipments on a landed basis to Port Macao; 9 percent of all U.S. exports went to Hong Kong.

Europe--total of shipments on a landed basis to the major European ports, primary destinations were Bremen, Antwerp, and Rotterdam; slightly over 13 percent of total exports went to European countries.

"Other foreign"--total of shipments on a landed basis to all other primary importing countries, such as China, the Philippines, Canada, and the Middle East; the remaining 36 percent of U.S. cotton exports were accounted for by these shipments.

Cost Items Covered

Marketing costs were developed for each physical function and service performed in assembling cotton into even-running lots and delivering it to the specified domestic mills and foreign destinations. These costs represent the expenses accrued against the average bale marketed. However, not all bales in a season are assessed storage and handling charges at the same rate.

Special arrangements, such as volume discounts or lower charges for a particular function, are sometimes made between cotton owners and those performing marketing services. These charges may sometimes be made on a "round-turn" basis, where one combined fee is charged for all necessary warehousing and compress services. This charge is usually slightly lower than the sum of individual charges, although adequate information is not available to permit estimates of the number of bales involved. But, the number is small in relation to total marketings and any effect on the level of average cost would be minimal.

The specific cost items for which individual estimates were made are shown below (certain items were grouped together for reporting purposes, such as transportation and financing expenses):

Buying and local delivery--commissions or comparable direct buying costs, and local delivery expenses from gin to warehouse.

Storage--insured storage at warehouse or compress for an average of 3 months.

Compression--primarily universal density compression, also patches and marks on foreign shipments.

Other warehouse services--receiving and outhandling, and for some bales, reweighing, resampling, and other special services.

Domestic transportation--rail or truck charges to domestic destination or port area.

Ocean freight--freight from port area to foreign destination, and also wharfage, forwarding, and controlling fees.

Cotton insurance--insurance on domestic shipments, which includes insurance on cotton (if any) not covered in storage or while in transit; on foreign shipments, also includes marine insurance.

Hedging--any direct expense related to hedging, but not losses on hedged positions.

Interest--only short-term interest paid on borrowed funds to finance cotton purchases.

Exchange--bank exchange fees charged for handling and processing negotiable instruments.

Selling--commissions or comparable direct selling costs.

Miscellaneous--rejections and quality adjustments on sales, bad debts, and fiber-testing fees.

Overhead--all other operational costs, such as salaries and bonuses not covered in buying and selling, office rent, property taxes, insurance, depreciation, communications and utilities, advertising, donations, Social Security taxes, and professional fees.

Efforts were not made to determine operating margins or profits of merchandising firms in developing marketing cost estimates. This information is beyond the study's scope and of a strictly proprietary nature.

MARKETING PRACTICES

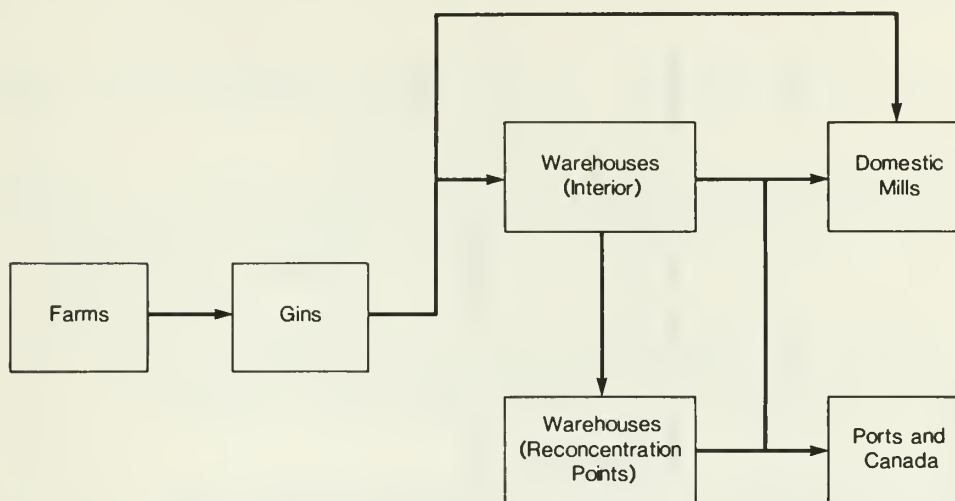
A typical cotton bale passes through the physical distribution stage, as well as the ownership transfers involved in merchandising. Thus, additional end-use value or utility is accrued along with additional costs.

Cotton marketing begins when the producer delivers seed cotton to the gin (fig. 1). Lint, seed, and trash are separated at the gin and bales then move directly to warehouses for storage and further compression. Southeast cotton, however, may move directly from gins to textile mills without storage or further compression. But in all other areas, compression to universal density (28 pounds per cubic foot) is usually performed at the warehouse.

However, most new gins now being constructed, and some of the larger existing facilities, are installing universal density presses to eliminate the need for this traditional warehouse service. But, a compression rebate is usually paid to the gin by the warehouse for delivery of universal density bales.

Other primary warehouse services, besides storage and compression, include sampling, weighing, patching (repairing bale covering or applying new covering, patches, or markets), banding, and replacing or repairing of existing bands. The warehouse also issues negotiable warehouse receipts for stored cotton which owners can use as collateral against loans from banks or the Federal Government. The title or

Physical Flow of U.S. Cotton



USDA

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Figure 1

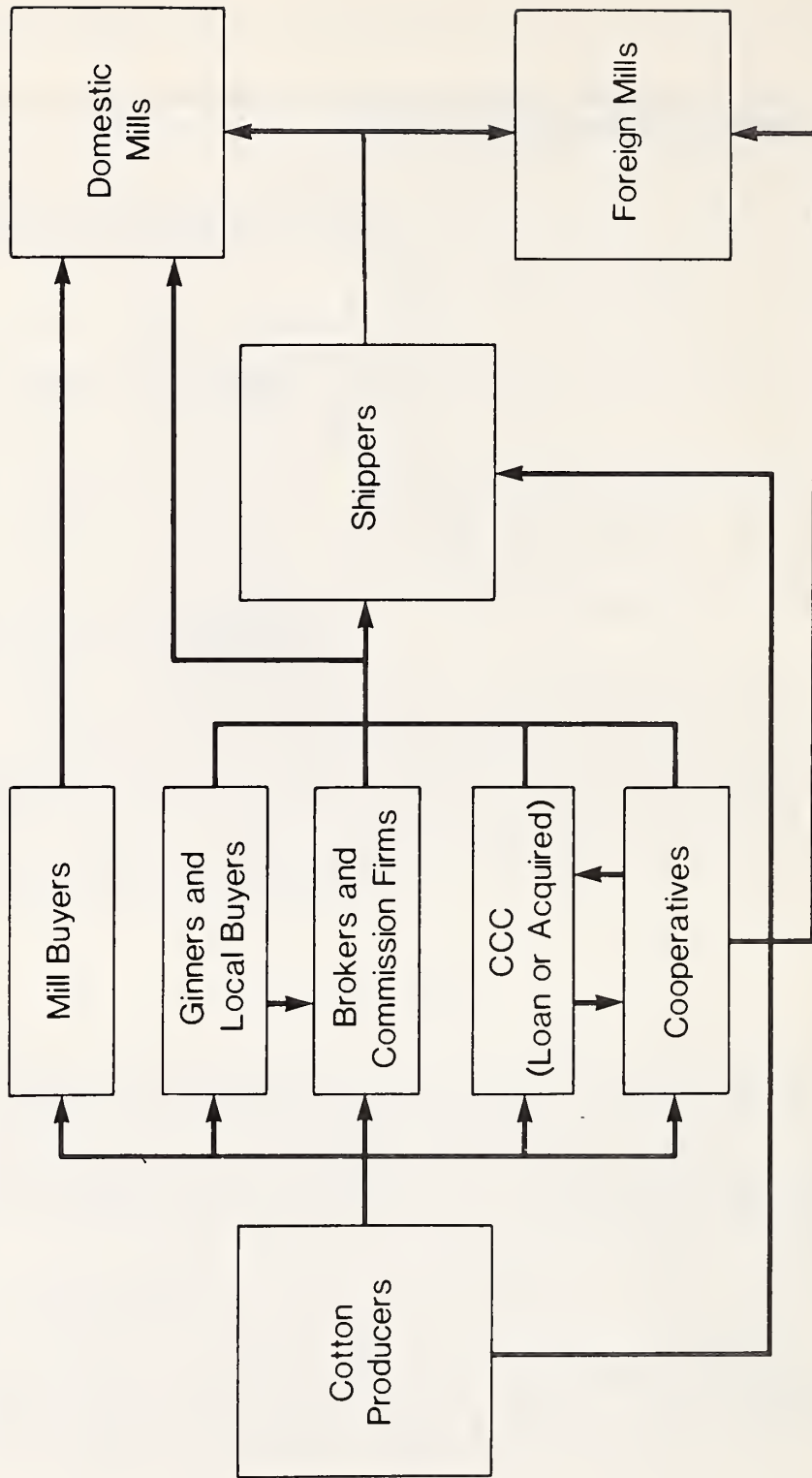
ownership, as represented by the receipt, may be transferred from the original depositor to subsequent owners. The warehouse is responsible for loading and shipping bales at the time and to the destination ordered by the owner. Cotton may also be moved from interior warehouses to other warehouses for reconcentration into even-running lots before shipment to mills or ports. ^{3/} Approximately 50 percent of all cotton shipments now move by truck and the remainder by rail.

The physical aspects of marketing are fairly straightforward, although a variety of merchandising options exist for ownership transfers. The first transaction usually occurs at gin points where the cotton producer sells to the ginner or other buyers (fig. 2). Producers may also elect not to sell and move cotton to a local warehouse while retaining title. Most of this cotton, however, is placed under Government loan (Commodity Credit Corporation) to be redeemed at a later date. Approximately one-third of the total 1977/78 crop was placed under loan and 95 percent was eventually redeemed.

Cotton not placed under loan at harvest, or redeemed from loan, is usually sold to one of five types of firms represented in the major cotton regions. The primary functions and methods of operation of these firms are described on page 7.

^{3/} Even-running lots refers to bales of like quality in groups of 100 bales each.

Flow of Ownership Documents for Merchandising U.S. Cotton*



* Warehouse receipts and bills of lading.

Figure 2

Merchant-shippers perform all functions involved in moving cotton from the producer to the mill. They actually hold title to the cotton from the time it leaves the farmers' hands until it is purchased and/or delivered to a domestic or foreign mill or trading firm.

Cooperative marketing associations act as shippers, although they represent farmer-members who comprise the association, and rebate any profits to growers. Also, some cooperatives operate their own compress warehouse as part of the marketing process.

Broker or commission buyers purchase cotton in country markets from growers or ginners and sell it to domestic mills on behalf of merchant-shippers or large growers.

Gin-buyers are usually gin owners supplementing their income and could be classified as merchant-shippers in that they take title to the cotton. However, actual practice indicates that they have a prearranged outlet for this volume either to a bona fide shipper or direct to the cotton department of a textile firm.

Direct mill buyer operations developed in the fifties and sixties as a result of fiber quality problems encountered by certain harvesting/ginning techniques. Growers with unusually large acreages contracted with mill buyers to process their crop according to a predetermined set of conditions for a predetermined price to the grower.

The situation has changed somewhat but arrangements still exist whereby the same firm purchases a particular grower's crop year after year. However, this is not a general practice, for two reasons: (1) Textile firm cotton departments do not have the personnel to deal with a volume of growers across the Cotton Belt, and (2) these departments prefer to have a third party between them and the grower who, under the present marketing system, would guarantee performance under any contract.

Recently, foreign trading companies have been opening offices in various Cotton Belt locations. These operations are primarily for export, although some sales are made domestically. The firms usually buy from growers and cooperatives.

Merchant-shippers and the cooperative marketing associations handle the greatest part of each year's crop, both domestically and for export. Approximately 75 to 80 percent of all cotton marketings are handled by them. The other firms are primarily involved in accumulating cotton from small country markets into larger volumes, or in facilitating sales to textile mills through established contacts.

Therefore, the data on marketing costs, as presented here, represent the average costs incurred by the merchant-shipper and cooperative sectors of the cotton industry.

U.S. AVERAGE MARKETING COSTS

The U.S. weighted average cost incurred to market cotton to all domestic and foreign outlets combined totaled \$42.86 per bale during the 1977/78 season, up 11 percent from the 1974/75 level and nearly 60 percent above 1972/73 (table 1). The sharp rise has resulted from increases in nearly all marketing cost categories, especially the strong increases in transportation services and financing during 1972/73 and 1974/75. These costs, which have moderated somewhat, still represent well over 50 percent of raw cotton's total marketing bill.

Costs for domestic marketings continue to show a steady upward rise. However, exporting costs, especially ocean freight rates, have experienced considerable

Table 1.--Estimated average cost of marketing U.S. cotton to domestic and foreign outlets, selected seasons

| Season | Market outlet | | All outlets ^{1/} |
|-------------------------|---------------|---------|---------------------------|
| | Domestic | Foreign | |
| <u>Dollars per bale</u> | | | |
| 1964/65 | 13.56 | 23.24 | 17.14 |
| 1972/73 | 19.57 | 34.57 | 26.98 |
| 1974/75 | 24.14 | 55.05 | 38.63 |
| 1977/78 | 31.76 | 55.38 | 42.86 |

^{1/} Weighted average cost to all domestic and foreign outlets.

Sources: 1964/65 data from Shippers' Service and Cost in Marketing United States Cotton, Cotton Econ. Res., Univ. Tex., May 1967. 1972/73 data from Shippers Cost of Merchandising U.S. Cotton, 1972/73 Season, Econ. Res. Serv., U.S. Dept. Agr., Oct. 1975. 1974/75 data from Cost of Merchandising U.S. Cotton, 1974/75 Season, Econ. Res. Serv., U.S. Dept. Agr., July 1976.

variation. Ocean rates for cotton experienced extremely sharp increases throughout 1972-74 and by the 1975 season had nearly doubled to a level almost as high as the total export marketing bill of a few years earlier. But, substantial reductions in ocean freight rates--which began in 1976/77--have brought transportation costs back to a more normal level.

Cotton's exporting costs averaged \$55.38 per bale in 1977/78--nearly the same as in 1974/75. But, since 1974/75, the increases in most marketing cost categories were offset by falling transportation costs which declined an average of over \$6 per bale.

The estimated average cost to market U.S. cotton to each specified outlet and for each function and service performed is shown in table 2. Marketing costs for domestic outlets ranged from a low of \$31.22 per bale for shipments to Alabama-Georgia mills to a high of \$35.06 for cotton shipped to New England. Marketing costs to Group 201 mill points, the largest domestic market, averaged \$31.90 per bale, with transportation and financing costs alone accounting for nearly 29 percent and 17 percent of the total, respectively.

The variation in marketing costs among domestic outlets is primarily explained by differences in transportation costs. These differences reflect the varying distances from cotton production centers, and the actual rate structure of railroads and motor carriers.

The total cost to market a bale of cotton to foreign outlets ranged from a low of \$54.59 per bale for shipments to Hong Kong to a high of \$57.53 to European countries. Shipments to Korea, the largest single foreign market in 1977/78, had an average cost of \$54.92 per bale. Overall, marketing costs to foreign outlets were nearly 75 percent above those to domestic markets. This difference is due to substantially higher transportation expenses, and marine insurance of over \$2 per bale when in transit.

Table 2.--Estimated average cost of marketing U.S. cotton by outlet and cost item, 1977/78 season 1/

| Market outlet | Buying and local delivery | Warehouse services | | | Transportation | Cotton insurance | Financing | Selling | Miscellaneous | Overhead | Total |
|-------------------------|---------------------------|--------------------|--------------|-------|----------------|------------------|-----------|---------|---------------|----------|-------|
| | | Storage | Com-pression | Other | | | | | | | |
| <u>Dollars per bale</u> | | | | | | | | | | | |
| Domestic: | | | | | | | | | | | |
| Group 201 mills | 1.36 | 3.30 | 4.43 | 3.87 | 9.12 | 0.29 | 5.50 | 1.09 | 0.44 | 2.50 | 31.90 |
| Group 200 mills | 1.24 | 3.36 | 4.30 | 4.01 | 9.35 | .29 | 5.42 | 1.12 | .48 | 2.43 | 32.00 |
| New England mills | 1.00 | 3.33 | 4.55 | 3.79 | 12.48 | .27 | 5.48 | 1.04 | .44 | 2.68 | 35.06 |
| Alabama-Georgia mills | 1.35 | 3.05 | 4.36 | 4.08 | 8.03 | .29 | 5.25 | 1.18 | .45 | 3.18 | 31.22 |
| Other | 1.36 | 3.09 | 4.34 | 3.35 | 8.88 | .40 | 5.56 | 2.11 | .26 | 3.39 | 32.74 |
| Average domestic | 1.33 | 3.24 | 4.39 | 3.94 | 8.89 | .29 | 5.42 | 1.13 | .45 | 2.68 | 31.76 |
| Foreign: | | | | | | | | | | | |
| Japan | 1.64 | 3.10 | 4.28 | 3.62 | 29.33 | 2.66 | 5.75 | .84 | .40 | 3.02 | 54.64 |
| Korea | 1.33 | 3.02 | 4.41 | 4.08 | 29.38 | 2.21 | 5.57 | 1.64 | .42 | 2.86 | 54.92 |
| Hong Kong | 1.61 | 2.97 | 4.42 | 3.82 | 30.20 | 2.18 | 5.48 | .90 | .31 | 2.70 | 54.59 |
| Europe | 1.49 | 3.07 | 4.52 | 4.28 | 30.94 | 2.18 | 5.39 | 1.92 | .43 | 3.31 | 57.53 |
| Other | 1.62 | 3.26 | 4.43 | 3.88 | 31.84 | 2.33 | 5.54 | 1.27 | .36 | 2.86 | 57.39 |
| Average foreign | 1.48 | 3.04 | 4.41 | 3.98 | 29.83 | 2.30 | 5.56 | 1.41 | .40 | 2.97 | 55.38 |
| All outlets | 1.40 | 3.15 | 4.40 | 3.96 | 18.73 | 1.23 | 5.48 | 1.26 | .43 | 2.82 | 42.86 |

1/ See section on method of study for explanation of cost items and outlets.

Costs for the other marketing functions and services for exporting U.S. cotton were only marginally above those for domestic shipments.

Nationally, over 70 percent of the \$42.86 per bale total marketing bill reflected costs for the physical operations performed in warehousing and transporting cotton. Storage, compression, and other services, such as receiving and shipping, averaged \$11.51 per bale, or 27 percent of the total cost. Transportation expenses averaged \$18.73 per bale, or nearly 44 percent of the total. Financing of cotton purchases, including hedging and bank exchange fees, is a significant and necessary cost in marketing cotton. Financing expenses for 1977/78 totaled approximately \$5.48 per bale, with interest rates, cotton values, and length of financing primarily determining this level.

Overhead costs of marketing firms were estimated at \$2.82 per bale during the 1977/78 season. Overhead costs for a particular season may vary widely from firm to firm due to volume marketed. But, comparisons of overhead costs per bale will tend to show much less variation over the longer term.

The remaining cost items (buying, selling, insurance, and miscellaneous fees), while of lesser magnitude than those previously mentioned, nevertheless represent vital services in obtaining cotton in mixed lots and assembling and distributing it at the time and place demanded by domestic mills or export customers.

Regional Costs

Regional marketing costs vary because of actual differences in costs or expenses incurred and in market structures and practices (table 3). For example, costs to all destinations combined varied from \$19.77 per bale in the Southeast to \$48.05 for the Southwest. The significantly lower costs for the Southeast resulted from the lack of foreign shipments out of the region, the close proximity of domestic mills, and lack of compression charges on most Southeast cotton.

The West had the highest cost to domestic markets (\$36.94 per bale), but also had the lowest average cost to foreign outlets (\$52.07 per bale). Higher domestic market costs reflect the greater distance to Southeastern mill points from the West. They also reflect the lower export costs which resulted from the combined effects of a larger proportionate share of shipments to the Far East, slightly lower ocean freight rates, and the cost-cutting effects of containerized shipments.

Higher buying and selling expenses, warehousing charges, and overhead costs of marketing firms contributed to the overall higher level of costs in the Southwest, compared with other regions. Longer distances from cotton production centers to port areas and generally higher ocean rates to major foreign markets also contributed substantially to the higher costs for exporting Southwestern cotton.

Marketing costs from the South Central region to all outlets combined averaged \$32.92 per bale--well below the average for other regions (except the Southeast). However, since most cotton marketed from the South Central region goes to domestic mills and only about 10 percent is exported, the weighted average cost is only slightly above the level for domestic shipments (\$30.62 per bale).

Table 4 shows the cost associated with marketing U.S. cotton from the production region to the specific domestic and foreign outlet. For example, for shipments to Group 201 mills, costs ranged from \$19.66 per bale from the Southeast to \$37.07 from the West. Cotton marketed to New England mills had the highest cost of all domestic outlets, but a sufficient number of shipments were only reported from the South Central and Southwest regions where costs totaled \$33.32 and \$37.29 per bale,

Table 3.--Estimated average cost of marketing U.S. cotton to domestic and foreign outlets by cost item and region, 1977/78 season 1/

| Cost item | Southeast | | South Central | | Southwest | | West | | United States | | | | | | |
|---------------------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|---------------|--------------|-------|-------|-------|-------|-------|
| | Domes- tic | For- eign | Domes- tic | For- eign | Domes- tic | For- eign | Domes- tic | For- eign | Domes- tic | For- eign | | | | | |
| Buying and local delivery | 0.99 | --- | 0.99 | 1.30 | 1.38 | 1.33 | 1.53 | 1.65 | 1.60 | 1.23 | 1.64 | 1.53 | 1.33 | 1.48 | 1.40 |
| Warehouse services: | | | | | | | | | | | | | | | |
| Storage | 2.79 | --- | 2.79 | 3.60 | 3.64 | 3.62 | 2.88 | 2.89 | 2.88 | 3.20 | 3.15 | 3.18 | 3.24 | 3.04 | 3.15 |
| Compression | --- | --- | --- | 4.48 | 4.50 | 4.47 | 4.65 | 4.60 | 4.62 | 4.15 | 4.18 | 4.16 | 4.39 | 4.41 | 4.40 |
| Other | 3.84 | --- | 3.84 | 4.05 | 3.56 | 3.88 | 4.28 | 4.43 | 4.37 | 3.06 | 3.44 | 3.32 | 3.94 | 3.98 | 3.96 |
| Transportation | 4.12 | --- | 4.12 | 7.57 | 30.53 | 9.86 | 9.22 | 31.71 | 22.26 | 14.99 | 27.48 | 23.74 | 8.89 | 29.83 | 18.73 |
| Cotton insurance | .18 | --- | .18 | .26 | 1.91 | .43 | .32 | 2.09 | 1.35 | .36 | 2.76 | 2.04 | .29 | 2.30 | 1.23 |
| Financing | 5.04 | --- | 5.04 | 5.48 | 5.52 | 5.49 | 5.26 | 5.30 | 5.28 | 5.83 | 5.88 | 5.86 | 5.42 | 5.56 | 5.48 |
| Selling | .69 | --- | .69 | 1.01 | 1.01 | 1.01 | 1.31 | 2.05 | 1.73 | 1.25 | .73 | .88 | 1.11 | 1.41 | 1.26 |
| Miscellaneous | .17 | --- | .17 | .61 | .45 | .59 | .37 | .34 | .35 | .21 | .37 | .32 | .45 | .40 | .43 |
| Overhead | 1.95 | --- | 1.95 | 2.26 | 2.07 | 2.24 | 3.45 | 3.73 | 3.61 | 2.66 | 2.44 | 2.51 | 2.68 | 2.97 | 2.82 |
| Total | 19.77 | --- | 19.77 | 30.62 | 54.57 | 32.92 | 33.27 | 58.79 | 48.05 | 36.94 | 52.07 | 47.54 | 31.74 | 55.38 | 42.86 |

Dollars per bale

1/ See section on method of study for explanation of cost items and outlets.
 --- = No warehouse compression performed, and no reported foreign marketings.

Table 4.--Estimated average cost of marketing U.S. cotton to domestic and foreign outlets, by region, 1977/78 season 1/

| Region where purchased and outlet to which shipped | Buying and local delivery | Warehouse services | | | Transportation | Cotton insurance | Financing | Selling | Miscellaneous | Overhead | Total |
|--|---------------------------|--------------------|-------------|-------|----------------|------------------|-----------|---------|---------------|----------|-------|
| | | Storage | Compression | Other | | | | | | | |
| <u>Dollars per bale</u> | | | | | | | | | | | |
| Southeast region: 2/ | | | | | | | | | | | |
| Group 201 mills | 1.01 | 2.78 | --- | 3.36 | 4.33 | 0.19 | 5.11 | 0.67 | 0.18 | 2.03 | 19.66 |
| Group 200 mills | .70 | 2.80 | --- | 3.64 | 4.20 | .07 | 4.98 | .70 | .16 | 1.23 | 18.48 |
| Alabama and Georgia mills | 1.25 | 2.81 | --- | 3.90 | 3.35 | .18 | 5.02 | 1.25 | .52 | 2.62 | 20.90 |
| All domestic outlets | .99 | 2.79 | --- | 3.84 | 4.12 | .18 | 5.04 | .69 | .17 | 1.95 | 19.77 |
| South Central region: | | | | | | | | | | | |
| Group 201 mills | 1.31 | 3.59 | 4.47 | 4.11 | 7.51 | .26 | 5.49 | 1.05 | .65 | 2.24 | 30.68 |
| Group 200 mills | 1.25 | 3.61 | 4.50 | 4.08 | 8.25 | .29 | 5.42 | .98 | .58 | 2.15 | 31.11 |
| New England mills | 1.38 | 3.70 | 4.48 | 3.52 | 10.91 | .29 | 5.56 | .68 | .31 | 2.59 | 33.42 |
| Alabama and Georgia mills | 1.34 | 3.62 | 4.49 | 3.81 | 6.68 | .29 | 5.37 | .99 | .54 | 2.45 | 29.58 |
| Average domestic | 1.30 | 3.60 | 4.48 | 4.05 | 7.57 | .26 | 5.48 | 1.01 | .61 | 2.26 | 30.62 |
| Japan | 1.43 | 3.70 | 4.45 | 3.48 | 33.57 | 1.81 | 5.49 | 1.09 | .46 | 1.89 | 57.37 |
| Korea | 1.44 | 3.64 | 4.50 | 3.37 | 31.32 | 2.04 | 5.48 | 1.01 | .49 | 2.16 | 55.45 |
| Hong Kong | 1.20 | 3.65 | 4.50 | 3.90 | 31.32 | 2.16 | 5.60 | .70 | .39 | 2.30 | 55.72 |
| Europe | 1.33 | 3.65 | 4.43 | 3.82 | 30.22 | 1.80 | 5.54 | 1.01 | .37 | 2.17 | 54.34 |
| Other foreign | 1.21 | 3.69 | 4.50 | 3.76 | 32.50 | 2.11 | 5.53 | .80 | .45 | 2.39 | 56.94 |
| Average foreign | 1.38 | 3.64 | 4.50 | 3.56 | 30.53 | 1.91 | 5.52 | 1.01 | .45 | 2.07 | 54.57 |
| All outlets | 1.33 | 3.62 | 4.47 | 3.88 | 9.86 | .43 | 5.49 | 1.01 | .59 | 2.24 | 32.92 |
| Southwest region: | | | | | | | | | | | |
| Group 201 mills | 1.88 | 2.87 | 4.66 | 4.37 | 9.62 | .37 | 5.30 | 1.30 | .28 | 3.38 | 34.03 |
| Group 200 mills | 1.43 | 2.90 | 4.62 | 4.28 | 10.13 | .31 | 5.28 | 1.34 | .44 | 3.26 | 33.99 |
| New England mills | .71 | 2.89 | 4.64 | 4.12 | 14.40 | .25 | 5.39 | 1.49 | .60 | 2.80 | 37.29 |
| Alabama and Georgia mills | 1.38 | 2.85 | 4.65 | 4.22 | 8.83 | .30 | 5.22 | 1.26 | .40 | 3.54 | 32.65 |
| Other domestic | 1.56 | 2.90 | 4.63 | 4.61 | 5.15 | .18 | 5.20 | 2.50 | .37 | 3.46 | 30.56 |
| Average domestic | 1.53 | 2.88 | 4.65 | 4.28 | 9.22 | .32 | 5.26 | 1.31 | .37 | 3.45 | 33.27 |
| Japan | 1.36 | 2.91 | 4.63 | 4.11 | 34.05 | 2.33 | 5.33 | 1.16 | .42 | 4.99 | 61.29 |
| Korea | 1.24 | 2.87 | 4.60 | 4.55 | 31.80 | 1.90 | 5.31 | 2.49 | .53 | 3.52 | 58.81 |
| Hong Kong | 1.74 | 2.90 | 4.35 | 4.27 | 31.80 | 1.73 | 5.29 | .95 | .27 | 2.80 | 56.10 |
| Europe | 1.58 | 2.89 | 4.59 | 4.59 | 30.70 | 2.18 | 5.28 | 2.33 | .48 | 3.73 | 58.35 |
| Other foreign | 1.96 | 2.90 | 4.61 | 4.49 | 34.50 | 2.20 | 5.36 | 2.36 | .25 | 3.68 | 62.31 |
| Average foreign | 1.65 | 2.89 | 4.60 | 4.43 | 31.71 | 2.09 | 5.30 | 2.05 | .34 | 3.73 | 58.79 |
| All outlets | 1.60 | 2.88 | 4.62 | 4.37 | 22.26 | 1.35 | 5.28 | 1.73 | .35 | 3.61 | 48.05 |
| West region: | | | | | | | | | | | |
| Group 201 mills | 1.25 | 3.20 | 4.15 | 3.05 | 15.20 | .35 | 5.85 | 1.18 | .23 | 2.61 | 37.07 |
| Group 200 mills | 1.05 | 3.21 | 4.18 | 3.32 | 15.22 | .37 | 5.84 | 1.55 | .20 | 2.67 | 37.61 |
| Alabama and Georgia mills | 1.06 | 3.18 | 4.16 | 3.40 | 15.18 | .18 | 4.80 | 1.25 | .21 | 2.10 | 35.52 |
| Other domestic | 1.25 | 3.22 | 4.17 | 2.59 | 11.17 | .54 | 5.79 | 1.58 | .20 | 3.36 | 33.87 |
| Average domestic | 1.23 | 3.20 | 4.15 | 3.06 | 14.99 | .36 | 5.83 | 1.25 | .21 | 2.66 | 36.94 |
| Japan | 1.74 | 3.15 | 4.18 | 3.48 | 27.85 | 2.78 | 5.89 | .74 | .39 | 2.44 | 52.64 |
| Korea | 1.44 | 3.17 | 4.18 | 3.58 | 26.35 | 2.60 | 5.90 | .66 | .30 | 2.12 | 50.30 |
| Hong Kong | 1.40 | 3.10 | 4.20 | 3.00 | 27.25 | 3.02 | 5.85 | .84 | .40 | 2.54 | 51.60 |
| Europe | 1.24 | 3.18 | 4.21 | 3.11 | 34.10 | 2.95 | 5.91 | .90 | .29 | 2.68 | 58.57 |
| Other foreign | 1.71 | 3.20 | 4.20 | 3.40 | 28.50 | 2.70 | 5.75 | .69 | .38 | 2.53 | 53.06 |
| Average foreign | 1.64 | 3.15 | 4.18 | 3.44 | 27.48 | 2.76 | 5.88 | .73 | .37 | 2.44 | 52.07 |
| All outlets | 1.53 | 3.18 | 4.16 | 3.32 | 23.74 | 2.04 | 5.86 | .88 | .32 | 2.51 | 47.54 |

1/ See section on method of study for explanation of cost items and outlets.

2/ No reported foreign marketings.

--- = No warehouse compression performed.

respectively. Shipments to Alabama-Georgia mills, the second largest domestic outlet, originate primarily from the Southwest. Over 56 percent of all domestic shipments from the Southwest were distributed to Alabama-Georgia mills at an average cost of \$32.65 per bale.

Marketing costs to foreign destinations vary more than do costs to domestic outlets within each region. Costs in the West ranged from \$50.30 per bale for exports to Korea to \$58.57 for exports to Europe. Variation in total costs among destinations in the South Central and Southwestern regions were not as great as in the West. Differences in buying and selling expenses, transportation costs, and overhead charges contributed to most regional variations. However, costs for other warehouse services are significantly lower in the West, as warehouse charges are not usually made for receiving bales of cotton.

Trading Area Costs

Marketing costs were also calculated for moving cotton from selected regional trading areas to each major market outlet (table 5). Costs were collected and tabulated for firms in all primary trading areas but lack of sufficient observation in some areas precluded reporting separate estimates. No trading area costs are shown for the Southeast for this reason.

Table 5 permits comparisons of the individual cost items among trading areas, as well as with the national and regional averages in tables 2 and 4, respectively. Furthermore, an evaluation of U.S. spot market prices versus mill-delivered cotton prices can also be made. The price spread should closely approximate the total of the individual costs as shown in table 5 for a particular trading area and destination.

OUTLOOK

The upward trend in cost for marketing U.S. cotton is expected to continue. But, the level and magnitude of these costs (both in individual items and in total costs) may experience year-to-year variations. These variations will result primarily from:

- (1) Actual increases or decreases in the cost of services or functions performed.
- (2) Variations in the total volume marketed and variations among volumes shipped from alternative destinations, as averages are weighted by volume shipped.
- (3) Year-to-year variations in the price of cotton and value of the crop.

The impact of escalating energy costs will be felt by all sectors of the cotton industry--especially in the area of transportation and warehousing; higher interest rates and labor costs will also push marketing costs higher. Transportation problems, such as size and availability of box cars, affect orderly marketing and increase costs. Moreover, the continuing shift of cotton production patterns toward the West and Southwest will also increase the cost of marketing cotton to domestic mills.

Textile mills are beginning to request instrument test values on cotton's length uniformity, strength, color, and trash content. Therefore, merchants may now have to adjust their purchasing procedures and actively seek and request instrument-tested bales.

Table 5.--Estimated average cost of marketing U.S. cotton from major trading areas to selected domestic and foreign outlets, 1977/78 season ^{1/}

| Trading area where purchased and outlet to which shipped | Buying and local delivery | Warehouse services | | | Trans-: portation | Cotton insurance | Finan-: cing | Sell-: ing | Miscel-: laneous | Over-: head | Total |
|--|---------------------------|--------------------|----------------|-------|-------------------|------------------|--------------|------------|------------------|-------------|-------|
| | | Storage | Com-: pression | Other | | | | | | | |
| <u>Dollars per bale</u> | | | | | | | | | | | |
| Memphis area: | | | | | | | | | | | |
| Group 201 mills | 1.26 | 3.60 | 4.50 | 4.24 | 7.30 | 0.26 | 5.28 | 0.99 | 0.66 | 2.20 | 30.29 |
| Group 200 mills | 1.21 | 3.62 | 4.50 | 4.18 | 8.08 | .29 | 5.27 | 1.00 | .58 | 2.26 | 30.99 |
| Alabama and Georgia mills: | 1.29 | 3.59 | 4.55 | 3.87 | 6.35 | .30 | 5.07 | .99 | .53 | 2.36 | 28.90 |
| Japan | 1.36 | 3.64 | 4.50 | 3.61 | 33.35 | 1.92 | 5.30 | 1.06 | .43 | 2.19 | 57.36 |
| Korea | 1.43 | 3.63 | 4.48 | 3.33 | 31.10 | 2.12 | 5.64 | 1.04 | .49 | 2.29 | 55.55 |
| Europe | 1.25 | 3.65 | 4.50 | 3.93 | 30.00 | 1.82 | 5.46 | 1.03 | .35 | 2.31 | 54.30 |
| Greenwood area: | | | | | | | | | | | |
| Group 201 mills | 1.34 | 3.63 | 4.43 | 4.02 | 7.82 | .26 | 5.48 | 1.06 | .64 | 2.28 | 30.96 |
| Group 200 mills | 1.30 | 3.60 | 4.50 | 3.98 | 8.40 | .28 | 5.19 | .98 | .58 | 2.08 | 30.89 |
| Alabama and Georgia mills: | 1.39 | 3.63 | 4.45 | 3.68 | 6.98 | .28 | 5.03 | 1.00 | .54 | 2.54 | 29.52 |
| Japan | 1.48 | 3.61 | 4.43 | 3.40 | 33.35 | 1.75 | 4.74 | 1.14 | .48 | 1.76 | 56.14 |
| Korea | 1.46 | 3.64 | 4.45 | 3.34 | 31.10 | 1.98 | 5.36 | 1.06 | .49 | 2.09 | 54.97 |
| Europe | 1.39 | 3.60 | 4.51 | 3.72 | 30.00 | 1.74 | 5.25 | 1.05 | .39 | 2.09 | 53.74 |
| Dallas area: | | | | | | | | | | | |
| Group 201 mills | 1.86 | 2.88 | 4.65 | 4.49 | 9.29 | .43 | 5.28 | 1.30 | .22 | 3.08 | 33.48 |
| Group 200 mills | 1.41 | 2.89 | 4.64 | 4.11 | 9.66 | .35 | 4.87 | 1.36 | .38 | 3.02 | 32.69 |
| Alabama and Georgia mills: | 1.41 | 2.87 | 4.65 | 4.59 | 8.29 | .36 | 5.06 | 1.40 | .36 | 2.94 | 31.93 |
| Japan | 1.89 | 2.89 | 4.63 | 4.71 | 32.75 | 2.26 | 5.02 | 1.46 | .20 | 3.83 | 59.64 |
| Korea | 1.04 | 2.90 | 4.67 | 4.66 | 30.50 | 1.86 | 4.84 | 2.65 | .47 | 2.89 | 56.48 |
| Europe | 1.60 | 2.91 | 4.65 | 4.62 | 29.40 | 2.09 | 5.16 | 2.11 | .29 | 3.03 | 55.86 |
| Lubbock area: | | | | | | | | | | | |
| Group 201 mills | 1.85 | 2.89 | 4.64 | 4.31 | 9.97 | .35 | 5.31 | 1.31 | .31 | 3.51 | 34.45 |
| Group 200 mills | 1.39 | 2.88 | 4.69 | 4.31 | 10.50 | .29 | 5.25 | 1.33 | .48 | 3.38 | 34.50 |
| Alabama and Georgia mills: | 1.34 | 2.88 | 4.64 | 4.12 | 9.29 | .28 | 5.27 | 1.24 | .44 | 3.70 | 33.20 |
| Japan | 1.34 | 2.87 | 4.65 | 4.08 | 31.95 | 2.34 | 5.31 | 1.15 | .44 | 5.08 | 59.21 |
| Korea | 1.25 | 2.89 | 4.69 | 4.53 | 32.70 | 1.90 | 5.28 | 2.48 | .55 | 3.62 | 59.89 |
| Europe | 1.54 | 2.90 | 4.66 | 4.58 | 31.60 | 2.21 | 5.28 | 2.39 | .53 | 3.92 | 59.61 |
| Phoenix area: | | | | | | | | | | | |
| Group 201 mills | 1.63 | 3.20 | 4.38 | 3.65 | 15.33 | .30 | 5.95 | 1.23 | .24 | 2.39 | 38.30 |
| Group 200 mills | .80 | 3.18 | 4.40 | 3.65 | 15.33 | .32 | 5.93 | 1.43 | .17 | 2.43 | 37.64 |
| Alabama and Georgia mills: | 1.06 | 3.22 | 4.29 | 3.34 | 15.33 | .18 | 5.95 | 1.25 | .30 | 2.10 | 37.02 |
| Japan | 2.16 | 3.15 | 4.38 | 3.98 | 28.10 | 2.60 | 5.98 | .65 | .33 | 2.36 | 53.69 |
| Korea | 1.51 | 3.18 | 4.38 | 3.70 | 26.60 | 2.40 | 5.97 | .63 | .31 | 2.10 | 50.78 |
| Europe | 1.74 | 3.15 | 4.29 | 3.82 | 31.35 | 2.56 | 6.00 | .69 | .22 | 2.57 | 56.39 |
| Fresno-Bakersfield area: | | | | | | | | | | | |
| Group 201 mills | 1.04 | 3.20 | 4.09 | 2.81 | 15.33 | .34 | 5.84 | .96 | .26 | 2.56 | 36.43 |
| Group 200 mills | 1.15 | 3.22 | 4.09 | 3.59 | 15.33 | .29 | 5.86 | 1.40 | .25 | 2.35 | 37.53 |
| Alabama and Georgia mills: | 1.06 | 3.18 | 4.10 | 3.45 | 15.33 | .18 | 5.75 | 1.25 | .20 | 2.10 | 36.60 |
| Japan | 1.40 | 3.20 | 4.11 | 3.07 | 27.50 | 2.95 | 5.87 | .69 | .46 | 2.45 | 51.70 |
| Korea | 1.36 | 3.22 | 4.09 | 3.44 | 26.00 | 2.89 | 5.89 | .61 | .30 | 2.10 | 49.90 |
| Europe | .98 | 3.15 | 4.09 | 2.73 | 33.75 | 3.20 | 5.90 | .76 | .33 | 2.62 | 57.51 |

^{1/} See section on method of study for explanation of cost items and outlets.

OSHA's new regulations for textile mills are of paramount concern to all segments of the cotton marketing system. These rulings, which will mandate new opening and mechanical feeding equipment, will eliminate a number of manual operations, such as the opening tender and visual inspection of the bale for impurities before manufacturing begins.

New mill equipment requires uncontaminated bales and bales that are uniform in weight, size, density, and shape. Therefore, bales not meeting the requirements will be rejected by the mills at considerable cost to cotton merchants. The establishment and industry-wide acceptance of a marketable bale are mandatory if cotton is to maintain or increase its competitive position.

The cotton industry can keep marketing costs down by paying particular attention to rapidly increasing cost areas, especially those representing the larger share of the marketing bill.



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