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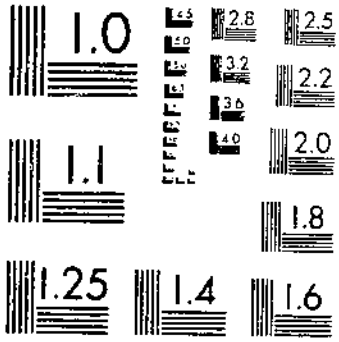

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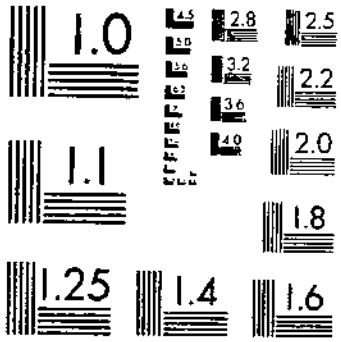

MICROCOPY RESOLUTION TEST CHART
NATIONAL BUREAU OF STANDARDS-1963-A

Technical Bulletin No. 891 • March 1945

UNITED STATES
DEPARTMENT OF AGRICULTURE
WASHINGTON, D. C.

MARKETING AND MANUFACTURING MARGINS FOR TEXTILES[1]

By L. D. HOWELL, *agricultural economist*

Bureau of Agricultural Economics

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INTRODUCTION

Wartime price-control programs emphasize the long-existing need for more information on marketing margins and costs. The formulation of Government price-control programs involves the determination of appropriate relative prices at different stages of the marketing procedure. Data on price spreads and costs for the various stages, along with information on factors associated with changes in these spreads and costs, are thus required. Adjustments in allowable margins which may be necessary in dealing with problems of price control must be based on information regarding marketing costs. The importance of such information is emphasized further by the fact that committees were appointed by both the Senate and the House of Representatives during the 78th Congress, 2nd Session, to investigate marketing margins and costs.

Information on marketing margins and costs is of even greater long-time importance, as it is basic to the treatment of problems

[1] Submitted for publication December 6, 1944.

connected with increasing the efficiency and reducing the costs of marketing. In the post-war years of readjustment to peacetime conditions, cotton and other natural fibers produced on farms in the United States will encounter very severe competition from synthetic fibers and from natural fibers produced in other countries. These prospects emphasize the desirability of closely examining marketing costs and margins for the natural fibers produced in the United States with a view to achieving the utmost economy in marketing, processing, and distributing these fibers and thus strengthening their competitive position.

The costs of marketing agricultural products have an important bearing on returns to farmers, on the one hand, and on marketing outlets and levels of living, on the other. The relative importance of marketing costs for textiles is indicated by the fact that on the average more than seven-eighths of the consumer's dollar paid for textile goods usually is absorbed in marketing and manufacturing margins. A reduction of 5 percent, for example, in these margins would make available for distribution to farm producers or to consumers or to both, more savings than a reduction of one-third in the cost of producing the raw fibers on the farm.

Marketing and merchandising margins for textiles—the spread between prices received by producers for the raw fibers and prices paid by consumers for the finished products—cover costs of rendering such services as assembling, processing, manufacturing, fabricating, wholesaling, and retailing. Detailed data are presented in this bulletin to show the margins or costs for the various groups of services rendered and the items of costs included. These data along with other information were used as a basis for indicating the extent to which it would be feasible to increase the efficiency and to reduce the costs of these services and the relative importance of such reductions and the means by which this could be accomplished.

MARKETING CHANNELS AND DIVISION OF CONSUMER'S DOLLAR

In this publication information is presented on cotton and cotton products, wool and wool products, and on rayon and silk products. Data for cotton and wool begin with farm prices and those for rayon and silk with prices to manufacturers.

COTTON AND COTTON PRODUCTS

Taking cotton from farms and delivering it in the form of finished articles to ultimate consumers requires the services of many different types of middlemen. These services begin when seed cotton is hauled from the farm to the gin where such services are rendered as conditioning and cleaning of seed cotton, separating the lint from the seed, and packing and wrapping the lint into bales of about 500 pounds.

MARKETING CHANNELS

Cotton usually moves from gins to compresses, where it is compressed to higher density, and then to warehouses where it is assembled and stored. From warehouses and compresses it usually

moves to mills by railroad or motor truck, or by a combination of truck, railroad, and water transport. Taking cotton from gins to mills involves merchandising services such as assembling, compressing, storing, insuring, transporting, financing, and risk-bearing, among others.

At mills the bales are opened and the cotton is picked, carded, combed (for fine yarns), and spun into yarn. On the average, about 4.4 percent of the gross weight of the bale usually is discarded as tare, about 4.6 percent usually is lost as nonspinnable waste, and most of the remainder, amounting to about 91 percent, is made into yarn (fig. 1). According to census reports for 1939, for exam-

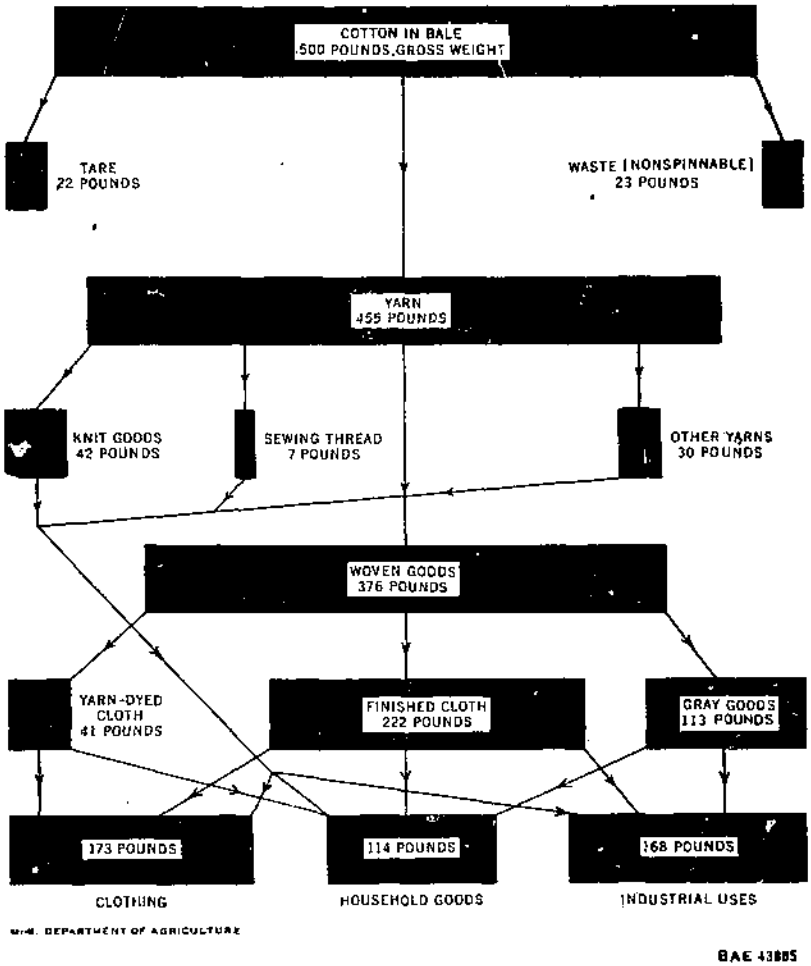

Figure 1.—Approximate distribution of a typical bale of cotton, 1939.

Most of the cotton utilized in the United States is spun into yarn and the yarn is woven into cloth. In 1939 about 38 percent of the cotton consumed by cotton manufactures, as reported by the Census, was used in the manufacture of clothing; about 25 percent in household goods; and about 37 percent for industrial uses.

ple, about 82.6 percent of the yarn was woven into cloth, about 9.2 percent was used by the knit-goods industry, and the remainder was used in making thread, cordage, twine, tire cord, and other products.

Census reports and other information indicate that in recent years about 30 percent of the woven cotton cloth was used in the gray unfinished form, about 11 percent was colored yarn fabrics styled and finished by mills, and about 59 percent was finished from the gray. Finishing gray goods includes bleaching, dyeing, and printing. Of the total linear yardage finished in 1939, for example, about 43 percent was bleached, 28 percent was dyed, and 29 percent was printed. The styling and finish for somewhat more than half of this cloth was controlled by converters and that for the remainder by mills, with or without the collaboration of the manufacturing user.

A large proportion of the finished cloth usually goes to cutters where it is made into wearing apparel and household goods. Estimates based on census reports indicate that of the total output of cotton manufactures in the United States in 1939 about 37 percent went into industrial uses, about 38 percent was used in the manufacture of clothing, and about 25 percent was used for household goods (*8a*).[2] Clothing and household goods usually go directly or indirectly through wholesalers, jobbers, or other agencies, to retailers by whom they are distributed to ultimate consumers.

DIVISION OF CONSUMER'S DOLLAR

The values of the products are enhanced so greatly by the conversions and services rendered in assembling, processing, manufacturing, fabricating, wholesaling, and retailing that returns to growers for the raw cotton amount, in many instances, to only a small proportion of the dollar paid by the consumer for the finished cotton goods. Data on retail values of a group of 42 cotton articles of clothing and household furnishings and on farm values of equivalent quantities of cotton indicate that during the 17 years, 1927-43, returns to farmers for the cotton used amounted on the average to about 10 percent of the consumer's dollar (fig. 2)[3]. The proportion of the consumer's dollar represented by the farm value of the cotton varied directly with the prices of cotton, from about 13 percent in 1928 to about 5 percent in 1932 and to almost 13 percent in 1943.

The fact that on the average about 90 percent of the dollar paid by the consumer for finished cotton goods is accounted for by marketing and manufacturing margins emphasizes the importance

[2] Italic numbers in parentheses refer to literature cited, p. 147.

[3] Parr, K., and Been, R. O., PRICE SPREADS BETWEEN FARMERS AND CONSUMERS—COTTON PRODUCTS. Unpublished manuscript.

Lint-cotton equivalents of consumers' articles were arrived at on the basis of information on the quantity and quality of cotton required to produce the various articles. An allowance was made for salable waste. The quantity and quality of cotton allowed for each article was held constant throughout the period. Retail values of per family purchases of cotton clothing and household goods were arrived at by weighting the value of each of the 42 cotton articles by the average number purchased annually by wage earners' and clerical workers' families, computed from a study by the Bureau of Labor Statistics on Money Disbursements of Wage Earners and Clerical Workers, 1934-36 (*28*).

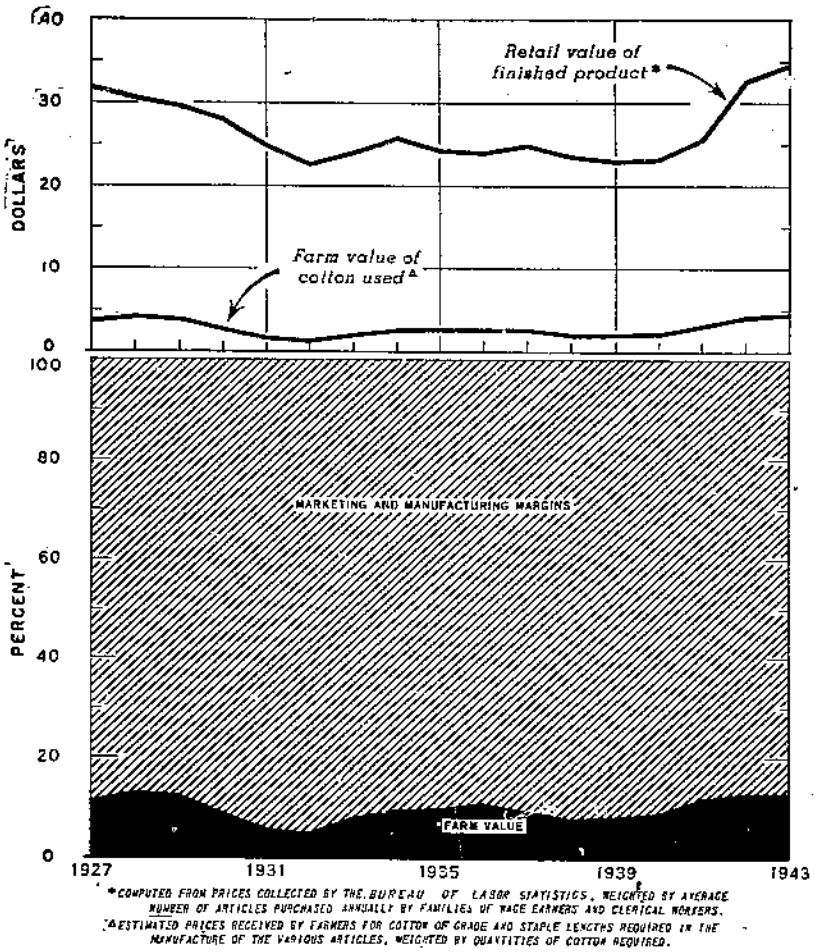

Figure 2.—Average value of per family purchases of 42 cotton articles at retail, equivalent farm value of the cotton used in their manufacture, and margins, 1927–43 (data for 1943 preliminary).

The farm value of the cotton used in these articles usually varied directly with changes in the retail value of the articles and the spread between these values usually varied directly with changes in the values of the products. Changes in the farm value of cotton usually were relatively greater than changes in the retail value of the finished products; and the proportion of the consumer's dollar represented by the farm value of the cotton used usually varied directly with changes in farm prices of cotton.

of a break-down to show the items included in these margins. Estimates, based on official data and on other information, were made to show the average distribution of the consumer's dollar paid for apparel and household goods made of cotton in 1939, the last "normal" pre-war year. The data available for this purpose are not complete and in some instances they are not strictly comparable. Consequently, some liberties were taken in approximating margins on the basis of these data and other information.

Furthermore, the estimated margins were adjusted to approximate the farm-to-retail price spreads for 42 items of cotton clothing, household textiles, and yard goods, as calculated by the Bureau of Agricultural Economics.

Approximations were made to show the average distribution of the consumer's dollar for apparel and household goods on the basis of specific conversions made or the services rendered and on the basis of the agency making the conversions or rendering the services. The results show that, on the average, about 7.5 percent of the consumer's dollar went to growers for farm production, 0.7 percent for ginning and baling, 2.1 percent for all the services rendered in taking cotton from gins and delivering it to mills, 10.5 percent for spinning yarn and weaving cloth, 8.5 percent for dyeing and finishing the cloth, 29.9 percent for manufacturing apparel and household goods, 8.2 percent for wholesaling, and 32.6 percent for retailing (fig. 3).

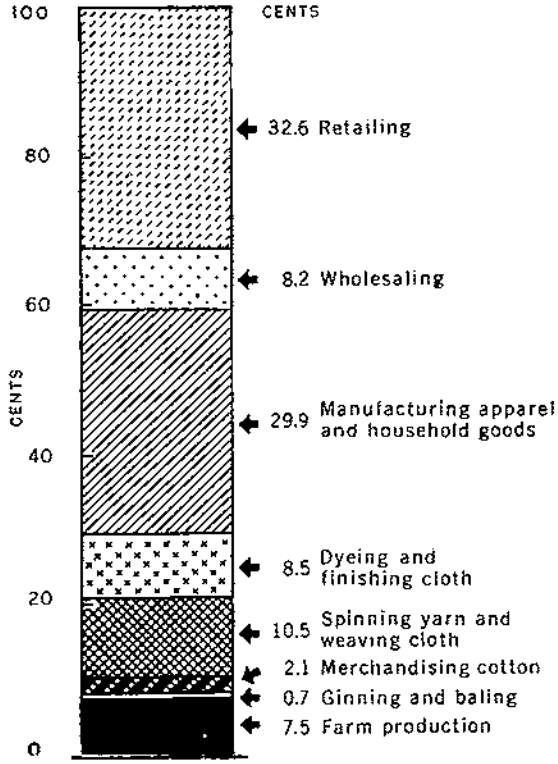

Figure 3.—Approximate distribution of the consumer's dollar paid for apparel and household goods made of cotton, by operations or services, United States, 1939 (based on official and other data and partly estimated).

Estimates indicate that in 1939 about 7.5 cents of the consumer's dollar paid for cotton clothing and household goods went to growers for farm production; almost 3 cents for ginning and baling and for all the services rendered in taking cotton from gins and delivering it to mills; almost 49 cents for manufacturing, including spinning yarn, weaving cloth, dyeing and finishing cloth, and fabricating apparel and household goods; and almost 41 cents for wholesaling and retailing the products.

Different kinds of agencies engage in some of the same kinds of conversions and services. Consequently, the margins indicated for each type of conversion and service do not show specifically the charges made by each type of agency. Some textile manufacturers, for example, although primarily engaged in spinning and weaving, do dye and finish some cloth, fabricate some of the cloth into household or other goods, and sell the products to wholesalers or retailers. Average margins for textile manufacturers in 1939 for making these conversions and rendering these services amounted to about 17.2 percent of the retail price of the finished products (fig. 4). Less than one-half of the dyeing and finishing

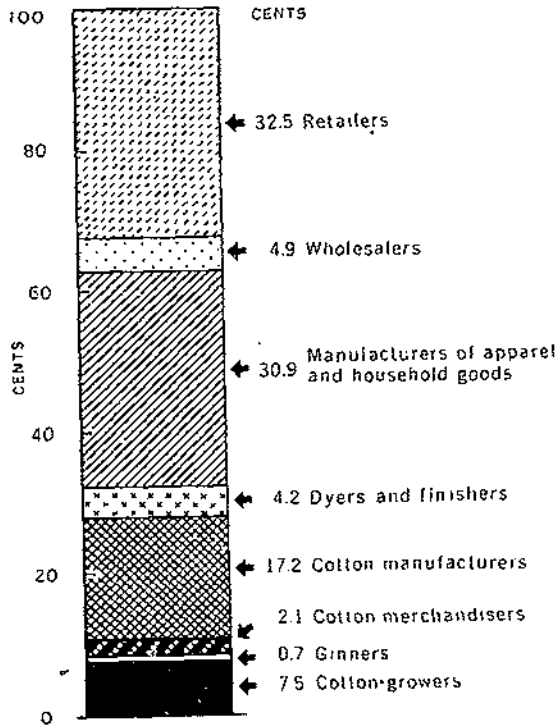

Figure 4.—Approximate distribution of the consumer's dollar paid for apparel and household goods made of cotton, by agencies, United States, 1939 (based on official and other data and partly estimated).

Estimates indicate that in 1939 about 52 cents of the consumer's dollar paid for apparel and household goods made of cotton went to agencies primarily engaged in manufacturing, including those primarily engaged in spinning yarn and weaving cloth, those dyeing and finishing cloth, and those manufacturing apparel and household goods; 37 cents to agencies primarily engaged in wholesaling and retailing; almost 3 cents to ginners and cotton merchandisers; and less than 8 cents to cotton growers.

was done by establishments primarily engaged in dyeing and finishing, and the margins for these establishments in 1939 amounted on the average to about 4.2 percent of the consumer's dollar.

Margins for establishments primarily engaged in the manufacture of apparel and household goods in 1939 amounted on the

average to about 30.9 percent of the retail price to consumers. These establishments sold almost two-thirds of their products to retailers and almost 2 percent to consumers. Margins for the selling services amounted to more than the margins for the manufacture of apparel and household goods by other agencies. These differences account for the margins for manufacturers of apparel and household goods being somewhat greater than the total margins for manufacturing apparel and household goods. Regular wholesalers' margins, amounting on the average to about 4.9 percent of the retail price, were substantially less than the average margin for wholesaling because a large part of the wholesaling was done by agencies not primarily engaged in wholesaling.

Information on specific items of cost are not complete and in many instances the data are not comparable for the various agencies, but rough approximations based on such data as are available indicate that salaries and wages accounted for more than one-half of the spread between retail prices of apparel and household goods made of cotton and returns to growers for the cotton used (fig. 5). Costs of advertising amounted to about 4.2 percent and profits to all agencies except farmers about 8.5 percent of the retail prices of the finished products. It is interesting that salaries and wages for marketing and manufacturing cotton and cotton products amounted to more than six times the returns to growers for farm production. Costs of advertising amounted to more than one-half and profits to all other agencies combined exceeded total returns to growers for the raw cotton.

Because they show the approximate proportions of the marketing and manufacturing margins for cotton and cotton products, these data may serve as a basis for indicating the relative importance of increased efficiency and reductions in costs for the various agencies and functions involved in these fields. The data show that the margins for ginning and baling combined with those for rendering all the merchandising services involved in taking cotton from gins and delivering it to mills, amounted to only about 6 percent of the combined margins for manufacturing and finishing the cloth and fabricating it into wearing apparel and household goods, and about 7 percent of the margins for wholesaling and retailing. In other words, a reduction of 4 percent in the margins for wholesaling and retailing or for manufacturing and finishing cloth and fabricating it into apparel and household goods, would tend to reduce the spread between retail prices to consumers and prices to growers for the raw cotton to a greater degree than a 50-percent reduction in the margins for ginning and merchandising the raw cotton.

Although differences in the size of the margins are important considerations, such differences may not reflect accurately the relative opportunities for making savings in marketing costs and charges that can be passed back to cotton growers or on to consumers of the finished products. But some indications of the extent to which it would be possible and feasible to reduce these margins may be obtained from an examination of detailed information for the various agencies. Such information on margins and

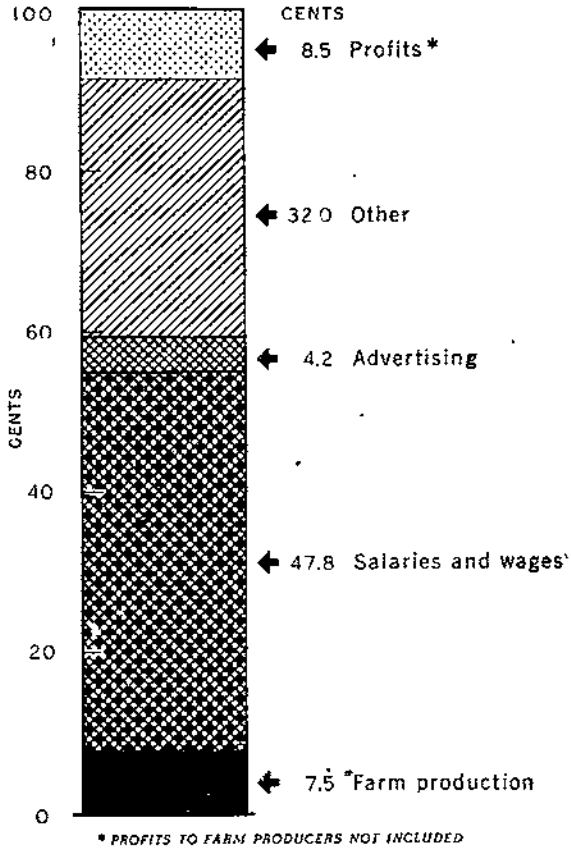

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Figure 5.—Approximate distribution of the consumer's dollar paid for apparel and household goods made of cotton, by cost items, United States, 1939 (based on official and other data and partly estimated).

Estimates indicate that in 1939 almost 48 cents of the consumer's dollar paid for apparel and household goods made of cotton represented salaries and wages, other than farm; advertising 4.2 cents; profits, other than farm, 8.5 cents; other factors, not including farm production, 32 cents; and farm production, including hauling to the gin, 7.5 cents.

costs and on means of reducing them is presented in this bulletin in about the order in which the marketing and manufacturing services are rendered, beginning with the movement from farms.

Wool and Wool Products

Wool utilized in the United States consists of two rather distinct kinds, known as apparel and carpet wools. Apparel wool includes the finer fibers used mainly in the manufacture of apparel yarns and fabrics. Carpet wool, according to Garside (*7, Chs. 1–2*), consists of the coarser fibers used mainly in the manufacture of carpets and rugs. In 1939, apparel wool accounted for about three-fourths and carpet wool about one-fourth of all wool consumed in the United States. All of the carpet wool and about 12 percent of the

apparel wool were imported. More than four-fifths of the wool produced in the United States is obtained from shearing live sheep and is known as shorn wool. The remainder is obtained by pulling the wool from the skins of slaughtered sheep and is known as pulled wool. Production of both kinds of wool is widely distributed throughout the United States.

MARKETING CHANNELS

Soon after the sheep are shorn the fleeces are usually packed for shipment in bags weighing, when filled, from 200 to 400 pounds. Some of this wool is assembled by local merchants and resold to merchants in central markets, but many of the growers, particularly the large producers, sell directly to merchants in central markets. Most of the wool moves out of producing areas to central markets or to mills within a short time after it is clipped. Producers of pulled wool sort their products into uniform lots, put it in bags or bales ranging in weight from 140 to 800 pounds, and much of it is sold directly to mills (*7, Chs. 1–2*).

Most of the imported apparel wool goes directly to central markets where it is handled by the same large merchants who handle the American-grown wool. Imported carpet wool also goes directly to central markets where it is handled by a specialized group of central market merchants, most of whom are located in Philadelphia.

Domestic and imported wool is concentrated in central markets, where it is divided into relatively uniform lots and stored until needed by manufacturers. Most of the wool requirements of manufacturers, particularly the worsted mills, are purchased in the grease. Considerable quantities are bought in the scoured state, however, particularly by woolen mills; this wool usually is scoured by dealers or by packers.

The apparel wool manufacturing industry consists of two major branches, the worsted and the woolen (*7, p. 70*). The worsted branch uses about 70 percent and the woolen branch about 30 percent of the virgin apparel wool consumed in the United States. Worsted manufacturers sort, blend, and scour wool, convert it into semi-manufactured products known as tops, and spin the tops into yarn. Woolen manufacturers do not make tops but they combine and mix the wool and other materials used, and card and spin it into yarn. If the wool is not bought by woolen manufacturers on a scoured basis, they have it scoured.

Most of the woolen and worsted yarns are woven into fabrics, but a considerable proportion goes into the knit-goods industry. Census data on manufactures in 1939 show that about 85 percent of the yarns produced by woolen and worsted manufacturers was weaving yarns and that about 15 percent was used as knitting yarns (fig. 6). Almost four-fifths of the weaving yarns was used in making apparel fabrics, about 11 percent in nonapparel fabrics, about 7.5 percent in blankets, and almost 2 percent in making woven felts and other products.

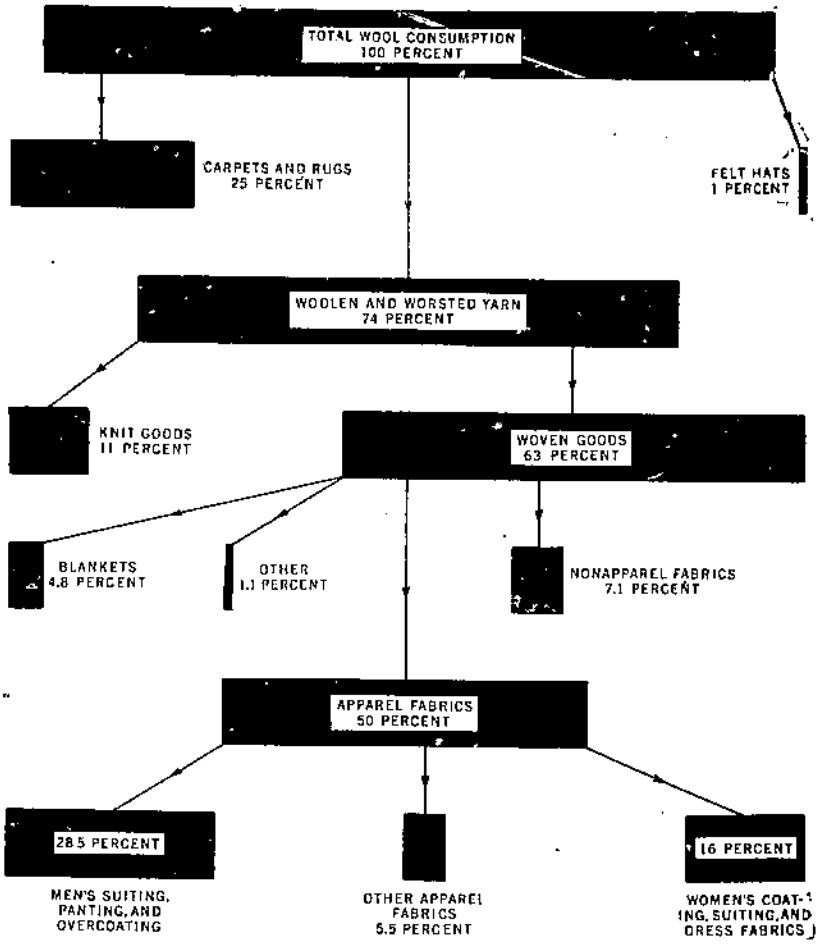


Figure 6.—Approximate distribution of wool consumed in the United States, 1939.

About 74 percent of the wool consumed by wool manufacturers in the United States in 1939 was used in woolen and worsted yarns. Carpet and rug manufacturers used about 25 percent and about 1 percent was used in felt hats. About 85 percent of the woolen and worsted yarns was used in woven goods and about 15 percent in knit goods. Almost four-fifths of the woven goods was used in apparel fabrics.

Most of the worsted and woolen cloths are dyed and finished by manufacturers. Scoured wool is not usually dyed except in blends made by woolen manufacturers. The more common method of coloring worsted is by dyeing the tops, but a large volume of worsted goods is dyed in the piece by applying dye to the woven fabrics. In finishing, the fabric in a moistened condition is subjected to heat, friction, and pressure, in order to shrink, thicken, and interlock the fibers in it. The fabrics are then napped and sheared (*7, pp. 90-91*).

Apparel fabrics are used largely for men's and women's outerwear. Census reports for 1939 show that about 57 percent of these fabrics was used in men's suiting, panting, overcoating, and top coating; about 32 percent in women's coating, suiting, and dress fabrics; and about 11 percent in other apparels, including bathrobes, shirts, snow suits, and interlinings, among others.

DIVISION OF CONSUMER'S DOLLAR

The value added to wool by processing, manufacturing, and the other services rendered is so great that returns to growers for the raw wool amount to only a relatively small proportion of the prices paid by consumers for the finished products. Data on retail values of 20 representative wool products and on the farm value of the wool used in their manufacture show that during the 16 years, 1926-41, returns to growers for the raw wool averaged about 13 percent of the retail prices of the finished products to consumers (fig. 7).[4] The proportion of the retail value of the wool products accounted for by the farm value of the wool used varied directly with the price of wool, from almost 18 percent in 1928 to about 6 percent in 1932 and to about 17 percent in 1941.

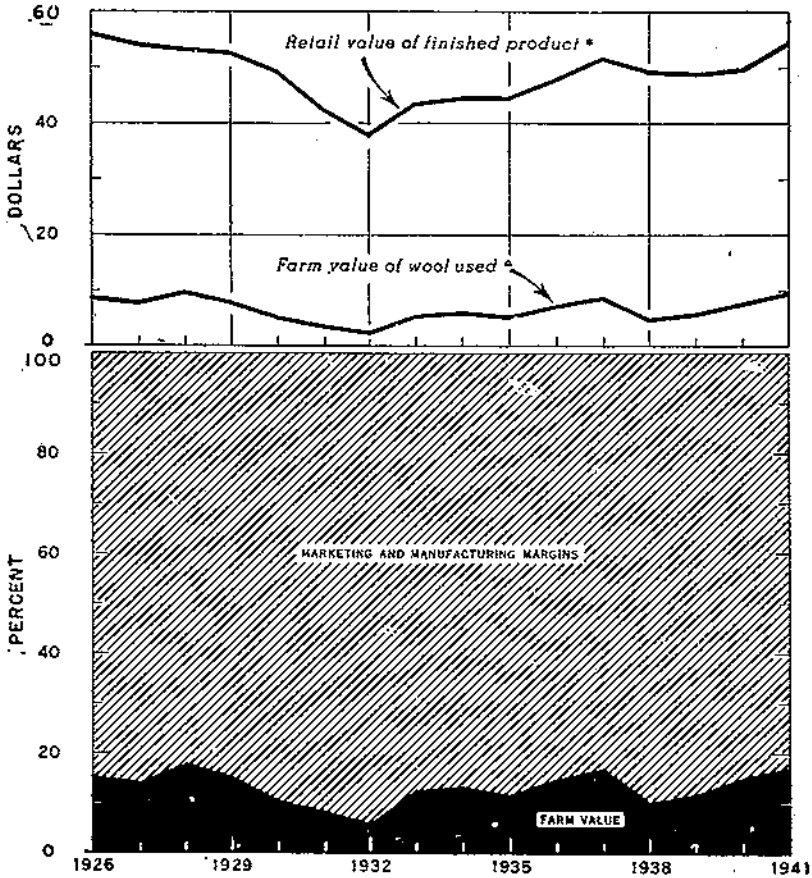
Marketing and merchandising margins for wool, or the spread between prices to farmers for the raw fibers and prices paid by consumers for the finished products, amounted on the average to more than 87 percent of the consumer's dollar during the 16-year period, 1926-41; and the proportions by years ranged from about 82 percent in 1928 to about 94 percent in 1932 and to more than 88 percent in 1939. The relative size of these margins emphasizes the importance of a break-down to show the amounts contributed by the various items included.

Rough approximations, based on official data and on other information, were made to show the average distribution of the consumer's dollar paid for clothing and household goods made of wool in 1939, the last "normal" pre-war year. The data available for this purpose are not complete and in some instances they are not strictly comparable. Consequently, considerable liberty was taken in approximating margins on the basis of these data and other information. Furthermore, the estimated margins were adjusted to approximate the farm-to-retail price spreads for 20 items of woolen and worsted clothing and household goods, as calculated by this Bureau.

Approximations were made to show the average distribution of the consumer's dollar for woolen and worsted clothing and household goods on the basis of specific conversions made or services

[4] These preliminary data were assembled by K. Parr and R. O. Been, for use in constructing farm-to-retail price spreads. The items included are men's overcoats, suits, sweaters (medium and expensive quality), jackets, topcoats, and trousers; women's coats, dresses, hats, flannel robes, and sports coats; boys' suits, overcoats, trousers, sweaters, and jackets; girls' coats and dresses; and blankets. The values shown were arrived at by weighting the retail price of each item by the number bought by the average wage earner's family, as reported by the Bureau of Labor Statistics in MONEY DISBURSEMENT OF WAGE EARNERS AND CLERICAL WORKERS, 1934–36 (*23*). In arriving at the farm values of the wool used, the quantity and kind of wool required for each of the 20 items were estimated and weighted by the average number of the articles purchased per family. The arithmetical products thus obtained were multiplied by the average annual farm price of wool. Similar data for years since 1941 are not available.

rendered. The results show that, on the average, in 1939, about 11.4 percent of the consumer's dollar went to growers for farm production of wool; 2.7 percent for all the services rendered in taking wool from farms and delivering it to mills, not including scouring; 13.4 percent for scouring, spinning and weaving, and finishing the woven fabrics; 34.6 percent for manufacturing apparel



* IN COMBINING THE VALUES FOR THE 20 ITEMS, PRICES WERE WEIGHTED BY THE NUMBER OF ARTICLES PURCHASED BY THE AVERAGE WAGE EARNER'S FAMILY AS REPORTED BY THE BUREAU OF LABOR STATISTICS. COMPLETE DATA FOR ALL ITEMS WERE NOT AVAILABLE EACH YEAR AND TOTALS WERE ESTIMATED FOR SOME YEARS ON THE BASIS OF RATIOS OF AVAILABLE ITEMS TO TOTALS.

^ FARM VALUE OF 4.86 POUNDS OF TERRITORY WOOL AND 5.85 POUNDS OF WOOL FROM EASTERN STATES.

BAE 43965

Figure 7.—Average value of per family purchases of 20 wool articles at retail, equivalent farm value of the wool used in their manufacture, and margins, 1926–41. (Similar data for more recent years are not available.)

The farm value of the wool used usually varied directly with changes in retail value of the articles and the spread between these values usually varied directly with changes in values of the products. Changes in farm value of wool usually were relatively greater than changes in retail value of the finished products, and the proportion of the consumer's dollar represented by the farm value of the wool used varied directly with changes in farm prices of wool.

and household goods; 3.1 percent for wholesaling; and 34.8 percent for retailing (fig. 8).

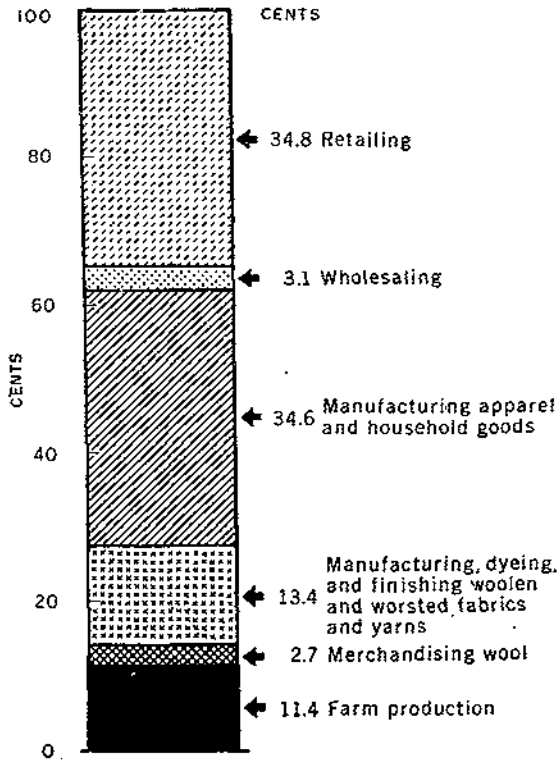


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Figure 8.—Approximate distribution of the consumer's dollar paid for apparel and household goods made of wool, by operations or services, United States, 1939 (based on official and other data and partly estimated).

Estimates indicate that in 1939 about 11.4 cents of the consumer's dollar paid for apparel and household goods made of wool represented the cost of farm production; 2.7 cents the cost of merchandising wool; 48 cents the cost of manufacturing, including manufacturing, dyeing and finishing woolen and worsted fabrics and yarns and the manufacture of apparel and household goods; and almost 38 cents the cost of wholesaling and retailing the products.

Agencies primarily engaged in different kinds of conversions or services, in one respect, may engage also in some of the same kinds of conversions or services in other respects. Therefore, the margins indicated for each type of conversion and service do not necessarily reflect accurately the charges made by each type of agency. Manufacturers of men's and boys' tailored clothing, for example, although primarily engaged in the manufacture of clothing, in 1939 sold about two-thirds of their products to retailers, about 3 percent to consumers at retail, and distributed about 16 percent of their manufactures through their own retail outlets. Average margins for manufacturing and rendering the additional services amounted to about 36 percent of the retail price of the finished

products (fig. 9). Less than two-thirds of the wholesaling was done by agencies primarily engaged in wholesaling.

Information on specific items of cost are incomplete and in many instances the data for these items are not comparable for the various agencies. But very rough approximations, based on such data as are available, indicate that salaries and wages accounted for almost one-half of the spread between retail prices of finished woolen and worsted clothing and household goods and returns to

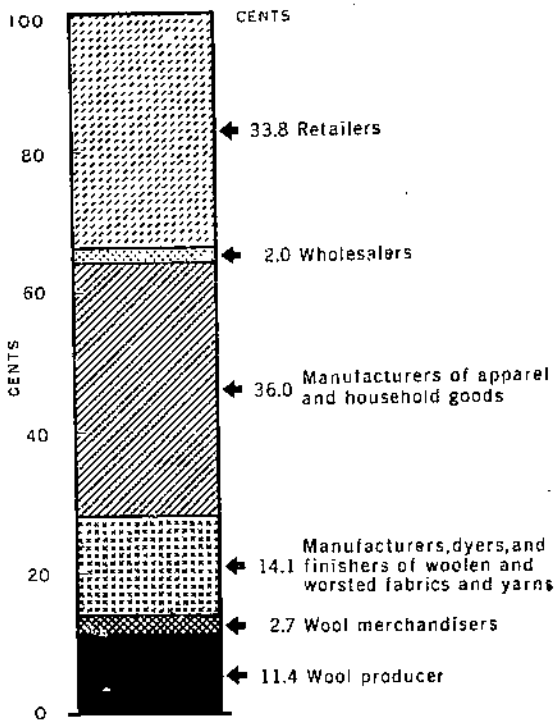

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Figure 9.—Approximate distribution of the consumer's dollar paid for apparel and household goods made of wool, by agencies, United States, 1939 (based on official and other data and partly estimated).

Estimates indicate that in 1939 about 35.8 cents of the consumer's dollar paid for apparel and household goods made of wool went to agencies primarily engaged in wholesaling and retailing; about 50 cents to agencies primarily engaged in manufacturing, including those primarily engaged in manufacturing, dyeing, and finishing woolen and worsted fabrics and yarns and those engaged in the manufacture of apparel and household goods; 2.7 cents to wool merchandisers; and 11.4 cents to wool producers.

growers for the wool used (fig. 10). Costs of advertising amounted to almost 4 percent; and profits to all agencies, except farmers, amounted to almost 9 percent of the retail price of the finished products. The relative importance of these items may be indicated by the fact that the total of salaries and wages paid for marketing and manufacturing wool and wool products was more than four times the gross returns to growers for farm production of the wool.

Costs of advertising averaged about one-third and profits to all other agencies combined averaged almost four-fifths of total returns to growers for farm production of wool.

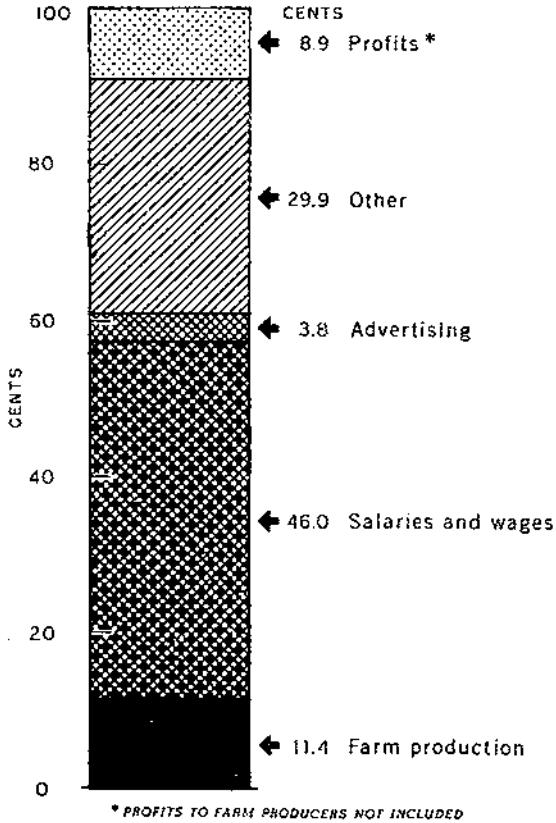

Figure 10.—Approximate distribution of the consumer's dollar paid for apparel and household goods made of wool, by cost items, United States, 1939 (based on official and other data and partly estimated).

Estimates indicate that in 1939 about 46 cents of the consumer's dollar paid for apparel and household goods made of wool represented salaries and wages, other than farm; advertising, 3.8 cents; profits, other than farm, 8.9 cents; other factors, not including farm production, almost 30 cents; and farm production 11.4 cents.

These data, which show approximately the proportions of the marketing and manufacturing margins for wool and wool products, indicate the relative importance of bringing about increased efficiency and reductions in costs for the various agencies and functions involved in the textile industry. According to the data, the margins for rendering all the services involved in taking wool from farms and delivering it to mills, not including scouring, amounted to less than 6 percent of the combined margins for processing the wool, manufacturing yarns and fabrics, and fabricating wool and worsted into clothing and household goods. Margins for merchandising raw wool amounted to only about 7 percent of the

margins for wholesaling and retailing the finished products. In other words, a reduction of 8 percent in the margins for wholesaling and retailing woolen and worsted clothing and household goods or for manufacturing and finishing woolen and worsted fabric and fabricating it into clothing and household goods would have more influence in reducing the spread between retail prices to consumers for the finished products and prices to growers for the raw wool used than the complete elimination of all margins or costs for merchandising raw wool.

Differences in the size of the margins are important considerations but such differences may not reflect accurately the relative opportunities for making savings in marketing and manufacturing costs or charges that could be passed back to wool farmers or on to consumers of the finished wool products. Some indications of the extent to which it would be possible and feasible to reduce these margins may be obtained from an examination of detailed information for the various agencies involved. Such information on margins and costs and on means of reducing them for the wool industry is presented in this bulletin in about the order in which the marketing and manufacturing services are rendered, beginning with the merchandising of raw wool.

MARKETING MARGINS FOR COTTON

Marketing margins for cotton may be thought of as including the costs or charges made for taking seed cotton from farms to gins and having it ginned and baled as well as those for taking the baled lint from gins and delivering it to mills.

Margins Included in Farm Prices

Farm prices are those at which cotton is sold by growers in local markets. They apply to cotton after it has been hauled from the farm to the gin and has been ginned and baled. The costs of this hauling and ginning and baling are paid by the farmer and are included in farm prices. But hauling cotton from the farm to the gin and processing it at the gin are parts of the services rendered in connection with the taking of seed cotton from farms and delivering the finished cotton articles to ultimate consumers.

HAULING FROM FARM TO GIN

Cotton is usually hauled to gins by farmers, but in recent years increased proportions have been hauled by ginners and by commercial truckers. The proportions of the crop of the United States hauled by farmers decreased from about 90 percent for the 1938 crop to about 86 percent for the 1940 crop, whereas the proportion hauled by ginners increased from about 4 percent to about 8 percent during the same period. The remainder was hauled by commercial truckers. In the southeastern region the proportion hauled by ginners increased from about 9 percent for the 1938 crop to about 24 percent for the 1940 crop.[5]

[5] Wright, J. W., and Soxman, R. C., CHARGES FOR GINNING COTTON. U. S. Agr. Marketing Serv., 61 pp. illus. 1942 [Processed]. (See pp. 32-37.)

CHARGES OR COSTS

Information on the costs of hauling seed cotton to gins by farmers is not very complete but some data are available on charges made for such hauling by ginners and by commercial truckers. In some instances the costs of hauling by ginners are included in ginning charges, but in most instances, particularly in recent years, separate charges were made. These charges for the Cotton Belt as a whole decreased from an average of about 62 cents per bale for the 1938–39 season to 57 cents for the 1940–41 season. Charges made by commercial truckers averaged $1.12 per bale in 1939–40 and $1.21 per bale in 1940–41.[6]

Charges made by commercial truckers probably reflect the actual costs of hauling cotton more accurately than those made by ginners. Ginners hauled cotton as a means of increasing their volume of ginning. That ginners are benefited by the hauling of cotton to their gins is indicated by the fact that they pay a part or all of the charges made by commercial truckers for a considerable proportion of the cotton hauled to the gins and the further fact that in some instances ginners reimburse farmers for hauling cotton to the gins.

MEANS OF REDUCING COSTS

The shortage of rubber tires during the war emergency and the fact that more than two-thirds of the cotton is hauled to gins by motortrucks emphasize the importance of making the most efficient use of trucks for this purpose. Average costs of hauling seed cotton to gins could be reduced by loading each truck fully for each trip to the gin where feasible, by hauling the cotton by the most direct route to the nearest gin, and by obtaining return loads whenever possible and feasible.

GINNING AND BALING

Most of the cotton produced in the United States after being harvested is taken to a gin where the lint is separated from the seed and the lint is baled before it is sold by the grower. During recent years only about 3 or 4 percent of the crop in the United States was sold before it was ginned. But in other major cotton-producing countries, where the practices in connection with the production and marketing of cotton are considerably different from those in the United States, a large proportion of the cotton produced is sold by growers before it is ginned.[7]

CHARGES OR COSTS

Charges for ginning vary considerably from year to year according to the prices of cotton and costs of bagging and ties; and from one State or region to another according to differences in kinds

[6] See Wright and Soxman, footnote 5, p. 17.

[7] In Egypt and India, for example, most of the cotton produced is sold by growers before it is ginned and in Brazil a large proportion of the cotton is sold in the seed. Apparently custom ginning is more highly developed or is more generally practiced in the United States than in any other major cotton-producing country. Information on cotton-selling practices in Egypt, India, and Brazil is based on observations by P. K. Norris, Marketing Specialist, Bureau of Agricultural Economics, during his studies of production and marketing of cotton in these countries.

and amounts of services rendered. For the 16-year period, 1928-43, charges for ginning a 500-pound bale of American Upland cotton, including charges for bagging and ties, averaged $5.09 for the United States taken as a whole and the yearly averages ranged from $4.04 in the 1931–32 season to $5.96 in 1928–29 (table 1).[8] In 1943–44 these charges amounted to $6.18. The average by States in 1943–44 ranged from $4.58 for South Carolina to $8.39 in Oklahoma.

TABLE 1.—*Average charges for ginning per 500-pounds gross-weight bale of Upland cotton, by States and regions, for specified years.*

State or region	Ginning charges—year beginning August							
	1928	1931	1935	1939	1940	1941	1942	[1]1943
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Alabama	4.49	2.67	3.30	3.17	3.34	4.03	4.71	4.97
Florida	4.64	3.37	5.06	4.63	3.91	4.68	4.91	5.38
Georgia	4.22	2.70	3.44	3.44	3.43	4.21	4.69	4.97
North Carolina	4.29	2.60	3.43	3.18	3.38	4.15	4.66	5.03
South Carolina	3.79	2.61	3.25	2.70	3.02	3.67	4.46	4.58
Virginia	4.91	3.41	4.51	4.05	4.14	4.82	4.97	5.38
Southeast	4.24	2.67	3.38	3.12	3.29	4.06	4.64	4.90
Arkansas	5.69	3.98	5.39	5.21	5.63	6.12	6.26	6.50
Louisiana	5.23	3.58	5.04	4.77	4.58	5.22	5.58	5.65
Mississippi	6.14	3.85	5.41	4.96	5.11	5.66	5.70	6.13
Missouri	7.51	5.85	8.10	5.97	6.28	6.56	7.12	8.02
Tennessee	5.36	3.96	4.41	4.38	4.79	5.21	5.52	5.77
Midsouth	5.81	3.97	5.39	5.04	5.31	5.82	5.95	6.23
Oklahoma	7.67	6.00	5.96	5.88	5.65	6.55	6.87	8.39
Texas	6.83	4.75	6.24	5.46	5.49	6.89	7.20	7.24
Southwest	6.99	4.99	6.20	5.52	5.52	6.82	7.14	7.38
Arizona	7.83	5.87	5.72	5.12	5.20	6.08	6.42	6.49
California	6.83	5.05	6.00	4.61	4.13	5.04	5.41	5.49
New Mexico	8.34	5.39	7.64	5.24	5.35	6.00	6.50	7.52
Far West	7.49	5.36	6.20	4.82	4.52	5.41	5.79	6.09
United States	5.96	4.04	5.03	4.67	4.76	5.71	5.95	6.18

[1] Preliminary.
Data adapted from Wright and Soxman, footnote 5, p. 17. (See p. 14.)
Data for 1941–1943 were supplied by J. W. Wright, Office of Distribution, War Food Administration. Averages are based on data obtained from ginners.

Charges for ginning American-Egyptian and Sea Island cottons are much higher than for American Upland. Seasonal average charges for ginning and wrapping American-Egyptian ranged from $10.64 per bale of 500 pounds gross weight in the 1940-41 season to $17.21 in 1928–29. Comparable data for Sea Island cotton are not available for the earlier years but charges for ginning and wrapping this cotton during the 1942–43 season averaged $12.42 per bale of 500 pounds gross weight.[9]

FACTORS AFFECTING GINNING CHARGES OR COSTS

Except in Oklahoma and in New Mexico where ginning rates are fixed by State regulatory authority, ginning charges were not subject to governmental control until the Office of Price Administration established ceilings in 1942. Differences in charges for

[8] Wright and Soxman, see footnote 5, p. 17. (See pp. 12–15.)
[9] Wright and Soxman, see footnote 5, p. 17. (See pp. 15–18.)

ginning from one State or region to another are influenced by the kinds and amounts of services rendered and by the conditions under which cotton is ginned. Information compiled on the factors affecting the charges or costs of ginning supply a basis for indicating the possibilities and the feasibility of reducing these charges.

VOLUME OF GINNING.—Average costs per bale of ginning cotton may be greatly influenced by the volume of ginning per gin plant. Differences in cost may result, for instance, from differences in size of the gin plant when used to optimum capacity, in volume of ginnings per unit of gin equipment, or a combination of both factors. Information on the extent to which average ginning costs per bale are influenced by size of the gin plant is not complete. Using the number of gin stands as a measure of size, data for cooperative gin plants with 4-, 5-, and 10-gin stands of 80 saws each, operated in Oklahoma and Texas during the seasons 1932–36, showed little if any consistent differences in average costs or expense per bale for ginning on the basis of size of the gin plants, when the volume of ginning per gin stand was about the same (*1, pp. 12–16*). Data on gin plants with 4, 5, 8, and 10 stands of 70 saws each operated in North Central Texas during the season 1924–25 indicated that, when the volume of ginnings per gin stand is about the same, average costs per hundredweight for ginning decreased considerably with increases in the size of the gin plant (*8, pp. 26–27*). But these results appear not to be very well supported by a more recent study of costs and profits of ginning cotton in Texas (*15*).

Average costs or expenses per bale of ginning cotton usually decrease considerably with increases in volume of cotton ginned per gin plant. Results of analysis of data for cotton gins in Texas in the seasons 1930–38 indicate that by increasing the volume per gin plant from 1,000 bales to 2,500 bales, for example, the average costs per bale could be reduced by about 40 percent (*15, p. 49*). Data presented for cooperative cotton gins operated in Texas and Oklahoma during the seasons 1932–36 show that for gin plants with 5-gin stands of 80 saws each the average expenses for ginning cotton decreased from $17.42 per bale for those ginning less than 500 bales per season to $4.82 for those ginning 1,500 to 2,000 bales and to $3.35 for those ginning 3,000 to 3,500 bales (*1, pp. 12–16*). Similar data for larger and smaller plants also show marked decreases in average expense per bale with increases in volume of ginnings per plant (table 2).

Average expenses per bale for some items of cost, particularly overhead costs, show relatively more decreases with increases in volume of ginning per gin stand than other cost items, but almost all items show decreases with increases in volume of ginning. For example, the average expenses per bale for the season for gin plants with 5 stands of 80 saws each, when the volume of ginning was from 500 to 1,000 bales, were as follows: $2.41 for depreciation; $1.27 for taxes and insurance; $1.24 for management; $1.24 for labor; and $1.93 for other items. The average expense per bale for plants of similar size with a ginning volume of from 2,500 to 3,000 bales, on the other hand, were as follows: $0.72 for depreciation; $0.47 for taxes and insurance; $0.45 for management;

TABLE 2.—*Average ginning expenses of Oklahoma and Texas cooperative cotton gins grouped according to size of plant operated and number of bales ginned, seasons 1932–33 to 1935–36.*

Number of bales ginned	4-80 plants[1]		5-80 plants[2]		10-80 plants[3]	
	Annual association records	Average expenses per bale	Annual association records	Average expenses per bale	Annual association records	Average expenses per bale
	Number	*Dollars*	*Number*	*Dollars*	*Number*	*Dollars*
Less than 500	16	16.39	36	17.42	1	26.49
500— 999	25	7.44	65	8.09	4	12.10
1,000—1,499	22	4.93	55	5.83	4	8.78
1,500—1,999	29	4.22	64	4.82	3	6.84
2,000—2,499	5	3.56	54	4.17	3	6.15
2,500—2,999	8	3.43	47	3.72	8	5.08
3,000—3,499	3	2.81	31	3.35	2	4.95
3,500—3,999	0	----	9	3.16	5	4.30
4,000—4,499	2	2.79	14	2.76	5	4.09
4,500—4,999	0	----	11	2.50	2	4.30
5,000—5,499	2	2.34	4	2.58	2	3.65
5,500—5,999	0	----	2	2.85	2	3.96
6,000—6,499	0	----	1	2.36	1	2.70
6,500—6,999	0	----	0	----	1	2.97
7,000—7,499	0	----	0	----	1	2.97
7,500—7,999	0	----	0	----	0	----
8,000—8,499	0	----	0	----	1	3.14
8,500 or more	0	----	0	----	5	2.69

[1] 4-gin stands of 80 saws each, or 320 saws.
[2] 5-gin stands of 80 saws each, or 400 saws.
[3] 10-gin stands of 80 saws each, or 800 saws.
Compiled from annual financial records of the associations by the Farm Credit Administration and reproduced from Burgess and Weaver (*1*).

$0.83 for labor; and $1.25 for other items (table 3). Similar comparisons made for larger and smaller gin plants, also, show substantial decreases in the average expense per bale for each of the items of cost, with increases in the volume of cotton ginned, particularly up to 500 bales per gin stand (*1, pp. 12–16*).

WEIGHT OF SEED-COTTON PER BALE.—Charges for ginning vary considerably with the weight of seed cotton required to make a standard-weight bale. In the 1940–41 season the quantity of seed cotton required to make a 500-pound gross weight bale averaged 1,366 pounds for American Upland cotton and 1,790 pounds for American-Egyptian cotton.[10] Ginning charges averaged $4.91 and $10.64 per bale, respectively. But American-Egyptian is long-staple cotton ginned on roller gins, whereas Upland has a shorter staple and is ginned on saw gins. The kind of gin and length of staple both affect the costs of ginning. The quantity of seed cotton required per 500-pound gross weight bale of Upland in 1940–41 ranged from an average of 1,287 pounds in South Carolina to 1,495 pounds in Missouri and the average ginning charges ranged from $3.10 to $6.44 per bale, respectively. But other factors besides differences in quantity of seed cotton required to make a 500-pound gross weight bale also helped to account for these differences in charges.

The quantity of seed cotton required per 500-pound gross weight bale is influenced considerably by the variety of cotton, by humidity and other conditions obtaining at the time of harvesting, and by the method of harvesting. The longer stapled varieties usually give a small lint outturn and are somewhat more difficult to clean

[10] Wright and Soxman, see footnote 5, p. 17. (See pp. 8-11.)

TABLE 3.—*Average ginning expenses for specified items grouped according to size of plant and volume ginned, Oklahoma and Texas cooperative cotton gins, for the four seasons, 1932–33 to 1935–36.*[1]

Bales ginned	Expense per bale for —							Total expense
	Labor	Fuel and lubricating oil	Repairs, supplies, and incidental plant expenditures	Taxes and insurance	Depreciation	Manager's salary and expense and directors' fees	Office and other expense[2]	
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
4–80 plants:[3]								
Less than 500	1.88	1.00	0.84	2.78	6.32	2.76	0.81	16.39
500–999	1.30	.58	.58	1.13	2.26	1.12	.47	7.44
1,000–1,499	.98	.51	.40	.73	1.27	.63	.41	4.93
1,500–1,999	.87	.46	.47	.57	1.02	.53	.30	4.22
2,000–2,499	.76	.46	.46	.47	.74	.44	.23	3.56
2,500–2,999	.73	.52	.45	.42	.60	.39	.32	3.43
3,000–3,499	.69	.31	.38	.37	.60	.27	.19	2.81
3,500–3,999	---	---	---	---	---	---	---	---
4,000–4,499	.87	.21	.34	.33	.47	.36	.21	2.79
4,500–4,999	---	---	---	---	---	---	---	---
5,000–5,499	.83	.18	.28	.25	.30	.24	.26	2.34
5–80 plants:[4]								
Less than 500	1.78	.73	1.26	3.10	6.43	2.81	1.31	17.42
500–999	1.24	.65	.62	1.27	2.41	1.24	.66	8.09
1,000–1,499	1.08	.61	.53	.85	1.49	.77	.50	5.83
1,500–1,999	.93	.51	.40	.65	1.18	.65	.41	4.82
2,000–2,499	.87	.46	.50	.55	.91	.48	.40	4.17
2,500–2,999	.83	.45	.45	.47	.72	.45	.35	3.72
3,000–3,499	.79	.33	.48	.43	.65	.35	.32	3.35
3,500–3,999	.70	.40	.43	.41	.57	.37	.28	3.16
4,000–4,499	.74	.32	.32	.32	.52	.31	.23	2.76
4,500–4,999	.70	.20	.40	.28	.43	.30	.19	2.50
5,000–5,499	.72	.46	.26	.27	.35	.31	.21	2.58
5,500–5,999	.72	.40	.34	.36	.42	.33	.19	2.85
6,000–6,499	.72	.23	.38	.30	.41	.23	.09	2.36
10–80 plants:[5]								
Less than 500	1.01	1.24	2.51	5.07	11.28	4.12	1.26	26.49
500–999	1.56	.45	.67	2.29	4.23	1.98	.92	12.10
1,000–1,499	1.40	.68	.65	1.38	2.64	1.30	.73	8.78
1,500–1,999	1.24	.57	.87	1.01	1.90	.75	.60	6.94
2,000–2,499	1.02	.35	.72	.90	1.83	.76	.57	6.15
2,500–2,999	1.05	.50	.31	.72	1.39	.68	.43	5.08
3,000–3,499	1.14	.57	.31	.83	1.18	.44	.48	4.95
3,500–3,999	.91	.52	.35	.57	1.02	.49	.44	4.30
4,000–4,499	1.01	.36	.48	.52	.98	.44	.30	4.09
4,500–4,999	1.17	.58	.38	.61	.83	.47	.26	4.30
5,000–5,499	.91	.28	.65	.50	.76	.33	.22	3.65
5,500–5,999	.80	.41	.66	.50	.76	.31	.43	3.96
6,000–6,499	.76	.22	.38	.28	.59	.25	.22	2.70
6,500–6,999	.89	.29	.39	.43	.59	.23	.15	2.97
7,000–7,499	.97	.16	.48	.35	.56	.24	.21	2.97
7,500–7,999	---	---	---	---	---	---	---	---
8,000–8,499	1.10	.27	.37	.35	.50	.34	.21	3.14
8,500 or more	.95	.25	.32	.29	.41	.26	.21	2.60

[1] The number of annual records for each volume-group plant is the same as those shown in table 2.
[2] Includes office salaries, audit fees, telephone, office supplies, advertising, and miscellaneous items.
[3] Plants with 4-gin stands of 80 saws each, or 320 saws.
[4] Plants with 5-gin stands of 80 saws each, or 400 saws.
[5] Plants with 10-gin stands of 80 saws each, or 800 saws.

Data included in this table compiled from annual financial records of associations by Farm Credit Administration and reproduced here from Burgess and Weaver (*1*).

and gin than the shorter staples. The quantity of seed cotton required to make a bale varies considerably with the quantity of trash and other foreign matter included when harvesting. The quantity of seed cotton harvested by snapping that is required to make a 500-pound gross weight bale averaged 1,945 pounds in 1940-41 compared with an average of about 1,366 pounds for cotton harvested by picking. Ginning rates per hundredweight of seed cotton harvested by snapping ranged from about the same to somewhat higher than those for cotton harvested by picking.

SUPPLEMENTARY EQUIPMENT.—The kinds and quantities of supplementary equipment, such as driers for conditioning green or damp seed cotton, cleaners for removing dirt and small particles of foreign matter, and extractors for removing burrs and other coarse materials, used in connection with ginning, influence considerably the costs of ginning. Such equipment is expensive to install and to operate and its use may add considerably to the costs of the services rendered. Gins in the Southeast have much less auxiliary equipment than gins in other parts of the Cotton Belt and usually these differences in equipment are reflected in the charges for ginning.[11] But differences in factors other than auxiliary equipment also help to account for the differences in charges.

LABOR, POWER, AND OTHER ITEMS.—Costs of ginning are influenced considerably by the costs of labor, power, and other items of expense in operating and maintaining the ginning and auxiliary equipment (*15, pp. 28–47*). Farm wages per day without board in October 1940, for example, ranged from an average of 85 cents in South Carolina to 95 cents in Mississippi and to $1.35 in Texas (*25, 1941, pp. 562–563*). Ginning charges for these States during the 1940–41 season averaged $3.02, $5.11, and $5.49 per bale, respectively. As already indicated, factors other than costs of labor also affect these charges. The type of power used, the mechanical conditions of the gin plant and supplementary equipment, and the skill with which it is operated also influence ginning costs (*1, pp. 28–31, 8, pp. 28–31*).

QUALITY OF SERVICES PERFORMED.—Ginning charges vary with the quality as well as with the amounts of the services performed. The real costs of the ginning services to producers are influenced by the quality of the services as well as by the charges made. Ginning of poor quality reduces the quality and value of the lint. The quality of ginning services performed is indicated by the proportion of the cotton that is rough ginned. The proportion of rough-ginned cotton usually has been greatest in those States or areas where ginning charges have been relatively low.[12] In the southeastern areas ginning charges usually are substantially lower and the proportions of rough ginned cotton usually are much greater than for other parts of the belt. The proportion of rough-ginned cotton may be influenced considerably by weather conditions during harvesting, staple length of the cotton, condition of the cotton at the time of ginning, and the kind and amount of equipment used and the method of its operation.

BAGGING AND TIES.—Charges for bagging and ties make up more than one-fourth of the total charges for ginning. In the Southeast, charges for these materials usually are substantially less than in other areas. These relatively low charges are largely accounted for by the fact that ginners in that area cover a considerable proportion of the cotton with second-hand materials, whereas in other areas ginners customarily use new bagging and ties.[13] The types of bagging used include open-weave jute, sugar-bag cloth, and cotton bagging. The costs vary somewhat with the kind

[11] Wright and Soxman, see footnote 5, p. 17 (See pp. 23–25.)
[12] Wright and Soxman, see footnote 5, p. 17. (See pp. 25–27.)
[13] Wright and Soxman, see footnote 5, p. 17. (See pp. 27–32.)

used but differences in the proportion of the various kinds used from one area to another are not great enough to affect materially the differences in average ginning charges shown.

SUPPLEMENTARY SERVICES RENDERED.—Services rendered in connection with ginning, the charges for which are included with those for ginning, may also affect materially the charges for ginning. Such services may include hauling from the gin to the warehouse, cotton yard, or railroad platform; storing lint cotton in the gin yard and cotton seed at the gin; and advances of credit for producing and harvesting the crop. In addition, ginners buy on the average about one-fourth of the lint ginned and most of the cottonseed crushed is bought by or through the ginners and the prices paid may influence, or be influenced by, the charges for ginning.

MEANS OF REDUCING COSTS

Information on the general situation in the ginning industry and on factors affecting the costs of ginning supply some basis for suggesting possible means of reducing these costs. But conditions vary from one locality to another and specific information on the situation in each locality would be needed as a basis for indicating the means by which and the extent to which it would be feasible to reduce ginning charges or costs in the various localities.

INCREASE IN VOLUME OF GINNINGS.—The fact that average costs per bale for ginning cotton were substantially less for gins with annual volumes of ginnings of 500 or more bales per gin stand than for gins with smaller volumes of ginnings, and the fact that the number of bales ginned per gin stand in the United States in 1940–41 averaged less than 300 bales, indicate that costs of ginning could be reduced considerably by increasing the volume of cotton per gin stand. This would require a reduction in the number of gin stands operated. Such a reduction might well be brought about by discontinuing the use of old, badly worn, and obsolete equipment and by limiting the construction of new plants and any replacements, other than necessary repairs, in any locality to those required for efficient operation.

Some indications of the possibilities of increasing the volume of ginnings per unit of ginning equipment by reducing excess ginning capacity may be obtained from data on the extent to which gin-capacity is utilized. Data compiled by the Farm Credit Administration on the number and capacity of gins and on the number of bales ginned during the seasons 1939–41 indicate that if all gins had been operated at capacity on the basis of a 12-hour day the American crop could have been ginned in about 22 days in 1939, in about 24 days in 1940, and in about 20 days in 1941 (table 4) (*16*). The number of days by States, for the period 1939–41, ranged from an average of 10 for Virginia and Florida to 65 for California.

Data on the extent to which ginning capacity is utilized during the heaviest part of the ginning season perhaps give a better basis than data on number of days required at full capacity to gin the crop for estimating the extent to which it might be possible and feasible to increase the volume of ginning per unit of ginning equipment by reducing excess ginning capacity without providing

Table 4.—*Number of gins, estimated capacity, bales ginned per gin, and average number of days needed to gin crop, by States, 1939–41.*

State	Total gins 1940	Equivalents 320-saw gins[1]	Estimated capacity per 320-saw gin per 12-hour day[2]	Bales ginned per 320-saw gin[3]		Average number days needed to gin crop	
				1940	1939–41	1940	1939–41
	Number	*Number*	*Bales*	*Number*	*Number*	*Number*	*Number*
Alabama	1,251	993	50.1	774	776	15	15
Arizona	62	82	39.2	2,319	2,181	59	56
Arkansas	1,199	981	47.7	1,506	1,434	32	30
California	112	156	44.5	3,405	2,909	77	65
Florida	51	28	49.0	640	500	13	10
Georgia	1,408	1,084	49.0	929	785	19	16
Louisiana	657	533	50.6	842	923	17	18
Mississippi	1,383	1,142	48.9	1,085	1,215	22	25
Missouri	191	166	47.3	2,392	2,607	51	55
New Mexico	44	49	41.3	2,348	2,080	57	50
North Carolina	1,009	665	47.9	1,126	892	24	19
Oklahoma	748	783	39.8	976	838	25	21
South Carolina	1,205	765	50.4	1,237	961	25	19
Tennessee	435	341	46.7	1,475	1,475	32	32
Texas	3,207	3,384	43.7	919	819	21	19
Virginia	93	39	48.3	552	480	11	10
All other	15	10	44.4	1,456	1,772	33	40
Total or average United States	13,070	11,201	46.6	1,098	1,012	24	22

[1] Number of 320-saw gins based on total number of saws, 1940. Roller gins converted to 320-saw gin equivalents.
[2] Based on ginners' estimates of capacity, October 1940.
[3] Number of bales ginned in 1941 subject to revision.
Adapted from a report by Schiffman, (*16*). The data were compiled from census reports.

additional storage space for seed cotton or changing harvesting practices. According to the Bureau of the Census, about four-fifths of the American crop is harvested and ginned during the 3 months from about the middle of August to the middle of November (*22*). The time of the peak load for ginning varies somewhat from one part of the Cotton Belt to another, but for most areas it comes in September or October.

Data on the capacity of gins and on the volume of cotton ginned during the period of largest volume of ginning by counties, for the seasons 1939–41, show that for more than one-half of the counties in 9 principal cotton-producing States less than one-half of estimated total ginning capacity on the basis of a 12-hour day was utilized during the peak load of the ginning season (table 5) (*16*). In about 15 percent of the counties less than 30 percent of total capacity was utilized and as much as 70 percent of capacity was utilized in less than 15 percent of the counties. The proportion of estimated total capacity on the basis of a 12-hour day by States utilized during the peak load period varied from 25 percent for Texas, to 30 percent for Georgia, about 60 percent for Mississippi, Louisiana, and Arkansas, and about 119 percent for Missouri.

These data clearly indicate that substantial reductions in the amounts of ginning equipment used and corresponding increases in the volume of ginning per unit of ginning equipment could be brought about in many parts of the Cotton Belt with little or no delay in harvesting and ginning and with little or no increase in storage space required for seed cotton. Unfavorable weather, the availability of cotton, the necessity for repairing machinery, and other factors may make it impossible to operate gins continuously

TABLE 5.—*Distribution of counties on the basis of the proportion of full capacity of gins utilized in the period of largest volume of ginnings, by States, 1939–41.*

Proportion of ginning capacity utilized	Proportion of the counties by States									
	N. C.	S. C.	Ga.	Ala.	Miss.	La.	Ark.	Tex.	Okla.	All 9 States
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
0 to 9%	-----	-----	-----	-----	-----	-----	-----	2.9	-----	0.7
10 to 19%	2.1	-----	1.7	1.5	2.7	-----	3.1	14.6	9.2	5.7
20 to 29%	8.3	-----	12.8	23.1	8.2	5.3	3.1	7.6	7.4	9.1
30 to 39%	12.5	7.3	18.8	35.4	11.0	2.6	10.8	18.7	22.2	17.0
40 to 49%	29.2	29.3	27.3	16.9	15.1	15.8	21.5	20.5	37.0	23.1
50 to 59%	22.9	26.8	26.5	12.3	17.8	21.1	18.4	10.5	18.5	18.1
60 to 69%	18.7	21.9	7.7	6.2	19.2	28.9	10.8	8.2	-----	11.5
70 to 79%	-----	9.8	2.5	4.6	13.7	18.4	7.7	8.2	1.9	7.0
80 to 89%	2.1	4.9	1.7	-----	6.8	5.3	12.3	5.8	1.9	4.6
90 to 99%	2.1	-----	-----	-----	5.5	2.6	4.6	1.2	1.9	1.8
100% and over	2.1	-----	1.0	-----	-----	-----	7.7	1.8	-----	1.4
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

Based on data compiled by E. G. Schiffman (*16*) from Bureau of Census reports. Full capacity, as used here, is 48 bales per 12-hour day per 320-saw gin. The number of 320-saw gins used is based on the total number of gins reported by the Bureau of the Census in October 1940. Ginning periods are those for which ginnings are reported to the Bureau of the Census and they range in length from 13 to 17 days. The proportion used for each county in making up the distribution represents the period in which capacity was most nearly fully utilized during any one period for any of the 3 years.

at full capacity on a 12-hour day basis for extended periods. But during the busiest part of the ginning season gins may be, and many actually are, operated for considerably more than 12 hours each day. Furthermore, the pressure on ginning facilities during the period of heaviest movement of cotton to gins could be eased and the period during which gins can operate at full capacity extended somewhat, by providing storage space for substantial quantities of seed cotton at the gins and by inducing producers to store more seed cotton on farms during the peak of the harvesting season.

Where gin plants are too small for the most efficient operation, average costs of ginning may be reduced by increasing the number of gin stands and the volume of ginnings per gin plant. This could be accomplished by combining existing gin stands, preferably only the better ones, into fewer plants and by limiting the construction of new plants to the larger and more efficient sizes. To be economically feasible, the savings in such ginning costs attributable to the greater efficiency of the larger plants would need to equal or exceed the expenses of making the combinations.

Reductions in costs of ginning by increasing the volume of ginnings per gin stand and per gin plant in some instances would be offset to some extent by increases in costs of hauling seed cotton to gins, as a result of increases in average distance of haul, and possibly by some delays in getting cotton ginned, particularly during the peak of the harvest season. But in many instances increases in volume of ginnings per gin plant could be brought about by reducing the number of gin plants in specific villages or towns without increasing appreciably the distances seed cotton would have to be hauled. The fact that in the 1935–36 season, for example, more than two-thirds of the seed cotton was hauled less than 5 miles to the gin[14] indicates that in most instances the volume could

[14] WRIGHT, J. W. MARKETING PRACTICES IN PRODUCER LOCAL COTTON MARKETS. U. S. Bur. Agr. Econ., 92 pp. illus., 1938. See p. 11. [Processed.]

be increased considerably without making the distance from the farm to the gin very great.

Differences in costs resulting from differences in volume of ginnings are not reflected accurately in differences in average charges from one State to another (table 6). In 1940, for example, the number of bales ginned per 320-saw gin averaged 929 in Georgia and 2,392 in Missouri. Charges for ginning services averaged $3.43 in Georgia and $6.28 in Missouri. Although gins in Oklahoma are subject to regulation by the State Corporation Commission, the volume of ginnings per 320-saw gin averaged lower and charges for ginning services averaged considerably higher than for the United States taken as a whole. But the condition of the cotton at the time it is ginned and the kinds and amount of ginning services differ considerably from one area to another and it is not known to what extent ginning charges are influenced by factors other than volume of ginnings.

TABLE 6.—*Average number of bales ginned per 320-saw gin and average charges per bale of 500-pound gross weight for American Upland cotton, by States, 1940–41.*

State	Bales ginned per 320-saw gin[1]	Average charges per bale for ginning services[2]	State	Bales ginned per 320-saw gin[1]	Average charges per bale for ginning services[2]
	Number	*Dollars*		*Number*	*Dollars*
California	3,405	4.13	Mississippi	1,085	5.11
Missouri	2,392	6.28	Oklahoma	976	5.65
New Mexico	2,348	5.35	Georgia	929	3.43
Arizona	2,310	5.20	Texas	910	5.49
Arkansas	1,506	5.63	Louisiana	842	4.58
Tennessee	1,475	4.79	Alabama	774	3.34
South Carolina	1,237	3.02	Florida	640	3.91
North Carolina	1,126	3.38	Virginia	552	4.14

[1] Based on data compiled from Bureau of the Census reports by E. G. Schiffman, Farm Credit Administration, U. S. Department of Agriculture.
[2] Data adapted from Wright and Soxman. See footnote 5, p. 17.

CAREFUL HARVESTING AND CONDITIONING OF SEED COTTON.—Cost of ginning and damage to the lint from cleaning and ginning could be reduced by picking the cotton carefully instead of snapping it and by properly conditioning the seed cotton before it is ginned.[15] But the feasibility of harvesting cotton by picking instead of snapping depends upon the extent to which increased costs of harvesting by picking, including any damages from leaving cotton exposed in the field for a longer time, offset the consequent reduction in ginning costs and the gin damages to the quality of the lint. Tests made at the Department's cotton ginning laboratories show that damages to the quality of lint as a result of snapping as compared with hand-picking reduced the average market value about $3 per bale.[16] Picking instead of snapping cotton delays the harvest and increases the damages from exposure in the field. The amount of exposure required to reduce the quality one grade ranges from 1 to 4 weeks, depending upon weather conditions.

EFFICIENCY IN ORGANIZATION AND OPERATION.—The kinds and amounts of ginning and auxiliary equipment, the condition or state of repair in which it is kept, and the method of organization and

[15] GERDES, F. L., MARTIN, W. J., and BENNETT, C. A. COTTON HARVESTING AND HANDLING. U. S. Bur. Agr. Econ., 13 pp., 1938. See pp. 9–11. [Processed.]
[16] See footnote 15.

operation may also influence considerably the average costs of ginning. The choice of kinds of ginning equipment in establishments already set up may be very limited but it may be an important consideration in setting up new plants or in making replacements. Any reductions in costs from the use of auxiliary equipment probably should be brought about by using efficiently the more suitable types and not by the elimination of their use when required to render the services needed. With an adequate volume of cotton for efficient operation reasonably certain, the ginner probably would be more likely to keep his equipment in good condition in order to improve the quality of the ginning services rendered as well as to reduce the costs per bale of ginning. Careful selection and efficient utilization of labor, power, and other items of expense may also reduce ginning costs (*15, pp. 31–47*).

IMPORTANCE OF REDUCTION IN COSTS

Information available on means of reducing costs of ginning indicates that by increasing the volume of ginning per unit of equipment, by using the better equipment more efficiently, and by other economies net costs of ginning might, over a period of time, be reduced in many instances by as much as one-fourth or possibly more. The relative importance of such savings will be apparent when it is understood that if such reductions had been reflected in prices to cotton growers in the 1942–43 season, the increase in their incomes resulting therefrom would have amounted to about $1.47 per bale of 500 pounds or to about 1.5 percent of the farm value of cotton.

COTTON MERCHANDISERS' MARGINS

Merchandisers' margins are the differences between farm prices of cotton and the costs of the raw cotton to mills. These margins include the costs of rendering the services incident to taking the cotton from gins and delivering it to mills at the time, in the quantities, and of the qualities desired. These services include receiving, sampling, weighing, classing, compressing, storing, insuring, transporting, financing, and risk bearing, among others.

RECEIVING AND RELATED SERVICES

Most of the cotton after leaving the gin is assembled in public warehouses or compresses where several services are rendered incident to the compression and concentration of cotton. These services usually include issuing warehouse receipts, weighing, marking or tagging, and storage up to 30 days.

CHARGES OR COSTS

In the 1939–40 season the average receiving charge in the United States was 23 cents per bale and the averages by States varied from 15 cents per bale in Arkansas, Oklahoma, and Tennessee to 37 cents in Georgia and North Carolina (table 7). During the 10-year period, 1932–41, average receiving charges remained unchanged in New Mexico and in Oklahoma but substantial changes were made in other States, and the United States average ranged from 21 cents per bale in the 1940–41 and 1941–42 seasons to 35 cents in 1934–35.[17]

[17] Wright, J. W., and Bennett, C. A. THE COMPRESSION OF COTTON AND RELATED PROBLEMS. U. S. Agr. Marketing Serv. and Bur. of Chem. and Eng. Mimeographed report, 68 pp., illus., 1940. (See p. 21.)

Variations in receiving charges may be accounted for largely by the facts that the kinds and amounts of services rendered vary considerably and that the charges for the services are not very well standardized. The storage period, for example, ranged from 0 to 30 days, and even if storage rates were all the same, this range would account for considerable differences in charges. Furthermore, the kinds and amounts of other services rendered also vary and some compresses do not make a receiving charge if they compress the cotton.

TABLE 7.—*Average receiving charges per bale at cotton compresses, by States, 1932–41.*

State	Year beginning August									
	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Alabama	34	32	30	30	30	35	31	30	32	20
Arizona	25	25	25	25	25	25	27	27	25	25
Arkansas	25	25	40	25	25	40	25	15	15	15
California	29	30	30	30	27	30	24	22	23	25
Florida	25	25	30	30	35	35	30	35	35	25
Georgia	16	26	29	25	35	30	34	37	32	25
Louisiana	25	20	30	30	25	41	32	28	24	21
Mississippi	25	25	36	31	25	40	32	28	22	22
Missouri	25	25	40	25	25	40	25	17	15	15
New Mexico	25	25	25	25	25	25	25	25	25	25
North Carolina	40	40	40	25	25	25	35	37	28	25
Oklahoma	15	15	15	15	15	15	15	15	15	15
South Carolina	28	40	26	25	25	25	27	35	25	25
Tennessee	25	25	40	25	25	40	25	15	15	15
Texas	25	22	39	21	21	22	27	23	24	24
Virginia	27	30	30	25	30	30	25	25	25	25
United States	24	23	35	25	24	31	27	23	21	21

Data for years 1932–39 abstracted from a report by Wright and Bennett, footnote 17, p. 28. Data for 1940 and 1941 were supplied by John W. Wright, Office of Distribution, War Food Administration. The data are based on published tariffs of commercial compresses. The services include issuance of warehouse receipt, sampling, weighting, marking or tagging, and storage for periods ranging from 0 to 30 days.

MEANS OF REDUCING COSTS

The costs of the services rendered in connection with receiving cotton may be reduced by minimizing unnecessary assembling and handling before shipment to mills, and by rendering the necessary services more efficiently. Much of the cotton changes hands several times in the course of its movement through marketing channels and in many instances these changes are accompanied by duplicate sampling and additional handling. Such resampling means additional service charges, wastes the cotton used, damages the bagging, and exposes the cotton to further waste and damage. Such duplication and waste could be eliminated by the use of equipment for taking automatically adequate and authentic samples of cotton bales while the bales are being formed. An automatic sampler, which has already been developed and tested on a commercial scale and for which a public service patent has been obtained, can be used with any standard gin equipment.[18] The most effective use of such a sampling device would require some reliable means for the correct and permanent identification of the sample with the bale from which it was drawn and progress has

[18] Unpublished information on results of research and developmental work on automatic sampler was made available by J. W. Wright, Office of Distribution, War Food Administration.

been made in recent years toward the development of means for the permanent identification of bales.[19] Savings might also be made by reducing or eliminating unnecessary duplications of such services as weighing, marking, and tagging. The combined savings by these means may reach in many instances as high as $1 per bale.

COMPRESSION OF COTTON

Cotton bales vary considerably in size, shape, and density. They include the square or flat gin bale, the standard- and high-density compressed bale, and a relatively small number of round bales of high density. The square gin bale averages about 50 inches in length, 28 inches in width, and 44 inches in thickness, and the density averages about 13 pounds per cubic foot. The standard-density bale averages about 56 inches in length, 30 inches in width, and 22 inches in thickness, and the density averages about 24 pounds per cubic foot. The high-density bale averages about 57 inches in length, 22 inches in width, and 22 inches in thickness, and the density averages about 33 pounds per cubic foot. These dimensions and densities vary considerably with the weight of the bale.[20]

With the exception of the relatively small quantity of cotton packed in round bales of high density at gins, all the crop in this country is put up at first in square gin bales and the charges for this service are included with those for ginning. Square bales are very bulky and, except in the Southeastern States where most of the cotton goes from gins directly to local mills, most of them are compressed to standard or high density to minimize costs of transportation and storage. In the 1937–38 season, for example, about 65 percent of the square bales were compressed to higher density and the proportion varied from about 10 percent in the Southeast to about 85 percent in the Mississippi Valley and the Southwest.[21]

The proportions of cotton compressed to standard density and to high density vary considerably. In the 1937–38 season, for example, about 38 percent was standard density and the proportion by areas ranged from about 9 percent in the Southwest to about 69 percent in the Mississippi Valley. Almost all the standard-density cotton was compressed from square gin bales. The proportions that were compressed to high density ranged from about 91 percent in the Southwest, where most of the cotton was prepared for export, to about 75 percent in the Southeast, where most of the cotton compressed was prepared for export, and about 31 percent in the Mississippi Valley. About 91 percent of the high-density cotton was compressed directly from the square bale and about 9 percent from standard-density bales.[22]

CHARGES OR COSTS

Charges for compressing cotton in most instances are made on a per bale basis but in some instances they are based on actual

[19] Wright, J. W., PERMANENT IDENTIFICATION OF COTTON BALES. U. S. Dept. of Agr., Mimeographed Report. 26 pp., illus., 1937.
[20] Wright and Bennett, see footnote 17, p. 28. (See pp. 26–27.)
[21] Wright and Bennett, see footnote 17, p. 28. (See pp. 5–7).
[22] Wright and Bennett, see footnote 17, p. 28. (See pp. 15–18.)

weight. In the 1938–39 season, for example, charges for about four-fifths of the cotton were made on a per bale basis and about one-fifth were based on actual weights. The proportions differ widely from one State or area to another. In New Mexico all, in Oklahoma almost all, and in Texas, California, and Tennessee considerable proportions of the charges were based on actual weight; whereas in Arizona, Florida, Georgia, Louisiana, Missouri, North Carolina, South Carolina, and Virginia all the charges were made on a per bale basis.[23]

The rates charged for compression to high density usually are somewhat higher than those for standard density. In the 1941–42 season the United States average rate for standard density was 64 cents per bale and the State averages ranged from 60 cents in Alabama, Florida, Georgia, North Carolina, and Virginia to $1.03 in California; whereas for high density the United States average rate was 78 cents per bale and the State averages ranged from 70 cents to $1.03. During the 10-year period 1932–41 the United States average rates for high-density compression ranged from 72 cents per bale for the seasons 1935 and 1936 to 78 cents in 1933, 1934, 1940, and 1941. Similar averages for standard density ranged from 60 cents per bale for the 1936 season to 64 cents for the seasons 1934, 1935, and 1941 (table 8).[24]

In the 1937–38 season almost one-fourth of the American crop was compressed to standard density and about 40 percent to high density. At the rates prevailing during that season the total charges for compression amounted to the equivalent of about 46 cents per bale for the entire crop. Several other services, such as weighing, sampling, marketing, insuring, reconditioning, and storing cotton, are also rendered by the compress industry. Of the total revenue of compress companies in 1932–33, for example, only about 30 percent was derived from the compression of cotton, whereas 50 percent was obtained from storage, and 20 percent from other services. It is apparent, therefore, that the extent to which compress charges can be reduced may be influenced considerably by efficiency in the other services and the charges made for them.

MEANS OF REDUCING COSTS

The compression of cotton to greater density at the gins has been proposed as a means of reducing costs of compression. That would require more powerful equipment at the gins and this in turn probably would require increased volumes of ginning at individual gin plants to obtain the greatest benefits from the use of this equipment. The technological and economic feasibility of the use of the higher density compresses at gins has been demonstrated and savings likely to result from the installation and operation of such equipment are estimated at 30 to 50 cents per bale, depending upon the volume of ginnings per gin plant.[25]

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[23] Wright and Bennett, see footnote 17, p. 28. (See pp. 18–19.)

[24] Wright and Bennett, see footnote 17, p. 28. (See pp. 18–20.)

[25] Wright, J. W., Gerdes, F. L., and Bennett, C. A. THE PACKAGING OF AMERICAN COTTON AND METHODS FOR IMPROVEMENT. Unpublished manuscript.

TABLE 8.—*Average charges per bale for compressing cotton, by type of compression and by States, 1932–41.*

STANDARD DENSITY

State	Year beginning August									
	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Alabama	61	60	70	70	60	60	59	61	57	60
Arizona	101	100	100	100	100	100	100	100	100	100
Arkansas	62	62	62	62	60	60	60	60	61	63
California	118	110	110	108	110	100	107	100	106	103
Florida	60	60	60	60	60	60	55	50	50	60
Georgia	60	60	60	60	60	60	50	50	50	60
Louisiana	68	60	75	75	47	61	63	61	63	63
Mississippi	61	61	61	62	60	60	60	60	61	62
Missouri	61	62	61	57	60	60	60	60	60	63
New Mexico	67	68	66	67	66	68	70	76	77	77
North Carolina	60	60	60	60	60	60	50	50	50	60
Oklahoma	66	67	62	60	59	76	76	76	67	67
South Carolina	60	60	75	75	60	75	56	50	67	68
Tennessee	62	62	61	60	60	60	60	60	61	63
Texas	68	68	69	62	64	71	75	76	74	75
Virginia	75	60	60	60	60	60	60	60	60	60
United States	63	63	64	64	60	62	63	62	63	64

HIGH DENSITY

Alabama	76	75	75	75	75	60	69	70	69	71
Arizona	101	100	100	100	100	100	100	100	100	100
Arkansas	75	75	75	75	75	75	75	75	75	75
California	108	110	110	103	110	100	102	100	106	103
Florida	82	75	75	75	75	75	67	65	65	75
Georgia	75	82	75	75	75	82	65	65	66	75
Louisiana	75	65	75	75	54	75	69	68	70	70
Mississippi	75	75	75	75	75	75	75	75	75	75
Missouri	----	----	75	75	75	75	75	75	75	75
New Mexico	75	75	75	79	79	79	79	79	82	80
North Carolina	----	----	----	----	----	----	70	65	70	75
Oklahoma	75	77	72	60	59	76	76	76	77	77
South Carolina	75	75	75	75	75	75	71	65	73	73
Tennessee	75	75	75	75	75	75	75	75	75	75
Texas	72	78	75	68	69	73	75	76	75	75
Virginia	75	75	75	75	75	75	75	75	75	75
United States	74	78	78	72	72	76	77	77	78	78

Data for years 1932–39 were abstracted from a report by Wright and Bennett, footnote 17. Data for 1940 and 1941 were supplied by J. W. Wright, Office of Distribution, War Food Administration. Data are based on published tariffs of commercial compresses. Rates quoted on a weight basis were converted to a per bale basis by using average bale weights.

STORAGE AND INSURANCE

Large quantities of cotton are held from the time they are ready for the market until they are needed by mills. Stocks of American cotton in the United States have increased markedly in recent years and during the 5-year period 1939–43 they averaged considerably greater than the American crops. Cotton in these stocks need protection from the weather to avoid or minimize deterioration and from destruction by fire and other hazards. These services are performed by compress establishments and by warehouses without compressing facilities.

CHARGES OR COSTS

Charges for storage and insurance vary considerably from year to year, from one State or region to another, and with the size of

the bale (table 9). In the 1941–42 season the monthly charges for uncompressed cotton or for compressed cotton for which no differential was provided averaged 19 cents per bale per month for the United States and averages by States ranged from 15 cents per bale in Arkansas, Missouri, Tennessee, and Virginia to 26 cents in South Carolina. Average charges for the United States decreased from 24 cents per bale in 1936 and 1937 to 19 cents in 1941–42.[26]

TABLE 9.—*Average monthly charges per bale for storing cotton, by States, 1932–41.*

State	Year beginning August									
	1932	1933	1934	1935	1936	1937	1938	1939	1940	1941
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Alabama	21	22	20	20	20	24	22	23	22	22
Arizona	20	20	20	20	20	20	20	20	20	20
Arkansas	25	25	25	25	25	25	20	15	15	15
California	22	20	20	20	25	20	21	20	22	21
Florida	20	20	20	20	20	20	23	20	20	20
Georgia	20	22	20	20	20	20	21	22	20	20
Louisiana	25	12	18	18	23	24	22	20	17	17
Mississippi	25	25	24	25	25	25	22	19	17	17
Missouri	25	25	25	25	25	25	20	15	15	15
New Mexico	25	25	25	25	25	25	25	25	25	25
North Carolina	25	25	25	25	25	25	25	25	25	20
Oklahoma	15	15	15	15	15	15	15	15	15	21
South Carolina	26	25	27	25	25	28	26	25	26	26
Tennessee	25	25	25	25	25	25	20	15	15	15
Texas	24	21	25	23	25	24	22	23	21	23
Virginia	10	15	18	15	15	15	15	15	15	15
United States	23	21	23	22	24	24	21	20	19	19

Data for years 1932–39 abstracted from Wright and Bennett, see footnote 17. (See p. 22.) Data for 1940 and 1941 were supplied by J. W. Wright, Office of Distribution War Food Administration. The data are based on published tariffs of commercial compresses. The rates are for uncompressed cotton or for cotton for which no differential is provided for compressed cotton.

Because of the differences in space required, the rates charged by most compresses are lower for compressed than for uncompressed bales. In the 1938–39 season, for example, about 17 percent of the compresses charged lower rates for compressed than for square bales and the charges made by these compresses averaged 17 cents per bale for compressed and 24 cents for uncompressed cotton. Compress establishments that do not provide differential rates usually follow the policy of compressing all cotton upon arrival or of reserving the right to compress the cotton in the event of a shortage of storage space.[27]

The fact that the carry-over of American cotton in recent years has exceeded annual production or consumption and that most of the cotton crop is ready for market during the first half of the crop year indicates that the quantity of cotton ready for storage during the year averages considerably greater than the crop. If this cotton were all stored and insured at the average monthly rate of 19 cents per bale, storage and insurance charges would be, on the average, about $3 per bale.[28] All cotton may not be stored and insured all the time but losses from not doing so probably about equal the storage charges made by commercial warehouses.

[26] Wright and Bennett, see footnote 17, p. 28. (See pp. 21–23.)
[27] Wright and Bennett, see footnote 17, p. 28. (See p. 23.)
[28] In arriving at this average it was assumed that the quantities of the carry-over plus ginnings less consumption, averaged about one-third more than the American crop and that the length of time the cotton was stored averaged about 16 months.

MEANS OF REDUCING COSTS

Charges for storage and insurance may be reduced by one or more of several means. Storage space may be more efficiently utilized by compressing the cotton before it is stored. Data on average storage rates per bale in 1938–39 indicate that storage costs could be reduced by as much as 25 percent by compressing the cotton beforehand. In some instances the rates may be reduced considerably by increasing the length of the period of continuous storage. The avoidance of any unnecessary changes may also minimize costs of handling. As the services of storage and insurance are frequently rendered in connection with related services, such as receiving, sampling, marking, and compressing, any economies in organization or in operation of the combined business would make possible a reduction in storage and insurance charges.

TRANSPORTATION

Cotton shipped from interior compress points goes largely to ports, to domestic mills, and to interior concentration points. During the 1937–38 season about 53 percent of this cotton went to ports, 41 percent to mill points, and 6 percent to interior concentration points. These proportions vary considerably for compress points in different areas. In the Southeast 89 percent of the shipments went to mill points and 11 percent to ports. For compresses in the Mississippi Valley 13 percent of the shipments went to interior concentration points, 58 percent to domestic mills, and 29 percent to ports. For those in the Southwest about 10 percent of the shipments went to domestic mills and 90 percent to ports.[29]

Most of the shipments from compress points were made by rail. During the 1937–38 season and for the United States taken as a whole about 96 percent of the shipments were made by rail, about 2 percent by motortruck, and about 2 percent by a combination of truck, rail, and water. Truck transportation was confined mostly to shipments from the Southeast to domestic mill points. Combined rail and water transportation was confined mainly to movements from the Mississippi Valley to domestic mills.

Rail shipments vary considerably in weight per carload. In the 1937–38 season most of the shipments to interior concentration points were less than carload lots. Shipments to mill points were mostly carloads of 50,000 pounds which were the minimum required to obtain the lowest rate. But a substantial proportion of the shipments from compresses in the Southeast to domestic mills was made in less than carload lots. Shipments to ports, particularly from the Southwest and from the Mississippi Valley, were largely limited to carloads of 65,000 pounds minimum which carried the lowest available rates to ports and for which high-density compression usually was required.

CHARGES OR COSTS

Charges for transporting cotton are based on fixed schedules of rates and on the distance shipped. Rates vary somewhat with the weight per carload. The distances shipped vary with the area in which produced and with the destination of the cotton. Information on freight revenues and on the values of cotton transported on

[29] Wright and Bennett, see footnote 17, p. 28. (See pp. 24–25.)

Class I steam railroads[30] in the United States in 1939 indicates that the cost of transportation averaged about $1.80 per bale during the 1939–40 season (*24, 1941, p. 710*). The average length of haul for cotton shipped by rail probably was considerably greater than that for cotton shipped by truck, but the freight revenues reported by Class I steam railroads do not include costs of trucking cotton to the railroads.

Railroad freight rates for cotton increased somewhat in the late 1930's but in the period 1940–42 they were only slightly above those for the pre-war years, 1913–16. The index numbers of these rates, based on the season 1913–14, advanced to 176 in the early 1920's, declined to 95 in 1933–35 seasons, and then, following an advance to 108 in 1938–40, declined to 102 in the period 1940–42. Comparable indexes for wheat and livestock for the 1940–41 season were 145 and 163, respectively (*25, 1942, p. 651*).

MEANS OF REDUCING COSTS

Means of reducing transportation costs include lowering freight rates, reduction or elimination where feasible of all cross hauls and back hauls, loading cars to capacity so as to obtain the minimum rates, use of through-rate privileges wherever possible, and the substitution of other transportation for rail where charges are lower. Data presented by the Interstate Commerce Commission on gross freight carload revenues and on fully distributed costs for cotton show that the ratio of freight revenues from cotton to fully distributed costs, including losses and damages, passenger and less-than-carload deficits, and a 4-percent return to capital, was 132 percent in 1939 (*26*). The ratio of freight revenues from cotton to fully distributed costs, including losses and damages, passenger and less-than-carload deficits, and actual rate of return, reached 138 percent. It is apparent from these data that freight rates on cotton could have been lowered by about one-fourth without reducing revenues from cotton below distributed costs as calculated by the Interstate Commerce Commission. But such a reduction in rates for cotton might necessitate offsetting adjustments in rates for other commodities and such adjustments may not be feasible. Data on carload and less-than-carload rates on cotton from interior points to ports and to domestic mills indicate that less than carload rates vary up to one-fourth greater than carload rates.

FINANCING

Cotton merchants buy the large volumes of cotton sold by growers during the harvesting season and supply the demands of spinners for raw cotton throughout the year. This requires the financing of cotton from the time it is sold by growers until it is needed by mills. Information on the average length of time cotton is held is not very complete, but the facts that the world carry-over of American cotton in recent years has averaged larger than the American crop and that most of the crop is sold by growers during the first half of the crop year indicates that the quantities of cotton carried in commercial channels during the year average considerably more than the size of the crop and that the length of time this cotton must be financed probably is about 16 months.

[30] Class I railroads are those with total gross revenues of 1 million dollars or more annually.

CHARGES OR COSTS

Interest charges for financing the holding of cotton range from 2 or 3 percent for the larger merchants to 6 percent or more for the smaller local merchants who obtain funds from local banks. In recent years substantial quantities of cotton have been carried as collateral for Commodity Credit Corporation loans to growers, at an interest rate of about 3 percent. On the basis of an average rate of about 4 percent, interest charges amounted on the average to about 15.2 cents per bale per month in the 1939–40 season when farm prices averaged 9.09 cents per pound, and to about 33.2 cents in the 1943–44 season when farm prices averaged 19.88 cents. The length of time individual bales were financed ranged from a few months to many months. Based on an average financing period of 16 months, the costs of financing at prices that prevailed during the 1939–40 season averaged about $2.43 per bale and in 1943–44 about $5.31.

MEANS OF REDUCING COSTS

Since the cost of financing cotton is based on the interest rate charged, the value of the cotton, and the length of time financed, a decrease in interest rates, in the value of the cotton, and in the length of the time it is financed would reduce the costs of financing. Interest charges, particularly for the smaller local merchants, may be reduced by increasing the volume of business through combinations or other measures that will make possible the obtaining of money on terms comparable with those obtained by the larger merchants. The average length of time cotton is financed is influenced considerably by the size of the carry-over. Means of reducing the carry-over include those for increasing outlets and decreasing production.

OTHER SERVICES AND COSTS

Other services for which charges are made include classing and assembling the cotton for sale in even-running lots; risk bearing, including risks from price changes, from losses in weight, and from rejections for failure to meet quality specifications; and selling, the costs of which may be included under the heading "overhead."

Cotton usually is classified from one to several times and it may be assembled more than once during its passage through commercial channels. Merchants, particularly the larger ones, usually hedge their market interests in spot cotton by offsetting transactions in future markets, but all the risks from price changes may not be shifted by this means (*10*). The general practice is to make deductions for any failure of the cotton delivered to meet weight and quality specifications and usually no credit is allowed for overweight or for qualities above specifications.

Selling and incidental services involve selling commissions and several other items grouped under overhead costs, such as salaries, traveling costs, telephone, telegraph, and cable expenses. In addition to these and other merchandising costs already listed, cotton merchants normally include in their charges a margin for profits.

CHARGES OR COSTS

Little information is available on the costs of or the specific charges made for these operations. Costs of classifying and assembling the cotton in even-running lots, including reclassifying and reassembling but not including transportation and receiving and related services by compresses and warehouses, probably averaged about $1.00 or $1.50 per bale in recent years. Charges for hedging on the New York and New Orleans Cotton Exchanges are 25 or 30 cents per bale.[31] These sums probably represent the minimum costs of assuming the risks from price changes. Losses from failure of cotton to meet weight specifications and from rejections for failure to meet quality specifications probably each average about 25 cents per bale.

Information on overhead costs and profits is very incomplete. But records for about a dozen representative cotton merchants for the five seasons 1928–33, when farm prices of cotton averaged slightly higher than in the 1939–40 season and substantially lower than in the 1943–44 season, indicate that overhead costs averaged $1.27 and profits 28 cents per bale (*6, p. 369*). Available data are not sufficiently adequate to indicate to what extent these costs and profits are typical of those in more recent years.

MEANS OF REDUCING COSTS

The merchandising of the raw product appears to be a highly competitive industry and the possibilities of bringing about any very substantial reductions in the costs of these services without changing marketing methods and practices may not be very promising. Much of the cotton is sold by growers on the basis of an inspection of samples taken from bales at the local gin, cotton yard, or warehouse. These inspections are made by buyers in the local markets and the number of these buyers in a market ranges from one in some markets to a dozen or more in others. Sales in many instances necessitate resampling and reclassification for each change or proposed change of ownership. This repetition of services results in waste of cotton and increases in costs of marketing.

The market procedure could be simplified and the costs of marketing could be reduced if cotton were sold on description throughout the marketing system on the basis of a dependable classification. Such a classification would require that the sample used be truly representative of the quality or qualities in the bale and that it be correctly identified with the bale from which it was drawn; that the classifications be in accordance with uniform standards upon the basis of which the quality of the cotton can be described for commercial purposes with a reasonable degree of accuracy; that the classifications be made by competent and reliable classifiers under conditions conducive to accurate classification; and that facilities be provided for assembling the samples, recording the classifications on convenient forms, and making the information available in time for its use in selling the cotton (*9, pp. 30–38*).

Not all of these requirements are likely to be met within the immediate future. But progress has been made in recent years toward the development of means for obtaining representative

[31] Rules and Regulations of the New York and the New Orleans Cotton Exchanges.

samples and for the permanent identification of bales. Official standards for grade and staple length have long been established and are in general use, but the lack of standards for the quality elements included under the term "character" limit the dependability and usefulness of classifications based on the official standards. The use of standards and classifications in the marketing of cotton has been expanded considerably in recent years and further progress is anticipated. Maximum contributions of these developments toward increasing the efficiency and reducing the cost of marketing would require a combination of these with other improvements in marketing methods and practices.

Importance of Reductions in Costs

Charges or costs of ginning and baling in the season 1939–40 amounted on the average to about 10 percent of the farm value and to about 8 percent of costs of raw cotton to mills. Margins or costs for rendering all the services incident to taking the cotton from the gins and delivering it to mills at the time, in the quantities, and of the qualities desired amounted to about one-fourth of the farm value of the cotton and to about one-fifth of the costs of the raw cotton to mills. Costs of specific services usually are only small proportions of the returns to growers for farm production and even smaller proportions of prices of the raw cotton to mills (table 10).

Table 10.—*Approximate average margins for producing, processing, and marketing cotton, United States, season 1939–40.*

Item	Margin or price per pound	Proportion of —	
		Returns to farmers	Prices to mills
	Cents	*Percent*	*Percent*
Farm production[1]	8.27	100.0	72.5
Ginning and baling[2]	.82	9.9	7.2
Farm price	9.09	109.9	79.7
Receiving and related services[3]	.05	.6	.4
Compressing[2]	.09	1.1	.8
Storage and insurance[2]	.60	7.3	5.3
Transportation[2]	.36	4.4	3.2
Financing[3]	.50	6.0	4.4
Classing and assembling[3]	.25	3.0	2.2
Risk bearing[3]	.15	1.8	1.3
Overhead[4]	.25	3.0	2.2
Profits[4]	.06	.7	.5
Total merchandisers' margins	2.31	27.9	20.3
Average prices to mills	11.40	137.8	100.0

[1] Includes hauling to gin.
[2] Based on data published by U. S. Department of Agriculture. Charges attributed to lint equal the charges for bagging and ties plus a pro rata share of other ginning charges based on the relative farm value of lint to seed.
[3] Estimated.
[4] Based on data on costs and profits of cotton shippers reported by Garside (*6*).

The relative importance of reductions in costs of ginning and baling and in merchandising will be apparent when it is understood that if the margins for these services in the 1939–40 season, for example, had been reduced by 10 percent, the reduction in costs of ginning and baling would have amounted to 41 cents per bale or to less than 1 percent of returns to growers for farm production.

The reductions in merchandising margins then would have been about $1.15 per bale or about 2.7 percent of returns to growers for farm production.

MARKETING MARGINS FOR WOOL

The wool industry in the United States consists of two rather distinct divisions, apparel and carpet. Apparel wool includes the finer fibers used mainly in the manufacture of apparel yarns and fabrics. Carpet wool consists of the coarser fibers used mainly in the manufacture of carpets and rugs. All wool produced in the United States is apparel wool and some apparel wool is imported over rather high tariff duties. In 1939 about 428 million pounds of wool were produced in the United States and 98 million pounds of apparel wool and 145 million pounds of carpet wool were imported (*25, 1942, p. 431*). Carpet wool is admitted into this country free of duty. Imports of apparel and carpet wool vary considerably from year to year.

Most of the wool produced in the United States is obtained by shearing live sheep and is known as "shorn wool." A considerable quantity is obtained by pulling the wool from skins of slaughtered sheep and is known as "pulled wool," and very small proportions are obtained by detaching the wool from carcasses of sheep which died on the range or farm and is known as "dead wool" or "murrain wool." During the 5 years 1936–40 about 85 percent of total production in the United States was shorn wool and about 15 percent pulled wool.

Production of shorn and pulled wool is widely distributed over the United States. Every State produces some shorn wool. In 1939 production of shorn wool varied from a few thousand pounds in some States to about 77 million pounds in Texas. The 10 largest wool-producing States that year, listed in order, were Texas, Wyoming, Montana, California, Utah, Idaho, Ohio, New Mexico, Oregon, and Colorado. Production in these 10 States made up 70 percent of the total in 1939. Pulled wool is produced mainly in large slaughtering and meat-packing plants at such centers as Chicago, San Francisco, New York, and Philadelphia, but considerable proportions are produced in independent wool pulleries located in various parts of the country. Reports indicate that in 1939 there were about 18 wool pulleries, independent of slaughtering and meat-packing plants, located in 10 States ranging from Maine to California (*7, pp. 4–5*).

Marketing apparel wool in the United States involves the handling of domestic shorn wool, domestic pulled wool, and foreign shorn and pulled wools. On the average for the 5 years 1936–40, shorn wool constituted about 66 percent, domestic pulled wool about 12 percent, and foreign wool about 22 percent of the total wool handled by the apparel wool trade (*25, 1942, p. 431*). These proportions vary considerably, largely as a result of fluctuations in quantities of apparel wool imported. These imports ranged from more than 300 million pounds annually during World War I to less than 15 million pounds in 1932, to about 223 million pounds in 1940, and to about 700 million pounds in 1943.

Most of the domestic clip is shorn during the months from February to July, inclusive, and usually a majority of the growers sell their wool at or soon after shearing time; hence, the greater portion of the shorn wool produced in the United States is usually sold by the producers in the spring and summer. Data on monthly receipts of domestic wool at Boston show that for the 10 years 1930–39 about 62 percent of the total was received during June, July, and August.[32] But practices with regard to time of selling vary considerably. In all years some, and in some years considerable proportions, of the wool is sold by growers well in advance of shearing. On the other hand, in all years some, and in some years considerable proportions, of the clip is consigned by producers to dealers or to growers' cooperative associations and may not be sold for several months or for 1 or more years.

Selling wool on the sheep's back in advance of shearing is known as contracting. The contracts are made in terms of grease prices and, as it is difficult to estimate accurately the shrinkage of wool on the sheep's back, considerable risks from shrinkage as well as from price changes are involved. Therefore buyers are necessarily conservative in the prices they offer. The volume of contracting varies considerably with the market situation and outlook; it is usually heaviest in the fall and winter following marketing seasons in which wool prices advanced (*7, p. 54*). In Texas, the volume contracted approximated one-half of the entire spring clip in 1937 and one-fourth of the spring clip in 1936. Little of the fall clip was contracted and only a small proportion of the spring clip was contracted in 1933, 1934, and 1935.[33] Similar data for other States are not available.

The volume of wool consigned to dealers usually is greatest in years when prices at shearing time are relatively low, the lowness of prices leading the growers to anticipate higher prices later. (*7, p. 54*). Such prices induce many growers in the territory States and in Texas and many local buyers in the fleece wool States to carry substantial quantities of wool in storage in anticipation of higher prices. But the smaller producers in the fleece wool States, other than members of cooperative associations and pools, usually sell their clip at shearing time regardless of price. Growers who belong to cooperative associations consign their entire clip to the association each year during the life of the contract. The proportion of United States production of shorn wool marketed cooperatively varied from 2.9 percent in 1920 to 33.5 percent in 1930 and averaged about 15 percent for the period 1932–42.[34] Total consignments of dealers and cooperative associations combined varied from 13 percent of the clip in 1928 to 63 percent in 1934 and averaged 35 percent for the 10 years 1926–35 (*7, p. 54*). During the period 1934–40 sales of wool at auction increased considerably, but the total volume sold in this way was only a small proportion of that produced in the

[32] United States Bureau of Agricultural Economics, The Livestock and Wool Situation, February 1943.

[33] HOLE, E. THE BOSTON WOOL MARKET. A thesis submitted in partial fulfillment of the requirements for the doctorate degree at Harvard University. 1937.

[34] ELSWORTH, R. H., and WANSTALL, G. STATISTICS OF FARMERS' MARKETING AND PURCHASING COOPERATIVES 1941–42 MARKETING SEASON. U. S. Farm Credit Admin. Misc. Rpt. 64, p. 18. 1943. [Processed.]

auction areas. The auction sales were conducted by a cooperative agency and by private firms.[35]

Great differences in size of individual clip are associated with considerable variations in marketing practices. In the territory States, where the clips run large, most of the wool is bought at the ranch by resident agents or traveling buyers for central dealers, more particularly Boston dealers. These buyers, when possible, inspect the clip at the range at shearing time to estimate shrinkage and quality, but where such inspection is not feasible the wool is examined in the barn on the grower's ranch or is bought on the basis of knowledge of previous clips of the same grower. In the fleece-wool States, where most of the clips are small, most of the wool is bought on the farms by country dealers who accumulate wool on their own account or buy on commission for central-market dealers. In Texas, usually a large proportion of the wool is shipped to warehousemen for sale but many buyers go to ranches and buy direct from producers. In California the wool is usually handled as in the other territory States (*7, pp. 55–57*).

Some of the wool is bought direct from growers or country dealers by topmakers and manufacturers. Such purchases, which constitute from 5 to 10 percent of the total clip, usually are made by sending buyers into the producing area. The greater portion of direct buying by distant consumers occurs in Texas because of the uniformity of Texas wool, the high concentration of large production within limited areas, and the convenience of inspection of wool assembled at well-organized warehouses. Considerable direct buying by consumers occurs in fleece-wool States partly because of the proximity of the supplies to consuming centers and partly because grease prices of fleece wool tend to be fairly uniform and to be fairly definitely established and are generally known within the limited areas so that purchases can be made with relative safety from a competitive standpoint.

Most of the wool produced in the United States is handled by dealers in central markets. A great majority of these dealers are in Boston where about 50 dealer houses are engaged in merchandising wool. These houses vary greatly in size of organization and in kind and volume of wool handled. The wool is purchased by traveling buyers or through resident agents of dealers. It has been estimated that about 80 percent of the clip is handled by central market dealers, about 20 percent on consignment, and about 60 percent on outright purchase (*7, pp. 59–66*). Almost half of the outright purchases are made against orders in hand from consumers or on a quick turn-over basis. About one-third of the clip usually is bought by dealers on their own account for holding until it is needed by consumers.

Domestic pulled wool usually is sold by packers, through their Boston offices, direct to consumers. The offers and sales are based on small samples, a 2-pound sample representing 20,000 pounds. The wool may be rejected if not equal in quality to the sample tendered at the time of purchase. Some pulleries sell direct from their

[35] COON, J. M., and RANDALL, C. G., WOOL AUCTIONS IN THE UNITED STATES. U. S. Farm Credit Admin. Special Rpt. 86. 1941. [Processed.]

plant to consumers through traveling salesmen or by correspondence and others sell through commission agents in Boston.

Charges or Costs

Some indications of the margins or costs for merchandising wool may be obtained from data on the spread between wool prices to growers and wool prices at Boston. Certain adjustments were necessary to make these data comparable because farm prices as usually reported are for ungraded wool on a grease basis whereas the Boston prices quoted are for well-defined grades of wool on a scoured basis. In an attempt to make such adjustments, two new price series were constructed. One shows the weighted average prices (scoured equivalent) of wool received by farmers in local markets and the other shows weighted average prices (scoured equivalent) of wool at Boston.[36] Annual prices and price spreads were arrived at by weighting monthly averages by monthly receipts of domestic wool at Boston.

These data show that merchandising margins, or the spread between prices received by farmers at local markets and prices at Boston, varied widely during the period 1935–43 and averaged about 11.5 cents per pound or about 13.6 percent of the Boston price (table 11). The average annual margin varied from almost one-fourth of the Boston price in 1935 to less than 6 percent of the Boston price in 1943.

Table 11.—*Average prices per pound of wool (scoured basis) received by farmers, wholesale prices at Boston, and spread between these prices, United States, 1935–43.*

Year	Boston price[1]	Farm price[2]	Merchandising margins	
			Actual	Proportion of Boston price
	Cents	*Cents*	*Cents*	*Percent*
1935	64.6	49.1	15.5	24.0
1936	80.3	67.0	13.3	16.6
1937	89.7	76.1	13.6	15.2
1938	60.0	47.2	12.8	21.3
1939	68.9	55.5	13.4	19.4
1940	81.6	69.4	12.2	15.0
1941	96.1	88.0	8.1	8.4
1942	106.8	98.7	8.1	7.6
1943	107.6	101.9	5.7	5.3
Average	84.0	72.5	11.5	13.6

[1] Prices of 10 representative grades of territory and bright fleece wools weighted by average production of each grade in 1936–40.

[2] Local market prices by States converted to scoured basis using shrinkage estimated by the United States Tariff Commission (farm States) and National Association of Wool Manufacturers (range States). Prices were weighted by 1935–39 average production of wool in each State (converted to a scoured basis).

Yearly prices and price spreads were arrived at from monthly averages reported by the Bureau of Agricultural Economics in The Livestock and Wool Situation, February 1943 weighted by monthly receipts of domestic wool at Boston.

Data on average grease-wool prices at Boston, average deductions (including freight, trucking, handling, grading, if any, service and appraisal charges), and average prices per pound paid to growers for more than 100 million pounds of wool handled by the Commodity Credit Corporation in 1943 show allowances made for merchandising services.[37] Deductions for ungraded wool averaged

[36] United States Bureau of Agricultural Economics, The Livestock and Wool Situation, February, 1943.

[37] United States Commodity Credit Corporation. Preliminary statistical data on 1943 wool purchase program. U. S. Dept. Agr. 1944 [Processed.]

4.73 cents per pound or 10.3 percent of the Boston price (table 12). The margins ranged from 4.35 cents per pound for Texas wool to 6.76 cents per pound for Oklahoma wool. The margins as proportions of the Boston price ranged from 8.9 percent for Texas and North Dakota wool to 20 percent for Oklahoma wool.

TABLE 12.—*Average grease prices per pound at Boston and to growers, and margins for ungraded wool handled by the Commodity Credit Corporation, by States, 1943.*

State	Total sales	Average shrinkage	Boston price	Net price to grower	Margin	
					Actual	Proportion of Boston prices
	1,000 pounds	*Percent*	*Cents*	*Cents*	*Cents*	*Percent*
Arizona	132	64.7	40.84	35.73	5.11	12.5
California	1,618	57.0	46.21	39.61	6.60	14.3
Colorado	5,601	64.0	42.00	37.32	4.68	11.1
Idaho	332	60.5	45.60	40.49	5.11	11.2
Illinois	20	47.0	52.42	46.57	5.85	11.2
Iowa	35	55.6	43.63	37.49	6.14	14.1
Minnesota	278	58.2	47.60	41.35	6.25	13.1
Missouri	10	64.1	37.13	30.98	6.15	16.6
Montana	8,479	57.4	48.98	43.87	5.11	10.4
Nevada	1,097	62.9	43.26	38.15	5.11	11.8
New Mexico	8,508	64.0	41.76	36.86	4.90	11.7
North Dakota	507	54.1	50.02	45.59	4.43	8.9
Oklahoma	51	70.6	33.84	27.08	6.76	20.0
Oregon	1,958	62.4	42.93	37.82	5.11	11.9
South Dakota	2,312	56.3	49.40	44.82	4.58	9.3
Texas	33,263	57.1	48.91	44.56	4.35	8.9
Utah	5,976	63.9	41.96	36.90	5.06	12.1
Washington	1,103	64.5	38.74	33.63	5.11	13.2
Wyoming	5,637	64.6	41.72	36.80	4.92	11.8
Total or average	76,917	59.8	46.10	41.37	4.73	10.3

Derived from Preliminary Statistical Data on 1943 Wool Purchase Program as reported by the Commodity Credit Corporation, January, 1944.

Similar data for graded wool show that the margins for wool from all States combined averaged 5.75 cents per pound or 12 percent of the Boston price (table 13). The margins by States ranged from 5.10 cents per pound for Texas wool to 7.52 cents for Oklahoma wool and from 10.6 percent of the Boston price for Texas and North Dakota wool to 19.8 percent for Oklahoma wool.

Information on fleece wool marketed through cooperative associations shows that average monthly marketing costs for 13 associations selling through the National Wool Marketing Corporation from 1930 to 1936, inclusive, amounted to about 5.10 cents per pound (*3*).

ITEMS INCLUDED IN MARGINS

Merchandising margins for wool include all items of cost incident to taking the product from the grower and delivering it to the manufacturer. The services rendered include assembling, storing, transporting, handling, grading, appraisal, financing, insurance, et cetera, but scouring and other processing usually are not included. Data on the costs of rendering these services are not complete but data supplied by the Commodity Credit Corporation on average deductions made for the various items in arriving at average prices paid to growers for wool handled on the 1943 wool-purchase program, give some indications of the amounts and relative importance of the various items of expense included in merchandising margins. In arriving at these deductions an attempt was made to approxi-

TABLE 13.—*Average grease prices per pound at Boston and to growers, and margins for graded wool handled by the Commodity Credit Corporation, by States, 1943.*

State	Total sales	Average shrinkage	Boston price	Net price to grower	Margin	
					Actual	Proportion of Boston prices
	1,000 pounds	*Percent*	*Cents*	*Cents*	*Cents*	*Percent*
Arizona	31	57.7	46.29	40.43	5.86	12.7
California	151	56.0	47.52	40.17	7.35	16.5
Colorado	4,518	58.8	46.24	40.81	5.43	11.7
Idaho	1,077	56.6	47.12	41.26	5.86	12.4
Illinois	808	47.0	52.21	45.61	6.60	12.6
Iowa	138	53.8	45.62	38.73	6.89	15.1
Michigan	40	49.5	51.06	44.55	6.51	12.7
Minnesota	110	51.0	49.27	42.27	7.00	14.2
Missouri	2,589	51.6	49.70	42.80	6.96	13.9
Montana	4,492	56.4	50.85	44.99	5.86	11.5
Nevada	7	61.4	41.99	36.13	5.86	14.0
New Mexico	151	64.4	40.58	34.93	5.65	13.9
North Dakota	3,913	51.8	48.93	43.75	5.18	10.6
Oklahoma	411	65.0	38.04	30.52	7.52	19.8
Oregon	404	59.3	44.46	38.60	5.86	13.2
South Dakota	3,561	55.8	47.78	42.45	5.33	11.2
Texas	1,006	55.8	48.27	43.17	5.10	10.6
Utah	2,543	60.1	45.07	39.26	5.81	12.9
Wyoming	1,312	61.2	43.83	38.16	5.67	12.9
Total or average	27,256	56.1	47.82	42.07	5.75	12.0

Compiled from Preliminary Statistical Data on 1943 Wool Purchase Program, as reported by the Commodity Credit Corporation, January, 1944.

mate as closely as possible the actual costs of rendering the specific services required to take the wool from farms and deliver it to the Boston market plus a reasonable profit for those rendering the services.

These data show that handling charges for ungraded wool, including costs of insurance, 1 month storage, showing or exhibiting wool to buyers, in and out handling, and profits, averaged about 1.29 cents per pound, or about 27 percent of the total merchandising margins, and 2.8 percent of the Boston price (tables 14 and 15). These charges amounted to 1 cent per pound for Texas and to 1.5 cents per pound for each of the other States. Secondary handling charges, including payment for the services of collecting the wool from farmers and putting it in bags which were sometimes furnished by the handler, amounted to 2.25 cents per pound in the fleece wool States and 1.5 cents in California, but averaged only 0.04 cent per pound for all States combined. Charges for service and appraisal, including estimating shrinkage, storage for about 7 months, and interest at the rate of 3 percent per annum on the investment, amounted to 1.125 cents per pound, or about 24 percent of total merchandising margins and about 2.5 percent of the Boston price. Freight and trucking charges averaged 2.27 cents per pound, or 48 percent of the total merchandising margins and to 4.9 percent of the Boston price. These charges varied considerably from one State to another (table 15).

Merchandising margins for graded wool from each State, as indicated by deductions made by the Commodity Credit Corporation, exceeded those for ungraded wool by the amount of the charges for grading, which were listed at 0.75 cent per pound (tables 16 and 17). Grading charges amounted to 13 percent of the total

TABLE 14.—*Average gre se pric s per pound at Boston, net prices to growers, and merch nd sing m rgins for ungraded wool handled by the Commodity Credit Corporation, by States, 1943.*

State	Boston price	Net price to grower	Merchandising margin				
			Total margin	Handling charges	Secondary handling charges	Service and appraisal charges	Freight and trucking charges
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Arizona	40.84	35.73	5.11	1.50	----	1.125	2.485
California	46.21	39.61	6.60	1.50	1.50	1.125	2.475
Colorado	42.00	37.32	4.68	1.50	----	1.125	2.055
Idaho	45.60	40.49	5.11	1.50	----	1.125	2.485
Illinois	52.42	46.57	5.85	1.50	2.25	1.125	.975
Iowa	43.63	37.49	6.14	1.50	2.25	1.125	1.265
Minnesota	47.60	41.35	6.25	1.50	2.25	1.125	1.375
Missouri	37.13	30.98	6.15	1.50	2.25	1.125	1.275
Montana	48.98	43.87	5.11	1.50	----	1.125	2.485
Nevada	43.26	38.15	5.11	1.50	----	1.125	2.485
New Mexico	41.76	36.86	4.90	1.50	----	1.125	2.275
North Dakota	50.02	45.59	4.43	1.50	----	1.125	1.805
Oklahoma	33.84	27.08	6.76	1.50	2.25	1.125	1.885
Oregon	42.93	37.82	5.11	1.50	----	1.125	2.485
South Dakota	49.40	44.82	4.58	1.50	----	1.125	1.955
Texas	48.91	44.56	4.35	1.00	----	1.125	2.225
Utah	41.96	35.90	5.06	1.50	----	1.125	2.435
Washington	38.74	33.63	5.11	1.50	----	1.125	2.485
Wyoming	41.72	36.80	4.92	1.50	----	1.125	2.295
Average	46.10	41.37	4.73	1.29	.01	1.125	2.275

Derived from Preliminary Statistical Data on 1943 Wool Purchase Program as reported by the Commodity Credit Corporation, January 1944.

TABLE 15.—*Net prices per pound to growers and merchandising margins expressed as proportions of Boston prices for ungraded wool handled by the Commodity Credit Corporation, by States, 1943.*

State	Boston price	Net price to grower	Merchandising margin				
			Total margin	Handling charges	Secondary handling charges	Service and appraisal charges	Freight and trucking charges
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Arizona	100.0	87.5	12.5	3.7	---	2.7	6.1
California	100.0	85.7	14.3	3.2	3.3	2.4	5.4
Colorado	100.0	88.9	11.1	3.6	---	2.6	4.9
Idaho	100.0	88.8	11.2	3.3	---	2.5	5.4
Illinois	100.0	88.8	11.2	2.9	4.3	2.1	1.9
Iowa	100.0	85.9	14.1	3.4	5.2	2.6	2.9
Minnesota	100.0	86.9	13.1	3.1	4.7	2.4	2.9
Missouri	100.0	83.4	16.6	4.1	6.1	3.0	3.4
Montana	100.0	89.6	10.4	3.0	---	2.3	5.1
Nevada	100.0	88.2	11.8	3.5	---	2.6	5.7
New Mexico	100.0	88.3	11.7	3.6	---	2.7	5.4
North Dakota	100.0	91.1	8.9	3.0	---	2.3	3.6
Oklahoma	100.0	80.0	20.0	4.4	6.7	3.3	5.6
Oregon	100.0	88.1	11.9	3.5	---	2.6	5.8
South Dakota	100.0	90.7	9.3	3.0	---	2.3	4.0
Texas	100.0	91.1	8.9	2.0	---	2.3	4.6
Utah	100.0	87.9	12.1	3.6	---	2.7	5.8
Washington	100.0	86.8	13.2	3.9	---	2.9	6.4
Wyoming	100.0	88.2	11.8	3.6	---	2.7	5.5
Average	100.0	87.7	10.3	2.8	.1	2.5	4.9

Derived from Preliminary Statistical Data on 1943 Wool Purchase Program as reported by the Commodity Credit Corporation, January 1944.

TABLE 16.—*Average grease prices per pound at Boston, net prices to growers, and merchandising margins for graded wool handled by the Commodity Credit Corporation, by States, 1943.*

State	Boston price	Net price to grower	Merchandising margin					
			Total margin	Handling charges	Secondary handling charges	Grading charges	Service and appraisal charges	Freight and trucking charges
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Arizona	46.29	40.43	5.86	1.50	----	.75	1.125	2.485
California	47.52	40.17	7.35	1.50	1.50	.75	1.125	2.475
Colorado	46.24	40.81	5.43	1.50	----	.75	1.125	2.055
Idaho	47.12	41.26	5.86	1.50	----	.75	1.125	2.485
Illinois	52.21	45.61	6.60	1.50	2.25	.75	1.125	.975
Iowa	45.62	38.73	6.89	1.50	2.25	.75	1.125	1.265
Michigan	51.06	44.55	6.51	1.50	2.25	.75	1.125	.885
Minnesota	49.27	42.27	7.00	1.50	2.25	.75	1.125	1.375
Missouri	49.70	42.80	6.90	1.50	2.25	.75	1.125	1.275
Montana	50.85	44.99	5.86	1.50	----	.75	1.125	2.485
Nevada	41.99	36.13	5.86	1.50	----	.75	1.125	2.485
New Mexico	40.58	34.93	5.65	1.50	----	.75	1.125	2.275
North Dakota	48.93	43.75	5.18	1.50	----	.75	1.125	1.805
Oklahoma	38.04	30.52	7.51	1.50	2.25	.75	1.125	1.885
Oregon	44.46	38.60	5.86	1.50	----	.75	1.125	2.485
South Dakota	47.78	42.45	5.33	1.50	----	.75	1.125	1.955
Texas	48.27	43.17	5.10	1.00	----	.75	1.125	2.225
Utah	45.07	39.26	5.81	1.50	----	.75	1.125	2.435
Wyoming	43.83	38.16	5.67	1.50	----	.75	1.125	2.295
Average	47.82	42.07	5.75	1.48	.35	.75	1.125	2.045

Derived from Preliminary Statistical Data on 1943 Wool Purchase Program as reported by the Commodity Credit Corporation, January 1944.

TABLE 17.—*Net prices per pound to growers and merchandising margins expressed as proportions of Boston prices for graded wool handled by the Commodity Credit Corporation, by States, 1943.*

State	Boston price	Net price to grower	Merchandising margin					
			Total margin	Handling charges	Secondary handling charges	Grading charges	Service and appraisal charges	Freight and trucking charges
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Arizona	100.0	87.3	12.7	3.3	----	1.6	2.4	5.4
California	100.0	84.5	15.5	3.2	3.1	1.6	2.4	5.2
Colorado	100.0	88.3	11.7	3.2	----	1.6	2.4	4.5
Idaho	100.0	87.6	12.4	3.2	----	1.6	2.4	5.2
Illinois	100.0	87.4	12.6	2.9	4.3	1.4	2.1	1.9
Iowa	100.0	84.9	15.1	3.3	4.9	1.6	2.5	2.8
Michigan	100.0	87.3	12.7	2.9	4.4	1.5	2.2	1.7
Minnesota	100.0	85.8	14.2	3.0	4.6	1.5	2.3	2.8
Missouri	100.0	86.1	13.9	3.0	4.5	1.5	2.3	2.6
Montana	100.0	88.5	11.5	2.9	----	1.5	2.2	4.9
Nevada	100.0	86.0	14.0	3.6	----	1.8	2.7	5.9
New Mexico	100.0	86.1	13.9	3.7	----	1.8	2.8	5.6
North Dakota	100.0	89.4	10.6	3.1	----	1.5	2.3	3.7
Oklahoma	100.0	80.2	19.8	3.9	5.9	2.0	3.0	5.0
Oregon	100.0	86.8	13.2	3.4	----	1.7	2.5	5.6
South Dakota	100.0	88.8	11.2	3.1	----	1.6	2.4	4.1
Texas	100.0	89.4	10.6	2.1	----	1.6	2.3	4.6
Utah	100.0	87.1	12.9	3.3	----	1.7	2.5	5.4
Wyoming	100.0	87.1	12.9	3.4	----	1.7	2.6	5.2
Average	100.0	88.0	12.0	3.1	.7	1.6	2.3	4.3

Derived from Preliminary Statistical Data on 1943 Wool Purchase Program as reported by the Commodity Credit Corporation, January 1944.

margin and 1.6 percent of the Boston price. The Boston prices for graded wool averaged somewhat higher than those for the ungraded product. This accounts largely for the fact that charges for specific marketing services represent somewhat larger proportions of the Boston price for ungraded than for graded wool.

Data on marketing costs for 13 cooperative marketing associations selling through the National Wool Marketing Corporation from 1930 to 1936, inclusive, show that local association charges amounted on the average to about 1.15 cents per pound or to about 2.9 percent of the average Boston price (grease basis) for bright fleece grade 56s (3/8 blood combing) in 1936 (*3*). These charges varied widely with the items of cost included and with the volume handled. The costs of grading and warehousing ranged from 1.15 cents per pound to 1.65 cents and averaged 1.35 cents or about 3.4 percent of the Boston price. The National Wool Marketing Corporation's selling charges averaged about 1.5 cents per pound during the period 1930–36 or to about 3.8 percent of the Boston price. In 1938 the corporation's charges for selling were 1.10 cents per pound, but in some instances the local branches of the corporation render other services, such as grading, storing, and rendering of account sales. In such instances the charges may total more than 2 cents per pound. Freight charges vary considerably. In 1936 they averaged about 1.15 cents per pound or about 3.8 percent of the Boston price (grease basis) for bright fleece wool grade 56s (3/8 blood combing).

Information assembled on wool-marketing costs in Boston in 1936 shows that rates on consignments to dealers, including 4 months of storage, varied from 1.5 cents to 2 cents per pound for wool in original bags and from 2 to 2.5 cents per pound if the wool was graded.[38] For sample-bag consignments, the rate varied from 0.5 to 1 cent per pound. The charge on consignments to brokers, exclusive of storage and grading, was 0.5 cent per pound; for order buying, 0.5 to 1 cent per pound; and for brokerage fees, 1 percent of sales. Storage costs amounted to 25 cents per bag for the first month and 15 cents thereafter for territory-sized bags, and 20 cents and 10 cents, respectively, for Texas bags.

Means of Reducing Costs

Data already presented show that merchandising margins for wool have been greatly reduced in recent years, despite substantial advances in the level of wool prices. The spread between average prices for 10 representative grades of territory and bright fleece wools in Boston and average local market prices by States converted to a scoured basis, decreased from 15.5 cents in 1935 to 5.7 cents in 1943 (table 11, p. 42). This reduction may be attributed in part to reductions in risks as a result of stabilizing prices during the war period and to reductions in the profits margins of local buyers and dealers.[39] A report of the Farm Credit Administration on "Cooperative Marketing of Fleece Wool" shows that the average marketing costs for 13 associations averaged 5.1 cents per pound during the

[38] Hole, E. See footnote 33, p. 40.
[39] United States Bureau of Agricultural Economics. The Livestock and Wool Situation. February 1943.

period 1930–36 and the report stated that a careful study of the charges made by the associations indicated that it might be difficult to reduce these costs (*3, pp. 44–45*). It was suggested that grading and warehousing charges may possibly be reduced slightly as volume increases.

Wool-marketing margins might be reduced considerably by simplifying and stabilizing marketing methods and practices, by the development and general use of accurate means of estimating shrinkage, and by expanding the services of grading and sorting as a basis for selling the wool by growers.

Importance of Reductions in Costs

Wool-merchandising margins or costs in 1939 amounted on the average to about 24 percent of the returns to growers for farm production of wool, about 6 percent of the margins for manufacturing and finishing woolen and worsted cloth and fabricating it into apparel and household goods, about 7 percent of the margins for wholesaling and retailing woolen and worsted apparel and household goods, and about 2.7 percent of the retail price of the finished products. In other words, a reduction of 25 percent in wool-merchandising margins would have been equivalent to an increase of about 6 percent in returns to growers for farm production of the wool and to a decrease of about 1.4 percent in margins for manufacturing and finishing woolen and worsted cloth and fabricating it into apparel and household goods. This reduction in wool-merchandising margins, moreover, would have been equivalent to a reduction of less than 2 percent in the margins for wholesaling and retailing the finished goods, and less than 1 percent of the average retail value of the finished goods.

With the reductions effected in wool-merchandising margins in recent years and the substantial advances in prices of wool and wool products, the relative importance of wool-marketing margins in 1943 was much less than it was in 1939.

COTTON MANUFACTURERS' MARGINS

When cotton reaches the mill, the bales are opened and the lint is picked, carded, and spun into yarn. Although considerable quantities of yarn are used by the knit-goods industry and by manufacturers of thread, cordage, and twine, most of it is woven into various kinds of fabrics. In 1939, according to the Census of Manufactures, about 3,505 million pounds of raw cotton, 45 million pounds of other raw fibers, and 92 million pounds of other materials were consumed by cotton-manufacturing establishments in the United States. About 3,145 million pounds of yarn were produced, of which about 88 percent was carded and about 12 percent was combed (*21*). According to the same report, cotton yarns consumed by cotton manufactures in the United States in 1939 totaled about 2,722 million pounds, of which about 4.6 percent was used by the cotton-yarn industry, 91.9 percent by the cotton broad-woven-goods industry, 1.7 percent by the cotton narrow-fabrics industry, and 1.8 percent by the cotton-thread industry.

Cotton-manufacturing establishments are specialized to a considerable extent. Reports of the Census of Manufactures show that

in 1939, 349 of the 1,248 cotton-manufacturing establishments reported were primarily engaged in the spinning, twisting, winding, and spooling of cotton yarn for sale as such, or for transfer to affiliated plants; 661 in weaving fabrics over 12 inches wide; 163 in weaving or braiding fabrics 12 inches and narrower in width; and 75 in the spinning, twisting, and manufacture of cotton sewing thread or crochet, darning, hand-knitting, and embroidery cottons for sale as such. A survey made by the Federal Trade Commission of 580 companies in the cotton-textile industry in 1936 showed that 113 companies were engaged in spinning, 67 in weaving, 264 in spinning and weaving, 87 in dyeing and finishing, 18 in thread manufacturing, 14 in finishing and spooling thread, and 17 in the manufacture of cordage and twine.[40]

Census reports on cotton manufactures in 1939 show that 2,592 million pounds of yarn were made by establishments for use in the same plant or in other plants under the same ownership and that 553 million pounds were made for sale. Data on the distribution of cotton-manufacturers' sales in 1939 show that of the total value of the yarns sold, 64 percent was represented by gray goods and 36 percent by finished yarns (table 18). Yarns may be finished by so-called job mercerizers, who do this work either for spinners or for users of the yarn on commission, or they may be finished by mercerizers who process yarns made by spinning mills which they

TABLE 18.—*Distribution of cotton manufacturers' sales, by classes of customers and by industries, United States, 1939.*

Item	Establishments reporting	Total distributed sales	Proportion of sales through or to —							
			Own wholesale offices	Other wholesalers and jobbers	Converters	Export[1]	Industrial users[2]	Retailers[3]	Consumers at retail	Total
	Number	*1,000 dollars*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Cotton broad woven goods	621	759,145	9.5	24.1	29.3	1.2	25.6	10.1	0.2	100.0
Gray goods	406	445,015	5.2	20.9	46.1	1.1	24.7	1.9	.1	100.0
Finished goods	255	219,208	[4]8.1	29.9	7.9	.1.6	36.6	15.7	.2	100.0
Fabricated products	63	94,862	[4]32.8	26.0	----	.5	4.7	35.9	.1	100.0
Cotton narrow fabrics	158	47,915	5.1	23.7	.6	.9	62.9	6.1	.7	100.0
Gray goods	18	3,906	----	[4]30.6	7.7	([5])	61.7	----	----	100.0
Finished goods	140	44,009	5.5	23.0	----	1.0	63.0	6.7	.8	100.0
Cotton yarns	338	159,553	3.9	14.3	18.9	1.9	60.1	.9	----	100.0
Gray goods	217	102,716	1.8	12.7	29.4	2.0	[6]53.5	.6	([6])	100.0
Finished goods	123	56,837	7.6	[7]17.1	([7])	1.7	72.2	1.4	----	100.0
Cotton thread[8]	72	56,068	22.6	[7]14.5	([7])	.4	[9]35.1	27.4	----	100.0

[1] Includes sales to export intermediaries and export direct to buyers in other countries.
[2] Includes commercial, professional, and institutional users (manufacturers, railroads, utilities, governmental bodies, hotels, contractors, etc.).
[3] Includes farmers, household consumers, and employees at retail.
[4] Sales to or through own retail stores combined with sales to or through own wholesale branches or offices to avoid disclosure.
[5] Direct export sales combined with sales to wholesalers and jobbers to avoid disclosure.
[6] Sales to consumers at retail combined with sales to industrial, etc., users to avoid disclosure.
[7] Sales to converters combined with sales to wholesalers and jobbers to avoid disclosure.
[8] Cotton thread reported as finished goods.
[9] Interplant transfers (gray goods) included to avoid disclosure.
Data abstracted from Bureau of the Census, *Distribution of Manufacturers' Sales: 1939* (63).

[40] UNITED STATES FEDERAL TRADE COMMISSION. TEXTILE INDUSTRIES IN THE FIRST HALF OF 1936. PART I.—THE COTTON TEXTILE INDUSTRY, INCLUDING THREAD, CORDAGE, AND TWINE. 1937. [Processed.]

control or yarns bought for this purpose from independent spinners (*4, p. 86*).

Reports on the uses made of cotton sales yarn indicate that nearly one-third of the total output in 1939 was used by weavers of cotton goods. More than one-fourth was sold to knitters, the most important users in this industry being the manufacturers of hosiery, underwear, and underwear fabrics. About one-fourth was sold outside the textile industry to household consumers who bought hand-knitting, crochet, and embroidery cottons, and to a large number of specialized enterprises in which relatively small quantities were consumed in a variety of uses. The remainder was sold to textile industries other than cotton, such as weavers of woolen and worsted, manufacturers of floor coverings, weavers of silk and rayon fabrics, lace makers, and manufacturers of cordage and twine (*4*).

Most of the broad-woven cotton goods manufactured in 1939 was sold in the gray but only a small proportion of the narrow fabrics was sold as gray goods. Census data on manufacturers' sales of woven goods and fabrics show that of the total value of the sales of broad-woven goods by manufacturers in 1939, about 59 percent was accounted for by gray goods, 29 percent by finished goods, and 12 percent by fabricated products. For manufacturers of narrow fabrics 8 percent of total sales was accounted for by gray goods and 92 percent by finished goods. Most all the thread was sold by manufacturers in the finished form.

Most of the products of cotton-manufacturing establishments are sold to industrial users, wholesalers and jobbers, and converters (table 18). In 1939 about three-fifths of the cotton yarns and narrow fabrics, one-third of the thread, and about one-fourth of the broad-woven goods were sold to industrial users. Wholesalers and jobbers bought considerable proportions of all the products and converters bought relatively large proportions of the unfinished products. Substantial proportions of the fabricated products for broad-woven goods and thread were sold through the manufacturers' wholesale offices and to retailers.

Charges or Costs

Information on costs of the raw materials used and on the value of the products indicate that cotton manufacturers' margins, or the spread between the costs of the raw materials used and the value of the products, vary considerably with the manufacturing processes involved and with the kind and quality of the products turned out.

Census reports on cotton manufactures in 1939 show that manufacturers' margins, or the spread between the costs of materials, supplies, and containers and the value of the products amounted on the average to 46.3 percent of the value of cotton yarns, 54.1 percent of the value of woven cotton goods, and 50.5 percent of the value of the thread produced (*21*). Raw cotton and cotton products used undoubtedly accounted for most of the costs included under "Materials, Supplies, and Containers," but the margin, or spread between the value of raw cotton or cotton products consumed

and the value of the resulting products, was somewhat less than the proportions derived from census data.

A report issued by the Federal Trade Commission on the Cotton Textile Industry for the first half of 1936, and based upon data furnished by 580 companies which operated more than two-thirds of the cotton spindles and looms in place on June 30, 1936, gives detailed information on costs and margins for companies engaged in particular kinds of manufacturing processes.[41] The data presented show that manufacturers' margins, or the spread between the costs of raw material used and the value of the products, amounted to 52.4 percent of the net selling price of the products for 113 spinning companies, 45.7 percent for 67 weaving companies, 54.9 percent for 264 combined spinning and weaving companies, 65.6 percent for 18 thread-manufacturing companies, and 52.1 percent for 17 cordage and twine-manufacturing companies.

Differences in the proportion of the net selling price of the products represented by manufacturers' margins are accounted for to a considerable extent by the kind of raw materials used and the kinds and amounts of processing involved. The raw materials used by spinning companies are largely raw cottons and the processing is mainly confined to carding and combing (for fine yarns) the cotton and spinning it into yarns, whereas the raw materials used by exclusively weaving companies are composed mainly of purchased yarns and the processing is limited chiefly to weaving the yarn into cloth. The relatively large manufacturers' margins for combined spinning and weaving companies is accounted for, in part at least, by the fact that the raw materials used by combined spinning and weaving companies were largely raw cottons, and two major manufacturing operations (spinning and weaving) were performed; whereas for each of the spinning and weaving companies only one major manufacturing operation was performed, and for the weaving companies the raw materials used were mainly purchased yarns.

Cotton-manufacturers' margins have increased during recent years, particularly since the beginning of the war. Data for 33 cotton-textile manufacturing corporations in 1939, representing about 38 percent of the total cotton-textile production in the United States, as reported by the Bureau of the Census, show that manufacturers' margins averaged 54.8 percent of the value of the products. Similar data for 56 corporations in 1940, representing more than 47 percent of total production, show that manufacturers' margins averaged about 58 percent of the value of the products. Information on costs, selling prices, and margins for specific kinds of coarse and fine goods in 1941, and on margins for 17 constructions as calculated by the Department of Agriculture show that the margins widened further in 1941 and in 1942.[42]

These margins vary considerably from one manufacturing establishment to another. Data for 33 corporations in 1939 and 56 corporations in 1940 show that the margins for individual corporations varied from less than 40 percent for those producing mostly coarse

[41] Federal Trade Commission. (See footnote 40, p. 49.)
[42] Data for 1941 were made available by Office of Price Administration and the United States Tariff Commission.

gray goods to more than 70 percent for corporations producing the finer products or finished goods and fabricated products, or both (table 19).

TABLE 19.—*Distribution of manufacturers' marketing margins for individual cotton textile manufacturing corporations expressed as proportions of the selling prices of the products, United States, 1939 and 1940.*

Margin (percentage of value of product)	1939	1940	1939 and 1940	
	Number	*Number*	*Number*	*Percent*
Under 40.0	2	2	4	4.5
40.0–44.9	3	4	7	7.9
45.0–49.9	4	9	13	14.6
50.0–54.9	7	16	23	25.8
55.0–59.9	4	11	15	16.9
60.0–64.9	4	6	10	11.2
65.0–69.9	4	4	8	9.0
70.0 and over	5	4	9	10.1
Total	33	56	89	100.0

Data compiled from records and reports of Federal Trade Commission.

Manufacturers' margins also vary considerably with the kind of products turned out. During the first half of 1936, 35 spinning companies manufactured carded yarns 40's or coarser and 8 manufactured combed yarns finer than 40's. The selling prices of carded yarns averaged 25.85 cents per pound, the raw material costs 14.06 cents, and the manufacturers' margins 11.79 cents, or 45.6 percent of the value of the yarns. For combed yarns, the selling price averaged 55.51 cents per pound, costs of the raw materials 19.72 cents, and the manufacturers' margin 35.79 cents, or 64.5 percent of the selling price of the yarn (table 20). Differences in costs, in selling prices, and in manufacturers' margins for combed yarns from those for carded yarns are due mainly to differences in quality of the cotton used and in the manufacturing processes required. Coarse carded yarns are spun from low-quality (short-staple) cotton which is less expensive than the longer staple cotton used for combed yarns. Furthermore, combed yarns require additional processing —combing after it has been carded—and the finer combed yarns require more time for the spinning of a given weight than do the coarser carded yarns.

Information assembled by the United States Tariff Commission for the Office of Price Administration on costs and margins in 1941 shows that total costs for carded cotton yarns averaged 23.39 cents per pound, costs of the raw cotton 16.26 cents per pound, and yarn-manufacturers' margins 7.13 cents per pound or 30.5 percent of the total cost of the yarn. These proportions for specific types of yarns ranged from less than 25 to more than 35 percent.

Data for 12 combed cotton yarn mills in North Carolina and New England show that in April and July 1941 the selling price of yarns averaged about 45.88 cents per pound, costs of the cotton used about 16.26 cents, and manufacturers' margins about 29.62 cents or about 65 percent of the selling price of the yarn. These proportions by mills ranged from less than 55 percent to more than 75 percent.

Eight weaving companies manufacturing one general type of product furnished information on their operations during the first half of 1936 to show the unit costs and selling value of the products

manufactured. Five of these companies manufactured towels and toweling and three companies manufactured upholstery fabrics. The selling prices of the towels and toweling averaged 63.80 cents per pound, the cost of raw materials 29.07 cents, and mill margins 34.73 cents, or 54.4 percent of the selling price. The selling price of the upholstery fabrics averaged 75.21 cents per pound, raw materials costs 33.64 cents, and mill margins 41.57 cents, or 55.3 percent of the selling price of the product.

Reports for 78 combined spinning and weaving companies, each of which manufactured one general type of product, present data on unit costs and selling prices of these products for the first half of 1936. These data show that usually the average costs per pound of the cotton used, the selling prices of the fabrics made from it, and the manufacturers' margins vary directly with the fineness of the fabrics (table 20). Average costs of cotton per pound of the finished product ranged from 13.29 cents for cotton duck to 18.10 cents for fine goods. Average selling prices of the products varied from 27.04 cents per pound for cotton duck to 52.93 cents for fine goods. Average manufacturers' margins ranged from 13.75 cents per pound for duck to 34.83 cents for fine goods. The ratio of manufacturers' margins to the selling prices of the products ranged from 50.9 percent for cotton duck to 65.8 percent for fine goods.

TABLE 20.—*Cotton costs, selling price of products, and merchandising margins for specified yarns and fabrics during the first half of 1936.*[1]

Products	Companies	Quantity produced	Cotton costs	Selling price of products	Mill margins	
					Actual	Proportion of selling price
	Number	*Million pounds*	*Cents*	*Cents*	*Cents*	*Percent*
Carded yarns.						
40's or coarser	[2] 35	36.1	14.06	25.85	11.79	45.6
Combed yarns:						
Finer than 40's	[2] 8	2.7	19.72	55.51	35.79	64.5
Towels and toweling	[3] 5	.5	29.07	63.80	34.73	54.4
Upholstery fabrics	[3] 3	1.1	33.64	75.21	41.57	55.3
Cotton duck	[4] 6	6.3	13.29	27.04	13.75	50.9
Sheeting, drills, and jeans	[4] 15	34.9	13.98	32.23	18.25	56.6
Print cloth	[4] 27	50.6	14.58	31.42	16.84	53.6
Coarse—colored fabric	[4] 11	25.5	13.71	31.10	17.39	55.9
Napped goods	[4] 5	7.5	15.12	41.04	25.92	63.2
Fine goods	[4] 4	28.0	18.10	52.93	34.83	65.8

[1] Data on costs, prices, and margins given in cents per pound of the yarns or fabrics.
[2] Spinning mills only.
[3] Weaving companies.
[4] Combined spinning and weaving mills.
Based on a report of Federal Trade Commission. See footnote 40, p. 49.

Data for 1941 on costs of the cotton used and on net wholesale prices of the cloth produced show that manufacturers' margins varied considerably from one kind of cloth to another (table 21). Margins for specified kinds of coarse goods, representing averages for three or more constructions produced by two or more mills, ranged from less than 53 percent to more than 68 percent of the net wholesale value of the product. Similar data for fine goods show variations from less than two-thirds to more than three-fourths of the net wholesale value of the products.

TABLE 21.—*Cotton costs, net wholesale price of the cloth and manufacturers' margins per pound for specified kinds of cloth, 1941.*

Kind of cloth	Cotton costs	Net wholesale price	Manufacturing margin	Percentage of wholesale price
	Cents	*Cents*	*Cents*	*Percent*
COARSE GOODS				
Narrow sheeting, Class C	15.65	42.01	26.36	62.7
Wide sheeting, Class C	13.87	39.30	25.43	64.7
Cheese cloth	15.80	44.44	28.64	64.4
Print cloth	14.79	43.58	28.79	66.1
Broadcloth	15.06	42.42	27.36	64.5
Drills (3 homers warp twills)	15.95	37.83	21.88	57.8
Jeans (3 homers warp twills)	13.41	43.03	29.62	68.8
4 Homers warp twills	14.62	37.75	23.13	61.3
Army duck	19.39	40.68	21.29	52.3
Denims (white filling)	13.74	35.16	21.42	60.9
Denims (blue filling)	14.04	38.42	24.38	63.5
Coarse express stripes (white filling)	13.24	34.23	20.99	61.3
Coarse hickory stripes (white filling)	12.97	35.07	22.10	63.0
Coarse stripes (blue filling)	13.11	35.93	22.87	63.6
Multistripe (blue filling)	13.33	36.34	23.01	65.3
Beach cloth (white filling)	14.72	44.12	29.40	66.6
Denims (Sanforized)	14.76	40.77	26.01	63.8
FINE GOODS				
Lawns	19.81	92.43	72.62	78.6
Combed broadcloth	20.59	60.71	40.12	66.1
Voiles	27.24	103.32	76.08	73.6
Filling sateen	17.67	73.43	55.76	75.9
Piques	21.09	101.07	79.98	79.1
Chipped spot marquisette	18.42	73.37	55.95	75.2

Compiled from data assembled by the U. S. Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

Data reported for individual constructions of coarse goods show that in 1941 manufacturers' margins for 6 percent of the constructions amounted to more than 70 percent, and margins for 7 percent of the constructions amounted to less than half of the net wholesale value of the products. Margins for individual constructions of wide sheeting Class C, for example, ranged from 57 to 70 percent and those for individual constructions of print cloth from less than 60 to more than 75 percent of the net wholesale value of the products. Similar data for fine goods show that manufacturers' margins for 8 percent of the constructions were more than 85 percent, and margins for 9 percent of the constructions were less than 60 percent of the net wholesale value of the products. Margins for different constructions of lawns, for example, ranged from 68 to 82 percent of the net wholesale value of the products.

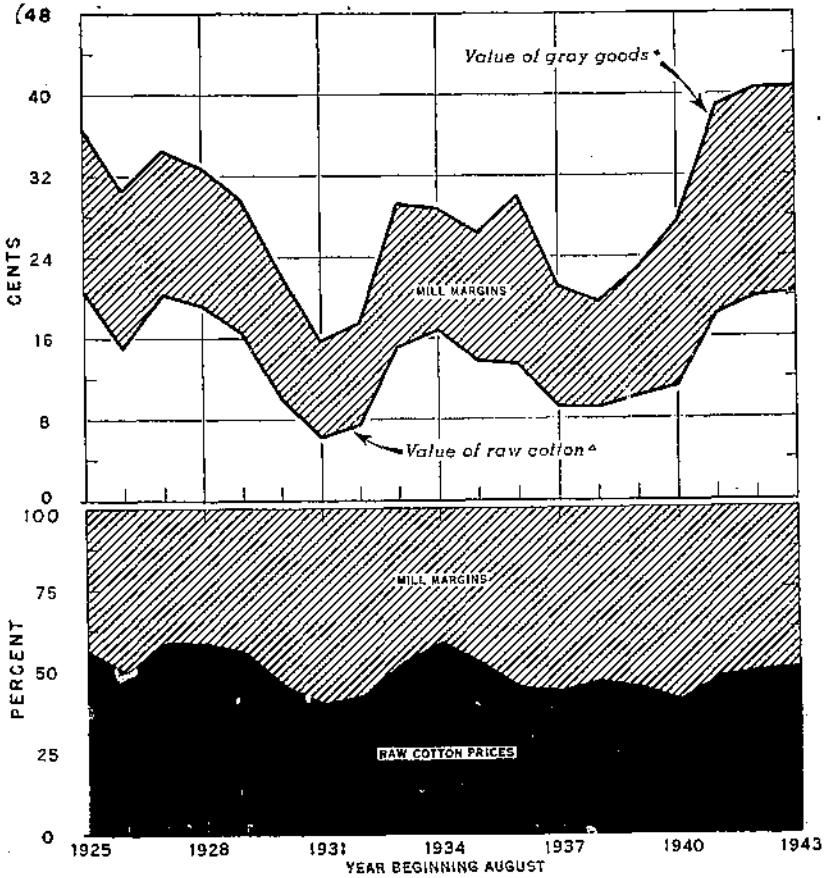
Cotton-textile manufacturers' margins, as calculated and presented by the Department of Agriculture under the title "Mill Margins," represent the average spread between the value of 17 constructions of unfinished cotton cloth obtainable from a pound of raw cotton and the price of the cotton used.[43] These margins represented a somewhat smaller proportion of the net wholesale value of the products than those reported for 264 combined spinning and weaving companies during the first half of 1936 by the Federal Trade Commission.[44] These 17 constructions do not include any

[43] United States Department of Agriculture. PRICES OF COTTON CLOTH AND RAW COTTON, AND MILL MARGINS FOR CERTAIN CONSTRUCTIONS OF UNFINISHED CLOTH. A PRELIMINARY REPORT. 28 pp., illus. 1937. [Processed.]

[44] Federal Trade Commission. See footnote 40, p. 49.

fine goods for which manufacturers' margins usually are much wider than those for coarser constructions, but the cotton prices used are based on those quoted in central markets and they may average somewhat lower than those paid for cotton delivered to mills in even-running lots.

Manufacturers' margins for the 17 constructions of unfinished cloth vary considerably with changes in price level (fig. 11 and



*AVERAGE WHOLESALE PRICES OF 17 CONSTRUCTIONS OF UNFINISHED CLOTH QUOTED IN THE INTERNATIONAL TEXTILE APPAREL ANALYSIS. PRICES PER YARD WERE CONVERTED TO THE APPROXIMATE QUANTITY OBTAINABLE FROM A POUND OF COTTON WITH AN ADJUSTMENT FOR SALABLE WASTE.

△AVERAGE PRICES IN THE 10 DESIGNATED MARKETS FOR THE QUALITY OF COTTON ASSUMED TO BE USED IN EACH KIND OF CLOTH. FROM AUGUST 1933 TO DECEMBER 1935, A TAX OF 4.00 CENTS PER POUND GROSS WEIGHT IS ADDED TO THE PRICE OF COTTON.

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Figure 11.—Average prices of cotton cloth and of raw cotton and mill margins for 17 constructions of unfinished cloth, 1925–43.

Mill margins usually vary directly with prices of raw cotton and with labor costs. The margins for 17 constructions of unfinished cloth have widened considerably with advances in price since the outbreak of the war but the proportion of the value of the unfinished cloth represented by mill margins has decreased considerably since 1940.

TABLE 22.—*Unfinished cloth prices (17 constructions), cotton prices, and mill margins, per pound, United States, 1925–43.*

Year beginning August 1	Cloth prices[1]	Cotton prices[2]	Mill margins	Proportion of cloth price of —		
				Cloth	Cotton	Mill margin
	Cents	*Cents*	*Cents*	*Percent*	*Percent*	*Percent*
1925	36.48	20.45	16.03	100.0	56.1	43.9
1926	30.57	15.16	15.41	100.0	49.6	50.4
1927	34.55	20.33	14.22	100.0	58.8	41.2
1928	32.82	19.23	13.59	100.0	58.6	41.4
1929	29.71	16.52	13.19	100.0	55.6	44.4
1930	22.35	10.18	12.17	100.0	45.5	54.5
1931	15.69	6.26	9.43	100.0	39.9	60.1
1932	17.52	7.45	10.07	100.0	42.5	57.5
1933	29.13	15.18	13.95	100.0	52.1	47.9
1934	28.72	16.89	11.83	100.0	58.8	41.2
1935	26.40	13.77	12.63	100.0	52.2	47.8
1936	30.02	13.43	16.59	100.0	44.7	55.3
1937	21.35	9.20	12.15	100.0	43.1	56.9
1938	19.54	9.10	10.44	100.0	46.6	53.4
1939	22.86	10.18	12.68	100.0	44.5	55.5
1940	27.47	11.12	16.35	100.0	40.5	59.5
1941	38.91	18.36	20.55	100.0	47.2	52.8
1942	40.62	19.99	20.63	100.0	49.2	50.8
1943	40.68	20.48	20.20	100.0	50.3	49.7

[1] Average wholesale prices of 17 constructions of unfinished cloth quoted in the International Textile Apparel Analysis. Prices per yard were converted to the approximate quantity obtainable from a pound of cotton with an adjustment for salable waste.

[2] Average prices in the 10 designated markets for the quality of cotton assumed to be used in each kind of cloth. From August 1933 to December 1935, a tax of 4 cents per pound gross weight is added to the price of cotton.

War Food Administration, Office of Distribution, Cotton and Fiber Branch.

table 22). Mill margins decreased from 16.03 cents per pound of cotton in 1925 when cotton prices averaged 20.45 cents, to 9.43 cents in 1931 when cotton prices averaged 6.26 cents; and in 1943 they averaged 20.20 cents when cotton prices averaged 20.48 cents. From 1938 to 1943 cotton prices advanced almost 125 percent and mill margins increased almost 94 percent. The proportion of the wholesale value of the unfinished cloth produced, accounted for by mill margins, decreased from 59.5 percent in 1940 to 49.7 percent in 1943. During this period cotton prices were influenced considerably by price-support measures and mill margins were influenced by price-support measures for cotton and price ceilings for cotton cloth. In normal times changes in mill margins reflect changes in the relative demand and supply situation for raw cotton and for cotton cloth and usually they tend to vary directly with prices of raw cotton and with costs of labor.

ITEMS INCLUDED IN MARGINS

Cotton-manufacturers' margins include costs of handling and opening the bales at the mill; picking, carding, combing (for fine yarns), and spinning the lint into yarn; weaving the yarn into fabrics; and selling the products, along with overhead, administrative, and other costs incidental to operating the mills. They may include some charges for merchandising the raw cotton since the prices used for cotton, particularly in calculating the margins for the 17 constructions of cloth, were based on prices at central markets rather than at mills. Margins for many cotton-manufacturing establishments also include costs of finishing yarns and fabrics and of fabricating products. The extent to which these costs are in-

cluded may be indicated by census data showing that of the total value of cotton manufacturers' sales in 1939, 36 percent of the yarn, 29 percent of the broad woven goods, 92 percent of the narrow fabrics, and all the thread was accounted for by finished goods, and 12 percent of the sales of broad goods manufacturers was accounted for by fabricated products.

Information available on items included in cotton-manufacturers' margins is not complete but census reports on manufactures of cotton yarn, woven cotton goods, and cotton thread in 1939 show that wages and salaries made up more than half of the spread between costs of materials, supplies, and containers, and the value of the products (table 23). These wages and salaries amounted to

TABLE 23.—*Values, costs, and margins for cotton manufactures, United States, 1939.*

Item	Kind of manufactures					
	Cotton yarn		Woven cotton goods		Cotton thread	
	1,000 dollars	*Percent*	*1,000 dollars*	*Percent*	*1,000 dollars*	*Percent*
Value of products	198,940	100.0	917,855	100.0	51,376	100.0
Costs of materials, supplies, and containers.[1]	106,766	53.7	421,106	45.9	25,407	49.5
Gross margins	92,174	46.3	496,749	54.1	25,969	50.5
Salaries and wages—						
Officers' salaries	1,977	1.0	7,144	.8	576	1.1
Manufacturing salaries	3,402	1.7	19,126	2.1	1,752	3.4
Manufacturing wages	45,055	22.6	236,951	25.8	10,529	20.5
Distribution	325	.2	2,838	.3	640	1.2
Other	139	.1	1,224	.1	------	----
Fuel	889	.4	9,302	1.0	556	1.1
Purchased electric energy	7,086	3.6	23,258	2.5	732	1.4
Other[2]	33,301	16.7	196,936	21.5	11,184	21.8

[1] Cost of "contract work" included with "materials, supplies, and containers" to avoid disclosing data reported by individual establishments.
[2] Includes depreciation, interest, insurance, rent, taxes, profits, and other expenses.
Adapted from census data on *cotton manufactures* (21).

more than one-fourth of the wholesale value of the products. Manufacturing wages accounted for more than seven-eighths of total wages and salaries for manufacturers of cotton yarn and woven cotton goods and for more than three-fourths of those for thread manufacturers. Fuel and purchased electric energy were relatively small items of costs. Data for a substantial proportion of total costs, representing such items as depreciation, interest, insurance, rent, profits, and taxes, were not shown in detail in census reports.

Data on the distribution of cotton-manufacturers' margins for 479 companies, grouped according to their principal manufacturing processes, also show that during the first half of 1936 labor was the outstanding item of cost or expense included in mill margins—which include all items of expense involved in the spread between the selling prices of the yarns and fabrics and the costs of the cotton used in their manufacture (table 24).[45] Labor accounted for 46.4 percent of mill margins for all companies combined and ranged from 30.9 percent for thread-manufacturing companies to 47.9 percent for combined spinning and weaving companies. The proportions of manufacturers' margins accounted for by other items

[45] Federal Trade Commission. See footnote 40, p. 49.

averaged 6.6 percent for fuel and power, 5.7 percent for depreciation, 5.7 percent for dyes and chemicals and taxes, 15.3 percent for other mill expense, 8 percent for selling expense and bad debts, 4.2 percent for other general expense, and 8.2 percent for net profits. These proportions varied considerably from one kind of cotton-manufacturing company to another.

The proportion of net sales of the products represented by labor costs averaged 25.4 percent for all companies combined and ranged from 18.6 percent for cordage and twine manufacturing companies to 26.3 percent for combined spinning and weaving companies. Fuel and power and depreciation combined amounted on the average to 6.7 percent; dyes and chemicals and taxes, 3.1 percent; other mill expense, 8.4 percent; selling expense, 4.4 percent; other general expense, 2.3 percent; and net profits, 4.5 percent of net sales. These proportions varied considerably from one kind of company to another as shown in table 24.

TABLE 24.—*Net sales, costs, and margins for cotton textile manufacturing companies, January-June 1936.*

Item	Kind of company					
	Spinning	Weaving	Combined spinning and weaving	Thread manufacturing	Cordage and twine manufacturing	All companies
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Net sales	38,917	20,396	315,335	21,350	3,460	399,467
Raw material costs[1]	18,541	11,075	142,098	7,350	1,656	180,720
Gross margin[1]	20,376	9,321	173,237	14,000	1,804	218,747
Labor	9,414	4,069	83,010	4,365	644	101,502
Fuel and power	1,744	400	11,418	594	111	14,297
Dyes and chemicals	302	167	5,868	291	4	6,632
Property taxes	474	155	4,551	326	36	5,542
Depreciation	1,326	479	9,794	773	83	12,455
Other mill expenses[2]	2,648	1,208	27,653	1,846	295	33,650
Selling expense and bad debts	1,809	1,371	11,328	2,841	263	17,612
Other general expense[3]	904	1,039	5,805	1,081	144	8,973
Net profit	1,755	433	13,780	1,892	224	18,084
	Proportion of net sales					
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Net sales	100.0	100.0	100.0	100.0	100.0	100.0
Raw material costs[1]	47.6	54.3	45.1	34.4	47.9	45.2
Gross margin[1]	52.4	45.7	54.9	65.6	52.1	54.8
Labor	24.2	20.0	26.3	20.4	18.6	25.4
Fuel and power	4.5	2.0	3.6	2.8	3.2	3.6
Dyes and chemicals	.8	.8	1.9	1.4	.1	1.7
Property taxes	1.2	.8	1.4	1.5	1.0	1.4
Depreciation	3.4	2.3	3.1	3.6	2.4	3.1
Other mill expenses[2]	6.8	5.9	8.8	8.6	8.5	8.4
Selling expense and bad debts	4.7	6.7	3.6	13.3	7.6	4.4
Other general expense[3]	2.3	5.1	1.8	5.1	4.2	2.3
Net profit	4.5	2.1	4.4	8.9	6.5	4.5
Number of companies	113	67	264	18	17	479

[1] Adjustments were made for changes in inventory.
[2] Includes mill overhead, processing tax, and amounts paid other companies for spinning, weaving, dyeing, finishing, or manufacturing operations performed for reporting companies, but not general and administrative expenses.
[3] Includes officers' and directors' salaries, commissions and bonuses and other administrative and general expense.
Adapted from a report of Federal Trade Commission. See footnote 40, p. 49.

The relative importance of the various items included in cotton-manufacturers' margins in 1936 for all companies combined was fairly typical of those in 1939 and 1940 (table 25). Some differences are indicated but they may be accounted for largely by differences in kind of manufacturing establishments included and by some differences in grouping of the items included. Data reported for 1939 and 1940 are not segregated on the basis of kind of companies and manufacturing processes involved and consequently they do not indicate to what extent the relative importance of items included in manufacturers' margins for companies primarily engaged in spinning cotton yarns, weaving cotton cloth, or a combination of both processes differs from those indicated for 1936.

TABLE 25.—*Sales, costs, and margins for cotton textile manufacturing corporations in the United States, 1939 and 1940.*

Item	1939		1940	
	1,000 dollars	*Percent*	*1,000 dollars*	*Percent*
Total sales	415,713	100.0	550,868	100.0
Material costs, direct	187,905	45.2	231,112	[illegible]
Gross margins	227,808	54.8	319,756	5[illegible]
Production wages and salaries	109,801	26.4	137,981	25.0
Depreciation	11,714	2.8	13,809	2.5
Taxes and social security	8,676	2.1	11,339	2.0
Other operating expense[1]	51,003	12.3	61,011	11.1
Goods purchased for resale	8,357	2.0	34,142	6.2
Selling expense	12,235	2.9	18,784	3.4
Advertising	1,815	.4	2,537	.5
Administrative and general office	6,604	1.6	9,979	1.8
Provisions for uncollectible accounts	268	.1	459	.1
Net profits	17,335	4.2	29,715	5.4

[1] Includes costs of repair and maintenance, and research and development expense.

Adapted from United States Federal Trade Commission, *Industrial corporation reports, cotton textile manufacturing corporations*, 1941–1942. [Processed].

Reports for individual corporations show wide variations in the relative importance of the items included in manufacturers' margins. The proportion of the selling prices of the products accounted for by production wages and salaries amounted to less than 20 percent for 9 percent of the corporations reported for 1939 and for 17 percent of the corporations reported for 1940; whereas production wages and salaries amounted to more than 33 percent of the selling price of the products for 20 percent of the corporations reported for 1939 and 11 percent of the corporations reported for 1940. Data for other items show that the proportion of the selling prices of the products accounted for by depreciation ranged from less than 1 to more than 4 percent; selling expense, from less than 1 to more than 7 percent; administration and general office expense, from less than 1 to more than 3 percent; and advertising expense, from none to more than 4 percent in 1939 and in 1940.

Labor and other items of costs included in manufacturers' margins vary considerably with the kind of manufacturing processes involved and with the kinds of yarns and fabrics produced. Data for 43 spinning companies, 8 weaving companies, and 78 combined spinning and weaving companies show that during the first half of 1936 average labor costs ranged from 5.93 cents per pound of carded cotton yarn 40's or coarser to 15.01 cents per pound of combed cotton yarn finer than 40's (table 26).[46] Average labor

[46] Federal Trade Commission. See footnote 46, p. 49.

costs for woven fabrics ranged from 5.78 cents per pound of cotton duck to 20.46 cents for fine cotton goods. Other items of cost or expense vary as shown in table 26.

TABLE 26.—*Selling price, costs, and margins per pound of yarns and fabrics for products of specified kinds of mills, January-June 1936.*

Item	Spinning mills		Weaving mills		Combined spinning and weaving mills					
	Carded cotton yarn 40's or coarser	Combed cotton yarn finer than 40's	Towels and toweling	Upholstery fabrics	Cotton duck	Sheeting drills and jeans	Print cloth yarn fabrics	Fine cotton goods[1]	Coarse colored cottons[2]	Napped goods
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Selling price	25.85	55.51	63.80	75.21	27.04	32.23	31.42	52.93	31.10	41.04
Raw material costs	14.06	19.72	29.07	33.64	13.29	13.98	14.58	18.10	13.71	15.12
Gross margin	11.79	35.79	34.73	41.57	13.75	18.25	16.84	34.83	17.39	25.92
Labor	5.93	15.01	14.30	15.13	5.78	7.48	8.73	20.46	7.89	12.27
Fuel and power	.97	3.44	2.47	2.11	.98	1.34	1.78	3.02	1.05	1.64
Dyes and chemicals	.02	----	2.28	2.32	.04	.04	----	.24	2.22	.96
Property taxes	.28	.74	.50	.23	.32	.56	.65	.70	.48	.80
Depreciation	.67	2.10	3.78	1.64	.73	1.15	1.32	1.72	.85	1.37
Other mill expense[3]	1.55	3.58	5.59	4.71	1.94	3.90	2.73	3.89	2.55	5.98
Selling and bad debts	1.12	3.84	5.22	2.85	1.69	1.49	.79	.90	1.25	1.92
Other general expense[4]	.52	1.53	4.34	3.76	.48	.36	.61	1.23	.51	.60
Net profit or loss	.73	5.55	[5]3.72	8.82	1.79	1.93	.23	2.67	.59	.38
	Proportion of selling price									
	Pct.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
Selling price	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Raw material costs	54.4	35.5	45.6	44.7	49.1	43.4	46.4	34.2	44.1	36.8
Gross margins	45.6	64.5	54.4	55.3	50.9	56.6	53.6	65.8	55.9	63.2
Labor	22.9	27.1	22.4	20.1	21.4	23.2	27.8	38.7	25.4	29.9
Fuel and power	3.8	6.2	3.9	2.8	3.6	4.2	5.7	5.7	3.4	4.0
Dyes and chemicals	.1	----	3.6	3.1	.1	.1	----	.5	7.2	2.3
Property taxes	1.1	1.3	.9	.3	1.2	1.7	2.1	1.3	1.5	1.9
Depreciation	2.6	3.8	5.9	2.2	2.7	3.6	4.2	3.2	2.7	3.4
Other mill expense	6.0	6.4	8.6	6.3	7.2	12.1	8.7	7.3	8.2	14.6
Selling and bad debts	4.3	6.9	8.1	3.8	6.3	4.6	2.5	1.7	4.0	4.7
Other general expense	2.0	2.8	6.8	5.0	1.8	1.1	1.9	2.3	1.6	1.5
Net profit or loss	2.8	10.0	[5]5.8	11.7	6.6	6.0	.7	5.1	1.9	.9
Number of companies	35	8	5	8	6	15	27	14	11	5

[1] Cambrics, dimities, lawns, and other fabrics usually woven from combed cotton yarns.
[2] Denims, tickings, suiting, etc.
[3] Includes mill overhead and amounts paid other companies for spinning, weaving, dyeing, finishing, or other manufacturing operations performed for reporting companies but does not include general and administrative expense.
[4] Includes payments to officers and directors and other administrative and general expense.
[5] Loss.
Abstracted from or based on report of Federal Trade Commission. See footnote 10, p. 49.

The proportion of the selling prices of the products represented by costs of labor for yarn-manufacturing companies ranged from 22.9 percent for those primarily engaged in producing carded yarns to 27.1 percent for those producing combed yarns (table 26). The proportions for weaving companies ranged from 20.1 percent for those producing upholstery fabrics to 22.4 percent for those producing towels and toweling. For combined spinning and weaving companies they ranged from 21.4 percent for those producing cotton duck to 38.7 percent for those producing fine goods. Data for other items show that costs of fuel and power ranged from 2.8 percent for upholstery fabrics to 6.2 percent for combed cotton yarns; depreciation costs, from 2.2 percent for upholstery fabrics to 5.9 percent for towels and toweling; and other mill expense from 6 percent for carded yarns to 14.6 percent for napped goods. The proportions

of the selling price represented by selling expense and bad debts ranged from 1.7 percent for fine goods to 8.1 percent for towels and toweling, and for net profits and losses, from an average loss of 5.8 percent for towels and toweling to profits of 11.7 percent for upholstery products.

Data for 12 combed cotton-yarn mills in North Carolina and New England assembled by the United States Tariff Commission for the Office of Price Administration showing selling prices, costs, and margins for the yarns indicate that the proportion of the selling prices of the yarns accounted for by various items of costs averaged about 22.8 percent for labor and superintendence, 3.2 percent for power, 3.4 percent for supplies, 5.1 percent for commissions and discounts, and 21.9 percent for net profits (table 27). These proportions varied considerably from one mill to another. Those for labor and superintendence, for example, ranged from less than 19 to more than 33 percent and those for commissions and discounts varied from less than 4 to more than 8 percent.

TABLE 27.—*Selling price, costs, and margins per pound for combed cotton yarn, April and July 1941.*

Item	April		July	
	Average amount	Proportion of selling price	Average amount	Proportion of selling price
	Cents	*Percent*	*Cents*	*Percent*
Selling price of yarn	44.21	100.0	47.55	100.0
Costs of cotton used	15.99	36.2	16.53	34.8
Gross margin	28.22	63.8	31.02	65.2
Labor and superintendence	9.91	22.4	11.01	23.1
Social security tax	.41	.9	.46	1.0
Power	1.51	3.4	1.47	3.1
Supplies	1.54	3.5	1.62	3.4
Repair and maintenance	.36	.8	.33	.7
Fuel and water	.07	.2	.09	.2
Other manufacturing expense	.18	.4	.24	.5
Depreciation	.81	1.8	.78	1.6
Administrative expense	1.13	2.6	1.21	2.5
Commissions and discounts	2.22	5.0	2.47	5.2
Freight out	.65	1.5	.66	1.4
Net margin or profit	9.43	21.3	10.68	22.5

Compiled from data made available by the United States Tariff Commission. The data are averages of 12 combed cotton yarn mills in North Carolina and New England as assembled by the United States Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

Information on costs and margins for carded cotton yarns by type of cloth for which they are used indicates that, in September 1941, labor costs averaged 4.09 cents per pound of yarn and ranged from 2.07 cents for yarns used in the manufacture of narrow sheeting to 6.68 cents for yarns used in the manufacturing of chambrays (table 28). Overhead costs averaged 3.04 cents per pound of yarn and ranged from 1.09 cents for yarns used in the manufacture of flannel twill to 4.23 cents for those used in the manufacture of print cloth.

The proportion of the total costs of carded yarns accounted for by labor costs in 1941 averaged 17.5 percent and ranged from less than 10 percent for yarns used in the manufacture of narrow sheetings to almost 24 percent for those used in the manufacture of chambrays (table 29). The corresponding proportions for overhead costs averaged 13 percent and ranged from 6.2 percent for yarns used in the manufacture of flannel twill to 17 percent for those used in the manufacture of denims.

TABLE 28.—*Costs and margins per pound of yarn for carded cotton yarns, by type of cloth for which they are used, September 1941.*

Type of cloth	Reports	Total costs	Cotton costs	Gross margin	Labor costs				Overhead costs			
					Carding	Spinning	Spooling and warping	Total	Carding	Spinning	Spooling and warping	Total
	Number	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Osnaburg	9	22.61	17.31	5.30	1.38	1.59	0.41	3.38	1.06	0.72	0.14	1.92
Denim	37	20.86	15.07	5.79	1.16	1.56	.26	2.98	1.27	1.21	.33	2.81
Drill	29	21.71	16.39	5.32	1.07	1.84	.27	3.18	.88	1.17	.09	2.14
Twill	7	25.14	15.48	9.66	1.49	2.09	2.29	5.87	1.30	1.79	.70	3.79
Duck	17	27.65	20.53	7.12	.97	1.27	1.78	4.02	.82	1.16	1.12	3.10
Denims (beach cloth)	3	20.19	13.40	6.79	1.14	1.69	.53	3.36	1.17	1.40	.86	3.43
Narrow sheeting, Class A	5	21.15	17.38	3.77	.79	1.23	.05	2.07	.65	1.01	.04	1.70
Narrow sheeting, Class B	3	20.99	15.30	5.69	1.32	1.75	.38	3.45	.86	1.26	.12	2.24
Narrow sheeting, Class C	2	23.40	16.23	7.17	1.31	2.08	.40	3.79	1.24	1.98	.16	3.38
Wide sheeting, Class A	2	23.62	16.36	7.26	1.32	2.92	----	4.24	1.28	1.74	----	3.02
Wide sheeting, Class B	1	21.52	16.57	4.95	1.17	1.66	----	2.83	1.00	1.12	----	2.12
Wide sheeting, Class C	24	21.58	14.01	7.57	1.64	2.37	.41	4.41	1.29	1.72	.15	3.16
Narrow and wide sheeting	6	23.92	16.57	7.35	1.41	2.02	.69	4.12	1.21	1.72	.30	3.23
Jean	8	22.32	14.26	8.06	1.40	2.75	.56	4.71	1.23	1.93	.19	3.35
Drill twill	3	22.20	16.39	5.81	.98	1.55	.77	3.30	.83	1.38	.31	2.52
Chambrays	3	27.98	17.40	10.58	2.50	2.78	1.40	6.68	1.19	1.99	.72	3.90
S F duck	10	25.17	19.80	5.37	.90	2.21	----	3.11	.93	1.33	----	2.26
Duck twill	2	20.30	13.16	7.14	1.19	1.80	.79	3.78	1.18	1.82	.36	3.36
Print cloth	23	25.19	15.45	9.74	1.92	3.41	.18	5.51	1.47	2.69	.07	4.23
Broadcloth	4	26.28	16.62	9.66	1.71	3.54	.20	5.45	1.38	2.75	.08	4.21
Number duck	7	27.80	20.91	6.89	1.17	3.40	----	4.57	.75	1.57	----	2.32
Army duck	6	27.77	19.82	7.95	.91	3.67	----	4.58	.81	2.56	----	3.37
Flannel twill	2	17.64	14.00	3.64	.78	1.77	----	2.55	.57	.52	----	1.09
Warp twill	6	25.40	15.99	9.41	1.41	4.49	----	5.90	1.16	2.35	----	3.51
Print cheese cloth	5	26.17	16.74	9.43	2.08	3.06	.37	5.51	1.52	2.27	.13	3.92
Print cheese and broadcloth	3	23.87	15.97	7.90	1.36	2.57	.64	4.57	1.23	1.85	.25	3.33
Broad and print cloth	2	26.00	16.54	9.46	1.93	2.95	.40	5.28	1.85	2.18	.15	4.18
Miscellaneous	13	26.15	16.50	9.65	1.99	2.98	.51	5.48	1.64	2.34	.19	4.17
Total or average	244	23.39	16.26	7.13	1.36	2.27	.46	4.09	1.15	1.64	.25	3.04

From primary data on yarn manufacturers assembled by the U. S. Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

TABLE 29.—*Percentage distribution of costs for carded cotton yarns, by type of cloth for which they are used, September 1941.*

Type of cloth	Reports	Total costs	Cotton costs	Gross margin	Labor costs				Overhead costs			
					Carding	Spinning	Spooling and warping	Total	Carding	Spinning	Spooling and warping	Total
	Number	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Osnaburg	9	100.0	76.6	23.4	6.1	7.0	1.8	14.9	4.7	3.2	0.6	8.5
Denim	27	100.0	72.2	27.8	5.6	7.5	1.2	14.3	6.1	5.8	1.6	13.5
Drill	29	100.0	75.5	24.5	4.9	8.5	1.2	14.6	4.1	5.4	.4	9.9
Twill	7	100.0	61.6	38.4	5.9	8.3	9.1	23.3	5.2	7.1	2.8	15.1
Duck	17	100.0	74.2	25.8	3.5	4.6	6.4	14.5	3.0	4.2	4.1	11.3
Denims (beach cloth)	3	100.0	66.4	33.6	5.6	8.4	2.6	16.6	5.8	6.0	4.3	17.0
Narrow sheeting, Class A	5	100.0	82.2	17.8	3.8	5.8	.2	9.8	3.0	4.8	.2	8.0
Narrow sheeting, Class B	3	100.0	72.9	27.1	6.3	8.3	1.8	16.4	4.1	6.0	.6	10.7
Narrow sheeting, Class C	2	100.0	69.4	30.6	5.6	8.9	1.7	16.2	5.3	8.4	.7	14.4
Wide sheeting, Class A	2	100.0	69.3	30.7	5.6	12.3	----	17.9	5.4	7.4	----	12.8
Wide sheeting, Class B	1	100.0	77.0	23.0	5.4	7.7	----	13.1	4.7	5.2	----	9.9
Wide sheeting, Class C	24	100.0	64.9	35.1	7.6	11.0	1.9	20.5	6.0	7.9	.7	14.6
Narrow and wide sheeting	6	100.0	69.3	30.7	5.9	8.4	2.9	17.2	5.0	7.2	1.3	13.5
Jean	8	100.0	63.9	36.1	6.3	12.3	2.5	21.1	5.5	8.6	.9	15.0
Drill twill	3	100.0	73.8	26.2	4.4	7.0	3.5	14.9	3.7	6.2	1.4	11.3
Chambrays	3	100.0	62.2	37.8	8.9	10.0	5.0	23.9	4.2	7.1	2.6	13.9
S F duck	10	100.0	78.7	21.3	3.6	8.7	----	12.3	3.7	5.3	----	9.0
Duck drill	2	100.0	64.8	35.2	5.9	8.8	3.9	18.6	5.8	9.0	1.8	16.6
Print cloth	23	100.0	61.3	38.7	7.6	13.6	.7	21.9	5.8	10.7	.3	16.8
Broadcloth	4	100.0	63.2	36.8	6.5	13.5	.8	20.8	5.2	10.5	.3	16.0
Number duck	7	100.0	75.2	24.8	4.2	12.2	----	16.4	2.7	5.7	----	8.4
Army duck	6	100.0	71.4	28.6	3.3	13.2	----	16.5	2.9	9.2	----	12.1
Flannel twill	2	100.0	79.4	20.6	4.4	10.0	----	14.4	3.2	3.0	----	6.2
Warp twill	6	100.0	63.0	37.0	5.5	17.7	----	23.2	4.6	9.2	----	13.8
Print cheese cloth	5	100.0	64.0	36.0	7.9	11.7	1.4	21.0	5.8	8.7	.5	15.0
Print cheese and broadcloth	3	100.0	66.9	33.1	5.7	10.8	2.7	19.1	5.2	7.8	1.0	14.0
Broad and print cloth	2	100.0	63.6	36.4	7.4	11.4	1.5	20.3	7.1	8.4	.6	16.1
Miscellaneous	13	100.0	63.1	36.9	7.6	11.4	2.0	21.0	6.3	8.9	.7	15.9
Total or average	244	100.0	69.5	30.5	5.8	9.7	2.0	17.5	4.9	7.0	1.1	13.0

From primary data on yarn manufacturers assembled by the U. S. Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

The relative importance of the items included in cloth manufacturers' margins also varies considerably with the kind of goods produced (table 30). In 1941 labor costs for specific kinds of coarse goods, representing averages for three or more constructions produced by two or more mills, ranged from 12.3 percent to 24.3 percent of the net wholesale price of the goods. Similar data for other items show that other conversion costs ranged from 12.3 to 29.5 percent; selling expense, from 2.6 to 5.6 percent; and net margins, from 14.1 to 39.0 percent of the net wholesale price of the goods. Similar data for fine goods show that labor costs ranged from 36.1 to 40.5 percent; other conversion costs, from 16.1 to 21.1 percent; selling expense, from 2.4 to 3.8 percent; and net margins, from 2.8 to 22.4 percent of the net wholesale price of the cloth.

TABLE 30.—*Costs and margins for specified kinds of coarse and fine goods expressed as proportions of the net wholesale prices of the cloth, 1941.*

Kind of cloth	Net wholesale price	Cotton costs	Gross margins	Conversion costs		Loss on seconds	Selling expense	Net margin
				Labor	Other			
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
COARSE GOODS								
Narrow sheeting, Class C	100.0	37.3	62.7	21.3	15.9	1.7	5.2	18.6
Wide sheeting, Class C	100.0	35.3	61.7	24.3	18.1	1.9	4.8	15.6
Cheese cloth	100.0	35.5	64.5	19.8	16.4	.2	2.6	25.5
Print cloth	100.0	33.9	66.1	20.3	15.4	.2	2.6	27.6
Broadcloth	100.0	35.5	64.5	21.4	15.5	.1	2.6	24.9
Drills (3 harness warp twills)	100.0	42.2	57.8	16.1	12.3	.6	3.0	25.8
Jeans (3 harness warp twills)	100.0	31.2	68.8	20.1	14.5	.7	2.6	30.9
4 harness warp twills	100.0	38.7	61.3	17.2	13.6	.6	3.4	26.5
Army duck	100.0	47.7	52.3	17.3	14.2	1.1	5.6	14.1
Denims (white filling)	100.0	39.1	60.9	16.7	19.6	1.2	4.9	18.5
Denims (blue filling)	100.0	36.5	63.5	17.0	15.4	.4	5.2	25.5
Coarse express stripes (W. F.)	100.0	38.7	61.3	17.8	15.5	.4	5.1	22.5
Coarse hickory stripes (W. F.)	100.0	37.0	63.0	17.9	17.2	.8	4.8	22.3
Coarse stripes (blue filling)	100.0	36.4	63.6	17.9	16.5	.4	5.0	23.8
Multistripes (blue filling)	100.0	36.7	63.3	17.9	16.0	.4	5.2	23.8
Beach cloth (white filling)	100.0	33.4	66.6	17.0	17.1	1.0	4.1	27.4
Denims (Sanforized)	100.0	36.2	63.8	12.3	29.5	1.5	5.1	15.4
FINE GOODS								
Lawns	100.0	21.4	78.6	38.2	21.1	0.6	2.4	16.3
Combed broadcloth	100.0	33.9	66.1	38.8	18.9	1.9	3.7	2.8
Voiles	100.0	26.4	73.6	36.1	17.2	2.5	3.7	14.1
Filling sateen	100.0	24.1	75.9	40.5	17.8	1.0	3.8	12.8
Piques	100.0	20.9	79.1	33.2	19.0	1.3	3.2	22.4
Clipped spot marquisette	100.0	24.8	75.2	40.4	16.1	1.8	3.7	13.2

From primary data assembled by Office of Price Administration and United States Tariff Commission and made available for use only as industry summaries.

Data for individual constructions included in the averages show considerable variations. About 77 constructions were included in the averages for wide sheeting Class C, for example, and labor costs per pound of cloth reported for individual constructions ranged from less than 8 to more than 12 cents per pound. Other conversion costs ranged from less than 6 to more than 49 cents; selling expense, from less than 1 cent to more than 4 cents; losses on seconds, from less than 0.2 cent to more than 2 cents; and net margins, from losses of more than 1 cent to net gains of more than 12 cents per pound of the cloth. More or less similar variations were indicated for other kinds of coarse and fine goods.

Some of the cloth is finished and fabricated into sheets, pillow cases, bolster cases, or other household furnishings before it is sold by manufacturers. Data for sheets, pillow cases, and bolster cases, for example, show that costs of manufacturing and selling these products ranged on the average in 1942 from less than 18 percent to almost 29 percent of the value of the finished product (table 31). Costs of bleaching and finishing ranged on the average from 2.4 to 3.8 percent; making, from 7.3 to 15.7 percent; packing and shipping, 1.5 to 2.5 percent; and selling, from 3 to 4.8 percent of the value of the products.

TABLE 31.—*Proportion of total costs of finished sheets, pillow cases, and bolster cases accounted for by the various items of cost, November 1942.*

Item	Kind of products						
	Sheets, types			Pillow cases, types		Bolster cases, types	
	112	128	140	128	140	128	140
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Total costs of finished article	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Costs of gray goods	82.3	79.4	79.3	73.2	71.1	80.0	73.6
Costs of manufacturing and sale	17.7	20.6	20.7	26.8	28.9	20.0	26.4
Bleaching and finishing	2.4	3.8	3.8	2.6	3.5	2.9	3.8
Materials	.7	1.2	.9	.9	.8	1.0	.8
Labor	.9	1.4	1.3	1.0	1.2	1.1	1.3
Other expense	.8	1.2	1.6	.7	1.5	.8	1.7
Making	8.8	8.3	7.3	15.7	15.0	8.9	12.0
Materials	----	.2	.4	----	1.0	----	.6
Labor	7.7	6.8	5.1	11.6	9.2	6.6	7.5
Other expense	1.1	1.5	1.8	4.1	4.8	2.3	3.9
Packing and shipping	1.5	2.0	1.7	2.5	2.3	1.8	2.3
Materials	1.2	1.5	1.1	2.0	1.6	1.4	1.6
Labor	.2	.4	.2	.4	.1	.3	.2
Other expense	.1	.1	.4	.1	.6	.1	.5
Loss on seconds	2.0	2.0	3.1	2.2	3.7	2.3	3.8
Selling expense	3.0	4.5	4.8	3.8	4.4	4.1	4.5
Number of reports used	21	54	124	12	36	8	25

From primary data on manufactures compiled from data assembled by the U. S. Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

MEANS OF REDUCING COSTS

Means of reducing cotton-manufacturers' margins may include: (1) Reductions in kinds and amounts of services rendered; (2) increases in efficiency and reductions in costs of rendering the services; and (3) reductions or elimination of profits. Any very definite statements regarding the extent to which cotton-manufacturers' margins or costs could feasibly be reduced by these means, however, would need to be based on at least fairly complete information on the services rendered, the particular processes involved, and the conditions under which these manufacturing establishments are operated. Such information should be complete enough to supply a reasonable basis for indicating the kinds of services involved, i.e., whether the services are indispensable, highly desirable but not absolutely essential, or desirable but not important enough for their elimination to cause great inconvenience or hardships. Furthermore, it should be reasonably adequate to determine whether each of the services rendered under specific situations contributes enough to the satisfaction of informed consumers to make them willing to pay the necessary costs of rendering it, and

to indicate feasible means for improving the efficiency and reducing the costs of these services. Limitations of the available information make it necessary to confine suggestions for reducing cotton-manufacturers' margins or costs to rather broad generalizations.

Cotton manufacturers' costs could be reduced considerably in many instances by the use of improved long-draft and high-speed spinning equipment. The use of such equipment facilitates processing and improves the quality of the yarns. Information available indicates that about one-half of the cotton textile industry of the United States already has installed this equipment and that a substantial proportion of the other mills could use this equipment to good advantage. Reductions in costs from the use of these more modern types of equipment are conservatively estimated to be about 10 percent as compared with regular draft equipment.

Information on the relationship of size of textile investments to costs, expenses, and profits or losses per dollar of sale do not indicate great possibilities for reducing costs or margins by changes in the size of the manufacturing establishments. Data for 113 cotton-spinning companies grouped by size of textile investment and type of yarn manufactured show that the net profits per dollar of sale increased somewhat with the size of the textile investment but the differences were somewhat irregular and not very great (table 32).[47] Similar data for 264 combined spinning and weaving companies for the same period show no consistent relationship between the size of the textile investment and net profits per dollar of sale. Although these data may not be conclusive they do not offer much basis for a hope that any very great reductions in mill margins can be brought about simply by increasing the size of the manufacturing establishments.

Information on the relationship between rate of mill operation and cost per pound of producing gray goods indicates that at times, particularly when the rate of mill operations is very low, substantial reductions in these costs might be brought about by using the mills to more nearly full capacity. Data on rate of mill operations and on costs per pound of producing gray goods in 1931–32 show that when the rate of mill operations was reduced from about 95 percent to about 66 percent of capacity, total costs per pound of producing gray goods were increased from 17.05 cents to 20.84 cents or by about 22 percent (table 33). A reduction in rate of mill operation from about 66 percent to about 24 percent of capacity was associated with an increase in costs of production from 20.84 cents to 31.06 cents or an increase of about 50 percent. The amount and also the proportion of the total represented by fixed costs increased markedly with decreases in rate of mill activity. Some indications of the variation in the proportion of mill capacity utilized may be obtained from data showing that, on an 80-hour week basis, the percentage of mill activity ranged from 38 in September 1934 to 138 in May 1942 (*22*). Yearly averages ranged from 57 percent of capacity in 1934–35 to 131 percent in 1931–32.

Means of increasing the proportion of available mill capacity utilized may include stepping up total production or reducing the amount of available capacity. Increases in total production as a

[47] United States Federal Trade Commission. See footnote 40, p. 49. See Appendix Table II.

TABLE 32.—*Costs, margins, and profits for manufacturing cotton yarns and fabrics per dollar of sales, by kind of product and by size of textile investment, during the first half of 1936.*

Product and size of textile investment	Companies	Total sales	Raw material costs	Gross margin	Other expenses and profits: Labor	Other mills	Selling administrative and general	Net Profits
	No.	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Yarns—all classes:								
Less than $100,000	16	100.0	53.9	46.1	22.8	14.3	8.7	0.3
$ 100,000 to $ 199,999	24	100.0	52.4	47.6	22.2	13.8	8.1	3.5
$ 200,000 to $ 399,999	28	100.0	48.6	51.4	23.5	17.1	7.9	2.9
$ 400,000 to $ 799,999	22	100.0	49.1	50.9	24.3	15.5	7.7	3.4
$ 800,000 to $1,599,999	16	100.0	47.5	52.5	24.9	16.0	6.1	5.5
$1,600,000 to $3,199,999	4	100.0	43.0	57.0	23.8	18.7	5.6	8.9
$3,200,000 to $6,399,999	3	100.0	43.4	56.6	25.0	19.9	6.3	5.4
All companies	113	100.0	47.6	52.4	24.2	16.7	7.0	4.5
Carded yarns:[1]								
Less than $100,000	11	100.0	54.8	45.2	22.0	13.9	7.6	1.7
$ 100,000 to $ 199,999	17	100.0	54.8	45.2	21.6	12.8	8.2	2.6
$ 200,000 to $ 399,999	15	100.0	52.7	47.3	21.6	16.5	6.9	2.3
$ 400,000 to $ 799,999	10	100.0	51.7	48.3	23.4	14.4	7.5	3.0
$ 800,000 to $1,599,999[2]	5	100.0	49.8	50.2	20.9	15.3	7.0	7.0
All companies	58	100.0	52.2	47.8	21.8	14.8	7.4	3.8
Combed yarns:[1]								
Less than $400,000	8	100.0	41.9	58.1	26.2	18.1	9.0	4.8
$ 400,000 to $ 799,999	4	100.0	47.7	52.3	21.8	14.7	9.2	6.6
$ 800,000 to $1,599,999	3	100.0	44.4	55.6	24.9	17.2	4.0	9.5
$1,600,000 to $6,399,999	4	100.0	41.0	59.0	24.4	20.5	6.7	7.4
All companies	19	100.0	42.6	57.4	24.3	18.9	7.0	7.2
Woven goods—all classes:								
Less than $100,000	7	100.0	44.0	56.0	27.7	22.5	6.4	[4].6
$ 100,000 to $ 199,999	8	100.0	43.8	56.2	27.6	15.7	5.8	7.1
$ 200,000 to $ 399,999	35	100.0	45.2	54.8	28.7	18.5	5.0	2.6
$ 400,000 to $ 799,999	64	100.0	45.0	55.0	28.4	18.3	5.5	2.8
$ 800,000 to $1,599,999	57	100.0	44.4	55.6	28.9	19.2	5.1	2.4
$1,600,000 to $3,199,999	40	100.0	47.4	52.6	26.3	17.4	5.1	3.8
$3,200,000 to $6,399,999	31	100.0	45.4	54.6	24.3	19.4	6.3	4.6
$6,400,000 to $12,799,999	10	100.0	44.3	55.7	28.1	20.2	5.0	2.4
$12,800,000 or more	6	100.0	43.8	56.2	24.3	18.7	5.4	7.8
All companies	264	100.0	45.1	54.9	26.3	18.8	5.4	4.4
Fine cotton goods:								
$ 200,000 to $ 399,999	4	100.0	44.2	55.8	35.8	13.6	4.1	2.3
$ 400,000 to $ 799,999	4	100.0	27.2	72.8	45.2	21.0	6.7	[4].1
$ 800,000 to $1,599,999	7	100.0	31.1	68.9	40.1	21.5	4.6	2.7
$1,600,000 to $3,199,999	4	100.0	42.8	57.2	30.1	15.7	4.6	6.8
$3,200,000 to $6,399,999[5]	3	100.0	33.2	66.8	37.3	18.9	4.0	6.6
All companies	22	100.0	34.9	65.1	36.9	18.5	4.5	5.2
Sheetings:								
Less than $200,000	3	100.0	56.5	43.5	25.4	16.2	6.1	[4]4.2
$ 200,000 to $ 399,999	4	100.0	55.7	44.3	21.8	12.8	4.0	5.7
$ 400,000 to $ 799,999	11	100.0	46.9	53.1	23.4	16.6	4.3	8.8
$ 800,000 to $1,599,999	5	100.0	44.0	56.0	24.1	19.5	4.5	7.9
$1,600,000 to $3,199,999	3	100.0	45.0	55.0	28.2	21.0	4.1	1.7
$3,200,000 to $12,799,999[6]	4	100.0	40.5	59.5	20.1	25.3	6.2	7.9
All companies	30	100.0	44.2	55.8	22.9	21.2	5.1	6.6

[1] Yarns coarser than 40's.
[2] Includes one company with textile investment of about $1,600,000.
[3] Both coarse and fine yarns.
[4] Loss.
[5] Includes one company with a textile investment of about $11,000,000.
[6] Includes one company with a textile investment of more than $2,500,000.
Abstracted from a report of the United States Federal Trade Commission. See footnote 40, p. 49.

TABLE 33.—*Rate of cotton mill operation and costs of producing gray goods, 1931-32.*

Item	13 weeks ended—		
	Nov. 28, 1931	April 30, 1932	June 30, 1932
	Percent	*Percent*	*Percent*
Capacity operated[1]	94.81	66.40	23.57
Expense:			
Total	100.00	100.00	100.00
Fixed, total	32.30	40.45	63.81
Fixed, out-of-pocket	16.49	20.53	32.18
	Cents	*Cents*	*Cents*
Cost per pound:			
Total	17.05	20.84	31.06
Fixed, total	5.50	8.43	19.81
Fixed, out-of-pocket	2.81	4.28	9.99

[1] 100 percent operation involved an average operation of about 55 hours a week for each department in the plant.
Abstracted from Madigan (*12*).

result of using larger proportions of total mill capacity tend to reduce prices and/or build up mill stock. Whether it would be profitable and feasible to increase the rate of mill operations and increase total output would depend largely upon whether the advantages of reductions in per unit costs of production would equal or exceed the disadvantages of consequent reductions in prices or the accumulation of stocks. The advisability of increasing the proportion of total capacity utilized for the mills operated, without increasing the total quantity produced, by reducing the number operated would depend upon whether the advantages of reduction in per unit costs for the mills operated would equal or exceed the losses from scrapping or leaving idle the unused mills. Additional information regarding each of these considerations would be needed as a basis for specific recommendations.

Data on the items included in manufacturers' margins indicate that, on the average, labor accounts for almost one-half of the total costs of converting raw cotton into gray goods. The proportions of the total costs accounted for by wages emphasize the importance of making use of every feasible means of increasing the efficiency and of reducing the per unit costs of labor. Reports on average hourly earnings in the Northern and Southern regions of the cotton-textile industry indicate that in 1936–37 hourly earnings in the Northern region averaged about 22.5 percent more than in the Southern region (*18*). Similar data for more recent years show that in September 1940 hourly earnings of Northern workers averaged almost 22 percent and in April 1941 they averaged almost 27 percent more than those for Southern workers (*19*). Reports on hourly earnings of cotton-textile workers by types of mill, yarn, and fabrics and by kind of worker and for specific kinds of work indicate that average hourly earnings in Northern States were in each instance substantially higher than in Southern States (tables 34 and 35).

Higher average hourly earnings of textile workers in the North than in the South, unless offset by differences in productivity, would indicate higher labor costs per unit of product in the North than in the South. Limited data on costs of manufacturing wide sheeting, for example, in Northern and Southern mills in 1941 indicate that the proportion of the wholesale prices of the sheeting accounted for

TABLE 34.—*Average hourly earnings of cotton textile workers in the North and in the South, by type of mill, yarn, and fabric and by kind of worker, September 1940.*

Type of mill, yarn, and fabric	Kind of worker							
	Total		Skilled		Semiskilled		Unskilled	
	North	South	North	South	North	South	North	South
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Yarn mills:								
Independent	44.5	35.6	55.4	42.7	44.7	35.3	38.2	32.8
Integrated	43.7	37.7	56.5	48.9	43.6	37.2	37.3	33.4
Coarse carded	44.3	38.0	50.7	49.0	43.7	37.6	39.0	33.5
Medium carded	44.6	37.2	58.1	48.4	44.7	36.5	37.6	33.0
Fine combed	43.2	38.8	53.3	50.6	43.3	38.2	36.2	34.2
Wide woven fabrics	44.8	40.8	54.0	47.9	40.1	36.1	36.0	34.1
Fine woven goods	49.0	41.4	57.5	49.2	41.1	36.7	35.8	33.7

Abstracted from *Hours and Earnings in Manufacture of Cotton Goods, September 1940 and April 1941* (*19*).

TABLE 35.—*Average hourly earnings of cotton goods workers by regions, by sex, and by occupation, September 1940.*

Occupation	Male		Female	
	North	South	North	South
	Cents	*Cents*	*Cents*	*Cents*
Skilled:				
Weavers	54.9	44.4	50.5	42.8
Semiskilled:				
Spinners, frame	46.3	40.1	43.4	35.6
Speed tenders	47.9	39.6	43.9	39.3
Trimmers and inspectors	43.4	36.1	36.5	34.2
Unskilled:				
Cleaners, machinery	36.0	33.2	35.7	33.3
Filling and battery hands	37.1	33.5	36.3	33.6
Sweepers and scrubbers	36.9	32.7	35.8	32.4

Abstracted from *Hours and Earnings in Manufacture of Cotton Goods*, September 1940 and April 1941 (*19*).

by labor costs averaged considerably greater for Northern than for Southern mills. But even if these differences in average hourly earnings and in per unit costs of labor are fairly typical of the normal differences between regions, it is not known to what extent it would be either feasible or desirable to reduce manufacturers' margins by shifts in production to the South as a means of cutting down labor costs. The rapid growth of the cotton-manufacturing industry in the South and the relative decline of this industry in the North may be significant in this connection (*22*).

IMPORTANCE OF REDUCTIONS IN COSTS

An indication of the relative importance of reducing cotton-manufacturers' margins or costs is the fact that in 1939 these margins averaged more than twice the returns to cotton growers for farm production of the cotton used, about six times the costs of ginning and baling the cotton and rendering all the services incident to taking the cotton from gins and delivering it to mills, and about one-sixth of the retail price of the finished cotton clothing and household goods to consumers. Margins for manufacturing wages alone amounted to more than the returns to growers for farm pro-

duction of the cotton and to more than two times the margins for ginning and merchandising the cotton. In other words, a reduction of 10 percent in cotton-manufacturers' margins would amount to more than a reduction of 50 percent in the combined margin for ginning and merchandising the cotton and to more than an increase of 20 percent in returns to growers for farm production, but it would amount to less than 2 percent of the retail value of the finished goods.

WOOL MANUFACTURERS' MARGINS

Wool-manufacturing establishments include woolen and worsted manufacturers and carpets and rugs, wool, and carpet-yarn manufacturers. Woolen and worsted manufacturing establishments are primarily engaged in scouring or carbonizing wool; combing tops on worsted combs from wool, rayon, or other fiber; spinning, twisting, winding, or beaming yarns spun on woolen and worsted systems of spinning; weaving fabrics and related products, other than carpets and rugs, wholly or in part from yarns spun on the woolen and worsted systems, or from horsehair or other hairs; and dyeing and finishing woolen and worsted fabrics woven wholly or in part from yarns spun on the woolen and worsted system, or in dyeing wool, top, or yarns spun on the woolen or worsted systems other than carpet and rug yarns (*21*).

Carpets and rugs, wool, and carpet-yarn manufactures include establishments primarily engaged in the weaving of carpets and rugs, wholly or in part of yarns spun on the woolen and worsted system and in spinning, in the woolen system of yarns for use, in the manufacture of carpets and rugs (*21*). Hat bodies and hat manufactures include those establishments primarily engaged in the manufacture of hat bodies and hats made chiefly of wool, wool shoddy, and hatters' fur.

Woolen and worsted manufactures in 1939, according to census reports, consumed 342 million pounds of raw fibers, 194 million pounds of tops, and 161 million pounds of other materials. Wool made up about 87 percent of the raw fibers, 88 percent of the tops, and 28 percent of the other materials. Carpets and rugs, wool, and carpet-yarn manufactures consumed in 1939 about 121 million pounds of raw fibers, 6 million pounds of tops, 6 million pounds of other materials, and 197 million pounds of yarn. Hat bodies and hat manufactures consumed in 1939 about 2.6 million pounds of raw fibers and about 5.4 million pounds of noils and waste.

Production of yarns by woolen and worsted manufactures in 1939 totaled about 487 million pounds, of which 394 million pounds were for the manufacturers' own use, 16 million pounds were produced on commission from materials owned by others, and 77 million pounds were produced for sale. Of the total, about 85 percent was weaving yarns other than carpet, 14 percent was machine knitting yarns, and 1 percent was hand knitting yarns. Woven goods produced by woolen and worsted manufacturers in 1939 totaled 366 million pounds of which 290 million pounds or about 80 percent were apparel yarns.

Census reports on the distribution of manufacturers' sales in 1939 show that the total value of the products sold was 606 million dollars for woolen and worsted manufactures, 27 million dollars

for dyeing and finishing establishments, 138 million dollars for manufactures of wool carpet and rugs, 19 million dollars for manufactures of carpet yarns, 16 million dollars for wool hat bodies and hats, and 40 million dollars for fur hat bodies and hats (table 36). Data on market outlets for these products show that most of them went to industrial users and to wholesalers and jobbers. About 10 percent of the products of woolen and worsted manufacturers and about 28 percent of the carpets and rugs were sold to or through the manufacturers' own branches or offices. Retailers, including chains, supplied outlets for 5 percent of the products of woolen and worsted manufacturers, almost 8 percent of those for dyeing and finishing establishments, and almost 22 percent for carpets and rug manufacturers.

Charges or Costs

The margins, or the spread between the value of the products and the costs of materials, supplies, and containers, in 1939 averaged about 41 percent of the value of the products for woolen and worsted manufactures, 58 percent for manufactures of wool carpets and rugs, 42 percent for manufactures of carpet yarns, 50.6 percent for manufactures of hat bodies and hats made of wool felt, and 59.4 percent for manufactures of hat bodies and hats made of fur felt (*21*). Margins for woolen and worsted manufacturers primarily engaged in production on a contract basis from materials owned by others averaged almost 90 percent of the value of products.

Data assembled by the Federal Trade Commission on 22 corporations primarily engaged in weaving fabrics and related products, other than carpets and rugs, wholly or in part from yarns spun on the woolen or worsted systems or from horsehair or other hair; in spinning yarns on woolen or worsted systems and twisting, winding, or beaming these yarns; and in dyeing and finishing such yarns and fabrics show that in 1939 the margins averaged 48.7 percent of total sales. Sales by these corporations in 1939 amounted to about 35 percent of the total value of such products reported by the Bureau of the Census. Similar data for 44 corporations in 1940, with a volume of sales equal to about one-half the value of products reported by the Bureau of the Census for 1939, showed an average margin of 42.5 percent of total sales.

Reports of the Federal Trade Commission on 7 corporations engaged primarily in weaving carpets and rugs wholly or in part of yarns spun on woolen or worsted systems and accounting for more than one-half of the total value of the sales of these products reported by the Bureau of the Census in 1939, show that the margins averaged 65.4 percent of total sales. Similar data for 21 corporations in 1940 show that the margin averaged 60.6 percent of total sales.

Data for individual corporations show that manufacturers' margins for about 17 percent of the corporations amounted to less than 30 percent of net sales and that margins for almost 13 percent of the corporations amounted to more than 55 percent of net sales. Margins for more than two-thirds of the corporations in 1939 came within the range of 40 to 60 percent of net sales and margins for

TABLE 36.—*Distribution of manufacturers' sales of wool products, United States, 1939.*

Item	Establishments reported	Distributed sales total	Proportion of sales made through —					
			Own wholesale offices	Wholesalers and jobbers	Industrial users[1]	Retailers, including chains	Other	All
	Number	*1,000 dollars*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Woolen and worsted:								
Manufacturers	549	606,398	[2]10.1	24.4	60.0	5.0	0.5	100.0
Dyeing and finishing	14	26,948	([3])	[3]67.9	[4]24.4	7.7	—	100.0
Manufacturers of:								
Carpets and rugs—wool	43	138,182	[5]28.3	[6]43.1	[7] 6.8	21.8	—	100.0
Carpet yarn, woolen and worsted	13	19,463	—	7.2	[4]92.8	—	—	100.0
Hat bodies and hats:								
Wool felt	12	15,904	19.7	[8]53.5	[4]26.8	([8])	—	100.0
Fur felt	40	39,786	([2])	[3]19.2	[7]23.6	53.8	3.4	100.0

[1] Also includes commercial, professional, and institutional users (manufacturers, railroads, utilities, governmental bodies, hotels, contractors, etc.)
[2] Includes a small quantity sold in retail stores.
[3] Sales to or through own wholesale branches or offices combined with sales to wholesalers and jobbers to avoid disclosure.
[4] Interplant transfers included to avoid disclosure.
[5] Sales to or through own retail stores combined with sales to or through own wholesale branches or offices to avoid disclosure.
[6] Sales to export intermediaries combined with sales to wholesalers and jobbers to avoid disclosure.
[7] Sales to consumers at retail and interplant transfers combined with sales to industrial users to avoid disclosure.
[8] Sales to retailers combined with sales to wholesalers and jobbers to avoid disclosure.

Abstracted from Bureau of the Census, *Distribution of manufacturers' sales:* 1939 (*28*).

about three-fourths of the corporations in 1940 came within the range of 35 to 60 percent of net sales.

Woolen and worsted manufacturers' margins vary with the manufacturing processes and with the kind of products turned out. A report on the woolen and worsted textile industry for the last half of 1935 shows that margins for 59 spinning companies averaged 40.1 percent; those for 27 weaving companies, 32.8 percent; and those for 153 combined spinning and weaving companies, 53.4 percent of net sales.[48] Margins for 10 companies spinning woolen yarns averaged 39.4 percent and those for 22 companies spinning worsted yarns averaged 37.5 percent. The margins for combined spinning and weaving companies averaged 51.9 percent for 4 companies making men's worsted wear, 57.4 percent for 8 companies making men's woolen wear, and 53.3 percent for 11 companies making women's woolen wear.

Information on selling prices, costs, and margins for wool tops shows that during the second quarter of 1942 manufacturers' margins, or the spread between the costs of the raw wool and the selling price of the tops, averaged about 31 percent of the selling price. These proportions were fairly uniform from one grade to another. Data on selling prices of the finished fabrics and on costs of the yarns used in the manufacture of specialized worsted fabrics show that during the third quarter of 1942 manufacturers' margins averaged about 37 percent of the average selling price and ranged from less than 32 percent for some fabrics to more than 45 percent for others. Similar data on selling prices of woven woolen fabrics and on costs of the raw materials used show that manufacturers' margins averaged almost 56 percent of the selling price of the finished fabrics.

Items Included in Margins

Information on the relative importance of the items included in wool manufacturers' margins shows that in 1939 salaries and wages made up more than one-half of the margins, or the spread between the costs of materials, supplies, and containers and the value of the products, for manufacturers of woolen and worsted, wool carpets and rugs, woolen and worsted carpet yarn, and wool-felt hat bodies and hats (table 37). Manufacturing wages alone accounted for 47.7 percent of the margin and 19.5 percent of the value of the products for woolen and worsted manufacturers, 36.9 percent of the margin and 21.5 percent of the value of the products for wool carpet and rug manufacturers, 41.6 percent of the margin and 17.5 percent of the value of the products for carpet yarn manufacturers, and almost 52 percent of the margin and 26.3 percent of the value of the products for manufacturers of wool hat bodies and hats. Salaries, distribution, fuel, purchased electric energy, and contract work, each accounted for relatively small proportions of the margin. Other costs including depreciation, interest, insurance, rent, taxes, profits, and others, in the aggregate made up a larger proportion of the total costs but details for these items are not shown in census reports.

[48] United States Federal Trade Commission. TEXTILE INDUSTRIES IN THE LAST HALF OF 1935. PT. II. THE WOOLEN AND WORSTED TEXTILE INDUSTRY. 1936. [Processed.]

TABLE 37.—*Values, costs, and margins for woolen and worsted, carpets and rugs, carpet yarn, and hat bodies and hat manufacturers, United States, 1939.*

Item	Woolen and worsted		Carpets and rugs, wool	Carpet yarn, woolen and worsted	Hat bodies and hats	
	Regular factories	Contract factories			Wool felt	Fur felt
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Value of products	685,312	13,157	140,338	19,983	16,010	39,501
Costs of materials, supplies, and containers	405,547	[1]1,349	58,555	[1]11,579	7,912	16,053
Gross margin	279,765	11,808	81,783	8,404	8,098	23,448
Salaries and wages:						
Salaried officers	6,682	544	1,189	239	91	654
Manufacturing salaries	16,239	782	4,609	480	479	1,540
Manufacturing wages	133,488	6,061	30,144	3,500	4,219	11,837
Distribution	2,611	66	2,204	12	102	947
Other	278	24	95	3	21	110
Fuel	8,359	419	1,412	138	178	626
Purchased electric energy	4,106	320	498	153	84	183
Contract work	4,338	(1)	600	(1)	.....	125
Other[2]	103,564	3,583	41,032	3,879	2,933	7,436
	Proportion of value of product					
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Value of products	100.0	100.0	100.0	100.0	100.0	100.0
Costs of materials, supplies, and containers	59.2	[1]10.3	41.7	[1]57.9	49.4	40.6
Gross margin	40.8	89.7	58.3	42.1	50.6	59.4
Salaries and wages:						
Salaried officers	1.0	4.1	.8	1.2	.6	1.6
Manufacturing salaries	2.4	5.9	3.3	2.4	3.0	3.9
Manufacturing wages	19.5	46.1	21.5	17.5	26.3	30.0
Distribution	.4	.5	1.6	.1	.6	2.4
Other	(3)	.2	.1	(3)	.1	.3
Fuel	1.2	3.2	1.0	.7	1.1	1.6
Purchased electric energy	.6	2.5	.4	.8	.5	.5
Contract work	.6	(1)	.4	(1)	.....	.3
Other	15.1	27.2	29.2	19.4	18.4	18.8
Number of establishments	583	76	43	18	12	43

[1] "Contract work" included in "costs of materials, supplies, and containers."
[2] Includes depreciation, interest, insurance, rent, taxes, profits, and other expenses.
[3] Less than 0.05 percent.
Adapted from *Census of Manufactures:* 1939 (*21*).

Reports of the Federal Trade Commission presenting data on total sales and costs for woolen- and worsted-manufacturing corporations in 1939 and 1940 show that production wages and salaries amounted to 20.5 percent of net sales and to 42.2 percent of manufacturers' margins in 1939 and to 21.2 percent of total sales and to about half of manufacturers' margins in 1940 (table 38). Depreciation, taxes, and social security payments totaled about 8.6 percent of the margin in 1939 and 7.3 percent in 1940. Selling expenses amounted to 3.7 percent of total sales and to 7.7 percent of manufacturers' margins in 1939 and to 3.6 percent of total sales and 8.4 percent of the margins in 1940. Advertising costs were 0.3 percent and net profits about 6 percent of net sales in 1939 and 1940. The amounts for other items are shown in table 38.

The items included in manufacturers' margins expressed as proportions of total sales varied considerably from one corporation to another. Data for the corporations reported for 1939 and those reported for 1940 show that wages and salaries ranged from less than 10 percent of total sales for some corporations to more than 30 percent for others. Similarly, depreciation ranged from less than 0.5

percent to more than 4 percent, selling expenses from less than 2 percent to more than 6 percent, administrative and general office expenses from less than 1 percent to more than 5 percent, and net profits or losses from losses of more than 2 percent to net profits of more than 10 percent.

TABLE 38.—*Sales, costs, and margins for woolen and worsted-manufacturing corporations, United States, 1939 and 1940.*

Item	1939		1940	
	1,000 dollars	*Percent*	*1,000 dollars*	*Percent*
Total sales	253,865	100.0	369,488	100.0
Material costs—direct	130,261	51.3	212,410	57.5
Gross margin	123,604	48.7	157,078	42.5
Production wages and salaries	52,143	20.5	78,255	21.2
Depreciation	5,475	2.2	5,384	1.5
Taxes and social security	5,170	2.0	6,053	1.6
Other operating expense[1]	30,684	12.1	22,511	6.1
Goods purchased for resale	25	(2)	314	.1
Selling expense	9,461	3.7	13,135	3.5
Advertising	656	.3	1,179	.3
Administrative and general office	4,746	1.9	7,790	2.1
Provisions for uncollectable accounts	170	.1	257	.1
Net profits	15,074	5.9	22,200	6.0

[1] Includes costs of repair and maintenance and research and development expense.
[2] Less than 0.05 percent.

Adapted from reports of United States Federal Trade Commission, on Woolen and Worsted Manufacturing Corporations published April 22, 1941 and November 10, 1942.

The relative importance of the items included in manufacturers' margins varies considerably with the operations involved and with the kind of products turned out. Results of a special study made of the woolen and worsted textile industry by the Federal Trade Commission show that during the last half of 1935 labor costs amounted to 20 percent of net sales and to about one-half of manufacturers' margins for spinning companies, 16.5 percent of net sales and about one-half of the margins for weaving companies, and 25.1 percent of net sales and 47 percent of the margins for combined spinning and weaving companies.[49] Selling expenses and bad debts ranged from 2.3 percent of net sales for spinning companies to 4.7 percent for combined spinning and weaving companies, and net profits ranged from 2.2 percent of net sales for weaving companies to 7.1 percent for combined spinning and weaving companies. Similar data for other items are shown in table 39.

Data on selling prices, costs, and profits for companies producing specified kinds of yarns and fabrics show that during the last half of 1935 labor costs ranged from 17.5 percent of the selling price for companies spinning worsted yarns and those weaving worsted cloth to 29.6 percent for combined spinning and weaving companies that produced men's woolen wear fabrics (table 40). The proportion of the manufacturers' margins accounted for by labor costs ranged from about 45 percent for combined spinning and weaving companies that produced women's wear fabrics to 55 percent for weaving companies that produced worsted cloth. Selling expenses and bad debts ranged from 1.5 percent of the selling price for spinning companies that produced worsted yarn to 5.6 percent for combined spinning and weaving companies that produced men's woolen-wear

[49] Federal Trade Commission. See footnote 48, p. 73.

TABLE 39.—*Net sales, costs, and margins for woolen and worsted textile companies, July-December 1935.*

Item	Kind of company					
	Spinning		Weaving stock	Combined spinning and weaving		All
	Stock	Commission		Stock	Commission	
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Net sales	40,471	431	11,236	187,510	244	239,892
Raw material costs[1]	24,223	29	7,556	87,379	(2)	119,187
Gross margins[1]	16,248	402	3,680	100,131	244	120,705
Labor	8,093	255	1,855	47,027	148	57,378
Fuel and power	723	33	117	3,689	14	4,576
Dyes and chemicals	403	3	89	5,576	5	6,076
Property taxes	337	1	57	1,875	2	2,272
Depreciation	486	8	105	3,427	19	4,045
Other mill expense[3]	2,253	25	424	11,241	37	13,980
Selling and bad debts	934	(2)	442	8,813	5	10,194
Other general expense[4]	1,142	8	346	5,120	12	6,628
Net profit	1,877	69	245	13,363	2	15,556
	Proportion of net sales					
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Net sales	100.0	100.0	100.0	100.0	100.0	100.0
Raw material costs[1]	59.9	6.7	67.2	46.6	(5)	49.7
Gross margins[1]	40.1	93.3	32.8	53.4	100.0	50.3
Labor	20.0	59.2	16.5	25.1	60.7	23.9
Fuel and power	1.8	7.6	1.1	2.0	5.8	1.9
Dyes and chemicals	1.0	.7	.8	3.0	2.0	2.5
Property taxes	.8	.2	.5	1.0	.8	.9
Depreciation	1.2	1.9	.9	1.8	7.8	1.7
Other mill expense[3]	5.6	5.8	3.8	6.0	15.2	5.8
Selling and bad debts	2.3	(5)	3.9	4.7	2.0	4.3
Other general expense[4]	2.8	1.9	3.1	2.7	4.9	2.8
Net profit	4.6	16.0	2.2	7.1	.8	6.5
Number of companies	59	4	27	153	5	248

[1] Adjustments were made for changes in inventory.
[2] Less than $500.
[3] Includes mill overhead, processing tax, and amounts paid other companies for spinning, weaving, dyeing, finishing, or manufacturing operations performed for reporting companies, but not general and administrative expenses.
[4] Includes officers' and directors' salaries, commissions and bonuses, and other administrative and general expenses.
[5] Less than 0.05 percent.

Based on a report of the United States Federal Trade Commission. See footnote 48, p. 73.

fabrics. Profits ranged from 2 percent of the selling price for spinning companies that spun woolen yarns to 11.9 percent for combined spinning and weaving companies that produced men's worsted-wear fabrics. Similar data for other items are shown in table 40.

Data on selling prices, costs, and margins for wool tops during the second quarter of 1942 show that almost 70 percent of the top makers' margins were accounted for by conversion costs, more than 9 percent by overhead, general, and administrative expenses, and about 21 percent by other items (table 41). About 8.5 percent of the top makers margins was accounted for by sorting, 31.6 percent by combing, 15.5 percent by losses on noils, 11 percent by losses on wastes, and almost 3 percent by losses on off sorts.

Information on net selling prices, costs, and profits for manufacturers of specified woolen fabrics during the third quarter of 1942 shows that about 27 percent of the manufacturers' margins was

TABLE 40.—*Selling price, costs, and margin per pound of woolen and worsted yarns and fabrics for products of specified kinds of mills, July-December 1935.*

Item	Kind of company					
	Spinning		Weaving worsted cloth	Combined spinning and weaving		
	Woolen yarn	Worsted yarn		Men's worsted wear	Men's woolen wear	Women's woolen wear
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Selling price	47.12	125.15	168.13	193.07	118.36	105.17
Raw material costs	28.57	78.28	114.55	92.92	50.47	49.09
Gross margins	18.55	46.89	53.58	100.15	67.89	56.08
Labor	9.42	21.85	29.48	45.70	35.05	25.28
Fuel and power	.82	2.12	2.03	4.13	2.02	2.45
Dyes and chemicals	.33	.97	1.80	4.44	4.64	4.51
Property taxes	.21	1.21	.88	2.47	1.01	1.32
Depreciation	.76	1.26	1.53	2.98	2.14	1.24
Other mill expense[1]	2.88	5.93	4.21	6.56	8.37	5.17
Selling and bad debts	.88	1.91	5.97	5.87	6.64	4.76
Other general expense[2]	2.29	4.12	4.09	5.05	2.93	5.82
Net profit	.96	7.52	2.09	22.95	4.49	5.53
	Proportion of selling price					
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Selling price	100.0	100.0	100.0	100.0	100.0	100.0
Raw material costs	60.6	62.5	68.1	48.1	42.6	46.7
Gross margins	39.4	37.5	31.9	51.9	57.4	53.3
Labor	20.0	17.5	17.5	23.7	29.6	24.0
Fuel and power	1.8	1.7	1.2	2.1	2.2	2.3
Dyes and chemicals	.7	.8	1.1	2.3	3.9	4.3
Property taxes	.4	1.0	.5	1.3	.9	1.3
Depreciation	1.6	1.0	.9	1.5	1.8	1.2
Other mill expense[1]	6.1	4.7	2.5	3.4	7.1	4.9
Selling and bad debts	1.9	1.5	3.6	3.1	5.6	4.5
Other general expense[2]	4.9	3.3	3.0	2.6	2.5	5.5
Net profit	2.0	6.0	1.6	11.9	3.8	5.3
Number of companies	10	22	14	4	8	11

[1] Includes mill overhead and amounts paid other companies for spinning, weaving, dyeing, finishing, or other manufacturing operations performed for reporting companies but does not include general and administrative expenses.

[2] Includes payments to officers and directors and other administrative and general expenses.

Abstracted from or based on a report of United States Federal Trade Commission. See footnote 48, p. 73.

accounted for by costs of converting raw materials to yarn, about 5 percent by yarn preparation, almost 20 percent by weaving, almost 4 percent by burling and mending, 14 percent by dyeing and finishing, about 11 percent by selling expense, and 19 percent by other costs and profits (table 42). Similar data for worsted fabrics show that about 7 percent of the manufacturers' margins was accounted for by yarn preparation, almost 21 percent by weaving, 12 percent by burling and mending, 21 percent by dyeing and finishing, almost 11 percent by selling expense, and 28 percent by other costs and profits (table 43).

Combined data for woolen and worsted fabrics show that during the third quarter of 1942 labor costs amounted on the average to about 19 percent of the net selling price and to 37 percent of the manufacturers' margins. Overhead costs amounted to 12 percent of net sales and to 24 percent of the margin. Costs of dyestuffs, losses on seconds, and selling and other costs combined amounted to 9 percent of net sales and to 18 percent of manufacturers' margins. Profits amounted to 11 percent of net sales and 22 percent of the manufacturers' margins.

TABLE 41.—*Average selling price per pound, costs, and margins for wool tops, United States, second quarter, 1942.*

Item	Grades					
	64's	62's	58's	56's	Other	All
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Average selling price	1.564	1.489	1.239	1.238	1.436	1.483
Average cost of wool	1.074	1.024	.880	.875	.995	1.024
Gross margin	.490	.465	.359	.363	.441	.459
Conversion costs—total	.342	.331	.265	.264	.297	.319
Sorting	.023	.021	.017	.022	.017	.039
Combing	.154	.157	.140	.124	.158	.145
Loss on noils	.090	.076	.052	.066	.064	.071
Loss on wastes	.058	.064	.052	.052	.046	.051
Loss on off sorts	.017	.013	.004	----	.012	.013
Overhead, general, and administrative	.042	.043	.030	.033	.043	.042
Other	.106	.091	.064	.086	.101	.098
	Proportion of average selling price					
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Average selling price	100.0	100.0	100.0	100.0	100.0	100.0
Average cost of wool	68.7	68.8	71.0	70.7	69.3	69.0
Gross margin	31.3	31.2	29.0	29.3	30.7	31.0
Conversion costs—total	21.8	22.2	21.4	21.3	20.7	21.5
Sorting	1.5	1.4	1.4	1.8	1.2	2.6
Combing	9.8	10.5	11.3	10.0	11.0	9.8
Loss on noils	5.7	5.1	4.2	5.3	4.5	4.8
Loss on wastes	3.7	4.3	4.2	4.2	3.2	3.4
Loss on off sorts	1.1	.9	.3	----	.8	.9
Overhead, general, and administrative	2.7	2.9	2.4	2.7	3.0	2.9
Other	6.8	6.1	5.2	5.3	7.0	6.6
Number of reports	50	27	4	5	43	129

Computed from primary data assembled by the United States Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

TABLE 42.—*Selling price, costs, and margins for woven woolen fabrics, United States, third quarter, 1942.*

Item	Fabrics reported	Selling price	Material costs	Gross margin	Conversion to yarn	Yarn preparation	Weaving	Burling and mending	Finishing and dyeing	Selling expense	Other
	No.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct*
Men's wear—all	53	100.0	45.4	54.6	17.1	3.0	11.3	1.8	7.5	5.6	8.3
Covert	1	100.0	58.1	41.9	18.6	1.8	12.4	1.7	6.9	1.4	1.9
Mackinaw	8	100.0	50.0	50.0	22.4	3.1	10.1	1.1	5.7	5.3	2.3
Officer's uniforms	3	100.0	40.7	59.3	18.7	2.9	16.1	2.3	6.5	11.1	1.7
Overcoating	6	100.0	43.4	56.6	19.2	3.2	9.7	1.2	8.1	4.4	10.8
Snow suiting	3	100.0	58.1	41.9	10.2	2.4	12.9	1.1	5.1	5.8	4.4
Sports jackets	1	100.0	45.5	54.5	20.8	1.4	8.4	2.0	8.0	8.5	5.4
Suiting	27	100.0	44.0	56.0	15.6	3.1	11.1	2.0	8.5	4.7	11.0
Topcoating	4	100.0	50.0	50.0	14.8	2.7	8.7	1.6	5.8	4.7	11.7
Women's wear—all	55	100.0	42.3	57.7	13.0	2.8	10.1	2.4	8.3	7.6	13.5
Coating	25	100.0	40.9	59.1	12.7	3.0	9.3	2.1	7.9	8.4	15.7
Dress goods	9	100.0	42.7	57.3	13.8	2.3	13.4	1.5	9.6	7.8	8.9
Sport coating	3	100.0	56.1	43.9	10.5	2.2	13.1	.8	7.1	8.0	2.2
Suiting	18	100.0	41.5	58.5	13.8	2.7	9.2	3.6	8.7	6.2	14.3
Total or average men's and women's wear	108	100.0	44.1	55.9	15.3	2.9	10.8	2.0	7.9	6.5	10.5

[1] Loss.

Computed from primary data assembled by U. S. Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

TABLE 43.—*Percentage distribution of costs and margins for worsted fabrics, United States, third quarter, 1942.*

Items	Fabrics reported	Average selling price	Yarn costs	Gross margin	Yarn preparation	Weaving	Burling and mending	Dyeing and finishing	Selling expense	Other
	No.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
Cheviots, all	7	100.0	65.2	34.8	2.5	7.1	4.6	7.5	2.2	10.9
Plain	6	100.0	65.1	34.9	2.6	6.0	4.4	7.8	2.2	11.3
Fancy	1	100.0	66.0	34.0	1.7	9.9	5.2	6.6	2.1	8.5
Coating, all	2	100.0	60.3	39.7	2.6	5.5	2.1	8.8	7.3	13.4
Women's wear boucle	1	100.0	59.9	40.1	1.8	5.2	2.5	7.6	7.0	16.0
Women's wear	1	100.0	60.5	39.5	3.2	5.8	1.8	9.9	7.6	11.2
Fancy worsteds, all	21	100.0	66.7	33.3	3.1	7.2	4.0	7.3	4.1	7.6
Finished	17	100.0	66.1	33.9	3.5	7.1	3.8	7.0	4.3	8.2
Semi-finished	4	100.0	69.8	30.2	1.7	7.4	4.4	7.8	2.9	6.0
Unfinished	3	100.0	66.7	33.3	2.1	7.7	4.9	7.8	3.9	6.9
Gabardines	13	100.0	63.6	36.4	2.7	8.2	4.6	7.5	3.6	9.8
Mixed worsteds, all	10	100.0	66.2	33.8	2.2	8.9	5.2	5.8	2.7	9.0
Plain finished	5	100.0	63.7	36.3	2.5	7.9	5.1	4.2	2.8	13.8
Plain unfinished	1	100.0	68.6	31.4	1.8	13.6	5.8	7.4	2.9	[illegible]
Fancy semi-finished	1	100.0	69.4	30.6	2.4	8.4	5.4	7.6	2.8	4.0
Fancy unfinished	3	100.0	68.6	31.4	1.8	9.0	5.1	7.5	2.5	5.5
Serges, all	20	100.0	61.9	38.1	1.1	6.4	5.4	9.2	3.9	11.8
Finished	16	100.0	61.9	38.1	1.4	6.5	5.3	8.9	4.1	11.9
Semi-finished	2	100.0	61.4	38.6	1.3	5.7	6.9	10.3	3.0	11.4
Unfinished	2	100.0	62.0	38.0	1.8	6.3	5.0	10.7	3.0	11.2
Tropicals, all	13	100.0	54.8	45.2	3.1	7.9	4.3	10.4	5.4	14.1
Plain	8	100.0	56.0	44.0	2.5	7.2	4.1	12.1	5.5	12.6
Fancy	2	100.0	61.2	38.8	3.6	9.3	5.5	7.5	2.5	10.4
Check	1	100.0	40.8	59.2	5.9	8.4	3.0	3.6	7.6	8.0
Flannel	1	100.0	52.1	47.9	2.9	9.2	3.5	11.4	7.0	13.9
Venetian	1	100.0	47.4	52.6	3.8	9.0	4.4	10.5	7.6	17.3
Venetians	3	100.0	54.0	46.0	2.1	9.9	3.8	3.7	6.8	19.7
Elastique	1	100.0	72.8	27.2	1.3	4.7	2.7	8.6	5.0	4.9
Flannel	1	100.0	69.1	30.9	2.6	10.2	1.7	3.9	6.0	3.5
Sharkskin	1	100.0	59.5	40.5	2.7	10.9	4.7	3.1	2.6	16.5
Suiting	1	100.0	53.6	46.4	2.3	6.2	2.4	9.3	7.6	18.6
Whipcord	1	100.0	78.9	21.1	2.9	9.7	1.6	4.8	3.5	7.4
Total or average, all worsteds	97	100.0	63.3	36.7	2.5	7.6	4.5	7.7	4.0	10.4

[1] Loss.

Compiled from data assembled by the U. S. Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

MEANS OF REDUCING COSTS

Information available is not adequate as a basis for indicating specifically the means by which and the extent to which it would be possible and feasible to reduce wool-manufacturers' margins. Many of the means suggested for reducing cotton-manufacturers' margins, indicated in another section of this bulletin, probably would also apply to wool manufacturers, but the available data are not sufficiently adequate even to approximate the reductions that would be possible and feasible by these means.

Data on costs, margins, and profits per dollar of sale for manufacturers of wool yarns and fabrics by size of textile investment in 1935 do not indicate very great possibilities for reductions in margins by increasing the size of the business units (table 44). These data show that manufacturers' margins vary somewhat irregularly from one size group to another but usually the margins were greater for the larger than for the smaller plants. Costs of

raw materials averaged less and net profits averaged greater for the larger than for the smaller plants. But these differences are not consistent and great enough to indicate the extent to which it would be feasible to reduce margins by making changes in the size of the business.

TABLE 44.—*Percentage distribution of costs and margins for manufacturing wool yarns and fabrics by companies and size of textile investment during the last half of 1935.*

Company (by size of investment)	Companies reported	Total sales	Raw material costs	Gross margin	Other expenses			Net profit or loss (—)
					Labor[1]	Other mill[2]	Selling, administrative and general	
	No.	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Spinning companies:								
Less than $100,000	11	100.0	68.4	31.6	17.5	7.2	4.3	2.6
$ 100,000 to $ 199,999	14	100.0	65.0	35.0	21.2	6.0	4.8	2.1
$ 200,000 to $ 399,999	14	100.0	60.6	39.4	23.5	9.7	5.5	.7
$ 400,000 to $ 799,999	8	100.0	63.3	36.7	20.8	7.9	5.3	2.7
$ 800,000 to $1,599,999	5	100.0	55.4	44.6	23.5	12.1	4.3	4.7
$1,600,000 to $3,199,999	4	100.0	58.1	41.9	20.4	10.0	7.4	4.1
$3,200,000 to $6,399,999	3	100.0	54.6	45.4	20.7	10.0	4.4	10.3
All companies	59	100.0	59.9	40.1	21.1	9.2	5.1	4.7
Weaving companies:								
Less than $100,000	7	100.0	66.4	33.6	20.8	4.9	6.8	1.1
$100,000 to $ 199,999	5	100.0	66.8	33.2	16.4	7.2	7.3	2.3
$200,000 to $ 399,999	7	100.0	63.8	36.2	17.5	5.8	7.7	5.2
$400,000 to $3,199,999	8	100.0	69.1	30.9	17.3	6.1	6.6	2.9
All companies	27	100.0	67.2	32.8	17.5	6.1	7.0	2.2
Spinning and weaving companies:								
Less than $100,000	13	100.0	45.8	54.2	30.6	14.8	9.3	.5
$ 100,000 to $ 199,999	15	100.0	49.1	50.9	28.0	12.3	9.2	1.4
$ 200,000 to $ 399,999	31	100.0	46.9	53.1	27.1	13.9	9.3	2.8
$ 400,000 to $ 799,999	40	100.0	49.4	50.6	24.8	13.3	7.4	5.1
$ 800,000 to $1,599,999	29	100.0	48.2	51.8	24.9	13.3	8.0	5.6
$1,600,000 to $3,199,999	11	100.0	46.8	53.2	26.1	13.2	7.4	6.5
$3,200,000 to $6,399,999	8	100.0	45.3	54.7	26.9	14.0	7.9	5.9
$6,400,000 to $12,799,999	3	100.0	47.9	52.1	23.2	11.6	7.7	9.6
$12,800,000 or more	3	100.0	44.9	55.1	24.6	13.8	6.2	10.5
All companies	153	100.0	46.6	53.4	25.3	13.4	7.4	7.3

[1] Includes amounts paid other companies for spinning, weaving, dyeing, finishing, or other manufacturing operations performed for the reporting company.
[2] Includes mill overhead, but not general and administrative expenses.

Data abstracted from a report of the United States Federal Trade Commission. See footnote 48, p. 73.

IMPORTANCE OF REDUCTIONS IN COSTS

The relative importance of reducing wool-manufacturers' margins may be indicated by data showing that in 1939 these margins, or the spread between the value of the products and the costs of the materials, supplies, and containers used, amounted to almost 12 percent more than returns to growers for farm production of the wool used, about 5 times as much as costs or margins for merchandising raw wool, and about 13 percent of the average retail price of apparel and household goods made of wool. In other words, a reduction of 10 percent, for example, in wool-manufacturers' margins would about equal a reduction of 50 percent in margins or costs for merchandising raw wool, and almost 12 percent of the returns to growers for farm production of the wool.

RAYON- AND SILK-MANUFACTURERS' MARGINS

Census reports on manufactures of rayon and allied products show that in 1939 about 106 million pounds of cotton linters and about 195,000 tons of wood pulp were used and that about 380 million pounds of rayon yarn and staple fibers were produced. Similar reports for rayon and silk manufactures indicate that 135 million pounds of raw fibers, 7 million pounds of other materials, and 349 million pounds of yarns were consumed by these industries in 1939. Rayon staple made up about 32 percent, raw silk about 28 percent, and raw cotton about 40 percent of the raw fibers used.

Production of rayon and silk yarns by rayon and silk manufactures in 1939 totaled about 200 million pounds, of which 67 percent was made for their own use or for use in plants under the same management, 18 percent was made on commission from stocks owned by others, and 15 percent was made for sale. Rayon and silk thread produced totaled about 970,000 pounds, of which about 80 percent was for industrial or manufacturers' use, and the remainder was for consumption in homes, as sewing, crochet, darning, embroidery, and hand-knitting thread. Production of rayon, silk, and rayon and silk mixtures of woven goods over 12 inches wide, in 1939, totaled 347 million pounds, of which 83 percent was all rayon, 2 percent was all silk, and 15 percent was mixtures of rayon and silk.

Considerable proportions of rayon and silk broad-woven goods, narrow fabrics, and yarns and thread are finished by the manufacturers before the products are sold. Census data show that of the total value of rayon manufacturers' sales in 1939, finished goods accounted for 20 percent of the sales for rayon broad-woven goods, 95 percent for rayon narrow fabrics, and 54 percent for rayon yarn and thread. Similar data for silk manufacturers show that the value of sales for finished goods accounted for 61 percent of the total for silk broad woven goods, 87 percent for silk narrow fabrics, and 55 percent for silk yarn and thread.

Rayon and silk manufacturers distribute their products as gray goods and as finished goods through various outlets. For all manufacturers and for all products combined, the proportion distributed to converters averaged 38.2 percent; to industrial users, 24.6 percent; to wholesalers and jobbers, 18.7 percent; to or through their own wholesale or retail offices, 16.7 percent; and to all other outlets, 1.8 percent (table 45). Converters are particularly important outlets for broad-woven goods in the gray. Industrial users and wholesalers and jobbers are important outlets for most of the products. Substantial proportions of the broad-woven goods, in the gray and in the finished form, and of the narrow fabrics in the finished form are sold through the manufacturers' own wholesale offices.

Charges or Costs

Census reports on values of the products and on costs for rayon manufactures show that in 1939 manufacturers' margins, or the spread between the value of the products and the costs of materials, supplies, and containers used, averaged 37.7 percent of the value of the products for broad-woven fabrics made in regular factories,

57.6 percent for narrow fabrics, and 32.4 percent for yarn and thread (*21*). Similar data for silk manufacturers show that in 1939 the margins averaged 42.9 percent for broad-woven goods, 66.6 percent for narrow fabrics, and 31.1 percent for yarn and thread. Margins for factories that operated on a contract basis averaged 93.4 percent for broad-woven rayon, 95 percent for broad-woven silk, 90.2 percent for rayon yarn and thread, and 87.2 percent for throwing and spinning silk.

TABLE 45.—*Distribution of rayon and silk manufacturers' sales, by classes of customers, United States, 1939.*

Items	Establishments reporting	Total distributed sales	Proportion of sales through —						
			Own wholesale offices	Other wholesalers and jobbers	Converters	Industrial users	Retailers including chains	Other	Total
	Number	*1,000 dollars*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Rayon manufactures:									
Rayon broad woven goods	190	233,403	16.6	18.5	54.0	10.1	0.8	(1)	100.0
Gray goods	125	230,632	[2]15.9	[3]11.5	67.9	4.7	(3)	(3)	100.0
Finished goods	86	52,966	[2]19.3	[4]14.9	(4)	[5]31.6	4.0	0.2	100.0
Fabricated products	5	806	(6)	[6]100.0	.....	(6)	(6)	.....	100.0
Rayon narrow fabrics	115	20,352	11.8	54.0	.....	23.8	10.4	.....	100.0
Gray goods	10	953	(7)	766.6	(8)	[8]33.4	.....	.....	100.0
Finished goods	109	19,399	12.4	[9]53.4	.....	23.3	10.9	.....	100.0
Rayon yarn and thread	45	14,770	.....	27.3	5.4	57.3	.....	.....	100.0
Gray goods	19	6,867	(7)	[10]36.6	11.7	51.7	.....	.....	100.0
Finished goods	31	7,903	(10)	[10]19.1	.....	80.9	(10)	.....	100.0
Silk manufactures:									
Silk broad woven goods	82	35,260	33.0	10.0	16.1	39.4	1.2	.....	100.0
Gray goods	34	13,615	33.1	[11]3.7	30.3	[12]32.6	(11)	.....	100.0
Finished goods	57	21,645	33.5	13.9	7.1	[13]43.5	2.0	.....	100.0
Silk narrow fabrics	94	12,958	32.7	35.6	.....	25.4	6.1	.2	100.0
Gray goods	18	1,644	(12)	[12]72.8	(12)	[12]27.2	.....	.....	100.0
Finished goods	79	11,314	37.4	30.2	.....	[13]25.2	7.0	.2	100.0
Silk yarn and thread	44	42,696	6.9	.9	.....	88.0	.7	3.5	100.0
Gray goods	9	19,128	(13)	.....	(13)	[13]100.0	.....	.....	100.0
Finished goods	35	23,568	12.6	1.6	.....	78.2	1.3	6.3	100.0
Total or average	1,187	778,878	16.7	18.7	38.2	24.6	1.4	0.4	100.0

[1] Less than one-tenth of 1 percent.
[2] Sales to or through own retail stores combined with sales to or through own wholesale branches or offices to avoid disclosure.
[3] Sales to retailers and direct export sales combined with sales to wholesalers and jobbers to avoid disclosure.
[4] Sales to converters combined with sales to wholesalers and jobbers to avoid disclosure.
[5] Interplant transfers included to avoid disclosure.
[6] Sales to or through own wholesale branches or offices, to retailers, direct export sales, and sales to industrial users combined with sales to wholesalers and jobbers to avoid disclosure.
[7] Sales to or through own wholesale branches or offices combined with sales to wholesalers and jobbers to avoid disclosure.
[8] Sales to converters combined with sales to industrial etc. users to avoid disclosure.
[9] Direct export sales combined with sales to wholesalers and jobbers to avoid disclosure.
[10] Sales to or through own wholesale branches or offices and retailers combined with sales to wholesalers and jobbers to avoid disclosure.
[11] Sales to retailers combined with sales to wholesalers and jobbers to avoid disclosure.
[12] Sales to or through own wholesale branches or offices and to converters combined with sales to wholesalers and jobbers to avoid disclosure.
[13] Sales to or through own wholesale branches or offices, to converters, and to exporters combined with sales to industrial etc. users to avoid disclosure.
Abstracted from or based on *Distribution of Manufacturers' Sales:* 1939 (*29*).

Data on total sales and on material costs for rayon and silk textile manufacturing corporations, published by the Federal Trade Commission, show that margins for manufacturers of rayon averaged 73.6 percent of total sales in 1939 and 75.6 percent in 1940. The margins for silk manufacturers averaged 49.2 percent of sales in

1939.[50] The reports of the Federal Trade Commission do not segregate data for regular factories from those for contract factories and it may be that the differences in manufacturers' margins in 1939 based on Federal Trade Commission reports from those based on census reports are accounted for to a considerable extent at least by differences in ratios of regular to contract factories included in the reports.

Differences between the margins for stock and commission companies were shown by a special report made by the Federal Trade Commission on the silk and rayon textile industry for the first half of 1935.[51] The data presented show that margins, or the spread between net sales and raw material costs, for silk and rayon textile manufacturers, averaged 28.1 percent of net sales for stock throwing companies, 97.6 percent for commission-throwing companies, 55.7 percent for stock weaving, 98.9 percent for commission weaving, 58.1 percent for stock throwing and weaving, and 98.9 percent for commission throwing and weaving companies. The differences are accounted for mainly by the fact that stock companies own the raw materials used whereas commission companies manufacture raw materials owned by others.

Manufacturers' margins vary considerably with the kind of products turned out. Data presented by the Federal Trade Commission show that during the last half of 1935 the margins for silk- and rayon-throwing companies varied from 26.3 percent of total sales for silk yarn to 34 percent for miscellaneous silk and rayon. Margins for stock-weaving companies ranged from 41.1 percent of total sales for miscellaneous rayon products to 80.1 percent for silk and rayon labels, and those for combined throwing-and-weaving companies from 53.5 percent of total sales for broad silk to 68.1 percent for miscellaneous silk products.

Items Included in Margins

Census reports on rayon manufactures show that in 1939 salaries and wages amounted to 23 percent of the value of the products and to 59 percent of manufacturers' margins (table 46). Manufacturing wages alone amounted to 20 percent of the value of the products and to 51 percent of manufacturers' margins. Fuel, purchased electric energy, and contract work each amounted to relatively small proportions of manufacturers' margins. Other costs, including depreciation, interest, insurance, rent, taxes, profits, and other expenses amounted to 13.7 percent of the value of the products and to 34 percent of manufacturers' margins. Some indication of the variations in relative importance of the items of costs may be obtained from the fact that the proportion of manufacturers' margins accounted for by salaries and wages varied from 55 percent for narrow fabric manufacturers to 72 percent for manufacturers of broad-woven goods on a contract basis.

Salaries and wages also account for large proportions of silk-manufacturers' margins. Census data for silk manufacturers in the United States show that in 1939 salaries and wages amounted to

[50] United States Federal Trade Commission. *Reports on Rayon and Silk Textile Manufacturing Corporations*. 1941–1942. [Processed.]

[51] United States Federal Trade Commission. TEXTILE INDUSTRIES IN THE FIRST HALF OF 1935. PART III, THE SILK AND RAYON TEXTILE INDUSTRY. [Processed.]

TABLE 46.—*Values, costs, and margins for rayon manufactures, United States, 1939.*

Item	Broad-woven goods		Narrow fabrics regular factories	Yarn and thread regular factories	Throwing and spinning contract factories
	Regular factories	Contract factories			
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Value of products	272,714	5,307	20,516	26,471	3,066
Cost of materials, supplies and containers	170,000	[1]340	[1]8,693	[1]17,882	[1]302
Gross margin	102,714	4,958	11,823	8,589	2,764
Salaries and wages:					
Salaried officers	1,713	210	542	332	99
Manufacturing salaries	2,310	239	775	495	134
Manufacturing wages	53,135	3,120	4,755	3,997	1,480
Distribution	681	7	371	114	26
Other	10	------	13	2	------
Fuel	938	35	120	166	34
Purchased electric energy	3,610	243	201	473	256
Contract work	2,894	([1])	([1])	106	([1])
Other[2]	35,143	1,104	5,046	2,904	735
	Proportion of value of product				
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
Value of products	100.0	100.0	100.0	100.0	100.0
Costs of materials, supplies and containers	62.3	[1]6.6	[1]42.4	67.6	[1]9.8
Gross margin	37.7	93.4	57.6	32.4	90.2
Salaries and wages:					
Salaried officers	.6	3.9	2.6	1.2	3.2
Manufacturing salaries	1.6	4.5	3.8	1.9	4.4
Manufacturing wages	19.6	58.8	23.1	15.1	48.3
Distribution	2	.1	1.8	.4	.8
Other	------	------	.1	([3])	------
Fuel	.4	.7	.6	.6	1.1
Purchased electric energy	1.3	4.6	1.0	1.8	8.4
Contract work	1.1	([1])	([1])	.4	([1])
Other[2]	12.9	20.8	24.6	11.0	24.0
Number of establishments	196	79	120	52	32

[1] "Contract work" included in "cost of materials, supplies, and containers."
[2] Includes depreciation, interest, insurance, rent, taxes, profits, and other expenses.
[3] Less than 0.05 percent.

Adapted from *Census of Manufactures: 1939* (*21*).

28 percent of the value of the products and to 60 percent of the manufacturers' margins (table 47). Manufacturing wages alone equaled 23 percent of the value of the products and 49 percent of the manufacturers' margins. Fuel and contract work were relatively small items of expense. Purchased electric energy amounted to almost 1.8 percent of the value of the products and to about 3.9 percent of the manufacturers' margin. A substantial proportion of manufacturers' margins was accounted for by a combination of such items as depreciation, interest, insurance, rent, taxes, other costs, and profits, but details for these items are not shown in census reports.

Federal Trade Commission reports on rayon and silk textiles manufacturing corporations show that production wages and salaries for rayon manufacturers amounted to 30 percent of total sales and 40.7 percent of the manufacturers' margins in 1939 and to 26.7 percent of total sales and to 35.3 percent of manufacturers' margins in 1940 (table 48). Depreciation amounted to more than 7 percent of total sales and to about 10 percent of manufacturers' margins. Selling expenses and advertising amounted to about 3 percent of total sales and to about 5 percent of manufacturers' margins. Net profits for rayon manufacturers amounted to 14.6 percent of total

sales and 19.8 percent of manufacturers' margins in 1939, and to 22.2 percent of total sales and 29.4 percent of manufacturers' margins in 1940. Data for other items are shown in table 48.

Similar data for silk-manufacturing corporations in 1939 show that production wages and salaries amounted to 22.8 percent of total sales and to 46.3 percent of the manufacturers' margins (table 48). Selling expenses amounted to about 6 percent of total sales and 12 percent of the margins; net profits to almost 3 percent of total sales and 6 percent of the margins. Data for other items are shown in table 48.

TABLE 47.—*Values, costs, and margins for silk manufactures, United States, 1939.*

Item	Broad woven		Narrow fabrics	Yarn and thread	
	Regular factories	Contract factories		Regular factories	Contract factories
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Value of products	35,732	1,102	13,133	48,005	15,853
Costs of materials, supplies, and containers	20,388	[1]55	4,386	33,066	2,029
Gross margin	15,344	1,047	8,747	14,939	13,824
Salaries and wages:					
Salaried officers	440	40	440	576	262
Manufacturing salaries	1,057	64	503	898	758
Manufacturing wages	7,606	725	3,852	6,736	7,638
Distribution	94	4	74	285	60
Other	1	----	13	4	1
Fuel	240	10	99	175	122
Purchased electric energy	424	67	142	550	896
Contract work	588	(1)	197	236	360
Other[2]	4,894	137	3,427	5,479	3,727
	Proportion of value of products				
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
Value of products	100.0	100.0	100.0	100.0	100.0
Costs of materials, supplies, and containers	57.1	5.0	33.4	68.9	12.8
Gross margin	42.9	95.0	66.6	31.1	87.2
Salaries and wages:					
Salaried officers	1.2	3.6	3.3	1.2	1.6
Manufacturing salaries	2.9	5.8	3.8	1.9	4.8
Manufacturing wages	21.3	65.8	29.3	14.0	48.2
Distribution	.3	.4	.6	.6	.4
Other	(3)	----	.1	(3)	(3)
Fuel	.7	.9	.8	.4	.8
Purchased electric energy	1.2	6.1	1.1	1.1	5.6
Contract work	1.6	(1)	1.5	.5	2.3
Other[2]	13.7	12.4	26.1	11.4	23.5
Number of establishments	82	37	100	53	78

[1] "Contract work" included in "cost of materials, supplies, and containers."
[2] Includes depreciation, interest, insurance, rent, taxes, profits, and other expenses.
[3] Less than 0.05 percent.

Adapted from *Census of Manufactures: 1939* (*21*).

The relative importance of the items included in rayon and silk manufacturers' margins varies considerably with the processes involved and with the products turned out. Data presented in a special report prepared by the Federal Trade Commission on the silk and rayon textile industry for the first half of 1935 show that the proportion of manufacturers' margins accounted for by labor costs averaged 52.3 percent and ranged from 45.5 percent for stock throwing companies to 70 percent for companies weaving on commission (table 49). The proportion of the margins accounted for by depreciation averaged 4.9 percent and ranged from 3.2 per-

TABLE 48.—*Sales, costs, and margins for rayon and silk textile manufacturing corporations, United States, 1939 and 1940.*

Item	Rayon				Silk	
	1939		1940		1939	
	1,000 dollars	*Percent*	*1,000 dollars*	*Percent*	*1,000 dollars*	*Percent*
Total sales	144,740	100.0	261,861	100.0	30,682	100.0
Material costs	38,179	26.4	63,845	24.4	15,571	50.8
Gross margin	106,570	73.6	197,816	75.6	15,111	49.2
Production wages and salaries	43,398	30.0	69,863	26.7	6,989	22.8
Depreciation	10,903	7.5	19,101	7.3	533	1.7
Taxes and social security	3,372	2.3	6,803	2.6	694	2.3
Other operating expenses[1]	18,867	13.0	28,783	11.0	2,485	8.1
Goods purchased for resale	39	(2)			204	.7
Selling expense	3,045	2.1	5,405	2.1	1,816	5.9
Advertising	1,400	1.0	2,355	.9	73	.2
Administrative and general office	3,863	2.7	7,065	2.7	1,388	4.5
Provisions for uncollectible accounts	557	.4	262	.1	28	.1
Net profits	21,128	14.6	58,089	22.2	901	2.9
Number of corporations reported	7		14		5	

[1] Includes costs of repair and maintenance, and research and development expense.
[2] Less than 0.05 percent.

Abstracted from or based on reports of United States Federal Trade Commission on Rayon and Allied Products Manufacturing Corporations and on silk manufacturing corporations. [Processed.]

cent for stock weaving companies to 6.3 percent for throwing and weaving companies that operated on a commission basis. Data for other items are shown in table 49.

The relative importance of the items of cost vary considerably with the products turned out by the same kinds of processes. Labor costs for throwing companies in 1935 ranged from 11.7 percent of total sales for silk yarn to 17.6 percent for silk tram (table 50). For weaving companies labor costs ranged from 22 percent of total sales for broad woven silk to 39 percent for silk and rayon ties, and for combined throwing and weaving companies from 26.9 percent for miscellaneous silk and rayon to 33.2 percent for miscellaneous silk products. Selling, administration, and general expenses for throwing companies ranged from 4.8 percent of total sales for silk tram to 8.9 percent for miscellaneous silk and rayon; for weaving companies, from 5 percent of total sales for miscellaneous rayon products to 27.6 percent for rayon ties; and for combined throwing and weaving companies, from 9.1 percent of total sales for broad silk and rayon to 18.6 percent for miscellaneous silk products. Data for other items are shown in table 50.

MEANS OF REDUCING COSTS

Several of the suggestions made in the sections on means of reducing cotton and wool manufacturers' margins also apply to rayon and silk manufacturers. Information on the relationship of size of textile investments to costs, expenses, and profits or losses per dollar of sale indicates the possibilities of making considerable reductions in manufacturers' margins by increasing the size of the manufacturing establishments with respect to the size of textile investment. Data on the relationship of size of textile investments to manufacturers' margins show that, for all classes of rayon and silk manufacturers combined, average manufacturers' margins decreased from 63 percent of total sales for companies with total tex-

tile investments of less than $100,000 to about 50 percent for those with investments of $800,000 to $12,799,999.[52] The proportion of total sales represented by labor costs and by selling, administration, and general expenses decreased considerably with increases in the size of textile investment.

TABLE 49.—*Net sales, costs, and margins for silk and rayon textile manufacturing companies, United States, January-June, 1935.*

Item	Kind of company					
	Throwing		Weaving		Throwing and Weaving	
	Stock	Commission	Stock	Commission	Stock	Commission
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Net sales	12,102	5,203	17,992	2,345	27,318	972
Raw material costs[1]	8,701	127	7,965	26	11,447	11
Gross margins[1]	3,401	5,076	10,027	2,319	15,871	961
Labor	1,548	3,096	4,783	1,019	7,889	655
Fuel and power	141	356	270	108	666	78
Dyes and chemicals	49	70	173	------	437	------
Property taxes	34	34	90	8	230	10
Depreciation	170	295	351	129	854	61
Other mill expense[2]	427	712	2,495	285	3,871	153
Selling and bad debts	352	192	996	15	2,126	12
Other general expense[3]	406	283	997	171	1,202	47
Net profit or loss	274	38	[4]128	[4]16	[4]1,404	[4]55
	Proportion of net sales					
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Net sales	100.0	100.0	100.0	100.0	100.0	100.0
Raw material costs[1]	71.9	2.4	44.3	1.1	41.9	1.1
Gross margins[1]	28.1	97.6	55.7	98.9	58.1	98.0
Labor	12.8	59.5	26.6	69.1	28.9	67.4
Fuel and power	1.2	6.9	1.5	4.6	2.4	8.0
Dyes and chemicals	.4	1.3	1.0	------	1.6	------
Property taxes	.3	.7	.5	.3	.8	1.0
Depreciation	1.4	5.7	1.9	5.5	3.1	6.3
Other mill expense[2]	3.5	13.7	13.9	12.2	14.2	15.8
Selling and bad debts	2.9	3.7	5.5	.6	7.8	1.2
Other general expense[3]	3.3	5.4	5.5	7.3	4.4	4.8
Net profit or loss	2.3	.7	[4].7	[4].7	[4]5.1	[4]5.6
Number of companies	17	45	80	51	37	12

[1] Adjustments were made for changes in inventories.
[2] Includes mill overhead and amounts paid other companies for throwing, weaving, dyeing, finishing, or other manufacturing operations performed for reporting companies but not general and administrative expenses.
[3] Includes officers' and directors' salaries, commissions and bonuses, and other administrative and general expenses.
[4] Loss.

Adapted from United States Federal Trade Commission. See footnote 51, p. 83.

Information available on the different kinds of rayon and silk-manufacturing companies indicates that the possibilities of reducing manufacturers' margins by increasing the size of the textile investment is confined mostly to rayon-manufacturing companies. The proportion of total sales accounted for by manufacturers' margins for companies weaving silk exclusively increased from 50 percent for those with total investments of less than $100,000 to 63 percent for those with total textile investments of $200,000 to $799,999. Similar data for companies weaving rayon exclusively show that the proportion of total sales represented by manufacturers' margins decreased from 73 percent for companies with textile

[52] United States Federal Trade Commission. See footnote 51, p. 83.

investments of less than $100,000 to 43 percent for those with textile investments of $400,000 to $3,199,999. Very substantial reductions in labor costs and in selling, administration, and general expenses with increases in the size of textile investments were indicated for companies weaving rayon exclusively.

TABLE 50.—*Costs and margins for specified kinds of silk and rayon products, expressed as proportion of total sales, United States, January-June 1935.*

Kind of company and products	Companies	Total sales	Raw material costs	Gross margin	Labor costs	Outside work[1]	Other mill expense[2]	Selling administrative and general expense	Net profit or loss (—) on sales
	No.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
Throwing:[3]									
Silk yarn	6	100.0	73.7	26.3	11.7	----	6.6	5.9	2.1
Silk tram	6	100.0	69.3	30.7	17.6	1.0	7.2	4.8	.1
Miscellaneous silk and rayon	5	100.0	66.0	34.0	13.5	.1	6.5	8.9	5.0
Total or average	17	100.0	71.9	28.1	12.8	.1	6.6	6.3	2.3
Weaving:[4]									
Broad silk	12	100.0	55.2	44.8	22.0	13.1	5.2	5.7	—1.2
Silk ribbons and hatbands	7	100.0	23.3	76.7	38.5	3.9	9.7	22.2	2.4
Miscellaneous silk products	6	100.0	38.7	61.3	25.9	17.6	15.7	8.5	—6.4
Rayon dress goods	4	100.0	53.5	46.5	25.4	1.1	13.4	6.3	.3
Rayon ribbons and hatbands	6	100.0	27.8	72.2	34.7	1.3	14.5	17.2	4.5
Rayon ties	3	100.0	23.1	76.9	37.4	5.0	10.0	27.6	—4.0
Miscellaneous rayon products	6	100.0	58.9	41.1	23.3	----	9.1	5.0	3.7
Broad silk and rayon	3	100.0	43.7	56.3	29.3	6.4	10.7	9.0	.9
Silk and rayon ribbons and hatbands	11	100.0	26.4	73.6	35.1	2.6	15.6	14.7	5.6
Silk and rayon ties	3	100.0	21.5	78.5	39.0	15.4	13.0	14.1	—3.0
Silk and rayon labels	9	100.0	19.9	80.1	33.7	1.5	14.6	26.2	4.1
Miscellaneous silk and rayon products	10	100.0	43.7	56.3	23.4	16.0	10.6	13.3	—7.0
Total or average	80	100.0	44.3	55.7	26.6	8.0	10.7	11.1	—.7
Throwing and weaving combined:[4]									
Broad silk	11	100.0	46.5	53.5	29.9	8.4	11.9	14.9	—11.6
Miscellaneous silk products	5	100.0	31.9	68.1	33.2	4.2	27.0	18.6	—14.9
Broad silk and rayon	6	100.0	45.5	54.5	29.8	4.0	12.2	9.1	—.6
Miscellaneous silk and rayon	15	100.0	41.0	59.0	26.9	6.7	16.8	11.0	—2.4
Total or average	37	100.0	41.9	58.1	28.9	6.1	16.0	12.2	—5.1

[1] Amounts paid other companies for throwing, weaving, dyeing, finishing, or other manufacturing operations performed for reporting companies.
[2] Includes mill overhead but not general and administrative expenses.
[3] Companies throwing their own silk and rayon.
[4] Stock companies.

Abstracted from or based on United States Federal Trade Commission report. See footnote 51, p. 83.

IMPORTANCE OF REDUCTIONS IN COSTS

The relative importance of reductions in margins or costs for rayon and silk manufacturers may be indicated by data showing that these margins amounted on the average to about two-fifths of the value of the broad-woven goods, about three-fifths of the narrow-woven goods, and about one-third of the value of the yarns and thread produced. But rayon and silk manufacturers' margins amounted on the average to only about 10 percent of the retail value of apparel and household goods made of these materials.

KNIT-GOODS MANUFACTURERS' MARGINS

The knit-goods industry is made up of plants which knit rather than weave textile products. These establishments use knitting machines and consume yarns made from any of the basic materials such as cotton, rayon, wool, or silk, or mixtures of these fibers. Some integrated plants spin their own yarns from raw fibers. According to census reports, the materials consumed by the knit-goods industry in 1939 included about 54 million pounds of raw fibers, about 80 percent of which was cotton, 412 million pounds of yarns, and about 18 million pounds of other materials.

The principal products of the knit-goods industry are hosiery, knitted underwear, knitted outerwear, knitted cloth, and knitted gloves. Census reports indicate that of the total yarns consumed in the United States by the knit-goods industry in 1939, 34.6 percent was used in the manufacture of hosiery, 31.4 percent in knitted underwear, 21.4 percent in knitted cloth, 12 percent in knitted outerwear, and 0.6 percent in the manufacture of knitted gloves. Other reports indicate that knitters made a wide variety of other products including tubing, corset cloth, and glove and shoe linings (*4, p. 11*).

The value of knit goods produced in 1939, according to census reports, totaled about 714 million dollars, 58.2 percent of which was hosiery, 15.8 percent knitted underwear, 14.7 percent knitted outerwear except gloves, 9.7 percent knitted cloth, and 1.7 percent knitted gloves. About two-thirds of the value of the hosiery produced was accounted for by full-fashioned and one-third by seamless hosiery.

Census reports on the distribution of manufacturers' sales for knit goods in 1939 show that for all products combined 42.5 percent went to retailers, including chain stores, almost 36 percent went to wholesalers and jobbers, about 10 percent went to industrial users, 9.1 percent was distributed through manufacturers' own sales offices, and small proportions went to consumers at retail and to export (table 51). Retailers, wholesalers, and jobbers supplied important outlets for all knit goods listed. Most of the knitted cloth went to industrial users. More than 11 percent of the full-fashioned hosiery and of knitted underwear were distributed through manufacturers' own sales offices.

Charges or Costs

Manufacturers' margins, or the spread between the costs of materials, supplies, and containers and the value of the products, for knit goods in 1939, averaged about 53.4 percent of the value of the products, according to census reports. The proportion of the value of the various kinds of products accounted for by manufacturers' margins averaged 59.5 percent for full-fashioned hosiery, 54.4 percent for seamless hosiery, 47.8 percent for knitted underwear, 47.5 percent for knitted outerwear other than gloves, 39.6 percent for knitted cloth, and 62.1 percent for knitted gloves.

Federal Trade Commission reports on incomes and expenses of 17 knit-goods manufacturing corporations in 1939 show that the spread between material costs and total sales amounted to 63.4 percent of sales.[53] The spread varied considerably from one man-

[53] United States Federal Trade Commission. *Knit Goods Manufacturing Corporation.* 1941. [Processed.]

ufacturer to another, amounting to less than 50 percent of total sales for more than one-sixth of the corporations and to more than 70 percent of total sales for about one-sixth of the corporations.

TABLE 51.—*Distribution of manufacturers' sales of knit goods, by kind of products and by outlets, United States, 1939.*

Item	Products					
	Hosiery		Knitted			
	Full-fashioned	Seamless	Cloth	Gloves	Outer-wear	Under-wear
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Total distributed sales	291,647	129,756	61,473	12,020	98,730	115,634
Establishments own sales offices[1]	34,241	9,087	3,196	(2)	5,100	13,040
Wholesalers and jobbers	80,900	63,616	9,905	[3]6,092	43,830	50,140
Retailers (including chains)	149,994	50,613	4,697	5,290	45,041	46,143
Exports[3]	1,917	1,144	192	73	212	2,232
Industrial users[4]	18,094	4,622	43,446	[5]566	[6]1,614	3,928
Consumers at retail[7]	6,492	674	37	(5)	2,933	151
	Proportion of total distributed sales					
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Total distributed sales	100.0	100.0	100.0	100.0	100.0	100.0
Establishments own sales offices[1]	11.7	7.0	5.2	(2)	5.2	11.3
Wholesalers and jobbers	27.8	49.0	16.1	[3]50.7	44.4	43.4
Retailers (including chains)	51.4	39.0	7.6	44.0	45.6	39.9
Exports[3]	.7	.9	.3	.6	.2	1.9
Industrial users[4]	6.2	3.6	70.7	[5]4.7	[6]1.6	3.4
Consumers at retail[7]	2.2	.5	.1	(5)	3.0	.1
Number of establishments	420	386	196	20	472	192

[1] Includes wholesale branches or offices and retail stores.
[2] Sales to or through own wholesale branches or offices combined with sales to wholesalers and jobbers to avoid disclosure.
[3] Includes transfers included to avoid disclosure.
[4] Also includes commercial, professional, and institutional users (manufacturers, railroads, utilities, governmental bodies, hotels, contractors, etc.)
[5] Sales to consumers at retail and interplant transfers combined with sales to industrial, etc., users to avoid disclosure.
[6] Interplant transfers included to avoid disclosure.
[7] Includes farmers, household consumers, and employees at retail.

Abstracted from *Distribution of Manufacturers' Sales:* 1939 (*99*).

Margins of knit-goods manufactures vary considerably with the particular kind of products. Data assembled by the Office of Price Administration on costs to manufacturers and on selling prices for knit goods in 1942 show that manufacturers' margins—the spread between yarn and trimming costs and the maximum selling price of the garments—for mills that sold to jobbers, averaged 38.3 percent of the selling price and varied from 30 percent for men's union suits to almost 62 percent for infants' wear. Similar data for mills that sold to retailers show that manufacturers' margins averaged 67.8 percent and ranged from 51.2 percent for men's and boys' shorts to 74.6 percent for infants' wear.

Information assembled by the United States Tariff Commission shows that manufacturers' margins for wool-knit coating, during the first quarter of 1943, averaged about 24 percent of the selling price of the products for company-manufactured wool-face and wool-back topcoating and about 22 percent for similar overcoating. For company-manufactured wool-face and purchased cotton back coating, the manufacturers' margins averaged about 34 percent for topcoating and 27 percent for overcoating. For purchased wool

face and cotton back coating the margins averaged about 36 percent for topcoating and 29 percent for overcoating. Margins for other fabrics ranged from about 43 percent for bathrobes to less than 10 percent for glove cloth.

Items Included in Margins

Information on costs to knit-goods manufacturers shows that wages and salaries were the principal items of costs included in manufacturers' margins, or the spread between cost of materials, supplies, and containers, and the value of the products. Census reports show that in 1939 wages and salaries amounted to 34.6 percent of the value of the products and to 64.8 percent of the manufacturers' margins (table 52). Manufacturing wages alone amounted

Table 52.—*Values, costs, and margins for manufacturing knit goods, United States, 1939.*

Item	Knit goods						
	Hosiery		Cloth	Outerwear (except gloves)		Underwear	Gloves
	Full fashion	Seamless		Regular factories	Contract factories		
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Value of products	277,170	133,665	68,063	97,641	6,559	113,353	12,385
Costs of materials, supplies, and containers	112,329	63,342	41,480	51,227	579	59,217	4,693
Gross margins	164,841	75,323	27,183	46,414	5,980	54,136	7,693
Salaries and wages:							
Officers' salaries	4,161	2,361	1,525	2,515	181	2,450	133
Manufacturers' salaries	7,473	3,844	1,785	2,156	115	3,650	291
Manufacturing wages	100,775	41,862	10,166	15,518	3,198	27,405	3,839
Distribution	4,553	701	495	2,695	0	2,508	97
Other	480	105	73	101	2	1515	24
Fuel	1,158	858	721	291	40	847	54
Purchased electric energy	2,033	881	556	425	126	564	33
Contract work	5,603	1,494	1,448	6,258	34	987	218
Other[1]	38,605	23,217	10,414	16,545	2,275	15,574	3,004
	Proportion of value of the products						
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Value of products	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Costs of materials, supplies, and containers	40.5	45.7	60.4	52.5	8.7	52.2	37.9
Gross margins	59.5	54.3	39.6	47.5	91.3	47.8	62.1
Salaries and wages:							
Officer's salaries	1.5	1.7	2.2	2.6	2.8	2.2	1.1
Manufacturers' salaries	2.7	2.8	2.6	2.2	1.8	3.2	2.3
Manufacturing wages	36.4	30.2	14.8	15.9	48.8	24.2	31.0
Distribution	1.7	.5	.7	2.8	.1	2.2	.8
Other	.2	.1	.1	.1	(2)	.1	.2
Fuel	.4	.6	1.1	.2	.6	.8	.4
Purchased electric energy	.7	.6	.8	.4	1.9	.5	.3
Contract work	2.0	1.1	2.1	6.4	.5	.9	1.8
Other[1]	13.9	16.7	15.2	16.9	34.8	13.7	24.2

[1] Includes depreciation, interest, insurance, rent, taxes, profits, and other expense.
[2] Less than 0.05 percent.

Abstracted from or based on census reports of Manufactures—Knit goods (*21*). "Knit Goods," covered by this report, includes establishments that use knitting machines and consume yarns made from any of the basic materials, such as cotton, rayon, silk, and wool or any mixtures of fibers. Some integrated plants spin their own yarns from raw fibers.

to 28.4 percent of the value of the products and to 53.1 percent of the manufacturers' margins. The relative importance of salaries and wages varies considerably with the kind of finished products. The proportion of the value of the finished products accounted for by manufacturing wages, for example, ranged from about 15 and 16

percent, respectively, for knitted cloth and knitted outerwear to 24 percent for underwear, and 36 percent for full-fashioned hosiery. Fuel, purchased electric energy, and contract work were relatively small items of costs. Other costs including depreciation, interest, insurance, rent, taxes, and profits averaged 15.3 percent of the value of the products and 28.7 percent of manufacturers' margins but the individual items were not shown separately in census reports.

Federal Trade Commission reports on total sales and costs for 17 knit-goods manufacturing corporations in 1939 show that production wages and salaries amounted to 29.4 percent of total sales and to 46.3 percent of manufacturers' margins (table 53). Depreciation, taxes, social security, and other operating expenses amounted to 9.3 percent of total sales and to 14.6 percent of the margin. Selling expenses and advertising amounted to 7.4 and 1.9 percent, respectively, of total sales and to 11.7 percent and 3 percent, respectively, of manufacturers' margins. Net profits amounted to 5.6 percent of total sales. The amounts and relative importance of other costs are shown in table 53.

TABLE 53.—*Sales, costs, and margins for 17 knit-goods manufacturing corporations, 1939.*

Item	Amount	Proportion
	1,000 dollars	*Percent*
Total sales	126,647	100.0
Material costs	46,328	36.6
Gross margin	80,319	63.4
Production wages and salaries	37,183	29.4
Depreciation, etc.	2,884	2.3
Taxes and social security	2,917	2.3
Other operating expense[1]	5,920	4.7
Goods purchased for resale	8,482	6.7
Selling expenses	9,372	7.4
Advertising	2,431	1.9
Administrative and general office	3,827	3.0
Provision for uncollectable accounts	154	.1
Net profits	7,149	5.6

[1] Includes research and development expense.

Abstracted from United States Federal Trade Commission report. See footnote 53, p. 89.

The relative importance of the various items of cost varies considerably from one corporation to another. Costs of production wages and salaries ranged from less than 20 percent of total sales for some corporations to more than 40 percent for others. Similar comparisons for other items show that depreciation and obsolescence ranged from less than 1.5 percent to more than 3.5 percent; selling expense, from less than 2 percent to more than 10 percent; and administration and general office expense, from less than 2 percent to more than 5 percent of total sales.

Information made available by the Office of Price Administration on maximum selling prices and on manufacturers' costs for knit underwear manufactured by mills that sold to jobbers shows that in 1942 direct labor amounted on the average to about 20 percent of the maximum selling price and to 52 percent of manufacturers' margins (table 54). The proportion of the maximum selling price accounted for by direct labor varied from 14.7 percent for men's drawers to 25.2 percent for infants' wear. Similar proportions for indirect labor varied from 2.4 percent for men's drawers and women's vests to 6.0 percent for boys' union suits and averaged 5 per-

cent. Factory overhead varied from 4.8 percent for men's union suits to 9.7 percent for infants' wear and averaged 5.9 percent. Costs of selling and distribution varied from 4 percent for men's union suits to 7.8 percent for infants' wear, and averaged 5.3 percent. Net profits or losses varied from an average loss of 3.6 percent for men's union suits to an average profit of 8.7 percent for infants' wear and averaged 1.2 percent loss. Details for these and other items are shown in table 54.

TABLE 54.—*Average selling price per dozen, costs, and margins for knit underwear, jobber mills, United States, 1942.*

Item	All	Infants' wear	Children's sleepers	Boys' union suits	Women's vests	Women's pants	Men's union suits	Men's shirts	Men's drawers
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Selling price	5.85	2.06	5.09	5.99	5.04	5.00	9.51	6.00	6.12
Yarn costs	3.13	.64	2.54	3.26	2.48	2.46	5.96	3.83	3.47
Trimming costs	.48	.15	.04	.38	.48	.39	.09	.39	.39
Gross margin	2.24	1.27	2.51	2.35	2.08	2.15	2.86	1.78	2.26
Direct labor	1.16	.52	1.30	1.26	1.12	1.10	1.00	.88	.92
Indirect labor	.20	.05	.31	.36	.12	.14	.50	.24	.15
Factory overhead	.35	.20	.36	.39	.27	.30	.46	.39	.41
Packing materials	.03	.07	.04	.02	.00	.00	.00	.00	.00
Selling and distribution	.31	.16	.37	.30	.32	.32	.38	.28	.38
General administration	.17	.09	.17	.18	.10	.12	.26	.09	.04
Net profit or loss (—)	—.07	.18	—.04	—.16	.15	.08	—.34	—.10	.36
	Proportion of maximum selling price								
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Selling price	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yarn costs	53.5	31.1	44.6	54.5	49.2	49.2	62.7	63.8	56.7
Trimming costs	8.2	7.3	11.3	6.3	9.5	7.8	7.3	6.5	6.4
Gross margin	38.3	61.6	44.1	39.2	41.3	43.0	30.0	29.7	36.9
Direct labor	19.9	25.2	22.9	21.1	22.2	23.8	16.8	14.7	15.0
Indirect labor	4.9	2.4	5.4	6.0	2.4	2.8	5.3	4.0	2.4
Factory overhead	5.9	9.7	6.3	6.5	5.4	6.0	4.8	6.5	6.7
Packing materials	.5	3.4	.7	.3	.0	.0	.0	.0	.0
Selling and distribution	5.3	7.8	6.5	5.0	6.3	6.4	4.0	4.7	6.2
General administration	2.9	4.4	3.0	3.0	2.0	2.4	2.7	1.5	.7
Net profits or loss (—)	—1.1	8.7	—.7	—2.7	3.0	1.6	—3.6	—1.7	5.9

From primary data on costs of manufacturing knit underwear assembled by the Office of Price Administration and made available for use only as industry summaries.

Similar comparisons for mills that sold to retailers show that direct labor costs amounted on the average to 16.6 percent of the maximum selling price and to almost one-fourth of the manufacturers' margins (table 55). The proportion of the maximum selling price accounted for by direct labor ranged from 9.6 percent for children's sleeping suits to 21.7 percent for boys' and girls' pullovers. Similar proportions for other items show that those for indirect labor and overhead ranged from 14.7 percent for children's vests and pants to 23.6 percent for men's and boys' shorts and averaged 16.4 percent. Selling and discounts ranged from 10 percent for boys' and girls' pullovers to 26.4 percent for children's sleeping suits and averaged 20.5 percent. Costs of packing ranged from 0.3 percent for men's union suits and women's underwear to 3.3 percent for infants' wear and averaged 2.2 percent. General administration expenses ranged from 2.3 percent for women's underwear to 8 percent for boys' and girls' pullovers and averaged 4.8 percent.

Profits and losses ranged from losses of 18.5 percent for men's and boys' shorts to profits of 13.5 percent for infants' wear and averaged profits of 7.3 percent.

TABLE 55.—*Average of maximum selling prices per dozen, costs, and margins for knit-goods manufacturers that sell to retailers, United States, 1942.*

Item	All	Infants' wear	Children's		Boys' and girls' pullovers	Boys' shorts	Men's and boys' shorts	Women's underwear	Men's union suits
			Vests and pants	Sleeping suits					
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Selling price	5.60	4.22	4.55	12.90	5.98	3.92	4.75	9.46	14.84
Yarn costs	1.41	.81	.89	3.79	1.69	.88	1.68	3.29	5.41
Trimming costs	.39	.26	.31	.66	.50	.74	.64	.47	1.29
Gross margin	3.80	3.15	3.35	8.45	3.79	2.30	2.43	5.70	8.14
Direct labor	.93	.75	.73	1.24	1.30	.70	.78	1.03	2.56
Indirect labor and overhead	.92	.63	.67	2.03	1.23	.91	1.12	1.67	2.54
Packing materials	.12	.11	.13	.18	.10	.04	.04	.03	.04
Selling and discounts	1.15	.84	1.06	3.40	.60	.98	1.20	2.36	3.13
General administration	.27	.22	.19	.65	.48	.16	.17	.22	.41
Net profit or loss (—)	.41	.57	.57	.95	.08	—.49	—.88	.39	—.54
	Proportion of selling price								
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Selling price	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Yarn costs	25.2	19.2	19.6	29.4	28.3	22.4	35.4	34.8	36.4
Trimming costs	7.0	6.2	6.8	5.1	8.4	18.9	13.4	5.0	8.7
Gross margin	67.8	74.6	73.6	65.5	63.3	58.7	51.2	60.2	54.9
Direct labor	16.6	17.8	16.0	9.6	21.7	17.9	16.4	10.9	17.2
Indirect labor and overhead	16.4	14.9	14.7	15.7	20.6	23.2	23.6	17.7	17.1
Packing material	2.2	3.3	2.9	1.4	1.7	1.0	.8	.3	.3
Selling and discounts	20.5	19.9	23.3	26.4	10.0	25.0	25.3	24.9	21.1
General administration	4.8	5.2	4.2	5.0	8.0	4.1	3.6	2.3	2.8
Net profit or loss (—)	7.3	13.5	12.5	7.4	1.3	—12.5	—18.5	4.1	—3.6

From primary data assembled by the Office of Price Administration and made available for use only as industry summaries.

Data made available by the Office of Price Administration on net sales and manufacturers' costs for women's full-fashioned hosiery show that in 1942 direct labor costs amounted on the average to 25.9 percent of net sales and to 35.4 percent of the manufacturers' margins (table 56). The proportion of net sales accounted for by direct labor ranged from 25.2 percent for hosiery distributed to retailers to 27.8 percent for those distributed to mail order and chain stores. Similarly, indirect labor costs ranged from 5 percent for hosiery distributed to wholesalers to 8.1 percent for hosiery distributed to mail-order and chain stores and averaged 6.1 percent. Manufacturing expenses ranged from 8 percent for hosiery distributed to mail-order and chain stores to 9.5 percent for those distributed to retailers and averaged 9.1 percent. Selling expenses ranged from 3.6 percent for hosiery distributed to wholesalers to 5.2 percent for those distributed to retailers and averaged 4.8 percent. Data on the amounts and relative importance of other items are shown in table 56.

Information on selling price and on costs to manufacturers of wool-knit coating and other knit fabrics during the first quarter of 1943 shows that average costs of winding, knitting, mending, etc. ranged from less than 7 percent to more than 17 percent of the

TABLE 56.—*Net sales, costs, and manufacturers' margins for women's full-fashioned hosiery, 1942.*

Item	Distributed to			
	Wholesalers	Mail order and chain store	Retailer	All
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Net sales	2,563	12,759	41,509	56,831
Yarn costs including throwing	488	3,775	10,995	15,258
Gross margin	2,075	8,984	30,514	41,573
Direct labor costs	707	3,551	10,481	14,739
Indirect labor costs	120	1,036	2,297	3,462
Supplies and containers	76	222	930	1,228
Manufacturing expenses	219	1,017	3,935	5,171
Contract work[1]	343	537	1,312	2,192
Selling expense	93	483	2,141	2,717
Advertising expense	0	4	319	323
Officers' salaries	121	231	952	1,304
Other administrative expense	59	247	1,016	1,322
Other costs and profits	328	1,656	7,131	9,115
	Proportion of net sales			
	Percent	*Percent*	*Percent*	*Percent*
Net sales	100.0	100.0	100.0	100.0
Yarn costs including throwing	19.0	29.6	26.5	26.8
Gross margin	81.0	70.4	73.5	73.2
Direct labor costs	27.6	27.8	25.2	25.9
Indirect labor costs	5.0	8.1	5.5	6.1
Supplies and containers	3.0	1.7	2.2	2.2
Manufacturing expense	8.6	8.0	9.5	9.1
Contract work[1]	13.4	4.2	3.2	3.9
Selling expense	3.6	3.8	5.2	4.8
Advertising expense	------	(2)	.8	.6
Officers' salaries	4.7	1.8	2.3	2.3
Other administrative expense	2.3	2.0	2.4	2.3
Other costs and profits	12.8	13.0	17.2	16.0

[1] Includes commission knitting, gray goods purchases, and outside dyeing.
[2] Less than 0.05 percent.

From primary data assembled by the Office of Price Administration and made available for use only as industry summaries.

selling price (table 57). Average costs of dyeing and finishing ranged from less than 9 percent to more than 11 percent, and average selling expenses ranged from less than 2 percent to more than 4 percent of the selling price of the products. Costs of other items also varied widely from one kind of product to another as shown in table 57.

MEANS OF REDUCING COSTS

Many of the statements made regarding ways of reducing cotton manufacturers' margins also apply to knit-goods manufacturers. This is particularly true of statements on information needed as a basis for determining feasible means of reducing margins or costs and on the influences of kinds of products, size of business, rate of operation, and labor costs on margins or costs.

In addition, margins or costs for knit-goods manufacturers could be reduced by reductions in services. Census reports on the distribution of manufacturers' sales in 1939 show that 43 percent of the products of knit-goods manufacturers were distributed to retailers, including chains, about 9 percent was distributed through the manufacturers' own sales offices, and about 1.4 percent was distributed to consumers at retail. If the costs to knit-goods manufacturers of rendering these merchandising services averaged about the same as

the costs to wholesalers and retailers of rendering similar services, knit-goods manufacturers might reduce their margins or costs by about 15 percent by discontinuing the rendering of merchandising services. But little if anything would be gained unless total manufacturing and merchandising margins or costs could be reduced as a result of such changes. Data compiled by Dun and Bradstreet on profit ratios by method of distribution for underwear manufacturers from 1936 to 1942, showed that there were no consistent differences between the profit ratios for concerns that distributed through wholesalers only and those for concerns that distributed through retailers only. It would appear, therefore, that little if any net savings would result from reducing the merchandising services rendered by knit-goods manufacturers (*5*).

TABLE 57.—*Selling price, costs, and margins for wool knit coating fabrics, United States, first quarter of 1948.*

Item	Reports	Net selling price	Yarn costs	Gross margin	Winding, knitting, mending etc.	Dyeing and finishing	Selling expense	Other	Profit or loss (—)
	Number	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Company manufactured wool face and wool back:									
Topcoating (not over 25 oz.)	8	100.0	75.8	24.2	6.9	8.4	2.5	1.1	5.3
Overcoating (over 25 oz.)	4	100.0	78.2	21.8	8.4	9.3	1.9	.5	1.7
Company manufactured wool face and purchased cotton back:									
Topcoating (not over 25 oz.)	15	100.0	66.0	34.0	9.8	11.0	4.3	3.1	5.8
Overcoating (over 25 oz.)	13	100.0	73.3	26.7	9.9	10.0	3.9	2.3	.6
Purchased wool face and cotton back:									
Topcoating (not over 25 oz.)	4	100.0	64.3	35.7	15.1	11.9	4.0	1.7	3.0
Overcoating (over 25 oz.)	2	100.0	71.3	28.7	17.3	11.1	4.0	1.9	—5.6

Primary data assembled by U. S. Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

Data on profit ratios for underwear manufacturers with different sizes of business and different methods of operation for the period 1936–42 indicate the possibilities for some reduction in margins or costs by increasing the size of the smaller concerns and by integration. During the 7-year period, ratios of aggregate profits after taxes to aggregate sales, for concerns with sales of less than $500,000, averaged less than one-half as large as those for concerns with sales of $500,000 to $1,000,000 and of $2,500,000 and over (table 58). Similar data on ratios of aggregate profits after taxes to aggregate sales for reporting concerns on the basis of method of operation show that profit ratios for concerns that bought fabrics and fashioned them into garments averaged about one-third as large as those for concerns that bought yarn and knit, and about one-fourth as large as those concerns that spun yarn and knit (table 59). These data indicate that profit ratios increased with size of concern and with the amount of integration. The integrated concerns usually were larger than those that bought fabrics and

fashioned them into garments and the difference in profit ratios shown may be attributed to both size and integration.

TABLE 58.—*Ratios of aggregate profits to aggregate sales, for manufacturers of underwear, by volume of sales, United States, 1936-1942.*

BEFORE TAXES

Volume of sales	1936	1937	1938	1939	1940	1941	1942	1936-42 average
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Under $500,000	4.8	1.5	0.4	1.2	1.3	3.6	5.3	2.6
$500,000 to $1,000,000	7.8	5.0	4.8	4.6	4.9	8.5	7.4	6.1
$1,000,000 to $2,500,000	5.9	2.2	2.4	4.0	3.8	6.4	8.7	4.8
$2,500,000 and over	7.1	4.8	3.3	5.6	5.7	8.9	11.0	6.6

AFTER TAXES

Under $500,000	3.6	1.4	.2	.8	1.3	3.3	3.8	2.1
$500,000 to $1,000,000	6.8	5.1	4.1	4.0	3.5	5.2	4.3	4.7
$1,000,000 to $2,500,000	4.6	1.7	1.5	2.9	2.6	4.0	3.6	3.0
$2,500,000 and over	5.9	4.3	2.7	4.7	4.5	4.8	3.7	4.4

Abstracted from a report by Dun and Bradstreet, Inc. (5).

TABLE 59.—*Ratios of aggregate profits to aggregate sales for manufacturers of underwear, by kind of operation, United States, 1936-42.*

BEFORE TAXES

Kind of operation	1936	1937	1938	1939	1940	1941	1942	1936-42 average
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Buy fabrics and fashion into garments	1.9	1.1	1.6	0.3	1.2	3.9	4.2	2.0
Buy yarn and knit	6.5	3.3	2.7	4.6	4.1	8.0	9.8	5.6
Spin own yarn and knit	8.3	6.5	4.4	7.1	8.1	9.3	11.3	7.9

AFTER TAXES

Buy fabrics and fashion into garments	1.5	.8	1.1	.2	.9	1.9	2.6	1.3
Buy yarn and knit	5.4	3.0	2.1	3.7	3.1	4.9	4.1	3.8
Spin own yarn and knit	6.8	5.5	3.7	5.8	6.0	4.4	3.1	5.0

Abstracted from a report by Dun and Bradstreet, Inc. (5).

IMPORTANCE OF REDUCTIONS IN COSTS

Some indication of the relative importance of reducing the margins or costs for knit-goods manufacturers may be obtained from the fact that these margins or costs averaged in 1939 about two or three times as great as the farm value of the cotton used. If all reductions were passed back to growers in the form of higher prices, each reduction of 1 percent in knit goods manufacturers' margins would mean an increase of 2 or 3 percent in returns to cotton growers from the cotton used.

DYERS' AND FINISHERS' MARGINS

Cotton cloths as they come from the looms are either gray goods woven from unbleached yarns or colored goods woven in whole or in part of dyed yarns. About 271 million pounds of colored-yarn cotton goods and related fabrics, or about 11 percent of the total of

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cotton-woven goods over 12 inches wide, were produced in 1939. Gray goods, which usually make up most of the total, may be used in the gray or they may be finished by being bleached, dyed, or printed. Information on the proportion of finished woven fabrics made by cotton manufacturers is not complete, but census data for 1939 and other information indicate that more than one-fourth of the woven goods was used in the gray, more than one-half was finished, and the remainder was yarn-dyed (*4*). Of the total linear yardage finished, about 43 percent was bleached, 28 percent was dyed, and 29 percent was printed (*21*).

The channels of distribution for domestic cotton cloth vary somewhat with the kind of cloth and with the uses made of it. Print cloth, which is probably the most typical domestic fabric, is woven in the gray largely by mills in the Southeastern States, but some is woven by New England mills. Usually the mills which weave print cloth ship it in the gray unfinished condition, an important part of which is sent direct to industrial plants for use in the gray. But most of the print cloth is finished at finishing plants located in the Southern, the Middle Atlantic, or the New England States. The finished fabrics are shipped from these plants to a wide variety of consumers such as the cutting-up trade where the cloth is used in making wearing apparel and household furnishings; to the jobbing trade for resale to retailers throughout the country; to the large department and chain stores for sale over the counter; and to industrial plants. Industrial plants use gray and finished print cloth in the manufacture of various nontextiles as well as textile products (*27, pp. 10–11*).

Cotton-cloth manufacturers usually sell their output through commission houses, brokers, or their own sales organization. These, with merchant converters, constitute the principal marketing agents for cotton-print cloth. Commission houses acting as exclusive agents for the mills secure orders for and control the shipments of the goods and advise the mills regarding their production policies. Usually they guarantee the sales accounts and in many cases they assist in financing the mills by discounting drafts against shipments or by loans against stocks on hand or in process. But often the services of discounting sales, advancing funds, assuming credit risks, and collecting accounts are turned over to factors. The commission houses obtain their orders largely from jobbers, garment manufacturers, big mail-order houses, and the export trade. Cloth brokers act as independent middlemen between mills and buyers, particularly converters. Brokers do not buy cloth nor accept any financial responsibility for their transactions. Mill-selling houses maintained by a few of the larger mills control the disposal of the products and arrange credits, and by so doing save the commissions that must be paid when the sales are made through other agencies. Staple goods marketed in this way are principally gray or bleached print cloth and sheetings (*27, p. 92*).

Converters occupy a key position in the marketing and distribution of cloth and constitute a basic point of contact between cotton manufacturers and the consumers of cotton goods. They buy print cloth and other cloth in the gray, have it bleached, dyed, or printed by the finishers and sell the finished cloth to various distributors

and consumers. Using gray goods from mills as their raw material they have it finished to their order in a great number of designs, finishes, and styles. A large percentage is bleached in various finishes from soft to hard; some is dyed in various colors, tints, and shades; and a substantial proportion, particularly of print cloth, is finished in a great number of colors or designs. Converters keep in close touch with the fluctuating requirements of the market and are an important factor in determining, within the limits of fashion changes, the seasonal drift of style goods (*27, p. 92*).

Some indications of the relative importance of the various outlets for goods handled by textile dyeing and finishing establishments may be obtained from census data on distributed sales by classes of customers for establishments dyeing and finishing textiles (except woolen and worsted) in the United States in 1939 (table 60). These data show that most of the products were sold to industrial users, wholesalers, and jobbers. A considerable proportion of the fabricated products from broad-woven goods and of cotton thread was sold through the manufacturers' own wholesale offices.

TABLE 60.—*Sales distributed by classes of customers for establishments dyeing and finishing textiles (except woolen and worsted) United States, 1939.*

Customer outlets	Sales of establishments			
	Dyeing and finishing textiles (except woolen and worsted)			Cloth finishing and miscellaneous special finishing
	Total	Gray goods	Finished goods[1]	
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Establishments own sales offices	14,046	------	14,046	4,495
Wholesalers and jobbers	24,336	1,135	[2]23,201	1,996
Converters for resale	3,921	3,921	(2)	------
Exporters[3]	2,034	572	1,462	287
Retailers (including chains)	1,071	------	1,071	448
Industrial users[4]	41,190	8,171	33,019	6,098
Total distributed sales	86,598	13,799	72,799	13,324
	Percentage distribution			
	Percent	*Percent*	*Percent*	*Percent*
Establishments own sales offices	16.2	------	19.3	33.7
Wholesalers and jobbers	28.1	8.2	[2]31.9	15.0
Converters for resale	4.5	28.4	(2)	------
Exporters[3]	2.4	4.2	2.0	2.1
Retailers (including chains)	1.2	------	1.5	3.4
Industrial users[4]	47.6	59.2	45.3	45.8
Total distributed sales	100.0	100.0	100.0	100.0

[1] Fabricated products combined with finished goods to avoid disclosure.
[2] Sales to converters combined with sales to wholesalers and jobbers to avoid disclosure.
[3] Includes sales to export intermediaries and exports direct to buyers in other countries.
[4] Also includes commercial, professional, and institutional users (manufacturers, railroads, utilities Governmental bodies, hotels, contractors, etc.)

Abstracted from *Distribution of Manufacturers' Sales 1939* (*23*).

CHARGES OR COSTS

Information on the margins or costs involved in taking gray goods from cotton mills and delivering them as finished fabrics to wholesalers in central markets is incomplete. Apparently a typical channel of movement is from the gray-goods mill through the selling agent, the converter, the finisher, and the transportation agency to

central markets. The margins or costs include the charges made by each of these agencies for the services rendered.

Census data on dyeing and finishing textiles in 1939 show that for 468 establishments primarily engaged in bleaching, dyeing, printing, finishing, or otherwise converting fabrics of cotton, rayon, silk, and linen, or mixtures of these fibers, and dyeing and finishing raw stock, yarn and thread of cotton, rayon, silk, and linen, the margin or spread between the costs of the materials and supplies used and the value of the finished products averaged about 52.7 percent of the value of the finished products (*21*). Similar data for 112 establishments primarily engaged in sponging cloth and miscellaneous special finishing such as waxing cloth and varnishing cambric and buckram, show margins or costs which in 1939 averaged about 60 percent of the value of the finished products.

Federal Trade Commission reports on textile dyeing and finishing (except woolen and worsted) corporations which accounted for more than one-third of the total value of the products reported by the Bureau of the Census show that the margins, or the spread between total sales and costs of materials, for these corporations averaged 47.5 percent of total sales in 1939 and 48.4 percent in 1940.[54] The kind of dyeing, finishing, and other services rendered vary considerably from one corporation to another and the average margins ranged from less than 30 percent to more than 80 percent of the value of the products. Data for 1939 and for 1940 combined show that the margins for more than 30 percent of the corporations averaged less than 40 percent and that margins for about 39 percent of the corporations averaged more than 70 percent of the value of the products.

A report of the Federal Trade Commission on textile industries in the first half of 1936 shows that the margins for stock dyeing and finishing companies averaged 38.3 percent, those for commission dyeing and finishing companies 96.9 percent, and those for thread finishing and spooling companies 40.3 percent of net sales.[55] The differences between the margins for stock and commission dyeing and finishing companies are accounted for chiefly by the fact that the raw material costs for stock companies included costs of the goods processed along with costs of dyes and chemicals, whereas costs for commission companies do not include costs of the goods processed but are confined to those for dyes and chemicals.

According to a report of the U. S. Tariff Commission, total costs of finishing, marketing, and distributing typical print cloth in 1934 averaged about 1.5 cents per yard for bleached goods, 2.25 cents for dyed goods, 3.75 cents for printed goods of one color and 30 percent coverage, and 4.95 cents for printed goods of four colors and 75 percent coverage (*27, p. 94*). The proportion of the value of the finished cloth in New York accounted for by these costs averaged about 20 percent for bleached, 27 percent for dyed, 38 percent for printed with one color and 30 percent coverage, and 44 percent for printed with four colors and 75 percent coverage.

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[54] United States Federal Trade Commission. *Reports on Textile Dyeing and Finishing (except woolen and worsted) Corporations*, 1939, 1942. [Processed.]

[55] United States Federal Trade Commission. See footnote 40, p. 49.

Tabulations made of primary data assembled by the Office of Price Administration for the years 1940–42 on converters' costs for finishing cotton goods show that the proportion of the net selling price of the finished cloth accounted for by converters' margins averaged about 26 percent for bleached goods, 37 percent for dyed goods, and 46 percent for printed goods (table 61).

TABLE 61.—*Selling price, costs, and margins for bleaching, dyeing, and printing cotton fabrics, average 1940–42.*

Kind of fabric	Reports	Average selling price	Proportion of selling price: Selling price	Cost of gray goods	Gross margin	Finishing costs	Other costs
			Bleached				
	No.	*Cents*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Broadcloth	116	15.91	100.0	79.2	20.8	10.5	10.3
Batiste, dimity, lawn, organdy, voile	53	14.27	100.0	78.7	21.3	10.0	11.3
Sheeting	58	11.45	100.0	72.3	27.7	16.2	11.5
Ducks	27	17.50	100.0	74.9	25.1	11.3	13.8
Twills and drills	153	16.73	100.0	70.9	29.1	15.8	13.3
Sateen	24	21.77	100.0	72.1	27.9	11.0	16.9
Print cloth	97	8.44	100.0	76.9	23.1	12.9	10.2
Poplins, rep and piques	48	17.57	100.0	63.3	36.7	13.3	23.4
Broadcloth—colored yarns	74	21.32	100.0	66.6	33.4	11.4	22.0
Other	162	11.60	100.0	74.0	26.0	9.6	16.4
All[1]	812	13.30	100.0	73.6	26.4	12.9	13.5
			Dyed				
Broadcloth	65	26.40	100.0	51.0	49.0	20.1	28.9
Batiste, dimity, lawn, organdy, voile	47	17.94	100.0	64.9	35.1	14.4	20.7
Sheeting	33	16.17	100.0	52.4	47.6	23.3	24.3
Ducks	15	18.40	100.0	71.8	28.2	14.5	13.7
Twills and drills	172	15.61	100.0	68.6	31.4	17.4	14.0
Sateen	78	22.69	100.0	66.6	33.4	15.8	17.6
Print cloth	33	9.89	100.0	68.3	31.7	16.1	15.6
Poplins, rep and piques	77	25.11	100.0	53.5	46.5	17.9	28.6
Other	175	18.89	100.0	64.2	35.8	15.5	20.3
All[1]	695	18.21	100.0	63.0	37.0	17.4	19.6
			Printed				
Broadcloth	144	13.68	100.0	60.5	39.5	24.5	15.0
Batiste, dimity, lawn, organdy, voile	174	18.27	100.0	47.9	52.1	25.7	26.4
Sheeting	99	25.33	100.0	37.3	62.7	32.9	29.8
Ducks	6	57.07	100.0	38.9	61.1	24.3	36.8
Twills and drills	52	36.39	100.0	33.7	66.3	33.6	32.7
Sateen	76	45.96	100.0	35.2	64.8	27.9	36.9
Print cloth	412	14.18	100.0	59.7	40.3	23.9	16.4
Poplins, rep and piques	104	24.47	100.0	52.0	48.0	24.9	23.1
All[1]	1067	19.12	100.0	53.7	46.3	25.6	20.7

[1] The items for each fabric were weighted by the quantities finished in 1939 in arriving at totals.

Primary data assembled by Office of Price Administration and made available for use only as industry summaries.

Information on costs of specified kinds of cloth in regular mill finish, on costs of sanforizing and shrinkage, and on costs of cloth sanforize finished, in 1941, shows that the margins for sanforizing and shrinkage averaged about 14 percent of the costs of the finished cloth (table 62). The margins for sanforizing and shrinkage were fairly uniform from one kind of cloth to another.

Data made available by the Office of Price Administration on costs and selling prices of finished rayon during the 3 years 1940–42

show that the finishers' margins ranged from about one-third to about two-fifths of the selling price of dyed rayon products and averaged about one-half of the selling price for printed rayon products. The proportion of the selling price accounted for by the finishers' margins usually was somewhat greater for products sold to retailers than for products sold to manufacturers and jobbers.

TABLE 62.—*Costs of cloth in regular mill finish, sanforizing and shrinkage, and of cloth sanforize finished by specified kinds, September 1941.*

Item	Cost per yard		
	Cloth regular mill finish	Sanforizing and shrinkage	Cloth sanforize finished
	Cents	*Cents*	*Cents*
Denims:			
White filling	10.91	1.86	12.77
Blue filling	10.58	1.85	12.43
D and T filling	10.26	1.64	11.90
Coarse stripes:			
Express—white filling	11.40	1.89	13.29
Hickory—white filling	11.03	1.83	12.86
Blue filling	11.01	1.83	12.84
Multi-stripes—blue filling	11.16	1.87	13.03
Beach cloth—stripes or white filling	9.62	1.80	11.42
All	10.90	1.84	12.74
	Proportion of sanforize finished		
	Percent	*Percent*	*Percent*
Denims:			
White filling	85.4	14.6	100.0
Blue filling	85.1	14.9	100.0
D and T filling	86.2	13.8	100.0
Coarse stripes:			
Express—white filling	85.8	14.2	100.0
Hickory—white filling	85.8	14.2	100.0
Blue filling	85.7	14.3	100.0
Multi-stripes—blue filling	85.6	14.4	100.0
Beach cloth—stripes or white filling	84.2	15.8	100.0
All	85.6	14.4	100.0

Primary data assembled by the U. S. Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

ITEMS INCLUDED IN MARGINS

Margins for dyeing and finishing textiles, or the spread between the costs of the raw materials used and the value of the finished products, include costs of wages and salaries, depreciation, fuel and power, dyes and chemicals, taxes, selling, advertising, and other items incidental to operating dyeing and finishing establishments. An indication of the relative importance of the items of costs for industries dyeing and finishing cotton, rayon, silk, and linen textiles may be obtained from census reports for 1939 (table 63). These data show that for establishments primarily engaged in bleaching, dyeing, printing, finishing, or otherwise converting fabrics of cotton, rayon, silk, and linen, or mixtures of these fabrics, and dyeing and finishing of raw stock, yarn and thread of cotton, rayon, silk, and linen, salaries and wages accounted for more than half of the gross margins and for more than one-fourth of the value of the finished products. Manufacturing wages alone accounted for more than 40 percent of the gross margin and for almost 23 percent of the value of the finished products.

TABLE 63.—*Value of products, costs, and margins for dyeing and finishing textiles, except woolen and worsted, United States, 1939.*

Item	Dyeing and finishing cotton, rayon, silk, and linen textiles		Cloth sponging and miscellaneous special finishing	
	1,000 dollars	*Percent*	*1,000 dollars*	*Percent*
Value of products	271,167	100.0	23,682	100.0
Costs of materials, supplies and containers	[1]128,215	47.3	9,473	40.0
Gross margins	142,952	52.7	14,209	60.0
Salaries and wages:				
Officers' salaries	5,839	2.2	684	2.9
Manufacturing salaries	11,902	4.4	557	2.4
Manufacturing wages	61,745	22.8	3,852	16.3
Distribution	2,468	.9	385	1.6
Other	336	.1	22	.1
Fuel	10,152	3.7	247	1.0
Purchased electric energy	2,106	.8	119	.5
Other[2]	48,404	17.8	8,343	35.2

[1] Cost of contract work included to avoid disclosing data reported by individual establishments.
[2] Includes depreciation, interest, insurance, rent, taxes, profits, and other expenses.
Adapted from a census report on *Cotton Manufactures* (*21*).

Similar data for cloth-sponging and miscellaneous special finishing establishments show that salaries and wages accounted for almost 39 percent of gross margins and about 23 percent of the value of the finished products. Manufacturing wages alone amounted to about 27 percent of the gross margins and to about 16 percent of the value of the finished products. A number of items of cost or expense such as depreciation, interest, insurance, rent, taxes, and profits were not shown separately in census reports.

Reports of the Federal Trade Commission on sales, costs, and margins for textile dyeing and finishing (except woolen and worsted) corporations in 1939 and 1940 present data for some items not segregated in the census reports (table 64). These data show that production wages and salaries accounted for almost 45 percent of the total margins for dyeing and finishing the textiles in 1939 and

TABLE 64.—*Sales, costs, and margins for textile-dyeing and finishing (except woolen and worsted) corporations in 1939 and 1940.*

Item	1939		1940	
	1,000 dollars	*Percent*	*1,000 dollars*	*Percent*
Total sales	100,961	100.0	104,592	100.0
Material costs	52,954	52.5	53,969	51.6
Gross margin	48,007	47.5	50,623	48.4
Production wages and salaries	21,450	21.2	18,492	17.7
Depreciation	2,939	2.9	2,945	2.8
Taxes and social security	1,830	1.8	1,995	1.9
Other operating expenses[1]	9,756	9.7	14,680	14.0
Goods purchased for resale	1,558	1.5	1,643	1.6
Selling expenses	3,250	3.2	3,157	3.0
Advertising	170	.2	224	.2
Administrative and general office	2,347	2.3	2,862	2.8
Provision for uncollectible accounts	107	.1	130	.1
Net profits	4,600	4.6	4,495	4.3

[1] Includes other payroll in cost, repairs, and maintenance, and research and development expense.
Adapted from reports of Federal Trade Commission. See footnote 54, p. 100.

almost 37 percent in 1940. The proportion of the total value of the finished products accounted for by production wages and salaries averaged 21.2 percent in 1939 and 17.7 percent in 1940. The proportion of the value of the finished products accounted for by other items of expense averaged almost 3 percent for depreciation, about 3 percent for selling expenses, and 4.6 percent for net profits. Data

for other items are shown in table 64. These averages were based on reports from 19 corporations in 1939 and 27 in 1940, and the value of the products dyed and finished by these corporations amounted to about one-third of the total reported by the Bureau of the Census.

The kinds and amounts of dyeing, finishing, and other services rendered differed considerably from one corporation to another. These differences are reflected in considerable variations in average costs for individual corporations from the averages for all corporations combined. Data for the 2 years combined show that the proportion of total sales accounted for by production wages and salaries amounted to less than 15 percent for more than one-fourth of the corporations and to more than 35 percent for about 13 percent of the corporations reported. The corresponding proportions for selling expense amounted to less than 2 percent for about one-third of the corportions and to more than 5 percent for 11 percent of the corporations. More than one-fifth of the corporations reported net losses which ranged up to about one-fifth of total sales. Net profits reported ranged from less than 1 to more than 20 percent of the value of the finished products.

The relative importance of the items included in the margins varies considerably with the kind of company. According to the Federal Trade Commission, data reported for the first half of 1936 show that the proportion of net sales accounted for by labor costs ranged from 12.6 percent for stock dyeing and finishing companies to 30.7 percent for commission dyeing and finishing companies and to 10.7 percent for companies engaged in finishing and spooling thread.[56] Variations for these and other items of cost are shown in table 65. The differences between the data for stock and commission dyeing and finishing companies are largely accounted for by the fact that raw material costs for stock companies include the value of the goods processed, whereas similar costs for commission companies are limited mostly to dyes and chemicals used.

The number and relative importance of the items included in gross margins also vary with the kind of finishing and other services rendered. Margins for finishing, marketing, and distributing cloth include the selling agents' commission, the converters' expenses, the finishers' costs, and costs of transporting the cloth from mills via finishing plants to the market. The proportions of the value of the finished goods and of the gross margin accounted for by each of these items vary with the kind of finishing (table 66). The proportion of the total margin or cost accounted for by the finishers' costs amounted to 61 percent for bleached, 71 percent for dyed, 73 percent for cloth printed with one color and 30 percent coverage, and 79 percent for cloth printed with four colors and 75 percent coverage. Converters' expense accounted for 13 to 17 percent; selling agents' commission, 4 to 12 percent; and transportation, 4 to 11 percent of total margins.

Information on bleaching costs in 1934–35 was presented by the Tariff Commission for 17 finishing plants of which 9 were located in the South, 5 in New England, and 3 in the Middle Atlantic States (*27, p. 118*). Calculations were made of costs per finished linear

[56] United States Federal Trade Commission. See footnote 40, p. 49.

TABLE 65.—*Net sales, costs and margins for cotton-textile dyeing and finishing companies, January-June 1936.*

Item	Sales and expenses of company					
	Dyeing and finishing				Finishing and spooling thread	
	Stock		Commission			
	1,000 dollars	*Percent*	*1,000 dollars*	*Percent*	*1,000 dollars*	*Percent*
Net sales	7,204	100.0	34,283	100.0	2,295	100.0
Raw material costs[1]	4,446	61.7	1,053	3.1	1,371	59.7
Gross margins[1]	2,758	38.3	33,235	96.9	924	40.3
Labor costs	910	12.6	10,553	30.7	245	10.7
Fuel and power	176	2.4	2,157	6.3	37	1.6
Dyes and chemicals	560	7.8	9,660	28.1	31	1.4
Property taxes	47	.7	470	1.4	17	.7
Depreciation	133	1.8	1,409	4.1	17	.7
Other mill expense[2]	535	7.4	4,551	13.3	155	6.8
Selling expense and bad debts	194	2.7	815	2.4	216	9.4
Other general expense[3]	212	3.0	1,605	4.7	160	7.0
Net profit or loss	[4] 9	[4] .1	2,015	5.9	46	2.0
Number of companies	10		77		14	

[1] Adjustments were made for changes in inventory.
[2] Includes mill overhead and payment for outside work but not general administrative expenses.
[3] Includes officers' and directors' salaries, commissions and bonuses, and other administrative and general expense.
[4] Loss.
Abstracted from or based on a report of Federal Trade Commission on *Textile Industries in the First Half of 1936*. See footnote 40, p. 49.

yard of converting gray print cloth 38½ inches wide, 64 by 60 inches, weighing 5.35 yards per pound into a bleached fabric 36 inches wide, weighing 6.81 yards per pound in soft and very lightly starched finish known as nainsook. Costs of packaging and imputed interest were also presented. The results show that total bleaching costs for the nainsook finish on print cloth having a construction of 64 by 60 inches in gray averaged 0.936 cent per square yard of which 0.831 cent was basic finishing costs, 0.075 cent packaging costs, and 0.03 cent imputed interest. Costs shown for other constructions did not differ greatly from those for constructions of 64 by 60 inches.

TABLE 66.—*Costs of gray goods, finishing, marketing, and distributing print cloth, expressed as proportions of the value of finished goods, 1934.*

Item	Distribution by kind of finish			
	Bleached	Dyed	Printed	
			One color, 30 percent coverage	Four colors, 75 percent coverage
	Percent	*Percent*	*Percent*	*Percent*
Value of finished goods[1]	100.0	100.0	100.0	100.0
Cost of gray goods	80.3	73.4	61.9	55.8
Gross margin	19.7	26.6	38.1	44.2
Selling agent commission	2.3	2.1	1.8	1.6
Converter's expense	3.2	3.5	6.5	5.8
Finisher's cost[2]	12.1	18.9	27.8	35.0
Transportation	2.1	2.1	2.0	1.8

[1] Cost of finished goods at New York based upon a mill price for the gray print cloth of 6.5 cents per yard.
[2] Includes processing, packaging, and imputed interest.
Abstracted from United States Tariff Commission Report to the President on *Cotton Cloth* (27, p. 94).

The bleaching process brings about some changes in the dimensions and weight of the gray fabrics. One yard of gray-print cloth 38½ or 39 inches wide, for example, makes about 1.02 yards of bleached cloth 36 inches wide. The degree of the changes in weight as a result of bleaching varies according to the extent to which the loss in weight in the bleaching process is made up by the addition of starch in finishing. The significance of these changes on margins and costs is indicated by data showing the costs of gray goods and of bleached goods made from it (table 67). These data show that costs of bleaching ranged from about 11.4 to about 14.3 percent of the value of the bleached cloth. Costs of transportation via bleachery to New York ranged from 2.1 to about 2.2 percent of the value of the bleached cloth.

TABLE 67.—*Costs of bleached cloth, gray goods, bleaching and transportation for four typical constructions of print cloth, 1934.*

Item	Cost per pound of bleached cloth					Percentage of value of bleached cloth				
	1-D	2-D	3-D	4-D	All	1-D	2-D	3-D	4-D	All
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct*
Value of bleached cloth[1]	51.08	47.13	48.63	50.96	49.45	100.0	100.0	100.0	100.0	100.0
Costs of gray goods	43.59	40.01	42.08	42.53	42.05	85.4	84.9	86.5	83.5	83.0
Raw cotton costs	22.31	19.78	20.22	21.61	20.98	43.7	42.0	41.6	42.4	42.4
Manufacturing labor	10.25	9.59	10.66	9.80	10.10	20.1	20.3	21.9	19.4	20.4
Overhead	8.65	8.39	9.16	8.60	8.70	16.9	17.8	18.8	16.9	17.6
Imputed interest	1.21	1.21	.93	1.26	1.15	2.4	2.6	1.9	2.5	2.3
Selling costs	1.17	1.04	1.11	1.17	1.12	2.3	2.2	2.3	2.3	2.3
Bleaching costs	6.40	6.10	5.54	7.32	6.34	12.5	12.9	11.4	14.3	12.8
Processing	5.65	5.45	4.96	6.44	5.63	11.1	11.5	10.2	12.6	11.4
Packaging	.55	.43	.39	.64	.50	1.0	.9	.8	1.2	1.0
Imputed interest	.20	.22	.19	.24	.21	.4	.5	.4	.5	.4
Transportation	1.09	1.02	1.01	1.11	1.06	2.1	2.2	2.1	2.2	2.2

[1] Does not include converters' expenses.

United States Tariff Commission Report to the President on *Cotton Cloth* (*27, pp. 120–121*).

Information on costs of specified kinds of cloth in regular mill finish and on costs of sanforizing, shrinkage, selling, and on total costs of the cloth sanforize finished shows that in 1942 sanforizing accounted for about 26 percent, shrinking 38 percent, loss on seconds 13 percent, and selling 23 percent of the total margin or spread between the costs of the cloth in mill finish and the selling price of the cloth in sanforize finish (table 68). These proportions varied considerably from one kind of cloth to another.

Data on finishers' margins for rayon fabrics during the 3 years 1940–42 show that finishing costs averaged about 12 percent of the selling price of dyed rayon and about one-fourth of the selling price for printed rayon (table 69). Cost of freight on gray goods averaged less than 1 percent, working allowance amounted on the average to about 6 percent, and costs of other items amounted on the average to about one-fifth of the selling price of the finished products.

MEANS OF REDUCING COSTS

Possible means of reducing margins or costs of finishing, marketing, and distributing cloth may include increased efficiency in rendering the services, the reduction or elimination of some of the services, or a combination of both. The Tariff Commission after de-

TABLE 68.—*Costs of cloth in regular mill finish, sanforizing, shrinking, and selling, and of cloth sanforize finished by specified kinds, November 1942.*

Item	Costs per yard					
	Mill finish	Sanforizing	Shrinking	Loss on seconds	Selling	Total
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Cents*
Denims:						
White back	7.47	0.65	0.86	0.32	0.55	9.85
Fancy stripes	7.84	.57	.98	.37	.57	10.33
Hickory stripes	7.78	.65	1.00	.37	.58	10.38
Express stripes	8.48	.48	1.13	.15	.58	10.82
O. D.	9.17	.61	.21	.02	.32	10.93
Chambrays	5.06	.63	.62	.24	.80	7.35
Coverts	7.51	.70	1.33	.42	.68	10.64
Whipcord	8.01	1.09	1.20	.25	1.22	11.77
All	7.63	.65	.96	.34	.59	10.17
	Proportion of total costs					
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Denims:						
White back	75.8	6.6	8.7	3.3	5.6	100.0
Fancy stripes	75.9	5.5	9.5	3.6	5.5	100.0
Hickory stripes	75.0	6.3	9.6	3.5	5.6	100.0
Express stripes	78.4	4.4	10.4	1.4	5.4	100.0
O. D.	83.9	5.6	1.9	5.7	2.9	100.0
Chambrays	68.8	8.6	8.4	3.3	10.9	100.0
Coverts	70.6	6.6	12.5	3.9	6.4	100.0
Whipcord	68.0	9.3	10.2	2.1	10.4	100.0
All	75.0	6.4	9.4	3.4	5.8	100.0

Primary data assembled by the U. S. Tariff Commission for the Office of Price Administration and made available by the latter agency for use only as industry summaries.

TABLE 69.—*Percentage distribution of costs and margins for finishers of rayon fabrics, United States, 1940-42.*

Kind of finish, outlet, and year	Reports	Net selling price	Gray goods cost	Gross margin	Freight on gray goods	Working allowance	Finishing cost	Other
	Number	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Dyed and sold to:								
Manufacturer—								
1940	126	100.0	66.2	33.8	1.0	6.3	13.0	13.5
1941	229	100.0	63.6	36.4	.8	6.4	12.2	17.0
1942	254	100.0	62.6	37.4	.8	6.2	11.5	18.9
Retailer—								
1940	49	100.0	58.1	41.9	.9	6.3	12.8	21.9
1941	73	100.0	61.8	38.2	.8	6.0	11.9	19.5
1942	89	100.0	58.5	41.5	.8	5.1	11.2	24.4
Jobber—								
1940	40	100.0	63.6	36.4	1.0	7.0	13.2	15.2
1941	68	100.0	62.9	37.1	.8	6.0	12.1	18.2
1942	69	100.0	61.9	38.1	.8	5.8	11.4	20.1
Printed and sold to:								
Manufacturer—								
1940	36	100.0	50.2	49.8	1.0	5.4	28.2	15.2
1941	15	100.0	41.7	58.3	.4	6.6	24.9	26.4
1942	57	100.0	51.1	48.9	.6	6.2	20.4	21.7
Retailer—								
1940	31	100.0	47.7	52.3	.8	5.0	26.0	20.5
1941	12	100.0	44.6	55.4	.4	6.5	23.3	25.2
1942	32	100.0	53.1	46.9	.5	5.0	18.3	22.3
Jobber—								
1940	28	100.0	47.2	52.8	.8	5.0	26.0	21.0
1941	14	100.0	50.6	49.4	.5	7.7	26.7	14.5
1942	40	100.0	58.1	41.9	.5	6.4	17.5	17.5

Primary data on selling price and on costs were assembled by the Office of Price Administration and made available for use only as industry summaries.

scribing the marketing organization for domestic cotton cloth indicated that competition among the agencies was so severe that any wasted effort or lost motion may be reflected more largely in low margins on the turn-over than in higher prices for the finished products. It concluded, however, that undoubtedly some savings in costs could be made at various points in the marketing sequence, especially with respect to agents' commission (*27, pp. 93–94*). But the information available is not sufficiently adequate to indicate definitely the means by which or the extent to which it would be possible and feasible to increase efficiency and lower costs without reducing or eliminating some of the services offered.

The data on costs of finishing, marketing, and distributing print cloth in 1934 indicate that the average cost for dyeing was 50 percent greater than for bleaching, that for printing with one color and 30 percent coverage was 70 percent greater than that for dyeing, and that for printing with four colors and 75 percent coverage was 29 percent greater than that for printing with one color and 30 percent coverage. The available information is not sufficiently adequate to indicate to what extent it would be feasible to substitute the lower for the higher cost finishes by means of consumer education on the relative utilities and costs of the various finishes.

Information on the production and transportation of print cloth indicates that some reductions in cost might be made by eliminating or reducing back hauls. In 1934 most of the production of gray-print cloth was in the cotton-growing States. New England and the Middle Atlantic States produced less gray goods than they finished. In 1934, New England accounted for less than 8 percent of the gray-print cloth produced but accounted for about 20 percent of the yardage bleached. Transportation charges for gray-print cloth shipped from Greenville, S. C., a representative point of origin for cotton produced and bleached in the South, via Niantic, Conn., a representative center for Southern print cloth bleached in the North, to New York, averaged 0.213 cent per square yard, compared with 0.154 cent for cloth shipped from Greenville direct to New York. (*27, p. 119*). The reduction in transportation costs as a result of direct shipments would amount to about 0.059 cent per yard or about 28 percent. It is not known to what extent such savings would be supplemented or offset by other developments associated with such changes.

A report of the Interstate Commerce Commission, showing a comparison of gross freight carload revenues with fully distributed costs giving freight rates on cotton cloth and cotton fabrics, shows that the ratio of freight revenues from cotton cloth and cotton products to fully distributed costs, including losses and damages, passenger and less-than-carload deficits, and 4-percent returns, amounted to 149 percent in 1939 (*26*). The ratios of freight revenues from cotton cloth and cotton products to fully distributed costs, including losses and damages, passenger and less-than-carload deficits, and actual rate of return, amounted to 150 percent. These data indicate that freight rates on cotton cloth and cotton products could have been reduced by about one-third without reducing the revenues from these products below distributed costs as calculated by the Interstate Commerce Commission. But such a reduction in rates for

cotton cloth and cotton fabrics might necessitate offsetting adjustments in rates for other commodities and such adjustments may not be feasible.

Importance of Reductions in Costs

Some indications of the relative importance of reducing the margins or costs involved in taking gray goods from mills and delivering them as finished fabrics to wholesalers in central markets may be obtained from a comparison of the margin—the spread between prices of gray goods at mills and prices of the finished cloth at wholesale markets—with costs of the raw cotton used in their manufacture. These margins, expressed as proportions of the value of the raw cotton used averaged about 53 percent for print cloth finished by bleaching, 78 percent for print cloth finished by dyeing, 133 percent for print cloth finished by printing with one color and 30 percent coverage, and 171 percent for print cloth finished by printing with four colors and 75 percent coverage. For each decrease of 1 percent in these margins, if fully reflected in prices to growers, incomes to growers from cotton would be increased from about 0.5 to about 1.66 percent.

APPAREL AND HOUSEHOLD-GOODS MANUFACTURERS' MARGINS

Some textile products are ready for use when they leave the mill. They include gray goods intended for use without being finished, such as print cloth, sheeting, and drills used in bags; goods made of dyed yarn, such as colored-yarn chambray shirting; and those finished before they leave the mill, such as sheets, bedspreads, towels, and tablecloths. Other goods are purchased from mills in the gray, finished at finishing plants, and sold as finished goods, such as print cloth, broadcloth, twill, and drill. These goods—finished and unfinished—may be grouped into three classes on the basis of the uses made of them and designated consumers' goods, industrial goods, and cutters' goods. The distinctions among these classes are based chiefly on differences in the users and not so much on the characteristics of the goods themselves. The same kind of goods may be included in each of the groups. It has been estimated that drills, for example, are used for no fewer than 40 purposes and that they may be classed as consumers' goods, industrial goods, or cutters' goods according to who uses them (*4, pp. 115–116*).

Consumers' goods come from manufacturing establishments ready for use as piece goods by household consumers. They include woven goods used by the consumer in the gray; those made from dyed yarns; and household furnishings which usually are fabricated at mills, such as sheets and pillow cases, bedspreads and blankets, towels, bath mats and washrags, rugs, tablecloths and napkins, and diapers. In addition, many knit goods produced in hosiery and underwear factories leave the mills as completed consumers' goods.

Cotton goods included in the industrial-goods group come from cotton manufacturing establishments ready for use by business houses outside the textile industry. Most of the fabrics are woven and they include many types of ducks, osnaburgs, so-called multiple fabrics, and leno fabrics; a considerable part of the industry's out-

put of sheeting, twills, drills, and sateen; and small quantities of fine goods, such as voiles, organdies, lawns, broadcloths, and print cloths. Industrial fabrics are incorporated directly into finished products such as sails, tarpaulins, tents, awnings, bags, and upholsteries. They are consumed in processes of various kinds, such as filters and screens, and buffing-wheel devices for inking, moistening, pressing, and steaming, and are combined with other materials to make new products, such as hose, tires, rubber footwear, imitation leather, and abrasives (*4*).

Cutters' goods are practically all finished fabrics used mainly in the manufacture of wearing apparel and household products. The terms "cutters" and "cutting-up trade" may be applied to all branches of the textile industry that characteristically perform "cut-and-sew" operations on purchased fabrics (*14*). The cutting-up trade includes several thousand manufacturers of many kinds and sizes, ranging from very large companies operating several factories, as is common in the manufacture of men's shirts or work clothes, to small "family shops," as is common in the manufacture of mattresses and some other kinds of household products. The establishments are widely scattered throughout the industrial districts of the country, although the manufacturers of particular products sometimes are closely concentrated in relatively small areas (*4*).

Information on the relative quantities of cotton fabrics that go to the different users is not complete, but rough estimates of the diversion among the various uses, of the total output of finished goods, yarn-dyed goods, and gray goods which are never finished, indicate that between 40 and 50 percent goes to cutters, 20 to 30 percent to industrial users, about 20 percent to household consumers, and the remaining 5 to 10 percent to export or for institutional consumers such as hospitals, schools, and hotels (*4, pp. 172–173*). The proportions of individual fabrics taken by the different users vary considerably. A large proportion of the fabrics used in men's wear, for example, goes to cutters. But a much smaller proportion of the fabrics designed for women's and children's wear goes to cutters and a considerable proportion goes to household consumers. Most of some other fabrics, such as osnaburgs and tire fabrics, goes to industrial users.

Data on the manufacture and distribution of apparel and other fabricated products made of cotton usually are not reported separately from those made of wool, silk, and rayon. Most of the woolens and worsteds and rayon and silk fabrics are sold to cutters for use in the manufacture of apparel. Estimates indicate that in recent years about 80 percent of the woolens and worsteds and 95 percent of the broad-woven rayon and silk goods were used in the manufacture of apparel. The remaining 20 percent of the woolens and worsteds were used chiefly in the manufacture of blankets and blanketing, automobile fabrics, and upholstery. Only about 5 percent of the rayon and silk fabrics went into uses other than garments, and much of this went into draperies and curtains (*4, pp. 176–187*).

The quantities of finished knit goods sold to cutters apparently are relatively small. Some finished knitted fabrics, made chiefly of

rayon, but to some extent of cotton and silk, are sold to cutters who use them in making such products as gloves, underwear, scarves, bathing suits, and occasionally dresses, but the quantities used for these purposes are relatively small. Wool knitters also sell some fabrics to cutters, but the bulk of the industry's output is sold as finished garments (*4, p. 187*).

Information on differences in cutters' costs and margins and in value of the finished products for articles made of cotton, wool, rayon, and silk is very incomplete. The fact that large proportions of the silk, rayon, and wool fabrics go into uses in which style is an important consideration indicates that the value of the products and cutters' costs and margins may be influenced considerably by these considerations of style. But many fabricated products are made of two or more kinds of fabrics and many fabrics are made of two or more kinds of fibers. Furthermore, most of the data that are available and that are presented in this bulletin on values, costs, and margins for fabricated textile products are not segregated to show separately those made from cotton, wool, rayon, silk, or some combination of these fabrics.

Manufacturers of apparel and household products sell the finished goods to or through various agencies. Census data on distribution of manufacturers' sales in 1939 indicate that goods amounting to about two-thirds of the total value of all finished apparel and household products combined were distributed to retailers, 14.3 percent to wholesalers and jobbers, 10 percent through outlets owned and operated by the manufacturer, 7.5 percent to industrial users, and small proportions to consumers at retail and to export (table 70). It will be observed that these proportions vary considerably from one product to another. The proportions sold to retailers ranged from less than 10 percent for embroideries and textile bags not made in textile mills to more than 90 percent for children's and infants' coats and women's and misses' blouses and waists. The proportions sold to industrial users ranged from negligible amounts for several products to more than 80 percent for others, and those sold to wholesalers and jobbers ranged from less than 10 to more than 70 percent. Other details are shown in table 70.

Charges or Costs

The margins, or spread between the costs of the raw materials used and the value of the finished products, for manufacturers of apparel and household goods vary considerably with the kind of finished product. Census data on manufacturers of apparel and other fabricated textile products in 1939 show that the margins or spread between the costs of materials, supplies, and containers and the value of the finished products averaged about 45.5 percent of the value of the products (table 71). The proportions of the value of the products accounted for by manufacturers' margins for the regular factories which own the materials used ranged from about 23 percent for manufacturers of textile bags not made in textile mills, to about 35 percent for manufacturers of curtains, draperies, bedspreads, and other house furnishings, and to more than 50 percent for manufacturers of millinery, corsets and allied garments, women's and misses' dresses except house dresses, children's dresses,

TABLE 70.—*Distribution of manufacturers sales of apparel and other finished products made from fabrics and similar materials, by classes of customers and by industries, United States, 1939.*

Item	Establishments reporting	Total distribution sales	Proportion of sales distributed to —							
			Owned and operated outlets		Wholesalers and jobbers	Export[1]	Retailers[2]	Industrial users[3]	Consumers at retail[4]	All
			Wholesale	Retail						
	Number	*1,000 dollars*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Children's and infants' outerwear	389	86,767	4.2	----	13.8	1.9	78.7	0.7	0.7	100.0
Children's and infants' coats	105	24,419	(5)	----	[5]7.7	----	92.3	(5)	----	100.0
Children's and infants' dresses	181	44,478	8.2	----	14.6	3.7	70.8	1.4	1.3	100.0
Other children's and infants' wear	103	17,870	(6)	----	[6]20.1	(6)	79.9	(6)	(6)	100.0
Men's and boys' furnishings, work, and sport garments	2,059	521,357	18.7	0.4	21.0	0.5	54.1	4.6	.7	100.0
Hat and cap materials, etc.	51	4,703	(7)	----	[7]34.2	1.6	(7)	64.2	----	100.0
Men's neckwear	344	45,700	8.7	.7	16.8	.3	72.0	1.1	.4	100.0
Hats and caps (except felt and straw)	255	11,898	4.5	----	37.6	1.6	50.5	5.6	.2	100.0
Shirts, collars, and neckwear (except work)	424	175,669	38.7	.7	11.2	.4	46.3	1.9	.8	100.0
Underwear	44	17,087	(8)	----	[8]50.2	(8)	47.2	[9]2.6	(9)	100.0
Trousers, wash suits, etc.	212	54,558	7.1	----	25.8	----	56.1	10.2	.8	100.0
Work shirts	74	34,249	13.0	----	[10]38.5	(10)	46.6	[11]1.9	----	100.0
Work clothing, sports, etc.	655	177,493	9.5	.4	22.7	.8	60.4	5.4	.8	100.0
Women's and children's accessories, except millinery	1,163	260,098	10.4	1.3	12.6	1.4	70.4	3.5	.4	100.0
Belts (apparel)[12]	241	19,112	(13)	----	[13]29.2	.8	44.8	24.9	.3	100.0
Corsets and allied garments	261	81,747	13.3	4.0	4.6	3.3	71.7	2.3	.8	100.0
Women's neckwear, scarfs, etc.	92	11,578	(13)	----	[13]28.3	----	64.0	7.7	----	100.0
Underwear and nightwear of cotton, etc.	146	36,546	17.2	----	[14]18.6	(14)	63.9	[14]1.3	----	100.0
Underwear and nightwear of knitted fabric	125	23,939	4.6	----	[14]19.4	(14)	75.3	[14]1.6	.1	100.0
Underwear and nightwear of silk and rayon	298	87,176	[15]10.1	(15)	10.0	.9	77.2	[14]1.4	.4	100.0
Women's and misses' outer clothing	3,362	879,299	3.4	1.1	7.2	.1	85.9	1.1	1.2	100.0
Coats, suits, and skirts (except fur coats)	1,095	274,428	3.5	.4	5.7	.4	86.3	[14]1.0	2.7	100.0
House dresses, uniforms, and aprons	484	103,213	3.2	2.8	[10]14.2	(10)	74.5	4.7	.6	100.0
Blouses and waists	170	36,414	2.8	----	[10]3.9	(10)	92.5	.8	----	100.0
Dresses, except house dresses	1,388	431,228	3.0	1.4	6.2	(16)	88.6	.3	.5	100.0
Other clothing	225	34,016	[15]7.5	(15)	15.0	(16)	75.0	2.3	.2	100.0
Fur coats and other fur garments, accessories, and trimmings	2,077	165,201	.7	5.8	31.2	.4	49.7	8.3	3.9	100.0

Millinery	989	103,931	3.0	1.2	21.1	.6	72.5	1.0	.6	100.0
Men's and boys' tailored clothing	1,331	517,645	2.7	16.2	7.0	([16])	68.0	3.4	2.7	100.0
Miscellaneous apparel and fabricated textile products	2,601	489,220	2.8	.4	21.5	1.3	40.1	31.0	2.9	100.0
Canvas products (except bags)	334	26,383	([13])	.9	[13]18.3	4.6	23.2	22.4	30.6	100.0
Clothing (leather and sheep-lined)	94	22,034	([13])	----	[13]32.5	2.5	64.2	.7	.1	100.0
Curtains, draperies, and bedspreads	362	70,996	4.3	1.0	12.8	.6	77.2	[11]1.9	2.2	100.0
Other housefurnishings	452	68,012	2.3	.7	19.4	.8	63.7	[11]11.3	1.8	100.0
Dress and semi-dress gloves and mittens	45	7,600	----	----	54.8	----	37.4	[11] 7.8	----	100.0
Work gloves and mittens	94	23,265	----	----	73.6	.8	15.9	[11] 9.7	----	100.0
Handkerchiefs	60	20,401	9.5	----	29.1	----	61.1	[9] .3	([9])	100.0
Robes, lounging garments, etc	173	36,630	1.9	----	14.6	.1	78.1	5.1	.2	100.0
Raincoats and other waterproof, etc	62	10,437	([17])	([17])	[17]29.3	.6	64.2	5.5	.4	100.0
Suspenders, garters, etc	62	15,418	([13])	----	[13]46.8	1.5	46.3	[13] 5.4	([13])	100.0
Embroideries—not Schiffli-machine	54	1,596	([13])	----	[13]34.7	----	28.5	[11]36.8	----	100.0
Embroideries—Schiffli-machine	102	6,988	([8])	----	[8]61.7	([8])	5.1	[11]33.2	----	100.0
Textile bags not made in textile mills	208	122,541	2.9	----	9.3	1.4	2.6	82.3	1.5	100.0
Trimmings, stamped art goods, etc	221	26,184	([13])	----	[13]25.0	.5	24.8	[11]49.7	----	100.0
Other fabricated textile products	278	30,735	9.5	1.1	17.8	4.5	19.2	43.5	4.4	100.0
Total or average for all groups	13,971	3,023,518	6.3	3.7	14.3	.5	66.0	7.5	1.7	100.0

[1] Includes export intermediaries and exports direct to buyers in other countries.
[2] Includes chains.
[3] Also includes commercial, professional, and institutional users (manufacturers, railroads, utilities, Governmental bodies, hotels, contractors, etc.).
[4] Includes farmers, household consumers, and employees at retail.
[5] Sales to or through own wholesale branches or offices and industrial, etc., users, combined with sales to wholesalers and jobbers to avoid disclosure.
[6] Sales to or through own wholesale branches or offices, export intermediaries, industrial, etc., users, and consumers at retail combined with sales to wholesalers and jobbers to avoid disclosure.
[7] Sales to or through own wholesale branches or offices and retailers combined with sales to wholesalers and jobbers to avoid disclosure.
[8] Sales to or through own wholesale branches or offices and export intermediaries combined with sales to wholesalers and jobbers to avoid disclosure.
[9] Sales to consumers at retail combined with sales to industrial, etc., users to avoid disclosure.
[10] Sales to export intermediaries combined with sales to wholesalers and jobbers to avoid disclosure.
[11] Inter-plant transfers included to avoid disclosure.
[12] Also includes men's belts.
[13] Sales to or through own wholesale branches or offices combined with sales to wholesalers and jobbers to avoid disclosure.
[14] Direct export sales combined with sales to wholesalers and jobbers to avoid disclosure.
[15] Sales to or through own retail stores combined with sales to or through own wholesale branches or offices to avoid disclosure.
[16] Less than 0.05 percent.
[17] Sales to or through own wholesale branches or offices and own retail stores combined with sales to wholesalers and jobbers to avoid disclosure.
[18] Inter-plant transfers and sales to consumers at retail combined with sales to industrial, etc., users to avoid disclosure.

Abstracted from *Distribution of Manufacturers' Sales; 1939* (*23*). The cutting-up industries or needle traders reported produce clothing and other fabricated articles from purchased woven or knit fabrics. All types of textiles are utilized, as well as leather, fur, and other materials.

dress and semidress gloves and mittens, and men's and boys' tailored clothing.

Margins for contract factories are substantially greater than those shown for regular factories. The differences are accounted

TABLE 71.—*Value of products, costs, and margins for apparel and other finished products made from fabrics and similar materials, United States, 1939.*

Item	Value of products	Costs of materials, supplies, and containers	Gross margin	
			Amount	Proportion of value of products
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*Percent*
REGULAR FACTORIES				
Women's and misses' outer clothing	899,095	469,638	429,457	47.8
Blouses and waists	36,419	18,373	18,046	49.6
Dresses except house dresses	441,325	215,708	225,617	51.1
House dresses, uniforms, and aprons	104,446	57,688	46,758	44.8
Coats, suits, and skirts, except fur coats	281,146	158,521	122,625	43.6
Clothing not elsewhere classified	35,759	19,348	16,411	45.9
Women's accessories except millinery	267,862	144,594	123,268	46.0
Underwear and nightwear	152,420	89,945	62,475	41.0
Knitted fabrics	24,608	14,568	10,040	40.8
Cotton and flannelette woven fabrics	37,184	20,768	16,416	44.1
Silk and rayon woven fabrics	90,628	54,609	36,019	39.7
Corsets and allied garments	84,418	38,618	45,800	54.3
Belts, apparel	19,076	9,764	9,312	48.8
Neckwear, scarfs, etc	11,948	6,267	5,681	47.5
Children's and infants' outerwear	89,655	42,616	47,039	52.5
Children's dresses	46,742	19,902	26,840	57.4
Children's coats	24,971	13,898	11,073	44.3
Other	17,942	8,816	9,126	50.9
Men's and boys' clothing and furnishings	1,059,670	559,847	499,823	47.2
Suits, coats, and overcoats	536,613	267,428	269,185	50.2
Shirts (except work), collars and nightwear	181,174	97,395	83,779	46.2
Trousers (semi-dress), wash suits, etc.	60,985	31,717	29,268	48.0
Work shirts	35,672	20,636	15,036	42.2
Work clothing, sport garments, etc	184,223	108,133	76,090	41.3
Underwear	15,598	9,123	6,475	41.5
Men's neckwear	45,405	25,415	19,990	44.0
Miscellaneous apparel	139,338	78,571	60,767	43.6
Gloves and mittens—work	22,457	11,757	10,700	47.6
Gloves and mittens—dress and semi-dress	7,703	3,434	4,269	55.4
Handkerchiefs	20,419	12,027	8,392	41.1
Suspenders, garters, etc	15,483	8,827	6,656	43.0
Robes, lounging garments, etc	39,830	22,772	17,058	42.8
Raincoats and other waterproof garments	11,304	6,288	5,016	44.4
Clothing—leather and sheep-lined	22,142	13,466	8,676	39.2
Miscellaneous fabricated textile products	315,504	211,559	103,945	32.9
Curtains, draperies, and bedspreads	70,233	46,036	24,197	34.5
Other house furnishings	67,521	42,907	24,614	36.5
Textile bags not made in textile mills	121,702	93,335	28,367	23.3
Canvas products except bags	24,408	12,845	11,563	47.4
Other	31,640	16,436	15,204	48.1
Millinery	105,601	47,106	58,495	55.4
Fur coats and other fur garments	168,032	105,536	62,496	37.2
Total regular factories	3,044,757	1,659,467	1,385,290	45.5

Adapted from *Census of Manufactures: 1939* (*23*).

for mainly by the fact that contract factories manufacture products from materials owned by others, whereas the regular factories own the materials used. Margins for contract factories averaged about

95 percent of the value of the finished products and ranged from less than 85 percent for men's and boys' underwear to almost 97 percent for women's and misses' housedresses, uniforms, and aprons (table 71a).

TABLE 71a.—*Value of products, costs, and margins for apparel and other finished products made from fabrics and similar materials, United States, 1939.*

Item	Value of products	Costs of materials, supplies and containers	Gross margin	
			Amount	Proportion of value of products
CONTRACT FACTORIES	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*Percent*
Women's and misses' outer clothing	116,661	4,649	112,012	96.0
Blouses and waists	5,311	234	5,077	95.6
Dresses, except house dresses	64,936	2,371	62,565	96.3
House dresses, uniforms, and aprons	9,252	293	8,959	96.8
Coats, suits and skirts, except fur coats	32,851	1,576	31,275	95.2
Clothing not elsewhere classified	4,311	175	4,136	95.9
Children's and infants' outerwear	6,830	364	6,466	94.7
Children's dresses	3,842	146	3,696	96.2
Children's coats	1,947	166	1,781	91.5
Other	1,041	52	989	95.0
Men's and boys' clothing and furnishings	74,935	4,538	70,397	93.9
Suits, coats, and overcoats	61,660	3,269	58,391	94.7
Shirts (except work), collars and nightwear	11,192	970	10,222	91.3
Men's and boys' underwear	1,095	168	927	84.7
Men's neckwear	988	131	857	86.7
Miscellaneous	2,861	376	2,485	86.9
Handkerchiefs	1,182	137	1,045	88.4
Curtains, draperies, and bedspreads	1,679	239	1,440	85.8
Total contract factories	201,287	9,927	191,360	95.1

Adapted from *Census of Manufactures: 1939* (23).

Data assembled by the Federal Trade Commission on 10 corporations primarily engaged in the manufacture and sale of men's, youth's, and boys' clothing and representing almost 15 percent of the total value of the products reported by the Census in 1939, show that the margins or spread between the costs of the materials used and the value of the products in 1939 averaged 64.6 percent of total sales. Similar data for 29 corporations in 1940 show that the margins averaged 62.6 percent of total sales and ranged from 57.8 percent for clothing sold to the trade to 59.2 percent for that sold direct to the wearer, and to 68.2 percent for that sold through their own retail stores.

Information made available by the Federal Trade Commission on 19 corporations primarily engaged in the manufacture and sale of men's and boys' cotton, leather, and miscellaneous garments, and representing about 18 percent of the total value of these products as reported by the Bureau of the Census, shows that manufacturers' margins averaged 52.8 percent of total sales. Similar data for corporations primarily engaged in the manufacture and sale of hats and caps show that in 1939 manufacturers' margins averaged 65.5 percent of total sales.

Primary data on women's cotton, rayon, and wool dresses for 1940, 1941, and 1942 assembled by the Office of Price Administration and tabulated by the Bureau of Agricultural Economics, show that the manufacturers' margin, or the spread between the costs of materials and trimming used and net sales, averaged 51.2 percent of net sales for all groups and for the 3 years combined. Little change in average margin from one year to another was indicated, but the margins increased markedly from the lower priced to the higher priced dresses, the average margin ranging from 42.4 percent of net sales for dresses priced up to $3.75 to 63 percent for dresses priced at $29.76 and up.

Similar data for men's dress shirts show that the manufacturers' margin, or spread between the costs of the materials used and the selling price of the shirts, in 1942 averaged about one-half of the selling price for shirts with soft collars and slightly less than half for shirts with fused collars. The margins when expressed as percentages of the selling price of the shirts showed little if any consistent relationship to prices of the shirts, but they varied considerably with the materials used and from one manufacturer to another. A frequency distribution for all shirts for all manufacturers combined showed that manufacturers' margins ranged from less than 40 percent to more than 60 percent of the selling price. Margins indicated by about three-fourths the reports fell within the range of 45 to 55 percent of the selling price.

Data on costs and on selling prices for men's canton-flannel work gloves in the fall of 1942 show that the manufacturers' margins, or the spread between the costs of materials and trimming and the selling price of the product, ranged from less than 40 percent to about 53 percent and averaged somewhat less than half of the selling price. The margins usually were relatively least for the heavier weights of gauntlet top and were relatively greatest for the lighter weight knit wrist and band top gloves.

Items Included in Margins

Margins for the manufacture and sale of apparel and household goods, or the spread between the costs of the materials used and the selling price of the products, include wages, salaries, depreciation, interest, insurance, rent, taxes, social security payments, costs of fuel and electric energy, selling expenses, advertising, administrative, and general office expenses, among others. Census data for 1939 indicate that on the whole, for regular factories, salaries and wages accounted for about one-half of the margin and for about 22.6 percent of the value of the finished products (table 72). Manufacturing wages alone amounted to 36 percent of the margin and to 16.3 percent of the value of the finished products. Costs of fuel and electric energy accounted for less than 1 percent; contract work, about 16 percent; and other costs, including depreciation, interest, insurance, rent, taxes, and profits, accounted for about one-third of the total margin.

The relative importance of the items of cost included in manufacturers' margins varies considerably with the product. The proportion of the value of the finished product made in regular factories accounted for by manufacturing wages ranged from 8.2 percent

for textile bags not made in mills to 29.8 percent for dress and semi-dress gloves and mittens. Similar comparisons for other items show that officers' salaries ranged from 0.7 percent for men's shirts to 5.3 percent for canvas products, except bags. Manufacturing salaries ranged from 1.1 percent for women's and misses' coats, suits, and skirts to more than 3 percent for women's corsets and allied garments and canvas products, except bags. Distribution and other salaries and wages ranged from less than 1 percent for men's underwear to more than 3.5 percent for men's neckwear, suspenders, garters, etc., and to about 7 percent for canvas products except bags. Costs of fuel and electric energy ranged from 0.2 percent for women's and misses' blouses, waists, and fur coats to 0.8 percent for dress gloves and mittens, millinery, and other miscellaneous textile products. Contract work ranged from none for textile bags not made in textile mills and canvas products except bags, to 16.7 percent for women's and misses' blouses and waists. Other costs, including depreciation, interest, insurance, rent, taxes, and profits, ranged from 11 percent for textile bags not made in mills to almost 23 percent for children's and infants' dresses.

Margins and the relative importance of items included for products made in contract factories out of materials owned by others differ considerably from those made in regular factories out of materials owned by manufacturers. Census reports on the values and costs of apparel and household goods made in contract factories show that in 1939 salaries and wages amounted to almost three-fourths of the value of the products and that manufacturing wages alone amounted to about 70 percent of the value of the products (table 72). Cost of fuel and electric energy averaged about 1.3 percent; contract work, 0.8 percent; and other costs, including depreciation, interest, insurance, rent, taxes, and profits, about 18.6 percent of the value of the products as listed in Census reports. These proportions varied considerably from one product to another as shown in table 72.

Data assembled by the Federal Trade Commission on corporations engaged in the manufacture and sale of men's and boys' clothing show that in 1939 and 1940 production wages and salaries, selling expense, profits, and advertising were among the principal items of cost included in the margin or spread between the costs of the raw materials used and the selling prices of the products (table 73). In 1939 and 1940 production wages and salaries made up more than one-fourth of total sales and about 40 percent of the total margin. Selling expenses mounted to 13.5 percent of total sales each year and accounted for 20 percent of the total margin in 1939 and for 22 percent in 1940. The proportions of the margin accounted for by advertising costs in 1939 and 1940 were 7.6 and 6.1 percent, respectively, and those accounted for by profits 9.6 and 10.3 percent, respectively.

The proportion of total sales and of manufacturers' margins accounted for by various items of expense varied considerably with the outlets for the finished products. Data for 1940 show that the total margins, and particularly selling expenses, were substantially greater for clothing sold through the manufacturers' own retail stores and direct to the wearer than for clothing sold to the trade

TABLE 72.—*Costs and margins for apparel and household goods manufacturers, expressed as proportions of the value of the finished products, United States, 1939.*

Item	Value of products	Cost of materials	Gross margin	Salaries and wages				Other costs		
				Salaries	Manufacturing		Distribution and other	Fuel and electric energy	Contract work	Other[1]
					Salaries	Wages				
REGULAR FACTORIES[2]	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Women's and misses' outer clothing	100.0	52.2	47.8	2.2	1.5	13.6	2.9	0.3	13.1	14.2
Blouses and waists	100.0	50.5	49.5	2.0	1.5	10.7	3.4	.2	16.7	15.0
Dresses except house dresses	100.0	48.9	51.1	2.4	1.7	14.0	3.3	.3	15.3	14.1
House dresses, uniforms, and aprons	100.0	55.2	44.8	1.9	2.2	16.9	2.3	.5	6.3	14.7
Coats, suits, and skirts, except fur coats	100.0	56.4	43.6	2.0	1.1	12.0	2.2	.2	12.4	13.7
Clothing not elsewhere classified	100.0	54.1	45.9	2.3	1.4	15.1	3.2	.4	8.9	14.6
Women's accessories except millinery	100.0	54.0	46.0	2.4	2.3	17.7	2.8	.4	2.8	17.6
Underwear and nightwear	100.0	59.0	41.0	1.8	1.9	17.1	1.6	.4	3.5	14.7
Knit fabrics	100.0	59.2	40.8	2.5	1.8	17.8	2.3	.5	.7	15.2
Cotton and flannelette woven	100.0	55.9	44.1	1.5	2.2	20.6	1.3	.5	2.7	15.9
Silk and rayon woven	100.0	60.3	39.7	1.8	1.5	15.8	1.6	.3	4.6	14.1
Corset and allied garments	100.0	45.7	54.3	3.1	3.3	18.6	4.8	.4	1.4	22.7
Belt apparel	100.0	51.2	48.8	3.7	1.9	21.3	3.5	.4	.3	17.7
Neckwear, scarfs, etc.	100.0	52.5	47.5	3.4	1.5	14.1	3.4	.3	7.5	17.3
Children's and infants' outerwear	100.0	47.5	52.5	2.3	1.8	16.3	2.3	.4	10.5	18.9
Dresses	100.0	42.6	57.4	2.5	2.0	17.3	2.2	.3	10.2	22.9
Coats	100.0	55.7	44.3	2.2	1.5	12.0	2.1	.3	12.8	13.4
Other	100.0	49.1	50.9	2.2	1.8	19.5	2.2	.5	8.3	16.4
Men's and boys' clothing and furnishings	100.0	52.8	47.2	1.5	1.8	18.9	2.0	.4	7.4	15.2
Suits, coats and overcoats	100.0	49.8	50.2	1.5	1.8	17.9	1.9	.3	11.3	15.5
Shirts (except work), collars and nightwear	100.0	53.8	46.2	1.2	1.8	20.6	1.4	.5	5.1	15.6
Trousers (semi-dress), wash suits, etc.	100.0	52.0	48.0	1.8	1.9	21.1	2.2	.6	4.5	15.9
Work shirts	100.0	57.8	42.2	.7	1.8	20.4	1.0	.6	1.6	16.1
Work clothing, sport garments, etc.	100.0	58.7	41.3	1.8	1.9	20.0	2.4	.6	1.8	12.8
Underwear	100.0	58.5	41.5	1.0	1.7	19.4	.8	.5	5.7	12.4
Neckwear	100.0	56.0	44.0	2.5	1.6	15.0	3.7	.4	1.9	18.9
Miscellaneous apparel	100.0	56.4	43.6	2.0	2.0	17.7	2.2	.5	4.1	15.1
Gloves and mittens—work	100.0	52.4	47.6	1.2	1.9	25.2	1.2	.7	.1	17.3
Gloves and mittens—dress and semidress	100.0	44.6	55.4	2.1	2.7	29.8	1.8	.8	1.9	16.3
Handkerchiefs	100.0	58.9	41.1	2.1	1.4	12.9	2.3	.3	8.5	13.6

Suspenders, garters, etc.	100.0	57.0	43.0	1.6	2.5	12.6	3.6	.3	.3	22.1
Robes, lounging garments, etc.	100.0	57.2	42.8	2.0	2.0	14.3	2.5	.4	6.9	14.7
Raincoats and other waterproof garments	100.0	55.6	44.4	2.7	2.2	16.6	2.1	.5	6.6	13.7
Clothing, leather and sheep-lined	100.0	60.8	39.2	2.4	2.0	20.7	1.5	.4	.9	11.3
Miscellaneous textile products	100.0	67.1	32.9	2.1	1.8	11.4	2.6	.5	.7	13.8
Curtains, draperies, and bedspreads	100.0	65.5	34.5	2.1	1.7	13.5	2.2	.5	1.6	12.9
Other house furnishings	100.0	63.5	36.5	2.5	1.7	11.9	3.0	.6	1.0	15.8
Textile bags not made in textile mills	100.0	76.7	23.3	.9	1.4	8.2	1.5	.3	(3)	11.0
Canvas products (except bags)	100.0	52.6	47.4	5.3	3.4	14.8	7.0	.7	(3)	16.2
Products not elsewhere classified	100.0	51.9	48.1	3.8	2.9	15.1	3.3	.8	1.2	21.0
Millinery	100.0	44.6	55.4	4.0	2.6	24.6	3.5	.8	.3	19.6
Fur coats and other fur garments, etc.	100.0	62.8	37.2	3.4	1.2	13.9	1.4	.2	1.1	16.0
Average all regular factories	100.0	54.5	45.5	2.1	1.8	16.3	2.4	.4	7.3	15.2
CONTRACT FACTORIES[4]										
Women's and misses' outer clothing	100.0	4.0	96.0	2.4	1.6	70.3	.3	1.3	.6	19.5
Blouses and waists	100.0	4.4	95.6	2.5	2.1	65.6	.1	1.5	.5	23.3
Dresses except house dresses	100.0	3.7	96.3	2.5	1.5	72.0	.3	1.2	.2	18.6
House dresses, uniforms and aprons	100.0	3.2	96.8	1.6	2.9	68.8	.5	1.9	.2	20.9
Coats, suits, and skirts, except fur coats	100.0	4.8	95.2	2.4	1.3	65.6	.3	1.4	1.6	18.6
Clothing not elsewhere classified	100.0	4.1	95.9	2.7	2.5	58.6	.2	1.7	.9	29.3
Children's and infants' outerwear	100.0	5.3	94.7	1.5	2.5	67.4	.2	1.6	.2	21.3
Dresses	100.0	3.8	96.2	1.2	2.9	67.6	.2	1.6	.1	22.6
Coats	100.0	8.5	91.5	2.0	1.4	68.1	----	1.5	.4	18.1
Other	100.0	5.0	95.0	1.8	2.9	65.1	.5	1.7	.3	22.7
Men's and boys' clothing and furnishings	100.0	6.1	93.9	2.3	2.2	70.1	.3	1.3	1.2	16.5
Suits, coats and overcoats	100.0	5.3	94.7	2.3	2.0	70.8	.3	1.3	1.5	16.5
Shirts (except work) collars and nightwear	100.0	8.7	91.3	2.3	3.2	68.1	.3	1.5	.1	15.8
Men's and boys' underwear	100.0	15.[illegible]	84.7	1.9	1.7	63.7	----	1.3	----	16.1
Men's neckwear	100.0	13.3	86.7	3.2	2.2	55.7	.4	1.4	----	23.8
Miscellaneous	100.0	13.1	86.9	3.4	2.5	52.1	.5	1.3	.4	26.7
Handkerchiefs	100.0	11.6	88.4	4.3	1.9	58.6	----	1.4	1.0	21.2
Curtains, draperies, and bedspreads	100.0	14.2	85.8	2.7	2.9	47.5	.9	1.2	----	30.6
Average all contract factories	100.0	4.9	95.1	2.3	1.9	69.9	.3	1.3	.8	18.6

[1] Includes depreciation, interest, insurance, rent, taxes, profits, and other expenses.
[2] Regular factories include those primarily engaged in production for sale from their own materials.
[3] Less than 0.05 percent.
[4] Contract factories include those primarily engaged in production on a contract basis from materials owned by others.
Adapted from *Census of Manufactures: 1939* (*21*).

TABLE 73.—*Sales, costs, and margins for corporations manufacturing men's and boys' apparel, United States, 1939 and 1940.*

Item	Sales and costs of clothing sold						
	1939			1940			
	Clothing[1]	Other garments[2]	Hats and caps	Through own retail stores	To trade	Direct to wearer	All
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*
Total sales	85,807	86,314	30,262	66,726	74,322	6,549	147,597
Material costs	30,354	40,783	10,435	21,219	31,364	2,672	55,255
Gross margin	55,453	45,531	19,827	45,507	42,958	3,877	92,342
Production wages and salaries	22,504	16,444	10,070	12,211	23,486	1,886	37,583
Depreciation	379	671	520	133	446	26	605
Taxes and social security	2,028	1,447	715	1,668	1,412	124	3,204
Other operating expenses[3]	4,080	3,996	1,383	4,038	4,013	164	9,115
Goods purchased for resale	1,834	7,099	452	------	------	------	------
Selling expense	11,538	6,146	2,483	13,946	4,757	1,212	19,915
Advertising	4,239	1,544	1,399	2,802	2,675	111	5,588
Administrative and general office	3,269	3,268	1,162	2,002	4,013	334	6,349
Provisions for uncollectible accounts	255	243	86	334	149	13	496
Net profit or loss	5,327	4,673	1,557	7,473	2,007	7	9,487
	Proportion of total sales						
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Total sales	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Material costs	35.4	47.2	34.5	31.8	42.2	40.8	37.4
Gross margin	64.6	52.8	65.5	68.2	57.8	59.2	62.6
Production wages and salaries	26.2	19.1	33.3	18.3	31.6	28.8	25.5
Depreciation	.4	.8	1.7	.2	.6	.4	.4
Taxes and social security	2.4	1.7	2.4	2.5	1.9	1.9	2.2
Other operating expenses[3]	4.8	4.6	4.6	7.4	5.4	2.5	6.2
Goods purchased for resale	2.1	8.2	1.5				
Selling expense	13.5	7.1	8.2	20.9	6.4	18.5	13.5
Advertising	4.9	1.8	4.6	4.2	3.6	1.7	3.8
Administrative and general office	3.8	3.8	3.8	3.0	5.4	5.1	4.3
Provisions for uncollectible accounts	.3	.3	.3	.5	.2	.2	.3
Net profit or loss	6.2	5.4	5.1	11.2	2.7	.1	6.4
Number of corporations reported	10	19	5	5	21	3	29

[1] Men's, youths' and boys' suits, overcoats, top coats, and separate coats and trousers.

[2] Men's, youths', and boys' shirts, including work and flannel shirts, collars, nightwear, and underwear made from woven or knit fabrics produced in other establishments; slacks and other semidress trousers, cotton wash suits and washable apparel, overalls, work pants, industrial garments; oiled cotton garments, mackinaws, lumber-jackets, blanket-lined coats, ski and snow suits, hunting and riding and related garments, and other heavy outerwear not elsewhere classified; suspenders, arm bands, garters, hose made from fabrics not manufactured in the same establishment; and leather and sheepliined garments for work and sportswear, except gloves and mittens.

[3] Includes costs of repair and maintenance, and research and development expense.

Adapted from reports of Federal Trade Commission on *Corporations Manufacturing Apparel and Other Finished Products*, published in 1941 and 1942.

(table 73). Selling expenses amounted to 20.9 percent of total sales for clothing sold by manufacturers through their own retail stores, 18.5 percent for clothing sold direct to wearer, and 6.4 percent for clothing sold to the trade. The proportion of the total margins accounted for by these costs amounted to 30.6, 31.3, and 11.1 percent, respectively. Production wages and salaries amounted to 18.3 percent of total sales for clothing sold through retail stores, 28.8 percent for those sold direct to wearer, and 31.6 percent for those sold to the trade. The proportion of the gross margins accounted for by these wages and salaries amounted to 26.8, 54.7, and 48.6 percent, respectively. Profits amounted to 11.2 percent of total sales for clothing sold through retail stores, 2.7 percent for those

sold to the trade, and to only a small fraction of 1 percent for clothing sold direct to wearer.

Information from the Federal Trade Commission on corporations primarily engaged in producing for sale from their own materials men's and boys' cotton, leather, and miscellaneous garments in 1939 shows that production wages and salaries amounted to 19.1 percent of total sales and to 36.1 percent of manufacturers' margins. Selling expenses amounted to 7.1 percent of total sales and to 13.5 percent of the margin. Profits amounted to 5.4 percent of total sales and to 10.3 percent of the margin. Data showing the relative importance of other items of cost are presented in table 73.

Primary data assembled by the Office of Price Administration and tabulated by the Bureau of Agricultural Economics on manufacturers' costs and selling prices for women's dresses, men's dress shirts, and work gloves show the relative importance of the various items of cost for these items as late as 1942. The data for women's dresses for 1940, 1941, and 1942 show that direct labor costs made up almost half of the margin or spread between the costs of the materials and trimming and the selling prices of the products and amounted to about one-fourth of the selling price of the products (table 74 and figure 12). The proportion of the price of the products accounted for by direct labor costs ranged from 22 percent for dresses priced at $29.76 and up to 26.2 percent for dresses priced from $10.76 to $16.75. Indirect labor and manufacturing expenses amounted on the average to about 11.8 percent of net sales and ranged from 8.4 percent for dresses priced up to $3.75 to 19.4 percent for dresses priced at $29.76 and up. Selling, advertising, and administrative expenses averaged 10 percent of net sales and ranged from 6.7 percent for dresses priced up to $3.75 to 15.1 percent for those priced at $29.76 and up. Officers' salaries and profits amounted on the average to 4.4 percent of net sales and ranged from 3.2 percent for the lowest priced group to 6.5 percent for the highest priced group. These proportions did not change much from one year to another.

Direct labor costs to manufacturers of men's dress shirts in 1942 amounted on the average to about one-fifth of the selling price of the shirts and to about two-fifths of the margin, or the spread between the costs of materials and trimming and the selling price of the shirts. These proportions averaged somewhat higher for shirts with fused collars than for those with soft collars, and they varied irregularly from one price group to another (table 75). Reports for individual manufacturers by styles indicate that direct labor costs amounted to less than 15 percent of the selling price for about 14 percent of the reports and to more than 25 percent of the selling price for almost 10 percent of the reports.

Information on the items included in direct labor costs for manufacturers of men's dress shirts show that on the average costs of cutting in 1942 accounted for about 11.7 percent, stitching 63.7 percent, laundering and boxing 20.9 percent, and inspection 3.7 percent of the total (table 76). These proportions varied somewhat with the kind of shirt. Cutting and stitching were of relatively greater importance for shirts with soft collars than for those with fused collars.

TABLE 74.—*Net sales, costs, and margin for manufacturers of women's cotton, rayon, and wool dresses in 1940-42.*

Items	Sales and costs				Proportion of net sales			
	1940	1941	1942	All	1940	1941	1942	All
	1,000 dollars	*1,000 dollars*	*1,000 dollars*	*1,000 dollars*	*Percent*	*Percent*	*Percent*	*Percent*
Prices up to $3.75								
Net sales	39,728	46,720	54,434	140,882	100.0	100.0	100.0	100.0
Costs of material and trimming	22,813	26,781	31,586	81,180	57.4	57.3	58.0	57.6
Gross margin	16,915	19,939	22,848	59,702	42.6	42.7	42.0	42.4
Direct labor	9,658	11,266	13,051	33,975	24.3	24.1	24.0	24.1
Indirect labor and manufacturing expense	3,197	3,939	4,615	11,751	8.1	8.4	8.5	8.4
Selling, advertising, and administration	2,829	3,166	3,495	9,490	7.1	6.8	6.4	6.7
Officers' salaries and profits	1,231	1,568	1,687	4,486	3.1	3.4	3.1	3.2
Prices $3.76–$5.75								
Net sales	41,220	48,952	57,517	147,689	100.0	100.0	100.0	100.0
Costs of material and trimming	22,039	26,150	30,980	79,169	53.5	53.4	53.9	53.6
Gross margin	19,181	22,802	26,537	68,520	46.5	46.6	46.1	46.4
Direct labor	10,453	12,368	14,125	36,946	25.4	25.3	24.5	25.0
Indirect labor and manufacturing expense	3,958	4,576	5,716	14,250	9.6	9.4	9.9	9.7
Selling, advertising, and administration	3,347	3,974	4,244	11,565	8.1	8.1	7.4	7.8
Officers' salaries and profits	1,423	1,884	2,452	5,759	3.4	3.8	4.3	3.9
Prices $5.76–$10.75								
Net sales	40,277	46,373	52,731	139,381	100.0	100.0	100.0	100.0
Costs of material and trimming	19,179	21,877	25,325	66,381	47.6	47.2	48.0	47.6
Gross margin	21,098	24,496	27,406	73,000	52.4	52.8	52.0	52.4
Direct labor	10,449	12,105	13,502	36,056	26.0	26.1	25.6	25.9
Indirect labor and manufacturing expense	4,671	5,467	5,878	16,016	11.6	11.8	11.2	11.5
Selling, advertising, and administration	4,162	4,646	4,966	13,774	10.3	10.0	9.4	9.9
Officers' salaries and profits	1,816	2,278	3,060	7,154	4.5	4.9	5.8	5.1
Prices $10.76–$16.75								
Net sales	29,746	33,150	34,238	97,134	100.0	100.0	100.0	100.0
Costs of material and trimming	12,246	13,711	13,793	39,750	41.2	41.4	40.3	40.9
Gross margin	17,500	19,439	20,445	57,384	58.8	58.6	59.7	59.1
Direct labor	7,779	8,752	8,909	25,440	26.1	26.4	26.0	26.2
Indirect labor and manufacturing expense	4,135	4,835	5,579	14,549	13.9	14.6	16.3	15.0
Selling, advertising, and administration	4,191	4,360	4,014	12,565	14.1	13.1	11.7	12.9
Officers' salaries and profits	1,395	1,492	1,943	4,830	4.7	4.5	5.7	5.0

Prices $16.76–$29.75								
Net sales	19,549	20,615	20,138	60,302	100.0	100.0	100.0	100.0
Costs of material and trimming	7,756	8,019	7,868	23,643	39.7	38.9	39.1	39.2
Gross margin	11,793	12,596	12,270	36,659	60.3	61.1	60.9	60.8
Direct labor	4,863	5,293	5,135	15,291	24.9	25.7	25.5	25.4
Indirect labor and manufacturing expense	3,078	3,157	3,317	9,552	15.7	15.3	16.5	15.8
Selling, advertising, and administration	2,946	3,160	2,789	8,895	15.1	15.3	13.8	14.8
Officers' salaries and profits	906	986	1,029	2,921	4.6	4.8	5.1	4.8
Prices $29.76 and up								
Net sales	12,913	13,108	11,526	37,547	100.0	100.0	100.0	100.0
Costs of material and trimming	4,701	4,790	4,400	13,891	36.4	36.5	38.2	37.0
Gross margin	8,212	8,318	7,126	23,656	63.6	63.5	61.8	63.0
Direct labor	2,780	2,838	2,645	8,263	21.5	21.7	22.9	22.0
Indirect labor and manufacturing expense	2,443	2,594	2,240	7,277	18.9	19.8	19.4	19.4
Selling, advertising, and administration	2,116	1,987	1,552	5,655	16.4	15.2	13.5	15.1
Officers' salaries and profits	873	899	689	2,461	6.8	6.8	6.0	6.5
All prices								
Net sales	183,433	208,918	230,584	622,935	100.0	100.0	100.0	100.0
Costs of material and trimming	88,734	101,328	113,952	304,014	48.4	48.5	49.4	48.8
Gross margin	94,699	107,590	116,632	318,921	51.6	51.5	50.6	51.2
Direct labor	45,982	52,622	57,367	155,971	25.1	25.2	24.9	25.0
Indirect labor and manufacturing expense	21,482	24,568	27,345	73,395	11.7	11.8	11.9	11.8
Selling, advertising and administration	19,591	21,293	21,060	61,944	10.7	10.2	9.1	10.0
Officers' salaries, and profits	7,644	9,107	10,860	27,611	4.1	4.3	4.7	4.4

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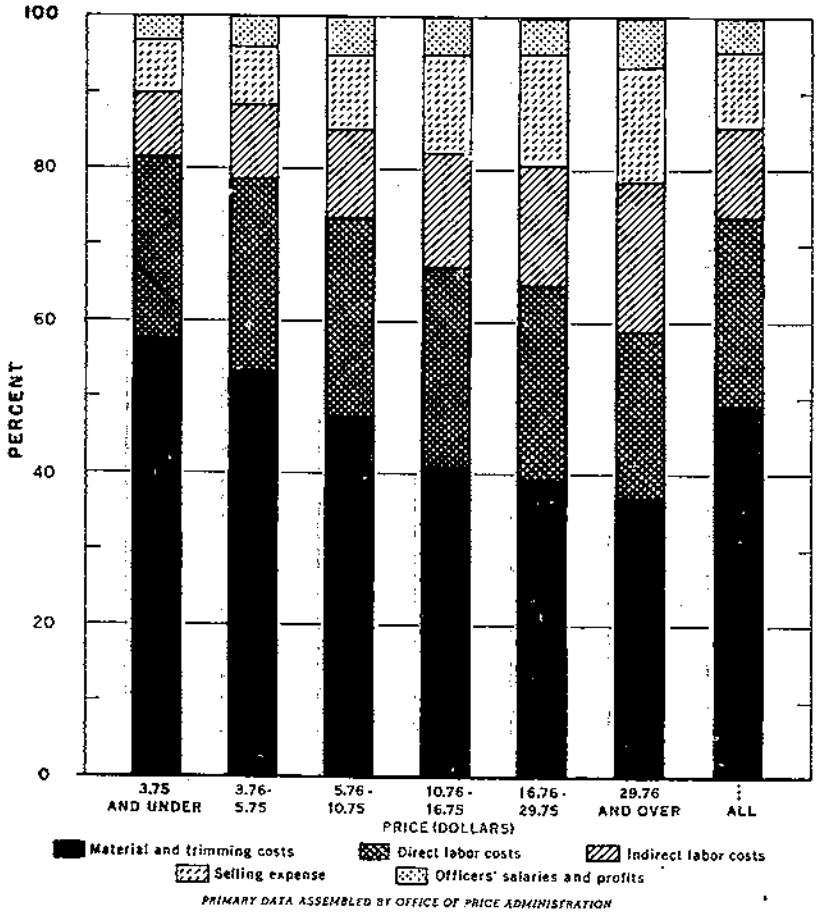

Figure 12.—Distribution of manufacturers' costs for women's cotton, rayon, and wool dresses, by price lines, 1940–42.

Manufacturers' margins for women's dresses increased from 42.4 percent of net sales for dresses priced up to $3.75 to 63 percent for dresses priced at $29.76 and up; indirect labor and manufacturing expenses from 8.4 to 19.4 percent; and the combined costs of selling, advertising, and administration from 6.7 to 15.1 percent of net sales.

Data on other items included in shirt manufacturers' margins show that costs of indirect labor and manufacturing overhead amounted on the average to 6.7 percent of the selling price and the proportions ranged from less than 2 percent to more than 12 percent. Similarly, selling and advertising expenses averaged about 7 percent and ranged from less than 2 percent to more than 10 percent of the selling price. Advertising expense alone ranged from none to more than 3 percent of the selling price of the shirts. Administrative and general expenses averaged about 8 percent and ranged from less than 3 percent to more than 12 percent of the selling price. Net operating results amounted to average profits of 6 percent of the selling price for shirts with fused collars and

8.4 percent for shirts with soft collars. The figures for individual reports ranged from losses of more than 5 percent to profits of more than 15 percent.

TABLE 75.—*Manufacturers' costs and margins for men's dress shirts, expressed as proportions of the selling price, 1942.*

Selling price (dollars per dozen)	Styles reported	Selling price	Material and trimming costs	Gross margin	Direct labor costs	Indirect labor and manufacturing overhead	Selling expense	General and administration expense	Net profits
	No.	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Fused collar:									
$10.75 to $11.75	5	100.0	55.1	44.9	20.2	5.4	2.8	8.3	8.2
$12.00 to $12.74	22	100.0	53.8	46.2	20.1	6.8	4.2	6.8	8.3
$12.75 to $13.75	28	100.0	50.3	49.7	22.7	7.3	6.8	7.6	5.3
$14.00 to $14.75	34	100.0	51.2	48.8	22.5	6.7	7.0	8.3	4.3
$15.00 to $15.75	49	100.0	51.3	48.7	22.5	6.4	7.2	7.7	4.9
$16.00 to $16.75	68	100.0	51.4	48.6	21.3	7.3	8.7	7.8	3.5
$17.00 to $17.75	23	100.0	51.5	48.5	21.3	3.9	5.8	9.4	8.1
$18.00 to $18.75	66	100.0	51.0	49.0	19.9	7.2	8.1	7.5	6.3
$19.00 to $20.75	6	100.0	50.0	50.0	19.7	6.3	4.8	11.3	7.9
$21.00 to $22.74	20	100.0	50.1	49.9	17.1	7.6	7.4	8.7	9.1
$22.75 and up	13	100.0	50.3	49.7	15.7	5.6	6.4	8.7	13.3
Total or average	334	100.0	51.3	48.7	20.8	6.7	7.2	8.0	6.0
Soft collar:									
$10.00 to $11.75	16	100.0	50.1	49.9	21.8	7.8	2.8	4.5	13.0
$12.00 to $12.75	5	100.0	49.4	50.6	19.1	4.6	4.8	9.3	12.8
$13.00 to $13.75	2	100.0	54.7	45.3	23.4	3.8	3.9	6.5	7.7
$14.00 to $14.75	12	100.0	51.3	48.7	22.3	6.1	7.3	10.3	2.7
$15.00 to $15.75	15	100.0	49.5	50.5	20.9	5.9	6.4	8.7	8.6
$16.00 to $16.75	43	100.0	50.9	49.1	21.9	6.8	8.8	8.3	3.3
$17.50 to $18.75	72	100.0	48.2	51.8	20.4	8.0	7.4	8.1	7.9
$19.00 to $20.75	28	100.0	49.8	50.2	19.1	6.7	6.5	8.3	9.6
$21.00 to $21.75	35	100.0	46.6	53.4	19.7	6.9	7.3	8.6	10.9
$22.00 to $23.75	19	100.0	53.6	46.4	18.8	3.8	6.7	8.2	8.9
$24.00 to $25.75	35	100.0	51.1	48.9	18.0	6.6	6.6	8.9	8.8
$26.00 to $30.00	23	100.0	52.1	47.9	17.3	5.9	7.1	8.5	9.1
$31.00 and up	16	100.0	51.9	48.1	13.6	5.9	6.3	9.7	12.4
Total or average	321	100.0	50.0	50.0	19.7	6.7	6.9	8.3	8.4

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TABLE 76.—*Director labor costs for specific items, expressed as proportions of total direct costs of making men's dress shirts, 1942.*

Kind of shirt	Cutting	Stitching	Laundry and boxing	Inspection	Total direct labor costs
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
Fused collar:					
White	10.1	61.8	23.0	5.1	100.0
Fancies	11.0	63.0	21.7	4.3	100.0
Rayon and novelties	9.0	65.8	20.8	4.4	100.0
Average	10.5	62.8	22.1	4.6	100.0
Soft collar:					
White	11.7	63.8	21.1	3.4	100.0
Fancies	12.3	63.7	20.9	3.1	100.0
Rayon and novelties	14.1	65.3	17.7	2.9	100.0
Average	12.4	64.2	20.2	3.2	100.0
Average fused and soft	11.7	63.7	20.9	3.7	100.0

Primary data assembled by Office of Price Administration and made available for use only as industry summaries.

Data on items included in margins for manufacturers of men's fabric work gloves show that costs of direct labor ranged from less than 10 to more than 19 percent of the selling price of the gloves (table 77). Costs of indirect labor and manufacturing ranged from less than 4 to more than 8 percent; of trimming and freight, from less than 3 to more than 5 percent; of selling and administrative expenses, from less than 5 to more than 9 percent; and of officers' salaries and profits, from less than 10 to more than 28 percent of the selling price of the gloves.

Means of Reducing Costs

Information available is not sufficiently adequate to indicate definitely the means by which and the extent to which it would be possible and feasible to reduce margins or costs for apparel and household-goods manufacturers. Census reports indicate that many of the cutting establishments operate on a small scale and may not be able to utilize labor and improved equipment to the best advantage. The fact that on the average in 1939 salaries and wages accounted for about 22.6 percent of the value of the finished products and for about one-half of the manufacturers' margins, emphasizes the importance of making full use of any technological developments and improvements in organization and operation as a means of increasing the efficiency and reducing the costs of labor.

Textile fashions that require a wide range in variety of styles and frequent changes in styles constitute an important element in the costs of manufacturing and merchandising apparel and household goods. To meet the latest whims of fashion for women's wear, for example, there has been a heavy concentration of manufacturing establishments in New York, the style center of the country, where it is estimated that about 90 percent of women's dresses sold by the piece are made (*4, p. 255*). In addition, production has been carried on in small plants which rely upon handwork, rather than in large mechanized factories which operate on a mass-production basis. These and other requirements necessary to meet the demands of fashion add substantially to the costs of manufacture.

Some indications of the effects of styling on manufacturers' margins for women's dresses, for example, may be obtained from data showing that average manufacturers' margins for the 3 years, 1940–43, varied from 42.4 percent of the value of the products for price lines up to $3.75, for which styling was of relatively small importance, to more than 60 percent for price lines $29.76 and above, for which styling was of relatively great importance. Style is also an important consideration in men's and boys' clothing, girls' and children's wear, and other apparel and household goods. Designers and manufacturers create new styles but it is reported that only about 15 to 25 percent of the new designs in women's garments ever sell in quantity and that fully one-half represent pure waste (*2, pp. 742–743*). Manufacturers are said to defend this waste as a variety of research that is necessary to find out what the consumers want. If consumers were willing to use products made on the same pattern in large quantities and to change styles only at infrequent intervals, substantial reductions in manufacturing costs would be possible.

TABLE 77.—*Manufacturers' costs and margins for men's fabric work gloves expressed as proportions of the selling price, 1942.*

Item	Selling price	Material costs	Cuff material	Gross margin	Cost of: Trimming and freight	Cost of: Direct labor	Cost of: Indirect labor and manufacturing	Cost of: Selling and administrative	Cost of: Officers' salaries and profit
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
White and unbleached canton flannel—single thickness									
CLUTE CUT									
Knit wrist 6 oz.	100.0	34.8	13.2	52.0	4.7	21.3	8.7	6.4	10.9
Knit wrist 8 oz.	100.0	37.2	11.8	51.0	4.1	18.9	7.5	6.1	14.4
Knit wrist 10 oz.	100.0	40.5	10.7	48.8	3.8	16.0	6.4	6.1	16.5
Knit wrist 12 oz.	100.0	43.9	9.0	46.2	3.6	14.8	6.0	6.1	15.7
Jumbo 12 oz.	100.0	44.4	9.2	46.4	3.4	12.6	5.2	6.9	18.3
Band top 8 oz.	100.0	36.4	10.4	53.2	4.1	18.5	7.3	6.0	17.3
Band top 10 oz.	100.0	40.9	11.4	47.7	3.9	16.1	6.5	6.2	15.0
Band top 12 oz.	100.0	44.5	10.7	44.8	3.6	15.0	6.1	6.3	13.9
Gauntlet top 10 oz.	100.0	28.6	27.7	43.7	2.7	11.3	4.5	6.4	18.8
Gauntlet top 12 oz.	100.0	33.9	27.5	38.6	2.8	11.5	4.7	6.1	13.5
GUM CUT									
Knit wrist 6 oz.	100.0	34.9	12.4	52.7	5.3	19.9	7.6	7.1	12.8
Knit wrist 8 oz.	100.0	38.2	11.6	50.2	4.0	18.7	7.6	6.4	13.5
Knit wrist 10 oz.	100.0	40.1	9.8	50.1	3.7	16.0	6.3	6.7	17.4
Knit wrist 12 oz.	100.0	43.9	9.8	46.3	3.5	14.8	6.0	5.6	16.4
Mittens 12 oz.	100.0	40.6	8.3	51.1	2.8	16.8	5.9	6.6	19.0
Band top 8 oz.	100.0	38.2	9.5	52.3	4.0	18.7	7.6	7.7	14.3
Band top 10 oz.	100.0	40.1	12.1	47.8	3.7	16.0	6.3	9.7	12.1
Gauntlet top 10 oz.	100.0	40.8	17.0	42.2	3.7	16.3	6.4	6.3	9.5
2 Thumb-knit wrist 8 oz.	100.0	38.0	10.2	51.8	3.6	19.0	6.8	6.7	15.7
2 Thumb-knit wrist 10 oz.	100.0	40.6	9.5	49.9	3.4	16.2	5.8	5.6	18.9
2 Thumb-knit wrist 12 oz.	100.0	42.5	8.5	49.0	3.0	14.5	5.2	6.8	19.5
Patch mittens 12 oz.	100.0	43.3	8.4	48.3	2.7	17.8	5.6	8.0	14.2
Striped and colored canton flannel—single thickness back, double thickness palm									
CLUTE CUT									
Knit wrist 6 oz.	100.0	40.9	8.7	50.4	4.5	15.8	6.6	7.8	15.7
Knit wrist 8 oz.	100.0	43.6	9.2	47.2	4.3	14.0	6.5	5.6	16.8
Knit wrist 10 oz.	100.0	47.2	8.3	44.5	4.0	13.3	5.4	7.0	14.8
Knit wrist 12 oz.	100.0	45.6	7.7	46.7	3.1	14.3	6.1	5.5	17.7
Knit wrist—hat mills	100.0	43.7	6.0	50.3	3.0	11.1	4.2	4.8	27.2
Safety top 8 oz.	100.0	35.1	12.8	52.1	3.5	11.2	5.3	6.5	25.6
Safety top 10 oz.	100.0	40.2	14.7	45.1	3.4	11.3	4.7	7.0	18.7
Safety top 12 oz.	100.0	36.9	9.3	53.8	2.5	11.6	5.0	6.5	28.2
Band top 8 oz.	100.0	42.8	10.8	46.4	4.3	13.7	6.5	5.7	16.2
Band top 12 oz.	100.0	42.7	13.2	44.1	2.9	13.4	5.8	7.1	14.9
Band top—hat mills	100.0	44.0	11.2	44.8	3.0	11.2	4.2	6.8	19.6
Gauntlet cuff 8 oz.	100.0	33.3	22.2	44.5	3.3	10.7	5.0	7.0	18.5
Gauntlet cuff 10 oz.	100.0	36.5	20.8	42.7	3.1	10.3	4.2	6.6	18.5
Gauntlet cuff 12 oz.	100.0	35.3	23.6	41.1	2.4	11.1	4.8	5.2	17.6
Gauntlet cuff—hat mills	100.0	36.3	16.7	47.0	2.5	9.2	3.5	6.6	25.2
Double thickness—back and palm									
Knit wrist 6 oz.	100.0	45.1	8.3	46.6	5.2	14.2	5.2	5.8	16.2
Knit wrist 8 oz.	100.0	47.3	8.1	44.6	3.7	15.0	6.8	6.0	13.1
Band top 8 oz.	100.0	42.2	14.8	43.0	3.3	13.4	6.1	9.3	10.9
Band top up to 9 oz.	100.0	35.8	10.5	53.7	3.3	17.7	7.3	4.8	20.6
Single thickness—back and palm									
Knit wrist 9 oz.	100.0	36.9	11.1	52.0	4.1	17.1	8.4	7.5	14.9
Knit wrist 10.5 oz.	100.0	40.5	10.2	49.3	3.3	15.5	6.8	6.4	17.3
Knit wrist 12.5 oz.	100.0	44.2	9.6	46.2	2.8	15.8	7.8	5.3	14.5
Knit wrist 13 oz.	100.0	43.7	9.0	47.3	3.6	12.8	4.4	6.1	20.4

Primary data assembled by the Office of Price Administration and made available for use only as industry summaries.

It is conceivable that margins for manufacturers of apparel and household goods might be reduced considerably by discontinuing some of the services they render or shifting them to others. Census reports on distribution of manufacturers' sales show that in 1939 about two-thirds of the sales of apparel and household-goods manufacturers was distributed to retailers, about 10 percent was distributed through their own operated outlets, and almost 2 percent was distributed to consumers at retail. These data indicate that the manufacturers rendered wholesaling and other merchandising services for a considerable proportion of the products manufactured. Costs of rendering these merchandising services are included in the manufacturers' margins. Apparently these data indicate that manufacturer's margins could be reduced considerably by shifting these merchandising services away from manufacturers to other agencies. But the total spread between prices of materials to cotton producers and prices of cotton goods to consumers would not be reduced as a result of such shifts unless these merchandising services could be rendered more efficiently by wholesalers or by other agencies than by manufacturers.

Other means of increasing efficiency and reducing costs include the use of improved mechanical aids along with a properly trained and coordinated labor force, standardization and simplification of the mechanical operations required, and organization and operation of the business in units large enough for greatest efficiency.

Importance of Reductions in Costs

Some indications of the relative importance of margins or costs for apparel and household-goods manufacturers may be obtained from data showing that in 1939 these margins averaged more than five times as great as returns to growers for farm production of cotton and more than 13 times as great as the costs of ginning and merchandising the cotton. A reduction of 4 percent, for example, in margins for apparel and household-goods manufacturers would amount to more than an increase of 20 percent in returns to growers for farm production of cotton and to more than a reduction of 50 percent in costs or margins for ginning and baling the cotton and for rendering all the services incident to taking the cotton from gins and delivering it to mills.

WHOLESALERS' AND RETAILERS' MARGINS[57]

Textile products flow from mills, converters, cutters, and other producers through a number of different combinations of middlemen, to consumers. An important channel of distribution, particularly in earlier years, was as follows: From manufacturer to wholesaler to retailer to consumer. Wholesalers to whom textile manufacturers sell goods are of many types but the most important type is represented by wholesale merchants. These merchants buy textile products outright from producers in comparatively large quantities and resell most of them to retailers in comparatively small quantities. Such wholesalers usually maintain a convenient place

[57] Credit is due Dr. Louis Bader, of New York University, for assistance in assembling information on wholesale and retail margins.

of business, provide facilities for the storage and handling of the goods, and in many instances they extend credit and make deliveries to customers.

Wholesalers supply a ready market outlet to manufacturers for products in rather large volume and relieve the manufacturer of making the many contacts necessary to sell directly to retailers. The large-lot purchases and the assembly services rendered by wholesalers make possible a reduction in transportation costs by permitting large-lot shipments over long distances. Wholesalers reduce the storage burden and the credit risks of manufacturers by advance buying, particularly for goods whose sales are seasonal. Occasionally the wholesalers may help finance producers by advancing funds. They also relieve them of some financial risks which arise in dealing with retailers, whose rate of failure is relatively high.

On the other hand, the wholesaler performs important services for the retailer. The assembly services rendered by wholesalers enables the retailers to obtain their supplies from relatively few sources. The readily available supplies made available by wholesalers to retailers enables them to reduce their overhead costs by the use of small stocks and more rapid turn-over. Total storage costs are reduced because large-scale storage in a wholesaler's warehouse is cheaper than storage on the relatively high-rent shelves of retailers. In addition, wholesalers provide credit and other services to retailers.

Retailers in turn perform the process of assembly primarily for the benefit of consumers. They bring together at convenient places for consumers varied stocks of goods which will satisfy the needs and tastes of the community. On the other hand, they collect and pass back to wholesalers and manufacturers information on the demands of consumers for use as a guide to further production. Retailers do some of the job of storing, take some risks involved in buying and selling goods, and grant credit to customers who cannot afford to pay cash for the goods they buy. In addition, retailers in many instances render delivery and other services to consumers.

This traditional channel from manufacturer to wholesaler to retailer to consumer has been criticized for not rendering the admittedly important economic service efficiently. Wholesalers are criticized for not relieving the manufacturers of their storage burdens and their price risks by ordering more in advance, for not reducing transportation and selling costs as much as they might because they insist upon buying in small lots at frequent intervals, for not doing adequately the work of assembly because they refuse to carry as large lines of merchandise as they might, for impeding rather than aiding the introduction of new products by manufacturers, and for keeping many incompetent retailers in business by undue generosity in granting credit to individuals who give no real indication of developing into competent storekeepers (*4, pp. 213–214*). Retailers have been criticized on the ground that they are too numerous and that many of them are grossly inefficient. Wholesalers and retailers deny that their operations are generally inefficient and blame many of the industry's troubles upon unwise policies of manufacturers.

Whatever the merits of these criticisms may be, the last half century has witnessed a continued development of types of mercantile organizations which combine the functions of wholesalers and retailers under one management, thus eliminating one of the sale-purchase transactions through which goods pass on their way from producer to consumer (*4, pp. 214–218*). But much of this development may be attributed to changes brought about in connection with the progressive concentration of population in the larger cities and towns, the increased use of automobiles and good roads, the spread of style consciousness, and the developments in management methods which increase the effectiveness of operations from one central office. Establishments that have grown up in response to these developments include department stores, chain stores, mail-order houses, and cooperative buying and selling systems.

Department stores are large retail establishments which combine under one roof and one management several divisions, each equivalent to a specialized store. Available information does not show the proportion of textile products handled by department stores, but some indication of their importance may be obtained from census data showing that in 1939 the number of department stores in operation in the United States amounted to 4,074 and that the total volume of their sales amounted to almost 3,975 million dollars. Of these stores, 1,371 were independents, 2,672 were chains, 24 were mail-order houses, and 7 were of other types. The proportion of total sales accounted for by the independent stores amounted to 58.2 percent, by chains 30.0 percent, by mail-order houses 11.7 percent, and by other 0.1 percent.

Department stores take over only a part of the wholesalers' functions. This is evidenced by data on cotton piece goods showing that a few years ago orders received by mills from department stores averaged about one-third or one-half as large as those from wholesalers and cutters, and that some department stores bought more piece goods from wholesalers than from converters or mills (*4, pp. 215–216*). Although their aggregate volume of sales is large, few department stores are said to be really large-scale buyers of individual commodities from producers. This is accounted for in part at least by the fact that the number of items handled usually is large and that their volume of sales of specific items may be no larger than those of other independent retailers with whom they compete.

Chain stores consist of four or more units of the same general kinds of business owned and operated jointly with central buying, usually supplied from one or more central warehouses. Usually the operation of each store is in the hands of a manager who is not identified as an owner. In 1939, according to census reports, the number of chain stores handling apparel totaled 17,381, of which 2,078 were local, 9,691 sectional or national, 1,956 manufacturer controlled, and 3,656 were leased departments. Sales of apparel in 1939, as reported by the Census of Business, totaled 3,259 million dollars of which about 992 million dollars, or about 30 percent, were made by chain stores. The proportions for specific kinds of stores were as follows: 24.2 percent for men's-boys' furnishings and hat stores, 21.9 percent for men's and boys' clothing and furnishings, 17.8 percent for family clothing, 28.3 percent for

women's ready-to-wear, 11.7 percent for furriers and fur shops, 54.4 percent for millinery, 32 percent for women's accessories, 6.6 percent for infants and other apparel, 2.1 percent for custom tailors, and 56 percent for shoe stores.

Chain stores with their centralized buying take over some but not all of the wholesalers' functions. Some of the chains are very large, operating several thousand stores, but many of them are small with only a few stores. The large chains, in procuring essentially similar merchandise for a large number of stores, buy from manufacturers on a scale comparable with that of wholesalers, but many of the smaller chains are supplied mainly through wholesalers (*4, p. 216*).

The number of mail-order houses in operation in 1939 totaled 434, according to census reports, and catalog sales totaled 537 million dollars or about 1.3 percent of total retail sales, during this period. Mail-order houses operated in chain units totaled 42 in 1939 and accounted for about three-fourths of the total sales of mail-order houses during that year. Those operated as department stores totaled 24 and accounted for about 86 percent of total sales of mail-order houses. Census reports on specific kinds of stores show that catalog sales of mail-order houses in 1939 totaled $14,657,000 for dry goods (soft lines), $18,646,000 for women's apparel and accessories, $2,336,000 for men's clothing and furnishings, and $236,000 for family clothing.

A large proportion of the aggregate business done by mail-order houses is accounted for by a few large companies that do a Nationwide business of selling to consumers by mail (*4, p. 217*). These are large-scale buyers and they do most of their buying direct from producers. The smaller mail-order houses buy larger proportions of their requirements from wholesalers.

Reports indicate that various types of cooperative plans have been worked out in recent years by retailers and wholesalers as a means of improving their efficiency in buying and selling (*4, p. 217*). An important phase of this development is said to be that of group or syndicate buying under which department stores and other retailers whose individual purchases of individual commodities are relatively small combine to establish a buying organization which will purchase for them directly from the manufacturers rather than through wholesalers. Some wholesalers have also formed such buying syndicates. But the available data are not sufficiently adequate to indicate to what extent the "traditional" channel, from producers to wholesalers to retailers, has been affected by these developments.

Census data for 1939 show that cotton manufacturers sold about 9 percent of their product through their own wholesale offices, 23 percent to other wholesalers and jobbers, and 9 percent to retailers. The proportions sold directly to retailers were greatest for fabricated products made from broad-woven goods and for finished thread. Similar data for apparel and household goods manufacturers show that on the whole about 6.3 percent of the goods represented in total sales was distributed through the manufacturers' own wholesale offices, 14.3 percent to wholesalers and jobbers, 66 percent to retailers, and less than 2 percent to consumers at retail.

These proportions varied from one product to another as shown in table 70, page 112.

Charges or Costs

Operating expenses of wholesale merchants in 1939, as reported by the Bureau of the Census, averaged 13.8 percent of total sales for dry goods, 14.8 percent for clothing and furnishings, and 14.2 percent for dry goods and clothing and furnishings combined (table 78). The proportions for dry goods ranged from 10 percent for silk, linen, rayon, and velvet piece goods to more than 19.1 percent for notions. For clothing and furnishings they ranged from 12.2 percent for dressed fur and fur clothing to 16.7 percent for millinery and millinery supplies.

Table 78.—*Total sales and operating expenses of wholesale merchants for textile products in the United States, 1939.*

Kind of product	Establishments reported	Total sales	Operating expenses as proportions of sales
	Number	*1,000 dollars*	*Percent*
Dry goods:			
General line	217	204,037	15.2
Hosiery and lingerie	404	84,461	10.9
Notions	861	92,549	19.1
Piece goods			
General line	46	13,769	15.2
Cotton	282	54,752	11.6
Silk, linen, rayon and velvet	366	78,148	10.0
Woolen and worsted	348	89,046	10.8
Other	369	37,212	15.0
Other dry goods	295	29,656	15.7
All dry goods	3,128	683,630	13.8
Clothing and furnishings:			
General line	422	61,129	14.6
Men's and boy's	1,155	130,644	14.1
Women's and children's	1,056	216,766	15.5
Furs, dressed, and fur clothing	488	61,518	12.2
Millinery and millinery supplies	450	62,184	16.7
All clothing and furnishings	3,571	552,241	14.8
All dry goods and clothing	6,699	1,235,871	14.2

Adapted from *Census of Business*: 1939 (20).

Information on operating expenses of wholesale dry goods houses obtained from reports of the Wholesale Dry Goods Institute, Inc., shows that for the period 1938–42 these expenses averaged 14.25 percent of net sales. They ranged from 15.25 percent in 1938 to 12.63 percent in 1942.

The margins or expenses of wholesale merchants per dollar of sale for handling dry goods, as reported by the Bureau of the Census, were usually considerably less for establishments with a large volume of sales than for those with a small volume. Operating expenses of wholesale merchants for handling cotton piece goods, for example, decreased from an average of 12.8 percent of total sales for establishments with a volume of sales of less than $200,000 to 9.4 percent for establishments with a volume of sales of $500,000 and over. Similar data for establishments handling woolens and worsteds showed a decrease from 20.3 percent for establishments with sales of less than $200,000 to 8.7 percent for those with sales of 1 million dollars or over. But wholesale merchants' margins for handling clothing and furnishings showed no very consistent rela-

tionship to volume of sales. Operating expenses of wholesale dry goods houses during the 5 years 1938–42, as reported by the Wholesale Dry Goods Institute, Inc., averaged 16.18 percent of net sales for houses with annual volumes of sales under $500,000 and 13.23 percent for those with volumes of sales of over 2 million dollars.

According to a report made by the Harvard Bureau of Business Research, margins, or the spread between merchandise costs and net sales, for department stores averaged about 37 percent of net sales in 1939 (*11*). These margins increased from 36.5 percent in 1936 to 38.7 percent in 1942. The margins for specialty stores averaged about the same as those for department stores. Expenses as proportions of net sales for department stores in 1942 increased with increases in volume of sales from 29.2 percent for those with a volume of sales of $500,000 to $750,000, to 32.7 percent for those with a volume of sales of 20 million dollars or more (*11*). These data on expenses do not include net profits or losses.

Total operating expenses to retailers, according to the Census of Business for 1935, amounted to 24.9 percent of total sales for dry goods and general merchandise stores and to 32.6 percent for the apparel group taken as a whole. The proportions in the apparel group varied from less than 30 percent for retailers of men's clothing to more than 58 percent for custom tailors.

Data on retailers' operating costs made available by Dun and Bradstreet, Inc., show that retailers' margins, or the differences between net sales and costs of the goods sold, for dry goods and general merchandise stores and for the apparel group averaged 30.8 percent of net sales in 1939. The proportions amounted to 28.1 percent for dry goods and general merchandise stores, 30.5 percent for women's ready-to-wear, 30.6 percent for family clothing, 31.8 percent for men's clothing, 34.2 percent for men's furnishings, 35.8 percent for lingerie, hosiery, millinery, and accessory stores, and 63.2 percent for custom tailors.

Retailers' margins vary considerably for different products within the same group. Data on typical costs to retailers and on retail prices for popular price lines in September 1942 show that retailers' margins for household furnishings, for example, ranged from 26.2 percent of retail prices for bed sheets to 38.8 percent for bath towels (table 79). Similar comparisons for other groups of commodities show that for children's and infants' wear the margins varied from 26.2 percent for diapers to 40.3 percent for creepers and rompers. For women's and misses' wear they varied from 33.8 percent for dresses and uniforms to 41.1 percent for misses' suits, and for men's and boys' wear they varied from 32 percent for cotton work gloves to 41 percent for cotton knit undershirts. These margins are based on median costs. An examination of the cost ranges in table 79 shows that retailers' margins for individual items range from none to more than 50 percent of the selling price.

Retailers' margins expressed as proportions of the retail price of the products usually average somewhat higher for the higher than for the lower price lines. Data presented by the National Bureau of Economic Research on wholesale and retail prices of women's dresses by price lines show that retailers' margins for dresses that retailed for less than $2 each usually amounted to less than one-third

TABLE 79.—*Typical costs to retailers and retail margins for popular price lines of textile products, United States, September 1942.*

Item	Stores reported	Retail price line	Cost range: Low	Cost range: High	Median cost	Retailer's margin: Actual median	Retailer's margin: Proportion of retail price
	Number	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Percent*
Household furnishings:							
Yard goods—cotton	131	0.29	0.17	0.27	0.20	0.09	31.0
Yard goods—part wool	22	2.49	1.45	1.75	1.55	.94	37.8
Bath towels	42	.49	.25	.35	.30	.19	38.8
Bed sheets	95	1.49	.67	1.38	1.10	.39	26.2
Blankets	52	5.95	2.65	4.25	3.70	2.25	37.8
Children's and infants' wear:							
Union suits and combination cotton knit	132	.69	.33	.56	.45	.24	34.8
Creepers and rompers	95	1.19	.62	.87	.71	.48	40.3
Diapers	50	1.49	.90	1.41	1.10	.39	26.2
Women's and misses' wear:							
Cotton slips—girls	100	.59	.31	.42	.37	.22	37.3
Dresses	138	1.98	1.06	1.40	1.31	.67	33.8
Uniforms	78	1.98	1.12	1.40	1.31	.67	33.8
Sweaters	251	2.98	1.50	2.25	1.88	1.10	36.9
Cloth coats	151	16.95	6.75	11.75	10.75	6.20	36.6
Suits—misses'	178	19.95	6.76	13.75	11.75	8.20	41.1
Men's and boys' wear:							
Undershirts—cotton knit	193	.39	.17	.33	.23	.16	41.0
Men's union suits—cotton knit	105	1.25	.69	1.12	.84	.42	33.6
Boys' union suits—cotton knit	102	.79	.39	.62	.51	.28	35.4
Socks—work—light-weight	209	.15	.07	.13	.10	.05	33.3
Socks—dress and sport	218	.35	.16	.29	.23	.12	34.3
Gloves—work—cotton	116	.25	.10	.25	.17	.08	32.0
Wash suits—boys'	71	1.19	.62	.87	.71	.48	40.3
Sport trousers and slacks	113	8.95	3.50	6.50	5.50	3.45	38.5
Overcoats—boys'	19	12.95	5.95	8.85	7.75	5.20	40.2
Topcoats and finger tips—boys'	27	7.95	4.25	5.75	5.00	2.95	37.1
Suits—students' size—wool	53	25.00	11.50	17.75	15.00	10.00	40.0
Suits—cadets' size—wool	28	14.95	8.00	10.75	9.00	5.95	39.8
Rain coats	51	6.95	3.50	5.00	4.25	2.70	38.8

Primary data collected by Bureau of Labor Statistics and made available by Office of Price Administration for use only as industry summaries.

of the retail price; whereas for some of the higher price lines retailers' margins amounted to more than 40 percent of the selling price (table 80).

TABLE 80.—*Wholesale and retail prices and retailer's margins for women's dresses by price lines.*

Materials used	Retail price	Wholesale price	Retailer's margin: Amount	Retailer's margin: Proportion of retail price
	Dollars	*Dollars*	*Dollars*	*Percent*
Cotton	0.59	0.40	0.19	32.2
Cotton	.79	.56	.23	29.1
Cotton	1.00	.71	.29	29.0
Cotton	1.59	1.04	.55	34.6
Cotton and rayon	1.95	1.31	.64	32.8
Cotton and rayon	2.95	1.88	1.07	36.3
Rayon	3.95	2.25	1.70	43.0
Rayon	4.95	2.88	2.07	41.8
Rayon and wool	5.95	3.75	2.20	37.0
Rayon, wool, and silk	7.95	4.75	3.20	40.3
Rayon, wool, and silk	10.95	6.75	4.20	38.4
Rayon, wool, and silk	12.95	7.75	5.20	40.2
Rayon, wool, and silk	14.95	8.75	6.20	41.5
Rayon, wool, and silk	16.95	10.75	6.20	36.6
Rayon, wool, and silk	19.95	12.75	7.20	36.1

Adapted from report of National Bureau of Economic Research on *Textile Markets* (*14*).

Data on typical retailers' margins for popular price lines in September 1942 show that the proportions of the retail price accounted for by the retailers' margins usually were greater for the higher than for the lower price lines (table 81). The price lines for each commodity were arranged from the lowest to the highest reported and divided into four groups of approximately the same number of price lines. Retailers' margins for each group expressed as proportion of the retail price show that almost invariably the margins increased appreciably from the lower to the higher priced group. Simple averages of these margins show increases of from 33.9 percent to 36 percent in the lower price groups and from 37.9 percent to 38.8 percent in the higher price groups.

TABLE 81.—*Average retailer's margins for specified groups of popular price lines of textile products expressed as proportions of retail prices in the United States, September 1942.*

Item	Price lines			
	Lowest one-fourth	2nd lowest one-fourth	2nd highest one-fourth	Highest one-fourth
	Percent	*Percent*	*Percent*	*Percent*
Household furnishings:				
Yard goods—cotton	27.[illegible]	31.0	40.0	42.6
Yard goods—part wool	34.8	36.6	38.4	40.3
Bath towels	29.2	35.1	40.5	39.5
Bed sheets	20.1	28.1	30.8	32.8
Blankets	32.2	34.5	36.8	40.0
Children's and infants' wear:				
Union suits, etc.	39.7	39.0	35.0	36.0
Creepers and rompers	35.4	34.6	41.0	39.1
Diapers	29.5	29.2	29.9	36.4
Women's and misses' wear:				
Cotton slips—girls'	35.2	35.6	39.4	39.2
Dresses—cotton	33.9	35.8	38.3	37.1
Uniforms	32.0	37.1	37.2	37.1
Sweaters	35.0	38.1	38.3	39.9
Cloth coats	38.0	39.2	38.7	40.6
Suits—misses'	38.3	39.1	42.0	42.2
Men's and boys' wear:				
Undershirts—cotton knit	35.4	39.6	40.0	39.4
Men's union suits—cotton knit	33.4	36.9	38.8	40.7
Boys' union suits—cotton knit	34.2	34.4	37.1	35.3
Socks—work—light weight	32.4	33.5	35.8	36.9
Socks—dress and sport	32.3	35.8	45.2	39.0
Gloves—work—cotton	26.7	30.8	32.0	33.0
Wash suits—boys'	33.6	39.2	35.5	38.9
Sport trousers and slacks	37.3	37.5	38.6	41.2
Overcoats—boys'	37.8	40.2	38.5	38.1
Top coats and finger tips—boys'	38.0	37.8	37.6	39.6
Suits—student size—wool	40.0	35.0	39.5	41.0
Suits—cadet size—wool	38.0	39.4	39.7	40.3
Raincoats	35.2	39.6	39.5	40.0
All	33.0	36.0	37.9	38.8

Primary data were collected by the Bureau of Labor Statistics for the Office of Price Administration and made available for use only as industry summaries.

ITEMS INCLUDED IN MARGINS

The principal items of costs included in margins for wholesalers of textile products are administrative and selling expenses. Census reports indicate that in 1939 costs of administration made up on the average about 4.6 percent of the selling price and about one-third of total wholesalers' margins or costs (table 82). Costs of administration were somewhat more important for clothing and furnishings than for dry goods, but the differences were not very great. These costs ranged from 3.4 percent of total sales for silk, linen, rayon, and velvet piece goods to 6.8 percent for general lines of piece

TABLE 82.—*Operating expenses of wholesale merchants whose sales of textile products amounted to $100,000 or more, United States summary, 1939.*

Kind of product	Establishments reported	Volume of sales	Operating expenses as proportion of sales[1]							Active proprietors of unincorporated businesses
			Total	Administration	Selling	Delivery	Warehouse	Occupancy	Other	
	Number	*1,000 dollars*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Number*
Dry goods:										
General line	135	161,532	15.4	3.7	6.0	0.9	1.6	1.8	1.4	73
Hosiery and lingerie	124	54,037	10.9	3.7	3.7	.7	.6	1.4	.8	102
Notions	138	48,457	19.4	7.2	6.5	1.8	.9	2.0	1.0	83
Piece goods:										
General line	15	8,018	15.3	6.8	4.1	1.3	.7	1.9	.5	12
Cotton	77	35,996	10.7	4.0	2.8	1.1	.7	1.2	.9	62
Silk, linen, rayon, and velvet	87	43,001	8.7	3.4	2.4	.6	.5	1.2	.6	50
Woolen and worsted	94	57,160	10.5	3.5	3.4	.6	.4	1.2	1.4	69
Other	42	14,316	13.6	4.6	4.7	1.0	.7	1.7	.9	33
Other dry goods specialties	45	14,421	14.9	5.8	3.7	1.1	1.6	2.1	.6	35
All dry goods	757	436,938	13.5	4.2	4.7	.9	1.0	1.6	1.1	519
Clothing and furnishings:										
General line	119	38,056	14.5	4.1	5.2	1.0	.9	2.1	1.2	129
Men's and boys'	218	78,380	14.3	5.4	4.4	.8	1.0	1.6	1.1	171
Women's and children's	336	131,297	14.9	5.5	4.4	1.1	.9	1.9	1.1	221
Furs, dresses, and fur clothing	102	33,778	12.0	4.9	3.0	.6	.3	1.6	1.6	79
Millinery and millinery supplies	94	30,104	16.8	5.5	5.5	1.2	.9	2.3	1.4	67
All clothing and furnishings	868	312,515	14.6	5.2	4.4	1.0	.9	1.9	1.2	667
All dry goods and clothing	1,625	749,453	13.9	4.6	4.6	.9	1.0	1.7	1.1	1,186

[1] Operating expenses include no compensation for active proprietors of unincorporated businesses.

Abstracted from *Census of Business, 1939, Wholesale Trade* (20).

goods. Selling expenses amounted to almost as much as costs of administration for all groups combined, and for dry goods the proportions for selling costs averaged somewhat greater than those for administration. Delivery, warehouses, occupancy, and other expenses were relatively small as shown in table 82.

The relative importance of some items of expense varied considerably with the volume of business (table 83). The proportion of the selling price of piece goods accounted for by administrative expenses and by rent or occupancy was substantially less for wholesalers who did a large volume of business than for those who did a small volume of business. Administrative expenses ranged downward from 5.2 percent of the selling price of cotton piece goods for wholesalers whose annual volume of sales was from $100,000 to $200,000 to 3.7 percent of the selling price for those with a volume of sales of $500,000 or more, and expenses for rent or occupancy from 2.9 percent to 0.9 percent. Similar differences are shown for other piece goods, but similar proportions for clothing and furnishings varied irregularly with volume of business.

Data compiled from reports of the Wholesale Dry Goods Institute, Inc., on operating expenses of wholesale dry goods houses show that, during the 5 years, 1938–42, selling expenses averaged 7.1 percent of net sales or about one-half of the total expenses and ranged from 6.8 percent for houses with annual sales of over 2 million dollars to 8 percent for houses with annual sales of less than $500,000 (table 84). Administrative expenses averaged 4.2 percent and ranged from 3.3 percent for houses with annual sales of over 2 million dollars to 5.3 percent for houses with sales of less than $500,000. Expenses of buying, receiving and shipping, and occupancy amounted on the average to 2.9 percent of net sales and they varied somewhat irregularly with volume of sales.

Pay roll expenses—comprising salaries, wages, and bonuses of all employees, including executives, but excluding pensions and pay roll taxes—was the most important item included in margins or costs for department and specialty stores. Data on operating results of department and specialty stores show that in 1939 pay rolls amounted to 17.8 percent of net sales and to almost half of the merchandising margins for department stores (table 85) (*11*).

Similar data for specialty stores show that pay rolls amounted to 17.6 percent of net sales and to almost one-half of the margins. The proportion of net sales accounted for by pay rolls decreased somewhat from 1939 to 1942. Real estate costs—including rentals, taxes, and insurance paid on leased real estate as well as taxes, insurance, depreciation, and interest on owned real estate—amounted to 4.7 percent; advertising, 3.6 percent; all other expenses, 10.3 percent; and net profits, 0.5 percent of net sales for department stores in 1939. The proportions for real estate, advertising, and all other expenses decreased from 1939 to 1942 and profits increased. The relative importance of the items of costs for specialty stores were about the same as that for department stores.

The various items of expense expressed as percentages of net sales varied somewhat irregularly with the total volume of sales by department stores, but in most instances the proportions were

TABLE 83.—*Operating expenses of wholesale merchants whose sales of textile products amounted to $100,000 or more, United States summary, 1939*

Kind of products and business-size groups	Establishments reported	Volume of sales	Operating expenses as proportion of sales[1]							Active proprietors of unincorporated businesses
			Total	Administration	Selling	Delivery	Warehouse	Occupancy	Other	
	Number	*1,000 dollars*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Number*
Piece goods:										
Cotton	77	35,996	10.7	4.0	2.8	1.1	0.7	1.2	0.9	62
$500,000 and over	25	24,088	9.4	3.7	2.6	1.0	.5	.9	.7	24
$300,000–$499,999	14	5,045	12.7	4.3	3.2	1.3	1.3	1.4	1.2	9
$200,000–$299,999	16	3,930	13.4	5.0	3.6	1.2	.6	1.8	1.2	13
$100,000–$199,999	22	2,933	13.6	5.2	2.8	1.3	1.0	2.4	.9	16
Silk, linen, rayon, and velvet	87	43,001	8.7	3.4	2.4	.6	.5	1.2	.6	50
$1,000,000 and over	12	19,285	5.7	2.1	1.7	.4	.5	.6	.4	8
$500,000–$999,999	17	11,609	9.0	3.1	2.6	.8	.7	1.3	.5	7
$300,000–$499,999	9	3,351	10.0	4.2	2.2	.9	.5	1.3	.9	6
$200,000–$299,999	17	4,151	14.1	5.9	4.5	.8	.5	1.5	.9	7
$100,000–$199,999	32	4,605	14.9	6.5	3.3	.9	.6	2.5	1.1	22
Woolen and worsted	94	57,160	10.5	3.5	3.4	.6	.4	1.2	1.4	69
$1,000,000 and over	12	28,545	8.7	2.8	3.1	.5	.5	.5	1.3	11
$500,000–$999,999	21	15,155	8.3	2.9	2.4	.7	.1	1.2	1.0	14
$300,000–$499,999	13	4,567	16.8	5.6	6.5	.8	.5	2.2	1.2	8
$200,000–$299,999	19	4,744	13.9	5.1	3.6	1.2	.3	2.4	1.3	15
$100,000–$199,999	29	4,149	20.3	7.2	5.6	.7	.6	2.8	3.4	21
Clothing and furnishings:										
General line	119	38,956	14.5	4.1	5.2	1.0	.9	2.1	1.2	129
$500,000 and over	15	17,104	14.3	3.6	5.7	.9	1.1	2.0	1.0	20
$300,000–$499,999	18	6,410	15.8	4.8	5.4	1.2	1.1	2.0	1.3	8
$200,000–$299,999	29	7,085	14.3	4.3	4.6	1.3	.6	2.3	1.2	35
$100,000–$199,999	57	8,377	14.2	4.3	4.4	1.0	.8	2.4	1.3	66
Women's and Children's	335	131,297	14.9	5.5	4.4	1.1	.9	1.9	1.1	221
$1,000,000 and over	23	32,277	15.1	5.4	4.8	1.1	.8	1.5	1.5	5
$500,000–$999,999	59	40,701	14.3	5.4	4.4	1.0	1.0	1.7	.8	37
$300,000–$499,999	60	23,134	15.2	5.4	4.5	1.1	.9	2.2	1.1	37
$100,000–$299,999	193	35,185	15.3	5.9	4.1	1.1	.8	2.3	1.1	142
Men's and Boys'	218	78,380	14.3	5.4	4.4	.8	1.0	1.6	1.1	171
$500,000 and over	34	36,885	12.7	5.1	3.9	.8	1.0	1.1	.8	21
$300,000–$499,999	46	17,114	15.9	5.8	5.0	1.0	1.0	1.8	1.3	34
$200,000–$299,999	46	10,888	16.3	5.5	5.2	.9	.9	2.6	1.2	39
$100,000–$199,999	92	13,493	15.1	5.4	4.3	1.0	.8	2.3	1.3	77
Specialty lines:										
Hosiery and lingerie	124	54,037	10.9	3.7	3.7	.7	.6	1.4	.8	102
$500,000 and over	32	30,751	10.3	3.3	3.8	.7	.4	1.3	.8	25
$300,000–$499,999	30	11,661	11.8	4.2	3.7	.9	.8	1.3	.9	28
$200,000–$299,999	25	6,299	11.3	4.2	3.6	.7	.5	1.3	1.0	12
$100,000–$199,999	37	5,326	11.8	3.8	3.2	.9	.8	2.1	1.0	37

[1] Operating expenses include no compensation for active proprietors of unincorporated businesses.

Abstracted from *Census of Business: 1939, Wholesale Trade* (*20*).

TABLE 84.—*Operating expenses of wholesale dry goods houses expressed as proportions of net sales, 1938-42.*

Item	1938	1939	1940	1941	1942	All
	Sales under $500,000					
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Total operating expense	16.55	16.76	17.40	16.05	14.22	16.18
Administrative	4.85	5.88	4.87	5.38	5.01	5.27
Buying	.60	.87	.83	.60	.39	.67
Selling	8.92	7.56	9.16	7.73	7.07	8.00
Receiving and shipping	1.09	1.08	1.19	1.23	1.09	1.12
Occupancy	1.09	1.37	1.35	1.11	.66	1.12
	Sales $500,000—$999,999					
Total operating expense	15.64	15.16	14.86	14.24	12.45	14.80
Administrative	4.87	4.89	4.59	4.16	4.31	4.62
Buying	1.03	1.09	1.01	.83	.54	.96
Selling	7.16	6.86	7.09	7.37	6.17	7.03
Receiving and shipping	1.22	.96	1.04	.88	.55	.99
Occupancy	1.36	1.36	1.13	1.00	.88	1.20
	Sales $1,000,000—$2,000,000					
Total operating expense	14.01	13.78	13.86	13.43	12.42	13.42
Administrative	4.27	4.10	3.87	4.06	3.73	3.99
Buying	.96	.90	1.01	1.00	.74	.91
Selling	6.92	6.99	7.24	6.69	6.49	6.83
Receiving and shipping	.96	.88	.87	.86	.65	.83
Occupancy	.90	.91	.87	.82	.81	.86
	Sales over $2,000,000					
Total operating expense	15.00	14.34	13.78	12.47	11.97	13.23
Administrative	3.67	3.46	3.64	3.06	3.02	3.30
Buying	.82	1.53	1.32	1.20	1.09	1.20
Selling	8.42	7.25	6.81	6.36	6.08	6.80
Receiving and shipping	1.18	1.14	1.12	1.06	.99	1.08
Occupancy	.91	.96	.89	.79	.79	.85
	All stores					
Total operating expense	15.25	15.04	14.67	13.71	12.63	14.25
Administrative	4.49	4.67	4.20	4.00	3.81	4.24
Buying	.88	1.06	1.05	.95	.77	.94
Selling	7.69	7.15	7.36	6.91	6.44	7.10
Receiving and shipping	1.10	1.00	1.03	.96	.83	.98
Occupancy	1.09	1.16	1.03	.89	.78	.99

Derived from unpublished reports of the Wholesale Dry Goods Institute, Inc.

somewhat greater for stores with the larger than the smaller volumes of net sales (table 86).

Salaries and wages were the most important items included in retail margins for textile products—the spread between the costs of the goods sold and prices to consumers. Census reports show that in 1939 wage costs to retailers made up 13.4 percent of total sales for retailers of dry goods and general merchandise and 16.2 percent for the apparel group taken as a whole. The proportions of labor costs for specific kinds of apparel stores were as follows: 16.3 percent for men's furnishings, 15.2 percent for men's clothing and furnishings, 16 percent for family clothing stores, 15.5 percent for women's ready-to-wear stores, 21.1 percent for furriers or fur shops, 22 percent for millinery stores, 36.4 percent for cus-

TABLE 85.—*Costs, margins, and net profits or losses for department and specialty stores expressed as proportions of net sales, 1936-42.*

DEPARTMENT STORES

Item	1936	1937	1938	1939	1940	1941	1942
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Net sales	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Merchandise costs	63.5	63.6	63.6	63.1	63.0	61.8	61.3
Gross margin	36.5	36.4	36.4	36.9	37.0	38.2	38.7
Total pay roll	17.4	17.9	18.3	17.8	17.6	17.3	16.8
Real estate costs	4.7	4.6	5.0	4.7	4.4	3.9	3.6
Advertising	3.6	3.6	3.8	3.6	3.5	3.2	2.7
All other expense	9.2	9.9	10.3	10.3	10.2	9.9	9.0
Net profit or loss (—)	1.6	.4	—1.0	.5	1.3	3.9	6.6
Number of reports	394	458	450	428	420	407	368

SPECIALTY STORES

	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Net sales	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Merchandise costs	62.9	63.0	62.9	62.2	62.5	61.6	61.2
Gross margin	37.1	37.0	37.1	37.8	37.5	38.4	38.8
Total pay roll	16.8	17.2	17.6	17.6	17.8	17.3	16.8
Real estate costs	5.3	5.1	5.2	5.2	4.8	4.7	4.2
Advertising	4.1	4.2	4.4	4.4	4.2	4.0	3.8
All other expense	9.4	9.9	10.3	10.3	10.3	9.9	9.0
Net profit or loss (—)	1.5	.6	—.4	.3	.4	2.5	5.0
Number of reports	93	113	99	93	90	61	109

Abstracted from *Operating Results of Department and Specialty Stores in 1942* (*11*).

TABLE 86.—*Expenses of department stores as proportions of net sales, by volume of net sales, 1942.*

Item	Net sales (1,000 dollars)						
	500 to 750	750 to 1,000	1,000 to 2,000	2,000 to 4,000	4,000 to 10,000	10,000 to 20,000	20,000 or more
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Total expense	29.20	30.60	30.40	31.70	31.50	32.40	32.70
Administrative and general:							
Total	7.40	7.85	7.90	7.65	7.40	7.50	7.50
Superintendency and general store	3.35	3.75	3.55	3.45	3.05	3.15	2.90
Interest on merchandise and accounts received	1.40	1.45	1.50	1.63	1.54	1.55	1.57
Taxes	.98	.95	1.05	.95	1.06	1.07	1.21
Other	1.67	1.70	1.80	1.62	1.75	1.73	1.82
Occupancy:							
Total	6.05	6.20	6.20	6.65	6.70	6.50	6.95
Real estate costs	3.00	3.10	3.25	3.60	3.75	3.30	3.80
Payroll	.70	.95	.85	.85	.95	1.15	1.20
Service purchased	.70	.65	.61	.59	.45	.44	.36
Repair	.55	.52	.46	.50	.53	.54	.43
Other	1.10	.98	1.03	1.11	1.00	1.07	1.16
Publicity:							
Total	3.15	3.60	3.40	3.95	3.90	3.90	3.60
Advertising	2.10	2.55	2.35	2.80	2.85	2.80	2.60
Pay roll	.70	.75	.70	.60	.60	.60	.60
Other	.35	.30	.35	.55	.45	.50	.40
Buying and merchandising:							
Total	3.70	3.50	3.70	4.10	4.00	4.35	3.95
Receiving and marketing	3.00	2.85	3.10	3.40	3.35	3.75	3.55
Traveling	.37	.35	.31	.37	.30	.30	.17
Other	.33	.30	.29	.33	.35	.30	.23
Selling and delivery:							
Total	8.90	9.45	9.20	9.35	9.50	10.15	10.70
Delivery	7.95	8.10	8.00	7.95	7.95	8.45	9.05
Supplies	.60	.70	.61	.70	.65	.73	.73
Other	.35	.65	.59	.70	.90	.97	.92
Number of firms reported	15	9	30	46	61	26	19

Abstracted from *Operating Results of Department and Specialty Stores in 1942* (*11*).

tom tailors, and 17.4 percent for accessories and other apparel stores. Other items of cost included in retail margins were not shown by the 1939 Census reports.

Data on operating costs in 1939 for retailers handling textile products show that salaries and wages were the largest items of costs included in retailers' margins (table 87) (*13*). Salaries of owners and officers amounted on the average to 9.1 percent of total sales and to 30 percent of retailers' margins. Salaries and wages combined amounted on the average to 16.1 percent of net sales and to 52.3 percent of retailers' margins. The proportions varied considerably from one kind of store to another. Salaries ranged from 8.2 percent of net sales for dry goods and general merchandise stores to 17.3 percent for custom tailors and wages from 6.4 percent for men's furnishings stores to 26.8 percent for custom tailors.

The proportion of net sales accounted for by occupancy averaged 4.7 percent and ranged from 3.9 percent for dry goods and general merchandise stores to 8.3 percent for men's furnishings. Advertising costs averaged 1.3 percent of net sales and ranged from 1 percent for lingerie, hosiery, millinery, and accessory stores to 2.5 percent for furriers. Losses through bad debts averaged 0.5 percent of net sales and ranged from 0.2 percent for lingerie, hosiery, millinery, and accessory stores to 0.9 percent for custom tailors. All other expenses averaged 5.3 percent of net sales and ranged from 3.9 percent for lingerie, hosiery, millinery, and accessory stores, to 9.7 percent for furriers. Profits amounted on the average to 2.9 percent of net sales and ranged from 1 percent for men's furnishings to 5.6 percent for furriers.

Data on costs, margins, and profits for retailers expressed as proportions of net sales show that in 1939 total expenses of retailers increased with increases in the proportion of the products sold on

TABLE 87.—*Costs, margins, and profits for retailers, expressed as proportions of net sales by kind of store, United States, 1939.*

Item	Dry goods and general merchandise	Family clothing	Women's ready to wear	Lingerie, hosiery, millinery and accessory	Men's clothing	Men's furnishings	Custom tailors	Furs	All
	Pct.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
Net sales	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Costs of goods sold	71.9	69.4	69.5	64.2	68.2	65.8	36.8	49.8	69.2
Gross margin	28.1	30.6	30.5	35.8	31.8	34.2	63.2	50.2	30.8
Salaries, owners and officers	8.2	8.4	9.2	12.6	19.6	11.3	17.3	14.4	9.1
Wages, all other employees	6.7	6.9	7.0	6.8	6.5	6.4	26.8	10.5	7.0
Occupancy expense	3.9	4.7	5.3	8.0	4.5	8.3	8.0	6.9	4.7
Advertising	1.1	1.3	1.2	1.0	1.5	1.2	1.6	2.5	1.3
Bad debt losses	.5	.6	.4	.2	.6	.5	.9	.6	.5
All other expenses	4.7	5.1	5.6	3.9	5.6	5.5	7.3	9.7	5.3
Profits	3.0	3.3	1.8	3.3	3.5	1.0	1.3	5.6	2.9
Concerns reporting (number)	564	298	333	75	320	75	25	32	1,722
Net sales (million dollars)	22.7	12.4	10.5	.9	14.5	2.3	.6	1.2	65.1
Percent profitable	69	70	59	69	73	61	64	72	68

Abstracted from *Standard Ratios for Retailing—Guides to Efficiency and Profits in Fifty Trades* (*19*).

credit (table 88) (*13*). For the various kinds of stores combined, total expenses of retailers increased from 25.7 percent of net sales for stores that sold 90 percent or more of the products for cash to 30.6 percent for stores that sold 50 percent or more of the products on open credit. The proportions for salaries and occupancy expenses varied irregularly but the proportions for wages, losses through bad debts, advertising, and all other expenses showed fairly consistent increases with increases in proportions of the goods sold on credit.

Means of Reducing Costs

Wholesalers' margins apparently could be reduced considerably for many kinds of apparel and household goods if the volume of business for many wholesalers were increased. One of the criticisms made of wholesalers is that they do not reduce transportation and selling costs as much as would otherwise be possible because they handle small lots at frequent intervals (*4*). The possibility of reducing operating expenses of wholesalers by increasing the volume of business appears to be supported by census data for the wholesale trade in 1939. Based on these data, a comparison was made of the proportions of total sales represented by operating expenses for wholesalers with volumes of sales of 1 million dollars or more per year and for those with volumes of $100,000 to $200,000. This comparison shows that average expenses of wholesalers with the smaller sales volumes exceeded those of wholesalers with the larger sales volumes by 31 percent for those handling men's and boys' clothing and furnishings; 8 percent for those handling women's and children's clothing and furnishing; 17 percent for those handling hosiery and lingerie; 91 percent for those handling cotton piece goods; 96 percent for those handling silk, linen, rayon, and velvet piece goods; and 122 percent for those handling woolen and worsted piece goods. Information on wholesale dry goods houses for the 5 years, 1938–42, shows that total operating expenses for houses with annual volumes of sales of less than $500,000 averaged more than one-fifth greater than those with annual volumes of sales of over 2 million dollars. If these differences in expenses may reasonably be attributed largely to differences in volume of business, it is apparent that very substantial reductions in wholesalers' margins could be brought about if the volume of business were increased, especially for the smaller wholesalers.

Means of reducing retailers' margins include increases in general efficiency and reduction in the services rendered. Means of increasing general efficiency involve problems of organization and operation, personnel selection and management, location of places of business, number and kinds of commodities handled, volume of operation, and purchase and sales policies, among others. Information on the extent to which margins could feasibly be reduced by improvements in general efficiency is very incomplete. Data on the relation of rate of stock turnover to margins, expenses, and profits for department stores in 1927 show that total expenses per unit of sale for stores with a rate of stock turnover of 4 and over averaged 8.5 percent less than those with a rate of stock turnover of under 3 (*2, p. 616*). Profits averaged about three times as great

TABLE 88.—*Costs, margins, and profits for retailers expressed as proportions of net sales, by kind of store and credit policy, United States, 1939.*

Kind of store and credit policy	Median net sale per store	Proportion of net sales represented by—								
		Cost of goods sold	Total expenses	Salaries	Wages	Occupancy expense	Advertising	Bad debt losses	All other expenses	Net profits or loss (—)
	Dollars	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Family clothing:										
90 percent or more for cash	19,900	70.4	25.3	9.1	5.6	5.4	1.0	0.3	3.9	4.3
20 to 50 percent on open credit	33,850	69.8	26.8	7.7	7.0	3.4	1.5	.6	6.6	3.4
50 percent or more on open credit	40,500	68.5	28.6	8.4	8.5	3.6	1.0	1.0	6.1	2.9
Women's ready-to-wear:										
90 percent or more for cash	15,500	68.4	27.5	10.2	5.7	6.1	1.1	.4	4.0	4.1
20 to 50 percent on open credit	23,000	71.4	27.1	8.7	7.0	4.8	1.3	.4	4.9	1.5
50 percent or more on open credit	28,450	68.4	32.4	8.2	9.3	4.6	1.4	.4	8.5	—.8
Men's clothing:										
90 percent or more for cash	20,400	69.1	26.6	10.4	5.0	5.2	1.3	.3	4.4	4.3
20 to 50 percent on open credit	33,400	67.8	28.6	10.4	5.8	4.2	1.8	.6	5.8	3.6
50 percent or more on open credit	42,600	66.1	30.9	8.7	8.2	4.2	1.9	.6	7.3	3.0
Dry goods and general merchandise:										
90 percent or more for cash	22,300	71.9	23.8	8.6	6.2	4.0	1.0	.3	3.7	4.3
20 to 50 percent on open credit	32,200	72.4	26.3	7.5	8.0	3.6	1.5	.4	5.3	1.3
Men's furnishings:										
90 percent or more for cash	18,600	65.6	33.7	11.9	6.2	9.2	.8	.3	5.3	.7
50 percent or more on open credit	27,650	65.6	31.1	10.3	6.7	5.1	1.6	.6	6.8	3.3
Weighted average for all:[1]										
90 percent or more for cash	20,101	70.1	25.8	9.5	5.7	5.1	1.1	.3	4.1	4.1
20 to 50 percent on open credit	31,223	70.6	27.1	8.5	7.1	3.9	1.5	.5	5.6	2.3
50 percent or more on open credit	37,336	67.4	30.6	8.6	8.5	4.2	1.5	.7	7.1	2.0

[1] Data for each kind of store were weighted by aggregate net sales reported for these stores.

Abstracted from *Standard Ratios for Retailers—Guides to Efficiency and Profits in Fifty Trades* (15)

for stores with a rate of stock turnover of 4 and over as for those with a rate of 3 or less. These data appear to indicate that the retailers' margins in many cases could be reduced considerably if the rate of stock turnover were increased.

Considerable savings in costs of retailing might be made by reductions in such services as free delivery, return privileges, and small unit purchases (*17, Ch. 10*). But normally the advisability of such reductions would depend upon whether the services rendered under the specific situations contribute enough to the satisfaction of informed consumers and others to make them willing to pay their necessary costs. Data on the items of expense for department stores indicate that delivery costs in 1942, for example, amounted to more than 8 percent of net sales and to more than one-fourth of total operating expenses of these stores (*11*). These data indicate that by reducing or discontinuing delivery services the operating costs of department stores might be reduced by amounts up to about 25 percent of the total. Some progress has been made in reducing delivery costs by setting up minimum sizes of packages that will be delivered. But for a reduction or elimination of these services to be feasible all competing stores in the same city probably would have to follow the same practice.

Margins or costs for department and specialty stores might be reduced considerably if advertising were confined more to informative as opposed to strictly competitive features and were placed on a more efficient basis. Reports indicate that in 1939 advertising costs amounted on the average to about 3.6 percent of net sales and to almost 10 percent of the gross margins for department stores and to 4.4 percent of net sales and to almost 12 percent of the gross margins for specialty stores (*11*). It is reported that advertising costs of a general mail-order house averaged about 10 percent of the selling price for men's clothing (*2, p. 211*).

Style and changes in fashion are important elements in the costs of wholesaling and retailing textile products as well as in their manufacture. The large number of styles and frequent changes in fashion increase the costs of wholesaling and retailing by necessitating frequent purchases of small lots of the styles in fashion at the time. The alternative is to bear the risks of substantial losses on stocks of out-of-fashion goods on hand after the fashion changes. Data on wholesale and retail prices and on retailers' margins for women's dresses by price lines show that retailers' margins per dollar of sale for handling the higher price line dresses where style was an important consideration was in some instances more than 25 percent greater than those for handling the lower price lines for which style and changes in fashion were relatively unimportant (*14, pp. 125–128*). These data, along with other information, indicate that wholesalers' and retailers' margins could be reduced considerably if the number of styles and the frequency of change in fashion were greatly reduced.

Retailers' margins apparently could be reduced considerably if their sales were confined to a cash basis. Data on costs to retailers of handling textile products show that total expenses per dollar of goods sold averaged about 19 percent greater for those that sold 50 percent or more on open credit than for those that sold 90 percent

or more for cash (*13*). But data available are not sufficiently adequate to determine the advisability and feasibility of shifting all trading to a cash basis.

Developments in recent years indicate that retailers' margins for textile products might be reduced considerably by the simplification of the selling process so as to permit and encourage some degree of self-service by the customer through open display of merchandise, arranged on the basis of the customer's primary interests, and through arrangements for completing the transaction by making payments at a convenient desk set up for that purpose.[58] The feasibility of simplifying the selling process has already been demonstrated in actual practice. It was pointed out by Wolf that self-service grocery stores freed the consumer from the slow process of depending upon the clerk to assemble her purchases, variety stores demonstrated the expandability of consumer demand as a result of merchandise display, department-store chains extended the principle of open display to many commodities not heretofore sold in this manner, and ready-to-wear specialty stores simplified shopping by displaying merchandise by size.

Simplified service makes possible a reduction in retail margins mainly by reducing payroll costs which average about one-half of total operating expenses of retailers. Although the available information is not adequate for accurate appraisals, the indications are that by the use of self-service or simplified service, operated under favorable conditions, retailers' margins for textile products might be reduced by amounts up to 10 percent. Accurate labeling to show the quality and the size of the products on the basis of uniform standards and other economies in retailing would make possible substantial reductions in marketing costs to the advantage of both producers and consumers.

Importance of Reductions in Costs

Margins for wholesaling and retailing textile products in 1939 averaged about 40 percent of the retail price of the finished goods and about four times as much as the returns to growers for the cotton and wool used in their production. Retailers' margins alone averaged about one-third of the retail price of the finished goods and more than three times the returns to growers for the cotton and wool used. In other words, a reduction of 10 percent in retailers' margins in 1939 would have amounted to about as much as one-third of the returns to growers for the cotton and wool produced. It would have amounted to more than the margins for ginning and baling the cotton and for rendering all the services incident to taking cotton from gins and delivering it to mills.

SUMMARY AND CONCLUSIONS

Wartime price-control programs and prospective post-war readjustments to peacetime conditions emphasize the long-existing need for more information on marketing margins and costs for textiles. In response to this need, data have been assembled on

[58] Wolf, C. E. A manual on simplified service for department, specialty, and dry goods stores. U. S. Bur. Foreign and Dom. Com. [In press.]

margins or costs for making the various conversions and for rendering the various services incident to taking cotton and wool from farms and delivering the finished products in the form of apparel and household goods to ultimate consumers.

Estimates, based on official data and on other information, were made to show the average distribution of the consumer's dollar paid for textile products in 1939, the last "normal" pre-war year. Data on margins for the various agencies and services available for this purpose are not complete and in some instances they are not strictly comparable. Consequently, some liberties were taken in approximating margins on the basis of these data and other information. Furthermore, the estimated margins were adjusted to approximate the farm-to-retail price spreads as already calculated by this Bureau.

Results show that the margins or costs of making the various conversions and for rendering the various services incident to taking the raw fibers from farms and delivering the finished products in the form of apparel and household goods to consumers were so great that in 1939 returns to growers for farm production of the fibers averaged only about 8 cents for cotton and about 11 cents for wool of the consumer's dollar paid for the finished goods. The proportions of the consumer's dollar paid for the finished goods that goes to farmers for the production of the raw fibers used usually vary directly with changes in farm prices of the fibers.

Margins for merchandising the raw fibers, including ginning and baling for cotton but not including scouring for wool, averaged, in 1939, about 3 cents of the dollar paid by the consumer for the finished goods. The proportions of the consumer's dollar accounted for by the combined margins for spinning yarn, weaving cloth, and dyeing and finishing the cloth, amounted to about 19 percent for cotton and 13 percent for wool; those for manufacturing apparel and household goods, about 30 percent for cotton and 35 percent for wool; and those for wholesaling and retailing, about 41 percent for cotton and about 38 percent for wool.

The margins for the various conversions and services were broken down to show the relative importance of the cost items included. The groupings of the cost items varied considerably from one agency to another and some liberties were taken in estimating and combining such items. The results indicate that salaries and wages accounted for about one-half of the farm-to-retail price spreads for textiles. Advertising amounted to about 4 percent and the combined profits of all agencies, except farmers, amounted to almost 9 percent of the retail price of the finished goods.

These data on margins or costs for the various agencies and functions along with other information were used as a basis for indicating the means by which and the extent to which it might be feasible to reduce these margins or costs, and the relative importance of such reductions. The suggested means for reducing margins or costs apply to specific items, functions, or agencies and in many instances possibilities for bringing about considerable reductions are indicated. It was pointed out, for example, that by increasing the volume of ginning per unit of equipment, by

using the better equipment more efficiently, and by other economies, the net costs of ginning and baling cotton might be reduced in many instances by as much as 25 percent or more and that margins for retailing textile goods might be reduced by as much as 10 percent in many instances through the use of self-service or simplified-service arrangements operated under favorable conditions.

Data on distribution of the consumer's dollar paid for textile goods may serve as a basis for indicating the relative importance of bringing about increased efficiency and reductions in margins or costs for the various agencies and functions involved. According to these data, margins for merchandising the raw fibers in 1939, for example, including ginning and baling cotton, amounted to only about 3 percent of the consumer's dollar, whereas margins for retailing the finished goods amounted on the average to about one-third of the consumer's dollar. A reduction of 10 percent in retail margins in 1939, for example, would have amounted to about as much as total margins for merchandising the raw fibers, including margins for ginning and baling cotton, and to more than 15 times as much as a reduction of 25 percent in margins for ginning and baling cotton.

Although differences in the size of the margins for the various agencies and functions are important considerations, they may not reflect very accurately the relative opportunities for making savings in costs that can be passed back to farmers or on to consumers. But data on the distribution of the dollar paid by the consumer for textiles may be used to good advantage in apportioning the efforts to increase efficiency and reduce costs on the basis of the relative importance of the agencies or functions involved.

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