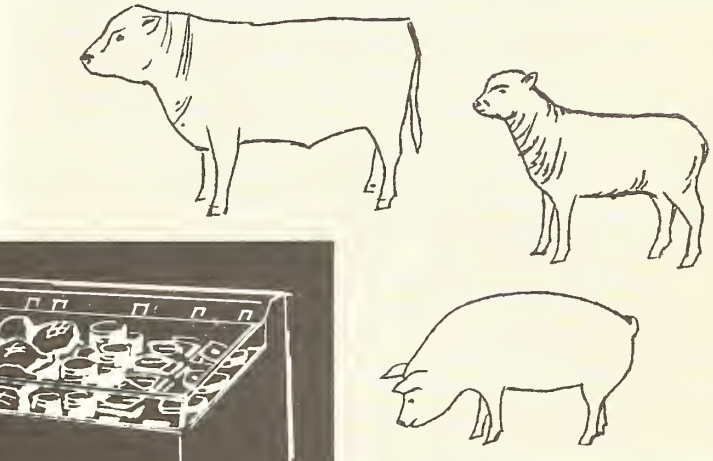
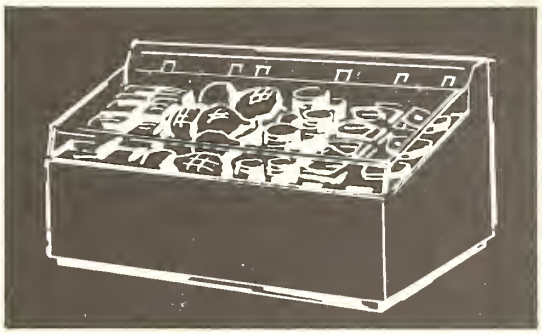
marketing costs and margins for LIVESTOCK and MEATS





MARKETING
RESEARCH
REPORT NO. 418

UNITED STATES DEPARTMENT OF AGRICULTURE
Agricultural Marketing Service
Marketing Economics Research Division

Preface

The study on which this report is based is part of a broad program of marketing research requested by the Congress, which directed the Department of Agriculture to make special studies of food marketing costs. Research in this cost area was recommended also by the Food Distribution Research and Marketing Advisory Committee. Livestock producers, as well as consumers and marketing agencies, are affected by the problems discussed in this report.

The report combines, coordinates, and, where practicable, brings up to date information developed in related studies of livestock and meat marketing, made previously by the Department. The purpose is to provide guidance toward greater efficiency and expanded markets for the industry by presenting a more complete picture of the agencies utilized, services rendered, and marketing costs and margins.

Gerald Engelman, Head, Livestock Section, Marketing Economics Research Division, made valuable suggestions on the preparation of this publication. He was responsible for developing the methodology and analysis appearing in many of the earlier costs and margins studies upon which this report is largely based.

Washington, D.C. Issued November 1960

Contents

Highlights

The overall marketing margins—the difference between the price per pound the consumer pays for meat and the price the farmer receives for an equivalent quantity of live animal—reached new highs in 1959 for pork, U.S. Choice grade beef, and U.S. Choice grade lamb (fig. 1). Margins for pork increased by about 41 percent from 1949 to 1959, margins for beef widened by 57 percent, and for lamb, 45 percent. Most of this long-term widening in margins was related to increased costs of providing marketing services.

Retail prices, farm values, and overall farm-to-retail margins for livestock and meat tend to fluctuate to a much greater extent on a monthly basis than they do from year to year. These short-term fluctuations are more closely related to changes in the supply of and demand for livestock and meats than to changes in the cost of providing marketing services.

Since 1919, the farmer's share of the consumer's dollar spent for Choice grade beef has varied from 39 cents to 79 cents per pound, and in 1959 it was 62 cents. For pork, the farmer's share varied from 36 to 75 cents and for 1959 was 48 cents; and for Choice grade lamb it varied from 41 to 74 cents and for 1959 was 53 cents.

Farm values, retail prices, and farm-to-retail price spreads for each of the species and for the meat product group as a whole display distinct seasonal patterns. During the last decade, the seasonal patterns of livestock prices and farm-to-retail spreads have been marked by a reduction in price variations and by shifts in the seasonal price paths. Each of these changes has been due primarily to corresponding changes in the seasonal pattern of livestock marketing. Earlier farrowings and feeding for faster gain have helped to smooth seasonal variations in hog marketings. Expanded feedlot operations have tended to transform seasonally concentrated grass cattle marketings into a more evenly distributed supply of higher grade cattle. Feeding of lambs, like that of cattle, has resulted in more orderly marketings of lambs throughout the year and exerted a stabilizing influence on retail prices and farm values.

Live-to-wholesale margins, which represent the meatpackers' gross margin and cover the slaughtering, processing, and the major share of the wholesaling function, have varied substantially during 1949–59.

The size of the packer margins per 100 pounds, live weight, varies by species. It is highest for hogs and lowest for cattle. These variations are associated with and reflect in part differences in marketing services performed by packers for the separate species. They do not, however, indicate the relative operational efficiencies of meatpackers by species. Meatpackers normally perform more marketing services for pork than for lamb or beef.

Generally, profits in food processing industries are low in relation to those of manufacturing industries as a group, and meatpackers' profits are usually low compared with those of other food processing companies. In addition, meatpackers' profits tend to be more variable than those of other food industries.

Retailers change their prices less frequently and by larger amounts than do wholesalers. Such practices by retailers tend to result in widening or narrowing of retail margins.

The packer-wholesaler margin for pork usually exceeds the margin for beef and lamb; the retail margin for pork usually is less than for either beef or lamb. These differences in retail margins among species reflect in part the different services performed by retailers for the various species.

One of the most important developments in the retailing of meat in recent years has been the trend toward self-service operations. The rapid growth of supermarkets, together with the increase in average volume per store, has contributed to this trend. These changes have led to more efficient utilization of labor and equipment in retail stores. Shifts to self-service meat departments have probably resulted in lower average costs in retailing meats. Most of this reduction has been due to increased volume associated with large-volume food store operations, rather than to differences in retail costs between self-service and salesman-service meat departments.

Dynamic structural changes have taken place in the marketing system for both livestock and meat. For livestock, the most significant change has been a trend toward a more decentralized marketing system. This trend was accelerated and augmented by the rapid growth in the number of livestock auction markets, beginning in the 1930's. The number of auctions in the United States increased from about 200 in 1932 to a peak of 2,500 in 1952. The number declined to 2,322 in 1955, but by 1959 it had increased to 2,374.

Terminal markets have been the principal outlet utilized by producers, a 1958 study showed. Terminals handled only a slightly higher volume, however, than auction markets. Dealers' handlings accounted for about one-fifth of producer sales. About 25 percent moved directly from producer to final purchaser.

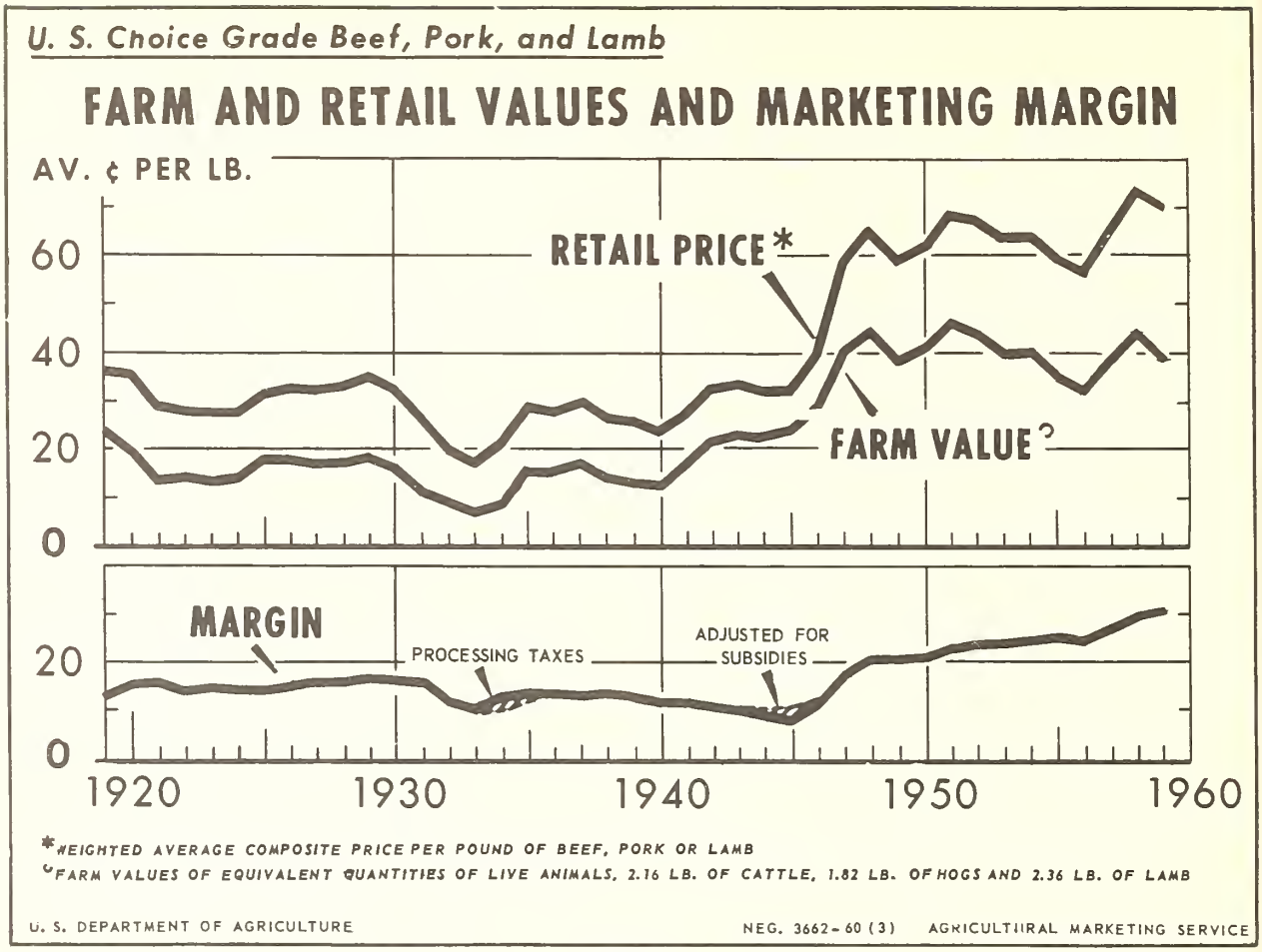


FIGURE 1.

Significant structural changes have taken place also in the distribution of meats. During the last 30 years, there has been a decline in the relative position of packer branch houses as wholesale meat distributors, accompanied by a smaller rise in the relative position of independent wholesalers.

Development of large-scale retailing organizations in food distribution, accompanied by adoption of centralized meat procurement programs, has stimulated direct sales of meat by packers to retail firms. Improvement and extension of hard-surfaced roads, permitting distribution of meat by refrigerated trucks, contributed to the trend toward more direct selling in the 1930's. The adoption of U.S. grade standards for beef, veal, and lamb also influenced the direct sale movement.

Average marketing charges, according to data compiled in 1958, usually have been highest for each of the species at terminals, and lowest for animals sold "direct." Per head expenses for marketing animals varied by species; they were highest for cattle and lowest for sheep and lambs at all types of outlets. The average marketing cost per head for livestock in 1955, for example, a year for which detailed data were compiled, was $1.99 for cattle, $1.09 for calves, 56 cents for hogs, and 34 cents for sheep and lambs.

The proportion of livestock moved by truck has increased substantially during the last 30 years. From 1935 to 1959, truck receipts as a percentage of total terminal market receipts increased by about 50 percent for calves and hogs, 75 percent for cattle, and 150 percent for sheep and lambs. In general, trucks are utilized to a larger extent than railroads for moving livestock shorter distances. Farmer-owned trucks are commonly used for hauling livestock distances of 50 miles or less. The bulk of the livestock shipped by rail moves distances greater than 100 miles.

The 1958 study showed typical relationships among average expenses per head for transporting livestock to market to be in the neighborhood of $4.85 for cattle, $1.55 for calves, $1.10 for hogs, and $1.00 for sheep and lambs. When transportation expenses and the weighted average expenses incurred at the market were combined, the average total marketing expense per head, for all costs of marketing livestock, was about $6.85 for cattle, $2.60 for calves, $1.65 for hogs, and $1.35 for sheep and lambs.

Marketing Costs and Margins for Livestock and Meats

By Dalton L. Wilson, Betty Sue Pence, and Victor B. Phillips,[1] *Agricultural Economists*, Marketing Economics Research Division, Agricultural Marketing Service

Introduction

The margins, or price spreads, associated with the marketing of livestock, meat, and meat products are of highly practical interest to both producers and consumers. During the early 1920's, the U.S. Department of Agriculture was asked to engage in special studies of the marketing margins for livestock. In 1934, at the request of livestock producers, the Department developed a "market-basket" statistical series, which measures changes in market costs for a number of agricultural commodities. In March 1935, the Department published a preliminary report which summarized price spreads for 10 of the most important farm products for the period 1910–34. This research was expanded, and in 1936 the Department issued a report which included price spreads for 58 food items. Since 1941, farm-to-retail price spreads for beef and pork have been published periodically by the Department.

The meat products group, which includes beef, veal, pork, and lamb, is one of the three livestock product groups in the market basket. On a retail cost basis, meat products are the largest group and usually make up from 25 to 30 percent of family expenditures for farm food products in the market basket. In terms of returns or cash receipts to farmers, meat products are even more significant. The farm value of meat products generally makes up from 30 to 40 percent of the total farm value of the items in the market basket. Sales of meat animals in recent years have accounted for approximately 30 percent of total cash farm income in the United States.

[1] Mr. Wilson has transferred to the Livestock and Meat Products Division, Foreign Agricultural Service. Miss Pence has resigned from the Agricultural Marketing Service.

Since meat products represent such an important component of the total market basket, changes in farm and retail prices of livestock, meat, and meat products are the most significant ones affecting trends for all food products. This is particularly the case for short-term comparisons, as livestock and meat prices tend to change much more rapidly than prices of many other food products due to the rather pronounced seasonalities in livestock marketing. Because the size of the marketing margins affects substantially both the returns received by producers for livestock and the prices paid by consumers for meat and meat products, there has been widespread public interest in marketing margins for livestock and meat.

Objectives of Study and Nature of Data

In recent years, several independent studies of different phases of the complex marketing process for livestock and meat have been made by the Department, and reports on them have been published. Each of these studies has been concerned with a selected segment of the overall marketing process. The immediate objective of this report is to combine and coordinate the information obtained in these numerous studies in order to present for use of the industry a more complete picture of the different agencies utilized, services rendered, and costs and margins in the marketing and processing of livestock and meat.

Adequate information was available for most phases of the study. However, data for some segments were fragmentary, and in these cases estimates were used to attain completeness.

A comprehensive study of margins for marketing livestock and meats was made in 1947 (*2*).[2] Most of the data in that report were for the base period 1939. Throughout the different sections of the current report, an effort has been made to maintain comparability between the two reports so that relevant comparisons can be made between the two periods.

Complexities of Costs and Margins for Livestock and Meat

Unlike some agricultural commodities, meat is sold to the ultimate consumer in forms that differ considerably from that of the live animal sold by the producer. The movement of livestock from the producer through the different marketing agencies involved in converting livestock into types of products desired by consumers constitutes a complex pattern. Normally, the processing and distribution of livestock and meat are classified into four broad functional categories: (1) Marketing livestock, including transportation, (2) meatpacking, (3) meat wholesaling and (4) meat retailing. The determination of the costs and margins of these different marketing functions is difficult.

In most instances, several alternative marketing methods are available to producers when selling their livestock. They may elect to sell their animals direct at the farms or they may sell through other types of market outlets, such as terminals, auctions, or dealers. In any event, the charges associated with the marketing of livestock may vary considerably, depending upon the channels through which the animals move and the services rendered.

Many products evolve from the slaughter of live animals. Slaughter produces a carcass which weighs much less than the live animal. Generally, processing of meat results in further reduction in weight, due to waste and shrinkage. The slaughtered animal yields many edible and inedible byproducts in addition to the carcass. The most important edible byproducts include lard and variety meats, while important inedible byproducts are hides, pelts, tallow, grease, pharmaceuticals, and raw materials for animal protein feeds and fertilizers. Some of these byproducts are sold through the same channels as the carcasses, while others are sold as raw products to other processors.

Each of the species is usually handled differently. Lamb and beef are generally sold in the fresh form, whereas much of the pork carcass is cured and smoked. The marketing functions performed by a particular agency also vary by species. Wholesale cuts of pork are often fabricated by the packers, while for beef and lamb this function is generally performed by wholesalers, jobbers, and retailers.

Hence, in the marketing process a single commodity (hog, lamb, or steer) becomes a multitude of products which sell at a wide range of prices. The returns to and costs incurred by the more important marketing agencies may vary widely within a particular year. Variations among costs and selling prices also yield different margins for similar services at different times.

Data on margins are estimates, rather than precise measurements. More reliance can be placed on trends in margins and costs, for marketing services than on the specific levels of prices, costs, or margins. But these data do provide some indication of the relative size of gross returns absorbed by the various marketing agencies for performing the different functions in the marketing and processing of livestock and meats.

Farm-to-Retail Costs and Margins for Marketing Livestock and Meat

The farm-to-retail margin, as used in this bulletin, refers to the total spread between the average retail price paid by consumers for the major cuts of meat and the net farm value of equivalent quantities of livestock sold by producers.[3] More specifically this spread represents the costs and returns for services performed in three rather broad functional operations: Marketing livestock, packing-wholesaling, and retailing.

The distribution of the retail price per pound of meat by marketing functions differs for pork, beef, and lamb (fig. 2). The retailing margins per pound for beef and lamb are larger than for pork. In 1959, margins per pound took 23.1 cents for beef and 19.5 cents for lamb, compared with 16.4 cents for pork. This is partly because more labor is required to retail beef and lamb than pork. Retailers generally buy carcasses and primal cuts of beef and lamb from packer-wholesalers, which they make into retail cuts such as roasts and steaks. They trim off excess fat, bone some cuts, and make a portion into ground meat. Retailers buy pork products which require comparatively little further cutting and trimming, such as hams, picnics, Boston butts, and sliced bacon. The marketing margin for retailing covers the services performed by the retailer.

The packer-wholesaler margin is larger per pound for pork than for beef and lamb. In 1959, it accounted for 11.9 cents for pork compared with

[2] Italic figures in parentheses refer to items in Literature Cited, p. 52.

[3] For a detailed discussion of the methods used in calculating these margins, see *Farm-Retail Spreads for Food Products*, U.S. Dept. Agr., Agr. Mktg. Serv., Misc. Pub. No. 741, November 1957.

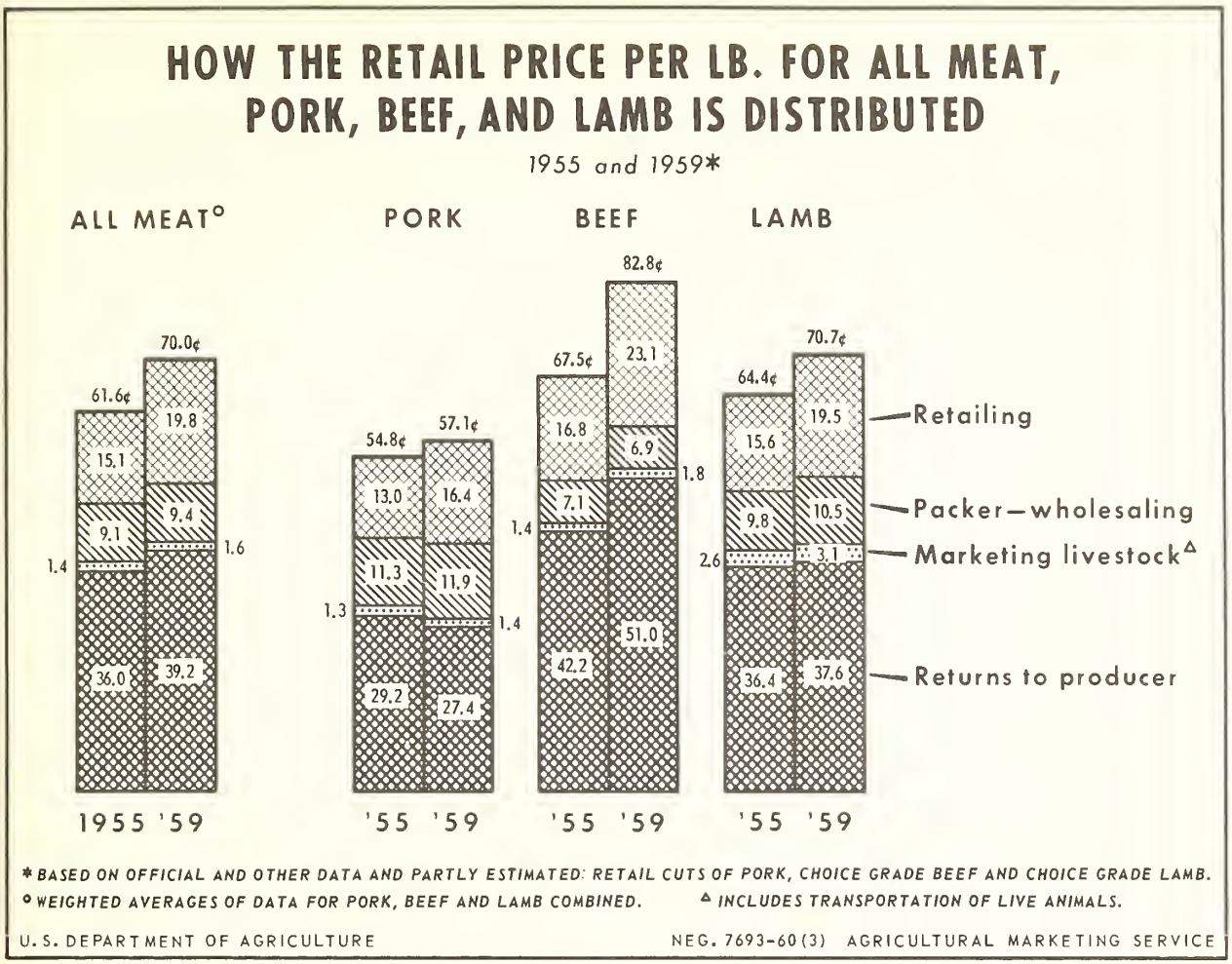


FIGURE 2.

6.9 cents for beef and 10.5 cents for lamb. This is because the packer-wholesaler normally performs on hogs a much larger share of the total marketing services necessary to move live animals from the farm to the ultimate consumer than he performs on cattle and lambs. For "block beef" and lamb, the packer-wholesaler's functions are usually confined to slaughtering the live animals and wholesaling the dressed meat as whole or quarter carcasses.[4] For pork, meatpackers slaughter the hog, cut the carcass into its component parts—hams, bacon, picnics, Boston butts, spareribs, loins, and others—and cure, process, and package some of these pork products.

Expenses for marketing livestock take a larger part of the retail price per pound for lamb than for beef and pork. This is partly due to the relatively light weight of the animals and greater transportation expense per pound caused by longer distances hauled.

Figure 3 shows the distribution, among producers and those performing the marketing function, of the consumer's dollar spent for meat. Retailing accounts for a larger share of the consumer's dollar for pork, beef, and lamb than packing-wholesaling. Livestock marketing charges took a larger share of the consumer's dollar for lamb than for beef and pork.

The variations in the distribution of the retail price per pound of meat and the distribution of the consumer's dollar spent for meat reflect in part differences in kinds and costs of services performed at different levels in the marketing channel. They do not measure or indicate in any way the relative operational or functional efficiencies.

The retailing, packing-wholesaling, and livestock marketing functions are discussed in more detail later in this report.

Figure 1 page vi, shows the average retail price, farm value, and farm-to-retail margin for Choice grade beef, Choice grade lamb, and pork on an annual basis for the period 1919 through

[4] "Block beef" is beef which ordinarily moves into fresh meat consumption channels rather than to processors or boners. It is fresh beef which moves across the cutting block of the retail butcher and includes qualities of beef sold to restaurants and other dining establishments.

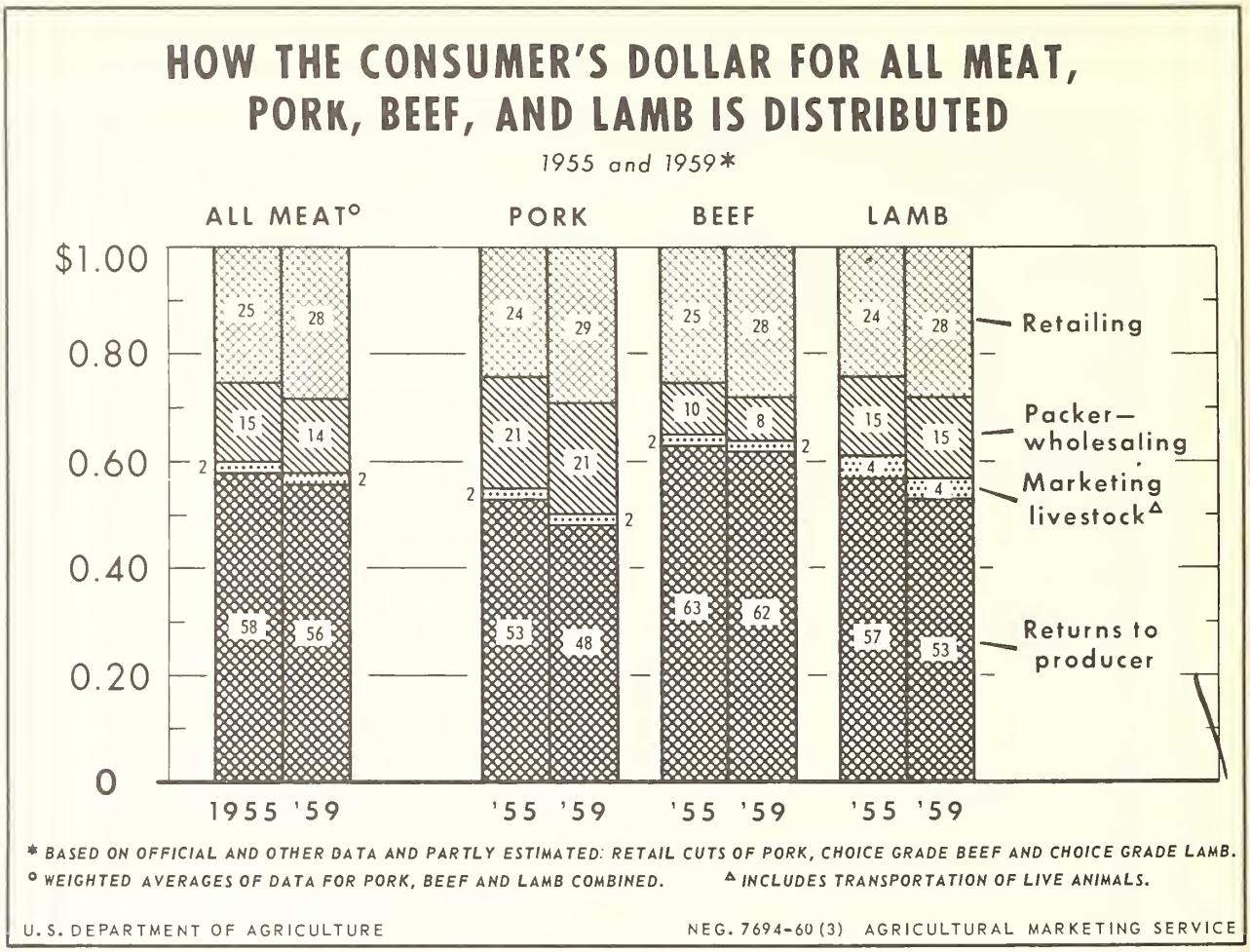


FIGURE 3.

1959.[5] The composite retail price shown here exceeds the average price paid for all qualities of meat by consumers, as the lower priced grades of fresh and processed beef, and some of the processed pork and lamb products, are not included in the series. Corresponding adjustments have been made in the farm value so that the relationships between the farm value and retail prices, or the farm-to-retail spreads, are not distorted. The primary purpose of this chart is to show the long-time trends of these price series and spreads rather than specific price levels.

During the 1920's, the farm-to-retail marketing margin for livestock and meat was relatively stable and averaged 15 or 16 cents per retail pound in most years. The margin declined sharply during the depression of the 1930's, reaching a low of 11 cents in 1933, and then advanced to around 13 cents in the latter part of the decade. After 1939, the spread again declined and averaged near 11 cents per pound during most of the war years, when the wartime subsidies paid to processors were included. The actual farm-to-retail margin (excluding processor's subsidies of 3.5 cents) reached a low of around 8 cents in 1945. The effect of the subsidies on the marketing margin was to decrease the spread by the amount of the subsidies. Taxes levied on processors during the 1933–35 period had the opposite effect on the marketing margin. Processors transferred the taxes to the producers by lowering the live hog prices by the amount of the tax.

During the inflationary period following World War II, the retail prices of meat, farm values of livestock, and marketing margins advanced at the most rapid rate on record. Margins more than doubled from 1945 to 1947. Although both retail prices and farm values trended downward rather sharply from 1951 to 1956, marketing margins continued to increase throughout the entire period. In 1957, both the retail price of meat and the farm value of livestock recovered from their 5-year downward trend, and by 1958 they had advanced 13.8 and 10.2 cents per retail pound, respectively. However, in 1959, the farm value and

[5] See appendix, table 22, p. 53, for yearly data, 1919–1959.

retail prices both dropped below their 1958 level. The farm-to-retail margin continued the upward trend which began in 1945, and reached a record level of almost 31 cents in 1959.

Farm-to-Retail Marketing Margins for Hogs and Pork

Since 1919, the trend in marketing margins for hogs and pork has followed about the same pattern as the margins for all species combined (fig. 4).[6] The margin was relatively stable during the 1920's at about 16 to 17 cents in most of the years. The spread narrowed sharply during the depression years and reached a low of about 9 cents in 1933. Following this low, the margin increased for 2 years and then declined gradually until it reached an alltime low of 8.1 cents per retail pound in 1945. However, during 1945 subsidies paid to pork processors amounted to 2.7 cents per retail pound. With the removal of price ceilings after World War II, retail pork prices, hog values, and the marketing margin all increased substantially. From 1945 to 1947, margins more than doubled, increasing from 8.1 to 17.9 cents. On an annual basis, the marketing margin for pork continued its upward trend, almost uninterrupted, after 1945, and reached an alltime high of 29.7 cents per retail pound in 1959.

[6] See appendix, table 24, p. 56, for yearly data, 1919–1959.

Farm-to-Retail Marketing Margins for U.S. Choice Grade Beef

The long-term trends in retail prices, farm values, and marketing margins for U.S. Choice grade beef are shown in figure 5.[7] The farm-to-retail price spread declined somewhat during the first half of the 1920's to 13 cents per retail pound in 1925, and then increased to nearly 18 cents in the latter part of the decade. Marketing margins gradually declined through the depression of the 1930's and continued to narrow during World War II when prices were under the restraint of Office of Price Administration ceilings. During the period 1930 to 1945, margins declined from 17.7

[7] See appendix, table 23, p. 54, for yearly data, 1919–1959.

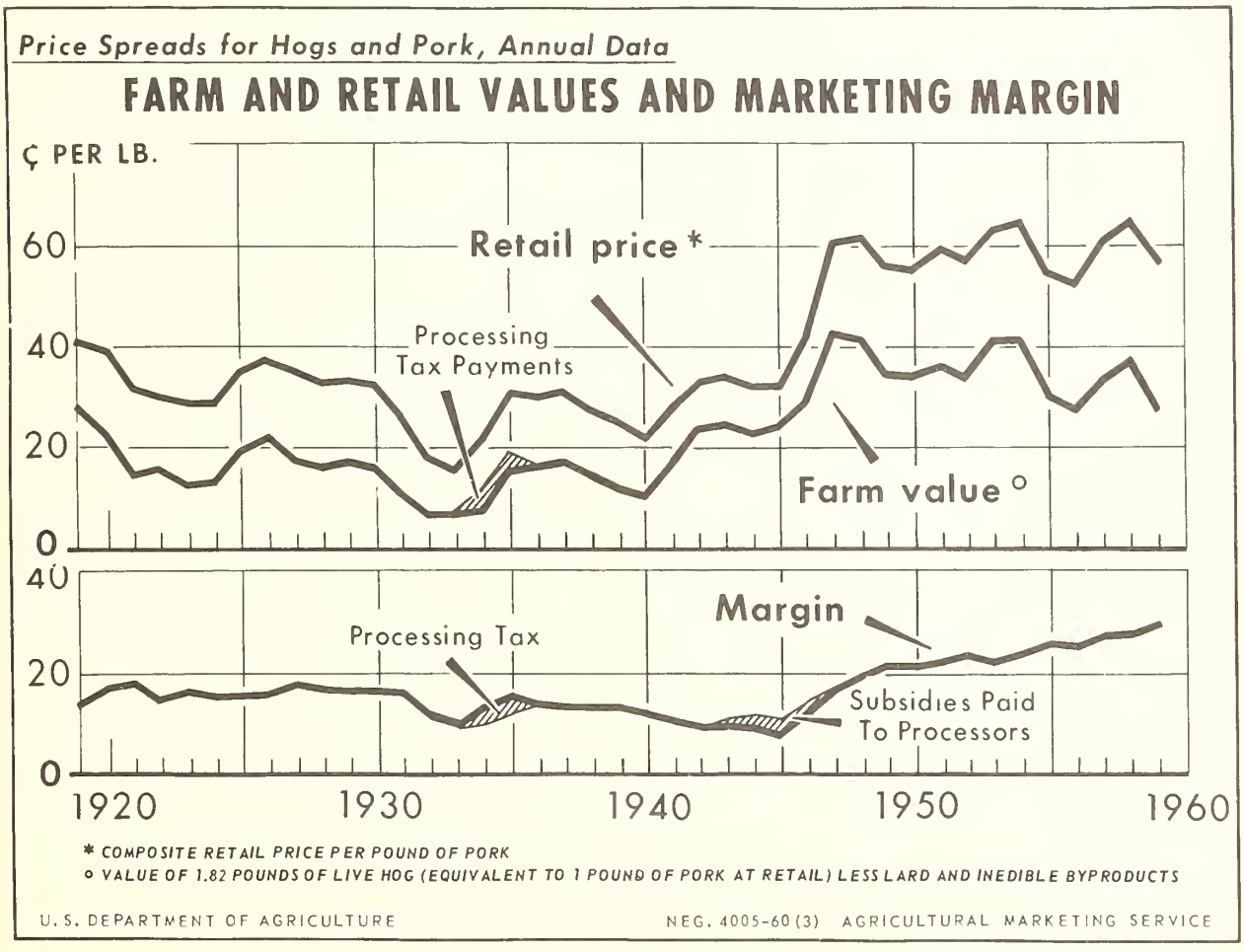


FIGURE 4.

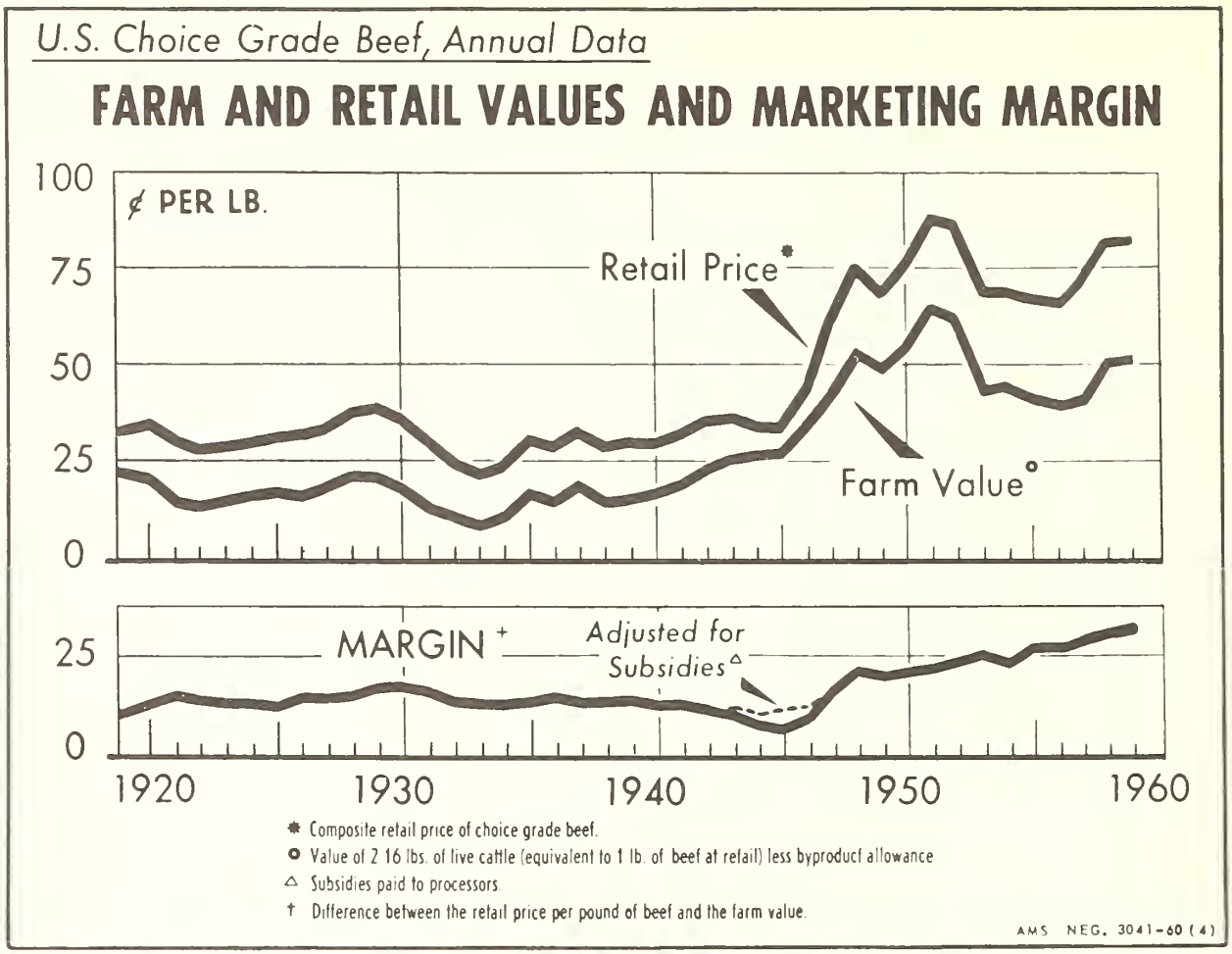


FIGURE 5.

cents to an alltime low of 7.1 cents. The margins were low even considering the addition of the 4.8-cent subsidy (retail pound basis) paid to processors in 1945. After removal of price controls in 1946, margins increased at an unprecedented rate for the next 2 years. Since 1949, marketing margins for beef have continued their trend upward, reaching a record high of 31.8 cents in 1959.

Farm-to-Retail Marketing Margins for U.S. Choice Grade Lamb

The path followed by the overall marketing margins for U.S. Choice grade lambs since 1919 was similar to that for beef and pork until about 1941 (fig. 6).[8] The primary difference was that the low point in the spread for lambs took place in 1941, while the alltime low in the margins for beef and pork occurred in 1945. Since 1941, the margin for lambs has trended upward, reaching a record high of 33 cents per retail pound in 1959.

[8] See appendix, table 24, p. 56, for yearly data, 1919–1959.

The foregoing charts showing the longtime trends in livestock prices, meat prices, and marketing margins demonstrate a point which is frequently the source of much confusion regarding marketing margins. These charts indicate that livestock and meat prices generally follow similar trends, while marketing margins may move independently. Short-term fluctuations in livestock and meat prices result primarily from changing conditions in the supply of and demand for livestock and meat. On the other hand, year-to-year and longer term changes in the farm-to-retail spread are generally independent of these supply and demand factors. Marketing margins over relatively long periods of time are, to a large extent, determined by changes in the cost of input factors (that is, labor, rent, supplies, transportation, and taxes) utilized by marketing agencies in providing their services. A widening or narrowing trend in margins over long periods is indicative of changes in the cost of providing the marketing services or an increase or decrease in profits. These margins also reflect changes in the amount and kind of services rendered by the marketing agencies.

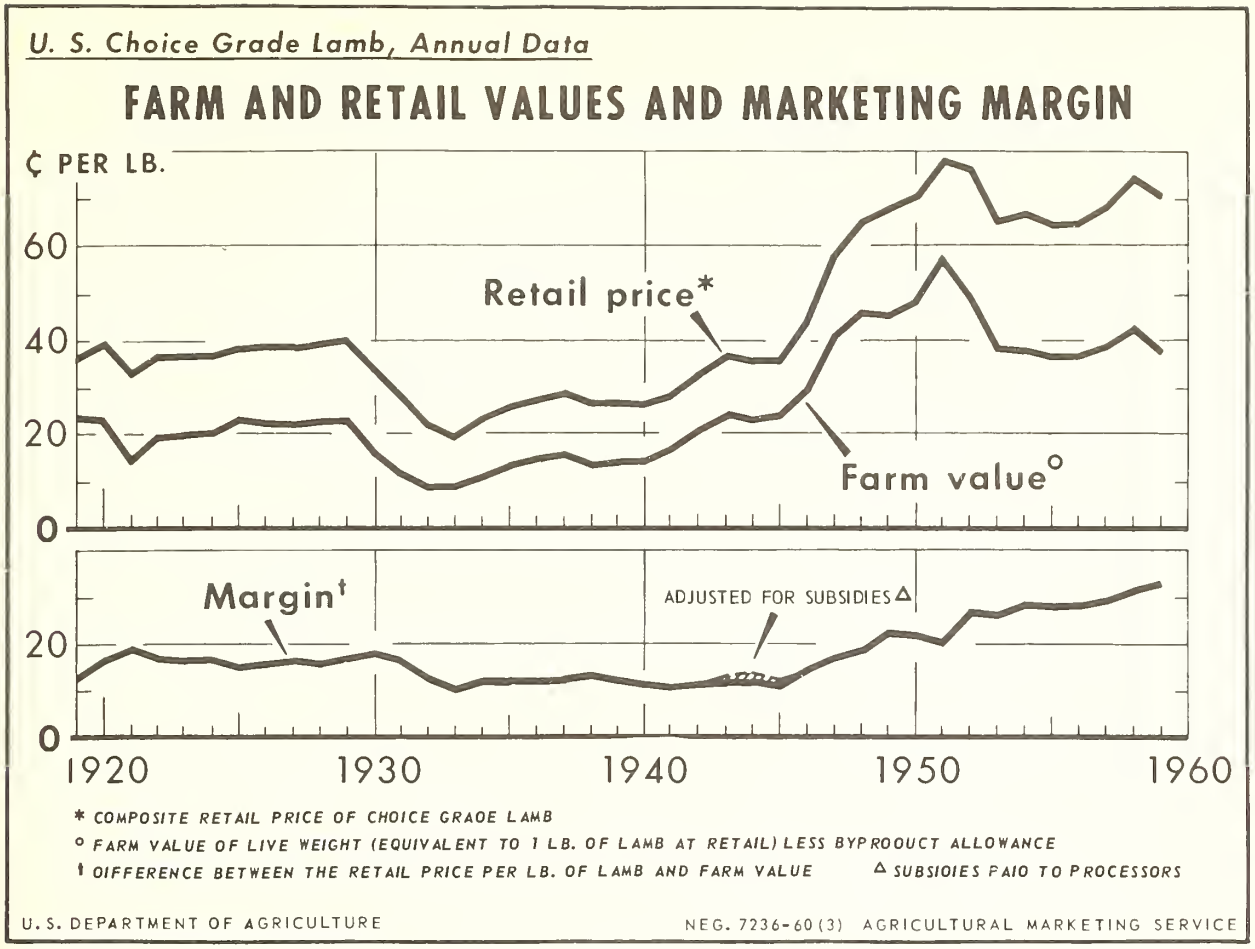


FIGURE 6.

Short-Term Changes in Farm-to-Retail Marketing Margins

Retail prices, farm values, and overall farm-to-retail margins for livestock and meat tend to fluctuate to a much greater extent on a monthly basis than they do from year to year.

Hogs and Pork

Monthly retail prices per pound of pork fluctuated substantially during the 1949–59 period, varying from a low of 46.7 cents to a high of 69.7 cents, a range of 23.0 cents (fig. 7).[9] Changes in the farm value tended to parallel roughly the movements of retail pork prices, and varied from 19.9 cents to 48.6 cents, a range of 28.7 cents. Farm-to-retail marketing margins over this period varied from 17.0 cents to 31.3 cents, a range of 14.3 cents per pound. In dollars and cents, the range in variations was largest for farm values and least for the marketing margins. The range in variation of farm values was two times that for the margin, while the range for retail prices was not quite double that for the margin.

Three other important characteristics of the prices and margins for hogs and pork are indicated by these short-term comparisons of farm and retail prices. These are (1) a gradual widening of the farm-to-retail margin, (2) a seasonal tendency for narrower margins in the first half of the year and wider margins in the latter half, and (3) a tendency for changes in retail prices to lag behind changes in farm prices.

Choice Grade Beef

Retail prices of U.S. Choice grade beef during the 1949–59 period moved up and down substantially (fig. 8).[10] Retail prices were at a relatively high level in 1951 and 1952. Under the pressure of greatly expanded supply, retail prices dropped sharply in the first part of 1953 and then recovered somewhat during the late summer. Retail prices remained relatively stable during most of 1954 and then trended downward until the early part of

[9] See appendix, table 24, p. 57, for quarterly data, 1949–1959.

[10] See appendix, table 23, p. 55, for quarterly data, 1949–1959.

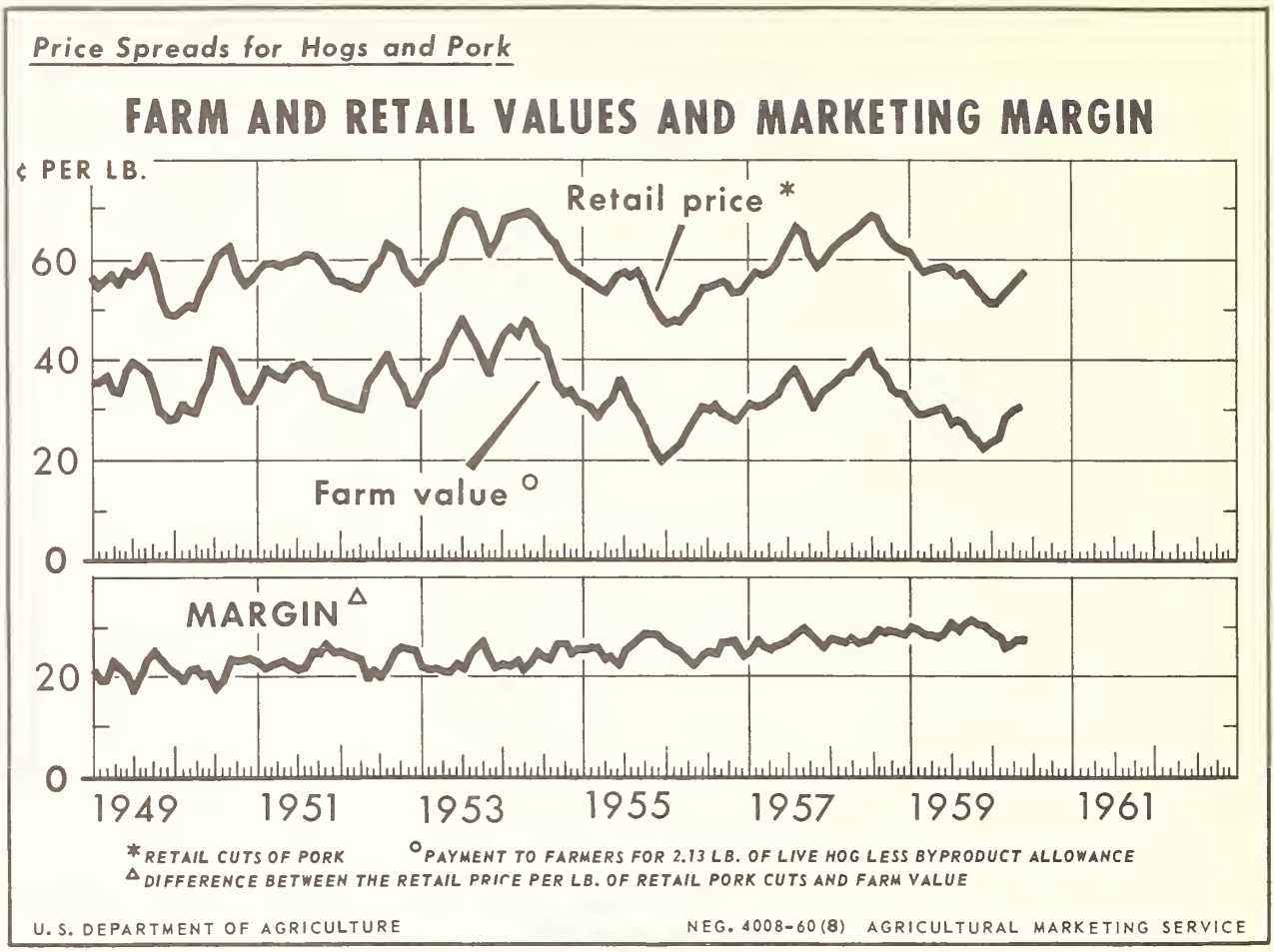


FIGURE 7.

1956. Prices advanced from a level of 61 cents per pound in March of 1956 to 82 cents per pound in December of 1959. Trends in the farm value of an equivalent quantity of U.S. Choice grade beef generally paralleled the trend in prices at retail.

Beef margins fluctuated widely between 1949 and 1959, varying from a low of 16.7 cents to a high of 34.7, a range of 18.0 cents. During this period, there was a trend toward a gradual widening in the margin. There were also some erratic month-to-month fluctuations in the overall farm-to-retail margin when retail prices failed to adjust quickly to changes in prices at the farm level. Failure of retail prices to follow farm values more closely resulted in a narrowing of the margin during periods of rising cattle prices and a widening of the margin during periods of falling prices.

Choice Grade Lamb

Retail prices per pound of lamb and farm values for an equivalent quantity of live lamb both trended upward from their low levels of 1949 to a high level in 1951 and 1952. Then they trended downward until the late winter of 1955 (fig. 9).[11] The trend in both series was upward after 1955. Throughout this period, the movements of retail lamb prices and farm values generally paralleled each other. Overall farm-to-retail margins widened during most of this period.

As was the case for the other species, the range in dollars-and-cents variations was greater for farm values and retail prices than for the margins. The month-to-month changes in retail prices, farm values, and margins for lambs also indicate a rather consistent seasonal pattern.

The foregoing discussion and charts demonstrate that erratic month-to-month variations in overall farm-to-retail margins take place for each of the species. These short-term fluctuations are more closely related to changes in the supply of and demand for livestock and meats than to changes in the cost of providing marketing services. Prices of livestock and meat change substantially in short periods, and there is a tendency for changes in retail prices to lag behind changes

[11] See appendix, table 25, p. 59, for quarterly data, 1949–1959.

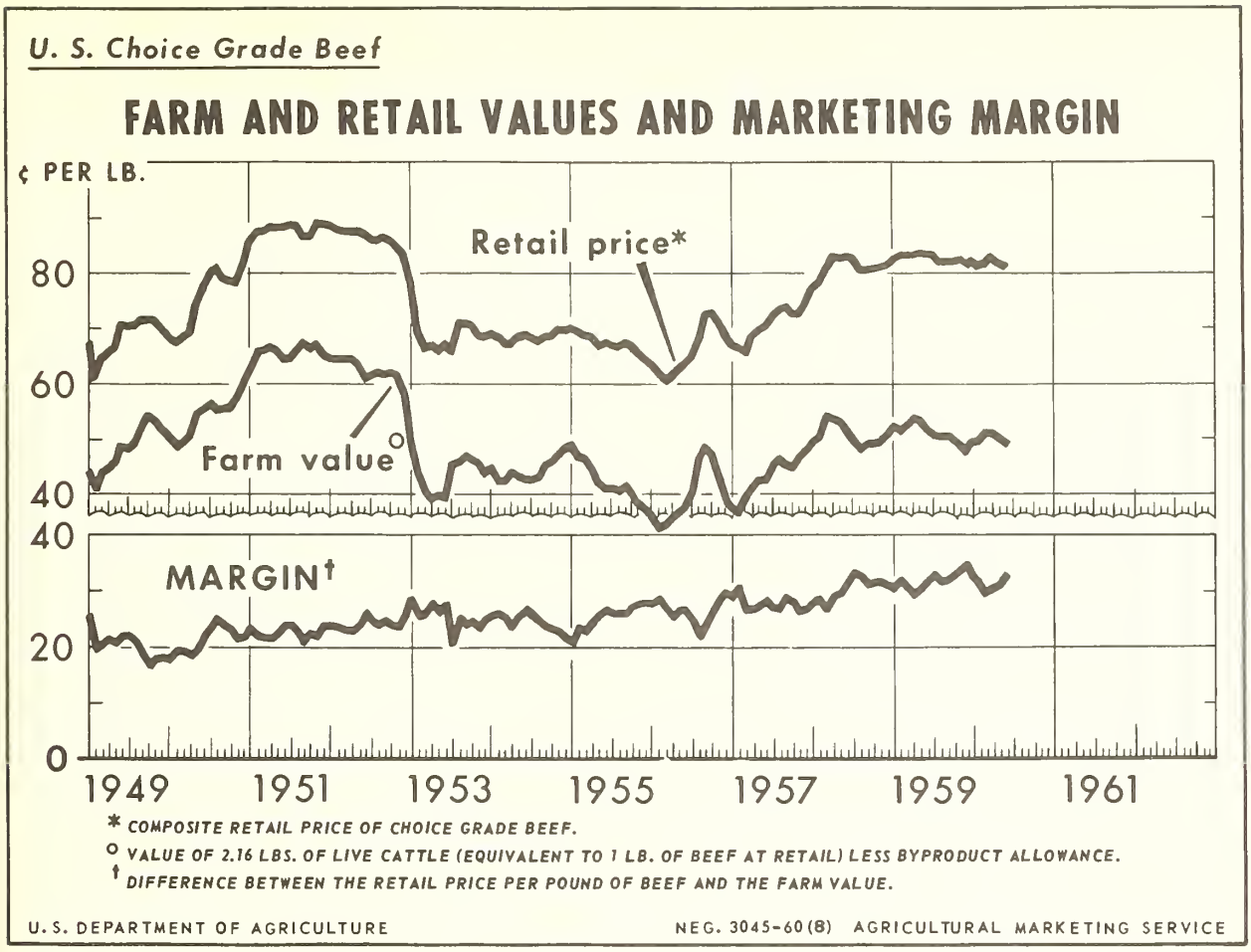


FIGURE 8.

in farm prices. Sharp seasonalities in livestock marketings and the failure of retail prices to adjust quickly to changes in livestock prices at the farm level bring about these erratic short-term changes in the margins.

The per-unit costs to the various marketing agencies in providing services for livestock and meat in the marketing process would not be expected to change as much as the spreads during these short-run situations. In cases where increased volume results in a more efficient utilization of existing facilities (by permitting firms to operate at a point nearer capacity), the cost per unit for providing these services can be expected to decrease rather than to increase. Of course, in other instances, where the increased volume of livestock could not be handled with existing facilities and labor supplies operating at full capacity during the normal workweek, the cost per unit would be expected to increase. For example, premium wages for night shift workers and overtime payments might more than offset the economies gained by operating the plants nearer capacity. On the other hand, if the existing marketing agencies are capable of handling the volumes of livestock marketed during the seasonal peaks in the fall and winter, these firms probably operate at levels well below capacity during periods when marketings are seasonally low. During these periods, overall margins absorbed by the marketing agencies are probably less than the actual cost of providing these services. Marketing agencies in these instances are operating at a loss in an effort to maintain an array of facilities, services, or supplies for their clientele. Successful marketing firms manage their operations in such a way that losses incurred during these low-volume, narrow-margin periods are offset during the high-volume, wide-margin periods.

Seasonalities in Prices and Margins for Livestock and Meat

Seasonal changes in meat prices at the farm and retail level and in the farm-retail spread have lessened over the 1947–58 period (fig. 10). Although meat prices usually are relatively low in the winter and relatively high in late summer, this pattern has become less distinct than it was formerly.

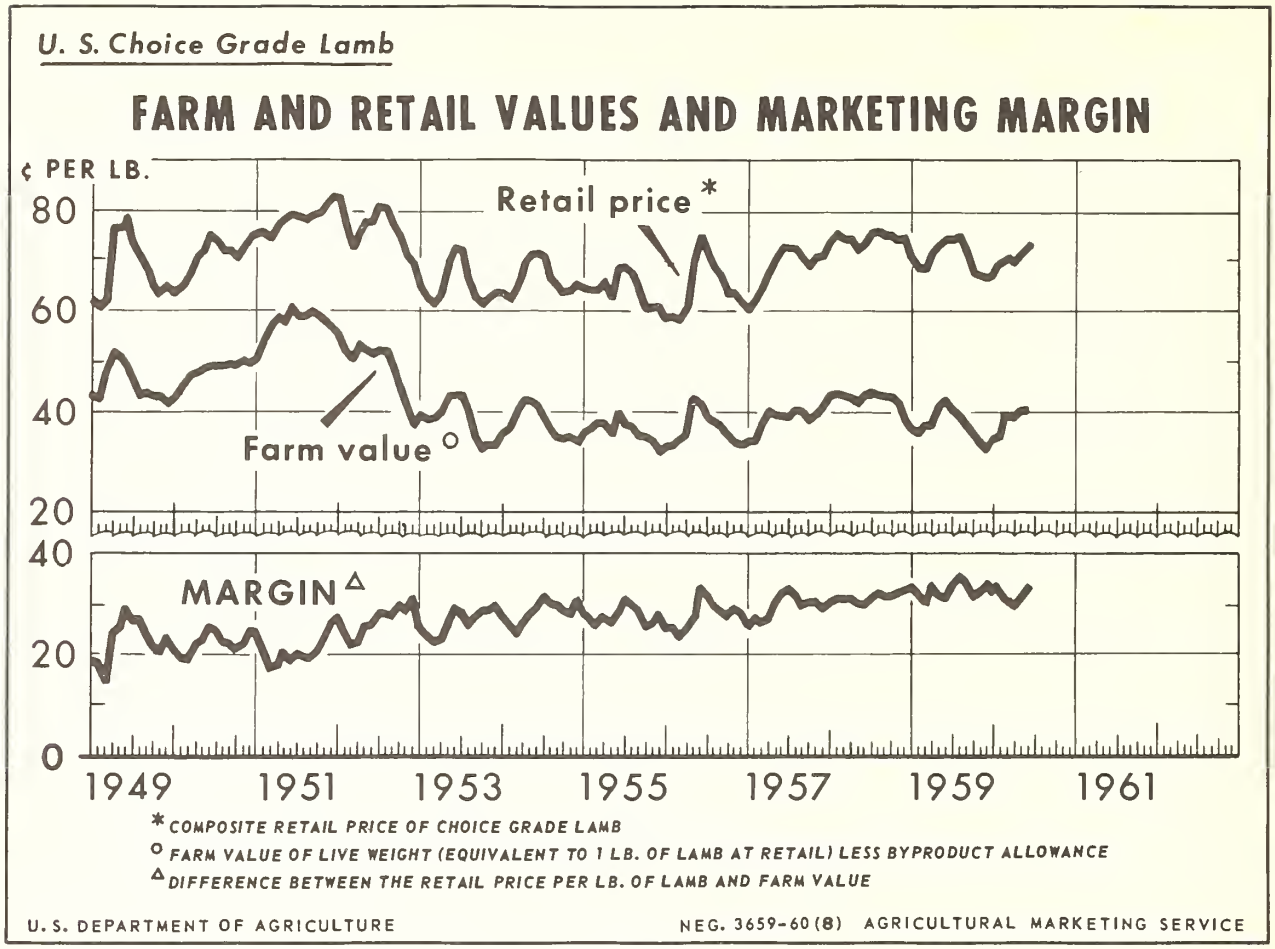


FIGURE 9.

Seasonality changes in retail prices of all meats as a group, used in this study, appear to be gradually diminishing. Retail prices of each of the individual species change little from one season to another. All of the reasons for this are not definitely known. One possibility might be the practice of processing large quantities of meat into less perishable form during seasons of peak volumes of production. This may tend to stabilize supplies of meats marketed throughout the year and to stabilize retail prices. Another possibility stems from limitations in available retail price data. For example, these data do not include price specials or weekend prices. A tendency to substitute seasonally bunched price specials or lower weekend prices for seasonally lower weekday prices may have developed. Stability of nonsale prices could serve the interest of retailers, because this would increase the effectiveness of sales and specials.

Another partial explanation for the apparent decline in seasonality of retail meat prices may be an increase in the volume of frozen and other types of processed meat appearing on the market during periods of light supply. The retail price data used in this study do not include prices for frozen and processed meats.

The moderation in seasonal swings of the farm value and farm-retail spread for meats during the last 10 years is explained by shifts in the seasonal patterns for both beef and pork. These shifts have tended to offset each other when the farm values and margins of the various species were combined into seasonal patterns for all meat. Seasonally high farm values for pork now appear earlier in the year, while farm values for U.S. Choice beef remain relatively stable throughout the spring and summer.

Pork

Farm values for hogs change much more seasonally than farm values for other meat animals. Retail prices of pork also vary seasonally, but to a lesser extent than do farm values of hogs. Usually, both farm prices of hogs and retail prices of pork are inversely related to seasonal variations in pork production. Hog prices typically advance during periods when hog marketings are approaching seasonal lows and decline in response to sharp increases in marketings (fig. 11).

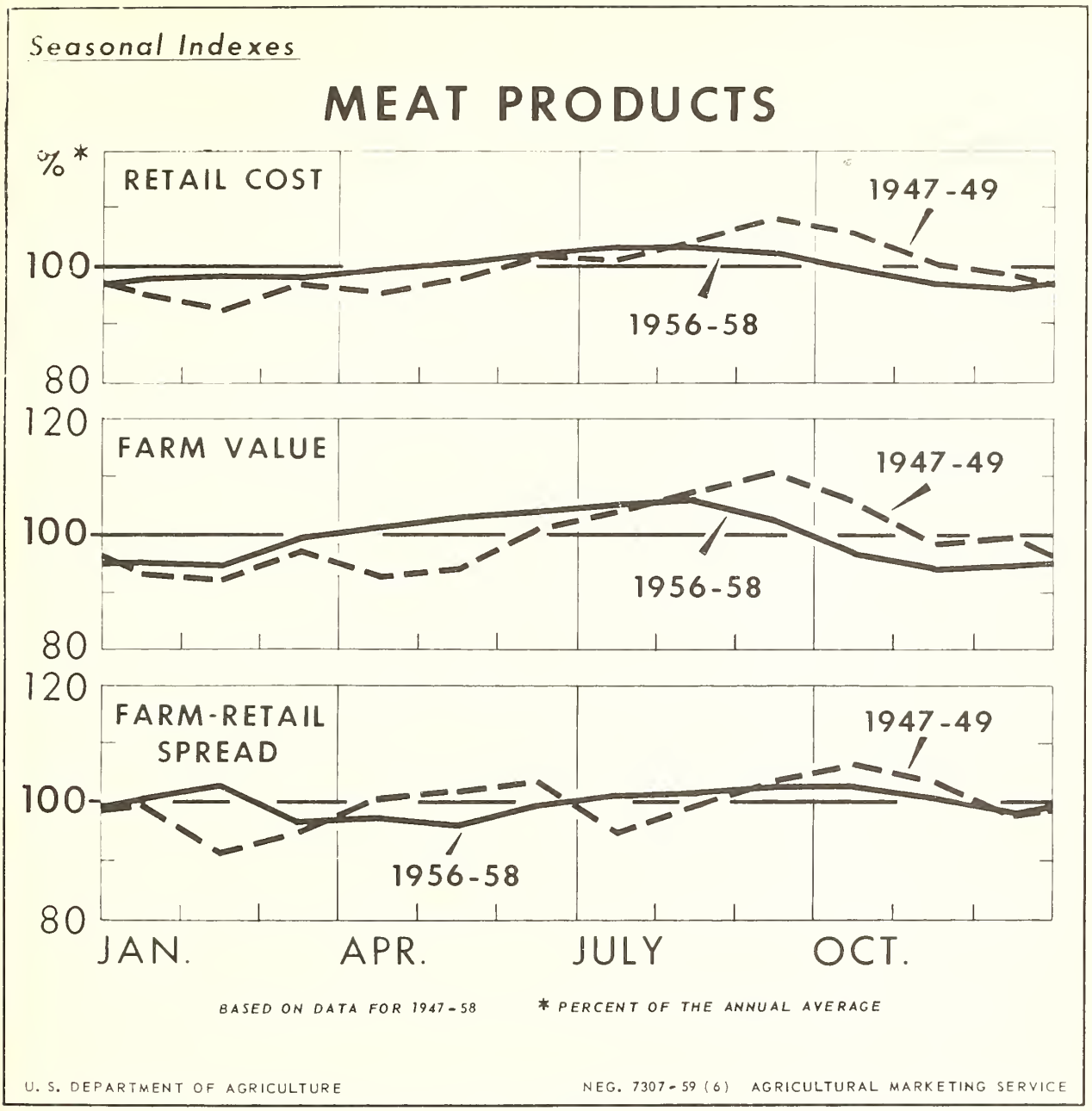


FIGURE 10.

Seasonal changes in the farm-retail spread tend to be inversely related to seasonal changes in farm and retail pork prices. As hog marketings drop seasonally, farm prices increase faster than retail prices and the farm-retail spread narrows. Conversely, when hog marketings are increasing seasonally, hog prices drop and the spread widens.

A part of these seasonal changes in the spread are due to factors affecting the packer-wholesaler margin. Changing numbers of hogs marketed represent changing demands for marketing services. As marketings increase, the demand for hog marketing services increases and packers have to expand their hog kill. However, the supply of marketing services, in terms of plant facilities and labor supply, is rather fixed and inflexible during the short run. In order to handle the additional deliveries of hogs, packers must increase the hours of work, which, in most cases, results in overtime pay. Thus the packer-wholesaler margin usually widens during the fall when farmers begin to market their hogs in sizable numbers. When hog marketings are light, the opposite situation occurs; a diminishing demand for hog marketing services forces packers to take a lower

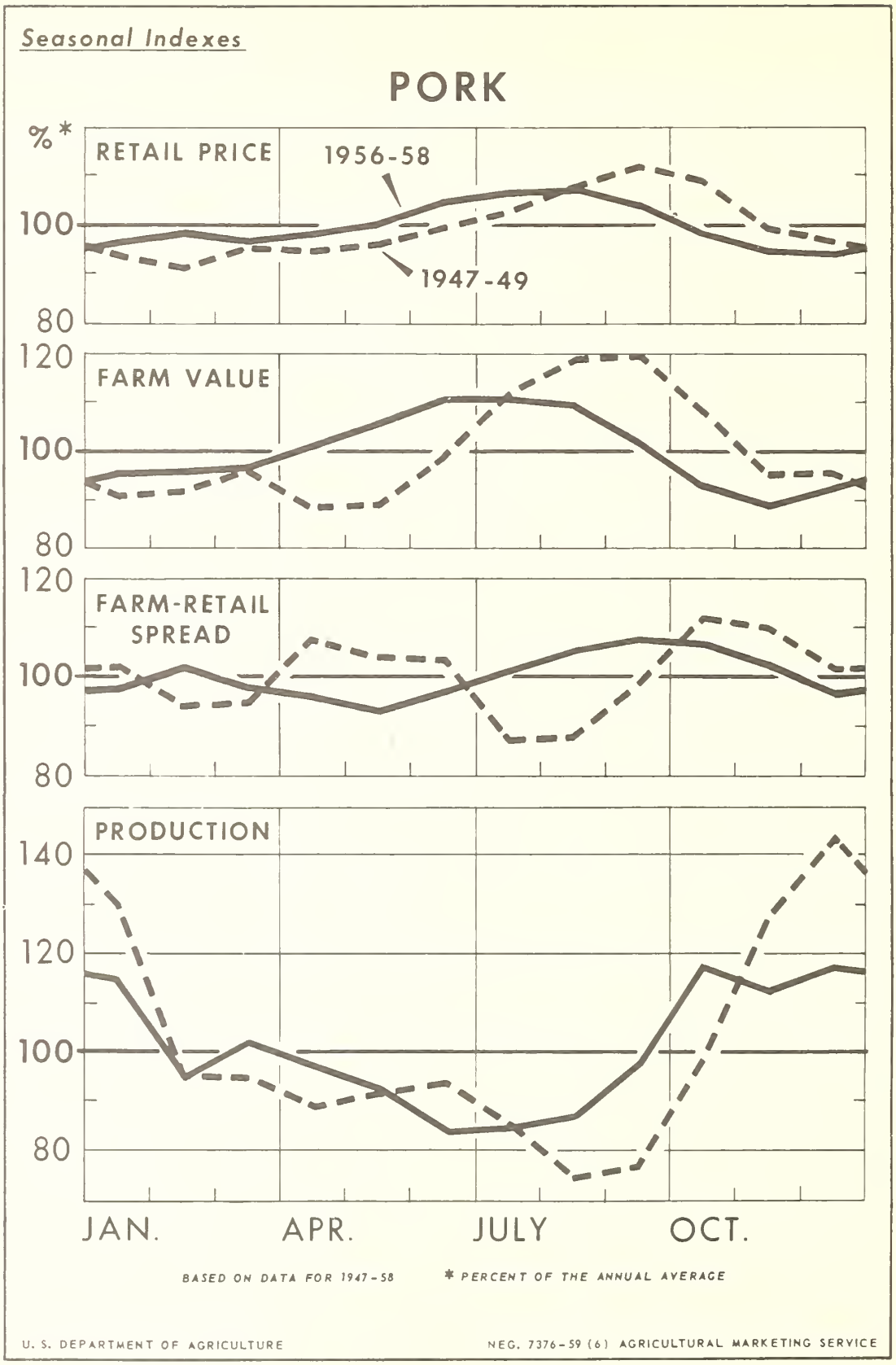

Seasonal Indexes
PORK
%*
RETAIL PRICE
1956-58
1947-49
100
80
120
FARM VALUE
100
80
120
FARM-RETAIL SPREAD
100
80
PRODUCTION
140
120
100
80
JAN.
APR.
JULY
OCT.
BASED ON DATA FOR 1947-58
* PERCENT OF THE ANNUAL AVERAGE
U. S. DEPARTMENT OF AGRICULTURE
NEG. 7376-59 (6) AGRICULTURAL MARKETING SERVICE

FIGURE 11.

margin—or price—for their processing and wholesaling services.

Lags in adjustments between farm and wholesale prices and between wholesale and retail prices also contribute to the expansion of the farm-retail spread when prices fall and to the contraction when prices rise.

The two important changes which have taken place in the last decade in the seasonal pattern of pork prices and of the farm-retail spread are the reduction in price variations and a shift in the seasonal price paths reflecting earlier seasonal highs and lows in 1956–58 than in 1947–49. Both of these changes have been due largely to corresponding changes in the seasonal pattern of hog marketings. Earlier farrowings and feeding for faster gain have shifted the marketing pattern. A more nearly equal balance between fall and spring pig crops, and some tendency toward more year-round farrowings have smoothed seasonal variations in marketings.

U.S. Choice Grade Beef

Seasonal production and price patterns differ considerably among the different grades of cattle; however, the following discussion will be confined to the production and prices of U.S. Choice grade cattle. The farm and retail price of Choice grade slaughter cattle are used in calculating the farm-to-retail margins for beef. It is the only grade of beef for which adequate price data are available for computing this margin on a continuing basis. Since U.S. Choice beef accounts for about 50 percent of the total supply of "block beef," this margin presents a fairly representative picture of margins and costs of marketing that portion of beef sold in fresh form.[12]

Monthly average retail prices and farm values for U.S. Choice grade beef have similar seasonal patterns (fig. 12). In recent years, however, seasonalities in the retail price have become considerably more stable than have seasonalities in the farm prices. In the 1947–49 period, retail prices varied from 8 percent below average in February to 7 percent above average in August and September. During the 1956–58 period, maximum differences in retail prices were only 2 percent below and above the yearly average.

Farm values for U.S. Choice grade beef respond rapidly to changes in supplies of Choice grade slaughter cattle, and, consequently, changes in the seasonality of Choice grade marketings during 1947–58 altered the seasonality of farm values for the Choice grade. Prior to the western commercial feedlot development, seasonally bunched calf births resulted in seasonally bunched cattle marketings of the different grades. Expanded feeding operations by farmers and commercial feedlots have tended to transform seasonally concentrated grass cattle marketings into a more evenly distributed supply of higher grade and heavier weight cattle. With more orderly marketings of Choice grade slaughter cattle throughout the year, fluctuations in the seasonal pattern of farm values have been reduced. As a result of less seasonal variation in farm value, retail price seasonality also is less.

The seasonal path of farm-retail spreads for U.S. Choice grade beef in 1947 was similar to the seasonal paths followed by prices at both the farm and retail levels. Since that time, however, the seasonal pattern of the spread has changed substantially. Reduction in the seasonal variations of both retail prices and farm values of Choice beef has resulted in a relatively stable seasonal farm-retail spread.

U.S. Choice Grade Lamb

Retail prices, farm values, and the farm-retail spread for U.S. Choice grade lamb all follow a similar seasonal course (fig. 13). Each of the series is seasonally high during the spring and summer, and then declines into the early winter. While these prices have held the same general pattern over the last decade, seasonal price changes in each of the series have become smaller. This tendency toward greater stability in prices is similar to that observed for the other species.

Feeding of lambs by farmers and commercial feedlots, like that of cattle, tends to smooth out the supply of lamb marketing throughout the year. As a result, reductions in the seasonal variations in supplies have, to some extent, exerted a stabilizing influence on retail prices and farm values. This, in turn, has reduced the seasonal fluctuation in the farm-retail spreads.

The direct relationship between the seasonal patterns of farm and retail prices and the spread for U.S. Choice grade lamb contrasts with that observed for pork.

For lambs, the retail prices (expressed in absolute terms) rise and fall faster than do farm values. Consequently the spread tends to widen seasonally during periods of rising farm and retail prices and to narrow when prices are falling. For pork, farm prices tend to rise and fall faster than do retail prices, resulting in narrowing margins when farm and retail prices are rising and widening margins when prices are falling.

Both prices and the spread for lambs are generally inversely related to the seasonal pattern of marketings. These relationships show that seasonality in the farm-retail spread is not necessarily indicative of supply conditions, since packers do not always realize a profit from month to month on lamb slaughter operations. Many packers slaughter lambs in order to supply their customers with a complete line of meats. Frequently, lamb is a specialty item, a sideline enterprise to their more important beef and pork operations. These packers, nevertheless, attempt to keep their

[12] See p. 3, footnote 4, for definition of "block beef."

clientele supplied throughout the year even though the supply of lambs may be scarce. For such specialty items, comprising a small percentage of the total operations, packers may even forego their usual margins for short periods of time in order to maintain a supply for their lamb purchasing clientele when lamb supplies are short. When lamb supplies are more adequate, these same packers may find opportunities to recoup their earlier losses.

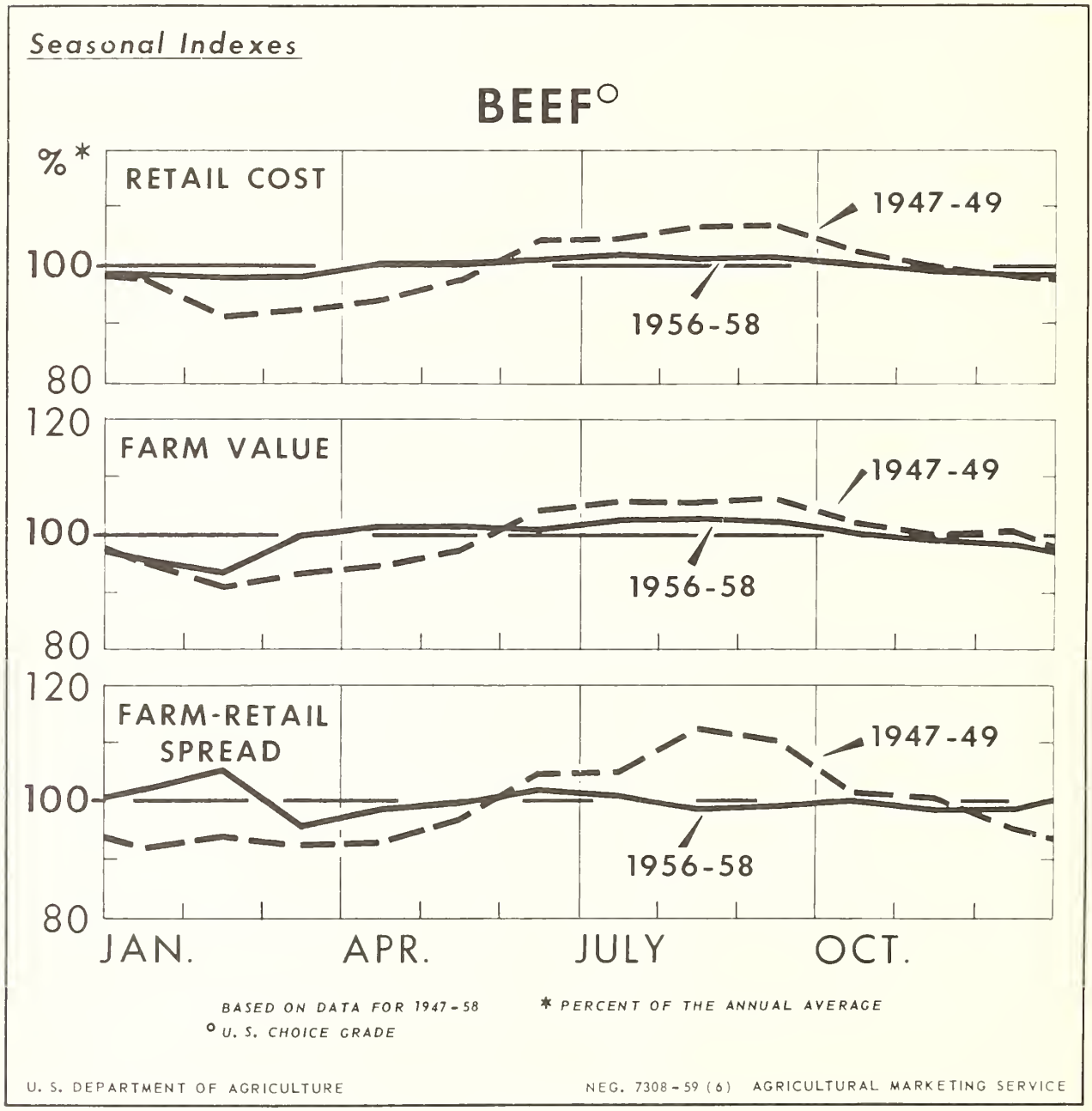


FIGURE 12.

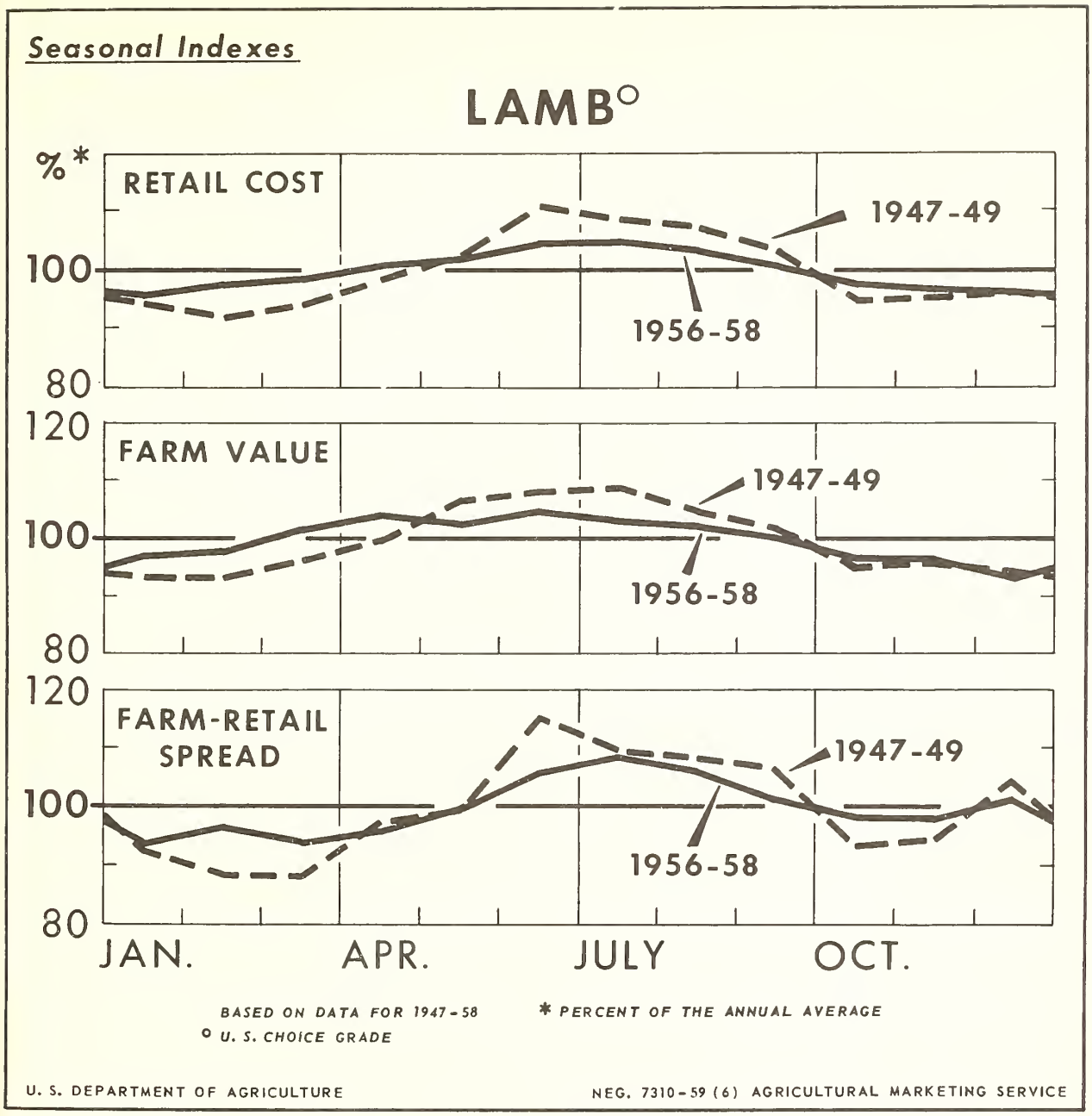


FIGURE 13.

Marketing Channels

The marketing system for livestock and meat comprises an important and complex segment of the economy. Prerequisites to an economic evaluation of the system include an understanding of the characteristics of the types of markets used, services provided by the various agencies operating at these markets, and costs associated with the services rendered. To facilitate the discussion on marketing structure, channel diagrams were developed for livestock and meat. Since the agencies used and the services required in the marketing of livestock differ considerably from those utilized in the processing and distribution of meat, separate diagrams are shown for livestock and meat.

Marketing Channels for Livestock

In most areas, livestock producers usually have several alternative market outlets available for use

in marketing their animals. These outlets include terminal public markets, auction markets, and various forms of "country selling." Country selling includes sales by farmers direct to packers, to livestock dealers, and to other farmers (*9*).

During the last 30 years, significant changes have taken place in the number and location of the various types of market outlets, as well as in the volume of livestock handled by them. These changes have altered the pattern of livestock marketing and have been characterized by a trend toward a more decentralized marketing structure. Important structural changes in the marketing of livestock began in the 1920's with the decline in the relative importance of terminals as a market outlet.

This decline is illustrated in figure 14, which shows the proportion of animals slaughtered under Federal inspection that were purchased at terminal markets from 1923 to 1956. During this period, central markets continually lost relative importance as a market outlet for all species. The decline varied among species, and was largest for calves and smallest for cattle. Until the mid-thirties, most of the decline in the proportion of livestock moving through terminal markets was accounted for by an expansion in country selling. After 1935, the decline was largely attributable to increased volume of livestock moving through auctions.

The most dramatic change in the livestock marketing system during the last three decades was the rapid growth in the number of livestock auction markets. The most phenomenal growth in numbers took place during the thirties (fig. 15). Only about 200 auctions were in operation in 1930. By 1937, the number of auctions had increased to 1,345. Rapid expansion in auction facilities continued until a peak of about 2,500 was reached in 1952. By 1955, the number had declined to 2,322(*4*), and by 1959 it had risen slightly to 2,374.

The early growth in the number of auction markets was concentrated in the North Central region. Development in the South, Northeast, and West came somewhat later. By 1955 there were livestock auction markets throughout the United States. The terminals, particularly the larger ones, are concentrated primarily in the Corn Belt (fig. 16).

Several factors provided stimulus for the de-

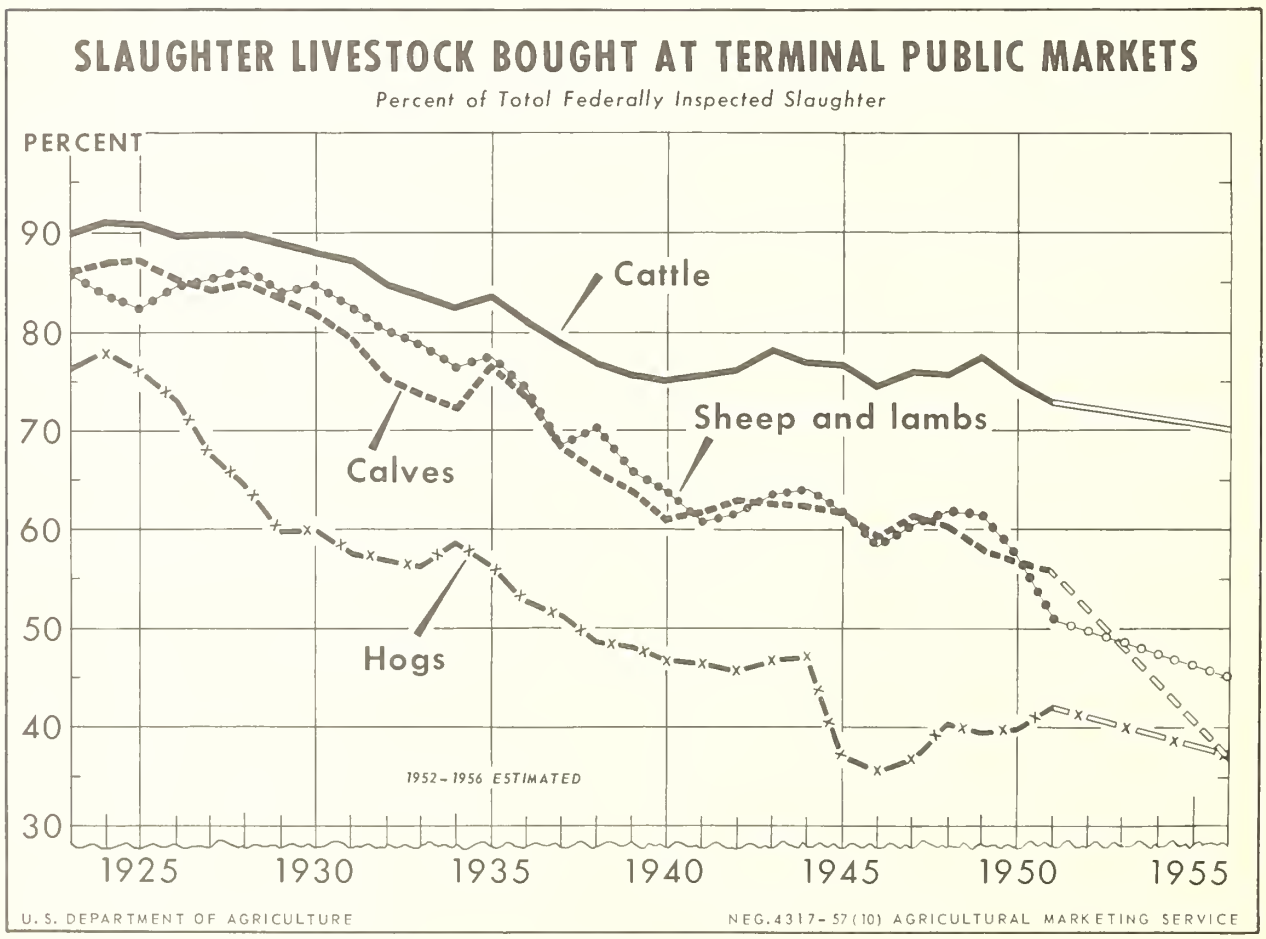


FIGURE 14.

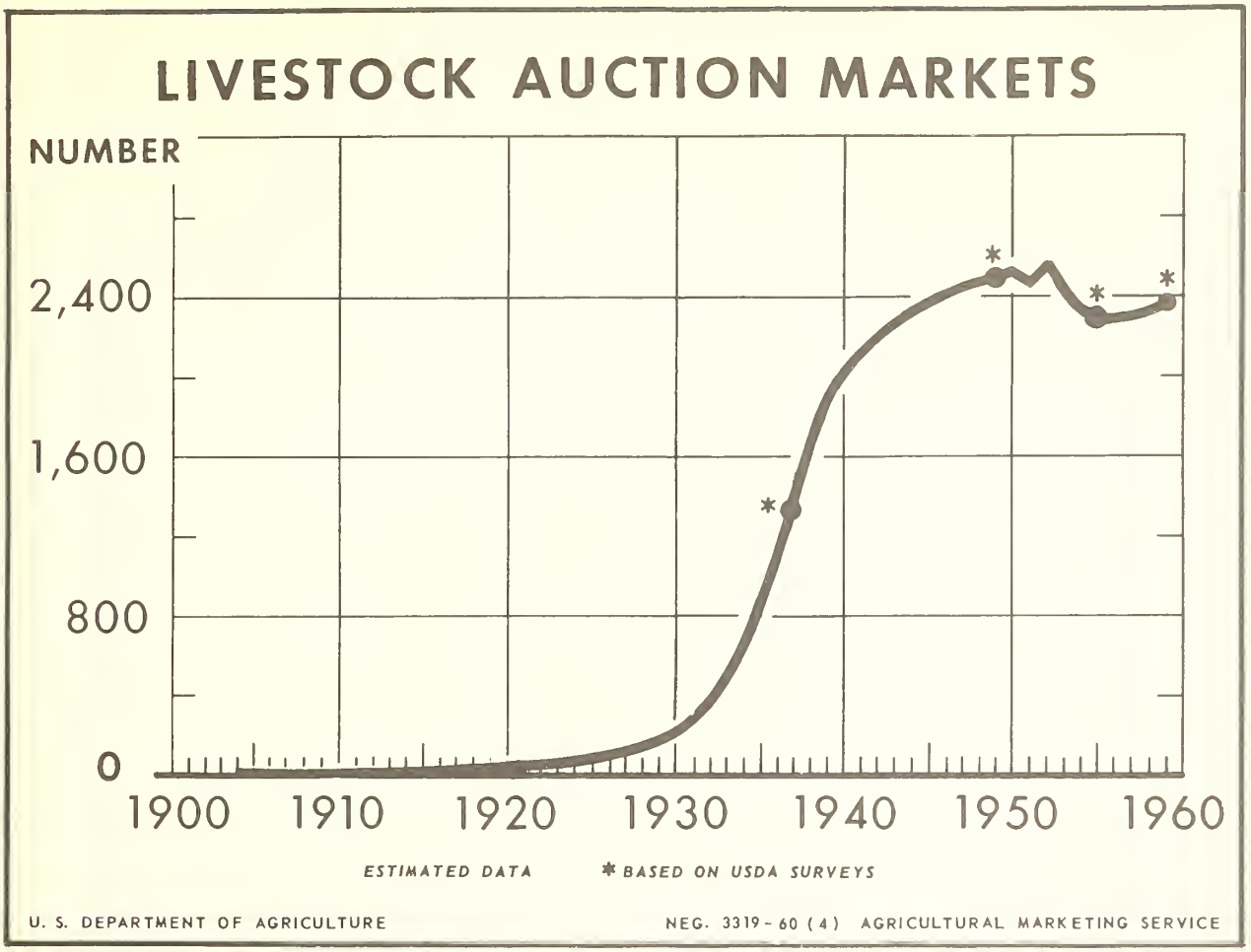


FIGURE 15.

velopment and growth of a more decentralized livestock marketing system and contributed to the relative decline of the central markets as an outlet for livestock. Of primary importance were improvement and extension of hard-surfaced roads, accompanied by increased reliance on trucks for transporting livestock. These changes gave the livestock producer greater flexibility in the choice of market outlets.

Another important factor was the development and expansion of the Federal Livestock Market News Service. The objective of this service agency, which originated in 1918 and expanded rapidly during the 1920's, was to provide more extensive collection and dissemination of unbiased market information. This agency developed and adopted a standard terminology for use in reporting market information throughout the country. The standard terminology enabled both buyers and sellers to make intermarket comparisons of prices at the different stages in the marketing process. Today, all major terminal markets are reported by the Federal Market News Service, as are many important auctions and country selling points. Much of the reporting on the smaller markets is carried out through Federal-State cooperative agreements. Also many State departments of agriculture have developed their own market news reporting services.

Still another factor which exerted a decentralizing influence on livestock marketing was the trend toward decentralization of the meatpacking industry. The increased congestion in most large cities has led many packers to relocate their plants. These new locations have generally been in areas near major sources of slaughter animals, and can be reached easily by both truck and rail transportation.

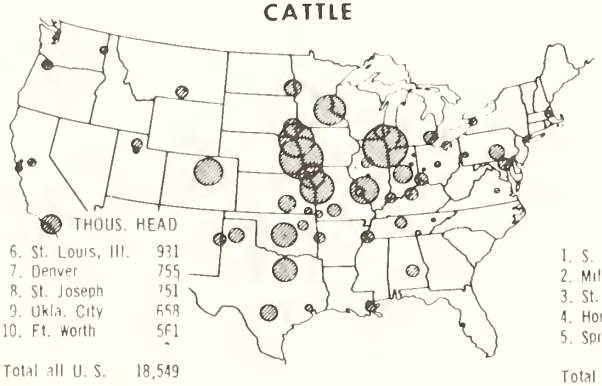
The relative importance of the various market outlets used by producers in selling their livestock differs among regions (fig. 17). In 1955, terminal markets were the dominant outlet in the North Central States, while in the South more livestock were sold at auctions than through any other type of outlet. In the Northeast and in the West, country selling accounted for the largest proportion of livestock marketings.

Although precise data on volume of marketings going to auctions, dealers, and direct to packers since 1955 are not available, there has been a

SALABLE RECEIPTS OF LIVESTOCK AT U. S. TERMINAL MARKETS

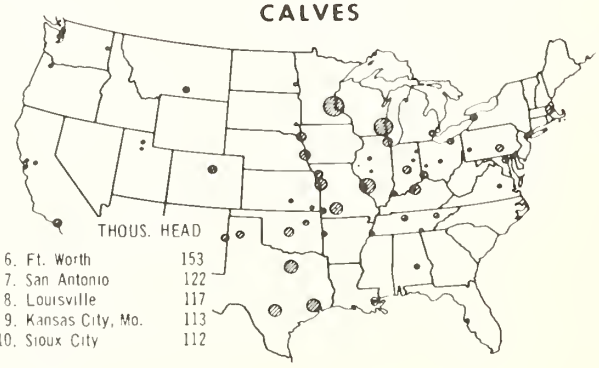
1954-58 Averages, by Type

CATTLE



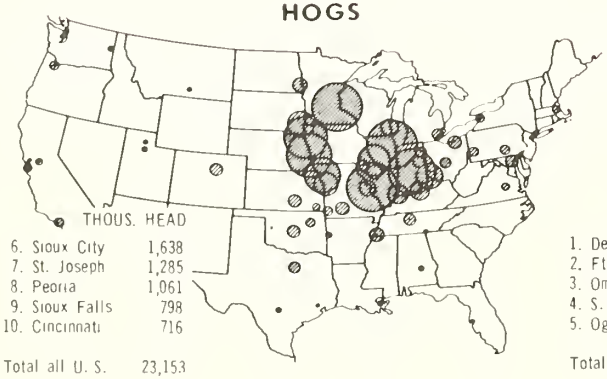
	THOUS. HEAD		THOUS. HEAD
1. Chicago	2,296	6. St. Louis, Ill.	931
2. Omaha	2,081	7. Denver	755
3. Sioux City	1,358	8. St. Joseph	751
4. S. St. Paul	1,155	9. Okla. City	658
5. Kansas City Mo.	1,130	10. Ft. Worth	561
Total 10 Markets	11,576	Total all U. S.	18,549

CALVES



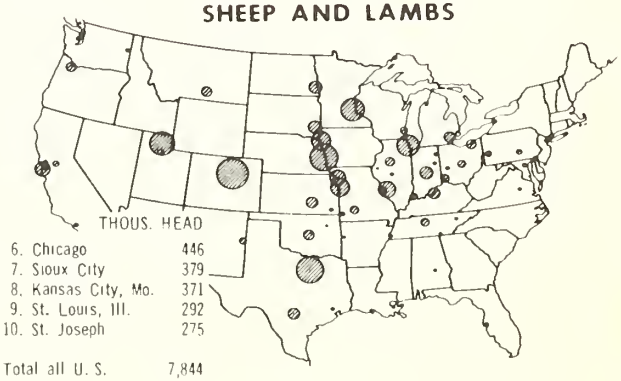
	THOUS. HEAD		THOUS. HEAD
1. S. St. Paul	482	6. Ft. Worth	153
2. Milwaukee	364	7. San Antonio	122
3. St. Louis, Ill.	215	8. Louisville	117
4. Houston	209	9. Kansas City, Mo.	113
5. Springfield, Mo.	167	10. Sioux City	112
Total 10 Markets	2,054	Total all U. S.	3,677

HOGS



	THOUS. HEAD		THOUS. HEAD
1. St. Louis, Ill.	2,770	6. Sioux City	1,638
2. S. St. Paul	2,673	7. St. Joseph	1,285
3. Chicago	2,291	8. Peoria	1,061
4. Indianapolis	2,278	9. Sioux Falls	798
5. Omaha	1,963	10. Cincinnati	716
Total 10 Markets	17,474	Total all U. S.	23,153

SHEEP AND LAMBS



	THOUS. HEAD		THOUS. HEAD
1. Denver	927	6. Chicago	446
2. Ft. Worth	779	7. Sioux City	379
3. Omaha	674	8. Kansas City, Mo.	371
4. S. St. Paul	549	9. St. Louis, Ill.	292
5. Ogden	482	10. St. Joseph	275
Total 10 Markets	5,174	Total all U. S.	7,844

U. S. DEPARTMENT OF AGRICULTURE

NEG. 4269-60(3) AGRICULTURAL MARKETING SERVICE

FIGURE 16.

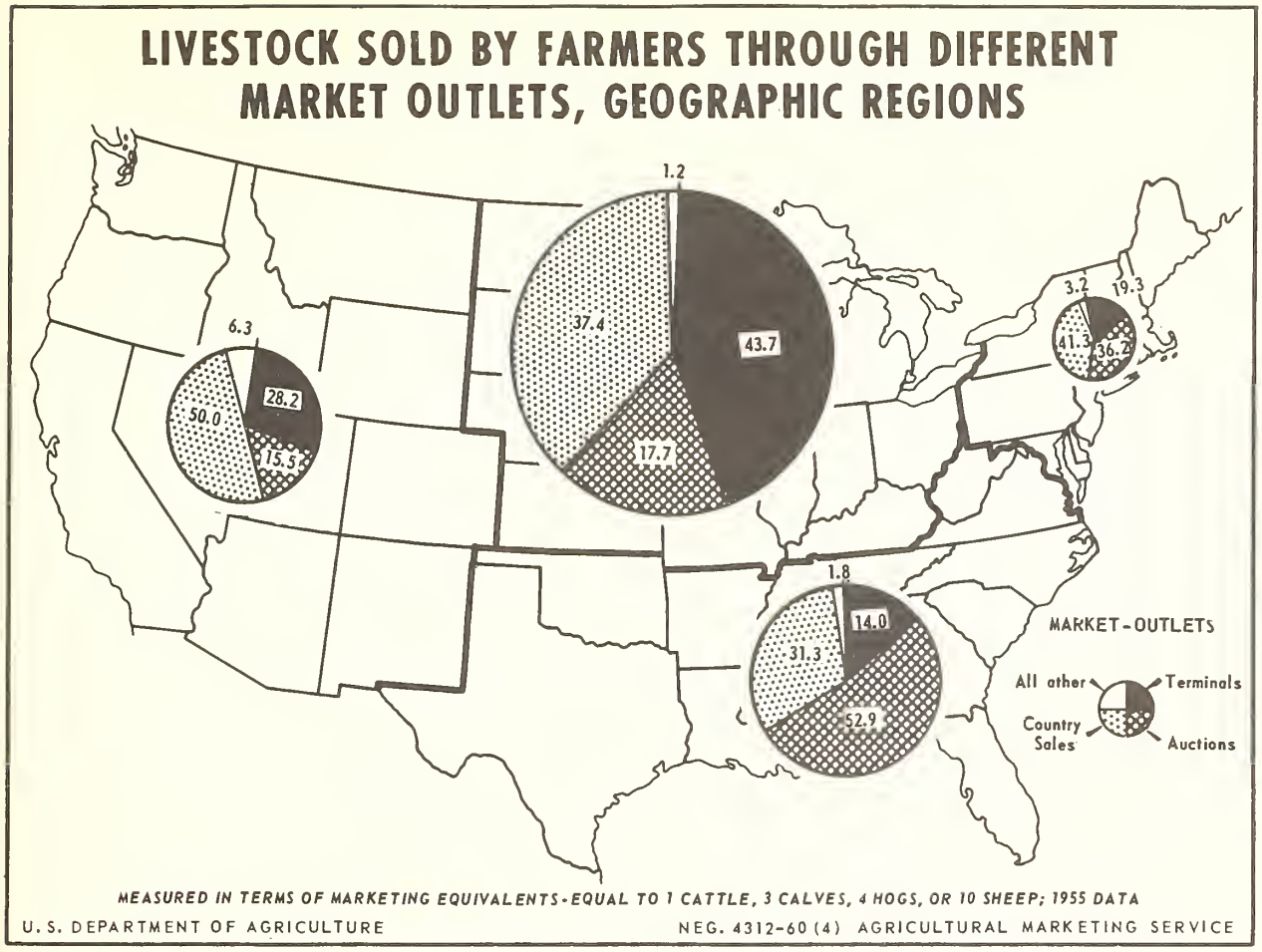


FIGURE 17.

small increase in the number of auction markets to 2,374 in 1959, and a small decline in the number of terminal markets to 56. Doubtless volumes of business have changed somewhat also, but not drastically.

The channels through which livestock were marketed in 1955 and the relative importance of the different types of markets utilized are shown in figure 18. In terms of marketing equivalents, cattle comprised 54 percent, calves 9 percent, hogs 33 percent, and sheep and lambs 4 percent of the livestock marketed by producers in that year.[13] About 75 percent of the animals sold by producers moved through at least one intermediate handler before reaching their destination at farm, feedlot, or slaughter house. Some of the animals were handled by several different agencies in the marketing process. The remaining 25 percent bypassed all intermediate agencies and moved directly from the producer to packers or other farmers as their final purchasers. About two-thirds of all animals sold went to packing plants for slaughter. The other one-third, consisting of stockers, feeders, and breeding stock, moved into feedlots or to farms and ranches for feeding or herd replacements.

Although the relative position of terminals as a market outlet for livestock has changed rather sharply during the last four decades, terminals still comprise an important and integral part of the livestock marketing system. In 1955, more livestock were sold through terminal markets than through any other single type of outlet. Auctions have emerged as a major outlet for marketing livestock, and they handled 26 percent of producers' sales in 1955. The volume handled by the various types of dealers, exclusive of their transactions at terminals, accounted for nearly one-fifth of all livestock sold by farmers.

While the sources from which the various types of markets obtained their livestock differed, the primary source for each was producers and feeders. Slaughter plants were the most important sales outlet for each type of market. Terminals relied more heavily on producers and feeders as a source of supply for their livestock sales than was the case for either dealers or auctions. In 1955, 94

[13] One marketing equivalent equals 1 head of cattle, 3 calves, 4 hogs, or 10 sheep and lambs.

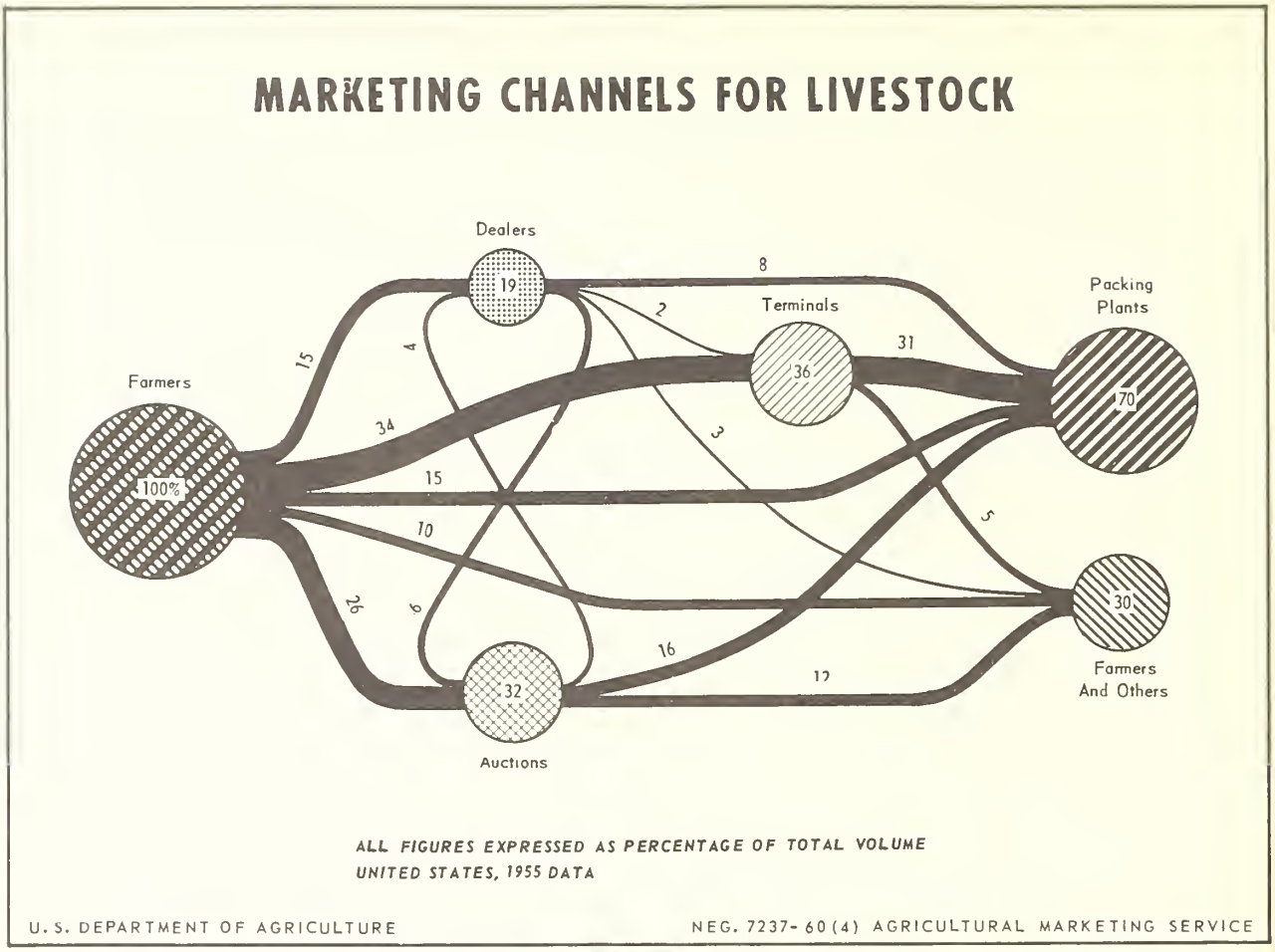


FIGURE 18.

percent of their receipts were obtained from this source; preliminary estimates for 1959 indicate no drastic change in this factor. A relatively small proportion of their volume came from dealers. Most of the animals sold at terminals went to slaughter plants and the remainder went to farmers, ranchers, and others. Major consignors of livestock at auction markets were producers and dealers, but the bulk was consigned by producers. Livestock purchases at auctions were made primarily by packers, producers, and feeders. A somewhat larger proportion of the sales were designated for packer accounts than for farmers and others. While dealers purchased the larger share of their livestock from producers, they also obtained some from auctions.[14] Although dealers utilized all the various market outlets when selling their animals, the greater part of their sales were to slaughter plants and to auctions. The combined sales through these two outlets accounted for nearly 75 percent of dealers' total volume.

[14] The operation of dealers at terminal markets is dealt with in detail later in this report.

The relative importance of public terminal markets, auctions, and dealers as market outlets for livestock varies considerably among species (figs. 19 and 20).

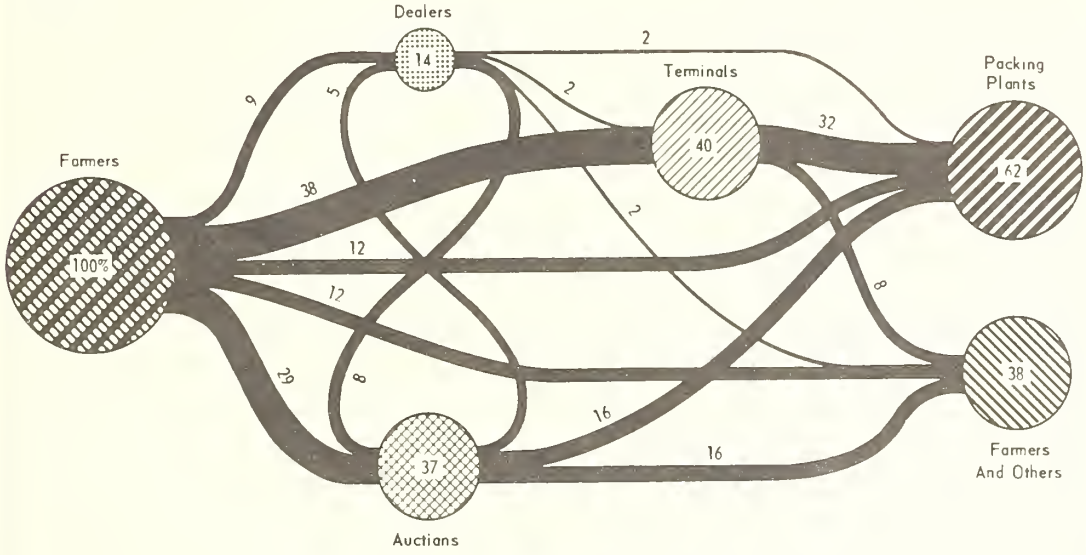
Terminal and auction markets were the primary market outlets for cattle in 1955; their combined volume accounted for over three-fourths of total cattle marketings. Nearly one-fourth of the cattle bypassed all marketing agencies and moved direct from producers to their final purchasers. Equal proportions of these direct cattle shipments went to packing plants and to farmers and others.

Auctions ranked first as an outlet for calves, more than half of calf marketings moving through this agency. Of the other half of calves marketed, about equal proportions were handled through terminals, dealers, and direct sales. Two-thirds of the direct shipments went to farmers and others, while only a third went to slaughter plants.

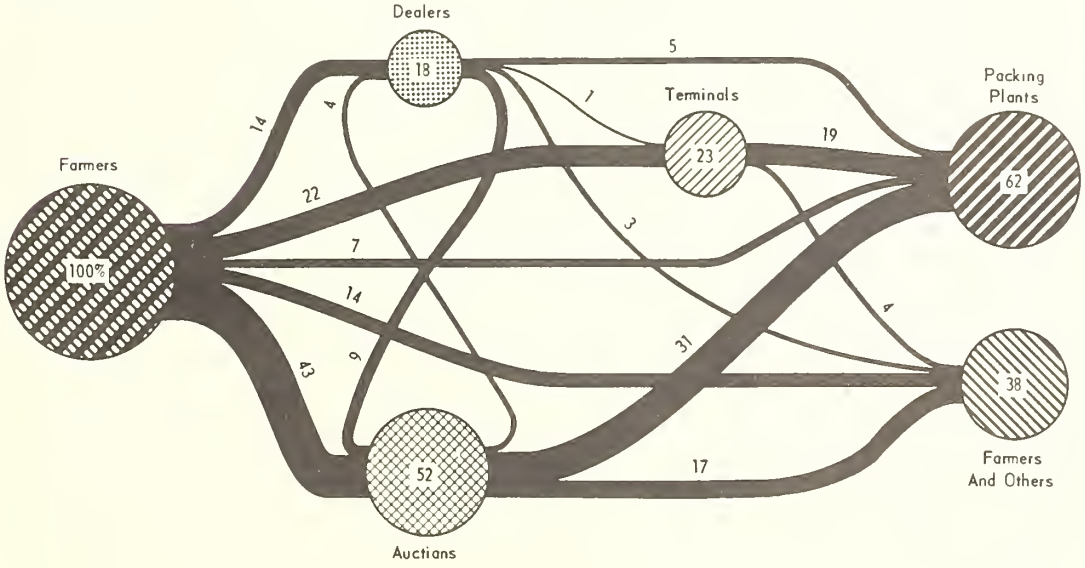
Terminals were the most important single market outlet for hogs, but only by a slight margin. Dealers and direct shipments ranked second and third, accounting for about equal proportions of total marketings. Dealer and direct shipments combined exceeded terminal market sales substan-

MARKETING CHANNELS FOR CATTLE AND CALVES

CATTLE



CALVES



ALL FIGURES EXPRESSED AS PERCENTAGE OF TOTAL VOLUME

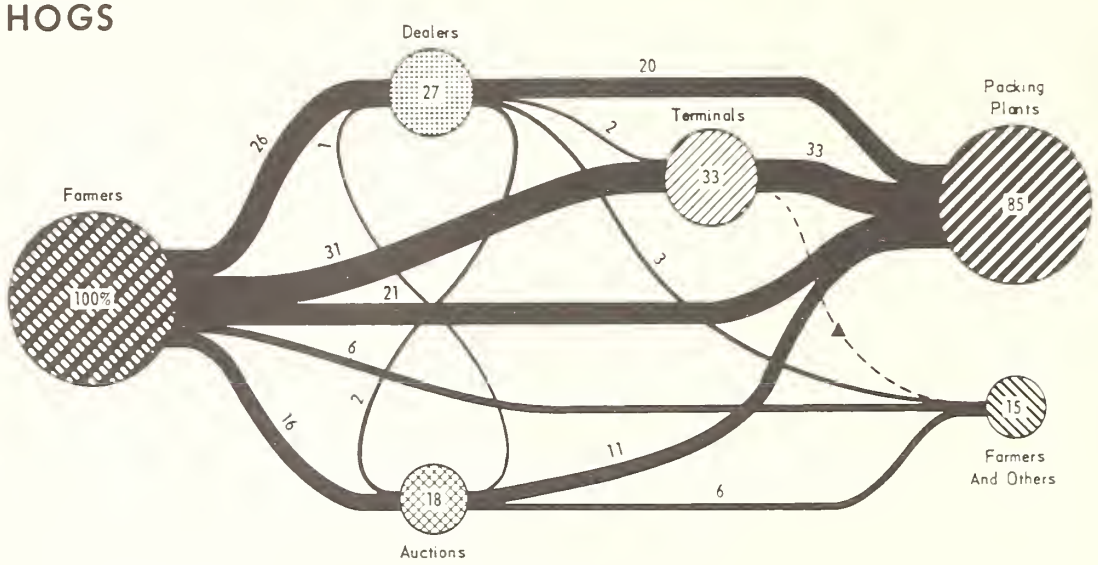
UNITED STATES, 1955 DATA

U. S. DEPARTMENT OF AGRICULTURE NEG. 7239-60 (4) AGRICULTURAL MARKETING SERVICE

FIGURE 19.

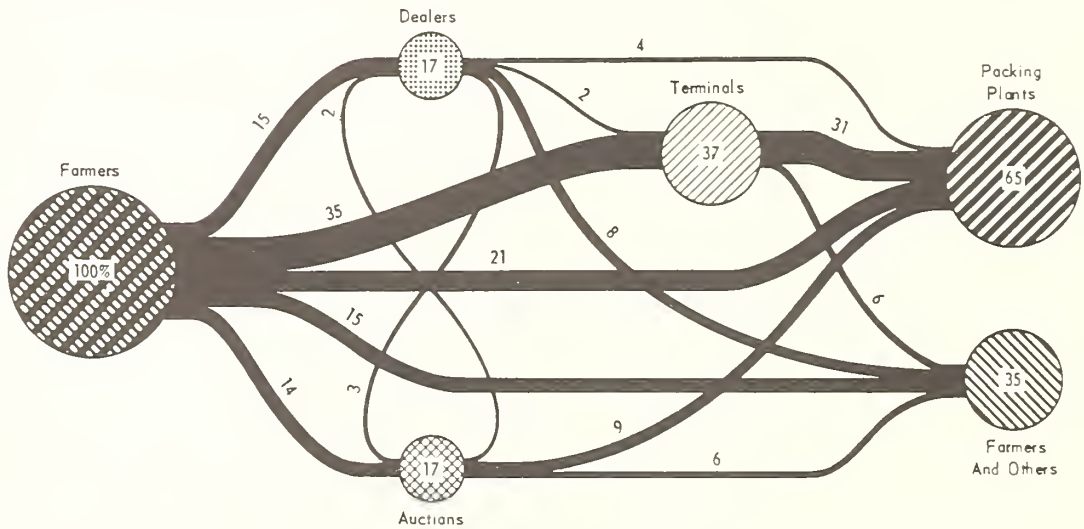
MARKETING CHANNELS FOR HOGS, AND SHEEP AND LAMBS

HOGS



▲LESS THAN 0.5 PERCENT

SHEEP & LAMBS



ALL FIGURES EXPRESSED AS PERCENTAGE OF TOTAL VOLUME

UNITED STATES, 1955 DATA

U.S. DEPARTMENT OF AGRICULTURE NEG. 7238-60(4) AGRICULTURAL MARKETING SERVICE

FIGURE 20.

tially. Many packers have verbal arrangements with dealers and consider them a part of their direct procurement operations. Direct sales of hogs to packers were over three times as large as the volume moving direct to farmers and others. Packing plants accounted for 85 percent of total hog marketings. Of the other species, less than two-thirds of their respective total marketings went to packing plants for slaughter. A much higher proportion of hogs than of the other species are marketed as slaughter animals rather than as feeders.

Terminals and direct shipments were the dominant methods utilized in the marketing of sheep and lambs. These two methods accounted for nearly four-fifths of total lamb marketings in 1955. A higher proportion of lambs were shipped direct than was the case for any of the other species.

Marketing Channels for Meat

Changes in the livestock marketing system during the last 30 years have not been confined to the marketing of live animals. Important structural changes have taken place also in the wholesale distribution system for meat and meat products (table 1). The more significant changes have been related to a decline in the relative importance of packer branch houses as wholesale meat distributors. The proportion of total commercial meat sold direct by packers to retailing outlets and to hotels, restaurants, and institutions (in the following discussions, the outlet will be referred to as H.R.I.) also increased during the 30-year period.

TABLE 1.—*Estimated distribution of sales by meatpackers to different classes of customers, 1929, 1935, 1939, 1948, and 1954*

Year	Packer-owned branch houses	Independent wholesalers and jobbers	Retail stores	Institutions and other large users	Export	Total
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
1929	47	14	32	4	3	100
1935	34	11	46	8	1	100
1939	30	11	49	8	2	100
1948	20	11	59	9	1	100
1954	19	16	55	9	1	100

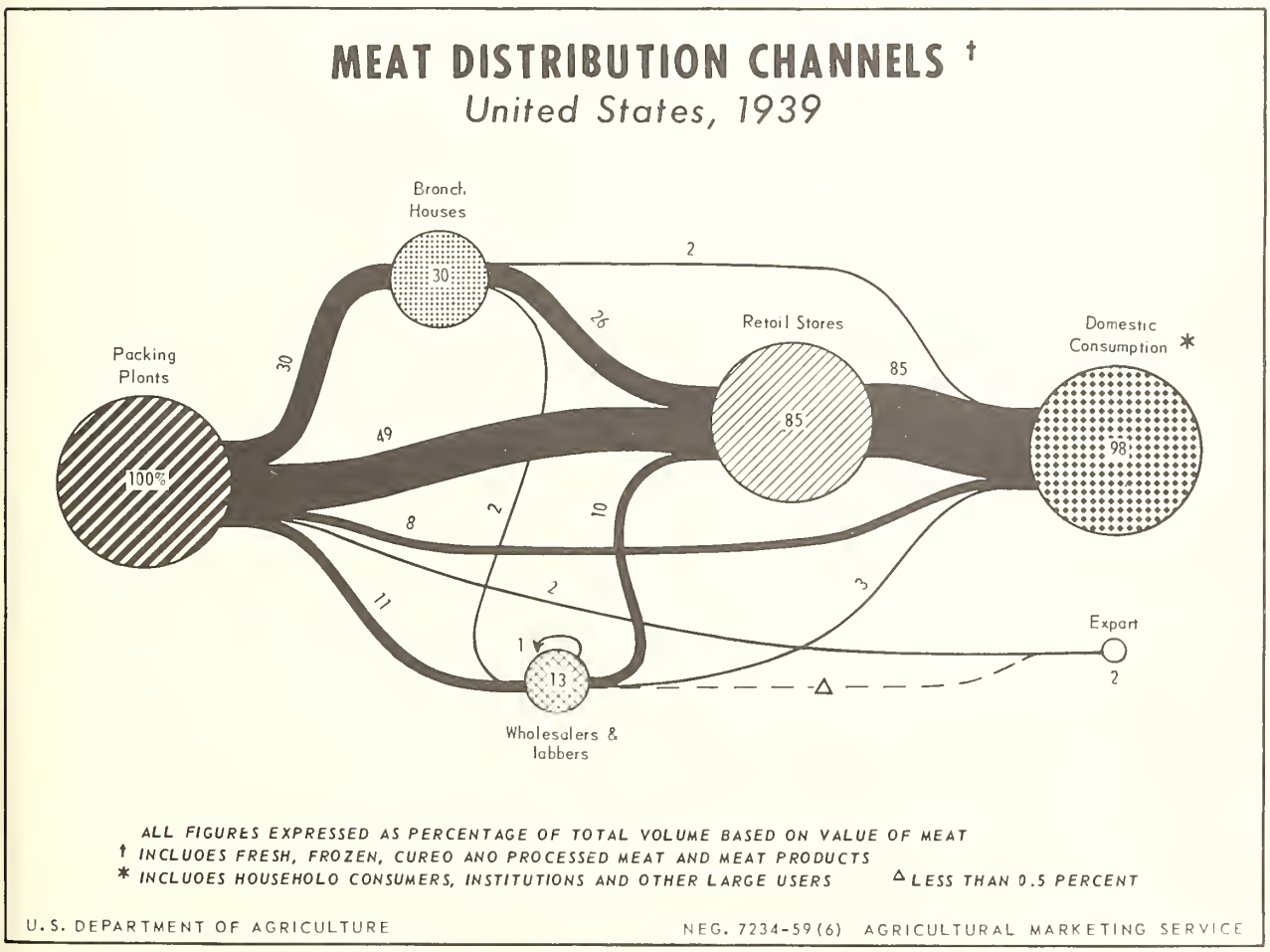


FIGURE 21.

The distribution channels through which meat and meat products moved during 1939 and 1954 are shown in figures 21 and 22.[15] In 1939, direct sale by packers to retailing outlets and to H.R.I. was the dominant method employed. Fifty-seven percent of total commercial meat produced was distributed by this method.[16] About 30 percent of the meat was distributed through packer branch houses, while another 13 percent was handled by independent wholesalers and jobbers. The wholesaling function for 87 percent of the meat produced in 1939 was performed by packing plants and packer-owned branch houses.

[15] Figure 21 is a revision of a chart entitled "Channels of Movement of Meat and Meat Products from Packing Plants to Consumers and Other Users, Based on Value of Products, 1939." See Knute Bjorka, *Marketing Margins and Costs for Livestock and Meat*, Tech. Bul. No. 932. January 1947.

[16] While information is available for 1939 on proportions moving separately to H.R.I. and to household consumers, figure 21 shows the two outlets, combined as "domestic consumption." This was done so that comparisons could be made between meat distribution channels in 1939 and 1954. Data are not available for 1954 for separate movements to these two outlets.

The bulk of branch house sales in 1939 were to retail stores, the remainder being about equally distributed to independent wholesalers and H. R. I. Wholesalers and jobbers relied primarily on packing plants for their supplies. Retail stores were the major sales outlet for independent wholesalers, while sales to H. R. I. or direct to household consumers accounted for about 25 percent of wholesalers' total sales. An insignificant amount of products from wholesalers moved into export trade. There was also some product movement within the wholesaler and jobber group.

In 1939, retail stores purchased almost 60 percent of their meat direct from packing plants and another 30 percent from packer branches. The remainder was bought from independent wholesalers and jobbers. Most of the meat handled by retail stores was sold to household consumers, and only a relatively small amount went to institutions and other large users. Eighty-three percent of production was purchased by household consumers, while 15 percent went to H. R. I. About 2 percent of total meat production was exported in 1939.

Meat distribution channels for 1954 are shown

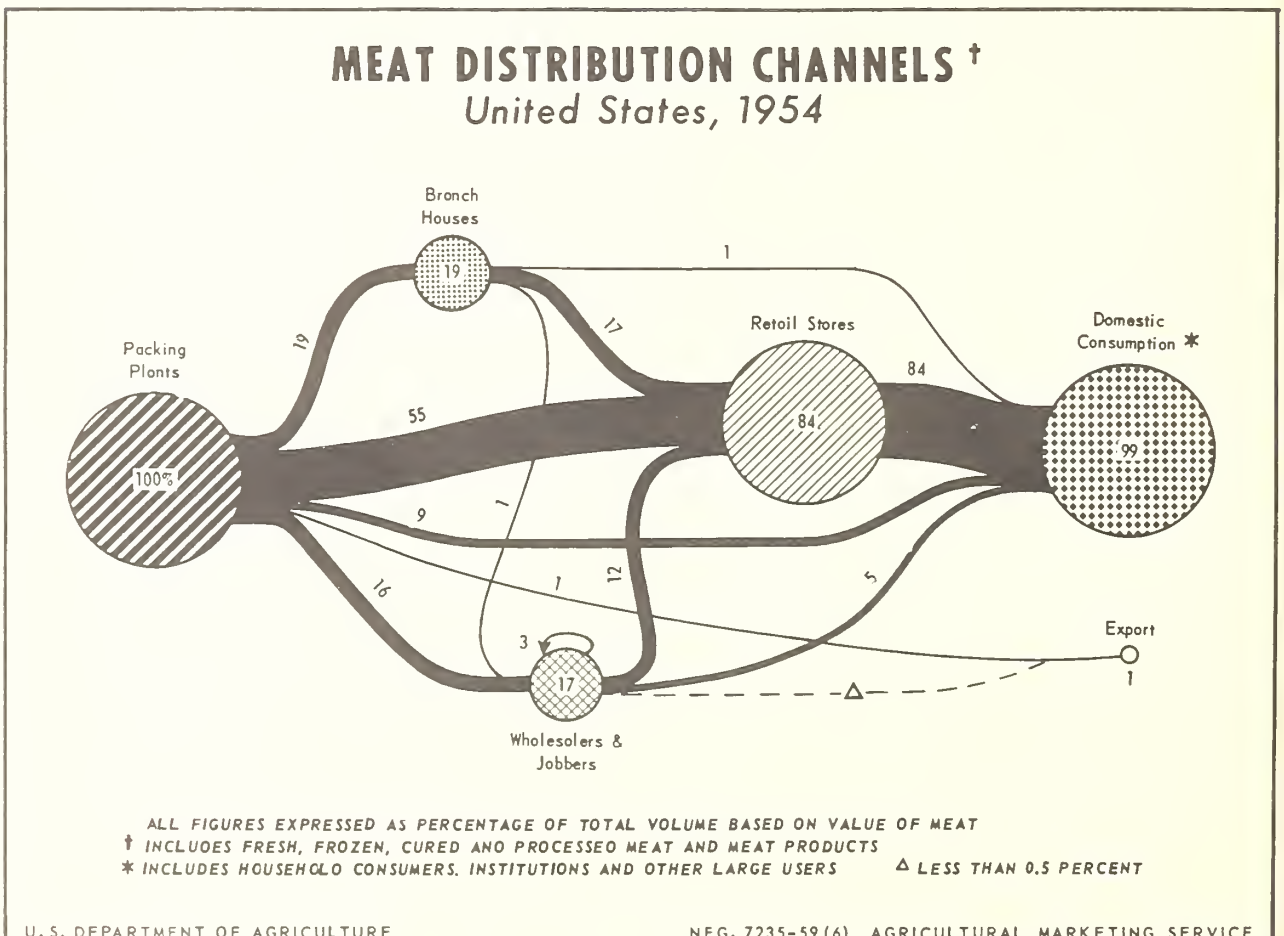


FIGURE 22.

in figure 22. A comparison between figure 21 and figure 22 shows differences in the relative importance of wholesale meat distributors for the years 1939 and 1954. The most important changes were the reduction in the percentage of total meat handled by packer branch houses and the increased share moving through independent wholesalers, as well as an increase in the proportion sold direct by packers. From 1939 to 1954, the percentage of total meat production sold through branch houses declined from 30 to 19 percent, while that handled by independent wholesalers increased from 13 to 17 percent. In 1939, 59 percent of packer sales were direct sales; in 1954, such sales had increased to 65 percent. Independent wholesalers obtained their supplies from the same sources, but obtained a larger share from packing plants and a smaller proportion from branch houses in 1954 than in 1939. Relative proportions going to each sales outlet from independent wholesalers and branch houses did not change appreciably between the 2 years. On the other hand, retail stores relied more heavily on direct shipments from packers and independent wholesalers for their supplies in 1954 than in 1939, while the relative volume coming from branch houses declined substantially.

In essence, figures 21 and 22 represent snapshot pictures of the wholesale meat distribution system at two points in time. Since the more significant changes in the system were those associated with the relationships of independent wholesalers and jobbers and branch houses, a more detailed analysis of the changes in status of these agencies is shown in table 2. From 1929 to 1954, the number of packer branch houses declined 43 percent. Although numbers declined throughout the entire period, they declined at a more rapid rate during the 30's and the early 40's than they did from 1948 to 1954. In contrast to branch houses, the number of independent wholesalers and jobbers increased substantially and nearly doubled from 1929 to 1954. Again in contrast to branch houses, the most rapid growth in numbers of wholesalers took place from 1948 to 1954.

Sales data reveal that from 1929 to 1954 branch houses continually declined in relative importance as wholesale meat distributors (no later data are available). During this period, the proportion of total meat sales by branch houses declined 54 percent. The most rapid rate of decline took place between 1929 and 1948. The branch house share of sales of meat at wholesale declined only 2 percent from 1948 to 1954.

TABLE 2.—*Number of establishments, sales, and changes in relative importance of packing house branches and independent meat wholesale distributors, specified years and periods of years, United States*

Years and specified periods	Establishments		Sales [1]		
	Packinghouse branches	Wholesalers	Packinghouse branches	Wholesalers	Packinghouse branches and wholesalers
	Number	*Number*	*Million dollars*	*Million dollars*	*Million dollars*
1929	1,157	2,225	5,824	2,089	7,913
1939	940	2,552	4,163	1,983	6,146
1948	756	3,200	2,759	1,942	4,701
1954	664	4,357	2,697	2,866	5,563
	Percentage change for specified periods				
	Percent	*Percent*	*Percent* [2]	*Percent* [2]	*Percent* [2]
1929–39	−19	+15	−29	−5	−22
1939–48	−20	+25	−34	−2	−24
1948–54	−12	+36	−2	+48	+18
1939–54	−29	+71	−35	+45	−9
1929–54	−43	+96	−54	+37	−30

[1] Sales values from the census were adjusted by the BLS wholesale price index for meats and by meat production to reflect 1954 levels.
[2] Indicates percentage change in sales value.

Source: Preliminary Trade Report, 1954 Census of Business, Wholesale Trade, Series P. W. 3-36, October 1956. Bureau of the Census, U.S. Department of Commerce.

Although the number of independent wholesalers increased substantially during the 1930's and 1940's, the share of total meat production handled by these marketing agencies declined slightly. From 1948 to 1954, the number of independent wholesale establishments increased by 36 percent while their volume of sales increased 48 percent.

From 1929 to 1948, the combined sales of packinghouse branches and independent wholesalers declined rather sharply, as an increasing proportion of meat was sold direct by packers. During the 1948 to 1954 period, the slight decline in branch house sales was more than offset by the substantial increase in the volume moving through independent wholesalers. This was associated

with a slight decline in direct sales. This decline in the relative volume of direct sales took place despite the rapid development and growth of large-volume retailing organizations. However, direct sales still remained the dominant method of wholesaling meat and accounted for about 65 percent of total volume in 1954.

Several factors have contributed to the shifts that have taken place in the relative importance of the several channels of wholesale meat distribution during the last three decades. Improvement and extension of hard-surfaced roads, which began in the 1930's, facilitated the movement of meat direct from packers to retailers. This development provides a means for distributing meat by refrigerated truck and has resulted in an increased proportion of meat production being moved by truck. In recent years, railroad car shipments have, to a considerable extent, been replaced by truck shipments. Trucks enjoy several advantages over railroad cars in the distribution of meat, particularly over short distances. Truck routes can be altered more effectively than railroad car routes, and the product usually requires less handling when transported by truck.

Another factor which has influenced the direct-sale movement has been the development of U.S. grade standards for beef, veal, and lamb. Adoption of these standards provided the industry with a national system of uniform terminology for describing carcasses. Through the use of grade standards, negotiations can be carried out without either party inspecting the product. Obviously, this development was an important factor contributing to the shift from purchase by inspection to purchase by description.

Rapid development of large-scale retailing organizations in food distribution and the adoption of centralized meat procurement programs by many of these chains also gave impetus to expansion of direct sales of meat and meat products. Under this procurement system, a buyer, using modern media of communication to buy by description rather than by inspection, can contact packers located in different sections of the country and contract for supplies for his stores, which also may be widely dispersed throughout the country. Some economies associated with this system are lower per-unit prices accompanying large-volume purchases (carlot prices), more direct shipment, substantial reduction in the buying staff, and less handling and storage of the product.

As indicated earlier, the proportion of meat sold direct and that moving through branch houses in 1954 declined as compared to that in 1948, while the proportion handled by independent wholesalers increased.[17] Apparently the demand for the type of specialized services offered by these wholesalers has increased substantially and their role in meat distribution has increased in importance in recent years.

Margins and Costs for Marketing Livestock

Marketing expenses for livestock include the charges for facilities and services provided at the market and the cost of transporting the animals to market and from there to the final destination. Average per head expenses vary by species and depend upon the numerous factors involved in the marketing process. The difference in marketing cost between types of market outlets by no means indicates the most profitable outlet for a producer. With difference in cost of marketing between outlets can come difference in market price. The net return is the difference between the producer's marketing expenses and the price he receives for his livestock.

Detailed information on average costs and charges at the markets are available for 1954 and 1955, but not for later years. However, sufficient figures are available to indicate that charges at all markets combined, terminal and auction, for all species combined have increased roughly between 15 and 20 percent from 1955 to 1959. To what extent the increases are evenly or unevenly distributed is not exactly known; but the proportions of the change are not extremely large, and relationships shown in the data presented here for 1954 and 1955 doubtless are still generally applicable, with occasional exceptions.

Expenses for marketing animals through a particular market outlet are related to the amount of services performed and the length of time the animals are handled by a market agent. A comparison of average expenses for the different types of outlets indicates that in 1955 costs of marketing livestock at terminals were highest for each of the species (table 3). Generally, livestock are held for a longer time at terminals and may be handled by as many as three market agents. Not all marketing charges at terminals, however, are paid directly by the producer. Dealers and buyers may also share the marketing expense. Average marketing expenses were smallest for those animals sold "direct" to packers. "Direct" sales of livestock to packers were considered to be sales of animals either at farms and feedlots direct to the plant or through packer buying stations.

The average cost of marketing livestock in any one particular year depends both on the proportions of each species moving through each type of market and the proportions moving through more than one outlet. For all livestock sold in 1955,

[17] The term wholesaler as used here includes jobbers, hotel and restaurants supply houses, purveyors, breakers, and boners.

the average cost of marketing per head was $1.99 for cattle, $1.09 for calves, 56 cents for hogs, and 34 cents for sheep and lambs. The average marketing expense for all species combined was $1.42 per head of livestock.

Transportation costs are an important element in the evaluation of the total expense of marketing livestock. The expense of transporting animals either to, from, or between markets varies according to the means of conveyance, distance traveled, size of lot, and kind of livestock. Average expenses for transporting livestock, of course, vary over time with changes in the relative importance of these various factors.

The three primary methods of hauling livestock include for-hire truck, farmer-owned truck, and railway. In this study, expenses for transporting livestock by farmer-owned truck were considered to be the same as by for-hire truck. Proportions of livestock transported by boat or driven on foot to market are insignificant, and therefore were not considered when estimating average transportation expenses.

The relative importance of livestock movement by truck has increased steadily over the last three decades. As mentioned before, development of the motortruck contributed to a decentralized livestock marketing system and to improvement and expansion in the nation's roads and highways—especially "farm-to-market" roads.

TABLE 3.—*Estimated expenses per head of marketing livestock through various types of market outlets, 1955* [1]

Market outlets	Cattle		Calves		Hogs		Sheep and lambs		All livestock combined [2]	
	Proportion marketed	Rate per head	Proportion marketed	Rate per head	Proportion marketed	Rate per head	Proportion marketed	Rate per head	Proportion marketed	Rate per head
	Percent	*Dollars*	*Percent*	*Dollars*	*Percent*	*Dollars*	*Percent*	*Dollars*	*Percent*	*Dollars*
Dealers	14	1. 42	18	0. 80	27	0. 40	17	0. 27	19	0. 86
Auctions [3]	37	2. 25	52	1. 27	18	. 63	17	. 42	32	1. 76
Terminals [4]	40	2. 74	23	1. 61	33	. 88	37	. 58	36	2. 05
Direct to packers [5]	12	1. 35	7	. 90	21	. 39	21	. 17	15	. 83
Direct to other farmers [6]	12		14		6		15		10	
Weighted average		1. 99		1. 09		. 56		. 34		1. 42
Transportation		4. 86		1. 53		1. 08		1. 00		3. 26
Total expenses		6. 85		2. 62		1. 64		1. 34		4. 68

[1] Losses resulting from shrinkage of tissue, bruising, death, and crippling of animals in transit or at markets may logically be considered marketing costs, but owing to lack of adequate data they are not so considered in this study in determining cost of marketing livestock. Percentages do not necessarily add to 100 because some animals were sold more than once.

[2] Data for all livestock combined derived by weighting the different species by volume according to marketing equivalents. One marketing unit or equivalent equals one head of cattle, 3 calves, 4 hogs, or 10 sheep and lambs.

[3] Estimates adapted from Engelman, G., and Pence, B. S., Livestock Auction Markets in the United States, U.S. Dept. Agr. Mktg. Res. Rpt. 223, March 1958.

[4] Estimates adopted from Uvacek, E., and Wilson, D. L., Livestock Terminal Markets in the United States, U.S. Dept. Agr. Mktg. Res. Rpt. 299, January 1959. Althougb these estimates are based on 1954 data, it is assumed that any changes in rates at individual markets during the 1-year period would have no significant effect on overall U.S. average charges.

[5] Because limited information is available, per head marketing expenses on direct purchases by packers are assumed to be the same as average country buying charges for commission agents. See table 11, page 31.

[6] It was not possible to determine the value of services performed by farmers selling their own livestock to other farmers.

The change in relative importance of truck transportation of livestock is illustrated by the proportions of truck receipts to total receipts at terminal public stockyards (table 4). In 1935, truck receipts of cattle and calves were slightly over half the total receipts at terminal public markets. By 1959, over 4/5 of the cattle and calves moving to terminals came by truck. Truck receipts of hogs increased in the 1935–59 period from 61 percent of total volume to over 91 percent. Sheep and lamb receipts by truck advanced from about a fourth of the total in 1935 to almost two-thirds in 1959. The most significant gain in relative importance of truck movement to terminals occurred in the late forties. Proportions of sheep and lamb receipts by truck, however, increased a little more than a fifth in the 1950–55 period and again in the 4-year period 1955–59.

Historical data are not available on methods of hauling livestock to other market outlets. However, it is generally known that the bulk of the livestock sold at auctions are hauled to market by truck.

Distance to or from the point of sale directly affects the costs of transporting livestock. It influences the decision making of the buyer or seller as to his choice of market outlet and method of hauling. Generally speaking, for short distances, truck movement has the advantage over rail, both in overall transportation costs and in shipping convenience. Farmer-owned trucks are more commonly used for shorter distances than are commercial or for-hire trucks. They are used mainly for distances of 50 miles or less. In contrast, the bulk of the livestock movement by rail is for distances in excess of 100 miles.

Average distances livestock are transported to market vary according to the type of outlet and the kind of livestock being hauled. In 1955, the average length of haul by for-hire truck was greatest to terminal markets for all species (table 5). Sheep and lambs were hauled greater distances

to terminals and auction markets than were the other kinds of livestock. Their average length of haul to local dealers was at least two to three times that of the other species. For direct sales to packers, the average distance by for-hire truck was longest for cattle. Country sales of calves to other farmers involved much greater distances to market, on the average, than was true for the other species. This was due mainly to shipments of feeder calves from the Western Region. Hogs were shipped relatively short distances by for-hire truck to all types of market outlets. While average distances change to some extent over time, these comparisons would probably be fairly consistent in more recent years.

TABLE 4.—*Truck receipts at terminal public markets: Percentage of total receipts and changes in relative importance, by kind of livestock, specified years, United States, 1935–1959*

Years and specified periods	Cattle	Calves	Hogs	Sheep and lambs
	Percent	*Percent*	*Percent*	*Percent*
1935	51	55	61	26
1940	66	64	68	32
1945	58	65	60	34
1950	76	78	79	44
1955	82	85	87	54
1959	90	87	91	67
	Percentage change for specified periods			
1935–40	29	17	12	23
1940–45	−11	1	−12	8
1945–50	30	20	31	29
1950–55	9	9	10	22
1955–59	7	−1	4	20
1935–59	73	53	48	150

TABLE 5.—*Average distance livestock was hauled by hired truck to various types of markets, by species, United States, 1955*

Kind of livestock	Terminal markets	Auction markets	Country sales		
			Direct to packers	Local dealers	Farmers
	Miles	*Miles*	*Miles*	*Miles*	*Miles*
Cattle	120	29	80	10	27
Calves	92	21	27	15	82
Hogs	75	23	26	11	7
Sheep and lambs	154	35	78	33	13

Source: Phillips, Victor B., Hired Truck Transportation in Marketing Livestock, Mkt. Res. Rpt. No. 297, U.S. Dept. Agr., December 1958, p. 8.

The average expense of moving livestock by for-hire truck to market varies by type of market outlet. The 1955 data indicate that per-head expenses by for-hire truck were highest for livestock shipped from the farm or ranch to terminal markets (table 6). Per-head trucking expenses to all market outlets averaged highest for cattle. However, on a per-hundred-pound basis, which is the most common method for assessing transportation rates on livestock, this relationship does not necessarily hold true.

TABLE 6.—*Average trucking expense per head of livestock hauled to market in motortrucks hired by farmers and ranchers, by market outlets, United States, 1955*

Kind of livestock	Terminal markets	Auction markets	Country sales
	Dollars	*Dollars*	*Dollars*
Cattle	3. 38	1. 51	1. 54
Calves	1. 43	. 87	. 54
Hogs	. 74	. 38	. 28
Sheep and lambs	. 96	. 38	. 28

Source: Phillips, Victor B., Hired Truck Transportation in Marketing Livestock, Mktg. Res. Rpt. No. 297, U.S. Dept. Agr., December 1958, p. 11.

In addition to the distance factor, transportation costs are also affected by the size and consistency of loads and the number of stops necessary to complete a load. Transportation rates might be expected to be lower in areas where there is a steady and heavy volume of livestock movement than in areas of sparse production. Trucking rates, particularly, may be influenced by State regulations covering truck weights, size limits, licensing regulations, taxes, and other factors.

Average transportation expenses for animals moving through more than one market outlet are relatively high. Some livestock may be sold by as many as three marketing agents before reaching a final destination. Each time these animals are conveyed from one seller or market agent to another agent or buyer, an additional transportation expense is incurred. Average transportation expenses in 1955 for moving livestock through all marketing channels, including both truck and rail, were estimated at $4.86 per head for cattle, $1.53 per head for calves, $1.08 for hogs and $1.00 per head for sheep and lambs.

For each of the species, the average per head transportation expense to farmers in 1955 was considerably higher than the average expense to farmers incurred at the market. When these expenses were combined, the average total marketing expense per head for all costs incurred in the marketing process was $6.85 for cattle, $2.62 for calves, $1.64 for hogs, and $1.34 for sheep and lambs.

Facilities, Services, and Marketing Charges at Terminal Public Markets (*11*)

The public terminal market where livestock is sold by private treaty acts as a livestock hotel—furnishing livestock with food, bed, and care. The stockyard company owns and operates the stockyard, providing the consignor with facilities

including pens, watering and feeding troughs, and a place to sell his livestock. Additional facilities such as scales, holding pens, and handling facilities also are available at terminal markets.

The major part of the services made available by the stockyard company are those connected with the physical handling of the livestock. Certain special services, including reweighing, vaccinating, and handling, also may be furnished by stockyard personnel upon request. The consignor or his agent requests and pays for the particular services his livestock receive.

Practically all of the salable receipts of livestock at stockyards are sold by commission agents. These commission firms do the actual selling, collect the proceeds of the sale from the buyer, deduct their charges, stockyard charges, and transportation charges, if any, and remit the net proceeds to the consignor. Commission agents also resell some animals at the market.

Some commission agents act as order buyers for purchasers. Commission agents acting as order buyers usually act also as commission sellers. Normally stockyard policy does not allow these commission agents to fill purchase orders with livestock consigned to them for sale. However, if an agent offers more than the highest bid received for the livestock, the transaction may be accomplished without violation of United States Department of Agriculture regulations.

Livestock dealers handled about 13 percent of the livestock initially sold at terminal markets in 1954. These dealers perform a service to producers by purchasing odd lots of livestock and sorting and combining them into larger lots more in demand by the regular buyers. The purchase of these odd lots could be expected to help the terminals maintain a more competitive market for livestock. Animals are bought, sorted, graded, and finally resold by these dealers at the yards. Although the dealer or "yard trader" does this in an attempt to profit from the resale of the animal, he indirectly furnishes the livestock producer with a broader demand for a wider variety of livestock.

Total livestock receipts at terminal public markets include all animals passing through the stockyards and are usually classified into three categories:

1. "*Salables*" *or* "*initials*" are livestock offered for sale for the first time at the terminal. "*Resales*" are animals that are resold at the yard.

2. "*Directs*" are livestock moving directly to a buyer, usually located at or near the stockyard.

3. "*Throughs*" are livestock in transit to a distant buyer; these may be unloaded for feed, water, and rest at the yard, or serviced in the cars.

Only "initials" and "resales" are actually sold at the market. "Directs" and "throughs" are en route to buyers and are not offered for sale at the terminals.

All rates, charges, and tariffs at a posted market are subject to regulation by the Packers and Stockyards Division of the U.S. Department of Agriculture. Each stockyard company and market agency at the market is required to submit a schedule showing all rates and charges for its services. Any changes in rates or charges require the approval of that branch and are considered only after a review has shown them to be just, reasonable, and nondiscriminatory. This tariff control is intended as a protection against excessive charges, and has tended to reduce much of the variation of the average charges for the various facilities and services at different markets.

Stockyard companies derived most of their gross income from yardage fees and sales of feed in 1954. The proportion of total gross stockyard income obtained from these two sources ranged from 86 percent in the Northeast Region to 97 percent in the North Central Region, and averaged 95 percent for the United States (table 7).

Five categories of stockyard income include yardage, feed, bedding, unloading and loading, and other services.

Yardage

This term represents a fixed charge per head for the use of pens, weighing, water, certain other services, and the privilege of the market.

TABLE 7.—*Distribution of gross income of posted terminal markets by sources and regions* [1]

Regions	Yardage	Feed	Bedding	Loading and unloading	Other service [2]	Total
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Northeast	30. 4	55. 5	1. 3	11. 8	1. 0	100
East North Central	68. 1	28. 2	1. 1	1. 3	1. 3	100
Southeast	74. 0	16. 9	. 8	. 8	7. 5	100
South Central	70. 1	26. 1	. 3	. 7	2. 8	100
West North Central	63. 2	33. 9	1. 5	[3]	1. 4	100
Mountain	45. 4	41. 5	3. 4	8. 4	1. 3	100
Pacific	53. 2	38. 6	4. 1	1. 0	3. 1	100
Total United States	62. 0	33. 0	1. 5	1. 8	1. 7	100

[1] Includes only that income derived from charges made directly for services rendered at the stockyards in 1954.
[2] Other services include weighing, dipping, spraying, brand inspection, insurance, vaccination, and so forth.
[3] Less than 0.05 percent.

Yardage is of 3 types: (1) Initial yardage, a charge for all livestock sold at the yards (salable livestock); (2) direct yardage, a charge for all "directs" livestock; and (3) resale yardage, a charge for livestock resold within the stockyards. Resale yardage is different for each type of resale.

Initial yardage charges are usually higher than either the yardage on "directs" or "resales." Variations in charges among species are related to the different amounts of service, time, and facilities necessary for handling livestock at the terminal markets. Average yardage charges for initial and direct livestock are shown in table 8. Average yardage per head on direct shipments of livestock passing through the yards was equivalent to about 60 percent of the average initial yardage for calves, hogs, and lambs, and nearly 70 percent for cattle.

TABLE 8.—*Average yardage charges for livestock at posted terminal markets, United States* [1]

Type of sale	Charges per head			
	Cattle	Calves	Hogs	Sheep and lambs
	Dollars	*Dollars*	*Dollars*	*Dollars*
Initial sale	0. 82	0. 46	0. 28	0. 17
Direct	. 56	. 29	. 17	. 10

[1] Based on data available for 1954.

Resale yardage varies according to the type of resale, and can be classified as charges for: (1) Livestock resold by commission agents, (2) livestock resold "other than by commission agents for local delivery," and (3) animals resold "other than by commission agents for shipment" (table 9). Since the amount of labor, pen space, and usual length of stay at the stockyard, by each type of resale, varies somewhat—the yardage charge is established accordingly.

Feed

Feed is available at all terminal markets. The consignor or his agent indicates whether or not the animals are to receive any feed, and specifies the kinds and quantities to be fed. In 1954, charges for feed amounted to 14.5 million dollars, and accounted for 33 percent of the stockyard companies' gross income. These feed charges varied among regions, species, markets, and even among consignments within the same market. Some of this variation may be attributed to the kinds and quantities of feed provided, the cost of the feed to the stockyard, and the handling and profit margin allowed by the stockyard tariffs.

The original consignor is charged only for the feed that his livestock consumes prior to the initial sale, and the purchaser pays feed charges after that. Total feed charges obtained from stockyard records were estimated at 38 cents per head for cattle; 10 cents for calves; 13 cents for hogs; and 12 cents for lambs.

TABLE 9.—*Average resale yardage charges for livestock at posted terminal markets by type of sale and species* [1]

Species	Resale charges		
	By commission agencies	Other than by commission agencies	
		For local delivery	For shipment
	Dollars	*Dollars*	*Dollars*
Cattle	0. 61	0. 18	0. 09
Calves	. 42	. 12	. 05
Hogs	. 18	. 06	. 04
Sheep and lambs	. 13	. 05	. 03

[1] Based on data available for 1954.

Bedding

Another income source for stockyard companies is derived from the sale of bedding and the services connected with it.

Hogs and sheep do not normally require additional bedding at the yards. On the basis of allocation of bedding to certain species, estimates of average bedding charges were 3 cents per head for cattle and less than 1 cent for calves and lambs.

Services

Many specialized services are normally provided by the stockyard company for a fee. In some areas of the country, particular services such as brand inspection are required by law. One of the most important services offered by stockyards is loading and unloading. All livestock—salable, directs, and throughs—may utilize this service. Usually no separate charge is made for this service for salable and direct livestock, since the yardage charge covers this service. "Through" livestock are subject to a "use of facilities" charge, which is somewhat comparable to a service and yardage charge, but which does not, however, cover such services as unloading and loading.

Commission agents assess a commission charge on a per-head basis for their services. Charges vary with the size of the consignment—small lots are generally assessed a higher per-head charge than larger consignments. The commission rates for these agents vary slightly among markets in the same region, but are generally consistent among firms within a market.

Selling

The average charges assessed by commission firms in 1954 for selling consigned livestock at terminal markets are shown in table 10. The relationship of charges among species was similar to that shown in the yardage charges. Resales by commission agents, or "plants," are animals recon-

signed to commission firms by livestock dealers to be resold on the yard. The charge for these resales is generally lower than the initial sales charge.

TABLE 10.—*Average charges for selling livestock by commission agents at posted terminal markets, by species, United States* [1]

Type of sale	Average charges per head			
	Cattle	Calves	Hogs	Sheep and lambs
	Dollars	*Dollars*	*Dollars*	*Dollars*
Initial sales	1. 18	0. 65	0. 38	0. 25
Resales	. 94	. 52	. 23	. 21

[1] Based on available data for 1954.

Buying

Commission agents may also act as order buyers for some customers. Average buying commission charges are somewhat lower than the average selling rates. This may be explained by the difference in the average size of the consignment sold or bought for consignors or producers.

Commission charges generally average slightly higher for country buying than for purchases on the market, since more services are required when buying off the market (table 11). The average country buying charges for commission agents also operating on the stockyard were 34 cents higher per head for cattle, 37 cents higher for calves, and 7 cents more for hogs, but were the same for lambs.

For the service of buying mixed lots of livestock, sorting, grading, and reselling in uniform lots, the livestock dealer or "yard trader" tries to make a profit. Other aspects of dealer operations are somewhat speculative, and sometimes may involve a loss. Over a period of time, however, the dealer must obtain a margin sufficient for profitable operation.

TABLE 11.—*Average charges for buying livestock by commission agents at posted terminal markets and country buying, by species, United States* [1]

Type of buying	Average charges per head			
	Cattle	Calves	Hogs	Sheep and lambs
	Dollars	*Dollars*	*Dollars*	*Dollars*
Buying at terminal market	1. 01	0. 53	0. 32	0. 17
Country buying	1. 35	. 90	. 39	. 17

[1] Based on available data for 1954.

The gross margin per head for livestock dealers—the difference between their purchase price and selling price—varies greatly among regions and between dealers at the same yards. From this gross margin, however, the livestock dealers must pay his yardage charges, feed charges, and commission charges to the stockyard company or commission agents, for any of these facilities and services which he utilizes at the market. In order to obtain a more accurate margin figure for dealers, an "adjusted gross margin" was determined by subtracting from the gross margin all charges paid by the dealer to the stockyard company and commission agents for feed, yardage, and special services.

Although this "adjusted gross margin" cannot be considered as a direct marketing charge for stock at the terminals, it is appropriate to incorporate it into the overall marketing costs for livestock passing through terminal markets. In 1955, the U.S. average "adjusted gross margin" per head for handlings by livestock dealers at posted terminals was $2.95 for cattle, $2.18 for calves, 62 cents for hogs, and 93 cents for sheep and lambs. Differences among regions were considerable, and the variations within an area were even more erratic.

Marketing charges levied upon livestock delivered to public markets for sale might be paid by either producers, commission agents, livestock dealers, or buyers. Average marketing charges for the salable livestock received at public markets are shown in table 12. These figures include both the charges which are levied directly against the producer or other marketing agents who may "initially" ship the livestock to the market, and the indirect costs incurred for resales through livestock dealers active on the market. Commission fees are the major charges paid by producers or other shippers at terminal markets. These usually account for about half of the total market charge. Yardage charges account for roughly one-third of the total charges paid by the initial consignor of livestock. Feed and service charges are among the minor items. Many livestock move through terminals without receiving either feed or any special services.

"Direct" livestock receive only the "direct yardage" charge, some "service" charges, and, in a very few instances, a feed charge. Charges are usually paid by the purchaser, since the animals have already been sold before they arrive at the stockyard. Average total charges for "direct" cattle in 1954 amounted to 63 cents per head, calves 33 cents, hogs 20 cents, and lambs 13 cents.

Livestock received as "throughs" are assessed a "use of facilities" charge, a feed charge, and some service charges. The average total charges for these livestock in 1954 were just about the same or a little less than the totals for directs. Some charges on "throughs" may be paid by the producer and some by the purchaser, or all by either one. In either case, these charges are a part of the overall cost of moving livestock to the ultimate receiver.

TABLE 12.—*Average marketing costs per head for salable livestock at posted terminal markets* [1]

Species	Initial sales charges per head					Dealer handlings average costs for resales [5]	Total marketing costs [6]
	Initial yardage	Feed [2]	Initial sales commission	Services [3]	Total charges for initial sales [4]		
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
Cattle	0. 82	0. 26	1. 18	0. 07	2. 33	3. 48	2. 74
Calves	. 46	. 10	. 65	. 04	1. 25	2. 34	1. 61
Hogs	. 28	. 08	. 38	. 03	. 77	. 71	. 88
Sheep and lambs	. 17	. 05	. 25	. 03	. 50	1. 05	. 58

[1] These include charges levied against producers and indirect costs of livestock dealer handlings at terminal markets, 1954 data.
[2] Producer's feed costs from United States Department of Agriculture producer's expenditure survey, 1955.
[3] Includes bedding.
[4] Charges paid by shipper or producer.
[5] Weighted averages include resale yardage, resale commission, and dealer's adjusted gross margin.
[6] Includes total charges for livestock initially sold plus the indirect costs of dealer handlings allocated to these livestock.

Facilities, Services, and Marketing Charges at Auction Markets (*4*)

At livestock auctions, animals are driven from the holding pens, where they had been yarded when received, into a sales ring where they can be viewed simultaneously by all buyers. The sale is conducted by the auctioneer, who is mainly responsible for obtaining the highest possible public bid for the stock. As was indicated earlier, trading at terminal markets is carried on by private treaty in the pens where animals are yarded. Procedures at livestock auctions and terminal markets differ principally in that respect.

While the general selling process is similar for most auctions throughout the United States, markets vary with respect to number and kinds of livestock handled, type of ownership, facilities, and methods of operation. The majority of livestock auctions are relatively small and conduct sales only once a week.

The movement of livestock through an auction market requires facilities for receiving, selling, and loading out animals. The layouts and designs of these facilities differ greatly among markets. Yards for receiving and loading out livestock include some or all of the following facilities: Truck and railroad docks, receiving and loading-out chutes and chute pens, tagging chutes, holding pens, alleyways, overhead walkways, dipping vats, feed racks, and water troughs.

Ordinarily, livestock are delivered to the yards on the sales day, although some are delivered before. Upon arrival at the market, the livestock are unloaded and inspected by yard personnel who record number and species consigned. In order to maintain identification, the livestock are usually tagged or marked before being assigned to pens.

Livestock consigned at auctions are sold either by weight on a price-per-pound basis or by the head. Two different methods are used for selling livestock on a weight basis. In one method, the animals appearing in the ring are all consigned by the same person and are sold either singly, in pairs, or in small lots that are fairly uniform in size, condition, and quality. When this method is used, the animals are weighed either prior to or immediately following the sale, depending upon the established practice of the market. Auctions selling livestock by the other method combine consignments from a number of owners to make up rather large lots containing animals of uniform grade and weight. Animals in these pooled lots are weighed only at the time they are sorted. This method is most frequently used at large auctions selling a predominant amount of slaughter livestock. Animals sold per head may be auctioned individually, in pairs, or in small lots. Selling by the head is generally more common in areas where substantial numbers of breeding stock are sold. Many auctions, however, use both methods.

Rates charged for marketing livestock vary at different auctions. Services for which charges are levied may include selling, yardage, weighing, insurance, brand inspection, and health inspection. Many auctions do not provide all these services. A commission or selling fee, however, is charged at all markets and is the primary source of income to auction operators. At some auctions, the commission covers yardage and weighing in addition to the selling service. Some operators levy a separate charge for each service provided, while others charge a single rate to cover all services.

Auction operators levy their charges on a percentage of gross value, or on a per head basis, or by a combination of the two methods. In this study, methods of assessing charges on livestock sales were classified into the following four categories:

(1) Straight per head—all charges levied per head.

(2) Per head combination—per head commissions, with other charges based on a percentage of gross value.

(3) Straight percentage—all charges assessed on a percentage of gross value.

(4) Percentage combination—percentage commissions, with other charges levied per head.

In 1955, more auctions used the straight per head method as a basis for levying charges on all

species than any other method (table 13). Among regions, this method was used by the largest proportion of North Central and South West Central auctions.[18] In the Western Region, the straight assessment per head was most important for cattle, calves, and sheep and lambs.

Straight charges per head on cattle and calves varied considerably among auctions reporting this type of assessment (fig. 23). However, the most usual charges for cattle ranged from $1.50 to $2 per head, and over three-fourths of the auctions levied rates between $1.50 and $2.50. Straight charges per head on calves tended to be less than on cattle and were predominately set at amounts ranging from $1 to $1.50. No assessments on calves of over $3 were reported by these auctions, and only 6 percent of the markets levied fees of more than $2.

While ranges in charges per head on hogs and sheep and lambs were generally smaller than those on cattle and calves, rates varied substantially (fig. 24). Charges per head most frequently levied on hogs ranged from 50 to 60 cents. However, another smaller grouping of charges occurred within the range of $1 to $1.10. This may be partially due to the fact that many auctions levy separate rates on the different classes—particularly butcher hogs and feeders. More than half of the assessments on sheep and lambs were within the range of 40 to 60 cents, only a few auctions reporting charges over 70 cents in 1955.

Comparatively few markets used the per head combination method in which commissions were assessed per head and other charges were based on a percentage of value. The only region in which this method was significant was the South, where about a third of the auctions reported per head combination charges on sheep and lambs.

Commissions on cattle and calves were relatively low at auctions levying per head combination charges. Over four-fifths of these auctions reported commissions per head on cattle within the range of $1 to $2. Commissions of 50 cents to $1 per head on calves were assessed by almost four-fifths of the markets using this system, and none reported amounts over $1.50. More than 95 percent of these auction operators levied other charges on cattle and calves at the rate of 1 percent or less.

[18] South West Central Region includes Oklahoma and Texas.

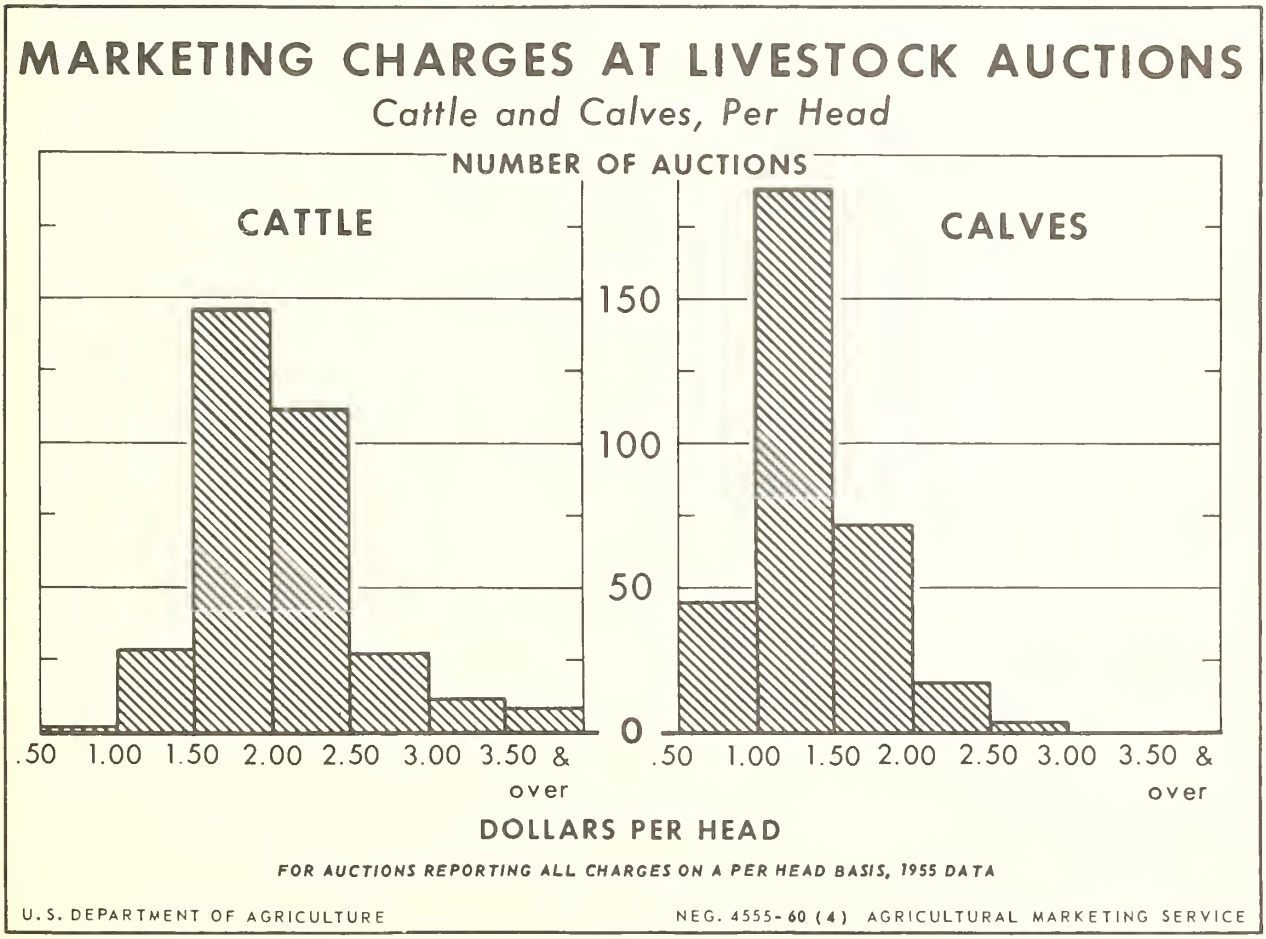


FIGURE 23.

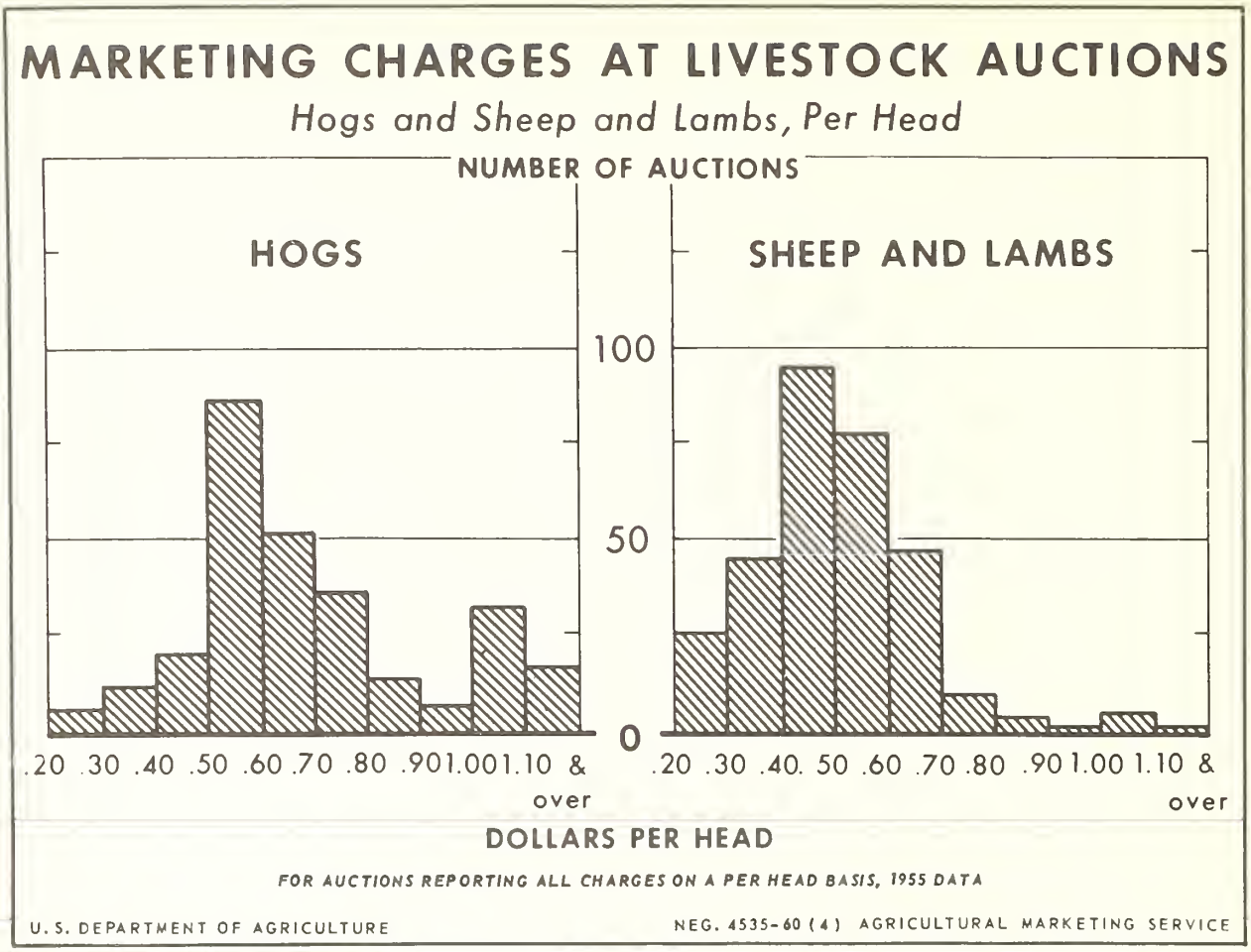


FIGURE 24.

TABLE 13.—*Distribution of auctions reporting, according to method of assessing charges, 1955*

Method of assessing charges	Number and proportion of auctions reporting charges on—							
	Cattle		Calves		Hogs		Sheep and lambs	
	Number reporting	*Percent*	*Number reporting*	*Percent*	*Number reporting*	*Percent*	*Number reporting*	*Percent*
Commission charges on per head basis:								
(1) Straight per head	332	40	324	42	276	37	307	46
(2) Per head combination [1]	75	9	71	9	64	9	70	10
Commission charges based on percentage of sales:								
(3) Straight percentage	161	20	159	20	188	25	125	19
(4) Percentage combination [2]	255	31	222	29	217	29	167	25
Total	823	100	776	100	745	100	669	100

[1] Other charges including yardage, insurance, brand inspection, health inspection, etc., are based on percentage of value.
[2] Other charges are assessed on a per head basis.

Two major groupings were noted in the distribution of hog commissions per head—between 20 and 30 cents and between 50 and 60 cents. Over three-fourths of the sheep and lamb commissions were levied at rates within the range of 20 to 40 cents. Again, over 95 percent of the other charges reported by these auctions were assessed at 1 percent or less on both hogs and sheep and lambs.

About a fifth of the auction operators reported straight percentage charges on cattle, calves, and sheep and lambs, while a fourth of the auctions used this method for levying charges on hogs. In the Northeastern Region, most of the auctions used the straight percentage method for all livestock.

The most usual charge on cattle, calves, and hogs

for auctions reporting straight percentage charges was 3 percent (fig. 25). Five percent was the most usual charge for sheep and lambs at these markets. The 5 percent rate, however, was more than twice as widespread as the intermediate 4 percent rate for all species.

The percentage combination charge (percentage commission, with other charges levied per head) was used by more auction operators than was the straight percentage assessment. Among regions, the percentage combination method was most important at Southern auctions. This method of assessment was second in importance in the North Central Region for all species, and ranked second also in the Western Region for cattle, calves, and sheep and lambs.

Commissions for auctions assessing percentage combination charges were generally lower, as would be expected, than the charges levied by auctions using the straight percentage method. Commissions of 3 and 3.5 percent were most common for all species. Less than a fourth of these markets charged commissions of over 3.5 percent. The most usual charge per head for other services at these markets ranged from 10 to 20 cents for cattle, calves, and hogs, and from 0 to 10 cents for sheep and lambs.

Charges per head could reflect the costs of services provided by auctions more accurately than levies based on a percentage of value. Selling costs do not vary directly with value, as the cost of handling low-value livestock is probably about the same as the cost of providing the same services to higher value animals. Auctions levying charges per head generally have lower rates for multiple lots. This is because the cost per head of the selling services declines as the number of head in the lot increases.

Average values per head for any given species of livestock sold through auction are affected by the proportions of the different classes, grades, and weights sold. Seasonal changes in price and volumes of the various classes marketed also influence the annual average value per head. Kinds and types of buyers, as well as management practices, also may have some influence upon values at a particular auction.

Average values per head and marketing charges during 1955 for the auctions reporting are shown

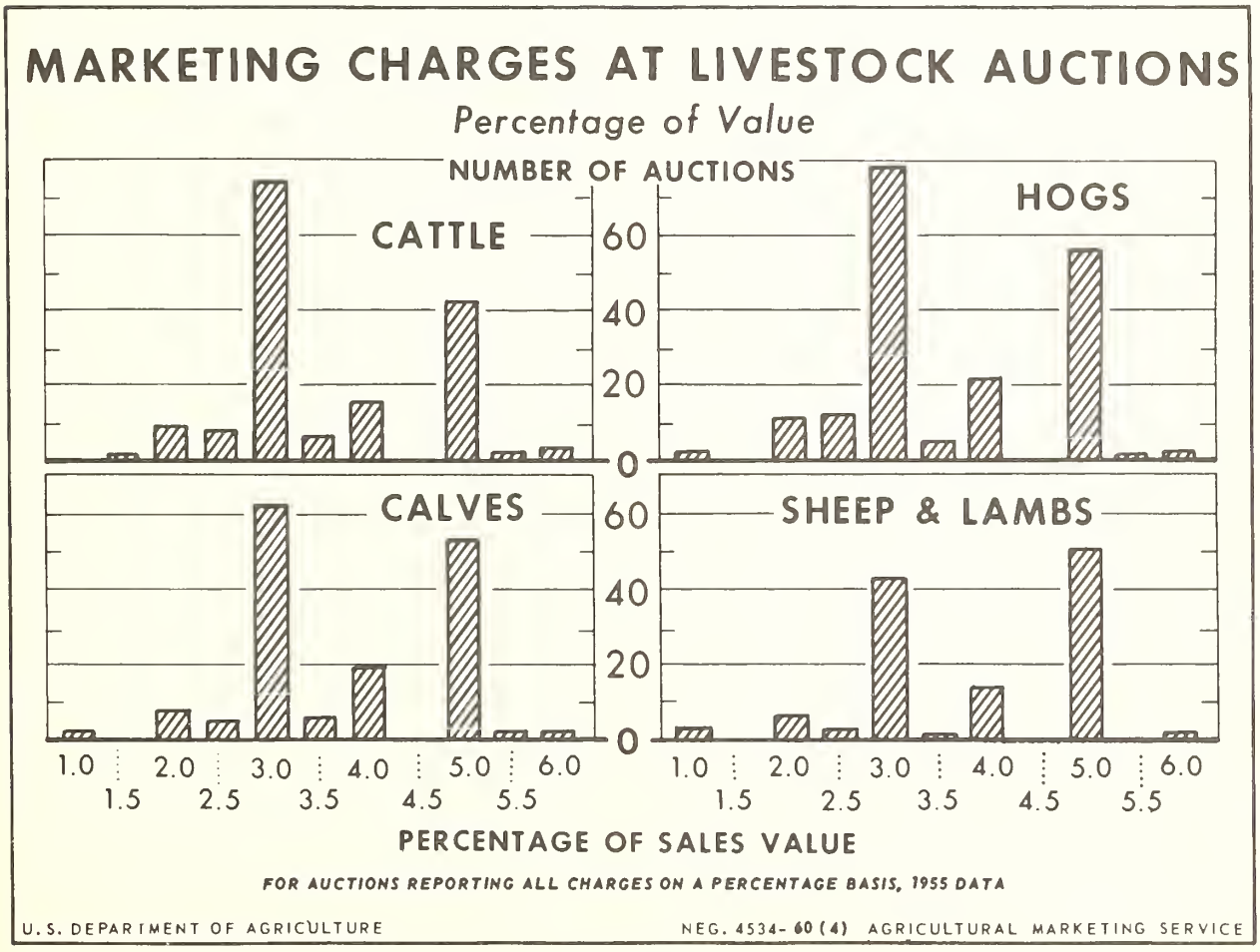


FIGURE 25.

in table 14. Marketing charges were computed on the basis of all charges reported by the auctions, regardless of the method of assessment, and the averages are expressed both in terms of dollars per head and as a percentage of the average value.

Average marketing charges differed considerably among regions for all species except sheep and lambs. Average cattle charges ranged from a low of $1.82 per head in the South West Central Region to over twice this amount in the Northeast where the average charge was $3.70 per head. In contrast, the Northwestern Region had the lowest average charge on calves while the South West Central had the highest. Regional average marketing charges for hogs at auctions varied from 56 cents per head in the North Central Region to a high of 89 cents per head in the Northeast. Marketing charges for sheep and lambs, however, averaged the same in all regions except the Northeast, where the average was 10 cents higher.

TABLE 14.—*Average value and marketing charges for livestock at auctions, by species and region, 1955*

Region	Cattle			Calves			Hogs			Sheep and lambs		
	Value per head	Total marketing charges		Value per head	Total marketing charges		Value per head	Total marketing charges		Value per head	Total marketing charges	
		Per head	As percentage of value		Per head	As percentage of value		Per head	As percentage of value		Per head	As percentage of value
	Dol.	*Dol.*	*Pct.*	*Dol.*	*Dol.*	*Pct.*	*Dol.*	*Dol.*	*Pct.*	*Dol*	*Dol.*	*Pct.*
Northeast	126. 27	3. 70	2. 9	15. 58	0. 79	5. 1	25. 62	0. 89	3. 5	13. 24	0. 52	3. 9
North Central	103. 07	2. 15	2. 1	54. 97	1. 22	2. 2	24. 47	. 56	2. 3	13. 36	. 42	3. 1
South	72. 78	2. 21	3. 0	38. 33	1. 35	3. 5	23. 20	. 75	3. 2	15. 28	. 42	2. 7
South West Central	79. 15	1. 82	2. 3	53. 84	1. 52	2. 8	16. 85	. 66	3. 9	11. 47	. 42	3. 7
West	97. 09	2. 55	2. 6	47. 02	1. 46	3. 1	22. 14	. 63	2. 8	12. 95	. 42	3. 2
United States	93. 82	2. 25	2. 4	45. 37	1. 27	2. 8	23. 71	. 63	2. 7	13. 35	. 42	3. 1

When regional average marketing charges were expressed as a percentage of value, the highest charges were associated with the lowest average values on all species except sheep and lambs. Percentagewise, charges on sheep and lambs were highest in the Northeast, although the value was slightly below the U.S. average. Selling rates for sheep and lambs may have been higher because these animals comprise an extremely small proportion of total livestock sales in the Northeast. Lowest charges on a percentage basis were generally associated with relatively high average values per head.

Operations and Facilities at Other Market Outlets

In addition to using auctions and terminal public markets, livestock producers in some instances use several other marketing agencies. These include dealers exclusive of those operating at terminals, cooperative associations, concentration yards, packers or packer representatives, other livestock producers, and feedlot operators.

Livestock dealers are more or less independent operators who buy and sell livestock outright. Dealers are often classified as either local or country dealers. Local dealers are distinguished from country dealers in that they have established places of business with fixed facilities for handling livestock.

A study of livestock dealers' operations in the Northeast indicated that their business is mostly part-time, since 68 percent of them were engaged in other businesses (*8*). Trucks were the major facility used by dealers in conducting their businesses. In this region, about 90 percent of the dealers used trucks. Only about 17 percent reported that they owned scales for weighing the animals. The volume of livestock handled annually by individual dealers varied considerably and averaged 1,039 head for the region. The sources and outlets for the animals bought and sold by dealers varied among States, and most of this variation was attributed to the kind and classes of livestock produced in the various areas and to the different market outlets available.

Some information relating to the expenses associated with dealers' operations was obtained in Indiana for 1949 and 1950 (*3*). Marketing expenses for dealers, as used in this study, were derived by adjusting the dealers' expenses obtained in the Indiana report. This adjustment procedure consisted of determining the relationship between auction markets and dealer charges in Indiana and applying this relationship to auction market charges in 1955 to obtain dealer expenses.

Cooperative associations handle livestock for members who feed and produce livestock. A study of the operation of livestock cooperative associations showed that a wide variety of facilities and services were provided for the member producers (*7*). Associations maintain faciilties, such as concentration yards, where livestock is assembled from producers and either sold at these

points or forwarded to other outlets for disposition. Many cooperatives own auctions which they operate one or more days of the week. The principal services rendered by cooperatives are those involved in assembling, selection of market outlets, and sale of all kinds and classes of livestock for their members. Other services available to association members include development of livestock improvement programs, production and feeding loans, and the dissemination of market information.

A 1955 study concerned with the operation of cooperative livestock markets in Ohio, Indiana, and Michigan included a detailed analysis of the expenses of their operations. Each of the 9 markets studied conducted a weekly auction and most of them sold some livestock by private treaty on other days of the week. The average marketing expense per animal unit varied considerably among the auctions and ranged from $1.61 to $3.07. The weighted average marketing expense for the 9 markets was $2.03 per marketing unit. In general, lower costs per unit were reported by the markets with higher volume. This study indicated that in 1955, the average marketing expense per head was $2.07 for cattle, $1.04 for calves, 50 cents for hogs, and 40 cents for sheep and lambs.

Originally, concentration yards, which are establishments with fixed facilities where animals are assembled from producers for reshipment, were established to accommodate rail shipments of hogs and were located in the hog production areas. Railroad companies built many yards at centrally located railroad stations to receive hogs originating at other points. Concentration yards today do not rely entirely on rail receipts for the livestock they handle, and many yards handle species other than hogs. In most cases, the animals are purchased directly from the producer and are sorted, regraded, and either sold at the yards or forwarded to other market outlets for final disposition. Although most of the yards are owned by packers, some are owned by cooperative associations and others by dealers.

Meatpackers and slaughterers obtain their supply of livestock from various sources. Many packers, particularly the larger ones, maintain staffs of salaried livestock buyers who travel throughout the country and buy animals directly at farms, ranches, and feedlots. Some salaried packer buyers operate only at packer-owned country buying stations. These country buying stations are fixed places of business, including yards and scales where livestock are delivered by farmers, cooperative selling associations, and country dealers. Dealers selling at packer buying stations may be truckers who negotiate purchases on the producers' farms and truck the animals to packer buying stations.

Packers purchase hogs "direct," for the most part, at their own plants and at their country buying stations.[19] In some instances, transactions for the purchase of hogs are made over the telephone, the packer and seller agreeing on the price before the animals leave the farm. Purchase by telephone is often made possible where the packer representative has had previous dealings with the producer and knows the quality of livestock delivered by him. On the other hand, most of the slaughter cattle and sheep and lambs bought "direct" are purchased at farms, ranches, and feedlots by traveling salaried packer-buyers. In buying cattle, the packer-buyer and seller usually agree on a price only after the buyer has inspected the animals. In some cases, however, packers do not inspect the cattle nor see them until they arrive at the packing plant.

Many packers maintain business relations with nonsalaried livestock buyers or local dealers. These nonsalaried buyers are usually independent operators who either maintain their own fixed facilities, similar to a packer-owned country buying station, or who travel in livestock producing territories making purchases of cattle and sheep and lambs at farms, ranches, and feedlots. These nonsalaried buyers are usually under agreement with the packers to deliver all suitable animals purchased by them. Generally, these buyers are paid a certain commission per head or per 100 pounds of livestock delivered to the packers' buying stations or plants.

Packers also purchase livestock at auction and terminal public markets. Many of the packing plants, especially those located outside the surplus-producing livestock areas, obtain a part of their livestock supplies at terminal markets. Salaried packer-buyers who are tied to or operating on a particular terminal market usually purchase livestock for distribution to plants adjacent to or near the stockyards.

In some cases, packers employ order buyers—individuals, partnerships, or occasionally firms—who purchase livestock for them on a commission basis. These buyers usually purchase to fill an exact order as to weight and grade. Commission agents on the terminal markets sometimes act as order buyers for packers.

Other producers and feedlot operators also serve as producers' market outlets for some livestock. Most of the animals sold through these outlets consist of feeders and breeding and replacement stock.

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[19] "Direct," as used here, is a method of buying, a transaction between the buyer and the seller, without the support of an agent, commission man, or broker.

Costs and Margins for the Combined Slaughtering, Processing, and Wholesaling Functions

The second important step in the operational sequence of the marketing process for livestock and meat is meatpacking and the subsequent step is wholesaling. In this report, these two operational steps have been combined. Hence, the live-to-wholesale margins as used here represent the meatpacker's gross margin, which covers the slaughtering and processing and the major share of the wholesaling function. The wholesaling operation for 83 percent of the meat produced in 1954 was carried out exclusively by meatpacking plants and packer-owned branch houses.

The size of the live-to-wholesale margins differs among species. It is highest for pork and lowest for cattle. These variations reflect in part differences in marketing services performed by packers for the separate species. They do not measure or indicate in any way the relative operational efficiencies of meatpackers by species. Meatpackers normally perform on hogs a much larger share of the total marketing services than they perform on the other species. For beef and lambs, packers' functions are usually confined to slaughtering the live animals and wholesaling the dressed meat as whole, half, or quarter carcasses. In handling pork, meatpackers slaughter the hog, cut up the carcass into its component parts—hams, bacon, picnics, butts, spareribs, loins, and others—and cure, process, and package some of these pork products.

Hogs and Pork

A comparison of live and wholesale values for pork illustrates an estimated margin for the combined slaughtering, processing, and wholesaling operations. Figure 26 shows the comparison of live prices of 200–220-pound barrows and gilts at Chicago with wholesale values of pork products

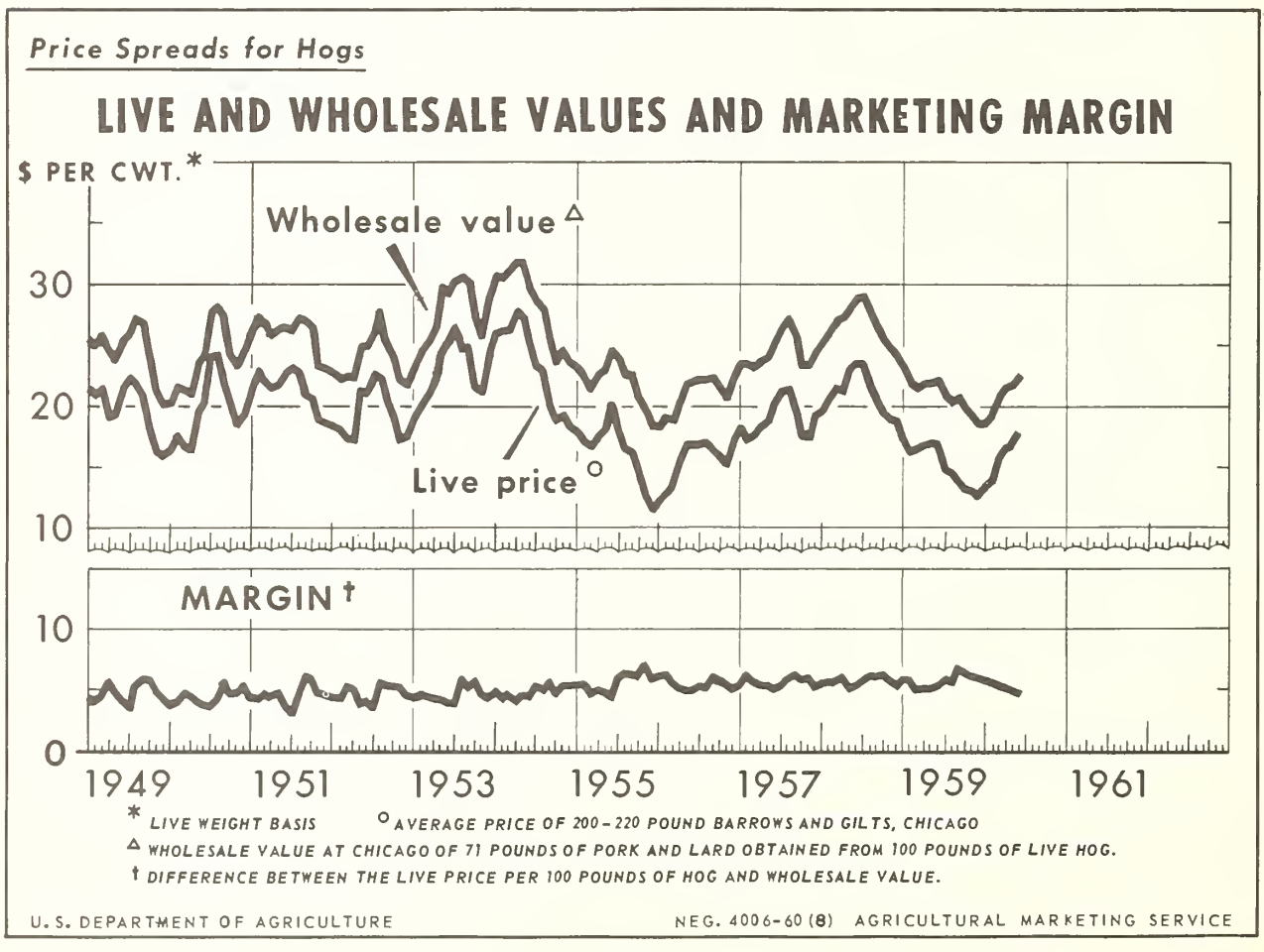

FIGURE 26.

at Chicago.[20] During the 1949–59 period, live and wholesale hog prices fluctuated sharply in response to seasonal and cyclical changes in hog marketings. They trended downward during the latter part of 1949, moved upward in 1950 but downward again in 1951. From the early part of 1952 until the spring of 1954, the trend in the wholesale value of pork was upward. Then, until the latter part of 1955, wholesale values of pork declined sharply. During this 2-year period, values declined from a high of $31.85 per hundredweight in April of 1954 to a low of $18.28 per hundredweight in January of 1956. From 1956 to mid-1958, the trend in prices was generally upward. However, wholesale values then began to drop sharply and continued to decline throughout 1959. A strong upturn followed in 1960. During the 1949–59 period, live hog prices roughly paralleled the trend in wholesale values. The most rapid drop in hog prices ever recorded in the United States for any 6-month period took place from June to December 1955. The major influence in this price decline was expanding hog production. This increase in slaughter represented a part of the expansion phase of the hog production cycle and was superimposed upon the usual seasonal increase in fall marketings.

Live-to-wholesale marketing margins during the 1949–59 period also underwent some noticeable changes. However, changes in the margins were not as large as changes in prices in terms of dollars and cents. The marketing margin on an annual basis was $1.01 per hundredweight higher in 1959 than in 1949. In 1959, the margin averaged $5.70 per hundred pounds live weight, 2 cents more than the previous record level of 1958.

Again the seasonal tendencies in margins are apparent. In many instances, packer margins were associated inversely with prices. Rising prices during the first part of the year were usually accompanied by narrower margins, while declining hog prices in the fall were associated with wider margins. Although wholesale and live prices generally followed parallel trends, they did not change by corresponding amounts. Also, changes in wholesale prices tend to lag behind the changes in live prices. Live hog prices respond rather rapidly when hog marketings either increase or decrease sharply. Changes in hog marketings are generally reflected in farm prices first and then in wholesale values. When live hog prices decline, wholesale prices often do not decline until several weeks later when packers find it difficult to move the increasing supplies of wholesale pork at previously prevailing levels of wholesale prices. After the peak of marketings is past, live hog prices strengthen rather rapidly when hog supplies begin to decrease consistently week by week. Again it is not until several weeks later that meat supplies are reduced enough to enable packers to charge appreciably higher prices for wholesale pork.

Some of these lags in changes of wholesale prices behind changes in farm prices may also result from the storing of dressed pork and the curing and processing of pork products. During the fall when relatively large quantities of pork are being stored, supplies in storage bring less immediate pressure on prices at the wholesale level than at the farm level. The movement of pork products out of storage in the spring and summer increases pork supplies at the wholesale level relative to farm marketing. These storage operations tend to reduce the fluctuations in wholesale pork supplies and wholesale prices. The fluctuations at the wholesale level are less than those at the farm level. Delays in farm marketings reaching the wholesale level also occur, because the conversion of fresh pork into cured and processed pork products requires varying periods of time. Hogs marketed at a particular time by farmers may not be available at the wholesale level until several weeks or even months later. Hence, storing operations and the curing of pork partially explain why changes in wholesale prices are usually less and tend to lag behind changes in live prices.

U.S. Choice Grade Beef

During the 1949–59 period, live prices and wholesale values of Choice grade beef varied considerably (fig. 27).[21] Live prices increased from a low level of around $25.00 per 100 pounds in 1949 to a high of about $35.00 in the spring of 1951. Live prices then declined to a low of about $22.00 in the spring of 1953. They remained fairly stable until early 1955, and declined sharply during the remainder of 1955. Then cattle prices began a general upward trend, reaching $27.62 in 1959. Wholesale prices during the entire 1949–59 period followed a pattern similar to that of live prices.

Live-to-wholesale price spreads for U.S. Choice grade beef have also varied throughout the 1949–59 period. Monthly variations in the spread ranged from a low of 63 cents per hundred pounds live weight to a high of $3.82. Although not as consistent as for hogs, the packer margin for Choice beef cattle does display some seasonal tendencies. In most years, margins were lowest either in the first or second quarter, with the low occurring in the first quarter most frequently. Seasonal highs in the margin rather consistently occurred in the third quarter. During the 1949–59 period, there does not appear to be any definite trend in the margins. The margin averaged $2.48 per 100 pounds live weight in 1959 as compared with $2.52 in 1949. On an annual basis, the spread ranged from a high of $2.94 per hundredweight in 1953 to the low of $2.14 in 1950.

[20] See appendix, table 27, p. 61, for quarterly and yearly data, 1949–1959.

[21] See appendix, table 26, p. 60, for quarterly and yearly data, 1949–1959.

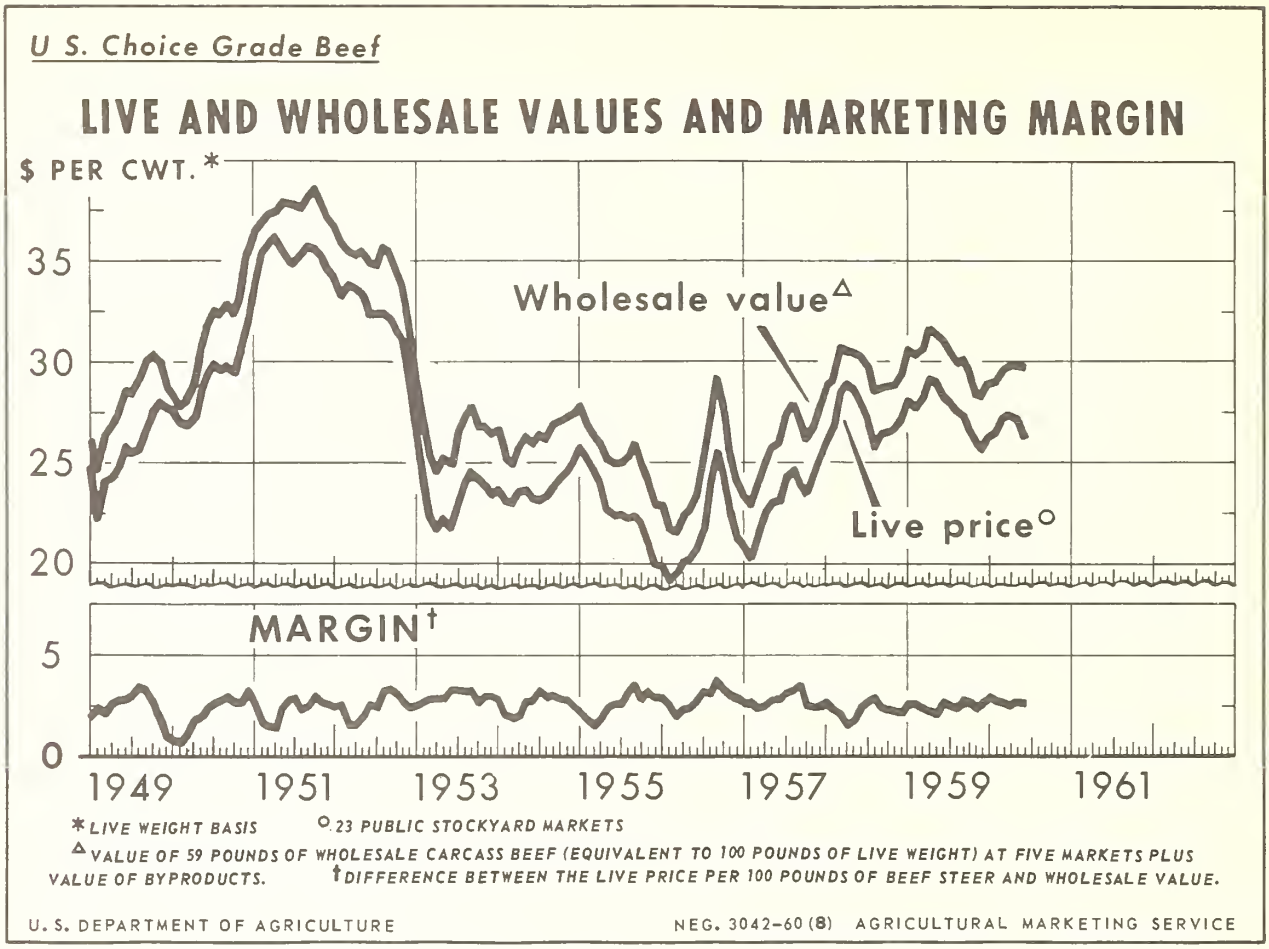

FIGURE 27.

U.S. Choice Grade Lamb

Live and wholesale prices of U.S. Choice grade lamb generally move up and down together, but not by corresponding amounts (fig. 28).[22] Live prices normally advance and decline more rapidly than do wholesale prices. Consequently, general increases in live and wholesale lamb prices, as well as seasonal advances, tend to be associated with narrowing packer-wholesaler margins, and declining live and wholesale prices are generally accompanied by a widening in the spread.

Live-to-wholesale margins for lamb have shown considerable variations during the 1949–59 period, ranging from a low of minus 38 cents per 100 pounds of live lamb in April 1951 to a high of $5.43 in September of 1953. Since 1951, except for seasonal changes, annual average margins have remained at or near $4.00 per 100 pounds live weight.

Throughout the entire period 1949–59, rather consistent seasonal patterns for live prices, wholesale values, and live-to-wholesale margins are evident. The basic sequence of spring births and summer grazing is reflected in heavy lamb marketings in the fall and relatively low supplies in the spring. For lamb, live-to-wholesale spread and production are generally directly related, while live and wholesale prices tend to be associated inversely with both the spread and lamb production. Seasonal lows in lamb production during the first part of the year are accompanied by increasing live and wholesale prices. Since live prices respond more rapidly to changes in marketings than do wholesale prices, margins are squeezed during the spring. Similarly, increased marketings and seasonal declines in live and wholesale prices during the fall are usually accompanied by seasonal increases in the live-to-wholesale margins.

Gross Margins and Profits in Meatpacking

From 1947 to 1958, gross margins in the meatpacking industry increased from 19.4 percent to 24.4 percent of sales (table 15). Gross margins in 1958 were down 4.5 percentage points from the

[22] See appendix, table 28, p. 62, for quarterly and yearly data, 1949–59.

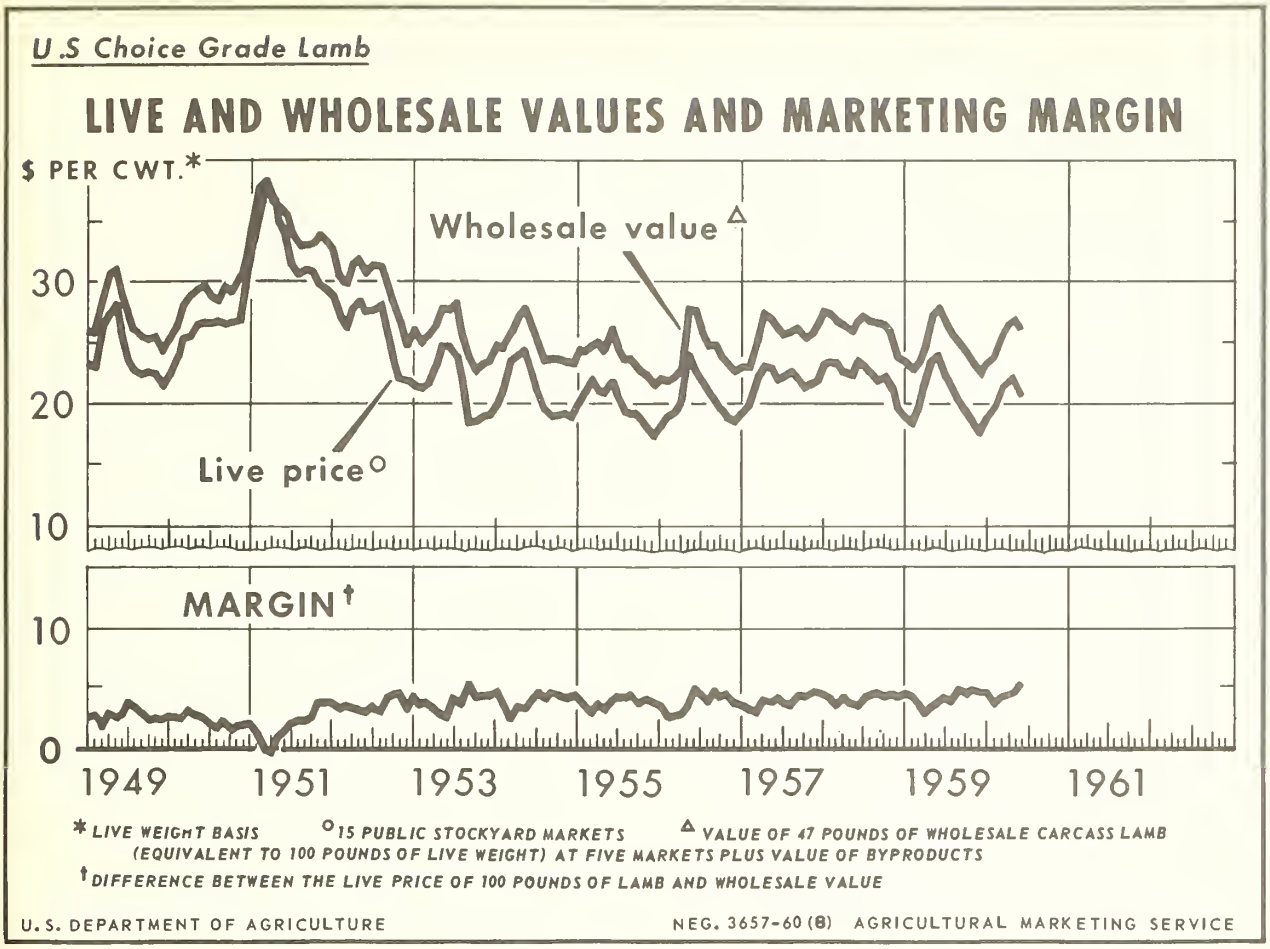

FIGURE 28.

TABLE 15.—*Costs and earnings of the meatpacking industry as a percentage of sales, 1947 and 1951–58*

Item	Fiscal years (beginning Nov. 1 for most companies)								
	1947	1951	1952	1953	1954	1955	1956	1957	1958
	Percent	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Total sales	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0	100. 0
Cost of livestock and other raw materials	80. 6	79. 6	78. 0	75. 8	75. 8	72. 9	71. 1	73. 6	75. 6
Gross margin	19. 4	20. 4	22. 0	24. 2	24. 2	27. 1	28. 9	26. 4	24. 4
Operating expenses:									
Wages and salaries	9. 0	9. 8	10. 9	11. 8	12. 0	13. 0	13. 8	13. 0	12. 0
Supplies and containers	2. 8	3. 5	3. 8	3. 9	4. 0	4. 2	4. 5	4. 1	3. 8
Transportation	1. 8	2. 0	2. 3	2. 6	2. 6	2. 6	2. 8	2. 6	2. 3
Taxes	1. 4	1. 1	1. 0	1. 2	1. 0	1. 5	1. 6	1. 1	1. 1
Depreciation	. 4	. 5	. 5	. 6	. 6	. 7	. 7	. 7	. 7
Interest	. 1	. 2	. 2	. 2	. 2	. 2	. 2	. 2	. 2
Administration and other expenses	2. 4	2. 6	2. 8	3. 1	3. 3	4. 0	4. 3	4. 0	3. 7
Total expenses	17. 9	19. 7	21. 5	23. 4	23. 7	26. 2	27. 9	25. 7	23. 8
Total earnings	1. 5	. 7	. 5	. 8	. 4	. 9	1. 0	. 7	. 6

Source: *Financial Facts About the Meat Packing Industry 1958*, Department of Marketing, American Meat Institute, Chicago, July 1959.

peak 1956 level, primarily because of higher average prices paid for livestock. The percentage increase in gross margins, particularly from 1951 to 1956, reflects both increased unit costs and lower average prices paid for livestock and other raw materials. From 1951 to 1956, the total cost of livestock and other raw materials purchased by packers decreased 18 percent, while the total volume of meat animals processed by the meatpacking industry increased by nearly one-third.

During the period 1951–58, about 75 cents of each dollar of packer-wholesaler sales was paid for livestock and other raw materials (table 16). The remaining 25 cents comprised the meatpackers' gross margin. Of the packer's gross margin, nearly half was accounted for by wages and salaries. Supplies and containers took up about 16 percent, transportation 10 percent, and taxes 5 percent. About 3 percent of the gross margin was net earnings. Interest, depreciation, and other expenses accounted for the remainder.

TABLE 16.—*Distribution of meatpacking industry's sales dollar, 1951–58*

Item	Percentage of sales	Percentage of packer's gross margin
	Percent	*Percent*
Total sales	100. 0	
Cost of livestock and other materials	75. 4	
Gross margin	24. 6	100. 0
Operating expenses:		
Wages and salaries	12. 0	48. 8
Supplies and containers	3. 9	16. 1
Transportation	2. 5	10. 1
Taxes	1. 2	4. 8
Depreciation	. 6	2. 5
Interest	. 2	. 8
All other expenses	3. 5	14. 1
Total expenses	23. 9	97. 2
Total net earnings	. 7	2. 8

Source: Compiled from *Financial Facts About the Meat Packing Industry*, 1958, Department of Marketing, American Meat Institute, Chicago, July 1959.

Several acceptable methods may be used in measuring profits, but perhaps the two most common methods employed are the ratio of profits per dollar of sales and profits as a percentage of net worth or stockholders' equity.[23] Profits per dollar of sales indicate the relative importance of profits in wholesale prices of meats. However, return on investment may be a more satisfactory measure of profitability, as rate of turnover needs to be taken into account. Yields on investments in firms with low rates of profit per sales dollar may be as high as returns from firms with higher rates per sales dollar, if the low profit rates on sales are accompanied by a relatively high-valued product with a rapid turnover.

Irrespective of the particular statistical method utilized in comparing meatpackers' profits with those of other industries, the answer is the same. Generally, profits in food processing industries are low in relation to those in manufacturing industries as a group, and meatpackers' profits are usually low compared with those of other food processing companies (table 17). During the 1947–58 period, net profits as a percentage of sales for meatpackers ranged from 0.3 to 1.4 percent and averaged only 0.7 percent. Over the 12-year period, average returns of 35 other food processing companies were nearly five times those for meatpacking. Net profits as a percentage of sales for wholesale food distributors and retail food chains also exceeded those of meatpackers. Meatpackers' net profits as a percentage of stockholders' equity also rank low compared with other food processing companies, wholesale food distributors, and retail food chains (table 18).[24]

Not only are profits in meatpacking relatively low, compared with those in other industries, but they also tend to be more variable. During the 1947–58 period, profit rates per dollar of sales in meatpacking fluctuated widely from year to year. Variations in profits for other food processors during the period were considerably less than those for meatpackers.

Financial data on meatpacking in the foregoing discussion are on a total company basis and include information on a number of nonmeat operations conducted by many of the meatpackers. Consequently, profit figures are not confined to the meatpacking phase of packers' operations.

[23] Stockholders' equity is excess of total balance sheet assets over liabilities.

[24] The size of profits is not necessarily a measure of efficiency. High profits do not indicate that firms are efficient, and low profits do not indicate that a good job is not being done in moving product at minimum cost.

TABLE 17.—*Net profits (after provision for taxes) as a percentage of sales, leading food companies, 1947–58* [1]

Year	Food processing companies			Five wholesale food distributors	Eight retail food chains
	Eleven meatpackers	Thirty-five other food processing companies	Forty-six companies combined		
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
1947	1. 4	3. 9	2. 6	1. 8	1. 4
1948	. 6	3. 8	2. 2	1. 8	1. 3
1949	. 5	3. 9	2. 1	1. 5	1. 4
1950	. 8	4. 2	2. 5	1. 2	1. 3
1951	. 6	2. 8	1. 7	1. 1	. 9
1952	. 4	2. 8	1. 6	. 7	. 8
1953	. 8	2. 8	1. 9	1. 0	1. 0
1954	. 3	3. 1	1. 8	1. 0	1 0
1955	. 8	3. 2	2. 2	. 9	1. 0
1956	. 8	3. 1	2. 2	1. 0	1. 1
1957	. 5	3. 2	2. 1	. 9	1. 2
1958	. 5	3. 4	2. 2	1. 2	1. 2
1947–58 average	. 7	3. 3	2. 1	1. 1	1. 1

[1] Includes 7 baking companies, 4 grain mill products companies, 4 canning companies, 10 dairy products companies, and 10 miscellaneous food companies (miscellaneous companies include sugar and corn refining companies, processors of vegetable oils, and companies manufacturing a wide variety of packaged foods).

Source: Compiled from financial statements reported in "Moody's Industrials."

TABLE 18.—*Net profits (less provision for taxes on income) as percentage of stockholder's equity, leading food companies, 1947–58* [1]

Year	Food processing companies			Five wholesale food distributors	Eight retail food chains
	Eleven meatpackers	Forty other food processing companies	Fifty-one companies combined		
	Percent	*Percent*	*Percent*	*Percent*	*Percent*
1947	12. 6	14. 4	13. 9	18. 8	17. 8
1948	5. 6	13. 5	11. 3	16. 0	16. 2
1949	3. 7	12. 3	9. 9	12. 5	15. 7
1950	5. 9	13. 5	11. 5	10. 0	14. 0
1951	5. 0	9. 7	8. 5	9. 4	10. 1
1952	3. 7	9. 8	8. 2	5. 8	10. 0
1953	6. 6	10. 0	9. 2	7. 6	11. 4
1954	2. 7	10. 9	8. 9	7. 5	11. 3
1955	6. 5	11. 2	10. 1	6. 7	11. 2
1956	6. 9	11. 1	10. 2	7. 6	13. 1
1957	3. 9	11. 0	9. 5	7. 6	14. 2
1958	4. 2	11. 7	10. 2	9. 7	13. 8
1947–58 average	5. 5	11. 5	10. 0	9. 2	13. 0

[1] Includes 8 baking companies, 7 grain mill products companies, 5 canning companies, 10 dairy products companies, and 10 miscellaneous food companies (miscellaneous companies include sugar and corn refining companies, processors of vegetable oils, and companies manufacturing a wide variety of packaged foods).

Source: Compiled from financial statements reported in "Moody's Industrials."

Costs and Margins for Retailing Meat

Meat and meat products account for a relatively high proportion of family food expenditures (25 to 30 percent). Meat departments that offer similar qualities of meats at only slightly lower prices than their competitors can usually induce some customers to patronize their stores and hence gain volume at the expense of their competitors.

Retailers often ignore small wholesale price changes in setting their meat prices until definite trends in wholesale prices have been established. Once clear-cut trends in wholesale prices are observed, retailers adjust their prices, generally by much larger amounts than wholesalers. Such practices by retailers tend to result in alternate widening and narrowing of retail margins.

There are several reasons why retailers change their prices less frequently and usually by larger amounts than do wholesalers. The primary reason retailers are reluctant to adjust their prices upward is the probability that such an adjustment will reduce their volume of sales significantly. Obviously, the practice of maintaining a given level of retail prices, when wholesale prices are advancing, results in a narrowing of the retail margin. However, retailers who hold the line on retail prices, while their competitors adjust their prices upward, may gain enough additional volume to more than offset the effects of lower per unit margins on net income.

Of course, during periods of declining wholesale prices, there is little immediate economic incentive for retailers to lower their prices. Such periods are usually associated with a widening of the margin and retailers who have maintained their retail prices during a period of narrowing margins would be inclined to regain what they believed to be a proper margin. However, retailers are usually reluctant to lower prices during periods of declining wholesale prices until competition from other retailers eventually compels price adjustments.

Other factors which contribute to infrequent price changes by retailers include their procurement and inventory policies. In many instances, retailing organizations procure large quantities of meat on a forward purchase basis. Retailers may purchase several carloads of meat at a given wholesale price with the stipulation that it be delivered over a period of several days. In such cases, fluctuations in wholesale prices between the purchase and delivery dates would not be a major factor to consider when making a decision to adjust retail prices. Moreover, many large-volume retail outlets own and operate their own warehouses where meat and meat product inventories are maintained. Some of these retail organizations may elect to ride out short-term wholesale price changes by adjusting inventories rather than changing retail prices.

Since the dominant type of retail meat outlet is the combination grocery and meat market, decisions concerned with retail price adjustments for meat must be considered in terms of their effects on returns for the entire store. Failure to change retail meat prices in response to changes in wholesale prices may have less effect on net returns for a store where meat sales account for a relatively small proportion of their total sales than for a store where meat sales make up a larger share of sales.

Another deterrent to retail price adjustments is the cost associated with such a price change. This would include the clerical costs involved in the calculation, preparation, and issuance of new price lists to individual stores, labor costs in the actual changing of price tags on individual meat items, and perhaps some other cost items.

Pork

A comparison of the United States average retail price per pound of fresh and cured pork products (excluding lard and byproducts) with the price of an equivalent quantity of wholesale cuts at Chicago provides some important insights on retail margins for pork (fig. 29).[25] Throughout the 1949–1959 period, retail and wholesale prices of pork generally followed similar seasonal and cyclical patterns, and the effects of variations in the supply of pork on these prices are clearly indicated. Comparisons of retail and wholesale pork prices reveal two important relationships among prices and the margin during this period: (1) Distinct seasonal tendencies in wholesale prices, retail prices, and the margin for pork, and (2) changes in retail pork prices that tended to lag behind changes in wholesale prices during short periods when prices were changing rapidly.

Seasonalities in the wholesale-to-retail margin for pork are quite evident. Both wholesale and retail pork prices usually advance during the spring and summer when hog marketings are declining. Prices decline during the fall in response to increased hog marketings. Although the movements in retail and wholesale values of pork generally parallel each other, wholesale

[25] See appendix, table 30, p. 64, for quarterly and yearly data, 1949–1959.

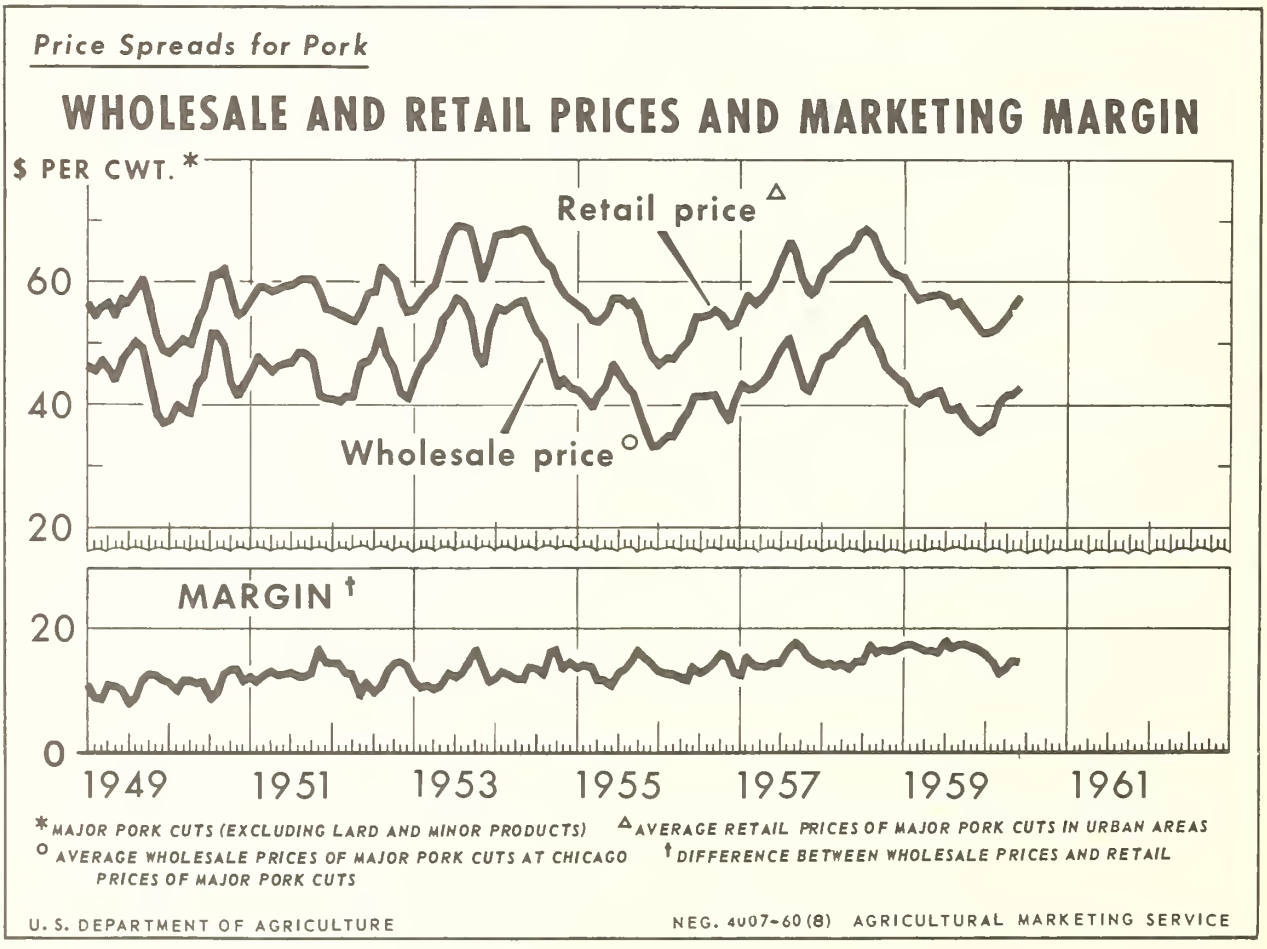

FIGURE 29.

prices tend to respond more quickly than do retail prices to short-time changes in hog marketings. These lags in retail pork prices behind changes in wholesale prices result in erratic month-to-month fluctuations in retail margins. Retail margins usually tend to narrow during periods when wholesale and retail prices are increasing, and to widen during periods of declining retail and wholesale prices.

U.S. Choice Grade Beef

During the 1949–59 period, retail values and wholesale prices per 100 pounds of Choice grade carcass beef varied considerably (fig. 30).[26] Composite retail values increased from a record low of $48.64 per 100 pounds (carcass weight basis) in February of 1949 to a high of $71.20 in November of 1951. Retail prices trended downward from this high level and in March of 1956 equaled the previous low of $48.64 per 100 pounds.

[26] See appendix, table 29, p. 63, for quarterly and yearly data, 1949–1959.

Beginning in April 1956, retail beef prices trended upward. The most rapid decline in retail values during the 1949–59 period took place between September 1952 and March 1953, when prices dropped about $16.00 per 100 pounds. Over this period, trends in wholesale prices of carcass beef generally paralleled those for retail prices. Wholesale prices varied from a high of $58.50 per 100 pounds of beef carcass in October 1951 to a low of $33.18 in March of 1956, a range of $25.32. Wholesale beef prices during this period were somewhat more variable than retail prices.

The wholesale-to-retail margin also fluctuated from 1949 to 1959. However, the dollars-and-cents variation in the margin was only about one-third the variation observed in the retail and wholesale prices. In 1949, retail margins averaged near $12.00 per 100 pounds carcass weight. They increased to about $14.00 in 1952 and remained at about this level through 1955. Beginning in 1956, the trend in the margin moved upward again reaching an alltime high of $21.52 in November 1959. As was true of pork, there

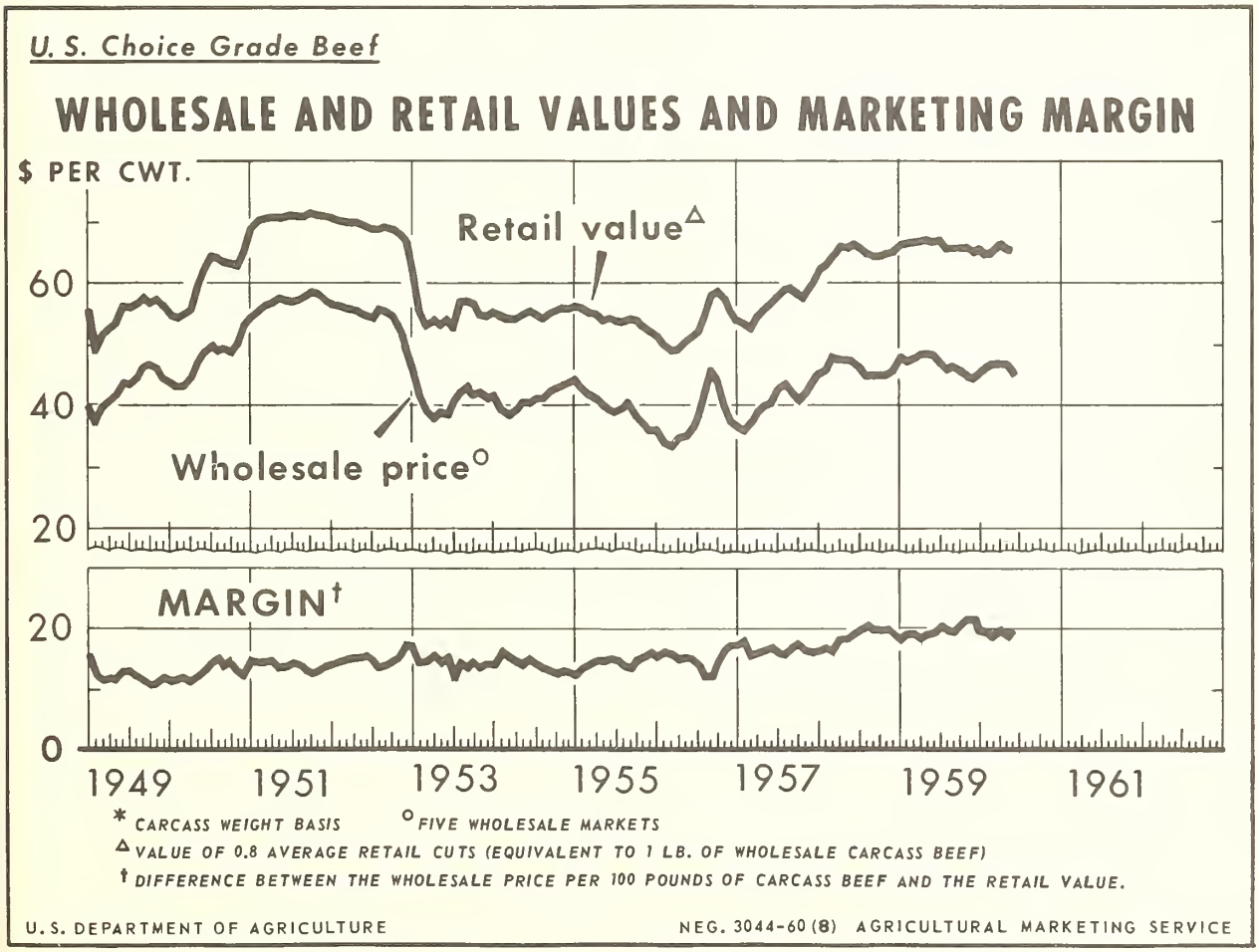

FIGURE 30.

was a tendency for adjustments in retail beef prices to lag behind adjustments in wholesale prices, resulting in some erratic month-to-month changes in the margin. As wholesale prices usually change faster than do retail prices, the direction of movement in the retail margin is often opposite that of wholesale and retail prices. Consequently, during periods of increasing wholesale and retail prices, retail margins are squeezed, while declining retail and wholesale prices are often associated with widening margins.

U.S. Choice Grade Lamb

During the 1949–59 period, retail and wholesale prices per 100 pounds carcass weight of U.S. Choice grade lamb followed the same general pattern (fig. 31).[27] Both price series normally advance during the spring and early summer and decline in the late summer and fall. Over the 11-year period, the range in price variation was slightly larger for wholesale prices than for retail prices. The retail margin for lamb has gradually widened, increasing from an annual average of $12.76 in 1949 to $19.34 in 1959, an increase of $6.58 per 100 pounds. Seasonally, there was a tendency for margins to decline during the first part of the year and to increase in the spring and early summer.

While the packer-wholesaler margin (wholesale weight basis) for pork exceeded the margin for beef and lamb, the retail margin (retail weight basis) for pork was less than for either beef or lamb. For the period 1949 through 1959, retail margins averaged $1.66 per 100 pounds higher for beef than for pork, while lamb margins averaged $2.03 higher than those for pork. These differences in retail margins among species reflect in part the different services performed by retailers for the various species.

The pork carcass is cut at the packer level and most of the retail cuts of pork are sold in the same form at retail as at wholesale. Retailers buy pork products such as hams, Boston butts, picnics, sliced bacon, and sausage, which require little or

[27] See appendix, table 31, p. 65, for quarterly and yearly data, 1949–1959.

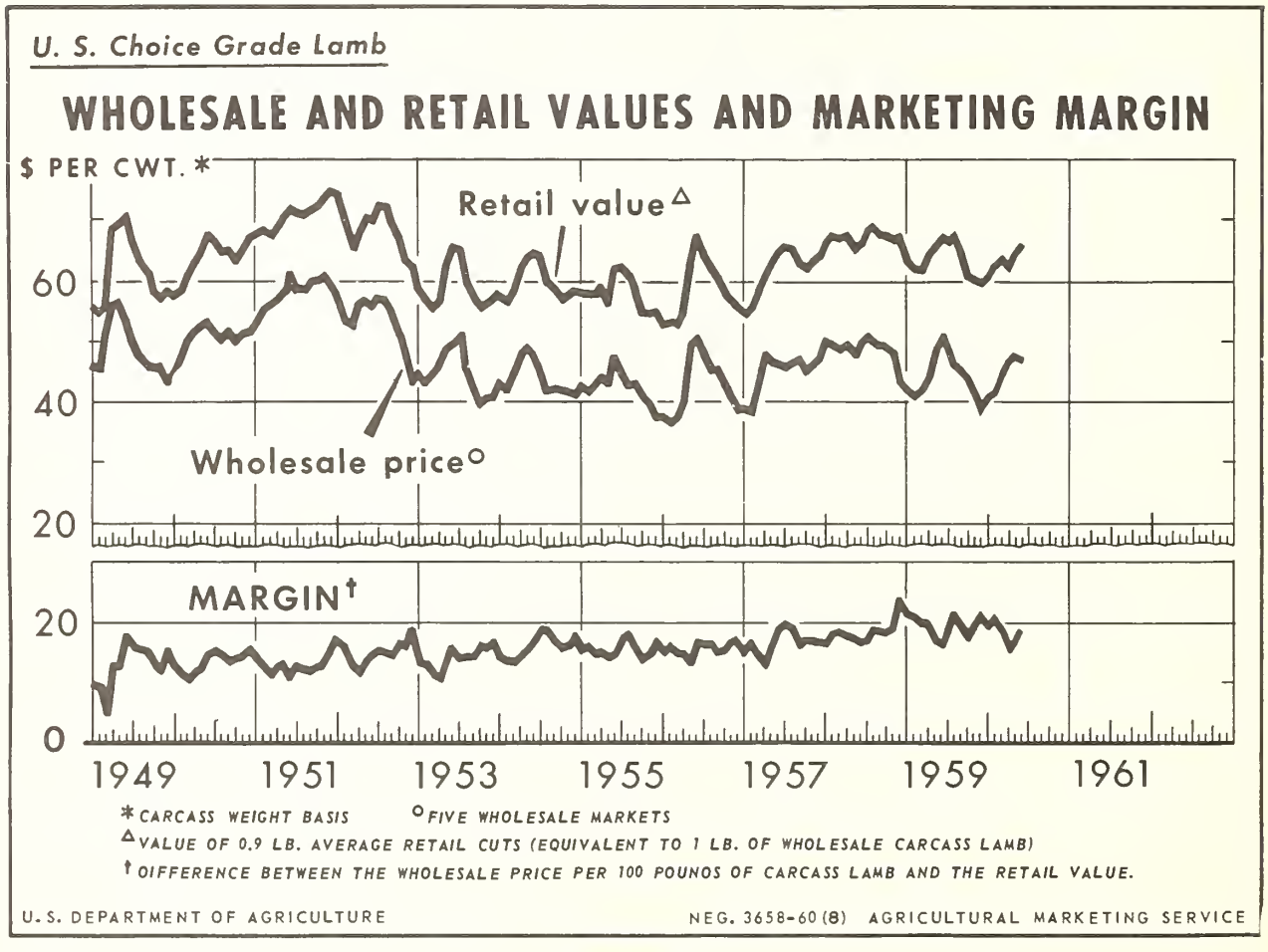

FIGURE 31.

no cutting and trimming before they are suitable for the retail trade. Most of the cutting, curing, and processing of pork is performed by the packer or wholesaler and results in a higher packer-wholesaler margin for pork than for either beef or lamb. In contrast, retailers purchase beef and lamb either as whole carcasses, halves, or quarters, and break them into the various retail cuts. Hence, more labor is required by retailers to convert beef and lamb from their normal wholesale form into cuts suitable for the retail trade than is required for pork. This additional labor results in added expense to retailers and hence wider retail margins for beef and lamb compared with pork.

Retailing

Historically, those agencies performing the retail function for livestock, meat, and meat products have absorbed nearly half of the total marketing margin. The retailer's function is to provide meat, a highly perishable product, to consumers in the best condition possible at the time and place desired.

The retailer has the task of accurately interpreting consumers' preferences for the various kinds and qualities of meat and transmitting these preferences back toward the processor and producer. His effectiveness in performing this function determines, to a large extent, how well the shopper's dollar votes are relayed back to processors and producers to encourage the production of the types of livestock and meat products most desired.

Retailers generally buy wholesale carcasses and cuts of the different species from packers and wholesalers, and fabricate them into various retail cuts. From pork, they cut and trim chops and roasts. In handling beef, retailers trim off excess fat, bone some cuts for roasts and stew beef, and grind parts of the carcass into hamburger. The margin for retailing covers these services performed by the retailer, as well as an allowance for losses in weight of the product due to waste from cutting, trimming, and boning, and to shrinkage. The loss in weight from trimming is greater for beef than for pork and lamb, primarily because more boned cuts are produced. The loss in weight at retail from cutting and trimming is less for pork than for beef and lamb, since most of these operations for pork are performed at the packer-wholesaler level.

Many different retail cuts are obtained from pork, beef, and lamb carcasses and they sell at widely different prices (figs. 32, 33, and 34). For each of the species, the more "desirable" and higher priced cuts represent a small proportion of the total carcass. Prices of different retail cuts of each of the species vary considerably. Some of these cuts sell at prices per retail pound which are less than half of the prices paid per pound for the carcasses at wholesale. Other cuts sell at prices which are more than double the carcass price per pound (table 19).

TABLE 19.—*Retail price per pound and retail value of 100 pounds of carcass meat, by species and by specified cuts* [1]

Item	Percentage of carcass	Price per pound	Value
	Percent	*Cents*	*Dollars*
U.S. Choice grade beef:			
Retail cuts:			
Steak:			
Porterhouse, T-bone and club	6	143	8.58
Sirloin	8	115	9.20
Round	10	102	10.20
Roast:			
Rib	8	86	6.88
Rump	5	79	3.95
Chuck	19	57–81	[2] 12.54
Hamburger, stew and other cuts	24	38–112	[2] 15.60
Total or average	80	84	66.95
Bones, fat, waste and shrink	20	½–3	[2] .34
Grand total or average	100	67	67.29
U.S. Choice grade lamb:			
Retail cuts:			
Steaks and chops:			
Rib chops	7	129	9.03
Loin chops	9	149	13.41
Roasts and other cuts:			
Leg—whole or half	29	81	23.49
Shoulder, square cut	23	61	14.03
Breast and flank	16	19	3.04
Neck, bone-in	3	31	.93
Shank, bone-in	3	45	1.35
Subtotal of retail cuts	90	73	65.28
Bones, fat, waste, and shrink	10	½	.05
Grand total or average	100	65	65.33
Major pork cuts: [3]			
Retail Cuts:			
Ham:			
Butt ends	7	77	5.39
Shank ends	11	70	7.70
Center slices	4	126	5.04
Loin:			
Center-cut chops	8	102	8.16
Loin-end roasts	4	61	2.44
Rib-end roasts	5	70	3.50
Sliced bacon	19	89	16.91
Spareribs	2	69	1.38
Butts	10	65	6.50
Picnics	13	45	5.85
Bacon squares	2	49	.98
Subtotal of retail cuts	85	75	63.85
Sausage	8	59	4.72
Bones, waste, and shrink	7	----	----
Grand total or average	100	68	68.57

[1] This table illustrates the differences in prices for various retail cuts of beef, lamb, and pork for a single group of food stores in a major U.S. city in July 1958.
[2] Weighted average price was used in computing dollar values.
[3] Excludes lard.

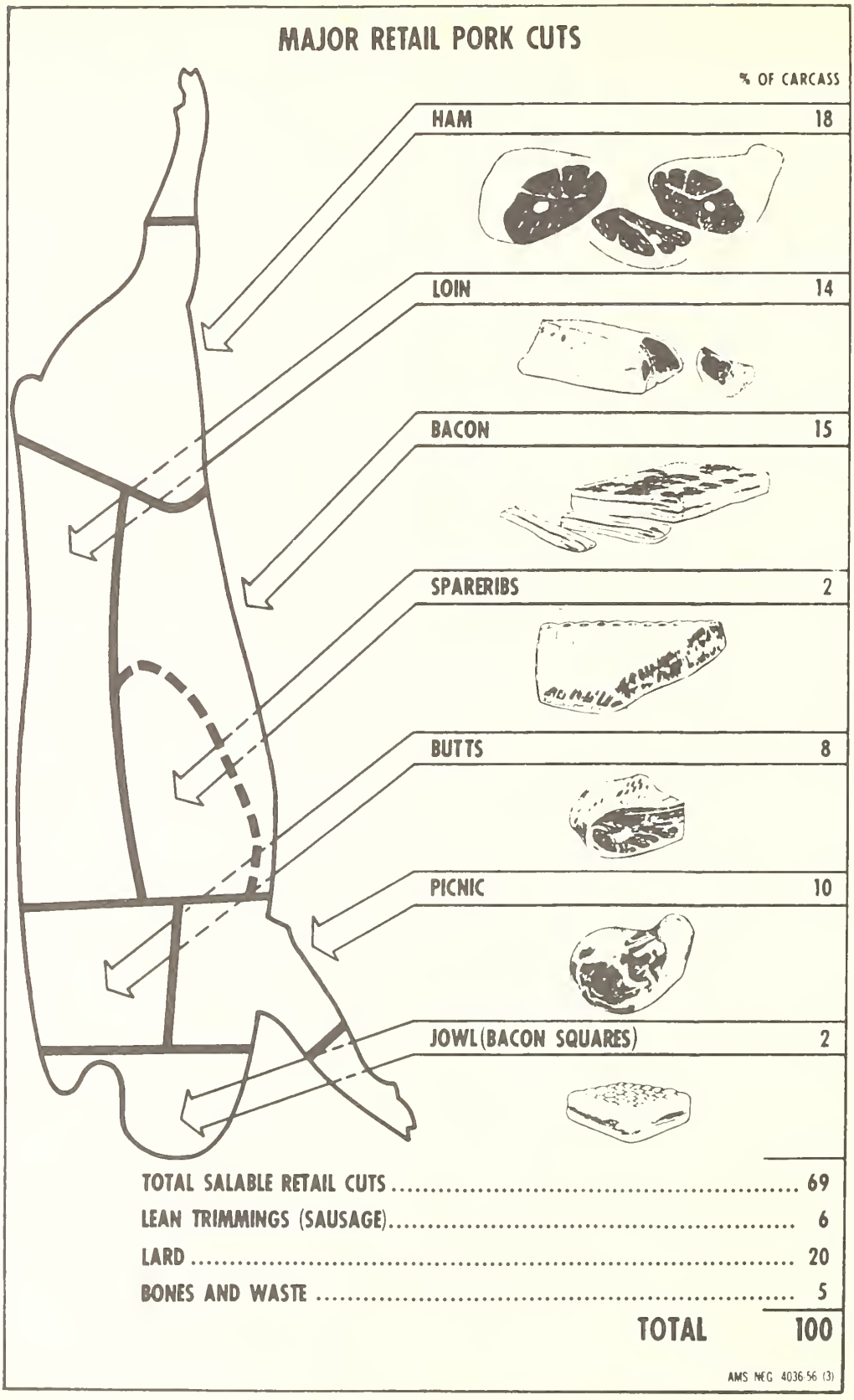
MAJOR RETAIL PORK CUTS
% OF CARCASS
HAM 18
LOIN 14
BACON 15
SPARERIBS 2
BUTTS 8
PICNIC 10
JOWL (BACON SQUARES) 2
TOTAL SALABLE RETAIL CUTS 69
LEAN TRIMMINGS (SAUSAGE) 6
LARD 20
BONES AND WASTE 5
TOTAL 100
AMS NEG 4036-56 (3)

FIGURE 32.

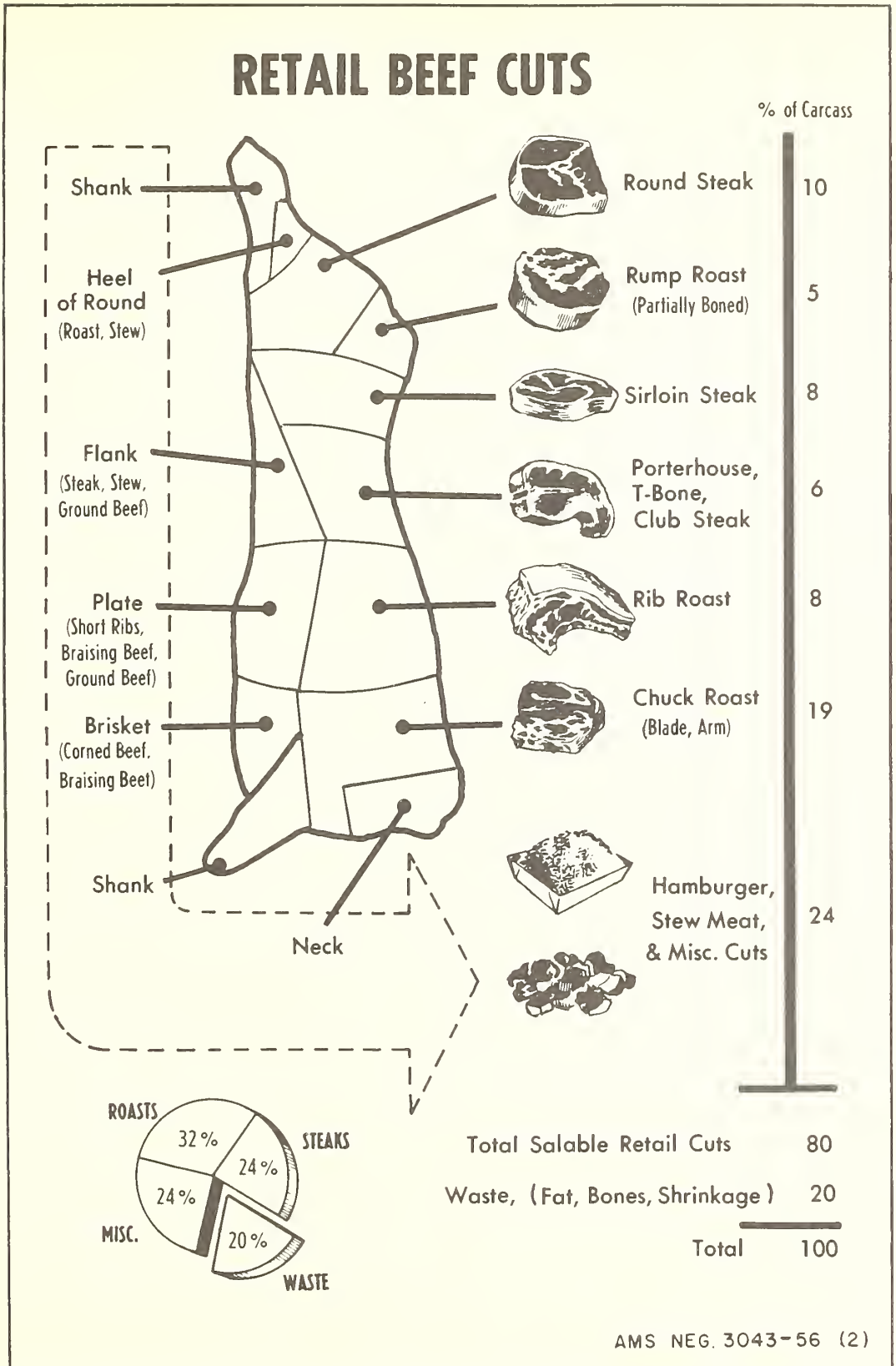
RETAIL BEEF CUTS
% of Carcass
Shank
Heel of Round (Roast, Stew)
Flank (Steak, Stew, Ground Beef)
Plate (Short Ribs, Braising Beef, Ground Beef)
Brisket (Corned Beef, Braising Beef)
Shank
Neck
Round Steak 10
Rump Roast (Partially Boned) 5
Sirloin Steak 8
Porterhouse, T-Bone, Club Steak 6
Rib Roast 8
Chuck Roast (Blade, Arm) 19
Hamburger, Stew Meat, & Misc. Cuts 24
ROASTS 32%
STEAKS 24%
MISC. 24%
WASTE 20%
Total Salable Retail Cuts 80
Waste, (Fat, Bones, Shrinkage) 20
Total 100
AMS NEG. 3043-56 (2)

FIGURE 33.

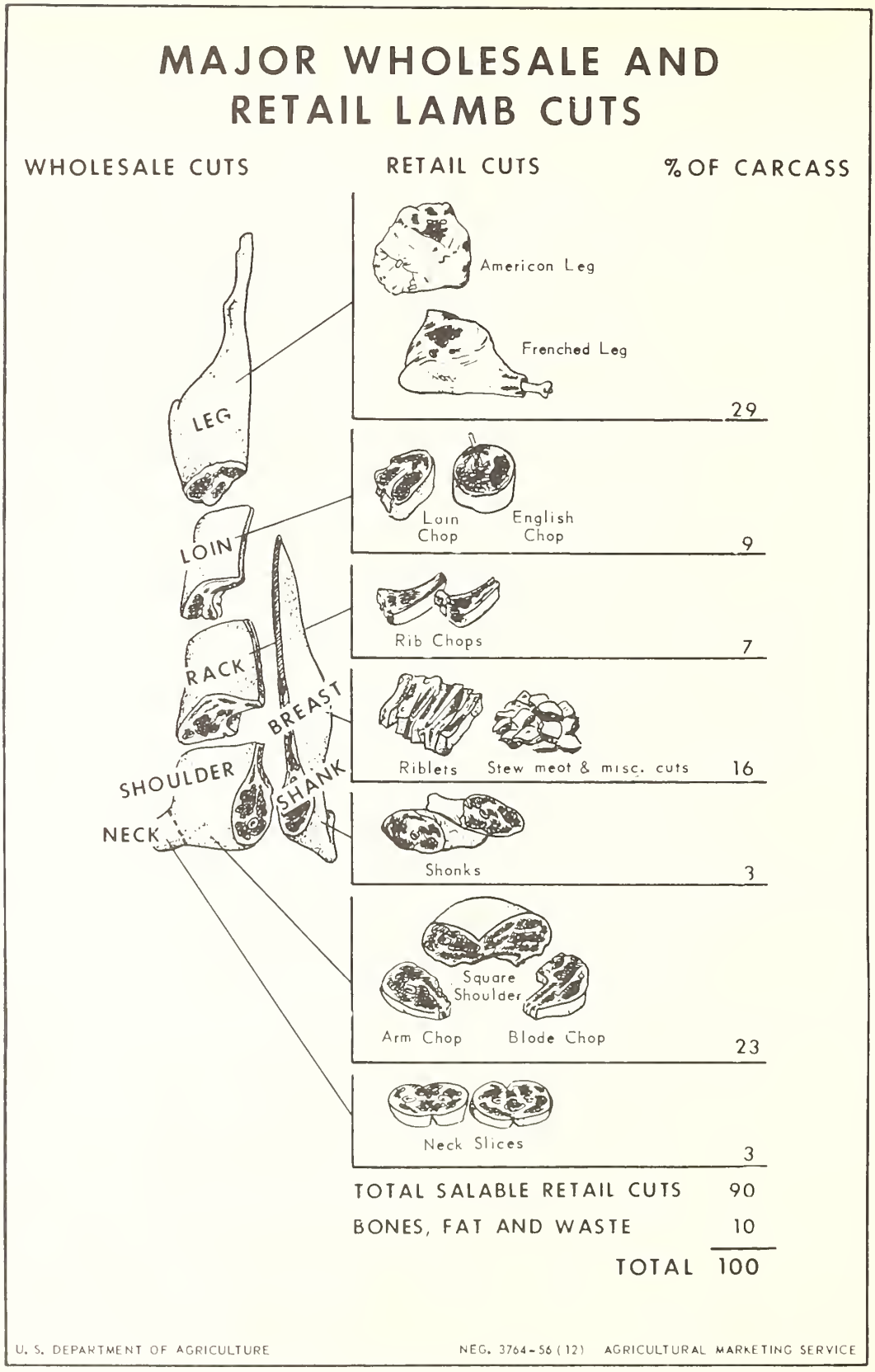
MAJOR WHOLESALE AND RETAIL LAMB CUTS
WHOLESALE CUTS
RETAIL CUTS
% OF CARCASS
LEG
LOIN
RACK
BREAST
SHOULDER
SHANK
NECK
American Leg
Frenched Leg
29
Loin Chop
English Chop
9
Rib Chops
7
Riblets
Stew meat & misc. cuts
16
Shonks
3
Square Shoulder
Arm Chop
Blade Chop
23
Neck Slices
3
TOTAL SALABLE RETAIL CUTS 90
BONES, FAT AND WASTE 10
TOTAL 100
U. S. DEPARTMENT OF AGRICULTURE
NEG. 3764-56 (12) AGRICULTURAL MARKETING SERVICE

FIGURE 34.

One of the most important developments in retailing of meat in recent years has been the trend toward self-service operations.[28] The growth of self-service meat departments in retail grocery outlets has increased tremendously since its beginning during the early 1940's. The rapid growth in supermarkets, together with the increase in average volume per store, has contributed to this trend. These changes have led to more efficient utilization of labor and equipment in retail stores. Since the advent of self-service, retailers have found that they are able to stock a greater variety of meat. This means that consumers have a greater variety of meat cuts available to them. They also have more food services available in the form of an increased number of products such as boned, trimmed, and defatted cuts.

In 1944, only 10 self-service meat departments in retail grocery stores in the United States had been reported (*1*). By mid-1948, retail stores with self-service meat departments had increased to 178. The number of stores with 100 percent self-service meat departments increased from 7,800 in 1952 to 11,500 in 1954, and by 1956 the number had climbed to 17,350 stores.

At the beginning of 1959, an estimated 20,000 chain and independent stores had 100 percent self-service meat departments (*10*). These stores accounted for nearly 50 percent of total meat sales in the nation's grocery and combination stores. Most of these stores, however, are in the supermarket category ($375,000 and over per year), although there has been a steady increase in the number of superettes ($75,000–$375,000 per year) selling meats self-service. A much higher proportion of chainstores had self-service meat departments than of independent stores.

Shifts to self-service meat departments probably have resulted in lower average costs in retailing meats. Most of this reduction has been due to increased volume associated with large-volume food store operations rather than to differences in retail costs between self-service and salesman-service meat departments. Based on data of a regional study, cost of labor and rent was nearly 10 cents a pound for stores with meat sales of less than $750 a week and only 5 cents a pound for stores with meat sales of $2,500 or more a week (*6*).

A study of the relative efficiency of salesman service and self service in retail meat departments in Iowa indicates that labor, paper supplies, floor space, and investment in equipment make up about 80 to 85 percent of total meat selling cost. Labor costs were less in self-service departments; paper supplies and investment in equipment averaged higher for self-service departments; and there was no significant difference between the amount of floor space used by the two methods. When these four factors were combined, however, it was found that at any given volume of sales the average costs of salesman service and self service were not significantly different (*12*).

The pricing of retail cuts of meat is probably the most complex phase of meat retailing. Many retailers follow several methods or combinations of methods in pricing. The percentage markup over cost is a common method used. This particular method was used most by retailers covered in a North Central study (*6*). The average gross margin received by retailers for meat items was about 21 percent. The 21 percent figure is an attempted gross retailing margin and is not a realized gross margin. Most retailers selling fresh meats did not know the gross margin actually realized from their meat department operations. The attempted gross margin represented the maximum gross margin which a retailer could obtain under a given set of price conditions. In many instances, the realized gross margin was considerably less than attempted gross margin. Retailers, on the average, attempted to obtain a 22 percent margin for beef, fresh pork, and fish; about 23 percent for veal and lamb; and 26 percent for variety meats. The gross margin attempted by independent stores and those in voluntary chains was slightly higher than for chainstores (table 20).

On the basis of data for 85 selected stores in 3 cities, the average cost of retailing meat in 1950 was estimated at 10 cents per pound wholesale weight (table 21). Wages and salaries comprised about two-thirds of the total cost of retailing meat. Rent was the next highest single cost item, accounting for about 8 percent of total operating cost. The remainder covered payments for lights, heat, and power, licenses and insurance, depreciation of equipment, including delivery trucks, containers and wrapping supplies, maintenance, advertising, and other miscellaneous items (*5*).

The levels of various cost elements in retailing meat do not in themselves indicate the relative efficiencies in meat retailing operations. However, they may indicate where cost reductions are possible. On the other hand, varying magnitudes of cost for retailing meat may in part reflect consumer demand for more and more of different services with their food purchases. If consumers consider these costs for retailing meat to be unusually high, pressure may be exerted on the marketing system to expand its efforts to improve efficiency in marketing livestock and meat. Retail operations, however, should be expected to

[28] Self-service retailing provides the shopper with direct access to cuts of meat and meat products of consumer sizes, wrapped in transparent film, and displayed in open-top refrigerated cases. The shopper makes a selection directly from the case.

encompass more than the performance of various marketing services at a relatively low cost. They should be so organized that consumers' tastes and preferences are transmitted promptly and accurately back to processors and producers to encourage the production of the kinds of livestock and qualities of meat to give maximum consumer satisfaction.

TABLE 20.—*Percentage gross retail margin attempted for specified classes of meat, by type of store and volume of sales, 1,351 stores, North Central States, May 1953* [1]

Type of store and volume of meat sales	Class of meat								
	Beef	Pork	Veal	Lamb	Sausage meats	Variety	Poultry	Fish	Average for meat dept.[5]
Independent:	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*	*Percent*
Less than $750	22. 0	21. 5	21. 8	22. 2	26. 7	25. 0	18. 7	21. 9	21. 1
$750–$2,499	22. 7	22. 4	23. 6	24. 1	29. 4	26. 7	19. 5	22. 4	21. 5
$2,500 and over	20. 8	21. 6	22. 6	22. 4	29. 2	27. 4	18. 7	23. 4	20. 8
Average [2]	22. 2	21. 7	22. 6	23. 1	27. 4	25. 7	18. 9	22. 2	21. 2
Voluntary chain:									
Less than $750	22. 1	21. 3	23. 3	23. 1	28. 8	25. 7	18. 4	22. 5	21. 0
$750–$2,499	22. 3	21. 7	23. 1	24. 1	30. 4	26. 6	17. 5	22. 3	21. 5
$2,500 and over	20. 2	22. 2	21. 8	20. 5	28. 2	26. 5	17. 1	23. 7	19. 3
Average [2]	22. 0	21. 6	22. 4	23. 0	29. 3	26. 2	17. 8	22. 6	21. 2
Chain:									
Less than $750	21. 2	20. 9	21. 2	18. 0	23. 0	24. 1	17. 6	23. 4	19. 2
$750–$2,499	18. 9	19. 5	21. 1	20. 0	24. 3	24. 5	16. 2	21. 7	18. 4
$2,500 and over	18. 1	19. 8	20. 7	20. 3	25. 7	24. 9	16. 0	22. 9	18. 0
Average [2]	18. 8	19. 8	20. 8	20. 0	24. 8	24. 5	16. 2	22. 3	18. 4
Average, all types [3]									
Less than $750	22. 0	21. 4	22. 0	22. 2	26. 9	25. 1	18. 7	22. 0	21. 1
$750–$2,499	22. 3	22. 0	23. 2	23. 6	29. 1	26. 5	18. 8	22. 3	21. 2
$2,500 and over	19. 6	21. 0	21. 6	21. 2	27. 6	26. 2	17. 3	23. 3	19. 4
Average, all sizes [4]	21. 9	21. 5	22. 6	22. 6	27. 5	25. 7	18. 6	22. 3	21. 0

[1] Compiled from *Retailing Meat in the North Central States*, North Central Regional Publication No. 55, Purdue Univ., Agri. Expt. Sta., 1955.
[2] Weighted by the relative importance of the volume of meat sales.
[3] Weighted by the relative importance of the type of store.
[4] Weighted by the relative importance of the type of store and volume of meat sales.
[5] Weighted by the relative importance of the specified classes of meat.

TABLE 21.—*Average cost for retailing a pound of meat, wholesale weight, in 85 selected stores in 3 cities, 1950* [1]

Item	Cost	Percentage of total
	Cents	*Percent*
Wages and salaries	6. 5	66. 3
Rent	. 8	8. 2
Other:		
Electricity, heat, water and ice	. 5	4. 7
Licenses and insurance	. 2	2. 4
Depreciation	. 3	3. 0
Wrapping supplies	. 4	4. 2
Maintenance	. 2	2. 0
Advertising	. 2	2. 4
Miscellaneous	. 7	6. 8
Total other	2. 5	25. 5
Total	9. 8	100. 0

[1] Compiled from publication by Farstad, Edmund, and Brensike, V. John *Costs of Retailing Meats in Relation to Volume*, Mktg. Res. Rpt. No. 24, U.S. Dept. Agr., August 1952.

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Appendix

TABLE 22.—*Average composite retail price, farm value, and farm-retail margin for Choice grade beef, pork, and lamb cuts, 1919–59* [1]

Year	Retail price per pound	Net farm value	Farm-retail margin	Year	Retail price per pound	Net farm value	Farm-retail margin
	Cents	*Cents*	*Cents*		*Cents*	*Cents*	*Cents*
1919	37.2	24.9	12.3	1940	25.0	13.0	12.0
1920	36.9	21.4	15.5	1941	29.1	17.4	11.7
1921	30.6	14.0	16.6	1942	33.9	23.1	10.8
1922	29.2	14.7	14.5	1943 [2]	34.9	24.8	10.1
1923	28.8	13.7	15.1	1944 [2]	33.0	24.2	8.8
1924	29.2	14.5	14.7	1945 [2]	32.9	25.0	7.9
1925	33.0	18.7	14.3	1946 [2]	41.9	30.7	11.2
1926	34.6	19.0	15.6	1947	61.1	43.4	17.7
1927	34.2	18.0	16.2	1948	67.9	46.9	21.0
1928	34.9	18.5	16.4	1949	61.9	41.1	20.8
1929	36.1	19.1	17.0	1950	64.5	43.3	21.2
1930	34.0	17.0	17.0	1951	71.2	48.5	22.7
1931	28.0	11.9	16.1	1952	70.2	46.4	23.8
1932	20.6	8.2	12.4	1953	66.4	42.3	24.1
1933 [2]	18.2	7.3	10.9	1954	66.8	42.6	24.2
1934 [2]	22.2	9.2	13.0	1955	61.6	36.0	25.6
1935 [2]	30.0	16.0	14.0	1956	59.6	34.0	25.6
1936	29.0	15.2	13.8	1957	66.0	38.6	27.4
1937	31.4	18.2	13.2	1958	73.4	44.2	29.2
1938	27.9	14.4	13.5	1959	70.0	39.2	30.8
1939	26.9	13.5	13.4				

[1] Composite retail prices and farm values of Choice grade beef, pork, and lamb cuts (appendix tables 23, 24, and 25) are weighted by total civilian consumption of beef, pork, and lamb adjusted to eliminate quantities of farm slaughter used on farms and imported meat. Quantities of each kind of meat are carcass weights reduced to estimated retail weights. Weights vary by years.

[2] Data with farm value and farm-retail margin adjusted for processing taxes in 1933–35, for Government payments to producers in 1945–46, and for Government payments to processors in 1943–46 are:

Year	Retail price	Net farm value	Farm-retail margin	Year	Retail price	Net farm value	Farm-retail margin
	Cents	*Cents*	*Cents*		*Cents*	*Cents*	*Cents*
1933	18.2	7.4	10.8	1944	33.0	24.2	11.2
1934	22.2	10.9	11.3	1945	32.9	25.5	11.4
1935	30.0	17.7	12.3	1946	41.9	33.1	13.4
1943	34.9	24.8	11.3				

TABLE 23.—*Beef, Choice grade: Retail price, farm value, farm-retail margin, and farmer's share of retail price, 1919–59**

Year	Retail price per pound [1]	Gross farm value [2]	Byproduct allowance [3]	Net farm value	Farm-retail margin	Farmer's share
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Percent*
1919	33. 8	28. 9	6. 1	22. 8	11. 0	67
1920	34. 1	25. 0	4. 8	20. 2	13. 9	59
1921	29. 3	16. 2	2. 2	14. 0	15. 3	48
1922	27. 7	16. 4	2. 8	13. 6	14. 1	49
1923	28. 8	17. 8	2. 7	15. 1	13. 7	52
1924	29. 5	19. 0	2. 9	16. 1	13. 4	55
1925	30. 7	21. 1	3. 4	17. 7	13. 0	58
1926	31. 4	19. 2	3. 0	16. 2	15. 2	52
1927	32. 8	22. 1	3. 7	18. 4	14. 4	56
1928	37. 4	26. 4	4. 6	21. 8	15. 6	58
1929	39. 2	25. 1	3. 6	21. 5	17. 7	55
1930	36. 2	21. 8	3. 3	18. 5	17. 7	51
1931	30. 0	16. 0	2. 2	13. 8	16. 2	46
1932	24. 9	12. 6	1. 6	11. 0	13. 9	44
1933	21. 5	10. 3	1. 9	8. 4	13. 1	39
1934	23. 3	12. 8	2. 1	10. 7	12. 6	46
1935	30. 5	20. 2	3. 0	17. 2	13. 3	56
1936	28. 6	17. 3	3. 0	14. 3	14. 3	50
1937	32. 5	22. 8	3. 5	19. 3	13. 2	59
1938	28. 7	17. 2	2. 5	14. 7	14. 0	51
1939	29. 5	18. 3	2. 6	15. 7	13. 8	53
1940	29. 5	19. 6	2. 7	16. 9	12. 6	57
1941	31. 5	21. 9	3. 3	18. 6	12. 9	59
1942	35. 0	26. 9	3. 9	23. 0	12. 0	66
1943 [4]	36. 2	30. 0	4. 3	25. 7	10. 5	71
1944 [4]	34. 2	30. 7	4. 4	26. 3	7. 9	77
1945 [4]	33. 5	30. 9	4. 5	26. 4	7. 1	79
1946 [4]	42. 5	38. 2	5. 1	33. 1	9. 4	78
1947	61. 8	50. 5	6. 3	44. 2	17. 6	72
1948	75. 3	59. 6	6. 6	53. 0	22. 3	70
1949	68. 4	53. 6	5. 4	48. 2	20. 2	70
1950	75. 4	60. 4	6. 3	54. 1	21. 3	72
1951	88. 2	73. 9	8. 1	65. 8	22. 4	75
1952	86. 6	68. 0	5. 5	62. 5	24. 1	72
1953	69. 1	48. 0	4. 2	43. 8	25. 3	63
1954	68. 5	48. 2	4. 0	44. 2	24. 3	65
1955	67. 5	45. 9	3. 7	42. 2	25. 3	63
1956	66. 0	43. 4	3. 6	39. 8	26. 2	60
1957	70. 6	46. 9	3. 9	43. 0	27. 6	61
1958	81. 0	55. 3	4. 5	50. 8	30. 2	63
1959	82. 8	56. 1	5. 1	51. 0	31. 8	62

[1] Estimated average price of Choice grade cuts.
[2] Payment to farmer for 2.16 pounds of Choice grade beef cattle (Good grade before 1951). Estimated premiums for Choice grade over average price of all beef cattle vary by months.
[3] Portion of gross farm value attributed to edible and inedible byproducts.
[4] Data with farm value and farm-retail margin adjusted to include Government payments to farmers in 1945–46 and to processors in 1943–46 are:

Year	Retail price	Gross farm value	Byproduct allowance	Net farm value	Farm-retail margin	Farmer's share
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Percent*
1943	36. 2	30. 0	4. 3	25. 7	11. 7	71
1944	34. 2	30. 7	4. 4	26. 3	10. 6	77
1945	33. 5	31. 7	4. 6	27. 1	11. 9	81
1946	42. 5	38. 8	5. 2	33. 6	12. 6	79

*The method used in calculating these data is explained in "Farm-Retail Spreads For Food Products," Misc. Pub. No. 741, U.S. Dept. Agr.

TABLE 23.—*Beef, Choice grade: Retail price, farm value, farm-retail margin, and farmer's share of retail price, 1919–59*—Continued*

Year and quarter	Retail price per pound [1]	Gross farm value [2]	Byproduct allowance [3]	Net farm value	Farm-retail margin	Farmer's share
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Percent*
1949:						
January–March	64. 8	48. 6	5. 6	43. 0	21. 8	66
April–June	67. 5	51. 7	5. 4	46. 3	21. 2	69
July–September	70. 6	55. 6	5. 5	50. 1	20. 5	71
October–December	70. 8	58. 7	5. 4	53. 3	17. 5	75
1950:						
January–March	68. 2	54. 6	5. 1	49. 5	18. 7	73
April–June	73. 7	59. 3	5. 7	53. 6	20. 1	73
July–September	79. 9	62. 6	6. 9	55. 7	24. 2	70
October–December	79. 6	65. 2	7. 5	57. 7	21. 9	72
1951:						
January–March	87. 0	73. 5	8. 7	64. 8	22. 2	74
April–June	88. 3	74. 2	8. 4	65. 8	22. 5	75
July–September	88. 6	74. 3	8. 1	66. 2	22. 4	75
October–December	88. 8	73. 5	7. 3	66. 2	22. 6	75
1952:						
January–March	88. 1	70. 5	5. 9	64. 6	23. 5	73
April–June	87. 3	68. 5	5. 5	63. 0	24. 3	72
July–September	86. 2	67. 4	5. 5	61. 9	24. 3	72
October–December	84. 7	65. 6	5. 0	60. 6	24. 1	72
1953:						
January–March	71. 1	48. 9	4. 3	44. 6	26. 5	63
April–June	66. 6	43. 6	4. 1	39. 5	27. 1	59
July–September	69. 3	50. 3	4. 3	46. 0	23. 3	66
October–December	69. 3	49. 2	4. 2	45. 0	24. 3	65
1954:						
January–March	68. 2	46. 7	4. 0	42. 7	25. 5	63
April–June	68. 1	47. 4	4. 3	43. 1	25. 0	63
July–September	68. 1	47. 5	4. 0	43. 5	24. 6	64
October–December	69. 6	51. 1	3. 8	47. 3	22. 3	68
1955:						
January–March	69. 6	51. 0	3. 7	47. 3	22. 3	68
April–June	67. 7	45. 9	3. 6	42. 3	25. 4	62
July–September	67. 0	44. 7	3. 7	41. 0	26. 0	61
October–December	65. 8	41. 9	3. 6	38. 3	27. 5	58
1956:						
January–March	62. 1	37. 7	3. 2	34. 5	27. 6	56
April–June	62. 6	40. 2	3. 7	36. 5	26. 1	58
July–September	68. 5	49. 1	3. 9	45. 2	23. 3	66
October–December	70. 8	46. 6	3. 7	42. 9	27. 9	61
1957:						
January–March	66. 4	41. 4	3. 5	37. 9	28. 5	57
April–June	69. 7	46. 1	4. 0	42. 1	27. 6	60
July–September	73. 2	50. 0	4. 3	45. 7	27. 5	62
October–December	73. 1	50. 2	3. 9	46. 3	26. 8	63
1958:						
January–March	78. 8	55. 5	4. 2	51. 3	27. 5	65
April–June	82. 8	57. 7	4. 7	53. 0	29. 8	64
July–September	81. 3	53. 6	4. 6	49. 0	32. 3	60
October–December	81. 0	54. 3	4. 5	49. 8	31. 2	61
1959:						
January–March	83. 0	56. 8	4. 6	52. 2	30. 8	63
April–June	83. 4	58. 7	5. 7	53. 0	30. 4	64
July–September	82. 6	56. 0	5. 5	50. 5	32. 1	61
October–December	82. 1	52. 8	4. 5	48. 3	33. 8	59

See footnotes on preceding page.

TABLE 24.—*Pork: Retail price, farm value, farm-retail margin, and farmer's share of retail price, 1919–59**

Year	Retail price per pound [1]	Gross farm value [2]	Byproduct allowance [3]	Net farm value	Farm-retail margin	Farmer's share
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Percent*
1919	40. 9	36. 7	9. 4	27. 3	13. 6	67
1920	39. 6	28. 7	6. 1	22. 6	17. 0	57
1921	31. 6	16. 8	2. 8	14. 0	17. 6	44
1922	30. 0	18. 6	3. 2	15. 4	14. 6	51
1923	28. 3	15. 3	3. 2	12. 1	16. 2	43
1924	28. 4	16. 3	3. 5	12. 8	15. 6	45
1925	34. 8	24. 4	5. 1	19. 3	15. 5	55
1926	37. 3	26. 0	4. 6	21. 4	15. 9	57
1927	34. 9	21. 1	3. 8	17. 3	17. 6	50
1928	32. 9	19. 4	3. 6	15. 8	17. 1	48
1929	33. 7	21. 0	3. 9	17. 1	16. 6	51
1930	32. 4	19. 5	3. 5	16. 0	16. 4	49
1931	26. 6	12. 7	2. 1	10. 6	16. 0	40
1932	17. 6	7. 5	1. 2	6. 3	11. 3	36
1933 [4]	15. 6	7. 7	1. 4	6. 3	9. 3	40
1934 [4]	21. 0	9. 3	1. 8	7. 5	13. 5	36
1935 [4]	30. 2	19. 2	4. 0	15. 2	15. 0	50
1936	29. 8	20. 5	4. 2	16. 3	13. 5	55
1937	30. 6	21. 4	4. 0	17. 4	13. 2	57
1938	27. 3	17. 1	2. 9	14. 2	13. 1	52
1939	24. 7	13. 8	2. 2	11. 6	13. 1	47
1940	21. 6	11. 9	1. 8	10. 1	11. 5	47
1941	27. 2	20. 1	3. 6	16. 5	10. 7	61
1942	32. 9	28. 8	5. 4	23. 4	9. 5	71
1943	33. 9	30. 3	6. 0	24. 3	[5] 9. 6	72
1944	31. 9	28. 8	6. 0	22. 8	[5] 9. 1	71
1945	32. 1	30. 9	6. 9	24. 0	[5] 8. 1	75
1946	41. 3	38. 0	9. 1	28. 9	[5] 12. 4	70
1947	60. 7	53. 0	10. 2	42. 8	17. 9	71
1948	61. 7	51. 0	9. 3	41. 7	20. 0	68
1949	55. 8	40. 6	5. 9	34. 7	21. 1	62
1950	55. 1	40. 2	6. 2	34. 0	21. 1	62
1951	59. 2	44. 2	7. 9	36. 3	22. 9	61
1952	57. 5	39. 6	5. 5	34. 1	23. 4	59
1953	63. 5	47. 5	6. 5	41. 0	22. 5	65
1954	64. 8	48. 4	7. 4	41. 0	23. 8	63
1955	54. 8	33. 9	4. 7	29. 2	25. 6	53
1956	52. 1	31. 8	4. 6	27. 2	24. 9	52
1957	60. 2	38. 9	5. 7	33. 2	27. 0	55
1958	64. 8	43. 2	6. 3	36. 9	27. 9	57
1959	57. 1	31. 3	3. 9	27. 4	29. 7	48

[1] Estimated average composite price of pork sold as retail cuts (ham, bacon, loin, picnic, butt, spareribs, bacon square).
[2] Payment to farmer for 2.13 pounds of live hog.
[3] Portion of gross farm value attributed to lard and to edible and inedible byproducts.
[4] Government processing taxes on hogs were in effect from November 5, 1933, to January 6, 1936. The effect of these taxes was to decrease the margin and increase the amount received by farmers. The adjusted data are:

Year	Retail price	Gross farm value	Byproduct allowance	Net farm value	Farm-retail spread	Farmer's share
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Percent*
1933	15.6	8.0	1.5	6.5	9.1	42
1934	21.0	13.7	2.6	11.1	9.9	53
1935	30.2	24.0	5.0	19.0	11.2	63

[5] Farm-retail margin plus Government payments to processors were: 1943, 10.9 cents; 1944, 11.3 cents; 1945, 10.8 cents; and 1946, 14.0 cents.
*The method used in calculating these data is explained in, "Farm-Retail Spreads For Food Products," Misc. Pub. No. 741, U.S. Dept. Agr.

TABLE 24.—*Pork: Retail price, farm value, farm-retail margin, and farmer's share of retail price, 1919–59*—Continued*

Year and quarter	Retail price per pound [1]	Gross farm value [2]	Byproduct allowance [2]	Net farm value	Farm-retail margin	Farmer's share
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Percent*
1949:						
January–March	55. 5	42. 3	6. 2	36. 1	19. 4	65
April–June	56. 5	40. 6	5. 8	34. 8	21. 7	62
July–September	58. 9	44. 9	6. 2	38. 7	20. 2	66
October–December	52. 4	34. 5	5. 0	29. 5	22. 9	56
1950:						
January–March	49. 8	34. 3	4. 9	29. 4	20. 4	59
April–June	53. 3	38. 4	5. 6	32. 8	20. 5	62
July–September	61. 3	48. 8	7. 6	41. 2	20. 1	67
October–December	55. 9	39. 3	6. 7	32. 6	23. 3	58
1951:						
January–March	58. 9	45. 4	8. 4	37. 0	21. 9	63
April–June	59. 1	45. 0	8. 2	36. 8	22. 3	62
July–September	60. 4	46. 1	8. 0	38. 1	22. 3	63
October–December	58. 2	40. 4	7. 0	33. 4	24. 8	57
1952:						
January–March	55. 0	36. 7	5. 8	30. 9	24. 1	56
April–June	56. 0	40. 1	5. 8	34. 3	21. 7	61
July–September	61. 3	44. 7	5. 8	38. 9	22. 4	63
October–December	57. 6	36. 9	4. 7	32. 2	25. 4	56
1953:						
January–March	57. 3	41. 3	5. 1	36. 2	21. 1	63
April–June	64. 2	49. 1	6. 1	43. 0	21. 2	67
July–September	69. 5	53. 2	7. 3	45. 9	23. 6	66
October–December	63. 1	46. 5	7. 4	39. 1	24. 0	62
1954:						
January–March	68. 0	53. 8	8. 3	45. 5	22. 5	67
April–June	68. 8	54. 5	8. 4	46. 1	22. 7	67
July–September	64. 1	46. 3	6. 8	39. 5	24. 6	62
October–December	58. 5	38. 8	5. 8	33. 0	25. 5	56
1955:						
January–March	55. 4	34. 9	4. 9	30. 0	25. 4	54
April–June	55. 5	38. 2	5. 2	33. 0	22. 5	59
July–September	57. 2	35. 7	4. 7	31. 0	26. 2	54
October–December	51. 3	26. 9	4. 0	22. 9	28. 4	45
1956:						
January–March	47. 4	25. 7	3. 7	22. 0	25. 4	46
April–June	51. 8	33. 6	4. 8	28. 8	23. 0	56
July–September	55. 2	34. 7	4. 7	30. 0	25. 2	54
October–December	54. 0	33. 1	5. 0	28. 1	25. 9	52
1957:						
January–March	56. 8	36. 6	5. 8	30. 8	26. 0	54
April–June	59. 4	39. 1	5. 7	33. 4	26. 0	56
July–September	65. 5	42. 9	6. 2	36. 7	28. 8	56
October–December	59. 2	37. 1	5. 1	32. 0	27. 2	54
1958:						
January–March	63. 1	42. 0	6. 0	36. 0	27. 1	57
April–June	66. 2	46. 0	6. 7	39. 3	26. 9	59
July–September	67. 5	45. 5	6. 6	38. 9	28. 6	58
October–December	62. 2	39. 1	5. 6	33. 5	28. 7	54
1959:						
January–March	59. 1	34. 1	4. 5	29. 6	29. 5	50
April–June	58. 2	34. 3	4. 6	29. 7	28. 5	51
July–September	57. 3	30. 5	3. 5	27. 0	30. 3	47
October–December	53. 8	26. 4	3. 1	23. 3	30. 5	43

See footnotes on preceding page.

TABLE 25.—*Lamb, Choice grade: Retail price, farm value, farm-retail margin, and farmer's share of retail price, 1919–59**

Year and quarter	Retail price per pound [1]	Gross farm value [2]	Byproduct allowance [3]	Net farm value	Farm-retail margin	Farmer's share
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Percent*
1919	36. 1	31. 2	7. 9	23. 3	12. 8	65
1920	39. 2	28. 7	5. 9	22. 8	16. 4	58
1921	33. 1	17. 2	2. 9	14. 3	18. 8	43
1922	36. 2	23. 5	4. 2	19. 3	16. 9	53
1923	36. 3	25. 0	5. 2	19. 8	16. 5	55
1924	36. 7	25. 9	5. 9	20. 0	16. 7	54
1925	38. 2	29. 4	6. 4	23. 0	15. 2	60
1926	38. 7	27. 8	5. 4	22. 4	16. 3	58
1927	38. 8	27. 3	5. 1	22. 2	16. 6	57
1928	39. 3	29. 0	5. 8	23. 2	16. 1	59
1929	40. 2	28. 3	5. 1	23. 2	17. 0	58
1930	34. 4	19. 6	3. 5	16. 1	18. 3	47
1931	28. 5	14. 0	2. 4	11. 6	16. 9	41
1932	22. 0	10. 8	1. 8	9. 0	13. 0	41
1933	19. 9	11. 8	2. 7	9. 1	10. 8	46
1934	23. 7	14. 4	3. 2	11. 2	12. 5	47
1935	26. 3	17. 0	3. 5	13. 5	12. 8	51
1936	27. 5	19. 3	4. 4	14. 9	12. 6	54
1937	28. 8	20. 8	4. 9	15. 9	12. 9	55
1938	26. 8	16. 8	3. 3	13. 5	13. 3	50
1939	26. 8	18. 4	4. 0	14. 4	12. 4	54
1940	26. 5	19. 2	4. 5	14. 7	11. 8	55
1941	28. 2	22. 4	5. 5	16. 9	11. 3	60
1942	32. 9	27. 3	6. 3	21. 0	11. 9	64
1943 [4]	36. 4	31. 0	7. 0	24. 0	12. 4	66
1944 [4]	35. 6	30. 1	6. 8	23. 3	12. 3	65
1945 [4]	35. 7	31. 2	7. 1	24. 1	11. 6	68
1946 [4]	44. 0	36. 5	6. 9	29. 6	14. 4	67
1947	58. 0	48. 4	7. 4	41. 0	17. 0	71
1948	65. 2	53. 7	7. 6	46. 1	19. 1	71
1949	68. 4	53. 8	8. 2	45. 6	22. 8	67
1950	70. 6	58. 8	10. 5	48. 3	22. 3	68
1951	78. 5	73. 9	16. 2	57. 7	20. 8	74
1952	76. 4	58. 5	9. 0	49. 5	26. 9	65
1953	65. 2	46. 6	8. 1	38. 5	26. 7	59
1954	66. 5	45. 8	7. 9	37. 9	28. 6	57
1955	64. 4	43. 8	7. 4	36. 4	28. 0	57
1956	64. 7	43. 9	7. 3	36. 6	28. 1	57
1957	68. 5	47. 1	8. 3	38. 8	29. 7	57
1958	74. 6	49. 6	6. 8	42. 8	31. 8	57
1959	70. 7	44. 5	6. 9	37. 6	33. 1	53

[1] Estimated average price of Choice grade cuts.
[2] Payment to farmer for an average equivalent quantity of 2.37 pounds of lamb. Equivalent varies by months.
[3] Farm value imputed to pelt and to edible and inedible byproducts.
[4] Data with farm value and farm-retail margin adjusted to include Government payments to producers in 1945–46 and to processors in 1943–45 are:

Year	Retail price	Gross farm value	Byproduct allowance	Net farm value	Farm-retail margin	Farmer's share
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Percent*
1943	36. 4	31. 0	7. 0	24. 0	13. 4	66
1944	35. 6	30. 1	6. 8	23. 3	14. 0	65
1945	35. 7	33. 0	7. 5	25. 5	12. 6	71
1946	44. 0	39. 4	7. 4	32. 0	14. 4	73

*The method used in calculating these data is explained in "Farm-Retail Spreads For Food Products," Misc. Pub. No. 741, U.S. Dept. Agr.

TABLE 25.—*Lamb, Choice grade: Retail price, farm value, farm-retail margin, and farmer's share of retail price, 1919–59*—Continued*

Year and quarter	Retail price per pound [1]	Gross farm value [2]	Byproduct allowance [3]	Net farm value	Farm-retail margin	Farmer's share
	Cents	*Cents*	*Cents*	*Cents*	*Cents*	*Percent*
1949:						
January–March	61. 5	54. 2	9. 7	44. 5	17. 0	72
April–June	77. 3	59. 3	8. 4	50. 9	26. 4	66
July–September	70. 6	51. 0	6. 4	44. 6	26. 0	63
October–December	64. 4	50. 6	8. 0	42. 6	21. 8	66
1950:						
January–March	65. 0	55. 2	10. 1	45. 1	19. 9	69
April–June	72. 4	57. 8	9. 0	48. 8	23. 6	67
July–September	72. 7	58. 7	9. 2	49. 5	23. 2	68
October–December	72. 4	63. 7	13. 9	49. 8	22. 6	69
1951:						
January–March	75. 2	79. 3	25. 1	54. 2	21. 0	72
April–June	78. 5	77. 4	18. 1	59. 3	19. 2	76
July–September	79. 0	69. 8	10. 5	59. 3	19. 7	75
October–December	81. 5	69. 2	11. 1	58. 1	23. 4	71
1952:						
January–March	77. 4	64. 8	12. 0	52. 8	24. 6	68
April–June	77. 2	61. 5	8. 9	52. 6	24. 6	68
July–September	79. 6	58. 4	7. 1	51. 3	28. 3	64
October–December	71. 4	49. 4	8. 2	41. 2	30. 2	58
1953:						
January–March	63. 0	49. 3	10. 2	39. 1	23. 9	62
April–June	68. 5	50. 8	8. 5	42. 3	26. 2	62
July–September	66. 9	46. 0	6. 4	39. 6	27. 3	59
October–December	62. 4	40. 4	7. 4	33. 0	29. 4	53
1954:						
January–March	63. 6	47. 5	9. 6	37. 9	25. 7	60
April–June	70. 6	50. 8	8. 4	42. 4	28. 2	60
July–September	67. 6	43. 2	6. 4	36. 8	30. 8	54
October–December	64. 1	41. 8	7. 2	34. 6	29. 5	54
1955:						
January–March	64. 2	46. 5	9. 5	37. 0	27. 2	58
April–June	65. 2	45. 4	7. 4	38. 0	27. 6	58
July–September	67. 0	42. 6	5. 8	36. 8	30. 2	55
October–December	60. 7	40. 5	6. 7	33. 8	26. 9	56
1956:						
January–March	58. 6	42. 6	8. 9	33. 7	24. 9	58
April–June	68. 5	47. 3	7. 3	40. 0	28. 5	58
July–September	68. 8	44. 1	5. 8	38. 3	30. 5	56
October–December	63. 0	41. 7	7. 5	34. 2	28. 8	54
1957:						
January–March	62. 2	45. 3	9. 8	35. 5	26. 7	57
April–June	70. 0	48. 5	8. 4	40. 1	29. 9	57
July–September	71. 8	47. 0	7. 0	40. 0	31. 8	56
October–December	70. 1	47. 5	7. 8	39. 7	30. 4	57
1958:						
January–March	74. 6	52. 4	8. 9	43. 5	31. 1	58
April–June	73. 4	49. 2	6. 5	42. 7	30. 7	58
July–September	75. 7	49. 1	5. 4	43. 7	32. 0	58
October–December	74. 6	47. 5	6. 4	41. 1	33. 5	55
1959:						
January–March	69. 0	44. 5	7. 7	36. 8	32. 2	53
April–June	73. 1	47. 8	7. 2	40. 6	32. 5	56
July–September	73. 6	45. 0	5. 9	39. 1	34. 5	53
October–December	67. 0	40. 9	7. 0	33. 9	33. 1	51

See footnotes on preceding page.

TABLE 26.—*Beef (Choice grade): Live-wholesale marketing margins per 100 pounds live weight, by quarters, 1949–59*

Period	Price of Steers [1]	Wholesale Value			Margin [3]
		Carcass [2]	Byproduct	Total	
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*
1949:					
January–March	23. 63	22. 95	2. 88	25. 83	2. 20
April–June	24. 93	24. 85	2. 77	27. 62	2. 69
July–September	25. 89	26. 33	2. 84	29. 17	3. 28
October–December	27. 78	26. 90	2. 79	29. 69	1. 91
Average	25. 56	25. 26	2. 82	28. 08	2. 52
1950:					
January–March	27. 18	25. 45	2. 58	28. 03	. 85
April–June	28. 41	27. 64	2. 82	30. 46	2. 05
July–September	29. 79	29. 13	3. 48	32. 61	2. 82
October–December	30. 70	29. 78	3. 75	33. 53	2. 83
Average	29. 02	28. 00	3. 16	31. 16	2. 14
1951:					
January–March	35. 01	32. 58	4. 29	36. 87	1. 86
April–June	35. 57	33. 61	4. 16	37. 77	2. 20
July–September	35. 27	33. 80	4. 03	37. 83	2. 56
October–December	35. 12	34. 26	3. 62	37. 88	2. 76
Average	35. 24	33. 56	4. 02	37. 58	2. 34
1952:					
January–March	33. 78	33. 16	2. 85	36. 01	2. 23
April–June	33. 15	32. 50	2. 70	35. 20	2. 05
July–September	32. 30	32. 57	2. 76	35. 33	3. 03
October–December	30. 53	30. 81	2. 48	33. 29	2. 76
Average	32. 44	32. 26	2. 70	34. 96	2. 52
1953:					
January–March	24. 42	24. 83	2. 26	27. 09	2. 67
April–June	21. 87	22. 66	2. 20	24. 86	2. 99
July–September	23. 92	24. 92	2. 22	27. 14	3. 22
October–December	23. 81	24. 46	2. 20	26. 66	2. 85
Average	23. 50	24. 22	2. 22	26. 44	2. 94
1954:					
January–March	23. 30	23. 45	2. 10	25. 55	2. 25
April–June	23. 49	23. 71	2. 22	25. 93	2. 44
July–September	23. 41	24. 36	2. 10	26. 46	3. 05
October–December	24. 60	25. 33	1. 98	27. 31	2. 71
Average	23. 70	24. 21	2. 10	26. 31	2. 61
1955:					
January–March	25. 13	25. 07	1. 95	27. 02	1. 89
April–June	23. 02	23. 39	1. 92	25. 31	2. 29
July–September	22. 33	23. 38	2. 01	25. 39	3. 06
October–December	20. 90	21. 88	2. 00	23. 88	2. 98
Average	22. 84	23. 43	1. 97	25. 40	2. 56
1956:					
January–March	19. 47	20. 15	1. 83	21. 98	2. 51
April–June	20. 30	20. 79	2. 00	22. 79	2. 49
July–September	23. 76	24. 97	2. 14	27. 11	3. 35
October–December	22. 68	23. 74	2. 06	25. 80	3. 12
Average	21. 55	22. 41	2. 01	24. 42	2. 87
1957:					
January–March	20. 84	21. 48	1. 92	23. 40	2. 56
April–June	22. 85	23. 39	2. 15	25. 54	2. 69
July–September	24. 30	25. 15	2. 30	27. 45	3. 15
October–December	24. 27	24. 68	2. 06	26. 74	2. 47
Average	23. 06	23. 68	2. 11	25. 79	2. 73
1958:					
January–March	27. 09	27. 36	2. 17	29. 53	2. 44
April–June	28. 46	27. 98	2. 40	30. 38	1. 92
July–September	26. 39	26. 64	2. 35	28. 99	2. 60
October–December	26. 81	26. 67	2. 34	29. 01	2. 20
Average	27. 19	27. 16	2. 32	29. 48	2. 29
1959:					
January–March	27. 96	28. 04	2. 41	30. 45	2. 49
April–June	28. 83	28. 30	2. 90	31. 20	2. 37
July–September	27. 62	27. 32	2. 82	30. 14	2. 52
October–December	26. 06	26. 32	2. 29	28. 61	2. 55
Average	27. 62	27. 50	2. 60	30. 10	2. 48

[1] Weighted average of price at 21 leading public stockyards.
[2] Wholesale carcass value per 100 pounds live weight is equivalent to 59 percent of average wholesale price of 100 pounds of Choice grade carcass beef.
[3] Difference between live price and total wholesale value.

TABLE 27.—*Pork: Live-wholesale marketing margins per 100 pounds live weight, by quarters, 1949–59*

Period	Price of hogs [1]	Wholesale value [2]	Margin [3]
	Dollars	*Dollars*	*Dollars*
1949:			
January–March	21. 26	25. 46	4. 20
April–June	19. 97	24. 69	4. 72
July–September	21. 72	26. 60	4. 88
October–December	16. 80	21. 77	4. 97
Average	19. 94	24. 63	4. 69
1950:			
January–March	16. 89	21. 03	4. 14
April–June	18. 83	22. 89	4. 06
July–September	23. 51	27. 94	4. 43
October–December	19. 15	24. 08	4. 93
Average	19. 60	23. 98	4. 38
1951:			
January–March	22. 23	26. 70	4. 47
April–June	21. 97	26. 28	4. 31
July–September	22. 28	26. 80	4. 52
October–December	19. 32	24. 36	5. 04
Average	21. 45	26. 04	4. 59
1952:			
January–March	17. 93	22. 54	4. 61
April–June	19. 83	24. 12	4. 29
July–September	21. 72	26. 47	4. 75
October–December	17. 95	22. 82	4 87
Average	19. 36	23. 99	4. 63
1953:			
January–March	20. 04	24. 50	4. 46
April–June	24. 10	28. 17	4. 07
July–September	25. 37	30. 36	4. 99
October–December	22. 45	27. 30	4. 85
Average	22. 99	27. 58	4. 59
1954:			
January–March	26. 18	30. 74	4. 56
April–June	26. 75	31. 11	4. 36
July–September	22. 14	27. 45	5. 31
October–December	18. 84	23. 98	5. 14
Average	23. 48	28. 32	4. 84
1955:			
January–March	17. 18	22. 37	5. 19
April–June	18. 60	23. 40	4. 80
July–September	16. 94	23. 02	6. 08
October–December	12. 93	19. 52	6. 59
Average	16. 41	22. 08	5. 67
1956:			
January–March	12. 82	18. 73	5. 91
April–June	16. 42	21. 43	5. 01
July–September	16. 77	22. 22	5. 45
October–December	16. 12	21. 49	5. 37
Average	15. 53	20. 97	5. 44
1957:			
January–March	17. 76	23. 45	5. 69
April–June	19. 09	24. 35	5. 26
July–September	20. 77	26. 49	5. 72
October–December	18. 08	23. 73	5. 65
Average	18. 92	24. 50	5. 58
1958:			
January–March	20. 59	26. 19	5. 60
April–June	22. 65	28. 11	5. 46
July–September	21. 85	27. 74	5. 89
October–December	18. 97	24. 74	5. 77
Average	21. 02	26. 70	5. 68
1959:			
January–March	16. 66	22. 17	5. 51
April–June	16. 85	21. 96	5. 11
July–September	14. 47	20. 54	6. 07
October–December	12. 88	19. 01	6. 13
Average	15. 22	20. 92	5. 70

[1] Average price of 200–220 pound barrows and gilts, Chicago.
[2] Wholesale value at Chicago of 71 pounds of pork and lard obtained from 100 pounds of live hog.
[3] Difference between live price and wholesale value of pork products per 100 pounds live weight.

TABLE 28.—*Lamb (Choice grade): Live-wholesale marketing margins per 100 pounds live weight, by quarters, 1949–59*

Period	Price of lambs [1]	Wholesale value			Margin [3]
		Carcass [2]	Byproduct	Total	
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Dollars*
1949:					
January–March	24. 34	21. 94	4. 83	26. 77	2. 43
April–June	27. 26	26. 00	4. 26	30. 26	3. 00
July–September	22. 76	22. 87	3. 31	26. 18	3. 42
October–December	22. 18	20. 91	3. 90	24. 81	2. 63
Average	24. 13	22. 93	4. 08	27. 01	2. 88
1950:					
January–March	23. 96	21. 77	4. 86	26. 63	2. 67
April–June	26. 30	24. 74	4. 52	29. 26	2. 96
July–September	26. 94	24. 35	4. 55	28. 90	1. 96
October–December	28. 66	23. 69	6. 65	30. 34	1. 68
Average	26. 46	23. 63	5. 14	28. 77	2. 31
1951:					
January–March	36. 07	25. 34	11. 68	37. 02	. 95
April–June	35. 16	27. 61	8. 39	36. 00	. 84
July–September	30. 73	28. 12	4. 97	33. 09	2. 36
October–December	29. 94	28. 10	5. 36	33. 46	3. 52
Average	32. 97	27. 30	7. 60	34. 90	1. 93
1952:					
January–March	27. 22	25. 11	5. 67	30. 78	3. 56
April–June	27. 89	26. 64	4. 48	31. 12	3. 23
July–September	27. 04	27. 02	3. 72	30. 74	3. 70
October–December	22. 32	22. 00	4. 40	26. 40	4. 08
Average	26. 12	25. 19	4. 57	29. 76	3. 64
1953:					
January–March	21. 42	20. 28	5. 25	25. 53	4. 11
April–June	24. 32	22. 73	4. 56	27. 29	2. 97
July–September	21. 10	22. 03	3. 61	25. 64	4. 54
October- December	18. 66	18. 77	4. 21	22. 98	4. 32
Average	21. 37	20. 95	4. 41	25. 36	3. 99
1954:					
January–March	21. 47	20. 09	5. 06	25. 15	3. 68
April–June	23. 65	22. 74	4. 49	27. 23	3. 58
July–September	19. 51	20. 46	3. 55	24. 01	4. 50
October–December	19. 01	19. 35	4. 04	23. 39	4. 38
Average	20. 91	20. 66	4. 28	24. 94	4. 03
1955:					
January–March	20. 99	19. 51	5. 03	24. 54	3. 55
April–June	21. 35	21. 05	4. 09	25. 14	3. 79
July–September	19. 56	20. 61	3. 24	23. 85	4. 29
October–December	18. 28	18. 50	3. 67	22. 17	3. 89
Average	20. 04	19. 92	4. 01	23. 93	3. 89
1956:					
January–March	18. 89	17. 29	4. 61	21. 90	3. 01
April–June	22. 29	22. 09	3. 98	26. 07	3. 78
July–September	20. 84	21. 94	3. 29	25. 23	4. 39
October–December	18. 94	18. 93	4. 13	23. 06	4. 12
Average	20. 24	20. 06	4. 00	24. 06	3. 82
1957:					
January–March	20. 53	18. 60	5. 12	23. 72	3. 19
April–June	22. 72	22. 23	4. 61	26. 84	4. 12
July–September	22. 23	22. 15	3. 84	25. 99	3. 76
October–December	21. 59	21. 59	4. 27	25. 86	4. 27
Average	21. 77	21. 14	4. 46	25. 60	3. 83
1958:					
January–March	23. 35	22. 78	4. 60	27. 38	4. 03
April–June	22. 72	23. 05	3. 50	26. 55	3. 83
July–September	22. 49	23. 83	2. 97	26. 80	4. 31
October–December	20. 87	21. 88	3. 40	25. 28	4. 41
Average	22. 36	22. 88	3. 62	26. 50	4. 14
1959:					
January–March	18. 98	19. 09	3. 97	23. 06	4. 08
April–June	23. 21	22. 73	3. 95	26. 68	3. 47
July–September	21. 12	22. 18	3. 40	25. 58	4. 46
October–December	18. 34	19. 22	3. 93	23. 15	4. 81
Average	20. 41	20. 80	3. 81	24. 61	4. 20

[1] Weighted average price at 15 leading public stockyards.
[2] On the average for a year, the wholesale carcass value per 100 pounds live weight is equivalent to about 47 percent of the average wholesale price of 100 pounds of Choice grade carcass lamb. This percentage of wholesale price varies by months because of changing pelt yield.
[3] Difference between live price and total wholesale value.

TABLE 29.—*Beef (Choice grade): Wholesale-retail marketing margins per 100 pounds carcass weight, by quarters, 1949–59*

Period	Wholesale price [1]	Retail value [2]	Margin [3]	Period	Wholesale price [1]	Retail value [2]	Margin [3]
	Dollars	*Dollars*	*Dollars*		*Dollars*	*Dollars*	*Dollars*
1949:				1955:			
January–March	38. 90	51. 84	12. 94	January–March	42. 49	55. 68	13. 19
April–June	42. 12	54. 00	11. 88	April–June	39. 65	54. 16	14. 51
July–September	44. 62	56. 48	11. 86	July–September	39. 63	53. 60	13. 97
October–December	45. 59	56. 67	11. 08	October–December	37. 08	52. 64	15. 56
Average	42. 81	54. 75	11. 94	Average	39. 71	54. 02	14. 31
1950:				1956:			
January–March	43. 13	54. 59	11. 46	January–March	34. 15	49. 68	15. 53
April–June	46. 85	58. 93	12. 08	April–June	35. 24	50. 08	14. 84
July–September	49. 37	63. 89	14. 52	July–September	42. 32	54. 80	12. 48
October–December	50. 48	63. 71	13. 23	October–December	40. 24	56. 64	16. 40
Average	47. 46	60. 28	12. 82	Average	37. 99	52. 80	14. 81
1951:				1957:			
January–March	55. 22	69. 63	14. 41	January–March	36. 40	53. 12	16. 72
April–June	56. 96	70. 64	13. 68	April–June	39. 65	55. 76	16. 11
July–September	57. 28	70. 85	13. 57	July–September	42. 62	58. 56	15. 94
October–December	58. 06	71. 07	13. 01	October–December	41. 83	58. 48	16. 65
Average	56. 88	70. 55	13. 67	Average	40. 12	56. 48	16. 36
1952:				1958:			
January–March	56. 20	70. 45	14. 25	January–March	46. 37	63. 04	16. 67
April–June	55. 09	69. 87	14. 78	April–June	47. 43	66. 24	18. 81
July–September	55. 20	68. 99	13. 79	July–September	45. 16	65. 04	19. 88
October–December	52. 22	67. 79	15. 57	October–December	45. 20	64. 80	19. 60
Average	54. 68	69. 28	14. 60	Average	46. 04	64. 80	18. 76
1953:				1959:			
January–March	42. 09	56. 91	14. 82	January–March	47. 53	66. 40	18. 87
April–June	38. 41	53. 28	14. 87	April–June	47. 96	66. 72	18. 76
July–September	42. 24	55. 41	13. 17	July–September	46. 31	66. 08	19. 77
October–December	41. 46	55. 41	13. 95	October–December	44. 61	65. 68	21. 07
Average	41. 05	55. 25	14. 20	Average	46. 60	66. 24	19. 64
1954:							
January–March	39. 74	54. 53	14. 79				
April–June	40. 18	54. 51	14. 33				
July–September	41. 28	54. 51	13. 23				
October–December	42. 93	55. 68	12. 75				
Average	41. 03	54. 81	13. 78				

[1] Weighted average of prices of Choice grade carcass beef in New York, Chicago, Los Angeles, San Francisco, and Seattle.

[2] Calculated from average retail prices of beef cuts in urban areas, published by Bureau of Labor Statistics. The retail value per 100 pounds carcass weight is 80 percent of average retail cost of 100 pounds of retail cuts, because about 20 pounds of a 100-pound carcass is fat, bone, and trim which is sold by retailers at nominal prices.

[3] Difference between retail value and wholesale price.

TABLE 30.—*Pork: Wholesale-retail marketing margins per 100 pounds of major cuts, by quarters, 1949–59*

Period	Wholesale price [1]	Retail price [2]	Margin [3]
	Dollars	*Dollars*	*Dollars*
1949:			
January–March	46. 27	55. 44	9. 17
April–June	45. 84	56. 29	10. 45
July–September	49. 40	58. 72	9. 32
October–December	39. 97	52. 18	12. 21
Average	45. 37	55. 66	10. 29
1950:			
January–March	38. 83	49. 61	10. 78
April–June	42. 13	53. 22	11. 09
July–September	50. 64	61. 11	10. 47
October–December	42. 77	55. 69	12. 92
Average	43. 59	54. 91	11. 32
1951:			
January–March	46. 69	58. 66	11. 97
April–June	46. 23	58. 93	12. 70
July–September	47. 87	60. 25	12. 38
October–December	43. 31	57. 98	14. 67
Average	46. 02	58. 96	12. 94
1952:			
January–March	40. 91	54. 83	13. 92
April–June	44. 81	55. 84	11. 03
July–September	49. 71	61. 03	11. 32
October–December	42. 96	57. 33	14. 37
Average	44. 60	57. 26	12. 66
1953:			
January–March	46. 34	57. 17	10. 83
April–June	53. 08	63. 96	10. 88
July–September	56. 11	69. 14	13. 03
October–December	49. 03	62. 91	13. 88
Average	51. 14	63. 30	12. 16
1954:			
January–March	55. 56	67. 79	12. 23
April–June	56. 13	68. 59	12. 46
July–September	49. 72	63. 85	14. 13
October–December	43. 44	58 29	14. 85
Average	51. 21	64. 63	13. 42
1955:			
January–March	41. 23	55. 18	13. 95
April–June	43. 86	55. 29	11. 43
July–September	43. 42	56. 99	13. 57
October–December	35. 71	51. 07	15. 36
Average	41. 06	54. 63	13. 57
1956:			
January–March	34. 49	47. 18	12. 69
April–June	39. 51	51. 62	12. 11
July–September	41. 52	54. 92	13. 40
October–December	39. 06	53. 69	14. 63
Average	38. 64	51. 85	13. 21
1957:			
January–March	42. 70	56. 57	13. 87
April–June	45. 20	59. 21	14. 01
July–September	49. 16	65. 16	16. 00
October–December	43. 56	58. 92	15. 36
Average	45. 16	59. 96	14. 80
1958:			
January–March	48. 66	62. 85	14. 19
April–June	51. 90	66. 04	14. 14
July–September	51. 28	67. 24	15. 96
October–December	45. 47	61. 99	16. 52
Average	49. 33	64. 53	15. 20
1959:			
January–March	41. 61	58. 86	17. 25
April–June	41. 71	58. 01	16. 30
July–September	39. 54	56. 97	17. 43
October–December	36. 37	53. 52	17. 15
Average	39. 81	56. 84	17. 03

[1] Wholesale price of 100 pounds of major pork cuts at Chicago computed from Livestock Market News and National Provisioner price quotations of individual cuts.
[2] Calculated from average retail prices of major pork cuts in urban areas, published by Bureau of Labor Statistics.
[3] Difference between the wholesale and retail prices.

Table 31.— Lamb (Choice grade): Wholesale-retail marketing margins per 100 pounds carcass weight, by quarters, 1949–59

Period	Wholesale price [1]	Retail value [2]	Margin [3]	Period	Wholesale price [1]	Retail value [2]	Margin [3]
1949:	*Dollars*	*Dollars*	*Dollars*	1955:	*Dollars*	*Dollars*	*Dollars*
January–March	47. 57	55. 35	7. 78	January–March	42. 30	57. 75	15. 45
April–June	55. 15	69. 54	14. 39	April–June	44. 59	59. 01	14. 42
July–September	47. 96	63. 54	15. 58	July–September	43. 23	60. 30	17. 07
October–December	44. 70	57. 96	13. 26	October–December	39. 56	54. 60	15. 04
Average	48. 84	61. 60	12. 76	Average	42. 42	57. 92	15. 50
1950:				1956:			
January–March	47. 20	58. 50	11. 30	January–March	37. 48	52. 74	15. 26
April–June	52. 33	65. 13	12. 80	April–June	46. 77	61. 68	14. 91
July–September	51. 09	65. 40	14. 31	July–September	46. 02	61. 89	15. 87
October–December	50. 65	65. 16	14. 51	October–December	40. 47	56. 73	16. 26
Average	50. 32	63. 55	13. 23	Average	42. 68	58. 26	15. 58
1951:				1957:			
January–March	54. 94	67. 65	12. 71	January–March	40. 33	56. 01	15. 68
April–June	58. 50	70. 62	12. 12	April–June	47. 14	62. 97	15. 83
July–September	59. 00	71. 10	12. 10	July–September	46. 47	64. 62	18. 15
October–December	60. 10	73. 38	13. 28	October–December	46. 17	63. 12	16. 95
Average	58. 14	70. 69	12. 55	Average	45. 03	61. 68	16. 65
1952:				1958:			
January–March	54. 42	69. 66	15. 24	January–March	49. 38	67. 11	17. 73
April–June	56. 49	69. 48	12. 99	April–June	48. 85	66. 09	17. 24
July–September	56. 69	71. 64	14. 95	July–September	49. 98	68. 10	18. 12
October–December	47. 03	64. 26	17. 23	October–December	46. 78	67. 17	20. 39
Average	53. 66	68. 76	15. 10	Average	48. 75	67. 12	18. 37
1953:				1959:			
January–March	43. 96	56. 67	12. 71	January–March	41. 37	62. 10	20. 73
April–June	48. 18	61. 65	13. 47	April–June	48. 14	65. 79	17. 65
July–September	46. 18	60. 24	14. 06	July–September	46. 53	66. 24	19. 71
October–December	40. 14	56. 16	16. 02	October–December	41. 08	60. 33	19. 25
Average	44. 62	58. 68	14. 06	Average	44. 28	63. 62	19. 34
1954:							
January–March	43. 55	57. 24	13. 69				
April–June	48. 21	63. 57	15. 36				
July–September	42. 90	60. 81	17. 91				
October–December	41. 37	57. 66	16. 29				
Average	44. 01	59. 82	15. 81				

[1] Weighted average of prices of Choice grade carcass lamb in New York, Chicago, Los Angeles, San Francisco, and Seattle. The West Coast markets—Los Angeles, San Francisco, and Seattle—were combined and the average was given equal weight with Chicago and New York.

[2] Value of 90 pounds of retail cuts estimated from United States average price of leg of lamb, and New York City relationship of the average price of all cuts to the average price of leg of lamb. About 90 pounds of retail cuts are obtained from 100 pounds of lamb carcass.

[3] Difference between retail value and wholesale price.

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