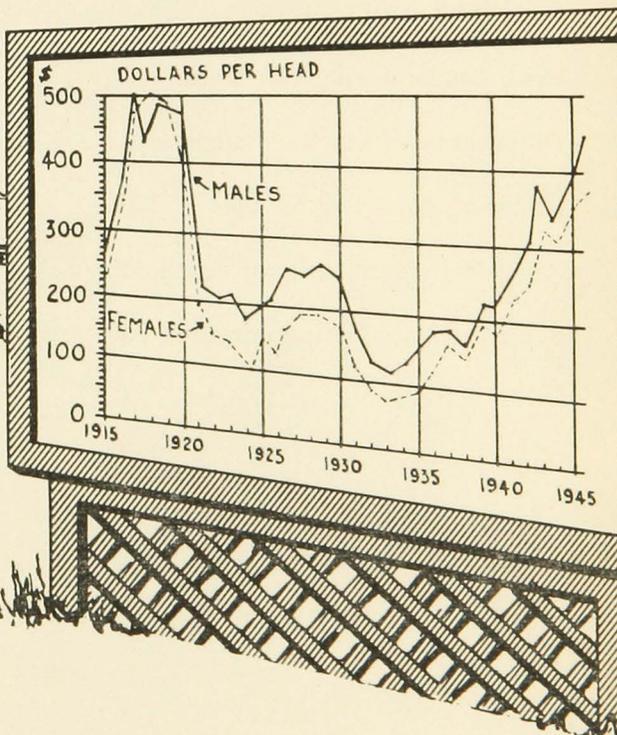
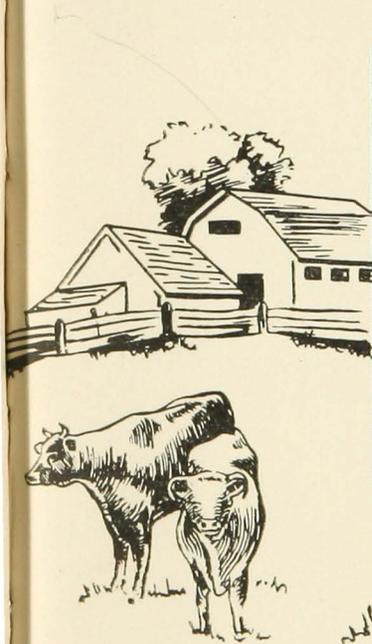


# Trends in Prices of PUREBRED CATTLE



This archival publication may not reflect current scientific knowledge or recommendations.  
 Current information available from Minnesota Agricultural Experiment Station: <http://www.maes.umn.edu>

AUSTIN A. DOWELL                      ARNOLD BREKKE  
*Agricultural Experiment Station*  
 UNIVERSITY OF MINNESOTA

## CONTENTS

	Page
Sources of data.....	4
Long-time price trends.....	5
Price trends during two wars.....	6
Differences within the year.....	6
Prices of males and females.....	8
Some factors affecting purebred dairy cattle prices.....	10
Some factors affecting purebred beef cattle prices.....	14
Other factors.....	16
Suggestions .....	18

# Trends in Prices of Purebred Cattle

by Austin A. Dowell and Arnold Brekke

**T**HE BOOM in prices of purebred beef and dairy cattle which began during the early part of the recent war is still under way (June, 1947). Within recent months a dairy bull is reported to have sold for \$45,000 and a dairy female for \$23,500. A lot of 50 purebred dairy cattle was sold at auction by one breeder at an average of \$3,082 per head. A breeder of purebred beef cattle sold 50 head of males and females at auction at an average of \$5,614. Fifteen bulls in this sale averaged \$10,233 and 35 females averaged \$3,605. This is the highest average for a beef breed ever reported for the entire offering of a single firm. One female of this breed in another sale brought \$25,000, which also established a new all-time record price for a beef female sold at auction.

One bull of another beef breed sold for \$51,000 and another for \$52,000. The latter is a new all-time record for a beef bull of any breed sold at auction in the United States. Prices comparable to those of the last few years have not been reported since the boom during and immediately following World War I, over a quarter of a century ago. Although these are extreme rather than typical cases, they suggest what is taking place in the purebred cattle market.

Buyers of breeding stock are concerned with somewhat different factors than buyers of animals for fattening or milk production. As a result, animals bought for breeding purposes usually command higher prices than the general run of market cattle. The factors affecting values of breeding cattle cover a wider range than of market cattle; consequently, the variation in prices of the former is considerably greater.

The sharp rise in prices paid for purebred beef and dairy cattle during and since World War II has led to widespread interest in the trend of prices over a period of time. What have been the long-time price trends? How do present prices compare with prices during the previous boom? Do average prices of purebred beef and dairy cattle vary during the year? What is the relationship between prices of males and prices of females, and are these relationships the same for beef and dairy cattle? A study of price trends raises many questions as to causal factors. For example, are purebred beef and dairy cattle prices influenced largely by prices of the ultimate products of beef and dairy herds? Are they influenced to a greater extent by the level of farm income or by other factors? These are some of the questions with which this bulletin is concerned.

## Sources of Data

While substantial numbers of purebred beef and dairy cattle are sold each year, these transactions do not occur at regularly established markets. Sales are made privately and at public auction, at irregular intervals, and at widely scattered points throughout the country. In some respects, the situation surrounding the sale of purebred cattle is quite similar to that surrounding the sale of farm real estate; there are no regularly established markets and no recognized market quotations comparable to those for commercial livestock, grain, and produce.

In the absence of definite quotations, it was necessary to develop a time series of sale prices from various sources.<sup>1</sup> Records of transfers of animals sold for breeding purposes are maintained by the various breed associations. However, the consideration is not required on the transfer form filed with the breed association, so price information is not available from this source. Prices paid in sales made privately are seldom published or reported except in the case of noted animals or unusual prices or both. In a few cases, the breed associations compile fairly complete records of sales made at public auction. More often this is done by the breed-association journals. A sale advertised in a given breed-association journal is commonly reported in some detail in a subsequent issue. Annual summaries of such sales frequently are published, together with comparisons with other years. Thus, from data obtained from breed associations and journals, it was

possible to construct a series of weighted average annual prices obtained at public auction for two breeds of beef cattle and for four breeds of dairy cattle, males and females combined, for the period 1910-46. Figures for males and females separately were not available for some breeds and were not complete for the entire period for others. Sale prices by quarters for the period 1939-46 were obtained for one beef breed and two dairy breeds. While the number of animals included in the reports of auction sales represents a relatively small proportion of all transactions, and while the average of prices received at the reporting auctions may vary more or less from the average of prices received for animals sold at private sales and at unreported auctions, either because of differences in age or in actual or assumed productivity, it is believed that the prices obtained at the reporting auctions indicate fairly satisfactorily the trend of purebred cattle prices.

The number of purebred breeding animals sold at public auction increases during boom periods and decreases during low-price periods. For example, the total of males and females of the four breeds of dairy cattle sold in the reporting auctions declined to a low of 3,588 head in 1933 and then increased to 31,463 in 1946. Of the two beef breeds, the total declined to a low of 3,312 head in 1932 and then increased to 50,762 in 1944, with 47,390 in 1945 and 49,132 in 1946. The average quality probably varies inversely with the number sold because the returns from low-grade animals hardly justify the feed and labor and the expense of an auction during low-price periods. Indications are that the rate of increase in price during a boom is less for low- than for high-grade animals. Consequently, it is probable that the price fluctuations reported in this bulletin are slightly less than if the quality of the animals remained constant.

<sup>1</sup> Sale prices of purebred beef cattle, dairy cattle, sheep, and hogs were compiled from various sources by the U. S. Department of Agriculture for the period 1922 to 1930. However, the methods used in obtaining, tabulating, and reporting the data were such that they could not be used in connection with this study. See *Crops and Markets*, 1924, 1925, 1927, 1929, and 1931, and U. S. Department of Agriculture Statistical Bulletin 20.

## Long-Time Price Trends

Index numbers of prices received at auction for purebred beef cattle and for purebred dairy cattle for the period 1910-46 (1935-39=100) are shown in figure 1. The general price trend appears to be much the same for both classes of cattle. A pronounced boom occurred during and immediately following World War I. This was followed by a decline which returned prices to about prewar levels by 1923. Prices strengthened during the next few years, but another decline which began late in 1929 carried prices far below the prewar level by 1932. Prices advanced considerably from 1933 to 1936, fluctuated within fairly narrow limits from 1936 through 1940, and thereafter moved upward at a rapid rate. The ad-

vance since 1940 suggests that the experiences of the preceding boom and subsequent depression may be repeated.

While the general trends of prices of purebred beef and dairy cattle appear to be much the same, some significant differences will be observed.

1. Purebred beef cattle prices have been subject to much greater fluctuations than purebred dairy cattle prices, rising much higher during the World War I boom and falling farther during the subsequent depression. Purebred beef cattle prices also fell farther in the depression of the early 1930's and advanced more sharply during the recent upswing.

2. At the beginning of a major upswing in prices, there appears to be some tendency for purebred beef cattle prices to rise one year in advance of

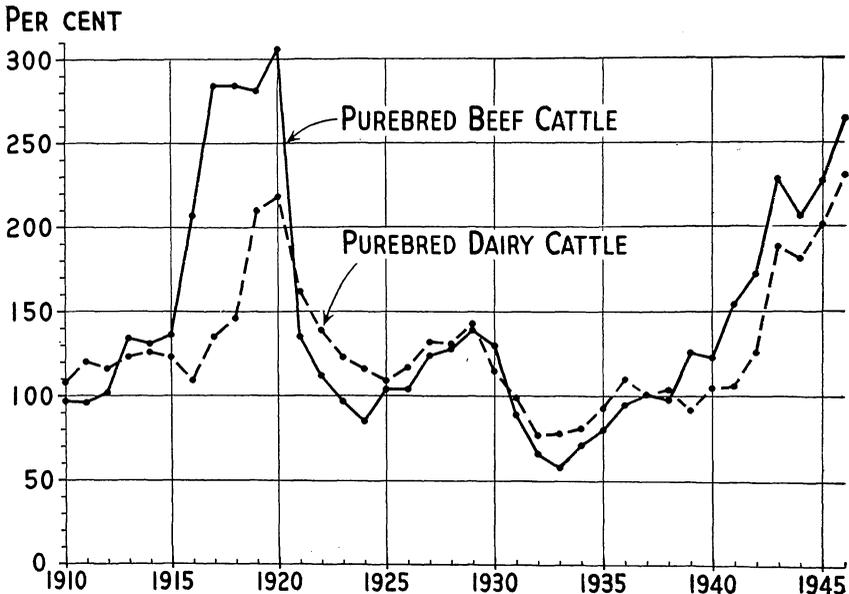


FIG. 1. Prices received for purebred beef and dairy cattle sold at auction, 1910-46. Index numbers, (1935-39=100). Data are based upon sale prices of males and females combined for two breeds of beef cattle and four breeds of dairy cattle

purebred dairy cattle prices. The rise in purebred beef cattle prices preceded the rise in purebred dairy cattle prices in 1916, 1925, and 1941, but lagged behind in 1933. But major price declines occurred simultaneously, the rate of decline varying.

## Price Trends during Two Wars

Purebred beef cattle prices remained fairly constant during the first two years of World War I and World War II and then advanced sharply (figure 2). The increase during this boom, through 1946, was very slightly less than during the boom following World War I. At the same time, the rate of increase during 1946 gave no indication that the current rise had run its course by the end of that year.

Prices of purebred dairy cattle remained fairly constant during the first three years of each war and then moved upward at a fairly rapid rate. The increase during this boom has been considerably greater than during the other boom. However, the increase was less for purebred dairy cattle than for purebred beef cattle during both boom periods, although the difference has been much less during this than during the previous boom.

## Differences within the Year

Great care must be exercised in interpreting within-the-year differences in average prices of purebred beef and dairy cattle sold at auction. For the period 1939 to 1946, for example, there was a fairly distinct and consistent within-the-year price variation for the one beef breed studied (figure 3). In seven of those eight years highest average prices were obtained during the first quarter and lowest prices during the third quarter. One of the two dairy breeds studied recorded its lowest

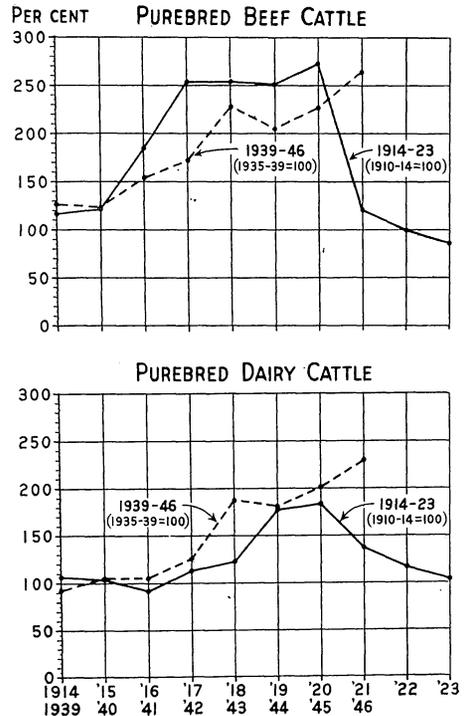


FIG. 2. Prices received for purebred beef and dairy cattle sold at auction  
Index number, 1914-23 and 1939-46

prices in the first quarter five out of eight years; the other dairy herd, in every one of the eight years. There was considerable variation, however, both within and between these breeds with respect to the quarter of highest average prices. Thus, there was relatively little uniformity in the within-the-year pattern of prices between the different breeds.

When numbers of animals sold per quarter were related to average prices received per quarter, it was found that lowest average prices tended to be paid when the smallest numbers were sold. One dairy breed recorded lowest prices each time numbers were lowest, and except for one quarter when numbers were next to the smallest the same was

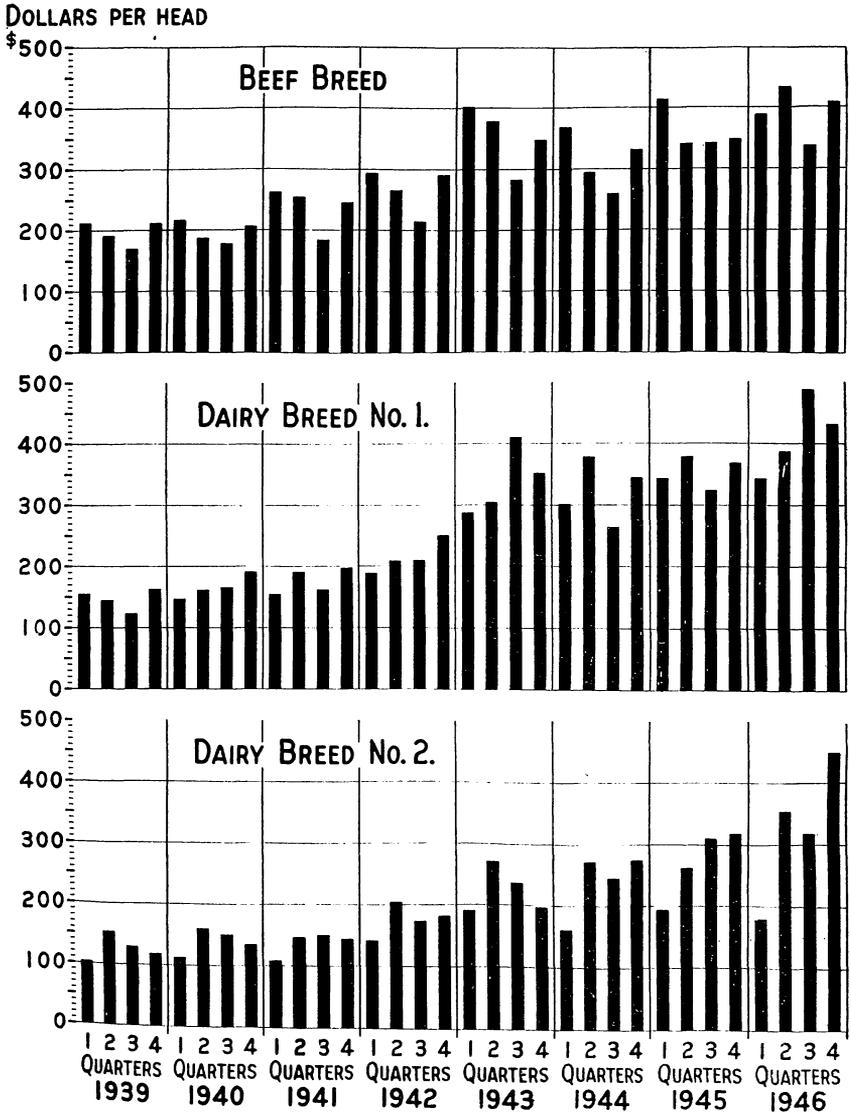


FIG. 3. Average prices received for purebred beef and dairy cattle sold at auction by quarters, 1939-46

Data are based on sale prices for each breed, males and females combined

true with the beef breed. Lowest prices for the other dairy breed were obtained when numbers sold ranked next to the lowest, except for one quarter when numbers as well as prices also were lowest.

Numbers and prices of males and females were tabulated separately by quarters for only one beef breed. The number of females sold was highest during the fourth quarter while prices were usually highest during the first quarter. The number of males was highest either during the first or the fourth quarter, with prices highest more often in the fourth quarter than in the first. In other words, the within-the-year price pattern for the females of this breed not only differed from that for males but it was more consistent from year to year.

It appears that differences in seasonal demands for males and females of a given breed contributed somewhat to the variation in prices during the year. It is also probable that, of animals of greater actual or assumed quality, a larger proportion are commonly sold at auction during some months than during other months, and that this varies from breed to breed. For example, a given consignment sale is usually held at approximately the same time each year, some of these being held in connection with regularly scheduled livestock exhibitions. Similarly an individual breeder who sells surplus animals at auction commonly sells at about the same time each year. When leading consignment and individual-breeder auction sales are thus concentrated in certain periods of the year, prices naturally average higher at that time than other months. This appears to be common, at least among some breeds. Variations in age also may be a contributing factor. To the extent that price variations within-the-year are due to quality or age, therefore, they should not be interpreted as representing seasonal price trends.

Additional research will be required to determine the nature of and the specific factor or factors responsible for the within-the-year variations in average prices at auction of each breed of purebred beef and dairy cattle. Such a study should cover a sufficient length of time to ascertain whether the price pattern associated with a rising market differs from that of a constant or declining market. The significance of such a study is readily apparent. Without this information, there is very real danger that a normal short-time within-the-year change in trend may be erroneously interpreted as the beginning of a major long-time change in the trend of prices.

## Prices of Males and Females

Prices of beef males were considerably higher than those of females each year except at the peak of the World War I boom (figure 4). On the other hand, average prices of males of the dairy breeds were higher than average prices of females only during the moderately high-price period from 1926 to 1929 and again during the higher-price period from 1943 to 1946 (figure 5). From 1932 to 1942, prices of dairy females were slightly higher than prices of males. The data are based upon prices received at auction separately for males and females of one beef breed during 1915 to 1946 and of three dairy breeds during 1926 to 1946.

A number of tentative conclusions are suggested by these rather limited data.

1. Prices of purebred beef males and females tend to rise and fall together, although not at the same rate. Prices of purebred dairy males and females also tend to rise and fall together. There is no evidence of a lag or divergence in direction of the price trends of beef males and females or of dairy males and females.

2. Of the one beef breed for which data were available for a considerable period of time, the average number of beef females sold at auction does not differ greatly from the number of males sold. However, the number of females sold varies more from year to year, rising relatively higher during high-price periods and falling farther during low-price periods. In the case of another beef breed for which comparable data were available only for the last few years, the proportion of males to females sold at auction declined from 40 per cent in 1943 to 26 per cent in 1946.

3. Prices of dairy males appear to rise higher during high-price periods than prices of dairy females. This may be due to the fact that the ratio of dairy males to females sold at auction, which

is low at all times, declines relatively more during high-price periods. About 17 per cent as many males as females were sold at the reporting auctions in 1932 and 1933 when relatively few of either sex were sold, compared with less than 13 per cent in 1942 and 1943, 12 per cent in 1944, and a little over 10 per cent in 1945 and 1946 when the absolute number of each sex had increased sharply.

It is also probable that the sire receives more attention, relatively, in beef herds than the dam, while the milk records of dairy cows tend to focus attention on the dams because of the value of such records in selling offspring. The relatively small proportion of males in purebred dairy cattle auctions compared with purebred beef

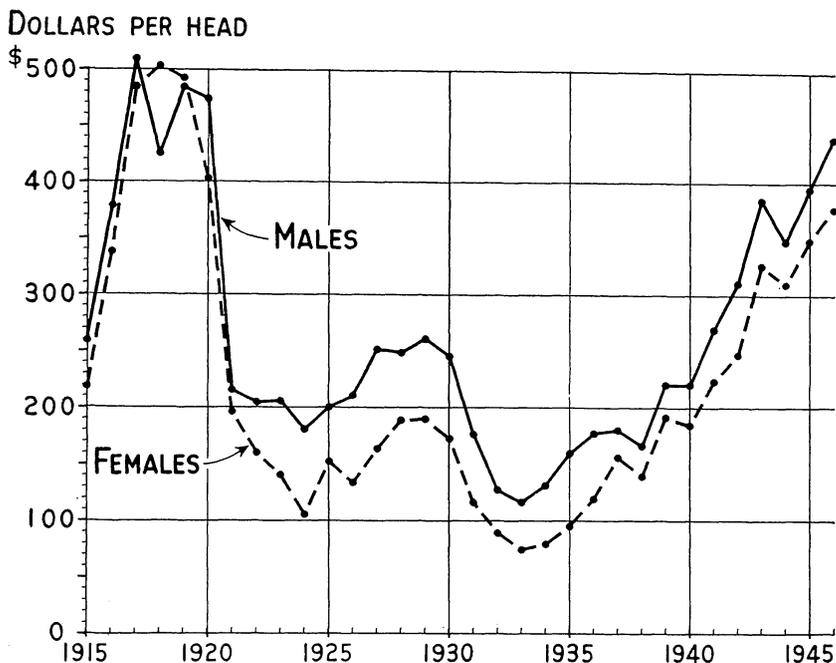


FIG. 4. Average prices received for purebred beef males and females sold at auction, 1915-46

Data are based on sale prices of one beef breed only

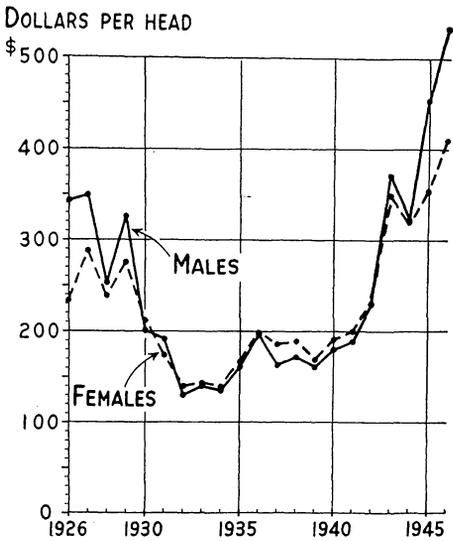


FIG. 5. Average prices received for purebred dairy males and females sold at auction, 1926-46

Data are based on sales of three dairy breeds

cattle auctions suggests that a higher proportion of dairy bulls is sold privately than is the case with beef bulls. Many dairy farmers buy young immature bull calves privately and grow them out for use as sires, while most breeders of beef cattle buy bulls of serviceable age. Although artificial insemination of cows in commercial dairy herds has expanded rapidly during recent years and may expand further, it has not yet reached a point where it has greatly affected the total number of bulls required.<sup>2</sup> The extent to which prices of beef or dairy males and females were influenced by differences in age or in actual or assumed quality during high- and low-price periods could not be determined from the data.

<sup>2</sup> A. A. Dowell and L. M. Winters, *Economic Aspects of Artificial Insemination of Commercial Dairy Cows*, *Journal of Farm Economics*, Vol. XXIV, No. 3, August, 1942, pp. 665-76.

## Some Factors Affecting Purebred Dairy Cattle Prices

Prices of purebred dairy cattle and of 92-score butter at New York (1935-39=100) are shown for the period 1910-46 in figure 6. The New York wholesale butter prices were adjusted for subsidy payments from 1943 to 1946. The index of purebred dairy cattle prices followed quite closely the index of butter prices from 1916 to 1922, but from 1923 to 1928 the index of butter prices remained much above that of purebred dairy cattle.

From 1929 to 1946 the trends were quite similar with two exceptions: (1) butter prices fluctuated somewhat more violently in 1932, from 1937 to 1939, and in 1946; (2) purebred dairy cattle prices advanced much more sharply in 1943 than butter prices but declined slightly in 1944. The failure of purebred dairy cattle prices to follow butter prices more closely from 1923 to 1928 probably was due to a temporary dampening of enthusiasm for purebred animals following the boom and subsequent crash, while the divergence in 1943 probably was due to increased enthusiasm for purebred animals as a result of wartime farm prosperity and to the fact that price controls were placed on butter but not on purebred cattle. The data for the entire period from 1910 to 1946 suggest that the relationship between prices of purebred dairy cattle and of butter is not one of dependency, but that both are affected by the same conditions.

Prices of purebred dairy cattle were even less closely associated with prices received by farmers of the United States for farm milk cows (figure 7) than with prices received for butter. The index of prices of purebred dairy cattle advanced much higher during the World War I boom but fluctuated less violently from 1926 to 1935 than the index of prices of farm milk cows.

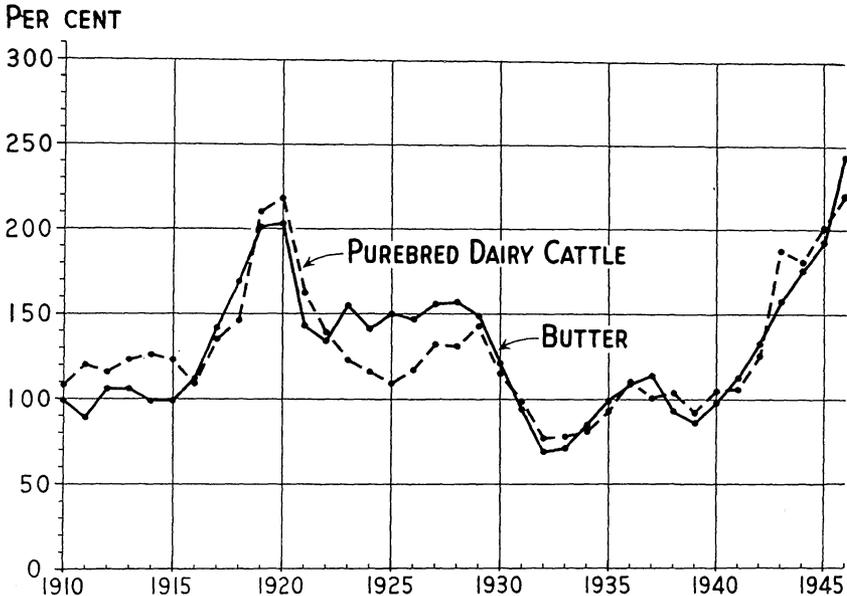


FIG. 6. Prices received for purebred dairy cattle sold at auction and wholesale prices of 92-score butter at New York, 1910-46

Index numbers, (1935-39=100). The New York wholesale butter prices were adjusted for subsidy payments from 1943 to 1946

However, the index of prices received by farmers for farm milk cows was closely associated with the index of prices received by farmers for beef cattle per 100 pounds. These relationships suggest that farm-milk-cow prices are determined to a considerable extent by the slaughter value of the cows, while purebred dairy cattle prices are determined largely by factors other than prices of farm milk cows or of beef cattle. The cyclical tendency of farm-milk-cow prices is due to the fact that farm-milk-cow prices are greatly influenced by the value of the dairy cow for meat.

For the period 1916-42, purebred dairy cattle prices followed wholesale prices of all commodities somewhat more closely than prices of butter or of farm milk cows (figure 8). The index of purebred dairy cattle prices was higher

than the all-commodity wholesale price index (1935-39=100) at the peak of the previous boom, fell less rapidly but slightly farther in the postwar slump, and advanced somewhat higher from 1927 to 1929; otherwise, the two price trends varied but little during this period. On the other hand, purebred dairy cattle prices were somewhat higher than wholesale prices of all commodities from 1911 to 1915 and much higher from 1943 to 1946. The divergence in the period 1911-15 was due largely to the fact that purebred dairy cattle prices as well as prices of many other agricultural products were higher relative to many important industrial items included in the all-commodity wholesale price index during this period than during most of the 1920's and 1930's. The divergence from 1943 on may be explained by price controls

which were in effect during most of this period and which prevented a sharp rise in the all-commodity wholesale price index, while purebred dairy cattle prices were not controlled. At the same time, the control of farm product prices may have tempered somewhat the rise of purebred cattle prices during this period.

The relationship between purebred cattle prices and farm land prices is also of interest because the more important long-time trends of each appear to be affected by some of the same economic forces.

The movements of sale prices of purebred dairy cattle and of farm real estate were quite similar from 1912 to 1920 and from 1933 to 1942 (figure 8). But the index of sale prices of farm real estate (1935-39=100) was considerably higher than the index for purebred dairy cattle from 1921 to 1932, except

from 1927 to 1929, and considerably lower from 1943 to 1946. Sale prices of farm real estate as well as sale prices of purebred cattle were high compared with many nonfarm items prior to the World War I boom. The purebred cattle boom was liquidated rather promptly, prices reaching approximately the pre-war level in 1923, or three years after the peak of the boom in 1920. On the other hand, it required more than a decade to liquidate the land boom. Average sale prices of farm real estate did not fall to the prewar level until 1932, and in some areas, including Minnesota, the low point was not reached for several years thereafter. The divergence from 1943 to 1946 was not quite as great as indicated in figure 8, for the reason that the purebred dairy cattle index for each year was based upon weighted average sale prices for the full year, while the farm

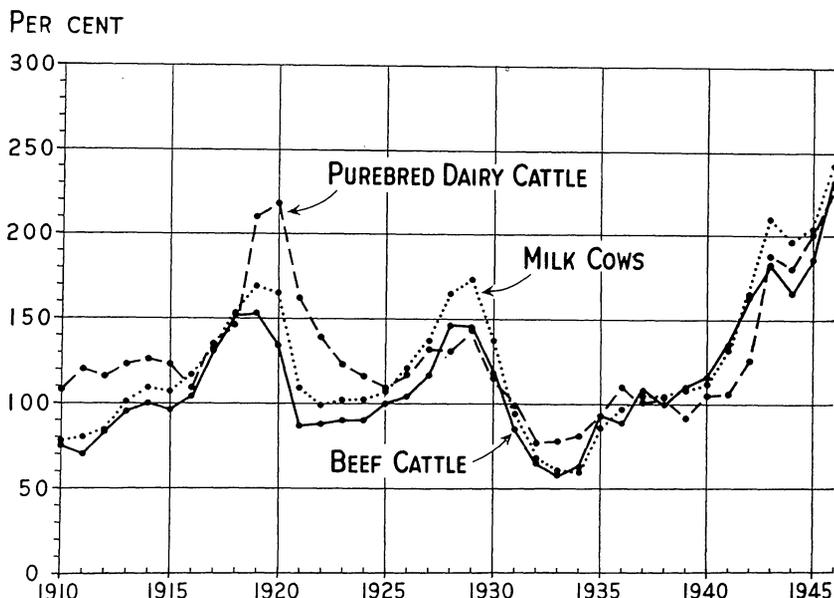


FIG. 7. Prices received for purebred dairy cattle sold at auction and United States farm prices of commercial milk cows and beef cattle, 1910-46

Index numbers, (1935-39=100)

real estate sale price index for a given year was based upon prices as reported by the Bureau of Agricultural Economics as of March 1, of that year. Land values advanced about 1 per cent per month from 1943 to 1946 so that the index for a full calendar year would have been somewhat higher than shown in the figure. However, even after allowance is made for this discrepancy, it is apparent that purebred dairy cattle prices advanced much more sharply from 1943 on than land prices.

In some respects, a purebred cattle boom is not as serious as a land boom. Boom prices for a few animals usually involve a smaller total investment than a boom price for a farm. A cattle boom is liquidated much more promptly than a land boom. However, both are undesirable, and when one is superimposed upon the other the results are bound to be disastrous to many. Large numbers

of farmers, particularly those near or beyond middle age at the time, were unable to recover from the World War I boom and subsequent crash. Indications are that farmers in general have a larger equity in their farm businesses now (June, 1947) than at any time since before World War I. This places them in a much stronger position to weather a financial storm, if and when it comes, than was the case following the preceding boom.

Several significant relationships will be observed between prices of purebred dairy cattle and the net income of farm operators in the United States (figure 9).

1. The net income of farm operators has fluctuated more violently than prices of purebred dairy cattle. The index of net income of farm operators (1935-39=100) advanced relatively more than the index of purebred dairy cattle prices during the World War I boom,

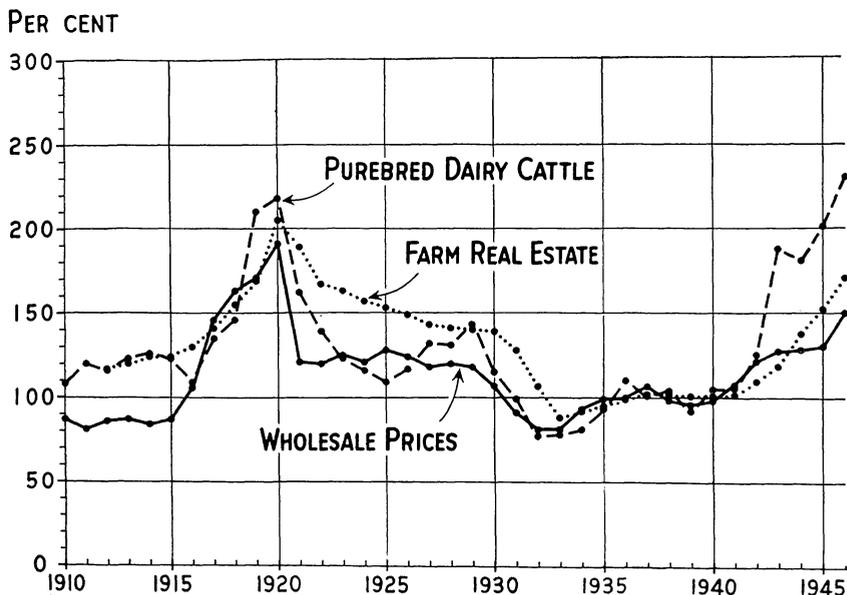


FIG. 8. Prices received for purebred dairy cattle sold at auction, wholesale prices prices of all commodities, and sale prices of farm real estate, 1910-46  
Index numbers, (1935-39=100)

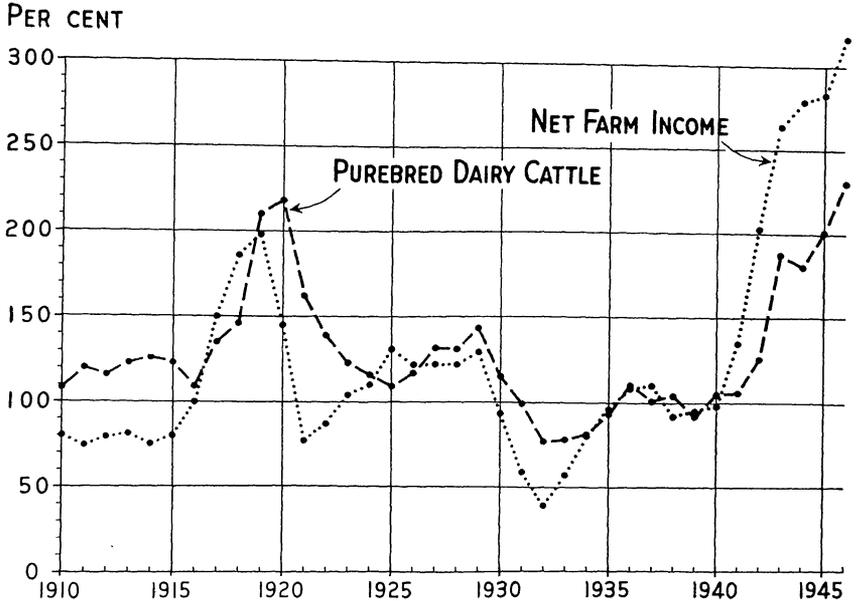


FIG. 9. Prices received for purebred dairy cattle sold at auction and net income of farm operators in the United States, 1910-46  
Index numbers, (1935-39=100)

fell more quickly and farther in the crash which followed, increased relatively more in the 1920's, fell farther in the early 1930's, and advanced much more sharply from 1941 to 1946.

2. The net income of farm operators has gained relative to prices of purebred dairy cattle since 1910-14. It was previously stated that purebred dairy cattle prices appeared to be relatively higher than wholesale prices of all commodities prior to World War I (figure 8). It now appears that prices of purebred dairy cattle at that time also were high relative to prices of other important farm products as reflected in the net income of farm operators.

3. There appears to be a tendency for changes in the trend of purebred dairy cattle prices to lag behind changes in the trend of net income of farm operators. For example, upturns in net in-

come of farm operators in 1916 and 1941 preceded upturns in purebred dairy cattle prices by one year and in 1933 by two years, while the upturn in 1922 was four years in advance of the upturn in purebred dairy cattle prices. The sharp downturn in 1920 and the modest decline in 1938 each preceded by one year a corresponding change in purebred dairy cattle prices, but in 1930 both declined together although not at the same rate.

### Some Factors Affecting Purebred Beef Cattle Prices

Prices of purebred beef cattle and prices of beef steers at Chicago behaved quite similarly from 1923 to 1938, but varied considerably prior to, during, and immediately following World

War I and again thus far in World War II (figure 10). The divergence was especially marked from 1916 to 1920 and from 1943 to 1946. Just as purebred dairy cattle prices were relatively high compared with prices of butter and of farm milk cows from 1910 to 1914, so were purebred beef cattle prices relatively high compared with prices of beef steers during that period. At the peak of the World War I boom, however, purebred beef cattle prices were much higher relative to the price of the commercial product than was the case with purebred dairy cattle. A similar situation developed in 1943 and continued through 1946. In other words, purebred beef cattle prices appear to be more closely tied to slaughter cattle prices during normal- and low-price periods than purebred dairy cattle prices to butter prices or to prices received by farmers for farm milk cows,

but much less closely associated during boom periods. Buyers of purebred beef cattle apparently pay close attention to prices of slaughter cattle during normal- or low-price periods, but pay little attention during a boom. That is, meat prices set an effective floor to purebred beef cattle prices but they do not set an effective ceiling. In short, speculative activities enter the picture in boom times.

Purebred beef cattle prices were fairly closely associated with the net income of farm operators (figure 11) from 1923 to 1938, although the relationship was not quite as close during part of this period as that of prices of purebred beef cattle and of beef steers at Chicago (figure 10). But the relationships were quite different during the two boom periods. During the earlier boom, even though purebred beef cattle prices rose much higher than the net

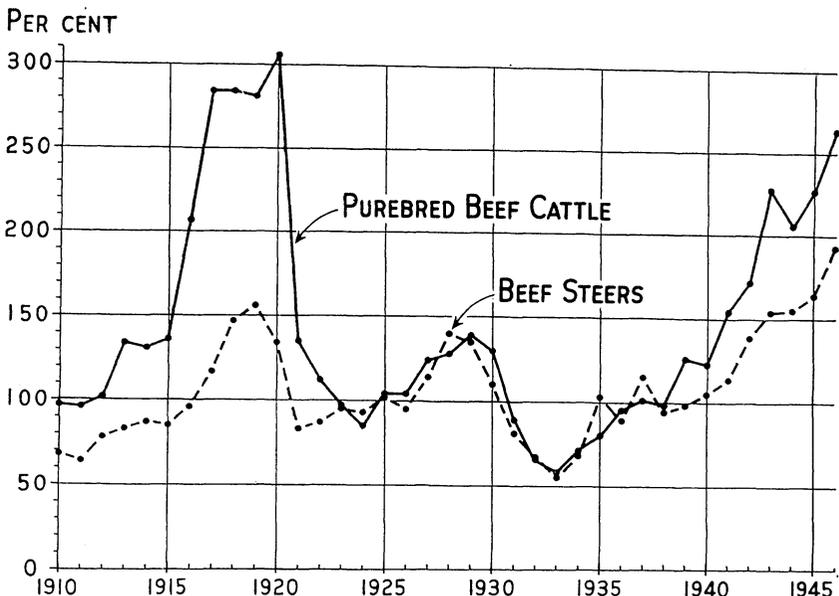


FIG. 10. Prices received for purebred beef cattle sold at auction and prices of beef steers at Chicago, 1910-46

Index numbers, (1935-39=100)

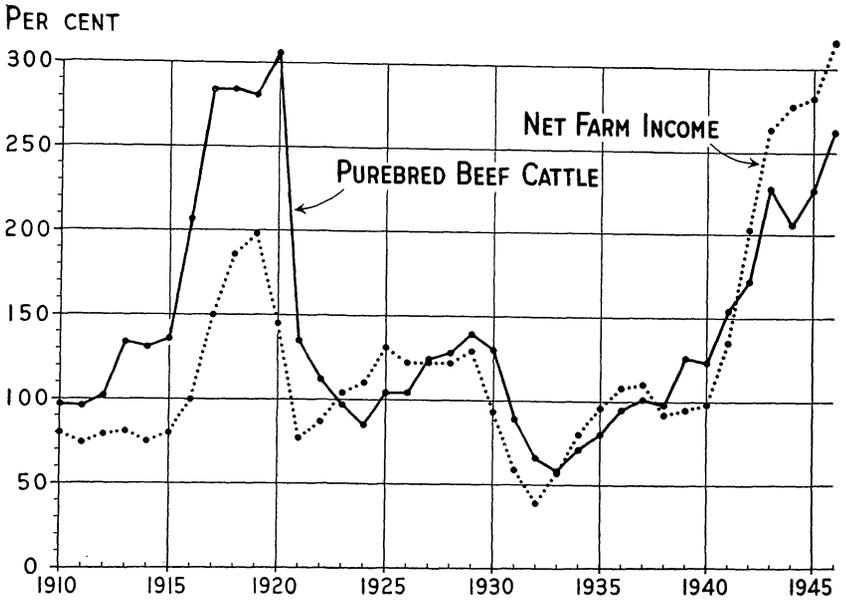


FIG. 11. Prices received for purebred beef cattle sold at auction and net income of farm operators of the United States, 1910-46

Index numbers, (1935-39=100)

income of farm operators, the divergence was much less than between purebred beef cattle prices and prices of beef steers at Chicago. On the other hand, from 1942 to 1946 the net income of farm operators was much higher and the prices of beef steers at Chicago much lower than purebred beef cattle prices.

The upturn in net farm income preceded the upturn in purebred beef cattle prices by three years in 1922 and by one year in 1933, while both moved up together in 1916 and in 1941. The decline in net farm income in 1920 preceded the decline in prices of purebred beef cattle by one year, but in 1930 both declined together. These relationships suggest that net farm income exerts strong pressure on purebred cattle prices, pulling purebred cattle prices upward as net farm income rises and

forcing purebred cattle prices downward as net farm income declines.

## Other Factors

Many factors in addition to those mentioned above also have affected the trends of purebred beef and dairy cattle prices. Some of these grew out of the war while others were of long standing. Some tended to limit the boom while others contributed to it. Among those which tended to limit the purebred cattle boom during and following the war were: (1) price ceilings on dairy products, slaughter cattle, and beef; (2) price ceilings on other agricultural products (except feed) and on nonagricultural products; (3) income tax payments; (4) purchase of government bonds by individuals; (5) farm-

labor shortage; (6) reduced feed supplies; and (7) memory of the preceding boom and subsequent crash. Productivity per man in agriculture as well as total agricultural output increased much more during this war than during World War I so that the supply situation tended to keep prices lower than would have been the case had productivity remained more nearly stable, as during World War I.

It is apparent from the data that prices received by farmers for butter and for slaughter steers, including various subsidies, continued to advance from the beginning of the war through 1946. Higher prices for these and other agricultural products together with extremely favorable crop yields were responsible for the increase of the gross income of farm operators to a new all-time peak in 1942, and the further rise each year thereafter through 1946. The gradual upward rise in prices received by farmers for dairy products, slaughter cattle, and many other farm products during this period was due to frequent increases in ceiling prices or in subsidy payments, or both. However, the net effect of price controls was to hold prices at lower levels than would otherwise have been the case. This was clearly indicated by the sharp rise in prices both of farm and nonfarm products when controls were lifted in 1946. Thus, price controls tended to limit the rise in farm and nonfarm incomes and hence to limit to some extent the rise in purebred cattle prices.

Income taxes were raised sharply during the war, tending to limit the net incomes of prospective farm and nonfarm purchases of purebred cattle. The purchase of government bonds likewise drew off some of the surplus cash. Labor shortage and the liquidation of surplus stocks of grain following the sharp increase in number of hogs to an all-time peak of 122 million pigs raised in 1943 contributed, no doubt, to the temporary decline in purebred beef and

dairy cattle prices in 1944. Some people were influenced by what happened during and following the other boom, but the memory of that unfortunate experience has grown dimmer with each passing year.

Other factors which tended to contribute to the purebred cattle boom include: (1) the absence of direct restrictions on either the transfer or price of purebred livestock; and (2) the purchase of breeding stock by individuals with large nonfarm incomes.

No restrictions were placed on the transfer or price of breeding animals during or following the war. The privilege of buying and selling either at private sale or at public auction was open to farm operators and outside investors alike. At the same time, building restrictions and the shortage of farm machinery limited expenditures for such items and left a larger proportion of the available income for other investments than otherwise would have been the case. Some of the surplus cash, no doubt, found its way into the purebred cattle market. However, even in the face of much greater savings and available purchasing power and much fewer opportunities to invest in farm buildings and machinery during this war than during World War I, the rise in prices of purebred cattle did not differ greatly during the two periods.

The maintenance of livestock-breeding establishments by outside investors is not new. Down through the years some urban residents have invested surplus funds in farm real estate, purebred livestock, and other forms of farm capital. By and large, such investments have been made primarily to satisfy a longing for the land and for good livestock, rather than for pecuniary gain. Under existing federal income tax laws and regulations, those with large incomes are encouraged to make such investments. Prices paid for any of these items are of relatively much less concern to those with large than those with

small incomes because they are able to recover a higher proportion of major capital losses and depreciation through income tax deductions.<sup>3</sup> They are also encouraged to make more or less wasteful operating expenditures because of the relatively small equities they have in their taxable incomes. This serves to explain in part at least the increased interest in purebred livestock by outside investors during the past few years. Although high-income receivers may limit their selections largely to animals that stand in the highest repute, the end result is keener competition and higher prices all along the line.

The extent of the purebred cattle boom clearly shows that the price-stimulating factors were much more effective during the war and up to the present (June, 1947) than those which tended to check it.

## Suggestions

The purebred cattle boom which has been underway since the early part of the recent war is largely a reflection of high net incomes to farmers and to some nonfarmers in the upper income brackets. High net farm income was due to a combination of unusually favorable yields, high prices for farm products, and production costs which lagged behind prices received. Although net farm income showed further increase during the first half of 1947, these factors are not likely to remain as favorable to farmers as during the last few years. For instance, there is some indication that production costs have begun to rise relative to prices of farm products and that effective foreign

demand may have reached its peak, at least for the present. Unfavorable weather in some important areas during the summer of 1947 has served notice that the uniformly large crops of the last few years are not to be expected indefinitely. In view of these considerations, a word of caution may be appropriate on the purebred cattle front.

Farmers should continue to keep both their short- and long-term debts within reasonable limits. Short-term debts, including purebred cattle notes, were especially troublesome following the World War I boom. The demand for funds to pay short-term obligations was in large part responsible for the fact that the total farm-mortgage debt of the country continued upward until 1923, or three years after the crash in 1920. Individuals were obliged to shift their short-term debts into long-term mortgage commitments.

Indications are that thus far during this boom the purchases of purebred cattle have been largely for cash. As long as surplus funds rather than borrowed capital are used for this purpose some of the disastrous effects of the preceding boom will be avoided. But funds spent on purebred cattle at inflated prices will not be available later to repair or improve the farmstead, to replace worn-out or obsolete farm machinery, or to raise farm living standards generally. Furthermore, if the boom continues over a period of time there is very real danger than an increasing proportion of purebred cattle transactions will be financed with promissory notes rather than with surplus cash.

The possible advantages to agriculture and to the public generally of investments in purebred livestock by those with large incomes should be balanced against the disadvantages. On the one hand, in a few notable instances, large-income receivers have brought about considerable improvements in the quality of livestock. A few

<sup>3</sup> A. A. Dowell and G. E. Toben, Some Economic Effects of Graduated Income Tax Rates on Investors in Farm Capital, *Journal of Farm Economics* 26(2):348-58, 1944. Also A. A. Dowell and G. E. Toben, *Income Tax Rates and Farm Investments*, Minnesota Farm Business Notes No. 253, January, 1944.

have made the services of superior sires available at moderate cost to farmers in their respective communities. On the other hand, such investments tend to contribute to the purebred cattle boom and to reduce the flow of funds into the federal treasury.

If it is decided that the general welfare will be best served by discouraging those with large incomes from investments in purebred livestock and by discouraging farmers and others from speculation in purebred animals, attention will need to be centered upon methods of reaching those objectives. The enthusiasm of large-income receivers would be dampened considerably by restriction of the practice of deducting capital losses and depreciation from farm and nonfarm income before computing the tax. If these items were deductible only from the current income from the farm, those with large incomes would be placed more nearly on the same level as owner-operators whose incomes are derived entirely from their farm operations. Elimination of the regulation whereby a considerable proportion of the capital gain is exempt from tax if the animals are owned more than six months would contribute to this end also. All capital gains would then be subject to the graduated income tax, and this would account for a considerable part of the total in the case of those with large incomes. These modifications of existing tax regulations would not prevent speculators with relatively small incomes from making substantial profits from buying and selling purebred livestock as long as prices continue to rise at a fairly rapid rate. To discourage such individuals from speculating in purebred livestock and hence contributing to the boom, it may be desirable to adopt a stiff capital-gains tax for the period of the emergency.

Farmers and others with moderate incomes should keep constantly in mind the fact that a purebred beef or dairy animal is worth what it will earn over its productive life, together with its slaughter value at time of disposal. Its true value is likely to differ greatly from its sale price either during a boom or during a depression. For example, the sale price of an animal during a boom may not be far out of line with the then existing prices of products to which it is related, but such a price may appear to be badly out of line when the boom ends and prices of products become adjusted to more normal conditions. Furthermore, as they listen to the chant of the auctioneer, farmers and others with moderate income should realize that the real cost of a high-priced purebred animal under existing income tax rates and regulations will be much less for those with large than for those with small incomes.

Past experience suggests that those who are already engaged in the breeding of purebred livestock will do well to avoid the temptation to expand operations during the boom or to buy or sell on credit. Farmers and others with modest incomes who look forward to joining the ranks of the purebred-cattle-breeding fraternity probably will find it to their advantage to husband surplus cash during the boom and await a more favorable time to embark upon such a career. Booms have a habit of ending at most unexpected times, and this one is not likely to be an exception. The end may be much nearer than many believe likely at this time (June, 1947). In any event, it would be much better for the industry generally if the violent price fluctuations which have characterized the past could be reduced by dampening the enthusiasm of boom periods and stimulating interest during periods of depression.