

AGRICULTURAL EXPERIMENT STATION

KANSAS STATE AGRICULTURAL COLLEGE
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DEPARTMENT OF AGRICULTURAL ECONOMICS

JUDGING PRICE RISKS IN MARKETING HOGS¹

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THE PROBLEM OF JUDGING THE HOG MARKET

The hog producer must judge market risks in planning both his production and marketing program. During the breeding period he must decide whether to increase or decrease the size of his hog business. During the feeding period he must decide whether to attempt to finish the hogs in a short period of time or to lengthen the feeding period.

Either consciously or unconsciously, the hog producer makes a market forecast. (Fig. 1.) If he increases his production he evidently believes the outlook to be bright. If he decides to lengthen

Acknowledgment.—Mr. Harold Hedges, now of the University of Nebraska, and Mr. D. N. Donaldson, now of the Colorado State Agricultural College, contributed to this circular by the compiling of data while connected with the Kansas State Agricultural College.

1. Contribution No. 43 from the Department of Agricultural Economics.

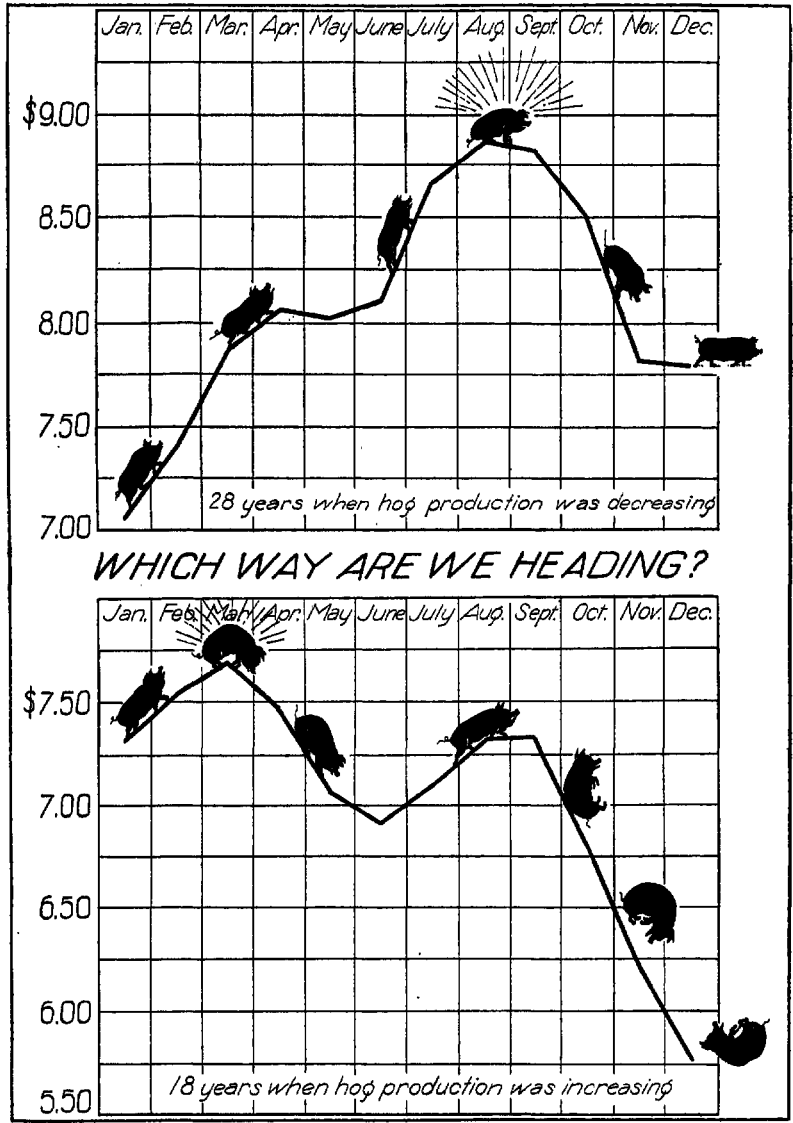


FIG. 1.—Hog prices and hog production.

the ordinary feeding period he predicts a more favorable outlook in the future. Right or wrong, he makes up his mind and acts accordingly.

The majority of hog producers are too often influenced by prevailing prices rather than by prospective prices. If hog prices and the feeding situation are favorable at breeding time, they increase production, while if the reverse is true, they decrease production. This practice has proved disastrous in the majority of cases.

The seasonal fluctuations in hog prices add to the risks involved in the production and marketing of hogs. Here again the actions of the majority influence the trend in prices. By following the line of least resistance and marketing at the time that is most convenient, many hog producers find that their hogs are ready to go to market at the time that many other producers are sending theirs to market.

The purpose of this circular is to point out some of the risks involved in the marketing of hogs. The hog producer can never eliminate the element of risk, but he can plan his operation in such a way as to take the least risk possible rather than in a way to make him run the greatest risks.

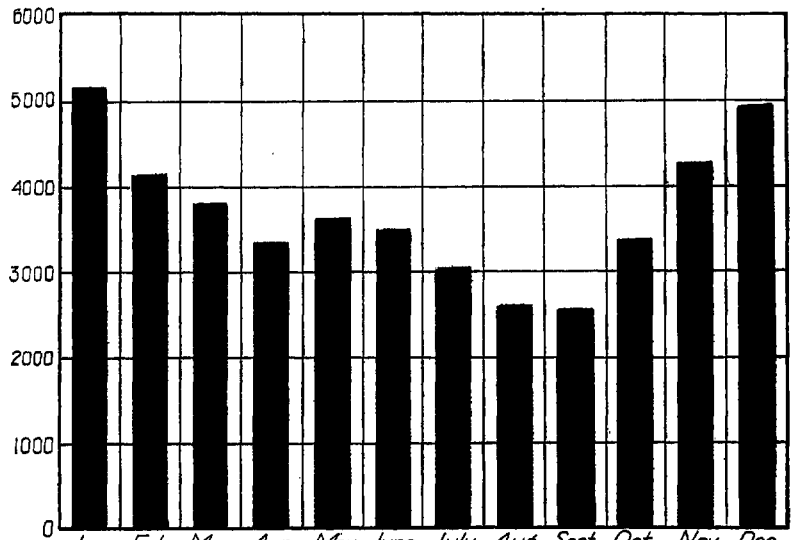
AVERAGE SEASONAL FLUCTUATIONS IN HOG PRICES

The seasonal trend in hog prices is quite generally recognized as being influenced by the marketing of the fall and spring pig crops. Market receipts tend to increase in May and June when the bulk of the preceding fall pig crop moves to market. Then again receipts increase in October, November and December, when the spring pig crop moves to market. As a consequence, the trend in hog prices is usually downward during these months of the year. This is illustrated in figure 2. The upper portion of the figure shows the average of monthly top prices at Kansas City for a period of 47 years (1880-1926) while the lower portion shows the average monthly receipts at the principal markets for a period of 11 years (1915-1925). The relation between receipts and prices is quite evident. The periods of increasing receipts are periods of declining prices and the periods of decreasing receipts are the periods of rising prices.

Averages are frequently misleading, however, for exceptionally high prices in a few years out of the many that go to make up the average may influence the average to such an extent that a true picture of the situation is not given. To overcome the distortion that averages may present in the seasonal price curve as shown in figure 2, a second figure, figure 3, was constructed. The lower portion of



Average of top prices by months



Average monthly hog receipts at principal markets, 1915-1925

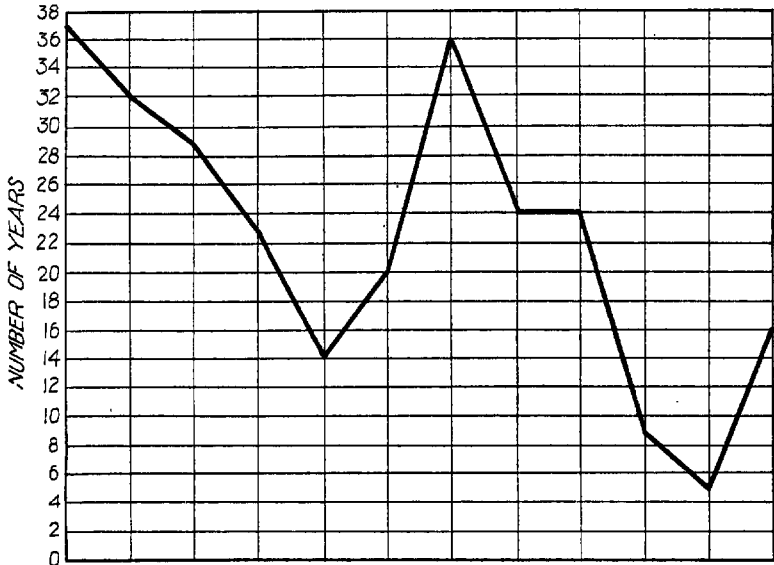
FIG. 2.—Top prices on hogs at Kansas City for 47 years, 1880 to 1926, and receipts at principal markets, 1915 to 1925.

this figure gives an idea of the frequency with which the price trend, as shown in the upper portion, occurred. For instance, this graph shows that in the 47 years under consideration the top price for hogs in July was higher than the top price in June 36 times. On the other hand, it shows that in only 5 years out of the 47 was the top price in November higher than the top price in October. This does not mean that the November price was the high price for the year. It only means that the November market was higher than the October market in 5 out of 47 years. It is important to bear in mind how the lower graph of figure 3 is constructed, for the method is used quite frequently in this circular.

The lower portion of figure 3 brings out some important points in connection with the average seasonal trend as presented in the upper portion of the figure. It shows that the April market is not so strong a market as the upper portion of the figure would lead one to believe. In fact, it shows that April prices were above March prices less than half the time, or in only 23 out of 47 years. Likewise, the August and September markets are not as frequently tending upward as the average of monthly prices indicates.



Average of top prices by months



Number of times that the top price in any month was higher than the top price in the preceding month

FIG. 3.—Top prices on hogs at Kansas City for 47 years, 1880 to 1926.

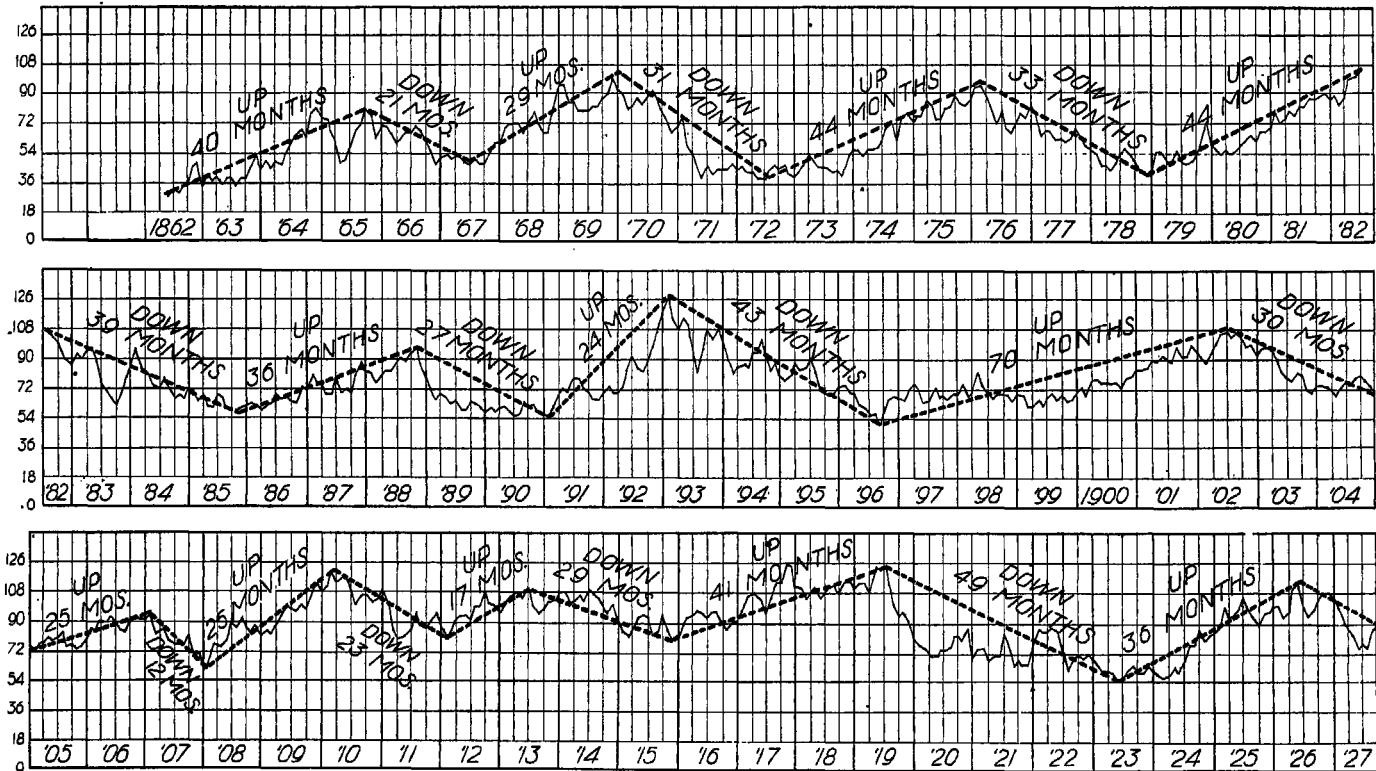


FIG. 4.—Hog values, 1862 to 1927.

The seasonal trends do, however, remain quite distinct even when the chances for abnormal movements are considered. The important factor influencing this seasonal trend is the variation in monthly receipts.

The reason for the variation in monthly receipts is mainly due to the fact that the easiest methods in hog production tend to throw hogs on the market at certain seasons of the year. Pigs farrowed in the early spring require more attention than those farrowed later in the spring and even then they must be handled with skill to be ready for market before the fall price decline starts. Furthermore, advancing corn prices during the summer months frequently make hog feeders check their operations and wait until new crop corn is available. Usually, however, it is the man who goes to the trouble to avoid the periods of heavy marketing who gets the advantage of the high points in the market.

RISKS OF CHANGES IN HOGPRICES

Hog prices not only move up and down from one season of the year to another, but they shift to higher or lower levels from one year to another. (Figs. 1 and 4.) The average seasonal tendency is for hog prices to be high in August and September. Such an average is, however, a cross between years when hog prices are shifting to higher levels and years when they are shifting to lower levels. It, therefore, pictures a situation about half way between two opposing realities. The hog producer is really faced with two risks—seasonal price fluctuations and year-to-year changes in price levels.

THE SUMMER PRICE ADVANCE WHEN HOG PRICES ARE WORKING TO HIGHER OR LOWER LEVELS

Higher hog prices in July have occurred 26 years out of the 29 in which hog prices were working to higher levels. On the other hand, when the general tendency of hog prices was toward lower levels, the July price advanced 12 years out of 19 and declined 7 years.

There is a greater risk in expecting strong August and September prices in years of declining price tendencies (Table I) than in years of advancing price tendencies (Table II). It is evident from this that high August and September hog prices are not a sure bet. The ordinary seasonal tendency of hog prices is itself affected by the general direction that production or some other factor is causing prices to take.

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TABLE I.—Years when price trend was down. Kansas City top hog prices, showing years in which there was a price advance or a price decline in any month as compared with the preceding month.

16	12	11	8	2	4	12	11	9	2	2	3
1927											
1923											
1922											
1920											
1914	1927					1927					
1911	1922	1923				1923	1927				
1910	1921	1922				1921	1923				
1907	1914	1921				1914	1914	1927			
1903	1910	1920				1911	1911	1923			
1896	1907	1914				1907	1910	1920			
1894	1903	1910				1896	1903	1910			
1893	1893	1903				1895	1894	1907			
1890	1890	1895			1921	1894	1890	1903			
1885	1885	1890	1895		1920	1889	1889	1894			1921
1884	1884	1889	1894	1922	1911	1885	1885	1893	1907	1911	1885
1883	1883	1883	1890	1893	1895	1884	1884	1890	1896	1883	1883
Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
3	7	8	16	17	15	7	8	10	17	17	16
1889	1889	1884	1883	1883	1883	1883	1883	1883	1883	1884	1884
1895	1894	1885	1884	1884	1884	1890	1893	1884	1884	1885	1889
1921	1895	1893	1885	1885	1885	1893	1895	1885	1885	1889	1890
	1896	1894	1889	1889	1889	1903	1896	1889	1889	1890	1893
	1911	1896	1893	1890	1890	1910	1907	1895	1890	1893	1894
	1920	1907	1896	1894	1893	1920	1920	1896	1893	1894	1895
	1911	1903	1895	1894	1894	1922	1921	1911	1894	1895	1896
		1927	1907	1896	1896		1922	1914	1895	1896	1903
			1910	1903	1903			1921	1903	1903	1907
			1911	1907	1907			1911	1910	1907	1910
			1914	1910	1910			1911	1910	1910	1911
			1920	1911	1914			1914	1914	1914	1914
			1921	1914	1922			1920	1920	1920	1920
			1922	1920	1923			1921	1921	1921	1922
			1923	1921	1927			1922	1922	1922	1923
			1927	1923				1923	1923	1923	1927
				1927				1927	1927		

SUMMER AND EARLY AUTUMN PRICES COMPARED WITH THE AVERAGE PRICE FOR THE WHOLE YEAR

A July price above the average price for the year prevailed 25 out of 28 years when hog prices in general were tending upward, as compared with a July price above the year's average price 7 times in 18 years of generally declining hog prices. The August price was above the year's average 27 years out of 28 years in generally advancing prices and 13 years out of 18 years of declining prices. September prices were above average 27 years out of 28 in years of advancing hog prices and 10 years out of 18 in years of declining hog prices.

October prices were above the year's average price 23 years out of the 28 when hog prices were tending toward higher levels and only 4 times out of 18 when hog prices were tending toward lower levels.

In years of advancing price tendencies, the chances are about 9 out of 10 that late summer and early autumn hog prices will be better than the average price for the year. On the other hand, the chances are only about fifty-fifty, or 5 out of 10, in years of declining price tendencies, in spite of the seasonal tendency toward strength in August and September.

CHANCES OF PRICE ADVANCES OR DECLINES IN ANY MONTH MUCH GREATER SOME YEARS THAN OTHERS

The risk of price declines in April (Tables I and II) is much greater in years of declining hog prices than in years of advancing prices. Likewise, the chances of December advances are much greater in years of advancing prices than in years of declining prices. Reference to Tables I and II shows much the same situation with regard to other months. There is no one distinct seasonal tendency in hog prices that always holds true in the way that a simple average of hog prices shows.

AVERAGE SEASONAL PRICE TREND MORE NEARLY LIKE WHAT HAPPENS IN GOOD MARKET YEARS

A statistical average, like the sausage coming out of a sausage mill, savors very much of the material that went into the other end of the machine. There is no magic in a 5-, 10-, 15-, 20-, or even a 50-year average. When 5 or 10 consecutive calendar years are averaged, the result leans toward the condition that is biggest and prevalent the longest time during the period.

For a long time, hog prices, in spite of their ups and downs, have been working up and away from \$3 and \$4 a hundred levels toward \$7 and \$8 levels. This in itself tends to make the later months in any average higher in price than the earlier months.

Furthermore, it will be found that while hog values have been up and down since Civil War times, every 2 to 4 years (fig. 4) the average length of the advance has been 36 months, while the average length of decline has been 31 months. From 1901 to 1926 the period of decline averaged 20 months; the period of advancing prices 27 months. Thus advances cover longer periods than declines. In indiscriminately averaging consecutive calendar years, there is considerable likelihood of including more months under the influence of advancing price tendencies than under the influence of declining tendencies because of the longer periods covered by price advances. This again would tend to make later months higher in the average than earlier months. All of this goes to make August and September prices relatively high in the average, as they really are in years of good hog prices. The average seasonal price, therefore, is the optimist's price. It needs to be understood in order not to be misleading at times.

HOW HOG PRODUCTION AFFECTS THE TREND OF HOG VALUES

A record of hog values since 1862 shows 11 distinct upward and downward swings. (Fig. 4.) The average length of time that values moved upward was 36 months, and the average length of time that values moved downward was 31 months.²

Several factors are responsible for the swings in hog values, but the increase and decrease in production is one of the chief factors. When hog values are high some producers expand their business and others get into the hog business. On the other hand, when hog values are low some producers curtail their hog business and others liquidate entirely.

An illustration of the influence of hog values on production is close at hand. The last peak in hog values was in June, 1926. Hog values had been on an upward swing for 36 months since May, 1923. Then production began to increase. The 1926 fall pig crop was 3 per cent larger than the year before and the 1927 spring pig crop was 3½ per cent larger than the 1926 spring pig crop. Again, the 1927 fall pig crop, as reported by the December pig crop survey by the United States Department of Agriculture, showed an increase of 11 per cent over the 1926 fall pig crop. The result was, of course, a change in the direction of hog values.

2. It should be noted that values are used instead of prices. It is thought that values put various price periods on a more comparable basis. Hog prices in 1880 at \$7 a hundred would be considered high, while to-day they would be considered low because the general price level for all commodities is higher.

It must not be assumed that the increase in production in the United States was altogether responsible for the decline in hog values since 1929. It must be understood that European production was also increasing and at a much faster rate than in the United States. This cut off our export demand to a large extent, and as a result added to the burden of increased production in the United States.

Hog producers apparently increase production more slowly under the encouragement of advancing prices than they decrease production under the influence of declining prices. This is shown by the fact that values continue on an upward swing longer than they do on a downward swing.

HOW TO GET SOME IDEA OF WHICH WAY PRODUCTION IS TENDING

Which way hog production is tending is an important judgment to reach in order to make the foregoing observations of practical value. Attention in this discussion is called to two bases of judgment. No doubt there are others. The following, however, are offered because they are two with which the writers have had some experience.

Twice a year the United States Department of Agriculture issues a report on the size of the pig crop. The June 1 report indicates, among other things, the number of pigs saved from the spring pig crop. The December 1 report gives the number of pigs saved from the fall pig crop.

The size of the spring pig crop will materially affect the number of hogs coming to market between October and March, inclusive. The fall pig crop will determine to a large extent the size of hog receipts from April to September, inclusive,

Other factors aside from the size of the pig crop, however, affect the movement of hogs to market, as will be shown later. A strong advance in corn prices may increase hog receipts by sending in hogs that would otherwise stay on the farm. A decline in corn prices may encourage holding and feeding to heavier weights. A pronounced drop in hog prices themselves may encourage holding back for a while. If the decline continues it may result later in a large increase in receipts. If even a rough account is taken of these factors, the size of the pig crop gives some idea of what to expect of receipts.

In Table III hog receipts at 67 markets were estimated for the period April to September, 1927, inclusive, on the basis of the size of the 1926 fall pig crop. Since the pig crop in the fall of 1926 was 3 per cent larger than that of 1925, an increase of 3 per cent in receipts might theoretically be expected. Out of the 1925 fall pig crop

there came to market between April and September, 1926, inclusive, 17,788 thousand hogs. A 3 per cent increase in the 1926 fall pig crop would mean, therefore, 18,322 thousand hogs for the period April to September, 1927. Merely on the basis of the 1920-24 average monthly distribution of receipts, 17.3 per cent of the number should come to market in April. This gives a theoretical figure of 3,170. This corresponds with actual April receipts of 3,142. Likewise, estimated receipts for other months can be determined and compared with the average. It will be noted that the greatest errors come in June, July and August. No doubt the spring advance in corn prices and the decline in hog prices followed by some improvement in hog prices by July, August and September was a disturbing influence. Even a 5 per cent arbitrary increase in the estimate of receipts for the three months, June, July and August, reduces the total error in the estimates about one-half.

By watching the trend of receipts the first month, if there is a decided change from the original estimate one can often correct his

TABLE III.—Estimate of hog prices at 67 markets from the fall pig crop of 1926 (103 per cent of the fall pig crop of 1925).

MONTH.	Marketed, 1920 to 1924.		Number marketed in 1926.	Marketed in 1927.	
	Av. number.	Av. per cent.		Estimate.	Actual.
	<i>Thousands.</i>		<i>Thousands.</i>	<i>Thousands.</i>	<i>Thousands.</i>
April	3,602	17.3	3,134	3,170	3,142
May	4,024	19.3	3,037	3,536	3,582
June	3,913	18.6	3,143	3,408	3,752
July	3,358	16.1	2,854	2,950	3,046
August.....	3,019	14.4	2,804	2,638	3,041
September.....	2,986	14.3	2,816	2,620	2,565
Total	20,902	100.0	17,788	18,322†	19,128

Revision of original estimate on basis of an unfavorable relationship between corn and hog prices that became apparent in June, 1927.				Revised estimate.	Actual.
April.....				3,170	3,142
May.....				3,536	3,582
June.....				3,578	3,752
July.....				3,098	3,046
August..				2,770	3,041
September.....				2,620	2,565
Total.....				18,772	19,128

† Total estimate, 103 per cent of 17,788, fall pig crop of 1925.

estimates for future months and reduce his first error of judgment. Without the employment of more involved statistical methods, this is about all that can be done to make these figures of practical value.

Carefully worked-out statistical measurements have shown that when corn prices increase and hog prices decline, or either one alone changes so as to make hog feeding less attractive, receipts compared with the previous year are affected. Receipts 6 to 18 months later are decreased 2 to 10 per cent.³ Apparently, the longer time influence of a bad corn- and hog-price relationship is to decrease production, and consequently receipts. The immediate influence, however, seems to be to increase receipts at the market for a time, as in June, July and August, 1927, referred to above.

**PRICE TENDENCIES IN MARCH AND APRIL AS INDICATORS OF THE
 GENERAL TREND OF HOG PRICES**

January, February and March prices are more frequently up than down even in years when hog prices for the year are generally tending downward. In 19 such years the January price was higher than the December price 16 times and lower only 3 times. February price was higher than January price 12 times and lower 7 times. Likewise, March price was higher than February price 11 times and lower 8 times. However, when it comes to April (Table I) prices have risen only 3 times and declined 16 times. This compares with higher April prices 20 times and lower April prices 9 times in the 29 years when hog prices for the year were tending upward.

Higher April prices only 3 times and lower April prices 16 times in 19 years, when the general trend of hog prices has been down, point to April as a seasonal turning point in the market. Higher April prices 20 times and lower April prices only 9 times in 29 years, when the general trend of hog prices was upward, point to the same conclusion.

April marks about the end of the marketing of the heavier winter-fed hogs and the beginning of the spring marketing of the fall pig crop. April receipts are most frequently the low point in hog receipts for the first six months of the calendar year. In 26 years, April receipts at four principal markets were the low point for the first six months of the year 17 times, or all but 9 years. The low point in the first six months' receipts came in March 4 times, in May once, and in June 4 times.

The time of heaviest pork exports is most commonly from January to March, inclusive. Exports usually show a decided decline

³ Elliott, F. F. Adjusting Hog Production to Market Demand. Ill. Agr. Expt. Sta. Bul. 298: 561-567. 1927. Ref., pp. 523-24.

in April or the two following months. Furthermore, the fall pig crop, which begins to come to market in April, is in total smaller than the spring pig crop, which moves to market mostly from October to March, inclusive. For these several reasons, April hog price is most often, though not always, quite sensitive to changes in hog-market influences.

APRIL AN IMPORTANT TURNING POINT IN HOG PRICES

I. Years of Declining Price Tendencies (19 Years) .—In 16 of the 19 years of declining hog price tendencies, the April price of hogs was either lower than or only equal to the March price. In 13 of these 16 years, the following July price was also lower than the March price. In 11 of the 16 years when April price was down, the following August price was also lower than the March price. In 12 of the 16 years the following September price remained below the previous March price and in all 16 years the December price was lower than the previous March price.

In years of declining hog price tendencies, therefore, the chances are about 5 to 1 that April price will be lower than the March price. If such happens to be the case then the chances are about 2 or 3 to 1 that prices in later months, even at the strongest times will be lower than the previous March price.

II. Years of Advancing Price Tendencies (29 Years) .—In 20 of the 29 years when hog prices tended generally upward throughout the year, the April price of hogs was higher than the March price. In all 20 of these years the following July price was also higher than the March price. In 18 of the 20 years, August price was higher than the March price; in 19 years of the 20, September price remained above the previous March price; and in 9 of the 20 years, or nearly half the time, even the December price, though seasonally low, was still above the previous March price.

In years of upward trend in hog prices, therefore, the chances are about 2 to 1 that the April price will be higher than the March price. When the April price is above the March price under these circumstances, there is very little risk in expecting July, August and September prices to be higher than the previous March price. There is even about a fifty-fifty chance that the seasonally low December price will be higher than the previous March price.

While there is no infallibility in the March-April price relationship, it has, in the case of top hog prices at Kansas City, been some aid along with other factors in getting some idea of the general trend of prices under the influence of changing production.

HOW CORN PRODUCTION AND PRICES AFFECT THE MOVEMENT OF HOGS TO MARKET

Corn prices have a marked influence on the movement of hogs to market. In years of large corn crops and low corn prices there is a distinct tendency to slow up market receipts from August to January.⁴ Hogs are held both for the purpose of increasing breeding stock and for the later feeding of the cheaper new corn. This ultimately, results in an increase in average live weight of hogs received at the markets.

The tendency to withhold hogs from market for feeding and breeding when corn prices are low results in a larger proportion of the season's hog production going to market between February and the following August.

In years of small corn crops and high corn prices market receipts tend to fluctuate to a greater extent than in years of low corn prices. As a consequence, the price trend in small corn-crop years is much more erratic than in large corn-crop years. The spring price decline is more severe, and similarly the summer rise is more pronounced. (Figs. 5 to 12.)

The relation between corn prices and hog prices is always an important factor in influencing market receipts. Hog prices may be low, but this factor may be offset by a very low corn price. The relation between the two prices is termed the corn-hog ratio. It represents the number of bushels of corn that it would take to buy 100 pounds of live pork. It does not express, as is sometimes assumed, the number of bushels of corn that it takes to produce 100 pounds of pork. It has been found, over a long period of years, that it takes approximately 11 bushels of corn to buy 100 pounds of live hogs. The average or normal ratio then is said to be 11 to 1. When corn is relatively cheap and hogs are relatively high, the corn-hog ratio is said to be high, and that is a profitable hog-feeding situation. On the contrary, when the ratio falls below 11 to 1 hog feeding becomes unprofitable except to only the most efficient feeders. As a consequence there is a tendency to dispose of feeding and breeding stock in periods when the corn-hog ratio is low.

In estimating the influence of the size of corn crop on market receipts, many factors must be taken into consideration, such as the relation between the size of the corn crop and the numbers of live stock, the amount of corn carried over from the preceding crop, and the quality and condition of the corn crop. However, a simple

4. Green, R. M., and Howe, Harold. Year-to-Year and Seasonal Fluctuations in Hog Prices. Kan. Agr. Expt. Sta. Cir. 132:1-14. 1926.

method, which most anyone can employ, that has been used satisfactorily is to compare the particular year under consideration with the three years on either side of it. This gives a seven-year moving average. Roughly, this method classes a corn-crop year since the World War of around three billion bushels as a large corn crop and one below three billion bushels as a small corn crop.

HOW HOG PRODUCTION AND THE SIZE OF THE CORN CROP TAKEN TOGETHER AFFECT THE SEASONAL FLUCTUATIONS IN HOG PRICES

The foregoing discussions have pointed out some of the major influences affecting the movement of hogs to market and the influence of this movement on hog-price trends. It is difficult, indeed, to give proper consideration to each factor influencing hog prices and feel certain that the proper weight has been given to each factor. It is apparent, however, that hog producers have had four distinct types of markets on which they sold their hogs. These may be classed as follows:

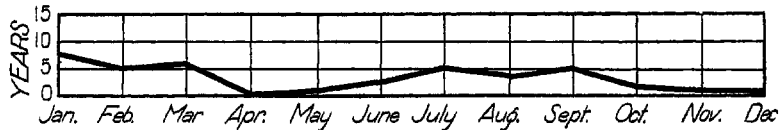
1. Years which follow *small corn crops* when hog *production is increasing* and the major trend in hog prices is downward. (Figs 6 and 10.)
2. Years which follow *large corn crops* when hog *production is increasing* and the major trend in hog prices is downward. (Figs 5 and 9.)
3. Years which follow *small corn crops* when hog *production is decreasing* and the major trend in hog prices is upward. (Figs. 8 and 12.)
4. Years which follow *large corn crops* when hog *production is decreasing* and the major trend in hog prices is upward. (Figs. 7 and 11.)

These four types of markets have distinct seasonal trends. When a price-trend chart for each is made, this becomes apparent. Figure 6, which shows the hog-price trend for the nine years since 1880, which followed small corn crops when hog production was increasing and the major trend in hog prices was downward, is quite different from the price-trend curve (fig. 3) showing the average of all years combined. Here the spring market shows a higher average than the fall market, the March market showing the peak price for the year. Figure 5 shows the same general trend.

However, figure 8, which pictures the price trend in years following small corn crops when hog production was decreasing, shows the fall market at higher levels than the spring market. The lower portion of the figure indicates the frequency with which prices advanced in a given month. It shows the upward swing well sustained from 50 to 90 per cent of the time. Figure 7 also shows a well-sustained seasonal advance in hog prices in years which follow large corn crops when hog production is decreasing.



Average monthly top price at K.C.



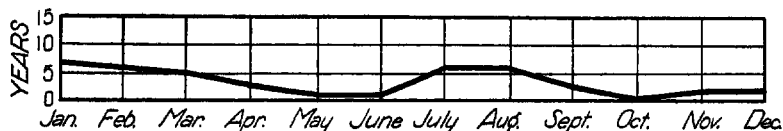
Number of times the price for any month was higher than the price for the preceding month

FIG. 5.—Top prices on hogs at Kansas City following large corn-crop years when major hog-price trend was downward.

Corn crop of 1895, 1902, 1906, 1909, 1910, 1919, 1920, 1921, 1922.
 Hog prices for 1896, 1903, 1907, 1910, 1911, 1920, 1921, 1922, 1923.



Average monthly top price at K.C.



Number of times the price for any month was higher than the price for the preceding month

FIG. 6.—Top prices on hogs at Kansas City following small corn-crop years when major hog-price trend was downward.

Corn crop of 1882, 1883, 1884, 1888, 1889, 1892, 1893, 1894, 1913.
 Hog prices for 1883, 1884, 1885, 1889, 1890, 1893, 1894, 1895, 1914.

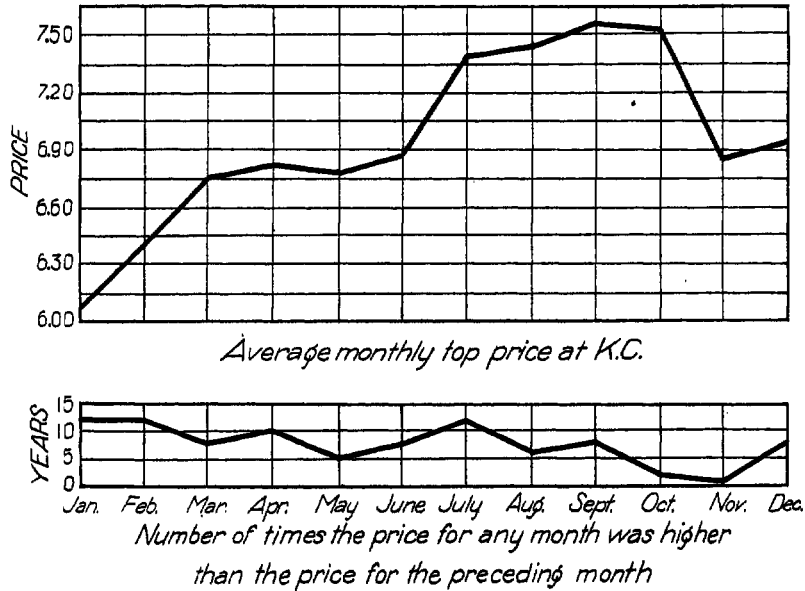


FIG. 7.—Top prices on hogs at Kansas City following large corn-crop years when major hog-price trend was upward.

Corn crop of 1880, '96, '97, '98, '00, '08, '04, '05, '07, '08, '12, '15, '23, '25.
 Hog prices for 1881, '97, '98, '99, '01, '04, '05, '06, '08, '09, '13, '16, '24, '26.

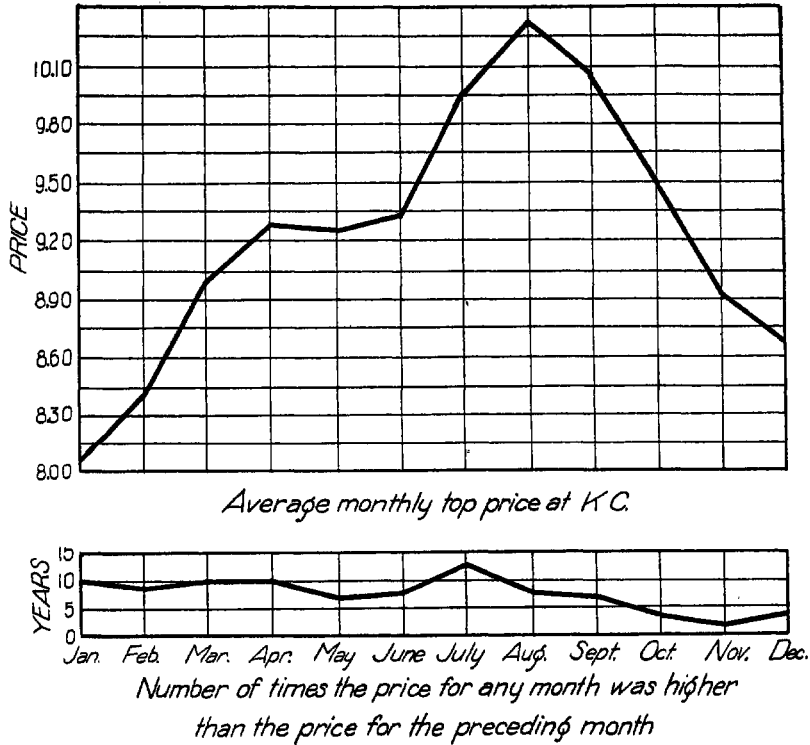


FIG. 8.—Top prices on hogs at Kansas City following small corn-crop years when major hog-price trend was upward.

Corn crop of 1881, '85, '86, '87, '90, '91, '99, '01, '11, '14, '16, '17, '18, '24.
 Hog prices for 1882, '86, '87, '88, '91, '92, '00, '02, '12, '15, '17, '18, '19, '25.

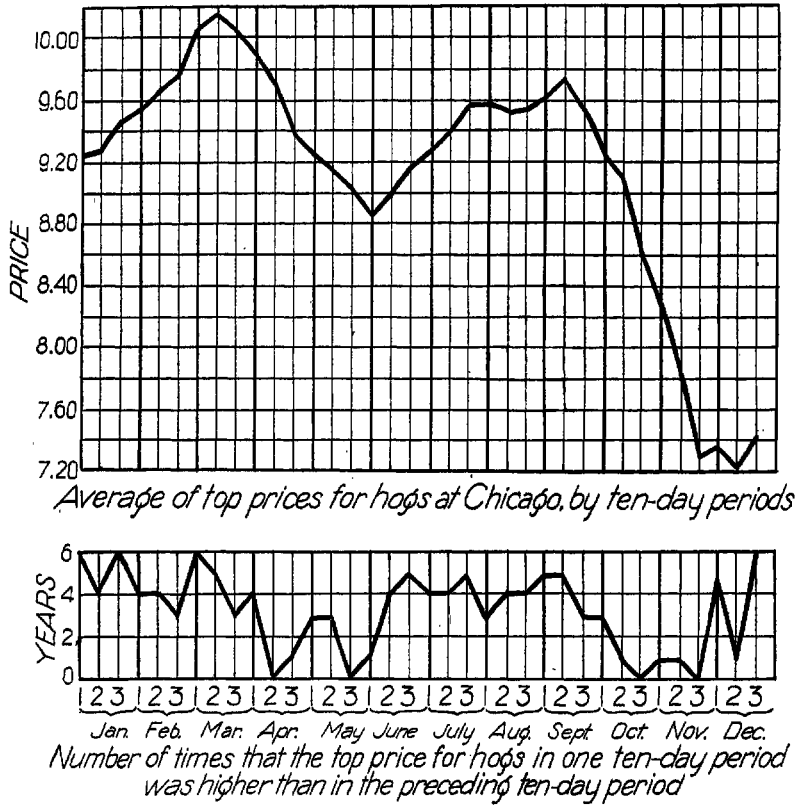
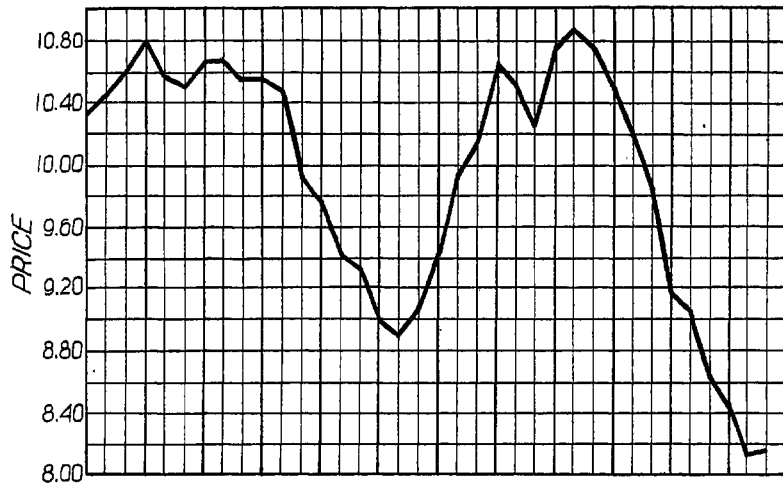
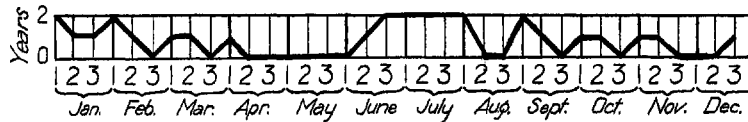


FIG. 9.—Top prices on hogs by 10-day periods at Chicago following large corn-crop years when major hog-price trend was downward—data for 1903, 1907, 1910, 1911, 1920, 1921, 1922, 1923.

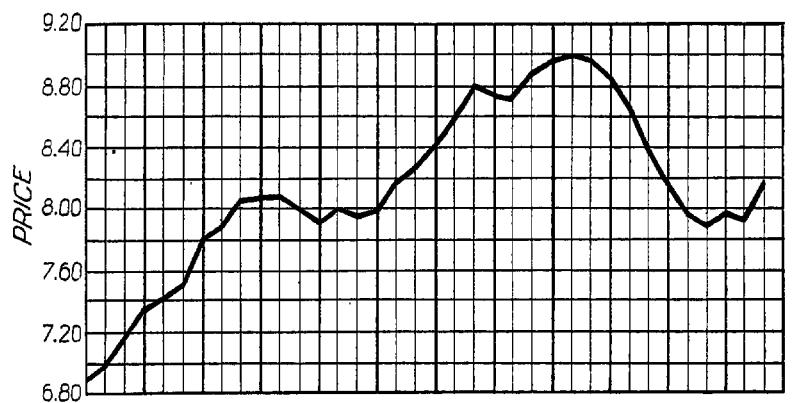


Average of top prices for hogs at Chicago, by ten-day periods

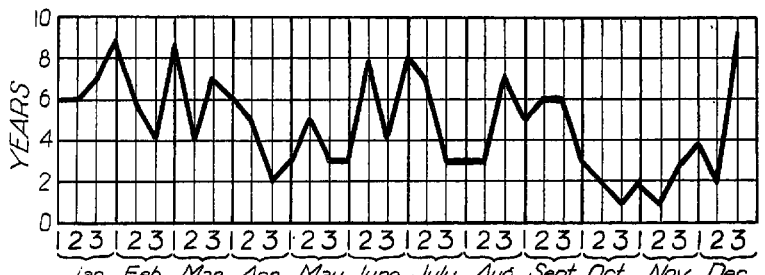


Number of times that the top price for hogs in one ten-day period was higher than in the preceding ten-day period

FIG. 10.—Top prices on hogs by 10-day periods at Chicago following small corn-crop years when major hog-price trend was downward—data for 1914, 1927.

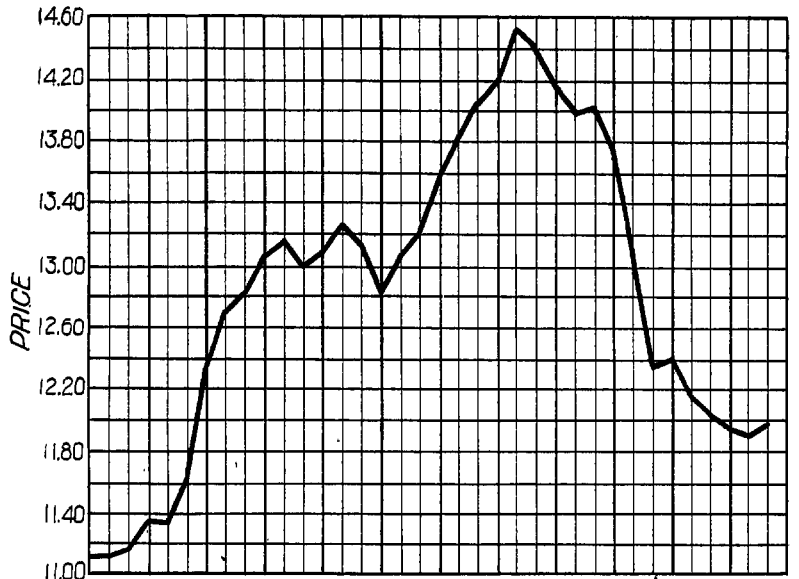


Average of top prices for hogs at Chicago, by ten-day periods

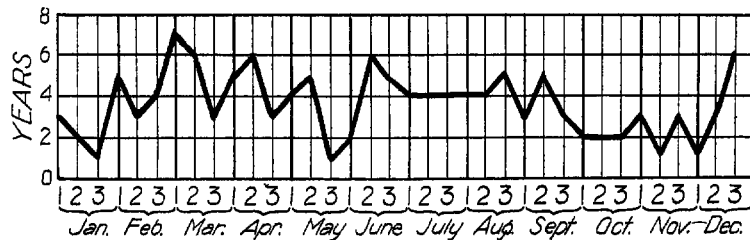


Number of times that the top price for hogs in one ten-day period was higher than in the preceding ten-day period

FIG. 11.—Top prices on hogs by 10-day periods at Chicago following large corn-crop years when major hog-price trend was upward—data for 1904, 1905, 1906, 1908, 1909, 1913, 1916, 1924, 1926.



Average of top prices for hogs at Chicago, by ten-day periods



Number of times that the top price for hogs in one ten-day period was higher than in the preceding ten-day period

FIG. 12.—Top prices on hogs by 10-day periods at Chicago following small corn-crop years when major hog-price trend was upward—data for 1902, 1912, 1915, 1917, 1918, 1919, 1925.

These price trends are well worth considering when one attempts to gauge the risks in the hog market.

It is unfortunate that daily price records prior to 1902 are not available, for a closer study of hog prices is often desirable.

Price records since 1902 were separated into four groups similar to the price data by months since 1880. These, however, were divided into 10-day periods in order to get a closer view of the hog price trends in each group of years. These are shown in figures 9 to 12. Here again it is apparent that the factor of increasing to decreasing production is the major influence in determining the general direction of hog prices. The size of the corn crop does, however, influence the shape of the price curve. In years following small corn crops, hog prices in the spring of the year are strengthened as a result of heavier marketings than usual the fall before. Also, because of less tendency to hold on to hogs after a small corn crop, midsummer hog prices are better maintained than in years following large corn crops.

It is the hog producer who looks ahead and gauges the situation correctly that profits most. It takes nerve to go contrary to what the majority do, but the majority usually are practicing the wrong procedure.

HOW CHANGES IN DEMAND AFFECT PRICES

I. Changes in Export Demand.—Demand for pork in foreign countries depends in part upon the general trend of commodity prices in those countries. If the prices of most commodities are going up the price of pork is likely to take a similar trend before long. Buyers will have increased buying power for pork as more is received for other commodities. Since prices in one country engaged in international trade cannot for long get out of line with the prices of another, it is quite likely that increasing pork prices abroad will closely parallel increasing prices in the United States. As price increases tend to parallel each other, the effect will finally be to decrease the quantity demanded at both ends of the line. Parallel advancing prices seem to affect hog production in somewhat the same way, both in the United States and abroad. Rising prices at about the same time start increased production at about the same time. This runs into a decrease in quantity of pork demanded in both countries, and, therefore, tends to start prices down in the United States and abroad at about the same time.

It is evident from this that increased production in this country is

very likely to run into increased production abroad. This increased production abroad will be another factor tending to lessen foreign demand. At the very time our own prices begin to decline, demand abroad at previous prices is likely to begin to lessen. Foreign demand] therefore, is more likely to parallel our home demand rather than step in and bolster up our prices when our home market is weakening.

II. Changes in Demand in the United States.—Many factors affect home demand. Perhaps as good a measure of this demand as the producer can very easily watch is the general trend of commodity prices. Such index numbers as the Bureau of Labor and Fisher's index appear in various current publications and on the market pages of many newspapers. They indicate whether most commodity prices are tending up or down. When commodity prices are tending upward some improvement in hog prices within 6 to 12 months is usually to be expected. When commodity prices are on the down turn some decline in hog prices may, as a rule, be expected in 6 to 12 months. Increasing commodity prices indicate improved demand for pork before long. Conversely, declining commodity prices are a warning that hog prices cannot stand out alone forever, but are likely to soon meet a lessening demand.

Reference to Table IV shows how commodity prices in general in the United States have tended up and down since 1903, the number of months these prices have been up and down, to what extent the ups and downs of hog values parallel this general commodity price movement, what the Chicago average hog price was at the high and low times, and to what extent English pork prices went up and down at the same time as United States hog prices. A study of this table will substantiate some of the things just said about shifts in demand for pork products.

TABLE IV.—A comparison of wholesale fluctuations in the United States with hog price fluctuations at Chicago and in England.

General commodities.				Hogs.				
High and low points.	U. S. wholesale price index.	Months.		High and low points.	Chicago average.	Months.		English pork price index, yearly average.*
		Up.	Down.			Up.	Down.	
Jan., 1903 . . .	90			July, 1902 . . .	\$7.65			109
May, 1905 . . .	86		28	May, 1904 . . .	4.65		22	89
July, 1907 . . .	97	26		Feb., 1907 . . .	7.05	33		(1906) 111
Nov., 1908 . . .	91		16	Feb., 1908 . . .	4.45		12	98
Mar., 1910 . . .	105	16		Mar., 1910 . . .	10.55	25		123
June, 1911 . . .	94		15	Feb., 1912 . . .	6.20		23	(1911) 104
Sept., 1913 . . .	104	27		July, 1913 . . .	9.05	17		125
May, 1920 . . .	252			July, 1919 . . .	\$21.85			
Jan., 1922 . . .	141		20	Sept., 1921 . . .	7.61		26	
Apr., 1923 . . .	162	15		May., 1922 . . .	10.48	8		
June., 1924 . . .	148		14	June, 1923 . . .	6.92		13	
Aug., 1925 . . .	164	14		June, 1926 . . .	14.05	36		

* Sauerbeck's index of price of pork.

MONTHLY SUMMARY OF MARKET FACTORS

The Department of Agricultural Economics and the Division of College Extension of Kansas State Agricultural College issue a monthly publication entitled "The Kansas Agricultural Situation." This publication gives a brief summary of the various market factors, together with an indication of the probable price trend for the next 30 days. It will be sent free on request. Address, Director of College Extension, Manhattan, Kan.

RADIO MARKET SERVICE

The information in The Kansas Agricultural Situation is released from Station KSAC at 12:35 p. m. on the tenth of each month. If the tenth falls on Saturday or Sunday the report is given on the following Monday.

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Bul. No.

- 216. The Marketing of Kansas Butter. By Theodore Macklin. (79 pp., 42 illus.)
- 221. Farm Leases in Kansas. By W. E. Grimes. (32 pp., 9 illus.)
- 224. Coöperation Applied to Marketing by Kansas Farmers. By Theodore Macklin. (61 pp., 8 illus.)
- 229. Farm Storage as a Factor in the Marketing of Kansas Wheat. By R. M. Green. (32 pp., 6 illus.)
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- 132. Year-to-Year and Seasonal Fluctuations in Hog Prices. By R. M. Green and Harold Howe. (14 pp., 6 illus.)

Copies of any of these publications in which the reader may be interested may be secured as long as available by addressing a request to: AGRICULTURAL EXPERIMENT STATION, MANHATTAN, KAN.