FARM BUSINESS NOTES

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What Is a Farm Worth?

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What has happened in the farm real estate market during and since the war? What have been the chief causes of these developments? And, finally, what is a farm worth?

The pronounced upward trend in sale prices of farm real estate which set in during the early part of the war has continued to the present. According to estimates of the Bureau of Agricultural Economics, the increase for the country as a whole over the average for 1935-1939 amounted to 92 per cent by March 1, 1947. This was considerably greater than the increase of 70 per cent which took place from 1912-1914 to the peak of the other boom in 1920. Even so, the average on March 1, 1947, was 6 per cent below the peak of the previous boom. This was due to the fact that farm real estate prices were lower during 1935-1939 than during 1912-1914.

The rate of increase during recent years and the level of prices now compared with the peak of the other boom have varied greatly in different parts of the country. For example, the increase from 1935-1939 to 1947 varied from a low of 29 per cent in Massachusetts to a high of 172 per cent in Kentucky. The increase of 67 per cent in Minnesota was considerably below the national average, and even smaller increases took place in the upper Great Plains, in New England, and in a few other states. The greatest increases occurred in the east south central, south Atlantic, eastern Corn Belt, Pacific, and some of the other western states. By March 1, 1947, prices of farm real estate were above the 1920 peaks in 24 states. Prices in Minnesota, however, were about one-third below 1920. For the country as a whole, prices have been rising at a rate of about 1 per cent a month the last six years.

The farm mortgage debt of the country has been reduced from the previous peak of nearly 11 billion dollars in 1923 to a little over 5 billion dollars in 1946. The reduction in Minnesota was from about 600 million dollars to less than 350 million dollars. This remarkable record is in sharp contrast with the increase in farm mortgage debt which took place during the other boom. Indications are, however, that the farm mortgage debt of the country has turned upward during recent months.

The volume of farm land sales tends to be higher during a boom than during a depression and the present is no exception. Sales during the last four years have been three-fourths or more above the volume before the war.

Slightly more than one half the buyers during the last four years have paid all cash at time of purchase. This augurs well for the future. On the other hand, about one third of all recent sales were mortgaged for 50 per cent or more of the sales price, and about one seventh were mortgaged for 75 per cent or more. Fifty per cent of present prices is not far below the full market price just before this country entered the war. Some of these mortgages no doubt have been reduced considerably. Others may prove troublesome if farm earnings decline substantially.

Causes of Recent Developments

High farm income has been the most important factor affecting the land market during and since the war. Net farm income for the United States was one-third higher in 1943, and again in 1944, than at the peak of the other boom. It was nearly 50 per cent higher in 1945 and 60 per cent higher in 1946. The continued high level of farm earnings has exerted strong upward pressure on farm real estate prices. It has increased the demand for farms on the part of farmers and other investors. At the same time, it has reduced the supply of farms offered for sale by retired farmers and others because of the high return on farm properties compared with the return on other investments with which they are acquainted. An abundance of credit available for mortgage loans at relatively low interest rates also has contributed to the upward pressure. Other factors contributing to the rise include the demand for farms on the part of returning servicemen and war workers, purchase of additional land to enlarge existing farms, and the almost complete absence of foreclosed farms awaiting buyers.

Factors tending to check the rise in prices of farm real estate include: (1) the memory of the other boom and subsequent crash, (2) a cautious attitude on the part of

some of the more important lending agencies, (3) changes in technique which have the same effect as increasing the supply of land relative to the other factors of production, (4) an increase in farm real estate taxes which adds to production costs, and (5) current income and capital gains tax rates which may tend to reduce, to some extent at least, speculation in the farm lands.

The price-stimulating forces have been much more impressive during and since the war than the price-retarding factors. Continued high farm income has been much more influential than memories of the preceding boom and crash which grow dimmer with each passing year. Consequently, farm real estate prices are not likely to decline until net farm income falls below the level of the past few years.

What Is a Farm Worth?

Perhaps an example will help bring this question into sharper focus. A certain quarter-section farm in the western Corn Belt has had the following sales history. It sold for $100 per acre in 1909, $145 per acre in 1913, $151 per acre in 1914, $188 per acre in 1916, $396 per acre in 1920, $170 per acre in 1930, $118 per acre in 1933, $205 per acre in 1943, and $300 per acre in 1947. What was this farm worth in 1909? The sales record suggests that it was a good buy at $100 per acre at that time. What was this farm worth in 1920? The price of $396 per acre proved to be far in excess of its value to the buyer as indicated by subsequent foreclosure. What was this farm worth in 1930? The price of $170 per acre proved to be beyond the capacity of the buyer who was obliged to give a mortgage in the amount of nearly $100 per acre at the time of purchase. What was this farm worth in 1933? The price of $118 per acre appears to have been below the long-run value whether measured by its previous or by its subsequent sales history. What is this farm worth now? It sold recently for $300 per acre, but what is it worth?

One common answer to the question "What is a certain item worth?" is that it is worth what it will bring in the market place. But is this the answer to the specific question we have posed here, namely, what is a given farm worth? Clearly, it is not a satisfactory answer to the questions raised in the preceding paragraph. The farm was not necessarily worth what it brought in the land market. At certain times it was worth more and at other times less than its market price. Its value to the buyer at a given time did not depend upon its past, present, or expected earnings or its sale price, but upon its earnings over the next 20 or 30 years. In short, the value of a farm at a given time is the sum of the discounted values of its future annual earnings.

Looking backward over a considerable period of time it is relatively easy to determine, within rather broad limits, whether a particular farm sold above or below its subsequent earning ability. But the buyer of a farm is concerned with the future rather than the past, and the future is full of uncertainties.

The answer to the question "What is a farm worth?" will depend to a considerable extent upon the course of the boom from here on out. Probably we should not overlook the possibility of the boom getting out of hand as it did in several European countries after the first World War and as has happened in several countries following the recent war. This could happen if the rising spiral of prices, wages, and profits is not broken rather promptly. However, the evidence seems to point in the direction of an end to the boom in the not-distant future. If this proves to be the case, then, from this observation point, we look back upon a long and pronounced rise in farm earnings and farm real estate prices from the depths of the Great Depression, and forward to a decline the extent of which is screened from our view. Agriculture has experienced its greatest profit period in history. It would be unfortunate for these profits to be dissipated at or near the end of a boom, and it would be little short of tragic for farmers to go heavily in debt to buy farms at boom prices as they did a little more than a quarter of a century ago.

Young men may find it desirable to continue to work by the month somewhat longer than usual before taking the next step up the agricultural ladder and becoming renters. Renters are likely to find it desirable to continue to rent until the future is much clearer than it is at the present time. Part-owners probably should continue to rent part of the land they operate rather than bid up the price of land to enlarge their holdings. In short, this is a good time to pay debts with cheap dollars and to set aside surplus funds for the inevitable rainy day. It is a time when special caution is an urgent need on the farm land front.

Annual Building Costs

S. A. Engene

One quarter of a Minnesota farmer's capital is invested in buildings. According to the 1940 U. S. Census the value of buildings per farm for the entire state was $2,838, out of a total investment of $10,600. The average investment in buildings among members of the Southeastern Minnesota Farm Management Service during the period 1928-1946 was $6,355, out of a total farm capital of $24,275.

Table 1. Average Farm Sales and Farm Purchases Per Farm, Southeastern Minnesota Farm Management Services, 1928-1946

	Average amount
Sales	
Livestock and livestock products	$5,398
Crops	686
Other farm sales	522
Total farm sales	$6,606
Purchases	
New buildings and fences	$ 242
Upkeep on buildings and fences	139
Taxes and insurance	305
Livestock purchased	530
Other livestock expense	100
Feed	798
Crop expense	253
New power and machinery	1,031
Hired labor	425
General farm	42
Interest (estimated)	250
Total farm purchases	$4,115
Net cash available for family living and saving	$2,491

These values were those given at the time the records were obtained. The original investment was considerably higher. If the useful life of the buildings was about half gone, the original cost would be about twice the values given. The cost of replacement at the present time would be even higher.

With such high investments in buildings, farmers must study carefully the usefulness of buildings they plan to erect. They must consider probable future costs for repairs, taxes, and insurance, and consider the funds available. The information in table 1, which is based on records kept by farmers in southeastern Minnesota, throws light on income and building costs. The farmers keeping these records are above average in sales, purchases, and net returns. An individual, however, can substitute estimates for his own farm in arriving at his decision regarding buildings.

These farmers spent an average of $242 a year for new buildings and fences. If they invest the same amount each year for the next 50 years, they can replace their buildings with a set costing $12,100. On the basis of building costs at the present or probable costs in the future this estimate is low.

The average cost of upkeep and repair was $139 a year. Almost half of the expense for taxes and insurance was for buildings. The annual cash outlay for new buildings, upkeep, taxes, and insurance was about $450. This figure is conservative. Some expenses were probably overlooked when the farmers made the entries into their record books. Some landlords' expenses on rented farms were not obtained. The cash expenses for buildings were then 7 to 10 per cent of the cash farm income.

Many farmers have saved considerable cash during the war years. Some plan to use part or all of this for new buildings. Many barns and other farm buildings are needed. There is even greater need for modern dwellings on many farms. Care must be used, however, in order that the investment in buildings may not be out of line with the earning capacity of the farm.

Custom Rates for Farm Operations

R. R. Beneke

Custom work serves a valuable function in spreading the cost of the services of expensive machines over more farms. In this way the advantages of lower production costs arising from increased mechanization are made available to farmers whose annual use of many machines is low. During these years of machine and manpower shortages, custom work is doubly important since it offers a means of making the limited supply of many farm machines serve more farmers. The custom rates given in table 1 are offered as a guide for those who are wondering what they should pay or charge for custom work.

These rates are a summary of 290 reports obtained through the cooperation of vocational agriculture instructors in the state and their students. In summarizing the reports an attempt was made to eliminate cases where the number of workers furnished or the special equipment supplied by the custom worker differed from that commonly furnished or supplied.

The rates contained in the table are based on the charge for the services of the operators, the horse or tractor power necessary for its operation, plus the added equipment and supplies commonly furnished.

The rates given for each operation are the most frequent and the second most frequent ones reported. An attempt also was made to determine changes taking place from 1946 to 1947.

The per cent of the custom operators charging the most common rate who reported they had raised or reported they intended to raise their 1947 rate is listed in the fourth column. In the fifth column is given the average amount of this increase.

Table 1. Custom Rates for Farm Operations

Operation	Basis of charge	1946 Rates Reported		Per cent farmers increasing rate in 1947*	Average amount of increase
		Most common charge	Second most common charge		
Plowing	Acre	$2.50	$2.00	48	$ .40
Plowing (2-bottom plow)	Hour	2.00	2.50	20	.25
Disking (single)	Acre	.50	.75	No change	No change
Disking (single)	Hour	2.00	2.50	No change	No change
Disking (tandem)	Acre	1.00	.75	No change	No change
Disking (tandem)	Hour	2.25	2.50	No change	No change
Spring-tooth harrowing	Acre	.75	.50	No change	No change
Duckfoot harrowing	Acre	.75	1.00	No change	No change
Seeding grain drill	Acre	1.00	1.50	No change	No change
Planting corn	Acre	1.00	1.25	No change	No change
Cultivating corn	Acre	1.25	1.00	57	.10
Harvesting grain, binder	Acre	1.50	1.25	50	.20
Windrowing grain	Acre	1.00	.50	33	.25
Combining grain	Acre	4.00	3.50	21	.25
Combining soybeans	Acre	4.00	3.50	23	.25
Threshing oats	Bushel	.04	.03	8	.01
Threshing barley	Bushel	.04	.05	12	.01
Threshing wheat	Bushel	.06	.05	No change	No change
Threshing flax	Bushel	.12	.10	10	.02
Threshing small grain	Hour	5.00	4.00	16	1.00
Cutting corn, binder	Acre	2.00	3.00	14	.50
Picking corn, mechanical picker	Acre	4.00	4.50	30	.75
Filling silo, stationary cutter	Hour	4.00	3.00	25	.25
Filling silo (14-foot), stationary cutter	Foot	1.00	.75	No change	No change
Filling silo, field chopper	Hour	8.00	9.00	No change	No change
Mowing	Acre	1.00	.80	25	.25
Stacking (tractor-mounted stacker)	Hour	3.00	2.00	No change	No change
Baling (handtie pickup with one man)	Bale	.10	.....	16	.02
Baling (handtie pickup with two men)	Bale	.11	.....	22	.02
Baling (handtie pickup with three men)	Bale	.12	.....	37	.02
Baling (automatic tie)	Bale	.10	.11	85	.02
Combining clover and alfalfa	Acre	4.00	3.50	50	.75
Hulling clover and alfalfa	Pound	.05	.06	20	.01

* In the fourth column is reported the per cent of farmers charging the most common rate who expected to increase their 1947 rates, while in the fifth column is given the average amount of this increase.

Minnesota Farm Prices For June, 1947

Prepared by W. C. WAITE and O. K. HALLBERG

The index number of Minnesota farm prices for June, 1947, is 262.1. This index expresses the average of the increases and decreases in farm product prices in June, 1947, over the average of June, 1935-39, weighted according to their relative importance.

Average Farm Prices Used in Computing the Minnesota Farm Price Index, June 15, 1947, with Comparisons*

	June 15, 1947	May 15, 1947	June 15, 1946		June 15, 1947	May 15, 1947	June 15, 1946
Wheat	$2.38	$2.43	$1.73	Hogs	$23.50	$23.40	$14.10
Corn	1.72	1.45	1.27	Cattle	19.50	17.70	13.80
Oats	.89	.84	.76	Calves	21.00	20.80	13.70
Barley	1.80	1.69	1.23	Lambs-sheep	19.07	18.62	13.12
Rye	2.87	2.89	1.39	Chickens	.207	.215	.218
Flax	5.93	6.00	3.11	Eggs	.380	.377	.308
Potatoes	1.30	1.30	1.25	Butterfat	.680	.650	.580
Hay	13.00	14.00	8.50	Milk	2.800	2.850	3.100
				Wool†	.370	.380	.440

* These are the average prices for Minnesota as reported by the United States Department of Agriculture.
† Not included in the price index number.

Prices received for Minnesota farm products rose 4 per cent from May to June, with crop prices increasing by 6.1 per cent, livestock prices by 4.5 per cent, and livestock product prices by 2.7 per cent. As a result, the purchasing power of Minnesota farm products rose to 42.7 per cent over the 1935-39 average.

The main increases in prices received were corn, 19 per cent; cattle, 10 per cent; barley and oats, 6 per cent; and butterfat, 5 per cent. Declines were noted in hay, 7 per cent; chickens, 4 per cent; and wheat and milk, 2 per cent. The sharp increase in corn prices is probably due to prospects of a small corn crop, while the decline in wheat prices follows the beginning of the harvest of the winter wheat crop.

Indexes and Ratios for Minnesota Agriculture*

	June 15, 1947	June 15, 1946	June 15, 1945	Average June 1935-39
U. S. farm price index	257.1	206.8	195.4	100
Minnesota farm price index	262.1	197.3	185.2	100
Minn. crop price index	317.9	223.9	187.7	100
Minn. livestock price index	280.0	181.1	176.6	100
Minn. livestock product price index	232.2	204.1	191.8	100
U. S. purchasing power of farm products	140.0	132.8	135.9	100
Minn. purchasing power of farm products	142.7	126.7	128.8	100
Minn. farmers' share of consumers' food dollar	63.9†	65.3	64.9	45.5
U. S. hog-corn ratio	12.6	10.1	12.7	12.0
Minnesota hog-corn ratio	13.7	11.1	14.4	15.2
Minnesota beef-corn ratio	11.3	10.9	13.3	12.8
Minnesota egg-grain ratio	11.3	12.1	15.8	14.6
Minnesota butterfat-farm-grain ratio	22.0	24.2	27.6	30.9

* Explanation of the computation of these data may be had upon request.
† Figure for April, 1947.

Crop Prospects

O. K. HALLBERG

Planting and growth of field crops in Minnesota, particularly corn, have been delayed considerably by excessive rain, unseasonably cool weather, and lack of sunshine. Most of the intended corn acreage was planted by June 1, or about two weeks later than usual, but much of this acreage was held back by unfavorable weather during June, and optimum growing conditions will be needed to attain average yields. The relative stands of corn vary greatly, even within small areas, depending on soil conditions and time of planting.

A record acreage of soybeans was planted this year, in many cases being a substitute for grain crops which could not be planted because of moisture conditions. In some areas heavy rains in June caused flooding of acreages planted to row crops such as soybeans and corn, and much of the unplanted acreage which was originally intended for small grains may remain idle because adverse weather has delayed planting substitutes.

Small grains were in good condition in June, but spring wheat and oat production will probably be less than in 1946, while barley, winter wheat, and rye production should be higher. This will depend a great deal on temperature and moisture conditions at the time the grain crops are filling, for development has been retarded so that the grain will be in the milk stage right at the time when high temperatures normally occur.

Pastures are poorer than the national average and hays are also in poorer condition than usual, particularly in northern Minnesota where considerable winterkilling of clover and alfalfa took place.

On the whole, the flax crop appears to be in good shape, even though much of it was planted late and is somewhat stunted. The wet, cool weather has not been as unfavorable to flax as to other crops, and favorable conditions in the next month should give a high production.

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