THE OHIO FARM REAL ESTATE SITUATION

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This publication assembles information bearing on the farm real estate situation. Some of this information is general and has been derived from various sources. Part of it is based on a study of the circumstances attending sales of farm real estate in a few sample counties. The purpose is to depict various relationships and trends related to farm real estate values and the functioning of the land market

Some Factors Related to Recent Trends

Ohio farm real estate prices have been increasing at an average rate of more than seven percent (compounded) a year for the past (16) years. With the exception of some slackening-off in 1950 and in 1953-54 this uptrend has been continuous although not at a constant rate. Prices of Ohio farm real estate during 1956 averaged about six percent higher than for comparable months in 1955. Sales data from a few counties for the first three quarters of 1957 indicated a continuation of the strength in prices but at a very low level of market activity.

How long will this trend continue? Some relevant circumstances explain fairly well what has been happening to land prices. Whether or not these continue to work with the same relative force in the near future is unpredictable.

Land prices, like other prices, are a product of mens' value judgments. How people are going to think and act next week, next month, or a year from now is uncertain. On the other hand some of the current circumstances influencing land prices are worth reviewing because they will continue to have some influence.

The relative importance of particular factors in the future is unknown. For example -- we say that farm real estate prices generally follow the trend of farm product prices and farm income. For the past few years this rule has not worked. Why? Several things supply part of the answer; no one should be singled out as the whole answer.

Enlargement of farm units -- The answer of many farmers to the price-cost squeeze is to enlarge their business in order to increase efficiency. They have the machinery and labor to farm more acres. About one-third of the recent farm land transfers have been to enlarge existing farm units. A farmer may bid up the price of a 40 or 80 to a relatively high figure because the additional land will

add to the efficiency of his entire unit.

<u>Credit</u> -- In the period of 1941 to 1956 between 50 and 60 percent of Ohio farm land purchases have been mortgage financed. The tightening of credit and gradual rise in interest rates the past few years so far have had only a minor restraining influence on the availability and use of mortgage loans to buy land.

In the past few years financial institutions have liberalized appraisals for farm mortgage loans. They have, in effect, conceded that we are now on a higher price level and are not likely to return to the level prevailing before World War II. Hence the average farm mortgage loan in 1956 was about 40 percent larger than in 1950.

Savings -- Until recently agriculture enjoyed an unprecedented prosperity. The backlog of savings held by some farm families tends to flow into the farm real estate market. Capital accumulations of others are doing the same thing to some extent. As estimated from sample areas, people classed as nonfarmers account for about 30 percent of the land purchases in Ohio. The combination of savings and credit add up to a high level of purchasing power on the demand side of the market.

<u>Nonfarm income of farm families</u> -- Estimates indicate that for the whole U. S., farm families realize about one dollar of income from nonfarm sources for every two dollars net income from farming. Because of the wide distribution of nonfarm employment opportunities in Ohio, farm families in this state probably exceed the national average in respect to the proportion of income received from nonfarm sources. This means, to some extent at least, that farm families are sharing in the high level of activity and prosperity prevailing in the nonfarm sector of our economy.

How would nonfarm income influence the price of farm real estate? First, the effective demand for farm real estate is at least partially divorced from the limitations of income and savings arising from the farm business. In the second place, it emphasizes the importance of the farm as a place to live as well as a place to make a living.

Limited amount of land for sale -- The total volume of land transfers has been heavily weighted by inheritance, gift, or sale transactions within families. The amount of land coming on the open market has been small relative to the demand. The restricted volume of market activity in recent years as compared with the 1940's is illustrated by the figures presented for a few sample counties at a later point in this publication.

Several reasons have influenced owners to postpone sale. One reason is the capital gains tax. Another reason is the problem of

finding alternative investment opportunities. Some owners have changed their minds about selling when they started to figure the heavy tax take and the possible income from the remaining capital put into investments they considered as secure as farm land.

Other reasons influence farmers to hold onto their land and retire on the farm. They are influenced to stay put because of the high cost and shortage of nonfarm housing. Social Security may influence farmers to change their retirement plans because their benefits will be greater if they keep on farming a little longer.

<u>Federal farm programs</u> -- Farmers believe some governmental price or income support for agriculture will continue. The belief that government programs insure against severe price breaks in the future serves to increase confidence in the value of farm land as an investment.

Land values, the general price level and farm income -- Let us take a long-term look at these. The years 1910 to 1914 have been generally viewed as a period when a relatively satisfactory relationship existed between agriculture and the rest of our economy. From that reason 1910 to 1914 (or 1912 to 14) is often used as the base period from which to compare relative prices as is done in Table 1.

From 1900 to 1910 farm real estate prices in the U. S. as a whole practically doubled; in Ohio the increase was slightly less. In the same period wholesale prices increased a fifth and farm products' prices about a third. This was a period of recovery from the depression of the 1890's. Measured by relative prices the reaction was most pronounced in land prices.

During the 20 years following 1900 the conviction grew that a continuedrise in land prices could be counted on as part of the reward to capital invested in land. Technological changes and world conditions generally upset the previous calculation and land prices remained depressed relative to general prices from 1920 to 1940.

Since then land prices have advanced rather steadily until they nowhold about the same position relative to the general price level as prevailed for a few years prior to World War I. If we take any other historical period as the base, land prices have risen more than general prices.

During the past 40 years farming methods have changed enough to cast some doubt on the validity of making comparisons from price relationships alone. Let us look at income. What is the "normal" relationship between land prices and farm income? Nobody knows exactly what "normal" is. It keeps changing. People

	Farm Rea	al Estate*	Wholesale	Farm Proc	luct Prices
	U. S.	Ohio	Prices U.S.	U.S.	Ohio
Year	(1912-14=	(1912-14=	(1910-14=	(1910-14=	(1910-14=
-	100)	1 00)	100)	100)	100)
	(1)	(2)	(3)	(4)	(5)
4000			09**	(=) 71**	(0)
1900	50**	59**	04**	11++	
1910	99	96	103	104	104
192 0	173	159	225	211	212
1930	114	90	126	128	128
1933	73	59	96	72	69
1940	82	77	114	100	99
1950	174	172	232	258	248
1951	193	200	258	302	298
1952	211	223	251	288	286
1953	221	223	247	258	262
1954	216	220	248	249	250
1955	224	234	248	237	219
1956	232	252	256	23 6	226
1957	247	267	264	242	

Index Numbers of Average Value per Acre of Farm Real Estate, United States and Ohio and Other Comparative Prices, Specified Years, 1900-1956

TABLE 1

* As of March, each year.

** Are approximations converted from data of U.S. Census of Agriculture and Agricultural Marketing Survey.

Source: Columns (1) and (2) -- various editions of The Farm Real Estate Market, A. R. S., U. S. D. A.; columns (3), (4), and (5) -- Price and Wage Trends, Mervin G. Smith, Ohio Farm and Home Research, Ohio Agricultural Experiment Station, November - December, 1956.

make this "normal" as their individual and collective judgment establishes the market price of land.

What does a long-time average show? Between 1911 and 1953, the estimated total net farm income in the U. S. for every 8.4 years equaled the value of all farm real estate. At times this ratio varied sharply from this long-term average. From 1911 to 1915, a period often taken as "normal" in agriculture, the ratio was about 10 years; in 1933 it was 15 years; in 1943 it was 4.7 years; in 1953, 7.0 years; in 1954, 8.0 years; in 1955 and 1956 it was 8.7 years. In other words, relative to net farm income, farm real estate values in the aggregate now are a little higher than the longterm "normal" but so far have not quite reached the level prevailing prior to the First World War.

Demand for land for nonfarm purposes -- This is a fairly important item in an area like Ohio. Growth of our population and its decentralization is in evidence about most towns, large and small. The movement of people to suburban and open country residences resulted in a 20 percent increase in Ohio's rural population from 1940 to 1950 as compared with a 13 percent increase in our urban population during the same period.

A somewhat similar decentralizing process is going on in industry and business and is taking more acres out of agriculture. We are utilizing more land for highways, air fields, water reservoirs, mining developments and recreational areas. All these things continue to displace farmers and to create more competition for the remaining rural lands.

The above generalizations are by no means applicable in equal force to all areas. The following comparisons based on census figures for 1900 and 1954 provide a perspective on what is happening to Ohio's farm land area.

Ohio's area is approximately 26,240,000 acres. In 1900 a little more than 93 percent of this total area was in farms; in 1954 about 76 percent was in farms. Out of each 100 acres of farm land in 1900, some 18 acres were not so counted in 1954. In the aggregate this loss amounts to better than 4.5 million acres. How was this loss distributed over the state?

Twelve counties, primarily those influenced most by urban-industrial developments, lost about 1.3 million acres or more than 100,000 acres per county. As a group these 12 counties had only 60 percent as much land in farms in 1954 as in 1900. Twenty-five more counties lost 2.2 million acres or about 90,000 acres per county primarily because the land lost was poorly adapted to agriculture; but partly because of the encroachment of urban-industrial developments. This group of counties had 70 percent as much land in farms in 1954 as in 1900.

The remaining 51 counties lost one million acres in the aggregate or an average of about 20,000 acres per county. As a group these counties had 93 percent as much land in farms in 1954 as in 1900.

To sum up: Enlargement of farms, available savings and credit, small amount of land for sale, the demand for land for nonagricultural purposes, and both short and long-run outlook for agriculture and the total economy influence land prices but do not operate with uniform force at all times and over all areas. To illustrate, the indexes of farm real estate prices in Table 1 indicate a more rapid average rise in Ohio since 1950 compared with the U. S. as a whole -- a difference which reflects the relatively rapid industrial and population growth in Ohio in recent years.

To illustrate further, the reader is referred to Table 7, in which is recorded the average (census) value per acre of farm real estate in each of the 88 counties at various dates during the past century. This localizes our information on farm real estate values about as far as practicable. As a further aid to evaluation on the county level, let us consider next the land value trends when the decline in the purchasing power of the dollar between 1900 and 1954 is taken into account.

Trend in Farm Real Estate Values -- Adjustment for the

Changing Value of Money

Over a period of time land prices relative to farm product prices or prices in general tend to fluctuate. Part of this may be merely a different rate of change in the irregular but recurrent cyclical movement of prices, but there is some evidence in the past halfcentury that Ohio farm land prices are rising relative to other prices. Presumably, this is because we have a virtually fixed land supply and a rapidly growing population which needs land for many uses in addition to agriculture.

The index numbers in Table 1 support this view, 1910 figures excepted. Average Ohio farm real estate values in 1954 were 3.73 times what they were in 1900. In comparison the U. S. index of wholesale prices of all commodities in 1954 was 3.02 times as high as in 1900. Measured by wholesale prices, \$100 in 1900 was worth as much as \$302 in 1954. That a substantial share of the rise in average farm real estate prices has been in response to the reduced purchasing power of the dollar is a reasonable assumption.

The general influence of rising prices has been reflected to some extent in farm real estate values in all areas. But land value trends have been far from uniform. This lack of uniformity is illustrated in Chart 1 which shows the relative change in the average value per acre of farm real estate from 1900 to 1954, when measured in dollars of constant purchasing power. I. e. 1954 census values of farm real estate were adjusted to the 1900 level of prices to cancel out the probable influence of general price inflation on farm real estate values.

CHART 1 County Trends in Farm Real Estate Values and Population Since 1900:* Upper Figure -- Percentage Change in Average Value per Acre of Farm Real Estate, 1900 to 1954, Measured in "Constant Dollars"** Lower Figure -- Percentage Change in Total Population, 1900 to 1950



** Constant dollars: 1954 census values of farm real estate adjusted to the purchasing power of money in 1900. The average value per acre of Ohio farm real estate as determined by the census was 42.31 in 1900 and 184.27 in 1954. But if adjusted for general price level changes, as described above, the 184.27 would be reduced to 60.92 -- the value in dollars of the same purchasing power as prevailed in 1900. When so adjusted to dollars of constant purchasing power, the average acre of Ohio farm real estate was worth 44 percent more in 1954 than in 1900. But when the above comparisons are made for individual counties (Chart 1) the results indicate a high degree of variation. In 77 counties the increase in farm real estate values has been more than the increase in general prices; in 11 counties, less.

Population pressure influences land values. The lower figure inserted in each county (Chart 1) shows the percentage change in the total county population from 1900 to 1950. In some rural counties where most of the land is well adapted to agriculture, land values have increased more than the state average but population has declined. Obviously this decline in population is associated with the enlargement of farms incidental to the process of mechanization. Under these circumstances anticipated farm earnings alone may lead to higher land prices.

The highest <u>rate</u> of increase in land values occurred in the more populous counties, the lowest <u>rate</u> in those counties which have lost population and which also have a substantial acreage of land poorly adapted to agriculture.

Some caution should be observed in drawing conclusions from the figures for individual counties. Information on both population and land values for individual counties is somewhat out of date, although the most recent available. Both the acreage of farm real estate and the capital improvements on the land have changed materially between 1900 and 1954. Comparisons are not based on the same physical quantities at the two dates.

Farm Real Estate Sales in Sample Counties

Some detailed information on farm real estate transfers has been assembled in a few sample counties since 1941. The transactions included in this survey are limited to those involving 10 acres or more when the conditions indicate that the consideration was for full value. Results over the years indicate that for many items the data assembled in these sample counties approximate trends in the entire state in respect to price changes, market activity, composition of buyers and sellers and use of mortgage credit. The following section centers discussion around the findings in these sample counties. *

Market Activity

Farm real estate market activity was at a relatively high level during most of the decade of the 1940's. This was in part a reaction from the low level of activity during the 1930's. By 1949 the stimulation in the farm real estate market arising from the war was dissipated. In most years since then the number of properties changing hands on the market has been less than half the peak number of sales in 1943. As indicated in Table 2, the number of sales in 1956 was less than two-thirds the number in 1941 and was the second lowest in the past 16 years. Incomplete data for 1957 indicate a slightly lower level of market activity compared with 1956.

The continued uptrend in prices has been associated with a relatively small supply of land being offered for sale at going prices.

Sellers of Farm Real Estate

A classification of those selling farm real estate in four counties during 1956 indicated 34 percent to be full-time operators prior to sale; 12 percent, part-time farmers; 29 percent, nonfarmers; and 25 percent, settlement of estates (the latter including tracts previously inherited by two or more persons and held in joint ownership).

A similar check in 1951 and 1952 revealed about the same distribution as in 1956. But a previous check for the period of 1941 to 1946 indicated a higher proportion of the sellers then to be non-farmers (39%) and a smaller proportion (31%) to be full or part-time operators. The main point to the above comparison is that in recent years, (as compared with the 1940's) a smaller proportion of the sales have been by nonfarmers, a higher proportion by active farmers.

Of those sellers classed as farmers about a third sold in 1956 as a move toward retirement, a third still owned some additional land, a fourth moved to another farm and about one in eight was changing his occupation.

^{*} Sample counties: From 1941 to 1948 inclusive data were assembled from Darke, Madison and Muskingum counties; because the number of transfers was declining sharply in Madison county, the adjoining county, Fayette, was added in 1949 to increase the sample from that area.

TABLE 2

Number of Sales of Farm Real Estate, 10 Acres or More, and Average Price per Acre, in Sample of Ohio Counties, 1941 to 1956

	N	umber of S	ales	Average Price per Acre			
Year	three counties	four counties	relative change (1941=100)	three counties	four counties	relative change (1941=100)**	
				Dollars	Dollars	Percent	
1941	476	(551)*	100	64	(71)*	100	
1942	486		102	67		105	
1943	828		174	79		123	
1944	658		138	86		134	
1945	660		139	100		156	
1946	727		153	113		177	
1947	679		143	122		191	
1948	532		112	133		208	
1949	348	403	73	136	150	212	
1950	446	517	94	156	167	237	
1951	347	419	73	172	187	265	
1952	337	380	71	189	206	292	
1953	297	346	62	185	196	278	
1954	348	393	73	190	195	276	
1955	349	390	73	218	214	303	
1956	298	340	63	219	228	323	

Counties in sample: Darke, Madison, and Muskingum, 1941 to 1948 inclusive. In 1949 Fayette was added to increase the number of sales in the sample. Historically, average farm real estate values in the three-county sample have approximated the average per acre dollar values for the total state as reported one year later by the census. For example, the average values indicated by the survey in 1944, 1949, and 1953 were \$86, \$136 and \$185 respectively; the average census values in 1945, 1950, and 1954 were \$85, \$136 and \$184 respectively. Average values are based on aggregate acreage sold and aggregate consideration.

^{*} Estimates based on relative numbers and values in 3-county and 4-county areas in 1949.

^{**} Before rounding to nearest dollar. Relative change in price based on 3-county sample, 1941 to 1948; on 4-county sample, 1949 to 1956.

Buyers of Farm Real Estate

In 1956 the status of buyers prior to the date of purchase was: nonfarmers, 37 percent; full-time owner-operators, 35 percent; part-time farmers, 11 percent; full-time tenants (and farmers' sons getting established), 17 percent. (Some classed as part-time farmers were also tenants.) Added together, all above classed as farmers made 64 percent of the purchases in 1956 as compared with 70 percent in 1951 and 1952, and 63 percent in 1945 and 1946.

Three-fourths of the purchasers during 1956 intended to operate the land personally. In about 18 percent of the cases the land would be leased to others and in seven percent of the cases the circumstances of purchase indicated temporary rather than permanent possession; most such land probably would be leased temporarily.

As near as could be determined at least 40 percent of the buyers during 1956 already owned land. And in a fairly high proportion of the cases the land purchased would be used to increase the size of operating unit.

Evaluating the above information on buyers and sellers indicates only moderate changes in the ownership pattern of farm real estate the past few years. Perhaps the most important point is that a high proportion of the purchases continue to be a move toward farm enlargement. The proportion of tenants (and young farmers) buying land (17%) is almost identical with the proportion of farm operators classed as full tenants (16.4%, 1954 census). The above 17 percent includes some farmers' sons who might only technically be classed as tenants. During the 1940's between 20 and 25 percent of the purchases were by tenants and farmers technically classed as tenants. The lower proportion in 1956 is an indication of the increased difficulty tenants and young farmers have in achieving ownership status at present land prices and farm incomes.

More than a third of the buyers are classed as nonfarmers. A minority of these are buying large farms either as an investment or to operate personally. A majority are buying smaller places more suitable for part-time farming. Information assembled in connection with another research project indicated that a majority of families making such a move originally has a farm background.

Fewer Tenants, More Part Owners

An adjustment in the farm tenure pattern has been going on in the past two decates which is related to the functioning of the farm real estate market, to the process of farm mechanization, farm enlargement and capital accumulation. Tenants have progressively moved into the ownership class so that the proportion of full tenant operators had dropped from 28.9 percent of all farm operators in 1935 to 16.4 percent in 1954, as indicated in the first column of Table 3. But this move from tenancy to ownership has not resulted in any substantial reduction in the proportion of Ohio's farm land operated under lease. This proportion has held consistently above one-third of all the land in farms. As the proportion of full tenancy decreased the proportion of farm operators who own some land and rent additional acreage has increased. These part owners rented 6.2 percent of the total acreage in farms in 1935 and 12.1 percent in 1954.

The increase in part owners is partly associated with the enlargement of farm operating units. Mechanization has stimulated the demand for more acreage and has also increased the mobility of farm equipment. More operators now farm multiple units and field-rent land dispersed over wider areas than formerly.

Some questions can be raised but not answered: (a) Is the increase in part owner operators a permanent change? (b) Or, does it represent a lag in the transfer of ownership which may in time be corrected by a more active farm real estate market? (c) Or, does the fact that about one-third of our farm land area remains under lease represent a "normal" proportion inherent in the way our system of land tenure operates?

Year	Percent of farm operators classed as "Full Tenants"	Percent of far by "Full Tenants"	rm land operated un by ''Part-Owners''	der lease Total
1925	25.5	30.9	4.6	35.5
193 0	26.3	31. 2	6.4	37.6
1935	28.9	32.8	6. 2	39 . 0
1940	26.3	31.3	6.3	37.6
1945	21.8	27.7	8.4	36. 1
195 0	17.9	24.6	10.3	34.9
1954	16.4	23.1	12. 1	35. 2

 TABLE 3

 Proportion of Farm Operators Classed as Full Tenants

and Proportion of Farm Land Operated Under Lease, Ohio, As Indicated by the Census, 1925 to 1954

Farm Mortgage Debt

The total outstanding mortgage debt on Ohio farm real estate has more than doubled in the past (10) years. Part of the increase has come from financing land purchases, part from financing of real estate improvements, farm equipment and livestock purchases, refinancing other indebtedness and miscellaneous purposes. From the partial information available for the period 1954 to 1956, roughly a third of the new farm mortgage loans commitments by several life insurance companies have been to purchase real estate, another third to refinance existing mortgages and the remainder for all other purposes.* It is not known whether the above proportions would apply to other lenders.

Present indebtedness is definitely geared to a high price level. Following is the total outstanding farm mortgage debt in Ohio in specific years since 1910 which marked the high and low spots in mortgage indebtedness:**

1910	\$114, 870, 000
1923	270, 081, 000
1930	272, 738, 000 - High
1934	220, 731, 000 - Low
1940	239,059,000 - High
1946	160,916,000 - Low
1952	200, 770, 000
1956	354, 095, 000

Mortgage Financed Purchases Compared with Cash Purchases

Several points of comparison between cash purchases of farm real estate and mortgage financed purchases are brought out by the figures in Table 4.

(1) Slightly more than half the transactions were mortgage-fi-

^{*} Agricultural Finance Review, Vol. 19, February 1957, p. 37 (U. S. D. A. Agricultural Research Service)

^{**} As of January each year as reported in various issues of the Agricultural Finance Review.

nanced in 1956, but the proportion was less than the two previous years and is about the same that prevailed during the 1940's.

(2) The mortgage-financed tracts usually are larger than tracts purchased for cash.

(3) The average debt per acre in 1956 was about three times what it was on purchases made in 1941 and has advanced a third since 1953.

(4) The market price per acre has advanced more since the early 1940's than has the size of loan. This emphasizes that although loan policy is definitely adjusted to a high level of land prices, the expansion in the use of credit has followed and not led the advance in prices. The short run relationship of purchase price to loan in 1956 raises the question of whether or not this shall continue to be the case.

TABLE 4

Comparison of Mortgaged and Mortgage Free-Tracts, Farm Real Estate Purchases in Sample Area, Ohio,* Specified Years 1941-1956

		1941 1942	1953	1954	1955	1956
Tracts mortgaged	Number	406	191	23 0	230	185
Tracts not mortgaged	Number	331	155	163	160	157
Proportion of tracts mortgaged	Percent	55	55	59	59	54
Average size of mortgaged tracts	Acres	86	76	87	82	77
Average size of mortgage-free tracts	Acres	82	72	76	96	61
Average purchase price per acre:						
of mortgaged tracts	Dollars	70	188	193	228	223
of mortgage-free tracts	Dollars	67	155	194	191	236
Average debt per acre on mort. tracts	Dollars	43	98	109	127	132
Average buyers equity in mort. tracts	Percent	39	48	44	44	41

^{*} Sample area: Darke, Madison, Muskingum Counties in 1941-42; Fayette also included, 1953 to 1956 inclusive.

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Sources of Mortgage Credit to Buy Land

A summary is given in Table 5 of the sources of mortgage credit used in the purchase of farm real estate in four counties during 1956. About 75 percent of these loans were provided by individuals and local financial institutions as contrasted with about 80 percent in 1950-52. Both insurance companies and the Federal Land Bank accounted for proportionately more of the lending in 1956 compared with 1950-52. The decline in the use of local sources of credit is principally accounted for by fewer loans by individuals and by savings and loan institutions. The net result is that more outside capital was used in 1956 to support the farm real estate value structure in these counties.

Onio, 1956							
Lender	Propor- tion of loans	Average s per tract	ize of loan per acre	Loan as percent of purchase price			
	Percent	Dollars	Dollars	Percent			
Seller	14	16400	172	70			
Other individual	9	10800	140	67			
Commercial bank	34	7600	122	56			
Saving and loan	20	6800	120	60			
Insurance company	14	12700	150	59			
Federal Land Bank	7	14600	91	41			
Other Institutional							
lenders	2	13600	125	47			
All lenders	100	10200	132	57			

TABLE 5

Mortgage Loans to Purchase Farm Real Estate, by Type of Lender, Four-County Sample,* Ohio, 1956

* Darke, Fayette, Madison and Muskingum.

Size of Loan - Different Lenders

As indicated in Table 5 individuals, and particularly the sellers of farm real estate, grant the largest loans measured by the percent of the purchase price. This reflects the probable influence of personal relationships between buyer and seller. Commercial banks and savings and loan institutions grant more small loans and often for shorter periods than either insurance companies or the Federal Land Bank.

Interest Rates

Interest rates have been advancing since the early 1950's. As applied to mortgage loans to buy land, this advance has been difficult to measure accurately because of the growing tendency for institutional lenders not to state the interest rate in recorded mortgages. Since 1950 the most frequent rate (when recorded in the mortgage) has been five percent compared with four percent in 1950. Individuals occasionally grant loans at three percent or less interest to buy land. Nineteen fifty-six is the first year in the past 16 in which no three percent loans were recorded in the four counties surveyed. The average interest rate on all loans (when stated in the mortgage) in this sample area was 5.25 percent in 1956, up from 5.14 percent in 1955.

Length of Loan

Over the past decade some tendency has existed to use more long-term and fewer short-term mortgage loans to buy land. Figures in Table 6 reveal the principal change has been a decline in the loans with a 5-year term and an increase in the loans with a term longer than (10) years. This could be a reflection of the prospects for lower farm earnings and higher land prices. It is also associated with the fact that in the more recent years insurance companies and the F. L. B. have made relatively more of the loans; also, commerical banks now are authorized to make loans up to a 20 year term--under federal and state legislation enacted in 1955.

Prices of Different Qualities of Land

Has the advance in price of farm real estate the past few years been reflected equally on all qualities of land? To help answer this question sales of tracts of farm real estate containing 30 acres or more were sorted into three grades based on the tax valuation per acre of the land, exclusive of buildings.

TABLE 6

Proportion of Mortgage Loans Granted for Spec	ific Terms,
Purchases of Farm Real Estate, 4-County	Area,
1947 - 1956	

Length of Loan - Years									
Year loan granted	One year or less	2 to 4	5	6 to 9	10	More than 10 years	Total		
Percent of loans									
1947	8	12	27	6	19	28	100		
1948	11	8	23	2	26	30	100		
1949	9	8	32	5	12	34	100		
1950	10	10	2 5	2	19	34	100		
1951	4	10	2 6	5	15	40	100		
195 2	6	8	19	1	19	47	100		
195 3	11	8	17	5	14	45	100		
1954	7	10	10	3	16	54	100		
1955	6	6	11	3	18	56	100		
1956	6	5	15	0	16	58	100		

As portrayed in Chart 2, the upper fourth of the sales ("best" quality land) in Darke, Fayette and Madison Counties sold for an average price of \$215 per acre in 1949 and \$350 in 1956, an increase in price of 63 percent. The middle half of the sales ("average" quality land) sold for an average of \$178 per acre in 1949 and \$300 in 1956, an increase in price of 69 percent. The "poorest" quality lands (lower fourth) averaged \$139 per acre in 1949 and \$232 in 1956, an increase in price of 67 percent.

The above slight difference in percentage increase in price cannot be deemed significant in view of the degree of random variation in quality and prices of land transferred from year to year. If any inference can be drawn it is that the percentage increase in price in lands of average or lower productivity is at least equal to the percentage increase in price of lands of above average productivity. On the other hand, as indicated by the trend in the lines on Chart 2, the dollar spread in average price per acre continues to widen between the lands graded #1, #2, and #3.

The above refers specifically to the sample area in western Ohio. Sales from one eastern Ohio county, Muskingum, have followed a similar pattern percentage-wise, although fluctuating more from year to year because of random differences in the quality of land sold. In this latter county less of the farm area is suitable for crops and per acre values average lower than in western Ohio; in 1956 sales grouped as #1 land averaged \$138 per acre; #2 land, \$90; and #3 land, \$47. This represents a percentage increase in price, 1949 to 1956, of 66, 125, and 62 percent, respectively for the above three grades of land.

Quality of Buildings and Price

As a general rule the better buildings are found on the more productive lands. On the other hand, a relatively higher proportion of the value (as indicated by tax valuations) of the less productive tracts of real estate is represented by buildings. Also, the demands for farm enlargement and for other uses may place a premium on the market price of tracts of land with no buildings. It is this latter circumstance which is of particular interest in Chart 3.

In Chart 3, the tracts classed as having good, fair and poor buildings show about the same price trend as when the tracts sold were graded according to quality of land in Chart 2. On the other hand, there is some evidence the past two years that tracts with no buildings were selling relatively high compared with tracts with buildings. The evidence of this trend is based on too few sales (28 with no buildings in 1956) to do more than point out that such was the case in a relatively slow real estate market.

Land Values by Counties

Table 7 has been compiled to show average farm real estate values by counties at various census dates from 1850 to 1954. These values were derived from farmers' estimates of the average per acre market value of their farm real estate (land and improvements) given to the census takers, as of specified dates. In times of rapidly rising prices, as since 1940, these average census values tend to be lower than average farm real estate prices computed from actual sales; five to (15) percent lower, as estimated from those few counties where information on land prices

CHART 2

Average Selling Prices of Different Qualities of Farm Real Estate, 30 Acres and Larger, Three Western and One Eastern Ohio County, 1949 - 1956

(#1:	Upper 4th of sales	- "Best" quality land)	As graded by)
(#2:	Middle half of sales	- "Average" quality land)	tax valuation)
(#3:	Lower 4th of sales	- "Poorest" quality land)	of land.)



CHART 3 Selling Prices, Tracts of Farm Real Estate, 10 Acres and Over, Graded According to Quality of Buildings, Sample Area --Three Western Ohio Counties, 1949 - 1956

(Quality graded by tax valuation of buildings)



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has been obtained. On the other hand, the census provides the best available information on average farm real estate values by counties over a long period of time.

Summarizing: -- Farm land values at any time or place may be influenced by numerous factors. Currently land prices tend to rise despite relatively low farm products' prices and incomes. This points to the possibility that we are in an extended period, similar to 1900-1920, in which land prices will adjust upward relative to farm products and prices in general.

Currently this tendency exists generally in the U.S., indicating the existence of several inflationary forces within and without the circle of the agricultural economy. This does not rule out the possibility of a leveling-off of land prices, but it does lessen the probability of an extended decline such as prevailed during the 1920's and 1930's.

In Ohio, economic development and population growth cause present or potential site value to supplement or replace farm income as the principal base of rural land prices in numerous communities. This is partially illustrated by the pattern of average farm real estate values in the various counties. This is a circumstance of particular importance to those buying land to farm or as an investment.

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TABLE 7

Average Census Value per Acre of Farm Real Estate, Ohio Counties, Specified Years, 1850 - 1954

	1850	1870	1900	1910	1920	1925
	(JUNE)	(JUNE)	(JUNE)	(APR.)	(JAN.)	(JAN.)
STATE	\$19.93	\$38.85	\$42.31	\$68.62	\$113.18	\$87.57
			- •	~~	10	
ADAMS	13	16	16	26	48	33
ALLEN	12	29	48	95	168	111
ASHLAND	21	44	40	62	90	71
ASHTABULA	11	34	32	47	77	79
ATHENS	11	21	25	29	42	37
AUGLAIZE	9	28	45	84	148	97
BELMONT	23	43	34	52	66	59
BROWN	22	27	30	42	75	52
BUTLER	38	72	50	75	135	108
CARROLL	17	38	29	37	45	42
CHAMPAIGN	20	49	45	82	139	90
CLARK	27	56	62	92	154	1 2 0
CLERMONT	25	47	30	46	83	67
CLINTON	22	42	46	82	155	97
COLUMBIANA	22	47	44	55	72	75
COSHOCTON	15	29	30	37	52	45
CRAWFORD	16	42	52	82	1 2 0	95
CUYAHOGA	24	69	1 2 0	206	298	533
DARKE	10	35	5 2	101	165	114
DEFIANCE	11	26	42	81	135	97
DELAWARE	16	42	40	72	125	86
ERIE	24	66	64	99	138	119
FAIRFIELD	22	46	46	77	127	94
FAYETTE	17	51	55	96	186	108
FRANKLIN	24	54	82	115	195	154
FULTON	11	34	50	90	166	105
GALLIA	9	20	19	21	37	29
GEAUGA	16	37	34	50	90	105
GREENE	25	51	53	83	169	105
GUERNSEY	14	29	24	36	44	40
HAMILTON	83	113	90	116	159	151
HANCOCK	12	33	50	96	158	103
HARDIN	11	25	43	86	144	93
HARRISON	21	46	32	46	58	47
HENRY	8	25	54	102	199	132
HIGHLAND	19	32	30	46	89	60
HOCKING	9	19	15	23	35	32
HOLMES	17	36	40	57	83	71
HURON	21	42	43	72	101	70
JACKSON	9	20	16	20	29	28
JEFFERSON	31	50	32	43	56	57
KNOX	19	42	35	60	88	67
LAKE	23	56	73	121	236	280
LAWRENCE	10	15	19	24	49	46

	1930 (APR.)	1935 (JAN.)	1940 (APR,)	1945 (JAN.)	1950 (APR,)	1954 (NOV.)
STATE	\$78.69	\$65.89	\$65.91	\$85.20	\$136.34	\$184.27
ADAMS	33	25	27	37	61	85
ALLEN	86	67	83	114	204	248
ASHLAND	57	44	40	64	101	145
ASHTABULA	84	57	54	65	111	144
ATHENS	36	26	29	30	57	64
AUGLAIZE	81	59	76	103	165	221
BELMONT	56	37	42	45	75	94
BROWN	49	36	41	52	81	119
BUTLER	117	81	94	110	190	278
CARROLL	36	27	33	37	66	82
CHAMPAIGN	74	56	73	98	151	213
CLARK	91	75	92	120	183	244
CLERMONT	69	56	63	87	156	174
CLINTON	72	55	74	97	163	208
COSHOCTON	43	34	36	45	63	87
COLUMBIANA	71	51	51	67	116	139
CRAWFORD	76	52	63	94	132	195
CITAHOGA	614	306	348	359	747	1064
DARKE	89	67	80	116	187	261
DEFLANCE	77	52	69	89	138	203
DELAWARE	75	50	67	80	136	214
ERIE	117	89	88	102	172	223
FAIRFIELD	88	62	68	82	133	104
FAVETTE	70	71	81	104	160	949
FRANKLIN	162	02	198	194	217	220
FILTON	00	66	85	199	106	250
GALLIA	30	24	28	29	66	209 71
GRADUA	132	66	20	107	175	99A
GREENE	85	60	80 88	119	194	201
CHERNSEY	37	28	24	30	55	64
HAMILTON	200	155	27	30 959	376	400
HANCOCK	203	69	75	109	169	203
HADDIN	70	51	71	100	1/7	200
HADDISON	30	21	21	34	59	200
UENDV	111	01 01	31	145	990	909
HENRI HICHI AND	59	40	90	140	440	403
HORKING	24	10	41	02	93	140
HOUNING	30	10	<u> </u>	40 60	4/	159
NUDON	64		04 E1	08	110	100
TACKSON	04 90	40 90	00	14	114 E2	T 0A
UNCLOUN IFFFFDGOM	50 20	20	20	32	00 05	14
A NUX	00 E77	39 38	41U A 6	41	00	00 111
LAKE	205	30 100	40 100	910	00 200	111 A1E
LAWRENCE	50	27	20 T92	413 /1	300 76	-110 -110
		J (00	41	10	74

TABLE 7	(Continued))
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	1850 (JUNE)	1870 (JUNE)	1900 (JUNE)	1910 (APR.)	1920 (JAN.)	1925 (JAN.)
STATE	\$19.93	\$38.85	\$42.31	\$68.62	\$113.18	\$87. 57
LICKING	12	43	37	59	94	81
LOGAN	16	37	37	69	121	85
LORAIN	19	47	52	77	121	123
LUCAS	14	62	81	126	211	181
MADISON	14	39	50	86	156	101
MAHONING	24	47	44	71	106	110
MARION	12	31	46	86	158	100
MEDINA	21	43	44	62	113	101
MEIGS	11	24	20	26	38	36
MERCER	9	20	42	90	153	99
MIAMI	25	58	58	102	173	118
MONROE	10	19	26	32	44	33
MONTGOMERY	30	69	71	128	169	159
MORGAN	16	27	25	31	40	33
MORROW	16	42	38	62	95	67
MUSKINGUM	22	33	26	38	54	49
NOBLE	13	32	27	38	50	37
OTTAWA	11	26	72	114	164	134
PAULDING	12	16	38	99	187	104
PERRY	17	30	27	35	56	46
PICKAWAY	22	51	54	94	173	104
PIKE	12	16	15	22	35	34
PORTAGE	22	43	43	57	95	88
PREBLE	24	47	49	85	158	105
PUTNAM	10	24	50	105	174	117
RICHLAND	22	48	40	65	96	83
ROSS	23	34	33	56	91	66
SANDUSKY	15	44	70	101	143	110
SCIOTO	17	20	16	26	40	48
SENECA	20	46	55	86	128	88
SHELBY	14	31	40	83	142	03
STARK	26	58	58	88	138	117
SUMMIT	24	53	57	83	189	144
TRIMBIIT.T.	20	30	37	54	95	109
TUSCARAWAS	16	38	36	40	62	50
INTON	19	38	49	77	199	00
VAN WEDT	2	20	47	100	105	115
	0 0	16	12	16	290	91 91
WARREN	36 36	61	10	80	471 110	61 06
WARLIN WASHINGTON	11	25	71 96	50 10	119	90 19
WASHINGIUN	20 11	20 57	40 54	34 70	110	43
WAINE	40 10	20	04 49	19	119	90
MUUD	10	29	43	109	106	00 195
	10	3U 96	0J 4F	103	190	133
WYANDO'I'	13	30	45	82	133	80

	1930	1935	1940	1945	1950	1954
	(APR.)	(JAN.)	(APR.)	(JAN.)	(APR.)	(NOV.)
STATE	\$78.69	\$59.89	\$65.91	\$85.20	\$136.34	\$184.27
LICKING	72	51	58	74	133	143
LOGAN	66	48	58	80	125	175
LORAIN	130	91	95	110	186	206
LUCAS	226	114	147	168	339	440
MADISON	71	54	75	89	159	208
MAHONING	104	86	81	102	156	206
MARION	75	51	67	89	144	187
MEDINA	104	64	81	104	166	251
MEIGS	35	24	2 8	30	55	59
MERCER	80	62	76	105	168	243
MIAMI	104	73	91	125	206	2 80
MONROE	32	22	24	27	41	44
MONTGOMERY	161	103	132	155	280	429
MORGAN	31	21	23	26	5 2	64
MORROW	55	38	47	73	106	137
MUSKINGUM	46	33	37	39	65	89
NOBLE	32	24	26	27	48	51
OTTAWA	136	97	97	124	213	258
PAULDING	85	59	79	97	157	176
PERRY	45	33	34	42	69	89
PICKAWAY	81	65	76	88	142	212
PIKE	33	23	25	32	59	72
PORTAGE	96	63	67	94	150	208
PREBLE	87	65	79	103	167	240
PUTNAM	101	71	87	121	186	247
RICHLAND	68	47	52	83	110	162
ROSS	56	42	49	55	93	133
SANDUSKY	108	75	86	117	175	265
SCIOTO	52	34	34	46	76	125
SENECA	86	57	64	97	135	183
SHELBY	75	59	64	07	165	214
STARK	125	04	102	128	170	214
SUMMIT	187	112	102	170	396	478
TDIMBIT	29	52	50	90	149	179
TICCADAWAG	56	16	19	59	144	111
INION	70	-10 /0	714 65	00 09	30 120	109
VAN WEDT	00	40 74	00	190	100	104 970
VINTON	00 91	(4) 17	91 10	140	722	210 E0
WADDEN WATCH	41 02	11	04 TD	19	30 100	0C 9/1
WARLEN WARLEN	00	07	01	90	100	241
WASHINGTON	40	32	32	39	29	71
WAINE	91	70	11	106	102	228
WILLIAMS	68	53	65	94	137	180
WUUUU	117	86	96	139	220	273
WYANDOT	72	53	65	91	143	199