

THE OHIO FARM REAL ESTATE SITUATION  
1941-1947

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### Summary

1. Peaks in farm real estate market activity came in 1943-44 and 1946. The latter was less well sustained and was followed by further leveling off the first quarter of 1947.
2. Stimulated by the rise of farm product prices and farm income, farm real estate prices reached practically the same level in the spring of 1947 as in the spring of 1920.
3. Comparing land sales, 1941-46, by certain classes of owners indicates a slight relative increase in sales by owner-operator farmers, a decline in sales by non-farmers and corporate owners and no significant change in sales of estates.
4. Classification of purchasers indicates a net movement of land into the ownership of persons who intend to operate it personally.
5. Nearly 50 percent of all farms were purchased, 1941-1946, free of mortgage debt. Credit financed purchases have averaged higher in price than all-cash purchases. The average equity of buyers of mortgaged tracts has been sustained at about 40 percent of the purchase price.
6. Local sources of credit--banks, individual lenders, and savings and loan institutions--account for more than 90 percent of the new mortgage loans made in 1945-1946.
7. Nearly three-fourths of all new loans carried some plan for installment payments, one-half of all being fully amortized.
8. More than two-fifths of a sample of mortgages that were checked will mature in five years or less and may call for a considerable amount of re-financing.
9. Analysis of individual sales indicates the following: (a) Land classed as having average or lower productivity has increased in price relatively more during the past six years, than more productive land, (b) land with fair or good buildings has advanced relatively more in price than land with poor buildings, particularly since 1944, (c) smaller tracts of land have advanced relatively more in price than large farms since 1944.  
  
Presumably the tendencies mentioned in (b) and (c) above are the result of the general building shortage and the associated demand for small acreages by people interested in urban as well as farm employment.
10. When all circumstances are taken into account the 1947 average land prices in those counties where large sized farms are typical are considerably below the average prices prevailing in 1920. In counties containing many small farms, particularly if urban influences are strong, average prices are now as high and in some counties higher than in 1920.

## THE OHIO FARM REAL ESTATE SITUATION

A war-stimulated economy has influenced land values, speculation, the use of mortgage credit and tenure changes of the people on the land. These and other related matters affected agriculture in the two decades following World War I because some widespread and painful re-adjustments were encountered. It remains to be seen whether or not similar re-adjustments will be encountered in the next two decades. It is certain that there are similarities and differences in the two post-war periods which no one can evaluate fully at this time. It is opportune, however, to consider so far as possible from the available information the course of events affecting the farm real estate situation in Ohio. This bulletin has been prepared to serve that purpose.

The information assembled in this bulletin is derived mainly from a study of actual sales of farm real estate. Such an analysis helps to evaluate some of the circumstances associated with an active market and a rapid rise in farm real estate prices. Details of the study, however, will have more meaning if viewed in the perspective of a few generalized comparisons which follow.

### Price Trends in Two Periods

As a general proposition farm real estate prices follow the lead of farm product prices and income. Land values at any given time tend to be a compromise between the current and the anticipated long-time earnings from the land. Ohio farm real estate prices are now for all practical purposes on the same level and farm product prices are higher than in 1920. Because present price supporting factors appear stronger than in the post-War I period, it may occur that farm real estate prices will not repeat the abrupt decline experienced in 1921. It is obvious, however, that farm real estate prices can be supported at the present level only by much higher farm product prices and income than prevailed during the 1920's. The extent and timing of future price adjustments and their net influence on agricultural income remain unknown but important factors in

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Sources of information.--Data related to individual sales of farm real estate in sample counties are the principal sources of information for this report. Transfers of title and mortgage debt were taken from public records. Information on sellers and buyers was assembled by personal inquiry. All the field work in three counties (Darke, Madison and Muskingum) was done by the Department of Rural Economics. Most of the field work in five counties (Medina, Pike, Putnam, Seneca and Wayne) was done by the Bureau of Agricultural Economics, U.S.D.A. under cooperative arrangement.

the farm real estate situation of the next few years. The following index numbers (with a base period of 1910-14=100) provide some comparisons:

<u>World War I Period</u>				<u>World War II Period</u>			
Year	Ohio farm products prices	Ohio cash farm income	Ohio farm real estate	Year	Ohio farm products prices	Ohio cash farm income	Ohio farm real estate**
1913	105	101	100	1940	99	148	77
1914	105	109	102	1941	127	199	80
1915	106	112	107	1942	160	266	89
1916	121	123	113	1943	193	319	97
1917	182	201	119	1944	194	335	111
1918	203	243	131	1945	203	354	121
1919	218	270	135	1946	237	411	140
1920	212	230	159	1947	269*	401*	158
1921	132	134	134	1948	?	?	?
1922	127	133	124	1949	?	?	?
1923	134	147	122	1950	?	?	?

\* Average for first four months of 1947

\*\* As of March each year

From 1915 to 1920 farm product prices increased 100 percent; cash farm income, 105 percent; and farm real estate prices, 49 percent. From 1941 to 1946 farm product prices increased 87 percent; cash farm income, 107 percent; and farm real estate prices, 75 percent. Land values were low relative to income at the beginning of World War II. This was an additional cause for rising land prices.

Farm Real Estate Market Activity and Price Trends as Indicated by Actual Sales

Information has been assembled from eight Ohio counties on farm real estate sales (10 acres or more) during the war and post-war period. From six of these counties coverage of sales has been nearly complete from 1941 to 1946 inclusive. In Tables 1 and 2 data are presented showing market activity and prices by years and quarter years for this six-county area.

As indicated in Table 1, market activity reached a high level in 1943 and continued through 1946 at a level ranging around 50 percent above that prevailing in 1941 and 1942. Incomplete data for the first quarter of 1947 indicate a slightly lower level of activity than prevailed during the first quarter of 1946 which was distinguished by a very active first quarter followed by a decided decline in activity to the end of the year.

Normally, considerably more than one-fourth of the total farm real estate sales are recorded during the first quarter of the year. Since 1940, however, this normal pattern has not always prevailed. Rising land prices, occupational changes engendered by the war, and surplus purchasing power in the hands of many people are but some of the things which have encouraged more buying and selling of farm real estate in the past five years than in any other period since 1920. The force of these factors has tended to modify the usual patterns of activity causing a few off-season peaks. From the second quarter of 1943 through the third quarter of 1945 normal seasonal tendencies were less pronounced in the farm real estate market than before or since.

Table 1.--Volume of Farm Real Estate Sales, Six County Sample Area\*  
Ohio, 1941 - 1946

Year	Number of sales by years and quarter years				
	Total year	1st quarter	2nd quarter	3rd quarter	4th quarter
1941	945	272	214	231	228
1942	929	286	238	177	228
1943	1423	365	423	286	349
1944	1492	428	324	357	383
1945	1232	316	322	332	262
1946	1291	507	298	258	232

Relative change in number of sales (1941=100)

1941	100	100	100	100	100
1942	98	105	111	77	100
1943	151	134	198	124	153
1944	158	157	151	155	168
1945	130	116	150	144	115
1946	137	186	139	112	102

\* Darke, Madison, Medina, Muskingum, Putnam and Seneca.

Resales.--Prior to 1946 it is estimated that less than 10 percent of all transactions were resales for a profit. During and since 1946 this proportion has generally increased. In one county, the most outstanding example, a check of transfers made during the first quarter of 1947 revealed that 28 percent of the tracts sold had been acquired by the seller since 1943. Undoubtedly, speculative intentions are having some influence on the volume of transfers but such have not so far dominated the farm real estate market.

Rising land prices can be viewed either as cause or effect of an active land market. Actual sales data (Table 2) indicate that the upward course of prices has not been at a uniform rate. Usually first quarter sales show more price strength than the succeeding three quarters but there

were exceptions to this in two of the past six years. It was assumed by some that the leveling-off of market activity and prices in 1946 indicated that land prices had reached a post-war peak. This may have been the case in some areas although the incomplete data assembled for the first quarter of 1947 indicated that the over-all price movement was still upward. Historically farm real estate prices have followed the trend of farm products prices and agricultural income which still favor rising land prices at least through the first half of 1947.

Table 2.--Average Price Per Acre, Farm Real Estate Sales, Six County Sample Area\* , Ohio, 1941 - 1946.

Year	Price per acre by years and quarter years				
	Total year	Quarter years			
		1st quarter	2nd quarter	3rd quarter	4th quarter
1941	\$ 68	\$ 66	\$ 68	\$ 69	\$ 69
1942	73	76	72	72	72
1943	85	81	81	85	91
1944	89	95	84	71	86
1945	107	110	105	104	107
1946	109	116	110	97	108

Relative change in price (1941=100)

1941	100	100	100	100	100
1942	107	115	106	104	104
1943	125	123	119	123	132
1944	131	144	124	103	125
1945	157	157	154	151	155
1946	160	176	162	141	157

\* Darke, Madison, Medina, Muskingum, Putnam and Seneca.

Sellers of Farm Real Estate Classified

The principal purpose served by Table 3 is to depict the trend in relative frequency of sales by different classes of owners<sup>1/</sup>. From 1941 to

<sup>1/</sup> Public records definitely reveal the type of ownership in certain classes of sellers but not in case of others. For instance, settlement of estates and sales by corporations or governmental agencies are definitely identified. On the other hand, the classification of individuals as farmers or non-farmers is dependent on personal inquiry which was not successful in all cases. It is estimated that for all sales for consideration of full value the percentage distribution of sellers by classes during the six year period was: active farmers, 38 percent; non-farmers, including retired farmers and their widows, 47 percent; settlement of estates, 13 percent; corporations & governmental agencies, 2 percent.

1946 sales by active farmers increased in relative frequency, sales by non-farmers remained relatively constant; settlement of estates declined slightly as also did sales by corporations including governmental agencies. As a whole perhaps the most significant trend was some acceleration in sales by farmers reaching an age when full or partial retirement was the objective in selling all or part of their farm land holdings. The past several years have been characterized as a sellers' market, a time favorable for the disposal of land holdings which have been held off the market in the preceding period of low land prices.

Table 3.--Classification of Farm Real Estate Sales By Designated Classes of Owners, Eight County Sample Area\*, Ohio, 1941 - 1946

Class of owners	-Year-						Six-year total
	1941	1942	1943	1944	1945	1946	
	-Number-						
Active farmer	47	193	320	272	351	370	1553
Non-farmer	103	238	387	455	396	362	1941
Estate	95	169	247	240	281	250	1282
Corporation or govt.	14	44	81	59	24	16	238
Total cases classified	259	644	1035	1026	1052	998	5014
			Percent				
Active farmer	18	30	31	27	33	37	31
Non-farmer	40	37	37	44	38	36	39
Estate	37	26	24	23	27	25	25
Corporation or govt.	5	7	8	6	2	2	5
Total	100	100	100	100	100	100	100

\* Darke, Madison, Medina, Muskingum, Pike, Putnam, Seneca and Wayne.

### Buyers of Farm Real Estate

The economic conditions existing since 1940 have encouraged farmers to acquire title to the land they operate. For the entire period, 1941-46, farmers classed as owner-operators made 33 percent of the land purchases in the area studied; tenant farmers, 24 percent; and non-farmers, 43 percent. During this six-year period the proportion of purchases made by existing owner-operators, either to replace land sold or to increase size of holdings, remained relatively constant; the proportion of purchases made by tenants and farm wage workers tended to increase; and that of non-farmers decreased. The net result has been an increase in the proportion of farmers holding title to all or part of the land they operate and a decline in farm tenancy to the lowest level in 60 years. 1/

<u>1/</u> Proportion of Ohio farms operated by tenants at various census dates:	
1880 - 19.3 percent	1925 - 25.5 percent
1890 - 22.9 percent	1930 - 26.3 percent
1900 - 27.4 percent	1935 - 28.9 percent
1910 - 28.4 percent	1940 - 26.3 percent
1920 - 29.5 percent	1945 - 21.8 percent

Table 4.--Buyers of Farm Real Estate, Eight County Sample Area\*

Period	Owner operator		Tenants and other farmers**		Non-farmer		Total transfers classified	
	No.	Pct.	No.	Pct.	No.	Pct.	No.	Pct.
1941	82	35	38	16	117	49	237	100
1942	217	32	150	22	309	46	676	100
1943	337	34	225	22	446	44	1008	100
1944	317	36	199	22	372	42	888	100
1945	267	30	274	30	355	40	896	100
1946	313	35	231	25	363	40	907	100
6-yr. total	1533	33	1117	24	1962	43	4612	100

\* Darke, Madison, Medina, Muskingum, Pike, Putnam, Seneca and Wayne.

\*\* Includes farm wage workers, sons of farmers and part-time farmers.

#### Intentions As To Operation

Most owner-operators and practically all tenants purchase farm land to operate personally. From one-half to two-thirds of the purchases by non-farmers is with the immediate intention of leasing to others. This proportion varies from time to time and with the area. Although not a complete coverage of all cases, the classification presented in Table 5 indicates the intention in respect to the method of operation of farm real estate purchases made in 1945 and 1946 in eight counties.

The point is illustrated also in Table 5 that tenant-operated farms usually contain more acreage than those operated by full owners. For instance, in 1945 the 29 percent of the purchases where the intention was to lease, contained 34 percent of the land transferred. In 1946 the 26 percent of the purchases intended for leasing contained 30 percent of the land transferred.<sup>1/</sup>

<sup>1/</sup> According to the 1945 census: in the entire state, the 21.8 percent of the farm operators who were tenants operated 27.7 percent of the land in farms; in the eight sample counties the 26.1 percent of the farm operators who were tenants operated 31.6 percent of the land in farms. The state average size of operating unit (1945) was: all tenants, 126.6 acres; hired managers, 314.6 acres; part owners, 163.9 acres; full owners, 77.5 acres.



Table 5.--Purchases of Farm Real Estate Classified as to Intention to Operate Personally or to Lease to Others, Eight County Sample Area\*, Ohio, 1945 - 1946

Class of purchaser	1945			1946		
	To operate	To lease	Total	To operate	To lease	Total
	Percent of cases					
Owner-operator	28	3	31	32	4	36
Tenant farmer	23	**	23	16	**	16
Other farmer	8	2	10	8	3	11
Non-farmer	12	24	36	18	19	37
Total	71	29	100	74	26	100
	Percent of acreage purchased					
Owner-operator	27	4	31	31	4	35
Tenant farmer	24	**	24	16	**	16
Other farmer	6	3	9	9	3	12
Non-farmer	9	27	36	14	23	37
Total	66	34	100	70	30	100

\* Darke, Madison, Medina, Muskingum, Pike, Putnam, Seneca and Wayne.

\*\* Less than 0.5 percent

Tot. no. of cases classified 831

852

Tot. acreage classified 63,986

70,769

Trends in Size of Farms

Due mainly to the advantages gained by mechanization the average size of the typical Ohio farm has tended to increase through the years. This tendency has been partially obscured by a counter-tendency arising from the demand by people for small acreages as sites for rural homes, part-time farms or subsistence farms. Under the influence of all these tendencies the average size of all farms in Ohio has fluctuated between approximately 90 and 100 acres during the past quarter century, according to the census, as indicated by the following figures:

1920 - 90.2 acres

1935 - 89.6 acres

1925 - 90.8 acres

1940 - 93.7 acres

1930 - 98.1 acres

1945 - 99.4 acres

A more accurate perspective of what is happening to the size of farm can be obtained by comparing the number of farms in different size groups as reported by the census: (see table next page)

Size groups	Number of Farms on Specified Census Dates					
	1945	1940	1935	1930	1925	1920
Under 10 acres	23,350	23,197	25,904	12,550	15,844	15,867
10 to 29 acres	29,061	29,177	33,366	x	x	x
30 to 49 acres	21,725	24,248	27,877	x	x	x
50 to 99 acres	57,299	67,950	75,470	71,160	81,537	86,337
100 to 179 acres	58,284	62,820	67,181	x	x	x
180 to 259 acres	19,240	17,281	17,027	x	x	x
260 to 499 acres	10,102	8,006	7,345	6,888	6,062	6,402
500 to 999 acres	1,335	966	868	791	664	728
1000 acres and over	179	137	108	104	96	105

x Not available

Very small farms, under 10 acres, increased in number slightly from 1940 to 1945 but declined somewhat from 1935. All size groups from 10 up to 179 acres have shown a decline in numbers from 1935 to 1945. Farms of 180 acres and up have increased in number. The active farm real estate market of the past few years has apparently accelerated the rate of adjustment in size of farms. On the other hand, because a farm operating unit may be all owned, part rented or all rented, the fact of ownership and transfer of title cannot be conclusively associated with the size of farm as an operating unit.

#### Farm Mortgage Debt

The total dollar value of Ohio's farm real estate now is not far different from what it was immediately following World War I. There is, however, an important difference in that the equity of owners now is more and their liabilities in respect to land less than in the early 1920's. The following dates and figures spot some high and low points of farm real estate mortgage debt in Ohio.<sup>1/</sup>

1910	-	\$114,870,000
1923	-	270,081,000
1930	-	272,738,000 - High
1934	-	220,731,000 - Low
1942	-	252,681,000 - High
1945	-	224,533,000 - Low
1946	-	229,351,000

From 1942 to 1945 farmers reduced their real estate mortgage debt 11.1 percent; during 1945 it increased 2.1 percent. The proportion of the total value of farm real estate represented by mortgage debt was 16.6 percent in 1940 and 12.0 percent in 1945.

<sup>1/</sup> Estimates of outstanding mortgage debt, Agricultural Finance Review, B.A.E. Amounts are estimated as of January 1st of the years indicated.

The debt structure associated with the purchases of farm real estate has reflected the influence of rising land prices in that the average mortgage debt per acre encumbering mortgaged tracts after purchase has shown about the same rate of increase as land prices. In other words, the average equity of buyers of mortgaged tracts has remained fairly constant, ranging around 40 percent of the purchase price with actually the smallest equity, 33 percent, in 1941 (Table 6). As compared with the World War I period mortgage credit has been more conservative from 1941 to 1946 in the following respects: (1) the use of junior liens has been relatively infrequent, being associated with less than 3% of the loans in 1945-46 and totaling less than 2% of the money loaned; (2) some plan of amortization of principal repayments has been specified in 70 to 75 percent of the cases; (3) approximately 50 percent of all farm real estate purchases have been made free of mortgage debt commitments. In the event of a sharp drop in agricultural income in the next two decades some financial distress could arise from the present mortgage debt commitments; on the other hand, the above mentioned circumstances support the opinion that financial distress on the scale existing in the 1930's can be avoided.

Table 6.--Comparison of Mortgaged and Mortgage Free Tracts, Farm Real Estate Sales in Eight County Sample Area\*, Ohio 1941-1946

		1941	1942	1943	1944	1945	1946
Tracts mortgaged	number	206	366	942	822	786	877
Tracts not mortgaged	number	203	313	824	920	858	912
Proportion of tracts mortgaged	percent	50	55	53	49	48	49
Average size of mortgaged tracts	acres	93	80	79	81	76	82
Average size of mortgage free tracts	acres	96	72	74	74	74	78
Average purchase price per acre:							
of mortgaged tracts	dollars	69.02	74.25	80.08	88.35	100.15	109.38
of mortgage free tracts	dollars	66.49	68.81	74.45	72.80	85.28	91.08
Average debt per acre of mortgaged tracts	dollars	46.83	44.34	49.35	53.29	56.39	64.17
Average buyers equity in mortgaged tracts	percent	33	40	38	39	44	41
Relative change in purchase price per acre (1941 price = 100):							
of mortgaged tracts	percent	100	106	116	128	145	158
of mortgage free tracts	percent	100	103	112	109	128	137
Relative change in debt per acre of mortgaged tracts	percent	100	95	105	114	120	137

\* Darke, Madison, Medina, Muskingum, Pike, Putnam, Seneca and Wayne.

Land prices average higher on mortgaged tracts.--From observation of individual transactions numerous cases can be found where credit financed purchases are no higher in price than straight cash deals for similar properties. As a general rule, however, mortgaged tracts were associated with higher purchase prices than all-cash transactions in every year, 1941-1946. This price differential broadened from 4 percent in 1941 to 17 percent in 1944 after which it has remained fairly constant. There are probably a number of reasons why credit financed purchases tend to be at a higher price than all-cash purchases. So far as has been determined the price difference cannot be associated solely with type or size of property, locality, type of lender, or productivity of the land. The tentative conclusion is that in all-cash transactions the bargaining position of purchasers is, as a rule, superior to those who must use mortgage credit to buy farm land.

In respect to the prevailing credit policy of lenders, the relative change in debt per acre, 1941-1946, has followed rather closely the relative change in price per acre of mortgage free tracts. It may also be observed that the average debt per acre in the 1946 sample (\$64.17) is only a little less than the average purchase price per acre of mortgage free tracts (\$66.49) in 1941.

Land Prices and Mortgage Debt of Different Sized Tracts

It has been mentioned that purchases involving mortgage debt commitments show a consistent tendency to average higher in price than cash deals. A grouping of sales in Table 7 indicates that this tendency was associated with the purchase of all tracts regardless of size; at least in the sample of 1946 sales, a more significant average price differential prevailed in respect to the smaller tracts.

Table 7.--Prices and Mortgage Debt on Different Sized Tracts of Farm Real Estate Purchased, Eight County Sample Area\*, Ohio, 1946.

Size of tract	Mortgage-free purchases		Purchases involving mortgage debt			
	Proportion of cases	Ave. price per acre	Proportion of cases	Ave. price per acre	Ave. debt per acre	Buyers equity
	Percent	Dollars	Percent	Dollars	Dollars	percent
10 to 29 acres	21	175	17	272	183	33
30 to 49 acres	20	120	18	167	95	43
50 to 79 acres	18	101	21	119	66	45
80 to 99 acres	16	91	17	117	64	45
100 to 159 acres	16	74	17	93	54	42
160 acres or more	9	61	10	67	40	40
Total or average	100	91	100	109	64	41
Total number of cases		912		877		

\* Darke, Madison, Medina, Muskingum, Pike, Putnam, Seneca and Wayne.

Sources of Mortgage Credit

Individuals and local financial institutions have continued to supply most of the farm mortgage loans. No significant changes have developed in this pattern in the past six years. Commercial banks have been supplying 40 to 45 percent of the farm mortgage loan funds, individuals 30 to 35 percent, other institutional lenders, principally savings and loan companies, about 20 percent. The remaining 5 to 10 percent of the loans have been divided between insurance companies and Federal credit agencies (FLB, LBC and FSA). In the course of time some loans initially made by individuals and commercial banks in particular are taken over by insurance companies and the FLB. At least one insurance company has a plan whereby a commercial bank makes the loan in the first instance with an understanding with the mortgagor and the insurance company for such transfer.

Size of loan.--Insurance companies are interested in the larger loans in good agricultural areas. Saving and loan companies are organized to handle smaller loans such as apply to residences and part-time farms. Loans by individuals, commercial banks and the FLB do not differ greatly in average size. As indicated in Table 7 the average size of loans from all sources was decidedly larger in 1946 than in 1945. Loan policy by both individuals and financial institutions has followed much the same pattern of increasing at approximately the same rate as the rise in land prices.

The formation of current loan policy is largely a local matter because individuals and local financial institutions are making such a high proportion of the farm mortgage loans.

Table 8.--Sources of Mortgage Credit New Mortgage Loans Associated With Farm Real Estate Purchases, Eight County Sample Area,\* Ohio, 1945 - 1946

Source of Credit	Proportion of cases		Average size of loans		Buyer's Equity	
	1945	1946	1945	1946	1945	1946
	Percent	Percent	Dollars	Dollars	Percent	Percent
Grantor as mortgagee	18	18	4231	5642	39	40
Other individual	16	15	4282	5313	40	42
Commercial bank	41	44	4598	5094	46	43
Insurance company	3	3	7486	10411	49	40
Federal Land Bk. & LBC	2	2	4557	5418	38	43
Other institutional lenders	20	18	3231	4464	41	34
Total or average	100	100	4289	5257	44	41

\* Darke, Madison, Medina, Muskingum, Pike, Putnam, Seneca and Wayne.

Rates of Interest and Terms of Repayment

Competition has tended to draw interest rates to the level of 4 percent with a range from less than three to more than six percent. Following is an analysis based on 394 new farm mortgage loans made during the year ending March 31, 1947 in Darke, Madison and Muskingum counties. Interest rates were specified in the mortgages securing 264 of these loans. Following is the percentage of loans carrying specified rates of interest:

<u>Rate of annual interest</u>	<u>Percent of loans</u>
Less than 4%	5
4.0%	46
4.5%	2
5.0%	34
6.0% or more	13
TOTAL	<u>100</u>

The maturity date of the loan was stated (or clearly implied) in 355 of the 394 mortgages mentioned above. Following is the percentage of loans running for specified periods:

<u>Length of loan</u>	<u>Percent of loans</u>
One year or less	7
2, 3 or 4 years	10
Five years	25
6, 7, 8 or 9 years	5
Ten years	13
More than ten years	<u>40</u>
TOTAL	100

Of these 394 farm mortgage loans, 50 percent were fully amortized, 19 percent were partially amortized and another 4 percent has some plan of installment repayments of the principal which was not stated in the mortgage agreement. Thus, a total of 73 percent of the farm mortgages under consideration, contemplated an orderly reduction of the principal. A similar analysis for the second quarter of 1944 indicated nearly the same proportion, 71 percent of the mortgage agreements provided some plan of amortization.

The fact that 42 percent of the loans will mature in five years or less time suggests that a considerable volume of re-financing may be necessary in the next few years.

Land Productivity and Prices

Productivity of the land is one of the principal qualities that gives value to farm real estate. The relationship between land prices and productivity is not constant but tends to change with the level of prices

of farm products and with farm income. Some measurement of this tendency is provided by the data in Table 8 derived from land sales in three counties--Darke, Madison and Muskingum. In as many cases as possible the productivity rating assigned by the AAA to each farm was noted and used as a basis for sorting the tracts sold into two classes. The average price of land based on actual sales in this sample area has risen since 1941 at approximately the same rate as has prevailed in the state as a whole. However, tracts classed as having above average productivity show an increase in price of 75 percent since 1941 and tracts classed as of average or lower productivity show an increase of 108 percent in the same period.

Table 9.--Prices of Farm Lands Classed as Above Average and Average or Lower Productivity, Farm Real Estate Sales in Three Counties,\* Ohio, 1941 - 1946 and first quarter 1947.

Period	Productivity above average		Productivity average or lower	
	Average price per acre	Relative change in price (1941=100)	Average price per acre	Relative change in price (1941=100)
1941	\$ 97	100	\$ 48	100
1942	95	98	57	119
1943	113	116	80	167
1944	115	119	72	150
1945	144	148	74	154
1946	150	155	86	179
1st quarter 1947	170	175	100	208

  

<u>Total period</u>	<u>Above average</u>	<u>Average or lower</u>
Number of sales	1,175	1,833
Acres	94,771	150,095
Average acres per sale	80.66	81.88
Total consideration	\$12,033,766	\$11,134,097
Average price per acre	\$ 127	\$ 74

\* Darke, Madison, and Muskingum.

Price Differences Associated With Differences in Quality of Buildings

The difficulties and high costs associated with building construction and repair the past few years have tended to emphasize the advantage of buying farm real estate already provided with the necessary buildings. Also the shortage of urban housing has caused more people to seek sub-urban or rural locations. It is presumed that these influences are related to the widening price spread existing between properties when classified according to good, fair and poor improvements as has been done

in Table 10. In 1941 according to the sample of farm land sales, tracts with good buildings and tracts with fair buildings sold for 76 percent and 26 percent more, respectively, than tracts with poor or no buildings. These margins of difference had at least doubled by the first quarter of 1947.

Table 10, --Price Trends Associated With Different Grades of Building Improvement, Farm Real Estate Sales in Three County Sample Area,\* Ohio, 1941 - 1946 and first quarter 1947.

Period	Quality of Improvements		
	Good	Fair	Poor
- - - - - Average price per acre - - - - -			
1941	\$ 88	\$ 63	\$ 50
1942	82	73	56
1943	109	89	63
1944	107	93	67
1945	134	109	72
1946	139	116	71
1st quarter 1947	185	119	73
Relative change in price (1941=100)			
1941	100	100	100
1942	94	115	113
1943	124	141	126
1944	122	148	134
1945	152	173	144
1946	158	184	142
1st quarter 1947	210	189	148

\* Darke, Madison and Muskingum.

Price Trends of Different Sized Tracts

Building improvements usually represent a larger share of the total value of small tracts than of larger acreages. Also, the element of site value influences the market price of a fairly large proportion of small holdings. Such reasons help to explain why the average price per acre tends to be higher as the size of tract becomes smaller (Table 11). Scarcity and high building costs and the active demand for housing are some of the reasons why tracts of less than 50 acres show a more pronounced price advance than larger tracts, particularly since 1944.



Table 11.--Price Trends of Different Sized Tracts of Farm Real Estate, Three County Sample Area,\* Ohio, 1941 - 1946 and first quarter 1947.

	Size Class			
	10 to 29 acres	30 to 49 acres	50 to 99 acres	100 acres or more
	Average price per acre			
1941	\$116	\$ 74	\$ 67	\$ 59
1942	114	83	72	60
1943	141	95	86	72
1944	167	124	96	77
1945	203	133	106	89
1946	232	160	109	78
1st quarter				
1947	246	153	110	91
	Relative change in price (1941=100)			
1941	100	100	100	100
1942	98	112	107	102
1943	122	128	128	122
1944	144	168	143	131
1945	175	180	158	151
1946	200	216	163	132
1st quarter				
1947	212	207	164	154

\* Darke, Madison and Muskingum.

Land Prices by Type of Farming Areas

Ohio can be divided into type of farming areas on the basis of the dominant pattern of land use, crops grown, and livestock kept. It is desirable, however, to recognize that several types of farms are intermingled in most Ohio communities and that average land values in an area can be associated with the dominant type of farming only in general terms.

Price per acre varies with the area and from one farm to another. Because the value-creating qualities of individual tracts of farm real estate vary so much it may require several hundred sales within an area to compensate fully for all the price differences which arise from differences in productivity, improvements, location, bargaining judgment of sellers and buyers and other reasons, some of which have been mentioned as affecting price. Variations arising from the above mentioned reasons show in the average land prices indicated for type of farming areas, by quarter years, in Table 12. On the other hand, when sales for each year are compared it becomes evident that land prices have advanced at somewhere near the same over-all rate in each of the designated type of farming areas from 1941 to 1946; more specifically, Eastern Corn Belt, 77 percent; Corn Belt Fringe,

(N. W. Ohio), 82 percent; Dairy Area (N. E. Ohio), 90 percent; General Farming Area (S. E. Ohio), 75 percent. As indicated above, in no case was there more than a 15 percent difference in the rate of price change; but even this small difference projected over a longer period would make important changes in land values,

Table 12.--Average Prices Per Acre, Farm Real Estate Sales in Sample Counties by Type of Farming Areas, 1941-1946, By Quarter Years

Year and Quarter		(1)Eastern corn belt	(2)Corn belt Fringe (NW Ohio)	(3)North- eastern Ohio (Dairy)	(4) South- eastern Ohio (general farming)
		Dollars per acre			
1941	1st quarter	\$ 82	\$ 61	\$ 61	\$ 25
"	2nd "	77	67	71	27
"	3rd "	85	72	70	19
"	4th "	82	69	73	25
"	Total year	82*	67*	69*	24*
1942	1st quarter	88	81	81	31
"	2nd "	82	71	75	25
"	3rd "	91	69	74	25
"	4th "	89	69	81	28
"	Total year	88*	73*	78*	27*
1943	1st quarter	98	92	80	29
"	2nd "	100	83	88	26
"	3rd "	96	86	94	26
"	4th "	102	83	101	29
"	Total year	99*	86*	91*	28*
1944	1st quarter	114	96	95	36
"	2nd "	113	94	86	33
"	3rd "	108	103	101	34
"	4th "	122	89	111	34
"	Total year	114*	96*	98*	34*
1945	1st quarter	133	109	117	31
"	2nd "	120	101	109	36
"	3rd "	126	108	103	39
"	4th "	134	103	119	36
"	Total year	128*	105*	112*	36*
1946	1st quarter	124	113	122	39
"	2nd "	154	107	130	34
"	3rd "	158	139	127	44
"	4th "	145	128	146	52
"	Total year	145*	122*	131*	42*

- (1) Darke and Madison Counties
- (2) Putnam and Seneca Counties
- (3) Medina and Wayne Counties
- (4) Muskingum and Pike Counties

\* Unweighted averages

Ohio Farm Real Estate Values, 1850-1945

In 1850 Ohio had 1,980,329 total population, 299 miles of railroads, and much land, particularly in northwestern Ohio, had not been cleared from the forest. Limited available markets and land improvements in the State as a whole were reflected in the low average farm real estate values of 1850. Subsequent changes in values have come partly from nearly a century of economic and social developments--both rural and urban--and partly from changes in the general level of prices.

This latter influence caused land values to decline from about 1880 to nearly 1900, to rise until 1920, to decline again to 1933, to recover gradually to 1940 and to rise rapidly thereafter. The census values given in Table 13 are the best available information to depict these changes over a long period in individual counties. Value-creating (or value limiting) forces have by no means worked uniformly in all counties.

The index numbers of Ohio farm real estate prices advanced 30.57 percent from 1945 to 1947. If this rate of advance is added to the 1945 State average census value, the average January 1, 1947, was \$111.25 per acre, as compared with \$113.18, January 1, 1920. Applying this 30.57 percent State average rate of increase to the 1945 census values in particular counties is subject to some error but does indicate the following:

- (1) In those counties containing the highest proportion of large farms, the 1947 average land values are still well below those of 1920. To illustrate, Champaign, Clinton, Fayette, Madison, Marion, Paulding, Pickaway, and Wyandot grouped together had an average census value of \$161 in 1920, \$95 in 1945 and an estimated value of \$124 in 1947. This further indicates what has been shown by actual sales; large farms have not advanced in price as much as small farms.
- (2) Grouping those counties containing a high proportion of small farms indicates a 1947 average price somewhat higher than in 1920. A group of 15 counties extending from Lucas to Ashtabula and south to Columbiana had an average census value of \$143 per acre in 1920, \$134 in 1945 and an estimated advance to \$175 in 1947.

A group of southeastern Ohio counties containing many small farms experienced a similar relative change--\$41 in 1920, \$34 in 1945 and \$45 in 1947.

Table 13.--Average Census Value Per Acre of Farm Real Estate, Ohio  
Counties, 1850-1945

	1850 (June 1)	1860 (June 1)	1870 (June 1)	1880 (June 1)	1890 (June 1)	1900 (June 1)
State	\$ 19.93	\$ 33.12	\$ 38.85	\$ 45.97	\$ 44.96	\$ 42.31
Adams	13	19	16	17	18	16
Allen	12	24	29	44	55	48
Ashland	21	37	44	44	55	40
Ashtabula	11	27	34	35	36	32
Athens	11	19	21	25	26	25
Auglaize	9	20	28	37	46	45
Belmont	23	32	43	43	42	34
Brown	22	31	27	33	33	30
Butler	38	61	72	70	53	50
Carroll	17	24	38	47	39	29
Champaign	20	38	49	55	50	45
Clark	27	47	56	61	64	62
Clermont	25	45	47	41	36	30
Clinton	22	40	42	44	48	46
Columbiana	22	33	47	52	46	44
Coshocton	15	25	29	39	39	30
Crawford	16	33	42	58	54	52
Cuyahoga	24	47	69	81	99	120
Darke	10	27	35	47	51	52
Defiance	11	18	26	36	45	42
Delaware	16	21	42	47	45	40
Erie	24	37	66	72	74	64
Fairfield	22	36	46	51	52	46
Fayette	17	37	51	44	45	55
Franklin	24	45	54	71	70	82
Fulton	11	22	34	45	50	50
Gallia	9	15	20	22	17	19
Geauga	16	28	37	38	32	34
Greene	25	49	51	68	56	53
Guernsey	14	33	29	31	29	24
Hamilton	83	98	113	108	106	90
Hancock	12	27	33	54	57	50
Hardin	11	22	25	40	43	43
Harrison	21	30	46	40	41	32
Henry	8	16	25	41	49	54
Highland	19	33	32	29	25	30
Hocking	9	15	19	20	20	15
Holmes	17	30	36	57	51	40
Huron	21	36	42	57	50	43
Jackson	9	16	20	20	16	16
Jefferson	31	35	50	48	42	32
Knox	19	33	42	52	44	35
Lake	23	40	56	56	65	73
Lawrence	10	15	15	18	19	19

Table 13.--(continued)

	1910 (Apr. 15)	1920 (Jan. 1)	1925 (Jan. 1)	1930 (Apr. 1)	1935 (Jan. 1)	1940 (Apr. 1)	1945 (Jan. 1)
State	\$ 68.62	\$113.18	\$ 87.57	\$ 78.69	\$ 55.89	\$ 65.91	\$ 85.20
Adams	25.50	48.23	33.00	33.28	25.27	27.35	37.36
Allen	94.66	168.16	110.53	86.00	66.95	82.86	113.86
Ashland	61.81	89.73	70.62	57.34	43.74	50.40	64.49
Ashtabula	47.40	77.30	79.25	83.98	56.61	54.16	64.72
Athens	29.44	42.44	37.42	36.41	25.88	28.92	29.58
Auglaize	83.96	147.91	96.99	81.31	59.31	76.12	103.43
Belmont	52.18	66.00	58.77	55.74	36.92	42.13	45.45
Brown	41.53	74.50	52.08	49.12	36.38	41.06	51.64
Butler	75.36	135.25	107.73	116.85	80.86	94.26	109.79
Carroll	36.93	44.91	41.99	35.57	27.29	32.66	37.04
Champaign	81.55	139.40	90.00	73.78	56.12	72.92	97.80
Clark	91.57	154.37	120.27	90.96	74.93	92.03	120.49
Clermont	46.11	83.14	66.50	69.07	55.67	62.85	86.79
Clinton	82.11	154.69	97.36	71.70	54.71	73.58	96.65
Columbiana	55.26	71.85	75.41	71.04	51.44	51.49	66.73
Coshocton	37.15	52.17	44.94	43.38	33.70	35.96	45.42
Crawford	81.58	120.43	94.56	76.08	52.00	63.38	93.54
Cuyahoga	205.84	298.34	533.32	613.56	305.87	348.13	358.69
Darke	101.33	164.64	114.21	89.24	66.69	80.20	116.26
Defiance	80.86	135.00	96.56	76.56	52.17	69.32	89.07
Delaware	71.90	125.40	86.46	75.07	49.74	66.64	89.10
Erie	98.54	138.28	119.40	117.23	88.74	87.91	102.09
Fairfield	77.35	127.44	94.11	87.99	61.81	68.34	82.31
Fayette	95.63	186.20	107.93	79.35	70.60	81.25	104.29
Franklin	114.59	195.29	154.44	161.77	92.34	127.91	133.94
Fulton	89.78	165.77	104.96	99.36	65.72	85.26	122.55
Gallia	21.43	36.63	29.18	32.48	23.92	27.61	32.10
Geauga	49.84	89.53	105.20	138.24	65.86	87.88	106.80
Greene	83.03	168.61	104.86	85.12	69.45	86.29	113.17
Guernsey	35.51	44.35	40.30	37.25	27.67	24.23	29.72
Hamilton	115.76	159.45	151.02	208.65	154.74	225.75	251.54
Hancock	96.15	158.38	103.19	85.74	62.35	75.28	108.04
Hardin	85.57	143.62	93.15	70.15	50.73	70.68	100.56
Harrison	45.63	57.58	46.68	39.13	31.15	31.24	34.13
Henry	102.35	198.59	131.54	111.26	84.22	96.48	145.26
Highland	45.69	88.73	60.16	51.87	39.79	47.42	61.56
Hocking	22.51	34.55	31.77	29.54	18.41	22.33	28.38
Holmes	57.17	83.22	70.50	66.00	50.53	54.49	68.43
Huron	72.12	100.54	70.21	63.52	48.11	50.55	72.45
Jackson	19.79	29.03	27.62	30.29	19.71	25.79	31.85
Jefferson	43.01	55.91	56.59	52.59	39.02	39.89	46.78
Knox	60.15	88.14	67.36	57.05	37.59	45.17	61.00
Lake	121.46	236.38	279.82	394.89	189.84	199.29	219.07
Lawrence	23.74	49.04	46.41	50.44	36.54	32.62	41.03

Table 13.--(continued)

	1850 (June 1)	1860 (June 1)	1870 (June 1)	1880 (June 1)	1890 (June 1)	1900 (June 1)
State	\$ 19,93	\$ 33,12	\$ 38,85	\$ 45,97	\$ 44,96	\$ 42,31
Licking	12	42	43	45	37	37
Logan	16	30	37	46	43	37
Lorain	19	31	47	48	56	52
Lucas	14	29	62	62	78	81
Madison	14	30	39	43	45	50
Mahoning	24	39	47	53	49	44
Marion	12	28	31	47	47	46
Medina	21	34	43	53	51	44
Meigs	11	21	24	22	24	20
Mercer	9	18	20	29	42	42
Miami	25	47	58	70	68	58
Monroe	10	19	19	25	26	26
Montgomery	30	66	69	84	74	71
Morgan	16	24	27	32	31	25
Morrow	16	31	42	54	42	38
Muskingum	22	28	33	36	34	26
Noble	13	22	32	35	33	27
Ottawa	11	29	26	58	66	72
Paulding	12	12	16	21	36	38
Perry	17	24	30	35	29	27
Pickaway	22	43	51	49	47	54
Pike	12	19	16	16	16	15
Portage	22	36	43	51	45	43
Preble	24	42	47	51	43	49
Putnam	10	18	24	38	50	50
Rickland	22	39	48	61	47	40
Ross	23	24	34	37	35	33
Sandusky	15	30	44	66	69	70
Scioto	17	21	20	16	16	16
Seneca	20	34	46	64	53	55
Shelby	14	24	31	37	43	40
Stark	26	43	58	78	65	58
Summit	24	41	53	64	65	57
Trumbull	20	29	39	41	37	37
Tuscarawas	16	25	38	43	45	36
Union	12	22	38	40	45	42
Van Wert	8	16	22	33	45	47
Vinton	9	13	16	16	17	13
Warren	36	44	61	57	41	47
Washington	11	28	25	28	26	26
Wayne	28	46	57	80	65	54
Williams	10	43	29	41	49	43
Wood	10	21	30	45	62	63
Wyandot	13	27	36	46	50	45

Table 13.--(continued)

	1910 (Apr. 15)	1920 (Jan. 1)	1925 (Jan. 1)	1930 (Apr. 1)	1935 (Jan. 1)	1940 (Apr. 1)	1945 (Jan. 1)
State	\$ 68.62	\$113.18	\$ 87.57	\$ 78.69	\$ 55.89	\$ 65.91	\$ 85.20
Licking	58.97	94.43	80.97	72.46	50.85	58.29	74.11
Logan	69.40	120.72	85.41	65.60	47.69	57.81	79.82
Lorain	76.54	121.02	122.56	130.41	91.05	95.02	109.75
Lucas	126.19	211.24	181.38	225.95	114.15	146.82	167.88
Madison	86.33	156.17	100.96	70.50	53.55	74.51	89.31
Mahoning	70.73	106.19	110.31	103.73	85.80	81.03	101.80
Marion	85.95	157.93	99.68	75.06	50.56	67.00	86.80
Medina	62.22	113.19	101.00	103.60	64.16	81.12	103.51
Meigs	25.81	37.93	36.41	34.58	24.37	27.78	30.45
Mercer	90.49	153.13	99.44	80.45	62.00	75.84	104.90
Miami	102.23	172.85	118.32	103.81	72.79	90.79	124.78
Monroe	31.62	43.95	32.95	31.55	21.86	23.60	27.30
Montgomery	128.36	168.99	159.41	161.46	102.52	131.62	154.70
Morgan	31.47	39.80	33.08	31.34	20.77	22.60	25.82
Morrow	62.29	95.10	66.53	54.59	37.64	47.32	72.67
Muskingum	37.73	54.28	48.78	46.29	33.25	37.29	38.81
Noble	37.60	50.41	36.58	32.47	23.97	25.65	26.55
Ottawa	113.56	164.28	134.00	135.76	97.48	96.69	124.45
Paulding	99.29	186.79	103.98	84.92	58.51	78.70	96.94
Perry	34.83	56.49	46.32	45.46	32.96	33.94	41.90
Pickaway	93.57	173.48	104.36	80.80	64.66	76.15	88.31
Pike	21.56	34.84	33.80	32.90	23.25	25.00	31.96
Portage	56.77	95.40	87.97	96.00	63.30	66.71	93.51
Preble	84.56	157.76	104.58	87.46	65.25	78.63	103.47
Putnam	105.11	174.32	116.95	100.54	71.30	86.67	120.80
Richland	64.80	96.19	83.27	68.24	46.68	51.88	82.66
Ross	56.19	91.23	66.14	56.06	41.71	49.22	55.15
Sandusky	100.89	142.55	110.23	108.40	75.14	85.54	116.68
Scioto	25.61	40.21	48.18	52.34	34.04	33.82	45.67
Seneca	85.98	127.75	87.87	86.43	57.20	64.30	96.91
Shelby	82.55	142.22	92.79	74.63	59.07	63.94	97.32
Stark	87.86	137.76	116.90	124.82	94.17	101.95	128.33
Summit	82.99	188.96	144.08	187.06	112.22	144.45	178.75
Trumbull	54.21	94.99	102.20	82.11	52.18	59.15	80.08
Tuscarawas	48.72	61.94	59.29	56.39	45.59	42.38	52.50
Union	76.82	138.37	88.25	70.04	47.85	65.23	82.50
Van Wert	100.22	195.14	115.28	87.86	74.28	90.67	127.81
Vinton	15.75	23.88	21.11	20.79	16.79	15.62	19.39
Warren	69.42	118.64	95.72	86.18	67.11	81.31	90.45
Washington	33.67	50.37	42.74	45.41	31.62	31.63	38.72
Wayne	79.11	118.51	94.85	91.00	70.11	77.33	106.02
Williams	72.63	127.92	87.97	68.39	52.83	65.11	93.60
Wood	102.95	195.62	135.07	117.20	86.26	96.05	139.08
Wyandot	82.11	133.45	86.46	72.33	52.62	65.42	91.42

