CIRCULAR No. 309 DECEMBER 1933
UNITED STATES DEPARTMENT OF AGRICULTURE
WASHINGTON, D.C.

THE FARM REAL ESTATE SITUATION, 1932-33

By B. R. Stauber, *assistant agricultural economist, Division of Land Economics, Bureau of Agricultural Economics*

CONTENTS

THE SITUATION IN GENERAL

Rapidly moving events in the farm real estate situation during the year 1932–33 [1] brought further recessions in farm real estate values, greater frequency of distress sales of all kinds, a slight increase in the frequency of voluntary sales, an increase in the number of farmer bankruptcies, the highest farm population in history, further contraction of the flow of new mortgage credit, further development of cooperative adjustment plans between debtors and creditors, and a wide variety of relief legislation.

During the year 1932 prices of most of the important farm products reached the lowest points recorded during the depression. As measured by the Bureau indexes, cotton prices in June 1932 were only 37 percent of pre-war prices (August 1909–July 1914=100); grain prices in December 1932 averaged only 33 percent of pre-war prices; meat animals in the same month averaged 52 percent; fruits and vegetables in November 1932 and February 1933 averaged 57 percent; dairy products in March and April 1933 averaged 59 percent; and poultry products in March 1933 averaged 54 percent. Prices paid by farmers declined, also, but not in proportion to the prices of farm products. Declining from 152 in 1929, prices paid

[1] The real estate year ordinarily covers roughly a 12-month period ending about Mar. 1. Possession of farms by lease or sale is commonly given at that time, and occupancy usually is considered as beginning on that date. Unless otherwise stated, therefore, the term "1932–33" denotes the 12-month period ended on or about Mar. 1, 1933. Most of the real estate data here used pertain to that period. Other data are available for the calendar year only. The term "1932" denotes the calendar year ended Dec. 31, 1932.

for commodities used by farmers averaged 107 percent of the pre-war level (1910–14=100) for the year 1932, and reached 100 percent in March 1933. For 1931 the index was 124, and in 1930 it was 144 percent of the pre-war base. Accordingly, the ratio of prices received by farmers to prices paid declined further, and in June 1932 reached 48 percent.

Gross income from farm production during 1932, estimated by the Bureau at $5,143,000,000, reached the lowest level in the available statistical record. This was a billion dollars less than in 1909, less than half the 1924–29 average, and 26 percent below that of 1931. Operating expenditures other than labor declined to $1,351,000,000, in comparison with $1,921,000,000 for 1931, and with $2,824,000,000 in 1930; and cash wages to hired labor amounted to $380,000,000 as compared with $587,000,000 and $809,000,000 in 1931 and 1930 respectively. Some reduction in taxes and interest also occurred, but not in proportion to the reduction in gross income.

In accomplishing these reductions in expenditures, farmers have curtailed their purchases sharply, particularly their capital expenditures. The Bureau estimates indicate that farmer's capital expenditures amounted to about $218,000,000 in 1932, which is about one quarter of the 1924–29 average.

It was inevitable that farm real estate values should decline further. During the year 1931–32 the index [2] of estimated value per acre of farm real estate [3] for the United States as a whole, based on reports from crop correspondents [4] to the Bureau of Agricultural Economics, declined 16 points, from 89 to 73. (One point on the index equals 1 percent of the average value per acre for the 3 pre-war years 1912, 1913, and 1914.) The United States average value per acre of farm land and buildings, as measured by the Bureau index, is lower than at any other time in the available record, which began in 1912.

During the decade 1920 to 1930, the index for the country as a whole dropped from 170 to 115, or 32 percent from the peak. Most of the decline occured in the early years of the decade, values having leveled off considerably in the latter part. During the 3 years, 1930 to 1933, the index dropped from 115 to 73, a decline of 37 percent. On an average, United States farm real estate values as of March 1, 1933, were approximately one quarter below the pre-war base and somewhat more than one half below 1920 values.

Calculated as a percentage of values in the preceding year, rather than as a percentage of the pre-war base, the average decline in values during the year was approximately 18 percent, in comparison with 16 percent in 1931–32, 8 percent in 1930–31 and 1920–21, and 11 percent in 1921–22. In all but 7 States the index of values in March

[2] Preliminary State estimates of changes in values are published annually in the May issue of Crops and Markets.

[3] The term "real estate" as used throughout this circular includes the land and buildings and other permanent improvements.

[4] In view of the small number of bona-fide sales occurring in many sections of the country during recent years, a possible bias toward holding prices may exist in the estimates of value obtained in this survey. Correspondents continue frequently to mention that voluntary sales are too few to establish much of a price base. Even though the estimates may thus require confirmation by subsequent actual voluntary sales, their trend should be significant. Estimates would seem to be prerequisite to the bids and offers out of which sale prices are made.

1933 was below the pre-war base, 4 of the 7 States having been in New England.

Although farm real estate values have declined seriously during the last 2 years, averaging 31 percent for the whole United States, it is worth while to recall that they have not been singular in this regard. Well-recognized indexes of stock prices have shown greater declines in the last 2 years than have farm real estate values. Even some bond indexes have declined as much or more. For example (*16*)[5] 351 industrial stocks declined 63 percent from March 1931 to March 1933; 37 public-utility stocks dropped 65 percent in the same period; and 33 railroad stocks declined 74 percent. A well-known index of industrial bonds was 44 percent lower in March 1933 than 2 years earlier, an index of high-grade railroad bonds was 20 percent lower, and an index of public-utility bonds was 18 percent lower. Although there are several important differences between these securities and farm real estate, it is evident that the general order of the declines in farm real estate values has not been greater than in the case of a substantial amount of other investments.

Land turnover, or changes in farm ownership for the country as a whole, showed a pronounced increase during 1932–33 in the volume of all forced sales and related losses of title through financial default (table 12). The weighted average rate for all classes of such transactions for the country as a whole was 54.1 per 1,000 (that is, on an average, out of each 1,000 farms, 54.1 farms went through foreclosure, tax sale, sale in bankruptcy, or other such loss of title). This rate represented an increase from the 41.7 reported for 1931–32, and is the highest point in the Bureau's record, which began with the 12-month period ended March 15, 1926. The corresponding national average for 1930–31 was 26.1 farms per 1,000; for 1929–30, 20.8; and for 1928–29, 19.5.

Excluding the tax-sale classification, the frequency of involuntary transfer (principally deeding back and mortgage foreclosures) increased during 1932–33 to 38.8 farms per 1,000 from the 28.4 indicated for the previous year. Plantations and ranches are considered as farms in these computations. In neither tax sales nor other types of forced sales are all the transfers of ownership indicated by these figures necessarily irrevocable. The laws governing such procedures in the various States customarily provide a period of redemption, during which, under certain conditions, the former owner may redeem his property. Moreover, there have been changes in the laws of various States in respect to these matters during the year, and the effects of these changes cannot yet be fully appraised. In many cases of mortgage foreclosure the former owner probably remains on the farm as a renter or may enter into an agreement for the repurchase of the place. In certain cases of tax sales, also, the former owners apparently have been allowed to remain.

Voluntary sales have been reported as somewhat more frequent in a number of regions. (See table 12.) The average rate for the United States was 16.8 farms per 1,000 for the year ended March 15, 1933, as compared with 16.2 for the previous year. Owner-operators who have not been pressed to sell are not generally disposed to offer

[5] Italic figures in parentheses refer to Literature Cited, p. 66.

their farms at present prices. Loan agencies are selling farms acquired through foreclosure as occasion offers, some of them having increased their sales in 1932 markedly over those of the preceding year.

In nearly all States the relative declines in values from a year ago were large. In the East North Central States real estate values averaged 15 percent below those of a year ago, and in the West North Central States, 21 percent below. The relative decline within the regions, however, varied from 12 percent in Indiana and Wisconsin to 18 percent in Illinois and from 10 percent in North Dakota to 27.5 percent in Iowa.

On the whole the frequency of voluntary sales in both these regions declined slightly during the year, but in Minnesota, Missouri, and South Dakota slight increases were reported. Forced sales as a result of delinquency on debt service increased in each of these States, whereas sales as a result of tax delinquency increased in some and decreased in others.

The Southern States, too, reported large mark-downs in values during the year, but, of course, there was variation from State to State. Values in West Virginia, for example, were 9 percent lower than those of the previous year, whereas those in North Carolina were 25 percent lower. In the East South Central States declines ranged from 14 percent in Alabama to 21 percent in Mississippi, and in the West South Central States they ranged from 14 percent in Louisiana and Texas to 23 percent in Arkansas.

Voluntary sales were reported as having been more frequent in a majority of the Southern States, and the average for each of these three geographic divisions was a little higher than the previous year. Forced sales as a result of debt delinquency were higher than during the previous year in every Southern State except Maryland and Virginia, and tax sales were more frequent in each State except Maryland, South Carolina, Kentucky, Arkansas, and Texas.

Values in the Western States continued to decline. For California and Oregon the Bureau index was 18 percent lower than last year, and in Washington it was 19 percent lower. Declines in the Mountain States varied from 13 percent in Arizona to 21 percent in Idaho.

Some of the Western States reported increased voluntary sale rates, others reported decreased activity, and the same is true of both tax sales and other forced sales.

Values in all the New England and Middle Atlantic States averaged lower than for the previous year, although in general the declines were less severe than in the remainder of the United States. The greatest relative declines in these regions were in Maine and Pennsylvania. On the whole, voluntary sales increased slightly in the Middle Atlantic States and decreased slightly in New England. Tax sales and other forced sales increased somewhat in both regions.

The latest available data concerning the number of farmers discharged in bankruptcy proceedings show increases for the year ended June 30, 1932, when 4,849 cases were concluded, as compared with 4,023 for the previous year. Prior to the year ended June 30, 1932, the trend in farmer bankruptcies has been downward since 1925. Increases in the number of farmer bankruptcies were reported in 31 States, decreases in 16, and 1 State reported no change. The

proportion of all bankruptcies represented by farmers increased to 7.7 percent from the 6.7 percent for the year ended June 30, 1931.

Farm population reached the all-time peak of 32,242,000 on January 1, 1933, according to estimates of the Bureau of Agricultural Economics. This is a striking increase from the 30,169,000 on January 1, 1930, which was the smallest number of persons on farms for at least the two preceding decades. The increase during the 3 years has been largely due, aside from the natural increase, to the smaller number of persons leaving farms for urban centers. The number of persons moving from city to country during 1932 was smaller than in 1931.

The shift in population has been reflected to some extent in an increased demand for farms to rent, in the purchase of farms, in "doubling up" in homes of farm families, and in the occupation of a large number of formerly abandoned homesteads, shacks, and buildings that would provide shelter. The movement has resulted in an increase in the number of persons directly dependent upon some type of agriculture, without a proportionate accompanying flow of capital. The effect of the movement upon farm real estate values has consequently been very meager, on the whole, and insofar as it has been effective, has cushioned the decline, rather than brought about an increase in values. The earning prospect of farm real estate continues to be the principal determinant of values.

The credit side of the farm real estate situation has been characterized by continued difficulties in repayment of credits previously obtained, and by the smallest volume of new credit extended in many years. Maturing loans have met with pressure for reduction as a condition of renewal, and both new and renewed loan contracts to an increasing extent have carried provision for payments on principal during the life of the loan.

It has not been possible, however, to reduce debts as rapidly as real estate values have declined, and consequently there has been an increase in the proportion of mortgaged farms having high ratios of debt in relation to the new values. There have consequently resulted an increased number of forced sales, as noted earlier, despite the further developed tendency among creditors toward postponement of payments and of leniency toward borrowers who were making sincere efforts to meet the requirements of creditors.

The distressed conditions in agriculture deriving from the low level of income, and especially from the increasing number of foreclosures and tax sales were, of course, largely responsible for the demand for various types of relief.

Several States modified their laws or regulations respecting collection of real estate taxes. Extension of penalty date, legalization of paying taxes in installments, extension of the redemption period, and modification of penalties are among the changes adopted. Concerted efforts looking toward tax reduction have been continued.

Increasing tension as a result of mortgage foreclosures brought about gubernatorial declarations of moratoria on foreclosures in some States. The legislative response to appeals for relief has varied from State to State, but among the proposals receiving legislative approval have been the extension of the redemption period, the ban-

ning of deficiency judgments, and the mandatory continuing of foreclosure actions. Some of the measures enacted have since been declared unconstitutional, and the constitutionality of some others may be questioned before the adjustment period is completed.

Federal interest in the situation has been evinced through the subscription by the United States Government of additional funds to the Federal land banks; by further extension of Federal credit to agriculture; through the enactment of legislation facilitating the composition of creditors' claims and the devising of compromises between debtors and creditors; and since March, through the undertaking of extensive plans to raise agricultural prices, to restore business activity generally, and through the reorganization of Federal credit activities as they relate to agriculture.

The year 1932–33 has been one in which much attention has been directed to the problem of arriving at a workable relation between debts and income. The impossibility of paying debts contracted at a higher price level with income at a much lower level, together with the necessity of cooperation between all parties has been more generally recognized, but the final working out of the situation will take time, and the policies facilitating eventual adjustment will of course be modified in the light of experience and subsequent economic developments.

FARM REAL ESTATE VALUES

VALUES DECLINED FURTHER, REFLECTING LOWER INCOMES

The year ended March 1, 1933, witnessed the decline of farm real estate values for the country as a whole to a level 27 percent below that of the pre-war period, 1912–14. The Bureau's index of estimated value per acre of farm real estate as of March 1, 1933, was 73 percent of the pre-war base (table 1 and fig. 1). During the 12 months, values declined 18 percent from their position at the beginning of the year. In only 2 recent years have such wide-spread and drastic declines occurred—during the year ended March 1, 1922, when the Bureau index declined 11 percent from 157, and during the year ended March 1, 1932, when it declined 16 percent from 106. As measured by the Bureau index the relative decline in farm real estate values from 1930–33 was greater than during the whole decade, 1920–30, the relative decline during the 10-year period having been 32 percent, and during the last 3 years 37 percent. When it is considered that values of 1920 had been reached as the climax of a land boom, the devastating effects of the last few years are strikingly apparent.

Region by region, State by State, farm real estate values have fallen as a result of the vicious circle initiated by declining incomes, namely, delinquent obligations, declining values, forced sales, and further declining values.

The greatest declines from a year ago were reported from the West North Central States, where the Bureau index (1912–14=100) declined from 81 to 64, a decrease of 21 percent. Declines during the year in individual States of this region ranged from 10 percent in North Dakota to nearly 28 percent in Iowa.

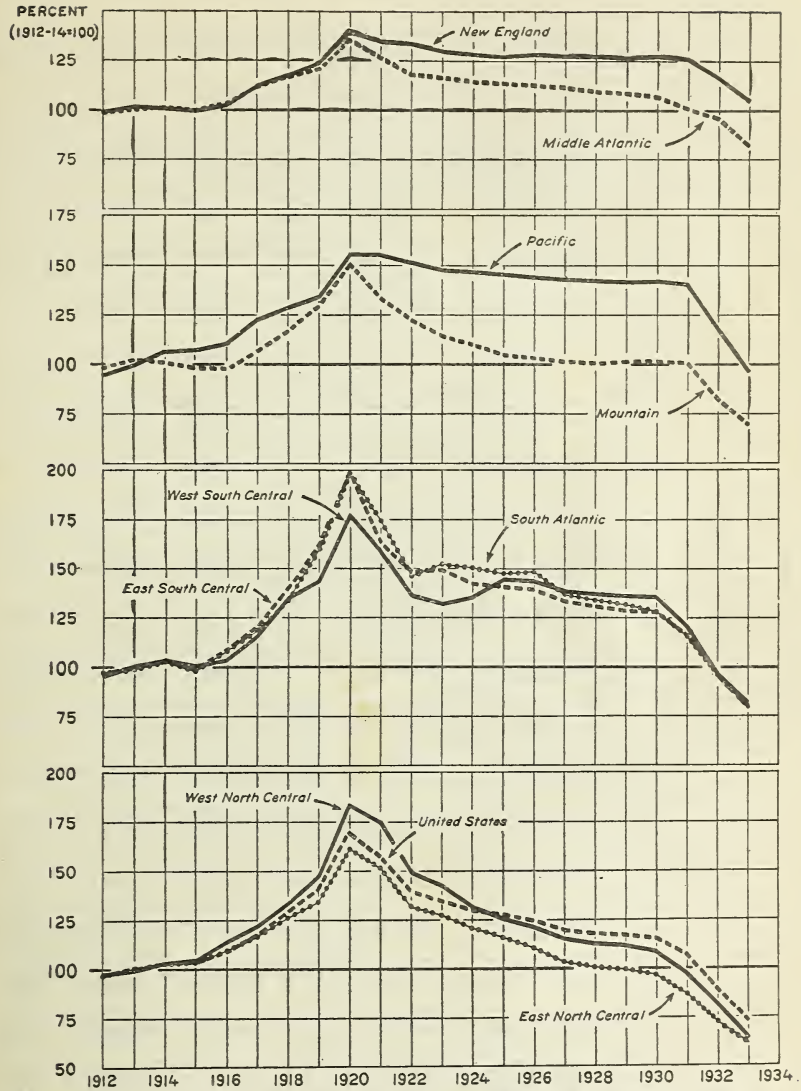

FIGURE 1.—FARM REAL ESTATE: INDEX NUMBERS OF ESTIMATED VALUE PER ACRE, AS OF MARCH 1, BY GEOGRAPHIC DIVISIONS, 1912-33.

Further declines in farm real estate values occurred during the year 1932–33. In only seven States were average values as of Mar. 1, 1933, higher than pre-war. During the decade from 1919–20 to 1929–30, the average value per acre of farm real estate, as measured by the Bureau index, declined 32 percent, but during the 3 years 1929–30 to 1932–33, it declined 37 percent.

TABLE 1.—*Farm real estate: Index numbers of estimated value per acre, by geographic divisions and States, 1912–33* [1]

[1912-14=100 percent]

Geographic division and State	1912	1913	1914	1915	1916	1917	1918	1919	1920	1921	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932	1933	Net change over 1932 [2]	
																								Per ct.
United States	97	100	103	103	108	117	129	140	170	157	139	135	130	127	124	119	117	116	115	106	89	73	−16	−18
Geographic divisions:																								
New England	99	101	100	99	102	112	117	123	140	135	134	130	128	127	128	127	127	126	127	126	116	105	−11	−9
Middle Atlantic	98	100	102	100	104	112	117	121	136	127	118	116	114	114	113	111	110	109	106	101	96	82	−14	−15
East North Central	97	100	103	104	110	116	127	135	161	151	132	128	121	116	111	104	101	100	96	87	73	62	−11	−15
West North Central	97	100	103	105	114	122	134	147	184	174	150	142	132	126	121	115	113	112	109	97	81	64	−17	−21
South Atlantic	98	100	103	98	108	119	135	161	198	174	146	152	151	148	149	137	134	132	128	116	96	80	−16	−17
East South Central	97	100	103	99	109	120	140	162	199	163	149	149	142	141	139	133	130	129	128	117	97	79	−18	−19
West South Central	96	100	104	100	103	116	134	143	177	159	136	132	136	144	144	139	137	136	136	121	97	82	−15	−15
Mountain	98	102	100	98	98	106	117	130	151	133	122	115	110	105	103	101	101	101	102	100	82	69	−13	−16
Pacific	94	99	106	107	111	122	129	134	156	155	151	148	147	146	144	143	142	142	142	140	118	96	−22	−19
New England:																								
Maine	100	102	98	96	98	110	115	124	142	132	127	129	127	124	126	124	124	122	124	123	111	94	−17	−15
New Hampshire	97	101	102	101	98	103	111	116	129	123	126	111	109	111	113	112	112	111	111	110	102	92	−10	−10
Vermont	101	101	98	104	115	127	133	136	150	150	145	134	130	125	126	125	123	123	123	121	112	101	−11	−10
Massachusetts	98	100	102	98	100	110	114	119	140	134	134	132	131	132	134	131	131	131	131	130	120	112	−8	−7
Rhode Island	100	101	100	102	106	112	118	123	130	130	127	124	126	128	130	133	134	134	134	133	126	118	−8	−6
Connecticut	98	100	102	100	102	110	116	121	137	134	140	137	140	137	137	138	139	139	140	140	133	124	−9	−7
Middle Atlantic:																								
New York	98	100	102	100	103	109	115	118	133	123	116	115	112	111	109	108	106	105	103	96	92	82	−10	−11
New Jersey	98	100	102	100	102	111	115	119	130	130	121	115	120	124	129	128	127	127	125	123	118	110	−8	−7
Pennsylvania	98	100	102	100	105	114	119	124	140	131	120	118	116	114	114	112	111	110	107	101	96	78	−18	−19
East North Central:																								
Ohio	98	100	102	107	113	119	131	135	159	134	124	122	118	110	105	99	96	94	90	82	70	59	−11	−16
Indiana	97	100	103	102	110	116	128	135	161	148	120	116	108	102	95	87	84	83	80	72	60	53	−7	−12
Illinois	97	100	103	102	105	111	119	130	160	153	126	123	116	115	109	99	96	95	91	80	66	54	−12	−18
Michigan	98	99	103	105	111	120	134	137	154	152	148	145	138	133	129	127	125	124	121	115	97	80	−17	−18
Wisconsin	97	100	103	104	117	124	133	143	171	168	154	147	139	130	125	122	120	119	117	104	91	80	−11	−12
West North Central:																								
Minnesota	95	100	105	107	122	138	155	167	213	212	187	177	170	159	155	145	140	138	133	116	98	79	−19	−19
Iowa	96	99	104	112	128	134	145	160	213	197	162	156	143	136	130	121	117	116	113	98	80	58	−22	−28
Missouri	97	100	103	102	108	115	125	137	167	156	133	127	117	112	104	99	96	95	92	79	67	55	−12	−18
North Dakota	97	100	103	103	112	118	124	130	145	141	136	128	114	109	105	100	99	98	95	85	73	66	−7	−10
South Dakota	96	101	103	101	108	116	126	145	181	173	146	126	117	115	107	97	96	95	93	83	67	55	−12	−18
Nebraska	98	100	102	101	104	110	127	145	179	166	144	139	128	123	123	119	117	116	113	106	90	69	−21	−23
Kansas	101	99	99	103	109	115	122	132	151	149	130	127	118	115	113	113	113	113	113	103	89	70	−19	−21
South Atlantic:																								
Delaware	100	101	99	100	105	115	124	129	139	129	119	119	107	112	114	111	111	111	111	107	95	80	−15	−16
Maryland	97	100	103	104	109	118	129	136	166	146	141	136	133	131	130	126	124	123	123	120	106	90	−16	−15
Virginia	97	100	103	97	117	125	142	167	189	180	157	170	162	154	148	138	137	136	134	117	99	88	−11	−11

West Virginia	97	100	103	101	104	112	122	135	154	141	125	127	125	120	116	110	109	108	105	98	81	74	−7	−9
North Carolina	97	99	104	102	114	130	152	176	223	196	166	195	192	187	185	178	172	165	158	135	114	86	−28	−25
South Carolina	101	98	101	94	98	107	122	162	230	186	126	128	136	138	128	113	110	110	104	90	73	57	−16	−22
Georgia	98	101	101	94	105	116	131	172	217	172	136	125	123	116	112	104	102	101	100	90	70	57	−13	−19
Florida	96	99	105	97	103	109	126	143	178	176	157	155	163	172	223	183	176	174	172	166	141	121	−20	−14
East South Central:																								
Kentucky	97	100	103	100	111	127	146	170	200	172	151	147	141	140	139	134	130	129	127	115	97	80	−17	−18
Tennessee	96	100	104	100	110	121	145	168	200	169	154	158	148	137	134	130	127	125	123	114	96	79	−17	−18
Alabama	98	98	103	98	98	103	128	143	177	147	135	143	144	154	154	145	145	143	143	129	102	88	−14	−14
Mississippi	97	102	102	97	111	121	131	155	218	150	148	143	134	136	134	126	123	122	122	112	92	73	−19	−21
West South Central:																								
Arkansas	98	101	101	95	109	129	149	169	222	186	174	170	160	160	153	150	147	145	141	118	104	80	−24	−23
Louisiana	99	102	99	95	106	112	143	157	198	163	140	144	137	141	143	135	132	132	132	121	103	89	−14	−14
Oklahoma	98	101	101	95	104	114	130	140	166	160	139	133	125	131	130	128	127	127	127	116	94	76	−18	−19
Texas	95	100	105	103	103	115	133	141	174	156	133	128	137	146	146	141	139	138	138	122	96	83	−13	−14
Mountain:																								
Montana	97	100	103	100	94	100	106	114	126	105	96	87	81	75	72	70	71	72	72	70	58	48	−10	−17
Idaho	100	101	99	96	99	114	130	146	172	162	136	133	129	123	119	117	116	116	116	114	96	76	−20	−21
Wyoming	97	103	100	103	94	97	121	147	176	146	134	121	112	100	95	94	95	96	98	95	77	62	−15	−19
Colorado	98	103	98	93	102	107	110	118	141	132	123	113	98	92	89	82	82	82	83	81	65	54	−11	−17
New Mexico	100	104	96	100	96	111	118	127	144	125	115	110	110	108	106	108	108	109	110	109	89	75	−14	−16
Arizona	95	100	105	97	95	105	125	140	165	148	135	124	128	121	125	123	122	123	123	123	104	90	−14	−13
Utah	100	102	98	98	104	117	122	144	167	137	133	133	131	130	129	128	127	127	126	122	98	83	−15	−15
Nevada	96	100	103	102	99	96	103	117	135	123	119	112	108	102	99	99	99	99	99	97	78	65	−13	−17
Pacific:																								
Washington	98	100	103	100	102	112	118	122	140	132	124	117	115	113	112	111	110	110	110	108	91	74	−17	−19
Oregon	97	100	103	99	100	104	112	118	130	130	122	115	113	110	107	106	106	106	107	106	88	72	−16	−18
California	93	99	108	111	116	130	136	142	167	168	166	165	164	164	163	162	161	160	160	158	133	109	−24	−18

[1] All farm land with improvement as of Mar. 1. Owing to rounding of figures, 1912–14 will not always equal exactly 100 percent.
[2] Minus (−) denotes decrease.

At the other end of the list is New England, where individual declines ranged from 6 percent for Rhode Island to 15 percent for Maine. For New England as a whole, the Bureau index declined from 116 to 105, or 9 percent.

Among other areas, considered as units, minor differences were exhibited. Average declines of 19 percent were reported by the East South Central and Pacific groups, an average decline of 17 percent was reported from the South Atlantic States, and 16 percent by the Mountain States. Values of real estate in the West South Central, East North Central, and Middle Atlantic divisions averaged 15 percent each below the levels of last year.

Considering States individually, the wide geographical distribution of large declines is even more evident. The largest drops were reported from Iowa and North Carolina, with decreases of nearly 28 percent and 25 percent, respectively.

Declines of from 21 to 23 percent were reported from such widely separated States as South Carolina, Idaho, Nebraska, Kansas, Arkansas, and Mississippi. Decreases from 14 to 19 percent were reported by 27 States, including at least 3 States from each of the 9 geographic divisions into which the United States is customarily divided except the New England and Middle Atlantic groups, from which there was 1 State each.

The 24 States reporting the largest relative decreases included 62 percent of the total land in farms, and 67 percent of the total value of farm real estate.

Judged by levels of values, relative to pre-war, reached as the cumulative effect of the depression, the North Central States, more particularly those of the Corn Belt, appear to have been most severely affected. In the Corn Belt States, values averaged less than two thirds of pre-war, and in the neighborhood of one third the peak values of 1920. In the Lake States of Minnesota, Wisconsin, and Michigan, values averaged around 80 percent of pre-war.

At the other extreme are the New England States, where the land boom of the twenties was felt less, and where the adversities of the recent years have pressed less heavily. For the group as a whole, values averaged about 5 percent above pre-war, with values in Maine, New Hampshire, and Vermont a little less, and those of the States farther south and closer to industrial centers averaging a little higher.

The Southern States as a group averaged in the neighborhood of 80 percent of pre-war. They averaged higher than the Corn Belt States largely by reason of the sustaining effects on values of the rebound of cotton prices in 1923 and 1924. In South Carolina and Georgia farm real estate values were lower, relative to pre-war, than in the neighboring States, owing in part, it appears, to the particular sequence with which the effects of boom cotton prices, subsequent deflation, and the bollweevil were experienced.

VALUES MORE NEARLY IN LINE WITH RENTS THAN IN EARLIER YEARS

Farm real estate values of course are predicated fundamentally upon income, and represent a composite market judgment of the present worth of future land income. Since it is future income, rather than past, that ownership of land provides, and since future

income depends upon numerous variable factors, there is an inevitable element of uncertainty in any estimation of present value. Both buyers and sellers need to consider this element of uncertainty and to allow for it, as it affects their respective interests. Since the factors entering into the determination of future land income are so complex, the tendency is to base estimates of the future pretty largely upon the experience of the recent past.

In periods of relative stability, confidence develops in the existing order, and the assumption that it will continue is the basis of business dealings, many of which involve long-time commitments. On the other hand, when customary relations become disturbed, the fundamental difficulty of accurately judging the future becomes evident, and people become more cautious in undertaking long-time contracts.

For example, the period 1900 to 1920 was one in which, by and large, farm incomes were increasing. The assumption seemed rather general, toward the end of the period, that the accustomed increase could be counted upon indefinitely, and current values reflected this assumption. As a result, the ratio of current net rents to current valuations became very low, and instances were not uncommon in which farmers were paying 6 percent interest on money borrowed to buy land priced to yield a much lower rate of return (*2*). An analogous situation existed in the security markets in 1929 (*13*). The prices of many stocks were such that the ratio of current dividends to current prices was very low.

With respect to farm real estate, these observations are illustrated by table 2, applying to Iowa. Attention has been called in previous yearly publications regarding the farm real estate situation to the upward trend over the last decade of the ratio of gross cash rent to the value of the land so rented. Gross cash rents, however, do not tell the whole story.

TABLE 2.—*Farm real estate rented for cash in Iowa: Approximate net rent per acre and proportion of current value based on current rents, 1921–33* [1]

Year	Average value per acre of cash-rental land	Gross cash rent per acre	Taxes plus estimated depreciation and repairs per acre	Approximate net rent per acre	Ratio of rent to value		Net rent capitalized at 5.5 percent	Proportion of value represented by capitalized net rent
					Gross rent	Net rent		
	Dollars	*Dollars*	*Dollars*	*Dollars*	*Percent*	*Percent*	*Dollars*	*Percent*
1921	236	10.48	2.14	8.34	4.44	3.53	152	64
1922	188	7.36	2.18	5.18	3.91	2.76	94	50
1923	170	7.43	2.13	5.30	4.37	3.12	96	56
1924	164	7.38	2.15	5.23	4.50	3.19	95	58
1925	154	7.39	2.07	5.32	4.80	3.45	97	63
1926	157	7.55	2.12	5.43	4.81	3.46	99	63
1927	149	7.69	2.15	5.54	5.16	3.72	101	68
1928	142	7.75	2.15	5.60	5.46	3.94	102	72
1929	140	7.79	2.22	5.57	5.56	3.98	101	72
1930	130	7.77	2.20	5.57	5.98	4.28	101	78
1931	114	7.43	1.95	5.48	6.52	4.81	100	88
1932	93	6.08	1.72	4.36	6.54	4.69	79	85
1933	70	4.46	[2] 1.61	2.85	6.37	4.07	52	[2] 74

[1] All data preliminary. [2] Estimated.

To arrive at an approximation of the share of income attributed or imputed to real estate, it is necessary to deduct from the gross rent, the taxes, depreciation, and repairs that are chargeable against it.

The result, given adequate data, closely approximates the land income that may properly be capitalized in considering value.

Data on real estate taxes per acre have recently become available, and an allowance for depreciation and repairs to buildings has been calculated as 3 percent of building values. This figure is based upon farm-management surveys. Value of buildings has been estimated from census data and, since 1930, upon approximate changes in building costs. The results, although not applicable to any specific farm, are believed to be representative of the general trends involved in recent years.

In the first several columns in table 2 are given the value, gross cash rent, deductions, and approximate net rent for the period for which data are available. The next two columns present the ratio of the gross and net rents to value. These ratios have risen considerably from the low values of the early twenties, a slight down turn, however, being suggested by the 1933 data. Whether this down turn marks a definite change in trend cannot now be determined, but it is significant to note that the same change holds good for several of the other States of the region.

One possible qualification may be noted respecting rents for the last 3 years. The rents indicated are the contract rents, given at the beginning of the respective years. No information is available as to whether there has been subsequent modification of the contractual rents in line with the decline in prices of farm products. In view of the magnitude of the drops in gross farm returns during 1931 and 1932, it is entirely possible that concessions have been made and that the rents actually collected have been lower than those contracted. The values are also reported at the beginning of the year, and since a modification of rent would presumably involve a corresponding change in the estimate of value, it would appear on the whole that whatever bias may exist on this score is relatively unimportant.

It has been noted in earlier investigations [6] (*2*) that as a result of the long period of rising incomes leading up to 1920, current valuations involved to a large extent the capitalization of an expected continued annual increase in incomes. The investigation disclosed that, if the current interest rate on mortgage indebtedness be accepted as a fair capitalization rate, approximately 56 percent of the 1920 values in the central Corn Belt were based upon the anticipated *future increases* in net rents, and conversely, that only about 44 percent of the 1920 values represented capitalization of the then current net rents.

In table 2 a similar analysis is applied to the Iowa data on cash rents secured from the Department's crop correspondents. Capitalizing the estimated net rents given in table 2 at 5.5 percent, which is a close approximation to the average mortgage rate of interest in Iowa,[7] gives the values in the next to the last column. The propor-

[6] WIECKING, E. H. THE ECONOMIC BASIS OF FARM LAND VALUES. U.S.Dept.Agr., Bur. Agr. Econ., 23 pp., illus. 1928. [Mimeographed report.]

[7] The average rate of interest on farm mortgages in Iowa, according to the 1920 census, was 5.5 percent; the total costs of mortgage money was 5.53 percent, according to the 1930 census. The latter figure includes financing costs in addition to interest, estimated at from 0.1 percent to 0.3 percent. An investigation (*9*) in Story County, Iowa, indicated the modal rate of interest was 5 percent from 1900 through 1931, except for a brief period shortly following 1920, when it rose to 6 percent. The annual arithmetic mean interest rate fluctuated in the neighborhood of 5.5 percent, rising to more than 6 percent shortly after 1920 and then dropping again to 5.5 percent or slightly below.

tion of average value per acre represented by the capitalized net rent is indicated in the last column.

Three observations should be noted at this point. In the first place, it is not suggested that the capitalized net rents represent the true value of Iowa land in any 1 year. Value depends, as has been pointed out, not on income in 1 year, but upon all future incomes. It is likely, however, that had it been generally recognized in 1921 that net rents would not rise materially during the decade, values would have fallen somewhat more rapidly than they actually did in the earlier years of the decade.

In the second place, the mortgage rate of interest may not be exactly the proper rate of capitalization. Farming is a way of life as well as an occupation, and offers satisfactions that are not susceptible to exact measurement. These factors may lead to a willingness on the part of farmers generally to pay a higher rate of interest on mortgage money than they require on their own invested capital. For present purposes, however, it is not particularly important whether the correct capitalization rate is a little higher or a little lower than the mortgage rate. The essential point is the trend, and in the absence of evidence indicating definite changes in the theoretically correct rate, the mortgage rate seems to offer the best practical approximation to the rate of capitalization. A lower rate would result in larger figures in the next to the last column, but would not materially alter the direction of trend.

In the third place, it should not be inferred from table 2, that since current net rents capitalized at 5.5 percent do not account for the whole of current values, further declines in values will necessarily follow. As has been pointed out, it is as yet a matter for conjecture whether the mortgage rate of interest may or may not be too high for use in capitalizing net rents. Its use seems more justified in demonstrating the existence of trends than in forecasting the precise location of "turning points." The prospect of a series of definitely higher rents, as a result of higher incomes, would exert a very definite influence upon the situation. The effects, for example, of the somewhat increased gross income from farm production in prospect for 1933, may be expected to reverse some of the deflationary forces acting on farm real estate values. It is still too early to appraise the precise effects.

SUPPLY OF FARMS LARGE, SEVERAL TYPES OF POTENTIAL BUYERS

In the formulation of a long-time investment policy, not only the short-time factors, including the effects of recovery upon the low prices of early 1933, but also certain factors of a more permanent nature, need to be considered.

Of very great importance, for example, are the factors that may be expected to determine the trend of the general price level over a considerable period, as distinguished from such shorter time movements as may be expected to accompany recovery from the depths of depression. The effects upon farm real estate values of a long-time upward trend in the price level may be expected to be quite different from those of long-time downward or horizontal trend. Other circumstances such as those affecting the prospective food

requirements of the Nation, not only in the aggregate but with respect to specific groups of products, are of definite importance from the long-time viewpoint. Whereas, for example, in the earlier part of the century, some apprehension was felt concerning the adequacy of the food supply for the anticipated population, recent years have brought evidence indicating that little apprehension need be felt on this score. On the one hand, the prospect of a declining or stationary population by 1950 or 1960, and on the other, the improvements in technic of production, such as the possibilities in the use of fertilizer, changes in dietary habits, shift to mechanical power thus releasing land from producing feed for work stock, and shifts from less to more efficient producers of meat, appear to have materially altered the prospects with which the century opened insofar as the required food supply in concerned.[8] These factors, however, pertain primarily to the long-time point of view.

For the more immediate future, the demand for and the supply of farms are most significant. On the supply side, there are first, the large holdings of mortgage lenders, together with other land which is delinquent and subject to foreclosure. Many holders have evinced an indisposition to sell their better properties at existing prices, although there is no doubt that much foreclosed land has been sold below the value of the investment.[9] In view of recent developments toward higher prices of farm products, it appears likely that owners of foreclosed land will make vigorous efforts to recover at least their investment, wherever possible.

Another source of supply may be noted. A farm is a durable good, which sooner or later must pass to a new owner. Voluntary transfers have been greatly restricted for several years, and although the number of farmers who wish to sell out and go to work in the city has probably been reduced, it is likely that there are a considerable number of owners who have not had to sell, but who would be willing to do so at a reasonable price. Farms owned by older farmers, that would normally have been sold as their owners retired, may come on the market when conditions clear sufficiently. The Bureau data on transfers indicate an increased number of inheritances, which may in part result from the curtailed voluntary sales of recent years (table 12). Older farmers, unable or unwilling under circumstances of the last several years to sell out and retire, may have willed farms to their heirs, who may or may not wish to engage in farming. In the latter case, a potential supply of farms for sale exists.

A great deal depends upon the availability of credit. For farms acquired through foreclosure, fairly lenient terms of sale may be reasonably anticipated if experience of recent years is acceptable as a guide, for, although new credit has been restricted, fairly lenient terms have in many cases been offered to purchasers of foreclosed land. The rapidity with which a renewed supply of funds becomes available for financing farm sales will have an important effect upon the restoration of greater activity in farm real estate.

On the demand side may be mentioned the group of tenants. Tenancy, it may be noted, reached an all-time peak in 1930, accord-

[8] Baker, O. E. THE PROSPECT FOR CONSUMPTION OF FARM PRODUCTS. U.S.Dept.Agr. 1932. [Mimeographed.]

[9] See p. 55.

ing to the census, when 42.4 percent of all farms in the United States were operated by tenants. Some of these have rented for years but have not bought for various reasons. With the high costs of ownership and the risks of buying in the face of an uncertain price level, many felt that it was more profitable to rent than to buy land. Some of these are potential purchasers who will enter the market when they believe conditions are right. Indications of a strong rental demand for the last few years suggest that the competition for farms to rent may encourage purchasing. In many cases, too, foreclosed farms are now being rented by former owners, some of whom have arranged repurchase agreements. If suitable terms can be arranged some of these are likely to enter again the ownership status, as conditions permit.

As has been widely noted the farm population is the highest in the Nation's history (*4*), partly as a result of natural population increase, and partly as a result of the lowered rate of cityward migration. Some of this group are potential farm buyers. But in considering their effect upon the land market, it must be recalled that a large proportion of this group have very restricted purchasing power as a result of prolonged unemployment, loss of savings in closed banks, or, on the part of younger farmers, the lack of opportunity to acquire capital. Part of them, on the other hand, are no doubt merely residing with parents or other relatives, and doubtless hope to return to their accustomed vocations at the earliest opportunity. There is some indication that many of this group, especially those from cities, are more interested in relatively small farms, preferably near cities, where part-time farming can supplement other income. The lower capital outlay required to swing such a deal is also a factor in favor of the small farm, for a small farm may often be bought outright for an amount that would form only the down payment on what the real farmer would consider a farm of desirable size. The events of recent years have suggested strongly the advantages of being free of debt, and it is likely that the lesson will be remembered for some time to come.

As a result, too, of the restricted flow of young people to the city, a larger number of young farmers may be expected to be coming into the market for farms, especially if, as some students fear, industrial opportunities are more restricted in the next than in the past decade.

A further potential source of farm buying that may become a considerable factor in the market is the investor. Some activity of this type has been in subdued evidence in recent years, and if the price situation continues to improve, it is not at all unlikely that investors will turn their attention more strongly to farm real estate. There are indications that buyers have been holding off, waiting for the bottom. The importance of this state of mind in the present situation is indicated by the widespread attention on the part of observers that has been given to the subject of commodity prices, interest, and tax rates. The normal expectation is, therefore, that a well-substantiated price rise among farm products would convince investors that the bottom had been reached.

From a broad point of view, the recent drastic shifts in the exchange relations between dollars on the one hand, and commodities

on the other, have probably served to bring more forcibly to the attention of many people the problems inherent in long-term commitments. Were contracts devised with sufficient flexibility so that loans might be kept in good standing even in times of drastic changes in price levels, the way might be opened not only to hastening the moving of the large number of farms now held by unwilling owners, but also to preventing a recurrence of a similar catastrophe of a wholesale loss of equities in the future. The use of some form of crop-payment plan is one method of meeting the problem. Another method, which has been developed as the basis of agreement between debtor and creditor in the current situation[10] (*12*), consists in a sliding scale of interest payments, depending upon an index of commodity prices. The possibility of applying some such plan to payments on principal, in addition to interest, furnishes an interesting field for exploration. By such a plan the prospective buyer might be encouraged to make a commitment, because the danger of losing his initial investment and succeeding payments as a result of factors beyond his control would be greatly reduced. Similarly, prospective sellers might be more willing to sell, rather than preferring to hold for the rise in prices, for, in case of such a rise, their payments would increase, and the advantages of holding their property would be largely attained. Thus, insofar as fear of further considerable changes in price levels discourages buying and selling, the clearing up of the foreclosed land situation would be facilitated by such contracts.

The fundamental factor in clearing up the present congested real estate situation lies in the development of a workable adjustment between prices of commodities sold, commodities bought, debt service, and taxes. Given the prospect for such an adjustment, progress may be expected. The large amounts of distress land and the restricted purchasing power of prospective purchasers suggest, however, that time will be required to work out a solution that will remove the major part of the debris from this depression.

The past year is one in which much attention has been given to these problems, and some progress is being made. Continued cooperation on the part of all parties concerned will accomplish much toward the eventual clearing of the situation.

Nevertheless, the cumulative effect of the pressure on farm real estate has resulted in a badly congested market. With the amount of involuntarily held land at high levels, and with additional amounts delinquent, much remains to be done before a normal market for real estate is restored. How rapidly this congestion can be cleared up and a normal market again restored is a subject for conjecture. No very great confidence can be placed in precedent, for the only period when distressed selling was at comparable levels, was the depression of the nineties. The satisfactory liquidation of involuntary holdings of that period was greatly facilitated by the persistent upward trend of farm real estate values beginning near the turn of the century, and concluding with the 1920 peak, during

[10] PECK, M. [ADJUSTING FARM RENTALS AND THE INTEREST LOAD TO CHANGING PRICES.] Iowa State Col., Dept. Agr. Econ. Nov. 2, 1932. [Mimeographed material.]

which time real estate values more than trebled. This upward trend, however, was the result of a peculiar combination of circumstances.

INCOME FROM FARM PRODUCTION WAS THE LOWEST IN MORE THAN 20 YEARS

Gross income from farm production in 1932 fell to the lowest level in the 24 years for which a statistical record is available (table 3, fig. 2). For the whole United States it was estimated (*14*) at

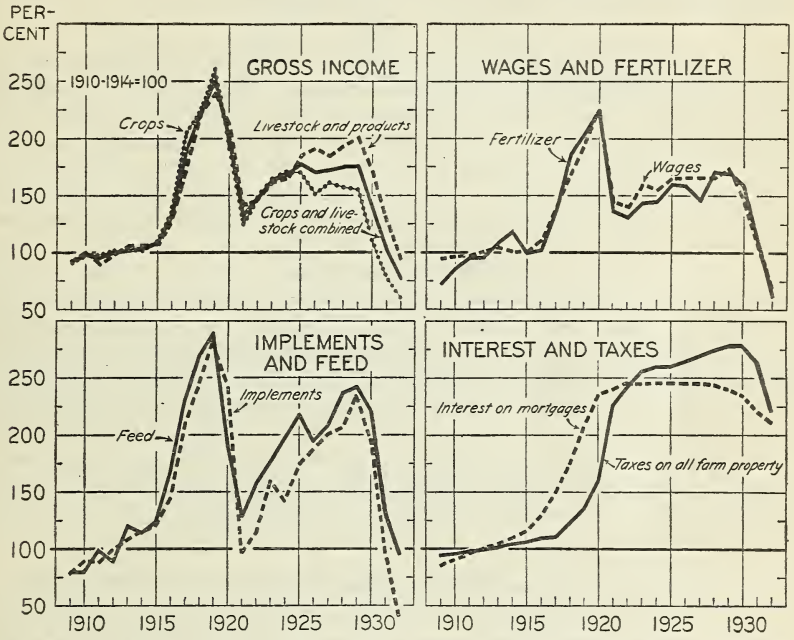

FIGURE 2.—GROSS FARM INCOME AND SELECTED EXPENDITURES, 1909-33.

Gross income from farm production, after remaining fairly stable from 1925 to 1929, declined rapidly, and in 1932 was over 1½ billion dollars less than the average for the pre-war years 1910–14, and less than half the average for the 1924–29 period. Gross income in 1932 from crops was lower relative to pre-war than that from livestock.

$5,143,000,000, approximately 1½ billion dollars below the average for the 5 pre-war years, 1910–14, about 1¾ billions less than in 1931, and somewhat less than half the average for the period 1924–29. The reduction since 1929 has been predominantly due to price declines. From 1929 to 1932, gross income dropped 57 percent, whereas the volume of physical production for both home and market dropped only about 5 percent, and the Bureau index of prices received by farmers declined about 59 percent in the same period.

TABLE 3.—*Gross income from farm production of the calendar years, 1909–32*

Year [1]	Gross income	Year [1]	Gross income	Year [1]	Gross income	Year [1]	Gross income
	Million dollars		*Million dollars*		*Million dollars*		*Million dollars*
1909	6,238	1915	7,395	1921	8,927	1927	11,616
1910	6,643	1916	8,914	1922	9,944	1928	11,741
1911	6,372	1917	12,832	1923	11,041	1929	11,918
1912	6,784	1918	15,101	1924	11,337	1930	9,414
1913	6,975	1919	16,935	1925	11,968	1931	6,911
1914	7,028	1920	13,566	1926	11,480	1932	[2] 5,143

Income from farm production in the United States, 1932 (*14*).

[1] Crop year for crops; calendar year for livestock and livestock products.
[2] Preliminary.

Gross income from both crops and livestock was less than a year ago, but the relative change was less in the case of crops than of livestock, the relative decline having been 22 and 28 percent, respectively.

Hogs and sheep and wool experienced the greatest relative losses in the livestock group (table 4), whereas grain prices declined more than prices of other crops. Considering the total decline relative to 1929 (or the series of years preceding) crops, led by the grains, averaged greater losses than livestock and livestock products. Gross income from grains in 1932 was only 25 percent of that of 1929, gross income from cotton and cottonseed was only 31 percent of that of 1929, and that from tobacco was 39 percent of the 1929 amount. Gross income from fruits, nuts, and vegetables was about half the 1929 amounts, whereas gross income from sugar crops declined only about a fifth. In the livestock group the greatest declines occurred in the case of hogs, gross income from which was, in 1932, 35 percent of the 1929 amount; in the case of sheep and wool the 1932 income was 41 percent of the 1929 amount; in the case of cattle and calves it was 45 percent; while for poultry and eggs it was 49 percent; and for dairy products 54.

TABLE 4.—*Gross income from farm production by groups of commodities, 1929–32*

Source of income	1929	1930	1931	1932
	Million dollars	*Million dollars*	*Million dollars*	*Million dollars*
Crops:				
Grains	1,283	779	474	322
Fruits and nuts	706	567	453	340
Vegetables	1,132	943	724	596
Sugar crops	85	94	69	68
Cotton and cottonseed	1,389	751	528	431
Tobacco	286	212	132	111
Other crops	540	453	334	245
Total	5,421	3,799	2,714	2,113
Livestock and livestock products:				
Cattle and calves	1,111	951	681	502
Hogs	1,531	1,350	912	538
Sheep and wool	262	204	158	107
Poultry and eggs	1,230	1,050	809	603
Dairy products	2,323	2,031	1,614	1,260
Other	40	29	23	20
Total	6,497	5,615	4,197	3,030
Total	11,918	9,414	6,911	5,143

Income from farm production in the United States (*14*).

The close relationship between the course of gross income from various commodity groups and of their prices, is evident from tables 5 and 6. The former presents the Bureau's index of prices received by farmers for six groups of commodities and for all groups and

the latter shows the prices of principal individual commodities relative to the pre-war period, August 1909–July 1914. The lower indexes for the grains, cotton, and hogs explain in large part the lower

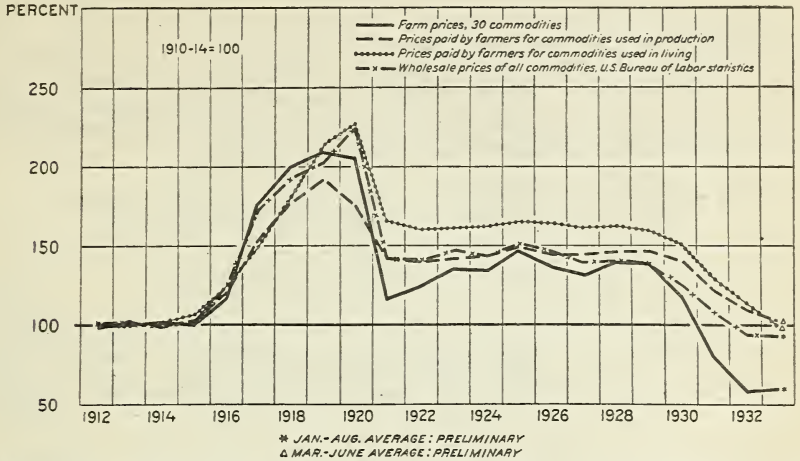

FIGURE 3.—PRICES RECEIVED AND PAID BY FARMERS, AND WHOLESALE PRICES OF ALL COMMODITIES.

Continuing the declines of recent years, prices of many farm products reached ruinous levels during 1932 before turning upward in the first half of 1933. Prices of commodities used by farmers, both for consumption and for production, declined less, relatively, than did prices of farm products, and responded less rapidly in the first half of 1933 to the influences encouraging higher prices. In August, prices received by farmers were lower than in July.

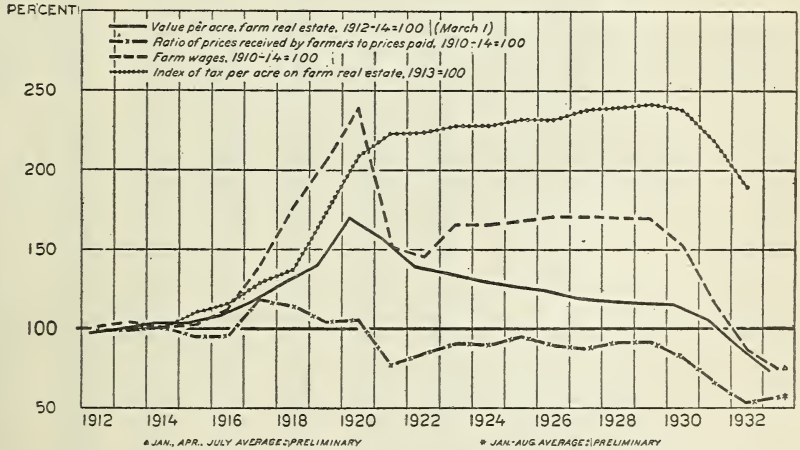

FIGURE 4.—RATIO OF PRICES RECEIVED TO PRICES PAID, FARM WAGES, TAXES PER ACRE ON FARM REAL ESTATE, AND VALUE PER ACRE OF FARM REAL ESTATE.

Taxes on farm real estate in 1932 were appreciably lower than in 1931, and wages to hired labor, and other operating costs declined. Farm real estate values, for the country as a whole, declined for the thirteenth consecutive year. Owing to the higher prices in the first half of 1933 the exchange value of farm products in return for other commodities increased. In August, however, it was lower than in July.

gross income received from these products. The trend of prices of farm products and its relation to other important series is presented in figures 3 and 4.

Since late 1932 or early 1933, however, the course of prices has been, in general, upward. From a low of 33 in December, the index for grains increased to 94 in July 1933; the index for fruits and vegetables increased from 57 in February to 120 in August; and the index for cotton rose from 43 in December to 84 in July. The index for poultry products, on the other hand, stood at 121 in December, 96 in January, and 54 in March. From that low point it increased to 67 in July. Much of the decrease from the winter months to the early spring was undoubtedly attributable to the strong seasonal movement in the prices of poultry products.

TABLE 5.—*General trend of prices and purchasing power for specified years, 1910–32, and by months, September 1931 to August 1933*

Year and month	Index numbers of farm prices (August 1909–July 1914=100)							Ratio of prices received to prices paid [1]	Wholesale prices, all commodities, U.S. Bureau of Labor Statistics, 1910–14=100
	Grains	Fruits and vegetables	Meat animals	Dairy products	Poultry products	Cotton and cottonseed	All groups		
1910	104	91	103	100	104	113	103	105	103
1915	120	83	104	98	103	78	100	95	102
1920	231	249	173	188	222	248	205	106	225
1925	156	160	139	137	161	177	147	95	151
1926	129	189	146	136	156	122	136	89	146
1927	128	155	139	138	141	128	131	87	139
1928	130	146	150	140	150	152	139	91	141
1929	121	136	156	140	159	145	138	91	139
1930	100	158	134	123	126	102	117	81	126
1931	63	98	93	94	96	63	80	65	107
1932	44	71	63	70	80	46	57	53	95
1931:									
September	50	83	86	92	99	47	72	60	104
October	46	70	79	95	110	42	68	57	103
November	57	68	76	95	123	50	71	60	102
December	52	68	68	92	120	45	66	56	100
1932:									
January	52	70	68	85	87	45	63	55	98
February	51	68	65	79	70	47	60	53	97
March	51	73	69	76	61	50	61	54	96
April	50	78	66	74	60	46	59	53	96
May	49	80	59	69	60	42	56	51	94
June	44	82	57	62	59	37	52	48	93
July	42	83	72	63	65	41	57	53	94
August	43	79	69	65	75	51	59	55	95
September	41	68	67	67	84	57	59	56	95
October	36	59	60	68	102	51	56	53	94
November	34	57	57	68	115	47	54	52	93
December	33	59	52	69	121	43	52	50	91
1933:									
January	34	59	51	68	96	45	51	50	89
February	34	57	53	62	57	44	49	49	87
March	36	60	56	59	54	48	50	50	88
April	47	66	57	59	56	49	53	52	88
May	62	68	65	63	62	65	62	61	92
June	63	74	66	65	55	69	64	62	95
July	94	103	66	71	67	84	76	71	101
August	81	120	63	72	67	71	72	64	102

[1] The value of a unit of the farmer's product at farm prices in exchange for commodities bought by farmers for use in both production and living, at retail prices, as compared with pre-war values (table 7).

TABLE 6.—*General trend of prices of individual products, for selected years, 1910–32, and by months, September 1931 to August 1933*

[Relative farm prices (August 1909—July 1914=100)]

Year and month	Grains			Meat animals				Fruits and vegetables			Dairy and poultry products				Cotton and cottonseed		Unclassified	
	Wheat	Corn	Oats	Cattle	Calves	Lambs	Hogs	Potatoes	Apples	Sweet potatoes	Milk	Butter	Eggs	Chickens	Cotton	Cottonseed	Hay	Wool
1910	110	96	102	92	95	108	113	77	102	88	100	102	105	103	113	114	95	116
1915	127	112	113	116	113	116	91	76	77	97	96	102	102	104	73	112	88	126
1920	250	220	196	163	175	202	180	353	204	196	177	214	222	224	250	235	177	214
1925	171	156	112	120	131	208	152	163	154	195	127	161	157	178	179	159	106	221
1926	153	109	97	124	143	196	163	266	127	178	125	163	147	192	122	124	110	186
1927	136	123	113	139	151	193	134	190	129	130	126	168	131	178	128	130	101	174
1928	128	139	123	176	174	205	121	119	152	128	128	173	141	186	150	171	90	203
1929	116	136	111	177	180	202	130	134	145	135	127	173	149	196	143	159	97	176
1930	92	121	95	145	147	139	122	178	140	132	114	145	117	162	100	119	95	119
1931	55	78	64	104	104	98	81	104	98	106	88	110	86	136	61	77	82	80
1932	44	44	46	78	74	75	48	62	73	65	65	83	74	102	47	44	63	54
1931:																		
September	40	67	50	96	103	85	75	86	74	93	84	109	89	138	48	41	75	74
October	41	52	50	92	97	79	65	66	61	75	85	119	106	126	43	35	72	70
November	57	57	58	92	89	76	60	66	64	66	86	117	123	126	49	53	73	74
December	50	54	58	84	83	71	52	66	67	67	83	114	119	122	44	50	73	72
1932:																		
January	50	52	57	82	83	75	52	68	69	70	77	103	80	117	45	47	72	70
February	50	50	57	78	86	78	49	64	69	70	74	92	60	111	47	46	71	73
March	50	50	57	82	84	86	54	66	74	73	71	90	48	111	50	46	73	70
April	49	49	57	81	75	87	49	67	82	73	69	86	47	111	46	44	74	62
May	48	47	55	75	69	81	41	67	86	74	64	79	48	107	42	44	71	51
June	42	46	50	73	69	76	39	64	96	71	58	73	49	100	37	40	64	40
July	40	47	44	87	74	74	58	70	90	73	60	72	56	103	41	39	59	39
August	44	47	37	84	73	70	56	74	68	78	60	77	68	103	52	41	57	42
September	42	44	36	83	76	70	52	55	60	63	62	78	80	102	58	51	57	51
October	39	34	33	75	70	67	45	49	60	50	63	79	105	94	52	47	55	53
November	37	30	33	72	66	66	42	49	59	43	63	80	121	89	48	43	55	53
December	36	29	33	66	62	67	38	53	64	44	63	84	131	81	44	40	52	52
1933:																		
January	37	30	34	63	61	69	37	54	68	48	62	81	100	82	45	40	51	50
February	37	30	33	64	70	71	41	53	69	50	58	72	51	82	44	40	50	49
March	39	32	34	66	68	72	44	56	73	53	55	71	47	80	49	42	50	50
April	51	44	43	68	65	73	44	61	82	57	54	73	48	86	49	46	52	57
May	67	61	54	76	67	80	54	63	88	64	56	78	55	91	66	55	54	99
June	66	63	58	78	67	88	55	71	92	65	60	78	47	88	70	59	54	120
July	98	86	98	76	68	89	55	140	90	77	66	84	61	91	85	75	59	126
August	84	76	81	73	70	89	52	188	78	106	69	80	62	86	71	71	63	126

There are only a few agricultural parts of the country which are not rather heavily dependent upon at least one of the three groups—grains, cotton, and hogs—each of which has experienced price declines of approximately two thirds or more from 1929 levels. Most of the remaining agricultural area includes those that are primarily dependent upon poultry, and poultry products, dairy products, vegetables, and fruits and nuts, cattle, and sheep. In the case of these products declines in gross income have closely approximated or even exceeded 50 percent in the period 1929–32. Thus it is that declines in realty values since 1929 have been so slightly divergent. Some significant differences existed between the levels reached as of that date, but the declines in major agricultural regions since then have differed relatively slightly.

Operating expenses of farmers have, of necessity, been curtailed over those of a year ago. The Bureau's estimate (*14*) [11] of total operating expenditures of farmers for 1932 was $1,351,000,000. This represents a drop of nearly 30 percent from the $1,921,000,000 of the year previous, which in turn was 32 percent less than the $2,824,000,000 of 1930.

Operating expenditures for the year represent 46 percent of the 1924–29 average, and gross income represents 44 percent of its average for the same period. Operating expenditures and gross income as a whole have thus been reduced almost, but not quite, in proportion. Significant variations appear, however, in the distribution of the decrease. Current expenditures for items directly associated with production, such as feed, seed, fertilizer, spray materials, and costs of operating tractors and automobiles, averaged 41 percent below the 1924–29 average.

Items of capital expenditure for machinery, automobiles, and trucks, or repairs on farm buildings declined 78 percent. Expenditures for these items can be postponed to a considerable extent. The old binder may be patched up to get through another year, and the painting or repairing of buildings can be postponed. These changes, particularly the former, result in a substitution of labor for equipment to some extent, and a more rapid rate of depreciation on permanent improvements. Continued long enough, delayed purchase of capital equipment means reduced output per worker and a return to more antiquated production methods. From the standpoint of the equipment industries, the decrease from an annual expenditure for new equipment and repairs of $1,000,000,000 to about $218,000,000 represents a sizable cut in production, which is, of course, reflected in lower payments for one or more of the items of raw materials, labor, and dividends.

Cash wages for hired labor have also been greatly reduced. From an average of nearly $924,000,000 for the years 1924–29, cash wages dropped to $809,000,000 in 1930, to $587,000,000 in 1931, and to $380,000,000 in 1932, a total reduction of 59 percent from 1924-29.

The expenditures considered so far are more or less flexible, and can be varied to some extent at the judgment of the operator. The items of taxes, interest, and repayment of principal on indebtedness are not so flexible. Some reduction in the tax burden on agricultural real estate has been accomplished, as is indicated by the decline in the estimated total of taxes payable [12] from $699,000,000 in 1930 to $664,000,000 in 1931, and to $556,000,000 in 1932. The total decline in taxes payable from 1930 to 1932 is 20 percent.

Most inflexible of all items of expenditure is that for interest payable.[13] From 1930 to 1932, this item has declined only 10 percent, or from $683,000,000 to $612,000,000. Most of this decline follows

[11] These operating expenditures include some capital outlay which should not be charged to a single year's operations in a strict accounting sense. But viewed from the standpoint of expenditure of available resources, they may be legitimately included. Further details are available in the reference indicated.

[12] As distinguished from taxes paid. A large but unknown amount of delinquent taxes exists.

[13] As distinguished from interest paid. It is known that there has been much delinquency on debt service, but it is not known how much of the delinquency applies to interest and how much to principal.

from the reduction in mortgage indebtedness outstanding.[14] There have been some cases where compromises of one sort or another have been worked out between debtor and creditor, thus reducing somewhat the interest charge. The total mortgage debt is estimated to have been approximately $9,000,000,000 as of January 1, 1930, and approximately $8,500,000,000 as of January 1, 1933. A considerable part of the decline is believed to have resulted from cancellation of debt by foreclosure.

Some of the relations between these changes are more clearly evident when the items of expenditure are expressed as percentages of gross income. Current operating expenditures varied only slightly from 16 percent of gross income during the 1924–29 period, but increased to nearly 21 percent in 1930–31, and to 22 percent in 1932, indicating that these items failed to decrease as rapidly as income.

Capital expenditures, on the other hand, varied from 7 to 10 percent during the 6-year period, but declined sharply after 1929, and amounted to only 4 percent of gross income in 1932. Cash wages to hired labor absorbed in the neighborhood of 8 percent of gross income, the ratio having changed only slightly during the whole period.

The combined items of interest and taxes averaged about 12 percent of gross income over the period 1924–29, with relatively slight variations. This was about one half higher than during the period 1909–16. The increase in debt during the 1910–20 decade was largely responsible for the increase. In the last 4 years, the share of income absorbed by these two items has very nearly doubled, in 1932 amounting to 22.7 percent of gross income, or about three times the 1909–14 share. In 1932 the share of total gross income represented by taxes payable was 10.8 percent and that by interest payable was 11.9 percent. As a matter of fact, however, less than half[15] the farms of the United States are mortgaged, and interest on mortgages is paid only by this share. Hence, on an average for mortgaged farms, the share of gross income that is claimed by interest, is probably nearer 20 percent than 10 percent. Since the amount of debt varies greatly from farm to farm, there are many farms on which the proportion is far greater than this.

The reduced expenditures noted have been accomplished partly through buying less and partly as a result of lower prices. Just how much of the decrease each of these factors is responsible for is not known. Undoubtedly great variations exist between different types of commodities. Since, however, the Bureau index of prices of commodities bought for use in production (table 7) declined only 27 percent from the 1924–29 level, and since total operating expenditures have been reduced 46 percent, it is evident that a considerable reduction in the physical quantities of goods bought has occurred.

---

[14] The total is based upon all bank loans, other than real estate loans, and on 90 percent of mortgage indebtedness, 10 percent of the total mortgage debt being assigned to farm dwellings.

[15] Forty-two percent, according to the 1930 census.

TABLE 7.—*Index numbers of prices paid by farmers, by years, 1910–32, and in stated months, 1930–33*

[1910-14=100 percent]

Year and month	Commodities used in production							Commodities bought for family maintenance [2]	All commodities bought for both production and family maintenance	Wages paid to hired labor	Commodities bought for use in production plus wages paid to hired labor	Index of farm real estate tax per acre [3]
	Feed	Machinery	Fertilizer	Building materials for other than house	Equipment and supplies	Seed [1]	All commodities bought for use in production					
1910	93	102	99	100	101	------	98	98	98	97	98	------
1911	107	101	99	102	100	------	103	100	102	97	101	------
1912	91	102	100	103	100	103	98	101	99	101	99	------
1913	107	98	102	101	100	97	102	100	101	104	103	100
1914	102	96	100	93	99	99	99	102	100	101	99	101
1915	100	100	112	102	106	120	104	107	105	102	103	110
1916	130	107	120	117	129	142	124	124	124	112	121	116
1917	184	126	137	137	156	149	151	147	149	140	149	129
1918	193	155	170	161	181	190	174	177	175	176	174	137
1919	211	161	182	189	180	280	192	210	200	206	195	172
1920	137	167	186	205	189	152	174	222	194	239	189	209
1921	97	156	156	156	152	134	141	161	150	150	143	223
1922	123	142	129	159	140	130	139	156	146	146	141	224
1923	134	146	126	161	136	142	141	160	149	166	147	228
1924	142	152	120	161	133	151	143	159	150	166	148	228
1925	141	153	129	164	140	172	147	164	154	168	152	232
1926	137	154	126	162	144	214	146	162	153	171	152	232
1927	138	154	121	160	141	197	145	159	151	170	151	238
1928	148	154	131	158	138	179	148	160	153	169	153	239
1929	145	153	130	159	136	185	147	158	152	170	153	241
1930	132	152	126	155	131	174	140	148	144	152	143	238
1931	93	150	115	139	116	152	122	126	124	116	120	218
1932	69	141	99	126	107	102	107	108	107	86	102	189
1930:												
March	134	154	126	158	133	176	142	155	148	162	147	------
June	135	152	126	157	132	176	142	152	147	160	146	------
September	138	152	125	153	131	176	142	146	144	150	144	------
December	120	152	125	150	128	168	135	140	137	129	134	------
1931:												
March	108	151	119	144	124	174	129	134	131	127	129	------
June	100	150	119	140	114	174	125	129	127	123	124	------
September	83	150	110	137	114	133	117	124	120	113	116	------
December	80	148	110	134	114	127	116	118	117	98	112	------
1932:												
March	76	144	103	130	111	109	112	113	112	94	108	------
June	72	142	103	127	106	109	109	108	108	87	104	------
September	67	140	96	124	106	94	105	106	106	84	100	------
December	62	139	96	123	104	94	104	103	103	74	97	------
1933:												
March	62	135	91	119	105	85	101	99	100	73	94	------
June	77	135	91	122	97	85	104	102	103	78	98	------

Compiled from prices reported to the Department of Agriculture by retail dealers throughout the United States. The index numbers include only commodities bought by farmers, the commodities being weighted according to purchases reported by actual farmers in farm-management and rural-life studies from 1920 to 1925. Figures for other months used in table 5 are straight interpolations between the above quarterly reporting dates.

[1] 1912–14=100.

[2] Includes food, clothing household operating expenses, furniture and furnishings, and building materials for house.

[3] 1913=100.

In contrast, the aggregate physical quantities of agricultural marketings have shown little change from 1924 to 1929. In short, the agricultural plant and personnel have continued to provide about as much food and raw materials as in other recent years, but in exchange have received a smaller quantity of the goods and services produced by industry. The capital and personnel of the nonagri-

cultural part of the population have curtailed production very markedly, with idle personnel, and plants operating at fractional capacities. In the last analysis the total quantity of goods produced is the total quantity that can be consumed. As a result of unemployment, the decrease in purchasing power has been far from equal, especially among industrial and commercial workers, some having reduced their consumption only slightly, others to a mere subsistence level. In agriculture, on the other hand, the prime requisites of existence have, on the whole, been available—primarily because all were working. Some, of course, have lost their homes, and the proportion of physical production required to meet debt and interest charges has increased tremendously, as a result of price declines, leaving a smaller share to be exchanged directly for the products of industry.

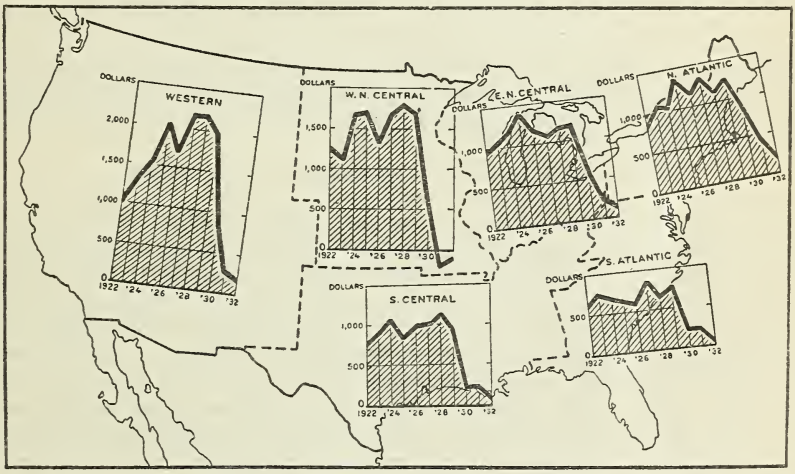

FIGURE 5.—FARM RETURNS, 1922-32: AVERAGE NET RESULTS ON OWNER-OPERATOR FARMS, BY REGIONS.

The average operating net results for 1932, as reported by the Department's crop correspondents, were lower than in 1931 in all but one geographic division. An average net loss was again reported from the West North Central States.

Another indication of the effects of the past year upon the fortunes of farmers is found in the reports of 6,383 owner operators for their own farms. The average size and average property values of the reporting farms are greater than the average for all farms reported by the census. Few of the reports relate to farms of less than 50 acres, whereas size groups of 80 acres and upward are well represented. The returns cannot properly be considered as average in the sense of applying to all farmers, but they are considered to be "representative" in the sense that both large and small, profitable and unprofitable farms are included, and they are distributed over all parts of the country. The year-to-year variations in the dollar figures in table 8 and figure 5 can be used only in a broad way—not for close comparisons of absolute and relative amounts of change.

The net results presented in table 8 consist of the average gross cash receipts, minus average current cash expenses, plus the change

in inventory value of personal property. The average net results, it will be observed, are far less favorable on the whole than for the preceding year. In addition to the net results indicated, these families during 1932 used food produced on the farm to the extent of $161 and had some fuel and the use of the farmhouse.

TABLE 8.—*Farm returns: Average net result of owner operators for their own farms for the calendar years 1922–32* [1]

Geographic division	1922	1923	1924	1925	1926	1927	1928	1929	1930	1931	1932
North Atlantic	$858	$1,070	$1,022	$1,352	$1,166	$1,333	$1,105	$1,254	$882	$445	$180
East North Central	928	1,030	1,155	1,370	1,169	1,088	1,170	1,178	604	202	119
West North Central	1,235	1,110	1,654	1,680	1,325	1,642	1,798	1,684	595	−178	−98
South Atlantic	623	740	656	616	569	818	639	764	214	215	41
South Central	735	890	1,059	824	973	980	1,121	987	217	216	88
Western	986	1,310	1,506	2,047	1,694	2,179	2,171	1,994	868	242	178
United States	917	1,020	1,205	1,297	1,133	1,290	1,334	1,298	538	154	66
Number of reports, United States	6,094	16,183	15,103	15,330	13,475	13,859	11,851	11,805	6,228	7,437	6,383

[1] Average gross cash receipts from sales, minus average current cash expenses, plus change in inventory of personal property. The following items are not included: Interest paid, expenditures for farm improvements, estimated value of food produced and used on farms, estimated value of family labor, including owner, and estimated change in value of real estate during year. Full details have been published for each year in Crops and Markets, the latest figures in July 1933.

PROBLEMS WERE INTENSIFIED IN ALL AREAS

That the problems of the farm real estate market became more acute during the year is evidenced by reports from nearly all sections. These developments had their origin primarily in the reduced incomes of the year, which, in turn, were directly associated with lower prices rather than with decreased production. The total area harvested in 1932 was 1 percent larger than in 1931, but a little less than that harvested in 1929 or 1930. The composite yield per acre was 3.6 percent greater than in 1931, but 1.4 percent below the average of the previous 10 years. Conditions have varied from State to State, and in some States, as in Iowa and Michigan, favorable growing conditions and better-than-average yields were experienced. Some others were not so fortunate, a March freeze in Texas, low wheat yields in Kansas, and unfavorable weather in Maryland, for example, having added to the distress in their respective regions.

Price declines were such that, combined with the variations in production that occurred, gross income from farm production was lower than a year ago in each of the 48 States. The biggest drop from a year ago, 46 percent, occurred in South Dakota. By a strange coincidence the smallest decrease, 2 percent, occurred in North Dakota. The reason for the small decrease is found in the fact that income in North Dakota the previous year was very low because of unfavorable growing conditions.

In more than half the States, gross income from farm production for 1932 was from 20 to 30 percent lower than in 1931. The greatest average declines by geographic divisions were in the West North Central States, where gross income for 1932 was 33 percent less than in 1931. In the East North Central States it was 29 percent lower, and in the Mountain States 25 percent. Somewhat less severe were the declines of 18 percent in the Pacific States and 19 percent in New

England. Decreases in gross income in the South Atlantic, East South Central, and West South Central States averaged 22 percent.

With this background of diminished ability to pay, financial difficulties multiplied.

With respect to new financing, the characteristic features of the situation were a scarcity of new loans, lower appraised values, and greater care generally on such loans as were made. Many of the agencies formerly active in mortgage financing had withdrawn their activities from several, if not all, regions. The Federal land banks are frequently reported as the only source of mortgage credit left for some areas. Appraisals are reported as having been cut further, and the personal qualifications of the applicant for loans were more carefully scrutinized. The volume of credit available for financing normal buying and selling of farms has thus been seriously curtailed.

Of more pressing importance were the developments respecting the handling of existing indebtedness. In this regard, also, the problems of most areas exhibited many points of similarity.

In the earlier years of the depression real estate in difficulty usually involved junior financing of some sort. The extent to which junior mortgages the country over were liquidated is not known. In Iowa, however, a recent study (*11*) leads to the conclusion that junior mortgages had been pretty well liquidated by 1930.

The renewed reduction of incomes involved an increasing number of mortgages which originally were considered as conservative investments. Foreclosures, of course, multiplied, but the increasing wave of delinquencies brought greater difficulty in realizing the indebtedness at the sheriff's sale, and mortgagees had to bid in properties with increasing frequency, with the result that they soon accumulated large amounts of distressed real estate. These in turn required management and administration. Mortgagees soon came to the conclusion that it was usually more advantageous to all parties concerned for the farmer to remain in possession than to attempt other forms of operation, and the nature of the problems involved appears to have become more generally recognized than earlier. Consequently, during the past year, it is reported that mortgagees appear to have developed a greater willingness to cooperate with mortgagors. The exact nature of the arrangements made depends to a considerable extent upon the region involved, the extent and nature of the indebtedness, the character of the mortgagor, and the policies of the mortgagee.

In many cases loans have been extended if interest and taxes were paid and if the owner prevented undue deterioration. In others the farmer has been required to pay at least the equivalent of a reasonable rent. Some cases were reported from Wisconsin in which, although loans have been extended, the farmer has been required to divide his cream check on a 50–50 basis.

Policies varied, however. From Wisconsin and Nebraska have come reports that companies have secured quitclaim deeds and sold to the original owner under a new agreement. Under this plan the new sale price may have involved a reduction of indebtedness or terms more suited to conditions. Again some creditors are said to have been willing to make substantial sacrifices to get the loans paid.

On the other hand, some mortgage-lending agencies have been reported as "hard-boiled", forcing collections by foreclosure.

The consensus of opinion of correspondents appears to be that loan companies in general are not anxious to acquire more land and for the most part are willing to cooperate with the farmer who does the best he can, but they are ready to take such steps as may be necessary to protect what they believe to be their rights and interests.

When land is acquired, differences in policy exist. The general tendency appears to be to dispose of the less desirable farms at once and to maintain the better farms in good shape for later sale. Other cases are reported of foreclosing and then selling at a loss, or permitting places to deteriorate seriously. The latter places are probably of poor quality.

The year has brought a general realization that a debt structure erected during high prices cannot be carried by a greatly reduced level of income and that restored income, or reduced debt, or a combination of the two, is essential to recovery. Working along the latter line, the Federal Government has provided legal processes designed to facilitate debt adjustment, has established machinery to assist in refinancing where it is feasible, and has embarked upon an extensive program for the purpose of raising prices paid to the farmer. The cooperation of all parties is needed to assure the ultimate solution of the problem.

REGIONAL TRENDS INFLUENCED BY DIVERSITY OF FACTORS

A general index of changing land values for any considerable geographic area reflects the composite effect of the dominant economic factors at work in the area. Where primary interest centers in the broader aspects of the subject, such an index, in which the local or transitory factors tend to average out, is essential. When the fundamental pattern is recognized, however, those interested in particular cases find it necessary to investigate certain of the more localized circumstances.

From the standpoint of the investing farmer, for example, knowledge of the general outlook for the type of agriculture in which he is interested is indispensable. In the case of wheat, such factors as production trends in other countries, prospects for the expansion or contraction of international trade, the circumstances conditioning the demand for the product, developments in the technic of production, and the competitive position of wheat as contrasted with other farm products are fundamental. In addition, however, consideration must be given to the effects which such prospective developments will have upon the various regions in which wheat production is important. A factor that operates to the advantage of one region may affect another region adversely. As such changes occur the attempt of farmers in each area to find the most advantageous combination under existing circumstances brings about shifts in production. Such changes are likely to be reflected eventually in land values.

The problems of the investor in farm mortgages are somewhat similar. Considerations affecting the safety of the investment are of prime importance. That size of farm may in certain areas be important is indicated by the experience of one large loaning organiza-

tion (*5*). It was found that relatively few foreclosures occurred in the case of small farms, but that the percentage of foreclosures increased for the larger farms. This experience is intimately associated with the character of the particular area and with the appraisal and loan policies of the organization, and is not necessarily applicable to other circumstances or areas. But it suggests that it is important to consider size of farm in relation to the characteristics of the area.

Data based upon the census afford valuable information concerning intrastate changes in land values and the effects of size and value per acre upon value trends.

During the decade 1920–30—on the whole a trying one for agriculture—there were substantial areas in which average farm-land values were higher in 1930 than in 1920, even though the average value per acre for the United States as a whole was roughly one third lower at the later date. This situation is illustrated in figures 6 and 7, which are based upon census data by counties. The predominant trend is downward, yet substantial sections of New England and other eastern seaboard States, parts of the Pacific coast and of the South, particularly western Texas, as well as several other scattered areas, experienced increasing values.

In the North Atlantic States, the more important factors involved are generally recognized. The closeness of a concentrated and growing market for food products, expanding suburban residential areas, increasing emphasis upon specialty crops, together with the abandonment of lower grade and inaccessible farms, all combined to raise the average value per acre of the area enumerated in 1930 over the acreage enumerated in 1920.

In western Texas, in Oklahoma, and in Kansas, the transition from a less intensive to a more intensive use, through the expansion of wheat and cotton to the parts of these areas to which they are respectively adapted is largely responsible for the higher average values there.

The higher acre values in Louisiana, Mississippi, and Alabama are probably partly nominal because of certain changes that were made in the procedure of the census enumeration. Whereas, for example, the average value per acre of land and buildings for Alabama, as reported by the census, was 3.1 percent higher in 1930 than in 1920, the average value per acre of land alone was 5.0 percent lower. In Louisiana the reported decrease in value per acre of land and buildings was 5.5 percent, but in land alone it was 12.5 percent. Similarly, in Mississippi, the acre value of land and buildings decreased 24.5 percent during the period, and land alone 32.8 percent. Similar relations are evident for individual counties. Of the counties in these three States reporting an average value per acre of land and buildings higher in 1930 than in 1920, the value of the land alone, with few exceptions, either increased less than land and buildings or actually decreased. In the cases of most of the counties reporting a lower average value of land and buildings in 1930, larger relative decreases were reported for land alone. These relations, together with other circumstances, suggest rather definitely that part of the reported increase in building values is nominal rather than real.

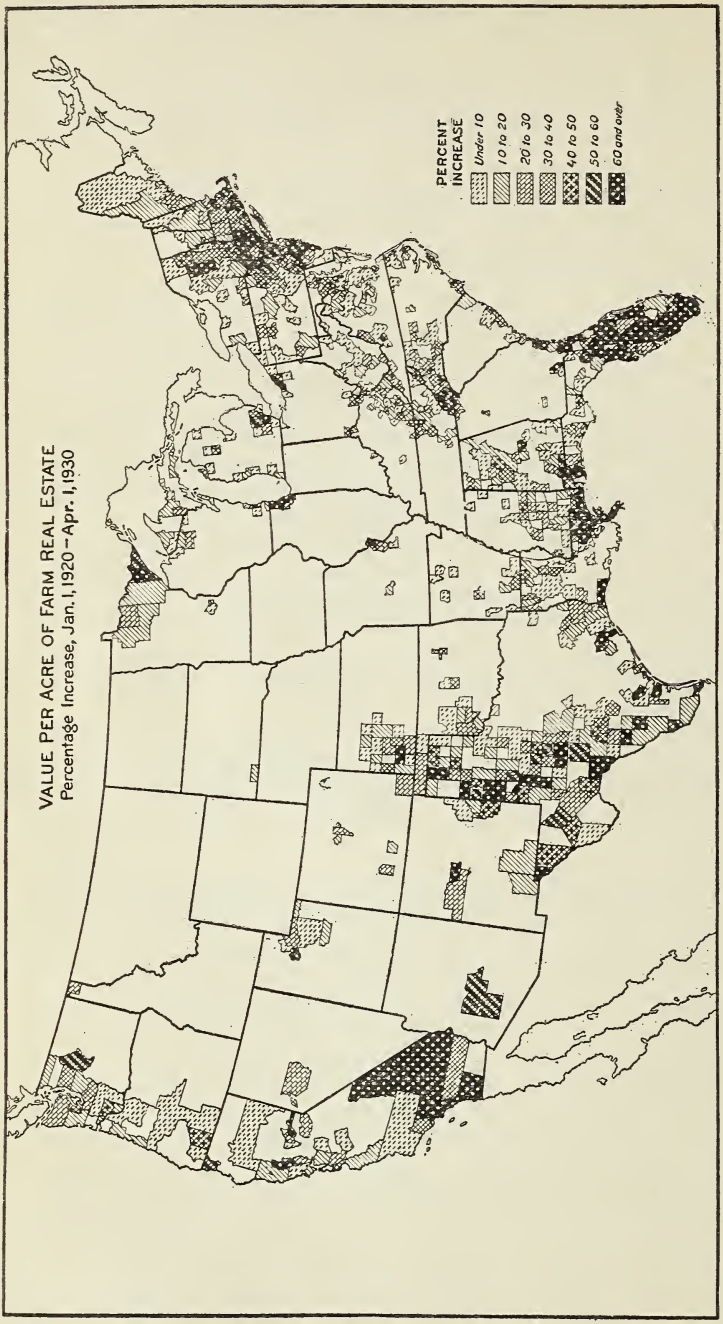

FIGURE 6.—Although the trend of farm real estate values was in general, downward from 1920 to 1930, there were limited areas where values apparently increased. Shifts in farming areas, the influence of growing cities, and the development of irrigation areas are among the local factors having significant effects upon land values.

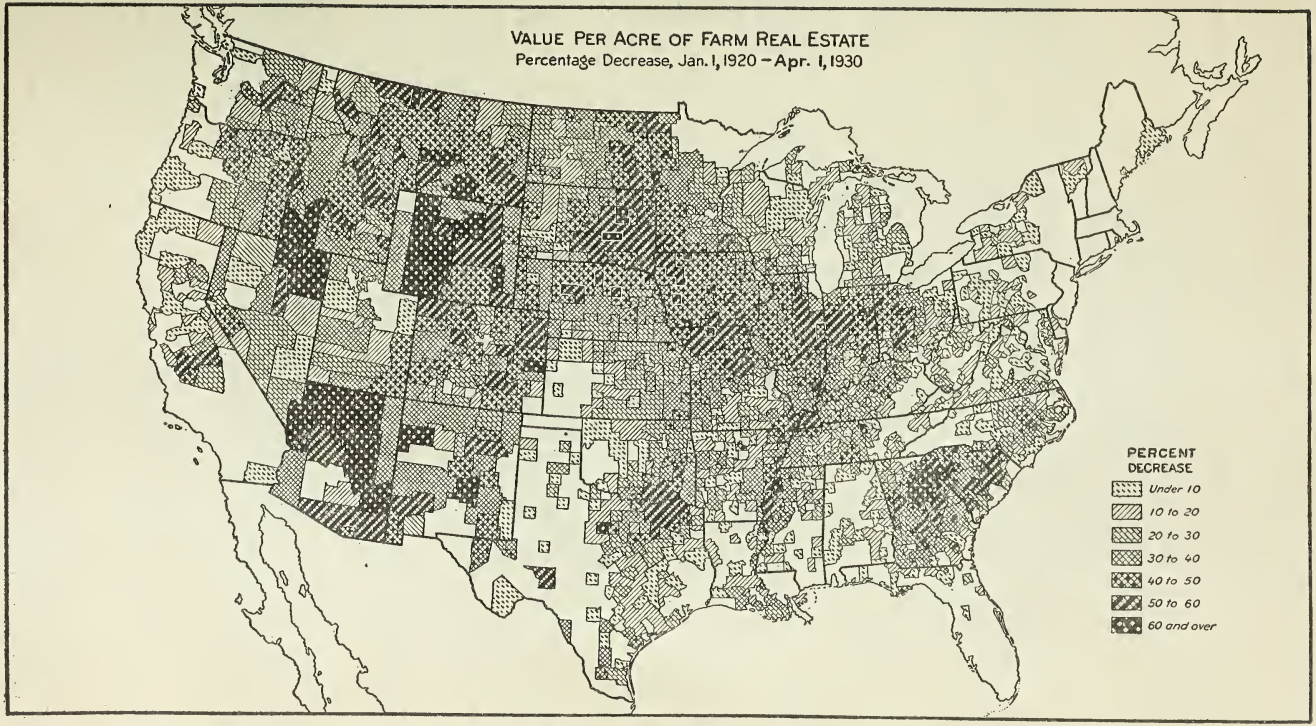

FIGURE 7.—Although farm real estate values in 1930 were in general lower than in 1920, the changes were far from uniform. There were significant differences between geographic areas, even within States, as well as between farms of different size and different grade.

It is probable, however, that part of the differences in average value of real estate indicated by the census between Mississippi and Alabama, on the one hand, and Georgia and South Carolina on the other, has real significance. Reduced yields as a result of the boll-weevil infestation were experienced by Mississippi and Alabama in the latter part of the decade 1910–20, and although the high prices increased incomes, land values in these States, especially in Alabama, did not rise so far above those of 1910 or even of 1900 as they did farther east. Consequently, higher yields in some of the later years operated in the direction of sustaining values. In Georgia and South Carolina, on the other hand, the bollweevil struck later, and values there received the impetus from the high cotton prices before they had reflected the full effects of the weevil. Consequently, when prices fell, and as the effects of the bollweevil accumulated, they declined more later. High prices, the bollweevil, and depression appeared in what was apparently a more unfortunate sequence than occurred farther west. At least in 1930 land values in Georgia and South Carolina were lower relative to the pre-war level than in Mississippi and Alabama.

Several more-or-less isolated areas of increasing values appear in the neighborhood of several of the larger cities throughout the country. St. Louis, Salt Lake City, Chicago, the Twin Cities, Detroit, Cincinnati, and Cleveland stand out prominently, and several eastern cities are surrounded by such general areas of increase that individual cities are obscured. Adjacency to large cities means that farm land in the neighborhood is subjected to the combined influences of expanding suburban or residential areas, expanding requirements for industrial or commercial sites, and increasing opportunity for producing for a specialized, highly concentrated local market.

The segregation of such areas has been facilitated by a study of metropolitan areas (*15*) based on the 1930 census. The more direct effects of nonagricultural factors may perhaps be removed by considering separately on the one hand the average value of farm land in those counties parts of which are included in the metropolitan areas as defined by the census,[16] and on the other, average values in the other counties of each State. These data are presented in table 9. Comparison with earlier years is afforded by comparable data.

[16] The basis of determining these areas is explained by the following paragraph from the census: "The metropolitan districts for the census of 1930, as here presented, include, in addition to the central city or cities, all adjacent and contiguous civil divisions having a density of not less than 150 inhabitants per square mile, and also, as a rule, those civil divisions of less density that are directly contiguous to the central cities, or are entirely or nearly surrounded by minor civil divisions that have the required density."

TABLE 9.—*Farm real estate: Average value per acre in all counties, in counties partially or entirely included in metropolitan areas,[1] and in counties located entirely outside of metropolitan areas, by States, [2] 1910, 1920, 1925, and 1930*

State	1910			1920			1925			1930		
	All counties	Counties in metropolitan areas[3]	Counties not in metropolitan areas	All counties	Counties in metropolitan areas	Counties not in metropolitan areas	All counties	Counties in metropolitan areas	Counties not in metropolitan areas	All counties	Counties in metropolitan areas	Counties not in metropolitan areas
Massachusetts	$67.51	$76.06	$42.40	$99.25	$116.41	$56.49	$107.53	$126.70	$61.73	$130.26	$153.03	$78.79
Rhode Island	63.01	79.69	39.79	79.58	100.04	42.08	90.35	109.83	51.40	123.52	150.62	63.62
Connecticut	63.28	74.04	32.03	100.20	119.60	47.03	110.22	128.87	57.29	151.38	185.89	67.39
New York	53.78	94.99	42.36	69.07	118.15	55.93	70.95	120.25	57.73	73.19	130.63	59.08
New Jersey	84.36	98.44	58.29	109.67	126.22	80.28	136.42	157.91	99.20	169.99	198.99	120.89
Pennsylvania	56.01	83.71	37.93	75.14	109.49	52.80	71.81	104.07	50.97	78.58	124.58	50.77
Ohio	68.62	84.04	64.95	113.18	136.62	107.79	87.57	127.03	78.87	78.69	124.25	69 52
Indiana	74.85	88.82	73.63	125.98	139.20	124.83	85.15	111.58	82.91	71.90	102.96	69.36
Illinois	108.32	126.97	106.17	187.59	196.06	186.62	136.65	182.14	131.65	108.68	166.53	102.67
Michigan	47.58	65.19	45.47	75.48	130.16	69.65	71.20	143.64	64.16	67.80	158.32	60.25
Wisconsin	57.06	106.34	54.86	98.78	147.91	96.58	86.90	142.22	84.42	79.16	162.47	75.76
Minnesota	45.62	60.41	44.77	109.23	107.26	109.35	79.63	95.52	78.65	68.74	94.30	67.34
Iowa	96.00	124.33	94.97	227.09	261.92	225.83	148.87	190.08	147.44	124.18	161.30	122.85
Missouri	49.61	124.36	47.11	88.08	174.34	85.30	61.37	141.22	58.94	53.23	165.10	49.92
Nebraska	46.95	120.92	46.35	87.91	262.51	86.62	60.06	210.03	59.00	55.81	187.19	54.88
Kansas	40.05	93.47	38.84	62.30	129.61	60.86	50.26	119.50	48.79	48.56	122.16	47.05
Delaware	51.17	88.75	40.21	68.56	98.61	59.66	66.33	100.62	55.83	74.31	139.31	54.88
Maryland	47.80	71.91	37.96	81.25	106.62	70.91	77.00	113.20	62.40	81.42	126.51	63.87
Virginia	27.29	62.25	25.83	55.19	103.75	53.21	51.53	113.30	49.15	51.16	126.04	48.64
West Virginia	26.37	31.41	25.88	42.93	51.67	42.10	39.66	56.73	38.01	38.85	54.30	37.43
Georgia	17.78	32.19	17.28	44.74	72.30	43.71	26.77	48.42	25.95	26.15	62.62	24.91
Florida	22.49	59.47	20.51	46.55	109.74	43.05	81.67	325.70	71.10	84.22	232.42	77.29
Kentucky	28.64	54.60	27.34	60.39	89.67	58.98	42.56	76.28	40.92	43.73	85.53	41.60
Tennessee	23.98	55.82	22.08	52.53	97.24	49.99	42.42	87.61	39.76	41.28	98.73	38.02
Alabama	13.90	51.71	13.47	27.77	59.90	27.43	24.78	57.00	24.45	28.62	89.40	27.99
Arkansas	17.75	39.55	17.27	43.14	105.25	41.52	34.59	70.51	33.42	34.13	69.66	33.04
Louisiana	22.75	98.96	22.28	47.31	196.43	46.83	36.74	152.92	36.11	44.70	194.90	44.23
Oklahoma	25.60	28.58	25.41	42.68	50.48	42.30	33.97	43.97	33.44	36.78	45.96	36.21
Texas	16.39	23.84	16.08	32.45	92.59	31.37	27.77	86.11	26.71	28.85	91.83	27.74
Colorado	30.19	46.40	29.07	35.40	60.63	34.28	24.51	51.39	23.20	21.79	54.08	20.34
Utah	34.60	85.40	29.74	48.26	97.90	43.81	38.43	115.15	34.26	39.41	142.16	33.67
Washington	48.84	94.55	43.74	69.49	119.20	64.19	57.64	113.66	51.60	57.17	118.33	51.62
Oregon	38.99	120.05	34.49	49.86	156.28	44.84	43.60	164.51	38.15	38.12	162.36	33.43
California	51.93	107.77	38.37	104.67	202.74	81.41	114.57	262.74	82.44	112.33	293.62	75.83

[1] Counties classified in each year on the basis of their relation to metropolitan areas in 1930.
[2] States, no part of which is included in the census category of metropolitan areas, are excluded from this table.
[3] Counties wholly or entirely included in a metropolitan area.

Table 9 illustrates one of the reasons why differences exist between an indicator of change in value based primarily upon typical agricultural land, such as the Bureau index, and relative changes as reported by the census, which includes all land in farms regardless of location. Although much land in the vicinity of cities is farmed, and enumerated by the census as land in farms, it is often held at values considerably in excess of its value for strictly agricultural purposes, because owners anticipate appreciation on account of possible residential or industrial use. Not all land near cities is thus affected, but to the extent to which this factor is operative there is a bias in estimates of change in value of strictly agricultural land based on such data.

In nearly every State in which there were metropolitan areas as defined by the census, the average value of farm real estate was greater in those counties, some part of which lay within a metropolitan area, than in those counties lying wholly without such an area. In most instances the differences were considerable. Except

in the Northeastern States, however, the area of farm land in the metropolitan areas has been so small, relative to the State total, that its exclusion usually makes only a few dollars difference in the State average, but in most States as far west as Ohio and as far south as Maryland, exclusion of such farm land makes a substantial difference in the State average.

There have been, in addition, significant differences in the rate of change of values. The decade 1910 to 1920 was one of rapid increase in value in practically all regions. In many States, particularly in the Middle West and the South, farm real estate in counties wholly outside metropolitan areas increased in value more rapidly than that in other counties.

The next decade was unfavorable to agriculture. When counties lying wholly or partially within metropolitan areas are excluded, in only 7 of the States in table 9 did average values of farm real estate increase during the decade, and 5 of these States were in the New England and Middle Atlantic groups, the other 2 being Alabama and Florida. In only 2 States, Massachusetts and Rhode Island, was the relative increase in value greater than that in the excluded counties. In all except these 7 States and Arkansas land valued primarily for agricultural purposes declined far more than farm land in the vicinity of cities. In fact, value per acre of farm real estate in many of the counties lying partially within metropolitan areas increased markedly during the decade.

These differences show plainly when the relative changes in average value from one period to another are compared, all farm real estate being used in one case, and that in counties lying partially in metropolitan areas being excluded in the other.

In Ohio, for example, the increase in average value per acre of all farm real estate from 1910 to 1930 was 14.7 percent, but if certain counties are excluded on the basis indicated, the average increase was only 7 percent. In Indiana, exclusion of the counties indicated alters the average change from a decrease of 3.9 percent to a decrease of 5.8 percent. In Michigan the average change is reduced from an increase of 42.5 percent to 32.5 percent, and in California it is changed from an increase of 116.3 percent to 97.6 percent.

In Wisconsin and in most of the west North Central, Southern, and Western States the differences in relative change are of less importance.

SIZE OF FARM AND VALUE PER ACRE AFFECT VALUE TRENDS

Not only do changing economic conditions bring about different results in different localities, but they also affect unequally farms of different sizes within the same general area. Farms very much smaller or very much larger than the typical farm usually differ in essential features of their organization from the typical farm. They are likely, therefore, to be affected by economic changes to a different degree, or even in a different direction, than the typical farm. Small farms, for example, often tend toward the truck or poultry type, whereas large farms often tend more toward livestock enterprises. Obviously, since prices of different groups of farm products do not usually change together and since considerable

shifts in farm organization cannot usually be accomplished at once, it may be expected that, in general, values of farms of different sizes will change at different rates.

That these expectations are realized is indicated in table 10, in which changes in value per acre for farms of different sizes for specified periods are presented. For the United States as a whole the average value per acre of farm land and buildings, as reported by the census, increased 75 percent from 1910 to 1920, and then decreased 30 percent during the following decade, leaving a net increase of 23 percent over the 20 years. For farms under 20 acres in size, however, the net change for the period was an 85 percent increase,[17] and for farms of 1,000 acres or over, the net increase was only 3 percent.

TABLE 10.—*Value per acre of farm real estate: Relative change for specified periods, by size of farm, for the United States and for groups of States*

Size of farm (acres)	United States			New England States			Middle Atlantic States			East North Central States			West North Central States		
	1910–20	1920–30	1910–30	1910–20	1920–30	1910–30	1910–20	1920–30	1910–30	1910–20	1920–30	1910–30	1910–20	1920–30	1910–30
	Pct.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
Under 20	62	14	85	43	43	103	25	53	92	51	26	90	64	3	69
20 to 49	85	−11	66	51	37	107	29	28	66	65	−7	54	84	−20	47
50 to 99	81	−22	41	50	29	94	37	7	48	67	−28	21	103	−36	31
100 to 174	100	−30	41	51	22	84	34	0	34	70	−37	8	134	−39	42
175 to 499	86	−32	28	53	15	76	29	−1	28	72	−41	2	103	−41	19
500 to 999	58	−30	11	58	17	85	34	30	74	59	−34	4	69	−39	3
1,000 and over	47	−30	3	75	41	146	51	47	122	58	6	68	26	−35	−19
All farms	75	−30	23	48	22	81	31	9	42	69	−34	12	91	−40	14

Size of farm (acres)	South Atlantic States			East South Central States			West South Central States			Mountain States			Pacific States		
	1910–20	1920–30	1910–30	1910–20	1920–30	1910–30	1910–20	1920–30	1910–30	1910–20	1920–30	1910–30	1910–20	1920–30	1910–30
	Pct.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
Under 20	97	10	117	130	−23	76	102	1	104	19	21	43	42	23	74
20 to 49	135	−18	92	123	−22	74	121	−16	86	42	−16	19	64	−2	61
50 to 99	121	−22	73	109	−20	67	117	−21	71	74	−25	31	69	−1	68
100 to 174	114	−22	66	113	−24	63	104	−16	72	134	−10	111	101	10	121
175 to 499	112	−21	68	114	−25	60	94	−12	70	30	−12	14	58	12	77
500 to 999	117	−15	83	117	−21	73	82	−6	71	4	−36	−33	58	−11	41
1,000 and over	87	15	116	115	−12	90	63	−7	53	28	−48	−33	58	−22	23
All farms	123	−16	87	118	−21	73	96	−13	71	22	−42	−30	72	−4	65

Based on data from the census.

If the average-sized farm may be considered as the typical farm, it may be said that in general terms the typical farm apparently increased most in value from 1910 to 1920, and decreased about in proportion to all farms in the following decade, making a net increase from 1910 to 1920 somewhat greater than the average of all

[17] In 1910 the average value per acre of farms under 20 acres in size in 1910 was $148.55, and in 1930 the average value per acre of farms under 20 acres in size in 1930 was $275.38, or an 85 percent increase. The farms included in a given size group at one census period are not necessarily identical to those in the same size group at another census period, since buying and selling occurs more or less continually, and farms may be combined or divided.

farms. More specifically, the average-sized farm in the United States has varied from 138 acres in 1910 to 157 acres in 1930. The census-size group containing these averages is the group of farms from 100 to 174 acres in size. The average value per acre in this group doubled between 1910 and 1920 and declined 30 percent from 1920 to 1930, making a net increase of 41 percent during the two decades, in contrast to an average increase for all farms of 23 percent.

Averages for the whole United States are highly generalized. A better, but not altogether satisfactory, unit for consideration consists of the customary geographic division. It is clear from table 10 that in practically every region great variation exists in the changes of real estate values from one size group to another. Generalization is difficult since so many differences exist between the different areas.

One statement can be made, however. Small farms appear to have fared better than the average. In every area there has been, for farms under 20 acres in size, a net increase in value per acre from 1910 to 1930. In no area has the increase for all farm land been so great as for the small farms, and in one area (the Mountain States) the average for all farms has decreased, partly by reason of the inclusion in farms of more low-grade land in the later period. In the case of the East South Central States the difference is relatively small.

In the East North Central States the increases from 1910 to 1920 were fairly uniform from one size group to another. The greatest increase occurred in the 175-to-499-acre group (the average size of all farms in this region was 105 acres in 1910), and it was this same group which subsequently declined most, and which, in 1930, stood lowest relative to the pre-war base. The group of farms slightly smaller than the average (50 to 99 acres) increased very nearly the same as the all-farm average, but declined slightly less in later years, and in 1930 stood at 21 percent above the pre-war base.

In the West North Central States, where the land boom appeared in a more aggravated form, farms in the 100-to-174-acre group (somewhat below the average size, which was 210 acres in 1910) increased most in average acre value from 1910 to 1920, and the average for all farms of between 50 and 499 acres increased more than did the average of all farms. The greatest decline in value from 1920 to 1930 was in the 175-to-499-acre group, but in 1930 the average value per acre for all farms less than 500 acres in size was further above the 1910 level than the average for all farms. The value per acre of very large farms (1,000 acres and over) averaged lower than in 1910, and that of the small farms considerably higher. There were more farms of 1,000 acres or more in size in 1930 than in 1920, in part as a result of the expansion of wheat growing in the Great Plains area.

In the Southern States, the greatest increases in value per acre occurred in the case of farms less than 50 acres in size—somewhat smaller than the average for all farms. The subsequent decline in values appears to have affected the very small and very large farms least severely.

Thus, if the very small farms are excepted, there appears to have been a tendency in the North Central States for the size groups which increased most in the boom years, to decrease most in the readjustment period. It can hardly be said, however, that these groups fell lower, relative to the 1910 level, than the groups which experienced smaller increases.

Another aspect of the problem may be raised. How does the safety of an investment in high-priced land compare with that of low-priced land?

The practical importance of this question is indicated by the study of the lending operations of the Federal Land Bank of Springfield (*5*), which showed that a larger proportion of the loans made on land with a low appraised value per acre were foreclosed than on land appraised at a high value. Moreover, the net loss on farms acquired by foreclosure and sale was lower per $1,000 loaned, on farms with a relatively high appraised value per acre. This situation was attributed in part to a tendency to overvalue the poorer land. It is, of course, impossible to generalize upon the basis of a local study, but it is clear that the question is of sufficient importance to merit careful investigation.

In this regard, table 11, based on the census, affords certain comparisons. Counties were classified on the basis of value per acre of farm real estate in 1910. The average value for each county for later years was compared with the value in 1910, and the relative changes for individual counties were averaged by 1910-value groups for States and geographic divisions. In this tabulation it was necessary to reject counties whose boundaries were changed during the 20-year period covered by the table.

TABLE 11.—*Value per acre of farm real estate: Relative change for specified periods, by value per acre, 1910[1], for the United States and groups of States*

Value per acre, land and buildings, 1910	United States				New England States				Middle Atlantic States				East North Central States				West North Central States			
	Counties	Average change			Counties	Average change			Counties	Average change			Counties	Average change			Counties	Average change		
		1910–20	1920–30	1910–30		1910–20	1920–30	1910–30		1910–20	1920–30	1910–30		1910–20	1920–30	1910–30		1910–20	1920–30	1910–30
	Number	*Percent*	*Percent*	*Percent*	*Number*	*Percent*	*Percent*	*Percent*	*Number*	*Percent*	*Percent*	*Percent*	*Number*	*Percent*	*Percent*	*Percent*	*Number*	*Percent*	*Percent*	*Percent*
Under $10	224	113	4	114													14	117	−14	89
$10 to $24.99	1,100	103	−11	68	22	49	4	53	11	45	24	74	46	74	−11	53	140	73	−19	37
$25 to $49.99	800	83	−16	47	29	42	30	84	69	34	16	54	124	63	−18	34	170	90	−36	18
$50 to $74.99	378	85	−23	34	5	40	47	106	35	36	11	52	89	62	−27	17	147	116	−41	26
$75 to $99.99	208	85	−26	29	4	56	61	141	8	35	15	56	87	68	−35	8	76	118	−40	29
$100 to $124.99	119	87	−24	35	1	53	53	135	7	31	40	83	48	75	−32	20	50	118	−42	29
$125 to $149.99	43	75	−30	18	3	43	51	115	2	27	1	28	23	78	−43	0	10	111	−35	32
$150 to $199.99	30	56	−4	50	2	47	26	86	5	13	93	176	16	80	−48	−8	3	23	20	44
$200 and over	25	8	105	121	1	−20	62	30	11	18	124	159	3	26	82	131	1	−27	28	−6
All groups	2,927	92	−14	58	67	44	26	80	148	33	27	68	436	68	−26	23	611	99	−33	28

Value per acre, land and buildings, 1910	South Atlantic States				East South Central States				West South Central States				Mountain States				Pacific States			
	Counties	Average change			Counties	Average change			Counties	Average change			Counties	Average change			Counties	Average change		
		1910–20	1920–30	1910–30		1910–20	1920–30	1910–30		1910–20	1920–30	1910–30		1910–20	1920–30	1910–30		1910–20	1920–30	1910–30
	Number	*Percent*	*Percent*	*Percent*	*Number*	*Percent*	*Percent*	*Percent*	*Number*	*Percent*	*Percent*	*Percent*	*Number*	*Percent*	*Percent*	*Percent*	*Number*	*Percent*	*Percent*	*Percent*
Under $10	44	156	5	167	45	113	3	113	96	113	18	125	24	41	−35	−8	1	30	−41	−34
$10 to $24.99	292	138	−16	91	213	97	−4	85	245	122	−1	98	97	52	−35	−1	34	58	−12	46
$25 to $49.99	136	119	−6	89	73	131	−31	56	96	99	−14	61	58	29	−31	−10	45	69	−8	59
$50 to $74.99	29	71	10	74	21	122	−30	44	17	104	−25	43	14	18	−26	−10	21	71	−1	68
$75 to $99.99	7	63	30	86	5	103	−31	36	1	−56	143	4	7	68	−13	27	13	74	12	97
$100 to $124.99	3	26	93	130	2	98	−12	54					2	37	13	38	6	43	15	67
$125 to $149.99					1	128	−16	91					2	−17	−30	−41	2	29	−11	15
$150 to $199.99	1	21	−32	−19									1	−57	−32	−70	2	105	68	263
$200 and over	1	−28	148	79					1	−15	288	232	1	−38	4	−35	6	9	80	96
All groups	513	128	−8	96	360	108	−11	79	456	114	0	94	206	41	−31	−4	130	63	0	65

[1] Counties the borders of which have been changed during the period 1910–30 have been excluded from this table.

The summary for the United States indicates that, with the exception of the few counties in which farm real estate was valued at over $150 per acre in 1910, the lower valued lands have increased more, relative to their 1910 value, than have the higher valued. Thus, in the 224 counties where real estate was valued at less than $10 per acre, values have a little more than doubled during the 20 years (that is, have increased by 114 percent, making them 214 percent of their initial value), whereas, for higher valued lands the relative increases were progressively less (with one exception). However, a 100-percent increase on $10 land is only $10, whereas a 30 percent increase on $100 land is $30, or three times as great. Hence, although the lands with lower initial value increased the most relatively, the absolute increases were in general greater for the medium and higher priced lands.

The 25 counties reporting values of $200 or more per acre in 1910 were so located that they cannot be considered as reflecting predominantly the effects of agricultural factors. All but 1 of the 25 counties either contained sizable cities or constituted the outlying parts of a large metropolitan area. For purposes of the present discussion, this group can be ruled out as not representative of typical agricultural conditions.

Considerable variation is evident from one size group to another, and from one area to another. In several of the geographic divisions, as for the United States as a whole, the lowest valued real estate has increased more in value relatively than have the other groups. Land valued at less than $10 per acre in 1910 frequently was land in a low stage of development. The addition of improvements, together with the fact that an increase of only a few dollars constituted a large percentage increase when the base is less than $10, probably explains such increases in large measure.

Excepting the extreme high- and low-value groups, there appears to have been a tendency in some areas, and with exceptions, for the groups which experienced the greatest relative increases from 1910 to 1920 to fall the most from 1920 to 1930.

In the East North Central States, for example, farms valued at $125 to $200 per acre increased more in value than most other groups, fell further on the average, and ended the 20-year period considerably lower relative to 1910, than was the case with the other groups.

In the West North Central States the $50-to-$125-per-acre farms, as a rule, increased more, subsequently declined further, and ended the 20 years lower, relative to 1910, than most of the other groups. In the South Atlantic region the $10-to-$75-per-acre farms rose most rapidly in value. Over the 1910–30 period, however, these groups showed a smaller increase in value than did the average of all counties in these States. A somewhat similar situation is indicated in the East South Central section, but does not appear so clearly in the West South Central. In the latter group particularly, the more valuable farm land (excepting the one county in the $200-and-over group) appears to have experienced the least relative increase in value.

Variation within States supports to some extent the tentative generalizations suggested. There are, however, sufficient exceptions to indicate the necessity for a more detailed study, taking account of

changing acreage, capital improvements, and transition from a less to a more intensive usage, and vice versa.

In areas such as New England and the Western States, where circumstances may vary greatly from one locality to another, the indicated changes do not represent so well the trends in value for farms of different average value as in the more uniform areas of the Middle West. In New England the abandonment of certain areas, and the suburban developments in others complicate the nature of the inferences from table 11. In the Western States, the addition of large areas to the existing farm acreage is a complicating factor. If the new land in farms is of low quality, its inclusion in the average for any county would tend to lower the average, even though the trend for the land that was in farms at the time of the earlier enumeration may have been upward. Similarly, the introduction of irrigation into a county would ordinarily raise the county average value, even though other land in the county might have declined in value. Comparison of the averages from one period to the next, under the circumstances, would not truly reflect the trend in values on a given farm.

CHANGES IN FARM OWNERSHIP

FORCED TRANSACTIONS INCREASED MARKEDLY

As the year 1932 progressed, the problems of indebted farmers and their creditors increased. Shrinking incomes meant increased delinquencies, and these in turn resulted in more foreclosure proceedings. In many instances it has been reported that creditors have felt that under the circumstances the rights of both parties would be more nearly protected if foreclosures were not pushed, but debtors given a chance to work out. The fact that the indebted farmers themselves normally would be able to operate the farms as efficiently as the average tenant who might be secured, together with the further fact that in numerous cases if the property were forced on the market it could not be disposed of for the face of the mortgage, has probably led to this conclusion.

Despite this circumstance, forced sales were far more frequent than during the preceding year (table 12 and fig. 8). The Bureau estimates that, on an average, for the whole United States, 38.8 farms out of each 1,000 were transferred through forced sale as a result of debt during the 12-month period ended March 15, 1933. This is an increase of 37 percent over the rate of 28.4 per 1,000 for the year before.

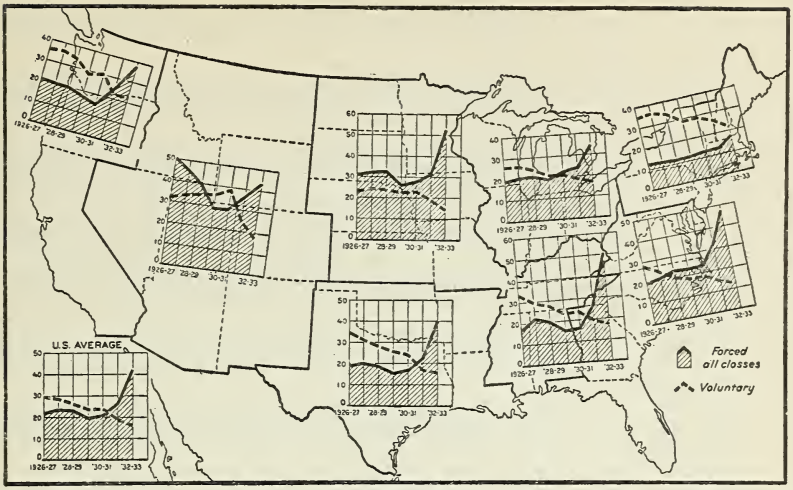

FIGURE 8.—FORCED AND VOLUNTARY SALES OF FARMS, 1926-33: NUMBER PER 1,000 FARMS, YEARS ENDED MARCH 15.

During the year 1932–33 the frequency of forced sales increased markedly in most areas. The number of voluntary sales increased slightly, principally in the South. Forced sales outnumbered voluntary sales in the United States as a whole and in every geographic division except New England.

TABLE 12.—*Number of farms changing ownership by various methods per 1,000 of all farms, by States and geographic divisions, 12 months ended Mar. 15, 1930–33*

Geographic division and State	Voluntary sales and trades [1]				Forced sales and related defaults											
					Delinquent taxes				Foreclosure of mortgages, bankruptcy, etc.[2]				Total			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
United States	23.7	19.0	16.2	16.8	5.1	7.4	13.3	15.3	15.7	18.7	28.4	38.8	20.8	26.1	41.7	54.1
New England	30.7	30.7	24.8	22.5	3.9	3.4	5.2	6.6	7.3	6.3	10.3	13.2	11.2	9.7	15.5	19.8
Middle Atlantic	28.3	24.5	20.4	21.0	3.5	4.6	5.6	8.7	9.6	9.2	12.4	19.6	13.1	13.8	18.0	28.3
East North Central	20.8	18.6	16.8	15.6	4.8	4.7	6.5	5.6	17.5	19.3	27.8	38.3	22.3	24.0	34.3	43.9
West North Central	22.9	18.9	14.2	13.8	4.2	5.5	8.7	10.5	23.3	25.8	43.8	61.5	27.5	31.3	52.5	72.0
South Atlantic	18.2	14.5	12.3	15.3	8.4	12.8	21.0	27.3	14.8	19.4	26.1	32.2	23.2	32.2	47.1	59.5
East South Central	23.9	19.4	17.2	18.9	4.9	10.0	26.0	27.1	11.2	15.9	24.6	36.4	16.1	25.9	50.6	63.5
West South Central	24.2	16.7	15.4	17.6	3.4	6.1	13.2	16.0	13.4	16.3	27.0	35.2	16.8	22.4	40.2	51.2
Mountain	38.7	24.8	17.6	16.8	11.2	13.8	16.5	19.2	18.2	22.6	27.0	33.6	29.4	36.4	43.5	52.8
Pacific	30.1	22.1	22.3	21.3	3.0	5.4	10.8	8.1	12.2	19.6	26.8	36.0	15.2	25.0	37.6	44.1
New England:																
Maine	29.7	31.0	21.0	21.2	7.4	4.2	9.1	13.3	9.6	10.1	14.6	17.0	17.0	14.3	23.7	30.3
New Hampshire	31.8	37.0	30.4	27.5	5.4	7.9	9.0	8.6	5.4	3.7	7.4	15.1	10.8	11.6	16.4	23.7
Vermont	37.5	34.0	32.2	27.4	1.3	3.7	1.7	2.1	8.5	6.1	9.7	15.0	9.8	9.8	11.4	17.1
Massachusetts	28.2	25.6	22.8	20.0	2.4	1.2	2.4	3.1	7.4	4.0	8.1	10.3	9.8	5.2	10.5	13.4
Rhode Island	31.0	23.0	23.6	19.5	.8	.8	1.0	1.2	2.3	2.0	4.0	3.7	3.1	2.8	5.0	4.9
Connecticut	27.2	28.9	21.9	18.7	1.0	1.0	2.2	1.8	3.2	4.5	8.9	7.1	4.2	5.5	11.1	8.9
Middle Atlantic:																
New York	30.4	28.1	24.1	24.1	5.0	4.8	7.0	11.8	11.6	11.6	12.9	21.5	16.6	16.4	19.9	33.3
New Jersey	30.6	30.6	23.5	23.5	2.2	4.5	5.0	8.6	5.4	6.4	11.0	17.0	7.6	10.9	16.0	25.6
Pennsylvania	26.0	20.1	16.4	17.6	2.3	4.4	4.4	5.8	8.4	7.4	12.2	18.2	10.7	11.8	16.6	24.0
East North Central:																
Ohio	22.7	18.3	16.6	16.0	1.8	2.4	2.9	2.2	13.5	16.4	21.6	31.9	15.3	18.8	24.5	34.1
Indiana	19.2	17.1	16.7	16.3	7.1	7.9	11.9	6.6	20.5	19.9	30.1	38.3	27.6	27.8	42.0	44.9
Illinois	18.8	17.8	15.3	13.6	3.9	2.9	4.7	6.1	17.2	20.1	29.8	44.6	21.1	23.0	34.5	50.7
Michigan	24.9	21.9	18.5	18.1	8.9	7.8	9.4	9.3	21.2	20.7	30.6	41.1	30.1	28.5	40.0	50.4
Wisconsin	18.1	18.1	17.1	14.1	3.3	3.4	4.8	4.4	16.4	20.2	28.3	36.0	19.7	23.6	33.1	40.4
West North Central:																
Minnesota	17.7	16.8	13.9	14.3	3.7	7.7	7.4	8.1	27.9	31.2	42.9	59.1	31.6	38.9	50.3	67.2
Iowa	17.6	14.5	12.8	11.8	2.2	3.3	6.3	7.4	25.1	24.8	52.5	78.3	27.3	28.1	58.8	85.7
Missouri	26.1	21.8	18.2	20.0	5.4	4.2	8.0	8.6	24.6	23.7	42.1	51.2	30.0	27.9	50.1	59.8
North Dakota	26.5	17.9	12.4	10.7	12.2	15.9	22.0	29.6	30.1	34.1	54.0	63.3	42.3	50.0	76.0	92.9
South Dakota	21.1	18.1	9.8	10.1	7.9	10.2	18.1	25.1	27.1	33.2	49.2	78.0	35.0	43.4	67.3	103.1
Nebraska	27.8	20.2	13.5	10.7	1.1	2.6	4.6	5.7	15.9	21.8	34.4	58.2	17.0	24.4	39.0	63.9
Kansas	26.0	22.1	13.8	11.6	2.6	3.4	7.1	8.4	14.8	20.0	36.0	52.7	17.4	23.4	43.1	61.1

South Atlantic:																
Delaware	24.4	19.0	19.0	14.7	1.4	3.7	1.5	5.1	5.6	10.0	14.5	19.9	7.0	13.7	16.0	25.0
Maryland	20.6	18.8	18.8	14.2	7.2	5.5	12.0	11.0	13.4	10.6	22.3	21.5	20.6	16.1	34.3	32.5
Virginia	16.3	13.7	9.8	14.6	2.6	6.7	9.5	15.3	10.4	15.2	29.3	28.0	13.0	21.9	38.8	43.3
West Virginia	23.6	18.5	15.7	18.3	12.0	18.1	32.5	49.5	7.5	9.0	12.9	17.6	19.5	27.1	45.4	67.1
North Carolina	19.1	16.5	11.0	13.5	10.8	22.3	35.6	45.8	15.0	20.0	32.6	40.8	25.8	42.3	68.2	86.6
South Carolina	14.2	9.7	11.0	13.7	15.5	17.0	25.0	21.6	25.0	32.0	28.8	38.6	40.5	49.0	53.8	60.2
Georgia	17.5	10.9	10.6	16.2	5.5	5.9	10.0	13.7	18.5	27.4	26.8	34.9	24.0	33.3	36.8	48.6
Florida	20.5	19.8	21.0	22.3	5.1	3.3	11.8	22.9	8.0	4.0	6.7	23.1	13.1	7.3	18.5	46.0
East South Central:																
Kentucky	30.0	27.2	19.0	21.0	6.4	10.3	21.9	17.0	12.6	12.1	17.9	31.0	19.0	22.4	39.8	48.0
Tennessee	18.5	16.7	18.0	19.5	2.3	3.6	10.1	14.5	8.8	10.9	23.0	34.2	11.1	14.5	33.1	48.7
Alabama	20.6	15.4	15.6	16.5	1.5	5.5	15.8	19.9	9.7	22.6	27.0	36.2	11.2	28.1	42.8	56.1
Mississippi	26.1	16.2	15.2	17.9	10.5	23.8	65.8	67.7	14.3	20.4	34.1	47.6	24.8	44.2	99.9	115.3
West South Central:																
Arkansas	27.7	19.1	19.6	23.9	4.3	8.3	27.8	27.2	16.3	18.6	32.7	36.9	20.6	26.9	60.5	64.1
Louisiana	28.8	22.5	15.5	17.8	7.6	7.4	22.3	42.6	14.2	14.4	23.5	32.8	21.8	21.8	45.8	75.4
Oklahoma	22.9	15.3	15.4	17.6	3.4	9.8	17.2	19.6	18.2	22.4	30.5	44.7	21.6	32.2	47.7	64.3
Texas	22.0	14.7	13.6	14.8	1.8	2.9	2.3	2.3	9.6	12.8	23.6	30.5	11.4	15.7	25.9	32.8
Mountain:																
Montana	46.6	21.0	15.0	15.5	22.0	29.1	35.0	28.1	25.1	31.1	34.6	39.8	47.1	60.2	69.6	67.9
Idaho	30.4	24.6	18.4	17.5	9.8	16.7	18.1	10.9	20.9	20.8	28.2	30.1	30.7	37.5	46.3	41.0
Wyoming	42.3	29.0	22.5	14.7	13.1	10.4	14.9	18.1	17.3	20.1	26.3	23.2	30.4	30.5	41.2	41.3
Colorado	39.5	24.5	16.0	18.5	9.4	5.9	11.0	29.3	18.8	20.3	27.5	45.2	28.2	26.2	38.5	74.5
New Mexico	44.2	34.4	22.0	19.2	4.1	3.9	3.7	7.5	12.4	22.3	20.1	26.4	16.5	26.2	23.8	33.9
Arizona	41.1	31.9	22.5	18.2	1.7	7.5	8.2	7.9	19.3	25.4	32.1	26.2	21.0	32.9	40.3	34.1
Utah	27.2	14.7	13.1	12.4	10.9	16.9	14.0	15.6	8.3	16.1	17.2	21.8	19.2	33.0	31.2	37.4
Nevada	29.5	31.2	23.7	14.2	1.2	4.9	10.0	5.2	12.0	21.0	25.0	22.0	13.2	25.9	35.0	27.2
Pacific:																
Washington	29.6	25.3	18.4	18.1	5.7	9.8	12.5	10.4	13.4	18.6	24.0	34.1	19.1	28.4	36.5	44.5
Oregon	38.9	34.9	27.6	25.4	3.7	7.0	9.5	7.8	11.2	13.4	22.3	33.5	14.9	20.4	31.8	41.3
California	26.7	15.1	22.3	21.4	1.3	2.3	10.4	7.0	12.0	22.6	30.2	38.0	13.3	24.9	40.6	45.0

[1] Including contracts to purchase (but not options).
[2] Including loss of title by default of contract, sales to avoid foreclosure, and surrender of title or other transfers to avoid foreclosure.

TABLE 12.—*Number of farms changing ownership by various methods per 1,000 of all farms, by States and geographic divisions, 12 months ended Mar. 15, 1930–33*—Continued

Geographic division and State	Inheritance and gift				Administrators' and executors' sales [3]				Miscellaneous and unclassified				Total all classes			
	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933	1930	1931	1932	1933
United States	9.3	9.4	10.4	13.1	6.1	5.7	6.2	7.0	1.6	1.7	2.2	2.6	61.5	61.9	76.6	93.6
New England	10.3	8.8	10.2	11.9	6.1	5.6	6.9	7.1	1.9	1.3	3.1	2.2	60.2	56.1	60.5	63.5
Middle Atlantic	8.2	8.5	9.0	11.2	7.0	7.0	6.1	7.9	1.4	1.7	1.8	1.5	58.0	55.5	55.3	69.9
East North Central	9.4	9.3	11.0	13.3	7.8	7.5	8.1	7.6	1.3	1.5	2.2	2.3	61.6	60.9	72.4	82.7
West North Central	9.8	9.7	9.8	12.9	6.2	5.4	4.9	6.1	1.6	1.5	2.4	2.3	68.0	66.8	83.8	107.1
South Atlantic	11.4	12.5	13.3	16.7	7.9	6.5	8.1	10.2	2.0	2.6	2.6	3.2	62.7	68.3	83.4	104.9
East South Central	9.3	9.9	11.1	13.7	5.8	5.6	6.2	7.5	1.4	1.8	2.1	3.0	56.5	62.6	87.2	106.6
West South Central	7.6	7.4	8.8	11.8	3.3	3.4	4.9	4.8	1.4	1.7	2.0	2.9	53.3	51.6	71.3	88.3
Mountain	7.0	6.9	7.8	9.5	4.7	3.6	4.5	4.1	1.9	1.1	2.1	2.2	81.7	72.8	75.5	85.4
Pacific	7.3	6.6	7.5	11.2	3.6	3.6	4.3	3.9	1.4	.8	2.0	2.2	57.6	58.1	73.7	82.7
New England:																
Maine	13.0	9.4	11.2	14.8	4.5	3.5	6.8	6.8	2.3	1.4	3.2	1.6	66.5	59.6	65.9	74.7
New Hampshire	7.4	9.6	13.9	14.0	4.9	7.4	11.4	9.6	2.1	2.1	4.3	3.8	57.0	67.7	76.4	78.6
Vermont	7.7	6.7	10.1	10.1	12.0	7.5	9.0	9.6	2.0	1.0	2.4	2.8	69.0	59.0	65.1	67.0
Massachusetts	9.6	8.4	8.0	11.3	5.0	6.8	2.5	6.1	1.9	1.0	3.5	1.8	54.5	47.0	47.3	52.6
Rhode Island	7.0	5.3	4.7	7.6	2.0	3.2	4.7	5.0	.3	0	2.5	.5	43.4	34.3	40.5	37.5
Connecticut	12.0	10.7	9.0	7.5	5.6	4.6	7.2	3.9	1.2	1.4	2.4	2.4	50.2	51.1	51.6	41.4
Middle Atlantic:																
New York	8.1	9.7	9.0	13.0	5.9	5.5	4.9	6.6	1.3	1.6	1.9	1.9	62.3	61.3	59.8	78.9
New Jersey	6.2	4.6	5.0	8.8	5.7	9.3	5.0	8.3	.7	1.0	1.0	1.5	50.8	56.4	50.5	67.7
Pennsylvania	8.5	7.9	9.6	9.9	8.2	8.1	7.5	9.0	1.5	1.9	1.9	1.2	54.9	49.8	52.0	61.7
East North Central:																
Ohio	9.5	8.3	13.1	14.8	8.4	8.8	9.2	9.8	.9	2.0	1.4	1.8	56.8	56.2	64.8	76.5
Indiana	11.2	12.7	13.7	15.0	10.2	8.7	11.5	9.8	2.2	1.2	3.1	2.6	70.4	67.5	87.0	88.6
Illinois	12.7	11.0	12.4	15.7	9.6	9.7	7.4	7.5	1.0	1.0	2.5	2.0	63.2	62.5	72.1	89.5
Michigan	7.5	7.4	9.7	10.8	5.6	4.2	6.8	4.7	1.0	1.5	2.7	2.7	69.1	63.5	77.7	86.7
Wisconsin	5.5	6.8	5.4	9.1	4.6	5.1	5.1	5.5	1.8	1.9	1.6	2.5	49.7	55.5	62.3	71.6
West North Central:																
Minnesota	8.8	11.0	10.0	12.5	5.3	6.3	4.7	5.7	2.1	1.6	3.4	2.3	65.5	74.6	82.3	102.0
Iowa	9.1	8.5	12.1	13.0	7.4	6.4	6.2	6.1	1.7	1.2	2.8	2.7	63.1	58.7	92.7	119.3
Missouri	12.0	10.8	10.4	13.8	5.5	3.6	4.5	6.7	1.7	1.0	2.6	2.7	75.3	56.1	85.8	103.0
North Dakota	7.6	6.6	6.4	9.9	4.5	4.0	3.5	5.3	1.5	2.7	2.0	1.9	82.4	81.2	100.3	120.7
South Dakota	9.1	9.4	7.4	11.2	5.6	3.9	3.4	5.0	1.6	1.6	2.0	1.6	72.4	76.4	89.9	131.0
Nebraska	8.7	9.6	9.4	14.3	7.1	6.9	5.7	5.6	1.3	2.4	1.4	1.5	61.9	63.5	69.0	96.0
Kansas	10.7	10.1	9.0	13.1	7.2	6.2	4.6	6.6	1.2	1.2	1.3	2.1	62.5	63.0	71.8	94.5
South Atlantic:																
Delaware	5.0	12.5	15.2	15.8	11.8	15.5	12.4	12.9	.2	0	1.4	1.9	48.4	60.7	64.0	70.3
Maryland	11.7	9.6	10.4	12.1	10.2	6.4	8.8	11.7	2.0	3.0	2.3	2.5	65.1	53.9	74.6	73.0

Virginia	10.1	12.0	14.6	16.2	7.1	7.9	10.8	11.7	1.5	3.0	1.6	3.8	48.0	58.5	75.6	89.6
West Virginia	13.7	12.0	15.4	14.7	5.5	4.7	6.2	7.4	2.5	1.5	3.8	1.8	64.8	63.8	86.5	109.3
North Carolina	12.7	18.3	16.0	20.6	8.7	7.0	7.2	11.4	2.6	4.0	3.4	3.4	68.9	88.1	105.8	135.5
South Carolina	13.3	9.7	12.9	16.5	7.3	6.0	9.8	9.1	1.1	2.0	3.3	3.6	76.4	76.4	90.8	103.1
Georgia	10.2	9.4	9.0	15.5	9.7	7.1	6.5	9.8	2.8	2.3	2.3	3.6	64.2	63.0	65.2	93.7
Florida	6.8	8.7	9.6	12.8	4.1	1.1	5.3	6.4	.5	0	.5	2.1	45.0	36.9	54.9	89.6
East South Central:																
Kentucky	12.1	11.9	10.7	16.8	8.4	6.1	5.1	8.4	2.0	2.0	1.6	2.6	71.5	69.6	76.2	96.8
Tennessee	9.1	8.7	11.8	13.2	5.7	5.4	8.4	7.5	1.8	2.0	2.3	2.9	46.2	47.3	73.6	91.8
Alabama	6.8	9.9	12.0	12.5	3.8	5.9	3.8	6.8	.8	.9	1.2	3.2	43.2	60.2	75.4	95.1
Mississippi	8.2	8.5	9.5	11.1	4.2	5.0	7.7	6.9	.8	2.4	3.6	3.3	64.1	76.3	135.9	154.5
West South Central:																
Arkansas	7.5	7.7	7.5	10.8	3.3	4.0	4.1	5.4	1.8	2.9	2.2	3.9	60.9	60.6	93.9	108.1
Louisiana	12.7	15.0	17.2	15.4	6.7	8.0	9.9	6.7	.9	2.6	3.4	3.3	70.9	69.9	91.8	118.6
Oklahoma	5.6	7.4	7.5	9.5	2.4	3.5	4.8	5.4	.7	1.7	1.4	3.1	53.2	60.1	76.8	99.9
Texas	7.4	5.2	7.9	12.4	2.8	2.0	3.9	3.8	1.7	.9	1.8	2.3	45.3	38.5	53.1	66.1
Mountain:																
Montana	7.0	8.1	5.6	6.9	5.3	4.7	3.0	5.8	1.9	2.1	1.1	2.6	107.9	96.1	94.3	98.7
Idaho	6.1	6.6	4.4	8.6	4.0	1.6	4.9	3.4	1.7	.7	.4	1.7	72.9	71.0	74.4	72.2
Wyoming	6.4	4.4	10.7	8.8	5.2	4.5	4.7	4.4	1.4	0	3.3	3.4	85.7	68.4	82.4	72.6
Colorado	9.0	7.5	6.6	10.8	5.8	4.9	4.0	4.2	3.2	.4	3.1	2.4	85.7	63.5	68.2	110.4
New Mexico	7.3	4.9	9.3	11.7	2.0	2.2	6.2	2.2	1.8	1.6	3.8	2.6	71.8	69.3	65.1	69.6
Arizona	6.2	9.2	12.1	12.3	3.4	6.8	4.3	4.9	1.0	0	3.8	1.8	72.7	80.8	83.0	71.3
Utah	4.0	6.5	14.0	9.8	5.7	1.7	6.1	4.0	.5	1.9	1.3	1.3	56.6	57.8	65.7	64.9
Nevada	7.0	6.8	10.8	8.8	2.8	6.8	3.9	3.0	1.2	0	1.5	1.5	53.7	70.7	74.9	54.7
Pacific:																
Washington	6.2	7.9	8.1	10.9	4.0	4.3	3.3	3.4	2.3	1.1	2.5	2.4	61.2	67.0	68.8	79.3
Oregon	9.0	7.1	8.6	11.6	3.6	3.1	4.2	3.9	.6	.9	1.0	1.8	67.0	66.4	73.2	84.0
California	7.1	5.7	6.7	11.1	3.3	3.5	4.8	4.1	1.3	.6	2.2	2.3	51.7	49.8	76.6	83.9

[3] Including all other sales in settlement of estates.

In some areas the number of distress sales far exceeded the United States average. In the Middle West particularly, they were numerous, for that is the region in which the mortgage debt is most concentrated and in which prices of farm products have been particularly unsatisfactory. The highest rate of forced sales, other than tax sales, was found in Iowa, where the estimated rate was 78.3 farms per 1,000, as compared with 52.5 for the previous year. Judgments in farm-mortgage foreclosure in 15 Iowa counties during the first 11 months of 1932 were 67 percent greater than during the entire year of 1931, the totals for the 2 periods having been $11,070,851 and $6,616,201, respectively (*11*). South Dakota, with a rate of 78 farms per 1,000 as compared with 49.2 the previous year, North Dakota with 63.3 as compared with 54, Minnesota with 59.1 against 42.9, and Nebraska with 58.2 in comparison with 34.4 the previous year, were not far behind.

Considered by geographic divisions the highest average forced-sale rate, 61.5 per 1,000 farms, was reported for the West North Central States, in comparison with 43.8 per 1,000 farms for the previous year. The lowest average rate was reported from New England, with 13.2 per 1,000 farms, and the next lowest was a rate of 19.6 per 1,000 farms, in the Middle Atlantic States. These compare with 10.3 and 12.4, respectively, for the previous year.

Averages for other geographic divisions ranged from 32.2 per 1,000 farms for the South Atlantic States to 38.3 for the East North Central, all, however, representing considerable increases over the previous year. The higher rate in the West North Central States is due in part to the greater concentration of mortgage indebtedness in that region. If the figures cited, which are relative to all farms, are adjusted on the basis of percentage of farms mortgaged, the result is an estimate of the number of forced sales per 1,000 mortgaged farms. The rates per 1,000 mortgaged farms [18] for the year ended March 15, 1933, are as follows: New England, 30.3; Middle Atlantic States, 48.6; East North Central States, 83.6; West North Central States, 112.4; South Atlantic States, 119.3; East South Central States, 117.0; West South Central States, 87.3; Mountain States, 70.4; and Pacific States, 69.5; and the United States average, 92.4.

The extent to which the total quantity of land held by loan agencies has been increased as a result of foreclosures during the year is not known. Some sales, as noted later, have been occurring, but the addition to total land held is a net figure, after allowing for sale of foreclosed property and for redemption by the original owner. It may be mentioned that the book value of real estate owned outright by the Federal land banks [19] (*20*) increased 61.8 percent from March 31, 1932, to March 31, 1933, as compared with an increase of 39.1 percent during the preceding year. The corresponding increase (*17*, *20*) from June 30, 1932, to June 30, 1933, was 52.6 percent.

[18] Adjusted on the basis of percentage of farms reported mortgaged by the 1930 census, the latest available data.

[19] [U.S. TREASURY DEPARTMENT, FEDERAL FARM LOAN BOARD.] FEDERAL LAND BANKS, CONSOLIDATED STATEMENT MAR. 31, 1933. . . . 43 pp. [Mimeographed.]

In Iowa an investigation [20] reported that corporate holdings of land in 54 counties studied amounted, in the first quarter of 1933, to 1,362,929 acres, or 7.2 percent of all land in farms in these counties. Over 95 percent of this total was held by financial institutions, and the remainder was held by colleges and miscellaneous corporations.

In general, the concentration of corporate-owned land was greater in counties with low value per acre than in the counties with higher-valued land.

Of the total corporate-owned land, insurance companies held 47.8 percent, deposit banks (including closed banks) held 22.5 percent, land-investment companies held 11.7 percent, the joint-stock land banks 8.2 percent, mortgage companies 2.4 percent, and the Federal land banks held 2.3 percent. Holdings of insurance companies are not out of proportion to the volume of their mortgage loans.

The avalanche of foreclosures brought cooperation among farmers in efforts to protect what they believed to be their interests, and at the turn of the year a wide variety of methods were being tried.

In Iowa a procedure was suggested by which the creditor and debtor might agree upon a sliding scale of interest payments, based upon an index number of prices of farm products.[21] This plan, in its essence, recognized one of the fundamental situations involved in long-time financing—that neither party to the contract knows whether the sum of money to be paid back will have the same, a greater, or a lower value in terms of what it will buy than the sum of money borrowed. If, for example, a man lends $1,000 he foregoes the ability to command in the market certain quantities of goods, which of course, constitute the real things which can be consumed or used in further production. If, during the period of the loan, the general price level doubles, the sum of money paid back at the maturity of the loan will command only half as much, measured in goods, as the money loaned. The borrower is able to discharge his debt with half the quantity of goods, which, in essence, were loaned him.

If, on the other hand, the price level declines 50 percent during the period of the loan, the sum of money returned will command twice as much, measured in goods, as that loaned. The borrower must repay, in essence, twice as much goods as he borrowed. Interest in either case consists of a percentage of the face of the loan. In the first case, one party loses; in the second, the other loses.

The plan mentioned above recognizes this situation as a fundamental problem in long-term financing, and attempts to resolve it in such a manner that, at least so far as interest is concerned, the payment for the use of funds shall be such as to give neither borrower nor lender a substantial advantage through changes in price levels. Application of the method to interest alone does not, of course, provide a remedy so far as principal is concerned.

In some cases where foreclosure proceedings have been instituted, counsel for the debtor is reported to have requested that " instead of the court ordering immediate foreclosure, it should render equity and justice to the debtors by continuing the cases to such time as farm

[20] MURRAY, W. B. and BENTLEY, R. C. CORPORATE-OWNED LAND IN IOWA. A PRELIMINARY REPORT. Iowa Agr. Expt. Sta., 23 pp., illus. July 1933. [Mimeographed.]

[21] See footnote 10, p. 16.

prices more nearly balance with the time at which the mortgage was made", and Supreme Court opinions have been cited as a basis for a court in equity's refusing an action that would result in "peculiar hardship, unconscionable advantage and oppression" (*1*).

In other cases sales were prevented, at least temporarily, by means of force. The frequent mention of such cases in the daily press evidenced the growing concern of farmers for their neighbors who were foreclosed upon. The possibility of deficiency judgments, especially, appears to have given rise to much apprehension.

Another development during the period has been the "98-cent sale", in which property was bid in at merely nominal figures, and afterward often turned back to the former owners. This procedure soon met with legal obstacles, at least one judge having announced that he would refuse to confirm future real estate foreclosures unless the property brought an amount sufficient to cover the mortgage, and the attorney general of Nebraska, according to the press, having said that "courts would declare void sales at which crowds of farmers, seeking to protect neighbors from dispossession, thwart foreclosure by 'penny' bids."

In Wisconsin, according to the press, two judges in one district announced that where no defense had been made, decrees of foreclosure would not be issued, nor would foreclosure sales be confirmed.

Concurrently with these developments, tension was increasing and in several States led to gubernatorial proclamations having for their purpose the restriction of foreclosure actions. The announcement by the New York Times on January 31 and February 1, 1933, that leading life insurance companies had decided to suspend foreclosure proceedings temporarily, except in most extreme cases, appeared to help relieve the tension that had been developing under the feverish attempts toward liquidation.

Another phase of the situation was the growing pressure upon legislative bodies for relief. A wide range of proposals were brought forward, including moratoria, refinancing plans, the empowering of courts to continue foreclosure suits, the placing of restrictions upon deficiency judgments, the levy of a tax upon foreclosures, the extension of the period of redemption, and the providing of committees to assist debtors and creditors in reaching compromise agreements.

In some States laws were passed, embodying various proposals. For example in Wisconsin [22] and South Dakota, legislation provided for extending the redemption period 1 year under certain conditions. Also in Wisconsin new legislation concerning mediation or arbitration of mortgage disputes before court action and affecting deficiency judgments was added to the statutes. In Iowa, new legislation granted to courts the authority to grant continuance of foreclosure actions until March 1, 1935, and makes such continuance mandatory unless good cause for different action is shown.

Newly enacted legislation in Nebraska provided a 2-year moratorium on real estate mortgage foreclosures, but within a month after the enactment a court held that the law impaired the obligation of a contract and was therefore unconstitutional.

---

[22] BERCAW, L. O., OLCOTT, M. T., and CARPENTER, M. F. STATE MEASURES FOR THE RELIEF OF AGRICULTURAL INDEBTEDNESS IN THE UNITED STATES, 1932 AND 1933. U.S. Dept. Agr., Bur. Agr. Econ. Agr. Econ. Bibliog. no. 45, 64 pp. 1933. [Mimeographed.]

Governors of several States, seeking to relieve the growing tension, issued proclamations forbidding foreclosures or requesting a cessation of such action. In some cases the proclamations were for limited periods or until legislation could be passed.

Federal interest in the farm-debt situation was evidenced by the subscription in 1932 of $125,000,000 additional capital to the land banks, and again by the enactment of an important piece of legislation dealing with the farm-debt problem. This law (Pub. Doc. no. 420, 72d Cong.) provided facilities whereby farmers may obtain a hearing of their indebtedness problems for the purpose of enabling them to carry on operations even though temporarily unable to meet their obligations (*22*).

Other legislation of far-reaching import became law on May 12, 1933, and provided for further Federal assistance in agricultural financing under a consolidated Farm Credit Administration.[23]

REGIONAL INVESTIGATIONS PROVIDE FORECLOSURE DATA FOR EARLIER YEARS

The Bureau's data on changes in farm ownership are not available for periods before the year ended March 15, 1926, and therefore do not provide a basis for comparing the present with earlier distress periods, as, for example, that of the 1890's.

Recent investigations in several States (*6*, *7*, *9*, *10*, *11*, *21*) make possible a limited comparison with earlier years. Figure 9 presents these data, reduced to the basis of number of farms foreclosed per 1,000 of all farms, for comparison.

The data for this chart are based primarily upon tabulations made from official sources, principally the records of the county recorders' offices.

In Minnesota, the available data (*6*) relate to four counties—Polk in the northwestern, Stearns in the central, Lincoln in the southwestern, and Mower in the southeastern part of the State. The data apply to farms sold at sheriff's sale in these counties, and were obtained from county records. They do not necessarily include all farms lost to owners on indebtedness, for, as indicated by studies elsewhere, many farmers have simply deeded their farms to creditors without the foreclosure procedure.

The Ohio (*21*) data relate to three counties in western Ohio, which are regarded as fairly typical of the section—Putnam, in the northwestern part of the State, Union, a little west of the center, and Greene, in the southwest. Data apply to property sold at foreclosure. Similar data for property foreclosed by financial institutions alone, together with information as to number of farms and acreage voluntarily assigned to such institutions, were also secured.

Information for Brookings County, S.Dak. (*7*), which is on the eastern border of the State, approximately midway between the northern and southern boundaries, applies to the period 1881 through 1932. For 1881–1930 data were compiled from private abstract books, and for 1931 and 1932 from records of the office of the register of deeds. Data for 44 (out of a State total of 69) counties

[23] A useful pamphlet, Farm Mortgage Loans by the Federal Land Banks and the Land Bank Commissioner (*18*), has been issued by the Farm Credit Administration and may be had upon application to the Farm Credit Administration, Washington, D.C.

FIGURE 9.—FORCED SALES OF FARM REAL ESTATE: NUMBER PER 1,000 FARMS IN SELECTED COUNTIES OF FOUR STATES.

Foreclosures of mortgages were relatively infrequent from 1900 to 1920, but in the years since 1920 a large number of farms have been lost to their owners. In South Dakota approximately 1 out of 3 farms has been involved in foreclosure since 1920, and in Story County, Iowa, 1 out of 6 farms has either been foreclosed or assigned since 1920 (assuming that individual farms have not been involved in more than one foreclosure and that each foreclosure represents a whole farm).

from 1921–31 were compiled from records of the register of deeds (Brookings County is included as 1 of the 44 counties). For the years 1921–30, data from the two sources are available for Brookings County. In most years compilations from private abstract books showed a slightly higher number of foreclosures, although the trends in both cases are essentially similar.

Story County, Iowa, is located practically at the center of the State, and is typical of the level central and northwestern sections of Iowa with high land values. The average value per acre of farm real estate in 1930 in Story County was $154, and the State average was $124. Information on number of foreclosures is available from 1854 (the county was organized in 1853) through 1931 (*9*). The first foreclosures occurred in 1857, 4 years after the first mortgage was recorded.

Figure 9 portrays the tremendous increase in foreclosures that has occurred since 1920. Although only three series are available prior to 1920, and only two prior to 1910, these latter two, Story County, Iowa, and Brookings County, S.Dak., indicate that during the whole period 1900 to 1920, foreclosures were relatively few, in several years amounting to only 1 or 2 per county. In 1904, a year of low wheat yields in South Dakota, there were 13 foreclosures in Brookings County. In the three Ohio counties there were very few foreclosures from 1910 to 1920.

Prior to 1900 in Brookings County, and prior to 1880 in Story County, the number of foreclosures per 1,000 farms was large. During these earlier periods, however, the counties were being settled, the number of farms was smaller than in recent years, and conditions were considerably different from those of a settled and more mature community. The fact that the years of numerous foreclosures differed so greatly between Iowa and South Dakota in the earlier periods, whereas in recent years the rates have been high in both, suggests that the less stable conditions of a community in process of being settled may be responsible in part for the high rates in South Dakota in the 1880's and 1890's, and in Iowa for certain years prior to 1880. For this reason the foreclosure rates of these pioneer periods are not altogether comparable with those of the present. With the passing of 1900, both sections were pretty well through the pioneer stage, and the data are more nearly comparable.

The sharp rise in distress transfers of farm real estate since 1920 is ample proof of the intensity of the readjustments that have been forced as accompaniments of the drastic changes in price levels and other adjustments of the period. It will be observed that the first peak of foreclosures was reached in certain of these areas in 1924 and 1925, and that in Iowa and South Dakota there was a downward trend till 1929 and 1930, when the number of foreclosures shot upward again. In the four counties of Minnesota the low point was reached in 1926 and was followed by a renewed upward trend. The available Ohio data, however, indicate a continuous upward trend in distress sales after 1920. Except for Brookings County, S. Dak., data for 1932 were not available from these sources. That year was shown in table 12 to be one in which there were further increases in the rate of foreclosures. The same tendency for Brookings County is evident from the chart.

The real import of these data is more clearly evident if the cumulative number of foreclosures over a period of years is considered. In Story County, for example (assuming that individual farms have not been involved in more than one foreclosure and that each foreclosure represents a whole farm rather than only a part of a farm), at least 1 out of 6 farms, on an average, has been foreclosed or voluntarily assigned since 1920; in the 44 counties of South Dakota nearly 1 out of 3 farms, on an average, has been foreclosed since 1920; in the 4 Minnesota counties the proportion of farms sold at sheriffs' sales was approximately 1 out of 5 farms; but in the 3 Ohio counties the ratio of foreclosures was much lower—only 1 out of 17.

In connection with these comparisons it may be noted again that the Story County data include assignments as well as foreclosures, whereas the Brookings County data include only foreclosures instituted. In Minnesota the data relate to farms sold at sheriff's sales. In Ohio the data apply to all foreclosures in the three counties. These differences should be noted with respect to the comparisons outlined above.

Another significant characteristic of the forced-sale situation is the change in proportions of actual foreclosures as compared with voluntary assignments. In 1925 (*21*), for the three Ohio counties of Putnam, Greene, and Union, there were, in all, 24 foreclosures by financial institutions and 19 voluntary assignments; foreclosures thus constituted over half the total. Foreclosures continued more numerous than assignments until 1929, when there were 33 foreclosures and 35 assignments. In 1931, the number of foreclosures jumped again, reaching 69, as compared with 36 assignments.

In Story County, foreclosures and assignments maintained a reasonably stable relationship to each other in the earlier years of the depression (*9*), foreclosures usually numbering 2 or 3 to each voluntary assignment. In recent years the ratio appears to have changed. The year 1929, for example, saw 6 foreclosures and 5 assignments, 1930 saw 10 foreclosures and 26 assignments, and 1931 saw 30 of the former and 35 of the latter, indicating an increase in the relative frequency of the assignment in recent years.

Further evidence of the increasing frequency of the assignment, at least in some parts of Iowa, is found in a classification of forced sales in 13 townships of Iowa, covering the years 1928 to 1932 (*10*). In 1928 total forced sales for the 13 townships amounted to $431,474, of which $261,482 represented foreclosure, $74.992 represented cancelation by foreclosure of prior lien, and $95,000 represented assignment to mortgage holder. In 1929 the total of forced sales was $265,643, but the combined amount foreclosed and canceled by foreclosure of prior lien declined approximately one half, whereas assignments increased about one seventh. The following year saw a further decrease in foreclosures and a doubling of assignments, resulting in a considerable increase in the total forced sales. The following 2 years saw an increase in all items, the total forced sales in 1932 having amounted to $959,135, of which $77,094 was canceled by foreclosure of prior lien, $454,841 was foreclosure, and $427,200 was assignment. Thus in these 13 townships, assignments grew in fre-

quency, accounting in 1928 for 22 percent of total forced sales and in 1932 for 45 percent.

Still another interesting development from this Iowa study (*10*) consists of the changes in the last 15 years in the methods of payment of mortgage loans. In the 13 townships included in the study, the average amount of mortgage loans repaid from 1915 to 1920, inclusive, was slightly over $1,250,000, of which 52 percent was paid by renewal, 27 percent through sale of the property, 21 percent by miscellaneous methods, and an insignificant amount through foreclosure.

In the 1920's the total loans paid increased somewhat, in 1923 amounting to $2,500,000, but in recent years it has declined, and in 1931 amounted to only $1,500,000. The average for the period 1926–31 was about $1,800,000.

The amount of renewals also increased in the early 1920's, and decreased later, averaging 44 percent of all debt payments over 1926–31 and only 17.5 percent in the first 10½ months of 1932. Payments through sale were lower after 1920 than during the several years preceding, and fell off rapidly after 1925, averaging only 4 percent of all payments over the period 1926 to 1931. Some improvement occurred in 1932 in this item, judging by the period January 1 to October 15, for which data were reported.

The proportion of loans paid by means of foreclosure, however, increased rapidly. From only $800 in 1918, loans paid in this manner increased to $909,064 in 1926, then declined to $265,643 in 1929, and again climbed to $959,135 for the first 9½ months of 1932. The proportion of loans paid by foreclosure averaged 30 percent for the 6 years 1926–31, and was 67 percent for the first 9½ months of 1932. These figures illustrate literally the report from correspondents that renewals have been getting increasingly difficult to secure.

A further point developed by the Ohio study (*21*) involved the prices at which foreclosed farms were sold. From 1910–24, in the 3 counties studied, in only 3 years did the total amount for which foreclosed farms were sold fail to exceed the amount of the judgments against the property. Since then the situation has been reversed. In each later year for which data are available (to September 1932) the total realized by the sale of foreclosed property has been considerably less than the total judgments. In fact, for the 367 farms involving 40,809 acres, which were foreclosed during these 7¾ years (1925 through September 1932) the total amount for which these properties were sold lacked a little over a half million dollars of satisfying the judgments against them; that is, the amount for which the properties were sold was 22 percent less than the amount of the judgments. This statement, pertaining to aggregate sales, does not mean that some of the individual properties may not have sold for the amount of the judgment or more.

TAX SALES INCREASED, RELIEF LEGISLATION ENACTED IN SEVERAL STATES

Tax sales, as well as foreclosure sales, increased markedly during the year ended March 15, 1933. The average rate of tax sales for the country as a whole, according to the Bureau estimates (table 12)

increased to 15.3 farms per 1,000, from the 13.3 for the preceding year.

Great variation occurred from region to region, and from State to State. The lowest average rate for any geographic division was 5.6 farms per 1,000 for the East North Central States. Individual States in the group ranged from 2.2 farms per 1,000 for Ohio to 9.3 for Michigan. The next lowest average rate for any geographic division was 6.6 per 1,000 in New England. In several States of this area, however, averages were lower than in any of the East North Central group, but high rates in two States raised the group average.

Higher frequencies of tax sales occurred in the South Atlantic and East South Central States, where division averages were 27.3 and 27.1 farms per 1,000, respectively. The West South Central and Mountain States, with respective rates of 16 and 19.2, occupied intermediate positions.

The Federal Land Bank of Wichita (*3*) states (February 1933): "Fairly complete reports from Colorado, Kansas, and Oklahoma indicate the possibility that more than 40 percent of the farms in these states were either sold for delinquent taxes last fall, or are now subject to such sale."

Interpretation of the rates of tax sales is rendered more uncertain by reason of legislation in a considerable number of States affecting tax-collection laws in several ways.

In North Dakota [24], for example, the right of the county to take a tax title was suspended until March 1, 1935. In South Dakota the law was changed, easing the payment of taxes, and penalties were modified. In Kansas, a new law provided that tax land bid in by the county may be redeemed without penalty before 1934, and without interest before September 1933. These laws were enacted in the first quarter of 1933.

Kentucky extended the time for payment from March 1 to March 31, and West Virginia and South Carolina liberalized somewhat the regulations concerning payment of taxes.

These are suggestive of the manner [25] in which legislatures have attempted to ease the incidence of property taxes. Most such measures apparently are based upon the expectation that incomes will eventually become adequate to meet these charges, provided the penalties are not exorbitant. It is probable that in many cases the effects of such legislation will be more evident in the figures for next year than for the one just passed.

FREQUENCY OF VOLUNTARY SALES INCREASED SLIGHTLY

The rate of voluntary sales for the country as a whole (which each year since 1926, with one exception, has been lower than the preceding year) showed a slight upturn for the year ended March 15, 1933, when the average rate was 16.8 farms per 1,000, in contrast to the 16.2 the preceding year. Four of the geographic divisions likewise averaged higher than a year ago, the Middle Atlantic, South Atlantic, East South Central, and West South Central. Average rates in the others were lower than the preceding year.

[24] See reference in footnote 22, p. 48.
[25] A more complete list is contained in the reference cited in footnote 22, p. 48.

The highest average rates were in the New England, the Middle Atlantic, and the Pacific States, the respective averages being 22.5, 21.0, and 21.3 sales per 1,000 farms. The lowest average rate was 13.8, in the West North Central States.

Of the individual States, in 21 the average voluntary sale rate was higher than a year ago, in 25 it was lower, and in 2 there was no change. Of the increases, 1 each occurred in the New England and Middle Atlantic States, 3 in the West North Central, 6 in the South Atlantic, 8 in the South Central, and 2 in the Mountain States. Of the decreases, 5 occurred in New England, 5 in the East North Central, 4 in the West North Central, 2 in the South Atlantic, 6 in the Mountain, and 3 in the Pacific States.

Complete data concerning the sellers of such farms are not available. There has been a definite tendency in recent years, however, for owners who have not had to sell to hold their farms rather than sell under the extremely unfavorable market conditions. Furthermore, the lack of opportunity in cities has discouraged the normal farm-to-city movement. Various of the land banks, as reported in statements to the daily press and in the Sixteenth Annual Report of the Federal Farm Loan Board (*19, p. 14*) have increased their sales. In 1930 the number of farms [26] sold by the 12 banks was 2,736, in 1931 it was 3,441, and in 1932 it was 4,886, an increase of 42 percent from 1931 to 1932.

The joint-stock land banks [26], too, have increased their sales during the last year. In 1931 the joint-stock land banks not in receivership sold 1,504 farms, and in 1932 the same banks sold 3,388, an increase of 125 percent.

The number of units sold by these two groups combined has increased approximately 69 percent from 1931 to 1932. Exact data concerning the extent to which other holders of distress land have increased their sales are not available, although the tendency appears more or less general to "clear the decks" of the poorer farms, but to retain the better properties, and to maintain them in good physical condition in the anticipation of eventually selling them under more propitious conditions than have prevailed for the past few years. It would appear, therefore, that increases in the number of voluntary sales consist to a considerable extent of increases in the sales of previously foreclosed farms rather than in the reestablishment of a normal market.

It may be pointed out in connection with the sale of foreclosed farms that the 3,643 farms [27] sold in 1931 by the Federal land banks were carried on the books of the banks at an investment of $12,530,415. The total consideration received for their sale was $10,040,247, or 19.9 percent less than the investment. The 5,092 farms sold in 1932 were carried on the books at an investment of

[26] These are the totals of (1) "lands owned outright disposed of (whole units)", (2) "parts of farms disposed of", (3) "sheriffs' certificates, judgments, etc., sold or redeemed", (4) less "sales canceled", as reported in tables 28 and 29 of the sixteenth annual report and tables 30 and 31 of the fifteenth annual report of the Federal Farm Loan Board.

[27] These figures refer only to "lands owned outright disposed of (whole units)." See tables 28 and 29, sixteenth annual report (*19*). Parts of farms were sold in addition, and there were sheriffs' certificates, judgments, etc., which were sold or redeemed. There were also some cancelations, some of which may have been of the "lands owned outright disposed of (whole units)."

$17,277,757, and the consideration received in their sale was $12,468,240, or 27.8 percent less than the investment. Similarly, the consideration received by the joint-stock land banks for farms sold in 1931 was 27.2 percent less than the investment as carried on the books, and in 1932 it was 34.5 percent less.

Little is known concerning the circumstances involved in individual foreclosures, except for general statements of policy, such as that from the sixteenth annual report (*19, p. 13*) of the Federal Farm Loan Board.

> The Farm Loan Board is advised that it is not the policy of the banks to institute foreclosure proceedings except for the protection of the banks when borrowers have abandoned their farms or when, after careful investigation of the merits of individual cases, it is found that the borrowers are not making satisfactory efforts to meet their obligations or have no chance to succeed if given further time. In a large proportion of the cases in which foreclosure proceedings have been instituted the action was taken upon the recommendation of the local national farm loan associations, composed of farmer-borrowers, through which the loans were obtained and which endorsed and became liable for the loans.

It frequently happens that borrowers allow taxes to become delinquent. Under the circumstances of tax delinquency, the mortgage holder is faced with the necessity of taking some action to protect his interests, and if there is doubt concerning the mortgagee, foreclosure affords the normal method of securing a more adequate control of such income as may be produced by the farm. It has also been necessary in some cases for holders of first mortgages to protect their interests from holders of junior liens, or from unsecured creditors.

It is probable that the farms sold at such losses are for the most part the more undesirable farms, either naturally, or as a result of careless or inefficient management. In the case of such properties, immediate sale, even at a loss, may be the most economical way out.

In any event, the large differences between investment and consideration received, when viewed in retrospect, suggest that as a general consideration careful attention in the future might well be given to the advisability of compromising with the debtor in cases which, if forced into foreclosure, might involve even greater losses to both parties concerned. Recently enacted legislation [28] should facilitate adjustment in such cases. Drastic changes in the purchasing power of the dollar, measured in terms of what it will buy, as have been involved in the changing price level from 1929 to 1933, are beyond the control and hence the responsibility of individual debtors and creditors. When such changes occur the essential problem consists in the development of the most economical workable solution which shall give equitable consideration to the rights of both parties, as well as to the public interest.

The total number of transfers of ownership appears to have increased during the last 2 years (table 12), but the principal trends in the relative frequency of different types of transfers have continued (table 13). Voluntary sales, which, in 1927, 1928, and 1929, represented about two fifths of all transactions, have dropped to less than one fifth; and all forced sales, which, in the earlier period,

[28] See page 63 and reference (*22*).

represented only about one third of the transfers, have increased to over one half. Little change has occurred on the whole in the proportion of inheritance and gift transfers. A slight downward trend seems to exist in the proportion of administrators' and executors' sales.

TABLE 13.—*Changes in farm ownership: Relative frequency in percentage of total transfers, 1927–33*

Geographic division	Voluntary sales and trades							Average 1927–33	All forced sales							Average 1927–33
	1927	1928	1929	1930	1931	1932	1933		1927	1928	1929	1930	1931	1932	1933	
	Pct.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
New England	51.5	54.4	52.2	51.0	54.7	41.0	35.4	48.6	19.7	16.7	18.7	18.6	17.3	25.6	31.2	21.1
Middle Atlantic	54.6	52.6	49.8	48.8	44.1	36.9	30.0	45.3	17.4	18.4	21.2	22.6	24.9	32.5	40.5	25.4
East North Central	38.8	37.5	36.8	33.8	30.5	23.2	18.8	31.3	30.7	32.4	33.5	36.2	39.4	47.4	53.1	39.0
West North Central	33.7	32.9	34.9	33.7	28.3	16.9	12.9	27.6	44.3	44.6	40.4	40.4	46.9	62.7	67.2	49.5
South Atlantic	37.8	31.8	30.4	29.0	21.2	14.8	14.6	25.7	32.8	37.0	38.1	37.0	47.2	56.5	56.7	43.6
East South Central	42.7	42.7	43.6	42.3	31.0	19.7	17.7	34.2	31.6	31.1	28.3	28.5	41.4	58.0	59.6	39.8
West South Central	48.7	46.8	48.6	45.4	32.4	21.6	19.9	37.6	31.1	31.0	28.9	31.5	43.4	56.4	58.0	40.0
Mountain	36.8	40.8	46.7	47.4	34.1	23.3	19.7	35.5	49.5	46.1	38.2	36.0	50.0	57.6	61.8	48.5
Pacific	52.8	51.1	49.2	52.3	38.0	30.3	25.8	42.8	29.3	29.6	30.5	26.4	43.0	51.0	53.3	37.6
United States	41.3	39.8	40.5	38.6	30.7	21.1	17.9	32.8	34.0	34.5	33.6	33.8	42.2	54.4	57.8	41.5

Geographic division	Inheritance and gift							Average 1927–33	Administrators' and executors' sales							Average 1927–33
	1927	1928	1929	1930	1931	1932	1933		1927	1928	1929	1930	1931	1932	1933	
	Pct.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
New England	15.8	16.2	16.5	17.1	15.7	16.9	18.7	16.7	11.9	11.1	11.2	10.1	10.0	11.4	11.2	11.0
Middle Atlantic	13.0	13.4	14.2	14.1	15.3	16.3	16.0	14.6	12.8	12.8	12.7	12.1	12.6	11.0	11.3	12.2
East North Central	14.7	15.2	15.6	15.2	15.3	15.2	16.1	15.3	13.7	13.0	11.8	12.7	12.3	11.2	9.2	12.0
West North Central	11.2	11.5	13.3	14.4	14.5	11.7	12.0	12.7	9.0	8.9	9.5	9.1	8.1	5.8	5.7	8.0
South Atlantic	16.0	16.9	17.3	18.2	18.3	15.9	15.9	16.9	12.0	12.6	12.4	12.6	9.5	9.7	9.7	11.2
East South Central	13.6	14.3	16.4	16.4	15.8	12.8	12.9	14.6	10.9	10.2	10.0	10.3	8.9	7.1	7.0	9.2
West South Central	12.2	13.1	13.7	14.3	14.3	12.3	13.4	13.3	6.9	7.1	6.9	6.2	6.6	6.9	5.4	6.6
Mountain	6.4	6.6	7.9	8.6	9.5	10.3	11.1	8.6	4.8	4.3	5.4	5.7	4.9	6.0	4.8	5.1
Pacific	10.1	10.6	11.3	12.7	11.4	10.2	13.5	11.4	5.8	6.6	6.4	6.2	6.2	5.8	4.7	6.0
United States	12.9	13.5	14.7	15.1	15.2	13.5	14.0	14.1	10.2	10.2	9.3	9.9	9.2	8.1	7.5	9.2

Geographic division	Miscellaneous and unclassified							Average 1927–33
	1927	1928	1929	1930	1931	1932	1933	
	Pct.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
New England	1.1	1.6	1.4	3.2	2.3	5.1	3.5	2.6
Middle Atlantic	2.2	2.8	2.1	2.4	3.1	3.3	2.2	2.6
East North Central	2.1	1.9	2.3	2.1	2.5	3.0	2.8	2.4
West North Central	1.8	2.1	1.9	2.4	2.2	2.9	2.2	2.2
South Atlantic	1.4	1.7	1.8	3.2	3.8	3.1	3.1	2.6
East South Central	1.2	1.7	1.7	2.5	2.9	2.4	2.8	2.2
West South Central	1.1	2.0	1.9	2.6	3.3	2.8	3.3	2.4
Mountain	2.5	2.2	1.8	2.3	1.5	2.8	2.6	2.2
Pacific	2.0	2.1	2.6	2.4	1.4	2.7	2.7	2.3
United States	1.6	2.0	1.9	2.6	2.7	2.9	2.8	2.4

Certain regional characteristics with respect to relative frequencies have been retained. In the North Atlantic and Pacific States, voluntary sales have accounted for a larger share of transactions than in other sections, during the last year as well as previously. Forced sales have been somewhat less frequent, relatively, in the North Atlantic States than elsewhere.

FARMER BANKRUPTCIES WERE MORE NUMEROUS

The fiscal year ended June 30, 1932, is the first year since 1925 during which the total number of farmer bankruptcies has failed to decline. The peak of farmer bankruptcies was reached in 1925, when 7,872 cases were concluded in the courts. For the country as a whole, the number steadily declined to 4,023 for the year ended June 30, 1931. The next year, the last for which data are available, however, saw a 21 percent increase, bringing the total for the year ended June 30, 1932, to 4,849 (table 14).

TABLE 14.—*Farm bankruptcies: Cases concluded in fiscal years ended June 30, 1925–32*

Geographic division and State	Number								Percentage of all bankruptcy cases							
	1925	1926	1927	1928	1929	1930	1931	1932	1925	1926	1927	1928	1929	1930	1931	1932
United States	7,872	7,769	6,296	5,679	4,939	4,464	4,023	4,849	17.8	16.5	13.1	10.6	8.7	7.4	6.7	7.7
New England	169	145	105	162	145	141	104	186	5.2	4.6	3.1	3.5	3.2	2.8	2.3	3.8
Middle Atlantic	190	224	224	274	270	305	353	372	2.6	3.4	3.1	3.5	3.2	3.6	3.6	3.8
East North Central	760	844	719	874	980	973	1,025	1,580	13.4	11.3	9.2	9.3	8.8	8.0	8.1	10.7
West North Central	2,889	2,813	2,404	1,729	1,471	1,257	1,010	1,099	39.2	35.4	30.3	24.2	21.2	19.2	17.9	20.5
South Atlantic [1]	1,037	747	585	685	515	491	455	467	17.6	12.7	10.0	9.9	7.0	5.9	5.8	5.7
East South Central	517	579	615	521	352	336	338	311	9.7	9.5	9.7	6.9	4.5	3.8	3.6	3.2
West South Central	650	764	567	561	484	375	282	308	23.6	25.6	20.7	19.5	17.3	14.7	10.5	10.2
Mountain	1,071	1,142	609	420	335	260	201	215	41.8	42.7	31.8	24.0	20.9	17.1	13.3	15.2
Pacific	589	511	468	453	387	326	255	311	14.6	11.9	10.0	8.5	6.1	4.6	4.4	5.0
New England:																
Maine	103	101	51	77	69	65	62	80	11.8	11.8	6.3	9.2	8.3	7.9	7.1	10.1
New Hampshire	5	7	7	7	6	5	1	9	5.8	6.5	6.7	6.4	4.4	4.3	1.2	6.9
Vermont	39	17	21	29	28	33	21	52	19.0	8.6	16.8	14.9	13.3	14.6	10.0	17.6
Massachusetts	7	12	10	18	26	22	15	32	.5	.8	.6	.7	1.0	.8	.6	1.2
Rhode Island	2	0	2	0	2	0	1	1	1.5	0	1.0	0	1.1	0	.5	.4
Connecticut	13	8	14	31	14	16	4	12	2.2	1.7	2.6	3.7	2.1	2.2	.7	1.6
Middle Atlantic:																
New York	104	122	145	152	149	172	198	193	1.9	2.8	3.0	2.7	2.7	3.2	3.1	3.1
New Jersey	16	33	16	12	18	12	18	21	2.2	4.1	1.9	2.1	1.7	1.2	1.4	1.8
Pennsylvania	70	69	63	110	103	121	137	158	5.6	5.3	4.0	6.3	5.5	5.8	6.4	6.8
East North Central:																
Ohio	214	188	137	157	220	270	277	460	11.8	8.7	5.7	5.6	6.4	5.7	5.6	8.0
Indiana	97	112	76	114	110	144	148	208	26.9	23.8	18.4	20.9	15.9	17.9	15.5	19.3
Illinois	190	234	257	374	410	364	368	614	11.9	9.0	8.7	11.9	10.9	11.5	11.3	15.2
Michigan	46	50	34	41	36	39	31	47	5.3	5.4	4.2	3.4	2.3	2.8	1.8	2.1
Wisconsin	213	260	215	188	204	156	201	251	20.2	19.9	16.9	11.3	12.0	7.9	11.6	15.2
West North Central:																
Minnesota	369	419	294	266	193	185	116	114	23.3	21.4	16.0	12.6	9.6	10.3	7.4	9.9
Iowa	861	791	656	534	420	328	338	456	50.4	45.0	41.2	41.2	37.9	33.6	37.2	45.0
Missouri	287	301	314	288	211	214	181	228	19.4	19.7	19.5	16.5	11.9	11.2	11.5	13.7
North Dakota	629	536	376	153	287	168	106	55	75.1	69.3	66.3	59.3	63.5	56.4	51.7	35.0
South Dakota	352	368	352	239	106	114	92	53	63.3	59.1	56.2	50.0	42.4	43.5	38.3	45.3
Nebraska	178	238	181	135	157	148	107	97	33.9	36.2	26.3	23.4	23.0	21.7	19.3	18.9
Kansas	213	160	231	114	97	100	70	96	31.8	24.7	22.8	16.5	14.6	15.9	11.5	12.8
South Atlantic:																
Delaware	8	5	4	10	8	7	15	19	20.0	11.4	13.3	28.6	25.0	19.4	25.4	26.4
Maryland	38	54	35	49	48	49	42	31	21.7	17.1	13.1	15.5	12.8	13.0	12.4	8.1
Virginia	95	111	97	109	98	110	103	117	6.8	6.6	5.3	5.5	4.5	4.1	4.0	4.6
West Virginia	19	10	16	25	41	30	29	34	4.6	2.1	2.4	3.1	4.2	2.9	3.3	3.4
North Carolina	45	37	50	38	25	39	56	47	14.6	11.6	12.9	10.1	7.9	7.4	9.6	7.6
South Carolina	26	53	47	46	34	25	22	26	11.3	19.3	16.8	15.9	14.2	10.9	13.2	13.5
Georgia	798	467	327	394	248	218	177	165	26.2	18.7	16.6	16.6	10.7	8.5	7.1	6.1
Florida	8	10	9	13	13	13	11	28	4.3	6.6	3.0	2.2	2.1	1.9	1.8	4.9

[1] Includes the District of Columbia. For the whole period only 1 farm bankruptcy in the District of Columbia has been reported, that 1 being for the year ending June 30, 1928.

TABLE 14.—*Farm bankruptcies: Cases concluded in fiscal years ended June 30, 1925–32*

Geographic division and State	Number								Percentage of all bankruptcy cases							
	1925	1926	1927	1928	1929	1930	1931	1932	1925	1926	1927	1928	1929	1930	1931	1932
East South Central:																
Kentucky	108	117	164	191	131	122	98	103	15.8	11.4	13.6	10.9	7.0	6.4	6.4	6.2
Tennessee	109	134	101	102	118	83	101	89	5.9	6.5	4.7	4.3	4.0	2.7	3.1	2.7
Alabama	242	295	318	211	85	117	126	94	10.8	11.0	12.2	8.0	3.2	3.6	3.0	2.3
Mississippi	58	33	32	17	18	14	13	25	10.7	8.9	7.6	2.1	4.9	2.6	2.5	3.9
West South Central:																
Arkansas	85	101	94	89	83	94	37	53	25.1	22.5	22.6	23.5	17.7	20.4	11.5	12.7
Louisiana	77	159	119	93	85	85	74	52	21.3	33.6	25.3	19.3	16.0	15.6	10.6	10.0
Oklahoma	145	170	145	108	65	55	34	64	15.7	20.1	18.5	13.2	8.8	7.4	4.6	6.4
Texas	343	334	209	271	251	141	137	139	30.4	27.5	19.5	22.8	23.9	17.6	14.7	12.6
Mountain:																
Montana	460	624	245	126	131	104	66	59	65.4	59.3	45.7	36.4	34.6	31.0	21.3	21.1
Idaho	260	223	161	101	78	39	41	45	55.6	51.5	47.8	35.6	30.0	24.2	22.0	25.6
Wyoming	48	38	31	44	17	12	3	18	33.6	32.5	27.2	29.7	25.0	21.1	5.2	15.3
Colorado	220	143	90	63	50	49	53	58	32.1	29.9	22.5	16.3	11.7	11.3	11.6	13.7
New Mexico	27	50	22	27	26	6	7	4	28.4	35.5	32.8	27.6	31.0	8.2	12.7	7.1
Arizona	19	29	30	23	7	6	7	9	30.6	34.5	26.3	26.7	11.1	10.3	9.9	12.0
Utah	32	33	26	34	25	36	22	21	8.4	9.2	8.0	8.9	8.4	10.6	6.9	8.1
Nevada	5	2	4	2	1	8	2	1	20.8	15.4	18.2	11.1	4.2	12.1	3.8	3.0
Pacific:																
Washington	196	182	160	144	107	90	100	92	23.8	19.1	14.6	12.6	7.4	5.1	6.7	7.5
Oregon	100	109	72	67	83	50	42	63	10.8	10.0	6.9	5.5	6.5	2.9	3.8	5.1
California	293	220	236	242	197	186	113	156	12.8	9.8	8.9	8.2	5.4	5.1	3.4	4.2

Division of Agricultural Finance, compiled from annual reports of the Attorney General.

The upward tendency was quite general, all but one of the geographic divisions—the East South Central—having reported more than for the year before. Increases were reported in 31 States, decreases in 16, and 1 State—Rhode Island—reported only one farmer bankruptcy, the same as the previous year.

The number of bankruptcies last year was equivalent to 1 bankruptcy for every 1,297 farmers, as compared with 1 bankruptcy for every 1,563 farmers for the year before, and for every 809 farmers in 1925. Inasmuch as these figures relate to bankruptcies concluded in the courts for the fiscal year ended June 30, 1932, they probably reflect to a considerable extent the reduced incomes of the 1930 or 1931 crop year rather than later years. It will be recalled that income from farm production in 1931 was about 27 percent less than that of 1930 and that income for 1932 was about 26 percent less than in 1931.

The greatest number of farmer bankruptcies occurred in the East North Central States, where 1,580, as compared with 1,025 for the previous year, were reported. In the West North Central States there were 1,099, which was only 89 more than in the preceding year. Of the individual States, Illinois reported the greatest number, 614, with Ohio and Iowa following with 460 and 465, respectively. Rhode Island and Nevada each reported only 1.

Farmer bankruptcies accounted for 7.7 percent of all bankruptcies. This compares with 6.7 percent the previous year, which was the lowest of the continually decreasing series since 1924, when 18.7 percent of all bankrupts were farmers. In the West North Central States, 20.5 percent of all bankrupts of the year were farmers, South Dakota and Iowa leading the list with 45.3 and 45.0 percent, respectively. The proportion of all bankrupts who were farmers increased in 33 States, decreased in 14, and remained constant in 1.

LARGER SHARE OF VOLUNTARY SALES TO NONFARMERS AND NONLOCAL RESIDENTS

Of the farms involved in voluntary sales and trades consummated during the year, the greater numbers were bought by local buyers (table 15). Seventy-six percent of the buyers at bona-fide sales reported by dealer correspondents lived in the same county or the county adjoining that in which the farm was located. The proportion of purchases by local buyers has been declining consistently during 4 of the 6 years of the available record, having changed in all from 84 percent in 1928 and 1929 to 76 percent in 1933. This trend appears to be associated with the city-to-farm migration on the part of unemployed.

TABLE 15.—*Voluntary sales and trades of farm real estate: Percentages of purchases reported in specified classes of residence, occupation, and purpose of purchase, for the United States and for geographic divisions, 12 months ended March 15, 1928–33*

Geographic division	Local residence						Purchase for operation					
	1928	1929	1930	1931	1932	1933	1928	1929	1930	1931	1932	1933
	Pct.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
New England	61	57	59	48	51	50	82	85	80	79	85	85
Middle Atlantic	75	77	70	70	69	68	83	85	82	85	82	83
East North Central	85	86	83	84	78	78	83	82	80	82	77	75
West North Central	88	88	89	88	85	81	85	84	82	81	76	74
South Atlantic	80	82	82	82	79	76	81	81	78	80	78	75
East South Central	87	87	90	85	87	86	85	82	79	79	81	80
West South Central	81	80	82	77	73	76	76	76	73	70	68	68
Mountain	81	86	81	77	76	77	91	91	87	88	87	88
Pacific	75	72	71	72	66	70	87	91	84	90	88	88
United States	84	84	82	81	77	76	84	83	81	81	79	77

Geographic division	Occupation of purchaser																	
	Active farmer						Retired farmer						Other occupation					
	1928	1929	1930	1931	1932	1933	1928	1929	1930	1931	1932	1933	1928	1929	1930	1931	1932	1933
	Pct.	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*	*Pct.*
New England	64	62	59	42	37	40	3	2	3	6	7	7	33	36	38	52	56	53
Middle Atlantic	62	67	56	50	45	42	5	4	4	7	5	5	33	29	41	43	50	53
East North Central	74	73	67	60	55	48	5	6	5	7	7	7	21	21	27	33	38	45
West North Central	83	82	81	75	67	58	6	5	5	8	8	9	11	13	14	17	25	33
South Atlantic	75	74	66	62	55	54	2	3	3	5	4	4	23	23	30	33	41	42
East South Central	78	78	74	69	65	66	3	2	2	3	4	3	19	20	23	28	31	31
West South Central	74	75	70	64	53	49	6	3	4	6	5	6	20	22	26	30	42	45
Mountain	91	91	83	76	67	68	1	1	2	4	5	2	8	8	15	20	28	30
Pacific	76	82	71	65	51	52	4	2	4	4	6	6	20	16	26	31	43	42
United States	77	78	72	65	57	53	5	4	4	6	6	6	18	18	24	29	37	41

The lowest proportion of local buyers, 50 percent, is reported in New England. In all other geographic divisions, two thirds or more of the buyers were local, indicating the preponderant, even though declining, importance of the local buyer.

Under normal conditions the majority of farm sales are made to persons who, prior to buying, have been closely associated with farming. Young men aspiring to ownership, farmers expanding their farms or investing surplus funds, and others who, for various rea-

sons, shift from one farm to another in attempting to better their condition, provide the principal demand for farms under normal circumstances. Indicative of this situation are the data of table 15. In 1928 and 1929 three fourths or more of the purchasers at voluntary sales were active farmers. In more recent years this class of buyers has become relatively less important, although in most regions, even for the year ended March 15, 1933, a larger share of the farms sold voluntarily were sold to active farmers than to any other one group. Declining farm incomes on the one hand and the increasing shift from city to farm as a result of industrial inactivity are largely responsible for the increasing share of purchases by persons from nonfarming occupations. In the industrial States of the Northeast, buyers from nonfarming occupations have predominated, having bought a considerably larger share of the farms than in the less-industrialized sections.

The predominant purpose in buying farms appears to be to engage in farming rather than to speculate or to rent to other persons. This tendency appears most pronounced in the Northeast and far West. In the former section it is not clear to what extent the expectation is to farm permanently and to what extent it is a temporary arrangement, or an attempt to provide a supplemental income through part-time farming. Similarly in the Central States it is not clear how far the decreasing proportion of buyers who plan to operate their farms indicates a tendency for investors or speculators to take advantage of what they believe to be bargains.

Complete information is not available as to the principal class of buyers at forced sales. Such evidence as is available indicates that in a majority of cases the property continues to be bid in by the mortgage holder.

One indication is provided by the experience of the Federal land banks. Out of 3,350 [29] (*8*, *19*) foreclosures completed in 1929 the Federal land banks bought in 3,072 [30] or 91.7 percent. Out of 4,637 [29] foreclosures completed in 1930, the banks bought in 4,483 [30], or 97.6 percent, and in the first 11 months of 1931, out of 6,826 [29] foreclosures completed, 6,558 [30] or 96.1 percent were bought in. In the case of the joint-stock land banks, the proportion of completed foreclosures bought in was practically the same as in the case of the Federal land banks.

FARM-MORTGAGE CREDIT CONDITIONS [31]

Farm-credit conditions during the year under consideration have been characterized by continued difficulties in repayment of credits previously obtained and by the smallest volume of new credit extended in many years. Low farm incomes in many cases have prevented payment of current interest and maturing payments on principal necessary to maintain loans in good standing. Loans with expiring terms have encountered pressure for reduction as a condition of renewal, in order to bring outstanding obligations within manageable limits for borrowers and within the requirements of law

[29] Includes farms deeded directly to the banks by borrowers.
[30] Includes farms bought by banks subject to redemption by the borrowers and farms deeded directly to the banks by borrowers.
[31] Prepared by the Division of Agricultural Finance.

and safety for creditors. In pursuit of this policy, lending agencies generally have included in new and renewed loan contracts, provision for payments on principal during the life of the loan.

Despite these efforts, it has not been possible to reduce debts as rapidly as farm values have declined, and the lag in debt adjustment incident to the shrinkage of more than one third in farm values during the 3 years 1930–33 has increased the number and proportion of mortgaged farms having high ratios of debt in relation to the new values. A widespread tendency among creditors toward postponement of payments and of leniency toward borrowers has not prevented an increased number of cases of forced liquidation following the rise in delinquency and the disappearance of equities, as evidenced by foreclosure, forced sale of property, or voluntary surrender of title.

New advances of funds on farm real estate security continued to decline throughout 1932 and the first half of 1933. The investments of 25 leading life insurance companies averaged approximately $600,000 per week during the first 8 months of 1933 as compared with an average of $900,000 in 1932, $2,000,000 during 1931, and $3,000,000 during the years 1928–30. New loans constituted less than 10 percent of the total loan contracts written by mortgage bankers during 1932.

The net result of small advances of new credit on the extinguishment of debt by taking over the security and through payment has been a continued reduction in the volume of outstanding farm loans of all lending agencies. Mortgages held by life insurance companies decreased more rapidly during the first 7 months of 1933 than during any 7 months of 1932, the decline during 1932 having exceeded the total reduction during the 4 previous years, 1928–31. At the same time, resale of acquired properties has represented only a fraction of the number of farms taken over on account of debt, with the result that credit arising from purchase money mortgages has been much less than that extinguished by acquiring land. A further result of this situation has been the continued net outward flow of capital from agriculture, with no reversal of this fundamental trend as yet evident.

In the field of short-term farm credit, the year was featured by banking difficulties and the use of emergency credit in larger proportions than in any previous year. The closing of many rural banks during the concluding period of 1932 and the early months of 1933 was followed by the bank holiday of March, which left more than 3,000 banks, mostly in the rural districts, closed or operating under restrictions. These difficulties stimulated the creation and expanded activity of Government-sponsored credit agencies. Outstanding advances of the regional agricultural credit corporations, intermediate credit banks, and crop-production loan offices amounted to $375,000,000 in August 1933.

The adverse trend of credit in agriculture during the past year has occurred despite generally favorable rates prevailing in central money markets with the exception of the early months of 1933 incident to the banking holiday. Very low rates have prevailed generally on short-term liquid credits, and yields on long-term bonds have declined slowly. Commercial-paper rates averaged 1.92 per-

cent for the first 8 months of 1933 as compared with 2.73 percent for 1932. Discount rates of Federal reserve banks have continued at extremely low levels, the New York rate having been 2½ percent during the summer of 1933. Average yields of United States Treasury issues have steadily declined from 4.27 percent in January 1932, to 3.38 percent in July 1933, averaging 3.46 percent for the first 8 months of 1933 as compared with 3.74 percent for 1932. Yields on Federal land bank bonds approached 6 percent in April 1933, but declined to 5 percent in August, averaging 5.41 percent for the first 8 months of 1933 as compared with 5.59 percent for 1932.

Federal land bank rates to borrowers averaged 5.58 percent for the 12 banks during most of 1932 and 1933. Contract rates on new loans by all banks were reduced to 5 percent in July 1933, though by provision of the Emergency Farm Mortgage Act the rates payable by farmers on outstanding loans made through the national farm loan associations and on new association loans made during the 2 years following May 12 are reduced to 4½ percent for the 5-year period begining July 11, 1933.

The year witnessed the enactment of a number of measures aimed at relieving debt distress and improving credit facilities. Acts of various State legislatures directed toward securing a stay of foreclosures for farmers temporarily unable to meet their obligations have restricted the number of formal court actions instituted to take possession of property. In several States voluntary local committees were formed to assist distressed borrowers in reaching such agreement with creditors as seemed calculated to assure mutual protection and fair treatment of all interests. An amendment to the National Bankruptcy Act approved March 3, provided for the appointment of debt conciliation commissioners by the Federal district courts, upon petition of 15 farmers from a given county. After prescribed hearings the court may approve any composition or extension of agricultural indebtedness agreed to by creditors representing a majority in number and amount. Legal proceedings against property may not be taken while cases are under consideration or during the life of the agreement. Secured creditors including lenders on real estate are not disturbed in their claims save with respect to the time and method of collection. The new law has been used extensively in adjusting debt difficulties in some areas, its facilities having been used by several hundred Utah farmers, for example.

The Federal Government enacted comprehensive measures relating to both long- and short-term credit. The Emergency Farm Mortgage Act in addition to reducing interest rates temporarily on loans by the Federal land banks waived all payments on principal for the 5 years following July 11, 1933, and authorized direct loans to farmers where national farm-loan associations do not provide accommodation. Authorization was given for the issuance of $2,000,000,000 of 4-percent bonds guaranteed as to interest by the Federal Government, such bonds to be offered in exchange for mortgages or sold to obtain proceeds for making new loans. Provision for second-mortgage loans not exceeding $5,000 each and bearing 5 percent interest was authorized from a fund of $200,000,000 made available by the Reconstruction Finance Corporation for cases of debt settle-

ment in which the total obligations of the borrower do not exceed 75 percent of the value of the farm property.

The Farm Credit Act of 1933 authorized the creation of regional credit corporations to be established in each of the 12 Federal land bank districts to assist in organizing and financing of local production-credit associations. Twelve banks for cooperatives are to be similarly established for the purpose of financing farmers' cooperative associations in the respective districts, while a central bank for cooperatives is to function in Washington for cooperatives operating on a national scale.

FARM REAL ESTATE TAXES [32]

Farm real estate taxes per acre reached their highest point for the country as a whole in 1929. For that year, according to revised data recently analyzed by the Department of Agriculture, the average tax per acre stood at 241 percent of the 1913 figure. Corresponding figures for 1930, 1931, and 1932 were 238, 218, and 189 percent. Thus a slight decrease from 1929 to 1930 was followed by a larger decrease in each of the later years. The 1931–32 change was 13 percent, and the total 1929–32 change was 22 percent.

In a great majority of cases these taxes are levied during the year named and are payable at about the end of that year or early in the next. They should be compared with land values for March 1 of the following year. The 22-percent decline in taxes from 1929 to 1932 compares with a 36.5-percent decline in land values. By 1932 severe distress was forcing substantial tax decreases. Yet average taxes payable near the end of 1932 had decreased from those of a year earlier by 13 percent, as compared with an 18-percent decrease in land values.

These tax changes both from 1929 to 1932 and from 1931 to 1932 were very unevenly distributed. In 2 States the tax per acre actually averaged higher in 1932 than in 1929, and in 2 States it stood at the same figure for the 2 years. Both increases were in New England. The greatest percentage decreases for the 3-year period were about 35 percent, in Florida and Indiana. Indexes of tax per acre in 1929, 1931, and 1932 and the changes between 1931 and 1932 are given by geographical divisions in table 16.

[32] Prepared by the Division of Agricultural Finance.

TABLE 16.—*Farm real estate taxes: Index of tax per acre and tax per hundred dollars of value, 1929, 1931, and 1932*

Geographic division	Index of tax per acre, 1913=100				Tax per $100 of value			
	1929	1931	1932	Change in the index 1931–32	1929	1931	1932	Change 1931–32
	Percent	*Percent*	*Percent*	*Points*	*Dollars*	*Dollars*	*Dollars*	*Dollars*
New England	249	253	242	−11	1.53	1.70	1.78	+0.08
Middle Atlantic	246	248	234	−14	1.51	1.69	1.84	+.15
East North Central	244	211	172	−39	1.51	1.73	1.67	−.06
West North Central	254	230	196	−34	1.08	1.31	1.36	+.05
South Atlantic	350	309	280	−29	1.07	1.25	1.36	+.11
East South Central	316	299	269	−30	1.22	1.51	1.66	+.15
West South Central	256	239	199	−40	.93	1.19	1.21	+.02
Mountain	203	184	173	−11	1.26	1.44	1.65	+.21
Pacific	259	235	208	−27	1.06	1.16	1.26	+.10
United States	241	218	189	−29	1.19	1.42	1.50	+.08

Taxes per acre indicate the actual amounts of taxes that farmers have had to pay on their real estate, and the actual amounts, therefore, have exerted immediate influence upon farm real estate values. In a more fundamental though less direct way the effect of taxes upon value depends upon the "burden" of the taxes. The latter relates the tax paid to the "true value" or "full value" of the property taxed. For any given year the burdensomeness is somewhat more closely related to income, but insofar as value is a proper capitalization of income, the ratio of taxes to value is an appropriate measure of burden, and changes in the ratio should indicate the changes in this burden. Table 16 shows, by geographic divisions, farm real estate taxes per hundred dollars of value in 1929, 1931, and 1932 and changes between 1931 and 1932.

Unlike tax per acre, tax per hundred dollars of value has continued to increase. While tax per acre decreased 22 percent from 1929 to 1932, tax per hundred dollars increased 26 percent. Between 1931 and 1932 tax per acre decreased 13 percent, and tax per hundred dollars increased more than 5 percent.

In one sense this increase in tax per hundred dollars is due to the failure of assessments to decrease as much as did land values. In many farming communities, on the other hand, further decrease in assessments would have brought only higher rates and no great change in tax levies. The difficulty lay deeper than assessments. Until total revenues required from the property tax could be reduced, a uniform decrease in assessments would fail to give relief. Relief in this sense has recently been attained to a significant degree, but not sufficiently to equal the decreases in farm income and farmland values. The continued increase in tax per hundred dollars means that, owing to the decrease in land values for other reasons, taxes have become an increasingly depressing influence upon these values.

LITERATURE CITED

(1) ANONYMOUS.
1933. NEW ANTI-FORECLOSURE MOVE HITS LAND BANKS. Com. West 65 (4) : 13.

(2) CHAMBERS, C. R.
1924. RELATION OF LAND INCOME TO LAND VALUE. U.S. Dept. Agr. Bull. 1224, 132 pp., illus.

(3) FEDERAL LAND BANK OF WICHITA [and] FEDERAL INTERMEDIATE CREDIT BANK OF WICHITA.
1933. TO REDUCE DELINQUENT TAX PENALTIES. Financing of Farming 7 (8) : [4].

(4) GALPIN, C. J., and MANNY, T. B.
1933. FARM POPULATION REACHES NEW ALL-TIME PEAK. U.S.Dept.Agr., Bur. Agr. Econ. Agr. Situation 17 (5) : 2–5.

(5) HILL, F. F.
1932. AN ANALYSIS OF THE LOANING OPERATIONS OF THE FEDERAL LAND BANK OF SPRINGFIELD, FROM ITS ORGANIZATION IN MARCH 1917, TO MAY 31, 1929. N.Y. (Cornell) Agr. Expt. Sta. Bull. 549, 107 pp., illus.

(6) JOHNSON, E. C.
1932. FARM MORTGAGE FORECLOSURES IN MINNESOTA. Minn. Agr. Expt. Sta. Bull. 293, 31 pp., illus.

(7) JOHNSON, S. E., and STEELE, H. A.
1933. SOME ASPECTS OF THE FARM MORTGAGE SITUATION IN SOUTH DAKOTA AND THEIR RELATION TO A FUTURE LAND USE POLICY. S.Dak. Agr. Expt. Sta. Circ. 9, 63 pp., illus.

(8) MELLON, A. W.
1932. FARM LOANS HELD BY THE FEDERAL AND JOINT-STOCK LAND BANKS. (Letter from the Secretary of the Treasury . . .) 5 pp. ([U.S.] Cong. 72d, 1st sess., Senate Doc. 36.)

(9) MURRAY, W. G.
1933. AN ECONOMIC ANALYSIS OF FARM MORTGAGES IN STORY COUNTY, IOWA, 1854–1931. Iowa Agr. Expt. Sta. Research Bull. 156, pp. [363]–423, illus.

(10) ——— and BENTLEY, R. C.
1933. THE AGRICULTURAL EMERGENCY IN IOWA. IV. IOWA FARM MORTGAGE SITUATION. Iowa Agr. Expt. Sta. Circ. 142, pp. [43]–55, illus.

(11) ——— BENTLEY, R. C.
1933. THE AGRICULTURAL EMERGENCY IN IOWA. IX. FARM MORTGAGE FORECLOSURES. Iowa Agr. Expt. Sta. Circ. 147, pp. [159]–179, illus.

(12) PECK, M.
1932. A PLAN FOR ADJUSTING CASH RENT TO CHANGES IN THE PRICES OF FARM PRODUCTS. Iowa Agr. Expt. Sta. Bull. 295, pp. [191]–218, illus.

(13) SCHOLZ, K.
1930. THE DETERMINATION OF REASONABLE MARKET PRICES OF SPECULATIVE INVESTMENTS. Annalist 35 (885) : 5–6, 8, illus.

(14) UNITED STATES DEPARTMENT OF AGRICULTURE, BUREAU OF AGRICULTURAL ECONOMICS.
1933. INCOME FROM FARM PRODUCTION IN THE UNITED STATES, 1932. U.S. Dept. Agr. Crops and Markets 10: 144–149.

(15) UNITED STATES DEPARTMENT OF COMMERCE, BUREAU OF THE CENSUS.
1931. FIFTEENTH CENSUS OF THE UNITED STATES METROPOLITAN DISTRICTS, POPULATION AND AREA.

(16) ——— BUREAU OF FOREIGN AND DOMESTIC COMMERCE.
1932–33. MONTHLY BUSINESS STATISTICS. U.S.Dept.Com., Bur. Foreign and Domestic Com. Survey of Current Business 12 (5) : 22–56, 1932; 13 (5) : 22–56, 1933.

(17) [UNITED STATES] FARM CREDIT ADMINISTRATION.
1933. STATEMENTS OF CONDITION OF FEDERAL LAND BANKS, JOINT-STOCK LAND BANKS [and] FEDERAL INTERMEDIATE CREDIT BANKS COMPILED FROM REPORTS OF THE BANKS AS OF JUNE 30, 1933. 44 pp.

(18) ———
1933. FARM MORTGAGE LOANS BY THE FEDERAL LAND BANKS AND THE LAND BANK COMMISSIONER. [U.S.] Farm Credit Admin. Circ. 1, 15 pp.

(19) [United States] Treasury Department, Federal Farm Loan Bureau.
1930–33. annual reports of the federal farm loan board. 13–16. Rpt. 13, 71st Cong., 2d sess., House Doc. 212; 14, 71st Cong., 3d sess., House Doc. 555; 15, 72d Cong., 1st sess., House Doc. 36; 16, 72d Cong., 2d sess., House Doc. 436.

(20) ———
1930–33. statements of condition of federal land banks, joint stock land banks [and] federal intermediate credit banks. Compiled from reports to the Federal Farm Loan Board as of December 31, 1929, to March 31, 1933. (Issued quarterly.)

(21) Wertz, V. R.
1932. the farm mortgage situation in putnam, union, and greene counties, ohio. Ohio Agr. Expt. Sta. Bull. 509, 32 pp., illus.

(22) Wickens, D. L.
1933. national law providing for composition and extension of agricultural indebtedness. U.S.Dept.Agr., Bur. Agr. Econ. Agr. Situation 17 (4): 10–11.

ORGANIZATION OF THE UNITED STATES DEPARTMENT OF AGRICULTURE WHEN THIS PUBLICATION WAS LAST PRINTED

Secretary of Agriculture	HENRY A. WALLACE.
Assistant Secretary	REXFORD G. TUGWELL.
Director of Scientific Work	A. F. WOODS.
Director of Extension Work	C. W. WARBURTON.
Director of Personnel and Business Administration.	W. W. STOCKBERGER.
Director of Information	M. S. EISENHOWER.
Solicitor	SETH THOMAS.
Bureau of Agricultural Economics	NILS A. OLSEN, *Chief.*
Bureau of Agricultural Engineering	S. H. MCCRORY, *Chief.*
Bureau of Animal Industry	JOHN R. MOHLER, *Chief.*
Bureau of Biological Survey	PAUL G. REDINGTON, *Chief.*
Bureau of Chemistry and Soils	H. G. KNIGHT, *Chief.*
Office of Cooperative Extension Work	C. B. SMITH, *Chief.*
Bureau of Dairy Industry	O. E. REED, *Chief.*
Bureau of Entomology	LEE A. STRONG, *Chief.*
Office of Experiment Stations	JAMES T. JARDINE, *Chief.*
Food and Drug Administration	WALTER G. CAMPBELL, *Chief.*
Forest Service	FERDINAND A. SILCOX, *Chief.*
Grain Futures Administration	J. W. T. DUVEL, *Chief.*
Bureau of Home Economics	LOUISE STANLEY, *Chief.*
Library	CLARIBEL R. BARNETT, *Librarian.*
Bureau of Plant Industry	WILLIAM A. TAYLOR, *Chief.*
Bureau of Plant Quarantine	A. S. HOYT, *Acting Chief.*
Bureau of Public Roads	THOMAS H. MACDONALD, *Chief.*
Weather Bureau	CHARLES F. MARVIN, *Chief.*

Agricultural Adjustment Administration	GEORGE N. PEEK, *Administrator.*

This circular is a contribution from

Bureau of Agricultural Economics	NILS A. OLSEN, *Chief.*
Division of Land Economics	L. C. GRAY, *Principal Agricultural Economist, in Charge.*

U. S. GOVERNMENT PRINTING OFFICE: 1933

For sale by the Superintendent of Documents, Washington, D.C. - - - - - - Price 10 cents