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Mortgage Loans on Farm Real Estate in Brookings County, South Dakota

G. Lundy
South Dakota State University

Circular 23 April, 1935

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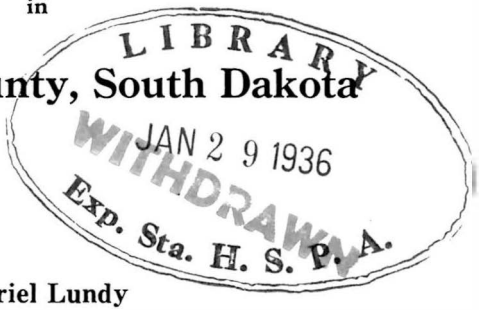

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Acknowledgment

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CONTENTS

Mortgage Loans on Farm Real Estate in Brookings County, South Dakota

1910-1930*
With special reference to Aurora, Afton and Argo Townships**

by
Gabriel Lundy

Department of Agricultural Economics

* This is a revision of a preliminary mimeographed report, Circular No. 15, "Farm Land Mortgage Loans in Brookings County, South Dakota, for the Years 1910 to 1927." Publication of this revised circular has been delayed by various causes. It is being printed at the present time partly because the supply of the mimeographed circular is exhausted, and partly in order to put the results of this study in a form comparable to the circulars in similar studies in Clark, Haakon, Hyde and Turner counties. It is hoped to combine these circulars into a bulletin after the data up to and including 1935, become available.

Purpose and Method of Study

Purpose of Study.—The purpose of this investigation in Brookings county, which is a part of a larger project including the counties of Clark, Haakon, Hyde and Turner, is to obtain a historical picture of the changes that have taken place in the farm mortgage situation in typical areas of South Dakota. It is hoped to show the sources of funds and the conditions under which farm mortgage funds have been obtained. The ultimate aim has been to discover what problems the farmers have had to face in the financing of land and buildings, and to discover and formulate principles for the safe and profitable use of land mortgage credit. Although the study has been made from the point of view of the farmer-borrower, it is obvious that no permanently satisfactory farm credit arrangement can be developed without also giving due consideration to the interests of the lender.

Method of Study.—The method of study has had to be adapted to the sources of information, and the limitation of resources available for the investigation. Aside from the public records in the various county offices, chiefly that of the Register of Deeds, the only original sources of information are the borrowers and lenders. It is, of course, obvious that all lenders do no maintain records of past transactions. This is still more true of borrowers; and both mortgagees and assignees are scattered, some of them may be dead, and only a very small percentage of them would care to supply research workers with detailed information. Despite the fact that the county records do not show unrecorded extension of time, partial payments made nor delinquent annual payments on principal or interest, they are still in many respects the best and most available source of data. At times the unrecorded delinquencies may counter-

** Townships 110, 111 and 112 respectively, Range 49.

balance the unrecorded partial payments. In the case of unsatisfied past due mortgages supplementary information was obtained, to the extent possible, by means of questionnaires sent to both borrowers and lenders.

In order to economize work, the study was confined to sample areas, and the data were computed for only every fifth year from 1910 to 1930 inclusive. Attempts were made to select five counties so distributed as to be representative of various regions of the state. Within each of these counties three townships were then selected on the basis of their representativeness in that region.

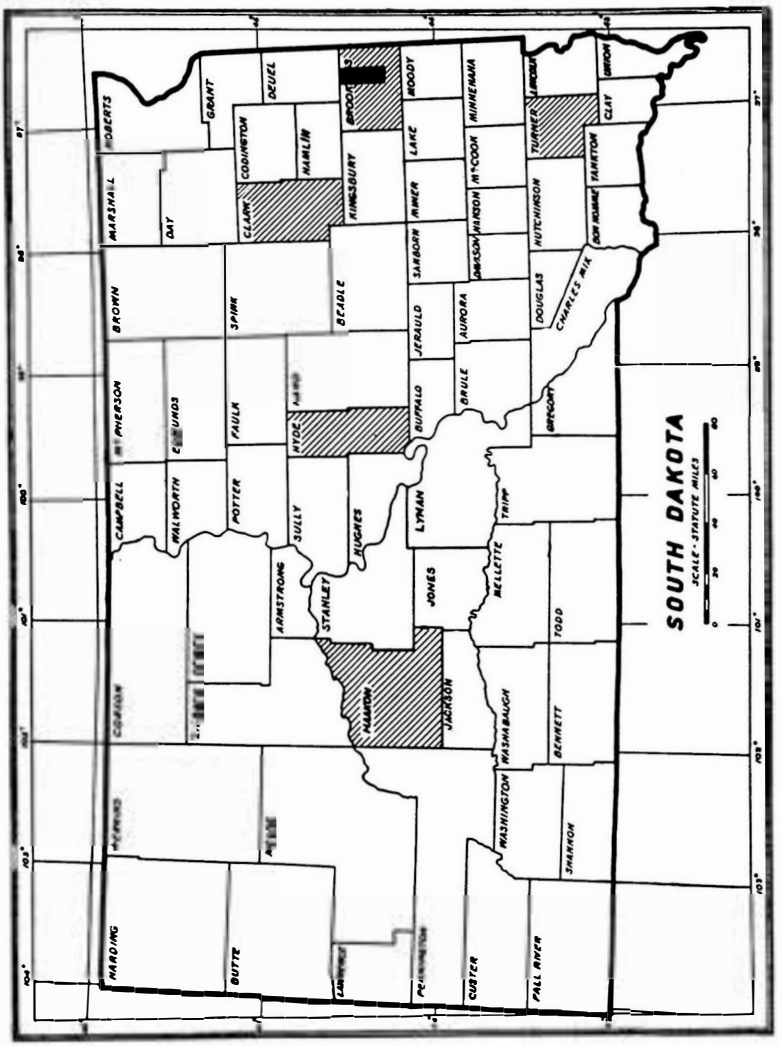

Fig. 1.—Map of South Dakota showing in solid black the three townships studied in Brookings County. Similar studies were made in Clark, Haakon, Hyde and Turner counties, which are shaded on the map.

Location of Area Studied.—As indicated in Figure 1, Brookings county is centrally located along the eastern boundary of the state. Bulletin 238 on "Types of Farming" classifies the surrounding region as Area III, the small-grain and livestock area.

Total Indebtedness: Changes in Amount and in the Relative Volume of Loans of Different Ranks

Changes in Total Amount of Indebtedness.—The enormous increase in the sum total of farm mortgage loans on record for the three townships studied, from $731,537 in 1910 to $2,702,565 in 1920, as indicated in Table 1 and Figure 2, reflect the influence of rising prices and land values. The bulk of this increase came from 1915 to 1920 as a result of the price inflation generated by the abnormal economic conditions and the inflationary credit policies associated with the World War. Instead of using the larger monetary incomes as a means of reducing their indebetdness, it is evident that the farmers as a class had their farms revalued on the basis of the temporarily higher monetary earning power, and used the increased land values as a means of obtaining larger loans. Some of this naturally came about by means of sale and purchase at the higher prices. The unfortunate situation is that inflated prices seldom are stable, and enlarged indebtedness which they permit tends to persist and become extremely burdensome when the price level declines. This is seen to be especially true regarding first-mortgage loans. Later it will be seen how the reduction in the total indebtedness from $2,702,565 in 1920 to $1,829,-517 in 1930 was brought about, in part at least, by the economically painful process of foreclosure.

TABLE 1.—Total mortgage indebtedness on farm land and amount of each rank, every fifth year, 1910 to 1929 inclusive

Year	Total Mortgage Indebtedness	Sum of First Mortgages	Sum of Second Mortgages	Sum of Third Mortgages	Sum of Fourth Mortgages
1910	$ 731,537	$ 638,509	$ 82,446	$10,482	$ 100
1915	1,193,031	983,764	201,172	5,945	2,150
1920	2,702,565	1,998,694	627,703	55,790	20,378
1925	2,387,729	1,943,269	370,096	68,244	6,120
1930	1,829,517	1,681,008	125,332	23,177	------

Amount and Trend of Junior Mortgage Indebtedness.—The figures in Table 1 show that the volume of first-mortgage indebtedness has been relatively more stable than that of the junior-mortgage indebtedness. This is also indicated in Figure 2. While first mortgages trebled in amount from 1910 to 1920, junior loans increased almost eight-fold. It is also noticeable that the reduction in amount from 1920 to 1930 was relatively greater in the case of junior mortgages than in the case of first-mortgage loans. Junior mortgages suffered a proportionately greater reduction from foreclosure than did first mortgages. Naturally this is to be expected, since a junior mortgage may be terminated by foreclosure proceedings instituted either by the owner of that mortgage or by the owner of a mortgage of prior rank.

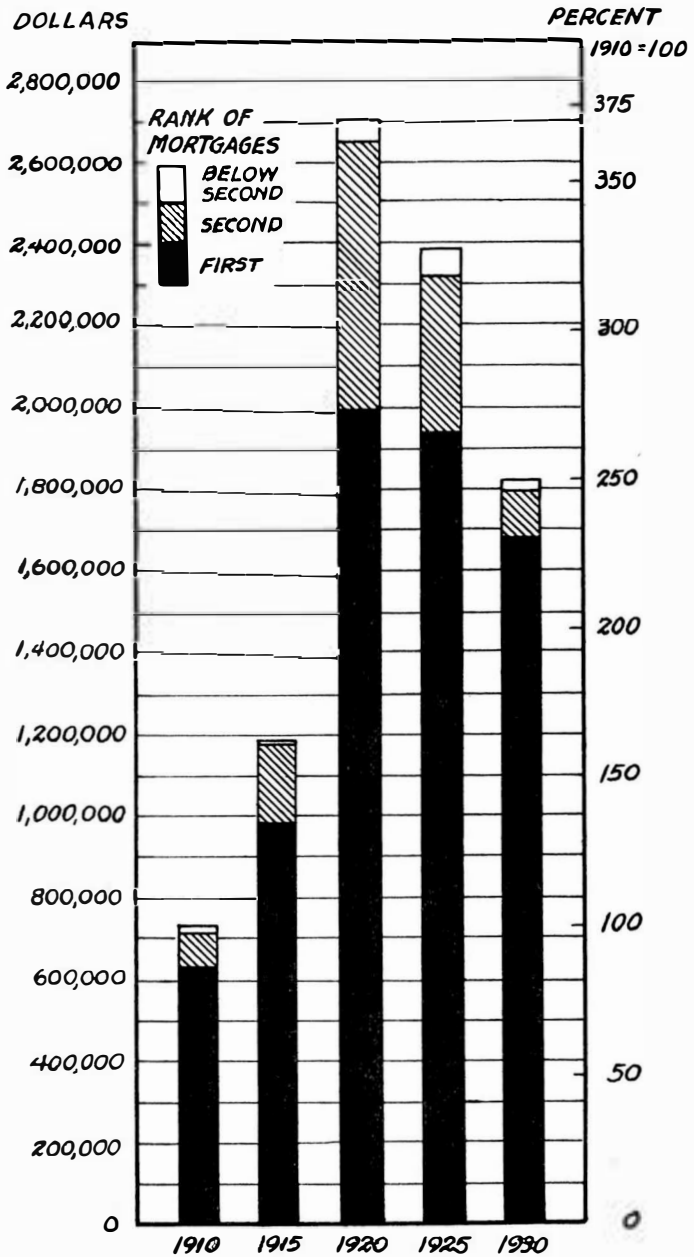

Fig. 2.—Total amount of mortgage indebtedness, index of change (1910=100%) and amount of mortgages of each rank, 1910-1930. (Based on Tables 1 and 3)

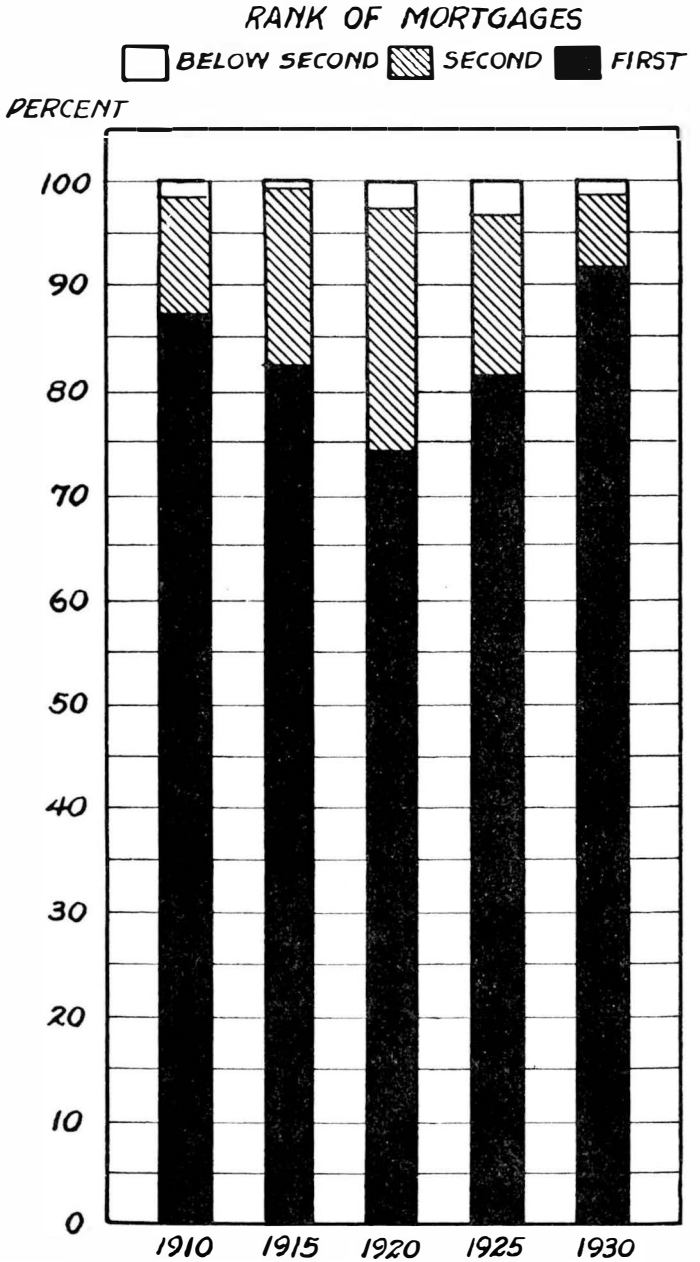

Fig. 3.—Percentage of total indebtedness represented by mortgage loans of different ranks, 1910-1930. (Based on Table 2).

TABLE 2.—Percentage of the total farm real estate mortgage indebtedness represented by loans of each rank, every fifth year from 1910 to 1930 inclusive

Year	Total Mtg. Indebtedness	Percentage in First Mtgs.	Percentage in Second Mtgs.	Percentage in Third Mtgs.	Percentage in Fourth Mtgs.
1910	$ 731,537	87.3	11.3	1.4	0
1915	1,193,031	82.4	16.9	.5	.2
1920	2,702,565	74.0	23.2	2.1	.7
1925	2,387,729	81.4	15.5	2.9	.2
1930	1,829,517	91.8	6.9	1.3	-

Percentage Changes in Indebtedness.—Examination of Table 2 and Figure 3 indicates even more clearly than the absolute figures do that junior-mortgage loans have undergone a greater relative fluctutation during the period under consideration than have first-mortgage loans. From 1910 to 1920 the first-mortgage loans declined from 87.3 per cent of the total to 74 per cent, a 15 per cent reduction in their relative importance. Junior mortgages, on the other hand, experienced more than a 100 per cent increase in their proportionate importance. During the period of liquidation from 1920 to 1930, it will be seen, junior loans suffered an even greater relative reduction with the result that first-mortgage loans constituted a larger proportion of the total indebtedness in 1930 than in 1910. Table 3 shows that the total indebtedness was increased from 1910 to 1920 by 3.69 times its original amount. At the end of ten years of liquidation the total debt was still 2½ times as large as in 1910. Table 4 shows that the most rapid increase in indebtedness occurred in the five-year period 1915-1920, and the most rapid decrease came during 1925-30.

TABLE 3.—Index of change in total indebtedness, every fifth year, 1910 to 1930 inclusive.

Year	Index of Change in Total Indebtedness	Total Mortgage Indebtedness
	(1910=100%)	
1910	100	$ 731,537
1915	163	1,193,031
1920	369	2,702,565
1932	326	2,387,729
1930	250	1,829,517

TABLE 4.—Percentage increase or decrease in the total amount of farm real estate mortgage indebtedness by periods*

Period	Percentage Change in Total Indebtedness	
	Increase	Decrease
1910 to 1915	63.1	
1915 to 1920	126.5	
1920 to 1925		11.6
1925 to 1930		21.7
1910 to 1920	269.4	
1920 to 1930		29.3

* In each case the indebtedness figure for the end of the previous period is considered as 100 per cent.

Area Mortgaged and Debt per Acre

Changes in Area Mortgaged.—A comparison of Tables 1 and 3 with Table 5 makes it clear that the changes in the acreage under mortgage has been much less extensive than the changes in the total indebtedness. In other words, the great increase in indebtedness was brought about by an increase in the debt per acre. This was especially true with respect to first-mortgage loans. The changes in the acreage covered by first mortgages were relatively moderate, as shown in Table 5 and Figure 4, but the acreage which also carried a second mortgage underwent almost a three-fold expansion from 1910 to 1920. It is likewise seen that the mortgaged acreage, as well as total indebtedness, was greater in 1930 than in 1910. Once a piece of land has been mortgaged it is more difficult to have it released than it is to reduce the debt. Lenders will naturally prefer to retain all possible security as long as even a part of the debt remains unpaid. During periods of rapidly declining land values the mortgagee may demand that the borrower either increase the relative amount of security or submit to foreclosure proceedings. Thus, in Turner county, the mortgaged acreage increased from 1920 to 1925, but this was not true in Brookings county. Table 6 shows that the land area under mortgage underwent smaller percentage changes than did the amount of indebtedness shown in Table 4.

Indebtedness per Acre.—Because of a moderate increase in the acreage under mortgage, the indebtedness per acre, as shown in Table 7 and in Figure 5, did not increase proportionally as rapidly as did the total indebtedness. Nevertheless the total debt per acre rose from $20.82 in 1910 to $54.64 in 1920. This represents almost a trebling of the debt burden per mortgaged acre. Even in 1930 the per acre debt of $45.50 is almost two and one-fourth times as large as it was in 1910. This, however, does not measure the increase in the farmers' debt burden.

TABLE 5.—Area mortgaged, and the percentage which such encumbered acreage was of all land, at five-year intervals, 1910 to 1930 inclusive.

Year	Total Acres Mortgaged	Index of Change in Mortgaged Acres (1910 = 100%)	Per Cent of all Land Mortgaged*	Acres Under Second Mortgage
1910	35,139	100	50.8	7,842
1915	39,482	112	57.1	10,920
1920	45,316	129	65.6	20,268
1925	44,103	126	63.8	15,154
1930	40,211	114	58.2	10,200

* "All land" equals all farm land, or 69,132 acres.

TABLE 6.—Percentage increase or decrease in encumbered acreage by periods*

Period	Percentage Change in Area Mortgaged	
	Increase	Decrease
1910 to 1915	12.4	
1915 to 1920	14.8	
1920 to 1925		2.7
1925 to 1930		6.8
1910 to 1920	29.0	
1920 to 1930		9.5

* In each case the encumbered acreage figure for the end of the previous period is taken as 100 per cent.

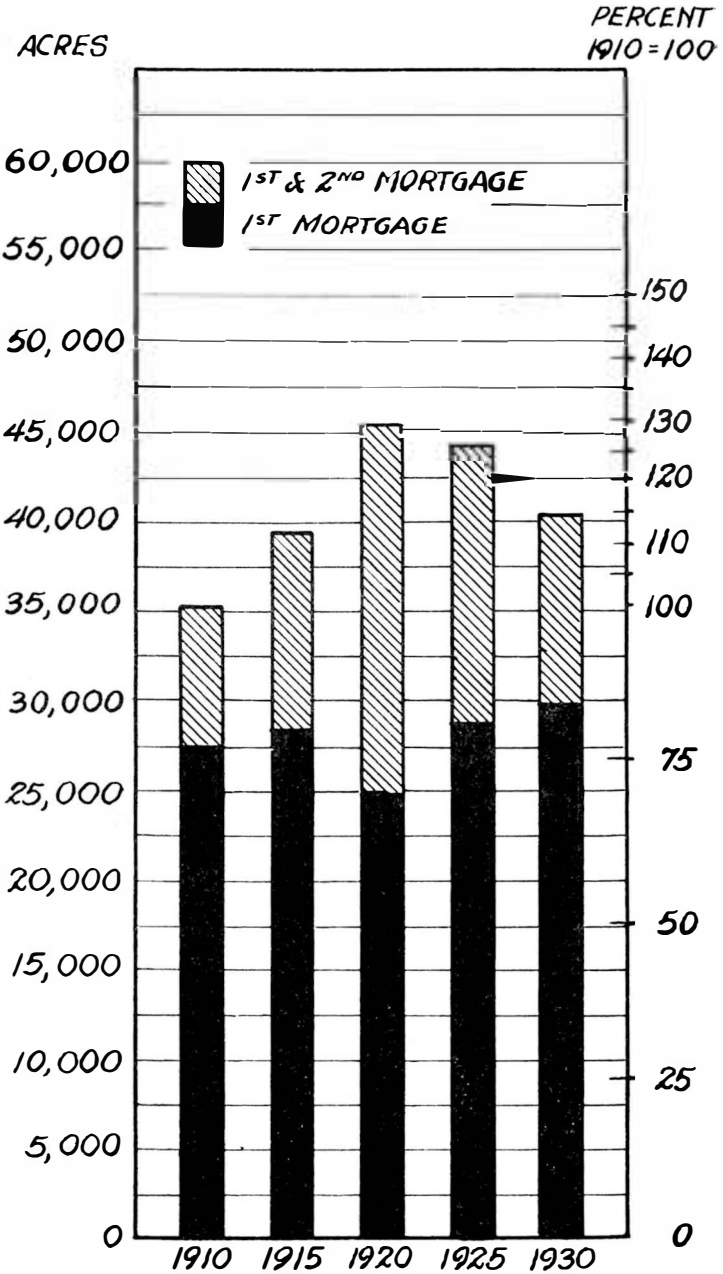

Fig. 4.—Total acreage covered by mortgage, index of change, and acreage covered by both first and second mortgages. (Based on Table 5.)

TABLE 7.—Average indebtedness per acre of mortgaged land and index of debt per acre at five-year intervals from 1910 to 1930 inclusive (Based on Tables 1 and 5)

Year	Average Total Debt Per Acre	Index of Change in Total Debt	Average First Mortgage Debt Per Acre	Index of Change in First Mortgage Debt Per Acre
		(1910 = 100%)		(1910 = 100%)
1910	$20.82	100	$18.17	100
1915	30.22	145	24.92	137
1920	59.64	286	44.11	243
1925	54.14	260	44.06	242
1930	45.50	218	41.80	230

TABLE 8.—Percentage increase or decrease in the average farm mortgage debt per acre of encumbered land by periods* (Based on Table 7)

Period	Percentage Change in Debt Per Acre	
	Increase	Decrease
1910 to 1915	45.1	
1915 to 1920	97.4	
1920 to 1925		9.2
1925 to 1930		16.0
1910 to 1920	186.5	
1920 to 1930		23.7

* In each case the debt per acre figure for the previous period is taken as 100 per cent.

With more acreage under mortgage, plus a larger debt per mortgaged acre, and with a more unfavorable relationship between production expense and selling prices, the 1930 debt burden was definitely much greater than in 1910.

Foreclosures

Amount of Loans Involved in Foreclosures.—From 1910 to 1920 the economic condition of the farmers in the three townships studied must have been favorable, judging by the absence of foreclosures. Table 9 and Figure 6 show no foreclosures during the first 10 years from 1911 to 1920 inclusive. The marked increase in land sales and in the heavy mortgaging of farm land did not occur until the last three years of the period of rising prices, and so long as the prices of farm products were rising, the borrowers were able to meet their obligations. Conditions at that time, however, were fundamentally unsound. Land values and loan values were predicated on the continuation of inflated prices, and consequently when the inflated price structure collapsed the borrowers were faced with serious maladjustments between their mortgage obligations and their income. As a result, foreclosures during the five years of 1921-1925 amounted to almost 13 per cent of the total loans in force in 1920, or $346,135. During the five years ending with 1930, $171,465 in mortgages were foreclosed.

Proportions of First and Second Mortgages Foreclosed.—Table 10 shows the amounts and the proportions of total foreclosures that involved first mortgages and second mortgages respectively. The foreclosures of each rank, however, become more significant when considered in relation to the volume of indebtedness secured by each class of mortgage.

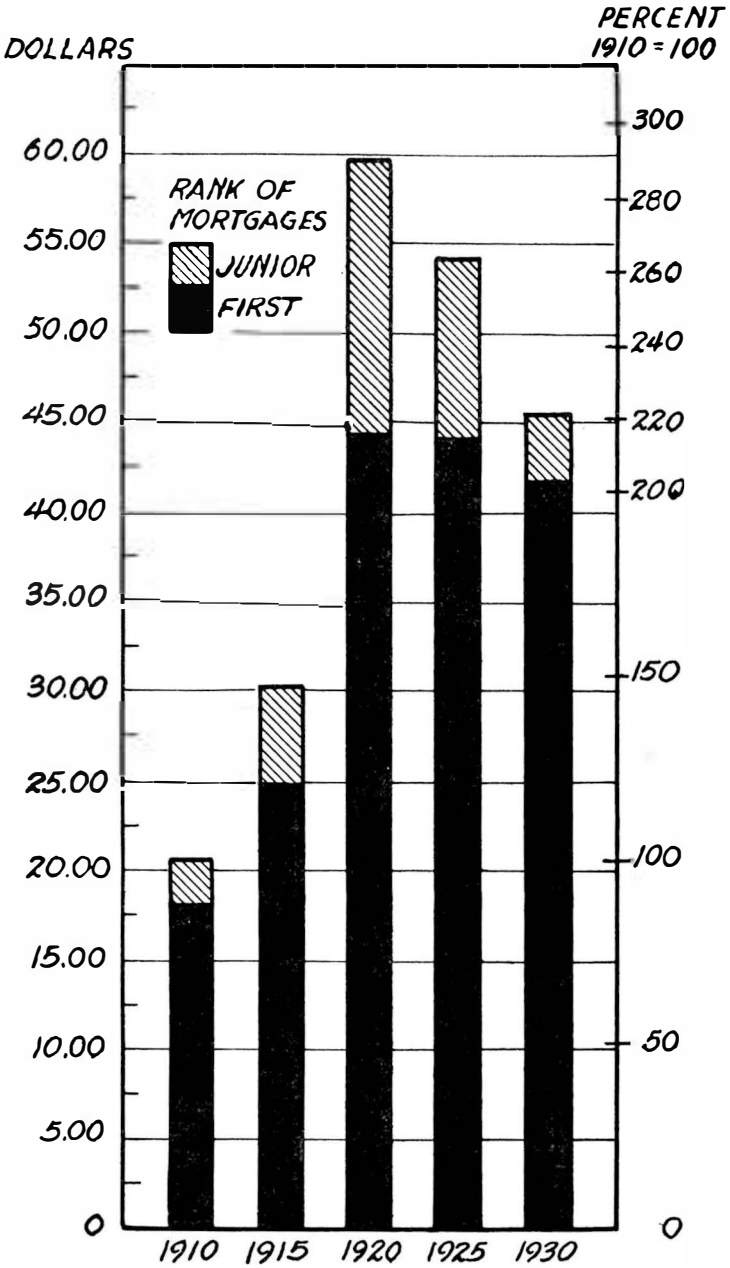

Fig. 5.—Average debt per acre of mortgaged land both as to the first mortgage and total loans, with index of change in total indebtedness per acre, every fifth year, 1910-1930. (Based on Table 7.)

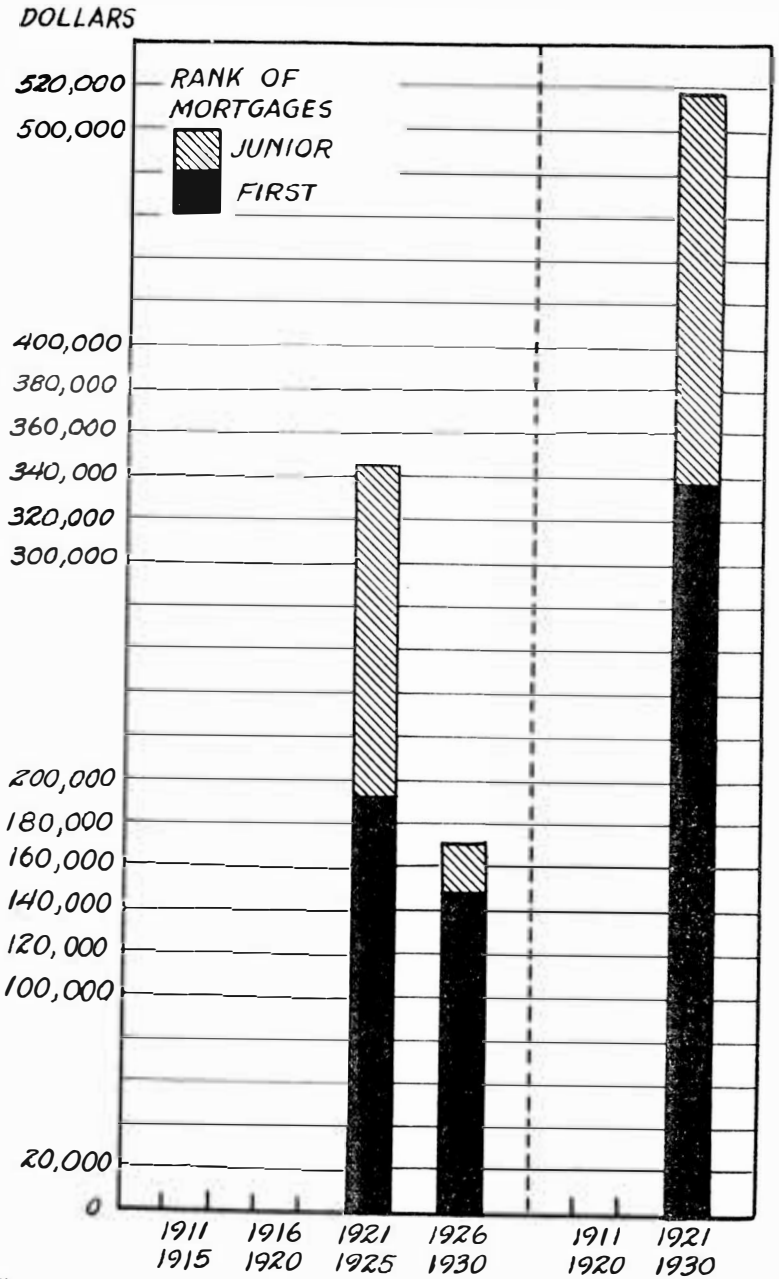

Fig. 6.—Amount of mortgage loans foreclosed during four successive five-year periods, or two successive ten-year periods. (Based on Tables 9 and 10.)

TABLE 9.—Amount of farm real estate mortgage loans foreclosed upon during four successive five-year periods and for two successive ten-year periods, with ratio of volume of foreclosures to total indebtedness* at beginning of each period. from 1911 to 1930 inclusive.

Periods	Total Amount of Foreclosures	Total Debt at Beginning of Period	Per Cent of Total Debt Foreclosed
1911 to 1915 inclusive	0	$ 731,537	----
1916 to 1920 inclusive		1,193,031	
1921 to 1925 inclusive	346,135	2,702,565	12.8
1926 to 1930 inclusive	171,465	2,387,729	7.2
1911 to 1920 inclusive		731,537	
1921 to 1930 inclusive	517,600	2,702,565	19.2

* The total idebtedness at the beginning of each period is the amount of indebtedness the previous year: 1910 debt for the 1911-15, etc.

It has previously been mentioned that it was the junior mortgage loans that fluctuated most violently in volume. Part of this was due to the larger proportion of junior mortgages terminated by foreclosure. During the five-year period 1921-1925, 9.6 per cent of the 1920 volume of first-mortgage loans were foreclosed. Of the second-mortgage loans, similarly, 24.6 per cent were terminated by foreclosure.

TABLE 10.— Distribution of the volume of foreclosures according to the rank of the mortgages foreclosed in successive five-year periods from 1911 to 1930 inclusive, and the percentage that the loans of each rank are of the total foreclosures.

Period	First Mortgages Foreclosed		Second Mortgages Foreclosed	
	Amount	Percentage	Amount	Percentage
1911 to 1915	0	----	0	----
1916 to 1920			0	
1921 to 1925	$191,712	55.4	$154,423*	44.6
1926 to 1930	147,020	85.7	24,445†	14.3

* Includes $13,000 4th mortgage.
† Includes $2,600 3rd mortgage and $14,000 4th mortgage.

Acreage Lost Through Foreclosure.—A comparison of Table 11 and Table 9 seems to indicate that a higher percentage of the mortgaged land was involved in foreclosure proceedings than was the case with loans. The reason for this is that some mortgaged land was covered by more than one mortgage, but only the specific mortgage in connection with which the action was instituted would be listed among the foreclosed loans, even though one or more junior loans might be wiped out by the foreclosure of a first mortgage; whereas the acreage would be counted three times if third, second and first mortgages on a given piece of land were successively foreclosed.

TABLE 11.—Acreage of land involved in mortgage foreclosures during four successive five-year periods and for two successive ten-year periods, with ratio of foreclosed acreage to encumbered acreage* at beginning of each period, 1911 to 1930 inclusive.

Periods	Total Acres in Foreclosures	Total Encumbered Acreage at Beginning of Period	Per Cent of Mortgaged Acreage Foreclosed
1911 to 1915 inclusive	0	35,139	----
1916 to 1920 inclusive		39,482	
1921 to 1925 inclusive	6,680	45,316	14.7
1926 to 1930 inclusive	4,936	44,103	11.2
1911 to 1920 inclusive		35,139	
1921 to 1930 inclusive	11,616	45,316	25.6

* The "total encumbered acreage at beginning of period" refers to the previous year; the encumbered acreage in 1910 is used with the 1911-1915 period, etc.

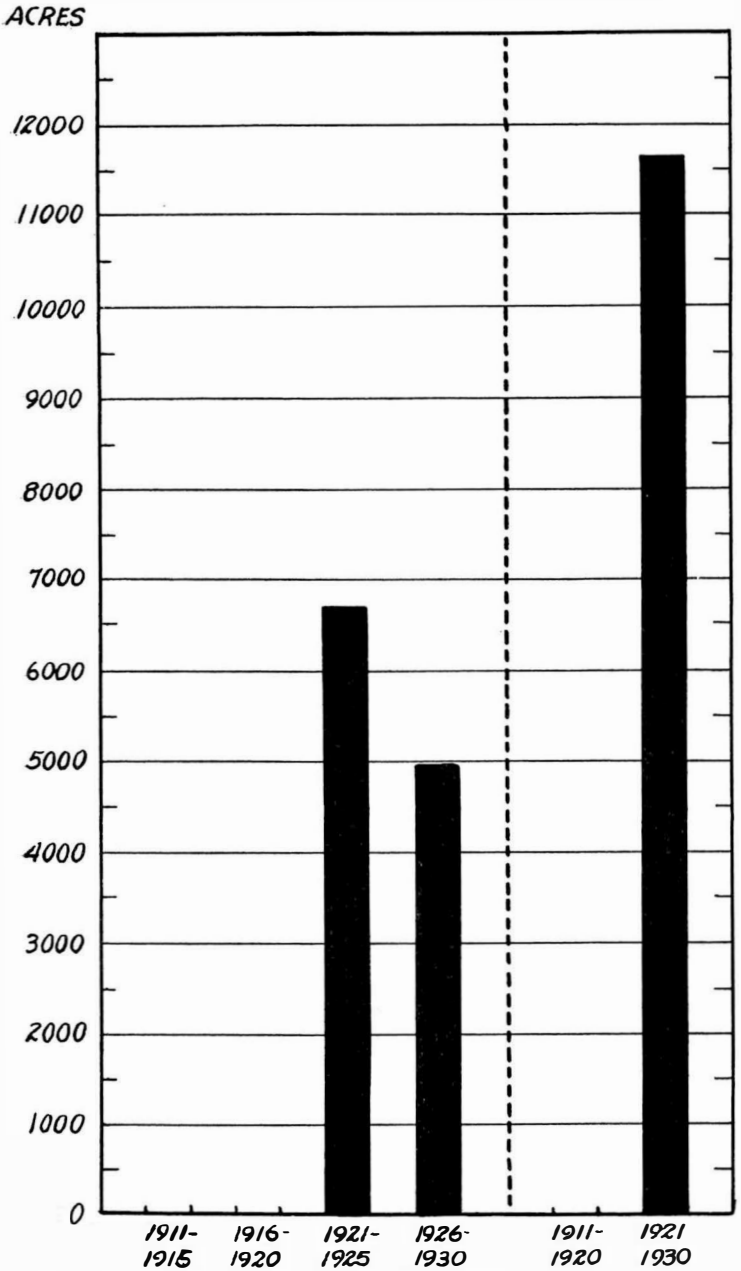

Fig. 7.—Acreage lost to owners through foreclosure of mortgages during four successive five-year periods, or two successive ten-year periods. (Based on Table 11.)

Delinquency

Amount and Percentage of First and Junior-Mortgage Delinquency.—Chronologically, delinquency precedes foreclosure, but foreclosure does not inevitably follow delinquency. Since this study is based on public records the term 'delinquency' as here used is confined to recorded mortgage loans which were past due and unpaid. Furthermore, it refers only to the principal of the loan. Delinquency of interest and other payments is not a matter of public record, and consequently not available. Tables 12, 13 and 14 indicate the volume of delinquent loans classified respectively as loans of all ranks, first-mortgage loans and junior-mortgage loans. These tables make it clear that the total volume of delinquent loans increased very greatly after 1920. It appears, however, that the percentage of loans classified as delinquent after 1920 exceeded the pre-war percentage of delinquency only in the case of junior mortgages. This appearance is undoubtedly due to the fact that the data are presented for only every fifth year, and after 1920 many delinquent loans were foreclosed and thus removed from the delinquent list. The year 1920 shows the lowest proportion of delinquent loans. Comparison with Table 9 on foreclosures indicates that mortgagees were more prompt to

TABLE 12.—Total amount of farm real estate mortgage loans of all ranks delinquent* at the end of every fifth year, 1910 to 1930 inclusive.

Year	Delinquent Mortgages of All Ranks		Sum of Mortgages Delinquent for Various Periods				
	Amount Delinquent	Per Cent of Total Debt Delinquent	Up to 30 Days	31 Days to 6 Months	Over 6 Mo. to 1 Year	Over 1 Year	Unknown Length of Time
	$		$	$	$	$	$
1910	100,107	13.7	7,800	28,270	10.600	53,437	
1915	154,017	12.9	5,000	0	47,782	101,235	
1920	95,305	3.5	3,000	4,900	49,205	38,200	
1925	319,504	13.4	4,250	17,381	78,225	163,158	56,490
1930	337,208	18.4	40,400	11,500	81,350	189,976	13,982

* A mortgage past due and not satisfied on the records is counted delinquent in cases where inquiry has not shown extension by agreement between borrower and lender. In the left hand column headed "amount delinquent" are included some delinquent amortization loans, chiefly Rural Credit loans, which have been listed separately in the right hand column for delinquencies of unknown length of duration.

TABLE 13.—Amount of first mortgage farm real etsate loans delinquent* as to principal, and percentage of the total first mortgage indebtedness which was delinquent at the end of the years indicated, 1919 to 1930 inclusive.

Year	Total First Mortgage Loans Delinquent		First Mortgages Delinquent for Various Periods				
	Am't Del'quent	Per Cent of Total First Mtg. Debt Del'quent	Up to 30 Days	31 Days to 6 Months	Over 6 Mo. to 1 Year	Over 1 Year	Unknown Length of Time
	$		$	$	$	$	$
1910	78,189	12.2	7,000	13,500	10,600	47,089	0
1915	138,632	14.1	4,000	0	46,582	88,050	0
1920	64,700	3.2	0	1,000	34,800	28,900	0
1925	169,140	8.7	2,000	13,050	32,500	65,100	56,490
1930	242,073	14.4	40,000	11,500	63,000	120,073	7,500

* A mortgage past due and not satisfied on the records is counted delinquent in cases where inquiry has not shown extension by agreement between borrower and lender. In the left hand column headed "amount delinquent" are included some delinquent amortization loans, chiefly Rural Credit loans, which have been listed separately in the right hand column for delinquencies of unknown length or duration.

start foreclosure on a delinquent loan between 1920 and 1925 than during the five years ending with 1930. A graphic presentation of the delinquency data is given in Figure 8 and Figure 9.

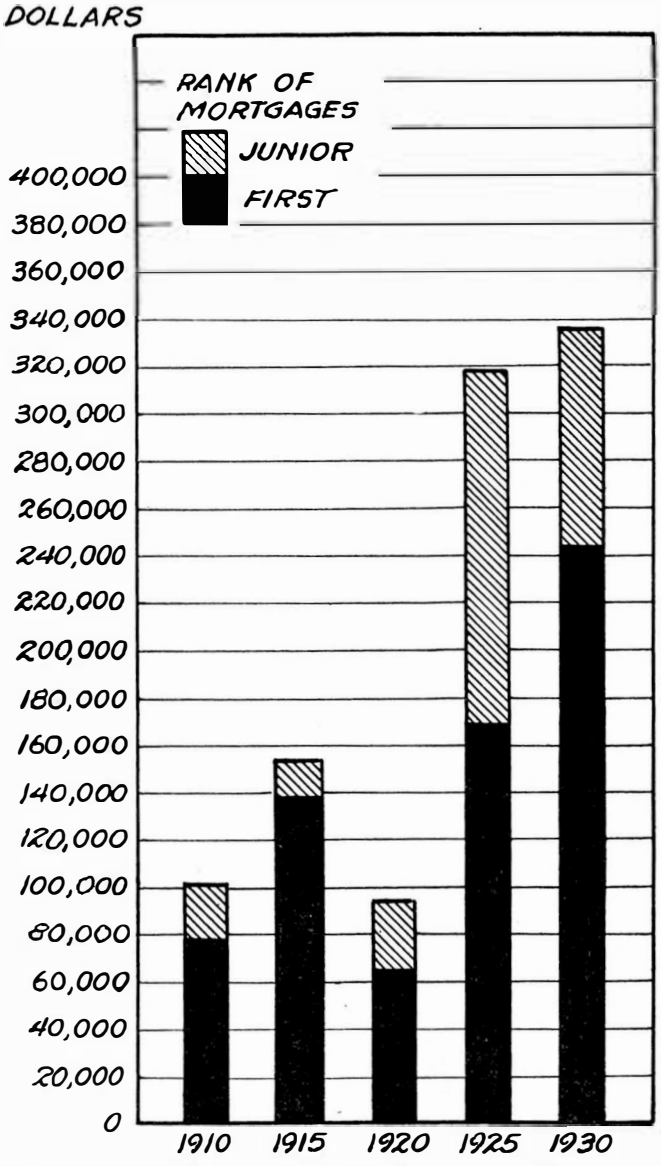

Fig. 8.—Total amount of delinquent loans, classified as to first and junior mortgages delinquent every fifth year, 1910-1930.
(Based on Tables 12, 13 and 14.)

TABLE 14.—Amount of junior mortgage loans delinquent* as to principal and the percentage of the total junior mortgage indebtedness which was delinquent at the end of the years indicated, 1919 to 1930 inclusive.

Year	Junior Mortgages Delinquent		Junior Mortgages Delinquent for Various Periods				
	Am't	Per Cent Total Junior Mtg. Debt	Up to 30 Days	31 Days to 6 Months	Over 6 Mo. to 1 Year	Over 1 Year	Unknown Length of Time
	$		$	$	$	$	$
1910	21,918	23.6	800	14,770	0	6,348	0
1915	15,385	7.4	1,000	0	1,200	13,185	0
1920	30,605	4.2	3,000	3,900	14,405	9,300	0
1925	150,364	33.8	2,250	4,331	45,725	98,058	0
1930	95,135	64.6	400	0	18,350	69,903	6,482

* A mortgage past due and not satisfied on the records is counted delinquent in cases where inquiry has not shown extension by agreement between borrower and lender. In the left hand column headed "amount delinquent" are included some delinquent amortization loans, chiefly Rural Credit loans, which have been listed separately in the right hand column for delinquencies of unknown length or duration.

Accuracy of Delinquency Records.—It is obvious that the recorded delinquency data may contain some inaccuracies. Even if the county records are otherwise correct, there is no assurance that the satisfaction of mortgage is promptly recorded in every case when a mortgage loan has been paid. Furthermore, if part of the principal of a loan has been paid there usually is no recorded entry to show it, and consequently, if the remainder of the loan is unpaid after maturity the whole amount will have been entered in this study as delinquent. Counterbalancing errors may occur in cases where not only the principal of the loan, but also interest payments, insurance premiums and taxes are unpaid and have been added to the principal. Payment of the latter items is not recorded in the mortgage records, but can be expected to reach considerable proportions during the periods of high delinquency.

Acreage with Delinquent Loans.—Table 15 presents information as to the acreage on which mortgage loans were delinquent. The low point, both with respect to absolute area with delinquent loans and the percentage of the mortgaged land carrying delinquent loans occurred in 1920. This refers to the years studied, and it may be repeated that the data for only every fifth year have been analyzed. That the debt burden was heavier after 1920 than before is indicated by the data in Table 15 on the percentage of mortgaged acreage supporting delinquent loans. This matter is presented graphically in Figure 10.

TABLE 15.—Amount and percentage of mortgaged acreage on which loans were delinquent* as to principal, every fifth year, 1910 to 1930 inclusive.

Year	Acreage on Which Loans Were Past Due and Unpaid	Total Mortgaged Acreage	Per Cent of Mortgage Acreage Delinquent
1910	6,760	35,139	19.2
1915	7,794	39,482	19.7
1920	4,790	45,316	10.6
1925	11,280	44,103	25.6
1930	12,240	40,211	30.4

* A mortgage past due and not satisfied of record is counted delinquent in cases where inquiry has not shown extension by agreement between borrower and lender.

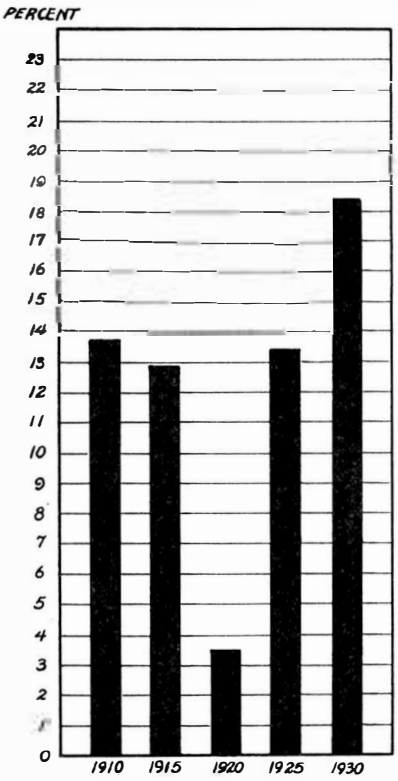

Fig. 9.—Percentage of the total debt delinquent at the end of the years indicated, 1910-1930. (Based on Table 12.)

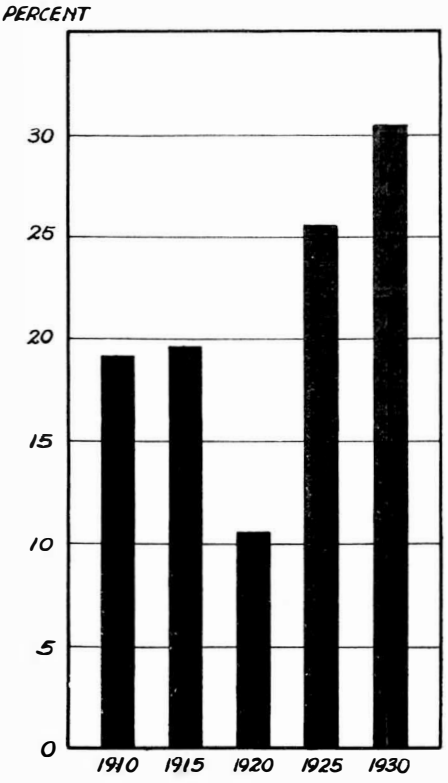

Fig. 10.—Percentage of mortgaged acreage on which loans were delinquent as to principal, 1910-1930. (Based on Table 15)

Classification of Mortgaged Land and Loans as to Amount of Debt Per Acre

How Classified and Why.—The classification is on the basis of total debt per acre. All cases where the total of first and junior-mortgage loans amount to not more than $10.00 per acre are placed in the first class. The second and third classes, etc., include cases with total indebtedness ranging respectively between $10.01 to $20.00 per acre, and between $20.01 and $30.00 per acre. The loans and the incumbered lands are classified separately but on the same basis. The purpose of this analysis is to obtain a better picture of the indebtedness situation as it has changed by five-year intervals from 1910 to 1930. The tables showing the average debt per acre fail to indicate what proportion of the indebtedness is near the average debt per acre, what is above, or what is below the average. Table 16 presents the information on the distribution of indebtedness as explained above. Figure 11 visualizes this distribution on the basis of $20 class intervals.

Changes Since 1910.—During all the years under consideration, there were some farmers whose lands were incumbered for less than $10 per acre, but the percentage of the total volume of loans and the percentage of incumbered lands with this light indebtedness per acre declined up to 1925 and then increased slightly up to 1930. The upper limit of incumbrance per acre rose from the $70.01 - $80.00 class in 1910 to the $180.01 - $190.00 class in 1920, and then declined to the $140.01 - $150.00 class in 1925 and 1930. Figure 11 makes it clear that the range in debt per acre was much narrower in 1910 than in any later year. In 1910, 88 per cent of the indebtedness was at the rate of not more than $40 per acre, and 95 per cent of the incumbered land was mortgaged for an amount not exceeding $40. In 1915 only 82 per cent of the indebtedness was included in the classes up to $80 debt per acre. The widest dispersion of the amounts of debt per acre was found in 1920. At that time it required all the classes of debt per acre from the smallest up to $110 per acre to include 85 per cent of the total indebtedness. These classes included 93 per cent of the mortgaged land. In 1925, 85 per cent of the total debt was included in the classes ranging up to $100 debt per acre. By 1930 the spread had been reduced to the point where 88 per cent of the indebtedness was included in the classes up to $70 debt per acre, while 94 per cent of the incumbered land was included within these classes. Figure 11 makes it particularly clear how indebtedness was customarily concentrated in loans for moderate amounts per acre in 1910. Through 1915 to 1920 this concentration disappeared as more of the debt was placed for larger amounts per acre. After 1920 the trend was reversed, and by 1930 a fairly high concentration within a few classes reoccurred, but the modal class was much higher than in 1910.

Debt Burden Relatively Heavier After 1920.—The various measures of indebtedness presented thus far all indicate that the burden of debt on the farm land in the three townships included in this study became definitely heavier after 1920. The index of the debt per acre, beginning with 1910 as a base of 100, was 286 in 1920 and 218 in 1930. Since, however, an increased acreage was mortgaged in the later years, the index

TABLE 16.—Distribution of the total farm real estate mortgage indebtedness according to the amount of debt per acre of encumbered land, every fifth year, 1910 to 1930 inclusive.

Classes of Indebtedness Per Acre	Average Debt Per Mortgaged Acre, Per Cent of Total Indebtedness and Per Cent of Mortgaged Land Falling in Each Indebtedness Class														
	1910			1915			1920			1925			1930		
	Average Debt Per Acre	Per Cent of Total Debt	Per Cent of Mortgaged Land	Average Debt Per Acre	Per Cent of Total Debt	Per Cent of Mortgaged Land	Average Debt Per Acre	Per Cent of Total Debt	Per Cent of Mortgaged Land	Average Debt Per Acre	Per Cent of Total Debt	Per Cent of Mortgaged Land	Average Debt Per Acre	Per Cent of Total Debt	Per Cent of Mortgaged Land
$ 0.01 to $ 10	$ 7.07	3.9	11.5	$ 7.25	1.5	6.4	$ 6.20	0.4	3.4	$ 7.50	0.1	0.7	$ 6.77	0.3	2.3
$ 10.01 to $ 20	15.17	34.5	47.3	16.10	16.7	31.4	15.75	2.5	9.5	16.47	1.9	6.3	16.65	1.5	4.3
20.01 to 30	25.12	26.9	22.3	24.23	15.4	19.3	24.40	3.9	9.6	25.03	4.3	9.3	24.10	5.7	20.0
30.01 to 40	33.96	22.6	13.9	33.99	22.3	19.9	35.44	7.1	11.9	34.92	11.4	17.6	33.88	15.4	20.0
40.01 to 50	45.26	7.5	3.4	45.39	15.7	10.4	46.62	8.3	10.6	44.90	12.3	14.9	44.44	25.4	25.2
50.01 to 60	53.50	2.9	1.1	54.42	10.4	5.8	54.69	7.6	8.3	54.94	17.3	17.0	53.19	22.9	19.4
60.01 to 70	0	----	----	64.78	3.9	1.8	64.87	13.2	12.1	63.98	10.6	9.0	63.49	16.6	12.0
70.01 to 80	76.88	1.7	0.5	74.04	7.0	2.8	74.14	9.4	7.6	74.54	12.7	9.2	76.68	3.2	1.9
80.01 to 90	0	----	----	86.11	3.5	1.2	84.84	8.5	6.0	84.27	9.3	6.0	82.68	4.4	2.4
90.01 to 100	0	----	----	93.75	1.3	0.4	95.62	13.6	8.5	95.44	5.1	2.9	93.75	0.4	0.1
100.01 to 110	0	----	----	0	----	----	104.85	10.1	5.7	106.23	5.0	2.5	105.06	2.7	1.5
110.01 to 120	0	----	----	115.00	2.3	0.6	115.69	3.1	1.6	115.23	6.6	3.1	0	----	----
120.01 to 130	0	----	----	0	----	----	124.47	4.4	2.1	125.00	1.1	0.5	125.00	0.3	0.1
130.01 to 140	0	----	----	0	----	----	133.80	0.8	0.4	133.03	1.1	0.5	0	----	----
140.01 to 150	0	----	----	0	----	----	145.23	1.7	0.7	144.92	1.2	0.5	143.75	1.2	0.3
150.01 to 160	0	----	----	0	----	----	157.55	2.3	0.9	0	----	----	0	----	----
160.01 to 170	0	----	----	0	----	----	165.63	2.0	0.7	0	----	----	0	----	----
170.01 to 180	0	----	----	0	----	----	0	----	----	0	----	----	0	----	----
180.01 to 190	0	----	----	0	----	----	181.89	1.1	0.4	0	----	----	0	----	----

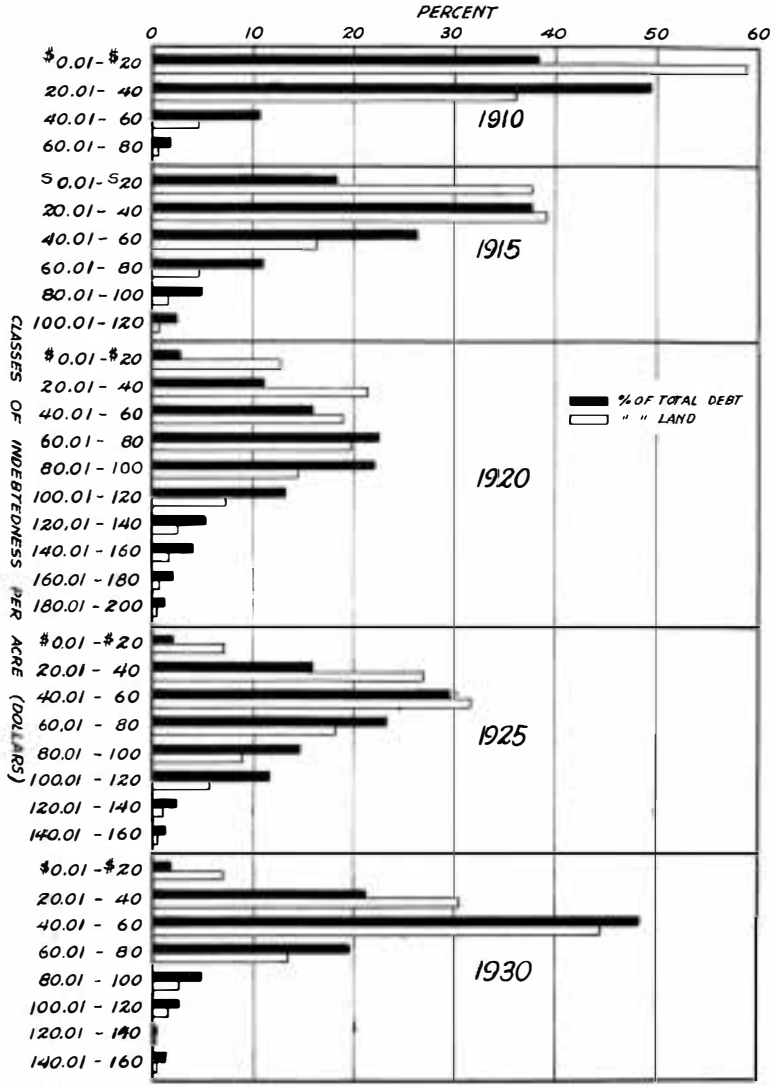

Fig. 11.—Percentage of total indebtedness and percentage of mortgaged land falling in different groups or classes of indicated indebtedness per acre of encumbered land, 1910-1930. (Based on Table 16.)

of total indebtedness increased from 100 in 1910 to 369 in 1920 and declined to 250 in 1930. These index numbers are significant only in relation to prices received by farmers and prices paid by farmers. An index number of prices received by South Dakota farmers for farm products, as computed by Professor R. E. Post, stood at 121 in 1930 as compared with 100 in 1910. A U.S.D.A. index of prices paid by farmers for commodities bought was 98 in 1910 and 145 in 1930. The farmers' cost prices had therefore risen more than their selling prices, and the debt burden remained relatively much higher than other farm costs.

Changes in Price Level and Farm Debts.—That prices rise and fall is a commonplace observation. It is also well known that changes in the price level may be either beneficial or harmful to farmers. The problem is how to escape the undesirable consequences. In connection with the farm mortgage situation we are specifically interested in knowing whether the potentially harmful consequences of changes in price level can be eliminated from the long-term debtor—creditor relationship. Unfortunately no method has yet been developed by which to forecast prices accurately. How, then, is a farmer to know what to do? Obviously farmers should not purchase land nor borrow heavily when land prices have risen to abnormal heights. This is true even though high prices of farm products may temporarily justify the high land prices. It is especially true if the buyer is not in position to purchase the farm without going into debt. Farms should be purchased when land prices are low in relation to the probable long term earning power of the land. Furthermore, it would seem desirable to obtain long-term loans when the interest rate is low, or to arrange for mortgage terms permitting refinancing whenever the interest rate becomes low. Although no method is available whereby one can foretell when prices and interest rates will be low, it is possible to compare current prices and rates at any given time with the course of such prices and rates in the past, and thereby to judge whether current prices and interest rates are relatively high or low. With such information at hand the intelligent farmer will be very conservative about incurring large long-term obligations during periods of price inflation. If debts are moderate, foreclosure and loss can be avoided more readily when depression succeeds inflation.

Source of Funds

Sources of First-Mortgage Funds.—It makes some difference from what source farmers obtain their farm loans, because not all sources can offer equally desirable terms, interest rates and renewal conditions. Table 17 indicates the amounts and the percentages of first-mortgage funds outstanding from the chief sources every fifth year from 1910 to 1930. Figure 12 reveals this percentage distribution graphically. The outstanding change is the shift from individuals as the most important source of farm mortgage loans in 1910 to insurance companies in 1930. The most rapid shift came after 1920. This may be accounted for by the assumption that individuals needed more of their savings for current uses after the depression set in. The large insurance companies, on the other hand, always have considerable funds which they need to invest or re-invest, and their experience with farm mortgages had been satisfac-

tory for a period of years prior to 1920. In 1910 individuals had furnished 72 per cent of the outstanding first-mortgage funds, and only 17 per cent had come from insurance companies. By 1930 these relative positions had been reversed. In the latter year insurance companies accounted for 67 per cent of the funds and individuals occupied second place with only 17 per cent to their credit. No other source accounted for as much as 10 per cent in any of the years studied. The Federal Land Bank has furnished only a small percentage but has consistently increased its proportion since it began operations.

TABLE 17.—Source of first mortgage funds: Amount and percentage of total coming from each source, every fifth year, 1910 to 1930 inclusive.

Source of Funds	1910		1915		1920		1925		1930	
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent
Insurance Comapnies	$109,910	17.2	$176,312	17.9	$ 465,753	23.3	$947,405	48.7	$1,127,969	67.1
Savings Banks	19,750	3.1	50,800	5.2	94,700	4.7	98,800	5.1	51,900	3.0
Commercial Banks	8,300	1.3	28,600	2.9	37,408	1.9	56,643	2.9	27,800	1.6
Individuals	460,649	72.1	625,382	63.6	1,031,900	51.6	570,710	29.4	277,340	16.5
Federal Land Bank	0	---	0	---	57,000	2.8	58,065	3.0	75,475	4.5
South Dakota School Fund	500	.1	500	---	5,500	0.3	5,000	0.3	15,000	0.9
South Dakota Rural Credit	0	---	0	---	225,155	11.3	156,846	8.1	67,796	4.0
Mortgage-Bankers	9,000	1.4	28,570	2.9	25,778	1.3	13,800	0.7	18,000	1.1
Miscellaneous	30,400	4.8	73,600	7.5	55,500	2.8	36,000	1.8	19,728	1.3

TABLE 18.—Source of second mortgage funds: Amount and percentage coming from each source, every fifth year, 1910 to 1930 inclusive.

Source of Funds	1910		1915		1920		1925		1930	
	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent	Amount	Per Cent
Insurance Companies	$ 500	0.6	$ 3,000	1.5	$ 11,500	1.8	$ 6,600	1.8	$ 2,200	1.8
Savings Banks	0	---	2,940	1.5	0	---	6,000	1.6	0	---
Commercial Banks	8,288	10.1	37,465	18.6	79,919	12.7	85,278	23.0	28,835	23.1
Individuals	60,438	73.3	92,659	46.1	471,995	75.2	214,864	58.1	68,710	54.8
Mortgage Bankers	12,720	15.4	32,063	15.9	36,144	5.8	24,409	6.6	22,237	17.7
Miscellaneous	500	0.6	33,045	16.4	28,145	4.5	32,945	8.9	3,250	2.6

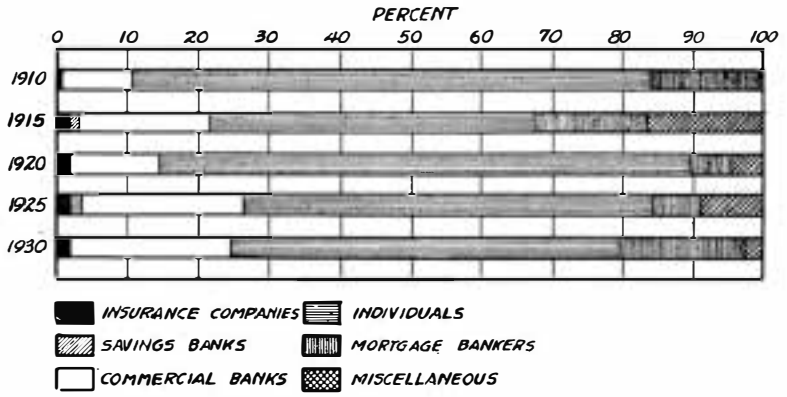

Fig. 12.—Percentage of first-mortgage funds coming from various sources, 1910-1930. (Based on Table 17.)

Fewer Sources of Second-Mortgage Funds.—Although a few loans from insurance companies and saving banks appeared on the records as second-mortgage loans, such cases occur chiefly where the first mortgage is already held by the same mortgagee. In effect, such a loan may be considered simply as an addition to the first-mortgage loan. Individuals, commercial banks, and mortgage bankers thus appear to be the chief sources of second mortgage funds. Individuals accounted for 73 per cent of such funds in 1910 and 55 per cent in 1930, as indicated in Table 18 and in Figure 13. Some of the second mortgages held by commercial banks may have been taken as additional security on previous loans. To a certain extent the second mortgages held by mortgage bankers appear to be commission mortgages taken in connection with the placing of a first-mortgage loan.

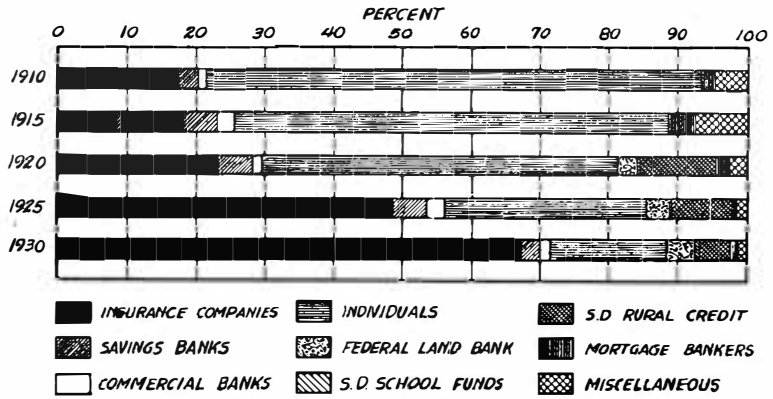

Fig. 13.—Percentage of second mortgage funds coming from various sources, 1910-1930. (Based on Table 18.)

The Cost of Funds

Factors Influencing Cost of Funds.—The interest cost of farm mortgage funds is generally said to depend on supply and demand conditions in the long-term investment market. When the supply of such funds seeking investment is large in relation to the volume of securities offered, or in relation to the demand, interest rates generally are low. The interest rate will also vary with the risk involved, rising with increased risk and falling with increased safety. The efficiency of the banking system will also have a bearing on interest rates in various regions. Thus, in a capital deficit area the interest rate will be relatively high unless an efficient banking system can attract low cost funds from surplus areas. Uncertainty may raise interest costs in the same way that risk does. For this reason, the farm mortgage of an unknown farmer can not hope to be as attractive to investors as are the well-known bonds of the Federal Land Banks. Information on the land banks is readily available, it is known that the interest is paid promptly, that the security is ample, and that the bonds can be sold at known prices every day. None of these favorable statements can be made with assurance about the mortgage loan of the average farmer because he is not known on the investment market. Other costs of borrowing on farm mortgages include a commission to the local agent or mortgage banker for placing the loan. In some cases the cost of bringing the abstract of title to the mortgaged land up to date may be considerable, and recording fees will also add a trifle to the cost. Aside from changes in the relative supply of, and demand for, long-term investment funds, it would seem that the reduction in interest costs on farm loans must come from improvement in the safety of farm mortgage loans and increased efficiency in the banking system serving agriculture.

First-Mortgage Interest Rates.—Table 19 indicates that there has been very little change in the rate of interest on first-mortgage loans in force during the years studied. This refers to the weighted average of all mortgages on record, and does not indicate the current rates charged during the specified years. Including the commission charged, the rate was either 6.1 per cent or 6.2 per cent until 1930, when the rate was down to 5.9 per cent. It should be noted that the commission refers only to such commissions as were paid in installments and recorded as commission mortgages. No record was obtained on the amount of cash commissions, but statements by informed persons indicate that the charging of a cash commission has been more common in recent years.

Second-Mortgage Interest Rate.—As indicated in Table 19, the average rates on second mortgages are based on fewer cases, and for other reasons also, they may be less significant. A second-mortgage may be a commission-mortgage, or may have been taken as additional security on a pre-existing debt. In either case the specified rate is no indication of the cost of second-mortgage funds. The table does, however, show that the second mortgage rate was higher than on first-mortgage loans.

TABLE 19.—Cost of first and second mortgage funds: The rate of interest and commissions, as weighted averages of loans in force, every fifth year 1910 to 1930

	First Mortgage				Second Mortgage	
	Rate of Interest		Rate of Commission		Rate of Interest	
Year	Per Cent	Number of Observations	Per Cent	Number of Observations	Per Cent	Number of Observations
1910	5.5	204	0.6	71	6.5	39
1915	5.6	223	0.6	84	6.5	61
1920	5.5	255	0.6	34	5.9	106
1925	5.6	248	0.6	33	6.4	84
1930	5.4	227	0.54	34	6.6	56

Frequency Distribution of the Rate on Current First-Mortgage Loans.—The customary rates charged on new first mortgages during each of the five years are shown in Table 20 and in Figure 14. These give a better picture of the situation than one can obtain from the table of average rates. In 1915 the predominant rate was 6 per cent, and almost 60 per cent of the loans were made at that rate. In 1910 a smaller percentage of the loans specified the 6 percent rate and the 5 per cent and 5½ per cent rates each accounted for about one-fourth of all the loans. In 1920 no single rate accounted for as many as 40 per cent of all loans, but the most commonly specified rate was 5½ per cent. By 1920 the modal rate had dropped to 5 per cent, at which rate 46 per cent of the loans were written. About 31 per cent of the loans drew 5½ per cent. These rates, of course, do not include commissions. By 1930 the rates had risen slightly so that 48 per cent of the mortgages called for 5½ per cent interest, and 33 per cent were 5 per cent loans.

TABLE 20.—Frequency distribution of the interest rates of the first mortgages recorded during various periods,* 1910 to 1930.

	1910		1915		1920		1925		1930	
Perc'tage Rate of Interest	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.
5	21	26.6	9	7.6	12	13.0	33	46.5	11	33.4
5¼	0	——	0	——	0	——	0	——	1	3.0
5½	19	24.0	24	20.2	35	38.1	22	31.0	16	48.5
6	36	45.6	71	59.6	21	22.8	7	9.9	4	12.1
6½	2	2.5	12	10.1	6	6.5	1	1.4	0	——
7	1	1.3	1	0.8	16	17.4	2	2.8	0	——
8	0	——	2	1.7	1	1.1	3	4.2	1	3.0
8½	0	——	0	——	1	1.1	0	——	0	——
9	0	——	0	——	0	——	3	4.2	0	——

* The periods mentioned in the title of this table refer to periods of 24 months each, including 6 months before and 6 months after the year specified at the top of the columns, except that for 1930 the period covers only the 18 months prior to December 31, 1930.

Rates on Current Second Mortgages.—As indicated in Table 22 the number of second mortgages recorded for each period was rather small, and for 1925 and 1930 such mortgages were too few for drawing any conclusion. For the previous years, it seems that the 6 per cent and the 8 per cent rate were the most popular. It is entirely possible that these two rates were used on different types of loans.

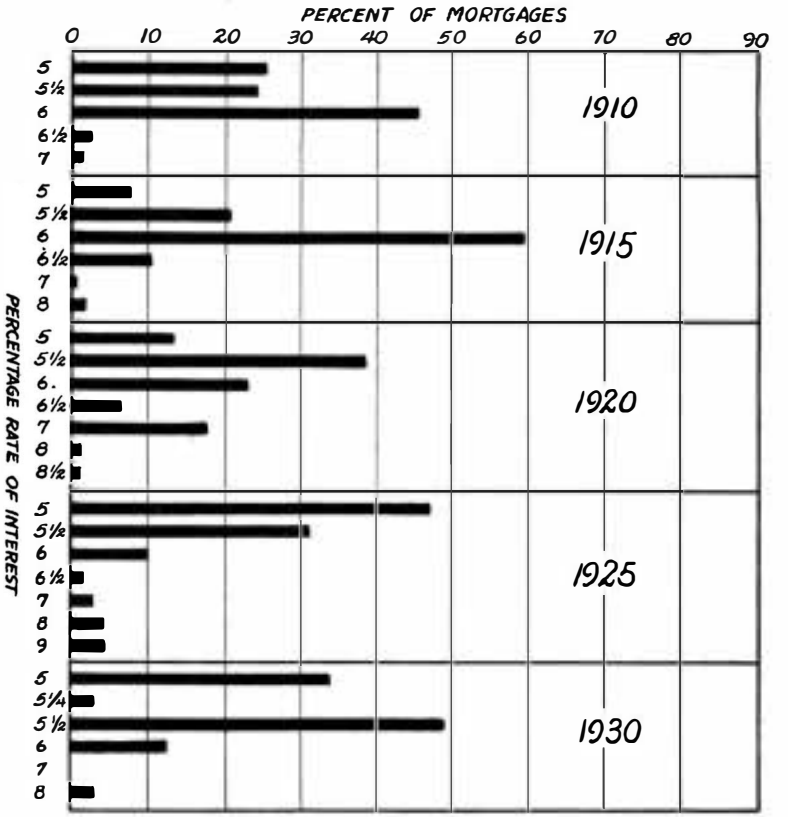

Fig. 14.—Percentage of first-mortgages drawing various rates of interest at different periods* from 1910 to 1930. (Based on Table 20.)

* The mortgages are such as were recorded during each year indicated plus 6 months before and 6 months after, but for 1930 the period covers only the 18 months ending December 31, 1930.

TABLE 21.—Frequency distribution of the interest rate on second mortgages recorded during various periods,* 1910 to 1930.

Perc'tage Rate of Interest	1910		1915		1920		1925		1930	
	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.
5	0	——	1	2.2	7	11.9	0	——	1	
5½	1	5.9	2	4.3	8	13.5	1	6.2	0	
6	10	58.8	23	50.0	28	47.5	6	37.5	2	
6½	0	——	1	2.2	1	1.7	0	——	0	
7	1	5.9	6	13.0	3	5.1	2	12.6	1	
7½	0	——	1	2.2	0	——	0	——	0	
8	4	23.5	10	21.7	10	16.9	6	37.5	0	
9	0	——	1	2.2	1	1.7	0	——	0	
10	1	5.9	1	2.2	1	1.7	1	6.2	0	

* The periods mentioned in the title of this table refer to periods of 24 months each, including 6 months before and 6 months after the years specified at the top of the columns, but only 18 months prior to December 31, 1930.

Length of Term

The Length of Term Should Fit the Need of the Borrowers.—The evidence from various farm mortgage studies indicates that the repayment of a major farm mortgage loan requires several years. The indications are that the typical five year loan is not repaid at maturity but is renewed or refinanced. From the point of view of the borrower, there are several disadvantages associated with this plan of financing the ownership of farm land. One disadvantage is that the frequency of renewal adds materially to the cost of the loan. Not only are there expenses and worry in connection with frequent renewals, but the maturity date may come at a time when funds are difficult to obtain and when interest rates may be high. Although the plan of repayment is not necessarily a function of the term, yet the standard five-year plan does not provide for regular annual and semi-annual repayment. On this account the short-term farm mortgage loan tends not only to make farm loans expensive, but also fails to promote systematic reduction of the debt. The five year loan seems to be a relic of past conditions when funds predominately came from individuals who might need their money soon and consequently dared not make loans for longer periods. Fortunately this condition has changed, and there is no insurmountable reason for continuing the obsolete five-year loan. The major portion of farm mortgage funds now comes from institutions having at their disposal an ample volume of long-term funds. It would therefore seem to be to the advantage of farm borrowers to obtain their loans on long-term contracts providing for regular annual repayments. The amortization loans of certain insurance companies and the Federal Land Banks offer a number of advantages. Such loans, running for about 35 years, usually can be repaid at any time after five years, and consequently they can be refinanced at some time when the interest rate is very low. Naturally there are two parties to every loan contract, and the interests of the lender must also be given due consideration. The important point to be stressed, however, is that the term of the loan should fit the need of the borrower and that it is poor business to lend short-term funds to a borrower who will need them for a long time. The fact that a farm mortgage is written for an arbitrary term of five years is no indication that farm mortgage loans are short-term investments. The best interests of both borrower and lender will be promoted by a mutual recognition of the earning power and rate of turnover of the enterprise in which the loan is to be invested. In farming the turnover is slow, and consequently the loans should be for longer terms.

Length of Term of Loans in Force.—Table 22 presents the data with respect to both first-mortgage loans and loans on second mortgages. Due to the inclusion of a few loans of slightly longer term, the average term of all first-mortgage loans in 1910 and 1915 was respectively 5.5 and 5.8 years. During the inflation years just before and during 1920, a number of loans were made for somewhat longer periods. Some of these longer-term loans appear to have been made in connection with the sale of farm. This accounts for the 7.4 average in 1920, and some of these loans were still on the records in 1925 with the result that the average term was then 6.9 years. The amortization loans of very long term have been excluded in computing the averages in Table 22. By

TABLE 22.—Length of term of first and second mortgage loans as averages of farm loans in force,* every fifth year 1910 to 1930.

Year	First Mortgage		Second Mortgage	
	Length of Term in Years	Number of Observations	Length of Term in Years	Number of Observations
1910	5.5	205	5.7	32
1915	5.8	222	4.7	60
1920	7.4	222	6.1	106
1925	6.9	221	4.8	84
1930	5.0	212	4.5	55

* Amortization loans have been excluded.

1930 the depression had eliminated most of the long-term loans, and the average was then 5 years.

Second mortgages, as shown in Table 22, averaged less than five years, except in 1910 and 1920. The longer term mortgages of 1920 appear to have been second-mortgages taken by sellers of land as a purchase money mortgage. In such cases, other inducements than those of the average lender influenced the granting of second-mortgage loans for relatively long terms.

Frequency Distribution of Terms of Current First-Mortgage Loans.—As previously indicated, the average does not indicate the variation, and the average of all loans, both old and new, which are on record at a given time does not represent the current rates charged on new loans. This information, however, is presented in Table 23 and in Figure 15. A comparison of Figure 15 with Figure 14 on the distribution of interest rates, makes it obvious that the term of most loans is much more likely to follow a given custom or mode than is the case with the interest rate. During every year studied, except during 1920, more than two-thirds of all loans placed were made for a term of five years. In the latter year less than 50 per cent of the new loans were for five years, and 32 per cent were for ten years.

TABLE 23.—Frequency distribution of the term of first mortgages RECORDED during various periods,* 1910 to 1930.

Length of Term in Years	1910		1915		1920		1925		1930	
	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.
1	0	—	1	0.8	0	—	7	9.7	1	3.0
2	0	—	0	—	0	—	1	1.4	0	—
3	3	3.8	6	5.1	1	1.1	2	2.8	1	3.0
4	3	3.8	0	—	2	2.1	1	1.4	2	6.1
5	66	83.5	80	67.9	44	47.3	49	68.0	26	78.8
6	0	—	4	3.4	1	1.1	1	1.4	1	3.0
7	1	1.3	2	1.7	0	—	1	1.4	0	—
8	0	—	1	0.8	2	2.1	2	2.8	9	—
9	2	2.5	0	—	0	—	0	—	0	—
10	3	3.8	20	17.0	30	32.3	2	2.8	2	6.1
11	1	1.3	1	0.8	1	1.1	1	1.4	0	—
12	0	—	1	0.8	1	1.1	0	—	0	—
15	0	—	2	1.7	1	1.1	0	—	0	—
18	0	—	0	—	1	1.1	0	—	0	—
19	0	—	0	—	1	1.1	0	—	0	—
20	0	—	0	—	0	—	0	—	0	—
30	0	—	0	—	6	6.4	0	—	0	—
35	0	—	0	—	2	2.1	6	6.9	0	—

* The periods mentioned in the title of this table refer to periods of 24 months each, including 6 months before and 6 months after the years specified at the top of the columns, except that for the year 1930 the period covers only the 18 months prior to December 31, 1930.

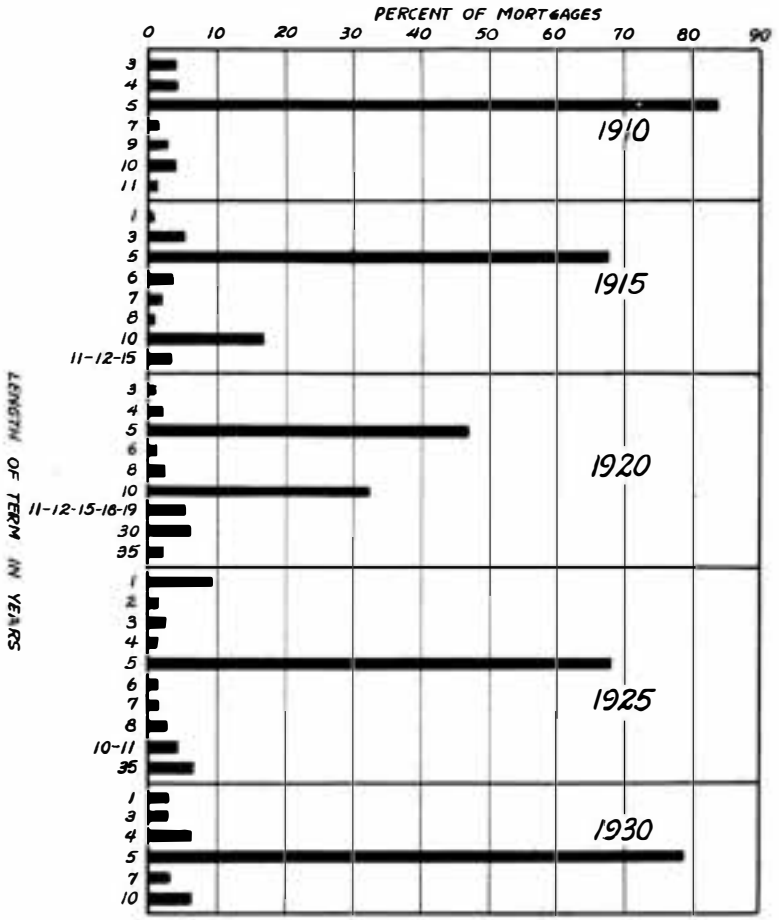

Fig. 15.—Percentage of first mortgages falling in various term groups during different periods* from 1910 to 1930. (Based on Table 23.)

* The periods mentioned in the title of this figure refer to periods of 24 months each, including 6 months before and 6 months after the specified year, except that for 1930 the period covers only the 18 months prior to December 31.

Terms of Current Second-Mortgage Loans.—A considerable but declining proportion of the second-mortgage loans was also made for five years. Except in 1920, very few such loans were for longer terms, one, two or three-year terms being common.

TABLE 24.—Frequency distribution of the term of second mortgages RECORDED during various periods,* 1910 to 1930.

Length of Term in Years	1910		1915		1920		1925		1930	
	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.	No. of Mtgs.	Per Cent of Mtgs.
1	3	18.8	9	21.4	6	10.5	6	37.6	1	
2			6	14.3	6	10.5	4	25.0	0	
3	2	12.5	3	7.1	2	3.5	1	6.2	1	
4			1	2.4	3	5.2	1	6.2	0	
5	11	68.7	18	42.9	25	43.9	4	25.0	2	
6	0	----	1	2.4	1	1.8	0	----	0	
7	0	----	0	----	1	1.8	0	----	0	
8	0	----	0	----	1	1.8	0	----	0	
9	0	----	0	----	2	3.5	0	----	0	
10	0	----	3	7.1	10	17.5	0	----	0	
11	0	----	1	2.4	0	----	0	----	0	

* The periods mentioned in the title of this table refer to periods of 24 months each, including 6 months before and 6 months after the years specified at the top of the columns, except that for the year 1930 the period covers only the 18 months prior to December 31, 1930.

Term and Rate on Loans from Various Sources

Average Rates of Interest.—No very marked difference is shown in the interest rate charged on first-mortgage loans from the different lending agencies. The rates charged seem, in the main, to have been so nearly alike that the choice of lending agencies may have depended more on the convenience of contacting the lending agency or its agent than on the interest cost. In Table 26 the commission charges are not included, and can not well be included in a comparison of interest costs from different agencies, because it is neither known to what extent each lender charged a cash commission, nor what was the amount of such commission.

Average Length of Term of Loans.—The average length of term of first-mortgage loans from the various sources was slightly more than five years. The only agencies making all or most of their loans for a period of 30 years or more were the South Dakota Rural Credit Board and the Federal Land Bank.

Average Rates and Terms of Second Mortgages.—Greater differences are indicated in connection with the second mortgages. With respect to the second mortgages held by insurance companies and savings banks, it can be said that these are only nominally second mortgages, because the same agency also held the first mortgage. The rates charged by commercial banks and by mortgage bankers were higher than the rates on such loans from individuals. The difference may be accounted for partly by the fact that some of the second mortgages held by individuals were taken in connection with the sale of land, where the sale price rather than the interest rate would be the governing factor in the extension of credit. The second mortgages of shortest term are very properly those from commercial banks operating with short-term funds.

TABLE 25.—The average weighted percentage rate of interest* and the average unweighted length of term in years, of outstanding† first mortgage loans from various sources, every fifth year, 1910 to 1930.

Source of Funds	1910		1915		1920		1925		1930	
	Interest	Term	Interest	Term	Interest	Term	Interest	Term	Interest	Term
Insurance Companies	5.2	5.2	5.5	5.8	5.6	7.5	5.6	6.6	5.2	6.3
Savings Banks	5.2	6.0	5.9	6.7	5.6	6.5	5.8	6.4	5.1	5.7
Commercial Banks	5.2	7.5	5.7	5.2	6.3	6.0	6.2	5.3	6.0	5.7
Individuals	5.6	5.4	5.7	5.7	5.6	7.5	5.6	7.4	5.5	6.2
Federal Land Bank	‡	‡	‡	‡	5.1	35.2	5.3	31.4	5.2	34.9
South Dakota School Fund	6.0§	5.0§	6.0§	5.0§	5.1	5.0	5.0§	5.0§	5.0	5.0
South Dakota Rural Credit	‡	‡	‡	‡	5.6	30.0	5.6	30.0	5.6	30.0
Mortgage Bankers	5.5	6.7	5.6	6.2	5.1	5.5	6.0	5.0	5.2	5.0
Miscellaneous**	5.4	6.1	5.4	6.5	5.3	9.0	5.9	19.2	5.8	14.5

* In addition to the interest cost, the borrower usually is required to pay a commission averaging about 6/10 of 1 per cent, except in the case of loans from the Federal Land Bank, South Dakota, and some local loans.

† The mortgages considered here include all such as were outstanding, that is, in force during the years specified. Naturally most of these mortgages had been made and recorded prior to the years mentioned.

‡ Includes joint stock Land Bank loans.

§ Only one loan.

** No loans.

TABLE 26.—The average weighted percentage rate of interest and the average unweighted length of term in years, of outstanding* second-mortgage loans from various sources, every fifth year, 1910 to 1930.

Source of Funds	1910		1915		1920		1925		1930	
	Interest	Term	Interest	Term	Interest	Term	Interest	Term	Interest	Term
Insurance Comanies	6.0§	5.0§	6.0§	11.0	5.8	7.3	5.6	8.0	5.5§	4.0§
Savings Banks	‡	‡	6.0	5.0	‡	‡	9.0	1.0	‡	‡
Commercial Banks	7.9	3.4	7.7	2.5	6.8	2.4	7.6	2.6	6.8	2.5
Individuals	6.3	4.4	6.1	5.0	5.7	6.8	5.8	5.8	6.5	5.0
Mortgage Bankers	6.9	4.8	6.9	4.4	6.1	5.8	7.7	3.2	7.2	5.1
Miscellaneous	5.5§	1.0§	6.0	8.3	5.9	6.7	5.9	6.2	5.5§	4.0§

* The mortgages considered here include all such as were outstanding, that is in force during the years specified.

§ Only one loan.

‡ No loans.

Amounts Loaned Per Acre by Different Agencies

Basis Lacking for Reliable Comparison.—Because of the very limited number of loans from some of the agencies, comparison is rather dangerous. It is interesting to note, however, that all agencies operating in the earlier years held larger loans per acre in 1920, and that in some cases the size of the loan per acre was increased rather than reduced during the difficult years following 1920. During some of these years many farmers found it impossible to meet all their obligations and became more heavily involved in debt.

TABLE 27.—Average amount loaned per acre on first mortgages by various agencies, as indicated by outstanding* mortgages for the years specified, 1910 to 1930.

Source of Funds	Average Amount Loaned Per Acre				
	1910	1915	1920	1925	1930
Insurance Companies	$14.58	$19.99	$39.86	$44.37	$44.95
Savings Banks	30.86	23.09	38.81	40.49	28.83
Commercial Banks	17.29	23.83	25.28	42.91	34.75
Individuals	19.23	26.83	47.27	45.52	36.88
Federal Land Bank	0	0	44.53	39.23	38.51
South Dakota School Fund	0	0	17.19	31.25	31.25
South Dakota Rural Credit	0	0	50.26	44.56	40.35
Mortgage Bankers	20.31	21.01	33.78	34.50	45.00
Miscellaneous	15.83	27.06	49.55	31.25	41.10

* The mortgages included here are all such as were outstanding, that is in force during the years specified. Naturally many of these had been recorded earlier than the year listed.

0. No loans.

Land Values and Ratio of Debt to Value

Stability in Land Values a Factor in Safety of Loans.—The ratio of debt to land value is of importance, not only at the time the loan is made, but also at all other times during the life of the loan. This ratio becomes especially significant when foreclosure becomes neccessary. For this reason, it may be well to give at least some consideration to the question of what determines land values and their stability. The total area of land is constant, and consequently it does not seem that the value of land should fluctuate on account of changes in the total potential supply. For the time being we may assume that the supply of land is constant. Hence, the factors influencing variations in value must be found in the economic productivity of the land. The economic productivity is determined by the physical productivity or yield, cost of production, selling prices of products, and the rate of interest at which the net return is capitalized. The variable factors include rainfall during the growing season, the price level, and the rate of interest. During the years considered the greatest variation has occurred in prices, and unfortunately, land values seem to have fluctuated mostly in harmony with the rise and fall of the price level. This is not the place to discuss price stabilization, but it seems appropriate to direct attention to the need for caution in either purchasing land or mortgaging land heavily during periods of abnormally high prices. A number of loans placed in 1918 to 1920 exceeded the value of the entire farm a few years later when prices had dropped. For this reason land values should be based on the expected average earning power of the land over a long period of years including periods of low as well as high prices.

Sale Prices Per Acre.—Table 28 presents the sale prices per acre in 1910, 1920, and 1930 in the three townships included in this investigation. In order to obtain a sufficient number of sales on which to compute a stable average, the results for each year are based on a three-year period ending with and including the specified year. Even by this means only nine sales were found on the records for the 1930 period. One reason for this is that many deeds on record hide the consideration behind the stock phrase "one dollar and other valuable considerations." On the basis of the available data, the average sale prices as shown in Table 28, were $45.59 per acre in 1910; almost three times this sum, or $121.48 in 1920; and by 1930 sale prices had declined to $74.03. The latter figure, however, is based on only nine sales. In view of these price changes it is obvious that a farm which was mortgaged to the limit with first and junior mortgages in 1920 would leave very little equity to the owner in 1930; if in the meantime no reduction had been made in the incumbrances. Census values for the entire county differ somewhat, but show the same general rise and fall.

TABLE 28.—Land values per acre as indicated by sales* and by the United States Census reports, 1910, 1920 and 1930.

Year	Sale Price Per Acre in 3 Townships	Census Value Per Acre for County§
1910	$ 45.59	$ 51.66†
1920	121.48 (1805 acres)	157.84‡
1930	76.60 (Only 9 cases)	72.99‡

* The sales cover those recorded during the three three-year periods, 1908-10, 1918-20, and 1928-30, and prices include both land and buildings.
§ These represent the value per acre of land and buildings.
† Thirteenth census of United States, 1910, Vol. VII, p 538.
‡Fifteenth census of the United States, 1930, Vol. II, Part I, pp 1148-49.

Ratio of Debt to Value Highest in 1930.—According to Table 29 the indebtedness on mortgaged farms in 1910 was equal to 45.7 per cent of the average sale price. Although the debts had increased greatly by 1920 the sale prices had also increased, so that the ratio of debt to value of land and buildings per acre of mortgaged land had risen only slightly to 49.1 per cent. The difficulty, of course, always comes after the inflation, and in 1930 the indebtedness was equal to 68.4 per cent of the sale values. The census ratio of debt to value for the entire county, based on owner-operated farms only, is considerably lower, as indicated in Table 29, but the relative changes are similar. These ratios clearly show the danger of borrowing to the limit when land values are abnormally high. The loans become inadequately secured because of the drop in land values, and furthermore the borrower may be unable to meet his payments and may thus through foreclosure lose all he has put into the farm.

TABLE 29.—The ratio of the debt to value of land and buildings per acre of mortgaged land, 1910, 1920 and 1930.

Year	Ratio of Debt to Sale Price in 3 Townships	Ratio of Debt to Census Value for County*
1910	45.7	25.7†
1920	49.1	25.9‡
1930	68.4 (Only 9 cases)	49.37§

* The census ratio of debt to value applies only to owner operated farms.
† Thirteenth census of United States, 1910, Vol. VII, p 546.
‡ Fourteenth census of United States, 1920, Vol. VI, Part I, p 675.
§ Fifteenth census of the United States, 1930, Agriculture, Vol. II, Part I, p 1191.

Land Purchases and Indebtedness

How Land Was Classified as to Sale or Non-Sale.—The period between 1910 and 1930 was first divided into four periods, as indicated in Table 30. During each five-year period each piece of land was classified either as sold or not sold during that period, without regard to what might have happened to such land during the preceding or succeeding periods. Only bona fide sales were counted; sheriff sales and sales to relatives were regarded as non-sales. According to Table 30 the land sold during the 1911-15 period constituted 31 per cent of all land. The most active period of land sales was in the 1916-20 period, when 44 per cent changed hands. During the next two five-year periods, this percentage was respectively 24 per cent and 15 per cent.

Sold Land Showed Higher Proportion Under Mortgage.—The significant point in this analysis is the evidence in Table 30 and in Figure 16 that the land which had been sold during any given period of either five, ten, fifteen or twenty years, on an average, carried a much higher indebtedness at the end of such period than was the case with land which had not been sold during the period. This seems a reasonable expectation, because the average farmer does not possess sufficient funds to pay cash for his land. He buys on time and generally gives a mortgage on the land as security for the share of the purchase price to be paid in the future. Because the net earnings in farming are small, it takes a long time to pay for a farm out of earnings. This may be one reason why a smaller percentage of sold lands were covered with mortgage at the end of the 20-year period than at the end of the shorter period. One point to remember here is that among lands which have been sold during a twenty-year period, there will be some that were purchased at the beginning of the period and on which the mortgage either has been reduced or paid off.

TABLE 30.—Comparison between lands which have not been sold and lands which have been sold during given periods as to the percentage of each class of land under mortgage, 1911 to 1930 inclusive.

		Lands Not Sold		Lands Sold	
Periods Covered	Length of Period in Years	Per Cent of All Land	Percentage Mortgaged	Per Cent of All Land	Percentage Mortgaged
1911-1915	5	69.0	45.9	31.0	83.2
1916-1920	5	56.2	47.0	43.8	89.6
1921-1925	5	76.4	57.5	23.6	80.7
1926-1930	5	85.4	56.6	14.6	76.4
1911-1920	10	44.2	39.7	55.8	86.2
1921-1930	10	60.5	53.7	39.5	68.3
1911-1925	15	37.3	41.5	62.7	78.3
1911-1930	20	34.0	44.8	66.0	67.3

Comparison of Debt per Acre on Sold and Unsold Incumbered Land During Periods of Rising Prices.—This comparison is presented in the first two five-year periods and in the 1911-1920 ten-year period in Table 31. These figures show that at the end of the period, the mortgaged land which had been purchased during the period was incumbered for a much larger amount than was the case with the mortgaged land which

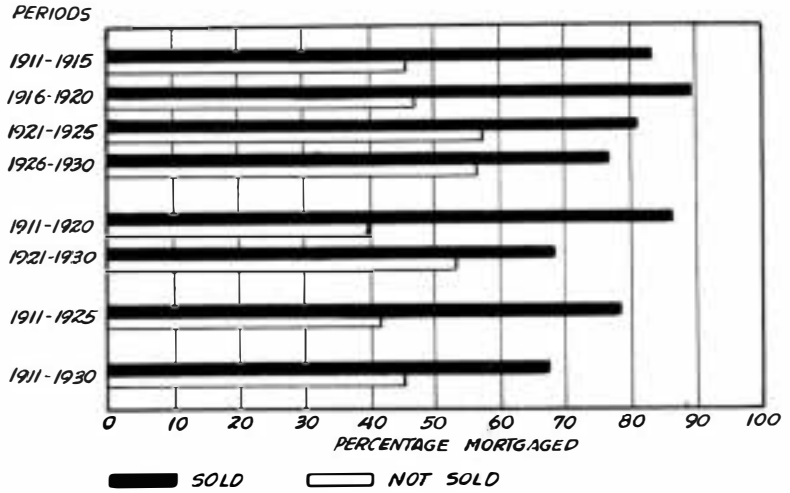

Fig. 16.—Comparison of lands which have been sold and lands which have not been sold during given periods as to percentage of the acreage of each class under mortgage at the end of each period. (Based on Table 30.)

had not been sold during the given period. This is naturally to be expected in view of the fact that during periods of rising prices farm lands sell at higher figures and consequently are mortgaged for larger amounts than the non-sold land. The mortgage on the non-sold land may be an old mortgage carried over from a period of lower loan values, and may also have been reduced by repayments.

Comparison of Debt per Acre on Sold and on Unsold Incumbered Land During Periods of Falling Prices.—Here the comparison refers to the period from 1921 to 1930 inclusive, as presented in Table 31. The same general trend is found whether one considers this period as one of ten years or as two five-year periods. It has been noticed that for the 1911-1920 period the sold and mortgaged land carried about twice as large a debt per acre as did the mortgaged land which had not been sold. Following 1920 a marked reversal of this trend seems evident. Thus, at the end of either the 1921-1925 period, the 1926-1930 period or at the end of the 1921-1930 period the indebtedness per acre on the mortgaged lands which had not changed ownership through sale and purchase was almost as large as on the mortgaged lands which had been sold during the respective periods. What are the reasons for this change? First, it must be remembered that we are now considering periods of falling land values. Consequently sales prices of land have declined and naturally the reduced values of the sold lands will support only mortgages that are smaller than many of the old mortgages on lands not sold. Many of the latter farms were mortgaged during the inflation years of 1918-1920 when much larger loans could be obtained than after the depression of 1921. Even if the farm remained in the hands of the same owner during all this period, the economic conditions were not such

as to permit rapid reduction or repayment of the large mortgages. Some debt reduction on mortgaged lands not sold may have come about through foreclosure by the holder of a junior mortgage. Such action would remove the junior mortgage or mortgages from the records, but the transfer of ownership would not be considered as a "sale" in the sense in which it is used here. On the other hand if a farm was foreclosed by the holder of the first mortgage all the junior mortgages would be wiped out, and if the new owner borrowed on the farm the loan would be for an amount in harmony with the reduced land values. Such a farm would also be classed as not sold. However, if this same owner who had acquired title through foreclosure then sold the farm and the new owner placed a mortgage on it, the land would be classed as sold, and this mortgage also presumably would be small in harmony with the reduced land prices.

TABLE 31.—Comparison between incumbered lands which have not been sold and incumbered lands which have been sold during given periods as to debt per acre in each class, 1911 to 1930 inclusive.

		Lands Not Sold		Lands Sold	
Periods Covered	Length of Periods in Years	Per Cent of All Land	Debt Per Acre of Mortgaged Land	Per Cent of All Land	Debt Per Acre of Mortgaged Land
1911-1915	5	69.0	$22.24	31.0	$40.09
1916-1920	5	56.2	36.07	43.8	75.82
1921-1925	5	76.4	52.75	23.6	59.95
1926-1930	5	85.4	46.21	14.6	46.33
1911-1920	10	44.2	31.97	55.8	70.05
1921-1930	10	60.5	44.96	39.5	47.77
1911-1925	15	37.3	40.76	62.7	58.95
1911-1930	20	34.0	40.89	66.0	47.82

Must Consider Kind and Extent of Activity in Land Transfers and Trend of the Price Level When Comparing and Analyzing Farm Indebtedness.—Comparison of two different periods or two different areas as to indebtedness may easily lead to erroneous conclusions unless the raw statistics are analyzed. Such analysis must take into account whether land prices have been rising or falling, whether bona fide sales have been numerous or infrequent, and whether land transfers have been the result of normal sales, gifts or foreclosures. The results of this, and of other studies indicate that periods of rising land prices result in increased land sales and larger farm indebtedess on the sold lands. During periods of falling prices a contrary tendency has been observed.

Conclusions

Economic Maladjustments Resulting from the War.—The period of inflation brought on by the World War raised land values and stimulated sales activity in farm land. Not only were the farms that were purchased at this time mortgaged for larger amounts, but many other farms as well, because of their higher security value, were incumbered for larger amounts. The increase in the debt per acre was relatively greater than the expansion in the acreage under mortgage. The collapse of

prices when the deflation set in at the end of 1920 wrecked many farmers who had purchased land or had increased their farm indebtedness on the basis of the inflated war and post-war price levels. The evidence of this can be found in high proportion of delinquency and foreclosure beginning in 1921.

Some Debt Revision Desirable.—A farm indebtedness in excess of the carrying capacity of the farm cannot be maintained. Such a situation may be changed either by foreclosure or by mutual arrangement between borrower and lender. Even though the borrower has lost his nominal equity in the farm due to its value having declined to an amount equal to or less than the incumbrances, he may sustain further losses if he is forced off the place and has to reestablish himself either as a tenant or a buyer of another farm. The mortgagee may also suffer loss through foreclosure. If he is a non-resident it will be expensive to supervise the renting of the place. Taxes and interest accumulated during the year of redemption and the cost of foreclosure may make it impossible to sell the farm for all it has cost him. In view of these possibilities, many debtors and creditors have found it mutually advantageous to make concessions to avoid foreclosure.

Precautions for the Future.—It is important to guard against purchasing land at inflated prices. This is especially difficult and dangerous during periods when the general price level is abnormally high. At such a time it is not safe to assume that the price of one farm is reasonable because another farm has been sold for as much or more. The same reasoning applies to the size of the mortgage loan. One must then attempt to determine the probable long-time trend of prices and farm income, and not to assume a larger obligation than a conservative estimate indicates can be carried after prices decline. If such a conservative policy were followed by all borrowers and lenders, farm indebtedness would not increase by leaps and bounds when prices are high, only to be painfully constricted by foreclosures when prices fall.

Need Loan of Longer Term and Annual Repayments.—Farm indebtedness in the United States is not a temporary affair. The general tendency has been for such indebtedness to increase. This being the case it is absurd to continue with the traditional five-year loan. We are only deluding ourselves if we assume that the average five-year farm loan really will be paid at maturity. Furthermore, such a loan is conducive to the perpetuation of a large volume of farm indebtedness. On account of the relatively large investment and small net return in agriculture, it takes a lifetime to liquidate the purchase price of a farm. The farmer must therefore be given a long-term contract similar to the amortization loans of the Federal Land Banks. He needs low interest rates and a systematic plan for reducing the principal of the loan every year. Furthermore, there should be some flexibility in the plan in order that the borrower shall not become delinquent and lose his farm during temporary periods of reduced income.

Summary

This study is based on the county records for three townships during the period from 1910 to 1930 inclusive. Only every fifth year has been studied.

The volume of indebtedness rose from $731,537 in 1910 to $2,702,565 in 1920, and then declined to $1,829,517 in 1930. On an index basis this equals 100, 369, and 250.

The acreage under mortgages was 35,139 in 1910; 45,316 in 1920; and 40,211 in 1930. The corresponding index numbers, 100, 129, and 114, when compared with those for indebtedness, show that it was the debt per acre rather than the number of acres under mortgage that increased most rapidly.

The average indebtedness per acre increased rapidly from $20.82 in 1910 to $59.64 in 1920, and at $45.50 per acre in 1930 was more than twice as large as in 1910. The comparable index numbers are 100, 286 and 218.

Foreclosures came only after 1920. During 1921-1925 inclusive they amounted to $346,135, and during the next five years ending with 1930 inclusive the amount was $171,465. During the ten years following 1920, 19.2 per cent of the 1920 indebtedness was terminated by foreclosure. During the same period 25.6 per cent of the 1920 incumbered acreage was foreclosed. Naturally some pieces of land were involved in more than one foreclosure.

The delinquencies as indicated in Table 12, were lowest in 1920 and highest in 1930. Because all the pertinent information is not available from the county records, these data may not be exact, although efforts were made to obtain correct information from borrowers and lenders.

Seventy-two per cent of the recorded first-mortgage farm loan funds came from individuals in 1910, and in 1930 insurance companies were the most important source and accounted for 66 per cent of the total of such mortgages on record.

Individuals and commercial banks have supplied most of the second-mortgage funds.

First-mortgage interest rates have averaged close to 5.5 per cent and 6 per cent, not counting commissions. Rates on second-mortgage loans have been higher.

The length of term of first-mortgage loans has been predominantly five years. Second-mortgage loans have had shorter terms.

The ratio of debt to sale price was 45.7 in 1910; 49.1 in 1920 and 68.4 in 1930.

Land which had been purchased during a given period showed a much higher percentage under mortgage than land which had not changed ownership. The debt per acre of mortgaged land was also higher on the sold lands. This was especially true during periods of rising prices from 1910 to 1920. During periods of falling prices from 1920 to 1930, sold lands could be mortgaged only in proportion to their reduced value, while many lands that had not been sold were still carrying large loans from the inflation period. This brought the amount of debt per acre on the two classes of land closer together.