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Farm Mortgage Experience in South Dakota: 1910-40

G. Lundy

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FARM-MORTGAGE EXPERIENCE

In South Dakota

1910-40

“There is no magic about credit. It is a powerful agency for good in the hands of those who know how to use it. So is a buzz saw. They are about equally dangerous in the hands of those who do not understand them.”—T. N. CARVER

But, if national policies foster inflation that permits larger debts, followed by deflation resulting in wholesale foreclosures, is the borrower alone responsible?

AGRICULTURAL ECONOMICS DEPARTMENT
AGRICULTURAL EXPERIMENT STATION
SOUTH DAKOTA STATE COLLEGE, BROOKINGS

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Farm-Mortgage Experience in South Dakota, 1910-40

With Special Reference to Three Townships¹ in Each of the Counties
of Brookings, Clark, Haakon, Hyde, and Turner

By GABRIEL LUNDY²

The rise and fall of prices as a result of the war inflation and post-war depression associated with World War I form the background for this study of farm mortgage experience in South Dakota. As such it may constitute to prospective farmer-borrowers a timely warning of potential economic dangers in a world again at war.

This bulletin summarizes the result of previous research³ covering the years, 1910-1930, by five-year intervals and brings the information up to date as of the end of 1940. The study is based largely on farm-mortgage data from the offices of Register of Deeds covering three townships in each of the five counties of Turner, Brookings, Clark, Hyde, and Haakon. (Fig. 1) These areas were originally selected as being representative of their respective surrounding territories. The data from the county records were supplemented by means of correspondence with borrowers and lenders.

Purpose of Study

Credit can either hasten or hinder a farmer's economic progress, depending on circumstances surrounding its use. It has, therefore, seemed desirable to obtain information on the sources and volume of mortgage credit used, as well as such data on credit failures as are revealed in the foreclosure records. It seems appropriate during this World War II period to review and draw a lesson from the farm-loan experience during and following World War I, in order to avoid a repetition of its excessive expansion in land prices and farm mortgages and its aftermath of mortgage foreclosures. Inflated land prices and speculative activity in land transfers may also impede the war effort by diverting funds away from necessary war financing.

Changes in Indebtedness

War-time Expansion; Post-war Contraction. Total amounts of farm-mortgage debt differed enormously in the five sample areas, but all were greatly expanded during the World War I inflation period, 1917-20, and were later greatly reduced, but not without hardship. (Fig 2, and Table 1).

The largest percentage expansion in the total indebtedness since 1910 occurred in the Brookings county sample area. Debt in this area in 1920 was almost 3.7 times as large as in 1910. Maximum debt reached in the Turner county area was proportionally a little larger than in the other areas west of Brookings, at its

¹ These townships are: Brookings—Twp. 110, 111, and 112, N., Range 49, W.; Clark—Twp. 117, N., Ranges 57, 58 and 59, W.; Haakon—Twps. 4, 5, and 6, N., Range 20, E.; Hyde—Twps. 113, 114, and 115, N., Range 73, W.; Turner—Twp. 98, N., Range 52, 53, and 54, W.

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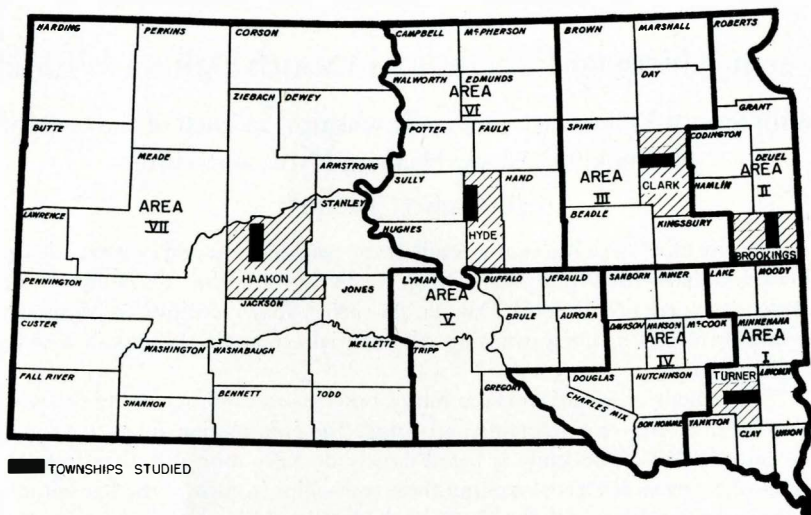


Fig. 1. Map of South Dakota. The mortgage data were obtained from three townships, shown in black, in each one of the shaded counties, Haakon, Hyde, Clark, Brookings, and Turner.

peak being 2.83 times the 1910 amount. In Clark and Haakon the indebtedness peaks were respectively 2.74 and 2.77 times the 1910 amount. The area studied in Hyde county is the only area where the indebtedness did not more than double, the 1920 amount being 1.68 times that of 1910, the smallest percentage increase found in any of the five areas. The reason for this is that the 1910 indebtedness was relatively large.

Of the five areas studied, all but the Turner county area had smaller indebtedness in 1940 than in 1910. In the sample areas of Clark and Haakon counties the first-mortgage debts were larger in 1925 than in 1920, in spite of the depression that began in 1921. One probable reason for this is that farmers who had unsecured short-term debts were pressed to pay up and they obtained the funds by enlarging first mortgages in Clark county and mortgaging more land in Turner county. (For acreage see Fig. 3 and Table 2). Furthermore, part of the increase occurred during the next few months following 1920 as a result of filing land-boom mortgages after some delay in obtaining clear title. Use of junior-mortgage loans¹ also increased considerably during the World War I inflation period. Such loans increased both in amount and as a percentage of the total mortgage debt. By 1940, however, the amount of junior-mortgage loans was smaller than in 1910 in all areas. The proportionately more rapid reduction in junior-mortgage financing which set in after 1920 or 1925 was not continued up to 1940. (See Fig. 2) One reason for this was the introduction of the Federal Land Bank Commissioner's second-mortgage loans in 1933. Many of these commissioner's second-mortgage loans were used in the areas studied, together with a Federal Land Bank or other first-mortgage loan, to refinance old loans. The earlier practice of making third-mortgage loans, however, seems to have been almost discontinued by 1940. (Table 1, page 26).

¹ Junior mortgages are those below the first mortgage such as second, third or fourth mortgages.

Acreage Under Mortgage and Debt per Acre

Acreage Under Mortgage Varies. The acreage covered by mortgage increased considerably from 1910 to 1920 in every sample area except in Hyde county where there was only a 1 percent increase and in Turner with a 9 percent expansion. In every county the 1940 acreage under mortgage was less than in 1910. (Fig. 3 and Table 2). Turner county, possibly the oldest in point of settlement of the five areas studied, shows the greatest stability in acreage of land under mortgage, and is the only area with more such land in 1925 than in 1920. Hyde shows relatively the largest decrease since 1910; it is also the only area where the 1910 mortgaged acreage was almost as large as the 1920 peak, and where there was a reduction from 1910 to 1915. This is accounted for by the fact that the 1910 acreage under mortgage in the Hyde county area was exceptionally large because of extensive sale and mortgaging of real estate between 1905 and 1910. The reduced acreage under mortgage in 1915 was due to foreclosures and reduced optimism following a drought and complete crop failure in 1911.

It is obvious from a comparison of Fig. 2 and Fig. 3 that the total indebtedness increased proportionately much more up to 1920 or 1925 than did the acreage of mortgaged land. In other words the debt expansion was more a result of larger debts per acre than of more land being encumbered.

The acreage under mortgage can also be considered from the point of view of the percentage of all land in each area subject to mortgage. According to Table 2 the Haakon and Turner areas had the smallest percentages, being below 50. Hyde and Clark were just above 50 percent, and Brookings led with a maximum of almost two-thirds of its area under mortgage in 1920. Hyde had

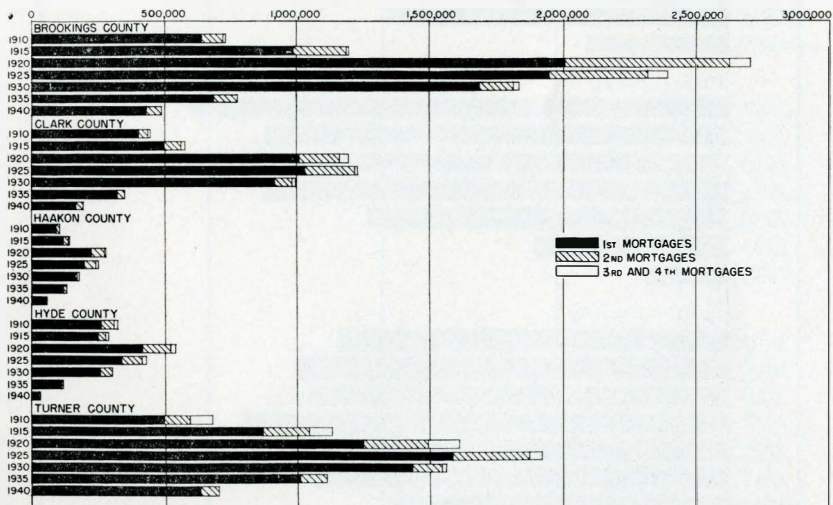


Fig. 2. Total amounts of mortgage indebtedness, and amounts in first, second and third mortgage loans, in three townships in each county every fifth year, 1910–1940. Based on Table 1, page 26.

the highest percentage of any area under mortgage in 1910, more than 50 percent, but had the least in 1940.

Debt per Acre Increases and Decreases. The peak in debt per acre of mortgaged land was reached in 1920 in the Hyde and Brookings areas. The other

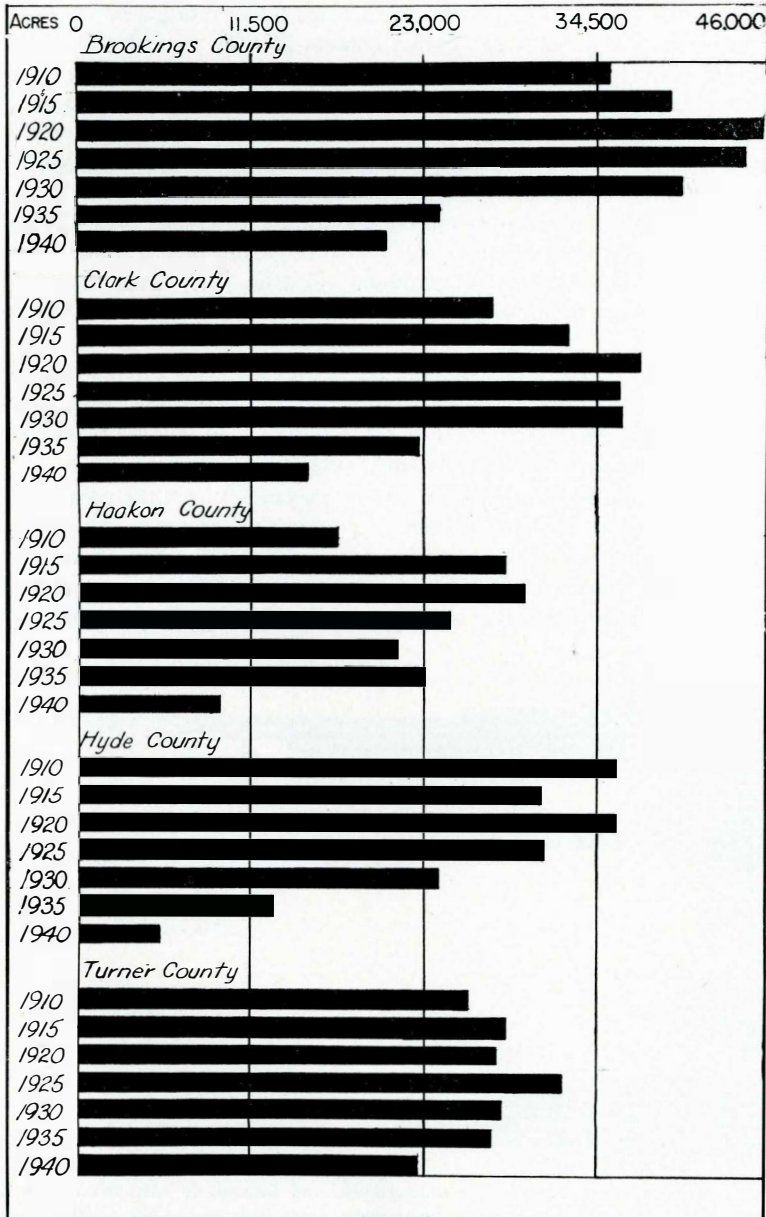


Fig. 3. Acreage under mortgage in three townships in each county every fifth year, 1910-1940. Based on Table 2, page 26.

three counties did not attain their maximum debt per acre until 1925. (Fig. 4 and Table 3). It is to be remembered that the data are presented in this study only for every fifth year; the absolute maximum may have been reached some other year. As previously indicated, and as a comparison of Figs. 2 and 3, and supporting Tables 1 and 2 will show, the total indebtedness was increased chiefly by placing larger loans per acre rather than by mortgaging more land. In the Haakon county area the debt per acre declined between 1910 and 1915. The reason for this is that many homesteaders, after having received patents to their lands shortly before 1911, had mortgaged their homesteads as security for loans. After the exceptionally dry year of 1911 foreclosures eliminated many loans that were large per acre. During the period of decline after 1920 or 1925, however, since foreclosure was one prominent method of debt reduction in all the areas, shrinkage of the acreage under mortgage accompanied the debt reduction. As a consequence the Turner and Brookings areas had larger debts per acre of mortgaged land in 1940 than in 1910.

Taking their respective 1910 debts per acre as a 100 percent base for purposes of comparison, these areas rank as follows in descending order as to increase up to their respective peaks in debt per acre of mortgaged land: Brookings, Turner, Clark, Haakon, Hyde. There were much greater differences between these areas as to absolute amounts of debt per acre during any one year than as to the proportional changes in the per acre debt from one period to another.

Foreclosures

Foreclosures "Normal" Until 1920. Farm mortgage foreclosures were small during 1911-15 and 1916-20. Only in the Haakon and Hyde areas did foreclosures during either of these periods reach 2 percent or more of the volume of loans in effect at the beginning of each period. Except for the 1911-15 period in Haakon county, foreclosure records seem to indicate relatively favorable economic conditions among farmers from 1910 to 1920. The midwestern and western counties by 1910 had experienced a land "boom" and mortgage expansion based on anticipated, but later unrealized, income from the land. Farm-mortgage reductions there between 1910 and 1920 might be considered normal and somewhat unavoidable adjustments in the process of finding out the productive possibilities of the regions.

As previously mentioned active, optimistic land sales by use of purchase money mortgages in Hyde county during 1905-10, and in Haakon county mortgaging of land by homesteaders who had obtained patents to their homestead lands about the same time, laid the basis for the relatively heavier foreclosure activity in those areas prior to 1921. Both counties reportedly lacked moisture in 1911, although the average precipitation for the state was considerably less in 1910. In Haakon county some homesteaders left after obtaining a mortgage loan on the land, deciding that it was not a farming country. At that time foreclosures in Haakon county involved relatively much land and little money because of small loans per acre.

Post-war Depressions Bring Increased Foreclosures. The great expansion in foreclosures during the 1921-25 period, great both in amount and in comparison

with the previous period; is evidence, not of lack of adjustment to geographic environment, but of economic maladjustment brought on by World War I. (Fig. 5, Table 4). From 1910 to 1920 mortgage debts per acre had increased by percentages ranging from 61 in Haakon to 186 in the Brookings area. Prices

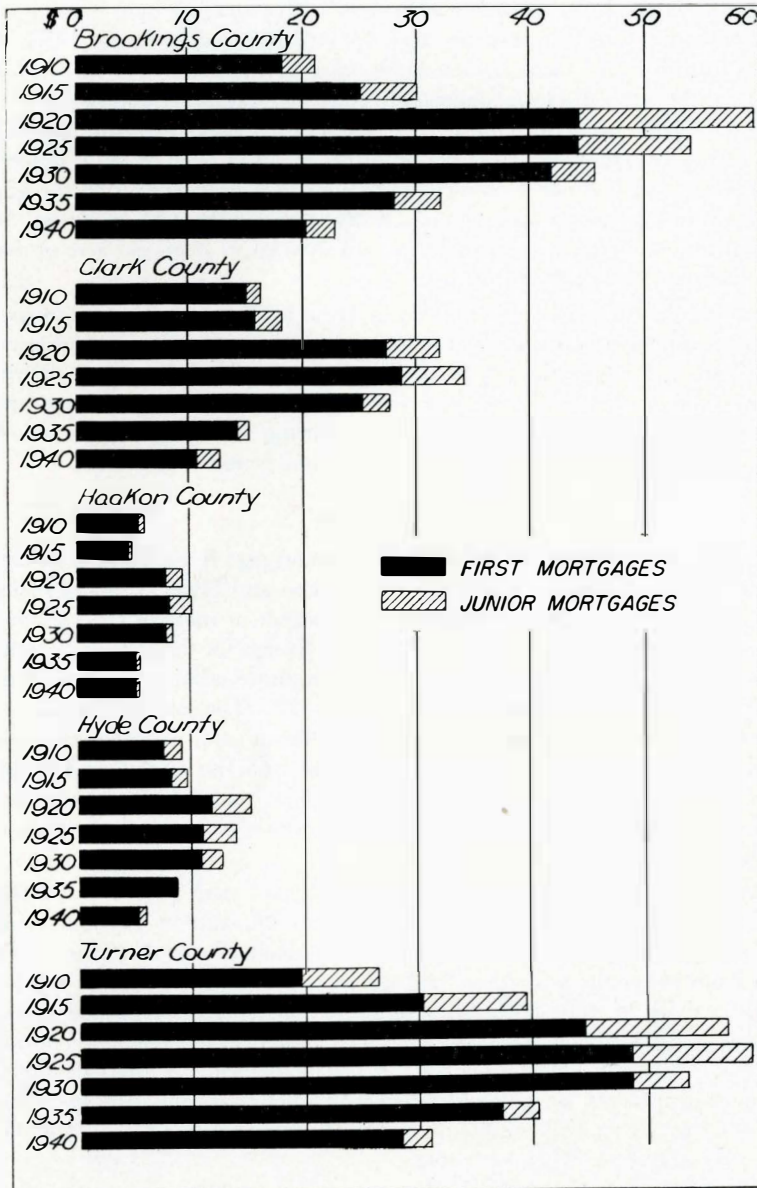


Fig. 4. Total indebtedness per acre of mortgaged land in 3 townships in each county. divided into first and junior mortgage loans every fifth year, 1910-1940. Based on Table 3, page 27.

received by South Dakota farmers, as measured by index numbers with a 1910-14 base of 100, had risen from an index of 93 in 1911 to 218 in 1919, a gain of 134 percent. This price inflation led to higher money income from farming, speculation in land, higher land prices and larger mortgages. Of course, prices paid by farmers also rose, but up to 1919 they rose more slowly than did prices received. By 1920, however, the index number of prices paid was 8 points higher than that of prices received. And when the 1921 index of prices received dropped to 106, or less than half of 1919, the index of prices paid stood at 141. This gave farmers a 35 point price disadvantage, and many of them were unable to pay interest and installments on their greatly expanded mortgage debt. Naturally, contractual obligations, like mortgage loans, do not automatically decline with market prices, and consequently for many farmers the disparity between prices received and inflated debts to be paid became much greater than 35 points. The resulting increase in foreclosures during 1921-25 is most noticeable in the Brookings area. (Fig. 5, Table 4). The dependence of the rural banks on farm prosperity is indicated by the fact that the volume of bank failures coincided markedly with farm mortgage foreclosures.

Foreclosures in the 1926-30 period as compared with 1921-25 varied from a slight increase in Clark county and a slight decrease in Turner to a considerable decrease in the other counties. (Fig. 5.)

The secondary post-war economic depression and low agricultural prices of the early 1930's was accentuated by the drought. With low prices and little to sell many indebted farmers who had escaped foreclosure during the first post-World War I depression of 10 years earlier became unable to meet their mortgage obligations. The amounts of mortgage loans terminated by foreclosure in the Brookings, Clark, and Turner areas during the 1931-35 period as compared with 10

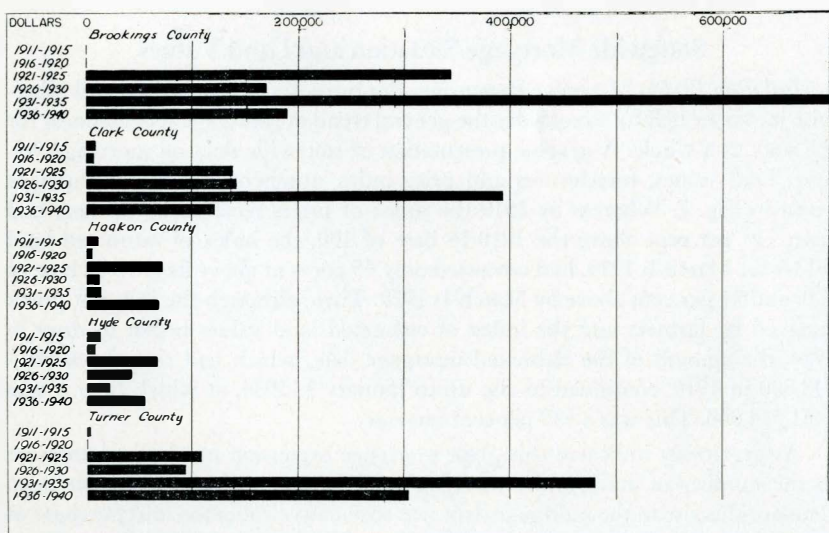


Fig. 5. Dollar volume of mortgage foreclosures in three townships in each county during successive five-year periods, 1911-1940. Based on Table 4, page 27.

years earlier, were respectively doubled, trebled, and quadrupled. (Fig. 5) Even during the 1936-40 period foreclosures in all five sample areas were much larger than prior to 1921. Because of the time involved in completing foreclosure many of the 1936-40 foreclosure actions naturally were caused by low yields in the middle 30's and by low prices earlier. Fig. 6 and Table 5 show the acreage involved in foreclosures.

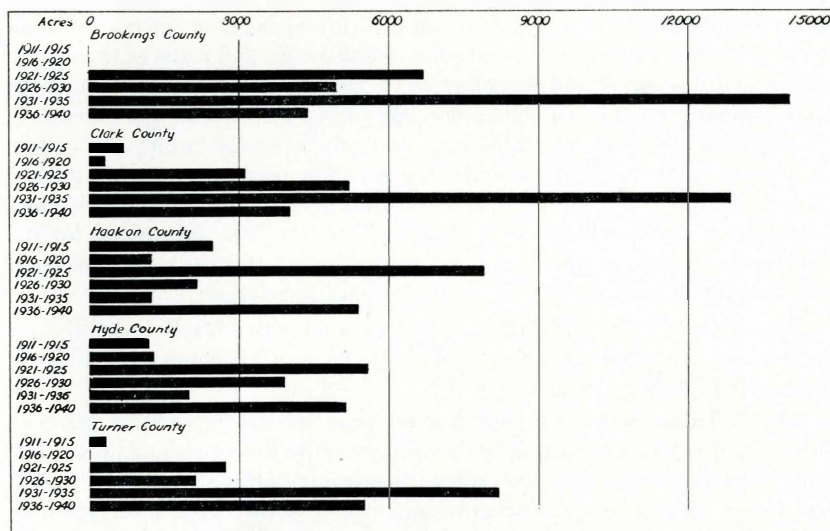


Fig. 6. Acreage involved in mortgage foreclosure in three townships in each county during successive five-year periods, 1911-1940. Based on Table 5, page 27.

Statewide Mortgage Situation and Land Values

Inflation Brings Mortgage Expansion. For purposes of comparison and otherwise it may be helpful to consider the general trend of mortgage indebtedness for the state as a whole. A graphic presentation of statewide data on mortgage volume, land values, foreclosures and price index numbers of farm products, is given in Fig. 7. Whereas by 1919 the index of prices received by farmers had risen 118 per cent above the 1910-14 base of 100, the index of estimated land values for March 1, 1919, had advanced only 45 per cent above its 1912-14 base of 100, and 81 per cent above by March 1, 1920. Then, although the index of prices received by farmers and the index of estimated land values began to drop in 1920, the amount of the estimated mortgage debt, which had risen from \$84,943,000 in 1910, continued to rise up to January 1, 1924, at which time it was \$461,513,000. This was a 443 per cent increase.

As previously indicated this great mortgage expansion involved an increase in the number of acres under mortgage and larger mortgage loans per acre. Cause of this rise in the mortgage debt was speculative valuation and purchase of land as a result of the war-generated price inflation. Generally such purchases were made with only a partial cash payment and a mortgage on the land given

as security for the remainder of the purchase price. Continuation of the mortgage expansion during the 1921-23 depression years in spite of lower prices, as previously mentioned, appears to have been due to farmers' short-term debts being converted into farm-mortgage loans at the insistence of creditors, and to delayed recordings of earlier loan mortgages.

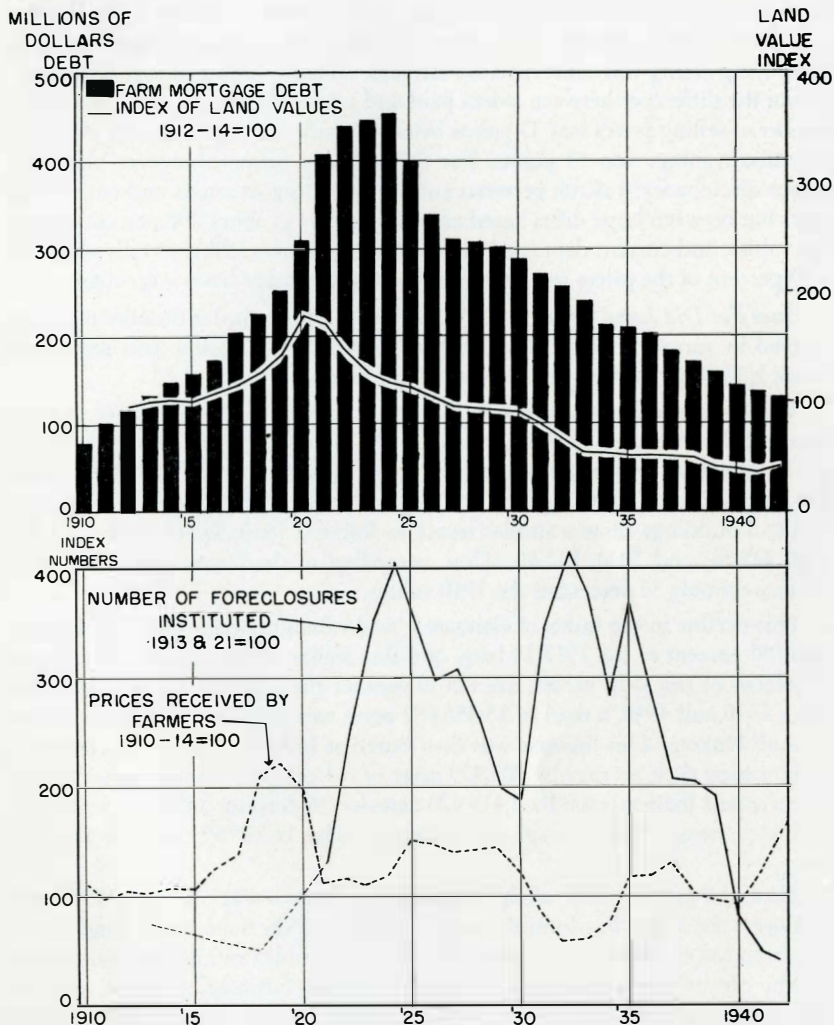


Fig. 7. Upper graph: Estimated amount of farm-mortgage debt in South Dakota as of January 1 each year. Index numbers of estimated land values per acre in South Dakota as of March 1 each year. 1912-1914 equals 100. Covers all land in farms including improvements. Data from Agricultural Finance Review, B.A.E., U.S.D.A.

Lower graph: Index numbers of the number of farm-mortgage foreclosures instituted in South Dakota each year (average of 1913 and 1921 equals 100.) Data assembled by Agricultural Economics Department, S. D. Agricultural Experiment Station. Index numbers of prices received by South Dakota farmers. 1910-1914 equals 100. Data from South Dakota Crop and Livestock Reporting Service.

Foreclosure Follows Deflation. By January 1, 1925, the decline in new mortgage loans recorded and the rapid expansion since 1921 in farm-mortgage foreclosures had brought on a trend toward farm-mortgage debt reduction. This continued for seventeen years until 1942. During the 1921-40 period more than 11,000,000 acres of South Dakota land were involved in foreclosures. Peaks in farm mortgage foreclosures came during the depressions of early 1920 and the early 1930's when farmers' selling prices fell far below their cost prices. As far as debt paying ability was concerned the farmers' economic disadvantage was greater than the difference between prices paid and prices received. In 1921 the index number of selling prices was 35 points below the index of cost prices. In 1932 this price disadvantage was 44 points. For the indebted farmer, however, the most serious discrepancy was not between current operating expenses and current receipts but between large debts based on selling prices at about 200 percent of pre-war values, and current depressed income from products selling at only about 25 or 30 percent of the prices received when the big mortgage loans were made.

How Far Did Land Prices Fall? With the drop in the index number of prices received by farmers from 218 in 1919 to 106 in 1921, a decline was registered March 1, 1921, in the index of estimated land values.

This index number declined for 20 years from 1921 to 1940 inclusive. On the basis of 1912-14 being 100 this index reached 181, or an 81 percent rise, by 1921, and by March 1, 1941, reached a low of 40 percent of its pre-World War I base. The United States Census figures of average value per acre of South Dakota farm land and buildings show a similar trend, as follows: 1910, \$38.63; 1920, \$71.40; 1930, \$35.24; and 1940, \$12.80. Thus, according to the Census, the 1940 land values were only 33 percent of the 1910 values.

This decline in the index of estimated land values between 1920 and 1940 to about 40 percent of the 1912-14 base, and the decline in the census valuation to 33 percent of the 1910 values, are not altogether the result of lower prices. Between 1910 and 1940, a total of 13,456,692 acres was added to the land in farms in South Dakota. This increase was distributed as follows: The 23 eastern counties increased their acreage by 305,429 acres or 3.4 percent. The 22 central counties increased their acreage by 2,415,670 acres or 26 percent, and the 23 western counties increased their acreage of land in farms by 10,735,593 acres or 141 percent.

Thus, the greatest bulk of the expansion in farm acreage between 1910 and 1940 occurred in the less humid western one-half of the state where land prices have been lower than in the eastern part. Both this index number of land values and the census valuations, being expressions of the estimated average value of land in the state, naturally were lowered during the latter part of the 1910-40 period by the inclusion of more price quotations or estimates on lower-priced western lands.

Obviously, acquisition of large acreages of land by involuntary owners through mortgage foreclosure proceedings increased the supply of land for sale to a point where the supply exceeded the demand at the old prices. Normally such a situation is price depressing. Another reason given for the drop in reported land values between 1910 and 1940 is that in the years before World War I

values were higher than were justified by incomes in later years. According to the U. S. Census Reports the average debt on mortgaged land in South Dakota was equal to 21.2 percent of the value in 1910. The indebtedness increased with the war inflation and was 21.8 percent of the value of the mortgaged land in 1920. Then, when the deflation set in, land values dropped more rapidly than debts could be paid with the result that the ratio of debt to value of mortgaged land rose to 39.3 percent in 1930 and reached 57.6 percent in 1940.

Taxes Become Burdensome. Taxes were also substantially more of a burden during the depression than before World War I. Taxes per acre rose from an average of 12 cents in 1910 to 45 cents in 1920, 44 cents in 1930 and in 1940 were down to 22 cents¹ per acre or 83 percent above the 1910 rate. Actually this underestimates the increase in the tax burden per acre because, as previously mentioned, the 1940 figures cover relatively more cheap western land with lower per-acre taxes than in 1910. Public expenditures and taxes rise during a period of inflation and tend to stay up. This is evidenced by the fact that the tax levies per acre rose 28 cents during the five years from 1915 to 1920, but declined only 23 cents during the following 20 years.

States surrounding South Dakota have experienced similar expansion and contraction in the volume of mortgage indebtedness and land values. Until 1940, however, the mortgage contraction since 1923 and the value shrinkage since 1910 were most marked in South Dakota.

One obvious conclusion to be drawn from this farm-mortgage history is that there is serious financial risk involved in going heavily into debt during a period of high prices. Such a period, on the other hand, is a good time during which to pay old debts and to buy only for cash.

Sources of Mortgage Funds

First-Mortgage Funds Shift. Referring again to the five sample areas, some important shifts in sources of first-mortgage funds have taken place, especially in Brookings, Clark and Turner counties between 1910 and 1940. (Fig. 8 and Table 6). There has been a marked reversal in the relative proportion of the mortgage loans of record held by individuals and by life insurance companies. In 1910 insurance companies held 17.2 percent, 13.3 percent and 23.4 percent, respectively, of the amounts of all first-mortgage loans in Brookings, Clark and Turner counties. Individuals accounted for, respectively, 72.1, 62.8, and 52.9 percent. By 1930 the relative importance of these two types of mortgage holders had been completely reversed. The holdings of individuals in the three counties had declined to 16.5, 13.6 and 19.0 percent, respectively. Insurance company holdings, on the other hand, had increased to 67.1, 54.0 and 71.2 percent of all first-mortgage loans respectively in the three sample areas in Brookings, Clark, and Turner counties. Considerable increase had already taken place by 1925.

The subsequent trend of insurance company holdings presumably indicates changes based on experience and a desire to make appropriate adjustments both as to individual loans and as to the geographic distribution of loans according to

¹ Agricultural Finance Review, Vol. 5, November 1942.

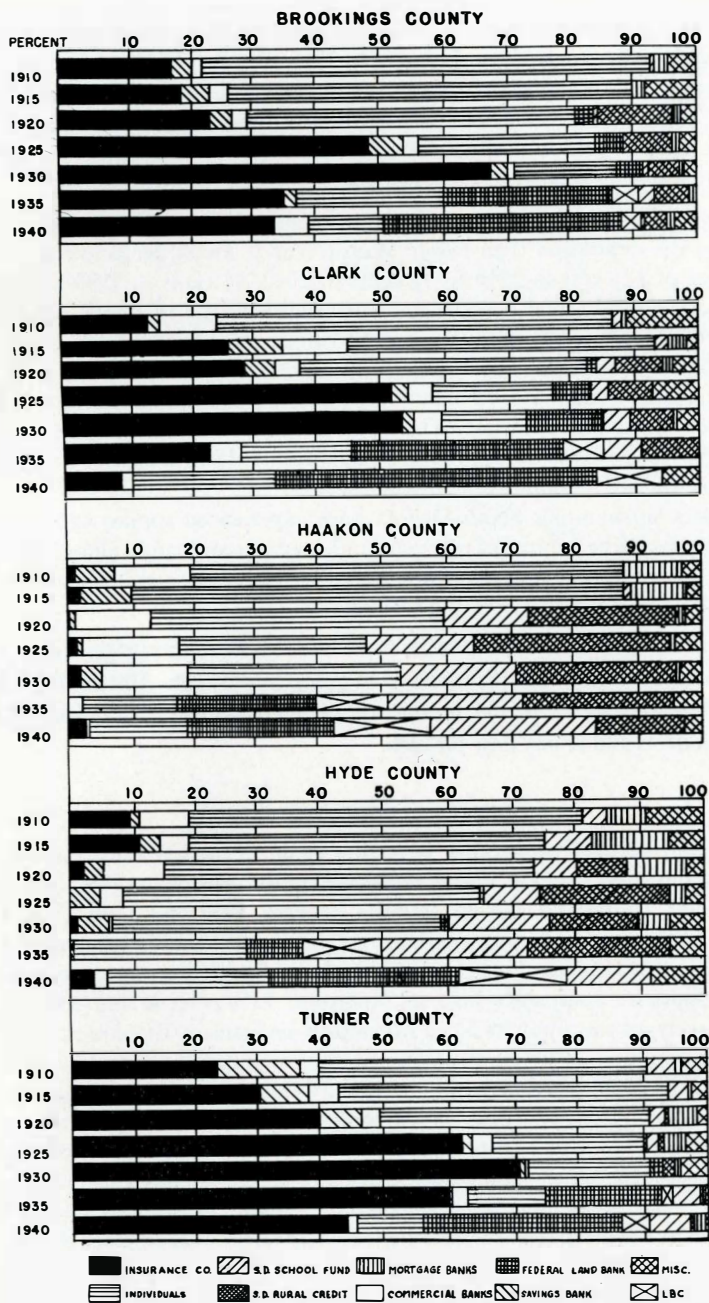


Fig. 8. Percentages of first-mortgage funds obtained from various sources, in three townships in each county, every fifth year, 1910-1940. Based on Table 6, page 28.

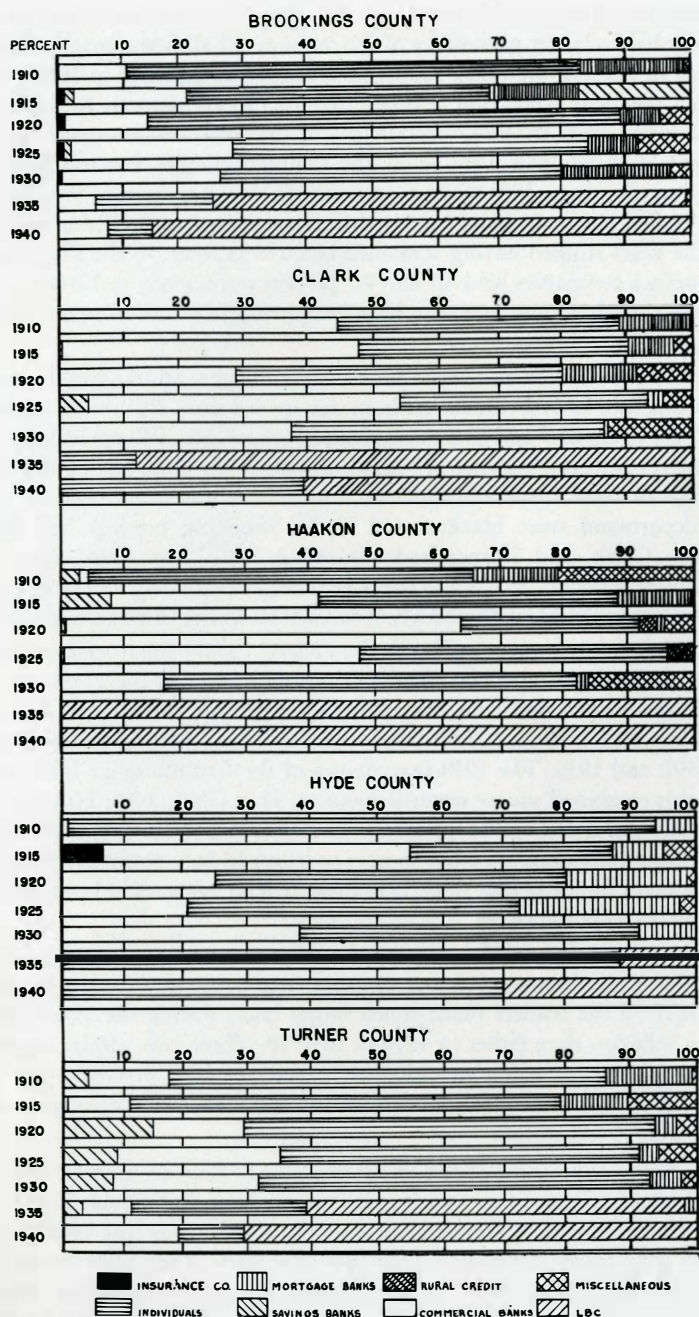


Fig. 9. Percentages of second-mortgage funds obtained from various sources, in three townships in each county, every fifth year, 1910-1940. Based on Table 7, page 29.

relative safety. In both the Turner and Brookings county areas, the insurance companies held a larger percentage of the amounts of all first-mortgage loans in 1940 than in 1920. In the Clark county area the percentage held in 1940 was less than even the 1910 proportion, a drop from 13.3 to 7.4 percent. In the Turner and Brookings areas the 1940 percentages of the total first-mortgage loan volumes held by individuals were below the 1930 percentages, but in Clark there was an increase from 13.6 to 24.3 percent. In Haakon county area the percentage of first-mortgage loans held by insurance companies has been negligible for all the years studied having remained below 4 percent. In the Hyde county area insurance companies held 8.1 and 9.7 percent respectively in 1910 and 1915. Since then their holdings appear to have been negligible both as to amount and percentage.

For both the Haakon and Hyde county areas the general trend in the proportion of loans held by individuals has been downward since 1910; the percentages for that year being 69.7 and 63.2 respectively. Comparable 1940 percentages were 13.2 and 27.3 percent. A glance at Fig. 8 shows that the areas having the largest percentage of their first-mortgage loan funds from the South Dakota Rural Credit department were Haakon and Hyde; Brookings possibly had slightly more than Clark, and Turner had almost no funds from that source. The South Dakota school fund has also supplied a larger percentage of the first-mortgage amounts in the Haakon and Hyde areas than in the three eastern areas.

As a source of first-mortgage funds the Federal Land bank, together with the Land Bank Commissioner has increased in importance. In the Haakon, Hyde and Turner county areas loans from this source did not show up in significant proportions until 1935 and 1940. Clark and Brookings had relatively more between 1920 and 1930. The 1940 percentages of the first-mortgage loan volume held by this combined source were: Brookings, 41.8; Clark, 60.5; Haakon, 40.1; Hyde, 44.2; and Turner, 36.1 percent. This does not mean that these federal agencies are supplanting the other sources of loans. In fact, recent evidence from various sources indicates that since 1940 these federal agencies have been declining in relative importance.

As to amounts loaned per acre by the various agencies, the record shows greater uniformity between lending agencies than between areas. In Brookings and Turner all the lenders made much larger loans during the World War I period of inflation than either in 1910 or in 1940. There was similar expansion and subsequent contraction in amounts loaned per acre in Clark, but on a smaller scale. Hyde and Haakon showed the smallest loans per acre, and the least inflationary expansion.

Individuals and Land Bank Commissioners Provide Second-Mortgage Funds. Second-mortgage loan funds came mainly from individuals in the years up to and including 1930. In the Hyde county area this was true even for 1935 and 1940; absentee land ownership and few new loans in the Hyde county area may have contributed to this situation. In the other areas the second-mortgage Land Bank Commissioner's loans dominated the field in the latter years. In Haakon this was true to the extent of 100 per cent. Commercial banks also have extended significant percentages of the second-mortgage funds. In many cases,

however, such mortgages represent additional security on short-term loans rather than outright loans on second-mortgage security. By 1940 only the Brookings and Turner areas had second-mortgage commercial bank loans on record. (Fig. 9 and Table 7).

Bank Failures. The economic loss to the state from financial instability in agriculture is not confined to farmers alone. Most of the large real estate lending agencies operating in South Dakota appear to have survived the depressions between 1920 and 1940. With respect to many of these, their holdings of South Dakota farm loans were small relative to their other investments. Such was not the case with the country banks. From the end of 1920 to the end of 1940 the number of banks in South Dakota was reduced from 702 to 164. At the latter date, however, there were 38 branch offices making 202 bank offices in all.

This loss of 538 banks between 1920 and 1940, a loss of more than three-fourths of the 1920 number, obviously can not be ascribed entirely to financial failures in farming. Some bank failures were due to poor banking, others may have been due to uncollectible loans to non-farm borrowers. Nevertheless, in a state as predominantly agricultural as South Dakota these extensive bank failures must be interpreted as being, to a considerable extent, due to financial distress among farmer depositors and farmer borrowers.

Small-town merchants as well as most other people of the state, being directly or indirectly dependent for success on agricultural prosperity, have also been adversely affected by the farmers' plight.

Interest Rates

Many Factors Influence Cost of Loans. Interest rates on loans at any given time naturally vary with the supply of loanable funds in relation to the demand for loans. Old, prosperous communities usually have lower rates than pioneer areas. Rates also vary with the quality of the security offered or risk involved, but even a good loan may be unattractive unless the lender is familiar with the borrower's credit standing. The marketability of the security normally influences the rate. Consequently, the efficiency of the financial organization acting as a contact agency between borrowers and lenders is an important factor affecting interest rates. The size and term of loans also influence the rate. In a number of cases actual rates have been lower than contract rates because of refinancing, lowering of rates and subsidies to the Federal Land Bank and Land Bank commissioners.

First-Mortgage Interest Rates Are Lower. The general trend in rates in all five areas between 1910 and 1940 was downward. (Table 8.) Furthermore, rates in the early period were much higher in the western counties, but by 1940 the rates in the different areas were more nearly uniform. In the Haakon area the first-mortgage interest rate declined from 8 percent in 1910 to 5.5 percent in 1940, whereas in Turner the rate declined from only 5.6 percent to 5.3 percent. This is an average of the rates on all loans in force, old and new, as of the end of the specified years. The rates in Hyde and Clark have been intermediate between the rates in Haakon and the Brookings-Turner areas. The Brookings rate of 4.9 percent for 1940 and the 5.1 percent rate in Clark presumably do not mean that

loan funds were available at a lower rate there than in the Turner area. The explanation seems to be that because of the greater stability in loans in Turner, relatively fewer foreclosures, the existence of relatively more old loans at a formerly slightly higher rate caused the 1940 average rate on all loans to be higher in the Turner than in the Brookings and Clark sample areas. In 1940 the average rate on all first-mortgage loans in force was 5.5 percent or less in every sample area.

Under a purely competitive lending system interest rates would vary with the risk and be higher where foreclosures were most common. But the fact that certain federal and state agencies make loans at uniform rates in all areas, and the fact that interest rates have been reduced in recent years seems to account for the foregoing recent apparent deviations from the rule that rates vary with the risk.

During the earlier years covered by this study, judging by recorded commission mortgages, borrowers in the western areas paid a higher commission as well as a higher rate of interest. These commissions ranged from about one-half of 1 percent in the east to between 2 percent and 3 percent in the west. But commission mortgages seem to be a thing of the past. (Table 8).

Second-Mortgage Interest Rates Also Descending. In the earlier years interest rates on second-mortgage loans were higher than rates on first-mortgage loans. As was the case with first-mortgage loans, the rates for the earlier years were higher in the western areas than in the eastern counties of the state. In 1940 the second-mortgage rate was substantially the same in all the five areas. As previously mentioned this refers to the average rate on all loans in force. Although second-mortgage loans in force normally would be expected to draw a higher rate of interest than existing first-mortgage loans, this was not true in 1940. The fractionally lower rate on second-mortgage loans in force that year appears to have been due to the fact that the first-mortgage loan rate was an average of many both old and new loans in force whereas the older high-rate second-mortgage loans had been virtually eliminated and replaced in most cases with second-mortgage Land Bank Commissioner and other loans drawing interest at 5 percent. (Table 9). In some cases rates paid were reduced below the contract rate.

Interest Rates on Current First-Mortgage Loans More Uniform. Shifting from a consideration of the average rate of interest on all loans in force to the most common rate on new loans recorded at various times, there is additional evidence of higher rates in the west in the earlier years and a general decline from 1910 to 1940. This analysis also shows a trend toward greater uniformity in rates in all the areas studied. The fact that loans from the Federal Land Bank and Land Bank Commissioner are available all over the United States at fixed or unvarying interest rates naturally tends toward uniformity.

In 1910 the most common rates varied from 5 percent in Turner to 10 percent in Haakon, with 6 percent being most common in the other counties. By 1935 the prevailing or most common rates on new first-mortgage loans was 5 percent in all the areas. The same was true in 1940. No new first-mortgage loans were recorded in the Hyde area in 1940; in the other areas the 1940 rate continued at 5 percent.

Interest Rates on Current Second-Mortgage Loans Also Uniform. Six, eight and 10 percent on new loans were the prevailing second-mortgage rates, rising from southeast to west in 1910. Turner had the lowest, and Haakon the highest rate. These rates did not change very much until 1935, when practically all second-mortgage loans were made at 5 percent. The Hyde area recorded no new loans in 1930 and 1940; Turner had one 4½ percent loan from an individual; in the other counties 5 percent was the only rate in 1940. The 5 percent rate on second mortgages in 1935 and 1940 obviously is largely a result of the second-mortgage Land Bank Commissioner loans being available at that rate. In all the areas except Hyde most of the second-mortgage loans of record in 1935 and 1940 were from this source.

Length of Term and Repayment Plan

Terms Should Fit Borrower's Need. To pay off a large farm-mortgage loan requires several years, often a lifetime. Hence, a short-term loan has to be renewed from time to time. This involves additional expense and worry. Furthermore the need for renewal may occur at a time when loanable funds are scarce and interest rates are high. A loan of adequate size may then be difficult to obtain.

Fortunately there are now financially strong lending agencies able and willing to make farm-mortgage loans at reasonable rates of interest for periods up to 40 years. Such loans usually provide for annual or semiannual payments on the loan. Amortization loans are an example. This brings about a systematic reduction of the debt, leading to debt-free ownership. In case of temporary inability to pay one or more installments some of the lenders are willing to extend the time of payment if the delinquency is due to conditions beyond the borrower's control. This is desirable, but not sufficient in all cases.

The borrower is entitled to know definitely beforehand how long and under what circumstances he normally can expect to escape foreclosure proceedings in case of one or more years of reduced farm income. The length of such period of grace might naturally vary with the borrower's equity in his farm and other factors bearing on his credit standing.

Of course, agencies that extend credit at low rates of interest cannot be expected to assume high risks. The borrower should, therefore, be permitted and urged or required to make advance payments in years of good income. This plan has been found helpful by some lenders and borrowers, and should more generally be put into practice. The Farm Security Administration's Farm Ownership loans embody this feature.

Repayment plans permitting variations in the amount of the yearly payments in harmony with fluctuations in annual income are especially desirable and appropriate in a mid-continent area, like South Dakota, where fluctuations in rainfall, temperature, insect pests and plant diseases at times do cause marked variations from year to year in yields and farm income. Price fluctuations also are relatively more serious in an area far from the large markets where prices are determined. Because of the higher freight charges on long hauls a given number of cents drop in price in South Dakota will leave a smaller percentage of the

former price than is the case in an area closer to the eastern consuming centers. This is another reason why the South Dakota farmer-borrower should obtain a loan contract that provides for variable repayments in harmony with income and ability to pay. On the other hand, for some private lenders with fixed obligations to be met at specified dates the variable payment plan may create additional problems. Naturally, the dates of the annual payments should be set to coincide with expected receipt of income.

More Long Term First-Mortgage Loans Are in Force. A marked increase in the use of longer term loans has taken place since 1910, when very few loans were made for more than five years. The average length of term of all loans in force in the Brookings, Clark, and Turner sample areas in 1910 was a fraction more than five years. In Hyde the average was closer to four years; in Haakon it was less than three years. By the end of 1940 the average length of term in years of all loans in force was: Brookings 18.4, Clark 15.8, Haakon 15.7, Hyde 16.0, and Turner 13.9 years. Thus the long term amortization loans of about 35 years still constitute less than one half of all loans in force. The five-year loan is still very common. But the trend has been toward long-term loans.

Length of Term Varies for Junior Mortgages. A comparison of the length of term of mortgage loans, both between first and junior, and as between different areas seem to indicate that the length of term, in the past especially, has been prescribed by the lenders pretty much in inverse relationship to the risk. Hence, the first-mortgage loans have had longer terms than the more hazardous junior-mortgage loans, and, with respect to both first- and junior-mortgage loans, the terms have been longer in the eastern than in the western areas. Presumably the lenders still prescribe the length of term of loans, but more in harmony with the anticipated need of the borrowers. Obviously governmental policy also has had a share in setting the length of term of farm-mortgage loans.

Average length of term of junior-mortgage loans in force in 1910 was close to five years in the Brookings and Turner areas. In the other three areas the average length of term was almost three and one-half years. By the end of 1940 the term averages were: Brookings, 13.1, Clark 11, Haakon 12.6, Hyde 8.8 and Turner 12.8 years. The Hyde area, it will be remembered, had relatively fewer of the second-mortgage 13-year Land Bank Commissioner's loans and relatively more loans from individuals than the other areas. Although reference is made to junior mortgages, only second mortgages are included, except for 1935 and 1940. The figures for those years include a few mortgages whose rank could not be determined, three of them possibly were third mortgages.

Geographic or Environmental Influences on Farm Financing

Agriculture, to a considerable extent, is a biological industry and certain environmental factors that vary with the geographic location influence crop yields, livestock production and farm income. Naturally anything that affects farm income is of concern both to the farmer-borrower and to his banker or other creditor. Some environmental influences can be overcome; to others farmers must and do adjust their production practices. Lending agencies also adjust their operations in line with local conditions.

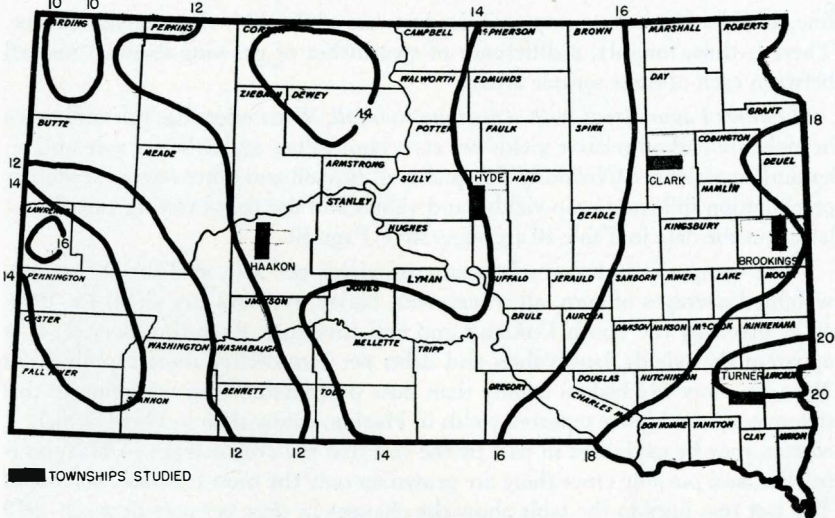


Fig. 10. Average warm-season precipitation in inches, (April to September, inclusive), in relation to areas studied. Adapted from p. 1116 U.S.D.A. Yearbook of Agriculture, 1941.

Climatic Variations Significant. Climatic variations are among the most important environmental factors associated with geographic location. In South Dakota the amount of the local annual precipitation and especially the amount of the rainfall during the growing season is important in determining crop yields. Two characteristic features of South Dakota precipitation are significant to both farmers and money lenders. One is the fluctuation from year to year in the amount and seasonal distribution of precipitation, which is typical of areas in the middle of large continents. For instance, during the seven years from 1914 to 1920 inclusive the average annual precipitation in South Dakota was 21.7 inches. During the seven-year period from 1930 to 1936 inclusive, on the other hand, the average yearly precipitation was only 15.2 inches. This average yearly difference of 6.5 inches between those seven fat and seven lean years accounted for good crops in the one period and crop failures in the other. Extreme fluctuations in temperature, influencing evaporation and plant growth, are also characteristic of mid-continent areas. The other significant feature of South Dakota precipitation is its geographic distribution.

For agriculture the amount of the precipitation during the warm season from April to September inclusive, may be more important than the amount of the annual precipitation. For this reason the warm-season precipitation lines¹ are shown in Fig. 10. It will be observed that the precipitation is highest in the southeastern part of the state and the lowest in the northwestern part. The five areas included in this mortgage study are situated as follows with respect to the amount of warm-season precipitation they receive. The 20-inch precipitation line runs lengthwise through the middle of the Turner county area. The 18-inch line is just east of the Brookings county area, and the 16-inch line is just west of the Clark county area. The Hyde county area is crossed diagonally by the 14-inch

¹ From the 1941 U.S.D.A. Yearbook of Agriculture, "Climate and Man" p. 1116.

line, and the Haakon county area lies just east of the 12-inch precipitation line. There is thus, roughly, a difference of two inches of growing-season rainfall between each of these sample areas.

Lenders Favor Areas with Adequate Rainfall. What effect has this difference in moisture had on relative yields per acre, land values and debt per acre and on lending experience? Obviously the quality of the soil and other factors as well as precipitation influence crop yields, land values and the debt-carrying capacity of land, but the data in Table 10 are suggestive. Page 30.

The composite index numbers of crop yields per acre in Table 10 are unweighted averages of corn, all wheat, oats, barley, rye, and flax yields for 1924-40 as given by the South Dakota Crop and Livestock Reporting Service. It is apparent that yields, land values and debts per acre decline more rapidly from Turner county to Haakon county than does precipitation. An exception to this statement is the higher reported yields in Haakon county than in Hyde, which, if correct, may be explained in part by the fact that the crop acreage in Haakon is smaller, and possibly crops there are grown on only the most favorable soil areas. The last two lines in the table show the changes in debt per acre between 1910 and 1940.

It will be observed that at the end of the 30-year period covered by this study the areas with close to 18 inches or more of warm-season precipitation had increased their per-acre debt, the other areas had reduced their debt per acre. To have a large debt per acre is not necessarily desirable, but it undoubtedly indicates that in the judgment of borrowers and lenders the land with the heavier precipitation can carry a larger debt load. (See Table 10).

Dividing the 30-year period into six 5-year periods, computing for each area the foreclosures during each 5-year period as percentages of the total mortgage debts at the beginning of each such 5-year period and adding these percentages for each area the following foreclosure percentages were obtained:

Turner	Brookings	Clark	Hyde	Haakon
70.4%	82.2%	101.3%	81.0%	103.8%

Obviously the inverse correlation between foreclosures and the quantity of precipitation is not likely to be as high as the positive correlation between debt per acre and precipitation. Foreclosures, of course, partly are due to incorrect judgment in the past by borrowers and lenders as to the debt-carrying capacity of a given area of land, and partly due to unpredictable causes like drought and low prices on farm products.

Another indication of the adjustment of lending activity to environment is found in the geographic distribution of the first-mortgage loans placed by different agencies at the end of the 30-year period included in this study. Lenders who are free to choose their loans, such as insurance companies, naturally will operate in what they believe to be low risk areas. Insurance companies more than doubled their investments in loans in the Turner county area between 1910 and 1940. They also increased their loans in the Brookings area. But such loans were greatly reduced in the Clark and Hyde areas. In the Haakon county area insurance company loans were insignificant during both years.

On the other hand the western areas studied had relatively more loans from individuals, the school fund and the Land Bank Commissioner. With respect to Rural Credit loans it was found that in 1935 they constituted the following percentages of all loans in each area: Turner 0.7, Brookings 4.6, Clark 8.2, Hyde 20.5, and Haakon 23.5. Not all areas had Rural Credit loans in 1940.

Land Values and Ratio of Debt to Value

Stable Land Values Promote Safe Loans. Farm-mortgage loans are expected to be repaid out of farm income, and land values are based on income from the land. Since the yearly farm income fluctuates considerably in harmony with variations in climatic and economic conditions and since owners, buyers and lenders have been prone to value land on the basis of short-run current income, land prices and the size of mortgage loans have fluctuated violently. This has resulted in periodic extremely heavy mortgage foreclosures. Obviously one remedy would be to value land on the basis of the average annual income over a long series of years, and to loan only a conservative percentage of this stable long-time average value. In order to be safe mortgages negotiated during periods of inflation should constitute a smaller percentage of current land prices than mortgages placed during a depression.

Ratio of Debt to Value Has Increased. Due to the fact that an insufficient number of the recorded deeds specify the amount of the purchase price it was impossible for the areas studied to compare the debt per acre with sale prices per acre. For the four census years, therefore, the county figures of ratio of debt to value are presented in Table 11. All areas except Hyde, with a 1930 peak, show the highest debt ratio in 1940. This table needs to be considered in relation to Table 12, "Average Value per Acre," also from the census reports. Census data on debts per acre are not available for 1920 and 1910. All the areas show exceptionally high land values in 1920, but considerably lower land values in 1940 than even in 1910. This naturally has boosted the ratio of debt to value on the mortgaged land.

Conclusions

Borrowing During Inflation Period Especially Dangerous. Paradoxical as it may seem the most hazardous time for farm borrowing has been during boom periods, such as are brought on by war inflation. Instead of using the enlarged income to pay off old debts, the evidence shows that farmers have increased their debt burden excessively when prices were high and as a direct consequence have lost their farms through mortgage foreclosure when prices returned to "normal."

Indebtedness Not an Evil in Itself. If the amount of the loan is reasonable in relation to probable future income and the funds are used productively so as to improve the borrower's financial condition and also provide funds for debt repayment, the use of credit is desirable. It is easier, however, to go into debt than to get out of debt; hence no loan should be incurred without very careful consideration of probable consequences.

Do not Borrow More than Can Be Repaid. How large a debt it is safe to incur depends on many factors, such as ability of the farmer, size of farm, total production, prices paid and received, and living expenses as well as repayment terms and the interest rate. Before borrowing to acquire ownership of a farm, if additional land can not be rented, it will be well to consider if the size of the farm to be purchased is sufficient to yield a net income above necessary living expenditures. That net income will be needed to repay the loan. The loan should be sufficiently small in relation to the size of the farm and the amount of income to permit a fair living for the farm family and still leave enough money to pay off the debt in a reasonable length of time.

Long-term Amortization Loans Preferable. Long-term amortization loans permit gradual whittling down of the debt by means of yearly payments out of annual net income, avoid need for frequent and expensive renewals, and make it possible to refinance the loan at a lower rate of interest, if interest rates on the loan market should fall. The short-term loan payable only at maturity does not encourage annual debt reduction and, besides the trouble and expense of frequent renewal, may come due at a time when loan funds are scarce and interest rates high. The annual net farm income as a percentage of the cost of a farm usually is small, consequently the large land loans need to be written for a long period of years if the trouble and expense of refinancing are to be avoided.

Loan Contract Should Permit Payments in Proportion to Income. The amount of the farm income will vary from year to year because of fluctuations in rainfall and prices. Consequently larger payments can and should be paid in years of high income than in years of low income. Advance payments in good years may save one from foreclosure during bad years. The loan contract should provide for such variable payments in harmony with income. It is also desirable to have the annual or semiannual payments come due at a season of the year when cash from the sale of farm products normally will be available.

How to Avoid Dangers From War Booms and Post-War Depression? Being familiar with the mortgage expansion spree and subsequent tragic foreclosure epidemic brought on by World War I, farmers may wish to consider means of avoiding similar consequences from World War II. During the previous war speculators bought land, helped bid up prices and later in some instances unloaded their land holdings at a profit. Some studies indicate that city people sold more land at high prices than they purchased and farmers bought more land than they sold. There is also evidence that land buying activity increased greatly during the "boom," and that the mortgage increase was largest on land that was sold. Being unable to pay cash for the abnormally high-priced land, thousands of farmers borrowed heavily and later lost their farms.

In order to avoid a repetition of this calamity farmers must take a long-time view of farm income. The "in and out" speculator will stress current high prices and low interest rates as reasons for high land "values," as reasons why farmers should borrow and buy at his high prices. The speculator hopes to "unload" before the boom ends; it is "none of his business" that the heavily mortgaged farmer later faces ruin. Farmers can avoid this by refusing to purchase land on credit

at high speculative prices. Land is worth only what it will earn. The average net annual income over a period of twenty or more good and bad years must be considered as a basis for estimating land values.¹ If this is not done the mortgage loan made during a "boom" should be for a much smaller-than-usual percentage of the "value" of the land given as security. This is especially true when a farmer takes on the responsibility of repaying a mortgage loan that is large in relation to the prospective net income from the farm.

Harmful consequences from a land boom are not confined to foreclosure of excessive mortgage loans. All farmers who acquire land at exorbitant prices will be handicapped by high land costs. This will involve losses even if title to the land is retained. If American agriculture is thus handicapped it will be at a disadvantage in exchanging products with non-agricultural industries. Unduly high costs may also make it more difficult to regain foreign markets. Furthermore, the diversion of funds into inflated land "values" will impede urgent war financing.

Considerable concern lest another destructive land mortgage expansion should occur is being expressed by various state and federal students of land economics and farm finance. The measures proposed to prevent another destructive "land boom" include publicity on the harmful consequences from inflated land prices and legislative and administrative restraints. The latter are proposed by those who believe education alone will be ineffective. These proposals include restrictions on credit to finance land purchases at "inflated" prices; special taxation to take the profits out of buying and selling land; ceiling prices on land, and facilitating the purchase of land by prospective owner-operators by means of permits to buy. Others would be handicapped in buying land.

Individuals may disagree as to the means by which to prevent a repetition of the land-boom and farm-foreclosure losses associated with the World War I inflation. But all who are interested in the welfare of agriculture presumably would like to see that the current high farm income be used to pay off old debts and to increase the proportion of owner-operating farmers. This can be done if land prices are not inflated to the point where land-buying farmers will be loaded down with unbearable mortgage debts.

Post-war Farm Price Prospects Uncertain. Although there are some government promises of price supports for certain farm products extending two years beyond the end of World War II this is no justification for basing land values on the current record farm income. All our large wars have been followed by long and severe depressions. Some of our present hopeful expectations may be no more reliable than the 25 year old slogans, "the war to make the world safe for democracy" and "the war to end all wars." The only safe course to follow is to be prepared to survive a post-war depression.

¹ See Bulletin 368, *What Price for This Land* by Norris J. Anderson, South Dakota Agricultural Experiment Station.

TABLE 1.—MORTGAGE INDEBTEDNESS ON FARM LAND, EVERY FIFTH YEAR, 1910 TO 1940
INCLUSIVE IN THREE TOWNSHIPS IN EACH COUNTY.

	Brookings	Clark	Haakon	Hyde	Turner
Totals					
1910	\$ 731,537	\$ 446,412	\$100,979	\$324,757	\$ 677,001
1915	1,193,031	579,794	136,582	294,416	1,130,443
1920	2,702,565	1,191,599	279,848	546,676	1,606,046
1925	2,387,729	1,222,696	250,570	431,646	1,917,219
1930	1,829,517	991,909	173,276	303,630	1,559,777
1935	774,448	344,151	128,776	118,538	1,109,805
1940	486,127	193,769	51,772	31,462	700,857
First Mortgages					
1910	\$ 638,509	\$ 400,061	\$ 89,674	\$261,618	\$ 499,070
1915	983,764	498,417	122,642	253,404	871,058
1920	1,998,694	1,007,864	227,716	418,933	1,245,408
1925	1,943,269	1,027,789	197,227	338,960	1,580,582
1930	1,681,008	915,598	165,518	258,327	1,430,898
1935	681,939	318,478	114,762	115,118	1,012,616
1940	429,239	160,096	48,420	27,183	633,584
Second Mortgages					
1910	\$ 82,446	\$ 37,161	\$11,305	\$ 49,694	\$ 97,031
1915	201,172	64,598	13,404	31,639	173,315
1920	627,703	149,756	47,280	109,264	244,913
1925	370,096	187,601	42,545	77,910	286,877
1930	125,332	66,858	5,418	44,941	113,609
1935	92,009	25,673	13,171	3,420	97,189
1940	56,688	33,673	3,352	4,279	67,273
Third Mortgages					
1910	\$ 10,582 ¹	\$ 9,190 ²	\$	\$ 13,445 ³	\$ 80,900 ⁴
1915	8,095 ⁵	16,779 ⁶	536	9,373	86,070 ⁷
1920	76,168 ⁸	34,679 ⁹	4,852	18,479	115,725 ¹⁰
1925	74,364 ¹¹	7,306 ¹²	10,798 ¹³	14,776 ¹⁴	49,760 ¹⁵
1930	23,177	9,453	2,340	362	15,270
1935	500		843		
1940	200				

¹ Includes \$100 in mortgages below third.² Includes \$1,450 in fourth mortgages.³ Includes \$5,485 in loans ranking below third.⁴ Includes \$24,088 in mortgages below third.⁵ Includes \$2,150 in mortgages below third.⁶ Includes \$1,259 in fourth mortgages.⁷ Includes \$11,375 in mortgages below third.⁸ Includes \$20,378 in mortgages below third.⁹ Includes \$7,800 in fourth mortgages.¹⁰ Includes \$53,050 in mortgages below third.¹¹ Includes \$6,120 in mortgages below third.¹² Includes \$3,906 fourth mortgages.¹³ Includes \$3,222 in fourth mortgages.¹⁴ Includes \$2,000 in fourth mortgages.¹⁵ Includes \$8,510 in mortgages below third.TABLE 2. ACREAGE UNDER MORTGAGE AND PERCENTAGE WHICH MORTGAGED ACREAGE WAS OF
ALL LAND IN AREA, EVERY FIFTH YEAR, 1910-40, THREE TOWNSHIPS IN EACH COUNTY.

	Brookings		Clark		Haakon		Hyde		Turner	
	<i>Acres</i>	%	<i>Acres</i>	%	<i>Acres</i>	%	<i>Acres</i>	%	<i>Acres</i>	%
1910	35,139	50.8	27,437	39.7	17,129	24.8	35,560	51.5	25,680	37.2
1915	39,482	57.1	32,142	46.5	28,292	40.9	30,640	44.3	28,693	41.5
1920	45,316	65.6	37,021	53.6	29,491	42.7	35,880	51.9	28,013	40.5
1925	44,103	63.8	36,081	52.2	24,691	35.7	31,080	45.0	32,393	46.9
1930	40,211	58.2	36,200	52.4	21,111	30.5	24,160	35.0	29,485	42.7
1935	24,402	35.3	22,532	32.6	22,846*	33.1	13,400	19.4	27,429	39.7
1940	20,662	29.9	15,256	22.1	9,446	13.7	5,280	7.6	22,555	32.6

* One FLB mortgage on 2,805 acres—foreclosed and not shown in 1940 figure.

TABLE 3. AVERAGE TOTAL DEBT AND FIRST-MORTGAGE DEBT PER ACRE OF MORTGAGED LAND, EVERY FIFTH YEAR, 1910-40, THREE TOWNSHIPS IN EACH COUNTY.

	Brookings		Clark		Haakon		Hyde		Turner	
	Total	First Mtg.	Total	First Mtg.	Total	First Mtg.	Total	First Mtg.	Total	First Mtg.
1910	\$20.82	\$18.17	\$16.27	\$14.58	\$ 5.90	\$5.24	\$ 9.13	\$ 7.36	\$26.36	\$19.43
1915	30.22	24.92	18.04	15.51	4.83	4.33	9.61	8.27	39.40	30.36
1920	59.64	44.11	32.19	27.22	9.49	7.72	15.24	11.68	57.33	44.46
1925	54.14	44.06	33.89	28.49	10.15	7.99	13.89	10.91	59.19	48.79
1930	45.50	41.80	27.40	25.29	8.21	7.84	12.57	10.69	52.90	48.52
1935	31.74	27.95	15.27	14.09	5.63	5.02	8.62	8.36	40.46	36.91
1940	22.65	20.77	12.70	10.49	5.48	5.12	5.96	5.14	31.07	28.09

TABLE 4. AMOUNT OF MORTGAGE FORECLOSURES BY 5-YEAR PERIODS, 1911 TO 1940 INCLUSIVE IN THREE TOWNSHIPS IN EACH COUNTY.

Period	Brookings	Clark	Haakon	Hyde	Turner
1911 to 1915	\$	\$ 8,270 ¹	\$ 10,149 ²	\$ 12,155	\$ 3,100
1916 to 1920		6,400 ³	4,610 ⁴	7,210 ⁵	
1921 to 1925	346,135	138,903 ⁶	71,916	66,988	107,588 ⁷
1926 to 1930	171,465	142,057	11,625	41,857	93,654
1931 to 1935	706,840	394,016	12,700 ⁸	20,555	481,563 ⁹
1936 to 1940	183,063	121,536	67,833 ¹⁰	54,598	304,056 ¹¹

¹ \$2,300 redeemed (240 acres).² \$3,709 on 960 acres redeemed. All land except 160 acres—\$25 loan—lost to owners.³ \$1,400 redeemed (80 acres).⁴ Includes loan of \$1,000 on 160 acres redeemed, and one of \$700 on 160 acres. \$700 loan redeemed by owner.⁵ Includes 8 foreclosures. \$3,160 was redeemed but title of land passed to other owners.⁶ \$6,000 redeemed (240 acres).⁷ Second mortgage of \$28,000 on 480 acres was redeemed.⁸ Deed issued in lieu of foreclosure involving 510 acres.⁹ Three deeds issued in lieu of foreclosures, consideration \$1.00 each, not included in this figure involving 440 acres.¹⁰ Two deeds issued in lieu of foreclosure involving 510 acres.¹¹ Eight deeds issued in lieu of foreclosures, consideration \$1.00 each involving 880 acres not included in above figure.

TABLE 5. ACREAGE INVOLVED IN MORTGAGE FORECLOSURES BY 5-YEAR PERIODS, 1911 TO 1940 INCLUSIVE IN THREE TOWNSHIPS IN EACH COUNTY.

Period	Brookings	Clark	Haakon	Hyde	Turner
1911 to 1915		680	2,476 ¹	1,200	320
1916 to 1920		320	1,240 ²	1,280 ³	
1921 to 1925	6,680	3,227	7,900	5,560 ⁴	2,720 ⁵
1926 to 1930	4,936	5,200	2,160	3,920	2,120
1931 to 1935	14,004	12,835	1,230	2,082	8,203
1936 to 1940	4,736	4,017	5,383	5,120	5,514

¹ Redemptions involved 960 acres. Only 160 acres saved by owners.² 320 acres redeemed but only 160 acres saved by owner.³ 640 acres redeemed but lost to original owners.⁴ 160 acres foreclosed on twice.⁵ 480 acres redeemed.

Source of funds	Brookings		Clark		Haakon		Hyde		Turner	
	\$	%	\$	%	\$	%	\$	%	\$	%
1910										
Insurance Cos.	109,910	17.2	53,350	13.3	1,500	1.7	21,245	8.1	116,795	23.4
Savings Banks	19,750	3.1	8,000	2.0	4,100	4.6	5,200	2.0	59,330	11.9
Commercial Banks	8,300	1.3	35,734	8.9	10,275	11.5	19,960	7.6	16,600	3.3
Individuals	460,649	72.1	250,802	62.8	62,493	69.7	165,232	63.2	264,020	52.9
Federal Land Bank										
Land Bank Com.										
S. D. School Fund	500	.1	4,950	1.2			9,100	3.5	21,000	4.2
Rural Credit										
Mortgage Banks	9,000	1.4	2,400	.6	9,000	10.0	18,188	6.9	3,325	.7
Miscellaneous	30,400	4.8	44,825	11.2	2,306	2.5	22,690	8.7	18,000	3.6
1915										
Insurance Cos.	176,312	17.9	128,160	25.7	2,400	2.0	24,458	9.7	258,093	29.6
Savings Banks	50,800	5.2	46,020	9.2	7,700	6.3	8,730	3.4	67,800	7.8
Commercial Banks	28,600	2.9	55,877	11.2	6,490	5.3	12,700	5.0	43,500	5.0
Individuals	625,382	63.6	236,700	47.6	90,146	73.5	144,417	57.0	449,840	51.7
Federal Land Bank										
Land Bank Com.										
S. D. School Fund	500		12,650	2.5	2,700	2.2	19,750	7.8	32,400	3.7
Rural Credit										
Mortgage Banks	28,570	2.9	13,010	2.6	10,100	8.2	29,200	11.5	6,025	.7
Miscellaneous	73,600	7.5	6,000	1.2	3,160	2.5	14,149	5.6	13,400	1.5
1920										
Insurance Cos.	465,753	23.3	292,578	29.0	500	.2	5,800	1.4	502,700	40.4
Savings Banks	94,700	4.7	43,200	4.3	2,800	1.2	9,500	2.3	80,500	6.5
Commercial Banks	37,408	1.9	39,262	3.9	25,995	11.4	41,046	9.8	37,900	3.0
Individuals	1,031,900	51.6	455,187	45.3	105,090	46.2	250,199	59.7	510,463	41.0
Federal Land Bank	57,000	2.8	9,200	.9						
Land Bank Com.										
S. D. School Funds	5,500	0.3	32,600	3.2	30,300	13.3	27,950	6.7	32,800	2.6
Rural Credit	225,155	11.3	82,672	8.2	51,331	22.5	30,686	7.3	5,000	.4
Mortgage Banks	25,778	1.3	13,500	1.3	6,600	2.9	38,020	9.1	60,245	4.8
Miscellaneous	55,500	2.8	39,665	3.9	5,100	2.3	15,732	3.7	15,800	1.3
1925										
Insurance Cos.	947,405	48.7	524,591	51.0	3,000	1.5	1,000	.3	978,879	61.9
Savings Banks	98,800	5.1	36,900	3.6	1,400	.7	15,400	4.5	29,200	1.8
Commercial Banks	56,643	2.9	43,834	4.2	27,529	14.0	7,400	2.2	41,100	2.6
Individuals	570,710	29.4	189,434	18.4	60,439	30.6	194,562	57.4	375,293	23.7
Federal Land Bank	58,065	3.0	63,807	6.2			1,800	.5	9,078	.6
Land Bank Com.										
S. D. School Funds	5,000	0.3	26,600	2.5	33,750	17.1	30,200	8.9	29,800	1.9
Rural Credit	156,846	8.1	81,427	7.9	58,609	29.7	67,616	20.0	15,580	1.0
Mortgage Banks	13,800	0.7			2,500	1.3	7,420	2.2	56,475	3.6
Miscellaneous	36,000	1.8	63,696	6.2	10,000	5.1	13,532	4.0	49,177	2.9
1930										
Insurance Cos.	1,127,969	67.1	494,801	54.0	3,750	2.3	3,			

Source of funds	Brookings		Clark		Haakon		Hyde		Turner	
	\$	%	\$	%	\$	%	\$	%	\$	%
1910										
Insurance Cos.	500	.6								
Savings Banks			59	.2	320	2.8			3,800	3.9
Commercial Banks	8,288	10.1	15,943	42.9	140	1.2	800	1.6	12,391	12.8
Individuals	60,438	73.3	17,063	45.9	6,878	60.8	46,154	92.9	67,312	69.4
Land Bank Com.										
Mortgage Banks	12,720	15.4	4,096	11.0	1,622	14.4	2,740	5.5	12,926	13.3
Miscellaneous	500	.6			2,345	20.8			600	.6
1915										
Insurance Cos.	3,000	1.5					2,000	6.3		
Savings Banks	2,940	1.5			1,025	7.7			1,500	.9
Commercial Banks	37,465	18.6	31,278	48.4	4,544	33.9	15,267	48.2	17,885	10.3
Individuals	92,659	46.1	27,034	41.8	6,395	47.7	10,271	32.5	118,550	68.4
Land Bank Com.										
Mortgage Banks	32,063	15.9	4,502	7.0	1,385	10.3	2,646	8.4	17,480	10.1
Miscellaneous	33,045	16.4	1,784	2.8	55	.4	1,455	4.6	17,900	10.3
1920										
Insurance Cos.	11,500	1.8								
Savings Banks					315	.7			36,000	14.7
Commercial Banks	79,919	12.7	42,776	28.6	29,603	62.6	27,799	25.4	35,800	14.6
Individuals	471,995	75.2	77,039	51.4	13,148	27.8	59,792	54.7	159,367	65.1
Land Bank Com.										
Mortgage Banks	36,144	5.8	18,081	12.1	758	1.6	20,413	18.7	7,346	3.0
Miscellaneous	28,145	4.5	11,860	7.9	1,856	3.9	1,260	1.2	6,400	2.6
Rural Credit					1,600	3.4				
1925										
Insurance Cos.	6,600	1.8			150	.4				
Savings Banks	6,000	1.6	7,745	4.1	80	.2			25,000	8.7
Commercial Banks	85,278	23.0	94,688	50.5	19,459	45.7	16,280	20.9	76,767	26.8
Individuals	214,864	58.1	74,007	39.5	21,115	49.6	39,877	51.2	161,767	56.4
Land Bank Com.										
Mortgage Banks	24,409	6.6	3,260	1.7	255	.6	19,243	24.7	8,943	3.1
Miscellaneous	32,945	8.9	7,901	4.2			2,510	3.2	14,400	5.0
Rural Credit					1,486	3.5				
1930										
Insurance Cos.	2,200	1.8								
Savings Banks									9,474	8.3
Commercial Banks	28,835	23.1	25,252	37.8	859	15.8	17,146	38.2	25,750	22.8
Individuals	68,710	54.8	32,568	48.7	3,559	65.7	23,917	53.2	70,250	61.8
Land Bank Com.										
Mortgage Banks	22,237	17.7	275	.4	100	1.9	3,878	8.6	6,035	5.3
Miscellaneous	3,250	2.6	8,763	13.1	900	16.6			2,100	1.8
1935										
Insurance Cos.										
Savings Banks									3,500	3.6
Commercial Banks	4,600	5.0							7,765	8.0
Individuals	16,600	18.0	2,966	11.6			3,00			

TABLE 8. COST OF FIRST-MORTGAGE FUNDS: THE RATE OF INTEREST AND COMMISSION, AS WEIGHTED AVERAGES OF LOANS IN FORCE, EVERY FIFTH YEAR, 1910 TO 1940, IN THREE TOWNSHIPS IN EACH COUNTY.

Year	BROOKINGS		CLARK		HAAKON		HYDE		TURNER	
	Rate of Interest	Rate of Commission	Rate of Interest	Rate of Commission	Rate of Interest	Rate of Commission	Rate of Interest	Rate of Commission	Rate of Interest	Rate of Commission
	%	%	%	%	%	%	%	%	%	%
1910	5.5	0.6	6.0	.7	8.0	3.0	6.3	2.5	5.6	.7
1915	5.6	0.6	6.0	.7	7.7	2.1	6.2	1.6	5.6	.8
1920	5.5	0.6	5.9	.5	6.4	2.4	6.3	1.3	5.5	.6
1925	5.6	0.6	5.7	.5	6.5	2.4	6.0	1.2	5.5	.7
1930	5.4	0.5	5.6	.5	6.4	2.3	6.0	1.8	5.3	.8
1935	5.2		5.3		5.7		5.4		5.5	
1940	4.9		5.1		5.5		5.4		5.3	

TABLE 9. COST OF SECOND-MORTGAGE FUNDS: THE RATE OF INTEREST, AS A WEIGHTED AVERAGE OF LOANS IN FORCE, EVERY FIFTH YEAR, 1910 TO 1940 IN THREE TOWNSHIPS IN EACH COUNTY.

Year	BROOKINGS Rate of Interest	CLARK Rate of Interest	HAAKON Rate of Interest	HYDE Rate of Interest	TURNER Rate of Interest
	%	%	%	%	%
1910	6.5	7.4	8.6	6.5	6.1
1915	6.5	7.0	8.5	7.0	6.1
1920	5.9	6.7	8.1	7.3	5.9
1925	6.4	7.0	8.1	7.6	6.5
1930	6.6	6.4	7.9	8.0	6.7
1935	5.6	5.2	5.0	6.5	5.7
1940	5.0	5.1 ¹	5.0	5.2	5.1

¹ One 10% mortgage Individual Lender in addition to this.

TABLE 10. WARM-SEASON PRECIPITATION; INDEX NUMBER OF YIELDS, LAND VALUE AND DEBT PER ACRE

County or ThreeTownship Sample Areas	Turner	Brookings	Clark	Hyde	Haakon
Approximate average Precipitation	20 inches	18 inches	16 inches	14 inches	12 inches
Composite index of County yield per acre—Turner equals 100	100.0	95.6	63.5	47.1	52.2
1940 U. S. Census Value per acre; County Averages	\$41.89	\$35.88	\$14.17	\$4.73	\$3.40
Debt per acre owner operators, County Average 1940 U. S. Census	\$30.41	\$24.81	\$12.46	\$4.12	\$2.53
Debt per Acre for Sample Areas, 1910	\$26.36	\$20.82	\$16.27	\$9.13	\$5.90
Debt per Acre for Sample Areas, 1940	\$31.07	\$22.65	\$12.70	\$5.96	\$5.48

TABLE 11. AMOUNT OF DEBT IN PERCENTAGE OF VALUE OF MORTGAGED REAL ESTATE*

	1940 ¹	1930 ²	1920 ³	1910 ⁴
	%	%	%	%
State	57.6	39.3	21.8	21.2
Counties				
Brookings	61.9	49.4	25.9	25.7
Clark	66.2	36.0	19.5	23.8
Haakon	40.5	32.0	18.2	⁵
Stanley	66.7	39.4	19.8	19.9
Hyde	37.9	40.4	28.4	16.5
Turner	67.2	36.9	17.3	22.6

* Ratio of debt to value applies to full owner-operated farms.

¹ Sixteenth Census of the United States, 1940, Agriculture for South Dakota, Second Series, page 16.

² Fifteenth census of the United States, 1930, Volume II, Part I, page 1191.

³ Fourteenth census of the United States, 1920, Volume VI, Part I, page 675.

⁴ Thirteenth census of the United States, 1910, Volume VII, Part I, page 546.

⁵ Haakon County was part of Stanley County in 1910.

TABLE 12. DOLLAR VALUES PER ACRE OF LAND AND BUILDINGS

	1940 ¹	1930 ²	1920 ³	1910 ⁴
	\$	\$	\$	\$
State	12.80	35.24	71.40	38.63
Counties				
Brookings	35.88	72.99	157.84	51.66
Clark	14.17	56.04	102.73	46.07
Haakon	3.40	11.48	21.07	⁵
Stanley	2.43	8.70	16.21	15.21
Hyde	4.73	19.69	43.15	32.74
Turner	41.89	112.07	226.92	69.48

¹ Sixteenth Census of the United States, 1940, First Series, Page 10, Line 65.

² Fifteenth Census of the United States, 1930, Volume II, Page 1148, Line 15.

³ Fifteenth Census of the United States, 1930, Volume II, Page 1148, Line 17.

⁴ Thirteenth Census of the United States, 1910, Volume VII, Page 538, Line 45 divided by line 27.

⁵ Haakon County was part of Stanley County in 1910.

The farm-mortgage debt was increased too much when prices of farm products rose high as a result of World War I inflation. As a consequence many farmers were squeezed out of both debt and farm ownership when farm income became low again; some became landless debtors.

One obvious conclusion to be drawn from this farm-mortgage history is that there is serious financial risk involved in going heavily into debt during a period of high prices. Such a period, on the other hand, is a good time during which to pay old debts and to buy only for cash. The only safe course to follow is to be prepared to survive a post-war depression.

SUMMARY

This is the story of the ups and downs which South Dakota farm mortgage borrowers and lenders in five selected areas have gone through between 1910 and 1940. Fig. 1, Page 4.

Although the amounts of indebtedness varied considerably between areas, all areas studied experienced marked mortgage expansion as a result of the World War I inflation period; percentage increases between 1910 and 1920 ranged from 68 percent in the Hyde county area to 269 percent in the Brookings county area. Page 5.

The acreage under mortgage increased only moderately, but the debt per acre of mortgaged land increased by percentages ranging from 61 percent in the Haakon county area to 186 percent in the Brookings county area. Page 6.

The first post-war depression beginning in 1921 and the second post-war depression in the next decade, together with the drought, reduced farm income far below the amounts required to pay off the large mortgage loans that had been made during the war inflation years. As a consequence foreclosures were extremely heavy during both these depression periods. Page 9.

First-mortgage funds came predominantly from individuals in 1910, but insurance companies and the Federal Land Bank were chief sources after World War I. Page 14.

First-mortgage interest rates have declined and become more uniform in all the areas; the average rate on loans in force dropped from 6 percent in the east and 8 percent in the west to about 5 percent in all areas. Page 17.

The average length of term of first-mortgage loans in force has increased from about five years in the east and three years in the west to between 14 and 18 years, because of increased use of long-term amortization loans. Page 20.

The debt per acre has declined since 1910 in those areas where the April-September rainfall has been 16 inches or less, but has increased where such growing-seasonal rainfall has averaged close to 18 inches or more. Page 21.

The state-wide changes in estimated farm mortgage indebtedness have been from \$84,943,000 in 1910 up to \$461,513,000 in 1924 and down to \$151,910,000 in 1940. Foreclosures instituted from 1921 to 1940 inclusive exceeded 11,000,000 acres. Page 11.

The average value per acre of land and buildings in South Dakota was lower in 1940 than in 1910, but not as much lower as the \$25.83 reduction shown in the United States census reports. Page 12.