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Farm Mortgage Loan Experience In Southeast Alabama

By
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AGRICULTURAL EXPERIMENT STATION
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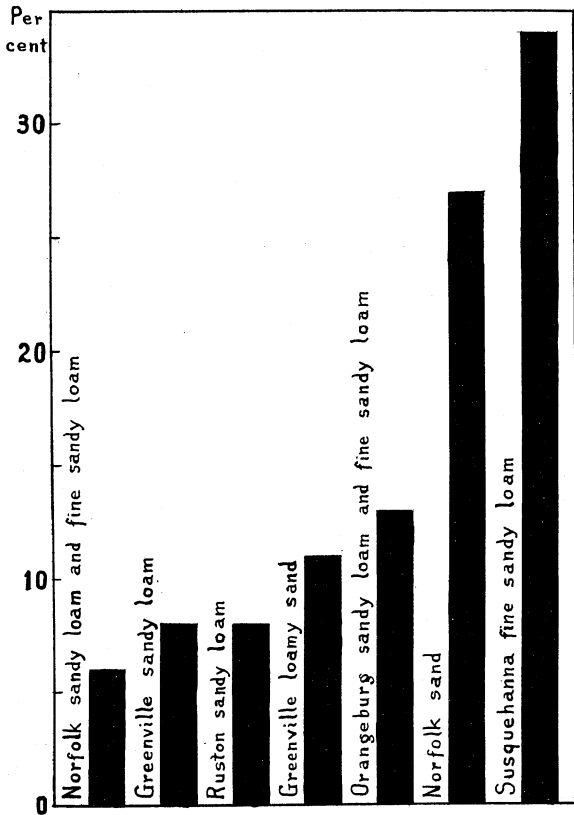
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Farm Mortgage Loan Experience In Southeast Alabama



PER CENT OF LOANS FORECLOSED BY SOIL TYPES
The percentage of foreclosures was more than five times as large on the Susquehanna fine sandy loam as on the Norfolk sandy loam and fine sandy loam.

By

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Associate Professor of Agricultural Economics

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Farm Mortgage Loan Experience In Southeast Alabama

INTRODUCTION

THE MAJOR object of this study was to determine some of the factors associated with foreclosures of farm mortgages and the resulting losses in the southeastern part of Alabama. This bulletin is based on a statistical analysis of the farm mortgage activities of nine large lending agencies* operating in Coffee, Dale, Geneva, Henry, and Houston counties in Southeast Alabama for the period January 1, 1917 to December 31, 1931.

A total of 4,750 farm mortgage loans is included in this study. All of these loans were secured by first mortgages. The farms which secured them represented 56 per cent of all the land in farms in the five counties, as reported by the United States census (1). In Coffee and Henry counties, 63 per cent of all the land in farms was included in the study.

Slightly over twelve million dollars were loaned on these 4,750 farms. Fifteen per cent of the loans had been foreclosed by December 31, 1931. In most instances the farmer lost his entire investment when the mortgage was foreclosed. The total loss which had been incurred by the lending agencies on the foreclosed farms which were sold, together with the expected loss on farms which had not been sold, amounted to about \$653,000 or \$54 per \$1,000 loaned. The losses of the lending agencies ranged from \$19 per \$1,000 loaned in Houston county to \$83 per \$1,000 loaned in Dale county. Some of the factors associated with mortgage foreclosures and losses on these farms are discussed.

TYPES OF SOIL

Foreclosures by Soil Types

A large number of different soil types of widely varying agricultural value occurs in the area covered by this study. The most important of these types have been arranged according to the per cent of the loans which were foreclosed (Table 1). Foreclosures ranged from 6 per cent on the Norfolk sandy loam and fine sandy loam to 47 per cent on the Kalmia fine sand. In general, a farmer's chances of repaying a mortgage loan were best on the sandy loam soils and poorest on the sands and fine sands.

*Acknowledgment is made to the following institutions for their splendid cooperation without which this study would have been impossible: Federal Land Bank of New Orleans, First Joint Stock Land Bank, Montgomery, Alabama, and the following life insurance companies: Union Central, Missouri, John Hancock, New York, Continental, North American, and Prudential.

TABLE 1.—Relation of Type of Soil to Appraised Value per Acre, Loan per Acre, Foreclosures and Losses, 1917-1931.

| Type of soil | Number of loans | Appraised value per acre | Average loan per acre | Loss per \$1,000 loaned | Per cent of loans fore-closed |
|---|-----------------|--------------------------|-----------------------|-------------------------|-------------------------------|
| Norfolk sandy loam and fine sandy loam | 1,306 | \$52 | \$19 | \$ 19 | 6 |
| Norfolk gravelly sand | 43 | 45 | 17 | 32 | 7* |
| Greenville sandy loam | 356 | 58 | 22 | 17 | 8 |
| Ruston sandy loam | 292 | 54 | 19 | 29 | 8 |
| Greenville loamy sand | 283 | 52 | 20 | 20 | 11 |
| Orangeburg sand and fine sand | 139 | 35 | 12 | 33 | 11 |
| Ruston loamy sand | 57 | 42 | 15 | 30 | 12 |
| Orangeburg sandy loam and fine sandy loam | 271 | 39 | 14 | 30 | 13 |
| Norfolk fine sand | 89 | 32 | 12 | 49 | 15 |
| Norfolk loamy sand | 144 | 47 | 17 | 67 | 18 |
| Kalmia, Leaf, Myatt, Cahaba and Congaree fine sandy loams | 132 | 31 | 11 | 114 | 26 |
| Norfolk sand | 684 | 33 | 12 | 102 | 27 |
| Kalmia sand | 58 | 33 | 12 | 148 | 33 |
| Susquehanna fine sandy loam | 303 | 30 | 11 | 152 | 34 |
| Kalmia fine sand | 88 | 29 | 10 | 218 | 47 |
| All soil types** | 4,750 | \$42 | \$15 | \$54 | 15 |

*Probably this soil type is not as good as this figure would indicate since the number of farms in this group may be too small to be representative.

**Includes mixed and unclassified soil types in addition to the listed types.

In general, foreclosures and losses increased as appraised value per acre decreased. The relation of loan per acre to value per acre was practically the same on all soil types, the loan being slightly more than one-third of the value. These results indicate that **the poorest soil types were over-valued in relation to the better types.** The rather high foreclosures and losses on even the best soils suggest—as will be shown later—that all land was over-valued, so that the poorer soil types were very much over-valued. These results agree with the findings of a similar study (2) in indicating that poor land is usually over-valued in relation to good land in the same region.

Although more than one-fourth of the total number of loans in these five counties were on farms located on Norfolk sandy loam and fine sandy loam, only one-tenth of the total number of loans foreclosed were on this soil type (Table 2 and Figure 1). Contrasted to this, farms on the Susquehanna fine sandy loam accounted for only 6 per cent of the total number of loans, but 14 per cent of the foreclosures. This soil type is shallow, with a very plastic sub-soil, so that it is too wet in wet weather and too dry in dry weather. Loans on poor soils in this area should be much more conservative in the future than they have been in the past, and it is questionable whether

TABLE 2.—Relation of Type of Soil to Foreclosures and Losses, 1917-1931.

| Type of soil | Number of loans | Per cent of total for the study | | | Loss per \$1,000 loaned |
|--|-----------------|---------------------------------|------------------------|------------|-------------------------|
| | | Number of loans | Number of foreclosures | Total loss | |
| Norfolk sandy loam and fine sandy loam | 1,306 | 28 | 10 | 9 | \$ 19 |
| Norfolk sand | 684 | 14 | 25 | 24 | 102 |
| Susquehanna fine sandy loam | 303 | 6 | 14 | 16 | 152 |

a person should go in debt to purchase a farm on the very poorest soil types.

Yields by Soil Types

Applications for mortgage loans usually contain information relative to the previous year's crop yields on the farm in question. This information on the yield of cotton and corn for three of the most important soil types has been summarized (Table 3). For the period 1920 to 1928 cotton yields obtained on the Susquehanna fine sandy loam were only 81 per cent and corn yields only 84 per cent of those obtained on the Norfolk sandy loam. The average yields of corn and cotton on the Norfolk sandy loam, Norfolk sand, and Susquehanna fine sandy loam varied directly with the appraised value per acre and inversely with the per cent of loans foreclosed (Tables 1 and 3). That is, the soils on which the best yields were obtained were valued the highest, and a higher proportion of the farmers were able to pay their debts and keep their farms.

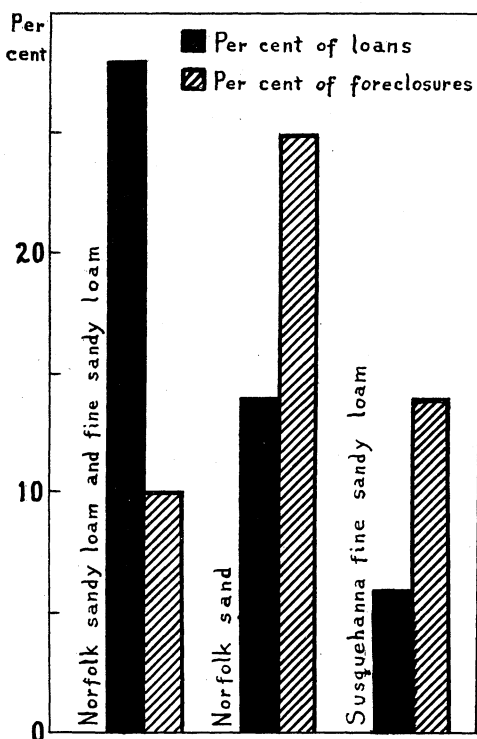


FIGURE 1.—THE PER CENT OF TOTAL LOANS AND TOTAL FORECLOSURES ON THREE SELECTED SOIL TYPES, 1917-1931.

Farms on the Norfolk sandy loam and fine sandy loam accounted for more than one-fourth of the loans but only one-tenth of the foreclosures.

TABLE 3.—Comparison of Crop Yields on Different Soil Types, 1920-1928.

| Type of soil | Average yields | | Per cent of best yield | |
|-----------------------------|----------------|----------------|------------------------|------|
| | Cotton (bales) | Corn (bushels) | Cotton | Corn |
| Norfolk sandy loam | 0.43 | 16.5 | 100 | 100 |
| Norfolk sand | 0.42 | 15.1 | 98 | 92 |
| Susquehanna fine sandy loam | 0.35 | 13.9 | 81 | 84 |

TOPOGRAPHY

While the type of soil was found to be the most important single factor affecting mortgage loan experience in the area studied, there are also other important factors. One of these is topography which is always an important factor affecting agriculture, but it is particularly important in such areas as Southeast Alabama where erosion is a serious problem. On the sandy loam soils only 4 per cent of the loans on farms classified as level were foreclosed as compared to 10 per cent of the loans on farms classified as rolling (Table 4). This occurred notwithstanding the fact that the farms classified as rolling were appraised at a lower value per acre, and the average loan per acre was only three-fourths as much as on the level farms.

TABLE 4.—Relation of Topography of Sandy Loam Soils to Foreclosures and other Factors, 1917-1931.

| Topography | Number of loans | Average value of crop land per acre | Per cent of farm in crop land | Average loan per acre | Per cent of loans foreclosed |
|------------------|-----------------|-------------------------------------|-------------------------------|-----------------------|------------------------------|
| Level | 503 | \$53 | 72 | \$20 | 4 |
| Undulating | 467 | 55 | 74 | 22 | 6 |
| Slightly rolling | 1,146 | 51 | 67 | 18 | 9 |
| Rolling | 518 | 43 | 64 | 15 | 10 |
| Total or average | 2,634 | \$51 | 69 | \$19 | 8 |

SALE VALUES

Sale values by soil types were summarized for the 42-year period 1890 to 1931 (Appendix). The sale prices were obtained from the loan applications and appraisers' reports which give the purchase price paid by the applicant and from records of transfers which are kept in the files of the lending agencies. These average sale values check very closely with the average

value per acre of farm land and buildings as reported by the United States census, except for the 1930 census. Farm land values had declined greatly during the one or two years just preceding the 1930 census, and many farmers did not realize the full extent of this decline. Consequently, the average sale value was significantly lower than the average value as reported by the census for this period.

Sale values and census values per acre for farm land for the period 1890 to 1931 are shown in Figure 2. Value per acre increased gradually from 1890 to about 1916, and then increased rapidly until about 1924. From 1924 to 1931 the general trend of value per acre was downward, particularly after 1930.

In the earlier years there was no marked difference in price between the Norfolk sandy loam (one of the best soils), and the Norfolk sand (one of the poorest soils) (Figure 3). The price differential between these two soil types has tended to increase in recent years. This tendency may be in part due to the more general recognition of the fact that Norfolk sand is the poorer soil. As agriculture becomes more specialized, and improvements such as fertilizers and better varieties of seeds become available, the advantage of the better soils which best utilize these improvements is increased. It is probable that this tendency towards an increased differential between the price of the best land, and the price of the poorest land will

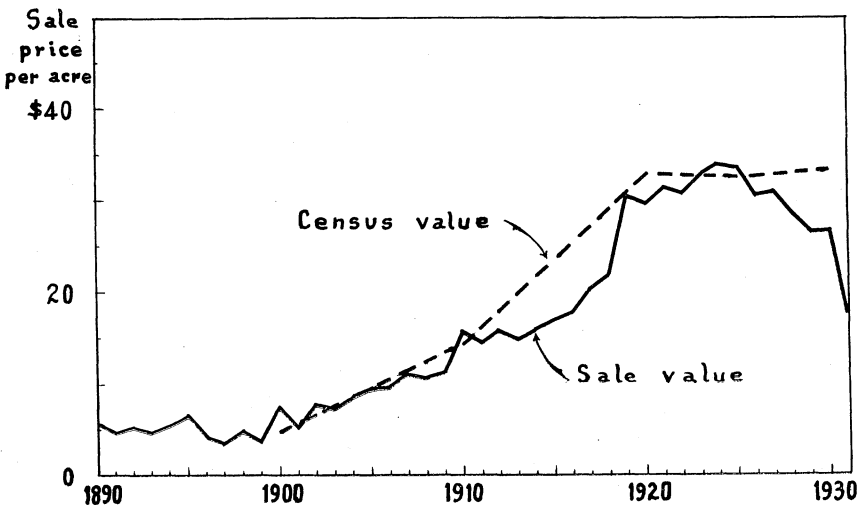


FIGURE 2.—AVERAGE SALE AND CENSUS VALUE PER ACRE OF FARM LAND.

Sale value per acre increased until about 1924. After 1924 the trend was downward.

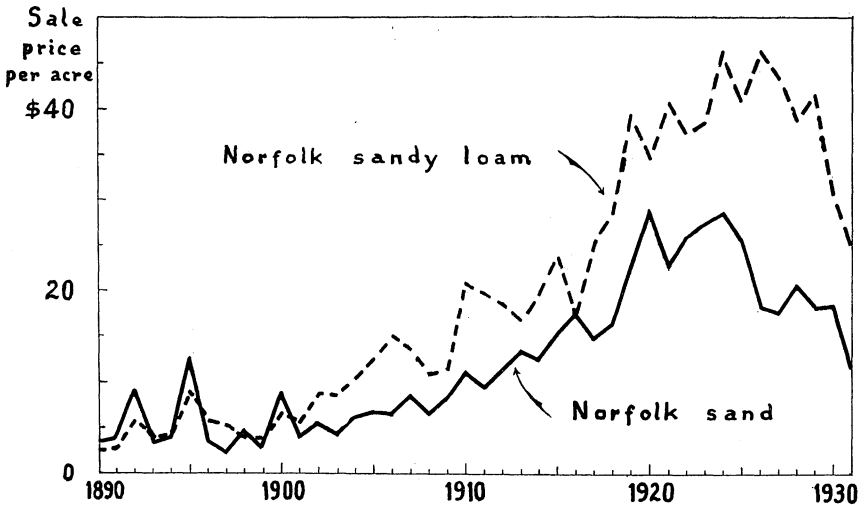


FIGURE 3.—AVERAGE SALE VALUE PER ACRE OF NORFOLK SANDY LOAM AND NORFOLK SAND.

The price differential between these two soil types tended to increase in recent years.

continue. If so, there is increasing danger of financial losses to farmers contracting long-term debts on the poorer soils.

Directly comparable data on sale values and appraised values are available for six individual soil types and for the average of all soil types (Table 5). For each of these soil types, as well as for the average of all soil types, **the average**

TABLE 5.—A Comparison of Sale and Appraised Values per Acre by Soil Types.

| Type of soil | Highest average sale value per acre 1890-1931 | | Average appraised value per acre 1917-1931 | | Average sale value per acre 1917-1931 |
|-----------------------------|---|-------|--|--------------------------------|---------------------------------------|
| | Year | Price | Value | Per cent of highest sale value | |
| Greenville sandy loam | 1926 | \$51 | \$58 | 114 | \$38 |
| Greenville loamy sand | 1928 | 50 | 52 | 104 | 38 |
| Ruston sandy loam | 1925 | 44 | 54 | 123 | 33 |
| Norfolk loamy sand | 1923 | 37 | 47 | 127 | 26 |
| Norfolk sand | 1920 | 29 | 33 | 114 | 21 |
| Susquehanna fine sandy loam | 1923 | 26 | 30 | 115 | 18 |
| All soil types | 1924 | \$34 | \$42 | 124 | \$28 |

appraised value per acre during the period 1917 to 1931 exceeded the highest yearly average sale value for the whole period 1890 to 1931. All of the agencies cooperating in this study usually are considered as conservative in their lending policies, however, it appears that their appraisals proved to be extremely liberal.

During 1929 to 1931 sale values in this area fell to 68 per cent of the highest yearly average sale value for the period 1890 to 1931 (Table 6). In general this decline from the peak in values was the least on the best soils, and the most on the poorest soils. Sale values of the Susquehanna fine sandy loam declined to 38 per cent of the sale value in the highest-priced year. As a result of declining land values, the average loan per acre on the Susquehanna fine sandy loam was 10 per cent more than the average sale value during 1929 to 1931 (Figure 4). Farmers who had borrowed money on this soil type had

TABLE 6.—A Comparison of Recent Sale Values with the Amount of Loan per Acre on Different Soil Types.

| Type of soil | Average sale value per acre 1929-1931 | | Average loan per acre 1917-1931 | |
|-----------------------------|---------------------------------------|---|---------------------------------|----------------------------------|
| | Price | Per cent of highest-priced year 1890-1931 | Amount | Per cent of 1929-1931 sale value |
| Greenville sandy loam | \$36 | 71 | \$22 | 61 |
| Greenville loamy sand | 31 | 62 | 20 | 65 |
| Ruston sandy loam | 32 | 73 | 19 | 59 |
| Norfolk loamy sand | 20 | 54 | 17 | 85 |
| Norfolk sand | 16 | 55 | 12 | 75 |
| Susquehanna fine sandy loam | 10 | 38 | 11 | 110 |
| All soil types* | \$23 | 68 | \$15 | 65 |

*Includes all soil types used in this study.

lost their entire investment. Even relatively conservative loans on this soil type were disastrous to both borrower and lender.

APPRAISED VALUE PER ACRE OF CROP LAND

It has been previously shown that loan experience was generally better and land values higher on the sandy loam soils* than on other classes of soils. Although the appraised value of the crop land per acre showed considerable variation within these two soil groups, a much higher proportion of the farms on sandy loam soils were in the higher-valued groups. The crop land of only 13 per cent of the farms on sandy loam soils was

*Sandy loam soils as used in this publication include all of the soils in the sandy loam group, i.e. sandy loam, fine sandy loam, and very fine sandy loam.

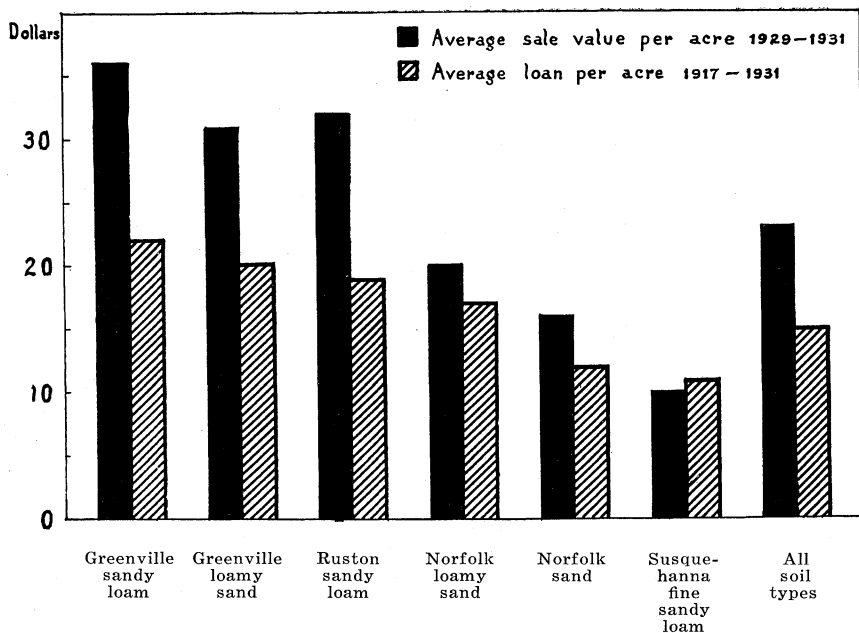


FIGURE 4.—A COMPARISON OF RECENT SALE VALUES WITH THE AMOUNT OF LOAN PER ACRE, 1917-1931.

Owing to the recent declines in land values, the amount borrowed per acre on the poorest soil types is dangerously high.

valued at less than \$35 per acre as compared with 44 per cent of the farms on other soil classes. Moreover, the crop land of 35 per cent of the farms on sandy loam soils was valued at over \$54 per acre as compared with only 10 per cent of the farms on other soil classes.

On the sandy loam soils the per cent of loans foreclosed decreased as the appraised value of the crop land per acre increased (Table 7). On the other soils there was no relation

TABLE 7.—Relation of Appraised Value of Crop Land to Foreclosures and Losses by Soil Classes, 1917-1931.

| Appraised value of crop land per acre | Average loan per acre | | Loss per \$1,000 loaned | | Per cent of loans foreclosed | |
|---------------------------------------|-----------------------|-------------|-------------------------|-------------|------------------------------|-------------|
| | Sandy loam soils | Other soils | Sandy loam soils | Other soils | Sandy loam soils | Other soils |
| \$ 1 - 34 | \$ 8 | \$ 8 | \$30 | \$ 85 | 9 | 25 |
| 35 - 54 | 17 | 14 | 21 | 103 | 8 | 25 |
| 55 or more | 27 | 24 | 19 | 112 | 6 | 25 |
| Average | \$19 | \$13 | \$21 | \$99 | 8 | 25 |

between appraised value and foreclosures. This indicated that the appraisers tended to underestimate the superior qualities of the best areas of the best soil class (sandy loams). The high percentage of foreclosures on the poorer soils indicates that they were generally over-valued. In this region, as is generally true, farmers are most successful on the best areas of the best soils and repay larger loans with less difficulty than those on poorer soils.

APPRAISERS' ESTIMATES OF AVERAGE YIELD OF COTTON

The appraisers' estimates of the average yield of cotton to be expected over a period of years tended to be considerably higher on the sandy loam soils than on the other soils (Table 8). The appraisers' estimates of the average yield of cotton corresponded very closely to the actual yield obtained in the previous year, and showed a direct relationship to the appraisers'

TABLE 8.—Distribution of Loans on Different Soil Classes by the Appraisers' Estimate of Average Yield of Cotton, 1917-1931.

| Appraisers' estimate of average yield per acre of cotton (bales) | Number of loans | | Per cent of loans | |
|--|------------------|-------------|-------------------|-------------|
| | Sandy loam soils | Other soils | Sandy loam soils | Other soils |
| Less than 0.30 | 154 | 331 | 7 | 18 |
| 0.30 - 0.35 | 603 | 635 | 26 | 35 |
| 0.36 - 0.48 | 312 | 268 | 13 | 15 |
| 0.49 - 0.54 | 1,025 | 483 | 43 | 27 |
| 0.55 or more | 271 | 89 | 11 | 5 |
| Total | 2,365 | 1,806 | 100 | 100 |

estimates of the average yield of corn and peanuts (Table 9). These close relationships indicate that the appraisers' estimates of average yields were rather accurate. The average value of the operators' house was considerably higher on farms where

TABLE 9.—Relation of Appraisers' Estimate of Average Yield of Cotton to Various Factors, 1917-1931.

| Appraisers' estimate of average yield per acre of cotton (bales) | | Average yield per acre | | | Average value of operators' house |
|--|---------|------------------------|----------------------|-------------------|-----------------------------------|
| | | Current* | Appraisers' estimate | | |
| Range | Average | Cotton (bales) | Corn (bushels) | Peanuts (bushels) | |
| Less than 0.30 | 0.24 | 0.29 | 12 | 26 | \$ 601 |
| 0.30 - 0.35 | 0.33 | 0.36 | 15 | 30 | 739 |
| 0.36 - 0.48 | 0.41 | 0.38 | 15 | 30 | 824 |
| 0.49 - 0.54 | 0.50 | 0.48 | 18 | 32 | 917 |
| 0.55 or more | 0.68 | 0.58 | 20 | 35 | 1,101 |
| Average | 0.42 | 0.42 | 16 | 31 | \$831 |

*Average yield reported by the applicant for the crop year previous to the date of loan.

the appraisers estimated that the average yield of cotton would be high than on farms where the appraisers estimated that the average yield of cotton would be low. Since farms which consistently give high yields make possible the building of better houses, the above relationship is another indication that the appraisers' yield estimates were accurate, at least on the average.

The per cent of loans foreclosed tended to decrease as the appraisers' estimate of the average yield of cotton increased (Table 10). This relationship held true for both sandy loam soils and other soils. The results indicate that the appraisers

TABLE 10.—Relation of the Appraisers' Estimate of Average Yield of Cotton to Foreclosures and other Factors by Soil Classes, 1917-1931.

| Appraisers' estimate of average yield per acre of cotton (bales) | Average farm value per acre | | Average loan per acre | | Per cent of loans foreclosed | |
|--|-----------------------------|-------------|-----------------------|-------------|------------------------------|-------------|
| | Sandy loam soils | Other soils | Sandy loam soils | Other soils | Sandy loam soils | Other soils |
| Less than 0.30 | \$28 | \$27 | \$10 | \$10 | 15 | 28 |
| 0.30 - 0.35 | 44 | 33 | 16 | 12 | 8 | 26 |
| 0.36 - 0.48 | 46 | 34 | 16 | 12 | 7 | 26 |
| 0.49 - 0.54 | 59 | 42 | 22 | 15 | 8 | 24 |
| 0.55 or more | 71 | 45 | 26 | 17 | 4 | 21 |
| Average | \$51 | \$35 | \$19 | \$13 | 8 | 26 |

generally recognized the differences between soils, but did not realize the full economic significance of these differences. Although loans made on farms where cotton yields were expected to be low were much smaller per acre than loans made on farms where cotton yields were expected to be high, the loans on poor-yielding farms were disproportionately high, causing losses to both borrowers and lenders.

AMOUNT OF LOAN PER ACRE

When all other factors are equal, foreclosures will tend to show a direct relation to loan per acre. On sandy loam soils

TABLE 11.—Relation of Amount of Loan per Acre to Various other Factors on Sandy Loam Soils, 1917-1931.

| Amount of loan per acre | | Number of loans | Average acres per farm | Per cent of farm in crop land | Loss per \$1,000 loaned | Per cent of loans foreclosed |
|-------------------------|---------|-----------------|------------------------|-------------------------------|-------------------------|------------------------------|
| Range | Average | | | | | |
| \$ 2 - 11 | \$ 8 | 349 | 218 | 50 | \$18 | 8.3 |
| 12 - 21 | 17 | 1,310 | 135 | 68 | 25 | 8.5 |
| 22 or more | 28 | 1,011 | 121 | 80 | 17 | 6.2 |
| Total or average | \$19 | 2,670 | 141 | 69 | \$21 | 7.6 |

there was a smaller percentage of foreclosures on loans of \$22 or more per acre than loans of less than \$12 per acre, indicating that the higher loans were made on better land (Table 11). This table is included here to point out that even on similar soil types there is so much variation in quality that the smallest loans are not necessarily the safest.

SIZE OF FARM

In general, the percentage of loans foreclosed increased consistently as the number of acres in the farm increased (Table 12). The average amount of loan per acre was less on the larger farms than on the smaller ones. The per cent of the area which was in crop land was much lower on the large farms than on the small ones. Of course, the average loan per farm was least on the smallest farms.

In adverse years, farmers on small farms can pay their debts by practicing very strict personal economy. Large farms are dependent on hired or cropper labor, and it is impossible to reduce wages and expenses as rapidly as incomes decline in adverse years. In years of falling prices, as in 1930, many land-

TABLE 12.—Relation of Size of Farm to Foreclosures, Losses, and other Factors, 1917-1931.

| Number of acres per farm | Number of loans | Average per cent of farm in crop land | Average loan per farm | Average loan per acre | Loss per \$1,000 loaned | Per cent of loans fore-closed |
|--------------------------|-----------------|---------------------------------------|-----------------------|-----------------------|-------------------------|-------------------------------|
| 1 - 19 | 8 | 91 | \$ 500 | \$31 | \$ 0 | 0 |
| 20 - 59 | 695 | 79 | 853 | 20 | 9 | 5 |
| 60 - 99 | 1,184 | 72 | 1,413 | 18 | 20 | 9 |
| 100 - 139 | 822 | 66 | 1,941 | 17 | 28 | 14 |
| 140 - 219 | 1,074 | 62 | 2,796 | 16 | 48 | 19 |
| 220 - 299 | 401 | 60 | 3,891 | 15 | 54 | 21 |
| 300 - 459 | 338 | 57 | 5,128 | 14 | 85 | 30 |
| 460 - 779 | 174 | 54 | 7,892 | 14 | 86 | 28 |
| 780 - 1,319 | 41 | 48 | 10,556 | 11 | 129 | 39 |
| 1,320 - 2,639 | 13 | 43 | 13,292 | 8 | 102 | 23 |
| Total or average | 4,750 | 61 | \$2,556 | \$15 | \$54 | 15 |

lords make advances to their tenants in the form of high-priced seed, fertilizer, and food to an amount which is far in excess of the possible return with low prices, even with a good crop. In such years, strict personal economy on the part of the owner of a 500 acre farm can have very little effect on the ability to pay interest on a large debt.

Although the per cent of foreclosures was much higher on large farms than on small ones, this relationship was different

on poor soils than on good soils. On sandy loam soils as size of farm increased the percentage of loans foreclosed increased less rapidly than on other soils (Table 13). If loans are to be granted on the poorest soils, they should be **very conservative**, and **only on the smallest farms**.

TABLE 13.—Relation of Size of Farm to Loans, Foreclosures, and Losses on Different Soil Classes, 1917-1931.

| Number of acres per farm | Average loan per acre | | Loss per \$1,000 loaned | | Per cent of loans foreclosed | |
|--------------------------|-----------------------|-------------|-------------------------|-------------|------------------------------|-------------|
| | Sandy loam soils | Other soils | Sandy loam soils | Other soils | Sandy loam soils | Other soils |
| Less than 100 | \$21 | \$15 | \$ 7 | \$ 45 | 5 | 14 |
| 100 - 299 | 20 | 13 | 20 | 81 | 9 | 27 |
| 300 or more | 15 | 12 | 37 | 133 | 17 | 38 |
| Average | \$19 | \$13 | \$21 | \$99 | 8 | 25 |

BORROWER'S EQUITY

The borrower's equity in the real estate at the time the loan was closed varied from less than nothing to over 80 per cent (Table 14). This is the equity above all liens including the first

TABLE 14.—Relation of the Borrower's Equity in the Real Estate to the Number of Loans Closed on Different Classes of Soil, 1917-1931.

| Per cent which the borrower's equity* was of the appraised value of the farm | Number of loans | | | Per cent of loans | | |
|--|------------------|-------------|------------------|-------------------|-------------|------------------|
| | Sandy loam soils | Other soils | All soil classes | Sandy loam soils | Other soils | All soil classes |
| 80 - 99 | 32 | 15 | 47 | 1 | 1 | 1 |
| 70 - 79 | 304 | 246 | 550 | 12 | 12 | 12 |
| 60 - 69 | 1,206 | 943 | 2,149 | 45 | 45 | 45 |
| 50 - 59 | 701 | 510 | 1,211 | 26 | 25 | 25 |
| 30 - 49 | 290 | 225 | 515 | 11 | 11 | 11 |
| 0 - 29 | 114 | 109 | 223 | 4 | 5 | 5 |
| Less than 0 | 21 | 26 | 47 | 1 | 1 | 1 |
| Total | 2,668 | 2,074 | 4,742 | 100 | 100 | 100 |

*At the time the loan was closed.

mortgage granted by one of the agencies cooperating in this study. The distribution of the loans according to the borrower's equity was almost identical for loans made on sandy loam soils and for loans made on other soils. This explains to a large extent the greater losses incurred on the poorer soils by lending

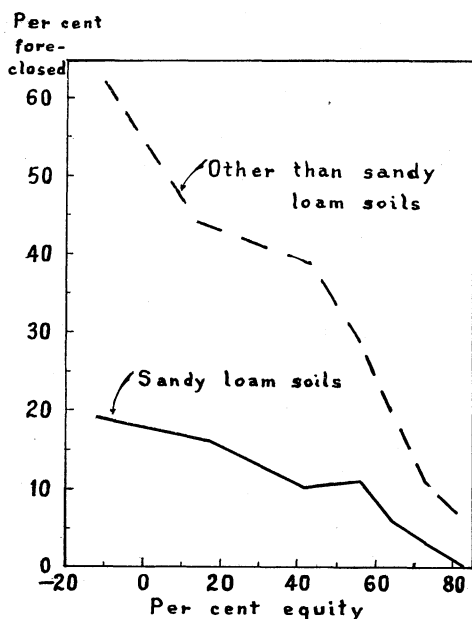


FIGURE 5.—RELATION OF THE BORROWER'S PER CENT EQUITY IN THE REAL ESTATE AT THE TIME THE LOAN WAS CLOSED TO THE PER CENT OF LOANS FORECLOSED, 1917-1931.

It is extremely risky to borrow on poor soils with only a small equity in the real estate.

TABLE 15.—Relation of the Borrower's Equity in the Real Estate to Foreclosures and Losses on Different Soil Classes, 1917-1931.

| Per cent which borrower's equity* was of the appraised value of the farm | Per cent of loans foreclosed | | | Loss per \$1,000 loaned | | |
|--|------------------------------|-------------|------------------|-------------------------|-------------|------------------|
| | Sandy loam soils | Other soils | All soil classes | Sandy loam soils | Other soils | All soil classes |
| 80 - 99 | 0 | 7 | 2 | \$ 0 | \$ 2** | \$ 1** |
| 70 - 79 | 3 | 11 | 7 | 2 | 21 | 9 |
| 60 - 69 | 6 | 20 | 12 | 10 | 68 | 35 |
| 50 - 59 | 11 | 29 | 19 | 34 | 115 | 68 |
| 30 - 49 | 10 | 39 | 23 | 17 | 146 | 70 |
| 0 - 29 | 16 | 44 | 30 | 42 | 222 | 131 |
| Less than 0 | 19 | 62 | 43 | 111 | 176 | 143 |
| Average | 8 | 25 | 15 | \$21 | \$99 | \$54 |

*At the time the loan was closed.

**Gain.

agencies. It is no more sound to lend an equal proportion of the value on good and poor farms than it is to lend an equal proportion of the value on government bonds and common stocks.

Foreclosures and losses increased consistently as the borrower's equity decreased (Table 15 and Figure 5). This was particularly true on the poorer soils (those other than sandy loams). It is important from the lender's standpoint that the borrower have considerable equity in his farm. This is much more important on a poor farm than on a good farm.

SUMMARY AND CONCLUSIONS

- 1.—The percentage of loans foreclosed on sandy loam soils was much lower than on other soil types. Soil differences are generally recognized but the differences in value are usually underestimated.
- 2.—In areas such as the one studied, where erosion is a serious factor, the nearer the topography approaches a level condition, the better is the loan risk.
- 3.—A study of sale values of farm land for the period 1890 to 1931 indicates that the differential between the value of good and poor land has been increasing.
- 4.—On all soil types the average appraised value was higher than the sale price had ever been.
- 5.—The appraisers recognized yield differences correctly, but failed to put sufficient weight on their importance.
- 6.—Large farms were much poorer risks than small ones, particularly on poor soils.
- 7.—Borrowers with small equity and poor soil had little chance of repaying their loans.

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APPENDIX

Average Sale Value per Acre of Farm Land of Different Soil Types in Five Southeast Alabama Counties.

| Year | Green-ville sandy loam | Orange-burg sandy loam | Ruston sandy loam | Norfolk sandy loam | Green-ville loamy sand | Norfolk loamy sand |
|---------|------------------------|------------------------|-------------------|--------------------|------------------------|--------------------|
| 1880-89 | \$ 2.15 | \$ 4.08 | \$ 3.38 | \$ 3.72 | \$ 1.00 | \$ 2.93 |
| 1890 | 9.71 | 15.79 | 10.00 | 2.42 | — | 8.29 |
| 1891 | 12.33 | 4.96 | 8.21 | 2.76 | 0.12 | — |
| 1892 | 0.71 | 4.47 | 5.00 | 5.59 | — | 12.50 |
| 1893 | 1.00 | 8.12 | 5.45 | 3.69 | 5.50 | — |
| 1894 | 3.27 | 7.57 | — | 4.00 | — | 3.59 |
| 1895 | 4.50 | 2.57 | 1.50 | 8.95 | 4.28 | 3.03 |
| 1896 | 4.00 | 2.76 | 5.91 | 5.55 | — | 4.14 |
| 1897 | 5.79 | 2.79 | 1.84 | 5.00 | 6.25 | 4.60 |
| 1898 | 4.50 | 6.90 | 6.24 | 3.79 | 6.76 | 2.58 |
| 1899 | 7.97 | 2.83 | 4.50 | 3.62 | 2.70 | 2.50 |
| 1900 | 10.33 | 3.41 | 7.40 | 6.32 | 6.62 | 8.13 |
| 1901 | 4.12 | 4.00 | 4.04 | 5.45 | 8.86 | 14.86 |
| 1902 | 11.98 | 5.65 | 13.00 | 8.71 | 10.12 | 3.40 |
| 1903 | 6.76 | 3.70 | 9.25 | 8.21 | 10.95 | 14.07 |
| 1904 | 9.40 | 7.16 | 7.68 | 10.06 | 9.75 | 8.15 |
| 1905 | 11.98 | 9.49 | 9.34 | 12.09 | 12.85 | 10.55 |
| 1906 | 10.61 | 8.02 | 10.73 | 14.93 | 13.73 | 8.14 |
| 1907 | 23.24 | 4.36 | 13.41 | 13.17 | 11.95 | 10.44 |
| 1908 | 22.78 | 13.36 | 9.33 | 10.88 | 10.41 | 15.07 |
| 1909 | 16.57 | 13.95 | 14.89 | 11.24 | 13.32 | 11.84 |
| 1910 | 28.23 | 14.18 | 16.26 | 20.91 | 19.29 | 12.98 |
| 1911 | 20.56 | 15.95 | 30.58 | 19.57 | 13.54 | 9.43 |
| 1912 | 24.29 | 17.98 | 18.34 | 18.35 | 33.86 | 11.03 |
| 1913 | 17.86 | 20.07 | 14.66 | 16.88 | 21.59 | 21.06 |
| 1914 | 22.45 | 14.35 | 23.61 | 19.45 | 19.86 | 14.64 |
| 1915 | 20.59 | 12.61 | 15.65 | 23.65 | 26.88 | 11.73 |
| 1916 | 23.74 | 15.37 | 18.95 | 17.14 | 24.85 | 16.13 |
| 1917 | 28.23 | 13.97 | 22.93 | 25.15 | 26.45 | 18.94 |
| 1918 | 29.79 | 19.64 | 29.35 | 28.44 | 25.37 | 21.12 |
| 1919 | 36.14 | 23.32 | 31.95 | 39.34 | 40.84 | 25.35 |
| 1920 | 41.08 | 34.05 | 33.31 | 34.66 | 39.14 | 33.08 |
| 1921 | 31.31 | 33.32 | 41.99 | 40.81 | 40.66 | 27.67 |
| 1922 | 44.54 | 24.09 | 28.46 | 37.37 | 47.30 | 23.36 |
| 1923 | 36.08 | 27.99 | 34.01 | 38.58 | 46.49 | 36.81 |
| 1924 | 44.87 | 48.99 | 35.06 | 46.03 | 38.57 | 28.08 |
| 1925 | 40.99 | 27.34 | 44.19 | 40.61 | 41.06 | 33.15 |
| 1926 | 50.55 | 27.98 | 32.42 | 46.15 | 39.37 | 27.80 |
| 1927 | 41.23 | 36.61 | 36.55 | 43.26 | 41.16 | 25.02 |
| 1928 | 42.89 | 35.72 | 23.52 | 38.82 | 49.71 | 25.96 |
| 1929 | 36.05 | 32.66 | 25.48 | 41.08 | 33.54 | 22.15 |
| 1930 | 48.61 | 24.57 | 39.04 | 30.63 | 26.82 | 14.88 |
| 1931 | 23.59 | 18.82 | 31.53 | 24.21 | 31.19 | 21.60 |

(Concluded on next page.)

**Average Sale Value per Acre of Farm Land of Different
Soil Types in Five Southeast Alabama Counties.**

| Year | Susque- hanna fine sandy loam | Orange- burg sand | Norfolk sand | Kalmia group | All soil types |
|---------|--|-------------------------|-----------------|-----------------|-------------------|
| 1880-89 | \$ 4.04 | \$ 3.85 | \$ 3.43 | \$ 4.65 | \$ 3.92 |
| 1890 | 7.93 | — | 3.72 | 3.18 | 5.78 |
| 1891 | — | — | 3.98 | 2.70 | 4.65 |
| 1892 | 5.38 | — | 9.06 | 2.62 | 5.15 |
| 1893 | 7.63 | 7.34 | 3.08 | — | 4.62 |
| 1894 | 7.27 | 3.90 | 3.90 | 1.67 | 5.22 |
| 1895 | 7.28 | 3.70 | 12.56 | 5.83 | 6.49 |
| 1896 | 1.67 | 3.60 | 3.46 | 2.00 | 4.18 |
| 1897 | 2.41 | 8.00 | 2.11 | 6.14 | 3.59 |
| 1898 | 5.99 | — | 4.70 | 2.44 | 4.93 |
| 1899 | 10.82 | 3.37 | 2.87 | 2.00 | 3.70 |
| 1900 | 6.60 | — | 8.74 | 6.94 | 7.36 |
| 1901 | 7.36 | 2.71 | 3.98 | 1.67 | 5.10 |
| 1902 | 5.44 | 9.10 | 5.54 | 4.71 | 7.61 |
| 1903 | 5.41 | 3.60 | 4.40 | 4.46 | 7.11 |
| 1904 | 7.74 | 7.31 | 6.16 | 7.02 | 8.24 |
| 1905 | 5.55 | 7.31 | 6.77 | 10.51 | 9.39 |
| 1906 | 6.62 | 8.22 | 6.26 | 6.58 | 9.49 |
| 1907 | 7.77 | 18.33 | 8.42 | 4.28 | 11.00 |
| 1908 | 10.48 | 8.59 | 6.67 | 9.67 | 10.64 |
| 1909 | 8.45 | 16.74 | 8.12 | 8.34 | 11.09 |
| 1910 | 12.08 | 11.41 | 11.16 | 9.68 | 15.55 |
| 1911 | 11.32 | 12.24 | 9.25 | 14.43 | 14.48 |
| 1912 | 12.13 | 7.93 | 11.30 | 11.73 | 15.85 |
| 1913 | 11.60 | 12.38 | 13.18 | 15.31 | 14.95 |
| 1914 | 9.65 | 18.96 | 12.56 | 9.00 | 15.90 |
| 1915 | 12.03 | 15.71 | 15.18 | 19.11 | 16.90 |
| 1916 | 14.75 | 15.77 | 17.75 | 13.98 | 17.88 |
| 1917 | 15.77 | 12.75 | 14.76 | 14.46 | 20.20 |
| 1918 | 16.75 | 17.69 | 16.24 | 15.59 | 21.96 |
| 1919 | 20.91 | 22.56 | 22.26 | 31.11 | 30.40 |
| 1920 | 24.95 | 18.95 | 28.85 | 20.37 | 29.77 |
| 1921 | 17.86 | 28.56 | 22.57 | 33.04 | 31.25 |
| 1922 | 21.43 | 26.24 | 25.99 | 31.07 | 30.70 |
| 1923 | 26.09 | 25.28 | 27.27 | 26.55 | 32.88 |
| 1924 | 20.43 | 29.33 | 28.58 | 25.93 | 33.91 |
| 1925 | 24.04 | 21.64 | 25.78 | 27.91 | 33.51 |
| 1926 | 17.86 | 19.03 | 18.15 | 18.33 | 30.32 |
| 1927 | 18.05 | 20.60 | 17.64 | 19.03 | 30.75 |
| 1928 | 16.12 | 21.74 | 20.30 | 17.24 | 28.18 |
| 1929 | 13.59 | 24.21 | 18.10 | 16.37 | 26.42 |
| 1930 | 11.32 | 26.72 | 18.18 | 8.45 | 26.51 |
| 1931 | 3.89 | 9.92 | 11.73 | 5.02 | 17.35 |