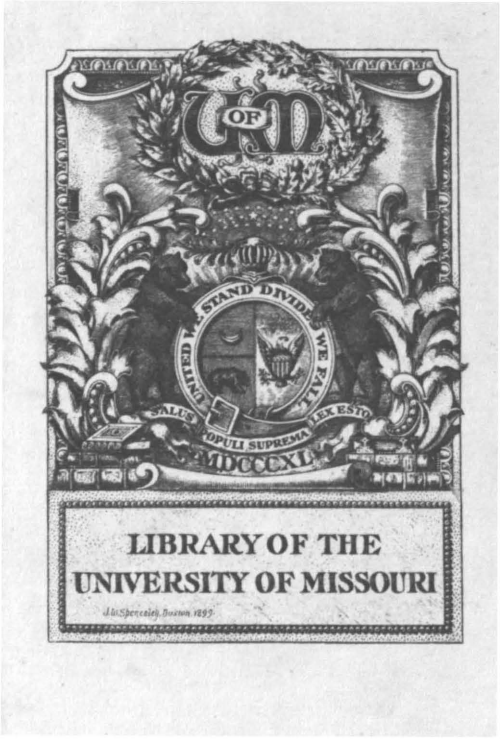

AN INVESTIGATION OF

FARM LAND CREDIT

by

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The writer wishes to express his indebtedness to the farmers and money lenders who have furnished information for the following work on farm land credit in Boone County; also to Mr. C.W.Thompson, who corrected the questionaire letters used in the investigations; and to Professor S. D. Gromer and Professor O. R. Johnson who have given many valuable suggestions for carrying on the work.

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AN INVESTIGATION OF FARM LAND CREDIT

INTRODUCTION

The problem of rural credit in the United States is growing rapidly in importance. Within the last few years it has attracted the attention of farmers, financiers, legislators, and city dwellers. Several commissions have gone abroad to secure information on foreign methods of loaning to farmers, the national government has been trying to devise an American system of rural credit, and state governments also, have taken up the problem and are suggesting various solutions.

This interest in rural credit is due to the fact that the consumers of the country are demanding larger supplies of cheap and wholesome foodstuffs and the farmers are failing to adequately meet this demand, due undoubtedly to several reasons, but expecially to the fact that modern farming requires more capital than is available to the farmers on reasonable terms.

Need of More Capital in Farming

The last thirty years have brought about radical changes in the methods of farming. These changes have worked

to increase the capital requirements of the farmer. During this period the last of the free land has been given away and cheap land has disappeared. Land is becoming an important item of capital and exacts rent. The average value of farm land and buildings per acre has more than doubled since 1880.* Table 1 shows this increase for the United States and also the increase for the State of Missouri and for Boone County which is the region dealt with later in the farm land credit discussion.

Table 1.-Average Value of Farm Land and Buildings per Acre.**

Year	United States	Missouri	Boone County
1910	$39.60	$49.61	$54.84
1900	$19.80	$24.82	$25.15
1890	$21.31	$20.33	$18.48
1880	$19.02	$13.47	$11.36

The greater increases in land values for the county and state than for the United States are likely due to the fact that the younger states have in general shown a much more rapid growth in land values than the older states during this thirty year period and Missouri belongs to the younger states.

*In fairness, perhaps it should be stated that the increase has not been due to the rise in the value of land alone but partly to the fact that money has depreciated in value considerably during this period.

**Ninth, Tenth, Eleventh and Twelfth Census of the United States.

However, the fact that the price of land has increased in general is evident. The figures show sufficiently well that the farmer who wishes to purchase land today must have much more capital than he would have needed in former years.

Not only are land values greater but the investments in livestock and farm equipment necessary to run a farm are considerably greater also. The census figures in Table 2 show the average amount of capital invested in the farming business at each census period beginning 1880. These figures include the values of land, fences, buildings, implements, machinery, and livestock. Each of these items has made a marked increase according to the census. This indicates that the farmer must have more capital invested in machinery, in livestock, and in buildings in order to farm under modern conditions. Furthermore, the growth of tenancy which is common in the United States bears out this fact by showing an attempt of the farmer, as will be explained later, to adjust himself to the requirements of a greater capital outlay in farming.

Table 2.-Average Value of All Farm Property Per Farm.

Year	United States Total Value	Missouri Total Value	Boone County Total Value
1910	$6444	$7405	$7860
1900	3563	3626	3629
1890	3523	3304	3115
1880	3038	2271.	2321

Careful investigations have shown that the farmer's profit bears a direct relation to the amount of capital which he has invested. The farmer with a relatively large investment can make enough to pay interest on the larger investment and have a much greater labor income left than the farmer with a relatively small investment. Table 3 shows this fact. The labor income is the farmer's reward for personal work and supervision after all business expenses and the interest on investment have been allowed.

Table 3. Relation of Capital to the Labor Income.*

Capital	Number of Farms	Labor Income
$2000 or less	16	$130
$2001--4000	69	219
$4001--6000	99	227
$6001--8000	94	303
$8001--10000	100	323
$10001--15000	134	528
$15001--25000	117	591
$25001--and over	43	1090

The data shown in Table 3 was secured from a farm management survey of a region in Johnson County, Missouri. Similar results have been secured from regions in Illinois, Iowa, and Indiana,** and also in New York.***

*Farm Management Investigation at the University of Missouri.
**U.S.Dept. Agr. Bureau Plant Industry. Bulletin 41, page 19.
***New York, Cornell Bulletin 295, page 400.

Securing More Capital Through Credit

The aim of the foregoing discussion is to show that the modern methods in farming are requiring a greater capital investment than formerly. The amount of this investment is such that many men capable of becoming good farmers are unable to obtain the necessary land and equipment. It is obvious that men with an abundance of capital do not engage actively in farming; men farm to make money, and cease when they reach an abundance. Most real farmers lack capital, and must be able to obtain more in order to carry on their business if agricultural production is to increase. The means by which more capital is obtained are by renting land, buying on time, and borrowing loanable funds. By renting land the farmer obtains an investment of capital in land so that he may put whatever capital he own into machinery, livestock, and other equipment. According to the census 37% of the farmers of the United States are tenants, which means that they obtain additional capital by renting land.

In this connection it may be stated that, in the opinion of many agriculturalists, tenancy has serious dangers and that better conditions would exist if farmers could, through other means, obtain capital enough to own and run their own farms.

When goods are bought on time the farmer secures the use of the goods ~~besides the amount of their price~~ until the

bill is paid. Anyone acquainted with farming conditions knows that this practice is very common in buying household supplies, fertilizer, fuel, and machinery.

However, the most inportant means the farmer has of obtaining capital is by borrowing funds or as is commonly called securing credit. The nature of this credit is of two kinds. First, long term or land-mortgage credit, which is defined by the United States Commission on Agricultural Credit as "credit to meet the capital requirements of the farmer."* The capital requirements are for buying land, constructing buildings, clearing, drainage, etc. Second, short term or personal credit which is "credit to meet the current or annually recurring needs of the farmer."** These needs are for money to carry on farm operations such as planting, harvesting, feeding live-stock, marketing, etc. The present discussion will be confined to land-mortgage credit because, in the opinion of the writer, it presents the larger problem---the farmer is in greater need of better facilities for securing land-mortgage credit than of a change in personal credit conditions.

AN INVESTIGATION OF PRESENT CONDITIONS IN REGARD TO FARM LAND CREDIT

Object of the Investigation

The object of this investigation is to secure from the ultimate sources all information obtainable on the

*Agricultural Credit Senate Doc. 380. Parts I and II.
**Ibid.

methods and means through which the farmers secure credit on farm mortgage security and to study at first hand as far as possible the conditions under which this credit is secured. The region included in the investigation is Boone County, Missouri, which is about centrally located in the state. The work has been carried on personally by the writer so that, with the time available, an intensive study of a greater area was not possible.

The information in this discussion is presented in an attempt to show the present conditions in Boone County, which is an average county in Missouri in regard to farm values and indebtedness. Figures will be submitted later to show how this county compares in averages with the state and the United States. Since a study of present conditions is necessary before any adequate system of improvement may be determined, it is hoped that the facts in this discussion may give a suggestion as to the degree to which rural credit reform is necessary and as to the direction the reform should take.

Sources of information

Three general sources of information were consulted in getting the data for this discussion: first, the farmer, second, the money lenders in the county, and third, the county records which pertain to farm values and farm mortgages.

Table 4.-Questionaire Letter Sent to Farmers.

QUESTIONS ON FARM LOANS.

1. Costs in getting mortgage loan:

(a) Interest rate %_____

(b) Abstract of title $_____

(c) Recording fee $_____

(d) Commission: Is it the custom in your locality to charge a single commission on a farm mortgage loan, payable once for all at the time the money is borrowed? If so, what %_____ Or is it customary to charge a commission figured for each year the same as interest? If so, what %_____.

(e) Examination of title_____

(f) Other charges (State what for)_____

2. Length of time of loan_____

3. Amount of mortgage loan_____

4. Purpose for which the money was borrowed (state whether to purchase land, construct buildings, consolidate old debts, etc.)

5. Value of real estate mortgaged $_____

6. Source from which money was borrowed (bank, private individual, insurance company, or other agency)

7. Will the loan be renewed?

8. Charges if any for renewal $_____

9. Would the farmers in your locality borrow more money for productive farming if they had a system by which they could borrow money for 10 or 20 years at lower rates of interest?

PERSONAL LOANS

10. Usual rate of interest on farmer's personal note_____

11. Usual length of time that such notes run_____

12. Is there any difficulty in obtaining personal loans when wanted? If so, why?

13. Do farmers in your locality pay different interest rates? Can you give any instances of such differences?

14. Do you think the farmers should be able to borrow for a longer term on personal note?

15. Do you consider the interest rate too high in your locality?

16. Can you give any further information on farm loans which would be of assistance in suggesting means of improvement?

Name_____

P.O. Address_____

Method of Inquiry

Quite a number of farmers were interviewed personally by the writer, but the majority of the farmers' testimonials were obtained from questionaire letters (see Table 4) sent to holders of farm mortgage loans. Two hundred and fifty-five such letters were sent out and seventy replies were received. The replies were from a representative lot of farmers from all parts of the county who had borrowed during the year 1914. Their names had been obtained from the county records. Information from money lenders, including the banks, was obtained through correspondence and personal interviews. Perhaps the most reliable data was obtained from the county deed of trust records. Besides these general sources of information the writer has had opportunity to talk with several individuals who are familiar with mortgage credit conditions throughout the county.

General Discussion of the Region

As previously stated Boone County is an average region in regard to farm values and farm mortgages. The total area in farm lands is 424,191 acres* which is more than the average for all the counties of the state because Boone County is above the average in total area in farms, and has a higher percentage of land area in farms. This percentage according to the 1910 census is 92.7%. Missouri has 78.6% of its land area

*Annual Report for 1915 of Assessed Valuation of Property in Boone County, made by County Clerk.

in farms and the United States has only 46.2% in farms. The average size farm is 118.6 acres in the county as compared with 124.5 acres for the state and 138.1 for the United States. By referring back to Table 2, page 3, the average value of all property per farm is found to be appreciably greater for Boone County than for the state or the United States. The foregoing facts indicate that farming is carried on a little more intensively on the average in Boone County than in the state or in the United States. In regard to the average farm value and mortgage debt per farm the county compares very closely with the state and with the United States. Table 5, shows this fact.

Table 5.-Value of Land and Buildings and Mortgage Indebtedness Per Farm.

	United States	Missouri	Boone County
Average value of farm	$6289.00	$6083.00	$6056.00
Ave. indebtedness per farm	1715.00	1758.00	1832.00
Average equity per farm	4574.00	4325.00	4224.00
Percent incumbrance	27.3%	28.9%	30.3%

Another point of interest in the discussion is the tendency of farm mortgages to increase. This is shown in Table 6 by percentages made from the census reports. A comparison of the percent of farms mortgaged in 1900 to those mortgaged in 1910 will indicate the increase. Only farms owned by the operator are considered. The table gives the

percent of such farms. Boone County appears to have a larger percentage of mortgaged farms owned by the operator and also a larger percentage of total farms owned by the operator. This would suggest that the mortgage problem in Boone County is greater than in an average region in Missouri or the United States. However, the real test of the problem is the relation of the supply of farm-loan funds to the demand for them. The supply must also be examined.

Table 6.-Percent of Farms Mortgaged and Farms Owned by Operators.

	% of farms mortgaged		% of farms owned by operator	
	1910	1900	1910	1900
United States	33.7%	31.2%	62.1%	68.1%
Missouri	46.3	42.4	69.4	68.9
Boone County	50.8	44.9	75.6	73.9

Table 6 shows that the percent of farms owned by the operator has increased slightly in Boone County and in Missouri. This condition, although it appears favorable for the region, is apt to be only temporary. It is due to the migration of a large number of tenant farmers from Missouri into the newer farming regions of the west and southwest while most of the land owning farmers remained. With a growing need for capital by the farmer who lives on the farm and tills the soil a return to increasing tenancy may be expected in Missouri. In the United States taken as a whole tenancy has been gradually increasing.

Most farmers in Boone County practice diversified farming, a number of them are dairymen, some feed livestock rather extensively, and a few in the southern part of the county grow fruit. The staple crops are grown primarily and the production is about that of an average agricultural county of the state. Taken altogether the general farm conditions and particularly the conditions pertaining to farm loans in Boone County should reflect the conditions of an average agricultural region of the state and very likely of the United States.

A Study of Farm Mortgage Loans

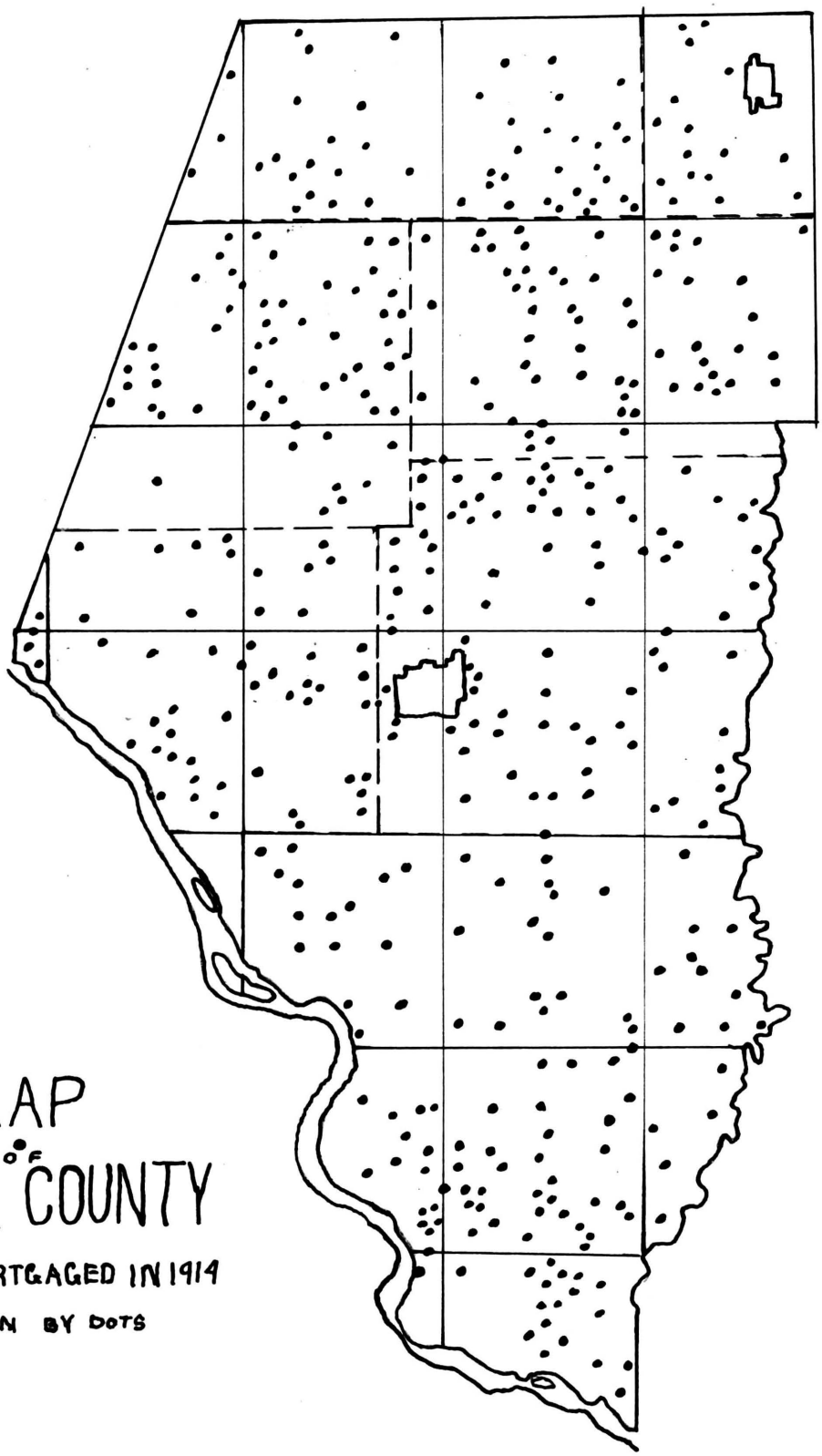
The most reliable source of data on mortgage loans was found to be the county deed of trust records. In an effort to determine present conditions the study wasconfined to all farm mortgages made and not released during 1914. Because of the time required in examining the mortgages no data was gathered on those made prior to 1914. However, because of the shortness of the term of loan, which will be discussed in detail later, the number of mortgages made in 1914 from which data was obtained comprise a large percentage of the total number of mortgages in the county. A fairly accurate figure for this percentage was obtained in the following manner:

The 1900 Census reported 1145 mortgaged farms operated by owners and the 1910 Census reported this figure at 1307.

This gives an increase of 11.5% from 1899 to 1909. Allowing the same rate of increase until 1914 we would have 1385 mortgaged farms in 1914. The 486 mortgages obtained from the records as made in 1914 were drawn against 435 farms. This number of farms represents 31.5% of the total number of farms mortgaged at the end of the year 1914. No account is taken in the census of the farms mortgaged by landlords who rent to tenants, but inasmuch as absentee landlords own less than one-fourth of the farms in the county and ordinarily are not heavy borrowers the discrepancy cannot be large.

In the opinion of the writer, 31.5% of the number of farms encumbered in the county should be fairly representative of the lot, moreover anydifference will fall in the direction that conditions are moving since the data is on the more recent mortgages. The distribution of these farms is shown on the map on page 14.

By examining Table 7 the total amount of the 486 mortgages is found to be $1,025,492. This amount is over half the amount of total mortgage indebtedness reported by the census in 1910 and consists of less than one-third (31.5%) the total number of mortgages calculated to exist in 1914. This shows undoubtedly that the tendency has been for farm mortgages to increase. However, the increase has been exceptional in the last fifteen years because of the large number of land transfers which resulted from the rapid increase in land



MAP
OF
BOONE COUNTY
FARMS MORTGAGED IN 1914
SHOWN BY DOTS

values from 1900 to 1910,* and also because of the poor crop years of 1911, 1913, and 1914.

Referring again to Table 7 the assessed valuation of the 435 farms mortgaged is found to be $439,116. The assessed valuation of all farms in the county is $4,356,450.** This gives the value of farms mortgaged in 1914 as 10.8% of the total value of farms in the region. No county records are

Table 7.-Data on Mortgages in 1914.***

Number of mortgages	486
Number of farms mortgaged	435
Total acres	46,044
Total assessed valuation	$439,116
Total actual valuation	$2,603,957
Mortgage debt incurred in 1914	$1,025,492
Total mortgage debt on 435 farms	$1,192,795
Total encumbrance	45.8%

obtainable on the actual valuation of farm land, but a ratio between assessed valuation and actual valuation was determined which has proved to be accurate for the purpose of calculating the actual valuation. Perhaps it will be profitable to digress long enough to explain how this ratio was obtained.

*See Table 1, page 2.
**Annual Report for 1915 on Assessed Valuation of Property in Boone County, made by the county clerk.
***Mortgages made during the year and cancelled before end of the year are not included.

From the replies to the questionaire shown in Table 4 which was sent to the farmers the writer selected forty-five which were the most reliable. From them the value of the real estate mortgaged in each case was obtained. These values were tabulated together with the acres and assessed valuations of the respective farms. The results are shown in Table 8.

Table 8.-Ratio of Assessed Valuation to Actual Valuation. 45 farms.

Acres	6229
Assessed valuation	$59,510
Actual valuation	$353,188
Assessed valuation per acre	$9.55
Ratio	1 to 5.93.

The ratio 1 to 5.93 indicates that the farm land and buildings in Boone County are assessed at 1/5.93 or about one sixth of their actual value. The assessed value per acre of these farms as shown in the table is practically the same as the average assessed value per acre of the total numer of farms, which is $9.54. The farms used were therefore representative. By assuming that the assessments are equalized throughout the county, the ratio of 1/5.93 can be safely used in calculating actual valuations.

Returning to the discussion of Table 7 we find the total actual valuation of the farms mortgaged in 1914 to be $2,603,957.

This amount is the value of the land and buildings which were mortgaged. The mortgage debt incurred is $1,025,492, which represents 39.3% of the total value. This amount is not the total indebtedness on the 435 farms however, because a number of mortgages were made on them prior to 1914. By including these prior liens the total mortgage debt becomes $1,192,795. The total encumbrance therefore is 45.8%.

The acres, actual value, and amount of mortgage debt per farm and per acre are shown in Table 9. The actual value per farm is very close to the 1910 Census figure for that item, but the mortgage debt is considerably greater.* It is doubtless a fact that the recent years of poor crops are partly responsible for this increase in mortgage indebtedness per farm.

Table 9.-Value and Mortgage Debt per Farm and Per Acre. 435 Farms.

	Per Farm	Per Acre
Acres	105.8	
Value of land and buildings	$5986	56.55
Mortgage debt incurred in 1914	2357	22.27
Total Mortgage debt	2742	25.90

The average principal per mortgage will be smaller than the mortgage debt per farm due to the fact that 51 of the 486 mortgages are second liens on farms already having 1914 mortgages. The amount of principal varies in the number of

*See census figure in Table 5, page 10.

mortgages studied from $25 to $30,000. The larger amounts which are obtained mostly from insurance companies or mortgage and loan companies are unusual. Table 10 groups all mortgages according to amount of principal.

Table 10-Classification of Mortgages According to Principal.

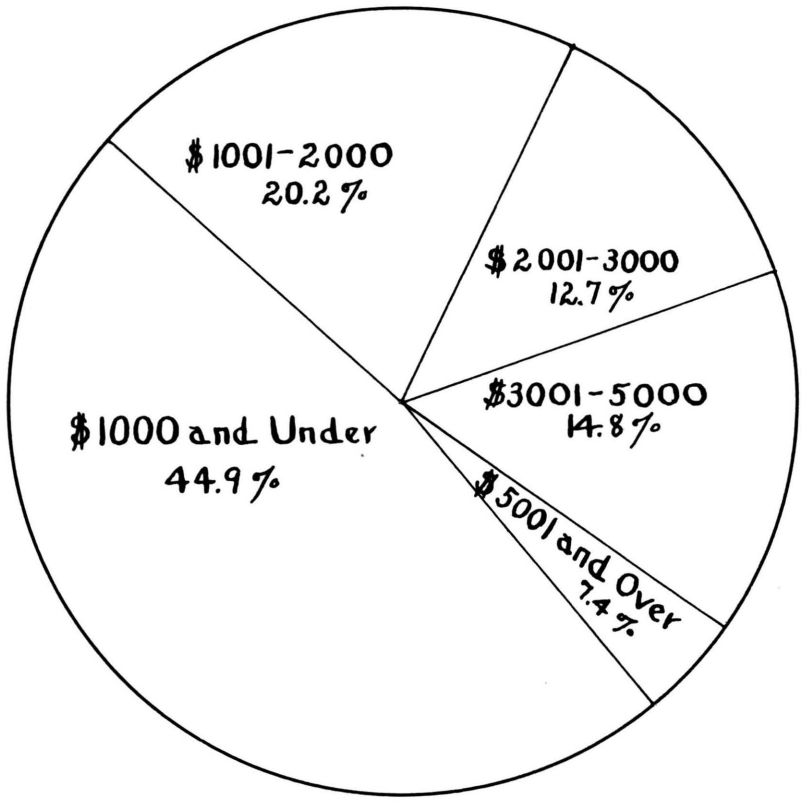
Classification	Number	%
$1000 and under	218	44.9
1001--2000	98	20.2
2001--3000	62	12.7
3001--5000	72	14.8
5001 and over	36	7.4

An effort was made to determine the purpose for which the mortgaged loans were negotiated. From the replies of the farmers the results in Table 11 were obtained. The great

Table 11.-Purpose of Loan.

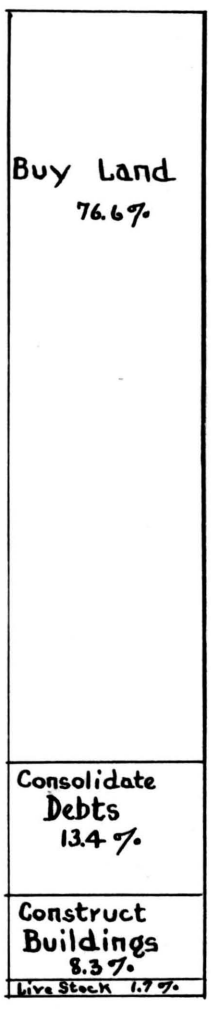
To buy land	76.6%
To consolidate debts	13.4
To construct buildings	8.3
To buy livestock	1.7
	100.0

majority of mortgages were made in connection with transference of land. As the region becomes more settled this purpose may be expected to decrease in inportance. Consolidation of old debts is next in importance due perhaps to the



Distribution of Mortgage According to Amount of Principal

Illustration of Table 10.



Purpose of Loan

Illustration of Table 11.

recent crop failures which have placed the farmer where he is unable to meet his bills for machinery, seed, feed, etc. In the replies received the farmers expressed the opinion that more money would be used to make farm inprovements and to purchase livestock if conditions for borrowing were more favorable. The following opinions are from Boone County farmers:

"Farmers should get money for a time of ten to twenty years which would help them improve the land and give them a better chance to do so. It takes time and money to improve most farms which many of us can't do on these short loans and high rates of interest."

"As long as a farmer has to sell his farm products to meet payments annually and face the danger of higher rates and failure to make a new loan he does not reach out much. I think it is production of more livestock that is needed."

"If the people could borrow money on longer terms they would work out more of the timber on the hills and get more grass."

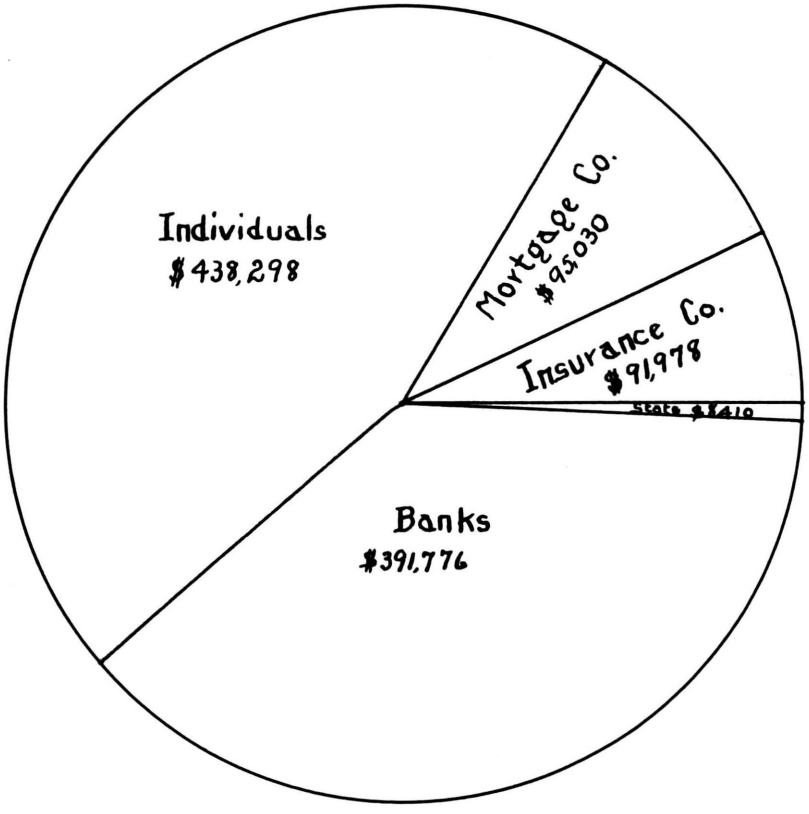
The sources of the loans secured by farm mortgages in 1914 are reported in Table 12 with the number and percentage from each source and the amount of loans and percentage from each source. A detailed discussion of these loan sources will be taken up later.

Table 12.-Sources of Farm Mortgage Loans with Amount and Number from Each Source.

	Amount Loaned	Number	% of total amount	% of number of loans from each source
Individuals	$438,298	231	42.7%	47.5%
Banks	391,776	186	38.3	38.2
Mortgage and Loan Companies	95,030	38	9.3	7.8
Insurance Companies	91,978	17	8.9	3.5
State School Funds	8,410	14	.8	3.0
Total	1,025,492	486	100.0	100.0

The Interest Rate

The interest rate is not the most important consideration in a loan contract. The borrower should give first consideration to the principal and his ability to repay it. It is more important to be able to return the loan at its maturity than to secure the lowest rates of interest. Nevertheless, the interest rate is important because it will often determine whether the loan has been profitable. It is not worth while to borrow if the borrowed funds cannot be used to bring a return greater than the amount of interest and keep the principal unimpaired. The opinion is common that the farmer is not making a profit on borrowed funds from the returns on investments made with them---that it takes two acres to pay interest on borrowed money invested in one acre. To examine this statement would involve a study of farm management, but it will be



Amount of Farm Mortgage Loans Secured in 1914
From Each Source.

sufficient for the present to state that land in Boone County worth $100 per acre will ordinarily rent for $3.00 cash, which is a return of 3% on the investment----other land yields about the same proportion of rent. Of course the returns from farming the land should be something greater than 3%, but it may be seriously doubted whether it reaches 6.5% in a large number of instances. On the other hand the average interest rate as will be shown later is 6.52%. (See Table 14) If such is the case then the farmer who borrows to buy a farm is dependent on the increment in the value of his land for his profit.

Table 13.-Percent of Loans at the Various Interest Rates. 476 Loans.*

	Individuals	Banks	Mortgage & Loan Co	Insurance Cos.	State Funds	All Sources
8%	21.3%	43.8	5.7%	8.3%		28.0%
7 or 7½	32.6	34.0	17.2	8.3		30.4
6 or 6½	42.2	22.2	57.1	25.1	100.%	36.8
5 or 5½	2.6		20.0	58.3		4.2
3	1.3					.6
	100.0	100.0	100.0	100.0	100.0	100.0

As stated the average interest rate is 6.5%, but this does not show the usual rate because several very large loans at low rates bear down appreciably upon the average. The usual rates may be seen from Table 13, which gives the percent of

*The interest rates were not reported in ten of the mortgages examined.

loans at the various interest rates. The source of loan has an important bearing on the interest rate and therefore has been considered in arranging the interest data. The distribution of loans as to interest rate from each source is shown for comparison. The greatest number of loans from individual lenders are made at 6%. Banks do the most lending at 8%, mortgage and loan companies at 6%, and insurance companies at 5½%. The state school funds are loaned at 6% straight.

In order to arrive at the average interest rate charged by each loan source and also by all sources the amount of interest on each loan for one year was calcualted, and then the interest rate determined by dividing the total amount of interest in each tabulation by the total principal. Table 14 gives the principal, amount of interest for one year, and average interest rate for each source and for all sources. The amount of lending by each agency in 1914 may be noted from this table. Ranked according to interest rate the sources would

Table 14.-Amount of Principal and Interest and Average Interest Rate.

Source	Principal	One year's Interest	Rate
Individuals	$438,208	$27,798.60	6.34%
Banks	391,626	27,274.77	6.96
Mortgage and Loan Companies	94,515	5,599.32	5.92
Insurance Companies	44,100	2,509.50	5.69
State School Funds	8,410	504.60	6.00
All Sources	976,859	63,686.79	6.52

stand as follows: banks, individual lenders, state funds, mortgage and loan companies, and insurance companies.

In order to determine the basis for the complaint that the farmer who borrows relatively small amounts is discriminated against in favor of the big farmer who borrows heavily, a tabulation was made to show the relation of the average interest rate to the amount of loan. Each group of loans according to source was handled separately first, and then all sources were figured together. This calculation gave the average interest rate for each classification of loans according to amount. The results are shown in Table 15. An almost uniform increase in interest rate occurs as the amount of loan decreases. This shows that the small borrowers pay more interest.

Table 15.-Relation of Average Interest Rate to Amount of Loan.

Amount of Loan:	Individual	Banks	Mortgage & Loan Co:	Insurance Cos.	State Funds:	All Sources
1000and under	6.91%	7.30%	6.46%	7.09%	6.00%:	7.00%
1001--2000	6.51	7.30	6.00	5.50	6.00	6.77
2001--3000	6.33	6.95	6.19	5.50	----	6.48
3001--5000	6.42	6.89	5.82	5.50	----	6.49
5000 and over	5.91	6.68	5.75	5.50	----	6.18

Another factor influencing the interest rateis the risk element in the loan. By a comparison of interest rates in first and second mortgages the writer found that the second mortgages bore the higher rates of interest. This is to be expected since the lender is taking greater chances of losing

his money on the second mortgages. The risk is also greater on heavily encumbered lands, so we find that such lands are security for loans of relatively higher interest rates.

The foregoing discussion has included the main factors influencing interest rate. The honesty and thrift of the borrower undoubtedly are factors but do not operate to a great extent in farm mortgage-loans, especially as compared with personal loans.

Costs Other Than Interest

The interest charge, though it is the most important cost in mortgage loans, falls considerably short of showing the real expense of the loan to the borrower. Under the present conditions there are a number of costs which add to the burden of borrowing. The greatest of these costs is the commission. It is difficult to present accurate data on commissions because they vary greatly--much more so than interest rates--and they are not stipulated in the mortgages. In order to arrive at a knowledge of the number and amount of commissions charged the farmers were consulted on this point. Of the replies received 42.8% reported no commission, 46.5% reported a commission charged for the first year only, and 10.7% reported a commission charged annually. The number of loans at the various commissions charged are given in Table 16. By studying the commissions reported with reference to the

sources of loans, and in considering the percentage of loans from the various sources, the writer was convinced that the numbers of loans at the various commissions shown in Table 16 express roughly the relative numbers of loans at the various

Table 16.-Number of Loans at Various Commissions.

	Number		Number
No commission	24	½% commission each year	2
2% for first year only	21	1 " " "	1
2½ " " " "	2	2 " " "	1
3½ " " " "	1	2½ " " "	1
1 " " " "	1	3 " " "	1
½ " " " "	1	Total number reporting	56

commissions among all loans made during the year. This point may be brought out by the following facts. Of the loans used in Table 16, 44% were from individual lenders, 37% from banks, and 19% from the other three sources. Since these figures rank similiarly with the percentage distribution of total loans according to source as shown in Table 12, and since the practices as regards commissions are in general uniform among lenders in each percentage group shown above, we may infer that the loans used in this study of commissions are fairly representative.

Annual commissions are not charged in connection with private loans or bank loans. They are connected almost exclusively with insurance or mortgage company loans. Such loans are negotiated through one or two agents or middlemen who receive the annual commissions. In a number of cases an additional mortgage is given to cover the commission charge of the original mortgage loan.

The commissions charged on individual loans are usually the remuneration of some loan agent who has brought the borrower and lender together. This may also be thecase with some bank loans but not all, because some banks charge a commission in addition to the interest. Usually the commissions are charged by middlemen connected with the loan transaction. When a commission of 2½% or 3½% is charged on a 1 or 2 year loan or when an annual commission of 2% or 2½% is charged the middleman should be fairly well rewarded for his trouble. If he justly earns this amount, which may be doubted, then the methods of bringing borrower and lender together must be very cumbersome indeed.

Besides interest and commission there are several other common costs in borrowing on farm mortgage security. Table 17 shows the usual, high and low charges representing these costs. The amounts reported under high and low are not the absolute extremes in each case but are figures established from several instances.

Table 17.-Costs Other Than Interest on Farm Loans.

	Abstract of Title	Examination of Title	Drawing up Mortgage	Recording Mortgage	Notary Fee	Commission	Renewals
Usual:	$10 to25:	$5.00	$1.80	$1.10--1.75	$.50:	2% for 1st yr.	$20 per M
High :	50:	20.00	$1.80	3.50	.50:	2½ each year	$25 per M
Low :	1.50:	2.50	1.80	.80	.50:	¼% for 1st yr.	$1.00

All costs in Table 17 are paid by the borrower, except that in a number of cases of land sales involving mortgage loans, the seller of the land pays for the abstract of title.

Besides the costs mentioned, examination of land and charges for collections may be added. No data on these costs has been obtained in this investigation. They are common however, and if they are not paid directly by the borrower they are paid indirectly through increased commissions and interest rates.

Typical Loans

In order to show the total expense met in obtaining farm mortgage loans Table 18 is submitted. The figures shown in this table are intended to reveal typical conditions. They are not in any way unusual, which may be demonstrated by examining the tables presented in the discussion of the interest rate, costs other than interest, term of loan, etc.* Loan No. 1, submitted in Table 18, is for a slightly larger amount than the average for all loans of the year. It is a type of loan common among individual lenders. The interest rate and commission are very common. When the total cost per year was figured for the three years during which this loan was held, it proved to be 8.3%. Only an exceptional farmer can farm in such a way as to make 8.3% on his investment and even he cannot do so if he is allowed a sufficient remuneration for personal labor and superintendence before figuring interest on investment.

Loan No. 2 is representative of the limited number of insurance loans in the county. These loans are for larger

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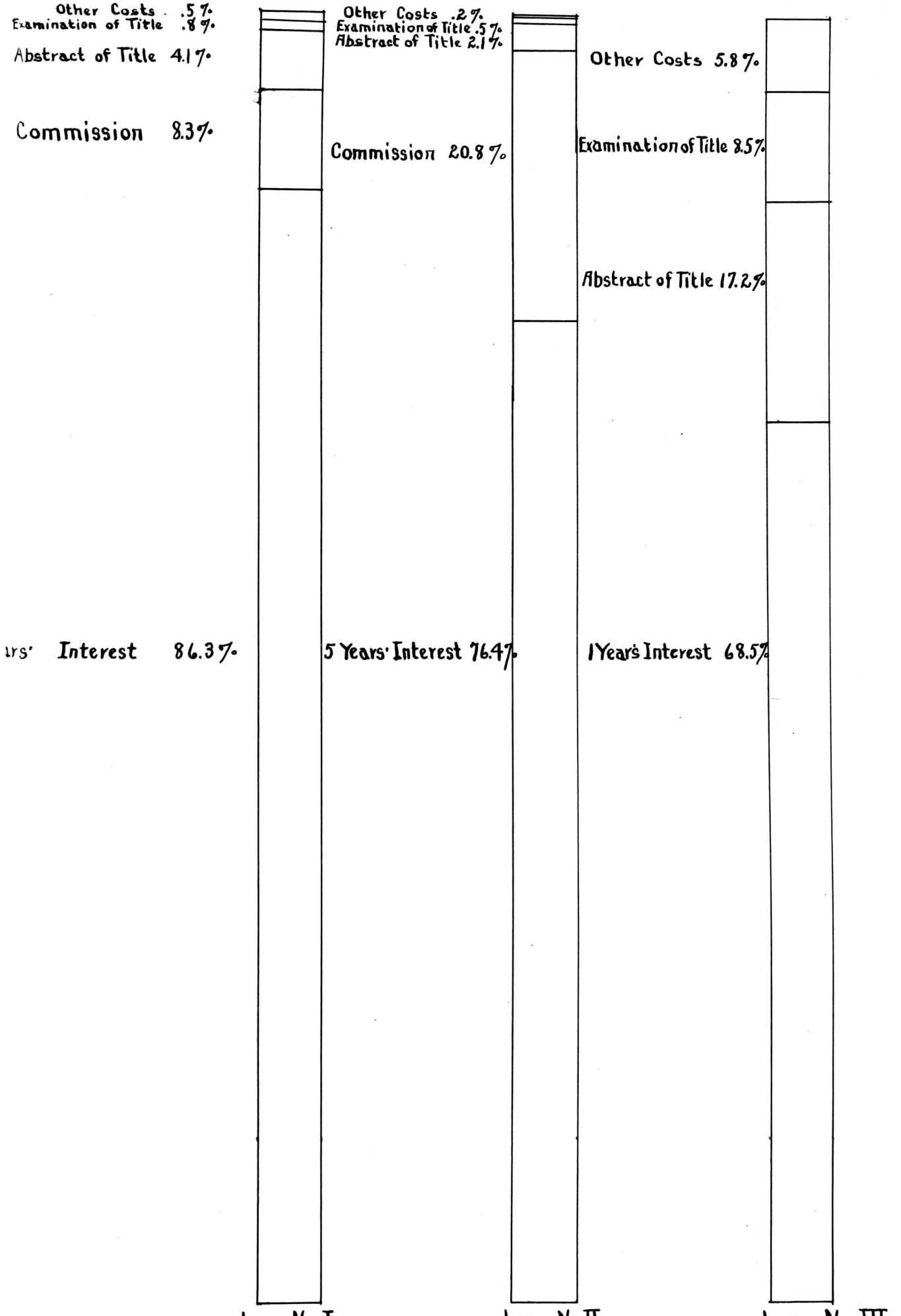
* See Tables 10, 13, 16, 17, 19, and 20.

Table 18.-Costs in 1914 Loans under Usual Conditions.

Loan No. 1		
Amount of principal		$2500.
Interest rate		7%
Term of loan		3 year
Percent Commission (charge 1st year only)		2%
Other costs:		
Abstract of title	$25.00	
Examination of title	5.00	
Drawing up mortgage	1.80	
Recording fee	1.10	
Notary's fee	.50	
Amount of commission	50.00	
	83.40	
Amount of interest(3 Years)	525.00	
Total cost		$608.40
Amount of loan minus initial costs		$2416.60
Percent of total cost to funds received		25.1%
Percent per year		8.3%
Loan No. 2		
Amount of principal		$6500.
Interest rate		5½%
Term of loan		5 years
Percent commission		1½% per year
Other costs:		
Abstract ot title	$50.00	
Examination of title	10.00	
Drawing up mortgage	1.80	
Recording fee	2.50	
Notary's fee	.50	
Total	64.80	
Amount of interest and commission per year		$455
Total interest and commission (5 years)		$2275.
Total Cost		$2339.
Amount of loan minus initial costs		$6435.
Percent of total cost to funds received		36.3%
Percent per year		7.2%

Loan No. 3.		
Amount of principal		$500.00
Interest rate		8%.
Term of Loan		1 year.
Percent commission		none.
Other costs:		
Abstract of title	$16.00	
Examination of title	5.00	
Drawing of mortgage	1.80	
Recording fee	1.10	
Notary's fee	.50	
Total	18.40	
Amount of interest	40.00	
Total Cost		58.40
Amount of loan minus initial cost		481.60
Percent total cost to funds received		12.1%

amounts than the average and have lower interest rates. Such loans must be secured by first mortgages. To provide additional safety the mortgage states that the buildings on the land must be insured, the improvements must be kept up and all taxes must be promptly paid or the principal and accrued interest become due. A second mortgage to cover the commission is usually made in connection with these loans. The costs on this mortgage have not been reported in the table nor has any interest on the commission been charged. The commission mortgage is very apt to make the cost per year on the net amount of funds obtained reach 7.5%. Of this amount 1½% to 2½% of the cost per year is for making the loan. Loan No. 2 is typical of a class of loans which are obtained by farmers having the best security to offer. The charges are considered by the borrower as being more reasonable than the average. But the charges on



Distribution of Charges for Loans

such loans as this are too great to allow their extensive use for clearing the land, draining, building up soil fertility, and similar investments for farm improvement.

Loan No. 3 is a very common bank or individual loan for a small amount. The frequency of occurence of the various terms of this loan may be learned from Tables 10, 13, 16, 17, 19, and 20. The real cost to the borrower is 12.1% and this figure represents that rate which a large number of small farmers pay.

From the data on the typical loans just submitted, we may get an idea of the great burden borne by the owner of a mortgaged farm. When we recall that a great many railroads and manufacturing concerns operate on funds borrowed at rates of 4% or 5%, we can understand one reason for abandoned farms, decreasing food exports, increasing tenancy, and lack of rural progress.

Term of Loan

Land-mortgage credit is frequently spoken of as long-time credit. The results of the investigation made on the term of loan proved that the name long-time credit is poorly applied with respect to land-mortgage loans. The majority of loans in 1914 were made for a term of one year or less. One year is certainly not a long time in which to pay for a farm or make permanent improvements. It is true that many of these loans can be renewed and some mortgages expressly

state that a privilege of five years may be had on the loan if taxes, interest, and insurance are promptly paid, but renewals are subject to increased interest rates and other charges, and besides many loans may fall due during a tight money market, which leaves the borrower entirely at the mercy of the lender. Table 19 shows the percent of loans made at the different maturities for each source and for all sources.

Table 19.-Percent of Loans at Various Matutities. 472 Loans.

Term	Individuals	Banks	Mortgage & Loan Co.	Insurance Cos.	State Fund	All Sources
Under 1 year	14.8%	21.9%				15.5%
1 year	53.6	54.7	5.2		100.0%	49.7
2 year	6.7	5.0	2.6			5.3
3 year	11.4	8.7				8.7
4 year	.9	.5	5.2	6.7%		1.3
5 year	10.8	8.7	52.7	53.3		14.5
6-11 yr.	1.8	.5	34.3	40.0		5.0
	100.0	100.0	100.0	100.0	100.0	100.0

It should be stated that loans which mature in a year or less time are frequently allowed to run on for a period of two or three or even five years. The borrower is not safe in the majority of cases, however, because the interest rate may be raised at any period or the lender may call in the loan. The lenders interests are amply safeguareded, which is necessary, but the present system under which the loans are made permits the safeguards which protect the lender to greatly inconvenience the borrower.

By referring to Table 19, the most common term of loan from an individual or bank is found to be one year. Lenders of this class very seldom loan for a period of more than five years, and more often the limit is three years. These lenders must keep their resources liquid in order to grasp the most promising investments and cannot afford to tie them up for periods of more than three or five years. Mortgage and loan companies and insurance companies that make a business of lending on farm security have funds which need not be kept ready for an emergency, and can therefore be invested for the longer terms. This fact is indicated in the table just referred to. In general the larger loans have longer maturities.

The renewal of the loan is a problem closely connected with the term of loan. The argument is often presented that even though the loans are granted for a short time, the borrower can usually renew. But the answer is that the borrower who has his farm at stake would much prefer to transact business with more certainty than this allows. In reply to inquiries on the renewal of loan, 37.5% of the farmers answered that they did not know whether their loan could be renewed or not, 48.2% replied that their loan could be renewed, and 14.3% replied that their loan could not be renewed. Thus a majority of them are in hot water---anxious to know where they can get money to tide over another two or three years. Those who can renew must do so on the lender's terms.

Terms of Repayment

Besides the terms of renewal the borrower is, or should be interested in the terms of repayment. Oftentimes, by some good fortune a farmer will make enough money so that he is able to cut down the principal of his loan. He should be able to do this and thus save the interest, but in many instances he cannot do so. The lender does not want to look for a new investment whenever the farmer has a few dollars to pay on a loan. This is the case with most all the agencies operating today. In a number of instances the mortgage contract allows payment of $100 or multiples thereof on any interest paying date, and in some instances serial payments are specified, but none of the loans studied involvesany real amortization principle, or encouragesthe borrower to pay off the loan as rapidly as possible. The farmer realized that he cannot pay the loan in a lump sum; that he must renew somewhere, so he makes no attempt to reduce the principal at all. Thrift is not encouraged under the present system.

Sources of Loans

Table 12 on page 20 shows that loans negotiated in 1914 were obtained from five sources. This table also shows the number and percent of loans from each source. It may be noted that the large majority of loans were made from individual lenders and banks which are the two most important sources.

Next come the mortgage and loan companies, then the insurance companies, and last comes the state which loans a small supply of school funds. The same rank holds in regard to the amount of funds loaned by each source. This is shown in Table 12, page 20, which gives the amount from each source, the percent of such amounts to the total, and the percent of the number of loans from each source.

Table 12 shows that the state school fund loans warrant little consideration in regard to the supply of farm loan fund in the county. Only .8% of the total fund consists of state money. To such borrowers as obtain these loans they are considered very good. The interest rate is 6% straight and the term of loan is from one to five years.

Before taking up the other sources in order, a comparison of several essential features of the loans from the different sources may be profitable. This comparison can be made from Table 20, which gives the average interest rate for loans from each source, the average acreage per farm and the value and encumbrance per farm and per acre for each class of loans, also the percent of encumbrance due to mortgages made in 1914.

It must be noted that the percent encumbrance is for 1914 mortgages, and that it does not take into account any prior mortgages nor any mortgages made to another source in 1914. The percent of total encumbrance per source has not been worked out

Table 20.-Comparative Data on Loans from Different Sources.

	Individuals	Banks	Mortgage & Loan Co:	Insurance Cos.*	State Fund	All Sources.
Number of Mortgages:	231:	186:	38:	17:	14 :	486 :
Average Interest Rate :	6.34%:	6.96%:	5.92%:	5.69%:	6.% :	6.52% :
Acres per Farm :	93:	114:	147 :	228 :	76 :	106 :
Value per Farm :	$4995 :	$7116 :	$7703 :	$16,305:	$2520:	$5986 :
Mortgage Debt per Farm :	$1974 :	$2188 :	$3394 :	$6132 :	$ 601:	$2357 :
Value per Acre :	$53.44 :	$62.51 :	$52.22 :	$71.55 :	$33.28:	$56.55 :
Mortgage Debt per Acre :	$21.12 :	$19.19 :	$23.01 :	$26.91 :	$ 7.93:	$22.27 :
Percent Encumbrance:	39.5%:	30.7%:	44.0% :	37.6% :	23.8%:	39.3%

because a considerable number of farms have been mortgaged to different sources, and besides the sources of the mortgages existing on the farms studied, prior to 1914, have not been determined.

Banks and individual lenders do most of the second mortgage business and their equity per farm is considerably less than the percentage of encumbrance given would indicate. However, the percent of the encumbrance submitted for mortgage and loan companies, insurance companies, and state school funds represents very nearly the total encumbrance because such sources accept very few second mortgages.

From Table 20 the highest average interest rate (6.9%) is found to be charged by the banks. Next in order

*An 800 acre farm valued at about $130 per acre influences appreciably the averages computed for insurance loans because of their small number.

of interest rate come individuals, then state school funds, mortgage and loan companies, and insurance companies. The cheapest loans are from the insurance companies notwithstanding the fact that commissions are usually greater on such loans. But these companies take only the largest and most attractive loans as may be seen by considering size of farm, amount of debt per farm and value per farm in the preceding table. They do not provide for handling loans of the average sized farmer. We are now ready for a brief discussion of the chief characteristics of each source of loan.

The individual lenders spoken of are usually local capitalists, who have invested their surplus in farm-mortgages. Some, however, are nonresidents who more than likely have a personal acquaintance with the borrower. Individual lending is necessarily restricted to cases where a personal supervision over the borrower can be maintained by the lender. The costs of the loan are not exceptionally high and the interest rate is less than the average of all sources, but serious difficulties for the borrower may arise from this kind of lending. Foreclosures are more common, renewals less certain, and the term of loan is shorter than in any other kind of lending. A short term gives a better chance for the lender to grasp attractive investments and also gives an opportunity to get higher interest rates if times permit. This fact appeals particularly to individual lenders.

Another consideration is that the farmer has difficulty

in finding individuals who want to lend just at the time at which he wants to borrow. Farmers who hold individual loans on favorable terms consider themselves rather fortunate in having hit upon such a situation. But all are not so fortunate and individaul lending taken altogether is a very unstandardized and haphazard business. Nevertheless 47.5% of Boone County farm loans came from individuals during 1914.

The next largest number of loans is by the banks. Eighteen banks operate in Boone County and practically all of them handle farm loans in some form or other. Most of the bank loans made in 1914 were from local banks but a few were from banks in neighboring counties or in the large cities of the state. A considerable number of banks loans are transferred to clients of the bank and the rest are based on bank deposits. Bank deposits must be kept liquid which is the reason for the short terms for which banks loan on farm mortgages. (See Table 19) Most local banks contend that their farm mortgage business is a sideline which they must accept for the convenience of their customers. It is doubtless true that commercial banks are fashioned chiefly for other purposes than for making farm-mortgage loans and that they lack the machinery for furnishing a satisfactory supply of long-time credit.

Mortgage and loan companies are institutions which make a practice of investing their clients' money in real estate

security. A large amount of this security is farm lands. Such companies loan for longer periods of time than do banks or individuals because they are better adapted to do so. They are organized for the maximum of private profit, however, and in a more or less unstandardized business must look after their clients' interests even though the farmer is injured. High commissions and other costs connected with loans from this source are apt to nullify any saving in reduced interest rates which the mortgage and loan company may offer.

Insurance companies invest their surplus funds in farm mortgages to a limited extent in Boone County. 3.5% of the loans made in 1914 were from this source. Since this percentage represents relatively large loans averaging $6132 per farm it is evident that the small farmer receives no assistance from this source. The cost of supervising the making of small loans by an institution with such a remote connection with the borrower as insurance companies have, makes any considerable local extension of insurance loans impossible.

As previously stated the state school fund loans are not of sufficient amount to warrant much discussion. In this region such loans have been very satisfactory.

SUMMARY AND CONCLUSIONS

Defects Found in Present Conditions

The discussion which is to follow will attempt to collect the salient points which have been brought out in the preceding pages and will present such conclusions which, in the writer's opinion, seem warranted. No detailed measures of reform will be offered. Only the general principles of rural credit improvement which seem feasible in the given situation will be mentioned.

The first proposition to be restated is that there is a growing need of the farmers for more capital with which to run their business. Recalling the facts that the investment per farm has been gradually increasing during the last thirty-five years; that the labor income of the farmer is reduced by insufficient capital; and that insufficient capital in farming leads to tenancy, soil depletion, and food shortage, we should now be able to see the necessity of an adequate supply of funds to meet the farmer's needs.

Scarcity of capital is indicated by high interest rates. We have found the average interest rate to be 6.52% on farm mortgage loans. If we consider that railroads, municipalities, and large numbers of industrial concern, having no better security than the farmer, can borrow at 4% or 4½% and pay

proportionally smaller initial costs, the scarcity of farm loan capital may be realized. The country's supply of capital is ample, but we lack adequate means of getting it into the hands of the farmer. For instance, we found that the costs of getting a loan by the existing methods add from 1½% to 2% per year to the interest rate. The typical loans which were submitted showed that the borrowers paid a total of about 8½% per year. This is more than the farmer can afford to pay in order to improve his farm and increase production.

Not only are the costs of borrowing unsatisfactory but the term of borrowing is unsatisfactory also. It is too short. We found that 65.2% of the number of loans fell due in one year or less. Only 5% ran for a term longer than five years, and nearly all of these fell due within ten years. When we review these facts and then consider that the returns from the land are very slow, that a new barn or dwelling will rarely pay for itself in less than ten years; and that the benefits of improving the soil accrue after long periods of time, we can understand why the farmers are almost unanimous in expressing a desire for longer-term loans.

Another fundamentally wrong feature in our present system of farm loans is the practice of demanding repayment of the principal in a lump sum with no provision for the amortization of the principal. This feature leads the farmer to regard the funds he has borrowed as a permanent part of his investment. He does not hope to make enough to pay the loan within

the short term which it runs, so his chief concern is to be able to renew or to secure a new loan. With a provision for the amortization of his loan over a sufficient number of years he would have to save enough each year to repay a percentage of the loan. This would be imperative---thus he would be forced to save and he would get used to it. But the amortization plan will not work with the present one, two, or five year loans and the length of time for which farm loans are made is not apt to be changed by the present lenders.

A New System

We are beginning to recognize the need of a new source of farm land credit which will be free from the defects which have been mentioned. Several kinds of land credit institutions are operating in Europe which have proven satisfactory to the farmers. Practically all of them are based on the following fundamental principles:*

First, long time loans that are unrecallable and are amortized by annual payments.

Second, securities that are given for farm loans are made negotiable as municipal or government bonds and are listed on the stock exchanges.

Third, provisions by which the loans can be readily and conveniently obtained without great expense.

Fourth, as low rates of interest as the condition of the money market will permit.

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*Ohio State University. Bul. 18. p30.

It may be seen that the principles just mentioned are aimed to correct the defects of the present system to a large extent. Then the next problem is what kind of an institution would be best adapted to carry out these principles in the United States. Three types of institutions have been successful in Europe in lending money to farmers on real estate security. They are the cooperative land credit societies, the joint-stock land banks, and the government land banks.

The writer is of the opinion that a strictly cooperative land credit institution cannot be put into operation at present in regions similar to the one which has been investigaged. The farmers are too individualistic; they represent too many races and types of men; and they are too unskilled in cooperative finance to make the organization of such institutions possible in the near future.

Another type of institution calculated to operate on the principles previously outlined is the joint-stock land bank. But many such banks as would likely be established would be too small to stand sponsor for a bond issue which would circulate widely and bear the lowest rates of interest. An absolutely safe, negotiable bond is essential to the system. Negotiability can be obtained only by bonds of institutions which are sufficiently large and prominent as to be widely known. Furthermore in regions where capital is scarce or where

the borrowing farmers are few and scattered, a joint stock land bank which has the making of profits as its primary motive will not be likely to be organized. Like the private loan companies of today they will avoid such regions because the amount of safe business does not offer large profits.

A third type of institution which might be based upon the principles mentioned is the state or government land bank. The objections to this type are that it might get into politics; that it might impair the credit of the state; and the inefficient management of it might cause serious losses to the state.

Perhaps the type of institution which will finally be developed to relieve the farm land credit situation will be a combination of the types which have been named. On this point the present discussion will not decide. It may be stated with certainty, however, that the European land credit systems are adapted to conditions which are different from those in the United States and therefore will not apply here. Our land credit problem is one of applying the fundamental principles which have been determined by foreign experience to conditions found in the United States.

May 15, 1915.

Professor H. J. Davenport,
Commerce Bldg.

My dear Dean Davenport:

It is customary for the Graduate Committee to refer dissertations, submitted by candidates for the degree of Master of Arts, to some member of the Group who is not connected with the Department in which the candidate's work has been done. I am sending you herewith a dissertation which has been submitted by J. H. Hursh

I shall be greatly obliged if you will kindly examine the same at your earliest convenience and report to us for the Graduate Committee whether in your opinion the dissertation meets the general standard which has been established in this University for the Master's dissertation.

Very truly yours,

Walter Miller

Chairman, Graduate Committee.

I here herewith approve H. J. Davenport