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To the Committee on Graduate Study:

I am submitting to you a thesis written by Richard George Milk entitled "Farm Credit in Williamson County, Tennessee, With Special Reference to Mortgage Credit". I recommend that it be accepted for eighteen quarter hours credit in partial fulfillment of the requirements for the degree of Master of Science, with a major in Agricultural Economics.

C. E. Allred

Major Professor

We have read this thesis
and recommend its acceptance:

Robert O. Kapp

E. Winters

Accepted for the Committee

W. C. Lassiter

Dean of the Graduate School

FARM CREDIT IN WILLIAMSON COUNTY, TENNESSEE, WITH SPECIAL REFERENCE TO MORTGAGE CREDIT

A THESIS

Submitted to
the Committee on Graduate Study
of
The University of Tennessee
in
Partial Fulfillment of the Requirements
for the degree of
Master of Science

By

Richard George Milk

August 1939

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CHAPTER I

INTRODUCTION

Purpose and Scope of Study

The purpose of this study is to analyze as completely as possible the needs, types, sources, costs, uses, and trends of agricultural credit in the given area. Certain facts have been brought out which it is hoped will be of value to farmers of this and other areas.

Characteristics of County and Region

Location. Williamson County is located in Middle Tennessee. It is bounded on the north by Cheatham and Davidson counties, on the east by Rutherford, on the south by Marshall and Maury, and on the west by Hickman and Dickson. Most of Williamson is in Region X.[1] For location of Region X and Williamson county see Figure 1. The western civil districts, not in type-of-farming Region X, are in Region VIII. Franklin, the county seat of Williamson county is located about twenty miles south of Nashville, the nearest large city.

In considering the topography of the county one must consider that the county lies in two distinctly separate physiographic regions: the Central Basin and the Western Highland Rim. The areas of the county

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(1) Allred, C. E., and Lanham, B. T., Factors Influencing Types-of-Farming Regions in Tennessee, unpublished report, U. T. Agricultural Experiment Station, Knoxville, 1938, p. 454.

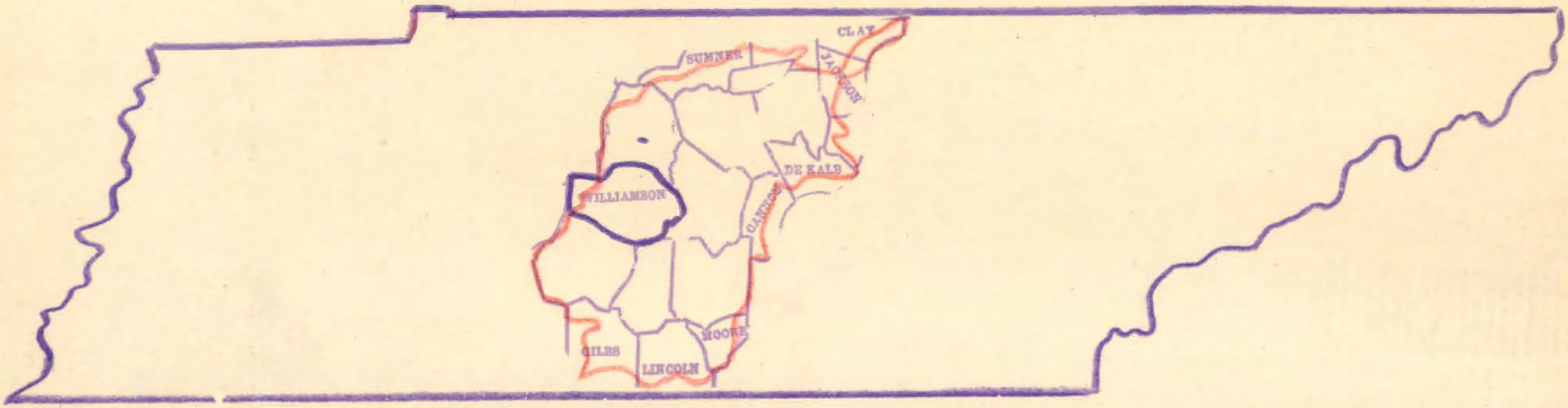

Figure 1. Location of Williamson County and Type-of-Farming Region X in the State of Tennessee

which are located in these physiographic regions typographically are similar to the regions of which they are a part.

The Central Basin is an area of gently rolling hills and valleys, marked here and there by rounded knobs which rise to a height of 200 to 300 feet above the surrounding territory; and by numerous spurs and isolated hills which extend out into the Basin from the Highland Rim.(2)

A large part of the Western Highland Rim has a flat to rolling topography. The rugged areas dissected by the Duck, Cumberland, and Tennessee Rivers of the Western Rim and the stream eroded slopes which connect the Highland Rim with the Central Basin are exceptions.

Soils. Except for the presence of large areas of outcropping limestone rock and shallow soils, the Central Basin is an area of relatively fertile soils. The typical soil of the area is a brown loam. Although much of the land is somewhat deficient in nitrogen and humus, there is an adequate amount of phosphorous in the soil, particularly on the Maury soils.

The Maury and Hagerstown series of this area are two of the better upland soils of the state. Both have been formed from massive limestone rock; the principal difference between them being that the Maury soil has a higher content of phosphorous. These soils are inherently productive and well adapted to corn, wheat, oats, clover, bluegrass, tobacco, alfal-

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(2) Bossler, B. S., The Stratigraphy of the Central Basin, Tennessee Division of Geology, Bul. 38, p. 17.

fa, apples, potatoes, and garden vegetables. In addition to these better agricultural soils, there are others which are less productive. The Frankstown soils, which are found on the knobs, are a less productive soil formed from impure limestones. Huntington and Egam soils are the better alluvial types found on the first bottoms throughout the area.

In the Highland Rim area the Dickson and Baxter soils predominate. These are brownish gray soils with a yellowish or reddish yellow subsoil. They have developed from a cherty limestone and are not so productive as soils developed from purer limestone rock.

Markets. Although having but one internal market, Franklin, Williamson is more favorably situated as to available markets than most of the counties in the state. Nashville, the second largest city in the state with a population of over 154,000, is located twenty miles north of the county seat. Good roads and railroads connect the county with Nashville. The Louisville and Nashville runs north and south through the county, passing through Franklin.

Population. Williamson County with a land area of 586 square miles had a population of 22,845 in 1930.(3) Of this number, 19,468 or 85 per cent, were classified as rural. Of the total rural population, over 16,000 were classified as farm. Thus it appears that over 70% of the total population is engaged in agriculture. The county seat, Franklin, with a population of 3,400, is the only town in the county of

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(3) U. S. Census, 1930, Population.

over 1,000 persons. It is distinctly a rural, agricultural county.

Agriculture. (1) Type-of-Farming Areas. The two western civil districts of Williamson County are in type-of-farming area VIII, which is characterized by a large percentage small general or self-sufficing and general farms, with corn and hog production appearing as the principal specialized enterprise. This region, although containing 8.6 per cent of the total land area of the state, has only 6.5 per cent of the farm land of the state.

The larger part of the county lies in the Central Basin area which is located in area X. This is a general livestock farming area representing 13.8 per cent of the land area in the state and almost one-fifth the total farm land in the state.

(2) Land Use. The acreage per farm in Williamson County, 88 acres, is larger than the state average of 70 acres, and the region X average of 80 acres. Although somewhat higher than the state figure of 71.5 per cent, the per cent of land area in farms in Williamson County, 83.6 per cent, is lower than the regional figure of 88.7 per cent.

From Table I and Figure 2 it can be seen why for most purposes Williamson County is regarded as a Central Basin or region X county. Williamson County figures very closely resemble those for region X whereas they are quite different from those for region VIII. Region VIII has an average acreage of 100, has only 50.7 per cent of the land area in farms, and has only 21.8 per cent of the farm land in crop land harvested.

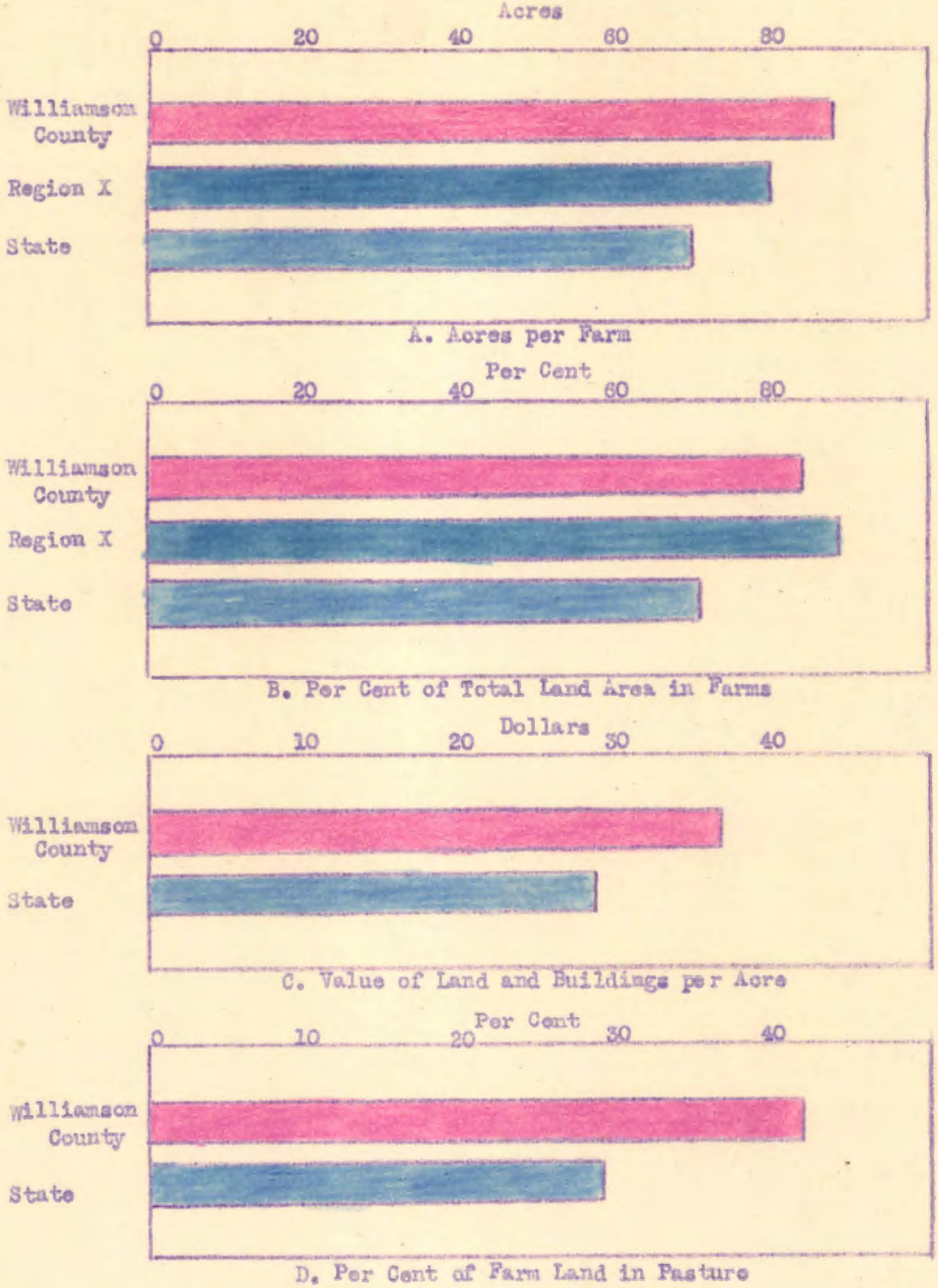

Figure 2. Some Comparisons of Williamson County with Tennessee and Type-of-Farming Region X

Based on Table I.

TABLE I. SOME FARM COMPARISONS OF WILLIAMSON COUNTY WITH TYPE-OF-FARMING REGION X AND THE STATE

Area	Number of Farms	All Land in Farms	Acres per Farm	Pct. Land Area in Farms	Value of Land and Buildings		Pct. Crop Land Harvested	Pct. Farm Land in Pasture
					Per Farm	Per Acre		
Williamson	3,568	313,480	88	83.6	$3,288	$37	33.3	42.1
Region X		3,292,669	80	88.7			34.6	45.1
Region VIII			100	50.7			21.8	18.0
State	273,783	19,085,837	70	71.5	$2,030	$29	33.2	29.6

Source: U. S. Census of Agriculture, 1935.

Over 42.1 per cent of the farm land of Williamson County is devoted to pasture, whereas only 29.6 per cent of the farm land of the state is so utilized. The Williamson County figure is very close to that of region X, 45.1 per cent, for farm land in pasture, but quite distinct from the region VIII figure of 18.0 per cent.

(3) Land Values. The farms of this county are worth over half again as much per farm as those of the state and almost one-third more per acre than the state average (Figure 2 and Table I).

(4) Crops. Williamson County has about 42.2 per cent of its crop land harvested in corn which is not quite so high as the state or region X, which have over 45.0 per cent of crop land harvested in corn. Region Xc is the particular section of region X in which Williamson County lies and is characterized by more truck, dairy, and cash grain farms than the region as a whole. The percentage of crop land in corn and wheat for Williamson County more nearly approach the figures of the subregion than those of region X.

With 33.3 per cent of the crop land harvested in hay, Williamson County has a smaller percentage of crop land harvested in hay than either the region or subregion, but more than the state as a whole which averaged but 27.6 per cent of crop land harvested in hay.

Williamson County grows over twice as much wheat as the average of the state. In Williamson County almost one-sixth of the total crop land harvested is in wheat, while wheat occupies but 15 per cent of the crop land harvested of the state. The per cent of crop land harvested in wheat is over three per cent higher than that for the region and over two per cent higher than that for the subregion (Table II and Figure 3). Apparently cash grain is even more important in Williamson County than in the subregion Xc.

TABLE II. SOME CROP LAND AND LIVESTOCK COMPARISONS OF WILLIAMSON COUNTY WITH STATE AND REGION X, 1935

Area	Per Cent of Crop Land Harvested in:			Number of Livestock per 1000 Acres of Improved Crop Land					
	Corn	All Hay	Wheat	Horses and Mules	Steers	Milk Cows	Sheep and Lambs	Swine	Chickens
Williamson County	42.2	33.3	14.9	41	13	71	140	109	1,058
Region X	45.1	34.1	11.8		18	76	137	120	1,278
Region Xc	43.4	35.9	12.6		19	80	144	104	1,178
State	45.2	27.6	6.6	42	12	52	38	93	1,000

Source: U. S. Census of Agriculture, 1935.

(5) Livestock. Although above the state average in numbers of all the various classes of livestock, except horses and mules, per thousand acres of improved crop land, Williamson County falls below

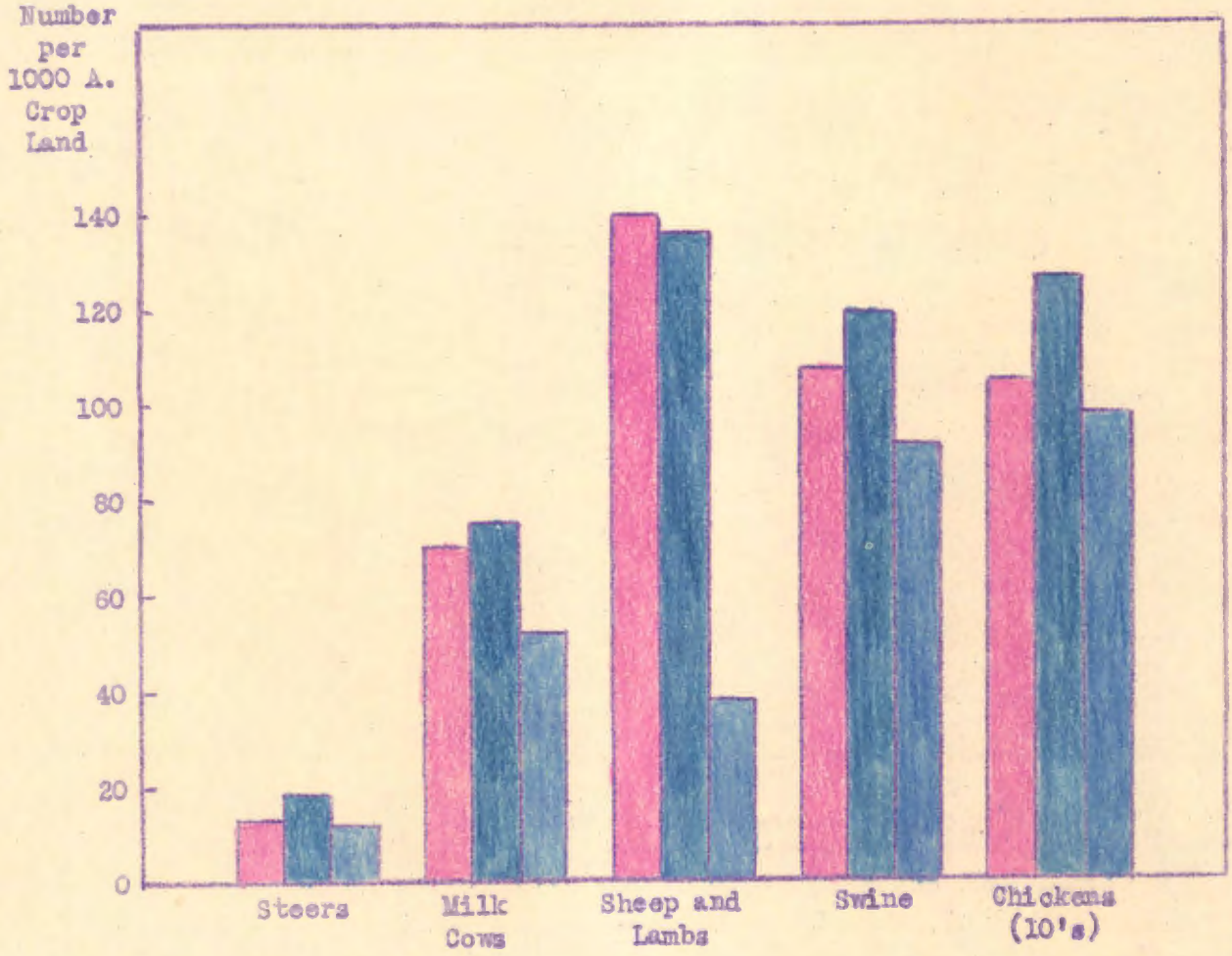

Figure 3. Number of Livestock per 1000 Acres of Crop Land -- Some Comparisons of Williamson County with Tennessee and Type-of-Farming Region X

Legend: Williamson County; Type-of-Farming Region X; State of Tennessee

Based on Table II.

the livestock ratios for region X in every case except sheep and lambs. For sheep and lambs the Williamson County ratios are over three times as high as those for the state as a whole. The ratios per thousand acres of crop land for steers and poultry were much nearer the state figures than the regional figures. There were over 220 less poultry per thousand acres of crop land for the county than for the region. The lower figures for livestock may quite likely be due to the influence of the western civil districts.

Sources of Data

There have been several different sources of information for this study. The sources from which most of the data were taken were: A survey conducted by the Farm Credit Administration in 1938, the Public Works Administration farm mortgage study of 1935, and the Federal Civil Works Administration real estate transfer study of 1934. Surveys made in 1920 and 1923 have been referred to for comparative data. Statistics on the county were obtained largely from the 1935 Agricultural Census.

F.C.A. Survey of 1938.[4] One hundred farms were surveyed in an area having 2,146 farmers, giving about a five per cent sample. The sample farms were not evenly distributed throughout the county but were obtained largely from civil districts 10, 11, and 14 (see Figure 4), 60 of the 100 sample farms being located in those three districts. In considering the reliability of the data, it is well to compare these civil districts with

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(4) Arthur Mauch, Special Analyst of the F.C.A. of Louisville, Kentucky, performed the field work for this study.

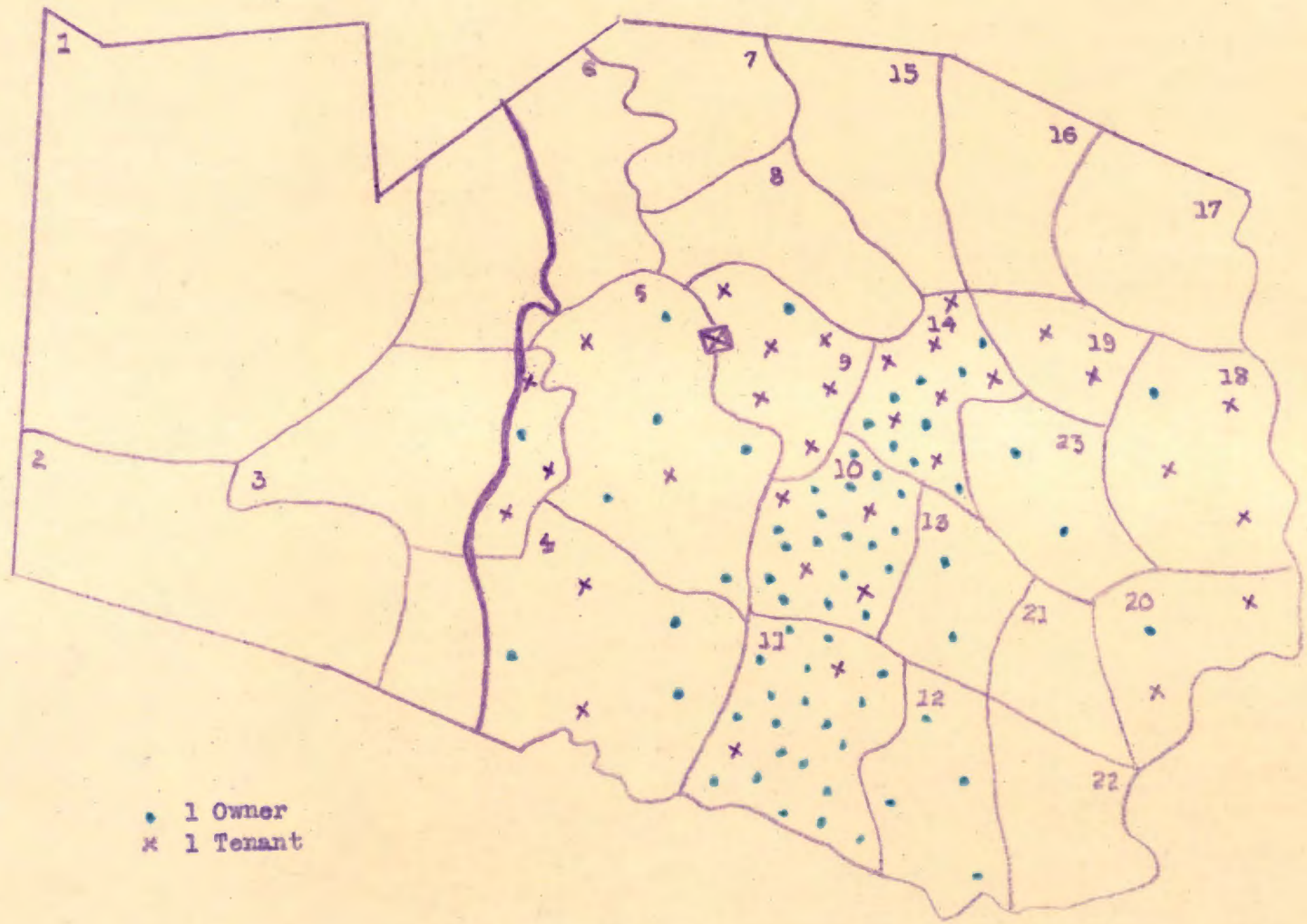

Figure 4. Distribution of Sample Farms in the 1938 FCA Survey, Williamson County

the county. In general these civil districts have smaller farms, a higher per cent of crop land harvested, and a higher value of land and buildings than the county figures.

There are variations among the districts as to crop and livestock importance. Civil District 11 appears to be an important tobacco area, while Civil District 10 has a great deal of wheat and Civil District 14 a great deal of poultry (Table III).

TABLE III. A COMPARISON OF WILLIAMSON COUNTY WITH THREE CIVIL DISTRICTS AS TO LAND USE AND LIVESTOCK NUMBERS, 1934

Area	Ave. Acres per Farm	Pct. Crop Land Harvested	Value of Land and Buildings per Acre	Pct. of Land in Pasture	Per Cent of Crop Land in			Number per 1000 Acres Crop Land		
					Corn	Wheat	To-bacco	Dairy Cows	Sheep	Chick-ens
County	88	33.3	$37	42.1	42.2	14.9	2.0	70.9	139.7	1058
C.D.10	82	47.9	56	34.4	35.7	20.1	2.6	55.8	90.7	995
C.D.11	76	39.6	48	44.9	40.5	12.0	4.0	69.3	116.8	905
C.D.14	60	40.1	39	56.7	36.6	9.0	1.3	103.8	119.9	1336

Source: U. S. Bureau of Census, 1935.

For all practical purposes the sample can be considered as representing white farmers, as only 3 negro farmers were interviewed. For the county as a whole, colored farmers represent over 15 per cent of the farmers. While only 33 per cent of the sample farms were tenants, 48.3 per cent of the farmers in the county were tenants according to the latest census. The average white owner for the county had 96.8 acres (1935), the

average farmer in the sample 189 acres.

While the average census value of land and buildings per full-owner farm (1935) was $3,777, the average of the sample full-owner farms was $12,264 or over three times the census figures. The sample farms ranged in value from $1,800 to $50,000, there being seven farms valued over $20,000. Part of this difference may be due to increase in values since the 1935 census. The value per acre of the land on full-owner farms in Williamson County according to the 1935 census was $36.22. The value per acre on the sample full-owner farms was $70.35, or nearly twice as much. The difference in size is also an important factor.

It can be seen that the sample taken in the survey represents somewhat better than average farms in the county. It would appear that the sample more nearly represents the Central Basin than it does the county.

One of the greatest limitations of this sample is the size of sample and the distribution of size of farms in the sample. When the sample is broken down for purposes of analysis, the number of farms in each subdivision is likely to be limited.

P.W.A. Mortgage Study of 1935. In this study performed by Tennessee Agricultural Experiment Station cooperating with Public Works Administration workers went to the county clerk's office in the various counties and made a complete record of each farm mortgage filed within the county. In Williamson County the recorders took records for as far back as 1899, making a total of 6,638 mortgages filed in the county.

U. S. D. A.-B. A. E.
Farm Finance Form 8

FARM MORTGAGES FILED AND RELEASED

(A Federal Works Project)

SUPPLEMENTARY SCHEDULE
☐ A ☐ B ☐ C ☐ D ☐ E
(Punch or check)

A. _____ (Mortgagor) _____ (State) _____ (County)

B. Transfer of property to mortgagee:
Date of filing _____ (Month) (Day) (Year)
Date of transfer _____ (Month) (Day) (Year)
Book ____ Page ____ Record ____
Type of deed:
☐ Warranty or special warranty. ☐ Sheriff (mortgage foreclosure).
☐ Quit-claim. ☐ _____

C. Transfer of property to party (parties) other than mortgagee:
Date of filing _____ (Month) (Day) (Year)
Date of transfer _____ (Month) (Day) (Year)
Book ____ Page ____ Record ____
_____ (Buyer (grantee)) _____ (State) _____ (County)

D. _____ (Mortgagee) _____ (State) _____ (County)

E. Assignment of mortgage:
_____ (Assignee) _____ (State) _____ (County)
Date filed _____ Date assigned _____ (Month) (Day) (Year)
Book ____ Page ____ Record ____
_____ (Assignee) _____ (State) _____ (County)
Date filed _____ Date assigned _____ (Month) (Day) (Year)
Book ____ Page ____ Record ____

F. Terms of mortgage:
Date of mortgage _____ Consideration, $_____
Date of maturity _____ (Month) (Day) (Year) Interest rate ____ percent.
Method of payment:
1. ☐ Straight term, no principal payment until maturity.
2. ☐ Specified partial payments on principal during term of mortgage.
3. ☐ Regular installments to provide complete amortization.

State _____ Book _____
County _____ Page _____ Schedule No. _____
Min. Civ. Div. _____ Date filed _____

G. Description	Sec.	Twp.	Range	Acres
Size code _____ Total acres,	x x x	x x x	x x x	

H. Type of instrument: 1. ☐ Mortgage, deed of trust, etc. 2. ☐ Sales contract.

I. Extension of maturity date of mortgage:
Date of filing _____ Book ____
Date of extension _____ Page ____
Date of maturity _____ (Month) (Day) (Year) Record ____
Method of payment: Interest rate ____ percent.
1. ☐ Straight term, no principal payment until maturity.
2. ☐ Specified partial payments on principal during term of mortgage.
3. ☐ Regular installments to provide complete amortization.

J. Other encumbrances on same property:
1. ☐ Subject to other encumbrances:
(a) Prior: See Schedule Nos. _____ _____ _____
(b) Junior: See Schedule Nos. _____ _____ _____
2. ☐ Free of other encumbrances.

K. Release of mortgage:
Date of filing _____ Book ____
Date of release _____ (Month) (Day) (Year) Page ____ Record ____
1. ☐ Partial release.
(a) Consideration, $_____
(b) Acres released _____
2. ☐ Released in full.

L. Foreclosure of mortgage:
Date action filed _____ Book ____
Date of sale _____ Page ____
Date of dismissal _____ (Month) (Day) (Year) Record ____

U.S. GOVERNMENT PRINTING OFFICE 8—9556

(Use other side for remarks)

Initials of record taker _____

Figure 5. Form Used in Recording Farm Mortgage Data

Some of the tables used in this study are based on tabulations made by the Bureau of Agricultural Economics in Washington, D. C., rather than the original data.

Figure 5 shows one of the forms used for recording the information on the individual mortgages. It can be observed how complete and detailed a record was made.

Because of its universal nature and completeness, little can be said of limitations of this source. It can be regarded as authentic.

Real Estate Transfer of 1934. For this study the workers obtained records of farm real estate transfers from the county clerk's offices. In Williamson County transfers as far back as 1926 were recorded. These data were collected by the Tennessee Agricultural Experiment Station in cooperation with Federal Civil Works Administration.

Figure 6 shows one of the forms used in recording the desired data.

This source of data is also authentic. However, there appear to be two minor limitations. One is that it is not over a long enough period of years. The second is that it is not possible to determine the period over which transfers can be said to have occurred, because some people waited several years after the transfer before filing the transfer.

U.S.D.A. - B.A.E.
Farm Finance Form 3

FARM REAL ESTATE TRANSFER

Card No. ----------
State ----------
County ----------
Minor civil div. ----------

File: Reference ---------- Volume ---------- Page ----------

1. Buyer - Name ---------- Address ----------
2. Seller - Name ---------- Address ----------
3. Date of transfer ---------- (Mo., Day, Year) 4. Date filed ---------- (Mo., Day, Year) 5. Amount of Fed. revenue stamps ------

6. Description	Sec.	Twp.	Range	Acres
Total acres ----------	XXX	XXX	XXX	XXXX

7. Consideration:
(a) Total ----------
(b) Cash paid ----------
(c) 1st mtg. ----------
(d) 2d mtg. ----------
(e) Other arrangement--
----

8. Assessed value ----------
(a) Total ----------
(b) Land alone ----------
(c) Improvements ----------
(d) Date of assessment ---
(Nearest to date of transfer)
----

9. Kind of transfer (check which (V))
(a) Voluntary sale ----------
(b) Forced sale:
(1) Foreclosure ----------
(2) Assignment ----------
(3) Tax sale ----------
(c) Gift, devise, or descent-

10. Kind of property (check which (V))
(a) Farm with buildings -------
(b) Farm without buildings ----
(c) Uncultivated land (other than forest) ----------
(d) Forest land ----------
(e) Cannot ascertain ----------

11. Kind of deed (check which (V))
(a) Warranty deed ----------
(b) Quit claim deed ----------
(c) Sheriff deed ----------
(d) Trustee deed ----------
(e) Tax deed ----------
(f) Contract for deed ------
Kind of deed ----------
(g) Bond for title ----------
Amount of bond -------
(h) Other ----------
State which ----------

12. If the sale was a forced sale, please state:
(a) Kind of action, if any ----------
(b) Amount of claim ----------

13. If sale was a foreclosure, was property occupied by owner at time of sale?
Yes ; No. ; Unknown .

(Use other side for remarks)

Initials of record taker -----

Figure 6. Form Used for Recording Farm Real Estate Transfer Data Taken from County Deed Records

CHAPTER II

CREDIT NEEDS

Trends Influencing Agricultural Finance

Transformation of American agriculture from a largely self-sufficient economy to a commercialized business has created a number of problems. One of the most important of these has grown out of a more extensive need for credit. The great increase in the investment necessary for profitable farm operations has been largely due to an increase in the price of farm lands and to the need for larger quantities of machinery, livestock, and improvements, the values of which have also increased. Furthermore there have been greater demands for operating capital, particularly on the more specialized farms. Rather than save operating capital from the previous year the tendency is for many farmers to shift the financing of crops to the merchant and banker. As Lee[1] says: "The modern farmer's operating credit problem can be accounted for by the practice of looking to the future crop to pay for present purchases."

Another factor which tends to make more working capital necessary is the increased time intervening between the production and consumption due to complexities of our marketing system, and other factors such as the

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(1) Lee, V. P., Principles of Agricultural Credit, McGraw-Hill Book Company, New York, 1930, p. 6.

the development of refrigeration.

Trends in Agriculture of Central Basin. (1) History. During the latter part of the eighteenth and the early part of the nineteenth century Tennessee was being settled. During this time agriculture was primarily self-sustaining in character because of transportation difficulties and distance to market. However, as early as 1801 they were growing cotton in the Central Basin and soon were shipping it down the Cumberland River to New Orleans.(2) The Central Basin area was one of the most rapidly settled sections of the state because of its very rich soil.

From 1820 to 1840 the agriculture of the state developed rapidly and Tennessee became one of the most important farm states of the nation ranking first in production of corn and hogs. Cotton production developed extensively in Middle and West Tennessee. But in spite of agricultural developments and improved transportation the agriculture was for the most part of a self-sufficient nature.

During the period 1840 to 1860 cotton production shifted largely from the Central Basin to West Tennessee. The blue grass area of the Basin rivaled that of Kentucky in the production of fine livestock.(3) Self-sufficiency had become of minor importance in the more advanced counties by this time. Slave numbers which had increased before due to requirements for cotton production, decreased in the Central Basin during

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(2) Atlas of American Agriculture, Part V, Section A, Cotton, Washington, 1918.

(3) Gray, L. C., History of Agriculture in Southern United States, Washington, 1933.

this era.

The period during the Civil War and recovery was one which greatly retarded the development of the agriculture of the state. The damage to crops and property by marching armies was tremendous and the freeing of slaves further decreased the assets of the farmers. Cotton, tobacco, grain, and livestock were the principal products of the Central Basin. Agriculture had developed to such an extent that large amounts of working capital were greatly needed.

From 1880 to 1935 the principal change in crops in the Central Basin was from small grains to hay crops.(4) Tobacco acreage has increased in the Basin since 1899, and this increase has been principally in Maury and Williamson counties. During the period 1880 to 1935 the number of hogs in relation to improved crop land decreased 50 per cent. Horses also decreased but all other major livestock classes increased. Beef cattle have decreased since 1920.

(2) Influence upon Credit Needs. As long as the agriculture was largely of a self-sufficient nature or up until the forties of the nineteenth century farmers had little need for capital. Land was cheap, only a few tools were needed, and buildings were usually made from logs out of the forests. With the development of better transportation farmers were encouraged to grow more for sale. This necessitated more livestock, better machinery, and more labor which in that time and area meant investments in slaves. The opening up of the area increased the value of land

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(4) Allred and Lanham, Factors Influencing Type of Farming, unpublished thesis, University of Tennessee, Agricultural Experiment Station, Knoxville, 1938, p. 459.

and made land purchase more difficult.

From the forties until the Civil War cotton was pretty well displaced from the Central Basin by livestock. Self sufficiency had declined, railroads having connected most of the area with the rest of the country. Farmers purchased many goods which formerly they had made at home. Short-term credit may have been needed but it is unlikely that many short-term credit agencies existed at that time.

Probably no other time in Tennessee history was adequate credit needed more than after the Civil War, but that was a period when money was scarce everywhere.

From that time until the present the trend has been toward use of more capital to operate a farm. Continued increases in land values, improved standards of living which call for more purchases of goods off the farm, and many modern developments such as the automobile have increased the farmer's need for cash.

Some idea of the difficulties and dangers of obtaining mortgage credit during the latter part of the nineteenth century can be obtained by examining the following:

> Farm mortgage is a comparatively new disease with the agriculturists of America. Fifty years ago the farmer who was obliged to put a mortgage on his farm was considered next to insolvent, and its clearance was thought highly improbable. They are so numerous now that their increase in hardly noticed by the rural communities. But I believe that at the present day not more than 50 per cent of mortgaged farms are released, except by change of ownership.

As to the oppressive nature of the western farm mortgages the Chicago Times says: "the syndicates that loan money at from 1 to 3 per cent per month are mainly made up of Scotch English, and New England capitalists, who have their agents throughout the South and West. These mortgages are falling due, and soon an immense number of southern and western farms will be in the hands of foreign mortgagors. The territories are covered with mortgages on new farms not yet patented. In many districts half the settlers borrow money at high interest to pay the small price required by the government in proving up. This is leading to widespread disaster. The object of the pre-emption law is perverted. Eastern and foreign capitalists get the land with such improvements as the settler has put upon it. The settler loses all by reason of the exorbitant interest he is compelled to pay". (5)

As to the payment of the commission various plans are in use. The most profitable method is this: out of the proceeds of the note and mortgage the mortgagor receives all the expense of making the loan, and his commission. For many years the commission was enormous. The companies located at St. Paul, Omaha, Des Moines, Kansas City, St. Joseph, Topeka, Denver or Dallas, sometimes received as high as a 15 per cent commission on a five year loan, and for many years the home company never received less than 10 per cent. The local agent exacted all that he could above this amount. Another custom as to commission is to secure it by notes and a second mortgage. This commission is usually made payable in ten semi-annual installments. On default in the payment of one installment, the whole sum becomes due.

Other sources of profit besides the initial commission will immediately be perceived. The transaction may have such a history as this: the first interest coupon is paid, the second is defaulted. The company remits to the eastern investor, and then declares the whole debt due on account of the default. The borrower wishes to pay up and have the loan reinstated. The company then collects the amount of the defaulted interest, with interest compounded thereon at the highest legal rate and a further commission or bonus for reinstating or renewing the loan. Or perhaps the company insists upon payment of principal and interest. In that case the borrower borrows elsewhere, the company is paid in full, the amount is reinvested, earning another 10 per cent commission and the new mortgage is sent to the investor and the old

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(5) Adapted from American Farms, Their Condition and Future, pp. 45-52, J. R. Elliott, 1890, for Nourse, Agricultural Economics, University of Chicago Press, 1916, p. 713.

one cancelled. The borrower, who for any reason desires to pay off his mortgage before it is due, must do so on such terms as the company may prescribe. He cannot deal directly with the eastern owner of the mortgage, for he cannot ascertain who that owner is; the assignment from the company to the investor is not recorded. The borrower is usually allowed to anticipate his obligation on payment of a bonus of 2 per cent per annum for the unexpired time. (6)

Specific Agricultural Credit Needs of the County

Agricultural credit needs can be roughly grouped into five classifications: land purchase and improvements, chattel purchases, production, marketing, and consumption.

According to 1935 census the average value of farms in Williamson County is $3,288. Such a sum may not be available to hired men or tenants from their own savings. If they are to proceed up the agricultural ladder, some financial help is needed.

The amount needed for chattels among the farms in the survey was $2,265 (Table IV). Even when allowance is made for the fact that the sample farms were larger and more valuable than the general county average, the fact remains that the capital required for farm chattels is an appreciable sum. More than half of the quick assets were livestock. Tenants

TABLE IV. AVERAGE AMOUNT OF VARIOUS ASSETS OF FARMERS, BY TENURE, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Assets	Tenants	Part-Owners	Owners	All Farmers
Livestock	$1,028	$1,417	$1,501	$1,324
Supplies	104	295	200	192
Equipment	503	1,003	787	748
Total chattels	1,636	2,721	2,488	2,265
Other quick assets	15	-	7	8
Land and buildings	-	8,433	12,264	7,259
Total assets	1,651	11,154	14,760	9,532

(6) Adapted from the Forum, IX (March 1890), 94-105, an article on the Mortgage Broker and Mortgage Company by James Willis Gleed for Nourses' Agricultural Economics, Univ. of Chicago Press, 1916.

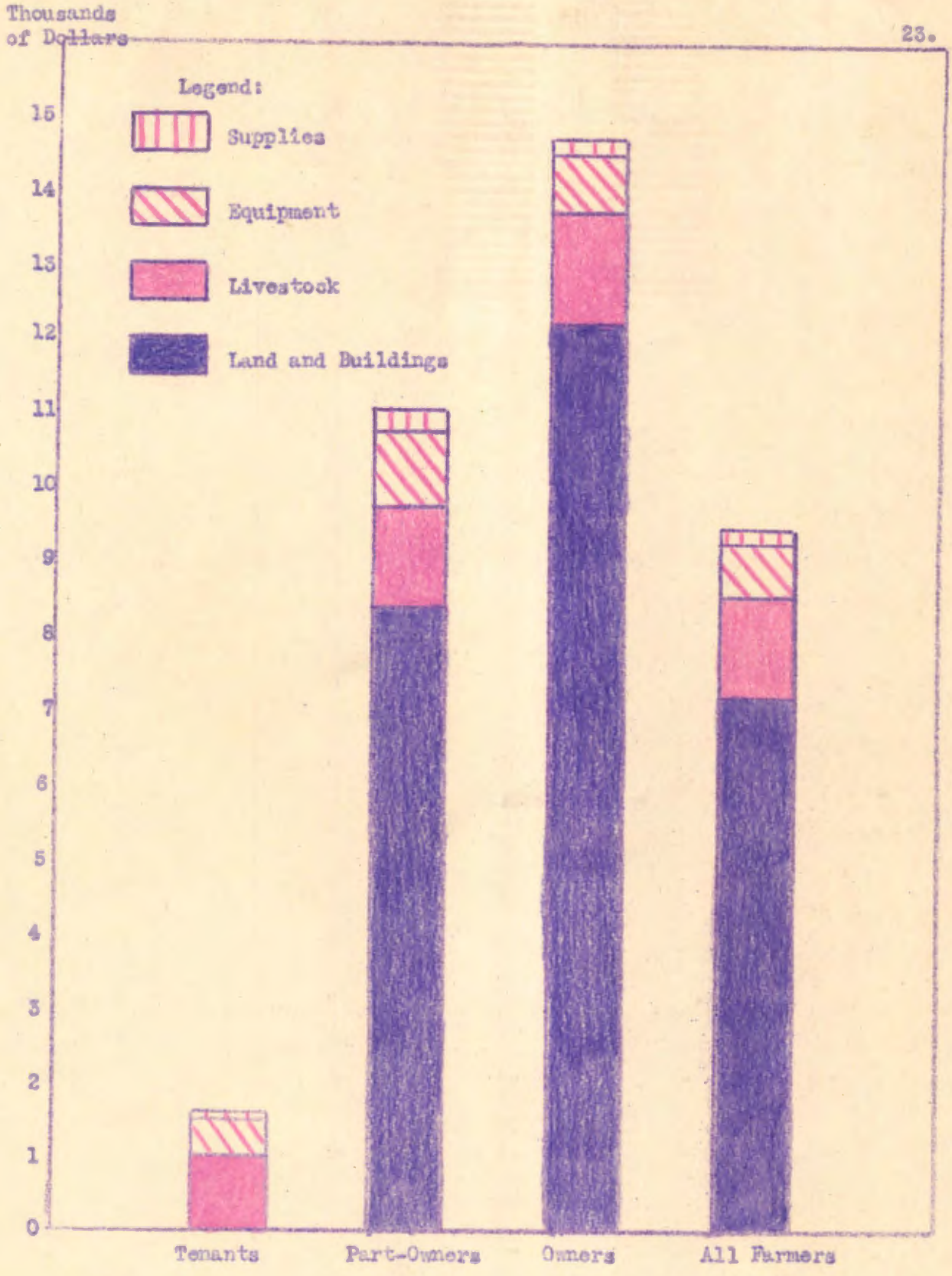

Figure 7. Average Amount of Assets of 100 Williamson County Farmers, 1938

Based on Table IV.

ciable sum. More than half of the quick assets were livestock. Tenants had farm chattels valued at $1,636 each, indicating their operating capital requirements are large. On the full-owner farms in the survey the chattels amounted to about one-sixth the total investment on the farm.

In this general livestock area it is natural that a large investment in livestock is required. Workstock is one of the first needs of any farmer. The average farmer had over $513 invested in work stock, or nearly as much as in cattle (Table V and Figure 8). The sheep investment

TABLE V. THE AVERAGE INVESTMENT PER FARMER IN THE VARIOUS CLASSES OF LIVESTOCK, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Class of Livestock	Tenants	Part Owners	Owners	All Farmers
Horses and mules	$456	$489	$573	$513
Cattle	347	513	645	516
Sheep	34	107	55	61
Hogs	83	207	131	134
Poultry	101	101	97	99
No. of milk cows	6	9	8.5	8

was small as only a few had sheep. Hogs and poultry were both of importance as livestock assets. Part owners had the highest investment in hogs and sheep and the largest number of dairy cows per farm, but owner farms had highest investment in workstock and cattle.

Cattle purchased to be fed out require credit to cover the investment until they are sold. Credit is often needed in addition to that required for the purchase of the stock. Even though home grown grains are used for the most part, some protein supplement is likely to be needed.

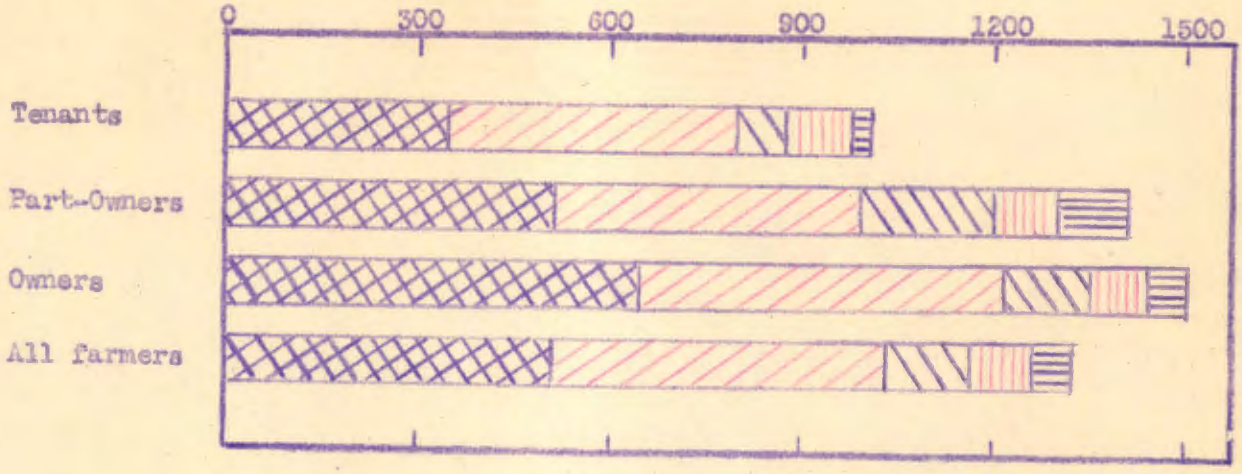

Figure 8. The Average Investment in Livestock of 100 Williamson County Farms, 1938

Based on Table V.

Legend:

Cattle | Horses and Mules | Hogs | Poultry | Sheep

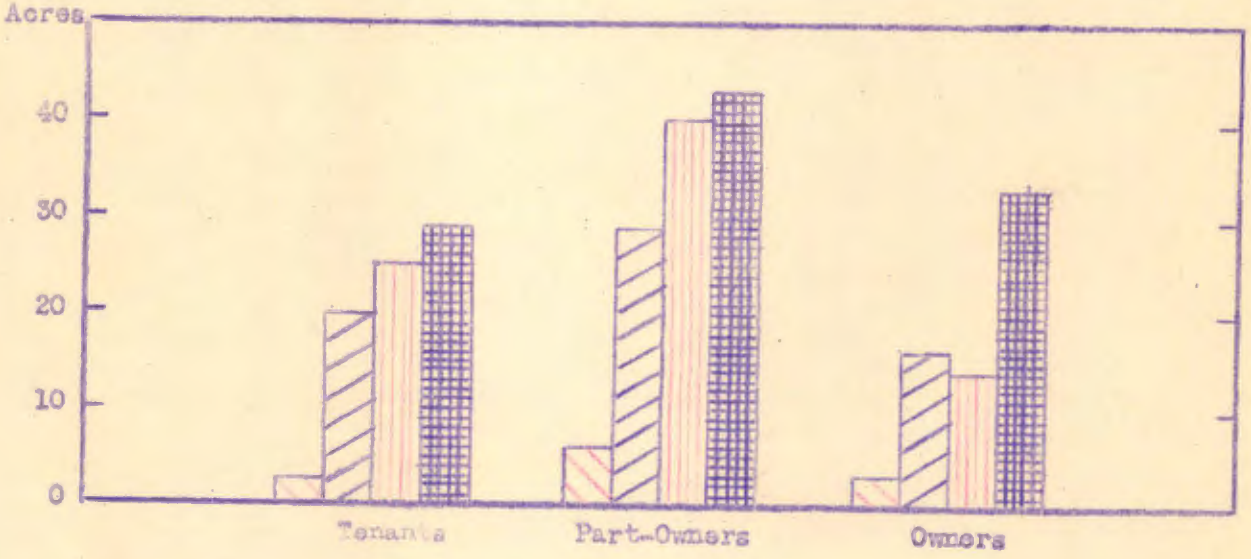

Figure 9. The Average Acreage of Important Crops on 100 Williamson County Farms, 1938

Based on Table VI.

Legend:

Corn | Wheat | Tobacco | Lespedeza

The growing of crops always entails a certain amount of investment being tied up in the crop - the actual amount varying with the specific crop. The farms in the survey had as their principal crops corn, wheat, lespedeza, and tobacco (Figure 9 and Table VI). In order to grow these crops it may be necessary to borrow money for seed, fertilizer, lime, or labor. From Table VI it appears that part-owners would have the greatest requirement for financing their crops because of the large acreage of tobacco, corn, and wheat. In addition to expenses that enter directly into crop or livestock production it is sometimes necessary to borrow for taxes, insurance, or other general farm expenses.

TABLE VI. THE AVERAGE ACREAGE PER FARM IN CERTAIN CROPS, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Crop	Tenant	Part Owner	Owner	All Farmers
Corn	29.7	42.8	32.9	34.3
Wheat	25.1	40.2	14.3	24.3
Tobacco	2.5	5.8	3.3	3.7
Lespedeza	20.1	28.9	16.6	21.0
Total acres	174.2	235.6	173.5	188.9

Credit for marketing of their products is not so important to the farmers of this area as in some single-crop areas. The farmers who obtain much of their livelihood from milk cows usually do not have to finance the marketing of their products except when they must wait for milk checks for a couple of weeks or a month after they first begin

shipping. The tobacco growers may have some marketing finance problems as it may be several months after the leaf is cured before it is sold.

Financing is one of the important aspects of livestock marketing. Because of refrigeration of the meat it may be many months after the animal has been sold to the packer until it is purchased by the consumer. However, this financing function is usually performed by the packer rather than the farmer.

CHAPTER III

TYPES OF CREDIT

Definitions

Mortgage credit as discussed in this study refers only to loans secured by farm real estate mortgages.

Cash credit or cash loans has been used to designate all loans not secured by real estate mortgages or qualifying as installment sales. It includes both short-term and intermediate credit.

Intermediate credit has been construed to be all cash loans of more than six months term.

Short-term credit refers to cash loans of a term up to and including six months.

Installment credit has at least three distinguishing features. Installment credit is for goods rather than cash. Such financing is usually secured by a conditional sale instrument, and periodic payments are usually the practice.

Open book account credit is used for purchase of goods or services, is generally without security, and has indefinite provisions for repayment.

Merchant credit refers to both installment credit and open account credit.

Distribution of Debts Among the Types of Credit

Average of All Farms. It was shown in Table IV (page 22) that the average farmer had assets amounting to $9,532. Table VII shows that the average farmer had debts amounting to $1,886 or about one-fifth (19.8 per cent) of his total assets.

The distribution of this $1,886 among the different types of credit is presented in Figure 10. Mortgage credit with 82.3 per cent of the total was by far the most important type of credit used. Cash credit amounted to almost 14 per cent of the total. Of the merchant credit, installment sales were most important, accounting for 2.8 per cent of the outstanding debts, whereas open accounts amounted to only 1.0 per cent.

TABLE VII. DISTRIBUTION OF OUTSTANDING DEBT OF 100 WILLIAMSON COUNTY FARMERS, 1938

Item	Mortgages	Cash Loans	Installment Loans	Open Accounts	Total
Amount	$155,193	$26,025	$5,384	$1,958	$188,560
Per cent	82.3	13.8	2.8	1.0	100.0
Average per farmer	$ 1,552	$ 260	$ 54	$ 19	$ 1,886

The accuracy of these distribution figures is somewhat verified by the figures of a parallel study made in Marshall County, Tennessee, the same year.(1) The distribution percentages of 81.0, 15.5, 2.2, and

(1) Allred, Luebke, and Milk, Farm Credit in Marshall County, Tennessee, 1938, Rural Research Monograph No. 94, Agricultural Experiment Station, Knoxville, Tennessee, 1939, p. 6.

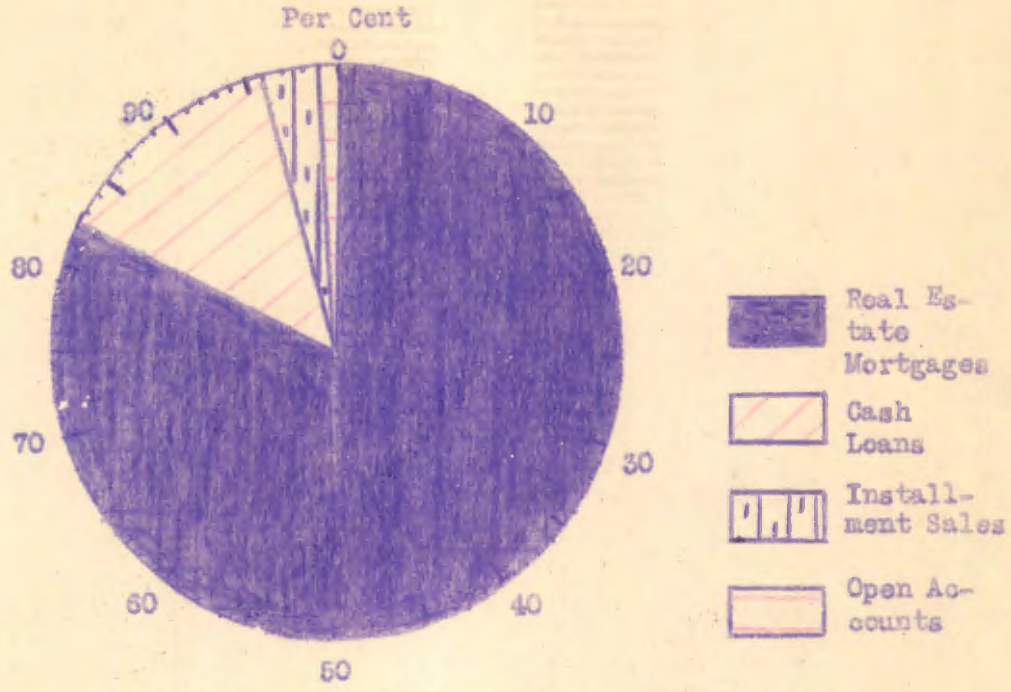

Figure 10. Percentage Distribution of Outstanding Debt of 100 Williamson County Farmers, 1938

Based on Table VII.

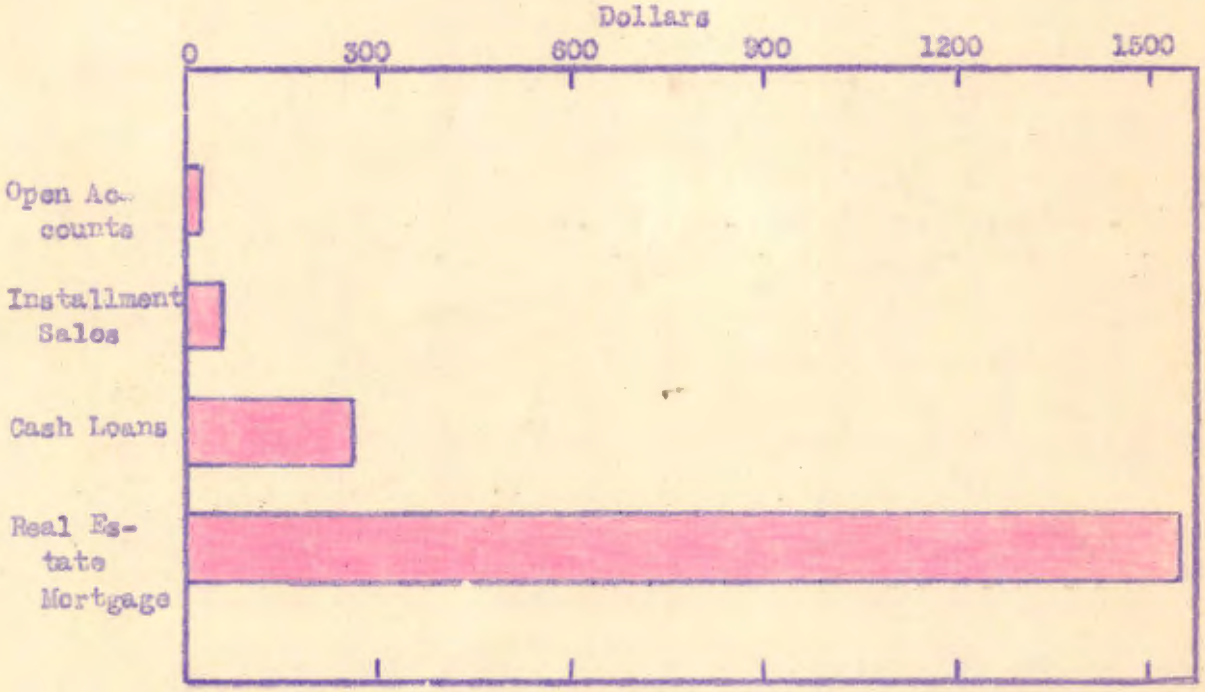

Figure 11. The Average Outstanding Debt of Each Type of Credit on 100 Williamson County Farms, 1938

Based on Table VII.

and 1.3 per cent for mortgages, cash loans, installment sales, and open accounts respectively approached very closely those shown in Table VII.

Figure 11 shows the amounts of each type on a dollar basis. Of the total, $1,552 or 82.3 per cent was in mortgage debt. Although the percentage distribution of credit in Marshall County approaches that of Williamson County, the actual amount used was substantially less. The sample farms in Marshall County had only $941 of mortgage credit and proportionate amounts of the other types of credit. For some reason, Williamson County farmers had two-thirds again as much debt as Marshall County farmers. This difference can probably be best explained by higher land values necessitating larger capital in Williamson County.

Distribution by Tenure. The debt situation of no two farmers will be alike. The problems of proper financing varies a great deal with a number of factors, one of which is tenure. The needs of a tenant and an owner are quite different, as was shown in Figure 7 (page 23). The owner needs the working capital of the tenant and additional capital for his investment. The part owner owns and operates his own farm for which he requires both working capital and fixed capital and in addition he rents additional land so that he may require more working capital.

Figure 12 presents graphically the percentage distribution of debts for the different tenure groups.

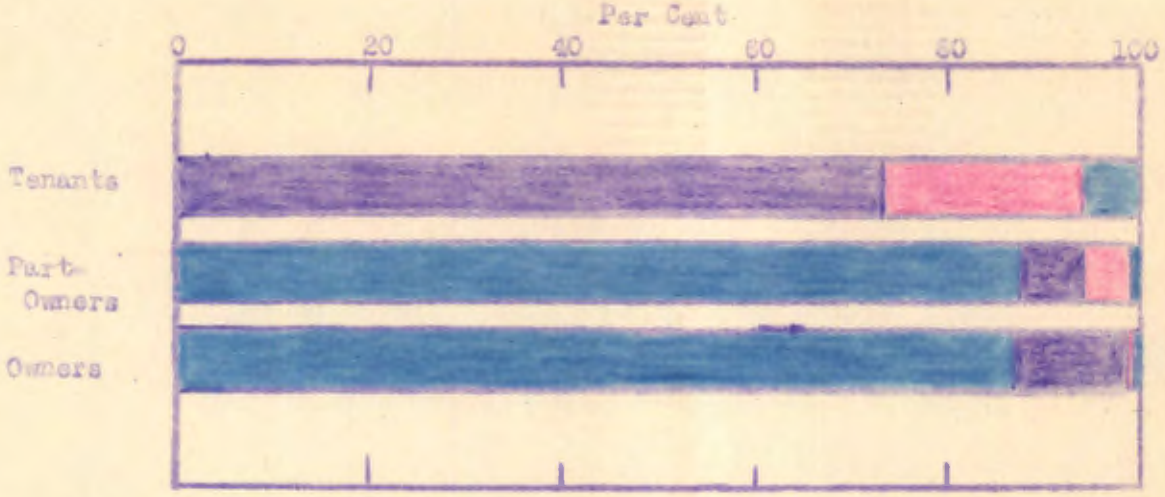

Figure 12. Distribution of Outstanding Debt Among the Types of Credit, by Tenure, 100 Sample Farms, Williamson County, Tennessee, 1938

Based on Table VIII.

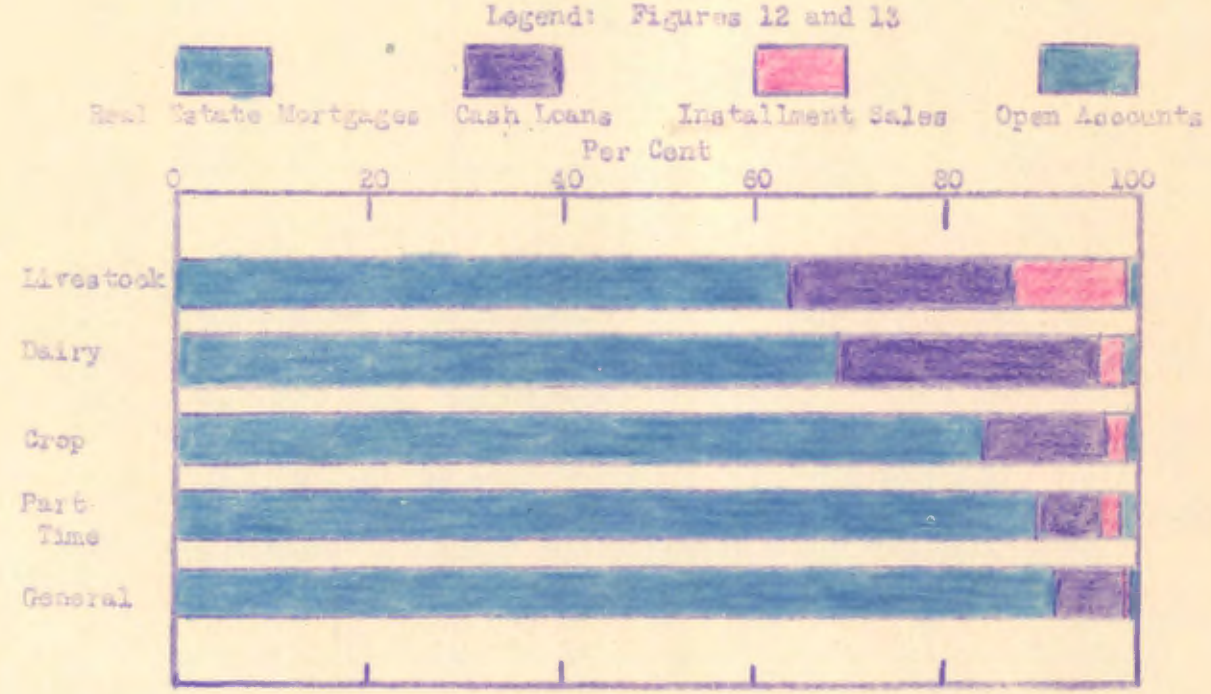

Figure 13. Distribution of Outstanding Debt Among the Types of Credit, by Types of Farming, 100 Sample Farms, Williamson County, Tennessee, 1938

Based on Table IX.

TABLE VIII. DISTRIBUTION OF OUTSTANDING DEBT AMONG THE TYPES OF CREDIT BY TENURE, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Types of Credit	Tenants		Part Owners		Owners	
	Amount	Pct.	Amount	Pct.	Amount	Pct.
Real estate mortgages			$39,983	87.8	$115,210	87.0
Cash loans	$7,865	73.6	2,765	6.1	15,395	11.6
Installment sales	2,164	20.3	2,275	5.0	945	.8
Open accounts	657	6.1	485	1.1	816	.6
Total outstanding indebtedness	$10,686	100.0	$45,508	100.0	$132,366	100.0

Since they do not own land tenants have no real estate mortgages. Cash loans accounted for 73.6 per cent of tenants' outstanding debt. Installment sales comprised 20.3 per cent of the tenants' unpaid obligations and open accounts 6.1.

Owners and part-owners obtained most of their credit from real estate mortgages, consequently the proportions in the other types of credit were much smaller than corresponding figures for tenants. There was little difference between owners and part-owners in the proportion of outstanding debt in real estate mortgages, the figures being 87.0 per cent and 87.8 per cent, respectively. Owners used more cash loan credit than part owners, owners having 11.6 per cent of outstanding debt in cash loans while part owners had but 6.1.

However, part owners had higher figures for open accounts and installment sales, having 1.1 per cent and 5.0 respectively, as compared with only 0.6 and 0.8 for owners. This might indicate that although their

credit needs were as great or greater than those of owners, they were not able to secure their full needs from sources giving cash credit.

In Marshall County the per cent distribution for owners was about the same as that of Table VIII.[2] In Marshall County part-owners had only 74.7 per cent of outstanding debt in mortgage credit as compared to 87.8 in Williamson County. The Marshall County part owners used much more cash loans, 21.5 per cent of total, than in Williamson and used more than owners.

Tenants in Marshall County had a smaller per cent of cash loans (54.5) and a much higher per cent of installment sales (51.5).

Distribution by Type of Farming. Another important factor influencing the credit needs is the type of farming. Generally speaking, it would be expected that a specialized crop farm would have higher requirements for operating capital than would a dairy farm.

For the purposes of analyzing the data according to type of farming, the farms were classified as dairy, livestock, or crop farms if they received 40 per cent or more of their income from one of those sources. If none of the classifications accounted for 40 per cent of the gross income, the farm was classified as general. The farms for which income off the farm was more than 40 per cent of the total income was classified as part-time. On the basis of this classification there were 23 dairy farms, 11 livestock farms, 11 general farms, 7 part-time, and 48 crop farms among the sample.

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(2) Allred, Luebke, and Milk, op. cit., p. 7.

Figure 13 and Table IX show how the debts of these different classifications were distributed.

TABLE IX. DISTRIBUTION OF OUTSTANDING DEBT AMONG THE TYPE OF CREDIT, BY TYPE OF FARMING, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Type of Farming	Real Estate Mortgages		Cash Loans		Installment Sales		Open Accounts	
	Amount	Pct.	Amount	Pct.	Amount	Pct.	Amount	Pct.
Livestock	$5,500	64.2	$1,965	23.0	$1,036	12.1	$ 60	0.7
Dairy	18,948	69.0	7,365	26.9	743	2.7	394	1.4
Crop	93,687	83.9	13,931	12.5	2,969	2.7	1,038	0.9
Part-time	19,500	89.8	1,339	6.2	495	2.3	382	1.7
General	17,658	91.5	1,425	7.4	141	0.7	84	0.4
All farmers	155,193	82.3	26,025	13.8	5,384	2.8	1,958	1.0

Livestock farms, with 64.2 per cent, had the lowest per cent of total outstanding indebtedness in real estate mortgages. At the same time they had by far the highest per cent, 12.1, of any of the type of farming groups in installment sales, and only dairy farmers had a higher per cent of outstanding debt in cash loans.

Dairy farms had 69.0 per cent of their outstanding indebtedness in real estate mortgages and 26.9 per cent in cash loans, the highest figure for cash loans.

Crop farmers with 83.9 per cent of outstanding debt in mortgages were intermediate between the livestock and dairy, which were lower, and the general and part-time farms, which were higher.

General and part-time farms with the highest proportion of debts (89.8 and 91.5 per cent, respectively) in real estate mortgages had lowest figures for each of the other types of credit - except that part-time farms had the highest per cent in open accounts.

The contrast of the results of this classification with the results in Marshall County are so great as to raise some question about the classification.

The 100 sample farms in Marshall County were for the most part dairy farms, whereas most of the Williamson County farms were crop farms. There were but 7 crop farms in the Marshall County sample, 46 dairy farms, 27 livestock farms, 16 general farms, 2 unclassified, and 2 poultry farms.

The only type of farming showing similar distribution of debt in both counties was general farms. In both studies general farms had the highest per cent of total indebtedness in mortgages. Crop farms showed no consistency for in Marshall County they had the lowest figure for mortgage (50.2) and highest for cash loans (39.0), whereas in Williamson County they had one of the highest for mortgages. Livestock and dairy farms had over 82 per cent of debt in mortgage in Marshall but under 70 per cent in Williamson.

This apparent lack of verification raises several questions. Would the results be more similar if larger samples were taken? Undoubtedly this is an important question because of the limited size in some of the groups. However it appears that some of the other questions are more

significant.

Are the needs of the different types of farming distinct enough to make differences in the distribution probable? If the distinctions between types of farming were clear enough it would appear that the differences of credit needs would be significant. The answer to this correspondends to that of the next question.

Is not the classification too arbitrary to be of value? This appears to be the critical question and it seems that in many cases the classification may be inadequate. The dividing line between farms is very small and although the farms of an area may be very similar, the classification may put them in separate groups. It is entirely possible that many of the crop farms of the Williamson County sample are simply general, livestock, or dairy farms with a larger crop income.

In spite of the arbitrary nature of this grouping and other weaknesses, it may bring out some significant comparisons. In the distribution of outstanding debt only one conclusion can be made with accuracy and that is that general farms appear to have a larger proportion of debts in mortgages than other type-of-farming groups and seem to require a smaller proportion of working capital.

Distribution by Net Worth Groups. One of the most important determinants as to where a borrower can obtain credit is his equity or net worth - the difference between what he owns and what he owes.

The classification according to net worth groups farms together

whose operators' net worth falls between certain limits. Figure 14 shows how the distribution for the groups appear.

TABLE X. DISTRIBUTION OF OUTSTANDING DEBT AMONG THE TYPES OF CREDIT, BY NET WORTH GROUPS, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Net Worth Groups		Real Estate Mortgages	Cash Loans	Installment Sales	Open Accounts
Under $2000	- Amount	$19,038	$9,264	$1,939	$747
	Pct.	61.4	29.9	6.3	2.4
2001 - 5000	- Amount	10,722	1,996	671	309
	Pct.	78.3	14.6	4.9	2.2
5001-10,000	- Amount	41,033	5,105	943	314
	Pct.	86.6	10.8	2.0	0.6
Over 10,000	- Amount	84,400	9,660	1,831	588
	Pct.	87.5	10.0	1.9	0.6
Total		$155,193	$26,025	$5,384	$1,958

There appears to be a positive relationship between the net worth of these farmers and the per cent of total indebtedness in real estate mortgages. Farmers with less equity have larger proportions of their debts in cash loans and merchant credit. The mere fact that they have a higher net worth and consequently a stronger financial position enables those in the higher equity groups to secure loans upon more favorable terms.

The sample from Marshall County indicated the same relationship as the sample from Williamson County in regard to net worth and distribution of debt. The group under $2000 had 44.5 per cent of debts in mortgages whereas the group over $10,000 had 85.9 per cent of debts in mortgages.

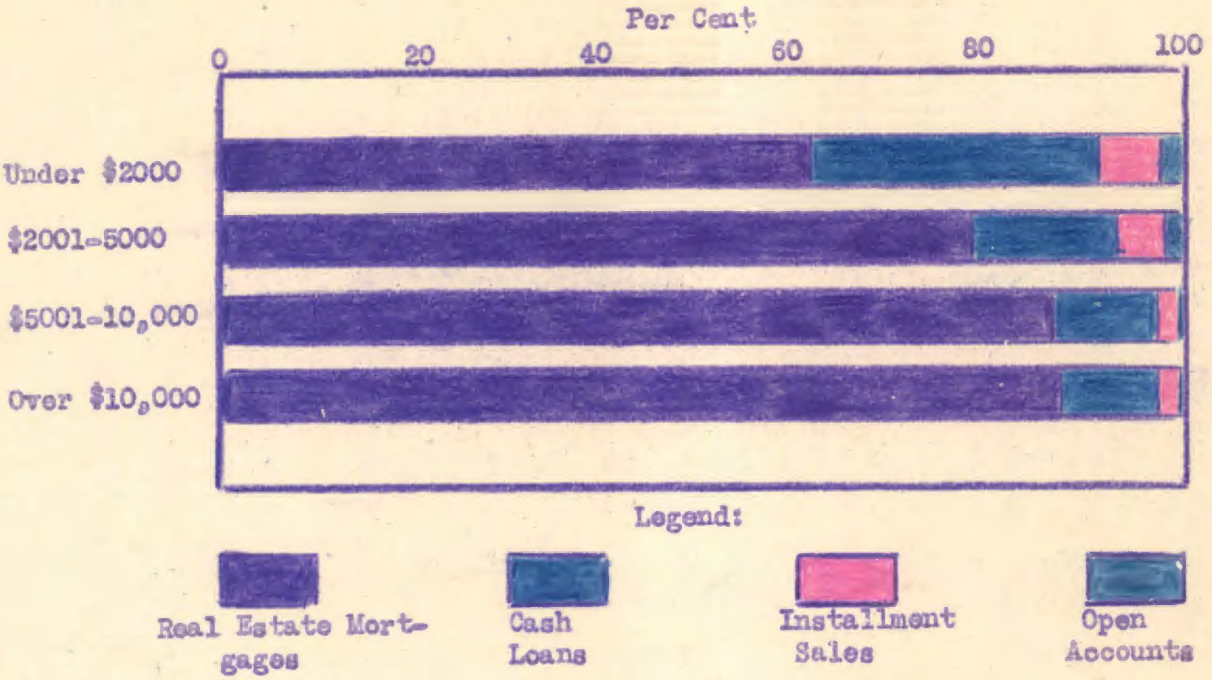

Figure 14. Distribution of Outstanding Debt Among the Types of Credit, by Net Worth Groups, Williamson County, Tennessee, 1938

Based on Table X.

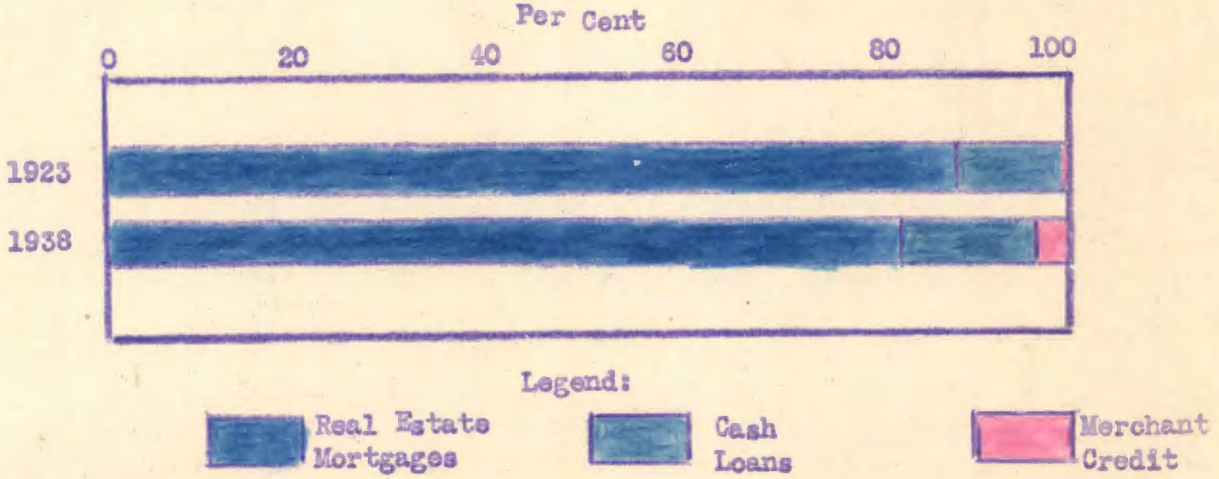

Figure 15. Distribution of Outstanding Debt Among Farmers in Williamson County, 1938 and 1923

Based on Table XI.

Other figures for Marshall County brought out similar relationships as for Williamson County in Table X. There was a higher per cent of total debts in mortgages for each higher grouping in net worth and a lower per cent in installment sales, cash loans, and open accounts for each higher grouping in net worth.

Trend. In 1923 a greater per cent of the outstanding debt was in mortgage credit and less was in merchant credit and cash loans (Figure 15). The per cent of debt in mortgages in a survey taken in 1923 was 82.3, while in the survey taken fifteen years later it was 88.4. Cash loans were 11.3 per cent of total in 1923 and 13.8 per cent in 1938. In 1923 there was no distinction between installment sales and book account credit, both being listed together as merchant credit. In that study all merchant credit accounted for only 0.3 of one per cent of the total outstanding debt, whereas in the 1938 merchant credit amounted to 3.8 per cent of the total outstanding debt.

Although these two studies were made of separate groups of farmers, nevertheless certain of the differences appear pertinent. It seems that fifteen years ago business in this area was done more largely upon cash than it is today. Installment buying has become an important source of financing with the advent of national installment financing companies.

TABLE XI. DISTRIBUTION OF OUTSTANDING DEBT AMONG FARMERS IN WILLIAMSON COUNTY, TENNESSEE, 1938 AND 1923

	Real Estate Mortgages	Cash Loans	Merchant Credit	Total
1923 Study	88.4	11.3	0.3	100.0
1938 Study	82.3	13.8	3.8	100.0

Source: Allred, Robinson, and Luebke, Rural Credit in Tennessee, 1923, Rur. Res. Mon. No. 82, Agr. Exp. Sta., Univ. of Tenn., Knoxville, 1938, p. 3.

Significance of Debts. One way to appreciate the importance of debts to a farmer is to examine how interest payments decrease the money available for other expenses.

Warren and Pearson[3] call attention to the fact that the total payment of interest and taxes on mortgaged farms in 1920 called for $361 out of the average gross sales of $1,075 per farm.

Using a similar method for Williamson County in 1930 it appears that for full-owner farms $290 would be needed to pay taxes and interest. Interest at six per cent on the average Williamson County full owner mortgage debt[4] of $3,396 would be $204. Table X shows that the average full owner had in addition to mortgage debt other debts amounting to 14.9 per cent of his mortgage debt. This per cent of $3,396 would give $506 of other debts. Six per cent interest on this would be $30, making total interest payments of $234. The average tax payment for full owners of Williamson County was $56.[5] This would make a total tax and interest payment of over $290. The average gross sales of all farms in Williamson County in 1929 was $1,430.

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(3) Warren, G. F., and Pearson, F. A., The Agricultural Situation, John Wiley and Sons, London, 1924, p. 44.

(4) 1930 Census.

(5) Ibid.

CHAPTER IV

LENDING AGENCIES

Historical Development

Along with the development of civilization and the substitution of a medium of exchange for barter has been the development of a banking system. A paper prepared by A. W. Brockway, Cashier of Brownsville Savings Bank, Brownsville, Tennessee which was read before the Tennessee Bankers' Association Convention at Chattanooga in 1892 has some interesting history of banks.(1)

The oldest bank note used as money of which any record could be found was issued in China as far back as 2696 B.C., but Mr. Brockway raised the question as to whether his source may not have been in error, the date instead being 1696 B. C.

The banking institution of Egbi and Company, which acted as an imperial banking house from 700 B. C. to 521 B. C., was the earliest known banking firm in Babylon.

From the time of early civilization there was little record of public banks in Europe until the Bank of Venice was established in 1171 A. D. This was followed by the Bank of Barcelona in 1401, the Bank of Genoa in 1407, and the Bank of Amsterdam in 1609. The Bank of England

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(1) The Tennessee Banker, October 1931, The Tennessee Bankers Association, Nashville, p. 24.

of which so much has been heard was not established until 1694.

The oldest bank in the United States, according to Mr. Brockway, was the "President, Directors and Company of the Bank of North America" which was planned as a national bank by Robert Morris but was chartered by the State of Pennsylvania.

Mortgage credit, organized into a special system of banking has existed in Europe since the reign of Frederick the Great. Although such institutions have been organized under authority of law in practically every European state, there has been little uniformity in their operation or detail.(2) One general principle which underlies all mortgage banks of Europe is the issue of bonds based on the collective value of security of many individual mortgages on real estate. The oldest of these banks are the Landshaften of Prussia. A member owning real estate mortgaged his lands and obtained the amount of the mortgage in landschaft bonds, secured by the collective value of all the lands of the members of the association. He then sold the bonds to any one who would buy them. The bonds were good but not easily sold so that later the organization was modified to provide for selling agencies to dispose of the bonds and give the borrowers cash.

After a number of years of agitation for a satisfactory national farm loan organization the Federal Farm Loan Act was signed by President Wilson in 1916. This provided for the formation of banks in each of the

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(2) Wright, Ivan, Farm Mortgage Financing, McGraw-Hill Book Company, Inc., New York, 1923, p. 38.

twelve Federal Reserve Bank districts. Each bank was to have capital stock amounting to $750,000 which was to be subscribed by individuals, firms and state and national governments. National Farm Loan Associations were authorized as a part of the system for the purpose of organizing borrowers from the Land Bank. Joint Stock Land Banks were provided for in this law to protect existing mortgage companies.

The Federal Land Banks were an effort to aid long-term financing. The Intermediate Credit Banks which were authorized in 1923 were to enable farmers to tap the money market for intermediate loans. They are authorized to discount farmers' notes for banks, credit corporations and similar institutions and to make loans to cooperative marketing associations. However not many banks used the F.I.C.B. and there were but few corporations that availed themselves of the F.I.C.B. facilities. Consequently in 1933 Production Credit Associations were organized to serve as connecting links between the F.I.C.B. and borrowing farmers.

In addition to the permanent organization of the Farm Credit Administration, the national government has set up other agricultural credit agencies. The War Finance Corporation was authorized in 1921 to make loans to banks on the security of farmers' notes. From 1929 to 1936 appropriations from one fund or another were made for feed and seed loans. Also the semi-credit, semi-relief work begun under the F.E.R.A., has continued first under the Resettlement Administration and lately under the Farm Security Administration. The Regional Agricultural Credit Corporations were set up in 1932 to make loans to farmers and stockmen

by corporations capitalized by the Reconstruction Finance Corporation. They were liquidated after the Production Credit Corporations were organized in 1933.

Flow of Capital into Agricultural Areas

An isolated community such as were many of the early settlements would be limited for credit facilities to the capital accumulated within its boundaries. Although such communities are very uncommon at present, the amount of accumulated local capital has important effects on financing arrangements.

Norton has enumerated the conditions under which capital tends to accumulate and the conditions under which local capital is scarce:(3)

Accumulation of local capital:
1. In older communities which are fully developed.
2. In areas with surplus incomes.
3. Where people are thrifty and save.
4. In periods of rising prices.
5. Under peace time conditions.
6. Where legal conditions encourage accumulations which do not have to be hoarded.

Scarcity of local capital:
1. In new areas.
2. In areas with undeveloped potential resources.
3. Where there are little or no surplus incomes.
4. Where the people are not thrifty.
5. In periods of falling prices.
6. In countries involved in war.
7. Where wealth has to be hidden to be safe.

In general it can be said that most agricultural sections of the United States must depend on outside capital for long-term credit and

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(3) Norton, L. J., Financing Agriculture, The Interstate Publishing Company, Danville, Illinois, 1938, p. 27.

and some for short-term credit.

The capital needed for long and short-term capital comes into a community in many ways.

Some of the most important methods of bringing in short-term capital are:(4)

1. Wholesale merchants and manufacturers in older areas may finance local merchants who may in turn make advances or accounts to the farmers.
2. Branch bank systems.
3. Chain bank systems.
4. Independent banks with connections in capital centers.
5. The Federal Reserve System.
6. Livestock loan companies.
7. Government agencies.

Some of the institutions most important in bringing in farm mortgage money are:(5)

1. Private mortgage bankers and brokers.
2. Insurance companies.
3. Joint Stock Land Banks.
4. Federal Land Banks.
5. The Government.

Private Lending Agencies

Life Insurance Companies. Life insurance companies are particularly important for their lending operations on real estate. From 1917 to 1935 insurance companies loaned nearly one quarter of the total amount loaned on real estate mortgages in Williamson County (see page 112).

In 1935 there were ten life insurance companies having loans out-

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(4) Norton, L. J., op. cit., p. 29.

(5) Ibid., p. 42.

standing in Williamson County (Table XII). Of these companies, Phoenix Mutual of Hartford, Connecticut, held the largest number, amount, and mortgaged acreage, accounting for over one-third of the total number. The Metropolitan Life Insurance Company and the Equitable Life Assurance Company were other principal lenders.

An interesting aspect is that practically all of the Metropolitan loans were made out with American Trust Company as mortgagee and then assigned to Metropolitan. Similarly the loans of the Equitable Life Assurance Company were made out with Central Trust Company as mortgagee and then assigned to Equitable.

TABLE XII. LIFE INSURANCE COMPANIES HAVING LOANS OUTSTANDING IN WILLIAMSON COUNTY, TENNESSEE, 1935

Companies	Number	Amount	Acreage Mortgaged
Phoenix Mutual Life Insur. Co.	63	$366,350	11,837
Metropolitan Life Insur. Co.	23	181,050	5,332
Equitable Life Assur. Co.	19	155,950	4,460
Northwestern Mutual Life Ins. Co.	18	108,260	3,759
Union Central Life Ins. Co.	18	91,486	1,767
New York Life Insurance Co.	12	71,860	2,225
Life and Casualty Company	3	47,000	1,138
Prudential Insurance Company	3	11,400	375
National Life and Accident Insurance Co.	2	5,750	409
Southern Insurance Company	1	11,500	262
Total	162	1,050,606	31,564

Banks. State and national banks are of considerable importance in financing farmers. A study in Marshall County in 1938 showed that such banks accounted for 99 per cent of the amount of short-term cash loans

borrowed by farmers in the study.[6] Even in South Carolina where large amounts of cash credit are advanced by landlords banks provided 77 per cent of the amount of short term cash loans in 1926.[7]

Although most state and national banks are much more interested in short-term loans than loans on real estate, nevertheless they are an important source of mortgage credit also. Over the period 1917-1935 commercial banks loaned roughly 12 per cent of the total mortgage loans in the county (see page 115).

In 1935 there were 54 banks and trust companies that had mortgage loans outstanding in Williamson County. These banks and trust companies were located in Williamson and 8 other counties, most of them nearby. Of the 54 institutions, 15 were in Williamson County, 8 in Davidson County, 5 in Rutherford County, 3 in Maury County, and one each in Shelby, Marshall, Lawrence, and Hickman counties of Tennessee, with one from Kentucky.

Over three-fourths of the loans outstanding by banks and trust companies in 1935 were held by Williamson County firms (Table XIII). The only other county whose banks held an appreciable number of loans was Davidson. Because of the large urban population at Nashville, a certain amount of capital accumulates which cannot find investment at home and flows into adjoining counties.

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(6) Allred, Luebke, and Milk, Farm Credit in Marshall County, Tennessee, 1938, Agr. Econ. Department, Univ. of Tennessee, Knoxville, 1939, p. 27.

(7) Wickens and Jensen, Agricultural Finance in South Carolina, Clemson Agricultural College, Bulletin 282, 1931, p. 17.

TABLE XIII. THE MORTGAGE LOANS OUTSTANDING OF BANKS AND TRUST COMPANIES IN WILLIAMSON COUNTY, TENNESSEE, 1935, BY COUNTIES IN WHICH BANKS ARE LOCATED

County	Number of Banks	Number of Loans	Amount	Acreage
Williamson	15	129	$294,615	18,679
Davidson	8	22	90,025	5,981
Maury	3	4	16,519	1,546
Rutherford	3	5	12,170	417
Shelby	1	2	8,500	135
Marshall	1	1	1,500	33
Hickman	1	1	598	97
Lawrence	1	1	375	40
Jefferson, Ky.	1	1	2,500	34
Total	34	166	$426,800	24,892

Of the 15 Williamson County banks and trust companies the Harpeth National Bank and the Williamson County Banking and Trust Company were the most important. In fact these two banks together accounted for over half the amount of mortgage loans outstanding in Williamson County in 1935. The relative impertance of the other 32 banks will be found in Appendix A. In addition to these 34 banks and trust companies which had loans outstanding in 1935, there were 15 other banks which had made loans at one time or another from 1901 to 1935. These banks were all outside of Williamson County, being located in 9 other counties of the state and one bank from out of state (see Appendix A).

The commercial banks have been the backbone of our credit facilities. During the past ten years they have been through difficult times as was evidenced by the many bank failures early in the thirties. In a

study of Tennessee's small banks, Dr. Ross[8] noted the great change from 1929 to 1938 in the proportion of total resources invested in loans and discounts to local industry. In 1929 the average percentage of total resources disposed of in the form of local loans and discounts amounted to 66.5, by 1932 it was 64.1, and in 1938 it was only 48.1 per cent. Some of the possible explanations for this shift were given by Dr. Ross to be:

1. The number of borrowers qualified to meet the standards maintained by the banks has decreased greatly as a result of the depression.

2. Some persons place the blame on the governmental bodies who have increased the strictness of requirements concerning "sound" paper to such an extent that few can qualify.

3. Others claim that credit risks in the smaller rural communities have been seriously weakened by such modern developments as the increasing number of chain stores and other integrated businesses which do not bank locally, and by the increased tendency of better borrowers to do business with larger communities as a consequence of the development of hard-surface highways and automobiles.

Individuals. Individuals are one of the most important of all possible sources of farm credit, particularly farm mortgage credit. Potentialities of credit from individuals cannot be estimated, because in the last analysis any person with surplus capital is a possible

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(8) The University of Tennessee Newsletter, "A Study of Tennessee's Country and Small Town Banks," November 1938, Knoxville, Tennessee.

source of credit.

The term "individuals" as used for the grouping as set forth later in this study includes many classes that might be segregated as separate lending agencies. "Individuals" includes private investors, former owners, active farmers, and inactive farmers, and possibly other groups. Wickens made such a distinction in his study of farm mortgage credit.(9) His nine principal classes of lending agencies in the United States January 1, 1928, included "Retired Farmers", "Active Farmers", and "Other Individuals". These three classes have all been grouped together in this study. On the basis of Wicken's table 7, "Other Individuals" would comprise about half, "Active Farmers" about a tenth, and "Retired Farmers" about a third of a total "Individual" classification.

Murray differentiated former owners from private investors.(10) On the basis of his findings, in Iowa former owners accounted for about one-fifth of a total "individual" classification as used in this study.

Merchants. Merchants are not so important a source of short-term credit as most regular credit agencies. However, they are a source of credit to some farmers, especially for consumption goods. Particularly for foods and general merchandise, an account at the local store may be a matter of convenience. There may also be an inability to get credit elsewhere. In many cases there may be no incentive to pay cash; or even

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(9) Wickens, David L., Farm-Mortgage Credit, Technical Bulletin No. 268, U.S.D.A., Washington, D. C., 1932, p. 22.

(10) Murray, William G., An Economic Analysis of Farm Mortgages in Story County, Iowa, 1854-1931, Agr. Exp. Sta. Research Bul. No. 156, Ames, 1933, p. 385.

where there may be an incentive there may be ignorance as to the cost.

In 1929 there were 166 stores in Williamson County which had net sales of over $3,219,000.(11) Even if a small percentage of the total sales were done on credit, the aggregate of credit provided in this fashion might be quite significant. However only a few of this number dealt exclusively in commodities farmers would use for production purposes. There were but 4 farmers' supply stores (including feeds and fertilizers) in the county, 2 lumber and building material dealers, 2 hardware and farm implement stores, and 17 dealers in automobiles and auto needs (includes 5 filling stations, 4 dealers, 7 garages, and 1 other automotive dealer). However, many "general" stores handle farm supplies.

Also it is possible that the trading areas of communities outside the county extend into the county and provide other potential sources of merchant credit.

Finance Companies. Finance companies are increasing their activities throughout the country and are an important private source of credit. They have made more rapid growth in urban areas, but their influence is extending to the rural communities also. Many of the large machinery and automobile companies either have company-managed finance companies or deal through some of the large financing companies.

For the most part such credit activity has largely been for goods which are of a durable nature and can be used as security for a condi-

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(11) Bureau of Census, Department of Commerce, Census of Distribution, 1930, Washington, D. C.

tional bill of sale. Farm machinery, automobiles and truck and household goods such as radios, refrigerators, stoves, and the like are being purchased more and more by "easy payments".

These companies sell their paper or accounts (general obligations) to banks and investors and use the proceeds to loan to consumers or dealers who in turn finance consumer purchases.

Government Lending Agencies

Federal Land Bank. The Federal Land Bank of Louisville, Kentucky, is one of the most important sources of farm mortgage credit available to the farmers of the area.

The Federal Land Bank is entirely a farm mortgage organization. Most loans are made through local National Farm Loan Associations. The farmer who wishes to borrow from a Federal Land Bank usually becomes a member of a local National Farm Loan Association and is required to buy capital stock equal to $5 per $100 of his loan.(12) The local association represents the Land Bank in making loans is required to be responsible for loans made to the extent of its resources, and represents the bank in servicing and collection. The theory is that the farmers within the area pool their resources and become jointly liable for default of members on their mortgages, thus enabling each to obtain credit at lower cost. In order to get anything out of his stock farmers must take an interest in their local association and strive to reduce losses

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(12) Myers, W. I. Farm Credit Administration, American Institute of Banking, New York, 1934, p. 193.

to a minimum. However, in practice the organization has not functioned as expected. In 1933 when the Federal Land Banks were rejuvenated by new capital many changes were made in the N.F.L.A. set-up. In some places they had to organize new associations where there had been insolvent ones. Inactive associations were combined with more active ones.

At the present time (1939) the National Farm Loan Association at Franklin serves Williamson County.

In addition to regular Federal Land Bank loans which can be made only under certain conditions farmers can also obtain loans through the Land Bank Commissioner. They can borrow up to a larger per cent of the value of property. Procedure in making L.B.C. loans is similar to that of F.L.B. loans. However the local association does not endorse the paper and the land bank handling the transaction is not financially responsible. The funds are obtained by sale of bonds guaranteed by the Government but issued by the Federal Farm Mortgage Corporation.(13)

Federal Intermediate Credit Bank. Although the Federal Intermediate Credit Bank of Louisville does not make direct loans to farmers in the area, nevertheless it is an important source of credit. The Production Credit Associations of the area all discount their loans with the F.I.C.B. In addition to discounting the paper of the P.C.A., the Intermediate Credit Bank can also discount agricultural paper of other institutions. State and National Banks, livestock loan companies, and agri-

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(13) Qureshi, A. I., Agricultural Credit, Sir Isaac Pitman and Sons, Inc., London, 1936, p. 151.

cultural credit corporations are also eligible to take advantage of the facilities of the Intermediate Credit Banks. The Intermediate Credit Banks are also authorized to make direct loans to farmers' cooperative marketing, purchasing, and business service associations and to discount loans for the banks for cooperatives.

The Intermediate Credit Banks obtain the funds necessary for discounting loans by selling issues of debentures in the financial markets. The discount rate cannot exceed the rate borne by the last preceding issue of debentures by more than 1 per cent per annum.(14) Credit institutions discounting farmer paper with the F.I.C.B. cannot charge the farmer more than 3 per cent per annum above the discount rate.

Production Credit Corporation. The Production Credit Corporation through the Columbia Production Credit Association makes loans to finance crops and livestock to Williamson County farmers. This association obtains its loan funds by rediscounting the notes of the farmer-borrowers with the Federal Intermediate Credit Bank at Louisville.

Each of these local associations throughout the nation is more or less an independent unit. Each borrower must take out $5 of voting stock in the local association for each $100 or fraction of $100 borrowed. In addition to the voting stock, some non-voting stock is also issued,

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(14) Myers, W. I., op. cit., p. 270.

most of which is purchased by the district Production Credit Corporation. The farmer's stock is not retirable after the loan is repaid but must be exchanged for non-voting stock or sold to some other borrowers. After a guaranty fund equal to 25 per cent of its paid-in-capital, the P.C.A. may pay dividend not to exceed 7 per cent on its stock.

Applications for loans are made directly to the local associations.

The Columbia Production Credit Association closed 55 loans in Williamson County as of December 31, 1937, amounting to $37,291.78. In other words the 55 loans made during 1937 averaged about $700. As of December 31, 1938, or during the 1938 season, 85 loans were closed in Williamson County amounting to $64,257.55.(15)

Farm Security Administration. The Farm Security Administration makes three types of loans: rehabilitation loans, group loans, and tenant purchase loans.

Rehabilitation loans are made to worthy farm families who are unable to obtain credit through other credit agencies. Such loans are usually for crop needs and for buying necessary livestock and farm tools.

Group loans enable small groups of farmers to buy heavy farm equipment, purebred sires, and other services which the individual farmer could not otherwise buy. Usually such loans are made to one farmer of

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(15) Hardin, Wm. G., Personal correspondence with Mr. Hardin who is Secretary-Treasurer of Columbia Production Credit Association, letter of June 9, 1939.

the group who agrees to rent the service to his neighbors.

Tenant purchase loans were designed to help farm tenants become owners. The full value of the farm and improvements may be borrowed. This makes it possible for a hard-working tenant who has a good reputation but is unable to buy a farm with other credit help to become an owner. The loans run for 40 years at 3 per cent interest. Not all counties have the tenant purchase program but Williamson is one of those in Tennessee.

On July 1, 1937, there were 37 standard R.R. (rehabilitation) loans in Williamson County amounting to $3,947 - or an average of a little over $100. At that time there were no group purchase or tenant purchase loans in the county.

Bank for Cooperatives. The Bank for Cooperatives at Louisville, Kentucky, is at the disposal of cooperative marketing, purchasing, and farm business service associations. They can borrow for operating, facility or commodity purposes. Each borrowing association takes out stock in the district Bank for Cooperatives at the rate of $100 worth of stock for each $2,000, or fraction thereof, borrowed.

CHAPTER V

MORTGAGE DEBT - TREND

Trend in United States

Economic Considerations. The increase of farm mortgage debt is a natural outgrowth of a maturing agricultural economy. It rises out of the same economic conditions giving rise to the increase of tenancy. When land values are high, the acquisition of a farm is made difficult for those wishing to begin farming. This causes many farmers to remain in the tenant status longer than they would if land values were low, or if free, or cheap undeveloped land were available. Because of the high investment of a productive farm, when operators are ready to proceed from tenant to owner status, they are able to purchase only a share of the equity in a farm, the rest usually being financed by a mortgage. In this day, the value of a productive farm is often nearly as much as one man's lifetime savings, so that farms which are mortgaged tend to remain so for many years.

In this country the prices of farm lands could not permanently advance so long as there was more tillable land than the population could use. Students of American history are familiar with the alienation of vast areas of the public domain to individual homesteaders. But by 1880 practically all of the better lands had been settled.(1) Prior

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(1) Wright, Ivan, Farm Mortgage Financing, McGraw-Hill Book Co., Inc., New York, 1923, p. 3.

to that date there had been eras of high land values, but they had been due to speculative booms such as that leading to the panic of 1837, rather than to fundamental increases in the utility and value of land.

There have been a number of factors other than the supply of land that have affected the value of farm lands in this country. Some of them have acted in line with and some against the general trend.

One of the most fundamental factors has been the increase in population. The country's population increased from five millions in 1800 to over seventeen millions in 1840, thirty-one millions in 1860, fifty millions in 1880, seventy-six millions in 1900, and one hundred and five millions in 1920.(2) Today the per capita acreage has been reduced to less than one-third that of 1860;(3) but the standard of living of the people has risen such that a larger variety of products are now required. This increase in population raises the value of land by increasing the competition of land acquisition.

The increased wants have also raised the value of land. However, this factor, which is related to population pressure, has not been acute in this country as in the densely populated more mature countries. Current with the increase in population has been the increase in agricultural efficiency which has had the effect of making more land available.

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(2) Wright, op. cit., p. 3.

(3) Wickens, David L., Farm Mortgage Credit, p. 5, U.S.D.A. Technical Bulletin 288, Washington, D. C., 1932.

Foreign demand for agricultural products has also been an important factor affecting the value of land. This probably was one of the leading reasons for the increase in land values and accompanying increase in mortgage debt from 1910 to 1920. The average value of farm land in the United States rose from $39.60 in 1910 to $69.38 in 1920.(4)

It is also likely that the decreased foreign demand for our agricultural products after 1925 and the loss of our foreign markets has been an important factor in accentuating the severity of the agricultural depression. It has resulted in a lowering of land value and a decrease in mortgage debt.

The protective tariff system of this country has traditionally been maintained for industry at the expense of agriculture. This has been a factor limiting the farmers' purchasing power. Also it has hindered foreign demand for our agricultural products. Both these influences have been toward decreasing the value of farm land.

These factors, and probably many others, have been responsible for the increased value of farm land in the country. This increased value of farm land has probably been the greatest single factor accounting for the increase in mortgage debt. However, there have been other contributing causes influencing the increase in mortgage debt.

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(4) Ibid., p. 5.

One of the more important other factors has been the shifting of credit from short-term to long-term for the purpose of refinancing other debts. Particularly in the post-war period of distress incident to the price decline, there were numerous transfers of short-term credit to long-term farm mortgages. As late in this period as 1924 commercial banks reported that 55 per cent of their farm mortgage loans were made for the purpose of paying other debts.(5)

This utilization of farm mortgages to refinance other debts also became of importance during the thirties. Among the Marshall County sample farms 51.2 per cent of the mortgage loans which were outstanding in 1938 had been made for the purpose of refinancing other debts.(6)

Not only has the value of land increased, but there has been an increased amount of working capital needed. More farm machinery is needed and automobiles are found on almost every farm.

The expanded use of mortgage credit has been aided by improved lending facilities, particularly the federal farm loan system, and by more favorable mortgage interest rates in many sections.

The increased value of farm lands has been said to be the most important single factor responsible for the increase in mortgage debt. Conversely, the decreased value of farm land has been one of the most important factors accounting for the subsequent decrease in mortgage debt. Other important considerations have been the severe depression which resulted in many foreclosures and the slowing down of new loans.

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(5) Ibid., p. 5.

(6) Allred, Luebke, and Milk, op. cit., p. 16.

The prices farmers have to pay for goods has decreased somewhat, although not so rapidly as the decline in value of farm lands or the prices of farm products.

Trend of Total Outstanding Farm Mortgage Debt in the Country. The total farm mortgage debt of the United States more than doubled between 1910 and 1920, increasing from $3,320,470,000 to $7,857,700,000 (Table XIV). After 1920 indebtedness increased further, reaching a peak of $9,468,526,000 at the beginning of 1928. The decrease from 1930 to 1935 was particularly rapid, amounting to 17 per cent. The total outstanding debt fell 1.9 per cent in 1935 and 3.3 per cent during 1936 (Table XV).

Figures 16 and 17 show the total farm mortgage for selected years for the United States and Tennessee.

TABLE XIV. TOTAL OUTSTANDING FARM MORTGAGE INDEBTEDNESS IN THE UNITED STATES AND TENNESSEE, FOR SELECTED YEARS

Year	United States	Tennessee
1910	$3,320,470,000	$26,850,000
1920	7,857,700,000	83,130,000
1925	9,360,620,000	85,857,000
1928	9,468,526,000	96,711,000
1930	9,214,278,000	91,381,000
1935	7,645,091,000	83,861,000
1936	7,500,489,000	83,252,000
1937	7,254,821,000	82,166,000

Sources: Wall, Norman J., Outstanding Farm Mortgage Loans of Leading Lending Agencies, U.S.D.A., Bureau of Agricultural Economics, Washington, D. C.

Agricultural Finance Review, Vol. 1, No. 1, p. 49, Dec. 1937, U.S.D.A., Bureau of Agricultural Economics, Washington, D. C., May 1938, p. 2.

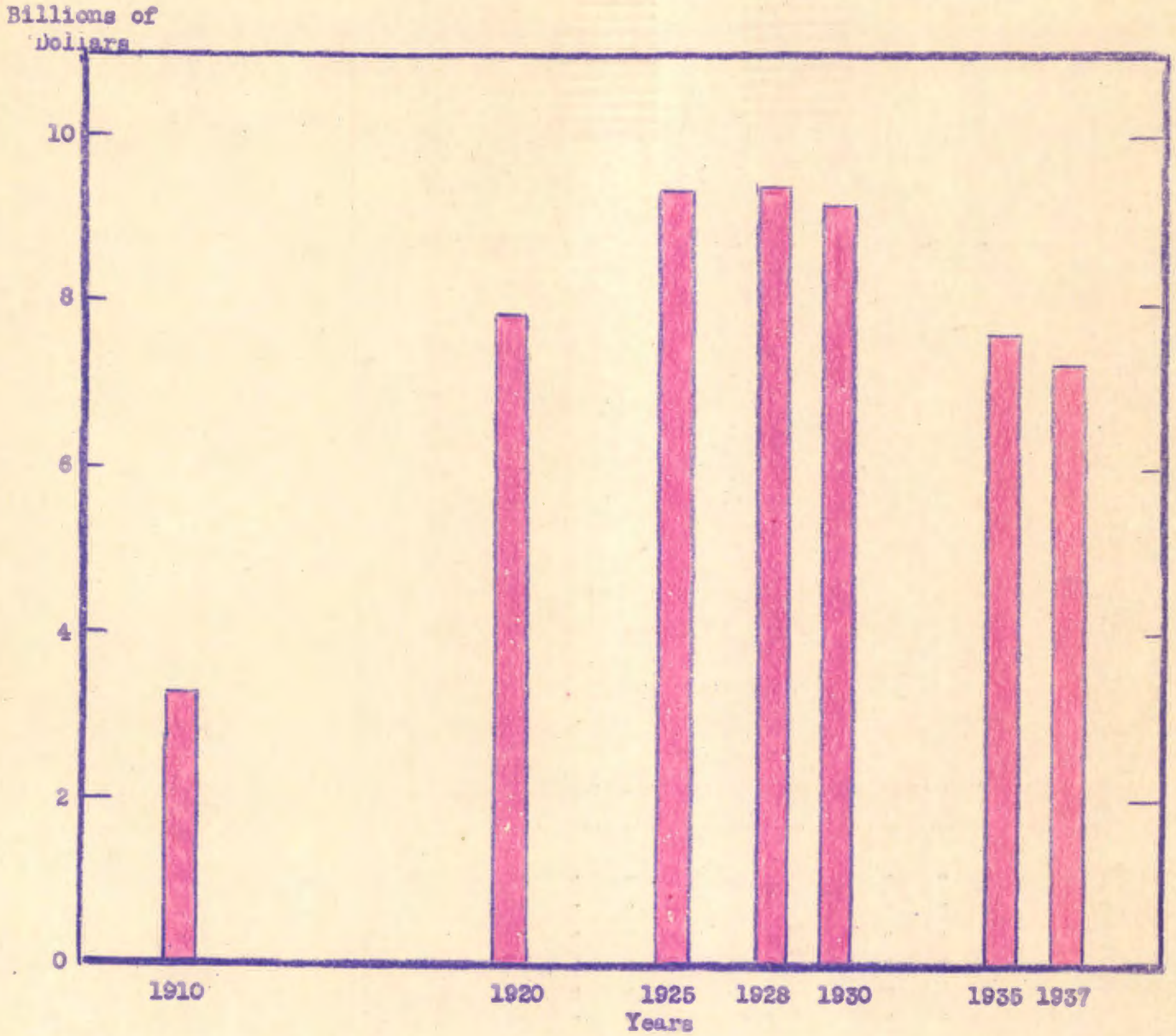

Figure 16. Total Outstanding Farm Mortgage Indebtedness in the United States for Selected Years

Based on Table XIV.

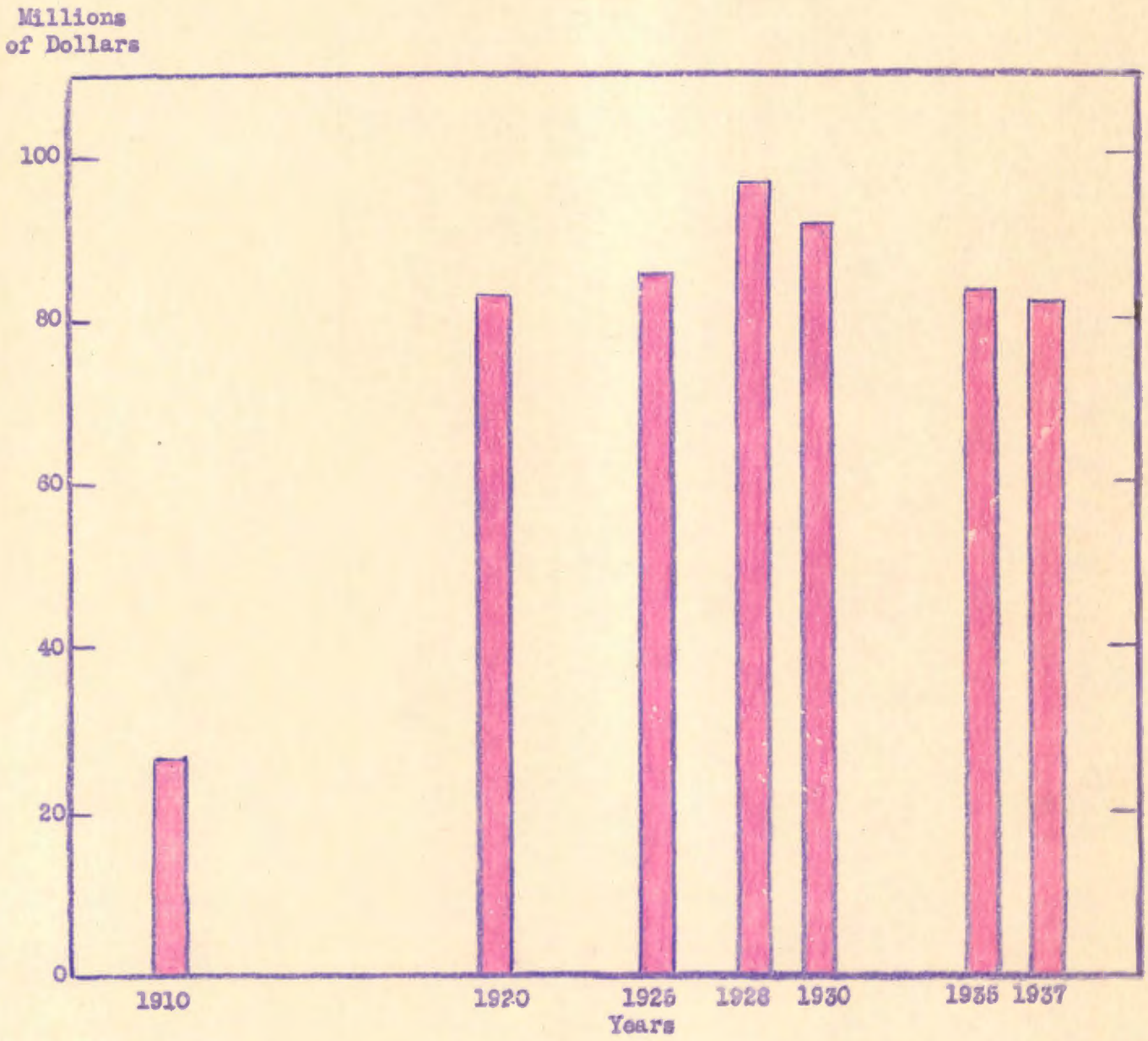

Figure 17. Total Outstanding Mortgage Debt in Tennessee, for Selected Years

Based on Table XIV.

The continued decrease in farm mortgage debt after 1935 probably has been due to the continuation of foreclosures and other distress transfers of farm properties so common in the early thirties and also to the repayment of mortgage debt made possible by the more favorable agricultural conditions during 1935 and 1936.

Trend in Tennessee

In general the trend has been the same for Tennessee as for the country as a whole. However the extent of the changes have not been the same. Tennessee's farm mortgage debt more than tripled from 1910 to 1920, whereas for the rest of the country the mortgage debt only doubled. This is shown in Table XV. The farm mortgage debt for the United States in 1920 was 136.6 per cent above that of 1910 whereas the farm mortgage debt of Tennessee in 1920 was 209.6 per cent above 1910. Tennessee's increase in total farm mortgage debt in the 1920's lagged behind the increase of the rest of the country. For the nation as a

TABLE XV. PER CENT CHANGE IN TOTAL FARM MORTGAGE DEBT, FOR SELECTED PERIODS, UNITED STATES AND TENNESSEE

Period	United States	Tennessee
1910 - 1920	136.6	209.6
1920 - 1925	19.1	5.3
1925 - 1928	1.2	12.6
1928 - 1930	- 2.7	- 5.0
1930 - 1935	- 17.0	- 8.7
1935 - 1937	- 5.1	- 2.0

whole most of the increase prior to the 1928 peak came during the first part of the decade, the 1925 figure being over 19.1 per cent larger than the 1920 figure. During this period Tennessee's farm mortgage debt increased only 3.3 per cent. From 1925 to 1928, however, Tennessee's debt increased 12.6 per cent while the country's indebtedness increased only 1.2.

During the period of decline Tennessee at first declined more rapidly than the country as a whole, the total farm mortgage debt decreasing from 1928 to 1930, 5.0 per cent in Tennessee as compared with only 2.7 per cent of the United States. However, following 1930 Tennessee declined much less than the country as a whole. From 1930 to 1935 the farm mortgage debt was reduced 17.0 per cent in the nation as a whole and only 8.7 per cent in Tennessee. The decrease in farm mortgage debt in Tennessee was larger in the early years of the depression, but the decrease has not continued as rapidly nor as far as the decrease for the country as a whole. In 1937 the farm mortgage debt of the nation was still declining appreciably - the decrease from 1935 to 1937 amounting to 5.1 per cent. Tennessee's farm mortgage debt had reached a more stable level, the state having only a 2.0 per cent decrease from 1935 to 1937.

Trend in Williamson County

Mortgages Filed, Released, and Outstanding. Probably the most accurate picture of the farm mortgage debt in Williamson County can be obtained by examining the schedules taken from the records. The results

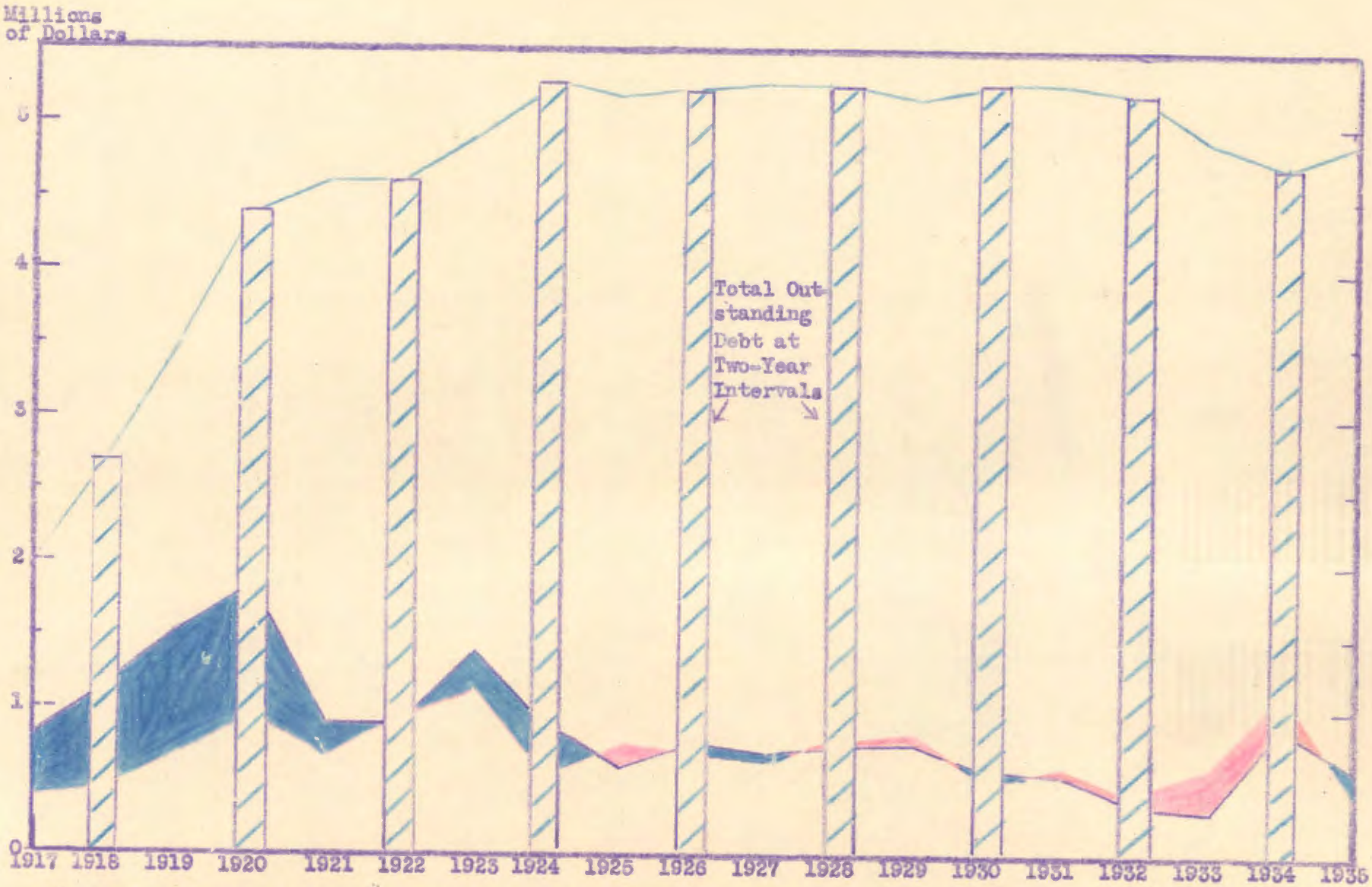

Figure 18. Increase and Decrease in Total Mortgage Debt, Williamson County, Tennessee, 1917-1935

of tabulating these schedules are presented in Figure 18. The mortgage schedules went as far back as 1899. Consequently the cumulative yearly difference between filings and releases which is used to represent the outstanding debt of 1917, is probably very nearly the exact figure. For the period 1917-35 the amount of mortgages filed each year is represented by the blue line, the amount of mortgages released by the red line, and the total outstanding farm mortgage debt by the green line. Periods when the amount filed exceeded the amount released are indicated by the blue spaces and periods when the amount released was greater than amount newly filed are indicated by red spaces. The bars represent the outstanding debt at two-year intervals.

The amount of outstanding mortgage debt increased rapidly until 1920. It continued to increase, at a less rapid pace, only two years with a decrease (1922 and 1925) until 1927. Since 1927 the trend was reversed, a decrease occurring every year except 1930 until a low was reached in 1934. In 1935 there was apparently another reversal of trend.

Between 1917 and 1920 the outstanding mortgage debt more than doubled. At the high point of the period, the outstanding debt stood at $5,300,355, more than two and a half times that of 1917.

It is interesting to note that in general the amount of mortgages filed and the amount extinguished maintained a direct relationship: when filings were real low, extinguishments were also likely to be low. This did not hold invariably true, however, for the year of highest

filings, 1920, extinguishments, although high, were not at their high point.

TABLE XVI. YEARLY RECORD OF MORTGAGES FILED, EXTINGUISHED, AND OUTSTANDING, WILLIAMSON COUNTY, TENNESSEE, 1917 - 1935

Year	Mortgages Filed	Mortgages Extinguished	Outstanding
1917	$ 817,149	$ 387,853	$2,020,171
1918	1,145,110	472,733	2,692,548
1919	1,535,253	692,931	3,534,870
1920	1,860,733	973,946	4,421,657
1921	916,772	695,934	4,642,495
1922	915,683	927,874	4,630,304
1923	1,452,856	1,152,054	4,931,106
1924	894,670	545,648	5,280,128
1925	665,654	761,688	5,184,094
1926	770,293	712,705	5,241,682
1927	717,388	658,715	5,300,355
1928	769,096	793,884	5,275,567
1929	765,257	843,219	5,197,605
1930	592,787	501,414	5,288,978
1931	566,111	583,483	5,271,606
1932	393,537	456,050	5,209,093
1933	326,978	611,591	4,924,480
1934	929,804	1,148,647	4,705,657
1935	626,919	447,982	4,884,574

The amount of mortgages filed varied considerably from year to year, averaging about $877,000 a year, but ranging from only $326,978 in 1933 to $1,860,733 in 1920. There were four years, 1918, 1919, 1920, and 1923, when filings amounted to over a million dollars, and only two years, 1932 and 1933, when filings were under the half-million mark.

The amount of extinguishments averaged about $703,600 a year. Roughly speaking, then, the mortgage debt in Williamson County increased at

the rate of $173,400 a year. Extinguishment varied from $387,853 in 1917 to $1,152,000 in 1923. There were only two years that extinguishments were over a million dollars, 1923 and 1934. There were four years that extinguishments were under the half-million mark, 1917, 1918, 1932, and 1935.

Ratio of Mortgage Debt to Value of Farm Land and Buildings. Mortgage debt has increased in proportion to the value of farm land and buildings in Williamson County from less than 2.0 per cent in 1890 to 41.6 per cent in 1935.

TABLE XVII. VALUE OF LAND AND BUILDINGS, MORTGAGE DEBT OUTSTANDING, AND RATIO OF DEBT TO VALUE, WILLIAMSON COUNTY, TENNESSEE, SELECTED YEARS, 1890 - 1935

Year	Total Outstanding Mortgage Debt	Value of Land and Buildings	Ratio of Debt to Value - Per Cent
1890	$ 117,470(a)	$6,322,850	1.9
1910	1,187,000(b)	12,065,815	9.8
1920	4,421,657	24,038,354	18.4
1925	5,184,094	17,201,967	30.1
1930	5,288,978	16,982,708	31.1
1935	4,884,574	11,730,477	41.6

Source: Value figures from 11th, 13th, 14th, and 15th Census and Census of Agriculture of 1925 and 1935. Debt figures from Table XVI except as noted.

(a) From special study of Real Estate Mortgage, 1890 Census.

(b) Estimate obtained by formula $X = \frac{K}{B} \times A \times \frac{C}{D}$. For explanation see Appendix B.

Because of the lack of complete data it was necessary to compute by formula the total outstanding debt for 1910. Formulas have been used

to obtain comparable data by other workers in mortgage credit such as Wickens[7] and Weaver.[8] Appendix B explains the formula used and shows that for the 1930 debt the formula gave a figure only 2 per cent below the actual figure and for the 1920 debt a figure only 16 per cent above the actual figure.

In 1935 the mortgage debt was almost 48 times as much as it was in 1890. The value of land and buildings in 1935 was less than twice as high as in 1890. Consequently the ratio of mortgage debt to value of land and buildings was over 20 times as high as in 1890.

It appears that the greatest proportionate increase in mortgage debt occurred during the turn of the century. From 1890 to 1910 the mortgage debt increased 1000 per cent and in 1910 over 5 times as much of the county's assets in land and buildings were covered by mortgages as in 1890.

While the mortgage debt of the United States doubled from 1910 to 1920 and the mortgage debt of Tennessee tripled (Table XIV) the mortgage debt of Williamson County quadrupled (Table XVII).

The value of land and buildings increased to a high point in 1920 and decreased to 1935; the mortgage debt increased to 1930 and decreased in 1935; but the ratio of the two increased every period (Figure 19).

Per Cent of Farms Mortgaged. Unfortunately no figures are available or can be estimated with accuracy for the number of farms mortgaged

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(7) Wickens, op. cit., p. 11-12.

(8) Weaver, Martha C., Nebraska Farm Mortgages, Nebraska Studies in Business No. 30, Lincoln, Nebraska, 1932, p. 6.

within the county in 1890 or 1910. However, in 1920 over one-third of the farms in the county were mortgaged. By 1930 over one-half the farms in the county were mortgaged.

TABLE XVIII. PER CENT OF FARMS MORTGAGED IN WILLIAMSON COUNTY, TENNESSEE, SELECTED YEARS

Year	Number of Farms in County	Number of Farms Mortgaged	Per Cent of Farms Mortgaged
1890	2,761	-	-
1910	3,015	-	-
1920	3,355	1,154	33.8
1925	3,296	1,453	44.1
1930	3,005	1,622	54.0
1935	3,568	1,701	47.7

Per Cent of Acres Mortgaged. Although the proportion of farms mortgaged may be a more accurate picture than the proportion of acres mortgaged, the per cent of acres mortgaged can be shown for the 1890 census. In 1890 a little less than 7.0 per cent of the total acres in farms were covered by a mortgage. During the next 50 years this percentage increased over 5 times. Since 1925 over half the acreage of the county has been under mortgage (see Figure 19).

The proportion of acres mortgaged is higher than the proportion of farms mortgaged. Apparently the mortgages are placed on the larger farms.

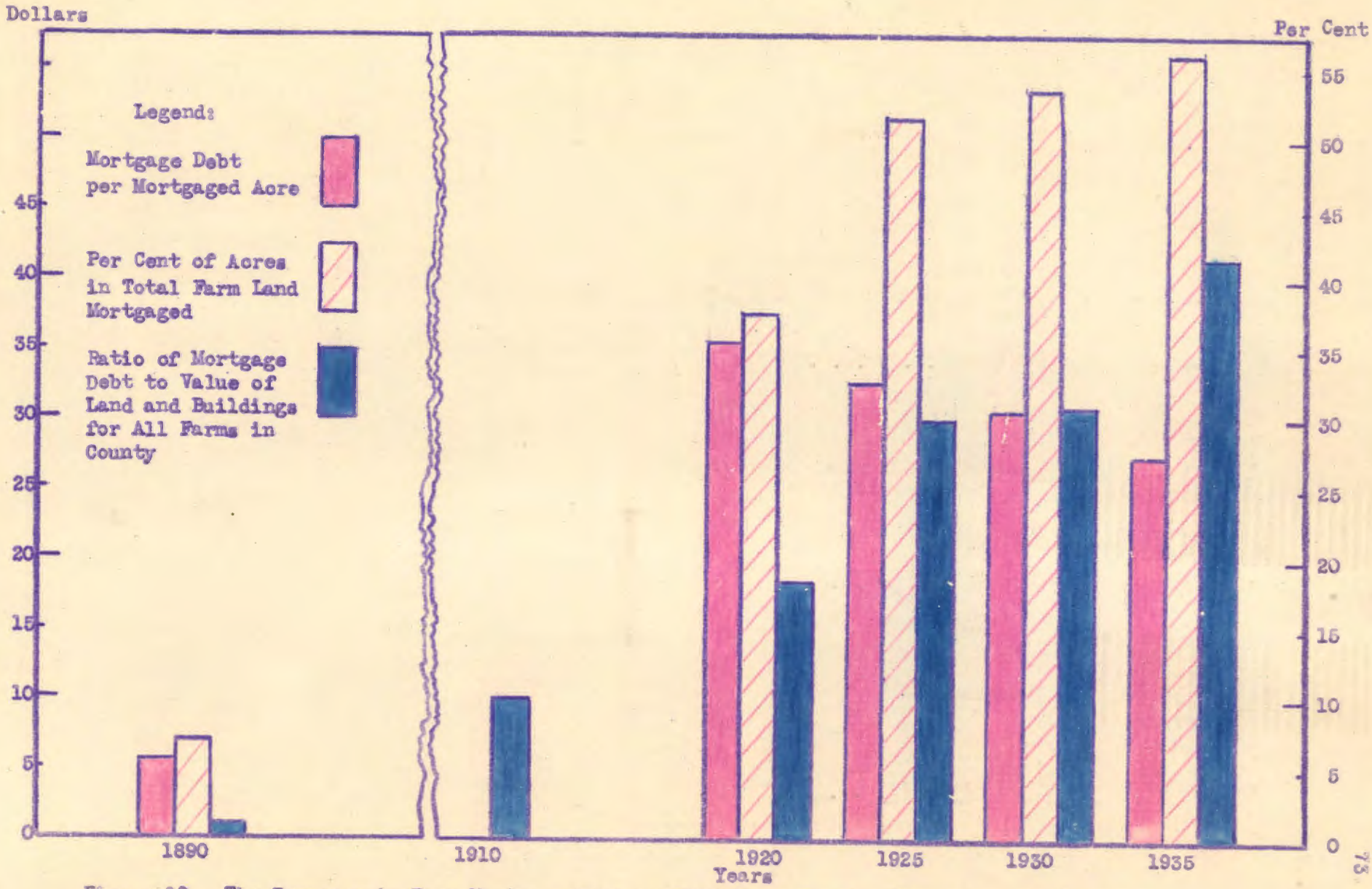

Figure 19. The Increase in Farm Mortgage Debt in Williamson County, Tennessee, As Shown by Mortgage Debt per Acre, Per Cent of Land Mortgaged, and Ratio of Debt to Value of Farm Real Estate, Selected Years

Based on Tables XVII, XIX & XX.

TABLE XIX. PER CENT OF TOTAL LAND IN FARMS COVERED BY REAL ESTATE MORTGAGES IN WILLIAMSON COUNTY, TENNESSEE, SELECTED YEARS

Year	Acreage of Farm Land - County	Acreage of Farm Land Mortgaged	Per Cent of Farm Land Mortgaged
1890	318,045	22,080[a]	6.9
1910	323,168	-	
1920	331,151	123,872	37.4
1925	309,590	159,427	51.5
1930	321,839	171,914	53.4
1935	313,480	177,301	56.5

(a) An estimate based on the total farm mortgage debt, 1890, divided by the average incumbrance per incumbered acre for 1889.

Mortgage Debt per Acre. It appears from Table XX that the great increase in mortgage debt in this county from 1890 to 1920 was due not only to an increasing proportion of the land being mortgaged as shown in Table XIX but also to a larger debt per acre mortgaged. From only $5.32 per acre in 1890 the amount of debt per mortgaged acre increased to $35.69 in 1920,

TABLE XX. MORTGAGED DEBT PER ACRE, MORTGAGED FARMS AND ALL FARMS, WILLIAMSON COUNTY, TENNESSEE, SELECTED YEARS

Year	Mortgage Debt per Acre Mortgaged Farms	Mortgage Debt per Acre All Farms	Value of Land and Buildings per Acre
1890	$5.32	$0.37	$19.88
1910	-	3.67	37.34
1920	35.69	13.35	72.59
1925	32.52	16.74	55.56
1930	30.76	16.43	52.77
1935	27.55	15.58	37.42

when land values were at their highest. Because of the decline of land values since 1920, the debt per mortgaged acres has also declined (Figure 19), but not in proportion to the decline in land values. The greater decrease in land values than in mortgage debt per acre has resulted in a higher ratio of mortgage debt to value of farm real estate as shown in Figure 19.

Relation of Mortgage Debt to Price Level. In an analysis of farm mortgages in Story County, Iowa, Murray(9) demonstrated the relationship between the prices farmers received for farm products and various factors such as amount of outstanding debt, debt per acre, acreage mortgaged, number of land purchase mortgages, and foreclosures and assignments. Of these many factors, foreclosures and land purchase mortgages seemed to show the closest relationship to the indexes of farm prices.

Similar and other comparisons have been made of the data for Williamson County. The analysis for foreclosures will be found under that section (see page 166).

Perhaps one of the most significant of such analyses was the relationship between amount or consideration of mortgages filed and prices Tennessee farmers received for farm products (Figure 20). When prices were rising rapidly, as from 1917 to 1919, the amount of mortgages filed

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(9) Murray, William G., An Economic Analysis of Farm Mortgages in Story County, Iowa, 1854-1931, Agricultural Experiment Station, Research Bulletin 156, Ames, Iowa, 1933, p. 403.

TABLE XXI. MEASURES OF FARM MORTGAGE FILINGS, WILLIAMSON COUNTY, TENNESSEE, 1917 - 1935

Year	Number of Farms	Consideration of Mortgages	Amount per Farm	Amount per Acre	Index No.(a) Tennessee Farm Prices (1910-14=100)
1917	307	$817,149	$2,662	$21.56	160.0
1918	250	1,145,110	4,580	38.00	213.7
1919	296	1,535,253	5,187	47.37	227.7
1920	311	1,860,733	5,983	50.40	216.3
1921	228	916,772	4,021	39.95	127.7
1922	207	915,683	4,423	38.31	139.4
1923	255	1,452,856	5,697	40.78	156.6
1924	204	894,670	4,386	39.02	160.0
1925	197	665,654	3,379	28.89	164.8
1926	196	770,293	3,930	41.83	142.8
1927	202	717,388	3,551	36.14	147.1
1928	210	769,096	3,662	31.72	161.1
1929	201	765,257	3,807	29.92	159.4
1930	168	592,787	3,528	34.76	128.4
1931	206	566,111	2,748	26.02	87.4
1932	147	393,537	2,677	27.67	63.8
1933	126	326,978	2,595	24.95	70.4
1934	241	929,804	3,858	29.83	92.9
1935	166	626,919	3,776	32.76	109.3

(a) Allred, Atkins, and Smith, Prices Paid Producers of Farm Products, Tennessee, 1866-1935, Agr. Exp. Sta., University of Tennessee, Knoxville, 1936, p. 162.

increased rapidly. Conversely when prices dropped sharply as they did after 1920, the amount of mortgages dropped also. It is interesting to note that the fluctuations in amount seemed to be due more to variations in size of mortgage per farm and amount per acre than to variations in number of farms mortgaged during this particular period (Table XXI). It appears that the extent to which lenders would loan money on real estate mortgages varied with the price outlook.

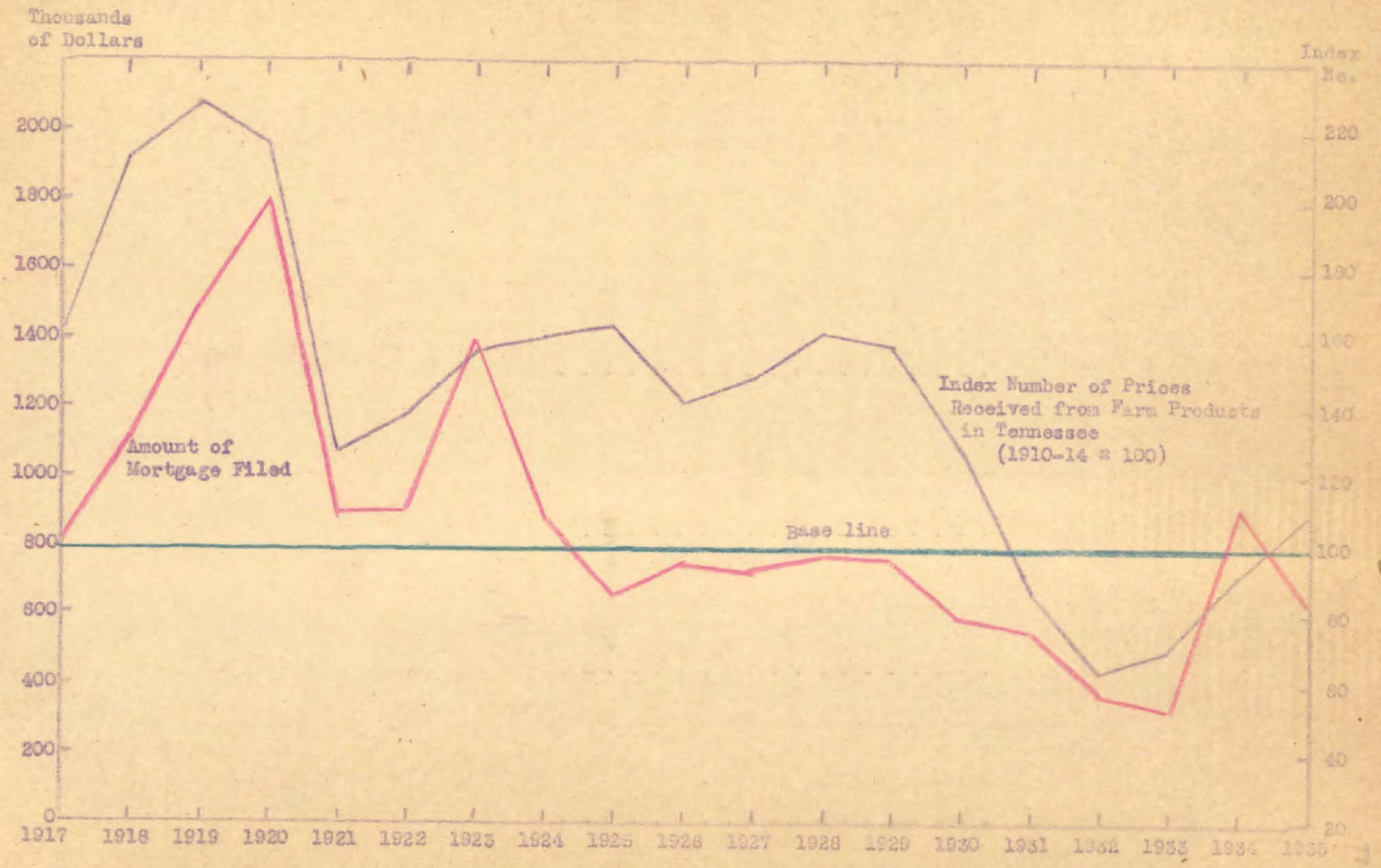

Figure 20. Relation Between Amount of Mortgages Filed and General Price Level Index for Prices Received by Tennessee Farmers, 1917-1935

Based on Table [illegible]

When prices rose slightly from 1921 to 1923, the amount of mortgages increased apparently out of proportion to the increase in prices. Once again this increase in amount seemed to be partly due to optimism of lenders, as the large amount per farm would indicate. After this smaller peak in lending activities had declined the amount did not vary appreciably until 1930. The fall in price level after 1929 was paralleled by a decline in amount of mortgages filed. In this case the smaller amount appeared to be due to a decreased number of farms obtaining loans more than a lower amount per acre, although that figure was also low. The increase in 1934 appeared out of proportion to the increase in price level. However it must be remembered that 214 of the 382 loans in 1934 were made by the Federal Land Bank which would account for the larger share of that increase.

It appears, then, that there is a distinct relationship between the amount of money farmers obtain from real estate mortgages in a given year and the level of farm prices that year in relation to other years. During periods of high prices both farmers and lenders are optimistic. Farmers want to borrow for expansion purposes and lenders are willing to lend. However, in periods of low prices pessimism rather than optimism is the case.

In almost every case the peak or trough in the amount of mortgages filed lagged a year behind the corresponding peak or trough in the general price index. This would indicate that people tend to think in terms of the past relationship since it is impossible to accurately predict the future. After a period of falling prices or rising prices everyone assumes that they will keep on falling or rising as the case may be, until after the trend has reversed.

CHAPTER VI

MORTGAGE CREDIT - USE

County Averages

In 1935 the average farm of the county had a mortgage debt of $1,369 outstanding against it. However, not all farms were mortgaged. According to Table XVI, 47.7 per cent of the farms in the county had mortgage loans outstanding recorded against them in the county clerk's office.

For the farms that were mortgaged, the average mortgage debt was $2,871.

The average for all farmers in the Williamson County study was $1,552 or the sample farms closely approached the general county average as far as mortgage debt per farm was concerned. However, since no record of mortgages was made on the tenant-operated farms, the sample data is not so complete as the county census data in this respect. This absence of mortgage information on the tenant-operated farms may account for the relatively low per cent of farms mortgaged (36 per cent).

If data were more complete for the sample the average mortgage debt might be larger. This observation is based on the larger mortgage debt per mortgaged farm, which is $3,527. However, since the survey did not obtain mortgage information from tenant-operated farms further analysis of the use of mortgage credit should be confined to owners and part-owners.

Of the 67 owners and part-owners in the Williamson County study 53.7 per cent had mortgages and the mortgage debt amounted to $2,316 per owner and part-owner or $4,311 per mortgaged farm. This amounted to 21.5 per cent of the value of all owner and part-owner farms and an average debt of $15 an acre. On the basis of the mortgaged farms only, the mortgage debt was 33.7 per cent of the value of the real estate and $26 an acre.

Use as Related to Type of Farming

Figure 21 shows that the part-time farmers had the largest mortgages, averaging $3,900 for all owners and part-owners and $9750 for the mortgaged farms. The certainty of outside income may be an important factor in enabling some of these farmers to secure mortgage credit.

TABLE XXII. AVERAGE SIZE OF MORTGAGES AND PER CENT OF FARMS MORTGAGED, BY TYPE OF FARMING, 100 SAMPLE FARMS, WILLIAMSON COUNTY, 1938

Type of Farming Group	Average Amount Owners and Part-Owners	Per Cent Owners and Part-Owners Mortgaged	Average Amount Mortgaged Farms
Dairy	$1,457	53.8	$2,707
Livestock	687	25.0	2,750
General	2,522	71.4	3,532
Part-time	3,900	40.0	9,750
Crop	2,752	58.8	4,679
All farms	$2,316	53.7	$4,311

Crop farmers had the next highest average mortgages, $2,752 for all owners and part-owners and $4,679 per mortgaged farm.

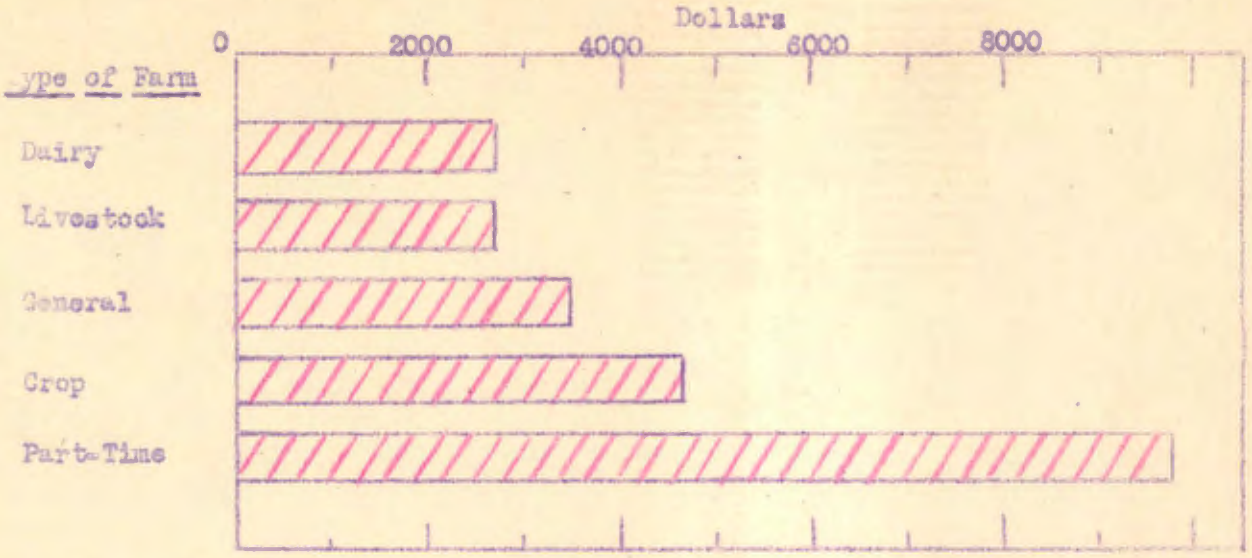

Figure 21. Average Amount of Mortgages on the Mortgaged Farms, By Type-of-Farming Groups, 100 Farms, Williamson County, Tennessee, 1938

Based on Table XXII.

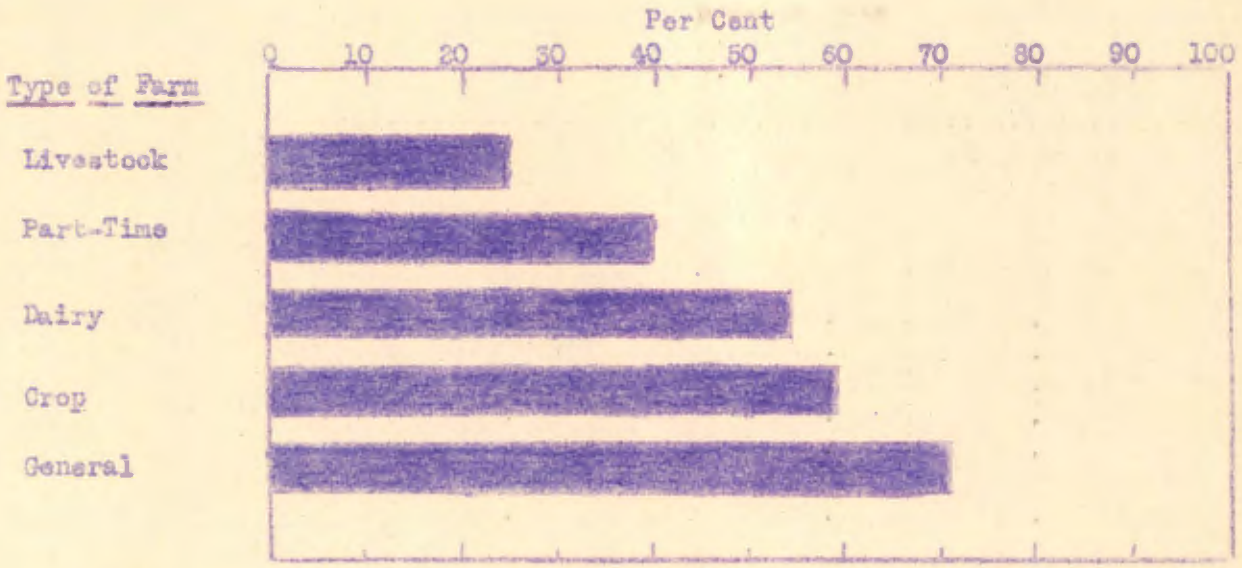

Figure 22. Per Cent of Owner and Part-Owner Farms Mortgaged, By Type of Farming, 100 Farms, Williamson County, Tennessee, 1938

Based on Table XII.

General farms with $2,522 for all owners and part-owners and $3,532 per mortgaged farm had mortgages of similar size to those of the crop farmers.

The farms specializing in dairy products had mortgages averaging $1,457 for all owners and part-owners and $2,707 for mortgaged farms.

Livestock farms had the smallest size mortgage - $687 for owners and part-owners. They also had the lowest per cent of farms mortgaged - only 25 per cent of the owner and part-owner farms being mortgaged.

It can be seen from Figure 22 that general farms with 71.4 per cent of owner and part-owner farms mortgaged, had the highest proportion of farms mortgaged. Crop farms had 58.8 per cent, dairy farms 53.8, and part-time farms only 40 per cent of the owner and part-owner farms mortgaged.

The phraseology, "use of mortgage credit", has not been in common usage by writers on mortgage financing. Nevertheless it appears that an analysis of the extent to which credit is used by different type-of-farming groups may be of interest and possible value.

The only other study with which comparisons can be made by the classification devised is the contemporary study in Marshall County.(1)

The results of this analysis in the two studies are so diverse as to cast serious doubts as to the presence of any significant differences

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(1) Allred, Luebke, and Milk, Farm Credit in Marshall County, Tennessee, 1938, Rural Research Monograph No. 94, Agricultural Experiment Station, Knoxville, 1939, p. 18.

in the use of mortgage credit among the different types of farms.

In Marshall County study livestock farms had the lowest per cent of farms mortgaged as contrasted with the highest in Williamson County. In Williamson County crop farmers had almost 59 per cent of their farms mortgaged, whereas in Marshall County only 16.6 per cent of the crop farms were mortgaged.

The principal point of agreement in the two studies was that livestock farms had the smallest size of mortgage. There was, however, more uniformity in the average size of mortgages among the type of farming groups under the two studies than in the percentage of farms mortgaged.

TABLE XXIII. MORTGAGE DEBT PER ACRE, ON MORTGAGED FARMS, BY TYPE OF FARMING GROUPS, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Type of Farming Groups	Average Acreage	Amount of Mortgage Debt per Acre	Per Cent Mortgage Is of Value
Livestock	367	$7.00	12.9
General	154	23.00	31.0
Dairy	123	22.00	30.1
Crops	170	27.00	35.3
Part-time	213	46.00	48.0
All mortgaged farms	167	$25.00	33.2

The type-of-farming groups having the largest average size of mortgage also have the largest debt per acre. The real estate mortgage debt per acre on part-time farms amounted to $46 and on crop farms $29. Furthermore these groups have less equity in their farms, the mortgage debt on the

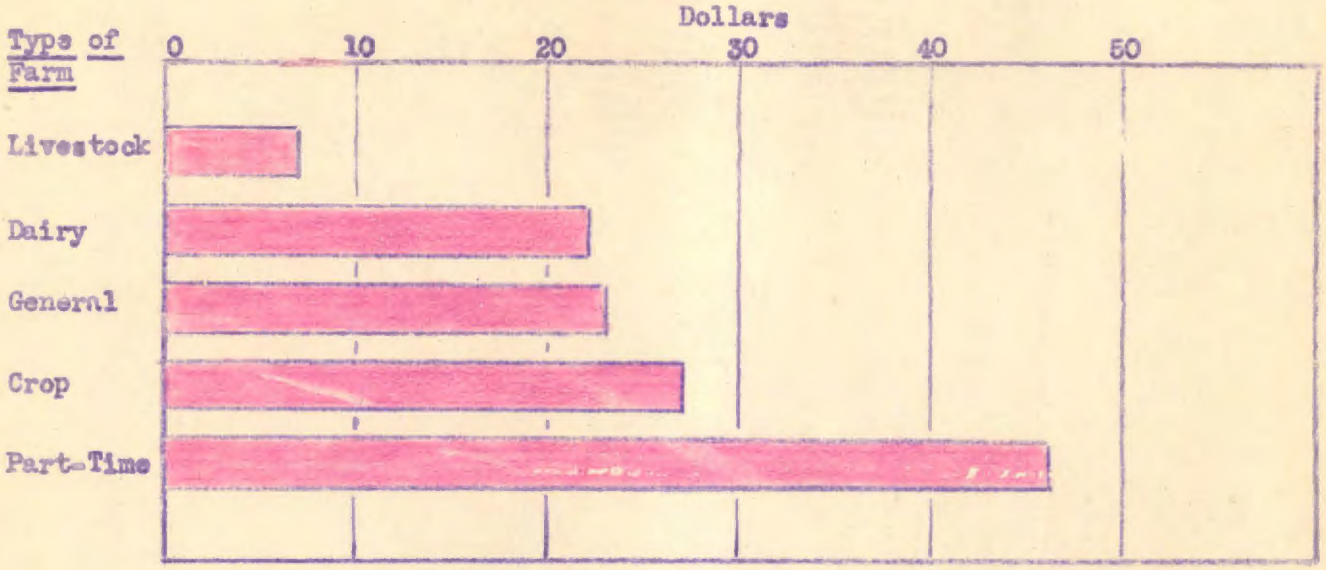

Figure 23. Amount of Mortgaged Debt per Acre, on Mortgaged Farms, by Type of Farming, 100 Sample Farms, Williamson County, Tennessee, 1938

Based on Table XXIII.

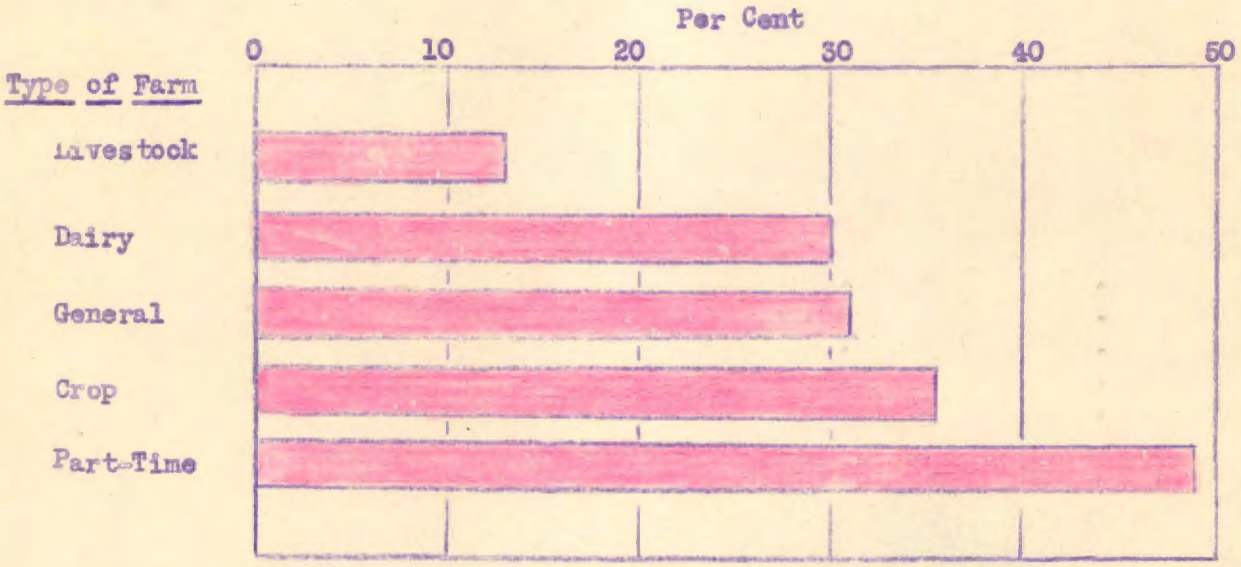

Figure 24. Per Cent That Mortgage Debt Is of Value of Land and Buildings, By Type of Farming, 100 Sample Farms, Williamson County, Tennessee, 1938

Based on Table XXIII.

mortgaged farms accounting for 48.0 per cent of the value of land and buildings on the part-time farms and 36.4 per cent on the crop farms.

Livestock farmers had the greatest equity in their farms. The mortgage debt on livestock farms only amounted to 12.9 per cent of the value of land and buildings, or to only $7.00 per acre. One of the reasons for a low debt per acre was the large size of the mortgaged livestock farms which averaged 367 acres or over twice the average size of all mortgaged farms.

The general farms and dairy farms had somewhat similar figures for the amount of mortgage debt per acre - $23 and $22 respectively. The percentage that mortgages were of value were also similar, 31.0 per cent for general farms and 30.1 per cent for dairy farms.

Use as Related to Net Worth

The large average amount of mortgage for the smallest net worth group is misleading because of the wide range in the individual mortgages in this group. The individual mortgages on farms in the "Under 2000" net worth group ranged from $700 to $14,238, and as there were but four farms in the group the arithmetic mean was not a good measure of representative mortgage. In considering this particular net worth group it is interesting to note that the farms in the survey having a net worth of under $2000 were 87.5 per cent tenants. The few farmers of this limited equity which had been able to get out of the tenant group were heavily in debt, all of them having mortgaged farms. Because of the high per cent of

tenancy, the average debt per farm in study would be very low for this net worth group.

The next highest net worth group of owner and part-owner farms had the smallest average amount of mortgage. One reason for this was that less than half the farms had mortgages. The average amount of mortgage per mortgaged farm was representative of the group, the variation being from $500 to $2400. The per cent of tenancy in this group was 22.2 per cent.

TABLE XXIV. AVERAGE SIZE OF MORTGAGES AND PER CENT OF FARMS MORTGAGED, BY NET WORTH GROUPS, WILLIAMSON COUNTY, TENNESSEE, 1938

Net Worth Group	Average Amount All Farms(a)	Per Cent Farms Mortgaged	Average Amount Mortgaged Farms
Under $2000	$4,759	100.0	$4,759
$2001 to $5000	596	44.4	1,340
$5001 to $10,000	1,641	44.0	3,730
Over $10,000	4,220	65.0	6,492
All farms	$2,316	53.7	$3,527

(a) That is, all owner and part-owner farms.

The farms having a net worth of between $5001 and $10,000 also had less than half (44.0 per cent) of their farms mortgaged. The average size of loan, $1,641, was below that for all owners and part-owners of $2,316, but the average size per mortgaged farm, $3,730, approximated the average of all owners and part-owners. Only 3.8 per cent of this group of 26 farms were tenants.

The average size of mortgage per mortgaged farm was the largest among the farmers of the highest net worth group. Sixty-five per cent of the farms in this group were mortgaged and the average size for all owners and part-owners was $4,220. All of the farms in the study which fell into this classification were either owner or part-owner farms.

Not only do the "under $2000" group have the highest average mortgage debt per farm, but they also have the highest average mortgage debt per acre, being over twice as high as any other single group. The mortgage debt for these farms amounts to over eighty per cent of the value of their farm real estate. This high per cent of debt may be one of the principal reasons for farmers coming under this group in a net worth classification.

TABLE XXV. MORTGAGE DEBT PER ACRE ON MORTGAGED FARMS BY NET WORTH GROUPS, WILLIAMSON COUNTY, TENNESSEE, 1938

Net Worth Groups	Average Acreage	Amount of Mortgage Debt per Acre	Per Cent Mortgage Debt Is of Value
Under $2000	79	$60.44	80.7
$2001 to $5000	83	16.15	33.5
$5001 to $10,000	144	25.81	41.5
Over $10,000	277	23.24	26.9
All mortgaged farms	167	$25.00	33.2

The farms in the second group had the smallest amount of debt per acre. It appears that the farms of this group were the least valuable of

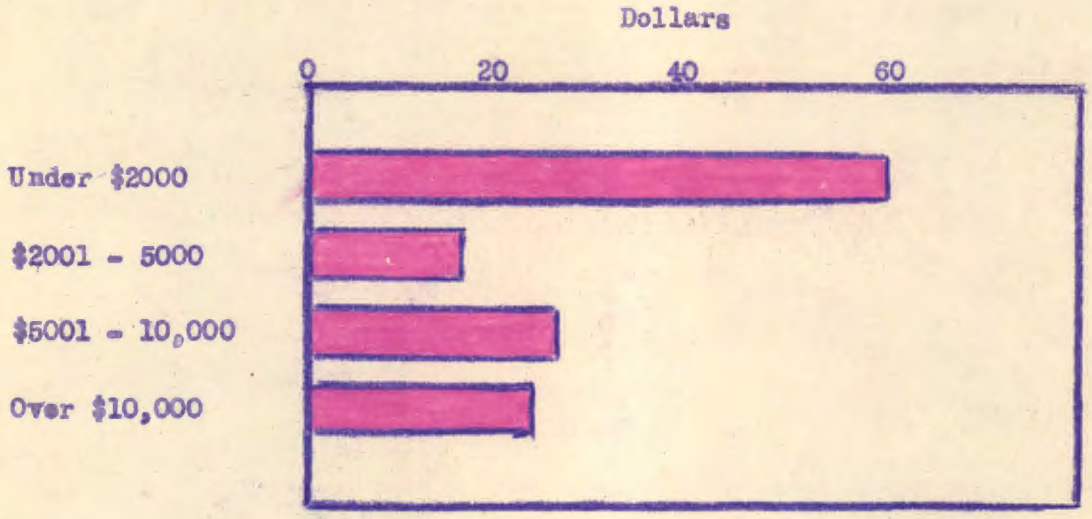

Figure 25. Amount of Mortgage Debt per Acre, on Mortgaged Farms, by Net Worth Groups, 100 Sample Farms, Williamson County, Tennessee, 1938

Based on Table XXIII.

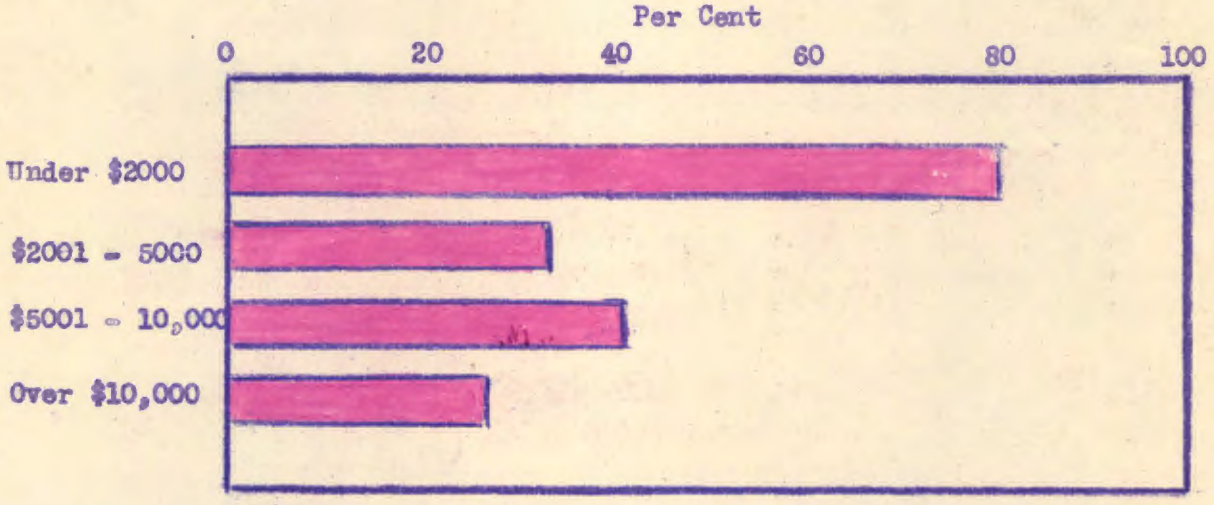

Figure 26. Per Cent That Mortgage Debt Is of Value of Land and Buildings, By Net Worth Groups, Williamson County, Tennessee, 1938

Based on Table XXIII.

of any of the net worth groups - and about as small as those of the lowest equity group.

Farms in the "$5001 to $10,000" group had an average mortgage debt per acre of $25.81, which amounted to 41.5 per cent of the value of the farm real estate. These farms were considerably larger than those of the preceding groups, but only slightly over half as large as those in the highest net-worth group.

The farms in the highest net worth group had the largest farms and the most valuable farms. These farms were mortgaged to the extent of about $23.24 an acre, but the mortgages amounted to only 26.9 per cent of the value of farm real estate. This was the lowest ratio between mortgage debt and value of real estate.

In Marshall County the relationships were much the same as in this study and in some cases even more pronounced. Only 33.3 per cent of the farms in the lowest net worth group were mortgaged and the average size of the mortages in that group was the lowest of any of the groups. This made the inverse relationship between the net worth and average size of mortgage for all owner and part-owner farms more pronounced.

Comparison of Mortgaged and Unmortgaged Farms

In connection with the social factors on these farms, Table XXVI shows that the average operator on the mortgaged farms was about 3 years older, had about one year more schooling, had a slightly larger family, and had been aided in life by an inheritance almost $1,200 larger than

the average operator on the unmortgaged farms.

This age difference was the reverse of what was found in Kentucky where unmortgaged farmers averaged 49 years and mortgaged farmers 47 years. These figures were based on about 400 sample farms in 5 counties.(2)

The operators on the mortgaged farms operated larger farms than those on unmortgaged farms by at least 15 per cent. The difference in size is more apparent between mortgaged part-owners and unmortgaged part-owners, mortgaged part-owners operating almost 40 per cent more land than unmortgaged part-owners.

These differences in size and value of farms were found to be true in 4 of the 15 counties in a study made in Kentucky. In only one of the counties did the unmortgaged farms have larger investments and larger acreages and that county, Burboun, is one of the central bluegrass region.(3)

Figure 27 shows the more important financial differences between the mortgaged and unmortgaged farms.

The amount of current assets was not significantly at variance, the $120 difference being in favor of the unmortgaged farms.

The value of land and buildings on the mortgaged farms was almost 180 per cent of the value of land and buildings on the unmortgaged farms. This larger value is out of proportion to larger acreage of the mortgaged farms and indicates that the mortgaged farms are somewhat more valuable

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(2) Bradley, C. J., The Use of Credit on Selected Kentucky Farms, Bul. No. 343, Agr. Exp. Station, Lexington, Kentucky, 1933, p. 173.

(3) Ibid., p. 166.

per acre than the unmortgaged farms.

TABLE XXVI. SOME SOCIAL AND ECONOMIC COMPARISONS ON 67 MORTGAGED AND UNMORTGAGED FARMS IN WILLIAMSON COUNTY, TENNESSEE, 1938

Items	Mortgaged			Unmortgaged			All Owners and Part-Owners
	Owners	Part-Owners	All	Owners	Part-Owners	All	
No. of farms	23	13	36	19	12	31	67
Age of operator	56.9	52.6	55.3	56.0	47.2	52.6	54.0
Education	9.8	7.1	8.8	8.5	6.8	7.9	8.4
Number in family	4.1	4.3	4.2	3.4	3.9	3.6	3.9
Years on farm	51.4	49.5	50.7	52.2	47.2	50.3	50.5
Inheritance	$3961	$2954	$3597	$3137	$1325	$2435	$3060
No. of total acres	178	271	211	168	194	178	196
No. of crop acres	113	205	146	87	131	104	127
Current assets	$2454	$2648	$2524	$2545	$2799	$2643	$2579
Value of land and buildings	14,378	10,879	13,114	9705	5783	7542	10,835
Total assets	16,832	13,527	15,639	12,250	8583	10,831	13,414
Net worth	11,282	10,235	10,904	12,046	8377	10,626	10,775
Cash credit (a)	$ 778	$ 231	$ 580	$ 238	$ 209	$ 223	$ 202
Installment credit (a)	170	209	184	54	213	116	153
Open accounts(a)	43	134	76	16	27	21	50
Total income	$3205	$2153	$2823	$1665	$2916	$2149	$2511

(a) Includes all such credit appearing on the schedules, regardless of the time when such credit was taken out.

However, in spite of the greater assets of the mortgaged farms, the net worth of the two groups is quite similar. This is accounted for by the larger debts of the mortgaged farms whose mortgage debt alone averaged $3527.

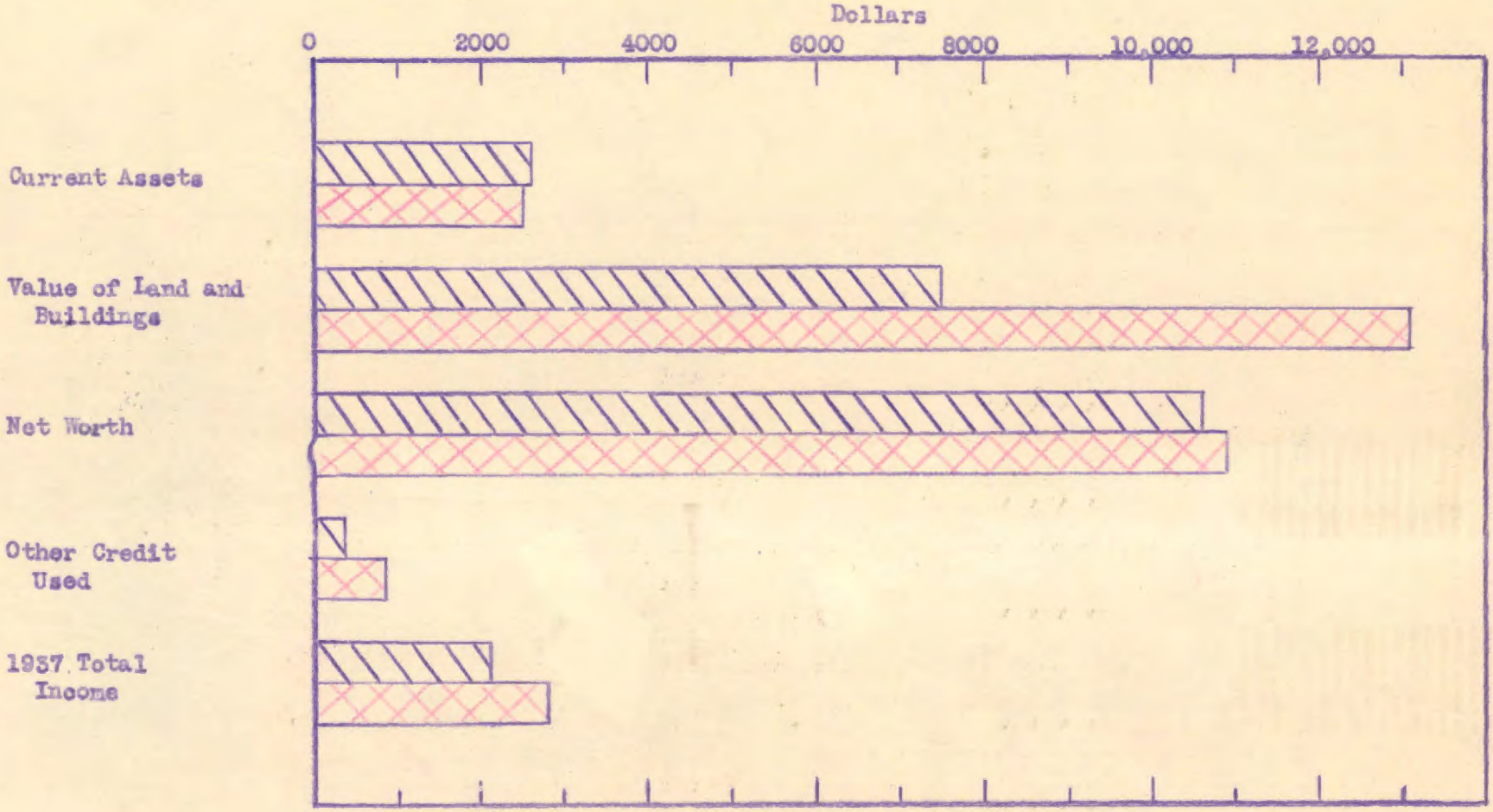


Figure 27. Financial Comparisons of Mortgaged and Unmortgaged Farms on 67 Owner and Part-Owner Farms, Williamson County, 1938.

Based on Table XXVI.

Legend:

Average of Unmortgaged Farms

Average of Mortgaged Farms

One of the most significant differences was in the amount of other credit used. The mortgaged farms had two and a third times as many cash loan, installment sales, and open account credit listed on their schedules as the unmortgaged farms. A possible explanation of this is that many farmers who do not have mortgaged farms are those who have a preference for cash trading. Debt, particularly mortgage debt, used to be considered a degradation. The increasing demands for credit have for the most part broken down that sentiment, but it probably influences the thinking of many farmers.

The mortgaged farms had about $700 larger income per farm than the unmortgaged farms, or about 1/3 more than the unmortgaged farms. The increased income may be due to the larger acreage, the more valuable land, the wider use of credit, better management or a combination of these and other factors.

CHAPTER VII

MORTGAGE CREDIT - PURPOSE

Purpose on the Sample Farms

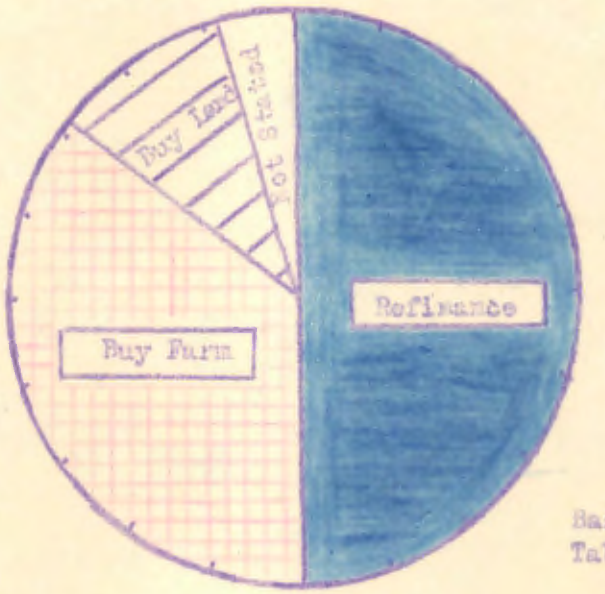
From the standpoint of the number of loans involved (Figure 28) refinancing, with 50 per cent of the number of loans, was the most important purpose for which mortgage loans were made. Mortgage loans for the purchase of a farm were next in importance, accounting for 36.4 per cent of the loans; and mortgages for land purchase accounted for an additional 9.1 per cent.(1) The purpose was not given for two loans, or 4.5 per cent of the total number.

TABLE XXVII. PURPOSE FOR WHICH MORTGAGE LOANS WERE MADE, 100 SAMPLE FARMS, WILLIAMSON COUNTY, 1938

Purpose	By Number		By Amount	
	Number	Per Cent	Amount	Per Cent
Refinance	22	50.0	$45,761	29.5
Buy farm	16	36.4	85,682	55.2
Buy land	4	9.1	17,500	11.3
Unknown	2	4.5	6,250	4.0
Total	44	100.0	$155,193	100.0

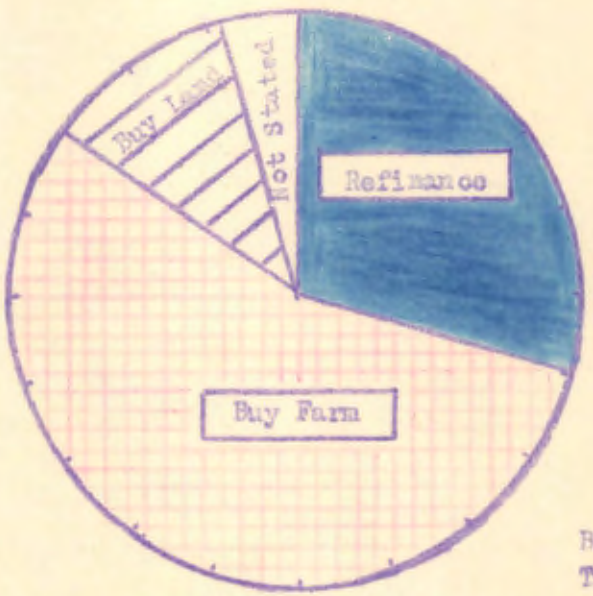
From the standpoint of amount of money involved (Figure 29), refinancing was of secondary importance, as only 29.5 per cent of the amount

(1) The differentiation between "buy land" and "buy farm" should be explained. "Buy farm" is self-explanatory. "Buy land" refers to the purchase of additional land after some land is already owned. However, it is possible that there may be some error in this matter. A farmer may have reported buying land when actually he may have bought a farm.



Based on
Table XXVII.

Figure 28. Purpose for Which Mortgage Loans Were Made, Per Cent of Total Number, 100 Williamson County Farms, 1938



Based on
Table XXVII.

Figure 29. Purpose for Which Mortgage Loans Were Made, Per Cent of Total Amount, 100 Williamson County Farms, 1938

of mortgage loans was for refinancing. Farm purchase accounted for 55.2 per cent of the amount of mortgage loans and land purchase an additional 11.5 per cent. The loans for which the purpose was not given amounted to 4.0 of the total amount of mortgage indebtedness.

The farm purchase mortgages averaged $5,355, over two and a half times the refinance mortgage average of $2,080. Land purchase mortgages averaged $4,375 (Figure 30). Furthermore, the loans to purchase farms had the widest range in size, from $500 to $17,000.

TABLE XXVIII. AVERAGE SIZE AND RANGE IN SIZE OF MORTGAGE LOANS BY PURPOSE, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Purpose	Average Size	Smallest Loan	Largest Loan
Refinance	$2,080	$ 500	$11,185
Buy land	4,375	1,000	7,000
Buy farm	5,355	500	17,000
Not stated *	3,125	2,950	3,300
All loans	$3,297	$ 500	$17,000

* Only two loans.

Purpose of Mortgage Loans by Source

Different sources of mortgage loans made loans for various purposes (see Table XXIX and Figure 31). Over 64 per cent of the amount of F.L.B. loans was made for refinancing, 35 per cent for purchasing a farm.

In connection with the borrowing of money for the purchase of a farm, the Federal Land Bank will only lend up to 50 per cent of the normal appraisal value of land plus 20 per cent of the value of permanent insurable improvements thereon. By taking out a Land Bank Commissioner loan

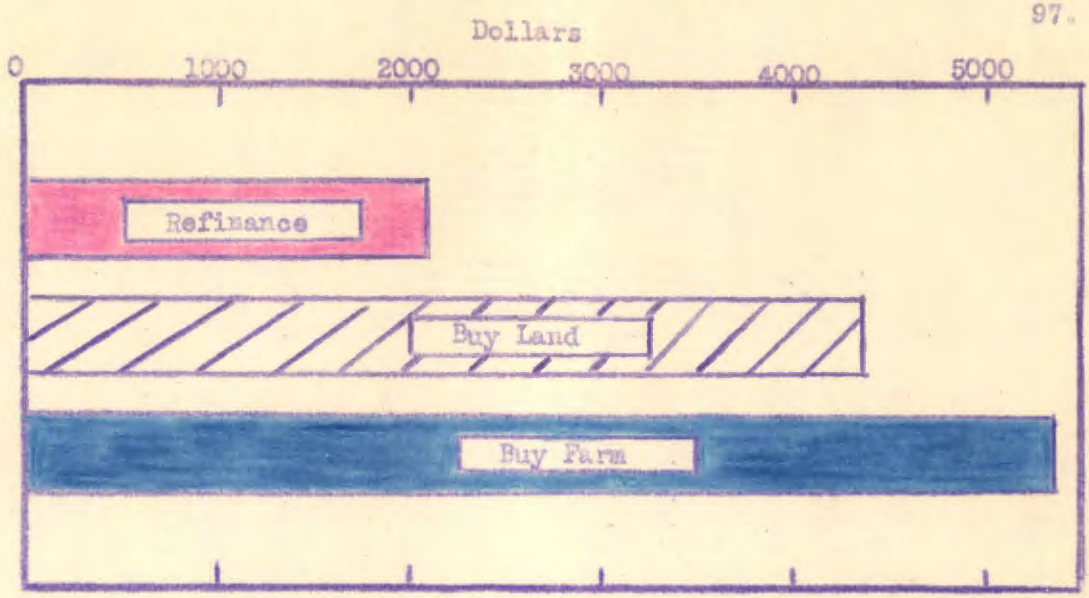


Figure 30. Average Size of Mortgage Loans, by Purpose, 100 Sample Farms, Williamson County, Tennessee, 1938

Based on Table XXVIII.

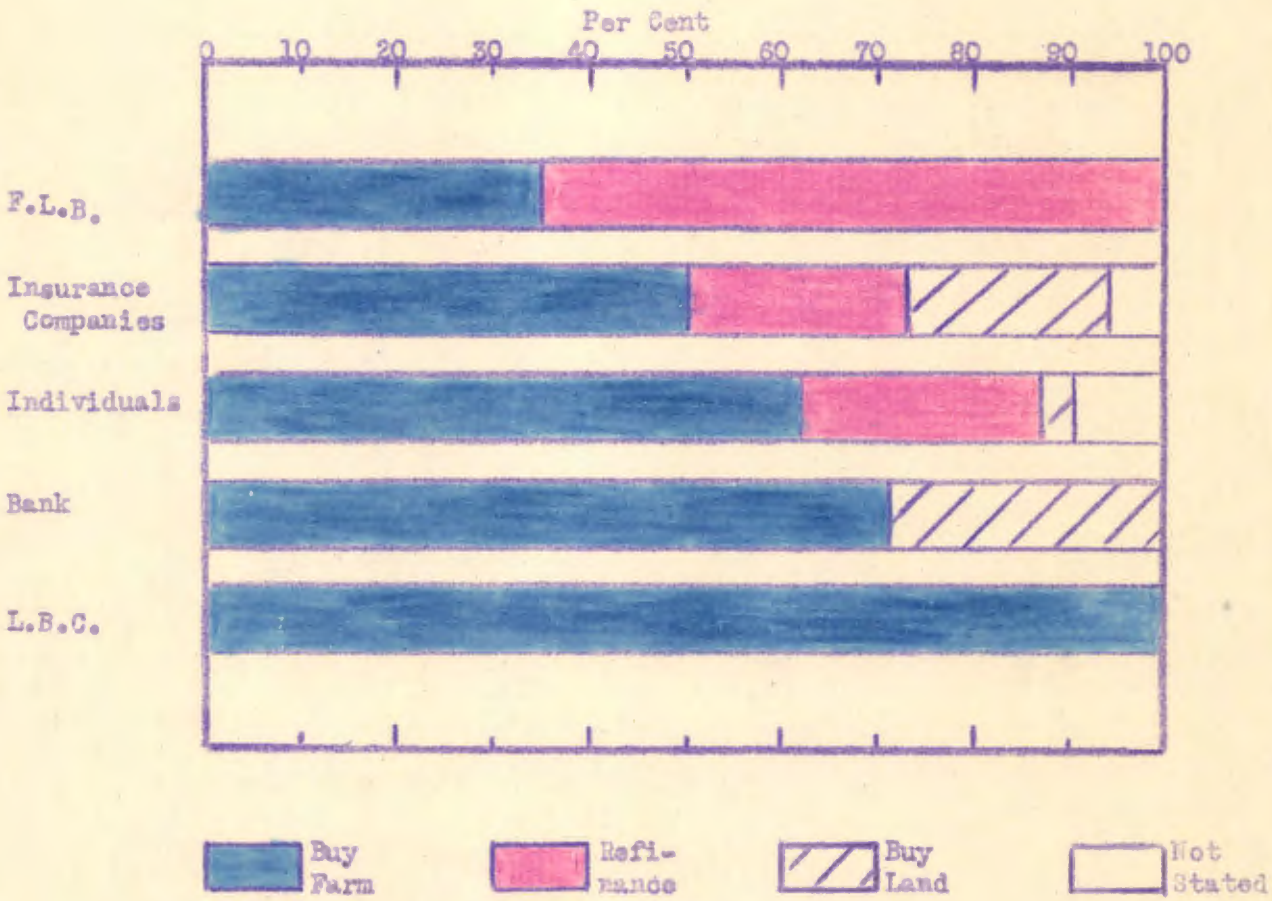


Figure 31. Distribution of Mortgage Loans, by Each Lending Agency, by Per Cent of Total Amount, by Purpose, 100 Williamson County Farms, 1938

Based on Table XXIX.

at the same time a farmer may borrow up to 75 per cent of the value of the farm at the time the loan is closed. This might help to explain why such a large per cent of the L.B.C. loans in this study were used for the purchase of a farm.

TABLE XXIX. PURPOSE FOR WHICH MORTGAGE LOANS WERE MADE, BY LENDING AGENCY, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Lending Agency	Per Cent of Total Amount Loaned				Total
	Buy Farm	Refinance	Buy Land	Not Stated	
Federal Land Bank	35.2	64.8	-	-	100.0
Insurance companies	50.5	23.1	20.5	5.9	100.0
Individuals	61.6	25.3	3.3	9.8	100.0
Banks*	70.6	-	29.4	-	100.0
Land Bank Comm.	100.0	-	-	-	100.0
All sources	55.2	29.5	11.3	4.0	100.0

* Only two loans

Insurance companies loaned 50.5 per cent of the amount of their mortgage loans for the purpose of buying farms, 23.1 per cent for refinancing other debts, and 20.5 per cent for the purchase of land.

Individuals made 61.6 per cent of the amount of their mortgage loans for farm purchase, 25.3 per cent for refinancing other debts, and 3.3 per cent for land purchase.

The amount of mortgage loans of banks was distributed as follows: 70.6 for farm purchase, and 29.4 per cent for land purchase.

Purpose of Mortgage Loans and Type of Farming

Because of the limited sample, definite conclusions cannot be based on the relationship between purpose and type of farming. However

such an analysis might prove interesting. If the number were larger and conclusions could be drawn, such an analysis might show which types of farming were having most difficulty. An especially high percentage of loans for refinancing might indicate that a particular type of farming was less adapted to the area than other types not so subject to financial difficulties.

TABLE XXX. PURPOSE FOR WHICH MORTGAGE LOANS WERE MADE, BY TYPE OF FARMING, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Type of Farming	Buy Farm	Refinance	Buy Land	Purpose Not Stated	Total
Livestock *	9.1	89.9			100.0
General		100.0			100.0
Dairy	34.8	49.6		15.6	100.0
Crops	49.3	28.5	18.7	3.5	100.0
Part-time *	100.0				100.0
All farms	55.2	29.5	11.3	4.0	100.0

* Only two mortgages.

On livestock, general, and dairy farms the largest share of the mortgage credit was used for refinancing, the percentages varying from 49.6 for dairy farms to 100 per cent for general farms.

Farm purchase accounted for mortgages of part-time farms. The mortgages of crop farmers were incurred for the following purposes: 49.3 per cent for purchase of a farm, 28.5 for refinancing, 18.7 per cent for purchase of land, and 3.5 per cent for which no purpose was stated. Crop

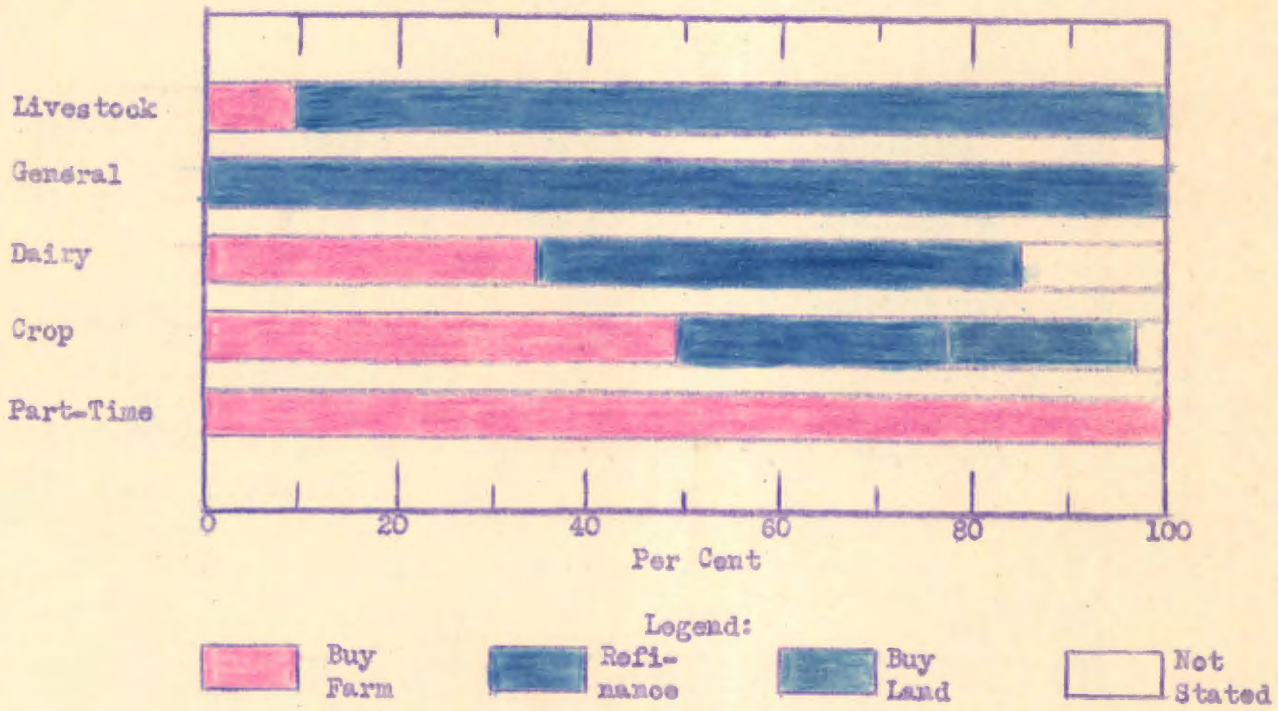


Figure 32. Distribution of Mortgage Debt by Purpose on Different Types of Farms, 100 Sample Farms, Williamson County, Tennessee, 1938

Based on Table XXX.

farms were the only farms in this study making use of real estate mortgages for the purpose of buying land.

The Purpose of Mortgage Loans in Other Studies

Purpose is one phase of farm mortgage credit of which there is little information. The study in Marshall County offers the most comparable data. In that study the distribution of the total number of loans by purpose was much the same as in Williamson County. Refinancing accounted for slightly over half the total number while the farm and land purchase loans together amounted to about the same as the farm and land purchase loans in Williamson County. The main difference was that in Marshall County 4.9 per cent of the total number of loans was made for improvements, whereas in Williamson County there were no loans for that purpose.

The distribution of sources of credit in the two counties was much similar also. The greatest difference was found in the Land Bank Commissioner loans. In Williamson County all such loans were for buying a farm, but in Marshall County most of them were for refinancing.

Few other studies have secured the purpose for all loans regardless of source, but many give the purposes for the specialized lending agencies.

Probably the largest and most comprehensive survey of real estate mortgages was that made by the 1890 census. In addition to a complete coverage of some aspects of the mortgage situation throughout the United States, they conducted more detailed studies in 102 selected counties

of the country. The two counties in Tennessee were McNairy and Maury. Since Maury County is in the same type-of-farming region as Williamson the figures for Maury County are of interest.

In 1890 over 83 per cent of the number of loans in Maury County had been made for the purchase of real estate, improvements, or a combination of the two.(2) This is much higher than the 45.5 per cent of loans for the purchase of real estate in Williamson County in 1935. For other information on this study see Appendix C.

Trend in Purpose

There are some rather significant differences between the purposes for which mortgage credit was used in the 1938 study and the study made in 1923. From the standpoint of number of mortgages refinancing was the most important use of mortgage loans in 1938; and, in the distribution by amount of mortgages, refinancing accounted for 29.5 per cent of the total amount. In contrast, refinancing is not even listed amout the purposes of securing real estate mortgages in the

TABLE XXXI. PURPOSE FOR WHICH MORTGAGE LOANS WERE MADE IN WILLIAMSON COUNTY, TENNESSEE, PER CENT OF TOTAL AMOUNT FOR EACH PURPOSE, 1923 AND 1938

Purpose	1923	1938
	Per Cent	Per Cent
Buy farm or buy land	92.7	66.5
Refinance	-	29.5
Improvements	0.4	-
Farm expenses	0.6	-
Unclassified	6.3	4.0
Total	100.0	100.0

Source: 1923 figures from Rural Credit in Tennessee, 1923, p. 13, Allred, Robinson, and Luebke, Rural Research Monograph 82, Dept. of Agricultural Economics, Knoxville, 1938.

(2) Eleventh Census of the United States, 1890, Special Report on Real Estate Mortgages, Washington, 1895.

1923 study. It is possible that part of the 1923 "unclassified" may have been for refinancing, but even if that were true the amount loaned for that purpose would not be significant. This appears to be quite an important difference.

In both years the amount loaned for the purchase of land or farms was the most important purpose. However the per cent figure for 1938 was much lower, by 26.2 per cent, than the figure of 92.7 per cent in 1923 because of the importance of refinancing in 1938.

CHAPTER VIII

MORTGAGE CREDIT - SOURCES

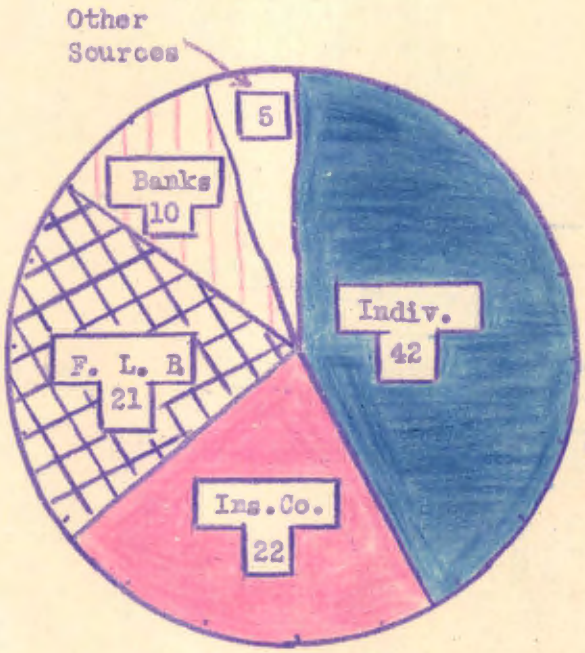
Sources of Mortgage Loans Outstanding in 1935

In 1935, 1701 farms in Williamson County had 2,271 mortgages recorded against them. Regardless of how importance is measured, whether by number, amount, or acreage, individuals were the most important source of mortgage loans. Of the 2,271 mortgage loans, 1,432, or 63.1 per cent, had been furnished by individuals.

Life insurance companies hold the next largest share of outstanding amount of mortgage debt, but the Federal Land Bank held the second largest number of mortgages and the second largest acreage mortgaged.

TABLE XXXII. DISTRIBUTION OF ALL RECORDED OUTSTANDING MORTGAGE LOANS OF WILLIAMSON COUNTY, BY SOURCES, 1935

Source	Number of Loans	Consideration of Loans	Acreage Covered	Per Cent of Total		
				Number	Amount	Acreage
Individuals	1,432	$2,043,318	119,251	63.1	41.8	47.6
Insurance companies	173	1,086,498	33,401	7.6	22.3	13.3
Fed. Land Bank	348	1,006,870	56,268	15.3	20.6	22.4
National and State banks	175	467,658	25,891	7.7	9.6	10.3
Administrators, etc.	18	34,422	2,204	0.8	0.7	0.9
Joint Stock Land Banks	1	1,500	130	.05	-	-
State or county agencies	1	5,896	36	.05	0.1	-
Other sources	123	238,412	13,640	5.4	4.9	5.4
Total	2,271	$4,884,574	250,821	100.0	100.0	100.0
Farms on which loans are made	1,701	4,884,574	177,301	74.9	100.0	70.7



(Figured in per cent of total amount recorded)

Figure 33. Distribution of All Recorded Outstanding Mortgage Loans in Williamson County, Tennessee, 1935

Based on Table XXXII.

National and State Banks were the only other important source of mortgage loans appearing in Table XXXII. Figure 33 shows the distribution by amount for the entire county as of 1935.

Sources for the Sample Farms

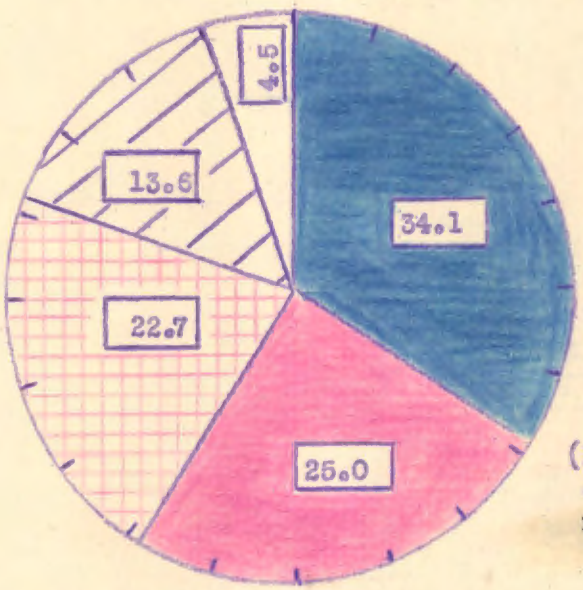
Among the farms in the sample individuals were the principal source of mortgage loans according to distribution by number of loans, as shown in Figure 34. The per cent of loans made by individuals was not nearly so high, however, among the mortgage loans of the sample farms as for the county as a whole. The Federal Land Bank and life insurance companies hold higher percentages of the loans for the sample farms than for the county as a whole.

In fact, when Land Bank Commissioner loans are included with Federal Land Bank loans, as they must be to provide figures comparable with those of Table XXXII, the Federal Land Bank held a higher proportion of the total number of loans than individuals.

TABLE XXXIII. SOURCES OF MORTGAGE CREDIT, 67 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

	Number	Per Cent	Amount	Per Cent
Individuals	15	34.1	$30,250	19.5
Federal Land Bank	11	25.0	38,748	25.0
Insurance companies	10	22.7	56,200	36.2
Land Bank Commissioner	6	13.6	12,995	8.4
Banks	2	4.5	17,000	10.9
Total	44	100.0	155,193	100.0

The per cent according to per cent of amount outstanding was considerably different, as is shown in Figure 35. Individuals were only



(Figured in per cent of total number.)

Figure 34. Sources of Mortgage Loans, by Per Cent of Total Number, 67 Williamson County, Tennessee, Farms, 1938

Legend:

Individuals

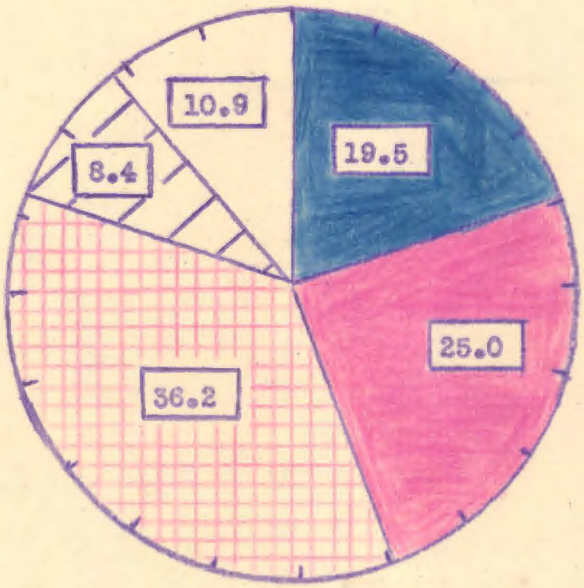
Insurance Companies

Federal Land Bank

Land Bank Commissioner

Commercial Banks

Based on Table XXXIII.



(Figured in per cent of total amount)

Figure 35. Sources of Mortgage Loans, by Per Cent of Total Amount Borrowed by 67 Williamson County Farmers, 1938

Legend:

Individuals

Insurance Companies

Federal Land Bank

Land Bank Commissioner

Commercial Banks

Based on Table XXXIII.

third in amount of loans held, indicating that individual mortgage loans were for much smaller amounts than institutional loans. Life insurance companies held the largest proportion of amount of loans, even when Land Bank Commissioner Loans are included with Federal Land Bank loans.

It appears that the sample is not truly representative of the county in regard to sources of mortgage credit. The fact that the sample farms are larger and more valuable than the county average probably accounts for the larger proportion of loans by private credit agencies among them.

Comparisons With Studies in Other Areas

Table XXXIV shows how the total mortgage loans were distributed in some other areas of the United States. Though the years in which the studies were made are not the same they are close enough together to bring out the relative importance of the different sources. The distribution for Williamson County is shown for 1928.

No two studies showed the same distribution of sources. In some areas, such as those studied in Iowa and South Dakota, life insurance companies were by far the most important sources. The Kentucky figures are for the whole state. There the commercial banks are of especial importance in mortgage loans. In the area studied in North Carolina the insurance companies were not an important source of mortgage credit, but joint stock land banks were. A large proportion of the mortgage debt of the Arkansas studies was furnished by merchants.

By studying the distribution of these different areas, it can be appreciated that the sources of mortgage credit differ widely from area to area. This is most strikingly brought out by the two different studies

TABLE XXXIV. DISTRIBUTION OF MORTGAGE CREDIT BY SOURCES, FOR SELECTED STUDIES, 1925-1930

Source	U.S. (a)	Iowa (b)	Ky. (c)	Ark. (d)	Ark. (e)	N.C. (f)	S.D. (g)	Tennessee, Williamson Co.
Year	1928	1930	1929	1925-1926	1927	1926	1930	1928
Individuals	30	20	20	5	26	45	16	43
Insurance companies	23	47	21	23	-	5	67	35
Federal Land Bank	12	15	9	3	31	19	4	4
National and State Banks	11	14	30	19	16	7	4	13
Joint Stock Land Banks	7	-	20	19	-	22		-
Mortgage Companies	10	-	-	11	19	-	1	-
Merchants	-	-	-	20	8	-	-	-
Other agencies	7	6	-	-	-	2	8	5

(a) Wickens, David L., Farm Mortgage Credit, Tech. Bulletin No. 288, United States Department of Agriculture, Washington, 1932, p. 21.

(b) Murray, William G., An Economic Analysis of Farm Mortgages in Story County, Iowa, 1854-1931, Research Bul. No. 156, Agr. Exp. Station, Ames, Iowa, 1933, p. 385.

(c) Bradley, C. J., The Agricultural Credit Situation in Kentucky, Kentucky Agr. Experiment Station, Bulletin No. 311, Lexington, Kentucky, 1930, p. 564.

(d) Giles, B. M., and Moore, A. N., Farm Credit in a Plantation and an Upland Cotton District in Arkansas, Bul. No. 228, Arkansas Agricultural Exp. Station, Fayetteville, 1928, p. 9.

(e) Giles, B. M., The Farm Credit Situation in Southwestern Arkansas, Bul. 257, Agricultural Experiment Station, Fayetteville, 1929, p. 31.

(f) Wickens and Forster, Farm Credit in North Carolina, Its Cost, Risk, and Management, Bulletin No. 270, Agr. Exp. Station, Raleigh, 1930, p. 81.

(g) Lundy, Gabriel, Mortgage Loans on Farm Real Estate in Brookings County, South Dakota, Agr. Circular 13, Agr. Exp. Station, Brookings, 1930, p. 26 (first mortgage percentages only).

in Arkansas - one in the planatation and upland cotton districts and one in southwestern Arkansas. While insurance companies made no loans at all in the southwestern area, they were the most important source of mortgage loans in the other area. Other very wide variations exist such as a high per cent of loans by joint stock land bank in one area and none at all from that source in the other area.

Consequently these differences should be borne in mind in interpreting the data from Williamson County.

Trends

One method of observing the trends in agricultural finance is to examine studies made in different periods. In the absence of other information such comparisons may be of value. However, since none of the studies cover all farms in the county and are not made from identical farms, conclusions from differences in the studies must be qualified.

TABLE XXXV. DISTRIBUTION OF MORTGAGE LOANS, BY SOURCES, FOR NUMBER OF LOANS - SELECTED STUDIES, WILLIAMSON COUNTY, 1920, 1923, and 1938

Year	No Report	Individuals	Insurance Companies	Commercial Banks	Federal Land Banks	Farm Mortgage Cos.	Other Sources
1920	31.6	44.7	15.8	2.6	5.3	-	-
1923	-	55.8	14.4	5.5	19.6	4.7	-
1938	-	34.1	22.7	4.5	38.6	-	-

The large number of farms not giving the source of their mortgage loans in the 1920 study makes comparisons with the other studies difficult.

However, it appears that in 1920 more of the outstanding mortgage debt was held by individuals and insurance companies and less by the other sources than in 1923. During the fifteen-year interval between the 1923 study and the one conducted in 1938 it appears that the importance of the Federal Land Bank has greatly increased, while that of individual lenders has decreased.

Actual Recordings. A more accurate picture of the relative importance of the different sources of farm mortgage loans and the changes in their importance can be obtained by a study of the farm mortgages filed in the county during the period 1917-35. During this period there were 5,710 mortgages filed, for the amount of $16,662,049. Over sixty per cent of the number of loans and over half of the amount of loans were made by individuals.

TABLE XXXVI. DISTRIBUTION OF MORTGAGE LOANS FILED, BY LENDING AGENCIES, WILLIAMSON COUNTY, 19-YEAR PERIOD, 1917 - 1935

Source	Number	Consideration	Acres
Individuals	3,607	$8,564,023	346,364
Insurance companies	597	3,944,262	114,831
National and state banks	728	2,010,227	102,748
Federal land banks	395	1,211,301	65,074
Administrators, etc.	72	211,239	8,726
Joint stock land bank	6	45,400	1,323
Mortgage companies	7	13,725	612
State or county agencies	2	7,327	68
Other sources	296	654,545	32,751
Total	5,710	$16,662,049	672,497

Individuals were the source of over five times as many loans as any other single source (see Table XXXVI and Figure 36).

Commercial banks, national and state, were second in importance when measured by number of loans, but insurance companies were second according to amount of consideration. A difference in size of mortgages is very apparent here, for although insurance companies had only a sixth of the number of loans to individuals, they had almost half the amount of consideration of individuals.

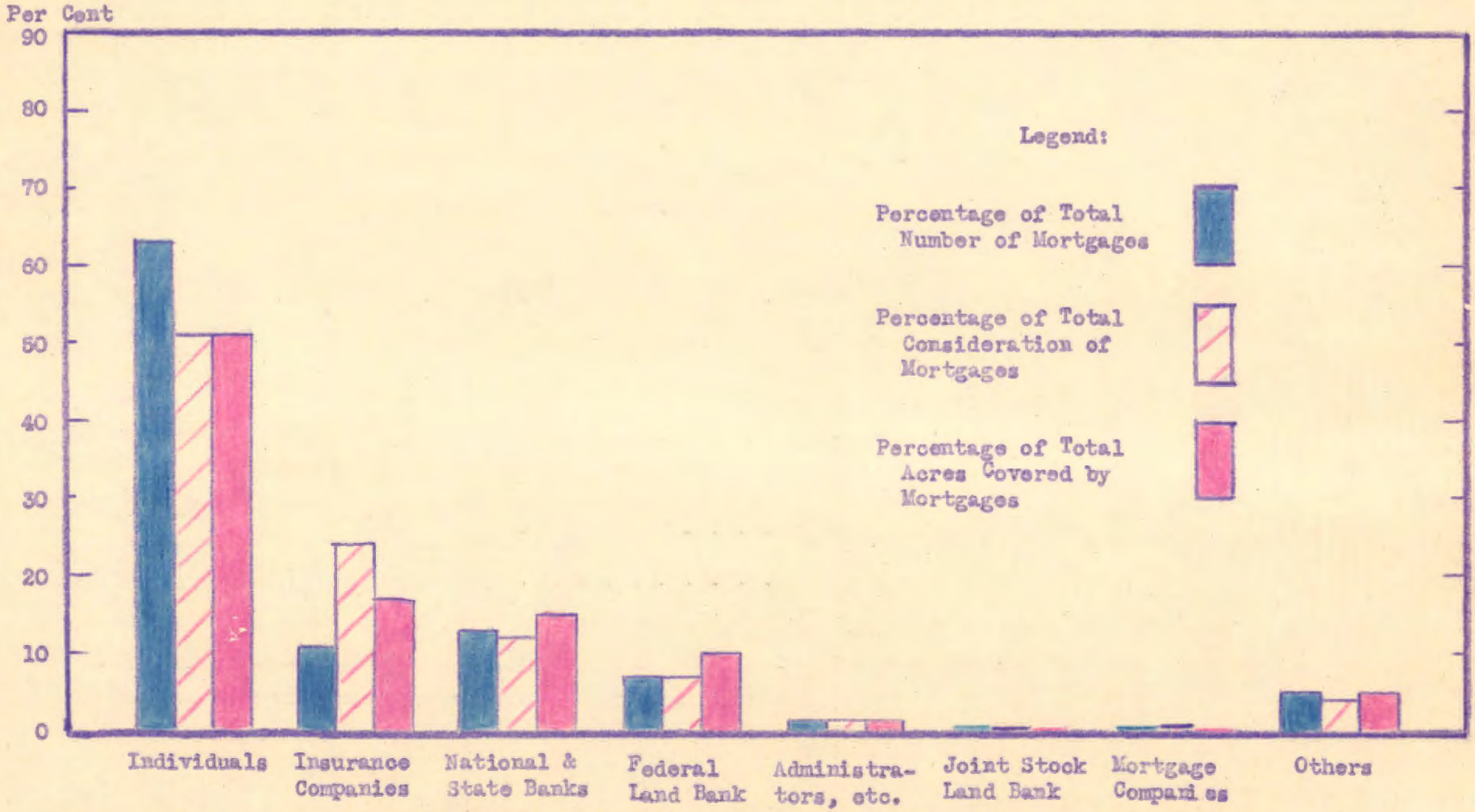


Figure 36. Distribution of All Mortgage Loans Filed, by Lending Agency, Williamson County, Tennessee, 1917 - 1935

Based on Table XXXVI.

The Federal Land Bank was also an important source of mortgage loans, making 395 loans amounting to $1,211,301 during the period. However, as shown in Table XXXVII and Figure 37 the F.L.B. varied widely its relative importance as a source of mortgage credit. It is interesting to note that more mortgages were made in the one year 1934 than during the rest of the nineteen-year period. In 1934 the Federal Land Bank made 214 of the 595 loans made from 1917-1935.

Administrators made 72 loans during the period and accounted for about 1.3 per cent of the total amount loaned.

There were a few loans by state and county agencies, mortgage companies, and Joint Stock Land Banks. None of these were of material importance, amounting to only a portion of one per cent. Joint Stock Land Banks only made loans in three years - 1923, 1924, and 1925.

In addition to those already mentioned, there was a miscellaneous group of lenders who made 296 loans and accounted for almost 4 per cent of the total loaned. Included in this group are: local merchants making short-term production and equipment loans; building and loan associations; for the past several years certain federally chartered associations, such as the production credit associations primarily concerned with crop loans, but sometimes including farm real estate in their mortgages; agents of undisclosed lenders, etc.

It is interesting to compare this distribution with a similar one for the State of Tennessee. For Tennessee individuals accounted for roughly one-half of total recordings, state and national banks roughly one-fifth, and insurance companies roughly ten per cent of the total

recordings.[1]

In other words the order of importance of insurance companies and commercial banks is reversed in Williamson County as compared with the State as a whole. For Williamson County, individuals accounted for roughly a half, the same proportion as in the state as a whole. State and national banks constituted roughly 12 per cent, and insurance companies roughly 24 per cent of the total recordings.

TABLE XXXVII. PERCENTAGE DISTRIBUTION OF TOTAL RECORDINGS OF FARM MORTGAGE LOANS, BY LENDING AGENCIES, WILLIAMSON COUNTY, TENNESSEE, 1917-1935

Year	Individual	Insurance Companies	F.L.B.	National or State Banks	Administrators, etc.	Others (a)	Total (b)
1917	61.7	27.7	2.4	3.7	1.5	3.0	100.0
1918	78.8	10.3	2.1	5.2	.2	3.4	100.0
1919	78.5	9.9	4.1	3.8	1.1	2.6	100.0
1920	69.5	25.3	1.1	3.8	.2	2.1	100.0
1921	71.1	14.6	4.7	7.1	1.0	1.5	100.0
1922	46.6	18.3	8.2	18.4	1.8	6.0	99.3
1923	53.0	38.3	2.2	18.5	1.8	3.7	97.5
1924	35.5	30.9	.6	28.1	1.6	2.1	98.8
1925	51.5	38.0	3.2	21.0	.7	4.8	99.2
1926	33.7	34.0	1.1	22.5	4.7	3.8	99.8
1927	42.1	31.8	3.5	16.7	.9	4.9	99.9
1928	59.8	23.4	1.2	10.1	.9	4.4	99.8
1929	35.2	37.6	2.7	15.3	3.1	6.1	100.0
1930	37.4	38.6	1.4	18.9	.3	3.4	100.0
1931	44.8	32.1	1.0	16.2	.6	5.3	100.0
1932	59.7	16.1	1.6	12.8	4.2	4.1	98.5
1933	55.3	5.8	24.5	4.9	1.4	8.1	100.0
1934	18.7	8.6	61.8	5.5	.0	5.4	100.0
1935	34.9	15.3	27.2	14.0	.5	8.1	100.0

(a) Includes all other sources except Joint Stock Land Banks and mortgage companies.

(b) Where total does not equal 100, the difference was loaned by mortgage companies or Joint Stock Land Banks.

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(1) Farm Mortgage Recordings in Tennessee, U.S.D.A., Bureau of Agricultural Economics, Washington, D. C., May 1938, p. 2.

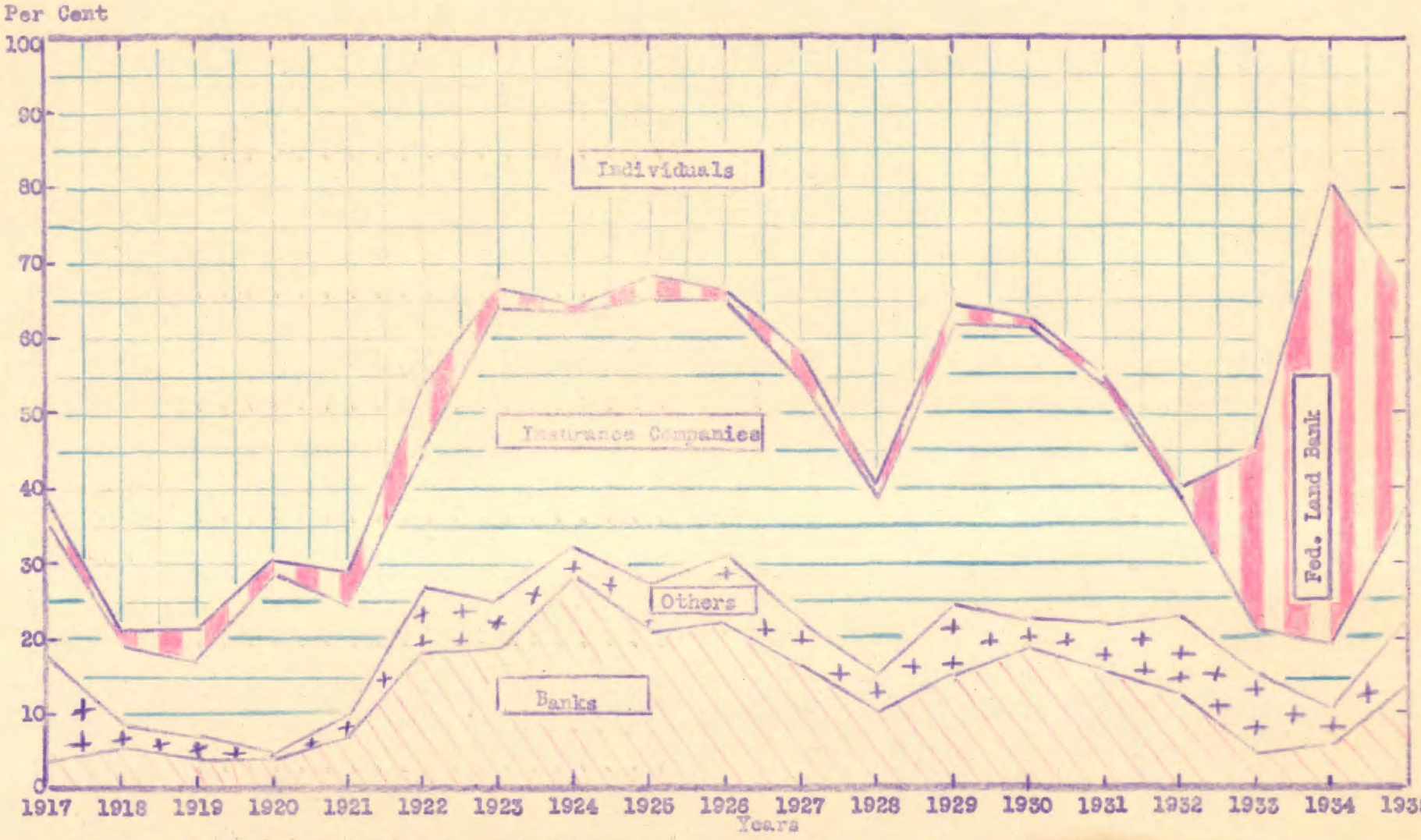

Figure 37. Percentage Distribution of Total Recordings of Farm Mortgage Loans, by Lending Agencies, Williamson County, 1917-1935

Based on Table XXXVII.

Why should life insurance companies be twice as important as a source of mortgage financing to Williamson County as they are to the State of Tennessee? A possible answer may be that Williamson County is more productive agriculturally than the average of the State. Generally speaking the insurance companies make farm loans only in the better farming areas.

For thirteen of the nineteen years individuals were the most important source of farm mortgage loans. The actual per cent that individuals were of total recordings varied from 78.6 per cent in 1919 to only 18.7 per cent in 1934. Individuals had over 50 per cent of the recordings in eight years of the period, and there was but one year for which the per cent was under 30 per cent.

Life insurance companies were the second most important source of loans for 11 of the 19 years, or oftener than any other source. Moreover, there were 5 years, 1923, 1925, 1926, 1929, and 1930, in which they were the most important source of farm mortgage loans. The actual per cent varied from 38.6 in 1930 to only 5.8 in 1933.

Commercial banks were generally the third most important source of farm real estate loans. Although comprising less than 10 per cent of the loans prior to 1922, after 1922 farm mortgage loans from state and national banks comprised over 10 per cent every year except for the year 1934. The largest per cent for any one year was 28.1 in 1924 and the lowest, 3.7 for 1917.

As a source of farm mortgage loans the Federal Land Banks were not of great significance until 1933. Prior to 1933 there were only three years -

1919, 1921, and 1922 - for which F.L.B. had a greater per cent of the total than miscellaneous sources. Due to the activities of the F.L.B. in refinancing other mortgages in the distress period from 1933 to 1935, they become one of the most important sources of farm mortgage loans. In 1934, the year in which such a large number of F.L.B. loans were made, they were by far the most important single source of loans, having over three times as high a per cent of the total as any other single source.

In examining Table XXXVII and Figure 37 it is well to bear in mind that the figures are percentages of total for that year and not indexes of amounts from year to year. A particular source may have a higher per cent of the total in 1930 than 1920, but have actually made less loans in 1930 than 1920. In this connection it is well to refer to Table XXI and Figure 20 which give the amounts loaned each year during the period. One of the causes for shifts in percentage may be that certain sources increase or decrease the amount of their loans more rapidly than others, thus certain sources will have percentages changing from year to year although the amount loaned may have been more or less constant.

Amount loaned and amount outstanding are two different things. The different sources vary so widely in their terms that the distribution of amount will be quite different from that of recordings. This can perhaps be best illustrated by the importance of F.L.B. loans (see Table XXXVIII and Figure 38). Whereas F.L.B. loans comprised but a small proportion of the amount recorded each year, the terms are for such length (see page 139, Table XLVII) that in the distribution by amount outstanding, F.L.B. slowly increases from year to year.

Another important difference is that the distribution by amount outstanding lags behind the distribution by amount recorded. Furthermore, the distribution bb amount outstanding shows changes much less abruptly - Figure 38 has smoother curves than Figure 37. If data were available for the last few years, it is possible that the distribution of amount outstanding might be similar to that of the sample farms (see Table XXXIII).

TABLE XXXVIII. PERCENTAGE DISTRIBUTION OF TOTAL OUTSTANDING FARM MORTGAGE LOANS, BY LENDING AGENCIES, WILLIAMSON COUNTY, TENNESSEE, 1917 - 1935

Year	Indiv.	Insur. Companies	F.L.B.	National and State Banks	Administrators, etc.	Others (a)	Total (b)
1917	48.9	37.9	1.0	6.9	0.7	3.9	99.3
1918	61.3	27.9	1.6	4.9	0.6	3.3	99.6
1919	68.1	21.3	2.7	4.4	0.7	2.7	99.9
1920	66.3	24.4	2.6	3.8	0.6	2.3	100.0
1921	64.5	24.7	3.4	4.6	0.7	2.1	100.0
1922	57.2	26.5	5.1	7.1	1.0	3.0	99.9
1923	48.0	31.6	4.7	10.5	1.0	3.3	99.1
1924	43.8	32.8	4.5	14.0	0.9	3.0	99.0
1925	42.3	33.4	4.8	14.4	0.9	3.3	99.1
1926	38.8	35.9	4.4	15.7	1.1	3.1	99.0
1927	40.0	35.7	4.2	15.1	0.5	3.4	98.9
1928	43.2	34.7	4.3	13.2	0.6	3.1	99.1
1929	43.4	34.8	4.5	11.9	1.0	3.4	99.0
1930	43.3	35.7	4.4	11.3	1.0	3.5	99.2
1931	43.6	35.4	4.3	11.4	1.0	3.4	99.1
1932	45.0	34.0	4.4	11.0	1.3	3.3	99.0
1933	45.1	32.5	6.1	10.7	1.0	3.9	99.3
1934	43.0	24.4	18.1	9.1	1.0	4.4	100.0
1935	41.8	22.2	20.6	9.6	0.7	4.9	99.8

(a) Includes all others except joint stock land banks and mortgage companies.

(b) Where total does not equal 100.0 the difference was loaned by mortgage companies and joint stock land banks.

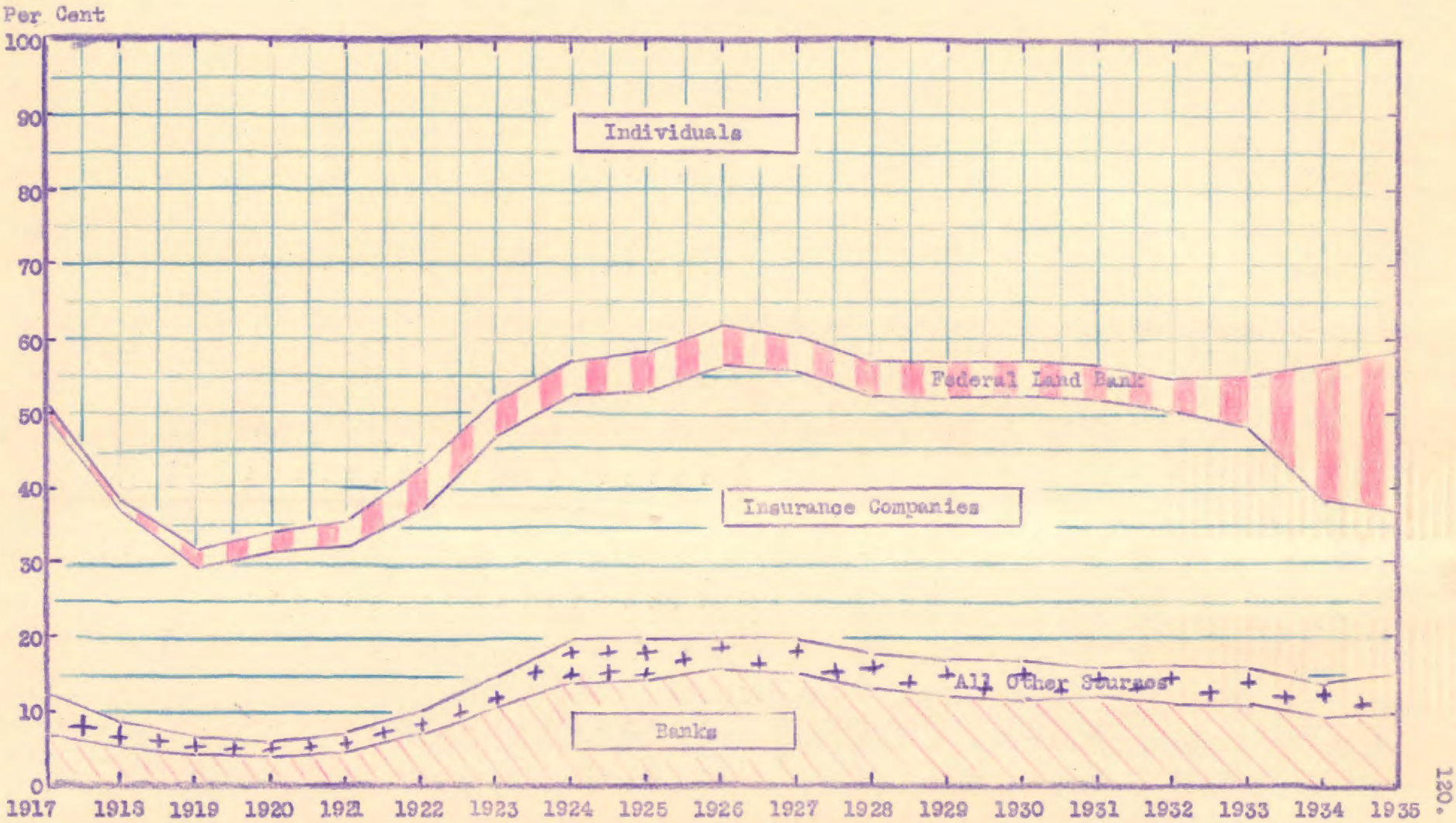

Figure 38. Percentage Distribution of Total Outstanding Farm Mortgage Loans, by Lending Agencies, Williamson County, Tennessee, 1917-1935

Based on Table XXXVIII.

Lending Practices of Different Sources

It has been stated (page 118) that the distribution by number of loans was substantially different from the distribution by amount, the difference being due largely to variations in size of loans. Table XXXIX and Figure 39 show those variations.

Joint Stock Land Bank loans were the largest, averaging $7,567. However, there were only seven such loans, so that they were not an important source. Of the principal lending agencies, the insurance companies made the largest loans. Insurance company loans averaged $6,607, or more than twice the average of all loans and nearly three times the average of loans from individuals. Federal Land Bank loans averaged $3,066, banks $2,761, individuals $2,374, and miscellaneous sources $2,211. Although individuals had one of the lowest figures for average size of loan, over the period they were the most important single source of loans as measured by amount. This would indicate that on the basis of number, individuals were the most important source of loans.

TABLE XXXIX. SOME COMPARISONS OF FARM MORTGAGE LOANS FILED, BY VARIOUS LENDING AGENCIES, WILLIAMSON COUNTY, TENNESSEE, 1917 - 1935

Source	Ave. Amount	Amount per Acre	Ave. Acreage
Joint Stock Land Banks	$7,567	$34.31	220
Insurance companies	6,607	34.35	192
Federal Land Bank	3,066	18.61	165
Administrators, etc.	2,934	24.21	121
National & State Banks	2,761	19.56	141
Individuals	2,374	24.72	96
Others	2,211	19.99	111
All sources	2,918	24.78	118

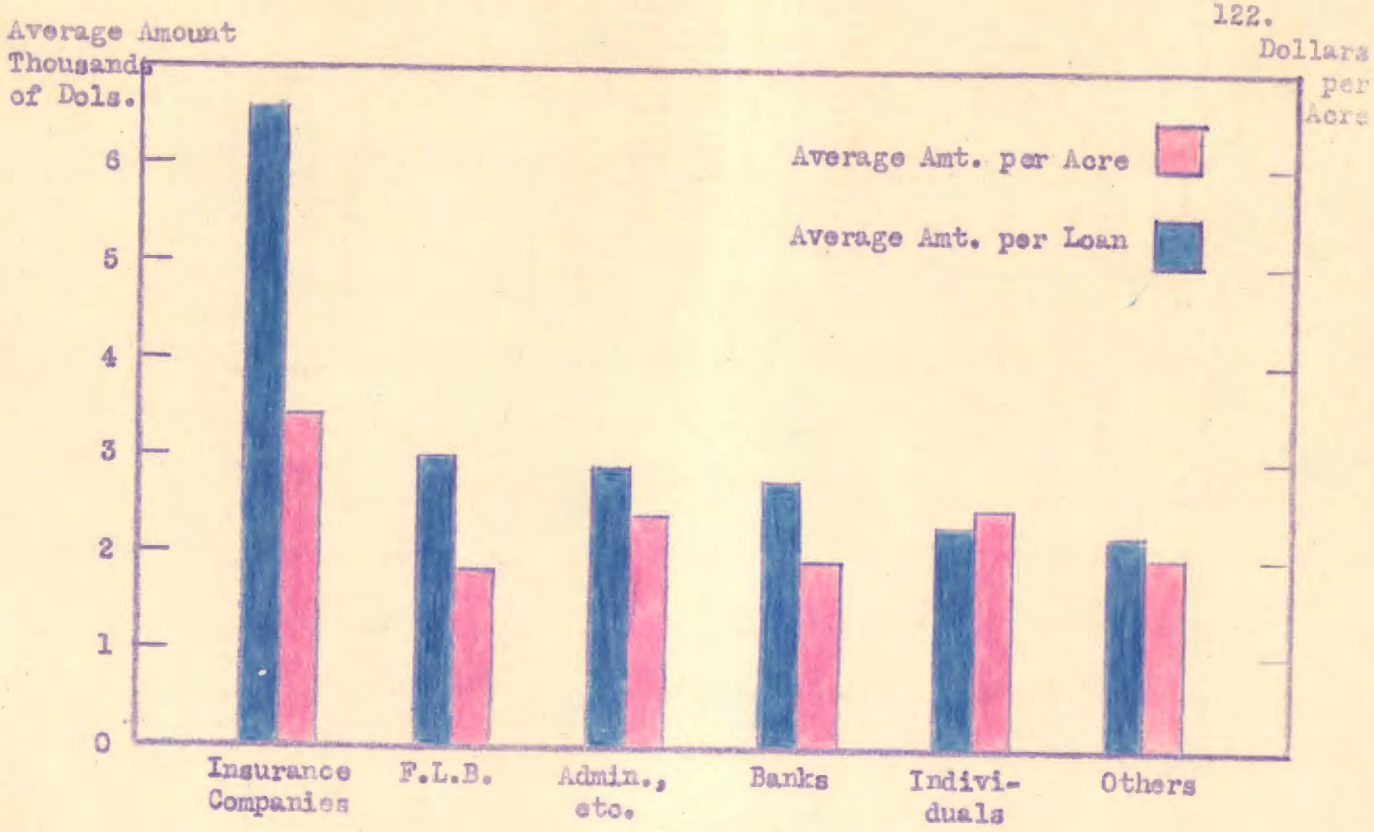

Figure 39. Average Amount Per Loan and Per Acre, Mortgages Filed in Williamson County, 1917-1935

Based on Table XXXIX.

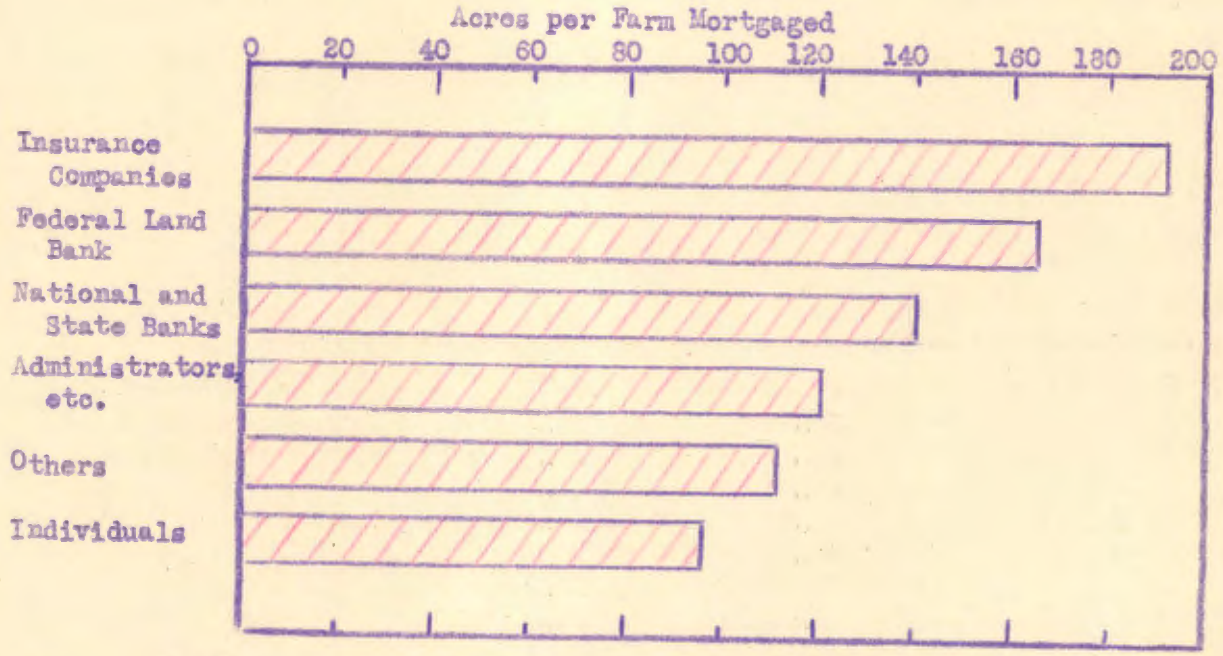

Figure 40. Average Acreage of Farms upon Which Different Lending Agencies Have Mortgages, Williamson County, 19-Year Period, 1917 - 1935

Based on Table XXXIX.

The average amount loaned per acre did not vary directly with the average amount per loan among these various sources. Federal Land Bank and Commercial Bank loans had relatively high average size of loans, but the amount loaned per acre by these sources was even less than that loaned by miscellaneous sources which had the lowest average size of loan. Probably the two most important factors accounting for differences in amount loaned per acre are farm land values and size of farms mortgaged.

The best example of differences in land value is the case of the Federal Land Bank loans. Since more than half of the loans were made in the one year 1934, a big share of F.L.B. loans were made when land values were considerably depressed. Thus the amount loaned per acre would be much less than insurance companies, for example, which made most of their loans during the high prices of the 1923-30 period.

Counteracting that influence, however, is the difference in size of farms (Figure 40). The farms on which insurance company loans were placed were over twice as large as those on which individuals placed loans. Consequently, although insurance company loans were almost three times larger than those made by individuals, the amount loaned per acre was only about forty per cent greater.

It appears that institutional lenders such as insurance companies, commercial banks, and the Federal Land Bank make loans on the larger farms, leaving owners of small farms to obtain their credit needs from individuals.

It is interesting to compare the average figures for all recorded mortgages during this period with the averages on the sample farms of the

F.C.A. Study. In that study the average amount per mortgage was $3,527 and the amount per acre was $26, whereas over the period all mortgages filed averaged $2,918 per loan and $25 per acre. These figures are comparatively close, particularly the amount per acre. However, they are not exactly comparable since the F.C.A. figures are based on amount outstanding in 1938 and the 1917-35 figures are based on the amount of all loans filed during the 19-year period.

One of the most interesting relationships would be the ratio of mortgage debt to value of farm real estate for these different sources. Unfortunately, not having the value of the farms upon which the loans were made, such a ratio cannot be determined for all loans recorded.

Some light can be thrown upon this from the sample farms. Table XL shows that for average amount of loan and average acreage the sources of the sample farm mortgage loans were similar to those for the county shown in Table XXXIX. The commercial banks, however, did not have the relationship shown in Table XXXIX. There were only 5 loans from commercial banks and it is quite possible that they were not representative.

TABLE XL. LENDING PRACTICES OF SOURCES OF MORTGAGE LOANS ON 36 WILLIAMSON COUNTY FARMS, 1938

Source	Average Original Mort. Loan	Average Original Value of Land & Bldgs.	Average Acre-age	Mort-gage Debt per A.	Ratio of Mortgage Debt to Value
Individuals	$2,737	$8,610	155	$18	31.8
Fed. Land Bank	4,829	12,206	161	30	39.6
Life Insur. Co.	6,457	19,999	217	30	32.4
Commercial banks	7,800	15,300	165	47	51.0

According to Table XL, individuals made loans at the lowest per cent of the value of the land and buildings and life insurance companies the next lowest. The land bank commissioner loans were included with the Federal Land Bank loans. Commercial banks loaned at the highest per cent of the value of land and buildings of lending agencies in this particular study. However, since the other factors are so different from those found in the county as a whole, it is doubtful if in general the banks of the county loan such a high per cent.

CHAPTER IX

MORTGAGE CREDIT - COSTS

Elements of Cost

Cost of credit is ordinarily thought of in terms of interest. Interest is not the only cost of credit, however.

In the case of mortgage credit, in addition to the interest charge there may also be an appraisal fee, the cost of getting an abstract of title, recording fees, or commission fees. The extent of these costs varies with the size of loan and with the different lending agencies.

Probably the only source to which a commission fee would be paid would be to a mortgage broker. If a loan was obtained from an individual or from a bank knowing the borrower personally an appraisal fee would not likely be charged. The recording would be nominal and the expense for abstracting the title insignificant. Borrowers from national farm loan associations pay a loan fee for the appraisal of property and the examination of the title by land bank attorneys. They also pay a loan fee not to exceed 1 per cent of the amount of application to their respective associations.(1)

Life insurance companies, commercial banks, and other institutional lenders may also charge appraisal fees or loan application fees.

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(1) Myers, W.F., Farm Credit Administration, Institute of Banking, New York, 1934, p. 215.

Another possible cost with land bank loans is the borrower's investment in the stock of the local association. If the borrower is an an area where large losses occur on land bank loans, he may lose the money invested in the stock of his national loan association. In one sense this must be regarded as an additional cost.

These additional items of cost may amount to a sizeable sum. However, if the amount of the loan is large and the mortgage is for a long term, the extra charges are usually not significant on an annual basis. The elements of cost going into a land bank loan, when spread over twenty to forty years, do not seem large.

But when loans are made on small amounts and for short periods, additional charges make the total annual cost much higher.

Unfortunately, information is not available on these service charges in Williamson County. Some concept of the extent of other costs can be obtained from the literature of other studies. Wickens and Forster[2] found other costs amounted to 0.2 of one per cent annually in the area studied in North Carolina in 1926.

The discussion of costs of mortgage credit will have to be restricted to the interest rate. Since this is the most important element of cost by far, a study of interest rates will provide a fairly accurate picture of the costs of mortgage credit.

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(2) Wickens and Forster, Farm Credit in North Carolina, Its Cost, Risk, and Management, Agricultural Experiment Station, Bulletin No. 270, Raleigh, 1930, p. 84.

Interest Rates on Present Debt

Rates of Outstanding Loans in 1935. The average interest rate for all lenders and all loans was 5.68 per cent. Administrators had the highest interest rate, but individuals and banks had average rates closely approximating those of administrators. Insurance companies were one of the lower cost sources of loans, but the Federal Land Bank had the lowest interest rate of all sources, averaging a half a per cent less than life insurance companies.

One would assume that second mortgages or mortgages subject to a prior lien would have a higher interest rate than mortgages free from other encumbrances, but such was not the case. Mortgages without other encumbrances had the lowest rate for each source except in the case of insurance companies and the Federal Land Bank. For these two sources the mortgages free of other encumbrances had the highest rate. The combined amount of these two sources is such that the general average reflects their influence and loans with other encumbrances have the highest interest rate.

TABLE XLI. INTEREST RATES ON RECORDED MORTGAGE LOANS OUTSTANDING IN WILLIAMSON COUNTY, TENNESSEE, 1935

Source	Subject to Prior	Subject to Junior	Free of Other Encumbrances	All Loans
Administrators, etc.	6.14	6.00	6.00	6.00
Individuals	6.00	6.03	5.97	5.99
National or State Banks	5.98	6.00	5.96	5.98
"Other" sources	5.85	6.00	5.61	5.75
Insurance companies	5.50	5.45	5.58	5.53
Federal Land Bank	5.00	5.07	5.15	5.06
All lenders	5.63	5.56	5.78	5.68

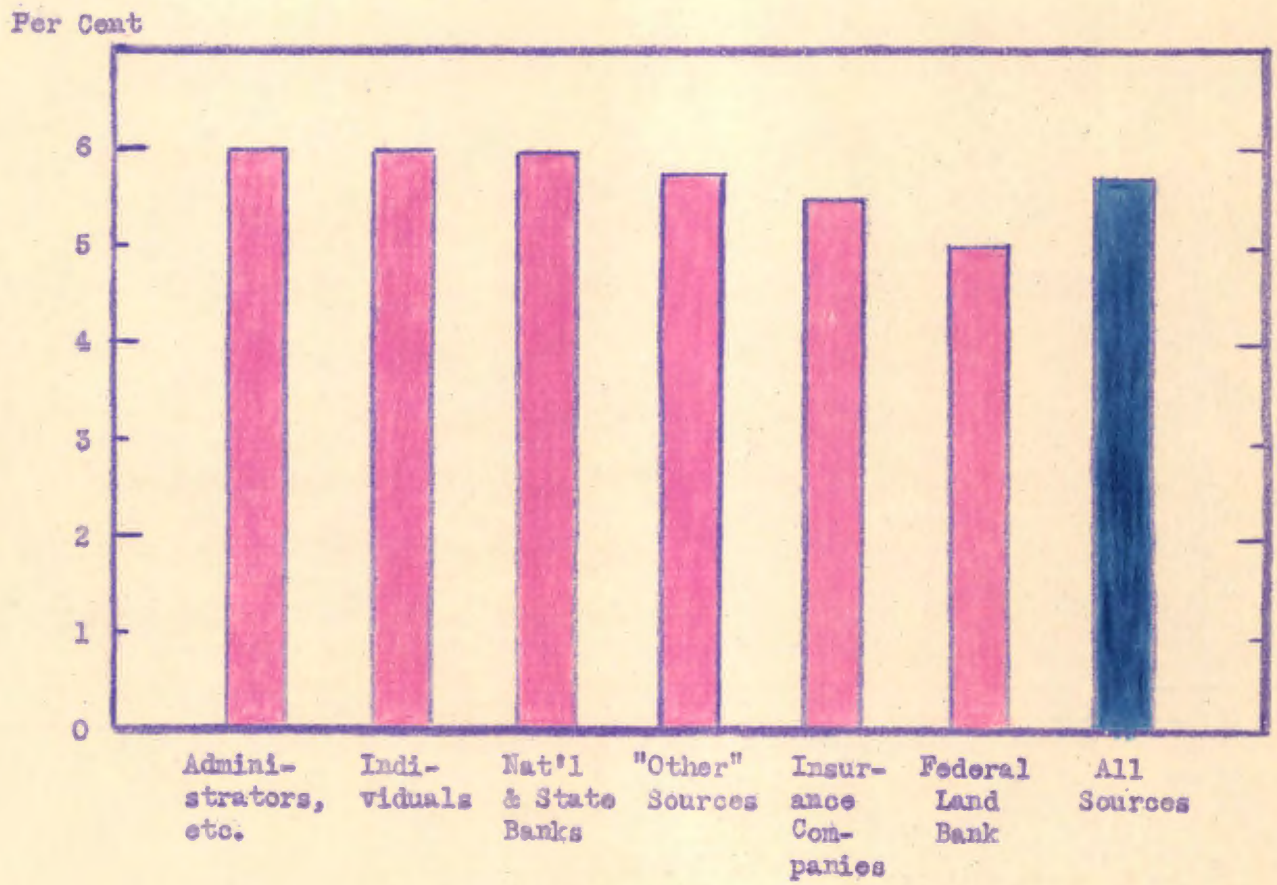

Figure 41. Average Interest Rates of Recorded Outstanding Mortgage Loans, by Sources, Williamson County, Tennessee, 1935

Based on Table XLI.

In the case of the Federal Land Bank, the lower rate for second mortgages can be explained by a difference in lending period. Prior to May 1933 when Land Bank Commissioner loans were inaugurated, the Federal Land Bank made no loans on second mortgages. The Land Bank Commissioner loans made after that date were made at 5%. Previous to the depression, 5 1/2 per cent had been charged on some Federal Land Bank loans.

Frequency Distribution of Interest Rate. Table XLII shows the distribution of loans as to interest rate. For all sources of mortgage loans about 80 per cent of the number of loans were made at 6 per cent interest, less than 15 per cent at 5 per cent, and about 5 per cent at 5 1/2 per cent interest.

Most of the Federal Land Bank loans were made at 5 per cent interest. Federal Land Bank loans had the smallest range in interest rates, the variation being only from 4 to 6 per cent.

TABLE XLII. FREQUENCY DISTRIBUTION OF INTEREST RATES ON RECORDED OUTSTANDING LOANS, BY PRINCIPAL LENDERS, WILLIAMSON COUNTY, TENNESSEE, 1935

Source	Interest Rate									
	0	4	4 1/4	5	5 1/4	5 1/2	6	7	8	Total
Federal Land Bank		4	3	294		34	11			346
Insur. companies	5			23	1	77	56			162
Other sources	1	2		5			110			118
Individuals	26	2	1	11		1	1267	1	18	1327
Commercial banks	2			1		2	160	1		166
All sources	34	8	4	334	1	114	1604	2	18	2119

Insurance companies had three different rates -- 5 per cent, 5 1/2 per cent, and 6 per cent, at which large numbers of their loans were made,

with 5 1/2 per cent the most important of the three.

"Other sources", individuals, and commercial banks all had the preponderance of their loans at 6 per cent interest. Individuals had the widest range of all sources - ranging from zero to eight per cent interest.

Interest Rates of Mortgages on the Sample Farms. Although the sample is not so comprehensive as the recordings for the entire county it is of more recent date. Furthermore, the Land Bank Commissioner loans have been segregated from the Federal Land Bank loans. For these reasons a study of the sample is worth while.

The interest rate on the mortgage loans from the Williamson County sample farms averaged 5.33 per cent. The average interest rate weighted by amount of loan was 5.27 per cent.

The interest rate on mortgages loaned by individuals averaged 5.8 when weighted by amount. The simple average interest on mortgages from individuals was almost 6 per cent.

There were only two mortgages made by commercial banks in this survey, one at 6 per cent and one at 4 per cent. The weighted average was 5.4 per cent, the simple average, 5.0.

Life insurance company mortgages had as their weighted average interest rate 5.19 per cent, the simple average being 5.05 per cent. Mortgages from life insurance companies showed the greatest variation in interest rate, ranging from 5 1/2 per cent to 5 1/2 per cent. The most common rate was 5 1/2 per cent for life insurance mortgages, half of the ten life insurance mortgages being made at 5 1/2 per cent. Three of them

were made at 5 per cent and one each at 3 1/2 and 4 1/2 per cent.

TABLE XLIII. AVERAGE INTEREST RATE BY LENDING AGENCY, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Agency	Simple Average Interest Rate	Weighted Average Interest Rate
Federal Land Bank	5.00	4.98
Land Bank Commissioner	5.00	5.00
Life Insurance Companies	5.05	5.19
Commercial banks	5.00	5.40
Individuals	5.93	5.83
All sources	5.33	5.27

All six of the Land Bank Commissioner mortgages were made at 5.0 per cent. Therefor both the average and weighted interest rates were 5.0 per cent.

Eight of the eleven Federal Land Bank loans were made at 5 per cent, one at 4 per cent, and two at 5 1/2 per cent. The simple average interest rate was 5.00 per cent and the weighted average rate very nearly 5.00 per cent.

Comparisons With Other Areas

For the newly recorded farm mortgage loans made in Williamson County in 1935 the average interest rate was 5.63 per cent. This was slightly under the average rate for new loans for the State of Tennessee in 1935 which was 5.7 per cent.(3) Unfortunately there is no data available for the

(3) Farm-Mortgage Recordings - Tennessee, U.S.D.A., Bureau of Agricultural Economics, Washington, May 1938, p. 5.

state as a whole on interest rates on outstanding mortgage debt.

TABLE XLIV. AVERAGE INTEREST RATES ON OUTSTANDING MORTGAGE LOANS IN WILLIAMSON COUNTY, EAST SOUTH CENTRAL REGION AND THE UNITED STATES, 1928

Source	Recorded in Williamson County	East South Central *	United States *
Federal Land Bank	5.5	5.6	5.5
Joint Stock Land Banks	6.00	5.9	5.9
Commercial banks	6.0	6.6	6.7
Mortgage companies	6.0	6.2	6.1
Insurance companies	5.5	5.7	5.5
Retired farmers	-	7.0	5.8
Active farmers	-	5.9	6.1
Other individuals	6.0(a)	6.5	6.2
Other agencies	5.9	6.2	6.2
All sources	5.8	5.9	5.8

(a) Includes all individuals.

*Source: Wickens, David L., Farm Mortgage Credit, Technical Bulletin No. 288, United States Department of Agriculture, Washington, 1932, p. 63.

Neither is there recent information on the rates for outstanding mortgages for the United States. However, by taking the rates on outstanding mortgage debt for 1928, we can compare them with the East South Central Region and the United States. Table XLIV shows such a comparison. Except for joint stock land banks (for which there were but few loans), the county interest rate was lower for each lending agency than the corresponding rate for the East South Central Region and those for the United States.

Trends

A study of the newly recorded farm mortgage loans recorded in Williamson County from 1917-1935 shows that the average interest rate of the

mortgages filed each year did not vary appreciably from year to year (see Table XLV and Figure 42). The year of the highest average interest rate was 1921 when it was 6.13 per cent. It has been said that the prevalence of interest rates above the legal rate during the years 1922-1923, was largely due to individuals and commercial banks with out-of-state addresses writing mortgages at higher rates than the legal rate.(4)

The next highest peak occurred in 1932 when it rose to 5.95. After 1932 the sharpest decline in the period occurred, the interest rate falling to 5.29 per cent in 1934. An important reason for this decrease is the fact that in the year 1934 a greater than usual share of loans were made by the Federal Land Bank and the Land Bank Commissioner.

TABLE XLV. AVERAGE INTEREST RATE ON NEW FARM MORTGAGE LOANS RECORDED IN WILLIAMSON COUNTY, TENNESSEE, 1917 - 1935

Year	Interest Rate	Year	Interest Rate	Year	Interest Rate
1917	5.88	1923	5.77	1929	5.68
1918	5.93	1924	5.84	1930	5.82
1919	5.95	1925	5.72	1931	5.86
1920	5.96	1926	5.82	1932	5.95
1921	6.13	1927	5.79	1933	5.71
1922	6.11	1928	5.87	1934	5.29
				1935	5.63

It can be seen from Table XLVI and Figure 43 that the average interest rates on newly recorded farm mortgages in Williamson County of

(4) Farm Mortgage Recordings in Tennessee, op. cit., p. 4.

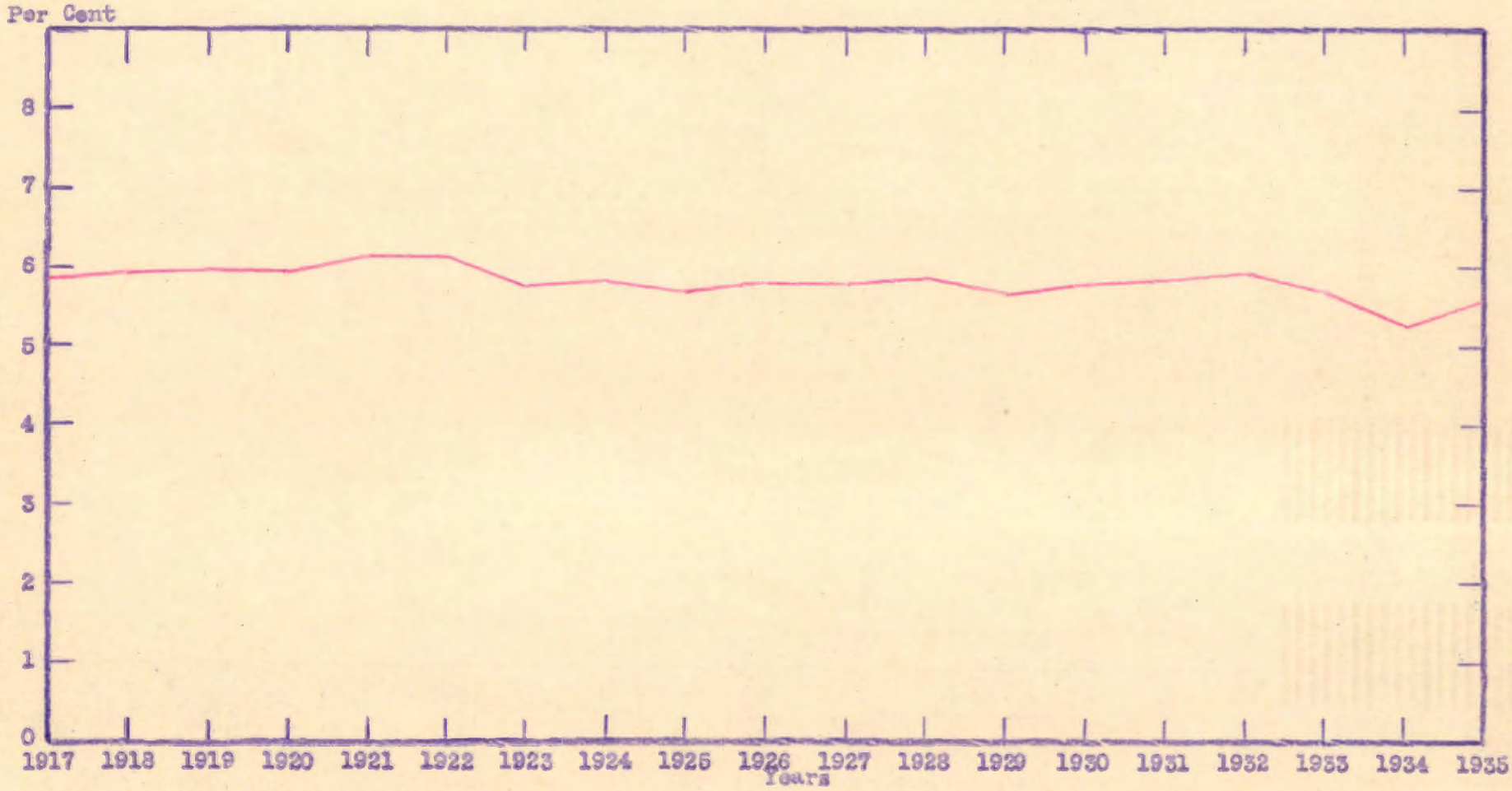

Figure 42. Average Interest Rate on New Farm Mortgage Loans in Williamson County, Tennessee, Recorded Each Year, 1917 - 1935

Based on Table XLV.

all lenders except the Federal Land Bank and insurance companies held close to the 6 per cent legal maximum throughout the 19-year period 1917-35. The rates of the Federal Land Bank were lowest for all but

TABLE XLVI. AVERAGE INTEREST RATES ON NEW FARM MORTGAGE LOANS BY LENDERS, WILLIAMSON COUNTY, TENNESSEE, 1917-35

Year	Individuals	National and State Banks	Insurance Companies	Federal Land Bank and Land Bank Comm.	Others
1917	6.00	6.00	5.67	5.00	6.00
1918	5.98	6.00	5.67	5.00	6.00
1919	6.00	6.00	5.74	5.34	6.00
1920	6.00	6.00	5.83	5.50	5.99
1921	6.13	6.17	6.17	6.00	6.14
1922	6.14	6.38	5.83	5.71	6.39
1923	6.04	5.98	5.40	5.50	6.00
1924	5.98	6.00	5.54	5.50	6.00
1925	5.98	5.96	5.36	5.50	5.91
1926	6.00	6.00	5.54	5.00	5.61
1927	6.00	6.00	5.44	5.15	5.97
1928	6.02	6.00	5.44	5.00	6.00
1929	5.98	5.98	5.25	5.07	6.00
1930	5.96	6.00	5.58	5.59	5.93
1931	6.00	5.95	5.62	5.51	6.00
1932	5.99	6.00	5.78	5.56	6.00
1933	5.94	6.00	5.83	5.00	6.00
1934	5.97	5.95	5.65	5.00	5.06
1935	5.90	6.00	5.85	4.88	5.96
Mean	6.00	6.02	5.64	5.30	5.94

three years. The rates of the insurance companies were next lowest and for the years 1923, 1925, and 1929 were the lowest. Federal Land Bank loans were made at maximum rate of interest for only one year, 1921. The same year the insurance companies exceeded the legal rate for the

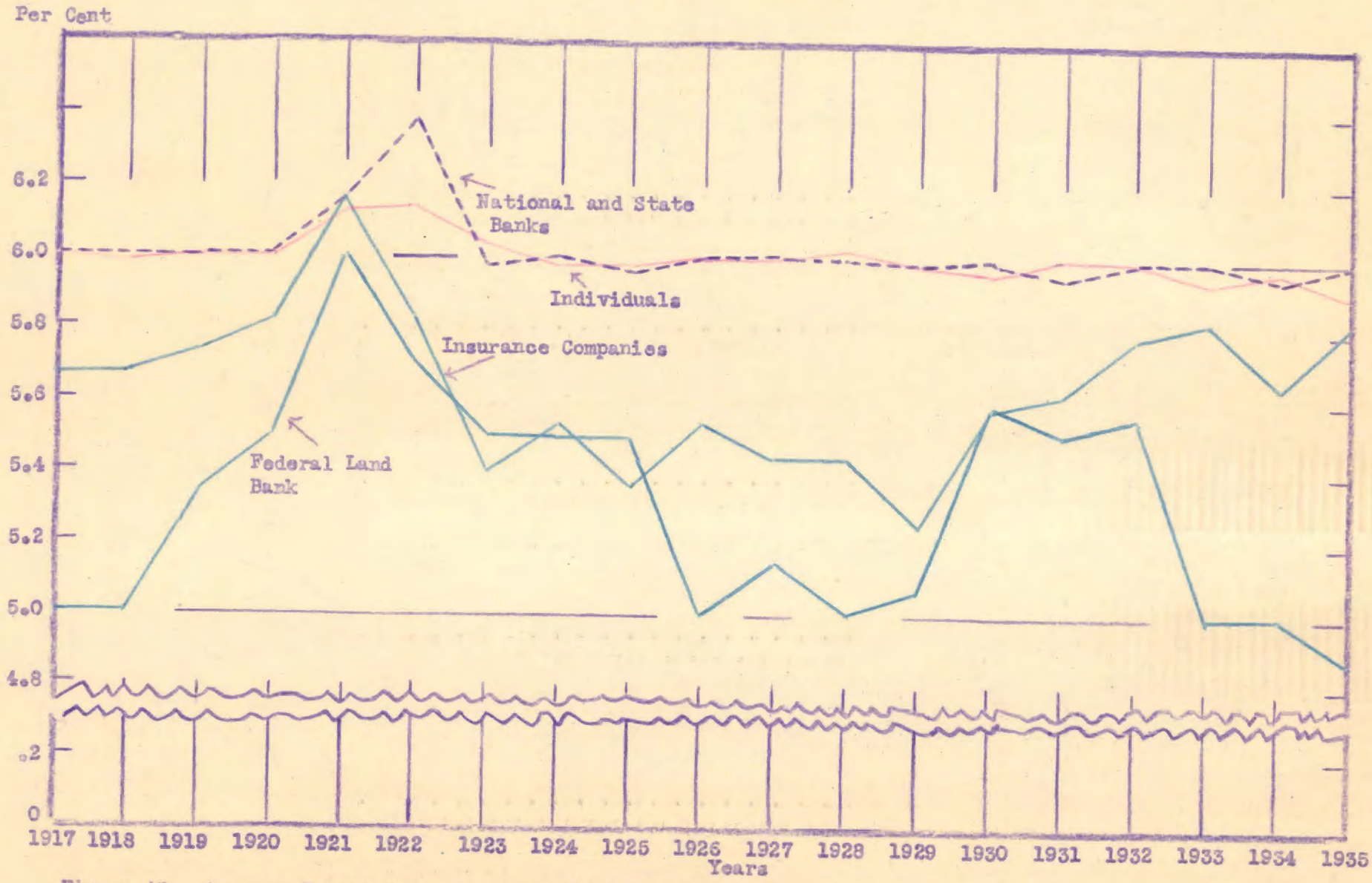

Figure 43. Average Interest Rates on New Farm Mortgage Loans, by Lenders in Williamson County, Tennessee, 1917-1935

Based on Table XLVI.

for the only time during the period. Insurance companies' rates have been generally higher since 1930, but Federal Land Bank rates have been generally lower. However this may be largely attributed to legislative setting of the interest rates of F.L.F. rather than to economic forces.(5)

The interest rate for each lending agency for each year was determined by dividing the total annual interest charge by the total consideration.

The arithmetic mean of the average interest rate for the yearly farm mortgage recordings is shown in Table XLVI as "mean". Federal Land Bank loans had the lowest mean, the interest rate on newly filed mortgages averaging 5.30 per cent over the 19-year period. Life insurance companies had the next lowest average with 5.64 per cent. Individuals and banks were very nearly the same, being about six per cent, the maximum legal rate. Banks were slightly higher.

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(5) Myers, op. cit., p. 205.
The Federal Land Banks are supposed to stand on their own feet and any changes in interest rate are usually due to economic forces. However, as an emergency measure Congress, by the Emergency Farm Mortgage Act, temporarily reduced interest rates on all Federal Land Bank loans in force as of May 12, 1933, and those made two years subsequent to that date.

CHAPTER X

MORTGAGE CREDIT - TERMS

Average Term

Term on Mortgages Recorded. The 5626 unextended mortgages filed during the nineteen-year period 1917-35 were made for an average term of 4.30 years. However, due to the many different lending agencies being represented, it is difficult to represent the true situation with a simple average length of term. Joint stock land banks had the longest term, but there were but seven such loans, all made in the 1922-26 period.

TABLE XLVII. AVERAGE TERM OF MORTGAGES FILED IN WILLIAMSON COUNTY, BY LENDING AGENCIES, TENNESSEE, 1917-35

Source	1917-21	1922-26	1927-31	1932-35	1917-35
	Years	Years	Years	Years	Years
National or state banks	1.28	2.54	1.80	1.44	1.92
Individuals	2.07	2.00	1.92	1.91	1.99
Administrators, etc.	2.21	1.70	2.14	2.02	2.00
Insurance companies	11.18	9.19	6.88	6.73	8.83
Joint stock land bank	-	31.03	-	-	31.03
Federal land bank	34.43	34.76	34.32	22.51	25.49
"Other" sources	1.84	1.90	2.36	2.73	2.19
All sources	3.59	3.81	2.96	7.96	4.30

Of the principal lending agencies, the Federal land bank had the longest terms, averaging 25.5 years. For each of the periods up until 1931 the average term was over 34 years. The decrease in the 1931-35 period

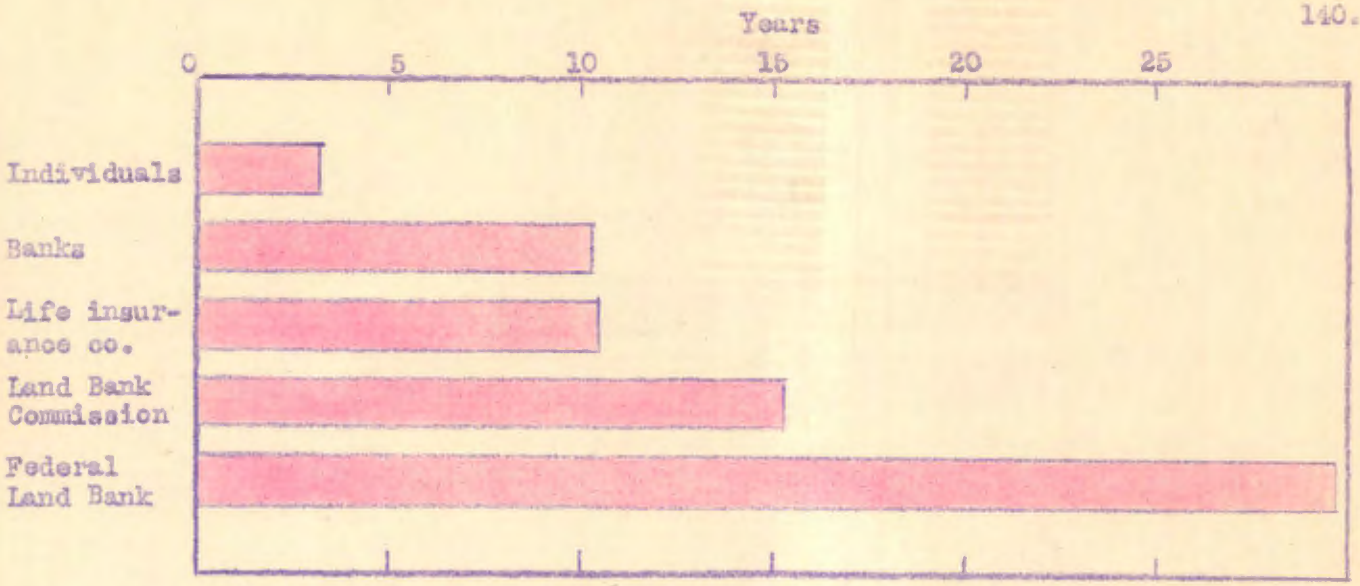

Figure 44. Average Term of Outstanding Mortgages, by Lending Agency, 100 Sample Farms, Williamson County, Tennessee, 1938

Based on Table XLVIII

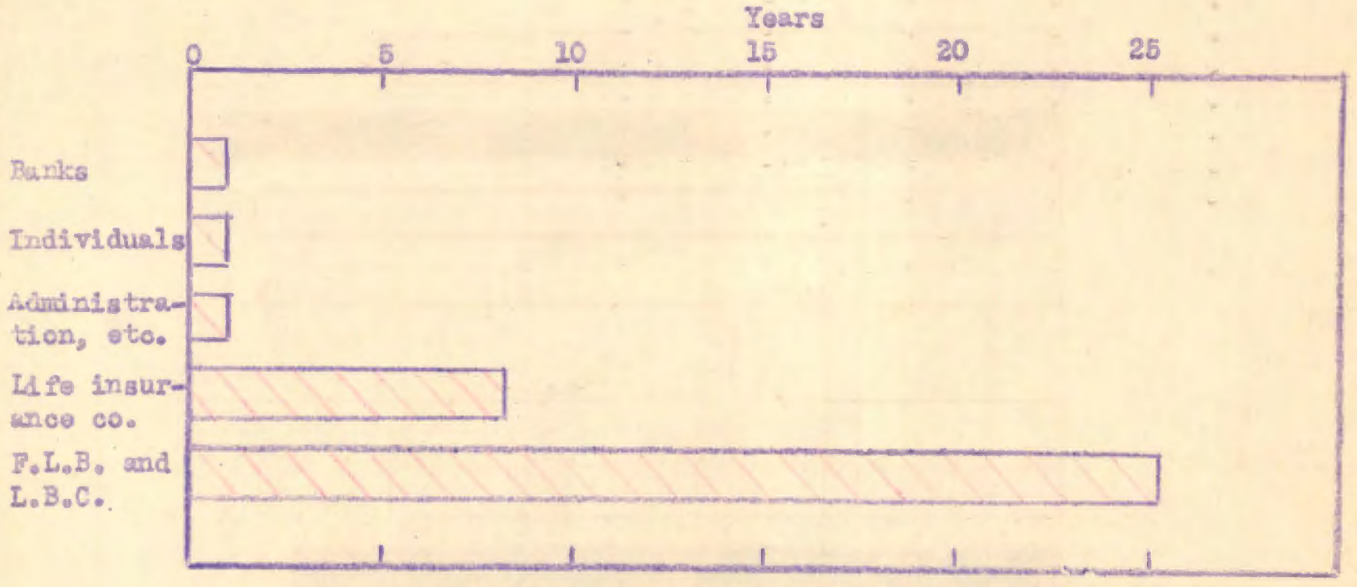

Figure 45. Average Term in Years by Lending Agencies, Mortgages Filed in Williamson County, Tennessee, 1917 - 1935

Based on Table XLVII

was probably due to the influence of Land Bank Commissioner loans which usually run for 13 years, and which are included in the Federal Land Bank classifications.

The average term of loans from insurance companies has shown a decrease during every period - decreasing from 11.18 years in 1917-21 to only 6.73 in 1932-35.

The average term of life insurance company loans was only a third that of Federal land bank loans but was over four times the average term of any other important agency. All of the important sources other than Federal Land Bank and life insurance companies had terms in the neighborhood of 2 years. Not one of these sources had an average term of over 2 years for the entire period. National and state banks had the fourth largest average term in 1922-26, but the lowest in 1932-35. "Other" sources was the only group for which the average term increased consistently during the period.

Term on Sample Farms. The average term of the mortgages in the F.C.A. study was 16.25 years. This is based on 32 of the 44 mortgages in the survey, data on term being given for only 32 mortgages.

For each one of the sources of credit the average term as shown in the sample farms was much longer than that indicated from the recordings. Probably the principal reason for this difference is that while the mortgages of the sample farms were outstanding loans only, the recordings covered all loans, and included many of relatively shorter duration which had been paid and released.

The mortgage loans to individuals had the shortest term, averaging only 5.8 years. However the term was given for only 5 of the 15 mortgages, so that the true average could not be ascertained.

The two bank loans averaged 10.5 in term, one being for 4 years and one being for 16 to 18 years.

The term of life insurance mortgages averaged 10.9 years, varying from 5 years to 30 years. The distribution of life insurance mortgages by term was as follows: 5 years, 4; 10 years, 3; 9 years, 1; 20 years, 1; and 30 years, 1.

TABLE XLVIII. TERMS OF MORTGAGES, BY LENDING AGENCY, 100 SAMPLE FARMS, WILLIAMSON COUNTY, TENNESSEE, 1938

Lending Agency	Average Term in Years	Loans Amortized	
		Number	Per Cent
Individuals	5.8	3	20.0
Banks	10.5	1	50.0
Life insurance companies	10.9	8	80.0
Land Bank Commissioner	15.7	6	100.0
Federal land bank	29.5	10	90.9
All loand	16.25	28	63.6

Land Bank Commissioner loans averaged 15.7 years in term, the loans ranging from 12 to 22 years.

Federal land bank loans had the longest term for mortgage loans, averaging 29.5 years. Seven of the eleven F.L.B. mortgages had terms of 33 years and one loan was made for 36 years. There were also F.L.B. loans with terms of 13, 20, and 27 years.

Distribution of Loans by Term

The terms used by the different lending agencies are so varied that the distribution of all loans according to terms has little meaning. Such a distribution indicated in Table XLIX and Figure 45 shows the heaviest concentration of loans under 5 years, but with appreciable numbers around 10 years and 30 years.

TABLE XLIX. FREQUENCY DISTRIBUTION OF RECORDED OUTSTANDING MORTGAGE LOANS IN WILLIAMSON COUNTY, TENNESSEE, 1938, BY TERM

Term Years and Months	Banks & Trust Co.	Indi-vi-duals	"Other" Sour-ces	Insur-ance Co.	Federal Land Bank	All Sour-ces
Less than 1 year	63	145	26	1		235
1 year - 23 months *	52	453	32			537
2 years - 35 months	13	200	14			227
3 years - 59 months	20	284	24	7		335
5 years - 7 yrs., 6 mo.	17	156	14	74	1	262
7 yrs., 6 mo.- 9 yrs., 11 mo.		21	2	5		28
10 yrs. - 12 yrs., 5 mo.		30		55	35	120
12 yrs., 6 mo. - 14 yrs., 11 mo.	1	6		1	84	92
15 yrs. - 19 yrs., 11 mo.	1	11		1		12
20 yrs. - 24 yrs., 11 mo.		3	4	14	50	71
25 yrs. - 29 yrs., 11 mo.				4		4
30 yrs. - 34 yrs., 11 mo.		2			131	133
35 yrs. - 39 yrs., 11 mo.					45	45
Over 40 years		1				1
"On demand"		15	2			17
All terms	166	1327	118	162	346	2119

* Inclusive.

Banks and trust companies had over two thirds of their loans for terms of less than two years. There were more loans from banks and trust companies in the classification of "less than 1 year" than in any other single group. They made many loans for terms of three, six, and nine months.

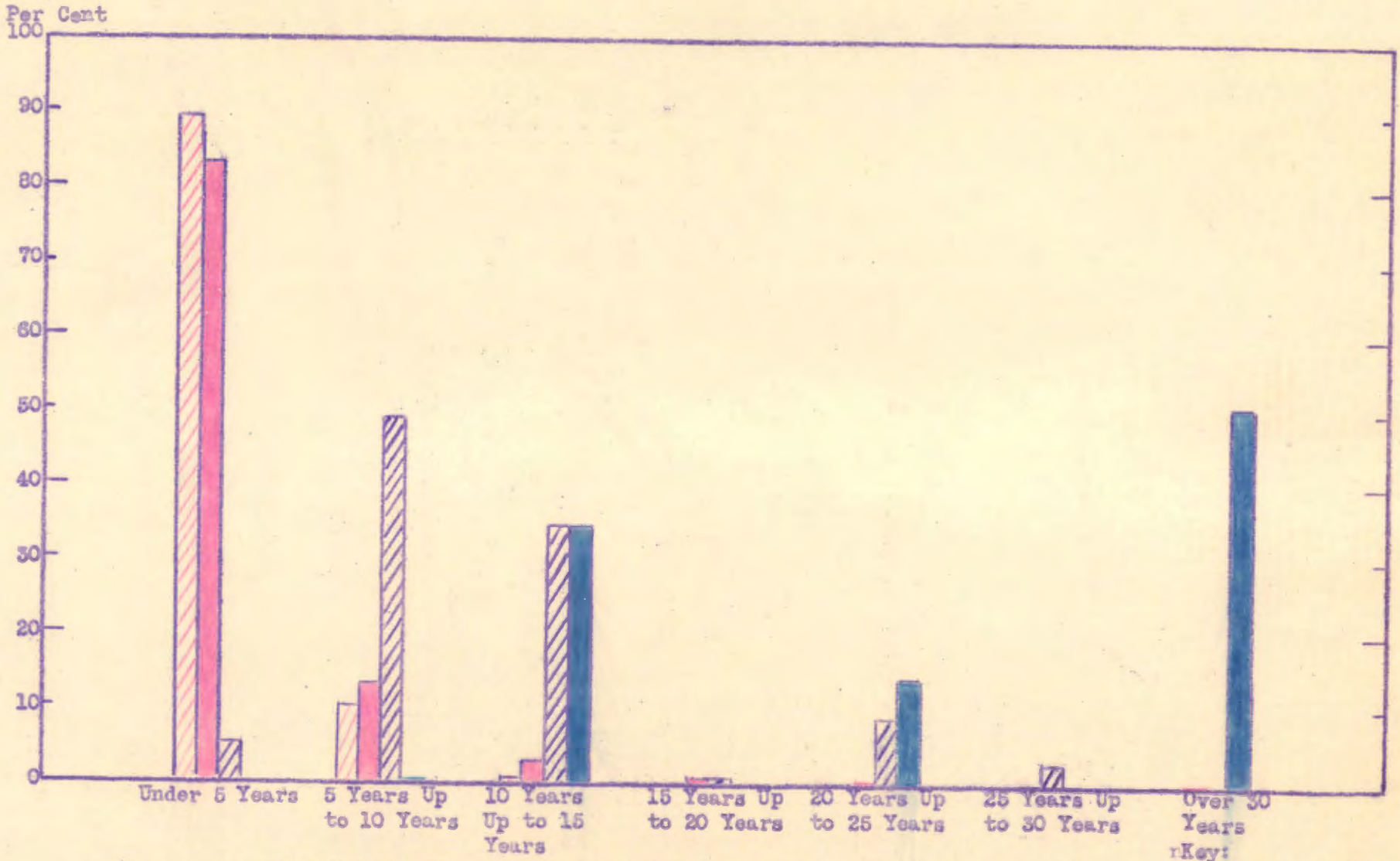

Figure 46. The Distribution of Recorded Outstanding Loans by Term, Per Cent of Total Recordings in Each Group, Williamson County, Tennessee, 1935.

Based on Table L.

Over a third of the loans from individuals were made for a term of about 1 year. Furthermore, over 80 per cent (Table L) of the total number of loans from individuals were for terms of under five year, indicating very definitely that individuals generally do not prefer to make mortgages for long terms. Individuals had the widest range in term, ranging from under one year to over 40 years. There were 15 loans from individuals, or over 1 per cent which were due upon demand.

Insurance companies appeared to have fairly long term mortgages, only 4.9 per cent being made for less than five years. Most of the loans were made at terms of from 5 to 7.5 years and from 10 to 12.5 years. However, there were 18 loans, or over 10 per cent of the total number, for terms of over 20 years.

The Federal land bank had one loan only under 10 years in length. Over half the loans had a term of over 30 years. Most of the remainder had terms of from 10 to 15 years with about 13 years as the most common terms. These loans were Land Bank Commissioner loans. There were also 50 loans of from 20 to 25 years in length.

TABLE L. PERCENTAGE DISTRIBUTION OF RECORDED OUTSTANDING MORTGAGE LOANS AMONG CERTAIN TERM GROUPS, WILLIAMSON COUNTY, TENNESSEE, 1935

Term Groups	Banks and Trust Co.	Individuals	Insurance Companies	Federal Land Bank
Under 5 years	89.2	82.7	4.9	-
5 years up to 10 years	10.2	13.3	48.8	.3
10 years up to 15	.6	2.7	34.6	34.4
15 " " " 20		.8	.6	
20 " " " 25		.2	8.6	14.4
25 " " " 30			2.5	
Over 30 years		.2		50.9

Methods of Payment

The outstanding mortgage loans were classified according to the method of payment provided for in the original mortgage contract. The mortgages in the first group were due in a lump sum at maturity. The mortgages in the second group were made with provisions for partial payments before maturity. The mortgages in the third group were incurred with provisions for amortization by installment payments.

TABLE LI. DISTRIBUTION BY METHODS OF PAYMENT OF ALL RECORDED OUTSTANDING MORTGAGE LOANS IN WILLIAMSON COUNTY, TENNESSEE, 1935

Source	Straight Term, No Sum Payment Until Maturity	Specified Partial Payments During Term	Regular Installments Providing for Amortization	Total
Federal land bank			346	346
Individuals	831	493	3	1327
Insurance companies	82	79	1	162
National and state banks	140	25	1	166
"Other" sources	73	45		118
All sources	1126	642	351	2119

The Federal Land Bank loans were all in the third group. Each of the outstanding mortgage loans in Williamson County from the Federal Land Bank called for installment payments.

Less than 0.3 of one per cent of the individual loans were amortized. Most of them were made payable in one lump sum, although over one third of the mortgage loans from individuals had specified partial payments during the term.

Insurance company loans were about evenly divided between the first two methods of payment, with slightly more single payment loans.

Banks had almost five times more lump sum mortgage contracts than partial payment mortgage contracts and of amortized loans they had only one.

Comparisons With Figures for United States

The distribution of the mortgage loans by length of term was much similar to that found by Wickens for the country as a whole in 1924.(1) The major difference at that time was that 100 per cent of the Federal Land Bank loans were made for a term of over 30 years.

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(1) Wickens, David L., Farm Mortgage Credit, Technical Bulletin 288, United States Department of Agriculture, Bureau of Agricultural Economics, Washington, 1932, p. 77.

CHAPTER XI

MORTGAGE CREDIT - DELINQUENCIES

Duration of Mortgages

By "duration of mortgages" is meant the time between the filing and releasing mf mortgages. It is used in contrast to "term", or the length of time for which the loans were made.

In addition to the method of determining average duration of mortgage loans for a given period by listing all the loans, there are some short-cut methods of determining fairly accurately this average.

Wickens[1] devised two methods for arriving at some estimate of the average number of years mortgaged farms remain under mortgage. By averaging the figures arrived at by the two methods he determined the average term of debt.

The first method consisted of dividing the per cent of farms in a given area that are mortgaged by the per cent of farms becoming mortgaged each year in that area.

The second method consisted of dividing the per cent of farms in a given area that are mortgaged by the per cent of farms being released from mortgage each year in that area. This gives the approximate number of years it would take farmers in a certain section to pay off all their mortgage loans if they continue to pay them off at a certain rate each year.

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(1) Wickens, David L., Farm Mortgage Financing, Technical Bulletin 288, United States Department of Agriculture, Bureau of Agricultural Economics, Washington, D. C., 1932, p. 75.

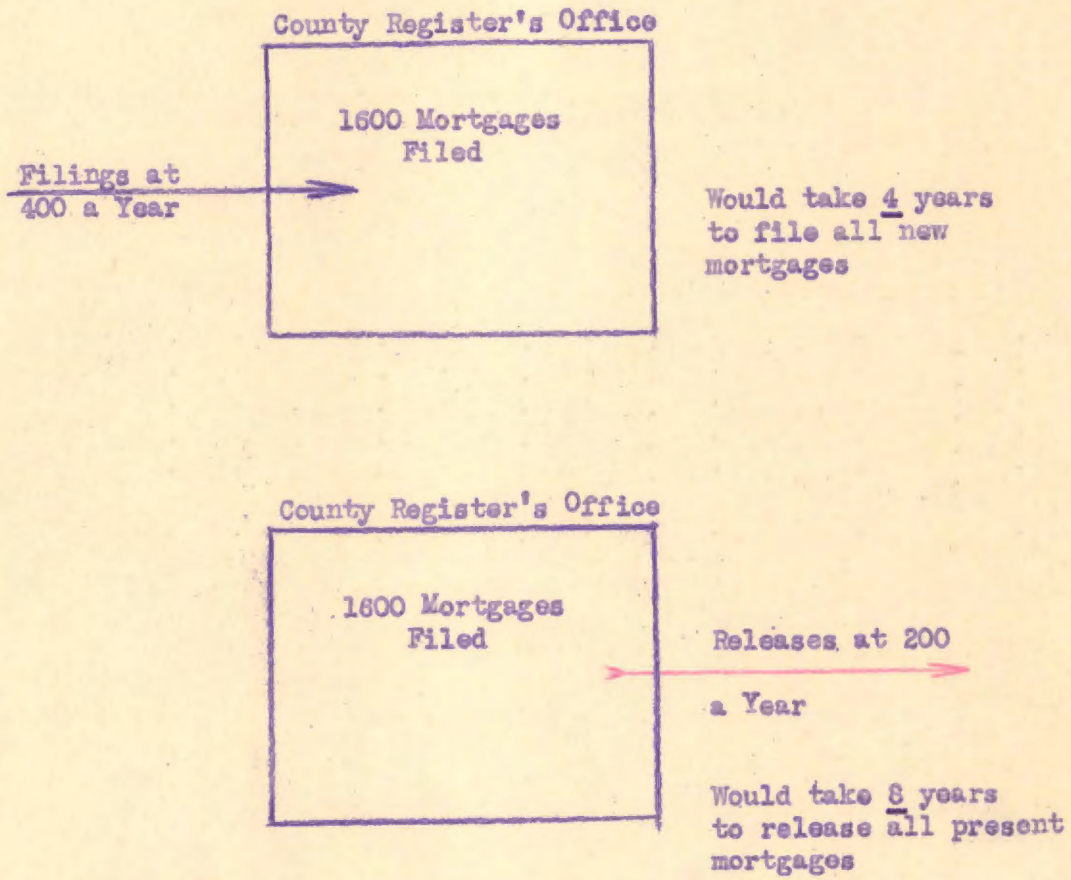
Of the two methods, the second appears to be the better, at least it is more easily understood. However, since farms are becoming mortgaged each year and may become mortgaged more rapidly or less rapidly than they become released from mortgages, the average of both is needed.

TABLE LII. AVERAGE TERM OF DEBT AS DETERMINED BY COMPUTATIONS FROM RATES OF INCURRING AND RELEASING MORTGAGES FOR SELECTED PERIODS, 1917-35, WILLIAMSON COUNTY, TENNESSEE

Date	Rate of Mort-gaging(a)	Per Cent of Farms Mortgaged (b)	Average Years Mort-gaged (c)	Rate of Releas-ing (d)	Average Year Mort-gaged (e)	Average Term of Debt (f)
1917-20	8.7	33.8	3.9	5.3	6.4	5.1
1921-24	6.8	33.8	5.0	4.6	7.3	6.1
1925-28	6.1	44.1	7.2	4.8	9.2	8.2
1929-32	6.0	54.0	9.0	5.0	10.8	9.9
1933-35	5.0	47.7	9.5	5.0	9.5	9.5
Average	6.6	42.7	6.5	5.9	7.2	6.8
	1	2	3	4	5	6

(a) Average number of farms newly mortgaged each year in period as a per cent of all farms as shown by nearest census year.
(b) Per cent of farms having mortgages recorded for nearest census year (Table XVIII).
(c) Column 2 ÷ Column 1.
(d) Average number of farms newly released from mortgages each year in period as a per cent of all farms given for nearest census year.
(e) Column 2 ÷ Column 4.
(f) Average of Columns 5 and 3.

Perhaps a better grasp of the logic of this method can be obtained by looking at Figure 46A. This figure represents a County Register's office where the mortgages are filed. If there are 1600 mortgages on file at the



An average of 4 and 8 indicates the average duration to be about 6 years

Figure 46A. Diagram Illustrating How Rates of Filing and Releasing Can Be Used to Determine Average Duration of Mortgages

end of a given year and there have been 400 newly filed mortgages recorded that year, at that rate it would take 4 years for each mortgage to become released because it would take that long to get a new 1600 recordings at 400 a year.

If there are but 200 releases each year, it is obvious that it would take 8 years for all the 1600 to become released. Consequently an average of 8 and 4 would be 6 or a rough measure of the average duration of the mortgages filed in that office. Wicken's method differs from that of the illustration only in that instead of actual numbers, percentages of the total number of farms in the area are used.

For rates of releasing and filing averages for several years are better than figures for a single year since a single year might be abnormal.

Table LII shows that over the 19-year period considering the per cent of farms mortgaged and the rates at which farms were being mortgaged and released from mortgages, a mortgage loan had an average term of 6.8 years. This is two and a half years longer than the average term for which loans were written (Table XLVII).

The average term of debt as determined by Wickens for the United States for 1925-1928 was 29.6 years or over three times as long as that for Williamson County for that period. The term for the East South Central Region was computed to be 23.0 years.(2) The much longer periods for these

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(2) Ibid., p. 75.

other areas appears to have been due to a much smaller per cent of farms being mortgaged and released from mortgage each year.

Overdue Loans

The fact that the average term of mortgage debt is two and a half years longer than the term for which the loans were written indicates that not all loans are paid at maturity.

Some measure of the delinquency can be obtained by an examination of the date of maturity of all the outstanding loans in the county in 1935. All those whose maturity date was after January 1935 were considered as not overdue. Those whose maturity date was before January 1, 1935, were considered as overdue.

TABLE LIII. RECORDED OUTSTANDING MORTGAGE LOANS FROM DIFFERENT SOURCES, OVERDUE AND NOT OVERDUE, WILLIAMSON COUNTY, AS OF JANUARY 1, 1935

Sources	Overdue	Not Overdue	Total
Federal land bank	0	346	346
Life insurance companies	57	105	162
Individuals	1065	262	1327
Banks	130	36	166
"Other" sources	80	38	118
All sources	1322	787	2119

On this basis almost two-thirds of the loans outstanding in the county in 1935 were overdue. Loans from individuals accounted for a great share of the overdue loans. Over 80 per cent of the real estate mortgage loans from individuals which were outstanding in 1935 were overdue, and

the proportion of mortgage loans from banks which were overdue was equally large.

On the other hand, not one of the Federal land bank loans were overdue, and only about one-third of the loans from life insurance companies were overdue. The longer terms of these two agencies as shown in Table XLVII permit payment of loans at maturity in most cases. It may be significant that the lending agencies having an average term in Table XLVII of less than the average term of debt computed in Table LII are the agencies having such a high per cent of overdue loans in Table LIII.

Some of the loans indicated in Table LIII may have unpaid installments or taxes which would constitute delinquency, but which would not appear on the records.

Overdue Loans by Years. An effort was made to determine whether there were definite trends in delinquency as indicated by overdue loans. The loans were grouped according to the year of maturity date and separated into those released at or before maturity and those not released at maturity. Mortgages from state and national banks and trust companies, and life insurance company loans only, were classified.

The loans from individuals were not classified and studied because of the possibility that in many cases the term was merely nominal. Particularly in the case of loans from relatives and neighbors, neither party may actually anticipate payment at maturity.

In the case of loans from banks a somewhat similar situation may be present. It is possible that many borrowers may contemplate renewal

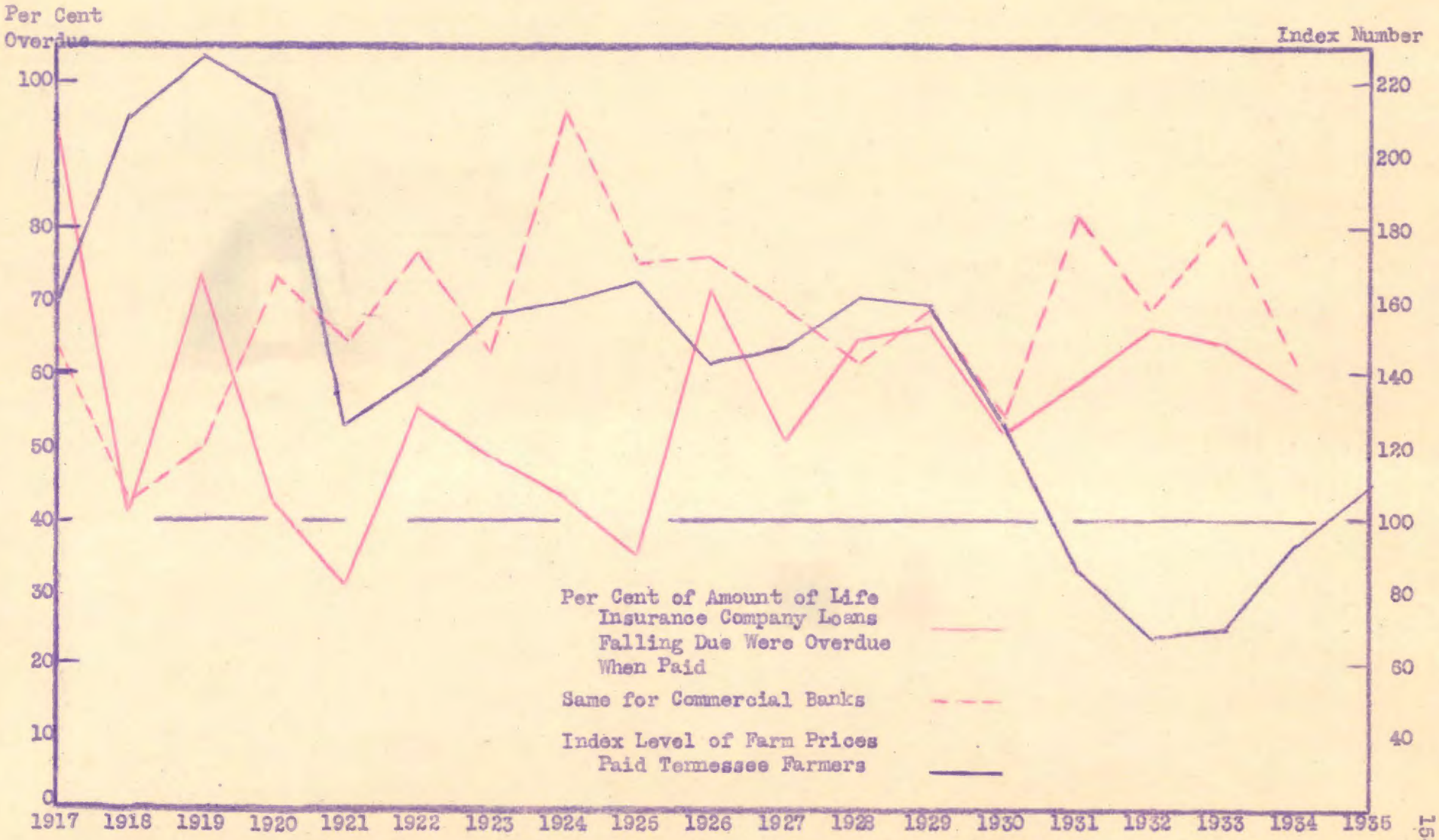

Figure 47. Relation of Prices Paid Tennessee Farmers to the Per Cent of Loans Overdue, All Recorded Life Insurance and Commercial Bank Loans in Williamson County, Tennessee, 1917-35

Based on Table LIV
Index figures from Table XXI

rather than payment at maturity.

TABLE LIV. PER CENT OF LOANS FALLING DUE ANNUALLY WHICH ARE OVERDUE, ALL RECORDED LIFE INSURANCE COMPANY AND COMMERCIAL BANK FARM MORTGAGE LOANS IN WILLIAMSON COUNTY, TENNESSEE, 1917-1935

Date	Life Insurance Companies		Commercial Banks	
	Amount Maturing Yearly	Per Cent of Amount Overdue	Amount Maturing Yearly	Per Cent of Amount Overdue
1917	$106,650	95.8	$38,349	63.7
1918	78,300	40.8	66,047	43.2
1919	87,250	69.3	52,215	80.2
1920	79,100	41.8	79,774	73.7
1921	67,600	31.3	51,680	64.7
1922	83,150	56.2	96,344	76.8
1923	123,900	48.5	83,570	63.0
1924	214,950	43.5	115,932	96.6
1925	298,989	35.6	98,139	75.5
1926	115,100	72.2	140,938	76.4
1927	142,550	51.2	188,950	70.3
1928	218,300	64.7	193,074	62.4
1929	203,450	67.2	222,526	69.1
1930	264,150	53.1	137,527	54.6
1931	169,890	59.4	127,928	82.2
1932	146,650	66.6	103,132	79.4
1933	337,050	64.5	53,759	80.8
1934	141,150	58.2	50,050	61.0
All Years	$2,878,179	56.5	$1,899,934	72.6

For the 18-year period over 72 per cent of the maturing farm mortgage loans from banks were not paid at maturity and over 56 per cent of maturing farm mortgage loans from life insurance companies were not paid at maturity. An attempt has been made in Figure 47 to relate the percentage of overdue loans with the index numbers of farm prices in Tennessee. There

appears to be no close relationship between the price level of farm products and overdue loans, although some association is evident.

The loans from life insurance companies appeared to show a closer relationship between the percentage of overdue loans and the index numbers of farm prices than did the banks. This was particularly noticeable in the period 1922 to 1927. As the index level rose from 1922 to 1925, the percentage maturing life insurance mortgage loans overdue dropped. When the index numbers dropped from 1925 to 1926, the percentage of overdue loans rose from 35.6 to 72.2 per cent. When the Tennessee farm price level rose in 1926 the percentage dropped.

An index number of the purchasing power would probably have been better for such comparisons. Perhaps the ideal comparison would have been an index of purchasing power, or farm prices for Williamson County. Statewide figures cannot accurate depict the situation in individual counties. A livestock area might not feel the effects of a fall in prices so soon as a cash crop area. A drought or other unfavorable conditions may affect only a local area.

We can conclude that the relationship as far as can be observed from Figure 46 is inverse, but only roughly so.

Relation of Term of Mortgages to Delinquency

In order to determine just how long mortgages run, it is necessary to list the individual mortgages and the time between filing and releasing. Mortgage loans of recent years would not have had sufficient time to become released. The loans falling due in 1924-25 were selected because those years were about the earliest years for which there were enough

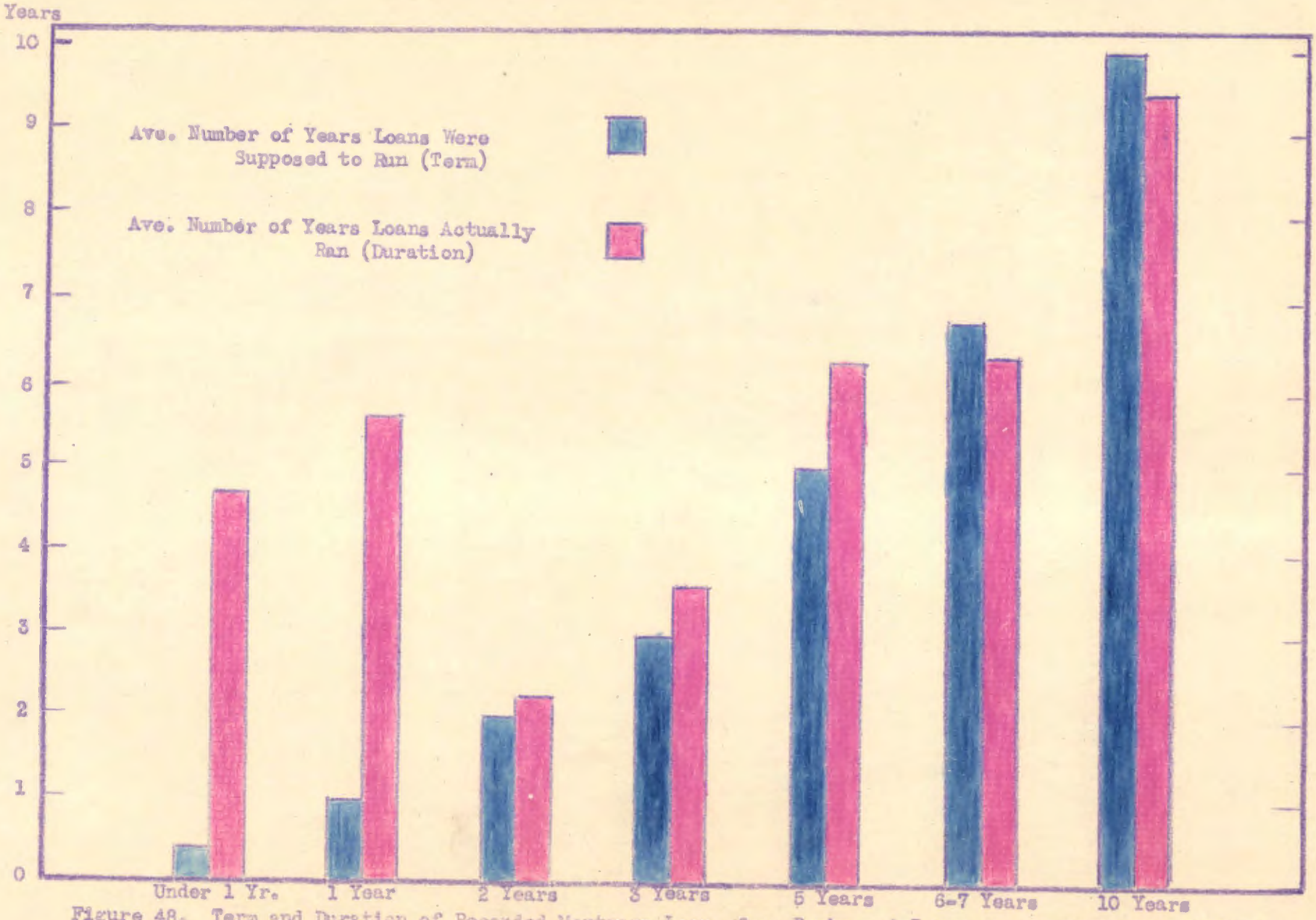

Figure 48. Term and Duration of Recorded Mortgage Loans from Banks and Insurance Companies in Williamson County, Tennessee, Maturing 1924 - 1925
Based on Table LV.

loans for an adequate sample. The analysis was restricted to commercial bank and life insurance company loans for the same reasons as pointed out in connection with the last section.

TABLE LV. TERM AND DURATION OF RECORDED MORTGAGE LOANS FROM BANKS AND INSURANCE COMPANIES IN WILLIAMSON COUNTY, TENNESSEE, MATURING 1924-1925.

Term Group	Number	Term Yrs.	Term Mos.	Duration Yrs.	Duration Mos.	Per Cent that Duration Is of Term
Under 1 year	32		5	4	6	1080.
1 year	29	1		5	7	558.3
2 years	3	2		2	3	112.5
3 years	16	3		3	7	119.4
5 years	61	5		6	3	125.0
6 & 7 years	7	6	9	6	4	93.8
10 years	7	10		9	6	95.0
All loans	155	3	4	5	7	167.5

A number of very significant comparisons present themselves in Table LV and Figure 48. Mortgages made out for terms of less than a year actually ran over ten times as long as they were written for. These mortgages, most of which were originally made out for three month, six month, and nine month terms, actually ran from 1 month to over 12 years, 9 of the 32 loans running for over 10 years.

Mortgages made out to run for a 1-year term were on the record over 5 and a half years before releasing. The actual time between filing and releasing for mortgages of 2, 3, and 5 year terms was somewhat greater than the term for which the mortgages were incurred, but the difference was not nearly so pronounced as in the case of loans written

for 1 year or less.

According to Table LII the computed average term of mortgage debt in Williamson County, Tennessee, is 6.8 years. Perhaps it is more than coincidence that mortgages with 6 to 7 year terms and 10 year terms ran on the average for slightly less than the instrument called for whereas mortgages written for terms shorter than these ran for longer than the instrument called for.

For all the loans from these two lending agencies which matured during this two year period the "duration", or length of time the loans ran, was 167.5 per cent or over half again as long as the time for which they were written.

In arriving at conclusions from the figures in Table LV, it must be borne in mind the two lending agencies represented are unequally represented as to the number of loans in the different term groups. All the loans for 1 year or less were by banks, while practically all the other loans were from insurance companies. This is particularly important because of different attitudes towards maturing loans by the various lending agencies. Table LIV shows that the agencies varied as to per cent of overdue loans, and also that there were variations from year to year. One reason for the long duration of loans for one year or less may have been a leniency on the part of banks and frequent renewals of the mortgage loans. Also the year 1925 had a high per cent of overdue loans (Table LIV).

Definite evidence that this was probably an important explanation for the longer duration of bank loans is found in the fact that such great discrepency between terms and duration did not occur in bank loans falling due in 1933-34. In the 30's banks had to be much more strict than they had been in the past and endeavored to avoid frozen assets as much as possible. But even during this period the duration of bank loans for terms of 1 year or less was over twice the term. Loans under one year had an average term of 5 months and a duration of 13 months, loans for 1 year had an average term of 13 months and duration of 26 months.

TABLE LVI. ACTUAL DURATION OF MORTGAGE LOANS BY VARYING ORIGINAL TERMS, RECORDED MORTGAGES FROM BANKS AND INSURANCE COMPANIES OF WILLIAMSON COUNTY, TENNESSEE, MATURING 1924-25

Original Term	Actual Duration — Per Cent of Total Mortgage Amount Paid by									Unpaid June 1, 1935
	1 Year	* 2 Years	3 Years	5 Years	7.5 Years	10 Years	12.5 Years	15 Years	20 Years	
Less than 1 year	11.9	58.1	58.8	67.0	83.7	84.5	-	-	-	14.8
1 year	7.2	12.5	33.2	36.7	43.6	63.5	65.6	-	-	54.4
2 years	0	37.5	87.5	100.0	100.0	100.0	100.0	-	-	-
3 years	13.9	23.2	46.3	53.5	80.7	80.7	80.7	-	-	19.3
All loans under 5 years	9.8	30.2	43.7	54.0	68.4	76.6	77.4	-	-	22.6
5 years	1.5	6.4	13.4	58.2	68.3	77.9	98.6	98.6	-	1.4
6-7 years	0	0	23.3	23.3	86.7	86.7	86.7	100.0	-	-
10 years	0	0	9.8	9.8	9.8	77.3	77.3	98.1	100.0	-
All loans over 5 yrs.	1.3	5.3	14.0	51.2	65.1	78.6	78.6	98.7	98.9	1.1
All loans	4.0	13.4	23.6	52.1	66.2	77.9	-	-	-	8.1

* Only 3 loans.

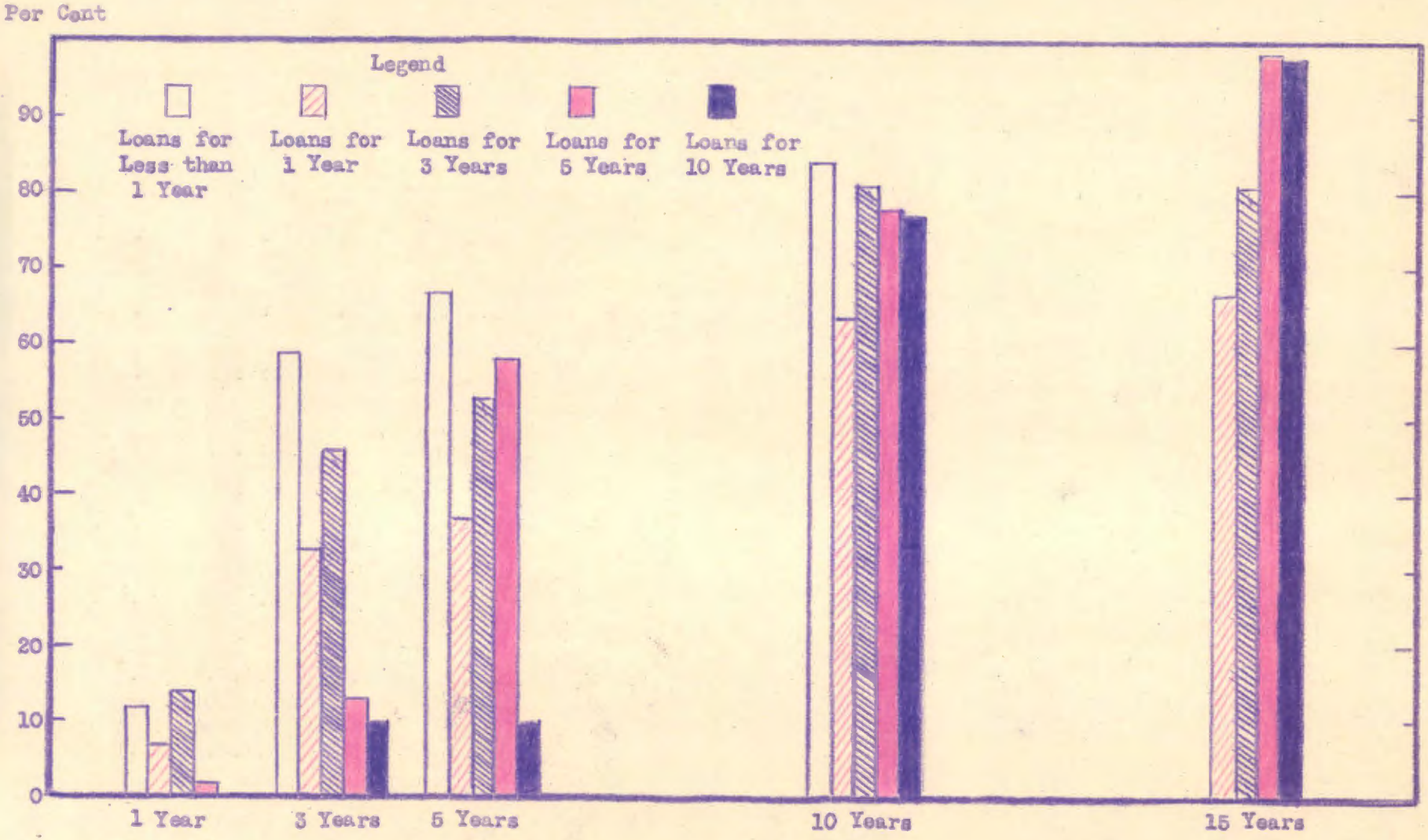

Figure 49. Per Cent That Payments Are of Total Amount of Mortgage Loans After Certain Lengths of Time, by Term of Loans, Recorded Mortgages from Banks and Insurance Companies in Williamson County, Tennessee, Maturing 1924-25

Based on Table LVI.

These averages are useful in analyzing the loan experience for a number of loans, but they do not show the range in payment dates. To show how rapidly loans were repaid the loans were tabulated. Intervals were selected in the "duration" of mortgages and the individual mortgages were listed by term under the proper interval column. When the columns were added, they were added cumulatively so that the totals of the previous columns were included.

From these tabulations some significant figures appear. Although all the loans from these two sources had an average term of 3 years, 4 months, and an average duration of 5 years, 7 months (Table LV), yet at the end of 5 years, only 52.1 per cent (Table LVI) of the total amount had been released. At the end of 10 years, or three times the length of the average term, only 77.9 per cent of the amount had been paid.

Loans with terms of less than 5 years (Table LVI) had only 54.0 per cent of the amount paid at the end of 5 years. Loans for less than a year, largely with 3, 6, and 9 month terms, had only 11.9 per cent paid at the end of 1 year. By the end of two years only 58.1 per cent had been paid, at 5 years 67.0 per cent, and 10 years, 84.5 per cent. These loans, averaging only 5 months in term, although written to mature in 1924-1925, were many of them not yet released in 1935 when 14.8 per cent of their amount had not been paid.

Loans written for 1 year term were only paid at maturity to the extent of 7.2 per cent of the amount. After 10 years, or 10 times as

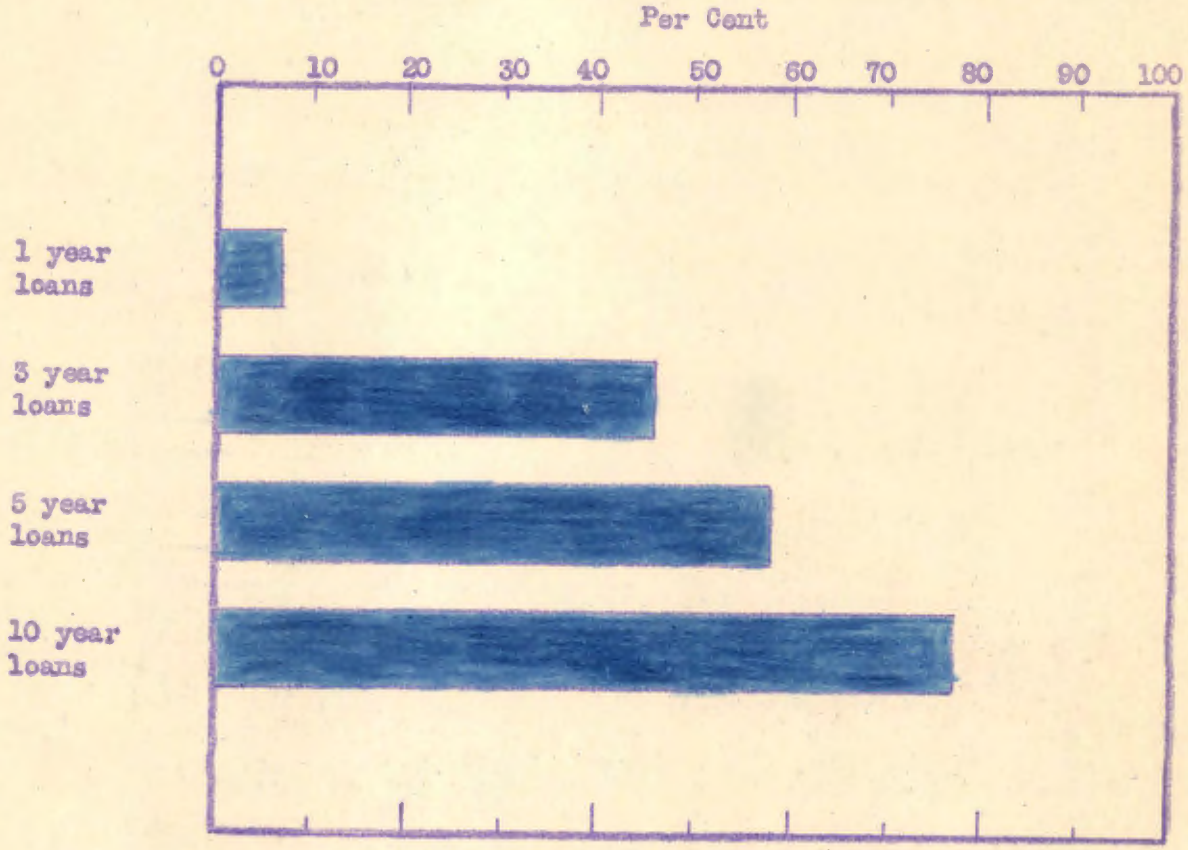

Figure 50. The Per Cent of Amount Due Paid by Maturity, for Selected Terms of Loans, Williamson County, Tennessee, Bank and Insurance Company Loans Recorded As Due in 1924-25

Based on Table LVI

long as the term contracted for, only 63.5 per cent of the amount had been paid. Over 34 per cent of the amount of 1 year loans due in 1924-1925 had not yet been paid June 1, 1935. Consequently the average duration for Table LV might be somewhat longer.

The proportion of amount of loans paid at maturity varied directly with the term as is shown in Figure 50. Three year loans had 46.3 per cent of their amount paid at maturity, a much larger proportion than loans for shorter terms. Five year loans had 58.2 per cent of total amount paid after five years, and 10 year loans had 77.3 per cent of total paid by 10 years.

CHAPTER XII

MORTGAGE CREDIT - FORECLOSURES

Relation of Foreclosures to Farm Prices

It has been pointed out (page 77) that there appears to be a distinct relationship between the price level of farm products and the amount of mortgages filed. There also appears to be a distinct, inverse relationship between the price level of farm products and the number and amount

TABLE LVII. MORTGAGES EXTINGUISHED BY FORECLOSURES, IN WILLIAMSON COUNTY, TENNESSEE, 1917 - 1935

Year	Number	Consideration	Index No.* of Tennessee Farm Prices	Acreage	Amount per Acre
1917	5	$3,960	160.0	828	$4.78
1918	2	311	215.7	88	3.53
1919	3	1,500	227.7	120	12.50
1920	4	3,850	216.3	568	6.78
1921	11	35,396	127.7	1,034	34.23
1922	3	22,400	139.4	806	27.79
1923	12	17,359	156.6	965	17.99
1924	10	19,474	160.0	807	24.13
1925	13	35,106	164.8	1,420	24.72
1926	16	64,398	142.8	2,177	29.58
1927	26	136,509	147.1	4,251	32.11
1928	28	107,722	161.1	3,383	31.84
1929	28	88,671	159.4	4,148	21.38
1930	12	43,122	128.4	1,756	24.56
1931	19	79,198	87.4	2,600	30.46
1932	32	131,550	63.8	4,153	31.83
1933	28	152,974	70.4	3,584	42.68
1934	22	107,863	92.9	3,261	33.08
1935	19	104,003	109.3	2,586	40.22

* Allred, Atkins, and Smith, Prices Paid Producers of Farm Products, Tennessee, 1866-1935, Agr. Experiment Station, Univ. of Tennessee, Knoxville, 1936, p. 162.

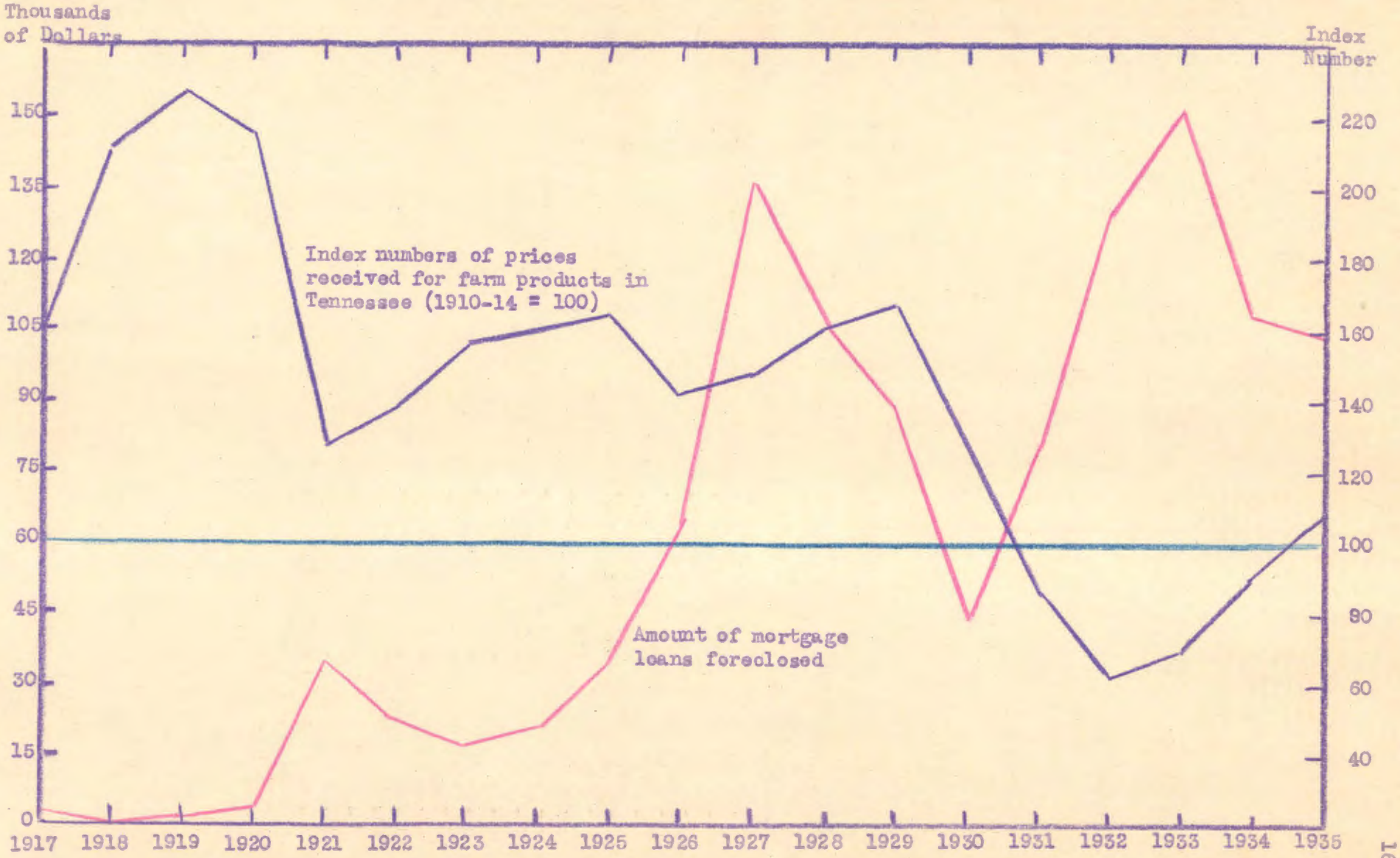

Figure 51. Relation Between Amount of Mortgage Loans Foreclosed and the Price Level of Tennessee Farm Products, 1917-1935

Based on Table LVII

of mortgages foreclosed. From 1917 to 1920 when farm prices were at a peak, foreclosures were negligible. Agricultural income was high during this World War period and mortgage obligations were comparatively easy to meet. The fall of prices in 1921 was accompanied by an increase in foreclosures. From 1921 to 1925 the price level of farm products rose slightly and foreclosures decreased slightly. However, a small decrease in farm prices after 1925 was accompanied by a very great increase in foreclosures. A number of factors may have entered into this situation.

For one thing farm prices, although above pre-war levels, were not so far above pre-war levels as were the prices of products farmers had to buy. Thus, farmers found it extremely difficult to meet payments on obligations contracted during the period of inflated values, from 1917-1920. An increase in farm prices in 1929 was followed by a bettering of the mortgage foreclosure conditions. By 1931, however, the prices that farmers received from their products were declining rapidly, one result of which was a great increase in the number and amount of foreclosures recorded. The low point of farm prices in Tennessee was reached in 1932, but the peak of foreclosure amounts was in 1933.

An interesting comparison is the peak of prices with peak of foreclosures. In 1919 prices were 227.7 per cent of pre-war. In that year there were but 3 foreclosures and the mortgages involved in the foreclosure actions amounted to only $1500. In 1933 prices were only 70.4 per cent of pre-war, less than a third as high as 1919. In 1933 there were 28 foreclosures or more than 9 times as many as in 1919. Moreover, the amount

involved in 1933 was over 100 times as much as in 1919.

Foreclosures by Lending Agencies

Over the 19-year period 1917-1935, the average outstanding mortgage debt in Williamson County was $4,665,103 (based on Table XVI). During this period the amount of foreclosed loans averaged $60,081 per year, or 1.75 per cent of the outstanding mortgage debt each year.

Expressed in another way, the total foreclosure amount of $1,155,366 during the 19-year period was 6.95 per cent of the amount of loans newly filed in the county from 1917 to 1935.

This proportion varied considerably among the different credit agencies. Life insurance companies had the highest proportion; they foreclosed a sixth as much mortgage debt as they wrote during the period.

TABLE LVIII. PER CENT THAT FORECLOSURES ARE OF LOANS RECORDED, BY SOURCE, 19-YEAR PERIOD 1917-1935, WILLIAMSON COUNTY, TENNESSEE

Source	Total Filings Recorded	Total Foreclosures Recorded	Per Cent
Life insurance company	$3,944,262	$645,040	16.35
National and state banks	2,010,227	212,989	10.60
Federal Land Bank	1,211,301	46,700	3.85
Individuals	8,564,023	210,054	2.45
All sources	$16,662,049	$1,155,366	6.95

State and national banks and trust companies foreclosed mortgage loans valued at over one-tenth of the value of all loans they made during the period. Individuals and the Federal Land Bank had smaller ratios of

of foreclosed loans to recorded loans.

On the basis of Table LIX it appears that individuals had the lowest per cent of number of outstanding loans foreclosed. However, the Federal Land Bank had no foreclosures during 15 of the 19 years and if all years were considered the per cent would be much lower.

Insurance companies had the highest proportion of outstanding loans foreclosed. There were foreclosures by insurance companies in 14 of the 19 years. For the 14 years in which there were foreclosures, there were 2.02 per cent as many loans foreclosed as there were outstanding.

It is possible that insurance companies may be less lenient than some of the other lending agencies.

TABLE LIX. COMPARISONS OF FORECLOSED MORTGAGE LOANS WITH ALL OUTSTANDING MORTGAGE LOANS, 1917-1935, WILLIAMSON COUNTY, TENNESSEE

Source	No. Years Having Foreclosures	Average of Years with Foreclosures					
		Ave. No. Foreclosed Loans	Pct. Foreclosed Loans Are of Outst.	Average Size of Foreclosed Loans	Ave. Size of Outstanding Loans	Ave. Debt per Acre Foreclosed Loan	Ave. Debt per Acre Outst. Loan
Insurance co.	14	5.0	2.02	$9,085	$6,264	$44.74	$34.38
National and state banks	15	3.8	1.84	3,737	2,485	27.36	18.44
Individuals	19	7.4	.62	1,490	1,881	16.62	21.22
Federal Land Bank	4	1.7	1.29	6,671	3,120	27.55	20.11

Figure 52 shows a comparison of the average size of loan on foreclosed and all outstanding loans. The greatest difference appears in the

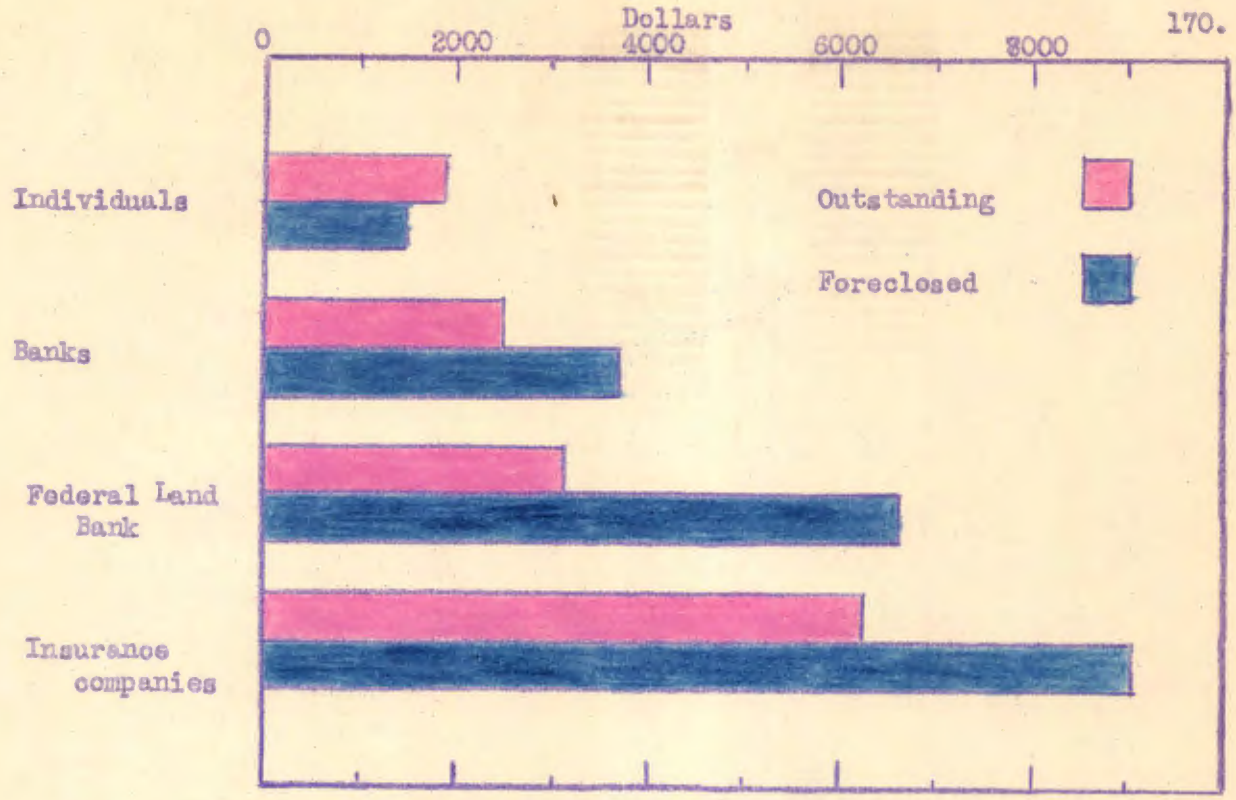

Figure 52. Average Size of Mortgage Loans, Foreclosed Loans, and Outstanding Loans, Williamson County, Tennessee, 1917-35

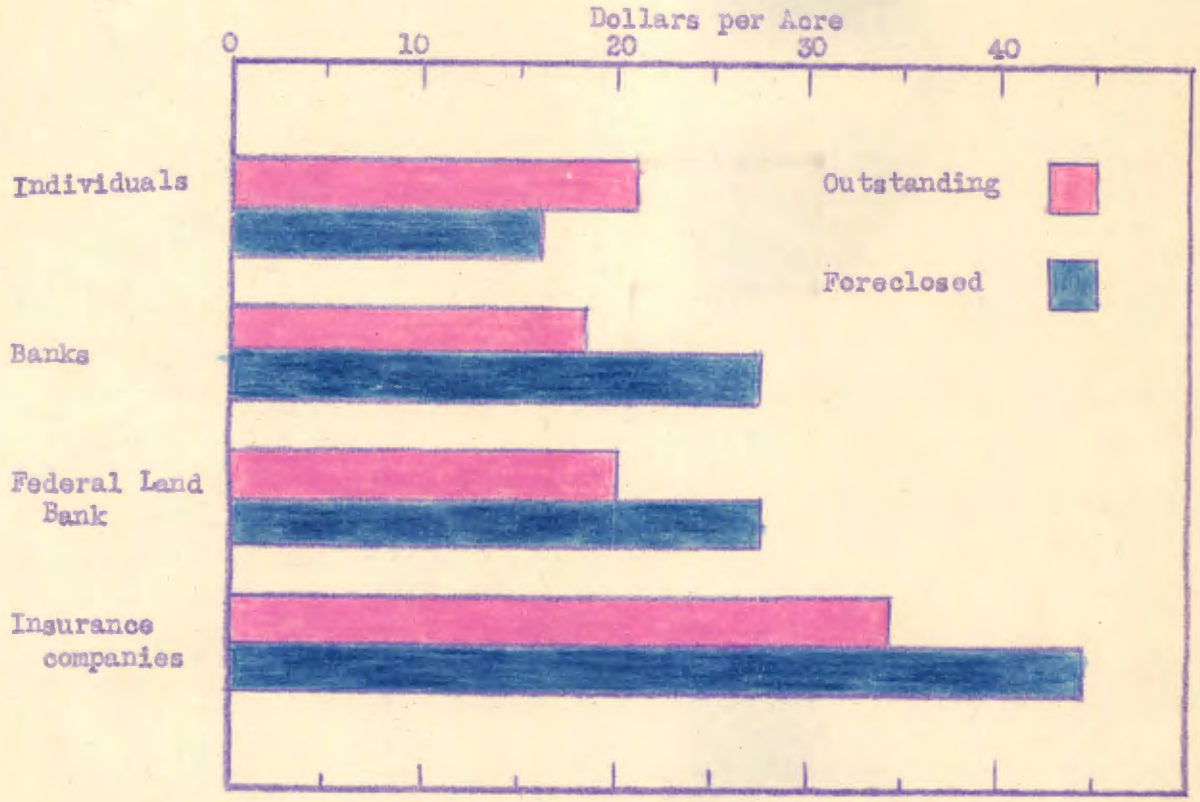

Figure 53. Average Amount of Mortgage Debt per Acre, Foreclosed Loans and Outstanding Loans, Williamson County, Tennessee, 1917 - 1935

Federal Land Bank loans, where the average size of foreclosed loan is over twice the average size of all loans. However there were only 7 foreclosures by the Federal Land Bank during the entire period, so that conclusions must be limited.

For the loans from insurance companies and banks, the average foreclosed loans were about a third larger than the average for outstanding loans.

Individuals differed from the other lending agencies in that the average size of foreclosed loan was smaller than the average size of outstanding loans.

This was also true for the average debt per acre as shown in Figure 53. Individuals were the only agency for which the average debt per acre of foreclosed loans was less than the average debt per acre of outstanding loans.

The relative difference between foreclosed loans and all loans was more apparent in the size of mortgage than in the average debt per acre. The larger acreage of foreclosed farms accounts for this.

The difference in size of farms was most apparent in the case of Federal Land Bank loans where the foreclosed farms averaged 242 acres as compared with a 155 acre average on farms having loans outstanding in the years when foreclosures occurred.

Farms with insurance company loans averaged 182.2 acres while farms with loans foreclosed by insurance companies averaged 203 acres. The difference in size was less apparent in the case of banks, 136.5 acres

for foreclosed and 134.7 acres for outstanding loans. For individuals it was 89.6 acres for foreclosed and 88.6 acres for outstanding loans.

It appears that for all lending agencies but individuals, overvaluation may be a contributing factor in foreclosures. The evidence seems to also indicate that it is the large farms that have more difficulty in carrying high mortgage indebtedness. Part of this may be due to a greater incentive for the mortgagee to foreclose on a larger farm.

It was pointed out on page that individuals made loans on the smaller, less valuable farms than the large corporate lending agencies. This may account for the fact that individuals do not show the same relation between outstanding and foreclosed loans as the other lending agencies. Individuals may loan on poorer land and smaller farms than other credit agencies. Financial difficulties arising out of inadequate resources in such cases could account for the lower values and acreages of loans from individuals.

Real Estate Transfers by Foreclosures

An analysis of the records of real estate transfers recorded in Williamson County shows that from 1926 to 1933, 130 transfers of equity in farm real estate by foreclosure action were recorded. These transfers were largely made as a result of public auctions of the foreclosed property. The consideration paid for the property averaged $4,288. This was considerably higher than the average of $2,883 of voluntary transfers for which true consideration was given during the same period.

The average acreage on the farms transferred by foreclosure was much larger than the average acreage of farms transferred by voluntary

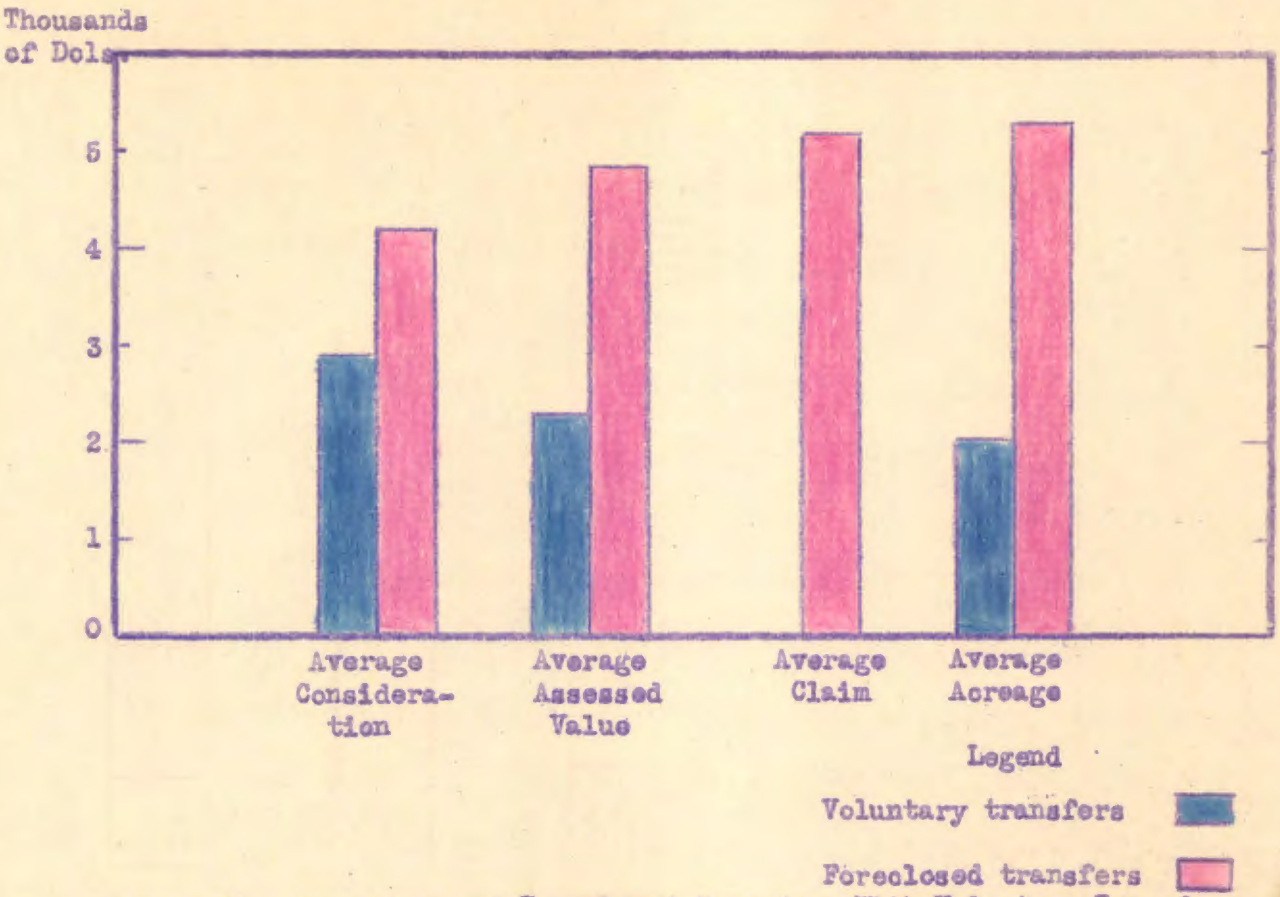

Figure 54. Comparison of Foreclosed Transfers With Voluntary Transfers, Williamson County, Tenn., 1926-33

Based on Table LX

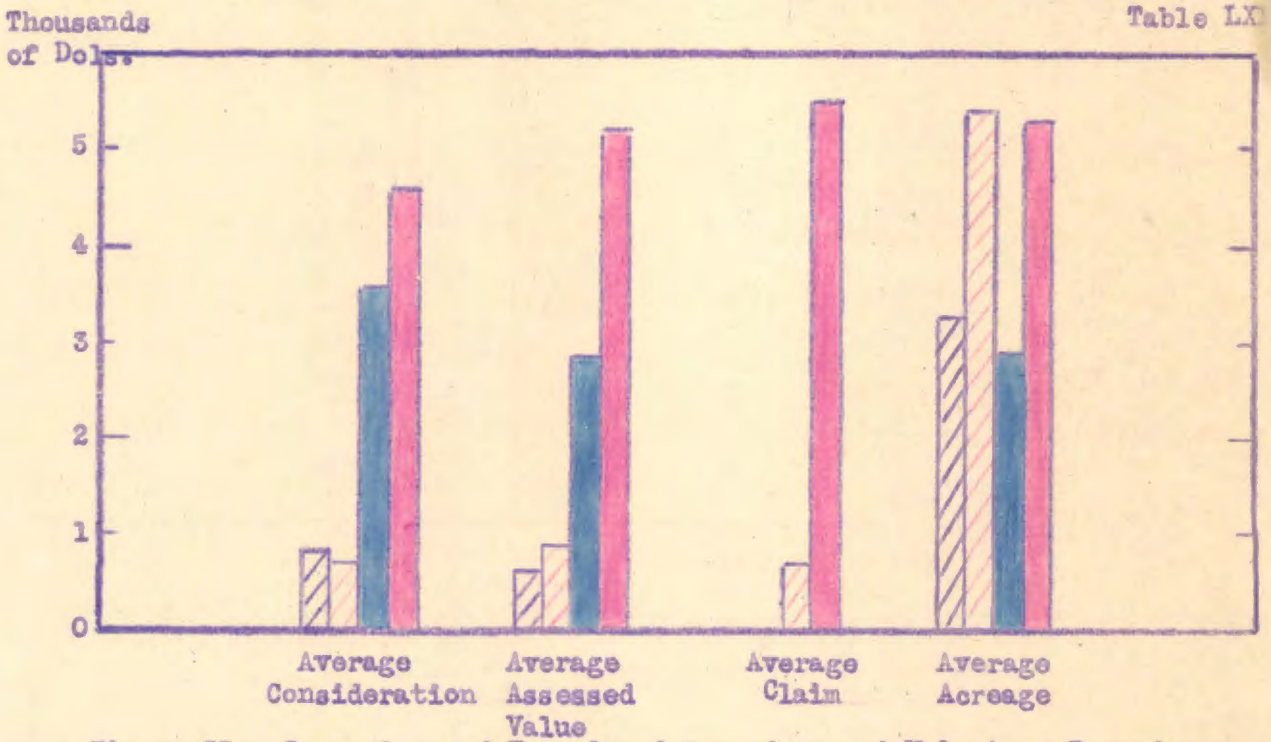

Figure 55. Comparison of Foreclosed Transfers and Voluntary Transfers Recorded in Williamson County, Tennessee, 1926-33, by Regions

Voluntary Transfers

C. D. 1 and 2 Other C.D.

Foreclosed Transfers

C.D. 1 and 2 Other C.D.

transactions (Figure 54). However, the amount paid per acre was somewhat less on the foreclosed farms than on the voluntarily transferred farms.

TABLE LX. A COMPARISON OF FORECLOSURE TRANSFERS WITH VOLUNTARY TRANSFERS RECORDED IN WILLIAMSON COUNTY, TENNESSEE, 1926 - 1933

Group of Transfers	Ave. Amount of Consideration	Ave. Acreage per Farm	Average Consideration per Acre	Average Claim per Farm *	Per Cent Ave. Consideration Is of Ave. Claim	Per Cent Consideration Is of Assessed Value
Foreclosures - co.	$4,288	132	$32.38	$5,219	82	88
C.D. 1 and 2	729	135	5.40	701	104	84
C.D. 3 - 23	4,552	132	34.43	5,497	83	88
Voluntary - county	2,883	76	38.06	-	-	127
C.D. 1 and 2	849	83	10.21	-	-	150
C.D. 3 - 23	3,615	73	49.46	-	-	125

* Not given for all foreclosure transfers. Average of 88 transfers for which information on mortgage claim was given.

The lower consideration per acre was probably due to the forced nature of the sale, rather than to a lower value of the property. Such a statement is based on the fact that although voluntarily transferred properties sold for 27 per cent above their assessed valuations, foreclosed properties brought only 88 per cent of their assessed valuations.

Consequently, it appears that the farms transferred by foreclosure were not only larger but also worth more per acre. Reason for this may lie in the fact that in general the poorer farms are less likely to become mortgaged, while the more valuable farms becomse of their higher investment may be more likely to become mortgaged (Chapter XIII, Table LXIII).

It was stated in the previous section that overvaluation may be an important factor accounting for foreclosures. Some evidence of this may be seen in Table LX. The average claim against the property was not only greater than the consideration paid for the property, but also greater than the assessed valuation of the property (Figure 54). However, if the transfers had not been forced sales and had brought the same proportion of assessed valuation as the voluntary sales, the consideration paid would probably have been adequate to meet the claims.

Of more than passing significance are the differences in the transfers of the Highland Rim and Central Basin Civil Districts. The foreclosure transfers on the Highland Rim (Civil Districts 1 and 2) were less than the voluntary transfers, notwithstanding the fact that the tracts foreclosed were considerably larger than those voluntarily transferred (Figure 55). The amount of consideration per acre of the foreclosed transfers was only about half the amount per acre of the voluntary transfers. The difference between what the land brings under forced sale and under a normal sale is much more pronounced in the Highland Rim civil districts than in the rest of the county. The consideration paid in Civil Districts 1 and 2 was 84 per cent of assessed value for foreclosure sales and 150 per cent of assessed value for voluntary sales. It appears that, if the land was assessed at a fair value, the amount paid in the case of voluntary sales was out of proportion to the actual value of the land.

The lenders were more conservative in making loans in the Highland Rim civil districts, however. The amount of claim was less than the amount received from foreclosure sales, indicating that mortgagees had been able to "bale out" even at the low prices brought at such sales.

CHAPTER XIII

MORTGAGE CREDIT AND LAND TRANSFERS

Analysis was made of data on real estate transfers collected in 1934 by the Tennessee Agricultural Experiment Station in cooperation with the Federal Civil Works Administration. Information concerning individual transfers of real estate was taken from the records of county clerks in the different counties studied, one of which was Williamson County.

Transfer records for all years were used. Only voluntary sales for which the true consideration was shown were considered. Also transfers of less than fee simple were excluded. Because of the lag between the date of transfer and the date of filing it is not possible to say accurately for what period the transfers were made. In Williamson County the date of filing went back only to 1926, but many transactions were recorded which had occurred several years previous.

Financial Arrangements of Transfers

There were records of 1096 voluntary transfers of fee simple recorded between 1926 and 1933. Of this number 25.6 per cent had first mortgages and 3.0 per cent had second mortgages in connection with the transfer of property.

Mortgages accounted for 29.4 per cent of the total consideration paid for these farms (Table LXI). The average size of the 281 first

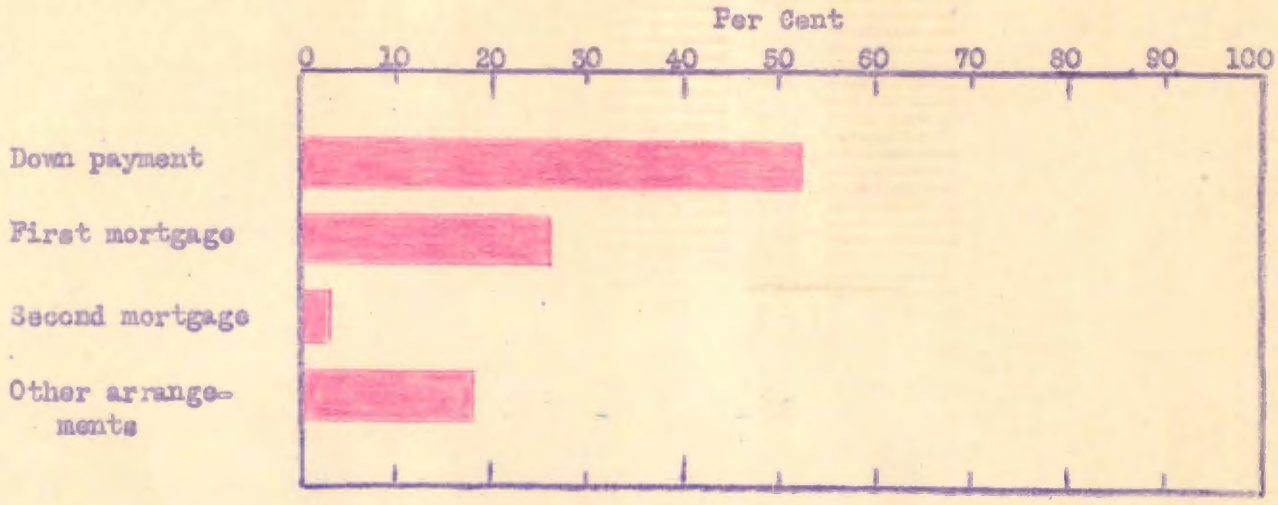

Figure 56. Percentage of Total Consideration for Farm Real Estate Sold Represented by Specified Financial Arrangements, Williamson County Recordings, 1926 - 1933

Based on Table LXI

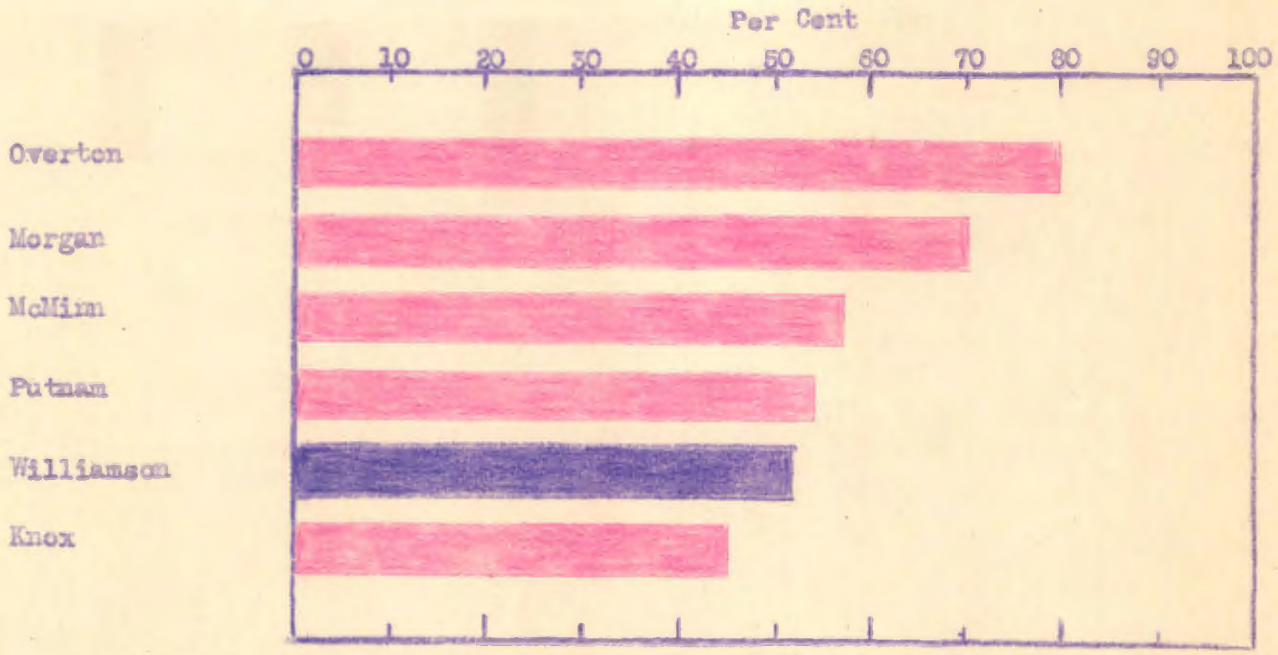

Figure 57. A Comparison of the Per Cent of Total Consideration in Down Payment in Williamson County (1926-1933) With Other Selected Counties of Tennessee (1930-1933)

Based on Table LXII

mortgages was $2980 and of the 33 second mortgages, $2,800. The total consideration paid, $3,160,193 or an average of $2,883 per farm, was distributed as follows among the different financial arrangements: 52.3 per cent for down payment, 26.5 for first mortgage, 2.9 for second mortgage, and 18.3 per cent for other arrangements, as shown in Figure 56. Most of the "other arrangements" consisted of notes, varying from small monthly payments to large amounts. Some notes were given for amounts above $1,000. The practice of giving personal notes was more prevalent than the practice of giving mortgages, notes being given in 34.8 per cent of the transfers. However, the average size of notes were smaller.

TABLE LXI. DISTRIBUTION OF CONSIDERATION BY SPECIFIED FINANCIAL ARRANGEMENTS, 1096 RECORDED REAL ESTATE TRANSFERS OF WILLIAMSON COUNTY, TENNESSEE, FILED 1926-1933

Arrangements	Consideration	Per Cent of Total	Number Having	Per Cent Having	Average * Size
Down payment	$1,652,985	52.3	1,018	92.9	$1,624
First mortgage	837,450	26.5	281	25.6	2,980
Second mortgage	92,404	2.9	33	3.0	2,800
Other arrangements	577,374	18.3	383	34.9	1,507
Total all transfers	$3,160,193	100.0	1,096	-	$2,883

* Based on number having, not total number.

There were a few, 7.1 per cent, of the transactions in which no down payment at all was made, the full purchase price being made with mortgages or notes.

Comparisons With Other Counties

It might be well to compare the financial arrangements accompanying transfers in Williamson County with those accompanying transfers in other counties of the state. Although a different period was used some comparisons can be obtained from the counties studied by Marshall in his study of land transfers.(1)

TABLE LXII. PERCENTAGE OF TOTAL CONSIDERATION FOR FARM REAL ESTATE SOLD REPRESENTED BY SPECIFIED FINANCIAL ARRANGEMENTS, SIX TENNESSEE COUNTIES, 1930-33

County	Down Payment	First Mortgage	Second Mortgage	Other Arrangements
Knox	45.2	44.0	7.6	3.2
McMinn	57.3	39.3	3.4	0
Morgan	70.0	8.3	9.0	15.7
Overton	79.5	9.8	3.0	7.7
Putnam	54.4	41.5	2.3	1.4
Williamson *	52.3	26.5	2.9	18.3

*Williamson County transfers recorded from 1926-1933.

Source: Allred and Marshall, Farm Land Values and Transfers, Agricultural Experiment Station, University of Tennessee, 1935, pp. 63-70.

Even considering that difference in period there are some rather significant comparisons in Figure 57 and Table LXII. It appears that in the poorer agricultural areas a larger proportion of the total consideration is paid as cash, and conversely that more credit is used in connection with transfers in the better agricultural counties.

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(1) Allred and Marshall, Farm Land Values and Transfers, Agricultural Experiment Station, University of Tennessee, 1935, pp. 63-70.

Knox County is largely urban and that fact might have an important bearing on the financial stipulations of real estate transactions. Except for Knox County, Williamson was lowest in the per cent that down payment was of total consideration. Other arrangements, which were in most cases notes, were more important in Williamson County than in any other.

Comparisons of Different Regions Within the County

In order to see there is a relation between the value of agricultural land and the amount of credit used in connection with its transfer, the Highland Rim civil districts were separated from the rest of the county. In Table LXIII the value per acre and financial arrangements of the divisions are shown.

TABLE LXIII. FINANCIAL ARRANGEMENTS IN SELECTED AREAS OF WILLIAMSON COUNTY, TENNESSEE, TRANSFERS RECORDED 1926-1933

Financial Arrangements	Civil Districts 1 and 2	Civil Districts 3-23	Williamson Co.
Transfer value per acre-dollars	$ 10.21	$ 49.46	$ 38.06
Per cent of total consideration in:			
Down payment	60.4	51.6	52.3
Mortgages	16.1	30.5	29.4
2nd mortgage	1.4	3.0	2.9
"Other arrangements"	23.5	17.8	18.3

The transfers of the Highland Rim portion of the county were made for an average consideration of $10.21 per acre. Such transfers were paid for in cash to the extent of 60.4 per cent of the total amount.

Mortgages comprised 16.1 per cent of the total and other arrangements 23.5 per cent.

In contrast to these figures the Central Basin civil districts, which averaged $49.46 in transfer value, had only 51.6 per cent paid as down payment. The per cent of consideration in mortgages was 30.5 or nearly twice as high as in the Highland Rim civil districts. Perhaps

TABLE LXIV. RELATION OF TRANSFER PRICE PER ACRE AND SPECIFIED FINANCIAL ARRANGEMENTS, BY CIVIL DISTRICTS, REAL ESTATE TRANSFERS RECORDED FROM 1926 TO 1933, WILLIAMSON COUNTY, TENNESSEE

Civil District	Value per Acre	Per Cent of Total Consideration in			
		Down Payments	1st and 2nd Mortgages	2nd Mortgages	Other
1	$8.59	55.4	14.5	0.7	30.1
2	14.18	67.6	18.7	2.5	13.7
3	20.68	60.3	21.2	0.6	18.5
17	22.16	39.7	31.3	-	30.0
19	22.30	36.5	43.5	-	20.0
12	30.84	45.1	29.0	8.6	25.9
13	35.61	64.4	11.0	0.4	24.6
22	37.54	63.7	10.6	2.2	25.7
11	38.80	41.5	39.4	3.1	19.1
16	40.19	40.7	44.6	18.3	14.7
6	40.44	43.8	33.3	-	22.9
20	40.94	61.4	24.1	-	14.5
21	41.18	64.8	17.9	-	17.3
4	45.80	55.5	23.8	0.8	20.7
14	47.41	66.9	18.5	-	14.6
10	49.66	47.7	26.5	-	25.8
7	51.92	64.7	31.9	2.6	3.4
18	54.26	51.1	42.0	2.9	6.9
23	54.76	36.8	54.5	0.7	8.9
5	56.68	51.1	25.5	4.4	23.4
8	62.41	45.8	35.8	4.9	18.4
15	117.94	40.8	39.7	12.2	19.5
9	143.83	62.2	25.6	-	12.2
County	38.06	52.3	29.4	2.9	18.3

because purchasers were able to obtain financing in the form of mortgages to a greater extent in the Central Basin civil districts, the proportion of total consideration in other arrangements was somewhat smaller for the transfers in the Central Basin civil districts.

An attempt was made to determine whether there was any relation between the transfer price per acre and the per cent of total consideration in different financial arrangements. It was thought that the civil districts having high market value per acre might show a higher proportion of mortgage debt in connection with the transfer than civil districts having lower market values per acre.

Table LXIV shows the civil districts ranged in order of the consideration paid per acre. Although in general the transfers in the districts having the more valuable land were financed to a greater extent by mortgages, the relation does not always appear. Apparently too many other factors enter into the picture.

CHAPTER XIV

SUMMARY AND CONCLUSIONS

Credit Needs

The average value of land and buildings on Williamson County farms in 1935 was $3,288, according to the census. This is an indication of the capital requirements for land and buildings in the county.

The average value of land and buildings on sample farms was $7,259. In addition to the investment in land and buildings, sample farmers had assets distributed as follows: $1,324 for livestock, $748 for equipment and $192 for supplies. These figures are indications of the capital requirement for farm chattels on the sample farms.

The average farmer in the survey grew 34.3 acres of corn, 24.3 acres of wheat, 3.7 acres of tobacco, and 21.0 acres of lespedeza. These acreages are indications of the requirements for crop production.

The credit required for marketing is not so important in this area as in many other areas.

Distribution of Debts by Type of Credit

The average farmer among the sample farms had debts amounting to $1,886 or one-fifth of his total assets.

The distribution of debt among the different types of credit was

82.3 per cent in mortgage credit, 13.8 per cent in cash loans, 2.8 per cent in installment loans, and 1.0 per cent in open accounts.

Owners used more cash credit and less installment credit than did part-owners.

Livestock farms had the lowest per cent (64.2) of total indebtedness in real estate mortgage; general farms, the highest per cent (91.5).

There appears to be a positive relationship between net worth of farmers and per cent of total indebtedness in real estate mortgages. The per cent of total indebtedness in each of the other types of credit appears to be inversely related to net worth.

In 1923 a greater per cent of the outstanding debt was in mortgage credit and smaller per cent in merchant credit and cash loans than in 1938.

Debts actively reduce net income. On the basis of 1930 census figures, interest on debts and taxes amounted to about one-fifth of the average farmer's gross sales.

Lending Agencies

At present the leading private institutions furnishing agricultural credit to Williamson County are: life insurance companies, commercial banks, individuals, and finance companies.

In 1935 there were ten life insurance companies having mortgage loans outstanding in Williamson County.

In addition to furnishing practically all agricultural short-term loans, banks are a major source of farm mortgage credit. There were 34

banks and trust companies having mortgage loans outstanding in Williamson County in 1935.

Individuals are one of the most important sources of agricultural credit, particularly mortgage credits. Since any person with surplus capital is a possible source of credit, it is difficult to estimate the extent to which individuals would make mortgage loans.

The principal governmental lending agencies serving Williamson County are the Federal Land Bank, the Intermediate Credit Bank, the Production Credit Corporation, the Bank for Cooperatives, and the Farm Security Administration.

The Federal Land Bank is represented by the Williamson County National Farm Loan Association at Franklin. The Production Credit Corporation is represented by the Columbia Production Credit Association, which in 1938 made 85 loans amounting to $64,237.35 in Williamson County. The Farm Security Administration had 37 standard rehabilitation loans in Williamson County amounting to $3,947 as of July 1, 1937.

Trends of Mortgage Debt

The farm mortgage debt of Williamson County quadrupled between 1910 and 1920. This was during a period when the farm mortgage debt of the state tripled, while that of the United States only doubled.

After 1920 the mortgage debt of Williamson County continued to increase, as it did for both Tennessee and the United States. Mortgage debt in Williamson County has declined since 1927.

The proportion of mortgage debt to the value of farm land and buildings in Williamson County has increased from 1.9 per cent in 1890 to 41.6 per cent in 1935. The value of land and buildings in the county in 1935 was less than twice the value of land and buildings in the county in 1890. The mortgage debt in 1935 was over 48 times the mortgage debt of 1890.

In 1930, 54.0 per cent of the county farms were mortgaged. The proportion of land in the county under mortgage increased from 6.9 per cent in 1890 to 56.5 per cent in 1935.

The mortgage debt per acre on mortgaged farms increased from $5.32 in 1890 to $27.55 in 1935.

There appears to be a direct relationship between the amount of real estate mortgage filings and the level of prices that farmers receive.

Use of Mortgage Credit

The average mortgage debt for all farms in the county in 1935 was $1,369, according to 1935 census. For each of the mortgaged farms, 47.7 per cent of all farms, the average mortgage debt was $2,871.

Of the 67 owners and part-owners in the Williamson County sample 63.7 per cent had mortgages. The mortgage debt amounted to $2,316 per owner and part-owner or $4,311 per mortgaged farm. On the mortgaged farms the mortgage debt amounted to 33.7 per cent of the value of real estate and $26 an acre.

The per cent of farms mortgaged was highest for general farms and lowest for livestock farms. Crop farms had the next highest per cent of farms mortgaged and second largest average amount of mortgages.

The type-of-farming groups having the largest size of mortgage also had the largest debt per acre and the largest ratio of mortgage debt to value of land and buildings.

There appears to be a definite relationship of net worth to average size of mortgages and per cent of farms mortgaged. The farms in the lowest net worth group, however, appeared to be exceptions.

The average owner-operator on the mortgaged farms was about three years older, had about one year more schooling, had a slightly larger family, and had been aided in life by an inheritance almost $1200 larger than the average owner-operator on the unmortgaged farms.

These operators of mortgaged farms had larger farms and more valuable farms than operators of unmortgaged farms, but the average net worth was similar for the two groups. The owners and part-owners having mortgaged farms had two and a third times as many cash loans and merchant credit accounts as owners and part-owners having unmortgaged farms. However, the mortgaged farms had about $700 larger income than unmortgaged farms.

Purposes for Which Mortgage Loans Were Incurred

Among the sample farms the most important purpose measured by number of loans was refinancing; measured by amount of loans was farm purchase.

The loans to buy a farm were the largest in average size, those for refinancing were the smallest.

The Federal Land Bank was the only source of credit which loaned more money for refinancing than for any other purpose. For other agencies loans to buy a farm were most important.

Refinancing was the purpose accounting for the largest proportion of mortgage loans on the livestock, general, and dairy farms in the study. "Buy farm" was the most important purpose on crop and part-time farms.

Measured as a per cent of all loans, mortgage loans for the purchase of land or farms decreased in importance from 92.7 per cent in 1923 to 66.5 per cent in 1938. Refinancing which was not listed in 1923 accounted for 29.5 per cent of the total amount in 1938.

Sources of Mortgage Credit

Of the 2271 outstanding mortgages filed against 1701 farms in Williamson County in 1935, 1432 or 63.1 per cent were held by individuals.

On the sample farms individuals held the highest percentage of total number of loans, but life insurance companies held the highest percentage of total amount of loans.

Of the 5,710 mortgages filed in Williamson County from 1917-35, 3,607 were made by individuals. This was 5 times as many as by any other single source. Individuals accounted for about one-half the total amount of loans made, life insurance companies about 24 per cent, and commercial banks 12 per cent. Loans from individuals constituted about

the same proportion of total amount of newly filed mortgages in Williamson County as they did for the state as a whole. However, the relative importance of banks and insurance companies in Williamson County where insurance companies were more important was reversed from their relative importance for Tennessee.

Individuals made the largest proportion of newly filed mortgages in 13 of the 19 years; life insurance companies, 5 years; and the Federal Land Bank, 1 year.

In 1934 the Federal Land Bank, which had written only slightly over 5 per cent of the total new recordings only two previous years, made 61.8 per cent of the new mortgage loans for Williamson County.

Throughout the period individuals have held the largest per cent of outstanding loans, and insurance companies have held the second largest per cent of outstanding loans.

Insurance company loans averaged $6,607, or twice the average of all loans, and almost three times the average of loans from individuals. Insurance company loans had the largest loan value per acre, while the Federal Land Bank loans had the lowest. The Federal Land Bank loans, which averaged $18.61 per acre, might have averaged somewhat higher if more of the loans had been made before land values declined. Over half the total loans made in the 19-year period were made in 1934.

Farms on which insurance company loans were made averaged 192 acres in size while farms on which individual loans were made averaged just half as much, 96 acres.

The 5,710 mortgages filed over the 19-year period averaged $2,918 for consideration, or $25 per acre.

On the sample farms individual loans were made for 31.8 per cent of value of land and buildings, the lowest ratio of the various sources. Commercial banks with 51.0 per cent had the highest ratio of mortgage debt to value.

Costs of Mortgage Credit

In addition to interest charge, cost of mortgage credit may also include charges for appraisal, abstract of title, recording, or commission.

The average interest rate on all recorded outstanding mortgage loans in Williamson County in 1935 was 5.68 per cent. Loans from administrators, individuals, and banks had interest rates of about 6.0 per cent. Federal Land Bank loans with 5.06 per cent, had the lowest rate of interest and insurance companies with 5.53 per cent, an intermediate rate.

Loans free from other encumbrances had lower rates than loans subject to prior or junior liens for all sources except life insurance companies and the Federal Land Bank. Apparently other factors affected the interest rates of these two agencies, more than priority of claim.

About 80 per cent of the recorded loans, or 1,604 of the total 2,119, outstanding in the county in 1935 had 6.0 per cent as their interest rate. There were 334 loans at 5.0 per cent interest, 294 of which were Federal Land Bank Loans, and 114 loans at 5.5 per cent in-

terest, 77 of which were insurance company loans. Individuals varied greatest in interest rate, the rate ranging from 0 to 8.0 per cent. Nevertheless, 1,267 of the 1,327 loans from individuals had 6.0 per cent interest rates.

On the sample farms the interest rate of mortgage loans averaged 5.33 per cent. Federal Land Banks had the lowest rate and individuals the highest.

The average interest rate on newly recorded mortgages in Williamson County in 1935 was 5.63 per cent, or slightly under the similar average for Tennessee of 5.70 per cent.

In 1928 the average interest rate on outstanding mortgages in Williamson County was 5.8 per cent, the same as the average for the United States as a whole, but 0.1 of one per cent less than the average for the South Central Region.

Over the period 1917-1935 the highest interest rate for new farm mortgages occurred in 1921, when the rate averaged 6.13 per cent or 0.13 more than the legal maximum. The lowest average was for 1934, when probably due to the influence of Federal Land Bank loans the average interest rate was only 5.29 per cent or nearly 1.0 per cent less than in 1921.

The interest rates for insurance companies and the Federal Land Bank varied somewhat from year to year, but the interest rate of all other agencies kept close to 6.0 per cent. The Federal Land Bank had the lowest interest rates for all but three years of the period - when insurance companies had lower rates.

Terms of Mortgage Credit

The 5,626 unextended mortgages filed during the 19-year period were made for an average term of 4.30 years. Of the principal lending agencies bank loans with an average of 1.92 years had the shortest average term, and Federal Land Bank loans with an average of 25.49 years had the longest average term.

The average term of 32 mortgages of the sample farms was 16.25 years. Loans from individuals had the shortest term, averaging 3.8 years. Federal Land Bank loans were the longest averaging 29.5 years.

Most of the outstanding recorded mortgages in the county in 1935 had been made for terms of less than 5 years. Over 89 per cent of such loans by banks and trust companies had been made for less than 5 years, and over two-thirds had been made for less than 2 years. Similarly, over 82 per cent of loans by individuals were written for under 5 years. Almost 50 per cent of the insurance company loans were from 5 to 10 years in length, and over a third from 10 to 15 years in length. Over half the Federal Land Bank loans were for terms of over 30 years.

All of the outstanding loans in the county in 1935 from the Federal Land Bank were amortized loans. Less than 0.3 of one per cent of the loans from individuals were amortized, but about one-third of the total loans had provisions for partial payment before maturity.

Insurance companies had about as many partial payment mortgages as straight term mortgages, but banks had 5 times as many straight term

mortgage as partial payment mortgages. Banks and insurance companies each had only one amortized loan.

Delinquencies of Mortgage Loans

During 1917-1935 mortgage loans had a calculated duration of 6.8 years, two and a half years longer than their average term. This was less than a third of the duration calculated by Wickens for the United States for 1928.

Almost two-thirds of the loans outstanding in the county in 1935 were overdue loans. Over 80 per cent of the loans from individuals and banks were overdue. None of the Federal Land Bank loans were overdue, and only about one-third of the insurance company mortgages were overdue.

There appears to be only a very rough inverse relationship between the price level of farm products and proportion of loans overdue.

Bank and insurance company mortgages maturing in 1924-25 and written for less than a year had durations ten times their terms. Similar loans maturing in 1933-34 had durations over twice the length of their terms.

The per cent of loans paid by maturity varied directly with the term for bank and insurance company mortgage loans maturing in 1924-25. Loans for 1 year were paid at maturity to the extent of only 7.2 per cent; 3-year loans, 46.3 per cent; 5-year loans, 58.2 per cent; and 10-year loans, 77.3 per cent.

Foreclosures of Mortgage Loans

There appears to be a distinct, inverse, relation between the

price level of farm products and the number and amount of mortgages foreclosed. Prices for farm products received by Tennessee farmers in 1933 were one third of prices received in 1919; the amount of foreclosures in 1933 was over 100 times the amount of foreclosures in 1919.

From 1917 to 1935 foreclosures amounted to 6.95 per cent of the amount of mortgages filed. This proportion varied from less than 2.5 per cent for individuals to over 16.3 per cent for insurance companies.

Foreclosures did not appear to be related to overdue loans. Insurance companies had one of lowest proportions of overdue loans, but the largest proportion of foreclosure.

For all sources but individuals the average size of loans and the average debt per acre were larger for foreclosed than for outstanding loans.

The larger more valuable farms appear to be more likely to have mortgage loans foreclosed than other farms. For all sources but individuals, mortgage debt of foreclosed loans was from $7 to $10 more per acre than for outstanding loans.

Transfers of real estate in the county by foreclosure action averaged $4,288 per transfer, whereas voluntary transfers averaged but $2,883. The average acreage transferred by foreclosure was almost twice the average acreage voluntarily transferred.

The average claim on foreclosed property was $1,000 more than average amount received from the foreclosure sale.

The lower consideration per acre on foreclosed transfers was

probably due to the forced nature of the sale rather than to a lower value of the property. Voluntarily transferred properties sold for 27 per cent above their assessed valuation, and foreclosed properties brought only 88 per cent of assessed valuation.

The difference between normal sale value and forced sale value is much more pronounced for the civil districts on the Highland Rim than for the rest of the county.

Real Estate Mortgages and Land Transfers

Mortgages accounted for 29.4 per cent of the total consideration paid for 1,096 voluntary transfers. There were first mortgages for 25.6 per cent of the transfers, second mortgages for 3.0 per cent.

The proportion of total consideration in real estate mortgages was half as high for the transfers of the Highland Rim civil districts, which averaged $10 per acre, as for the transfers of the Central Basin civil districts, which averaged $49 per acre. This relation between value of land transfers and the proportion of consideration in mortgages is corroborated by the proportion of mortgages to total consideration in selected counties.

Conclusions

1. The extent to which individual farmers use various types of credit varies with their tenure status, their net worth, and their type of farming.

2. Judicial use of mortgage credit appears to increase farm earnings. Although interest payments decreased farm net income on the

sample mortgaged farms by about $240 a year, these farms made $700 a year more gross income than the sample unmortgaged farms.

3. It appears that either investors have felt the land of the county a better than average investment or that more capital has been required for the development of the county's agriculture than in other areas. From 1910 to 1920 the mortgage debt of the county quadrupled, while that of the United States only doubled.

4. Increase in land values has been regarded as one of the most important causes of the increase in mortgage debt. From 1890 to 1935 when the value of land and buildings in the county doubled, the mortgaged debt multiplied 48 times. It is evident that many factors in addition to the increase in land values have been responsible for the increase in mortgage debt.

5. Refinancing has become one of the most important purposes of mortgage loans. As long as loans continue to be made for terms too short to permit payment at maturity, there will be the necessity of refinancing mortgage loans.

6. Indications are that the county may have a lower risk cost than the state as a whole. Interest rates on new farm mortgages in 1935 averaged slightly lower for the county than for the state as a whole.

7. Because of lower interest rates, longer terms, and more favorable repayment plans, the Federal Land Bank has increased in importance as a source of mortgage loans and probably will continue to do so unless other agencies offer more attractive provisions.

8. Probably individuals, in the past the most important source of mortgage loans, will remain a major source of mortgage loans for many years. It appears, however, that individuals have financed the smaller and less valuable farms. With the expansion of activities of specialized lending agencies which offer lower interest rates and longer terms, borrowers will rely mainly on individuals only when other agencies will not make loans.

9. Many aspects of farm mortgage debt are closely related to farm purchasing power. The amount of newly recorded farm mortgages appears to vary directly with, and foreclosures appear to vary inversely with, the index level of farm prices.

10. The most important factor influencing delinquencies appears to be the term of the mortgages. The average duration of mortgages, 6.8 years, is two and a half years longer than the average term, 4.3 years. If lending agencies wish loans to be paid at maturity, they should give the mortgagor sufficient time. Probably the term of mortgages should be more nearly equal to the average duration.

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APPENDIX

APPENDIX A

APPENDIX TABLE I. BANKS HAVING MORTGAGE LOANS OUTSTANDING IN WILLIAMSON COUNTY, 1935, BY COUNTIES IN WHICH BANKS ARE LOCATED

Home County of Banks and Banks	No.	Amount	Acreage
Williamson County:			
Harpeth National Bank	28	$80,730	4,625
Williamson County Banking & Trust Co.	51	75,792	7,185
Commercial Trust Company	4	27,500	768
National Bank of Franklin	9	32,632	1,928
Bank of College Grove	8	17,926	1,179
Williamson County Bank	2	22,000	563
Harpeth Trust Company	9	8,440	439
Nolensville Bank	5	3,712	458
First Bank and Trust Company	3	8,038	560
Central Trust Company	2	7,680	426
Bank of Leipers Forks	4	2,819	341
Franklin Trust Company	1	5,000	36
Mayberry Trust Company	1	1,000	85
Thompson Bank and Trust Company	1	900	80
Williamson County Bank and J. F. Stock	1	444	26
Total of Williamson County 15 banks	129	294,613	18,679
Davidson County:			
First Savings Bank and Trust Company	4	24,925	825
Broadway National Bank	4	20,117	1,001
American Trust Company	5	18,108	977
Nashville Trust Company	4	15,700	526
Nashville and American Trust Company	1	2,000	55
4th and 1st National Bank	1	7,000	177
American National Bank	2	1,640	15
Bank of Tennessee	1	535	405
Total of Davidson County 8 banks	22	90,025	3,981
Maury County:			
Columbia Bank and Trust Company	1	2,500	617
Maury County Trust Company	2	12,092	852
Spring Hill Bank	1	1,927	77
Total Maury County 3 banks	4	16,519	1,546

(continued)

APPENDIX TABLE I. BANKS HAVING MORTGAGE LOANS OUTSTANDING IN WILLIAMSON COUNTY, 1935, BY COUNTIES IN WHICH BANKS ARE LOCATED (continued)

Home County of Banks and Banks	No.	Amount	Acreage
Rutherford County:			
Bank of Eagleville	2	2,020	132
Smyrna Bank and Trust Company	1	550	11
Commerce Union Bank	2	9,600	274
Total Rutherford County 3 banks	5	12,170	417
Shelby County:			
First National Bank	2	8,500	135
Marshall County:			
First State Bank of Chapel Hill	1	1,500	33
Lawrence County:			
Farmers' and Merchants' Bank	1	375	40
Hickman County:			
Harpeth Valley Bank	1	598	97
Jefferson County, Kentucky:			
Land Bank Commissioner	1	2,500	34
Total 34 banks in 9 counties	166	426,800	24,692

APPENDIX TABLE II. BANKS WHICH HAVE MADE MORTGAGE LOANS IN WILLIAMSON COUNTY FROM 1901 TO 1935 BUT WHICH DO NOT HAVE LOANS OUTSTANDING IN 1935

Davidson County:
- Commerce Union Bank
- Mortgage Loan and Trust Company

Montgomery County:
- First National Bank
- Southern Trust Company
- First National Bank of Clarksville

Marshall County:
- First National Bank of Lewisburg
- Citizens' Bank and Trust Company

Dickson County:
- Farmers' and Merchants' Bank
- Bank of Kingston Springs

(continued)

APPENDIX TABLE II. BANKS WHICH HAVE MADE MORTGAGE LOANS IN WILLIAMSON COUNTY FROM 1901 TO 1935 BUT WHICH DO NOT HAVE LOANS OUTSTANDING IN 1935

(continued)

Maury County:
Phoenix National Bank

Lawrence County:
Dublin & Lawrence Bank

Hickman County:
First National Bank of Centerville

Hamilton County:
Chickamauga Trust Company

Giles County:
Peoples Bank of Pulaski

Gwinett County, Georgia:
Broadway Branch of First Savings Bank and Trust Company

APPENDIX B

In the absence of accurate information concerning the total mortgage debt for Williamson County for 1910 it was thought advisable, by a system of calculations, to arrive at some approximation of the total figures for all farmers, rather than depend upon incomplete census data. The census gives information on the mortgage debt, but for the years 1910-1930, only on full owner farms. Furthermore not all full owner farms were included.

The formula used is based on the admittedly bold assumption that the same relationship exists between the county full owner mortgage debt figure and the actual total county mortgage debt as between the state full owner mortgage debt and the state total mortgage debt. If such relationship were true the total mortgage debt (X) could be determined by the formula $X = \frac{K}{B} \times A$, where K is the known state total mortgage debt, B is the census state full owner debt, and A is the census county full owner debt.

Such an assumption would be based on premises that might not be completely accurate. Such premises are: that the same proportion of full owner farms are mortgaged in the county as in the state; that the average size of mortgage is the same; and that there is the same relationship between the number of full owners and total farmers in the county as in the state.

In order to make corrections for these factors it is necessary to expand the formula. Since the 1920 and 1930 actual mortgage debt figures for Williamson County are known, a trial and error method was used to find a formula which would, when applied to the full owner figures, give most nearly the correct figure for those two years. Several formulas were devised - some rather complex ones tried to give weight to such factors as per cent of full owner farms. However no formula gave better results than the one $X = \frac{K}{B} \times A \times \frac{C}{D}$

X, K, B, and A have been explained on the previous page.

C = Average size of mortgage in census county figures.

D = Average size of mortgage in census state figures.

APPENDIX TABLE III. MORTGAGE DEBT COMPUTED BY FORMULA COMPARED WITH ACTUAL FIGURES, WILLIAMSON COUNTY, 1910-1930

Year	Computed Debt	Actual Debt	Per Cent Error
1910	$1,187,000	-	+ 1
1920	5,124,886	$4,421,657	+ 16
1930	5,165,161	5,288,978	- 2

APPENDIX C

APPENDIX TABLE IV. PURPOSES FOR WHICH MORTGAGE LOANS WERE MADE IN TWO SELECTED COUNTIES OF TENNESSEE, 1890

Purpose	McNairy		Maury	
	Per Cent of Number	Per Cent of Amount	Per Cent of Number	Per Cent of Amount
Purchase of real estate	49.47	31.60	59.58	62.50
Real estate improvements	6.32	2.60	22.50	20.61
Purchase and improvements combined	1.05	0.29	1.25	1.61
Business	6.32	28.53	5.14	7.94
Farm machines, domestic animals and other personal property	7.37	6.63	2.36	1.04
Purchase, improvements, business, and personal property combined with each other	-	-	0.69	0.54
Purchase, improvements, business, and personal property combined with objects other than farm and family expenses	-	-	0.42	0.97
Purchase, improvements, business, and personal property combined with farm to family expenses	2.10	0.52	0.28	0.16
Farm and family expenses	8.42	2.35	4.03	1.58
All other objects	18.95	27.48	3.75	3.05
Total of first three classes of table	56.84	34.49	83.33	84.72
Total of first six classes of table	70.53	69.35	91.52	94.24

Source: Eleventh Census of United States, 1890, Special Report on Real Estate Mortgages.

APPENDIX TABLE V. PROPORTION OF TOTAL MORTGAGE LOANS NOT SUBJECT TO OTHER ENCUMBRANCES, WILLIAMSON COUNTY, 1917-35

Year	Total Number of Loans Filed	Number Without Other Encumbrances Filed	Proportion
1917	339	216	63.7
1918	299	176	58.9
1919	370	211	57.0
1920	416	229	55.0
1921	319	173	54.2
1922	310	139	44.8
1923	363	168	46.3
1924	302	139	46.0
1925	274	145	52.9
1926	274	142	51.8
1927	286	160	55.9
1928	294	160	54.4
1929	284	165	58.1
1930	252	133	52.8
1931	293	180	61.4
1932	232	130	56.0
1933	181	107	59.1
1934	382	162	42.4
1935	240	148	61.7