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Character and extent of recent agricultural credit and its effect upon the solvency of Indiana farmers

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CHARACTER AND EXTENT OF RECENT
AGRICULTURAL CREDIT AND ITS
EFFECT UPON THE SOLVENCY
OF INDIANA FARMERS

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STATEMENT OF THE PROBLEM

The oft repeated plea for more liberal and extensive credit facilities to Agriculture has been granted. It has now been operative long enough that it shows definite results.

It is desirable to learn if this new move has been beneficial to the farmer, as a guide to what we should advocate in the future. This is especially true in view of the fact that some phases of the new credit program really constitute a subsidy for farmers at the general taxpayer's expense.

This study is an inquiry into the economic status of the Indiana farmer. It is desired to learn the extent to which the farmer of this decade has been granted credit, and on what terms in contrast with terms and types of loans in the past few decades. Also it is desirable to see what his economic condition is, the effect upon types of farming and the success of any resultant changes in farm management; and finally how the more extensive credit and better facilities have affected the solvency of the farmer.

REVIEW OF LITERATURE

Literature available for this study is meager and consists principally of reports and parts of reports by the federal census, the United States Bureau of Agricultural Economics, and economics departments of our state universities. A search of such sources as "The Agricultural Index," "The American Economic Review," bibliographies, and the current publications does not reveal any study upon this problem.

PROCEDURE

Data were gathered and examined from all available sources such as; Treasury reports, reports of Federal Department of Reports, United States Bureau of Agricultural Economics, reports by Department of economics of state universities, questionnaire to insurance companies, correspondence with professors of agriculture and farm management, county agricultural agents, census reports, reports of tax commissions, and by personal interview with bankers, implement and supply dealers, Farm Bureaus and farmers.

CHAPTER II

EXAMINATION OF DATA

TYPES OF AGRICULTURAL CREDIT

For former decades the types of agricultural credit fall mainly into four classifications: real estate mortgage credit, short term loans, intermediate loans, and merchant credit. From the standpoint of volume, real estate loans were the most important. The short term indebtedness of farmers was represented chiefly by loans from the local banks in the farm areas.

The objections to these types of loans in the past were; the comparatively high interest on mortgage loans, their short term, which was usually five years, and high cost of renewal. The intermediate loans carried high interest rates, often falling due at such unfavorable times that forced liquidation frequently caused serious losses.

A large volume of farm credit was carried by the implement and fertilizer companies. In addition a considerable volume of credit was carried as ledger accounts by local merchants. These types of credit declined rapidly in volume after farm prices began to tumble in 1920 because farmers were unable to meet the ordinary rate of liquidation, and as a result many firms failed. The ones surviving had to curtail credit heavily to survive. This in turn necessitated a heavy volume of refinancing on the part of farmers who were more heavily involved. Much of this was done through real estate loans, and as a result the demand for more favorable credit became increasingly insistent.

Up to this period capital for farm credit was supplied chiefly by local banks, insurance companies, and merchant and dealer credit. The chief difficulties as the farmer saw it were: high interest rates and short term, expense and often great difficulty of renewals. The fact that forced sales of crops and live stock at enormous losses were so frequently necessary to meet credit maturities that credit was a constant worry to the farmer and had a deleterious effect upon his efficiency and tended to maintain a lower standard of living upon the farm.

Following the general collapse in prices of farm commodities after the end of war-time inflation, there was a rapidly increasing interest in Federal credit to farmers. Since then millions of dollars have been loaned directly to farmers. Much of this in the drought and flood areas was without adequate prospect of repayment.

Since then, the growth of farm credit by the government or by federally subsidized agencies has grown enormously. This has made farm credit much easier and more flexible at a time when credit stringencies were causing untold suffering and has had a beneficial effect not only in creating a more favorable spread but in greatly lowering interest rates. Prior to this time the annual interest rates on real estate averaged six per cent, on short term credit eight per cent, and on merchant credit fifteen to twenty per cent.[1]

PRESENT TYPES OF FARM CREDIT

While all the old types of farm credit still persist and creditors are beginning to cater to farmers on more favorable terms, it is essential to get a summary of the part played by the credit organization of the government agencies and government subsidized agencies that have entered the farm credit field, to better understand the present situation. The following data should contribute to a better understanding of the problem:

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[1] U. S. Dept. Agriculture, "Farm Credit" *Yearbook*, 1924, page 188.

Expenditures from Funds Appropriated and Allocated for Recovery and Relief.
July 1, 1931----June 30, 1939[2]

Agricultural Aid:

Agricultural Adjustment Adm.	$198,226,000
Federal Farm Mortgage Corporation	213,546,000
Federal Land Banks	455,837,000
Commodity Credit Corporation	94,393,000
Commodity Credit Corp. Revolving Fund	122,192,000
Farm Credit Administration	351,388,000
	$1,435,582,000

Relief:

Department of Agricultural Relief	$83,924,000
Rural Electrification Adm.	17,015,000
Reclamation	29,233,000
	$130,172,000

Farm Security Administration (and Subsistence Homesteads)	$719,280,000

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2 U. S. Office of Government Reports, Report No. 6 (Oct. 1939), Page 7.

Loans, Loans Insured and Expenditures for Relief and Recovery Programs by Agency

March 3, 1933----June 30, 1938[3]

Loans Closed or Allotted:

Farm Credit Adm.	$5,053,961,000
Farm Security Adm.	217,337,000
Rural Electrification Adm.	60,041,000
Diaster Loan Corp.	6,874,000
	$5,338,213,000

Expenditures:

A.A.A.	$2,599,111,000
Farm Security Adm.	301,849,000
Reclamation Service	225,484,000
	$3,126,444,000

The above estimates have been compiled to show expenditures from both regular and relief appropriations by the respective agencies. It should be noted that in addition to the vast sum of federal funds actually loaned, agricultural credit has been enormously increased by federal insurance of loans issued by numerous agencies.

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[3] *Ibid.*, p. 8.

These include agencies operating through co-operation with the Federal Housing Administration.[4] These agencies handle loans for modernization and repair, the notes being discounted at 3 per cent. They also accept farm home mortgages for insurance with interest plus insurance at 5 per cent.

The federal National Mortgage Association makes outright purchase of mortgages insured by F. H. A. at 4½ per cent interest rate.

Through the Federal Intermediate Credit Banks paper is discounted for production credit associations, banks for cooperatives, state and national banks, agricultural credit corporations, livestock loan companies and similiar financing institutions.

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[4] *Ibid.*, p. 10-13

Much additional credit is involved in projects and agencies that are not easy to segregate. However, the foregoing data will bring out the fact that federal credit to farmers has grown to such proportions that it has become a factor of great importance in our national economic structure.

INTEREST RATES

As we have previously mentioned, interest rates were formerly so high that agricultural credit was placed in a very unfavorable position as compared to commercial credit. Since the advent of greater participation of federal agencies in making and insuring loans, farm credit has been available on much more favorable terms. In fact it is now the contention of some economists that the federal agencies will force all commercial and private interests out of the field,[5] This opinion is frequently expressed in current news. For example, "A movement now being pointed out by informed sources reveals coming legislation which will make farm mortgages unattractive to private capital, hence forcing mortgages increasingly into the federal system.

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[5] United States News, Vol.VIII, No.II, (Mar. 15, 1940) p. 16.

This is expected to be the fundamental aspect of any forthcoming legislative reorganization of the farm mortgage."[6]

Bearing in mind that formerly the prevailing rates of interest on farmers were six to eight percent for short terms amd much higher on book credit, the following data will show striking changes in rates that have made the federally sponsered credit very attractive to farmers.

Interest Rates Charged on Loans Made By Government Agencies and Government Supervised Agencies. (As of June 30, 1939)[7]

I. Federal Loan Agency	
1. Diaster Loan Corporation	3%
2. Export-Import Bank of Washington	
a. Intermediate Credit (6-12 months)	3%-6%
b. Long Term Credit (1-5 years)	3%-6%

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6 Ibid., p. 40.

7 U.S. Office of Government Reports, Report No. 6, (Oct. 1939) p. 9.

3. Federal Home Loan Bank System

a. Federal Home Loans Banks

To member institution

Rate after October 1, 1939 — 1%-3%

b. To non-member institutions

Rate after October 1, 1939 — ½ of 1%

4. Federal Housing Administration

The following rates on loans by private institutions insured by the F. H. A.

a. Farm Home Mortgage

Small home mortgage up to $16,000 maximum plus ½ of 1% insurance premium on unpaid balance---- true rate of — 4½% / 5%

5. Electric Home and Farm Authority

Effective rate on unpaid balances. — 5%

II. Department of Agriculture

1. Commodity Credit Corporation

Loans on specified agricultural products, including loans under marketing agreements.

Effective November 1, 1939, rate of — 3%

2. Rural Electrification Administration

Rate effective as of October 1, 1939 2.69%

3. Farm Security Administration

a. Rural Rehabilitation loans	5%
b. Home financing loans	3%
c. Construction loans	3%
d. Cooperative service loans	3%
e. Farm-tenancy loans (Bankhead-Jones Act)	3%

III. Farm Credit Administration

1. Federal Land Banks

On first mortgage security one half per cent higher than on loans made through National Farm Loan Association.

a. Loans made through National Farm Loan Associations, rate effective July 1, 1940	4%
b. Installments due prior to July 1, 1940	3½%
c. Loans made under special authority through Farm Loan Association.	4½%
d. Land Bank Commissioner First and second mortgage security rate June 30, 1939	5%

e. Federal Intermediate Credit Banks

Operate as banks of discount for production credit associations, state and national banks, agriculture credit corporations, livestock loan companies and similiar agricultural financing institutions.

Rate in effect March, 1940	$1\frac{1}{2}$%

f. Production Credit Association

Rate in effect June, 1940	$4\frac{1}{2}$%

g. Banks for Cooperative

Makes loans to national, regional and local farmers' cooperative associations.

Commodity loans	$1\frac{1}{2}$%
Operating capital loans	$2\frac{1}{2}$%
Facility loans	4%

h. Emergency Corporation and Federal Loans

1937-38-39 loans	4%
1934-35-36 loans	$5\frac{1}{2}$%

i. Federal Credit Union System

To members only. On the unpaid balance, rate per month not to exceed 1%

[8] U. S. Dept. [illegible]

[9] U. S. Office [illegible] Oct. 1939, p. 9-14.

The foregoing rates when compared with previous rates as shown in Table I, will show a reason why there has been such a heavy volume of refinancing by farmers. Also it has resulted in a great volume of original credit. In fact some of the above rates have had substantial reductions temporarily from time to time. These factors have made farm credit much easier in recent years.

There is another factor that has been instrumental in easing the burden of farm debt that became topheavy during the period of greatest stress, namely debt adjustment.

TABLE I

COMPARISON OF INTEREST RATES

	Old Rate[8] Average	New Rate[9] Average
Mortgage Loans	6 to 7%	5½%
Notes	8%	6%
Dealer Credit	10%	7%
Book Credit	20%	10%

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8 U. S. Dept. Agriculture, *Yearbook* 1924, p. 188.

9 U. S. Office Govt. Reports, *Report No. 6*, Oct. 1939, p. 9-14.

FARM DEBT ADJUSTMENT

The committees on farm debt adjustment have been instrumental in easing the debt load for many farmers whose debt situation looked hopeless. Many worthy farmers who had excessive debt loads have been able to secure such material relief in voluntary adjustments with their creditors that they are enabled to carry on. This has applied to farmers not only as individuals, but also has been more common for organized groups such as levee, irrigation, drainage organizations. The following table no. II, will show this has been to a considerable number of farmers a substantial benefit.

TABLE II

DEBT ADJUSTMENT ACTIVITY[10]

Item	1937	1938	1939
Cases Adjusted Individual	27,011	16,663	24,776
Original Debt	$56,200,000	$56,500,000	$77,300,000
Reduction	$25,400,000	$13,700,000	$16,500,000
Groups Adjusted	16	33	30
Farmers Benefited	2,395	4,421	3,736
Original Debt	$3,300,000	$5,100,000	$8,200,000
Reduction	$2,000,000	$3, 200,000	$6,200,000

EXTENT OF AGRICULTURAL CREDIT

Since we have examined the recent trends of agricultural credit as to agencies and rates, let us notice something of the extent of farm credit as compared with past periods. The following tables will give a fair idea of the extent of rural credit and a comparison of the volume in force in former years.

10 Agricultural Financial Review, Vol. II, No. 2, (Nov. 1939), p. 57.

TABLE III

Personal and collateral loans to farmers held by insured commercial banks.[11]

(In thousands of dollars)

States	Jan. 1937	Jan. 1938	Jan. 1939	July 1939
New Eng.	6,081	7,992	9,252	8,613
N. Atlan.	38.648	43,174	54,212	52,536
E. N. Cent.	89,120	126,500	156,309	187,550
W. N. Cent.	190,512	242,593	311,928	354,138
S. Atlantic	24,991	40,191	56,991	78,333
E. S. Cent.	26,865	54,141	102,690	117,844
W. S. Cent.	82,182	116,234	181,965	202,701
Mountain	69,298	76,602	84,593	81,110
Pacific	65,917	80,924	106,727	110,641
U. S. Total	593,614	778,351	1,064,000	1,193,466

[11] *Ibid.*, p. 45.

In the East North-Central group of states as shown by Table III, the personal and collateral loans of farmers held by insured commercial banks increased from $89,120,000 in 1937 to $187,550,000 in 1939. This is of special interest in this study because Indiana is included in this group.

For the whole country it may be noted that this type of credit has grown from $593,614,ooo in 1937 to $1,193,466,000 by July of 1939. With the exception of New England and the Mountain states there has been a pronounced growth of this type of credit.

This is not necessarily inconsistent with statements that there has been a reduction in farm debt in recent years. It is necessary to take into account the fact that there have been great changes in the relative position of different types of farm credit.

The foregoing data show that this type of farm credit has approximately doubled in a little over three years.

The farm real estate loans by the same banks for the same period have increased $43,000,000, or nine per cent as will be shown by the following Table IV.

TABLE IV

Loans secured by farm real estate
held by insured commercial banks.[12]
(In thousands of dollars)

Section	Jan. 1937	Jan. 1938	Jan. 1939	July 1939
New Eng.	15,105	13,760	13,628	13,393
Mid. Atlan.	40,397	41,894	44,033	45,417
E. N. Cent.	104,810	111,063	117,053	120,749
W. N. Cent.	87,218	96,485	99,727	102,172
So. Atlan.	47,397	48,415	52,913	55,179
E. So. Cent.	41,477	42,070	44,278	46,166
W. So. Cent.	27,813	25,705	25,291	25,971
Mountain	10,332	10,279	10,380	10,427
Pacific	112,985	111,780	111,974	111,154
U. S. Total	487,534	501,450	519,276	530,628

[12] *Ibid.*, p. 46.

Here, too, we are especially interested in noting the trends as shown for the East North-Central section of states, which include Indiana. According to the records set forth in Table IV, we see that there has been an increase in this type of credit for this section, from $104,810,000 in January of 1937 to $120,749,000 on July 1, 1939. These findings and the increases noted in Table III, are not necessarily inconsistent with statements of farm debt reductions for these periods, for it must be remembered that there has been a great shift in the types of agricultural credit used during this period. The figures in Tables III and IV indicate some of these trends.

Even though there has been an enormous increase in the amount of farm loans by the government subsidized agencies, there is still a considerable volume of farm loans held by life insurance companies. This type of farm credit reached a peak in 1930 when it comprised almost 22 per cent of the farm mortgage loans of the country. Since then there has been a gradual decline to about 12 per cent. The following Table V, will illustrate the trend in this type of the farm loan business.

13 *Ibid.*, p. 55.

TABLE V

Farm Mortgage Loans Held by

Life Insurance Companies.[13]

(In thousands of dollars)

	Mortgage loans held by life insurance companies.	Percent outstanding mortgage loans by life insurance companies.
1910	$386,961	12.1%
1915	669,984	13.4%
1920	974,826	11.5%
1925	1,942,624	19,6%
1930	2,105,477	21.9%
1931	2,059,221	21,8%
1932	2,007,361	21.8%
1933	1,869,160	21.6%
1934	1,661,046	21.1%
1935	1,258,900	16.2%
1936	1,054,770	13.8%
1937	936,454	12.7%
1938	895,470	12.4%
1939	887,336	12.6%

13 *Ibid.*, p. 55.

While it would be extremely difficult to secure accurate information as to the total farm indebtedness, the following data comprise a fair estimate of the extent of farm credit and will show the trends as to agencies for recent years.

TABLE VI

Farm Mtg. Debt by Leading Agencies.[14]

(In thousands of dollars)

Jan.	Total	Federal Land Banks	Joint Stock Land Banks	Com'l Banks
1910	3,207,863	*	*	*
1915	4,990,785	*	*	739,500
1920	8,448,772	296,386	60,038	1,447,483
1925	9,912,650	923,077	446,429	*
1930	9,630,768	1,185,765	626,980	*
1931	9,630,768	1,175,832	590,811	954,172
1932	9,214,004	1,151,659	536,644	*
1933	8,638,383	1,105,610	459,183	*
1934	7,887,119	1,273,881	392,438	555,885
1935	7,785,971	2,501,824	255,931	498,842
1936	7,638,867	2,853,966	175,677	487,505
1937	7,389,797	2,888,912	133,499	487,534
1938	7,214,138	2,835,962	104,163	501,450
1939	7,070,896	2,723,022	87,362	519,276

[14] *Ibid.*, p. 87.

An examination of Table VI shows that the total farm mortgage debt held by leading lending agencies reached a high in January 1, 1925, with a total of $9,912,650,000. At this time only $923,077,000 was held by Federal Land Banks and $446,429,000 by the Joint Stock Land Banks.

The high total for the Commercial banks shown in this table is $1,447,483,000 as of January 1, 1920. The low for this type of credit was on January 1, 1936, with a total of $487,505,000, then with a moderate growth to $519,276,000 in 1939 on the first of January.

The peak for loans held by Joint Stock Land Banks was reached on January 1, 1930, with a total of $626,980,000 and gradually receeding to a low of $87,362,000 on January 1, 1939.

The amount of credit extended by the Federal Land Banks has grown from $296,386,000 in 1920 to a high of $2,888,912,000 on January 1, 1937. This shows a rather steady progressive growth with exceptions for the years 1931-32-33, when there was a steady decline, ~~then~~ jumped to a new high in 1934. Beginning with 1938, there was a steady decline which harmonized with the general decline in extent of farm credit. This table illustrates the shift in heavy loans by farmers in recent years to the Federal Land Banks.

The farm mortgage debt held by life insurance companies is not shown in this table but is given in the preceeding table, Number V. It shows a growth from $386,961,000 in 1910 to an all time high of $2,105,477,000 in 1930, ~~and~~ redeeding to $887,336,000 in 1939. Three State Credit agencies, not shown, decreased from $93,274,000 in 1930 to $17,281,000 in 1939. Farm Security Administration Loans also ommitted for lack of space, increased from $3,615,000 in 1938 to $35,986,000 in 1939. The foregoing table shows farm mortgage indebtedness increasing from $3,207,863,000 in 1910 to a high of $9,912,650,000 in 1925 and a rather gradual reduction to $7,070,896,000 in 1939.

EFFECT UPON THE SOLVENCY OF FARMERS

The solvency of the farmer today is a question for argument among certain groups. There is no question as to the dire financial straights of part of our farm population. Different authorities disagree upon the extent. Secretary of Agriculture Wallace in asking for easier credit for farmers asserted that a serious condition existed, that one-fourth of the farm mortgages were in arrears.[15] However, the following table showing the condition of Federal Land Bank Loans does not show the condition to be so serious as some persons would have us believe.

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[15] *Indianapolis News*, (Mar. 26, 1940), p. 6.

TABLE VII

Condition of Federal Land Bank Loans

June 30, 1937, 1938, 1939[16]

	Per cent of loans with all matured installments paid by borrowers.			Per cent of loans delinquent			Per cent of loans matured with installments extended but no delinquency of extension.		
	1937	1938	1939	1937	1938	1939	1937	1938	1939
N. Atlan.	90.0	88.8	81.8	9.4	10.8	18.1	0.6	0.4	0.1
E. N. Cent.	88.2	87.9	85.8	8.1	9.7	13.1	3.7	2.4	1.1
W. N. Cent.	65.4	66.7	67.1	12.6	16.2	20.5	22.0	17.1	12.4
S. Atlan.	81.1	83.8	80.8	8.2	7.8	10.0	10.7	8.9	9.2
S. Cent.	79.1	80.3	82.8	11.1	12.2	12.9	9.8	7.5	4.3
Western	77.9	77.3	75.1	16.0	18.8	20.9	6.1	3.9	4.0
U. S.	77.8	78.5	78.0	11.2	13.1	16.0	11.0	8.4	6.0

16 <u>Agricultural Financial Review</u>, Vol. II, No. 2, (Nov. 1939), p. 11.

In examining the condition of mortgage loans held by Federal Land Banks as shown in Table VII, it may be seen that for the country as a whole there has been little change for the years 1937-38-39. An average of 78.1 per cent of these loans have all installments paid. For the same period the average delinquency has been 13.4 per cent. During these years the loans with extended installments but with no delinquency of the extension averaged 8.4 per cent of the Federal Land Bank loans.

For the East North Central section, in which Indiana is located, the average per cent of loans with all installments paid is 87.3. For this same period the average per cent of delinquent loans was 10.3. During this period there were 2.4 per cent with extended installments but no delinquency of the extensions. This table seems to indicate that the Federal Land Bank loans are in stable condition.

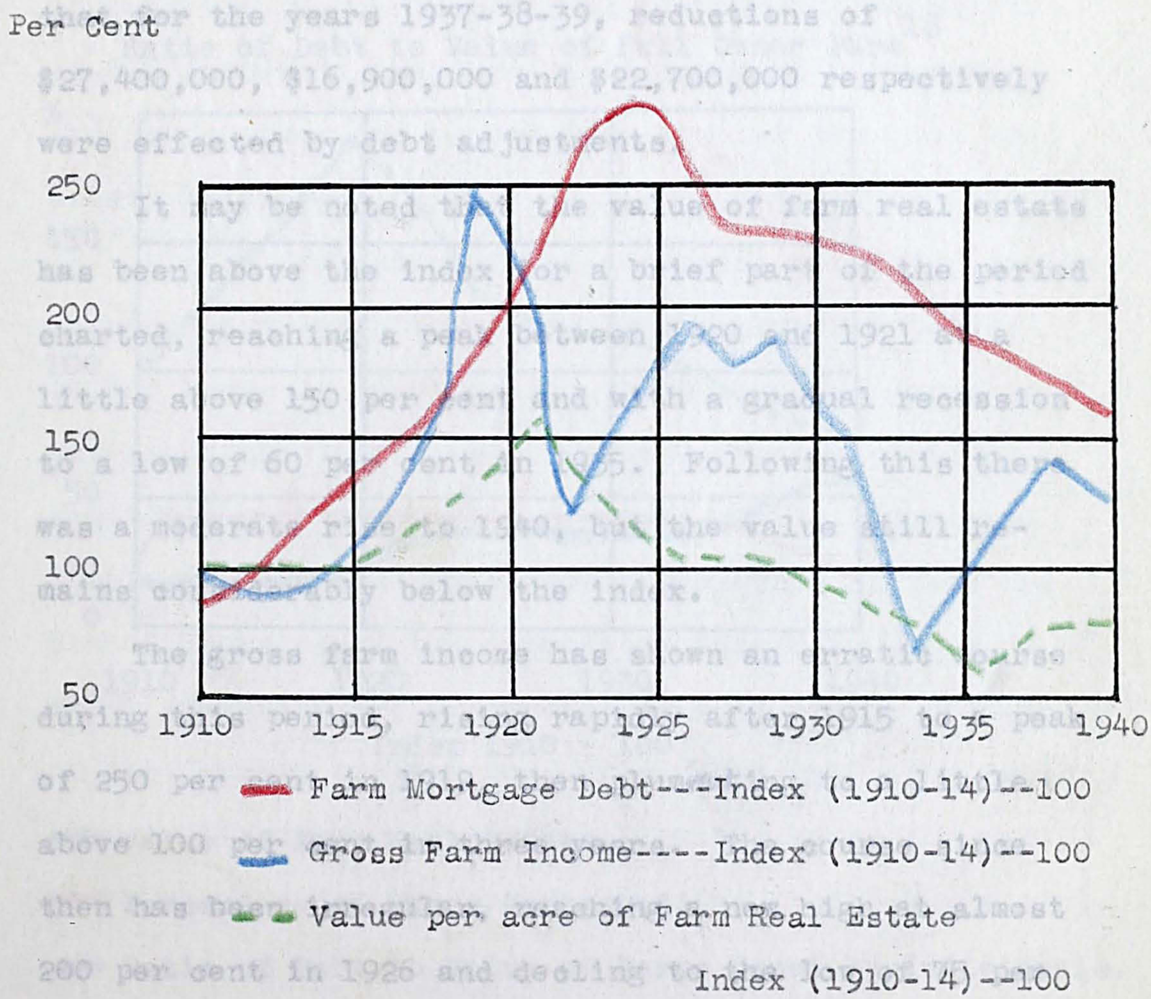
While there has been a tremendous decline in the gross farm income since the peak of 1920 and a corresponding decline in the value per acre of farm real estate, it is encouraging to note there has been a corresponding decline in farm mortgage debt for the same period, See Table VI, that speaks eloquently for the solvency of farmers through a time when prices and values were tumbling. This is strikingly shown by the following graph.

GRAPH I

Farm Mortgage Debt, Value Per Acre of

Farm Real Estate, Gross Farm Income.[17]

1910---1939



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17 Ibid., p. 15.

In Graph I, it may be seen that the farm mortgage debt rose rapidly from 1910, reaching a crest in 1924. There was a heavy drop from the crest to 1926. Since then there has been a rather uniform reduction. It may be noted by reference to Table II that for the years 1937-38-39, reductions of $27,400,000, $16,900,000 and $22,700,000 respectively were effected by debt adjustments.

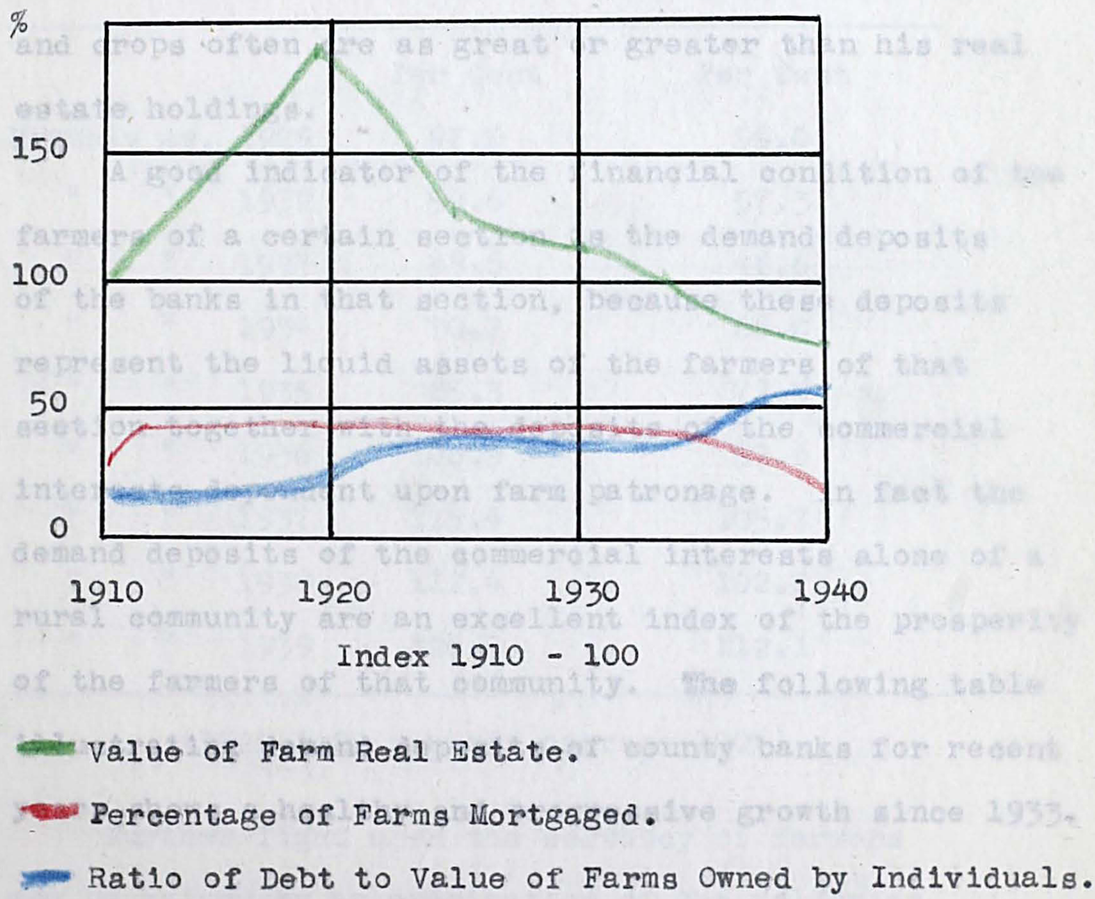
It may be noted that the value of farm real estate has been above the index for a brief part of the period charted, reaching a peak between 1920 and 1921 at a little above 150 per cent and with a gradual recession to a low of 60 per cent in 1935. Following this there was a moderate rise to 1940, but the value still remains considerably below the index.

The gross farm income has shown an erratic course during this period, rising rapidly after 1915 to a peak of 250 per cent in 1919, then plummeting to a little above 100 per cent in three years. The course since then has been irregular, reaching a new high at almost 200 per cent in 1926 and decling to the low of 75 per cent in 1933.

In relation to the gross farm income and the real estate values for this period, the reduction in farm mortgage debt makes a favorable showing.

GRAPH II

Ratio of Debt to Value of Full Owner Farm[18]



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18 *Ibid.*, p. 15.

The above graph shows the percentage of farms mortgaged to be much lower than ordinarily expected. The ratio of debt to value of land is so low as to make a fine showing of assets. This seems to be an indication of a substantial equity for the farmers. It must not be overlooked that the additional assets of the farmer in the form of implements, livestock, and crops often are as great or greater than his real estate holdings.

A good indicator of the financial condition of the farmers of a certain section is the demand deposits of the banks in that section, because these deposits represent the liquid assets of the farmers of that section together with the deposits of the commercial interests dependent upon farm patronage. In fact the demand deposits of the commercial interests alone of a rural community are an excellent index of the prosperity of the farmers of that community. The following table illustrating demand deposits of county banks for recent years shows a healthy and progressive growth since 1933.

TABLE VIII

Demand Deposits of Country Banks[19]

Year	Corn Belt States	Twenty Leading Agricultural States
	Per Cent	Per Cent
Monthly Av. 1929	97.2	99.0
" " 1932	59.6	57.3
" " 1933	48.6	48.6
" " 1934	70.7	66.0
" " 1935	85.3	77.5
" " 1936	106.9	97.6
" " 1937	115.4	105.7
" " 1938	112.4	102.7
" " 1939	124.2	112.1

(1924-1929 monthly average-100%)

Further light upon the solvency of farmers may be gained by an examination of the following table. A comparison of the amount of farm mortgage debt per thousand dollars of farm real estate

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[19] *Ibid.*, p. 5.

value for recent decades makes a favorable showing for the general financial equity of farmers. This is an even more favorable showing for the last decade than is apparent on the surface when you take into consideration the enormous decline in real estate values.

TABLE IX

Farm Mortgage debt per $1000 of farm real estate value.[20]

	1923	1930	1933	1938
New England	$159	$182	$216	$200
Mid. Atlantic	170	162	214	179
East N. Central	175	202	274	190
W. N. Central	248	236	345	245
So. Atlantic	127	135	171	126
East. So. Central	153	161	217	154
West So. Central	218	191	282	194
Mountain States	313	234	318	237
Pacific States	161	189	279	215
United States	205	201	281	202

[20] *Ibid.*, p. 22.

An examination of Table IX shows that the farm mortgage debt in relation to the value of farm real estate has never been unduly high. Almost invaribly it has been considered a sound investment to lend up to 50 per cent of the value of the mortgaged property. For the country as a whole we note that the high was reached in 1933 at only $281 to $1000 of real estate value, and this has declined by 1938 to $202.

For the East North-Central section we note that the high in 1933 was only $274 per $1000 of real estate value. This, by 1938, had declined to $190. Evidently our farmers have a considerable equity in their real estate.

Some idea of the relative financial condition of our farmers may be gained by a study of the changes in ownership as illustrated in Table X.

The data contained in this table seem to indicate a healthy growth in the financial condition of our farmers.

For instance voluntary sales of farms have progressively increased from 17.8 per 1000 farms in 1934 to a high of 31.5 in 1937 and moderately declined to 29.9 and 28.2 for 1939 and 1939 respectively.

By examining the record of foreclosures, we see that from a high of 38 to 1000 farms in 1933 they have declined progressively to a low of 13.4 for 1939.

Also in the record of delinquent tax sales we note a progressive reduction from a high of 15.3 per 1000 farms in 1933 to a low of 3.4 in 1939, a reduction of almost four-fifths.

TABLE X

Change in Farm Ownership[21]

Per 1000 Farms

Year	Voluntary Sales	Foreclosure Sales	Delinquent Tax Sales
1933	16.8	38	15.3
1934	17.8	28	11.1
1935	19.4	21	7.3
1936	24	20.3	5.3
1937	31.5	18.1	4.3
1938	29.9	14.4	3.1
1939	28.2	13.4	3.4

[21] New International Yearbooks, 1930-1940.

It must be remembered that in considering Tables number X and number XI that the figures include owners of sub-marginal lands. Many of these owners were never in very secure financial condition, to say the least. Taking this factor into consideration, the status of the average farmer would make a more favorable showing in the average net result indicated in these tables.

While data is not available as to the exact percentage of failures that are found on the sub-marginal lands, we know that they are in the majority. And taking this into consideration shows the financial condition of the average and better class farmer in a more favorable light.

TABLE XI

Farm Bankruptcies in United States[22]

Year Ending June 30	Farm Bankruptcies	Per Cent of U. S. Total
1929	4939	8.7
1930	4464	7.4
1931	4023	6.7
1932	4849	7.7
1933	5917	8.9
1934	4716	8
1935	4311	7.7
1936	3642	7
1937	2479	4.5
1938	1799	3.6

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[22] U. S. Bureau of Agricultural Economics, <u>Agricultural Financial Review</u>, Vol. II, No. 2, (Nov. 1939) p. 105.

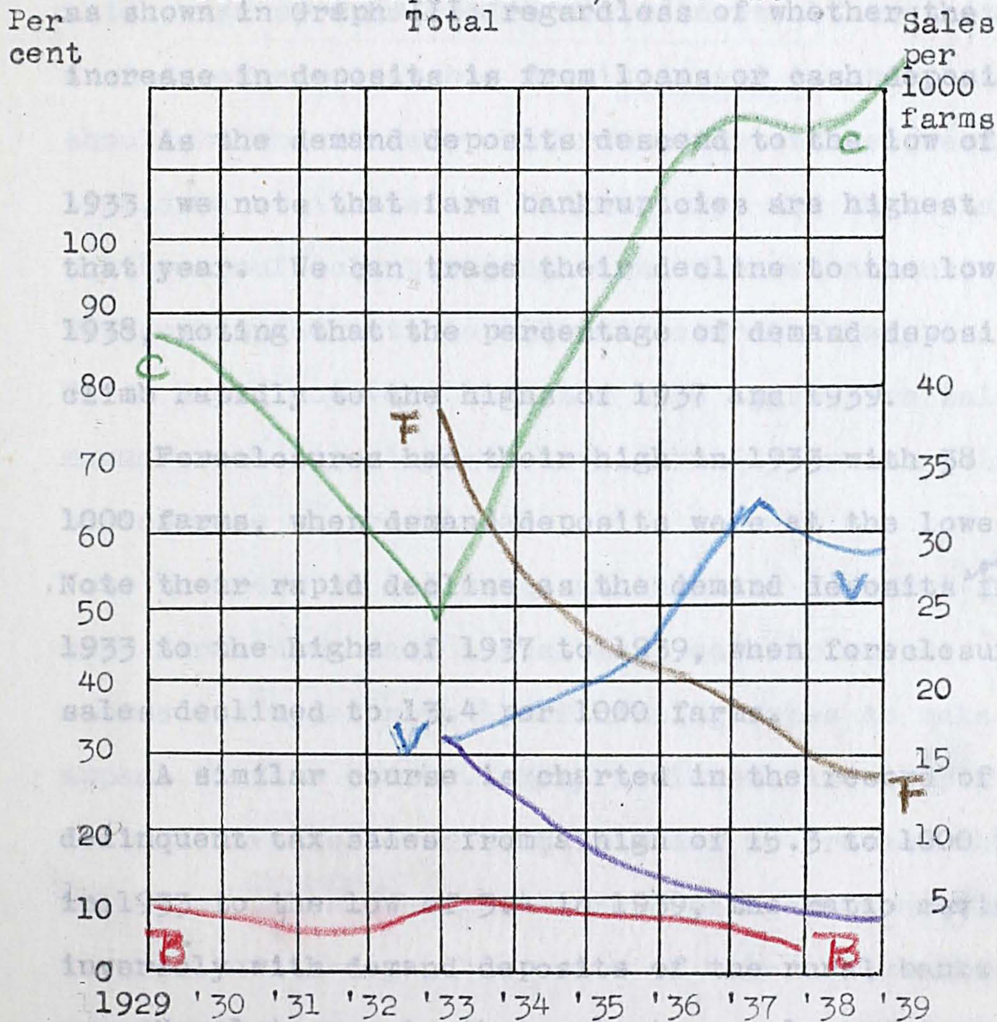
One of the most striking indications of the financial status of our farmers is the record of farm bankruptcies, especially as we note their relation to the total bankruptcies for the United States as shown in Table XI.

Starting with the rather high total of 4939 in the fiscal year 1929, they decreased in number down through 1931, then soared to an all time high of 5917 in the fiscal year ending June 30, 1933. Since that time there has been a rather gradual reduction until in 1938 they were a little over a third of the high, or 1799.

It is interesting to note that in the worst years of farm depression the farm bankruptcies were only a small per cent of the total bankruptcies for the United States. The fact that the farm bankruptcies for the United States for the year 1938 were only 3.6 per cent of the total for the country is highly significant.

GRAPH III

Demand Deposits in Rural Banks of Corn Belt States
Voluntary Sales per 1000 Farms in United States
Foreclosure Sales per 1000 Farms in U. S.
Delinquent Tax Sales per 1000 Farms
Farm Bankruptcies as % of U. S.
Total



B Farm bankruptcies as % of U. S. total bankruptcies as shown by Table XI.
F Foreclosure sales per 1000 farms as shown by Table X.
V Voluntary sales per 1000 farms as shown by Table X.
D Delinquent tax sales per 1000 farms as shown by Table X.
C Demand deposits of country banks in the cornbelt states as shown by Table VIII.

While some have questioned that the demand deposits of rural banks are an indication of the solvency of the farmers of a particular section, evidently there is a correlation inversely expressed, as shown in Graph III, regardless of whether the increase in deposits is from loans or cash deposited.

As the demand deposits descend to the low of 1933, we note that farm bankruptcies are highest in that year. We can trace their decline to the low of 1938, noting that the percentage of demand deposits climb rapidly to the highs of 1937 and 1939.

Foreclosures had their high in 1933 with 38 to 1000 farms, when demand deposits were at the lowest. Note their rapid decline as the demand deposits rose from 1933 to the highs of 1937 to 1939, when foreclosure sales declined to 13.4 per 1000 farms.

A similar course is charted in the record of delinquent tax sales from a high of 15.3 to 1000 farms in 1933 to the low of 3.4 in 1939, the ratio moving inversely with demand deposits of the rural banks.

Now let us note that voluntary sales of farms were only 16.8 to 1000 in 1933, when the demand deposits were at the lowest, while they climb with the rise in deposits to a high of 31.5 in 1937, when deposits were nearing the peak for the decade.

INSTALLMENT DEBT OF FARMERS

Another factor that may have a considerable influence on the relative financial status of our farmers is the extent of their installment debt. This phase of farm credit would in itself constitute a study of considerable magnitude and is one that should be undertaken. Unfortunately at the present time data available are fragmentary, and there has not been sufficient segregation of rural accounts from urban accounts to make an accurate analysis. We do know, however, that the more aggressive sales managers in recent years have turned to rural sales to increase their volume.

In order to influence an increase in rural sales many firms have made installment sales plans of attractive types with low financing rates to make an appeal to farm people. Many implement and supply dealers have followed suit in order to protect their volume of sales. Changes in farm management have favored this change, because with modern diversified farming there has been a great change in the distribution of farm income in contrast to what it was a few years ago. The following table will illustrate why the new distribution of farm income harmonizes so nicely with installment buying.

TABLE XII

National Farm Income
From Marketing[23]

Month	Percentage
January	7.7
February	6.6
March	6.9
April	7.2
May	7.8
June	7.3
July	8.1
August	8.7
September	10.1
October	11.7
November	9.8
December	8.1
	100 %

23 *Harvester World*, April 2, 1937.

From the foregoing Table XII, it may be seen that installment buying with small monthly payments is the logical procedure for purchasing many items of both farm and household equipment that have been sold to farmers in recent years. That it has raised the standard of living on our farms is not questioned. The dealers like it because they contend that it has saved them a lot of grief on collections and they also claim that through its operation farmers have maintained a better equity in their purchases than under the system formerly used most extensively.

One leading implement company reports that their installment paper up to January 1, 1940, has increased only 10 per cent in a period of five years. The same company reports that January 1, this year, there has been a decrease of 20 per cent in this type of credit held by them, which fact they attribute largely to heavier purchases by commercial banks. They express the opinion that installment buying has not had a bad influence upon the solvency of the farmer.

SOLVENCY OF INDIANA FARMERS

From the foregoing data as they appertain to the East North Central section of states, a fair idea of the financial condition of the Indiana farmer may be gained. However, in this study it is desirable to obtain more specific and definite information as to the economic status of the farmers in this state. To get a clearer picture of the situation let us first note the principal indebtedness of Indiana farmers as shown below.[21]

Principal Loans of Indiana Farmers
January 1, 1939

Farm Mortgages	$201,480,000
Commercial Banks	23,609,000
Credit Associations	5,902,000
Farm Security Adm.	5,500,000
	$236,491,000

Sometimes when we read the figures for farm mortgages and other types of indebtedness, we are inclined to jump at conclusions without examing carefully the resources to offset the indebtedness.

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21 [illegible]
[illegible]

One principal asset of the farmer next to real estate and improvements is his livestock. Let us examine the livestock situation in Indiana as a factor affecting the Indiana farmer's margin of equity.

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21 Butz, E. L., Purdue University, By letter, April 4, 1940.

TABLE XIII

Livestock on Indiana Farms.[22]

(In thousands)

	Horses	Mules	Cattle	Sheep	Swine
1926	548	99	1282	647	2820
1927	540	101	1295	731	2961
1928	517	97	1287	714	3227
1929	484	90	1307	741	3066
1930	456	84	1333	795	2637
1931	438	84	1386	859	2637
1932	425	83	1466	906	2953
1933	412	83	1573	867	3750
1934	404	83	1613	856	3900
1935	402	82	1604	937	2675
1936	398	81	1684	992	2942
1937	398	79	1617	959	3089
1938	390	77	1617	1009	3182
1939	382	75	1649	906	3405
1940	367	74	1748	904	4189

[22] Indiana Business Review, Vol. XV, (Apr. 20, 1940.)

The foregoing table indicates values which, computed at current prices, show~~s~~ in addition to changing trends in farm management, that farm assets of this type are in a favorable position.

In addition to livestock resources of Indiana farmers there are heavy crop reserves, and the investment in farm equipment is growing steadily from year to year. According to reports of Purdue university, there are 47,532 Indiana farms using electricity from power lines and 4,479 home power plants.[23] There are 32,576 electric~~s~~ washers, 16,789 electric refrigerators, 20,163 sweepers, 38,899 radios, and 31,336 battery radios.

In 17,840 farm homes there was furnace heat. Water was piped into 20,254 kitchens, and 11,289 had bathrooms.

On Indiana farms are found 44,970 tractors, 5,046 mechanical corn pickers, and 4,677 combine harvesters.

In one decade the number of trucks increased from 3,501 to 28,468. Passenger cars increased from 102,122 to 155,000.

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[23] Dept. Farm Management, Purdue University, by letter (May 10, 1940.)

The number of farms using electricity increased 33 per cent in one decade, and number of farms installing water systems in the home increased 30 per cent in a ten year period.[24]

These figures not only indicate modern trends of Indiana farm life, such as change from horse to motor power but show that there is an enormous investment involved.

The total farm real estate mortgage indebtedness of Indiana farmers on January 1, 1939, was estimated at \$201,480,000. This debt has been declining steadily for the past ten years. It reached an all-time high at \$293,448,000 in 1933 and stood at \$283,830,000 in 1929.

On January 1, 1939, the Federal Land Bank and the Land Bank Commissioner had loans in Indiana amounting to \$93,840,000. The Joint Stock Land Banks had loans amounting to \$11,583,000, and the life insurance companies had loans amounting to \$52,643,000. The remainder of Indiana farm mortgage indebtedness was held chiefly by individuals.

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[24] Indiana Tax Study Commission, <u>Special Report</u>, (Jan. 1, 1940), p. 81.

The amount of production credit loans in Indiana based on chattel securities on January 1, 1939, was divided as follows: Commercial Banks--$23,609,000; Production Credit Association--$5,902,000; Farm Security Administration (June 30) --$5,500,000.

The following balance sheet should give a fair idea of the financial strength of the Indiana farmer.

TABLE XIV

Balance Sheet for Indiana Farmers

January 1, 1939

Assets[25]

Farm Land	$959,000,000
Farm Buildings	202,000,000
Implements	237,000,000
Livestock	203,000,000
Crops	166,220,000
Total	$1767,220,000

Liabilities[26]

Farm Mortgages	$201,480,000
Commercial Banks	23,609,000
Credit Associations ..	5,902,000
Farm Security Adm. ...	5,500,000
Total	$236,491,000

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[25] Ibid., p. 79.

[26] Butz, E. L., Purdue University, by letter, April 4, 1940.

While neither part of the foregoing balance sheet is complete, because data are not available for some items, it does show most of the assets and liabilities and should be a good indicator of the relative financial condition of the Indiana farmer. The apparent margin of equity is much more favorable than we have been led to believe.

The indebtedness of Indiana farmers has been declining at a fairly steady rate for the past ten years, and failures are growing fewer each year. There is no evidence to indicate that more extensive credit has not been beneficial to Indiana farmers.

CHAPTER III

SUMMARY AND CONCLUSIONS

The change in the credit conditions affecting farmers in the past two decades, especially the one just past, has been great and of far reaching influence. It has been the most important factor in the the "**Agrarian Revolution**" that has lagged so many years behind the "Industrial Revolution."

More favorable credit conditions have enabled farmers to win their way out of a period of chaos until today they are in the most substantial condition as a class that they have been for years. Farm mortgage foreclosures, which in 1932 constituted 37 per cent of the transfers[27] and led to rioting, as for example in Iowa, where from 1932 to 1933, the foreclosed farms represented nine per cent of all the land in Iowa,[28] have declined to the lowest point in ten years, according to the United States Department of Agriculture.[29]

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[27] U. S. Dept. Agriculture, Yearbook, 1934, p. 62.

[28] Schultz, T. W., "Farm Tenacy Reform," Journal of Political Economy, 48, No. 3, p. 324.

[29] Indianapolis News, (Feb. 4, 1940) p. 10

In spite of the loss of world markets for much of our farm production, the debt position of farmers has improved considerably since 1935. Land values are increasing, and the total farm real estate debt has declined to the lowest point in twenty years.

During the year ending March 1, 1940, only 16.8 of every 1000 farm owners lost their land through forced sales, foreclosures, and tax sales. For the year previous it was 17.4, and in the year ending March 1, 1935 it was 28.3 out of each 1000 farms.

The number of sales on account of deliquent taxes was only 3.4 to the 1000 farms last year as compared with 7.3 in 1935 and has declined to the lowest point since 1926.

As an indication of the better financial status of the farmer, voluntary sales of farms is estimated at 28.2 per 1000 in the past year as compared with 19.4 in 1935. Using the years 1912-1914 as an index of 100 in computing land values, an increase from 73 in 1933 to 84 in 1939 has been noted. The farm mortgage debt has declined steadily for the past several years and is now the lowest since 1919.

Indiana farmers had a gross income of $369,915,000 last year.[30] This is the greatest in four years. This figure added to the assets listed in Table XI gives them total assets of $1,991,915,000 against comparable liabilities of $236,491,000. This is substantial evidence of the solvency of Indiana farmers.

Improved credit conditions have freed the Indiana farmer from the harassing worries of former years, enabled him to devote himself to a more intelligent type of farming, brought about opportunity for many farm improvements, induced greater mechanization of farms, led to greater diversification, resulted in more livestock of a higher quality, and brought about the production of a higher standard of crops. The higher standard of living that has been made possible has resulted in a more wholesome type of farm life.

While there are isolated cases in which the improved credit facilities for farmers have been grossly abused, there is nothing on the whole to indicate that they have not been beneficial to the farmer.

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[30] Terre Haute Star, (July 12, 1940) p. 6.

Since, our farmers comprise the greatest group in any one occupation and agriculture is ~~being~~ so essential as our first line of defense, any legitimate improvement that can be made in the credit situation for farmers is important and desirable.

This problem is one of vital importance and we recommend a further study of it.

APPENDIX

BIBLIOGRAPHY

Agricultural Financial Review, Vol. II, No. 2, March, 1939.

Allen, J. Knight, "Federal Farm Credit Competition," Banking, Vol. XXXII, No. 2, Aug. 1939, p. 22.

Dickerson, J. H., "Recent Farm Loans and Real Estate Experiences of Five Leading Life Insurance Companies," Journal Farm Economics, Vol. XXI, No. 2, May 1939, p. 507-511.

Dynamic America, Vol. X, No. 2, March 1940, p. 31.

Edwards, Gurden, "Government Lending," Banking, Vol. XXXII, No. 1, July 1939, p. 30-31.

Goss, Albert S., "Strengthening NFLA's," News for Farmer Cooperatives, Vol. VI, No. 3, June 1939, p. 19-20.

Indiana Business Review, Vol. XV, April 20, 1940.

Indianapolis News, Vol. LXXX, Feb. 4, 1940.

Indiana State Tax Study Commission, Special Report, Jan. 1, 1939.

Macy, Roscoe, "Installment Loans for Farmers," Banking, Vol. XXXI, No. 11, May 1939, p. 30.

Mason, Jerry H., "Five Years of Financing Co-ops," News for Farm Co-ops, Vol. VI, No. 1, April 1939, p. 3-4.

New International Yearbooks, 1930-1940.

Price, W. H., "Debt Carrying Capacity of Farm Property in Relation to Cash Income." American Association Farm Appraisers Journal, Vol. II, No. 2, Nov. 1938, p. 59-63.

Rose, John Kerr, "The Financing of Farm Electrification,"Agricultural Financial Review, Vol. II, No. 1, May 1939, p. 9-15.

Schultz, T. W., "Farm Tenacy Reform," Journal of Political Economy, Vol. XLVIII, No. 3, June 1940, p. 324.

Smith, Robert B., "Insured Mortgages for Farm Improvements," Hoards Dairyman, Vol. LXXXIV, No. 10, May 25, 1939.

Stewart, Ray P., "Financing Young Career Farmers." Banking, Vol. XXXI, No. 10, April 1939, p. 21-22.

Survey of Current Business, Vol. XX, No. 1, Jan. 1940, p. 4.

Terre Haute Star, (July 12, 1940), p. 6.

U. S. Bureau Agr. Economics, "Fewer Bankrupticies in 1938, "Report, Mar. 20, 1939.

U. S. Dept. Agriculture, Yearbook, 1934, p. 62.

U. S. Dept. Agriculture, Yearbook, 1924, p. 188.

U. S. Office Govt. Reports, Report No. 6, Oct. 1939, p. 9-14.

United States News, Vol. VIII, No. 11, Mar. 15, 1940, p. 16.

Wall, Norman J., "Short Term Credit Development," Agricultural Financial Review, Vol. II, No. 1, May 1939, p. 34-41.

Wall, Norman J., "Lending Agencies Reduce Farm Holdings," Agricultural Situation, Vol. XXIII, No. 3, March 1939, p. 13-14.

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