PROCEEDINGS

OF THE

SECOND INTERNATIONAL CONFERENCE

OF

AGRICULTURAL ECONOMISTS

HELD AT
CORNELL UNIVERSITY,
ITHACA; NEW YORK,
AUGUST 18 TO AUGUST 29, 1930

The Collegiate Press
GEORGE BANTA PUBLISHING COMPANY
MENASHA, WISCONSIN
1930

Indexed

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Farm credit

AGRICULTURAL CREDIT PROBLEMS IN THE UNITED STATES

A. G. Black
Iowa State College, Ames, Iowa

As long as agriculture in the United States was in the pioneer stage, other problems were so pressing that little or no attention was given to the problem the individual farmer had to face in securing sufficient credit to finance his needs. In early days capital requirements were so small that it was not believed necessary to make special provision whereby the individual could borrow a part of the small capital, which even then was necessary, to set himself up as an independent farmer. On the frontier, land was free. In older sections it was very low priced. Farm implements were crude, few in number, and cheap. They were often made by the local blacksmith or mechanic. It is apparent, therefore, that a man could begin farming without any very extensive investment of capital. The sum required could be accumulated by working for a few years. During this early stage, farmers were dependent upon local money lenders for any sums that they had to borrow. Even in the newest sections of the country there were always a few people who had some surplus funds and made a business of loaning these funds to their neighbors. During the period of early agricultural development, rates of interest were inordinately high. In central Iowa, for example, during the '50's and '60's, farm mortgages were usually made at 10 per cent interest. The term was usually for one year and it was not at all uncommon for a borrower to pay a bonus of 10 per cent for such a loan, thus increasing the interest to approximately 20 per cent per annum.

Under such conditions it is not surprising that farmers avoided debt. They preferred to progress slowly, expanding their business and improving their living conditions only as fast as they could save from their rather small cash receipts. While progress under these conditions was necessarily slow, it was preferable to getting enmeshed in the coils of the money-lender. All too frequently, this brought about loss of the farm and forced the owner into a new country where he had to repeat the years of heavy work required to subdue new land.

Throughout the nineteenth century and the early part of the present century, agriculture was financed to a considerable extent from savings of the individual farmer, from funds supplied by the local money-lender, or by the local bank. In the case of funds loaned on the security of first mortgages, some money was supplied from outside sources. From the beginning of the third quarter of the nineteenth century, and to a certain extent even earlier, a large traffic in farm mortgages was carried on between mortgage brokers in the Middle West and investors in the East, particularly in the New England States. Life insurance companies during this period also furnished large amounts of money to farmers of the Middle West. For many years they have been the largest single source of first mortgage credit.

As time went on, it became apparent that the credit conditions for agriculture were not as satisfactory as those for other forms of industry. There was no uniformity in lending practices, interest rates were high, mortgage brokers and loan agents charged high commissions, loan periods were short, and in general, mortgage credit conditions were very unsatisfactory. Short-term credit conditions were also unsatisfactory, but as farmers have never borrowed as much for current needs as they have for other purposes, dissatisfaction with short-term credit machinery was not as marked as in the case of the mortgage credit system.

After many years of investigation and debate Congress finally established the Federal Farm Loan System in 1916. Thus for the first time, agriculture was provided with a source of credit specially planned to fill the needs of that industry. The low interest rates, and the long-time amortized loan provided by the Federal Farm Loan System met with immediate response from farmers with the result that at present the Farm Loan System has almost one and three-quarters billions of dollars in outstanding loans. This is perhaps 20 per cent of the total farm mortgage debt of the United States.

Although the Federal Farm Loan System greatly improved the status of farmers with respect to mortgage credit, comparatively little has been done to improve short-term credit conditions. The Federal Reserve Act of 1913 extended some special benefits to agriculture. The Federal Reserve Board was given rather broad powers in administering the act and has shown a disposition to deal liberally with agriculture in the matter of credit extension. Following the post-war depression, there was much agitation to improve farmers' short-term credit conditions. This agitation resulted in the passage of the Agricultural Credit Act of 1923. This legislation established a series of intermediate credit banks whose function it was to provide credit for agricultural purposes for terms extending from six months to three years. For various reasons, however, these banks have not been widely patronized. They have performed very good service in certain sections of the country. Their most important function has been the financing of cooperative marketing associations. Recent legislation extends their powers in this respect and we may look for even greater use of the intermediate credit system by cooperatives. These governmental institutions greatly improved farmers' credit conditions.

At present farm mortgage credit is supplied by (1) Federal Farm Loan System; (2) life insurance companies; (3) farm mortgage bankers; (4) private investors; and (5) commercial banks. The Federal Farm Loan System and the life insurance companies hold approximately 40 per cent of the total farm mortgage debt. Farm mortgage bankers and commercial bankers together supply only a small amount of mortgage money. Probably the largest source of mortgage funds is the private investor. Of private investors very little is known. It would appear that for the country as a whole, farmers are adequately supplied with first mortgage credit. In certain localities this is not true, but generally speaking, this statement would hold. There is, perhaps, need for some institution to supply second mortgage credit. Just how pressing this need is, we do not know. Neither do we know what safe-guards would have to be provided to make loans secured by second mortgages reasonably secure.

The bulk of the short-term credit is supplied by commercial banks. This source is supplemented by credit extended by merchants and by loans from private sources. In the better developed sections of the United States, the short-term needs of farmers appear to be adequately cared for. In other sections where banks are not so well developed, farmers are too dependent upon store credit for their short-term requirements. This form of credit is very expensive and if possible should be avoided. It is particularly important in the South. Except in the South, farmers are as well supplied with short-term credit as are other small business men. It may well be that certain changes in the banking structure would result in improved service to agriculture, but until research in agricultural credit has been carried further, we can not tell where or how the present system may be improved.

Compared with the fields of farm management, marketing, or prices of farm products, research in agricultural credit has been neglected. For the most part, agricultural credit research has consisted of descriptive studies whose objective has been to find out how agriculture was being financed, how adequate were the sources of credit, and what were the special problems in the field. In any new field of research, such general studies are necessary before research of a more intensive nature directed toward the solution of specific problems can be intelligently undertaken. Enough of these ground-clearing, preliminary studies, have been done so that we may look forward to results throwing some light upon problems uncovered in the preliminary surveys.

A committee recently appointed to study the field of research in agricultural credit and to outline methods of research in that field, suggests that credit problems may be approached from the point of view of first, the area; second, the institutions; third, the types of credit; fourth, credit functions; and fifth, the commodity. It is recognized that research conducted according to the approach outlined in any of the above, will cut across the subject matter suggested in the other approaches. The emphasis, however, will be different. The credit problems of the country can, perhaps, be suggested in no better fashion than by reviewing briefly the outline of research in this field as suggested by this committee.

Under the area approach, descriptions of the credit situation prevailing in an area would be discussed, its development traced, and suggestions for the solution of its difficulties proposed. As suggested above, most of the credit research to date has been of this type.

The institutional approach suggests that credit problems be studied from the point of view of the financial institution supplying such credit. Investigation in this field would include a statement of the historical background, the economic set-up, the financial set-up, the operating organization, policies, business practices, services, costs, margins and rates for various services of the institutions being studied. Studies dealing with institutions supplying agricultural credit should lead to improved credit conditions by suggesting improvements in the internal economy of the institutions. Studies, such as outlined here, of country banks, of chain banking systems, agricultural credit corporations, livestock loan companies, farm mortgage companies, Federal land banks, Federal intermediate credit banks, joint stock land banks, insurance companies, and stores, doubtless would result in suggestions for improving the services rendered by these institutions or in suggestions whereby the users of these services may adapt their plans of operation so as to take fullest advantage of existing credit sources.

This institutional approach can be made not only from the point of view of the institution supplying credit but also from the point of view of the institution receiving such credit. Much work needs to be done in studying the credit uses and needs of the using institution. For example, the financing aspects of a farm organization has been almost completely overlooked by research workers in farm management. The credit problems involved have been almost entirely ignored. Similarly we need to know much more about the credit needs and the nature of credit of the different systems of farming. For example, just how do the credit needs of the corn, hog, and beef-cattle system of farming in Iowa differ from the credit needs of the wheat farm in Kansas, or the dairy farm in New York, or the citrus ranch in California. It is obvious, of course, that the credit needs of these different types of farming must differ radically. It would follow that different types of financial institutions must be used by the farmers of these different areas. These farmers will use different proportions of mortgage and short-term credit. The differences in the type of security offered may result in different types of credit institutions growing up in these different farming areas. The short-term credit requirements differ widely in the seasonality of demand for loans and in the term of loans. Perhaps short-term loans are more adequately secured under certain types of farming than under others. All of these things we should know.

Much the same type of analysis needs to be done for the various cooperative marketing agencies. Surely the financing problem of a cheese cooperative differs widely from that of a cotton cooperative. One organization, perhaps, needs much more than the other for building permanent facilities. It may take a much longer time for one product to pass from the original producer to the distributing market than it does for the other. All of these differences in products and methods of handling result in different demands. We do not know how adequately these demands are met or whether some modification of existing facilities needs to be made to take care of the demands not now satisfactorily met.

A problem which calls for immediate consideration is that of risk in the extension of agricultural credit. Almost nothing is known of the comparative risk involved in real-estate loans, for example, compared with the risk involved in the purchase of railroad or industrial bonds. For many years, it was assumed that real-estate mortgages were the finest type of investment, excelled only by government bonds, and some, but not all, state or municipal bonds. For many years this assumption proved correct. The depression of 1920 and 1921 has demonstrated, however, that real-estate values in this country can go down as well as up. As a result farm mortgages are no longer as attractive to the conservative investor as formerly. We now need facts rather than assumptions to guide us in determining the amount of risk in farm mortgage loans.

The risk factor in the short-term loan is also almost as important as in the case of farm mortgage loans. Its study is made more difficult, however, as the personality of the borrower is a more significant factor in determining the safety of the loan than is true in the mortgage loan. We do not know whether farmers as a class are more, or less inclined to meet their obligations promptly than are small business men in other lines of activity. Neither do we have exact information of the extent to which agricultural production as such is inherently a better or worse financial risk than manufacturing or commerce.

Appraisal policies of our loaning institutions are matters of concern to those who desire to improve agricultural credit conditions. Inasmuch as all farms must be appraised before loans are made, it is clear that the appraisal must be correct if justice is to be done both to the borrower and the lender. Heretofore, farm land appraisal has been made with the sole object of protecting the lender of funds. Events of the past few years show that appraisers have been none too successful in achieving their objective. The recent experience would suggest that our appraisal system needs over-hauling. Methods of appraisal at present differ slightly or not at all from methods in common use 60 years ago. There is undoubtedly great opportunity for improvement in land appraisal, and research on this problem may be expected to yield results that will be of real benefit to borrowers and lenders. Such research should have for its objective reducing the problem of land evaluation so far as possible to a problem of measurement rather than, as it is at present, a problem of the individual judgment of the appraiser.

Farm land appraisal at present consists of little more than making an estimate of what the land will sell for under present conditions. When loans are made for periods of 30 or 35 years, it is necessary to examine the bases of land values much more adequately than is done at present. By isolating and measuring the factors influencing land values in an area, it should be possible to establish means by which appraisals may become much more standardized than is now true. When standards are set up for an area, the appraiser's task will become one of measurement and one of fact collecting. There will still be plenty of room for the exercise of judgment. The appraiser will have to determine the credit risk of the applicant. He will have to determine the extent to which individual farms may be above or below the standard for the area. But he will no longer be expected to exercise his judgment in arriving at the basic value of the property. This will already have been done by experts who have had at their command all of the facts influencing the level of land values in the district.

No small part of the research on this problem will consist of finding ways and means of collecting the necessary current data needed as a basis for appraisal of land. The Federal land banks, the life insurance companies, the United States Department of Agriculture, and the state experiment stations—all will have an important part to play in the solution of this problem. The experience of the past ten years has brought the lending institutions into a frame of mind where they are frankly skeptical of their present appraisal methods. Not much forward looking work has been done as yet, but we may expect increasing experimental and investigational work to be done. It is a fairly safe prediction that the best farm land appraisal methods of ten or fifteen years hence will bear slight resemblance to the methods now in current use.

There is a series of problems closely related to the study of the credit needs of a particular type of farming organization that calls for special study. For example, under what conditions may credit advanced for the purchase of fertilizer for the growing of cotton in various sections of the South be economical, both from the standpoint of the grower of the cotton and from the standpoint of the lender of funds. The same question may be asked regarding the purchase of feeder cattle, or a tractor, or the clearing of land, or the construction of special farm equipment. These are suggestive of a host of similar problems that may properly become the subject of research in this field.

It was suggested early in this paper that credit problems could be studied through the commodity approach. Such research would examine the uses, needs, and nature of credit required in a particular form of agricultural production such as wheat growing, cotton growing, dairy farming, ranching, or orcharding. In like fashion the credit problems of marketing cotton, tobacco, or citrus fruits may become the subject matter of special researches.

There is another set of problems of a more general nature upon which study needs to be done. These problems are, perhaps, of even more interest to those interested in agriculture as an industry than those which have been mentioned heretofore. We do not know very much about the variations in interest rates within areas or the causes of such variation. Study of this problem will assist materially in arriving at a more conclusive answer to the question of whether or not our present sources of agricultural credit are sufficient. In the same connection investigation of the place of agricultural credit in our whole financial structure may properly become the subject for extended research. We have no very adequate idea of the relationship existing between agricultural financing and general financing. Nor do we understand the effect of monetary disturbances upon the agricultural credit problem. It is clear that general credit policies will necessarily have an effect upon agricultural credit, and consequently upon such problems of public interest as the expansion or contraction of production of any farm product, land utilization, and agricultural development in general.

For those interested in keeping abreast of current agricultural conditions, certain sets of index series which may properly be the subject of research in agricultural credit, will be of great service. For example, indexes of collections of farm loans, interest rates, rates of payment on principle of mortgages, volume of mortgage indebtedness, forced sales, farm foreclosures, and volume of "distressed" land holdings will prove to be very good indicators of the condition of agriculture.

The foregoing discussion of research problems in agricultural credit is by no means definitive. It is merely suggestive of the type of problems which now engage the interest of those engaged in research in this field. Research has progressed sufficiently far for us to know that we can no longer safely advise the setting up of new institutions to extend farm credit, nor can we safely suggest the liberalizing of the present institutions. What is needed most just now is an understanding of the uses of credit by farmers under various conditions of production, and after we have learned that, the degree to which our present facilities meet, or fail to meet, the present needs. The other type of research is of a more general nature and will be of particular service to those interested in the larger phases of agricultural economics.

As previously suggested, most of the research published to date is of the general ground clearing type. Not very much analytical work has been done. The point has just been reached where workers may profitably extend their efforts toward the solution of more fundamental problems.

It may be of interest to learn some of the preliminary results of a study in farm credit now under way at the Iowa Agricultural Experiment Station. This study is intensive in character, and should supply some of the data needed to construct some of the indexes suggested above. The project is being conducted in coöperation with the divisions of Agricultural Finance and Land Economics of the Federal Bureau of Agricultural Economics. All relevant information contained in each farm mortgage recorded in Story County, Iowa from the beginning of the county in 1854 to June, 1930 has been transcribed upon tabulating machine cards. These cards have been coded, punched and are now in process of tabulation. When the study is completed, we expect to have a series of farm mortgage interest rates from 1854 to date. Other information will show terms of mortgages, total mortgage indebtedness outstanding at particular dates, amount of loans per acre, number of foreclosures each year for the entire period, residence of the mortgagor, mortgagee, and assignee (if any), sources of farm mortgage credit, average equities in land, the extent to which land purchase is a purpose of the loan, average length of time particular pieces of land have been mortgaged, and much other information of a similar character. In the course of another study, all of the land transfers in the county were recorded, and these data were found very useful in the present study. A part of this same study has involved the securing of prices of agricultural products at local points for as much of the period as these data are available. We expect to construct an index of local prices and to determine what relationship, if any, exists between price fluctuations and mortgage loan fluctuations. The geographical center of the state is located near Story County, and Story County is representative of a large proportion of the state of Iowa. It is hoped that the results of this investigation will be representative of results which could be secured by similar means from most of the central part of the state.

Table 1. Number and Amount of Farm Mortgages Recorded in Story County, Iowa, by Ten Year Periods, 1854 to 1930

Period	*Number of mortgages recorded*	*Amount of mortgages recorded*
1854–1860	424	$187,869
1861–1870	1,541	779,227
1871–1880	3,934	2,632,881
1881–1890	3,845	3,569,038
1891–1900	4,323	6,513,087
1901–1910	3,652	11,193,398
1911–1920	4,531	35,752,559
1921–1930	3,751	31,184,937
Total	26,001	$91,812,996

From 1854 to June, 1930, 26,001 farm mortgages were recorded in Story County. The total amount loaned during this period was $91,812,996. The number and amount of mortgages recorded by ten-year periods from 1854 to date is shown in table 1.

Since 1871 from 3,500 to 4,500 mortgages have been recorded during each ten-year period. A total of 4,531 mortgages were recorded between 1911 and 1920. Although the number of mortgages recorded during the past 60 years has not varied greatly from decade to decade, the amount of the mortgages has increased very rapidly. From 1871 to 1880 mortgages to the amount of $2,632,881 were recorded. From 1911 to 1920 the mount of the mortgages recorded was $35,752,559. From 1921 to 1930 the amount of mortgages declined to $31,184,927.

In 1920, 807 mortgages amounting to $10,505,634 were recorded. This was the heaviest year during the period. The second largest year in point of numbers was 1875 when 605 mortgages amounting to $486,425 were recorded. The amount was small when compared with the amounts in recent years. More than a million dollars of mortgages per year have been recorded in each year since 1901 with the exception of four years.

The number of foreclosures in Story County by ten-year periods from 1854 to date is shown in table 2. The decade having the fewest number of foreclosures was from 1911 to 1920, with a total of ten. During the succeeding nine years, from 1921 to 1929, there were 203 foreclosures. The largest previous number of foreclosures occurred during the decade of 1871-80 when there were 193 foreclosures.

Table 2. Number of Farm Mortgages Foreclosed in Story County, Iowa, by Ten Year Periods, 1854 to 1930

Period	*Number of foreclosures*
1854–1860	72
1861–1870	87
1871–1880	193
1881–1890	83
1891–1900	52
1901–1910	13
1911–1920	10
1921–1930	203

The data in table 3 represent results for only three of the sixteen townships in Story County. Tabulations have not progressed far enough to give these data for the whole county. This table indicates that loans made by private individuals have declined in importance from the very beginning of the study. From 1854 to 1860, 80 per cent of the mortgage loans were supplied by private individuals, while in the period from 1921 to 1930 only 22 per cent was thus supplied.

The funds from insurance companies, however, have shown exactly the opposite trend. From 1861 to 1870 only 1 per cent of the mortgage loans were supplied by insurance companies while during the present decade, 45 per cent were insurance company loans.

Other important sources of mortgage funds are the commercial banks and former owners. The banks seem to be maintaining, or perhaps, increasing their percentage of mortgage loans. During

Table 3. Per Cent of Funds on Mortgage Loans Coming from Different Sources, by Ten Year Periods, 1854 to 1930, Three townships in Story County, Iowa

Period	*Source of funds and per cent of funds from each source*										
	Local money lenders	*Private individual*	*Insurance companies*	*Banks*	*Farm mortgage companies*	*Federal land banks*	*Joint stock land banks*	*Story County school fund*	*Former owners*	*Miscellaneous*	*Total*
1854–1860		80						7	3	10	100
1861–1870	1	53	1					8	36	1	100
1871–1880	6	46	8	7	1			4	26	2	100
1881–1890	10	36	27	11	1			3	11	1	100
1891–1900	15	41	22	8	1			2	10	1	100
1901–1910	10	31	33	15				1	10		100
1911–1920	4	26	28	13	3	1	2		23		100
1921–1930	2	22	45	19	5	3	3		1		100

Table 4. Number of Mortgages Recorded Classified According to Interest Rates, by Ten Year Periods, 1854 to 1930*
Three townships in Story County, Iowa

Period	*Interest rates (per cent)*							
	10	9	8	7	6	5	4 or less	Total
	Number of mortgages	*Number of mortgages*	*Number of mortgages*	*Number of mortgages*	*Number of mortgages*	*Number of mortgages*	*Number of mortgages*	*Number of mortgages*
1854–1860	39			1	3			43
1861–1870	169	11	45	4	13			242
1871–1880	581	39	46	19	12	1	4	702
1881–1890	88	6	312	66	133	1	1	607
1891–1900	1		145	206	255	60		667
1901–1910			40	29	171	344	2	586
1911–1920			36	40	228	370		674
1921–1930			83	42	179	252	2	558

* Data as to interest rates were not available for 288 mortgages.

the last decade they made 19 per cent of the loans. Former owners, however, appear to be declining in importance. From 1861 to 1870 they made 36 per cent of the mortgage loans, from 1911 to 1920 they made 23 per cent of the mortgage loans while during the present decade they have made only 1 per cent of the mortgage loans. This is because very few sales have been made during the last ten years. Most of the transfers are the results of fore-

Table 5. Percentage of Cash Paid Down in Purchase of Land, Grouped According to Cases for the Period 1854-1930,*
Three townships in Story County, Iowa

Per cent of cash paid down	*Number of cases*
0–9.9	77
10–19.9	96
20–29.9	112
30–39.9	105
40–49.9	109
50–59.9	155
60–69.9	113
70–79.9	70
80–89.9	38
90–99.9	30
Total	905

* Only cases involving some borrowing on mortgages were included. Where more than one mortgage was given, all the mortgages were totalled and that amount subtracted from the purchase price of the land to find the amount of cash evidently paid down.

closures or the inability of the owner to maintain title to his property.

Study of these records shows that there has been a substantial decrease in the interest rate from 1854 to 1930 as is shown in table 4. From 1854 to 1860 only four mortgages out of a total of 43 giving the rate of interest, were made at a rate lower than 10 per cent. The number of 10 per cent mortgages increased until 1880. During the decade 1881 to 1890, the modal interest rate dropped to 8 per cent and from 1891 to 1900 the modal rate declined still further to 6 per cent. Since 1901 the modal rate has been 5 per cent.

Table 5 shows a frequency distribution from the sales of land in three townships from 1854 to 1930 classified according to the per cent of cash payment. The table indicates that most of the purchasers paid down from 20 to 70 per cent of the purchase price. The largest single group paid from 50 to 60 per cent of the purchase price. Four hundred and ninety-nine purchasers paid less than 50 per cent in cash and 406 paid more than 50 per cent of the purchase price in cash.

The change in the total outstanding debt from 1860 to June 1930 is indicated in table 6. The debt increased very rapidly from $22,000 to $85,000 between 1860 and 1870. This jumped to

Table 6. Total Outstanding Farm Mortgage Debt at Ten Year Intervals in Three Townships in Story County, Iowa, 1854 to 1930

Year ending December 31	*Total outstanding farm mortgage debt*
1860	$ 22,235
1870	85,895
1880	213,564
1890	316,306
1900	498,990
1910	898,363
1920	3,758,843
1930*	$3,563,202

* Mortgage debt as of June 1, 1930.

$213,000 in 1880, to $316,000 in 1890, to almost $500,000 in 1900, and $900,000 in 1910. During the decade from 1911 to 1920 the outstanding debt increased to $3,759,000. Since 1920 there has been a small decline to $3,563,000. Much of this decline has been caused by the foreclosure of mortgages.

The foregoing is in no sense a complete analysis of the data collected. These tables have been presented merely to illustrate the type of analysis possible in this kind of research work. Preliminary results indicate that much very valuable information can be secured by analyzing official records of the kind used in this study.