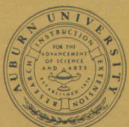


An Analysis of Agricultural Credit in the Wiregrass Area of Alabama



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An Analysis of Agricultural Credit in the Wiregrass Area of Alabama

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WITH THE TREND TOWARD A GREATER USE of purchased inputs in agriculture, credit will play an increasingly important role in the total agricultural picture. More information concerning the extent of credit use, including source and type, possible increase in net farm income that can be achieved through the wise use of credit, and the various attitude patterns exhibited by farm operators of varying ages and economic levels, is needed.

The price-cost squeeze, increasing size of farms, and dollar amounts of purchased inputs introduce many questions concerning credit use. Social and economic conditions have been changing rapidly creating a need for current data that could serve as a basis for developing valid criteria to aid in making management decisions. The primary objectives of this study were:

- (1) To determine the present use of agricultural credit by farm families in selected localities of the Wiregrass Area of Alabama.
- (2) To determine attitude patterns exhibited by farm families toward credit practices.
- (3) To determine factors related to a potential increase in net farm income through the wise use of agricultural credit.

PROCEDURE

The Wiregrass Area of Alabama was selected for study because of its long history of diversified farming operations, its high per-

* Research on which this report is based was carried out under Hatch Project Ala-267 titled "An Analysis of Agricultural Credit in Alabama." This project was supported by Federal and State research funds. Appreciation is expressed to the farmers who supplied the data for this study.

centage of owner-operator farmers, and its projected contribution to the agricultural industry of Alabama. For the purpose of sampling, three representative counties, based on census data, were chosen from the nine-county area shown in Figure 1. Counties selected were Houston, Geneva, and Coffee. Personal interviews were conducted with farmers in these counties.

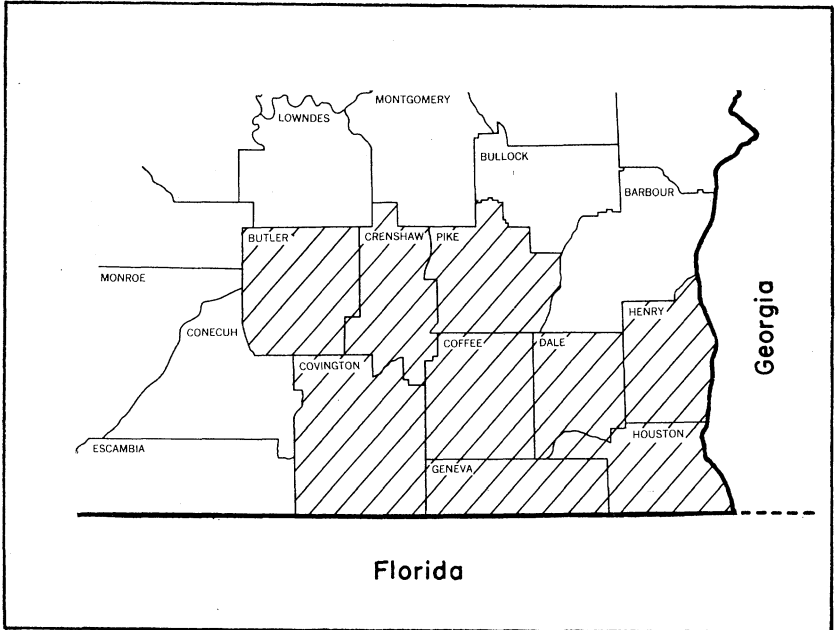


FIG. 1. The Wiregrass Area of Alabama consists primarily of the nine-county area indicated here. Of these nine counties, Houston, Geneva, and Coffee counties were selected for this study.

A random sample of 24 primary townships was selected along with 6 alternates. Limits of a maximum of two part-time farmers per township were set in addition to a maximum number of seven completed questionnaires per township. Schedules were obtained by starting in the northeastern corner of each designated township, working in a clockwise direction, and taking a schedule from each farmer until the desired number was reached.

Data were coded and punched on electronic data cards. Various classification factors were chosen for analysis based on logic, previous research, or both when it was anticipated that they might be associated with the use of credit. Factors such as net worth, acres operated, net farm income, age, tenure, education, and per

cent earned on investment were used in the analysis. Simple correlation analysis showing the relationship between use of credit and these selected quantifiable factors was applied. For the qualitative data, Chi-square tests were used to analyze the attitudinal variables with respect to the use of credit.

DESCRIPTION OF AREA

The Wiregrass Area is a nearly level to rolling plain with irregular topography on the northern border. Dothan, with a population of 31,440 in 1960, is the largest town and is located in the southeastern corner of the area.¹ Other towns with populations exceeding 10,000 are Enterprise, Ozark, Andalusia, and Troy.

Soils in the Wiregrass Area are predominately gray to red sandy loams to loamy sand surface soils with subsoils ranging from loamy sands to clays. The soils, especially in the southern two-thirds of the area, are well suited to general farming and truck crops. Principal crops include peanuts, corn, cotton, and a limited acreage of soybeans.

The climate in the Wiregrass Area is influenced by the Gulf of Mexico and is generally mild. Average annual rainfall is 53 inches with about 55 per cent of the total rainfall occurring during the spring and summer months.² Temperatures vary from 18 to 100 degrees with the average annual temperature being 66 degrees. The last killing frost occurs in mid-March and the first killing frost in the fall usually occurs in early November. The annual growing season ranges from 235 to 240 days.³

FARM CHARACTERISTICS AND CREDIT USE

Debt and credit are terms common to most farmers. Predictions are for an increasing debt load for agriculture in general and the individual farmer in particular as farms get larger. To determine if size and quantity of resources had any effect on various income measures, farmers were grouped into four classes accord-

¹ U.S. Department of Commerce, Bureau of Census. 1960. General Population Characteristics, Alabama. Washington, D.C.: Government Printing Office, pp. 2-51.

² U.S. Department of Commerce. Alabama Annual Summary, 1967, Climatological Data, Vol. 73, No. 13. Washington, D.C.: Government Printing Office.

³ Steering Committee, Wiregrass Resource Planning Area. Project Plan Wiregrass. Fort Worth, Texas: Government Printing Office, May 1967, p. 5.

ing to the number of acres operated. The following class groupings were specified:

<i>Classification</i>	<i>Number</i>	<i>Acres operated</i>
Small.....	43	0-149
Medium.....	49	150-299
Large.....	24	300-799
Extra-large.....	8	800 and over

Three main credit use patterns were distinguished for analysis and were defined as follows:

<i>Type of credit</i>	<i>Definition</i>
Operating.....	Money borrowed or credit obtained for a period not to exceed 1 year.
Intermediate.....	Money borrowed or credit obtained for a period of 1 to 5 years.
Long-term.....	Money borrowed or credit obtained for a period exceeding 5 years.

A general summary of the existing farm situation in the Wiregrass Area is presented in Appendix Table 1. Farms were classified according to acres operated during 1967. The variance in the ages of farmers had a range of 9 years. Operators of large farms had the youngest average age, 47 years, and exhibited the highest per cent earned on investment, 3.5 per cent. This earnings figure compared quite favorably with the overall average of 0.8 per cent for all farmers and was 1.0 per cent higher than any other farm grouping. Crops were the greatest source of revenue in all groups of farms. Approximately 50 per cent of all cash receipts reported were from this source. Large farm operations, with 61 per cent of the farm receipts from crops, had a slightly higher percentage receipt from crops than the others. Total non-farm income ranged from \$902 for medium-sized operations to \$1,620 for small operations.

Land accounted for more than 50 per cent of total assets for all size groups of farms. Large farming operations had approximately 21 per cent of the assets in machinery compared to 12 per cent for the extra-large operations. Small and medium-sized operations ranged between these extremes. Medium and large-sized operations had approximately 10 per cent of the assets in the form of livestock compared to 8 per cent for small operations and 18 per cent for extra-large operations.

Extra-large farming operations were the only ones that had a negative net cash income. Large outlays of capital for long term investment by the owners, especially for land and feedlots, attributed to this situation. When dollar figures representing net farm

income were compared with acres operated of respective classes, medium-sized operations had the highest net return, which was \$13.08 per acre operated. This was followed closely by large operations, \$12.11, and then a major decrease to \$9.07 for small and \$6.25 for extra-large farms. The negative per cent earned on investment by small farming operations points toward a problem area in agriculture.

Any individual who reported borrowing any money during 1967 or had previously negotiated loans which were outstanding in 1967 was classified as a borrower. Of the individuals sampled, 98 (79 per cent) were classified as borrowers and 26 as non-borrowers.

The same general format followed in Appendix Table 1 was used in Appendix Table 2. However, farmers were classed as borrowers and non-borrowers. Borrowers, as an average, were 10 years younger than non-borrowers and operated over twice as much land. Cash receipts from crops for borrowers accounted for 55 per cent of total cash receipts compared to 44 per cent for non-borrowers. Net worth of borrowers was nearly twice that of non-borrowers, with both having approximately the same percentage of total assets in the form of land. The age difference of 10 years is a factor to be considered when comparing the net worth figures. Two other key factors noted were that borrowers had net farm incomes 2.2 times that of non-borrowers and per cent earned on investment three times that of non-borrowers.

Dollar amount of credit obtained and borrowers as a percentage of all farmers are shown in Table 1. A definite progression from 53 to 100 per cent is shown in the use of operating credit when individual farmers are considered by size of farm. Significance can be given to the greater use of credit in conjunction with an increase in size of farming operations. Dollar amounts shown in relation with large and extra-large operations point toward the increase in volume of credit that will be needed in the future. Lenders, who have in the past met the needs of their farm customers and desire to continue such financing, might well adjust their policies to ensure a capability to continue such a practice in the future.

Intermediate term credit was utilized in fewer instances than operating credit in all size classes except large operations. On the other hand, dollar amounts of credit used increased for all size classes. The \$50,000 average representing operators of extra-

TABLE 1. PERCENTAGE OF FARM OPERATORS WHO WERE BORROWERS AND AVERAGE AMOUNTS BORROWED BY TYPE OF CREDIT AND SIZE OF OPERATION, WIREGRASS AREA, ALABAMA, 1967

Type of credit	Size of farming operation								All borrowers	
	Small		Medium		Large		Extra-large			
	<i>Pct.</i>	<i>Dol.</i>	<i>Pct.</i>	<i>Dol.</i>	<i>Pct.</i>	<i>Dol.</i>	<i>Pct.</i>	<i>Dol.</i>	<i>Pct.</i>	<i>Dol.</i>
Operating.....	53	1,320	69	3,410	75	6,860	100	10,770	67	5,290
Intermediate.....	32	2,780	51	3,860	79	8,910	38	50,000	49	6,840
Long-term.....	21	9,590	49	10,410	54	20,786	75	52,250	48	17,440
Total credit.....		13,690		17,680		36,556		113,020 ¹		29,570

¹ Excluding two exceptionally large sums in excess of \$150,000, an adjusted average long-term debt for extra-large farm operators would be \$28,000.

large farms involved only three individuals whose borrowed sums ranged from \$1,000 to \$99,000.

Even though average dollar amounts of intermediate term credit decreased in comparison to dollar amounts of operating credit for large farm operations, these operations showed a significantly larger percentage using intermediate type funds compared to small or medium-sized operations. Use of credit by farmers in this large size class might well be a factor in their achieving a higher per cent return on investment. Often this type credit usage is necessary in an enlargement program designed to increase efficiency, to change enterprise combination, or to expand the volume of the business.

The use of long-term credit was quite substantial for extra-large operations with two individuals reporting borrowed sums in excess of \$150,000. A relatively low percentage (21 per cent) of farmers in the small farm class had outstanding long-term loans, while in all other classes 50 per cent or more of the farmers reported long-term loans.

Although the kind of credit as a proportion of total credit appears rather uniform for all size classes, managers of large operations tended to have a greater percentage of their total borrowed funds in operating loans and less in intermediate loans, Table 2. Operators of small farms exhibited greater percentage use of funds for long-term purposes.

TABLE 2. CREDIT USE BY TYPE AS A PER CENT OF TOTAL CREDIT BY SIZE OF FARMING OPERATION, WIREGRASS AREA, ALABAMA, 1967

Type of credit	Size of farming operation				All borrowers
	Small	Medium	Large	Extra-large	
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	
Operating	12	21	26	18	20
Intermediate	22	25	22	34	23
Long-term	66	54	52	48	57

The use of credit has been discussed without considering security in relation to obtaining of funds. Table 3 shows the percentage of total credit by types of security and size of operation. These figures include the total sample and give a general pattern for the Wiregrass Area.

Long-term credit, when viewed as a per cent of the value of land and buildings, showed a varied picture for small size operations in that the percentage was higher for this size class than for all others. On the other hand, average dollar amount of long-term

TABLE 3. PERCENTAGE OF TOTAL CREDIT BY TYPES OF SECURITY AND SIZE OF OPERATION, WIREGRASS AREA, ALABAMA, 1967

Security factors	Size of farming operation				All bor- rowers
	Small	Medium	Large	Extra- large	
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Long-term credit as per cent of land and buildings.....	56	38	43	24	44
Intermediate credit as per cent of machinery and livestock.....	55	45	39	39	43
Operating credit as per cent of machinery and livestock.....	28	39	46	21	38
Total credit as per cent of total assets.....	59	26	27	16	30
Total credit as per cent of net worth.....	65	56	64	38	60

credit borrowed by this particular class was the lowest. Figures representing extra-large farming operations showed exactly the opposite of this situation. Medium and large farming operations were rather uniform in this instance with 38 and 43 per cent of the credit, respectively, in long-term loans.

The amount of intermediate-term credit in relation to machinery and livestock assets was quite uniform with the exception of small farm operations, which showed a slightly higher figure. The increase might well be attributed to a need for basic items of machinery which are necessary to carry on a farming operation and which are quite expensive in relation to actual farming needs.

Often the use of operating credit is associated with a farmer's crops and livestock. Because of the lack of crop data in this study, a relationship was drawn between the use of operating credit and the farmers' assets in machinery and equipment. Small and extra-large operations showed a sizeable decrease from that percentage previously shown for the use of intermediate credit. Large operations, on the other hand, showed an increase when comparing these same relationships. This increase for large operations and the stability of medium-sized operations further emphasized relative credit use patterns, especially for operators of large farms, and the attempts to obtain a high per cent return to capital investment.

Credit use when compared with total assets and net worth revealed high percentages in both instances for the small farm operation and rather low percentages for the extra-large farms. Operators of medium and large farms showed definite variance in that the amount of funds borrowed was roughly 25 per cent of total assets but approximately 60 per cent of net worth.

A slightly different comparison is illustrated in Table 4, using actual amounts of outstanding credit as of January 1, 1968 as a percentage of selected factors. Also, borrowers were considered as a separate class. The data show a rather remarkable uniformity per class with all percentages being quite low. Operating credit in most cases was reported repaid annually, but it was not considered in this analysis.

TABLE 4. RELATIONSHIP OF OUTSTANDING CREDIT TO TOTAL ASSETS AND NET WORTH, BY SIZE OF OPERATION AND TYPE OF CREDIT, ALL FARMS AND BORROWERS, WIREGRASS AREA, ALABAMA, 1967

Size of operation	Type of credit			
	Long-term		Intermediate	
	Total assets	Net worth	Total assets	Net worth
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
Small.....	7	7	2	3
Medium.....	10	11	5	5
Large.....	9	11	7	8
Extra-large.....	10	11	1	1
All borrowers.....	11	12	4	4

The relation of borrowers to their use of the three types of credit is shown in Table 5. Of the 98 borrowers, 24 used only one type credit while 74 used some combination of three types. Thirty-two per cent of the borrowers reported using all three types of credit with an average borrowed amount of \$35,822.

TABLE 5. AVERAGE AMOUNT OF CREDIT AND NUMBER OF BORROWERS BY TYPE OF CREDIT, WIREGRASS AREA, ALABAMA, 1967

Type of credit	Bor- rowers	Average amount of credit		
		Operating	Inter- mediate	Long-term
		<i>No.</i>	<i>Dol.</i>	<i>Dol.</i>
Operating.....	13	4,892	-----	-----
Intermediate.....	8	-----	6,228	-----
Long-term.....	3	-----	-----	9,667
Operating and intermediate.....	18	3,822	6,111	-----
Operating and long-term ¹	21	7,835	-----	25,476
Intermediate and long-term.....	4	-----	5,388	9,625
All credit.....	31	9,031	10,681	16,110

¹ Two individuals had large borrowings therefore skewing the mean upward. With a sample size of 19, average operating credit was \$6,004 and average long-term credit was \$18,053.

USE OF CREDIT

Operating Credit

Relatively little is known about the amount of operating credit

used for specific purposes and the related interest rates in Alabama. Such information would be useful to those who counsel farm families in an educational or lending capacity as well as to others who have an interest in the resources used by farm families.

Sixty-seven per cent of the farmers interviewed reported using some form of operating credit during the calendar year 1967. The average amount used was \$5,290, with amounts ranging from \$300 to \$31,000, Table 6. Operators of extra-large farms greatly influenced this range because three respondents reported borrowing amounts in excess of \$25,000. Excluding these three borrowers, the range was from \$300 to \$16,000. Fifty-seven per cent of the loans ranged from \$500 to \$5,000.

TABLE 6. OPERATING CREDIT BY PURPOSE, NUMBER OF LOANS, AMOUNT BORROWED AND INTEREST RATE, WIREGRASS AREA, ALABAMA, 1967

Purpose of loan	Loans	Average amt. borrowed	Stated av. int. rate
	<i>No.</i>	<i>Dol.</i>	<i>Pct.</i>
General operating.....	93	5,720	5.9
Family living.....	8	2,380	6.2
Feed and seed.....	4	1,200	6.7
Feeder livestock.....	3	6,330	6.0
Labor.....	1	2,050	---
Total or average.....	109	5,290	5.9

There was a direct relationship between amounts of operating credit and size of farm. Farmers operating extra-large farms borrowed the greatest average amount, \$10,770, with large farm operators borrowing an average of \$6,860. Operators of medium-sized farms followed next in line borrowing an average of \$3,410, with small farm operators utilizing an average amount of \$1,320.

Interest rates were rates given the interviewer by farmers and may not be the true interest rate. Stated interest rates averaged 5.9 per cent when considering all loans. Operators of medium-sized farms reported paying the highest average interest rate (6.1 per cent) while operators of large farms paid the lowest (5.4 per cent). The remaining two classes, operators of small and extra-large farms, averaged 5.9 and 5.8 per cent, respectively.

Operating credit was obtained from dealers by 40 per cent of the respondents and from banks by 37 per cent. Production Credit Associations were used as a source of funds in 10 per cent of the cases, with the two largest loans coming from this source. Private individuals and the general category of "others" each accounted for 6 per cent of the loans, with the Farmers Home Administration accounting for 1 per cent of total loan volume.

Banks supplied the largest total dollar amount of loans among all lenders. Production Credit Associations provided the largest average size loan, \$10,620, which was approximately \$3,500 more than that averaged by other major credit sources.

Operating credit was used most frequently for "general operating" expenses. Most often farmers borrowed a lump sum which was used for many different purposes. Therefore, in most instances, they could not specify the amount of credit used for a particular purpose. A detailed summary showing the respective sources, amounts, and interest rates is given in Appendix Table 3.

A majority of farmers stated they had repaid all debts incurred for operating costs prior to the end of 1967. The 18 per cent who reported some debt carryover gave crop failure and family illness as primary causes.

Only 6 per cent of the farmers reported any trouble obtaining sufficient operating credit. Reasons given for trouble encountered were (1) lack of security, (2) source of credit, (3) hesitance to incur indebtedness, and (4) renewal of the previous years unpaid debts. All farmers operating 300 or more acres reported they obtained operating credit without any difficulty.

Seventy-eight per cent of the respondents felt they could not increase farm profits by borrowing more operating capital. The opinion was often expressed that they had a hard enough time paying back what they presently borrowed; therefore, they were not desirous of incurring an increased debt load. Operators of medium-sized farms held the strongest feelings about the potential benefits of increased use of short-term credit with 33 per cent of them feeling there might be some benefit. About 15 per cent of all other farm operators responded in a positive manner to this question.

Intermediate Credit

Forty-nine per cent of the farmers reported they used some form of intermediate-term credit. The average amount used was \$6,840, while the range was from \$500 to \$99,000. Managers of extra-large and large farms influenced the mean somewhat with borrowed amounts in excess of \$20,000 being reported in five instances. Most loans ranged from \$1,000 to \$5,000.

Only two cases of this type loan negotiated by small farm operators exceeded \$5,000. Intermediate-type loans negotiated in excess of \$5,000 by the remaining classes of farm operators ac-

counted for 25, 43, and 100 per cent of the respective categories from medium to extra-large. The range in size of loans was from \$2,780 for operators of small farms to \$50,000 for the managers of extra-large farms. The average for the extra-large farm operator was rather large; however, only three operators in this class used intermediate credit. Two of these three borrowers accounted for \$149,000 of the \$150,000 reported. Excluding all borrowers in the extra-large farm classification, the average amount borrowed by the remaining farmers was \$4,990. Operators of large farms reported an average of \$8,910 borrowed for intermediate credit with operators of medium farms utilizing \$3,860.

Stated interest rates ranged from 6.7 to 8.0 per cent, with the average rate for all farmers being 6.9 per cent. Contrary to what might be expected, operators of small farms reported the lowest interest rates and operators of extra-large farms reported the highest. It is normally thought that lower interest rates are associated with greater sums borrowed but such did not prove to be the case in this survey. Borrowers of the two largest loans in the sample did, however, report a rate of 6.0 per cent. In most cases, banks were reported to be the cheapest source of funds, excluding the Farmers Home Administration. Interest rates charged by dealers ranged from 6.0 to 12.0 per cent. A summary of average amounts borrowed, average interest rates paid, and length of loans is shown in Table 7.

TABLE 7. INTERMEDIATE CREDIT BY PURPOSE, NUMBER OF LOANS, AMOUNT BORROWED, INTEREST RATE, LOAN LENGTH, AND TYPE REPAYMENT, WIREGRASS AREA, ALABAMA, 1967

Purpose of loan	Loan	Av. amt. borrowed	Av. int. rate	Av. length	Repayment
	No.	Dol.	Pct.	Yr.	
Equipment.....	58	8,000	7.0	3.3	Annual
Pick-up.....	7	1,730	7.3	1.2	Annual
Automobile.....	4	2,980	7.4	2	Annual
Livestock.....	2	4,400	6.2	1	Annual
Grain bins.....	2	1,300	4.0	2.5	Annual
Total.....	73	6,840 ¹	6.9	3	Annual

¹ Deducting loans negotiated by operators of extra-large farms reduced this figure to \$4,990.

Dealers were listed as a source of credit in 40 per cent of all intermediate-term loans. Banks were next in frequency with 28 per cent, followed by Farmers Home Administration, finance companies, and Production Credit Associations. Loans were negotiated for purchase of equipment in 79 per cent of the cases.

Other uses of funds, in order of frequency, were for pick-up trucks, automobiles, livestock, and grain bins.

Length of loans was 1 to 5 years with a mean length of 3 years. Equipment loans averaged 3.3 years in length, with banks providing an average of 2.4 years per loan compared to Farmers Home Administration approving this type loan for approximately 4.5 years. The largest single financing group, dealers, extended credit for an average of 3.8 years. Of the 73 loans reported, in only five instances was there any deviation from an annual type repayment. A detailed summary showing sources of money, average amounts borrowed, interest rates, length of loans, and type of repayment appears in Appendix Table 4.

Forty-three per cent of the respondents stated they could increase their profits by using more intermediate-term credit. Fifty per cent of the operators of medium-sized farms expressed this opinion followed by operators of large (46 per cent) and small (41 per cent) farms. However, operators of extra-large farms unanimously agreed that increased intermediate-term borrowing would not materially increase their farm profits.

When questioned concerning possible uses of additional intermediate-type funds, the purchase of additional machinery was reported most frequently. Other items mentioned were clearing of land, investment in livestock, improvement of pastures, and improvement of buildings and feeding facilities.

Ninety-two per cent of the farmers reported obtaining adequate intermediate-term credit without any difficulty. Sources and plans of repayment were reported satisfactory. Many farmers mentioned that funds were often too easily obtained. Reasons given by the 8 per cent that had some difficulty in obtaining this type credit were: age, lack of security, lack of required down-payment, and self-imposed hesitance to borrow.

Credit life insurance is often associated with the use of intermediate credit. Little is known about the extent to which this type insurance is used. Of the 61 farmers reporting intermediate type loans, 39 reported use of credit life insurance. Of this number, 14 stated this type insurance was required by the lender. This accounts for 23 per cent of the sample thereby giving evidence that credit life insurance is a factor in intermediate-type loan financing but not a prevalent factor.

Long-Term Credit

Of the farmers interviewed, 48 per cent reported having outstanding real estate loans ranging from \$2,500 to \$144,000. The average amount borrowed on a long-term basis was \$17,440. This figure was reduced to \$13,320 when three loans in excess of \$50,000 were excluded from the total. Loans ranged from \$5,000 to \$15,000 in 85 per cent of the cases. Funds borrowed for purchasing land averaged \$18,420 compared to \$10,620 for building homes (mortgage on farm land). Loans to operators of small and medium-sized farms averaged \$9,590 and \$19,410, respectively, while loans to operators of large and extra-large farms averaged \$20,786 and \$52,250. With the exception of one loan, all loans in the large farm classification ranged from \$10,000 to \$30,000.

Interest rates ranged from 4.0 to 7.0 per cent with an average rate on all long-term loans of 5.4 per cent. Managers of small farms reported paying the highest rate — 6.4 per cent. All other farmers paid rates ranging between 5.3 and 5.6 per cent. In all cases, loans obtained from the Farmers Home Administration had the lowest interest rates — 4.0 to 5.0 per cent. Bank interest rates ranged from 6.0 to 7.0 per cent. The rate of interest paid to Federal Land Banks averaged 5.1 per cent with the most commonly occurring rate being 6.0 per cent.

Farmers reported loans from Federal Land Banks in greatest frequency with an average of \$35,400 borrowed for the purchase of land. Banks and individuals each supplied 18 per cent of land-purchase loans, averaging \$13,200 and \$35,400, respectively. All farmers, with the exception of operators of small farms, used the Federal Land Bank as a source of funds approximately 50 per cent of the time. The two largest loans, each exceeding \$100,000, were obtained from private individuals.

Long-term loans averaged 19 years in length with annual payment reported in all cases. Loans for land averaged 18 years while home loans averaged 28 years. The range of loan lengths was from 1 to 40 years with 20 years most often reported. The most frequently reported length of bank loans was 1 year and by private individuals, 5 years. Most bank loans had an annual oral renewable commitment. Only one real estate loan was carried by an insurance company and it was at a 6.0 per cent rate with a 20-year length. Long-term loans according to the number, average amounts, and lengths are summarized in Table 8. A more detailed summary by source of loan including various ranges and average amounts is given in Appendix Table 5.

TABLE 8. LONG-TERM CREDIT BY NUMBER OF LOANS, AMOUNT BORROWED, INTEREST RATE, LENGTH, AND TYPE REPAYMENT, WIREGRASS AREA, ALABAMA, 1967

Purpose of loan	Loans	Av. amt. borrowed		Av. int. rate	Av. length	Repayment
		No.	Dol.	Pct.	Yr.	
Land.....	56	18,420		5.4	18	Annual
Home.....	8	10,620		5.2	28	Annual

When asked whether or not they could increase their profits by using more long-term credit, 44 per cent of the respondents answered "yes." Positive answers were more prevalent among the managers of extra-large and large farms with 61 and 49 per cent, respectively. The primary purpose for which additional funds would be used was the purchase of land. This response was given by half of the operators of medium-sized farms. Other purposes for which long-term loans would be used were buildings and machinery.

Ninety-five per cent of respondents reported obtaining long-term credit without any difficulty. Only two farmers reported problems obtaining long-term credit. In these two instances, security requirements and the length of the loan were stated as areas of possible revision.

CREDIT-ORIENTED ATTITUDES, PRACTICES, AND OPINIONS

Attitudes

A series of opinion statements relating to agricultural credit was used to determine the attitudes existing about credit use and to determine possible external factors that might cause fluctuations in a farmer's income. Agree, disagree, or undecided responses were provided by the respondents to each attitude statement. Statements in terms of agree responses received are summarized in Table 9.

The vast majority of farmers (between 85 and 95 per cent) agreed with the six statements (A through F) that revolved around the idea of farming as a business activity. The most widely endorsed statement, Item A, revealed the acceptability of credit as a tool for crop and livestock adjustment. Farmers also considered credit to be the most essential element in a farming operation. Response to Item D indicated a recognized willingness on the part of most lenders to adjust repayment schedules to coincide with the farmer's income flow.

TABLE 9. FARMERS ATTITUDES TOWARD STATEMENTS REFLECTING CREDIT USE AND INCOME FLUCTUATION FACTORS, WIREGRASS AREA, ALABAMA, 1967

Item	Statement	Agree <i>Pct.</i>
A.	Credit should be used as a tool when crop and livestock adjustments will be financially rewarding.....	98
B.	Farming today is more of a business than merely a way of life.....	94
C.	The availability of credit is the most essential element in a farming operation.....	92
D.	Most lenders will adjust loan repayments to meet the particular situation of a farmer.....	91
E.	Farmers who are willing to take chances usually do better financially.....	91
F.	The best way to compete in agriculture is to apply the latest research recommendations.....	86
G.	Government price support programs have been beneficial to the farmer.....	77
H.	The farmer with the most education is the most successful.....	68
I.	Banks loan money in relation to a farmers management ability rather than extent of security.....	66
J.	The marketing system should be more market oriented with little if any government influence.....	51
K.	Farming provides young people an excellent financial opportunity.....	50
L.	Farmers should not worry about interest rates because when they go to borrow money there is nothing they can do about them.....	45

Note: Undecided responses were noticeably infrequent; therefore, these responses were arbitrarily considered to be in disagreement with the statements.

Items G, H, and I indicated the influence exerted on the farmers' attitudes by external factors. Education was valued as an aid to success but the respondents did not think that the farmers with the most education were necessarily the most successful. Likewise, management capabilities were valued in high esteem but it was also recognized that security was an important ingredient for a lender's loan consideration.

The three statements showing the lowest per cent agreement (J, K, and L) revealed an indifferent attitude toward government influence in the market sector, financial opportunity offered young people in farming, and the ability of farmers to influence interest rates paid. However, in reference to this latter statement, a slight majority of the farmers felt they could influence interest rates paid by such means as shopping around for the most favorable credit terms, consolidation of indebtedness, and timely credit decisions.

An 80 per cent or greater agreed response eliminated statistical evaluation of an item with reaction of respondents being accepted as a statement of fact. Of the remaining statements, contingency tables were constructed according to classifications involving ten-

ure, education, age, net worth, and acres operated. Chi-square test was used to determine whether attitudes differed significantly among farmers classified according to the above variables.

An arbitrary level (0.1) was selected as the critical level of significance. In only 1 instance of the 30 tested was a significant relationship found. This one instance related education to Item L, Table 9. The trend shown gives weight to the opinion that education is a factor in the acceptance of interest rates paid, Table 10.

TABLE 10. EDUCATION'S EFFECT ON FARMERS CONCERNING THEIR ABILITY TO INFLUENCE INTEREST RATES PAID, WIREGRASS AREA, ALABAMA, 1967¹

Education ²	Respondents per class	
	No.	Agree <i>Pct.</i>
8 yr. or less.....	55	65
9-11 yr.....	29	34
12 yr.....	31	29
13 yr. or more.....	9	11

¹ Table relates to responses received in connection with item L, Table 9.

² Education refers to years of formal schooling completed.

Practices

Questions pertaining to credit orientation and related practices which often have bearing on farming operations were asked. Most respondents elaborated rather extensively on each question but only their main response was recorded.

In response to a question concerning their first consideration when borrowing money, farmers usually replied with one of three answers — interest rate, repayment schedule, and how best to invest and pay back. These three responses accounted for 70 per cent of all responses. Other responses ranked in order of frequency were whether the money is actually needed, whether he will make a profit on the borrowed money, whether the amount borrowed was adequate to meet expenses, and whether the lending agency was reliable. A few farmers stated they did not borrow money.

Findings showed that 97 per cent of the respondents did not object to lenders requesting a financial statement when funds were sought. Of those reporting objections, the main reason was that their complete financial status was none of the lender's business. In contrast, of those not objecting to providing a financial statement, 58 per cent indicated they felt it was the lender's job to obtain such a record and that the lender had a right to know

the borrower's total financial status prior to advancing funds. Also, some borrowers stated that lenders did not require financial information before making the loan, but in most cases, these borrowers were either long-time residents of the community or had dealt with the lender over a number of years. Circumstances such as these tend to offset the requirement of a formal financial statement since personal relationship, repayment history, and knowledge of the farmer's operation are good indicators of his repayment capacity.

It was anticipated that farmers might not be oriented toward orderly record keeping procedures. Only 7 per cent indicated they did not keep any records. The majority (59 per cent) kept either a journal or ledger, 10 per cent used cancelled checks, and 24 per cent kept haphazard records in the form of receipts thrown in a drawer. Farmers in the age classification of 40 to 54 years reported the greatest percentage use of a journal or ledger format and also had the least percentage of individuals who did not keep records, Table 11.

TABLE 11. RECORD KEEPING SYSTEMS FOLLOWED BY FARMERS BY AGE, WIREGRASS AREA, ALABAMA, 1967

Age	Journal or ledger	Cancelled checks	General loose system	No records
	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>	<i>Pct.</i>
39 yr. or less.....	47	18	23	12
40-54 yr.....	62	12	24	2
55 yr. and over.....	60	5	22	13

Principal use of records (94 per cent) was for income tax purposes. Also, evaluation of farming operation was mentioned by 23 per cent of these same respondents, while an additional 5 per cent gave this as their only reason.

Opinions

Many banks in the Midwest and some in the South staff agriculturally trained representatives for the purpose of dealing with farm customers. They perform a public relations function for the banks as well as providing supervision and advice to the borrower. In response to a question concerning the desirability of this type bank practice in the Wiregrass Area, 66 per cent of the farmers questioned responded they were favorable to such a service and indicated it would be helpful to them. Responses of those favoring this practice, in order of frequency of response, were

know more about farming and understand farm problems, improve the farmers' relationship with the banks, know latest agricultural recommendations, and provide better service.

Disinterested or negative responses concerning this consultant role of bank personnel were given by 34 per cent of the farmers. Reasons given ranged from a feeling that they did not need this kind of advice to the idea that they presently received borrowed funds easily enough. Most bank lending was done through relatively small banks in this agricultural area. The bank president or loan agent normally had an agricultural background or had been associated with agricultural people for many years. It should also be noted that agriculture is the primary industry in this area and many small banks are dependent on it for a large share of their business.

When asked what they thought their responsibility was to the lenders after borrowing money, 85 per cent of the respondents replied that they should definitely keep them informed of their financial status and repayment capacity at all times. Over 80 per cent of the farmers felt such a practice was necessary because temporary adjustments often must be made concerning the due date of a loan. A small percentage, 6 per cent, preferred to pay off a loan prior to its due date if possible. Several borrowers stated they did not like to be in debt but that it was the only way of operating a business with today's high costs. The comment "deny thyself" was stated by a number of the older farmers when funds were borrowed. Their attitude was that nonessentials should be eliminated temporarily until the borrowed funds were paid back.

Seventy-five per cent of the farmers stated there was no time during the previous year when they refused to use money for an apparently profitable purpose. Of those indicating a reluctance to invest, the elements of security, monetary reserve, and fear to venture were the main reasons given. No farmer under 40 years of age responded negatively, thereby providing evidence that young farmers were more prone to use all available funds. Opportunities missed as a result of holding funds were listed as the purchase of feeder cattle and land clearing.

Another relatively new idea associated with agricultural credit is that of permanent or semipermanent debt. This concept includes continuous debt financing to implement long-run production plans rather than operate on a year to year basis. Such a concept could be associated with short or long run financing or combinations of the two.

Those who favor it argue that it should not be necessary for a farmer to repay all of the credit obtained to buy his farm during his lifetime. They argue that this is done in industry and that corporations, for example, do have a permanent debt. While investors may change, the capital base remains and is available to management.

When asked their attitude toward permanent or semipermanent financial arrangements, 29 per cent of the farmers stated it would be beneficial and had merits for their particular operation. Some of the suggested uses for this type of loan are given in Table 12. On the other hand, 50 per cent stated they did not or would not like this financial arrangement mainly because they were too old.

TABLE 12. RESPONSES RELATING TO THE DESIRABILITY OF PERMANENT OR SEMI-PERMANENT DEBT AS A MEANS OF FINANCING FARM OPERATIONS, WIREGRASS AREA, ALABAMA, 1967

Primary response	Reasons given for primary response	Individuals responding
		<i>Pct.</i>
Yes	Keep a good source of credit.....	11
Yes	Enable more people to get into farming.....	9
Yes	Allow larger-scale farming.....	7
Yes	Help purchase land.....	2
Yes	Easier to pay back.....	2
No	Too old.....	50
No	Do not like to be in debt.....	11
No	Interest payment too large.....	2
Undecided	6

It was hypothesized that the older farmers might be more conservative about this credit program than would younger farmers. This did not prove to be the case. Only those farmers ranging in age from 30 to 34 years opposed this method of financing by a percentage less than 50 per cent.

Two questions were asked the farmers relative to this line of reasoning — “Do you normally discuss your credit needs with your lender prior to the need for additional capital?” and “Do you prefer one source of credit or do you prefer to spread your credit needs among several lenders?” Findings showed that 52 per cent of the respondents did not discuss their credit needs with the lender in advance. Of those who did discuss their needs with their lenders, items reportedly discussed were security, purpose for the desired funds, and the individual’s general farm operation. Financial statements were requested in only 12 per cent of the total cases. With the trend toward larger farms and more pur-

chased inputs, a line of credit enabling the "money to be there when you need it" is going to become a reality. This practice enables the lender and borrower to anticipate expenses and financial needs.

With the present system of credit, many farmers finance fertilizer, seed, feed, and fuel through dealers. In many cases, no interest charge is made for a specified period of time, thereby saving the farmer money. On the other hand, discounted cash purchases, quantity discounts, and other such advantages are obtained by having available cash.

Eighty-two per cent of the respondents stated they preferred one source of credit. These farmers felt that by having one source of credit, arrangements were more easily made and a better overall understanding of each party's (lender and borrower) position was reached. A small number of farmers favored one credit source but stated they were sometimes forced to use several. Of the remaining respondents, 16 per cent stated they preferred two or more sources of credit.

Certainly one of the major questions pertinent to farm credit is whether the availability or lack of credit has influenced the farm operation. Fifty-seven per cent of respondents stated that availability of credit had indeed assisted them in their overall operation. Type of assistance credit had provided is summarized in Table 13. Forty-three per cent stated availability of credit had not influenced their operation.

TABLE 13. PERCENTAGE RESPONSE BY REASON FOR THOSE FARMERS REPORTING THE EFFECT CREDIT HAD IN DEVELOPING THEIR OPERATIONS, WIREGRASS AREA, ALABAMA, 1967

Reason given for credit influence of operation	Response
	<i>Pct.</i>
Enabled operator to carry on desired operation.....	25
Enabled operator to take advantage of desirable situations.....	18
Enabled purchase of additional land.....	16
Enabled operator to buy equipment.....	13
Enabled operator to get into farming.....	12
General expansion.....	7
Would have gotten bigger if able to obtain funds.....	9

Opinions were solicited concerning possible changes credit agencies might make in lending policies. The majority (64 per cent) of the respondents indicated they thought the present system was adequate. The prime complaint of those indicating needed changes (22 per cent) was directed at the need for lower interest rates. (During 1967, interest rates were equally as high

or higher than any year since 1960. However, rates have steadily increased to the current level since 1929.) Additional responses were longer length of payment, less security requirements, confidential surroundings for loan discussions, need for more budgeted loans, and greater consideration of management. These comments have particular relevance to the lender because they merit action on his part to correct or improve.

The connotation of the word credit is broad and rather all encompassing. For purposes of this study, the offering of formal credit is associated with an agency that has the primary responsibility of lending money. The fact does remain, however, that most business firms extend informal credit in the form of open accounts (30 days and longer).

To determine farmers' opinions of this form of informal dealer financing, they were asked "Do you feel that it is a farm supply dealer's responsibility to finance your purchase?" Forty-seven per cent responded positively and a like percentage responded negatively to this question. Those answering "yes" indicated they believed the dealer selling the product was obligated to provide short-term credit to his customers. In contrast, those answering "no" stated that the dealer was not a loan agency and was not responsible for providing this sort of credit.

Taking this dealer financing practice one step further, farmers were asked if they found it quicker and easier to finance machinery and equipment through a dealer than a bank or Production Credit Association. Sixty-six per cent replied they preferred to use the more formal channels of banks or Production Credit Associations. Wherein the previous question was primarily related to feed, fertilizer, fuel, and general supply dealerships offering up to 1 year credit, this question dealt with intermediate-term credit.

Among those farmers who preferred to deal through more formal channels when financing machinery and equipment, almost half (41 per cent) indicated lower interest rates were obtained more readily through banks and Production Credit Associations. Contrasted to this was the fact that only 6 per cent of those who responded negatively to the previous question gave a lower interest rate as the reason for preferring bank or Production Credit Association financing when in need of operating credit. Farmers generally reported an awareness that financing through an equipment dealer usually cost more but this cost was offset by the ease of financing and longer terms.

Possible sources of a budgeted loan, a loan upon which interest is paid only for the actual time funds are being used, was presented to farmers as an item of general knowledge. Seventy-three per cent of the respondents stated they were aware such loans were being made. The Production Credit Association was most often mentioned as a source of such loans (34 per cent) with the general category of banks being mentioned by 22 per cent of the respondents. Nineteen per cent of the farmers reported they were aware budgeted loans were being made but failed to give the source of such loans. Only 23 per cent of the respondents failed to have any knowledge of this type of financial arrangement.

CREDIT USE RELATED TO SELECTED FACTORS

Patterns of credit use in relation to selected characteristics associated with farmers and their farming operations were analyzed. Classifications for these social and economic factors were developed by arraying the data and using natural breaking points to distinguish appropriate levels and adequate cases of each variable. Dollar amounts of credit used in relation to the social and economic factors refer to those dollar amounts obtained by the class of farmers noted as borrowers.

Tenure

Farmers were categorized according to three major tenure types — full owner, part owner, and tenant. Part owners used approximately the same average amount for both operating and intermediate term credit, Table 14. This group also used the largest average amount of these two types of credit with full owners using the largest amount of long-term credit. Full owners borrowed approximately \$3,000 more than part owners. Tenant farmers generally used the smallest amount of credit, using about one-fourth as much as part owners used. Their use of intermediate credit was roughly two-thirds that of part owners and only slightly more than that used by full owners.

Education

The educational levels attained by these farmers were classified according to academic standards where 8 years were associated with completion of junior high school, 12 years indicated a high school graduate, and 13 or more years attested to some college

TABLE 14. PERCENTAGE OF FARMERS USING CREDIT AND AVERAGE AMOUNT OF CREDIT USED BY TENURE AND TYPE OF CREDIT, WIREGRASS AREA, ALABAMA, 1967

Tenure	Farmers	Operating credit			Intermediate credit		Long-term credit	
		Bor- rowers	Av. amt.		Bor- rowers	Av. amt.	Bor- rowers	Av. amt.
		No.	Pct.	Dol.	Pct.	Dol.	Pct.	Dol.
Part owner.....	58	81	9,123	67	9,688	57	17,679	
Full owner.....	54	56	4,278	30	5,797	48	20,231	
Tenant.....	12	50	2,000	50	6,983	0	0	

training. It was hypothesized that as educational levels rose, there would be a greater willingness to accept debt and greater knowledge of available credit alternatives. Of the total sample, 44 per cent of the respondents had less than 8 years of education while only 7 per cent reported having attended college. Twenty-five per cent of these farmers indicated they had finished high school. As hypothesized, farmers with the most education generally used the largest amount of credit.

There was a significant increase in all three types of credit utilized by farmers with 13 or more years of education compared to the remainder of the sample, Table 15. All farmers reporting education up through 12 years utilized approximately the same amount of operating and intermediate credit but this pattern did not hold for long-term credit use. There was a significant increase in long-term credit use by each classification level of education, with those having 13 years or more using approximately 5 times as much as those with 8 years or less.

TABLE 15. PERCENTAGE OF FARMERS USING CREDIT AND AVERAGE AMOUNT OF CREDIT USED BY YEARS OF EDUCATION AND TYPE OF CREDIT, WIREGRASS AREA, ALABAMA, 1967

Education	Farmers	Operating credit			Intermediate credit		Long-term credit	
		Bor- rowers	Av. amt.		Bor- rowers	Av. amt.	Bor- rowers	Av. amt.
		No.	Pct.	Dol.	Pct.	Dol.	Pct.	Dol.
8 yr. or less.....	55	60	5,455	40	8,977	42	10,691	
9-11 yr.....	29	69	5,396	55	6,517	48	17,143	
12 yr.....	31	74	8,333	58	7,044	58	24,194	
13 yr. or more.....	9	78	12,787	56	16,780	44	47,000	

Age

Young farmers used more operating and long term credit, while older farmers used larger sums for intermediate purposes, Table

16. Farmers under 55 years were expanding their land investment, thereby creating a necessity for increased use of operating credit. However, these farmers used roughly one-third the amount of intermediate-term credit used by older farmers. A far greater percentage of the young farmers used all three types of credit and to a greater extent than did older farmers. Non-borrowers among the older farmers outnumbered borrowers with regard to intermediate and long-term credit with only 55 per cent of them using operating credit.

TABLE 16. PERCENTAGE OF FARMERS USING CREDIT AND AVERAGE AMOUNT OF CREDIT USED BY AGE OF OPERATOR AND TYPE OF CREDIT, WIREGRASS AREA, ALABAMA, 1967

Age of operator	Farm-ers	Operating credit		Intermediate credit		Long-term credit	
		Bor-rowers	Av. amt.	Bor-rowers	Av. amt.	Bor-rowers	Av. amt.
		No.	Pct.	Dol.	Pct.	Dol.	Pct.
39 yr. or less.....	17	65	9,909	59	7,390	53	34,833
40-54 yr.....	52	81	7,341	69	6,299	56	20,638
55 yr. and over.....	55	55	5,059	27	14,120	38	9,400

Non-Farm Income

Farmers who did not report any non-farm income used the largest average amounts of all three types of credit, Table 17. Only 38 per cent of the farmers interviewed reported non-farm earnings, with about 19 per cent having less than \$3,000 and about 19 per cent over \$3,000.

TABLE 17. PERCENTAGE OF FARMERS USING CREDIT AND AVERAGE AMOUNT OF CREDIT USED BY TOTAL NON-FARM INCOME AND TYPE OF CREDIT, WIREGRASS AREA, ALABAMA, 1967

Total non-farm income	Farm-ers	Operating credit		Intermediate credit		Long-term credit	
		Bor-rowers	Av. amt.	Bor-rowers	Av. amt.	Bor-rowers	Av. amt.
		No.	Pct.	Dol.	Pct.	Dol.	Pct.
0.....	77	69	8,341	52	9,374	55	20,200
1-2,999.....	24	54	2,480	33	5,113	29	8,714
3,000 and more.....	23	74	5,577	56	7,431	13	20,000

Cash Receipts

The classification involving cash receipts was considered meaningful based on the idea that "It requires use of money to make money." Among farmers grossing over \$20,000 in 1967, 88 per

cent reported borrowing funds for operating credit. The average amount borrowed was \$16,128. In direct contrast, only 48 per cent of the farmers grossing less than \$5,000 reported borrowing any operating capital. The average amount borrowed by these farmers was only \$1,133, Table 18. The simple correlation coefficient between cash receipts and operating credit was .61, indicating a relatively strong relationship.

TABLE 18. PERCENTAGE OF FARMERS USING CREDIT AND AVERAGE AMOUNT OF CREDIT USED BY TOTAL CASH RECEIPTS AND TYPE OF CREDIT, WIREGRASS AREA, ALABAMA, 1967

Total cash receipts	Farm- ers	Operating credit		Intermediate credit		Long-term credit	
		Bor- rowers	Av. amt.	Bor- rowers	Av. amt.	Bor- rowers	Av. amt.
<i>Dol.</i>	<i>No.</i>	<i>Pct.</i>	<i>Dol.</i>	<i>Pct.</i>	<i>Dol.</i>	<i>Pct.</i>	<i>Dol.</i>
0-4,999.....	33	48	1,133	24	2,163	24	7,375
5,000-9,999.....	28	68	2,257	50	3,982	46	8,538
10,000-19,999.....	38	68	5,897	60	6,379	50	11,916
20,000 and more.....	25	88	16,128	64	18,294	76	37,526

Only 24 per cent of those grossing under \$5,000 used intermediate credit while 60 and 64 per cent, respectively, of the two large income classifications used intermediate credit. Long-term credit was utilized by 50 per cent or less of all classes with the exception of those farmers who grossed \$20,000 or more.

Cash Expenses

Operating credit increased geometrically in accordance with the specified levels of cash expenses, Table 19. Borrowers as a percentage of non-borrowers increased in like fashion. Eighty-eight per cent of those who had expenses of \$18,000 or more used some type of credit. This can be compared to only 47 per cent of the farmers with expenses less than \$3,000 who were borrowers. The use of intermediate and long-term credit generally followed the same pattern as was observed for operating credit.

Net Worth

Farmers with the largest net worths borrowed roughly 3 to 5 times larger amounts than did farmers in any other class, Table 20. Farmers with the least net worth had fewer long-term loans in relation to the remainder of the sample with a probable reason for this being their smaller land holdings. The number of users of intermediate-type credit among individuals comprising the

TABLE 19. PERCENTAGE OF FARMERS USING CREDIT AND AVERAGE AMOUNT OF CREDIT USED BY TOTAL CASH EXPENSES AND TYPE OF CREDIT, WIREGRASS AREA, ALABAMA, 1967

Total cash expenses	Operating credit			Intermediate credit			Long-term credit		
	Farm-ers	Bor-rowers	Av. amt.	Farm-ers	Bor-rowers	Av. amt.	Farm-ers	Bor-rowers	Av. amt.
	<i>Dol.</i>	<i>No.</i>	<i>Pct.</i>	<i>Dol.</i>	<i>No.</i>	<i>Pct.</i>	<i>Dol.</i>	<i>No.</i>	<i>Pct.</i>
0-2,999	36	47	1,425	30	23	5,157	30	20	7,000
3,000-6,999	33	67	2,494	32	50	3,707	50	43	8,750
7,000-17,999	38	76	6,449	38	60	6,140	60	53	12,845
18,000 and more	17	88	20,201	24	62	18,393	62	79	36,211

TABLE 20. PERCENTAGE OF FARMERS USING CREDIT AND AVERAGE AMOUNT OF CREDIT USED BY NET WORTH AND TYPE OF CREDIT, WIREGRASS AREA, ALABAMA, 1967

Net worth	Farm-ers	Operating credit		Intermediate credit		Long-term credit	
		Bor-rowers	Av. amt.	Bor-rowers	Av. amt.	Bor-rowers	Av. amt.
		<i>Dol.</i>	<i>No.</i>	<i>Pct.</i>	<i>Dol.</i>	<i>Pct.</i>	<i>Dol.</i>
0-15,999	18	61	1,634	56	5,180	22	9,500
16,000-34,999	42	64	4,289	43	4,557	48	11,095
35,000-74,999	41	68	5,326	58	6,290	54	10,705
75,000 and more	21	81	16,836	43	25,300	62	47,231

\$35,000 to \$74,000 category further indicates the use and importance of this type credit.

Two key income factors used for analysis were net farm income and per cent earned on investment. Net farm income represents an annual net farm return while per cent earned on investment represents the returns in comparison to total investment in land, buildings, livestock, and machinery.

Net Farm Income

Net farm income was derived by the subtraction of unpaid family labor from net cash income plus or minus change in inventory. Non-farm income was not added to farm receipts but was handled separately.

A rather unusual pattern with respect to credit use and net farm income existed. Farmers reporting a negative net farm income borrowed the second largest average amounts of money for operating and long-term credit and were a close third in the use of intermediate credit, Table 21. Farmers showing the largest net farm incomes, \$6,000 or more, used the largest average amounts of credit and exhibited the highest percentage of borrowers compared to non-borrowers. Farmers whose net farm in-

TABLE 21. PERCENTAGE OF FARMERS USING CREDIT AND AVERAGE AMOUNT OF CREDIT USED BY NET FARM INCOME AND TYPE OF CREDIT, WIREGRASS AREA, ALABAMA 1967

Net farm income	Farm- ers	Operating credit		Intermediate credit		Long-term credit	
		Bor- rowers	Av. amt.	Bor- rowers	Av. amt.	Bor- rowers	Av. amt.
		<i>Dol.</i>	<i>No.</i>	<i>Pct.</i>	<i>Dol.</i>	<i>Pct.</i>	<i>Dol.</i>
—1 or less.....	22	73	7,584	45	6,880	50	19,182
0-2,499.....	44	59	3,023	39	4,650	36	8,281
2,500-5,999.....	34	62	4,656	56	8,806	50	10,700
6,000 and more.....	24	85	13,571	62	13,153	62	38,933

come was from zero to \$2,499 and \$2,500 to \$5,999 were relatively uniform as to per cent of borrowers. These two classes differed only by \$1,600 when average amounts of operating credit were considered. This variation was wider for the use of intermediate and long-term credit and showed both an increased percentage of borrowers and amounts borrowed among farmers with net farm incomes between \$2,500 and \$5,999.

Increased use of credit appeared to be related to an increase in net farm income as shown by all groups who had a positive net farm income. The simple correlation coefficients for short, intermediate, and long-term credit were .40, .21, and .19, respectively. However, it must be remembered that just going through the physical act of borrowing money does not necessarily mean a farmer is going to earn a profit. He must possess the managerial ability to utilize this borrowed money to a profitable advantage.

Farmers who earned a negative net farm income borrowed the second largest average amount of money. Percentage borrowers to non-borrowers compared quite favorably with the rest of the sample concerning net farm income in that borrowers made up 73, 45, and 50 per cent, respectively, of the farmers in the three credit categories.

Appendix Table 6 lists farmers according to their net farm income, credit use, non-farm income and adjusted income, size of farm, and per cent earned on investment. Ten of the 22 farmers had a negative net cash income (receipts minus expenses) while the majority of the others had decreases in inventories such that a negative net farm income resulted. All farmers who had a negative net farm income had an average net farm income of minus \$1,755. After non-farm earnings were added, this group had an average adjusted income of \$5.68. Those farmers having no non-farm income had an average net farm income of minus \$2,110,

while those farmers with a non-farm income source had an adjusted average income of \$2,550. Six of the farmers said crop failures contributed to their negative net farm incomes. In each of these cases, operating credit outstanding from the previous year had to be renewed.

When considering this group by an acres operated classification, 12 farmers were classed as small farm operators, 7 as medium-sized farm operators, 2 as large farm operators, and 1 as an extra-large farm operator. The individuals who fell in the latter two groups might be considered chance happening but those classed as small or medium-sized farm operators were a rather significant portion of the primary class. Individuals from these two classes comprised 28 and 14 per cent, respectively, of their total class structure. Negative farm incomes and relatively large borrowings, especially among the small and medium-sized farms, and greater attention to non-farm than farm income sources probably contributed to the decreasing number of full time farmers.

Per Cent Earned on Investment

Credit use as related to per cent earned on investment is shown in Table 22. Four main class groupings were determined with two groups having positive percentages and two groups negative. Farmers who used the least amount of credit received the lowest returns. Farmers earning from 0.0 to 4.9 per cent on their investment used the greatest amount of credit for each of the three specified credit types. Generally, the percentage of borrowers per class ranged from 42 to 68 per cent, with only one exception. Farmers earning the lowest return on investment had 79 per cent of the class characterized as borrowers. Farmers earning the highest per cent on investment used an average total credit of \$31,918, which was \$5,554 more than those farmers earning a negative

TABLE 22. PERCENTAGE OF FARMERS USING CREDIT AND AVERAGE AMOUNT OF CREDIT USED BY PER CENT EARNED ON INVESTMENT AND TYPE OF CREDIT, WIREGRASS AREA, ALABAMA, 1967

Per cent earned on investment	Farmers	Operating credit		Intermediate credit		Long-term credit	
		Borrowers	Av. amt.	Borrowers	Av. amt.	Borrowers	Av. amt.
		No.	Pct.	Dol.	Pct.	Dol.	Pct.
-5.0 or less.....	24	79	4,727	42	7,220	50	14,417
-4.9--0.1.....	26	65	6,025	50	4,773	42	13,864
0.0-4.9.....	43	60	9,353	42	12,067	46	25,195
5.0 or more.....	31	68	6,367	64	8,051	52	17,500

0.1 to 4.9 per cent return. The two groups of farmers who earned a negative return on their investment used approximately the same average amount of total credit (\$25,000). Contrasted to this, the two groups of farmers earning positive returns on investment used from \$7,000 to \$22,000 more total credit than the farmers earning negative returns.

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

Summary and Conclusions

The Wiregrass Area of Alabama has a long history of diversified farming and is characterized by owner-operator type farms. This area of the State was selected as the basis for a farm credit study to determine the present use of agricultural credit, to determine attitude patterns held by farmers toward credit related factors, and to determine variables relating to a potential increased net farm income through the wise use of credit by farm families. A random sample of 124 farmers was obtained from three representative counties within the Wiregrass Area by means of personal interview. Information obtained was analyzed on the basis of size of farming operation, borrower vs. non-borrower, and other selected factors.

Operators of large farms reported the highest per cent return on investment (3.5 per cent compared to 0.8 per cent average for all farms). Net farm incomes varied from \$726 for small farms to \$10,261 for extra-large farms. Crops were the largest source of revenue in all instances based on an acres operated classification. Non-farm income ranged from \$902 for operators of medium-sized farms to \$1,620 for operators of small farms. Operators of medium-sized farms reported the highest earnings per acre (\$73.08), with the lowest figure (\$6.25) associated with operators of extra-large operations.

Borrowers were 10 years younger than non-borrowers and had approximately double the net worth. Net farm incomes of borrowers were 2.2 times that of non-borrowers, but the adjusted per cent earned on investment was relatively the same for both groups. Non-borrowers received approximately the same average receipts from crops and livestock, whereas borrowers had almost double crop receipts in comparison to livestock receipts. Total cash expenses for borrowers were about equal to their cash receipts but non-borrowers' cash expenses were about one-half the amount of their cash receipts. This gives evidence of the expan-

sionary attitude and capital investment program of the borrowing class. Borrowers had a much higher net farm income than non-borrowers, indicating a larger per cent of their cash expenses were for capital items.

Of the 98 borrowers, 24 used only one type of credit while the remainder used some combination of the three types of credit (operating, intermediate, long-term). Thirty-two per cent of the borrowers utilized all three types of credit with the average amount borrowed totaling \$35,822. Characteristics associated with the three types of credit are summarized in Table 23.

TABLE 23. SELECTED CHARACTERISTICS BY TYPE OF CREDIT, WIREGRASS AREA, ALABAMA, 1967

Type of credit	Primary source	Primary purpose	Bor-	Av. amt.	Av. int.	Av.
			rowers	borrowed	rate	length
			<i>Pct.</i>	<i>Dol.</i>	<i>Pct.</i>	<i>Yr.</i>
Operating.....	Dealer	Gen. op. expenses	67	5,290	5.9	---
Intermediate.....	Dealer	Machinery	49	6,840	6.9	3.3
Long-term.....	FLB	Land	48	17,440	5.4	19

The items most often considered by the farmers were interest rates, repayment schedules, and how best to invest and pay back. The giving of financial statements to formal lending agencies was a procedural requirement accepted by a majority of the farmers; however, many farmers stated that such a document was seldom required by lenders. A farm record-keeping format involving either a journal or ledger was reported by 59 per cent of the respondents, with the overwhelming use of all record systems being for income tax purposes.

Eighty-two per cent of the respondents stated they preferred one source of credit. The primary reason given was that arrangements were more easily made and better over-all understanding of each party's position was reached.

Forty-seven per cent of the farmers reported they felt dealers should extend credit for operating type items because they should finance the product they sell. When questioned concerning the source of intermediate type credit, the majority of farmers replied they preferred to use more formal channels, meaning banks and Production Credit Associations. The ability to obtain lower interest rates was given most often as the reason for this preference.

Among farmers grossing over \$20,000 for the year 1967, 88 per cent reported borrowing funds for operating credit. For farmers grossing less than \$5,000, only 48 per cent reported borrowing

operating capital. Farmers with the largest net worths borrowed on the average 3 to 5 times larger average amounts than any other class of farmers.

Farmers who reported a negative net farm income used the second greatest average amount of total credit. This was partially explained by the rather substantial non-farm income earned by these farmers. Adding non-farm income to that earned from farm sources brought their adjusted net farm income to \$5.68 per farm unit. Farmers showing the largest net farm income, \$6,000 or more, used the largest average amount of credit and had the highest percentage of borrowers to non-borrowers of any farm class. Among farmers with a positive net farm income, there was a marked increase in net farm income as total amount of credit increased.

Farmers who had a negative per cent earned on investment borrowed less than those earning a return on their operation. Farmers earning from 0.0 to 4.9 per cent on their investment borrowed more than farmers who reported a 5.0 per cent or greater return.

The younger age of borrowers and their substantially larger net worths and net farm incomes compared to non-borrowers gives significance to the role credit can and does play in today's farming operations. The acres of land operated by an individual is constantly increasing, thereby adding to his need for outside capital. It has been shown that the farmer using the large quantities of credit usually has the largest cash receipts, the largest net farm income, and receives the greatest per cent return on investment.

Implications

Based on the 1964 Census of Agriculture, average farm size in Alabama has increased 66 per cent since 1949. A similar comparison for the Wiregrass Area showed farm size had increased 76 per cent. By 1980 farm numbers in the State are predicted to decrease approximately 25 per cent with actual land in farms decreasing approximately 10 per cent. This results in a predicted farm size of 216 acres for Alabama by 1980. Applying this same relationship to the Wiregrass Area, average farm size in 1980 would be 264 acres.

Total production expenses for the operation of farms have steadily increased. Total production expenses for Alabama farms have risen from \$239 million in 1950 to \$543.1 million in 1967.

With future technological advances in the agricultural industry, production expenses will most assuredly continue in an upward direction. Further substitution of capital for labor and continued inflation are two major reasons for this trend.

Net farm incomes for Alabama farms averaged \$2,579 in 1964. This figure can be compared with a State average of \$2,721 for 1966 and a Wiregrass Area net farm income average of \$3,245 for 1967. The 1980 projected net farm income per farm for Alabama is \$5,589. Applying a similar adjustment to the Wiregrass Area income data, average net farm income for this region should reach \$6,554 per farm by 1980.

In 1962 farm assets for the U.S. averaged about \$60,000. This figure is predicted to increase to \$155,000 by 1980. Along with this increase in assets, debts per farm are expected to increase from the 1962 level of \$7,800 to approximately \$40,000 by 1980. As of January 1, 1968, outstanding debt averaged \$9,000 for farms in the Wiregrass Area of Alabama. This latter figure represented a debt-asset ratio of 13 per cent, which was about the same as the ratio for U.S. farms in 1962. Using U.S. figures as a base, predicted debt per farm in the Wiregrass Area for 1980 is \$30,500.

From the farmers' standpoint, the amount of credit outstanding per farm indicated they should take more time to search for favorable credit terms. With a slightly greater than threefold increase in debt per farm predicted during the period 1967-1980, a negotiated interest rate or repayment schedule could mean the difference between profit and loss.

One of the latest changes associated with farming has been the upgrading of management practices. The farm manager's ability to handle increased farm acreage and the additional responsibilities that accompany increased size demand sound judgment and application of sound business principles and practices. The various demands of credit and those positive results achieved by farmers utilizing credit as a tool have been noted. With the prospect of greater capital investments in the future, farmers will need to become more proficient in financial matters. Most of all, farmers will need to know their businesses well enough to recognize where additional credit will pay.

Capital and credit needs of agriculture are expected to increase to levels well beyond those previously experienced. Farmers, as well as credit institutions, must be capable of meeting and adapting to these increasing credit needs.

APPENDIX

APPENDIX TABLE 1. FARM CHARACTERISTICS BY SIZE OF FARMING OPERATION, WIREGRASS AREA, ALABAMA, 1967

Characteristic	Size of farming operation				All farms
	Small	Medium	Large	Extra-large	
Farmers, No.....	43	49	24	8	124
Age (operators), Yr.....	56	51	47	52	52
Acres owned, Acre.....	78	154	297	1,177	221
Acres cash rented, Acre.....	9	42	145	351	70
Acres share rented, Acre.....	9	34	88	119	41
Acres rented out, Acre.....	16	20	17	5	17
Acres operated, Acre.....	80	210	513	1,642	315
Cropland, Acre.....	57	138	300	700	179
Pastureland, Acre.....	8	28	83	456	59
Woodland, Acre.....	15	44	130	488	77
Cash receipts, livestock, Dol.....	1,670	4,038	5,757	27,660	4,934
Cash receipts, crops, Dol.....	2,125	6,722	14,246	37,420	8,412
Government payments, Dol.....	540	1,249	2,354	7,029	1,551
Total farm receipts, Dol.....	4,337	12,589	23,035	72,602	15,630
Cash farm expenses, Dol.....	2,925	8,455	13,684	58,484	10,784
Total farm expenses, Dol.....	3,435	10,585	15,753	98,312	14,775
Net cash income, Dol.....	902	2,004	7,282	25,710	855
Net farm income, Dol.....	726	2,746	6,077	10,261	3,174
Non-farm income (operator), Dol.....	1,202	68	352	-----	506
Non-farm income (other), Dol.....	418	834	775	1,360	712
Assets, land, Dol.....	15,462	29,217	48,340	269,031	43,620
Assets, buildings, Dol.....	1,228	2,173	3,388	23,500	3,563
Assets, machinery, Dol.....	3,680	7,653	16,888	51,275	10,877
Assets, livestock, Dol.....	2,030	4,418	7,900	76,697	8,927
Assets, other, Dol.....	1,452	1,640	5,400	15,331	3,079
Total assets, Dol.....	23,852	45,101	81,916	435,834	70,066
Farm mortgage, Dol.....	1,574	4,409	7,750	44,125	6,635
Chattel mortgage, Dol.....	593	1,832	5,763	5,125	2,376
Net worth, Dol.....	21,685	38,860	68,403	386,584	61,055
Return to operator's labor, Dol.....	-581	197	1,480	-13,725	-723
Return to capital, Dol.....	-475	530	2,651	5,136	889
Per cent earned on invest., Pct.....	-2.8	2.5	3.5	2.2	0.8

APPENDIX TABLE 2. FARM CHARACTERISTICS BY BORROWERS AND NON-BORROWERS, WIREGRASS AREA, ALABAMA, 1967

Characteristic	Borrower	Non-borrower
Farmers, <i>No.</i>	98	26
Age (operator), <i>Yr.</i>	50	60
Acres owned, <i>Acre</i>	240	152
Acres cash rented, <i>Acre</i>	86	12
Acres share rented, <i>Acre</i>	47	21
Acres rented out, <i>Acre</i>	14	41
Acres operated, <i>Acre</i>	359	144
Cropland, <i>Acre</i>	201	80
Pastureland, <i>Acre</i>	67	22
Woodland, <i>Acre</i>	91	40
Cash receipts, livestock, <i>Dol.</i>	5,362	3,389
Cash receipts, crops, <i>Dol.</i>	9,764	3,526
Government payments, <i>Dol.</i>	1,804	622
Total cash farm receipts, <i>Dol.</i>	17,647	7,987
Cash farm expenses, <i>Dol.</i>	12,544	4,116
Total cash farm expenses, <i>Dol.</i>	17,458	4,619
Net cash income, <i>Dol.</i>	189	3,368
Net farm income, <i>Dol.</i>	3,587	1,621
Non-farm income (operator), <i>Dol.</i>	476	626
Non-farm income (other), <i>Dol.</i>	768	500
Assets, land, <i>Dol.</i>	49,282	22,278
Assets, buildings, <i>Dol.</i>	4,088	1,711
Assets, machinery, <i>Dol.</i>	12,538	4,616
Assets, livestock, <i>Dol.</i>	10,647	2,447
Assets, other, <i>Dol.</i>	2,157	6,427
Total assets, <i>Dol.</i>	78,712	37,479
Farm mortgage, <i>Dol.</i>	8,395
Chattel mortgage, <i>Dol.</i>	3,006
Net worth, <i>Dol.</i>	67,311	37,479
Return to operator's labor, <i>Dol.</i>	-841	-274
Return to capital, <i>Dol.</i>	1,075	188 ¹
Per cent earned to invest., <i>Pct.</i>	1.2	-.6 ¹

¹ One farmer reported an exceptionally low per cent return on investment; therefore, re-calculation without this individual yielded a sample size of 25 with return to capital of \$412 and a per cent earned on investment of 1.1 per cent.

APPENDIX TABLE 3. AVERAGE AMOUNT OF OPERATING CREDIT AND INTEREST RATES
BY SOURCE AND PURPOSE, WIREGRASS AREA, ALABAMA, 1967

Characteristic	Source of funds					
	PCA ¹	Bank	Individ.	Dealer	FHA ²	Other
General operating expense						
Av. amt. borrowed, <i>Dol.</i>	10,620	7,010	3,680	3,250	3,400	14,430
Range of borrowed amt., <i>Dol.</i>	1,000-31,000	500-16,000	350-7,000	300-16,000	1,800-5,000	3,000-33,000
Av. int. rate, <i>Pct.</i>	6.2	6.8	5.0	5.0	4.5	7.0
Mode ³ int. rate, <i>Pct.</i>	6.5	7.0	6.0	6.0	---	---
Range of int. rate, <i>Pct.</i>	5.0-7.0	5.0-8.0	5.0-8.0	0.0-8.0	4.0-5.0	6.0-8.0
Borrowers, <i>No.</i>	10	32	5	41	2	3
Feed and seed expense						
Av. amt. borrowed, <i>Dol.</i>	---	3,000	---	600	---	---
Range of borrowed amt., <i>Dol.</i>	---	---	---	500-800	---	---
Av. int. rate, <i>Pct.</i>	---	7.0	---	6.5	---	---
Mode int. rate, <i>Pct.</i>	---	7.0	---	---	---	---
Range of int. rate, <i>Pct.</i>	---	---	---	6.0-7.0	---	---
Borrowers, <i>No.</i>	---	1	---	3	---	---
Feeder livestock expense						
Av. amt. borrowed, <i>Dol.</i>	---	5,500	---	---	---	8,000
Range of borrowed amt., <i>Dol.</i>	---	2,000-9,000	---	---	---	---
Av. int. rate, <i>Pct.</i>	---	6.0	---	---	---	---
Mode int. rate, <i>Pct.</i>	---	6.0	---	---	---	---
Range of int. rate, <i>Pct.</i>	---	---	---	---	---	---
Borrowers, <i>No.</i>	---	2	---	---	---	1
Family living expense						
Av. amt. borrowed, <i>Dol.</i>	---	2,980	700	---	---	2,700
Range of borrowed amt., <i>Dol.</i>	---	300-8,500	400-1,000	---	---	---
Av. int. rate, <i>Pct.</i>	---	6.0	6.0	---	---	8.0
Mode int. rate, <i>Pct.</i>	---	6.0	---	---	---	8.0
Range of int. rate, <i>Pct.</i>	---	5.0-7.0	4.0-8.0	---	---	---
Borrowers, <i>No.</i>	---	5	2	---	---	1
Labor expense						
Av. amt. borrowed ⁴ , <i>Dol.</i>	---	---	---	---	---	2,050

¹ Production Credit Association.

² Farmers Home Administration.

³ Mode is most common figure in a group.

⁴ Only one individual reported separate labor expenses with only the amount borrowed being recorded.

APPENDIX TABLE 4. AVERAGE AMOUNT OF INTERMEDIATE CREDIT, INTEREST RATES,
AND LOAN LENGTHS BY SOURCE AND PURPOSE, WIREGRASS AREA, ALABAMA, 1967

Characteristic	Source of funds					
	PCA ¹	Bank	Finance Co. ²	Dealer	FHA ³	Other
Equipment expense						
Av. amt. borrowed, <i>Dol.</i>	2,750	12,020	2,970	6,570	3,020	23,250
Range of borrowed amt., <i>Dol.</i>	500-5,000	1,000-99,000	1,000-6,000	1,000-24,300	1,400-6,000	1,500-45,000
Av. int. rate, <i>Pct.</i>	6.5	6.4	7.7	7.9	4.2	6.0
Mode int. rate, <i>Pct.</i>	6.5	7.0	8.0	8.0	4.0	6.0
Range of int. rate, <i>Pct.</i>	---	6.0-7.0	7.0-8.0	6.0-12.0	4.0-5.0	---
Av. loan length, <i>Yr.</i>	3	2.4	3.6	3.7	4.7	---
Mode loan length, <i>Yr.</i>	3	3	4	3	5	---
Range of loan length, <i>Yr.</i>	---	1-4	3-4	1-5	4-5	---
Borrowers, <i>No.</i>	2	17	5	27	5	2
Livestock and grain bin expense						
Av. amt. borrowed, <i>Dol.</i>	3,800	5,000	---	---	---	1,300
Range of borrowed amt., <i>Dol.</i>	---	---	---	---	---	1,200-1,400
Av. int. rate, <i>Pct.</i>	6.5	6.0	---	---	---	4.0
Mode int. rate, <i>Pct.</i>	6.5	6.0	---	---	---	4.0
Range of int. rate, <i>Pct.</i>	---	---	---	---	---	---
Av. loan length, <i>Yr.</i>	1	---	---	---	---	2.5
Mode loan length, <i>Yr.</i>	1	---	---	---	---	---
Range of loan length, <i>Yr.</i>	---	---	---	---	---	1-4
Borrowers, <i>No.</i>	1	1	---	---	---	2

(CONT.)

APPENDIX TABLE 4. (CONT.)

Pick-up expense							
Av. amt. borrowed, <i>Dol.</i>	900	1,900	---	1,860	---	---	---
Range of borrowed amt., <i>Dol.</i>	---	---	---	1,400-2,500	---	---	---
Av. int. rate, <i>Pct.</i>	6.0	---	---	8.0	---	---	---
Mode int. rate, <i>Pct.</i>	6.0	---	---	---	---	---	---
Range of int. rate, <i>Pct.</i>	---	---	---	---	---	---	---
Av. loan length, <i>Yr.</i>	2	1	---	1	---	---	---
Mode loan length, <i>Yr.</i>	2	1	---	1	---	---	---
Range of loan length, <i>Yr.</i>	2	1	---	1	---	---	---
Borrowers, <i>No.</i>	---	---	---	---	---	---	---
Auto expense							
Av. amt. borrowed, <i>Dol.</i>	---	2,000	---	3,250	---	---	3,400
Range of borrowed amt., <i>Dol.</i>	---	---	---	2,900-3,600	---	---	---
Av. int. rate, <i>Pct.</i>	---	6.5	---	7.0	---	---	---
Mode int. rate, <i>Pct.</i>	---	6.5	---	---	---	---	9.0
Range of int. rate, <i>Pct.</i>	---	---	---	6.0-8.0	---	---	---
Av. loan length, <i>Yr.</i>	---	---	---	1	---	---	3
Mode loan length, <i>Yr.</i>	---	---	---	1	---	---	3
Range of loan length, <i>Yr.</i>	---	---	---	---	---	---	---
Borrowers, <i>No.</i>	---	1	---	2	---	---	1

¹ Production Credit Association.

² Commercial Credit Equipment Corporation.

³ Farmers Home Administration.

APPENDIX TABLE 5. AVERAGE AMOUNT OF LONG-TERM CREDIT, INTEREST RATES, AND LOAN LENGTHS BY SOURCE AND PURPOSE, WIREGRASS AREA, ALABAMA, 1967

Characteristic	Source of funds				
	Bank	Individual	FLB ¹	FHA ²	Ins. Co.
Land expense					
Av. amt. borrowed, <i>Dol.</i>	13,200	35,400	16,200	9,800	30,000
Range of borrowed amt., <i>Dol.</i>	4,000-60,000	2,500-144,000	2,900-96,000	6,000-17,000	---
Av. int. rate, <i>Pct.</i>	6.4	6.0	5.1	4.3	6.0
Mode int. rate, <i>Pct.</i>	6.0	6.0	6.0	4.5	6.0
Range of int. rate, <i>Pct.</i>	6.0-7.0	5.0-7.0	3.5-6.8	4.0-4.5	---
Av. loan length, <i>Yr.</i>	8	5	25	28	20
Mode loan length, <i>Yr.</i>	Ann. Renew.	5	20	20	20
Range of loan length, <i>Yr.</i>	1-30	1-20	10-30	20-40	---
Borrowers, <i>No.</i>	10	10	27	8	1
House construction expense					
Av. amt. borrowed, <i>Dol.</i>	---	---	9,200	10,000	18,000
Range of borrowed, amt., <i>Dol.</i>	---	---	5,000-16,000	8,000-12,000	---
Av. int. rate, <i>Pct.</i>	---	---	5.2	4.8	6.0
Mode int. rate, <i>Pct.</i>	---	---	4.5	5.0	6.0
Range of int. rates, <i>Pct.</i>	---	---	4.5-6.0	4.5-5.0	---
Av. loan length, <i>Yr.</i>	---	---	25	32	---
Mode loan length, <i>Yr.</i>	---	---	20	---	---
Range of loan length, <i>Yr.</i>	---	---	20-40	25-40	---
Borrowers, <i>No.</i>	---	---	4	3	1

¹ Federal Land Bank.² Farmers Home Administration.

APPENDIX TABLE 6. FARMERS WITH A NEGATIVE NET FARM INCOME BY SIZE, AMOUNT OF CREDIT, NON-FARM INCOME, ADJUSTED INCOME, AND PER CENT EARNED ON INVESTMENT, WIREGRASS AREA, ALABAMA, 1967

Net farm income	Operating credit ¹	Intermediate credit ¹	Long-term credit ¹	Non-farm income	Adjusted income ²	Earned on investment ³
<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Dol.</i>	<i>Pct.</i>
Small						
-2,166	-----	11,300	18,000	6,780	4,614	- 6.9
-520	325	-----	-----	600	80	- 5.4
-572	1,100	3,600	8,000	6,340	5,878	-10.3
-60	500	1,900	-----	-----	-60	- 5.8
-169	1,000	-----	4,000	2,468	2,299	- 5.0
-1,742	1,500	2,000	-----	960	-782	- 7.4
-384	-----	600	-----	6,744	6,360	- 1.4
-60	2,400	-----	-----	-----	-60	-16.7
-4,025	-----	-----	-----	6,000	1,975	-42.9
-421	-----	-----	-----	1,000	579	- 9.8
-1,774	-----	-----	-----	-----	-1,774	- 7.6
-2,362	1,500	-----	10,000	-----	-2,362	-17.6
Medium						
-1,021	3,600	6,000	10,000	1,343	322	- 6.5
-488	1,920	-----	-----	2,800	2,312	- 7.0
-6,630	13,500	14,000	30,000	-----	-6,630	-14.7
-2,552	1,500	-----	10,000	3,600	1,048	-10.7
-3,887	10,000	-----	15,000	-----	-3,877	-17.7
-902	8,000	15,000	-----	-----	-902	- 6.4
-2,278	-----	-----	-----	-----	-2,278	- 0.6
Large						
-3,529	18,500	10,000	12,000	-----	-3,529	-14.6
-1,138	15,000	4,400	34,000	-----	-1,138	-10.4
Extra-large						
-1,950	41,000	-----	60,000	-----	-1,950	- 1.4

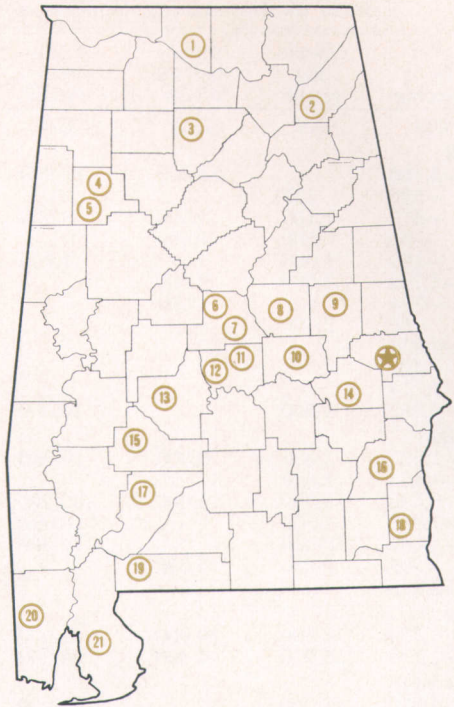
¹ Amount borrowed.

² Non-farm income minus net farm income.

³ Return to capital divided by average investment.

AGRICULTURAL EXPERIMENT STATION SYSTEM OF ALABAMA'S LAND-GRANT UNIVERSITY

With an agricultural research unit in every major soil area, Auburn University serves the needs of field crop, live-stock, forestry, and horticultural producers in each region in Alabama. Every citizen of the State has a stake in this research program, since any advantage from new and more economical ways of producing and handling farm products directly benefits the consuming public.



Research Unit Identification

★ Main Agricultural Experiment Station, Auburn.

1. Tennessee Valley Substation, Belle Mina.
2. Sand Mountain Substation, Crossville.
3. North Alabama Horticulture Substation, Cullman.
4. Upper Coastal Plain Substation, Winfield.
5. Forestry Unit, Fayette County.
6. Thorsby Foundation Seed Stocks Farm, Thorsby.
7. Chilton Area Horticulture Substation, Clanton.
8. Forestry Unit, Coosa County.
9. Piedmont Substation, Camp Hill.
10. Plant Breeding Unit, Tallassee.
11. Forestry Unit, Autauga County.
12. Prattville Experiment Field, Prattville.
13. Black Belt Substation, Marion Junction.
14. Tuskegee Experiment Field, Tuskegee.
15. Lower Coastal Plain Substation, Camden.
16. Forestry Unit, Barbour County.
17. Monroeville Experiment Field, Monroeville.
18. Wiregrass Substation, Headland.
19. Brewton Experiment Field, Brewton.
20. Ornamental Horticulture Field Station, Spring Hill.
21. Gulf Coast Substation, Fairhope.