AgEcon SEARCH
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

The World's Largest Open Access Agricultural & Applied Economics Digital Library

This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.

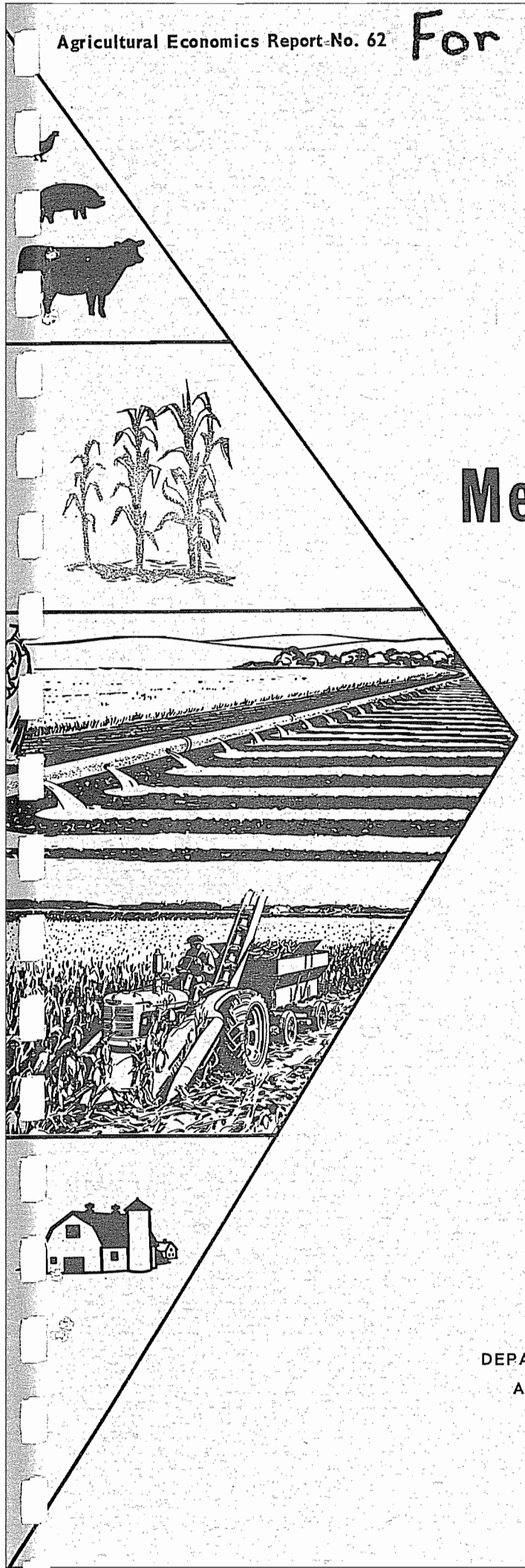
Help ensure our sustainability.

Give to AgEcon Search

AgEcon Search
http://ageconsearch.umn.edu
aesearch@umn.edu

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

Agricultural Economics Report No. 62 For Check Out Only! April 1969



Merchant-Dealer Credit in North Dakota

PART I
Farmer Use and Importance

Fred R. Taylor, Hilmer Huber

DEPARTMENT OF AGRICULTURAL ECONOMICS
AGRICULTURAL EXPERIMENT STATION
NORTH DAKOTA STATE UNIVERSITY
FARGO, NORTH DAKOTA

TABLE OF CONTENTS

	Page
SUMMARY, CONCLUSIONS, AND IMPLICATIONS	1
SUMMARY	1
Walsh County	1
Cass County	1
Richland County	1
Factors That Affect the Use and Source of Production Credit	2
Size of Farm	2
Tenure of Operator	2
Age of Operator	2
Enterprise	3
CONCLUSIONS	3
IMPLICATIONS	4
PART I - FARMER USE AND IMPORTANCE	5
INTRODUCTION	5
OBJECTIVES	6
METHOD OF STUDY	6
SOCIO-ECONOMIC CHARACTERISTICS	6
AGE OF FARMERS	7
Walsh County	7
Richland County	7
Cass County	8
YEARS FARMING	8
Walsh County	8
Richland County	8
Cass County	8
FARM SIZE	9
Walsh County	9
Richland County	10
Cass County	11

Page

TENURE 12

Walsh County 12
Richland County 13
Cass County 13

ENTERPRISE 14

Walsh County 14
Richland County 14
Cass County 14

PRODUCTION EXPENSES, PRODUCTION CREDIT, AND ITS SOURCES 14

SIZE OF FARM 15

Walsh County 15
Cass County 16
Richland County 16

Size of Farm For All Areas Surveyed 16

TENURE 18

Walsh County 18
Cass County 18
Richland County 19

Tenure For All Areas Surveyed 20

AGE OF FARMERS 20

Walsh County 20
Cass County 21
Richland County 21

Age For All Areas Surveyed 21

ENTERPRISE 23

Walsh County 23
Cass County 23
Richland County 24

Enterprise For All Areas Surveyed 24
Totals For All Areas Combined 24

THE USE OF MERCHANT AND DEALER CREDIT IN FINANCING INDIVIDUAL EXPENSES 27

	Page
PETROLEUM PRODUCTS	27
FERTILIZER	28
REPAIRS	29
FEED	29
SEED	30
INSECTICIDES AND SPRAYS	31
BUILDING AND MATERIALS	31
FARM SUPPLIES	32
LIVESTOCK EXPENSE	32

LIST OF TABLES

Table		Page
1	Average Age of Farm Operators By Tenure and Size of Farms, Walsh, Richland, and Cass Counties, 1966	9
2	Average Value of Land and Buildings Owned, Operator Debt, and Gross Farm Income By Age Group, Walsh, Richland, and Cass Counties, 1966	10
3	Average Number of Years Farming By Tenure and Farm Size, Walsh, Richland, and Cass Counties, 1966	11
4	Average Value of Land and Buildings Owned, Operator Debt and Gross Farm Income By Farm Size, Walsh, Richland, and Cass Counties, 1966	12
5	Average Value of Land and Buildings Owned, Operator Debt, and Gross Farm Income By Tenure, Walsh, Richland, and Cass Counties, 1966	13
6	Average Value of Land and Buildings Owned, Operator Debt, and Gross Farm Income By Enterprise, Walsh, Richland, and Cass Counties, 1966	15
7	Average Production Expenses, Production Credit, and Proportions of Production Credit Financed By Selected Sources By Farm Size, Walsh, Richland, and Cass Counties, 1966	17
8	Average Production Expenses, Production Credit, and Proportions of Production Credit Financed By Selected Credit Sources By Farm Size, Walsh, Cass, and Richland Counties Combined, 1966	18
9	Average Production Expenses, Production Credit, and Proportions of Production Credit Financed by Selected Credit Sources, By Tenure, Walsh, Cass, and Richland Counties, 1966	19
10	Average Production Expenses, Production Credit, and Proportions of Production Credit Financed By Selected Credit Source By Tenure, Walsh, Cass and Richland Counties, 1966	20

Table		Page
11	Average Production Expenses, Production Credit, and Proportion of Production Credit Financed By Selected Credit Sources By Age, Walsh, Cass, and Richland Counties, 1966	22
12	Average Production Expenses, Production Credit, and Proportions of Production Credit Financed By Selected Credit Sources By Age, Walsh, Cass, and Richland Counties Combined, 1966	23
13	Average Production Expenses, Production Credit, and Proportion of Production Credit By Selected Credit Sources By Enterprise, Walsh, Cass, and Richland Counties, 1966	25
14	Average Production Expenses, Production Credit, and Proportions of Production Credit Financed By Selected Credit Sources By Enterprise, Walsh, Cass, and Richland Counties Combined, 1966	26
15	Average Production Expenses, Production Credit, and Proportions of Production Credit Financed By Selected Credit Sources: Average Totals For All Counties, 1966	26
16	Petroleum Products: Cost, Cash Purchases, Total Credit, and Merchant and Dealer Credit Extended By County, Average Per Farm, 1966	28
17	Fertilizer: Cost, Cash Purchases, Total Credit, and Merchant and Dealer Credit Extended By County, Average Per Farm, 1966	29
18	Repairs: Cost, Cash Purchases, Total Credit, and Merchant and Dealer Credit Extended By County, Average Per Farm, 1966	30
19	Feed: Cost, Cash Purchases, Total Credit, and Merchant and Dealer Credit Extended By County; Average Per Farm 1966	30
20	Seed: Cost, Cash Purchases, Total Credit, and Merchant-Dealer Credit Extended By County; Average Per Farm 1966	31
21	Insecticides and Sprays: Cost, Cash Purchases, Total Credit, and Merchant-Dealer Credit Extended by County, Average Per Farm, 1966	32
22	Building and Materials: Cost, Cash Purchases, Total Credit and Merchant-Dealer Credit Extended by County, Average Per Farm,,1966	33
23	Farm Supplies: Cost, Cash Purchases, Total Credit, and Merchant-Dealer Credit Extended By County, Average Per Farm, 1966	33
24	Livestock Expense: Cost, Cash Purchases, Total Credit, and Merchant-Dealer Credit Extended By County, Average Per Farm, 1966..	34

SUMMARY, CONCLUSIONS, AND IMPLICATIONS

SUMMARY

The rapid increase in purchased inputs by farmers will require a greater use of production credit. Merchants and dealers have always played a significant role in financing the farm business and evidence indicates they will continue to do so. This study was undertaken to determine the importance of merchant and dealer credit in financing the farm business, and the factors that affect credit used by farmers.

The findings of this study regarding production credit use are summarized for each area as follows:

Walsh County

1. The percentage of production expenses financed averaged 44 percent per farm. The amount of production credit used ranged from $1,090 to $13,388 per farm in Walsh County, with an average of $6,491 per farm.

2. Merchants and dealers financed from 46 to 100 percent of the production credit used, with an average of 74 percent. Other sources accounted for the following proportions: banks, 19 percent; PCA's, 5 percent; and FHA and other credit sources, 2 percent.

Cass County

1. The percentage of production expenses financed averaged 39 percent per farm. The amount of production credit used ranged from $4,585 to $22,118 per farm in Cass County, with an average of $10,421 per farm.

2. Merchants and dealers financed from 33 to 69 percent of the production credit used, with an average of 40 percent. Other sources accounted for the following proportions: banks, 51 percent; PCA's, 7 percent; and other credit sources, 2 percent.

Richland County

1. The percentage of production expenses financed averaged 62 percent per farm. The amount of production credit used ranged from $3,291 to $22,475 per farm in Richland County, with an average of $13,866 per farm.

2. Merchants and dealers financed from 18 to 92 percent of the production credit used, with an average of 27 percent. Other sources accounted for the following proportions: banks, 32 percent; PCA's, 39 percent; FHA and other credit sources, 2 percent.

Factors That Affect the Use and Source of Production Credit

Socio-economic factors, such as size of farm, tenure of operators, age of operators, and type of enterprise, affect the amounts and sources of credit used by farm operators. These factors are summarized as follows:

Size of Farm

1. Operators of largest-sized farms financed the smallest percent of their production expenses, while operators of the medium-sized farms financed the largest percent of their production expenses, 39 and 65 percent, respectively. Operators of the smallest-size farms financed 41 percent of their production expenses.

2. Merchants and dealers supplied the largest percent of production credit used by operators of all three farm size groups.

3. Operators of the smallest-sized farms used banks as a secondary production credit source to a greater extent than operators of medium- or large-sized farms.

Tenure of Operator

1. Approximately one-half of the production expenses were financed by all tenure groups.

2. Merchants and dealers supplied the largest percent of production credit used by part owners and tenants. Tenants used merchants and dealers to finance the largest proportion of their production credit used (65 percent), while full owners used the smallest, 30 percent.

3. Full and part owners used banks as a secondary production credit source to a greater extent than did tenants. Banks supplied 48 percent of the production credit used by full owners, 32 percent for part owners, and 25 percent for tenants. Full and part owners also used more PCA credit than did tenants.

Age of Operator

1. The over 65 age group and the under 35 age group financed the smallest proportion of their production expenses (45 percent and

41 percent, respectively), while all other age categories financed approximately 50 percent of their production expenses.

2. Merchants and dealers supplied the largest proportion of production credit used by all age groups except the under 35 age group. The over 65 age group used only merchant and dealer credit, while the other age groups used merchants and dealers to finance from 36 to 61 percent of their production credit.

3. Banks were the most important secondary production credit source for all age groups.

4. PCA's were also an important credit source for operators in the 35-44 and 45-54 age groups. They financed approximately 22 to 30 percent of the production credit used by farmers in these age categories.

Enterprise

1. Livestock farmers financed the largest percent of their production expenses (74 percent), while cash grain farmers financed the smallest, 34 percent. Diversified farmers financed 55 percent of their production expenses.

2. The major production credit source for cash grain was the merchant and dealer. They supplied 70 percent of the production credit used for cash grain farmers.

3. The major credit source for livestock farmers was PCA. They supplied 59 percent of the production credit used.

4. Diversified farmers used banks as the primary production credit source. Banks supplied 46 percent of the production credit used by diversified farmers.

CONCLUSIONS

The farmers interviewed in Richland County indicated that they had no trouble obtaining loans from banks and PCA's for operating expenses, thereby reducing their reliance on merchants and dealers as a source of financing their production credit needs. This was due at least in part to the aggressiveness and competition between Richland County banks and PCA's in financing farmers. In contrast, Walsh County farmers had difficulty in obtaining operating loans from PCA's and banks. Many of the farmers were "loaned up" with loans for capital items and could not get additional credit for operating loans. Thus, they had to rely on merchants and dealers to finance their operating expenses. Eastern Cass County was similar to Richland County, while Western Cass County could be compared with Walsh County.

This suggests the need for greater effort on the part of banks and PCA's to become more aggressive and competitive in Walsh and Western Cass County. If banks and PCA's were more aggressive in this area, farmers would have to rely less on merchants and dealers for production credit.

When asked what were the merchant and dealer interest charges, most farmers said there were none. However, this may not always be the case. Many of the merchants and dealers had a carrying charge, but apparently farmers were not aware of this fact. This suggests the need for better communication between farmers and merchants and dealers. Farmers should know how much interest they are paying.

Merchant and dealer credit is the most convenient source of credit and farmers are benfiting from its use. However, they should be aware of the problems which may occur when credit is extended by people whose primary interest is sales.

IMPLICATIONS

Because of changes in technology, farmers are purchasing more farm production inputs and, therefore, need more operating capital. Future technological changes will require even more operating capital. Many farmers are using credit from regular commercial sources to finance these capital requirements. However, some farmers are unable to secure adequate credit from these sources due to the lack of collateral and reluctance to "borrow money". Consequently, they use merchant and dealer credit for operating expenses. Although the farmer may be able to obtain sufficient capital from lending institutions, he may still use merchant and dealer credit because it is convenient. The farmers may be too busy with other things when such items as petroleum products, fertilizer, etc., are delivered and it usually saves time for all concerned to simply "charge it" and send the statement at the end of the month or after the harvest period.

The importance of merchant and dealer credit has been shown in this study. It would be reasonable to expect that merchant and dealer credit will become increasingly important in the future. Merchants and dealers incur expenses in granting credit and must recover these costs from their customers. In the future, merchants and dealers may increase their credit charges and those who presently are not charging for extending credit will be forced to do so. Also, it may become difficult for merchants and dealers to find adequate credit sources to finance their credit extensions to farmers.

MERCHANT-DEALER CREDIT IN NORTH DAKOTA

PART I - FARMER USE AND IMPORTANCE

Fred R. Taylor and Hilmer Huber[1]

INTRODUCTION

Rapid development of technology in agriculture has increased the need for some factors of production relative to others. One of these is the need for capital in the farm business. Continued substitution of capital for land and labor and growth in the size of the farm enterprise will have a great impact on capital investment and credit needs of farming in the future. As farmers increase capital use, a greater percentage of total production inputs is being purchased. In the last 20 years, the amount of capital investment required to generate $1 of farm income has increased from $4.73 to more than $15 and the proportion of nonpurchased inputs has declined from approximately 60 to 25 percent.[2]

A large share of the rising productivity of agriculture over the next two decades will come from operating capital inputs because their productivity is higher than that of the labor and land resources they replace. Operating inputs include fertilizer, lime, feed, seed, high protein concentrates, herbicides, insecticides, hybrid seeds, and such.

By 1980 the use of operating inputs for the farm industry is projected to increase 70 percent. Purchases of fertilizer and lime in 1980 are conservatively projected to grow about 80 percent. Operating inputs used per farm are expected to be nearly three times those of the present.

The need for increased credit is verified by the increase in farm mortgage debt from $5.6 billion in 1950 to $18.9 billion in 1965, an increase of 337 percent in 15 years. At the same time the nonreal estate debt of farmers rose from $6.18 billion in 1950 to $18.6 billion in 1965, an increase of 273 percent.[3] The large increase in nonreal estate debt is the subject of interest in this study.

---

[1]Professor of Agricultural Economics and Graduate Research Assistant, respectively.

[2]Heady, Earl O., United States Agriculture in 1980, Iowa State University, CAED Report No. 27, Ames, Iowa, 1966.

[3]United States Department of Agriculture, The Balance Sheet of Agriculture 1966, Economic Research Service, Bulletin No. 314, p. 1.

Large strides in technology have put short-term operating capital in a very vital position. One question is whether or not commercial lenders are keeping pace with the needs for this type of credit. The farmer, in his quest for increased operating funds, may be turning to merchants and dealers for credit. This study is concerned with the relative importance of merchant and dealer credit and the extent to which it is being used by farmers as a part of their operating funds.

Merchant and dealer credit, as it will be used in this study, refers to purchases which are made from a merchant or dealer where no cash passes from the purchaser to the merchant or dealer at the time of the transaction. Credit in the form of open account or 30-day credit was excluded in the analysis of credit use by farmers.

OBJECTIVES

This study was undertaken to determine the importance of merchant and dealer credit in financing the farm business, and the factors that affect credit use by farmers.

Specifically, the objectives were briefly stated as follows:

1. To determine the average amount of production credit used by farmers from all lending sources.

2. To determine the amount of credit supplied by merchants and dealers for operating expenses per farm.

3. To determine the relative importance of merchant and dealer credit and that supplied by commercial lending institutions.

4. To examine the different factors that affect the use of merchant and dealer credit.

METHOD OF STUDY

The basic data for this study were obtained from a personal survey of 40 farmers in each of Walsh, Cass, and Richland counties in 1967. The farmers interviewed were selected at random from a list received from the county agent in each of the counties. Each county agent was instructed to select at random from the county plat book, 100 farmers who would cooperate with this study. From this list, 40 farmers were randomly selected for a personal interview.

SOCIO-ECONOMIC CHARACTERISTICS

For purpose of analysis, socio-economic factors, such as age of operator, the number of years he had farmed, the size of the farm, the

tenure arrangements, and the type of farm enterprise operated, were determined for the 40 farms in each county. This analysis indicated the differences in socio-economic characteristics of the farmers by county and related these to value of land and buildings, operator debt, gross farm income, and percent of operators indebted.

AGE OF FARMERS

Walsh County

The 40 Walsh County farmers surveyed ranged in age from 32 to 65, with an arithmetic mean of 46 years. Operators of the smallest farms and the largest farms were older than the operators of medium-sized farms. However, the operators of the smallest farms were older than operators of the larger farms. Farm operators with less than 500 acres averaged 49 years of age, those on 500-1,000 acre farms averaged 44 years of age, and those on farms over 1,000 acres averaged 48 years of age. The tenants in each size group were younger than either full owners or part owners and the part owners were older than full owners (Table 1).

The operator in the over 65 age category had the greatest amount of operator debt, the smallest investment in land and buildings, and the smallest gross farm income (Table 2). The 55-64 age group had the largest investment in land and buildings and the smallest operator debt. With the exception of the one farmer in the over 65 age category, the 35-44 and 45-54 age groups had the largest percent of farmers indebted. The over 65 age category had the highest operator debt as a percent of land and building value (31 percent) while the 55-64 age group had the lowest (3 percent).

Richland County

The farmers surveyed in Richland County ranged in age from 28 to 58, with an arithmetic mean of 43 years. Operators of the medium-sized farms were older than those in the remaining two categories. Operators of less than 500 acres and more than 1,000 acres averaged 41 years of age, while those in the 500-1,000 acres category averaged 46 years of age. Owners were older than part owners and tenants. Full owners averaged 47 years of age while part owners averaged 42 years of age, and the tenants averaged 37 years of age (Table 1).

Operators between the ages of 55 to 64 had the largest investment in land and buildings, the largest farm income, and the least operator debt, while operators in the 45-54 and under 35 age groups were the most heavily indebted. Operators in the under 35 age category had the lowest gross farm income. The average operator debt as a percent of land and building value was the highest in the 45-54 age group (19 percent) and the lowest in the 55-64 age group (2 percent) (Table 2).

Cass County

The 40 Cass County farmers surveyed ranged in age from 29 to 64, with an arithmetic mean of 45 years. There was very little variation in age in each size group with the less than 500 acre size group averaging 44 years of age and the remaining two categories 45 years of age. The tenants in each size group were younger than either full or part owners (Table 1).

Operators between the ages of 55 and 64 had the greatest investment in land and buildings, while the under 35 age category had the highest gross farm income, and the 45-54 age group had the least operator debt. The most heavily indebted group was the 35-44 age group. Average operator debt as a percent of land and building value was highest in the under 35 age group and lowest in the 45-54 age group (Table 2).

YEARS FARMING

Walsh County

The farm operators in Walsh County had farmed an average of 21 years. Part owners had farmed the longest (22 years), while the full owners had farmed an average of 19 years, and the tenants five years. There was no significant difference in years farming between full owners and part owners in the 500-1,000 acre size group. In the less than 500 acre size group, full owners farmed an average of 17 years, while part owners farmed an average of 23 years (Table 3).

Richland County

The farm operators in Richland County had farmed an average of 20 years. Full owners had farmed longer than both part owners and tenants. Full owners had farmed an average of 23 years, while part owners had farmed for 19 years and tenants 21 years (Table 3).

Cass County

The farm operators in Cass County had farmed an average of 21 years. Part owners had farmed the longest, while tenants had farmed the least number of years. Full owners had farmed an average of 22 years, while part owners had farmed an average of 24 years and tenants 15 years (Table 3).

TABLE 1. AVERAGE AGE OF FARM OPERATORS BY TENURE AND SIZE OF FARMS, WALSH, RICHLAND, AND CASS COUNTIES, 1966

Size of Farm	Average Age of All Tenure Groups	Full Owners	Part Owners	Tenants
Walsh County				
Under 500	49	46	52	34
500-1,000	44	45	43	*
Over 1,000	48	*	48	*
All Farms	46	45	47	34
Richland County				
Under 500	41	47	38	43
500-1,000	46	46	47	40
Over 1,000	41	46	40	*
All Farms	43	47	42	42
Cass County				
Under 500	44	49	45	37
500-1,000	45	*	49	37
Over 1,000	45	45	48	38
All Farms	45	46	48	37

*None interviewed.

FARM SIZE

Walsh County

The largest number of farms surveyed was in the 500-1,000 acre class and the fewest farms in the over 1,000 acre class. Value of land and buildings and gross farm incomes varied directly with farm size (Table 4). Gross farm income of farms in the over 1,000 acre size group was almost twice that of the income of farms in the 500-1,000 acre size group and almost six times that of the smallest farms. The size group with the largest average operator debt was the over 1,000 acre class, while the 500-1,000 acre class had the lowest average operator debt. The percentage of operators indebted was highest in the over 1,000 acre class, and the lowest in the 500-1,000 acre class. The average operator debt as a percent of land and building value was largest in the under 500 acre class and smallest in the 500-1,000 acre class.

TABLE 2. AVERAGE VALUE OF LAND AND BUILDINGS OWNED, OPERATOR DEBT, AND GROSS FARM INCOME BY AGE GROUP, WALSH, RICHLAND, AND CASS COUNTIES, 1966

Age of Farmers	Value of Land and Buildings	Operator Debt	Gross Farm Income	Percent of Operators Indebted	Operator Debt as a Percent of Land and Building Value
(years)	(dollars)			(percent)	
Walsh County					
Under 35	$ 82,000	$ 7,875	$47,750	25	10
35-44	96,184	15,967	32,900	69	17
45-54	93,176	8,192	24,051	77	9
55-64	103,833	3,250	27,333	33	3
Over 65	51,000	16,000	7,000	100	31
All Farms	$ 93,806	$10,724	$30,026	62	11
Richland County					
Under 35	$115,333	$20,567	$33,667	100	18
35-44	122,606	16,744	37,751	90	14
45-54	128,519	24,999	43,377	85	19
55-64	220,750	3,500	44,687	25	2
Over 65	*	*	*	*	*
All Farms	$133,796	$18,389	$39,992	82	14
Cass County					
Under 35	$ 45,000	$15,820	$46,600	80	35
35-44	125,076	17,100	42,676	54	13
45-54	138,519	12,729	33,718	84	11
55-64	168,000	14,812	34,925	62	21
Over 65	*	*	*	*	*
All Farms	$115,275	$15,009	$38,603	69	13

*None interviewed.

Richland County

The largest number of farms surveyed was in the 500-1,000 acre class and the remaining two classes had equal numbers of farms surveyed. Value of land and buildings, gross farm income, and average operator debt varied directly with farm size (Table 4). The percentage of operators indebted was approximately the same in all categories of farm size. The average operator debt as a percent of land and building value was largest in the under 500 acre class and lowest in the over 1,000 acre size group.

TABLE 3. AVERAGE NUMBER OF YEARS FARMING BY TENURE AND FARM SIZE, WALSH, RICHLAND, AND CASS COUNTIES, 1966

Size of Farm (acres)	Average Number of Years Farming by All Tenure Groups	Full Owners	Part Owners	Tenants
Walsh County				
Under 500	20	17	23	5
500-1,000	21	20	21	*
Over 1,000	24	*	24	*
All Farms	21	19	22	5
Richland County				
Under 500	18	27	14	21
500-1,000	23	22	24	22
Over 1,000	18	21	17	*
All Farms	20	23	19	21
Cass County				
Under 500	21	25	20	16
500-1,000	22	*	27	14
Over 1,000	21	19	23	15
All Farms	21	22	24	15

*None interviewed.

Cass County

The largest number of farms surveyed was in the over 1,000 acre class and the fewest farms in the under 500 acre size group (Table 4). While the gross farm income varied directly with size, the value of land and buildings and total debt averaged higher on the small farms than on the medium-sized farms. The percent of operators indebted did not vary significantly among the different sizes of farm groups, but the average operator debt as a percent of land and building value was the largest in the under 500 acre class and the lowest in the over 1,000 acre size group.

TENURE

Walsh County

The largest number of farmers surveyed in this area was the part owner category (Table 5). They operated the largest-sized farms and earned the largest average gross farm incomes. The average investment in land and buildings by full owners was larger than that of part owners, even though part owners operated larger farms. The average operator debt of full owners was larger than that of part owners, while the one tenant interviewed had no debt. Full owners had the highest percent of operators indebted. The average operator debt as a percent of land and building value was about equal for full and part owners.

TABLE 4. AVERAGE VALUE OF LAND AND BUILDINGS OWNED, OPERATOR DEBT AND GROSS FARM INCOME BY FARM SIZE, WALSH, RICHLAND, AND CASS COUNTIES, 1966

Size of Farm	Number of Farms	Value of Land and Buildings	Operator Debt	Gross Farm Income	Percent of Operators Indebted	Operator Debt as a Percent of Land and Building Value
(acres)		(dollars)			(percent)	
Walsh County						
Under 500	12	$ 55,929	$ 9,269	$10,618	58	16
500-1,000	21	87,642	8,728	31,723	57	10
Over 1,000	7	177,228	19,205	58,207	71	11
All Farms	40	$ 93,806	$10,724	$30,096	60	11
Richland County						
Under 500	12	$ 72,083	$14,923	$20,319	83	21
500-1,000	16	136,062	17,928	46,925	81	13
Over 1,000	12	192,489	22,470	50,421	83	12
All Farms	40	$133,796	$18,389	$39,992	82	14
Cass County						
Under 500	6	$ 83,283	$13,738	$16,958	83	16
500-1,000	9	70,555	8,976	30,027	67	13
Over 1,000	24	160,877	17,173	47,230	75	11
All Farms	39	$128,096	$15,009	$38,603	74	12

Richland County

As in Walsh County, the largest percentage of farmers surveyed in Richland County were part owners (Table 5). Average gross farm income was lowest in the tenant class and highest in the full owner category. Full owners had the largest average investment in land and buildings and the largest average operator debt. Part owners had the highest percent of operators indebted and also the highest average operator debt as a percent of land and building value.

Cass County

As in the other two counties, the largest number of farmers surveyed was in the part owner category (Table 5). They operated the largest farms and had the largest gross farm income. The average investment in land and buildings by full owners was larger than that of part owners, even though part owners operated larger farms and had the largest average operator debt. The percent of operators indebted was highest in the full owner group, while the part owners had the highest average operator debt as a percent of land and building value.

TABLE 5. AVERAGE VALUE OF LAND AND BUILDINGS OWNED, OPERATOR DEBT, AND GROSS FARM INCOME BY TENURE, WALSH, RICHLAND, AND CASS COUNTIES, 1966

Tenure Group	Number of Farms	Value of Land and Buildings	Operator Debt	Gross Farm Income	Percent of Operators Indebted	Operator Debt as a Percent of Land and Building Value
		(dollars)			(percent)	
Walsh County						
Full Owners	10	$106,515	$12,567	$25,220	70	12
Part Owners	29	92,658	10,448	32,512	58	11
Tenants	1	---	---	6,000	100	--
All Farms	40	$ 93,806	$10,724	$30,026	62	11
Richland County						
Full Owners	10	$198,575	$23,223	$42,866	70	12
Part Owners	27	124,671	18,542	41,492	92	15
Tenants	3	---	841	16,916	33	--
All Farms	40	$133,796	$18,389	$39,992	82	14
Cass County						
Full Owners	7	$180,100	$14,140	$30,484	86	8
Part Owners	24	150,627	19,333	42,621	79	12
Tenants	8	---	2,800	33,656	37	--
All Farms	39	$128,096	$15,009	$38,603	71	12

ENTERPRISE

Walsh County

In Walsh County cash grain farmers had a larger average investment in land and buildings, operator debt and gross farm income than did diversified farms.[4] Diversified farmers had the highest percentage of operators indebted. Average operator debt as a percent of land and building value was equal in the cash grain and diversified categories. There were no farms surveyed in this county that could be classified as operating a livestock enterprise (Table 6).

Richland County

There was more livestock raised in Richland County than in the other two counties. Out of the 40 farmers interviewed, 27 had livestock, with five of these classed in the livestock enterprise category. The cash grain farmers had the largest average investment in land and buildings, operator debt, and gross farm income (Table 6). The livestock category had the highest percentage of operators indebted, while the diversified category had the least average operator debt and the lowest percentage of operators indebted. The average operator debt as a percent of land and building value was the highest in the livestock category and lowest in the diversified class.

Cass County

The largest number of farmers surveyed in Cass County was in the diversified category (Table 6). Cash grain farmers had the largest investment in land and buildings and the largest average gross farm income. The average operator debt did not vary significantly among the categories, but the percent of operators indebted was highest in the diversified category. The average operator debt as a percent of land and building value was highest in the livestock category.

PRODUCTION EXPENSES, PRODUCTION CREDIT, AND ITS SOURCES

The purpose of this section was to examine the importance of merchant and dealer credit with respect to other sources of credit used to finance farm production expenses, and how the use of different types of credit was affected by size of the farm, tenure of operator, age of the farmer, and the type of enterprise in each of the three areas surveyed.

---

[4]Diversified farmer--In this study, a diversified farmer is one who has a combination of livestock and cash grain.

TABLE 6. AVERAGE VALUE OF LAND AND BUILDINGS OWNED, OPERATOR DEBT, AND GROSS FARM INCOME BY ENTERPRISE, WALSH, RICHLAND, AND CASS COUNTIES, 1966

Enterprise	Number of Farms	Value of Land and Buildings	Operator Debt	Gross Farm Income	Percent of Operators Indebted	Operator Debt as a Percent of Land and Building Value
		(dollars)			(percent)	
Walsh County						
Cash Grain	22	$ 99,929	$11,319	$34,223	54	11
Diversified	18	86,322	9,996	24,897	61	11
Livestock	*	*	*	*	*	*
All Farms	40	$ 93,806	$10,724	$30,026	62	11
Richland County						
Cash Grain	13	$155,759	$22,275	$44,502	84	14
Diversified	22	132,818	15,452	39,987	77	12
Livestock	5	81,000	21,206	28,089	100	26
All Farms	40	$132,796	$18,389	$39,992	82	14
Cass County						
Cash Grain	10	$140,460	$15,450	$39,366	54	11
Diversified	27	127,301	14,803	38,844	70	11
Livestock	2	77,000	15,592	34,000	50	20
All Farms	39	$115,275	$15,009	$38,603	69	13

*None interviewed.

SIZE OF FARM

Walsh County

Average production expenses ranged from $5,672 for the smallest-sized farms to $28,763 for the farms included in the largest size category (Table 7). The proportion of expenses financed ranged from 33 percent for the largest farms to 51 percent for the farms in the 500-1,000 acre size group.

Merchants and dealers constituted by far the most important source of financing. This source accounted for 74 percent of all production credit for the farms in the over 1,000 acre size group. For the farms

in the other two categories, merchant-dealers supplied 68 and 76 percent of production credit. The remainder was supplied by either PCA's or banks.

Cass County

Average production expenses ranged from $8,247 for the smallest-sized farms to $34,879 for the farms included in the largest size category (Table 7). The average percent of production expenses financed by all sources varied from 37 percent for farms over 1,000 acres to 56 percent for farms under 500 acres. The average percent financed was 39 percent for all farms.

Merchants and dealers constituted the most important source of financing in Cass County. This source accounted for 35 percent of all production credit for the over 1,000 acre size group to 68 percent for the under 500 acre size group. Banks also played an important role in financing production credit in all size categories, while PCA's were an important source only in the under 500 acre size group.

Richland County

Average production expenses ranged from $12,672 for the smallest-sized farms to $27,028 for the farms in the 500-1,000 acre group (Table 7). The proportion of expenses financed ranged from 33 percent for the smallest farms to 83 percent for the 500-1,000 acre size group.

Merchants and dealers, banks, and PCA's financed almost all of the credit. PCA's provided 39 percent of production credit while banks provided 32 percent and merchant-dealers provided 27 percent. Banks had the largest variation in financing farmers' production credit; the percent of credit varied from 1 percent for the smallest farms to 45 percent for the farmers in the 500-1,000 acre category.

Size of Farm For All Areas Surveyed

When average production expenses, production credit, and the sources of credit for all 120 farms by size group were analyzed, it was found that production expenses ranged from $8,987 for the smallest farms to $31,297 for the largest farms (Table 10). The proportion of expenses financed ranged from 39 percent for the smallest farms to 65 percent for the 500-1,000 acre size group.

Merchant and dealer credit was the most important source of financing. They provided 41 percent of the production credit for all farms compared with 36 percent provided by banks and 21 percent by Production Credit Associations. Merchants and dealers provided the

TABLE 7. AVERAGE PRODUCTION EXPENSES, PRODUCTION CREDIT, AND PROPORTIONS OF PRODUCTION CREDIT FINANCED BY SELECTED SOURCES BY FARM SIZE, WALSH, RICHLAND, AND CASS COUNTIES, 1966

Size of Farm	Number of Farms	Production Expenses	Production Credit*		Sources of Credit					
			Amount	Percent of Expenses	All Sources	M&D	Bank	PCA	FHA	Other
(acres)		(dollars)			(Percent of production credit)					
Walsh County										
Under 500	12	$ 5,672	$ 2,706	48	100	76	--	24	--	--
500-1,000	21	51,140	7,689	51	100	68	28	3	--	1
Over 1,000	7	28,763	9,410	33	100	90	7	--	3	--
All Farms	40	$14,684	$ 6,491	44	100	74	19	5	1	1
Cass County										
Under 500	6	$ 8,247	$ 4,585	56	100	68	11	16	--	5
500-1,000	9	15,830	7,432	47	100	48	44	--	--	8
Over 1,000	25	34,879	12,859	37	100	35	57	7	--	1
All Farms	40	$26,598	$10,421	39	100	40	51	7	--	2
Richland County										
Under 500	12	$12,672	$ 4,176	33	100	22	1	70	6	1
500-1,000	16	27,028	22,373	83	100	25	45	29	--	1
Over 1,000	12	25,314	12,216	48	100	36	12	51	--	1
All Farms	40	$22,207	$13,866	62	100	27	32	39	1	1

*This table excludes 30-day M&D credit.

largest percent of production credit to farms with less than 500 acres and greater than 1,000 acres. Banks provided the largest percent of credit to farms in the 500 to 1,000 acre group.

TENURE

Walsh County

Average production expenses ranged from $2,535 for the tenant to $15,060 for part owners (Table 9). The proportion of production expenses financed ranged from 37 percent for the tenant farmer to 64 percent for full owners.

Merchants and dealers constituted the most important source of financing. The proportion supplied by merchants and dealers ranged from 49 percent for full owners to 100 percent for the tenant. The only other important source was banks which supplied 47 percent of the production credit used on the full owner farms.

TABLE 8. AVERAGE PRODUCTION EXPENSES, PRODUCTION CREDIT, AND PROPORTIONS OF PRODUCTION CREDIT FINANCED BY SELECTED CREDIT SOURCES BY FARM SIZE, WALSH, CASS, AND RICHLAND COUNTIES COMBINED, 1966

Size of Farm	Number of Farms	Production Expenses	Production Credit*		Sources of Credit					
			Amount	Percent of Expenses	All Sources	M&D	Bank	PCA	FHA	Other
(acres)					(percent of production credit)					
Under 500	30	$ 8,987	$ 4,695	41	100	49	43	4	3	1
500-1,000	46	19,410	12,710	65	100	39	40	19	--	2
Over 1,000	44	31,297	12,135	39	100	42	38	18	1	1
All Farms	120	$21,163	$10,245	48	100	41	36	21	1	1

*This table excludes 30-day M&D credit.

Cass County

Average production expenses ranged from $14,529 for tenants to $38,084 for full owners (Table 9). Approximately one-third of the production expenses was financed.

Banks constituted the most important source of financing. This source accounted for over 50 percent of the total production credit used. Merchant and dealer credit ranged from 21 percent of the production credit used by full owners to 65 percent used by tenants.

TABLE 9. AVERAGE PRODUCTION EXPENSES, PRODUCTION CREDIT, AND PROPORTIONS OF PRODUCTION CREDIT FINANCED BY SELECTED CREDIT SOURCES, BY TENURE, WALSH, CASS, AND RICHLAND COUNTIES, 1966

Tenure	Number of Farms	Production Expenses	Production Credit*		Sources of Credit					
			Amount	Percent of Expenses	All Sources	M&D	Bank	PCA	FHA	Other
		(dollars)			(percent of production credit)					
Walsh County										
Full Owners	10	$14,808	$ 9,419	64	100	49	47	4	--	--
Part Owners	29	15,060	5,640	37	100	89	3	6	1	1
Tenants	1	2,535	950	37	100	100	--	--	--	--
All Farms	40	$14,684	$ 6,491	44	100	74	19	5	1	1
Cass County										
Full Owners	8	$38,084	$10,384	28	100	21	75	--	--	4
Part Owners	24	27,774	11,664	42	100	40	51	8	--	1
Tenants	8	14,529	6,877	47	100	65	25	7	--	3
All Farms	40	$26,598	$10,421	39	100	40	51	7	--	2
Richland County										
Full Owners	10	$28,703	$18,913	66	100	23	38	38	--	1
Part Owners	27	21,548	13,170	61	100	28	31	40	1	--
Tenants	3	6,489	2,831	44	100	80	15	--	--	5
All Farms	40	$22,207	$13,866	62	100	27	32	39	1	1

*This table excludes 30-day M&D credit.

Richland County

Average production expenses ranged from $6,489 for tenants to $28,703 for full owners (Table 9). The proportion of expenses financed ranged from 44 percent for tenants to 66 percent for full owners.

Except for tenants who used merchants and dealers to finance 80 percent of their production credit, merchants and dealers, banks, and PCA's were approximately equally important as sources of credit in Richland County. Each of these sources financed approximately one-third of the total production credit.

Tenure For All Areas Surveyed

When average production expenses, production credit, and the sources of credit for all farms by tenure were analyzed, production expenses ranged from $12,730 for tenants to $25,061 for full owners. Approximately one-half of the production expenses was financed (Table 10).

Merchants and dealers constituted the most important source of financing. This source accounted for 30 percent of all production credit used by full owners compared with 65 percent used by tenants. Banks and PCA's played an important role in financing full and part owners.

TABLE 10. AVERAGE PRODUCTION EXPENSES, PRODUCTION CREDIT, AND PROPORTIONS OF PRODUCTION CREDIT FINANCED BY SELECTED CREDIT SOURCE BY TENURE, WALSH, CASS, AND RICHLAND COUNTIES, 1966

Tenure	Number of Farms	Production Expenses	Production Credit*		Sources of Credit					
			Amount	Percent of Expenses	All Sources	M&D	Bank	PCA	FHA	Other
		(dollars)			(percent of production credit)					
Full Owners	28	$25,061	$12,808	51	100	30	48	21	--	1
Part Owners	80	21,063	10,012	48	100	44	32	22	1	1
Tenants	12	12,730	5,576	44	100	65	25	7	--	3
All Farms	120	$21,163	$10,245	48	100	41	36	21	1	1

*This table excludes 30-day M&D credit.

AGE OF FARMERS

Walsh County

Average production expenses ranged from $5,895 for the over 65 age category to $20,864 for the under 35 age group (Table 11). The proportion of expenses financed varied from 45 percent for the over 65 age category to 55 percent for the under 35 age category.

Merchants and dealers constituted the most important credit source. This source accounted for 37 percent of all production credit for the under 35 age group compared with 100 percent for the over 65 age category. The remaining three categories also used a large percentage of merchant and dealer credit. Banks were an important source of credit for the under 35 and 55-64 age groups.

Cass County

Production expenses ranged from $22,043 for the 55-64 age group to $29,888 for the under 35 age category (Table 11). Cass County farmers financed 39 percent of their production expenses.

Banks were the most important source of financing. They financed approximately one-half of the total production credit used. Merchants and dealers were the second most important source of financing for all age groups, with the 55-64 age groups using the largest percentage of merchant and dealer credit to finance their production credit, 52 percent.

Richland County

Average production expenses ranged from $11,410 for the under 35 age group to $25,398 for the 45-54 age category (Table 11). The proportion of expenses financed ranged from 46 percent for the under 35 age group to 68 percent for the 35-44 age category. On the average, 62 percent of production expenses were financed for all farms in Richland County.

Merchant and dealer financing ranged from 20 percent of the production credit used by the 35-44 age group to 99 percent used by the 55-64 age group. Banks financed a relatively large proportion in all age categories except the 55-64 age group, while PCA's financing was important only in the 35-44 and 45-54 age categories. PCA's financed more of the total production credit for the 35-44 age group than merchants and dealers or banks.

Age For All Areas Surveyed

When average production expenses, production credit and its sources for all farms by age were analyzed, it was found that average production expenses ranged from $5,895 for the over 65 age category to $22,733 for the 35-44 age group (Table 12). Approximately 50 percent of the total production expenses were financed.

Merchants and dealers constituted the most important source of financing. Banks also played an important role in financing production credit in all age categories except the over 65 age group, which used

TABLE 11. AVERAGE PRODUCTION EXPENSES, PRODUCTION CREDIT, AND PROPORTION OF PRODUCTION CREDIT FINANCED BY SELECTED CREDIT SOURCES BY AGE, WALSH, CASS, AND RICHLAND COUNTIES, 1966

Age of Farmers	Number of Farms	Production Expenses	Production Credit*		Sources of Credit					
			Amount	Percent of Expenses	All Sources	M&D	Bank	PCA	FHA	Other
(years)		(dollars)			(percent of production credit)					
Walsh County										
Under 35	4	$20,864	$11,483	55	100	37	63	--	--	--
35-44	16	15,884	6,475	41	100	89	--	9	--	2
45-54	13	12,233	5,249	43	100	84	6	6	4	--
55-64	6	14,255	6,526	46	100	60	39	--	--	1
Over 65	1	5,895	2,675	45	100	100	--	--	--	--
All Farms	40	$14,684	$ 6,491	44	100	74	19	5	1	1
Cass County										
Under 35	5	$29,888	$ 9,382	31	100	33	56	6	--	5
35-44	14	29,863	10,422	35	100	37	44	17	--	2
45-54	13	24,621	9,144	37	100	36	63	--	--	1
55-64	8	22,043	12,957	59	100	52	47	--	--	1
Over 65	**	**	**	**	**	**	**	**	**	**
All Farms	40	$26,598	$10,421	39	100	40	51	7	--	2
Richland County										
Under 35	3	$11,410	$ 5,260	46	100	44	54	--	--	2
35-44	20	23,257	15,813	68	100	20	36	42	1	1
45-54	13	25,398	15,163	60	100	28	30	41	--	1
55-64	4	14,687	6,244	43	100	99	--	--	--	1
Over 65	**	**	**	**	**	**	**	**	**	**
All Farms	40	$22,207	$13,866	62	100	27	32	39	1	1

*This table excludes 30-day M&D credit.

**None interviewed.

only merchant and dealer credit. PCA's financed a significant amount of credit in the 35-44 and 45-54 age categories.

ENTERPRISE

Walsh County

Cash grain farmers in Walsh County had the largest production expenses, but financed the smallest percentage of these expenses (Table 13).

Merchants and dealers were the most important source of financing. Banks financed an important amount of credit for the diversified farmers, 36 percent.

Cass County

Average production expenses ranged from $19,129 for livestock farmers to $29,199 for cash grain farmers. The proportion of production expenses financed ranged from 46 percent for livestock farmers to 25 percent for the diversified class (Table 13).

TABLE 12. AVERAGE PRODUCTION EXPENSES, PRODUCTION CREDIT, AND PROPORTIONS OF PRODUCTION CREDIT FINANCED BY SELECTED CREDIT SOURCES BY AGE, WALSH, CASS, AND RICHLAND COUNTIES COMBINED, 1966

Age of Farmers	Number of Farms	Production Expenses	Production Credit*		Sources of Credit					
			Amount	Percent of Expenses	All Sources	M&D	Bank	PCA	FHA	Other
(years)		(dollars)			(percent of production credit)					
Under 35	12	$22,260	$ 9,051	41	100	36	59	3	--	2
35-44	50	22,733	11,312	50	100	37	31	30	1	1
45-54	39	20,750	9,852	47	100	40	36	22	1	1
55-64	18	17,812	9,321	52	100	61	38	--	--	1
Over 65	1	5,895	2,675	45	100	100	--	--	--	--
All Farms	120	$21,163	$10,245	48	100	41	36	21	1	1

*This table excludes 30-day M&D credit.

Banks constituted the most important source of financing. This source accounted for 51 percent of all production credit used by all farmers. Banks accounted for 61 percent of production credit for the diversified farmers while PCA's accounted for 24 percent for cash grain farmers. Merchants and dealers provided 84 percent of the credit used by livestock farmers and 40 percent of the credit used by all farmers.

Richland County

Average production expenses ranged from $16,268 for cash grain farmers to $26,267 for the diversified group (Table 13). The proportion of production expenses financed ranged from 39 percent for cash grain farmers to 93 percent for livestock farmers.

Merchants and dealers supplied 10 percent of total production credit used by livestock farmers and 57 percent used by cash grain farmers. Banks and PCA's played an important role in financing livestock and diversified farmers. PCA's alone accounted for 65 percent of the credit used by livestock farmers.

Enterprise For All Areas Surveyed

When production expenses, production credit, and its sources for all farmers by enterprise were analyzed, it was found that production expenses averaged from $19,094 for cash grain farmers to $22,747 for diversified farmers (Table 14). The proportion of expenses financed ranged from 34 percent for cash grain farmers to 74 percent for livestock farmers.

Merchants and dealers financed the largest percent of production credit for cash grain farmers (70 percent) and the smallest percent for livestock farmers, 17 percent. PCA's financed the largest percentage of production credit used by livestock farmers (59 percent) and the smallest percent for cash grain farmers, 17 percent. Banks were the most important source of credit for diversified farmers; they financed 46 percent of production credit.

Totals For All Areas Combined

When the totals of average production expenses, production credit, and the sources of credit for all areas surveyed were analyzed, it was found that average production expenses were highest in Cass County and lowest in Walsh County (Table 15). The proportion of production expenses financed was highest in Richland County (62 percent) and lowest in Cass County (39 percent).

Merchants and dealers constituted the most important source of financing. Walsh County farmers used merchants and dealers to finance

TABLE 13. AVERAGE PRODUCTION EXPENSES, PRODUCTION CREDIT, AND PROPORTION OF PRODUCTION CREDIT BY SELECTED CREDIT SOURCES BY ENTERPRISE, WALSH, CASS, AND RICHLAND COUNTIES, 1966

Enterprise	Number of Farms	Production Expenses	Production Credit*		Sources of Credit					
			Amount	Percent of Expenses	All Sources	M&D	Bank	PCA	FHA	Other
		(dollars)			(percent of production credit)					
Walsh County										
Livestock	**	**	**	**	**	**	**	**	**	**
Diversified	18	$13,427	$ 7,177	54	100	57	36	4	2	1
Cash Grain	22	15,712	5,884	37	100	91	2	6	--	1
All Farms	40	$14,684	$ 6,491	44	100	74	19	5	1	1
Cass County										
Livestock	2	$19,129	$ 4,779	25	100	69	10	5	--	16
Diversified	27	26,092	11,918	46	100	33	63	3	--	1
Cash Grain	11	29,199	7,531	26	100	51	23	24	--	2
All Farms	40	$26,598	$10,421	39	100	40	51	7	--	2
Richland County										
Livestock	5	$19,786	$18,376	93	100	10	24	65	--	1
Diversified	22	26,267	17,215	66	100	24	38	36	1	1
Cash Grain	13	16,268	6,323	39	100	57	18	24	--	1
All Farms	40	$22,207	$13,866	62	100	27	32	39	1	1

*This table excludes 30-day M&D credit.

**None interviewed.

TABLE 14. AVERAGE PRODUCTION EXPENSES, PRODUCTION CREDIT, AND PROPORTIONS OF PRODUCTION CREDIT FINANCED BY SELECTED CREDIT SOURCES BY ENTERPRISE, WALSH, CASS, AND RICHLAND COUNTIES COMBINED, 1966

Enterprise	Number of Farms	Production Expenses	Production Credit*		Sources of Credit					
			Amount	Percent of Expenses	All Sources	M&D	Bank	PCA	FHA	Other
		(dollars)			(percent of production credit)					
Livestock	7	$19,598	$14,524	74	100	17	22	59	--	2
Diversified	67	22,747	12,409	55	100	34	46	18	1	1
Cash Grain	46	19,094	6,414	34	100	70	12	17	--	1
All Farms	120	$21,163	$10,245	48	100	41	36	21	1	1

*This table excludes 30-day M&D credit.

TABLE 15. AVERAGE PRODUCTION EXPENSES, PRODUCTION CREDIT, AND PROPORTIONS OF PRODUCTION CREDIT FINANCED BY SELECTED CREDIT SOURCES: AVERAGE TOTALS FOR ALL COUNTIES, 1966

County	Number of Farms	Production Expenses	Production Credit*		Sources of Credit					
			Amount	Percent of Expenses	All Sources	M&D	Bank	PCA	FHA	Other
		(dollars)			(percent of production credit)					
Walsh	40	$14,684	$ 6,491	44	100	74	19	5	1	1
Cass	40	26,598	10,421	39	100	40	51	7	--	2
Richland	40	22,207	13,866	62	100	27	32	39	1	1
All Areas	120	$21,163	$10,245	48	100	41	36	21	1	1

*This table excludes 30-day M&D credit.

the largest percent of production credit (74 percent) while Richland county County used the smallest percentage of merchant and dealer credit (27 percent). Banks played an important role in financing production credit in Cass and Richland counties; PCA's were important only in Richland County.

THE USE OF MERCHANT AND DEALER CREDIT IN FINANCING INDIVIDUAL EXPENSES

The purpose of this section was to examine the common production expenditures and to show the importance of merchant and dealer credit in financing these expenses.

Merchant and dealer credit may be broken down into two categories: (1) merchant and dealer 30-day convenience credit, and (2) merchant and dealer extended open account credit. The merchant and dealer 30-day convenience credit is that which is used by a farmer merely as a convenience in making purchases. This credit is usually less than 30 days old when it is paid. This study considered 30-day convenience credit to be cash purchases. Merchant and dealer extended open account credit is that which is obtained by the farmer for a period over 30 days in length and carried by the dealer on open account. This type of credit is usually paid once, twice, or possibly three times a year by the farmer, and the majority of farmers stated that there were no direct interest charges on the balance of the account. However, this may not always be the case. Many merchants and dealers had a carrying charge, but apparently farmers were not aware of this fact. Nevertheless, this is the most common type of merchant and dealer credit.

Expense items for which credit is used are divided into 9 categories. They are: (1) petroleum products, (2) fertilizer, (3) repairs, (4) feed, (5) seed, (6) insecticides and sprays, (7) building and materials, (8) farm supplies, and (9) livestock expense.

This description of merchant and dealer credit covers the entire three-county area. If there were differences in the way the credit is handled among the counties, they were pointed out within each expense category.

Expenses which are examined in this section were not all the expenses that are incurred in producing farm products. Items, such as taxes, insurance, etc., are also considered as production expenses, but they are usually cash items. Therefore, the items examined will be those expenses which are financed by credit sources.

PETROLEUM PRODUCTS

Over 70 percent of petroleum product purchases were financed by various financial sources (Table 16). Farmers of Walsh and Richland counties financed a larger percentage of petroleum product purchases than farmers of Cass County. Farmers of Cass County paid cash at time of purchase or within 30 days for 58 percent of petroleum product purchases. In comparison, farmers of Walsh and Richland paid cash for 8 and 12 percent, respectively, for petroleum purchases.

In all counties 96 percent of extended credit was provided by merchant-dealers. Usually, no interest charges were made on merchant-dealer credit. The credit was given on the basis of customer history and interest was charged only on overdue accounts in some cases. The most common interest charge was 6 percent simple yearly interest employed six months from date of purchase.

FERTILIZER

Farmers in all counties financed an average of 57 percent of all fertilizer purchases (Table 17). Little variation was found in the percentage of average costs financed in each of the counties; averages ranged from 54 percent (Walsh County) to 60 percent (Richland County). However, the percentage of credit provided by merchants and dealers varied greatly.

TABLE 16. PETROLEUM PRODUCTS: COST, CASH PURCHASES, TOTAL CREDIT, AND MERCHANT AND DEALER CREDIT EXTENDED BY COUNTY, AVERAGE PER FARM, 1966

County	Cost	Cash Paid*	Average Credit Extended	Percent of Average Cost	Merchant-Dealer	
					Amount	Percent of Average Credit
			(amount)			
Walsh	$1,927	$ 146	$1,781	92	$1,714	96
Cass	2,519	1,471	1,048	42	1,011	96
Richland	1,920	233	1,687	88	1,648	96
All Farms	$2,122	$ 617	$1,505	71	$1,457	96

*Includes 30-day merchant and dealer credit.

Merchant-dealers provided 98 percent of credit used by Walsh County farmers and 89 percent of the credit used by Cass County. However, merchant-dealers provided only 49 percent of credit used by Richland County. The smaller percentage of credit provided by merchant-dealers was due to the extensive use of operating loans from banks and PCA's in Richland County.

TABLE 17. FERTILIZER: COST, CASH PURCHASES, TOTAL CREDIT, AND MERCHANT AND DEALER CREDIT EXTENDED BY COUNTY, AVERAGE PER FARM, 1966

County	Cost	Cash Paid*	Average Credit Extended	Percent of Average Cost	Merchant-Dealer	
					Amount	Percent of Average Credit
			(amount)			
Walsh	$2,004	$ 925	$1,079	54	$1,061	98
Cass	2,373	1,033	1,340	56	1,200	89
Richland	1,745	695	1,050	60	522	49
All Farms	$2,041	$ 884	$1,157	57	$ 928	80

*Includes 30-day merchant and dealer credit.

REPAIRS

This category included all machinery, auto and truck repairs, and also repair labor expenses. Farmers of Walsh and Richland counties paid cash for about 40 percent of repair costs while farmers of Cass County paid cash for 65 percent of repair costs (Table 18). Merchant-dealers provided over 92 percent of total credit used by farmers in Walsh and Cass counties. They provided 69 percent of the credit used by Richland County farmers.

FEED

Cass and Richland counties used a greater quantity of feed per farm than those of Walsh County (Table 19). Farmers of Cass County financed the smallest percent of feed purchases (17 percent) and used merchant-dealer credit to finance almost all of that credit (97 percent). Farmers of Walsh County financed a greater percentage of feed purchases (40 percent) and received a great deal of that credit from merchant-dealers (84 percent). Farmers of Richland County financed the largest percentage of feed purchases (83 percent) but received only 19 percent of that credit from merchant-dealers. Richland County farmers financed a large percentage of feed purchases with operating loans from banks and PCA's. Feed was usually obtained from a country elevator and no interest was charged unless accounts were carried longer than six months.

TABLE 18. REPAIRS: COST, CASH PURCHASES, TOTAL CREDIT, AND MERCHANT AND DEALER CREDIT EXTENDED BY COUNTY, AVERAGE PER FARM, 1966

County	Cost	Cash Paid*	Average Credit Extended	Percent of Average Cost	Merchant-Dealer	
					Amount	Percent of Average Credit
			(amount)			
Walsh	$1,317	$ 538	$779	59	$765	98
Cass	2,617	1,697	920	35	852	92
Richland	1,390	527	863	62	599	69
All Farms	$1,775	$ 920	$855	48	$739	86

*Includes 30-day merchant and dealer credit.

TABLE 19. FEED: COST, CASH PURCHASES, TOTAL CREDIT, AND MERCHANT AND DEALER CREDIT EXTENDED BY COUNTY, AVERAGE PER FARM, 1966

County	Cost	Cash Paid*	Average Credit Extended	Percent of Average Cost	Merchant-Dealer	
					Amount	Percent of Average Credit
			(amount)			
Walsh	$ 486	$ 291	$ 195	40	$164	84
Cass	3,188	2,639	549	17	536	97
Richland	4,047	690	3,357	83	665	19
All Farms	$2,574	$1,207	$1,367	53	$455	33

*Includes 30-day merchant and dealer credit.

SEED

This category included new seed purchases and also cleaning and processing of seed. These items were usually obtained from a local elevator and no interest charge was made for extended open account credit.

Farmers of all counties financed an average of about 33 percent of seed purchases (Table 20). Farmers of Walsh County received almost all of the credit used for seed purchases (96 percent) from merchant-dealers. Farmers of Cass County received 72 percent of credit from merchant-dealers and farmers of Richland County received 52 percent.

TABLE 20. SEED: COST, CASH PURCHASES, TOTAL CREDIT, AND MERCHANT-DEALER CREDIT EXTENDED BY COUNTY, AVERAGE PER FARM, 1966

County	Cost	Cash Paid*	Average Credit Extended	Percent of Average Cost	Merchant-Dealer	
					Amount	Percent of Average Credit
			(amount)			
Walsh	$1,892	$1,231	$661	35	$641	96
Cass	1,491	1,078	413	28	299	72
Richland	758	461	297	39	155	52
All Farms	$1,380	$ 923	$457	33	$365	79

*Includes 30-day merchant and dealer credit.

INSECTICIDES AND SPRAYS

This category included cost of materials and custom spraying expenses. The percentage of average cost financed varied from 27 percent in Richland County to 54 percent in Cass County. The percentage of credit provided by merchant-dealers was high in Walsh County (100 percent) and Cass County (72 percent), while in Richland County, merchant-dealers provided 52 percent of the credit. The percent of credit provided by merchant-dealers was influenced by the credit policy of custom sprayers which demanded payment within 30 days.

BUILDING AND MATERIALS

These items included only expenses incurred for repairs and maintenance of present farm building sites. New additions to present buildings were excluded.

Farmers of Cass County financed the greatest percentage (43 percent) of the total cost (Table 22). Farmers of Walsh County financed a smaller percentage (26 percent) and farmers of Richland County financed

TABLE 21. INSECTICIDES AND SPRAYS: COST, CASH PURCHASES, TOTAL CREDIT, AND MERCHANT-DEALER CREDIT EXTENDED BY COUNTY, AVERAGE PER FARM, 1966

County	Cost	Cash Paid*	Average Credit Extended	Percent of Average Cost	Merchant-Dealer	
					Amount	Percent of Average Credit
			(amount)			
Walsh	$408	$264	$144	35	$144	100
Cass	628	289	339	54	286	84
Richland	360	263	97	27	52	59
All Farms	$465	$272	$193	42	$160	82

*Includes 30-day merchant and dealer credit.

very little of expenses for building and materials (12 percent). Merchant-dealers of Walsh County provided a large percentage of extended credit (58 percent) compared with 19 percent for Cass County and 13 percent for Richland County.

FARM SUPPLIES

This expense category included fencing equipment, electric motors, and miscellaneous items for the farm. A large percentage of these expenses were paid within 30 days. Farmers of Richland County financed 29 percent of purchases compared with 14 percent for Walsh County and only 5 percent for Cass County. Merchant-dealers of Walsh County provided all of the credit used by farmers compared with 50 percent for Richland County and 38 percent for Cass County. Usually, a credit charge of 6 percent was imposed on unpaid balances after 60 days.

LIVESTOCK EXPENSE

This account included cattle sprays, salt, medicine, and veterinarian expenses. Veterinarians usually preferred to be paid for medicine and services within 30 days, while salt and sprays were usually carried as extended open account credit. Richland County farmers financed 67 percent of the average cost with merchant-dealers providing only 3 percent of the total credit. Cass County farmers financed 29 percent of the average cost and merchant-dealers furnished 32 percent of the extended credit. Walsh County farmers financed only 13 percent of average purchases; however, merchant-dealers provided 100 percent of extended credit.

TABLE 22. BUILDING AND MATERIALS: COST, CASH PURCHASES, TOTAL CREDIT AND MERCHANT-DEALER CREDIT EXTENDED BY COUNTY, AVERAGE PER FARM, 1966

County	Cost	Cash Paid*	Average Credit Extended	Percent of Average Cost	Merchant-Dealer	
					Amount	Percent of Average Credit
			(amount)			
Walsh	$545	$402	$143	26	$84	58
Cass	924	528	396	43	52	13
Rich-land	949	500	449	12	86	19
All Farms	$806	$492	$314	39	$74	23

*Includes 30-day merchant and dealer credit.

TABLE 23. FARM SUPPLIES: COST, CASH PURCHASES, TOTAL CREDIT, AND MERCHANT-DEALER CREDIT EXTENDED BY COUNTY, AVERAGE PER FARM, 1966

County	Cost	Cash Paid*	Average Credit Extended	Percent of Average Cost	Merchant-Dealer	
					Amount	Percent of Average Credit
			(amount)			
Walsh	$343	$295	$48	14	$48	100
Cass	375	357	18	5	7	38
Rich-land	334	237	97	29	49	50
All Farms	$351	$296	$55	16	$35	63

*Includes 30-day merchant and dealer credit.

TABLE 24. LIVESTOCK EXPENSE: COST, CASH PURCHASES, TOTAL CREDIT, AND MERCHANT-DEALER CREDIT EXTENDED BY COUNTY, AVERAGE PER FARM, 1966

County	Cost	Cash Paid*	Average Credit Extended	Percent of Average Cost	Merchant-Dealer	
					Amount	Percent of Average Credit
			(amount)			
Walsh	$ 95	$ 83	$ 12	13	$12	100
Cass	195	139	56	29	18	32
Richland	262	86	176	67	7	3
All Farms	$184	$103	$81	44	$12	14

*Includes 30-day merchant and dealer credit.