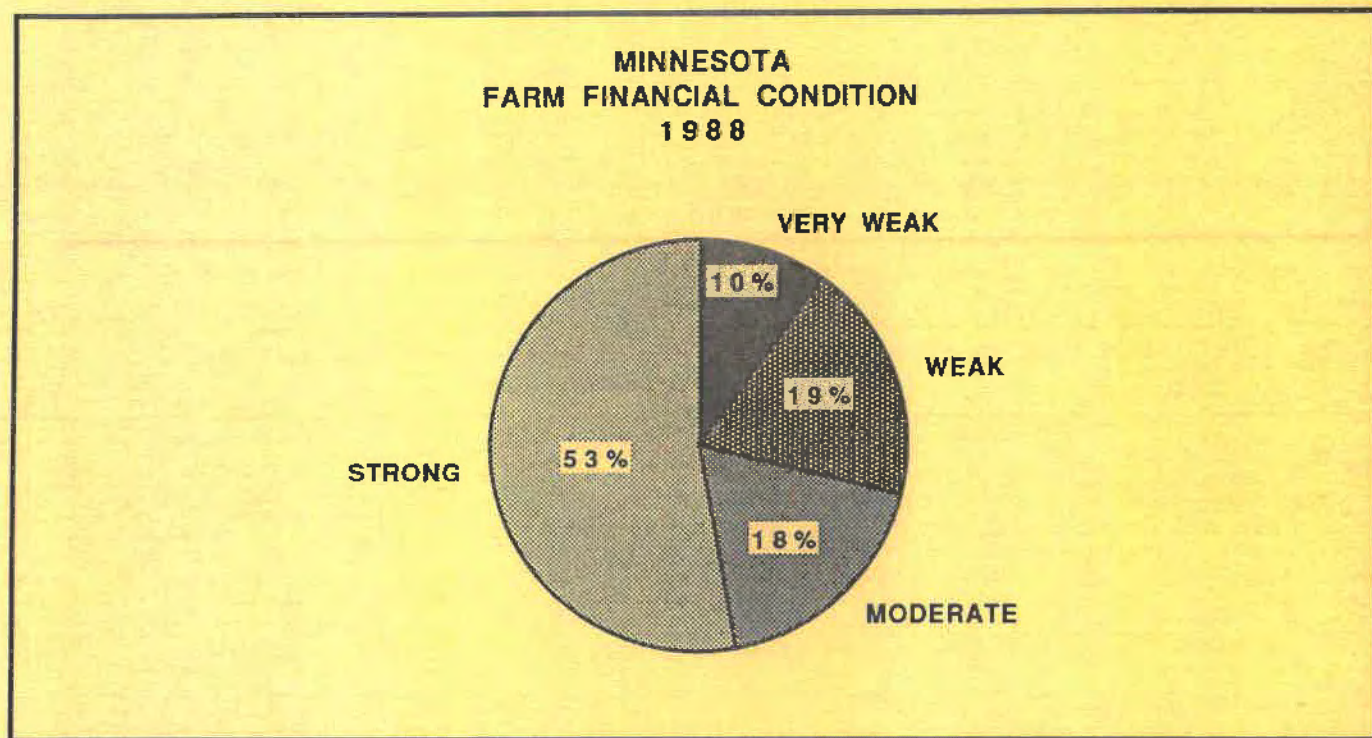


# FARM FINANCIAL CONDITION

1989 Report

## FARM FINANCIAL DATA COLLECTION TASK FORCE



MINNESOTA DEPARTMENT OF AGRICULTURE

IN COOPERATION WITH THE

MINNESOTA TECHNICAL COLLEGE SYSTEM AND MINNESOTA EXTENSION SERVICE

NOVEMBER, 1989

# **FARM FINANCIAL DATA COLLECTION TASK FORCE**

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## **ACKNOWLEDGEMENT**

Officials of the Minnesota Technical College System and the Minnesota Extension Service coordinated the collection of the financial data, assisted in the formulation of this Report and reviewed the numerous drafts. The preparation of the final Report of the Task Force, however, was entrusted to the Planning Division of the Minnesota Department of Agriculture.

Cover Graph is explained on page 9 of this Report.

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## SECTION I

### MAJOR FINDINGS

#### I. SECTION IV A - CASH FLOW SUMMARY

- \* Net Cash Farm Income increased from \$31,597 in 1986 to \$49,808 in 1988.
- \* Total Cash Income increased to \$58,002 in 1988 from \$38,797 in 1986.
- \* Federal Government payments fell from 58.8 percent of Net Cash Farm Income in 1987 to 39.1 percent in 1988.

#### II. SECTION IV B - DEBT-ASSET SUMMARY

- \* The average debt-asset ratio of 0.48 is down from its level of 0.50 in 1987.
- \* Debt obligations relative to asset holdings has declined steadily the past three years.

#### III. SECTION IV C - FINANCIAL CONDITION SUMMARY

- \* 53 percent of the farm operators were classified as being in a "strong" financial condition.

#### IV. SECTION IV D - FARM ENTERPRISE SUMMARIES

##### \* CROP FARMS

- \* Net Cash Operating Income varied between \$19,176 to \$68,753, depending on farm size.
- \* Large crop farms had a debt-asset ratio of 0.44 compared to 0.49 for smaller farming units.

##### \* DAIRY FARMS

- \* Net Cash Operating Income varied between \$26,957 to \$60,926, depending on farm size.
- \* Large dairy farms had a debt-asset ratio of 0.51 compared to 0.59 for smaller farming units.

##### \* CROP-DAIRY FARMS

- \* Net Cash Operating Income varied between \$29,203 to \$69,726, depending on farm size.
- \* Large dairy farms had a debt-asset ratio of 0.50 compared to 0.53 for smaller farming units.

##### \* CROP-SWINE FARMS

- \* Net Cash Operating Income varied between \$26,867 to \$77,892, depending on farm size.
- \* The larger crop-swine operations had a debt-asset ratio of 0.44 compared to 0.55 for the smaller units.

#### V. SECTION IV E - LAND TENURE SUMMARY

- \* Approximately 20 percent of the operators rented all the land in their operation.
- \* Two-thirds of these operators were less than 35 years old.
- \* The Addition to Owners Equity for renter-operators was \$24,580 compared to \$18,944 for owner-operators.
- \* The average debt-asset ratio for renter-operators was 0.44 compared to 0.52 for owner-operators.

### CONCLUSION

Cash flow has increased over 1986 and 1987 levels and debt levels have continued to decline over the past three years. Hence, in spite of the "Drought of '88", Minnesota farm financial conditions have continued to improve in 1988.

## SECTION II

### DEFINITION OF TERMS

Liquidity Measures -- Measures the ability to make loan and debt payments as they come due during the year.

1. Net Cash Farm Income: Cash farm receipts from the sale of agricultural products plus government payments, less cash production expenses. Interest is a cash expense; depreciation is not and is not included.

2. Off-Farm Income: Income earned from off farm employment.

3. Total Cash Income: The sum of Net Cash Farm Income and Off-Farm Income.

4. Current Ratio: Current Assets divided by Current Liabilities. This ratio is used to measure the liquidity available for paying short-term obligations. It shows the ability to pay debts as they come due during the year.

5. Working Capital Ratio: Current plus Intermediate Assets divided by Current plus Intermediate Liabilities. This ratio reflects the ability of the farm business to maintain liquidity and management flexibility to meet price decreases and other factors that negatively affect asset values. It is commonly understood that this ratio should be greater than 2:1 and increasing over time.

6. Debt Service Coverage Ratios

a. Farm Income, Alone: Net Cash Farm Income plus Interest Payments less Family Living and Income Taxes divided by debt service costs (Interest plus Principal Payments). This ratio reveals the ability to service debt, meet family living needs and pay taxes out of annual farm income. A ratio less than "1.0" indicates a problem in meeting debt service requirements.

b. Total Cash Income: Same as (a), above, except Off-Farm Income is included.

Solvency Measures -- Reflects the risk of the farm's financial structure and ability to repay all outstanding farm debt at a point in time.

7. Assets: Items of ownership having exchange value.

a. Current: Cash or other items that will be received, converted to cash, or consumed in production during one business year.

b. Intermediate: Items that support production and have an expected useful life of one-ten years.

c. Long-Term: Items of a more permanent nature such as land, buildings and improvements.

8. Liabilities: Debts or monetary obligations.

a. Current: Obligations due and payable on demand within current accounting period.

b. Intermediate: Obligations that are expected to be repaid over a period on one to ten years.

c. Long-Term: Obligations with repayment terms of more than ten years.

9. Equity: Assets minus Liabilities.

10. Debt-Asset Ratio: Total Liabilities divided by Total Assets. This measure reflects the overall financial risk of the farm operator. It shows the amount of debt pledged against the assets of the farm. The larger the ratio, the greater the risk.

Profitability Measures -- Measures the farm's profitability and indirectly reflects the farmer's managerial ability.

11. Return on Assets (%): Net Farm Income plus Interest Payments minus Family Living divided by Average Total Assets. Measures the profitability in terms of the relationship to total assets employed on the farm including both debt and equity capital.

Efficiency Measures -- Measures the financial efficiency of the farm business.

12. Interest Expense -% of Receipts: Interest Expense divided by Total Cash Receipts. This ratio shows the proportion of cash receipts that are used for interest payments.

## **SECTION III**

### **INTRODUCTION**

The 1989 Minnesota Farm Financial Report is a continuation of previous surveys authorized by the Farm Financial Data Collection Task Force of the Minnesota Legislature. The responsibility of the Task Force is to collect data on the farm financial conditions in Minnesota and report these findings to the State Legislature.

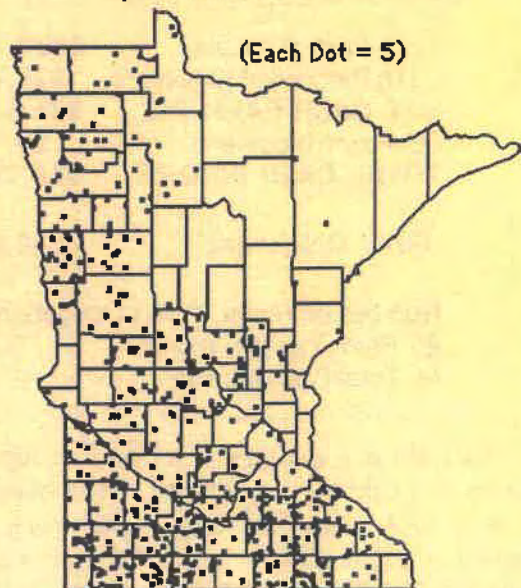
The financial data in this Report was obtained from participants in the Minnesota Technical College System Farm Management Program and from the Southeastern-Southwestern Minnesota Farm Business Management Associations (Extension Service). A total of 2,652 farm records from the Technical College program and 213 records from the Extension Service program were compiled and summarized in this Report. Appendix A contains the survey form used to gather the financial data used in this Report. Figure 1, below, shows the location of the participants in the 1989 Farm Financial Report. Technical College and Extension Service personnel assisted in the collection and analysis of this data.

A set of descriptive statistics for the farm operators included in this year's Report is contained in Appendix B. Average values for operator age is 39; farm size is 534 acres; and net cash farm income is \$49,808. Both Technical College and Extension Service operators are identified, along with the result of combining the two sets of financial data ("Comb Data"). This data is also compared to 1987 Census data. The tables and graphs in this Report are based upon the combined set of data of farm operators.

#### **LOCATION OF SURVEY PARTICIPANTS**

**2,865 SURVEY PARTICIPANTS**

(Each Dot = 5)



**Figure 1 - Surveys per County**

## SECTION IV

### STATE WIDE SUMMARY

#### Cash Flow Summary

1986-1988

In spite of the "Drought of '88", cash flow increased over 1986 and 1987 levels, as seen in Table 1, below. Cash farm receipts increased thru improved prices for grain and oilseed crops, movement of reserve grain to market, Federal program support, disaster and emergency feed program payments, together with insurance proceeds. Additionally, a relatively strong beef market helped improve the earnings of both beef and dairy producers. Farm prices received for Minnesota crop and livestock products is contained in Appendix C.

While cash production expenses were also higher, Net Cash Farm Income increased from \$31,597 in 1986 to \$49,808 in 1988. With the addition of Off-Farm Income, Total Cash Income increased from \$38,797 in 1986 to \$58,002 in 1988 .

Table 1  
**CASH FLOW SUMMARY<sup>1</sup>**  
1986-1988

ITEM	1986 ALL FARMS (N=790)	1987 ALL FARMS (N=978)	1988 ALL FARMS (N=2865)
Cash Farm Receipts	\$129,708	\$154,285	\$173,176
Cash Production Expenses	\$97,739	\$117,751	\$123,368
<b>NET CASH FARM INC</b>	<b>\$31,597</b>	<b>\$37,156</b>	<b>\$49,808</b>
Off-Farm Income	\$7,143	\$8,354	\$8,492
<b>TOTAL CASH INCOME</b>	<b>\$38,797</b>	<b>\$45,595</b>	<b>\$58,002</b>
 "Fixed Obligations" <sup>2</sup>	 \$40,869	 \$40,737	 \$37,452
 Number of Times "Fixed Obligations" Covered: <sup>3</sup>			
By Farm Income, Alone	0.77	0.91	1.33
By Total Cash Income	0.95	1.12	1.55

<sup>1</sup> This table is a summary of all the data reports used. However, all operators did not answer each question. Hence, the columns may not add due to missing data from any given operator.

<sup>2</sup> Principal reduction payments, family living expenses plus social security and income taxes. All interest expenses are included in cash production expenses. Annual principal reduction payments for 1988 were calculated at the rate of 12% of nonreal estate liabilities and 6% of real estate liabilities.

<sup>3</sup> Income divided by "Fixed Obligations". This ratio will be "1.0" or greater if these obligations are fully covered.

These income figures, however, need to be evaluated in light of the "Fixed Obligations" that have been committed to by the operators and their families. These financial commitments, which averaged \$37,452 for 1988, include annual principal reduction payments, family living expenses and social security and income taxes.

The relationship between income and "Fixed Obligations" is seen in the lower portion of Table 1. This relationship is expressed as a ratio which indicates whether or not "Fixed Obligations" are fully covered by the two measures of income. This ratio will be "1.0" or greater, if these obligations are fully covered.

With improved income and "Fixed Obligations" remaining relatively steady, or declining, this ratio has strengthened in the past three years, indicating an improved cash flow situation for the operators included in this analysis.

These findings are confirmed by data for Minnesota compiled by the U.S. Department of Agriculture for the period 1983-1987. Total Cash Income has increased since 1984 and is comparable to the income levels cited in this Report.<sup>1</sup>

<sup>1</sup> Appendix D, "Minnesota Farm Income Indicators." USDA defines a "farm" as a place that sells or normally sells at least \$1,000 of agricultural products annually.

## FEDERAL GOVERNMENT PAYMENTS

While still sizable, the level and proportion of Federal Government payments dropped sharply from 1987 levels (Table 2). With relatively strong commodity prices, deficiency payments were cut, and farmers received a greater proportion of their income from farm marketings and off farm employment.

Table 2  
FEDERAL GOVERNMENT PAYMENTS<sup>1</sup>  
1987-1988

ITEM	1987 ALL FARMS (N=998)	1988 ALL FARMS (N=2865)
Government Payments	\$24,085	\$19,499
Government Payments as a Percent of:		
Cash Farm Receipts	14.1	11.3
Net Cash Farm Income	58.8	39.1
Total Cash Income	48.5	33.6

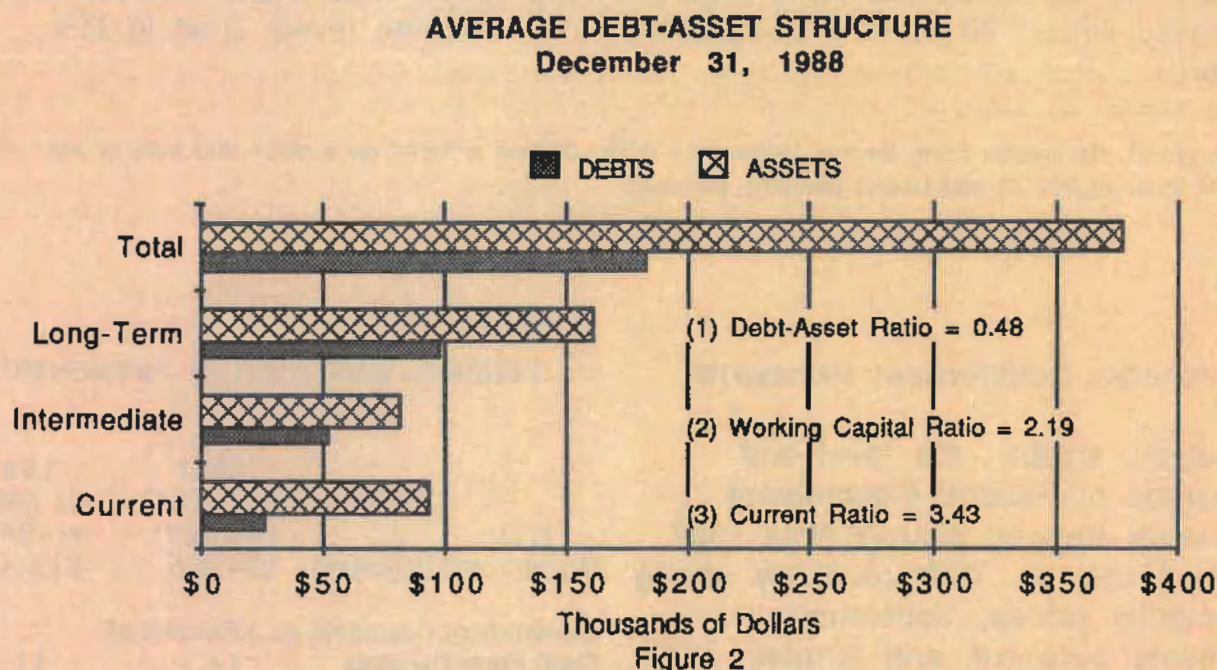
<sup>1</sup> Government payments includes deficiency payments, storage payments and other program support payments, excluding dairy buyout payments.

## DEBT-ASSET SUMMARY

### AVERAGE DEBT-ASSET STRUCTURE

The average Debt-Asset structure of the operators in this analysis is shown in Figure 2, below. Total Assets of \$378,000 are more than twice the level of Total Liabilities of \$182,000. Hence, the Debt-Asset ratio of 0.48 is below the desired "bankers rule-of-thumb" of 0.50 for this measure of solvency.

Additional measures of solvency are reflected in the relationship between nonreal estate assets and liabilities. The Working Capital ratio reflects the degree of financial flexibility available to farm managers to meet business downturns. Its average value for the operators in this study is slightly above the commonly used standard of 2:1.



(1) Total Liabilities divided by Total Assets; (2) Current plus Intermediate Assets divided by Current plus Intermediate Liabilities; (3) Current Assets divided by Current Liabilities.

The Current Ratio reflects the operators ability to pay off annual debts as they come due during the year. For operators in this analysis, Current Assets averaged more than 3 times the level of Current Liabilities - a very strong current ratio position. (The judgements as to the normative values of these ratios are those of the reviewers of this report.)

## SUMMARY BALANCE SHEET

The change in the overall solvency position of the farm operators is reflected in Table 3, which shows the Balance Sheet at the end of 1987 and 1988. The major changes to be noted are the intermediate and long-term asset values.

The intermediate asset increases reflect increased inventory values and purchases of new farm equipment and breeding livestock during the year. Long-term assets have also increased reflecting both the purchase of real estate as well as the increase in land values. With debt levels remaining relatively stable, owners equity, by definition, shows a corresponding increase. This is also reflected in a slightly lower debt-asset ratio for 1988.

These observations are generally confirmed by findings of the U.S. Department of Agriculture and the University of Minnesota which are contained in Appendices E and F. Both reports confirm the increase in real estate and nonreal estate values.

Table 3  
SUMMARY BALANCE SHEET  
1987-1988

ITEM	Dec. 31, 1987	Dec. 31, 1988
	ALL FARMS (N=1214)	ALL FARMS (N=2865)
<b>ASSETS</b>		
Current Assets	\$92,226	\$94,377
Intermediate Assets	\$63,044	\$81,915
Long-Term Assets	<u>\$157,922</u>	<u>\$161,441</u>
<b>Total Bus Assets</b>	<b>\$313,192</b>	<b>\$337,734</b>
Personal Assets	<u>\$41,831</u>	<u>\$40,223</u>
<b>TOTAL ASSETS</b>	<b>\$355,023</b>	<b>\$377,957</b>
<b>LIABILITIES</b>		
Current Liabilities	\$23,409	\$27,462
Intermediate Liabilities	\$52,615	\$53,041
Long-Term Liabilities	<u>\$99,426</u>	<u>\$98,396</u>
<b>Total Bus Liabilities</b>	<b>\$175,450</b>	<b>\$178,899</b>
Personal Liabilities	<u>\$1,683</u>	<u>\$3,676</u>
<b>TOTAL LIABILITIES</b>	<b>\$177,133</b>	<b>\$182,575</b>
<b>EQUITY</b>		
Business Equity	\$137,742	\$158,834
<b>TOTAL EQUITY</b>	<b>\$177,890</b>	<b>\$195,382</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$355,023</b>	<b>\$377,957</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	3.94	3.43
Working Capital Ratio <sup>2</sup>	2.04	2.19
Debt-Asset Ratio <sup>3</sup>	0.50	0.48

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

### DISTRIBUTION BY AVERAGE DEBT-ASSET RATIO

The distribution of farm operators by average debt-asset ratio is shown in Figure 3. The proportion of operators in the 70 percent or more categories declined from a year ago, while a greater number of farmers are now in the 11-70 percent range. The percent of those with no debt remained constant.

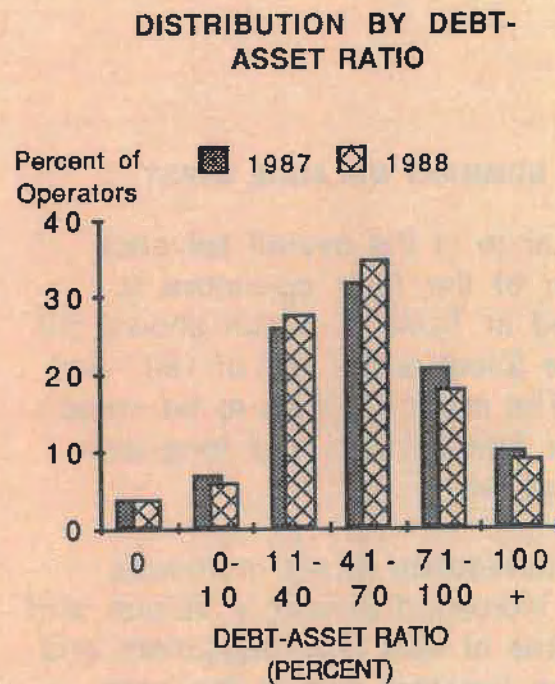


Figure 3

Table 4

PERCENT OF OPERATORS		
DEBT-ASSET RATIO	1987	1988
0	4	4
0-10	7	6
11- 40	26	28
41-70	32	35
71-100	21	18
100 +	10	9
Total	100	100

The table to the left are the data points for Figure 3. The proportion of operators in the 70 percent or greater categories declined 4 percentage points from a year ago, while the number of farmers in the 11-70 percent range increased 5 percentage points. The percent of those with no debt remained constant at 4 percent.

The overall improvement in the average debt-asset structure by age of farm operator is reflected in Figure 4, below. Except for the 55-64 year-old group of operators, debt levels have consistently fallen, relative to asset holdings, among all age groups since 1986. This observation is consistent with the U.S.D.A. report cited in Appendix E. The most significant improvement was made by the younger set of operators.

**DEBT-ASSET RATIO BY OPERATOR AGE  
1986-1988**

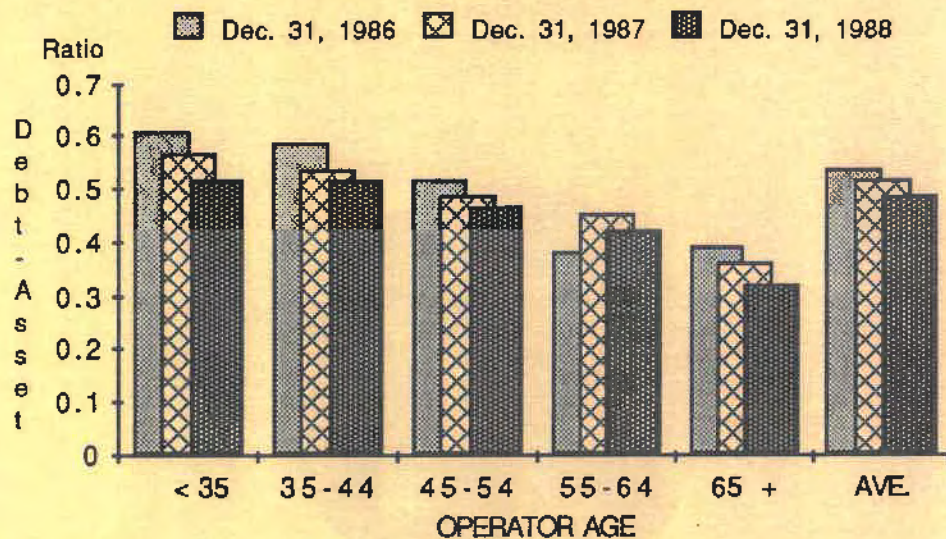


Figure 4

## SUMMARY FARM FINANCIAL CONDITION

This section is a summary of the combined effect of cash flow and debt obligations into one statement of financial condition. An operators financial condition was measured by the value of his "Debt Service Coverage Ratio (DSCR)". This ratio combines both income and debt service obligations into one statement, and reveals the ability to service debt, meet family living needs and pay taxes out of annual income. The overall financial condition of Minnesota farmers in this analysis is shown in Figure 5, below.

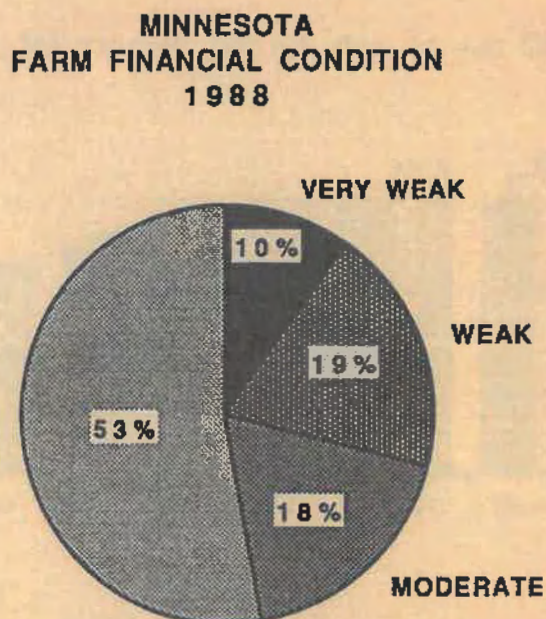


Figure 5

<u>DSCR</u> <sup>1</sup>	<u>FINANCIAL CONDITION</u>	<u>EXPLANATION</u> <sup>2</sup>
< 0	Very Weak	Insufficient income to meet family living and pay taxes
0 - 1.0	Weak	Problem in meeting debt service obligations
1.0 - 1.5	Moderate	Debt obligations are met, but limited funds for reinvestment in business
> 1.5	Strong	Funds available to reinvest in business

<sup>1</sup> Debt Service Coverage Ratio: Total net cash income plus interest payments less family living and income taxes divided by debt service costs (interest plus principal payments).

<sup>2</sup> The four categories and explanations were developed by the Minnesota Department of Agriculture and approved by the reviewers of this report.

As seen, approximately one-half of the operators in this analysis could be considered to be in a relatively strong financial condition at the close of 1988. This is compared to 35 percent of the operators in 1987 (Table 4, below).

Table 5  
**FINANCIAL CONDITION**  
**1987-1988**

(Percent of Operators)

	<u>1987</u>	<u>1988</u>
VERY WEAK	19	10
WEAK	28	19
MODERATE	18	18
STRONG	<u>35</u>	<u>53</u>
TOTAL	100	100

Improved net income together with reduced debt loads have caused many farm operators to move into an improved and stronger financial position.

## ENTERPRISE AND FARM SIZE SUMMARY

This Section provides a brief summary of the financial situation of the farm operators by major farm enterprise and farm size, regardless of their location in the State. The proportion of operators by major farm enterprise is seen in Figure 6, below.

Major farm enterprises were determined by the proportion of total cash farm receipts contributed by a given enterprise or combination of enterprises. If 75 percent, or more, of total receipts were contributed by an enterprise, it was classified accordingly.

Farm size was determined by the level of total cash farm receipts. Two sizes were determined: one, less than or equal to \$150,000 and the other, greater than \$150,000 in total cash farm receipts. (See Figure 5, Appendix B, page 44.).

Because of the wide variety of enterprises included in the "Other" enterprise classification, they were omitted from the following summaries.

### MAJOR FARM ENTERPRISES

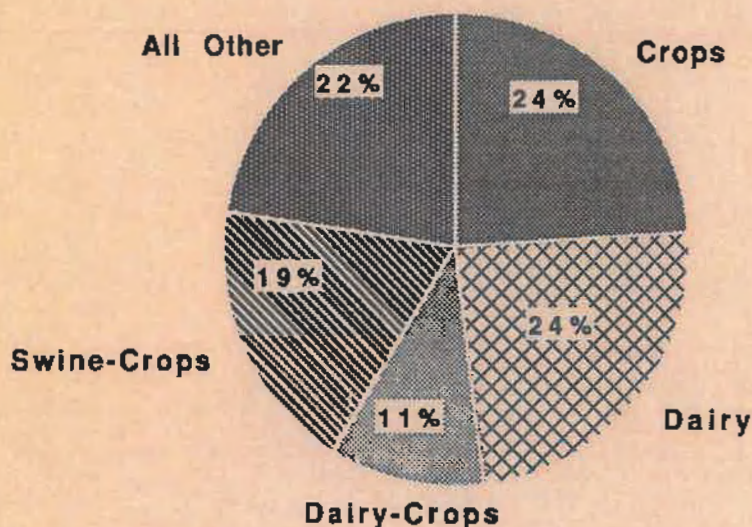


Figure 6

## ALL CROP FARMS

Table 6  
**SUMMARY INCOME STATEMENT**  
**1988**

	<u>&lt;\$150,000</u> (N=334)	<u>&gt;\$150,000</u> (N=230)
ITEM		
Operating Receipts	\$84,793	\$260,394
Operating Exp. b/f Int	\$57,666	\$170,858
Interest Expense	<u>\$7,951</u>	<u>\$20,782</u>
<b>NET CASH OPERATING INC</b>	<b>\$19,176</b>	<b>\$68,753</b>
Depreciation Expense	\$8,294	\$19,295
Change in Value of Inv.	\$7,783	\$14,713
Extra Ordinary Income		
Sale of Assets	\$386	\$326
Debt Forgiveness	<u>\$312</u>	<u>\$776</u>
<b>BEFORE TAX RETURN</b>	<b>\$19,362</b>	<b>\$65,274</b>
Inc Tax Paid (1987)	<u>\$2,298</u>	<u>\$4,325</u>
<b>AFTER TAX RETURN</b>	<b>\$17,064</b>	<b>\$60,949</b>
Off-Farm Income	\$10,973	\$9,525
Withdrawals (Farm Living)	<u>\$16,268</u>	<u>\$25,474</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$11,769</b>	<b>\$45,000</b>

Table 7  
**SUMMARY BALANCE SHEET**  
**Dec. 31, 1988**

	<u>&lt;\$150,000</u> (N=334)	<u>&gt;\$150,000</u> (N=230)
ITEM		
<b>ASSETS</b>		
Current Assets	\$55,902	\$145,186
Intermediate Assets	\$44,128	\$112,010
Long-Term Assets	<u>\$110,557</u>	<u>\$265,612</u>
<b>Total Bus Assets</b>	<b>\$210,587</b>	<b>\$522,808</b>
Personal Assets	<u>\$34,467</u>	<u>\$61,518</u>
<b>TOTAL ASSETS</b>	<b>\$245,054</b>	<b>\$584,326</b>
<b>LIABILITIES</b>		
Current Liabilities	\$20,407	\$47,017
Intermediate Liabilities	\$32,842	\$70,525
Long-Term Liabilities	<u>\$66,061</u>	<u>\$142,153</u>
<b>Total Bus Liabilities</b>	<b>\$119,310</b>	<b>\$259,695</b>
Personal Liabilities	<u>\$3,374</u>	<u>\$6,753</u>
<b>TOTAL LIABILITIES</b>	<b>\$122,684</b>	<b>\$266,448</b>
<b>EQUITY</b>		
Business Equity	\$91,277	\$263,112
<b>TOTAL EQUITY</b>	<b>\$122,370</b>	<b>\$317,878</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$245,045</b>	<b>\$584,326</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	2.72	3.40
Working Capital Ratio <sup>2</sup>	1.89	2.32
Debt-Asset Ratio <sup>3</sup>	0.49	0.44

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP FARMS**  
**AVERAGE FARM SIZE**

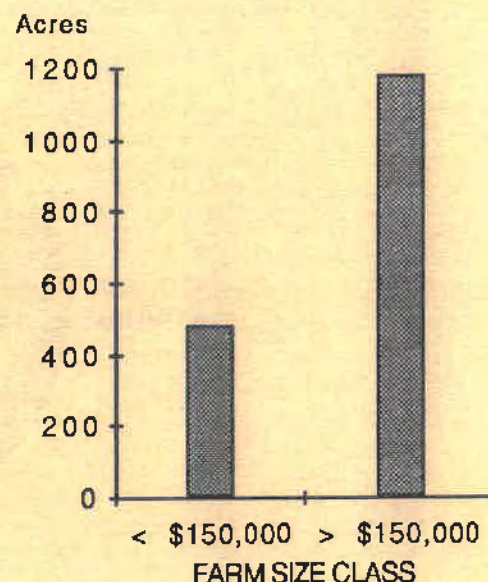


Figure 7

The larger crop farmers operate nearly 1,200 acres, while the smaller operators farm about 500 acres. In comparing the larger units with the smaller, receipts, expenses, and net cash operating income are about 3 times larger; the addition to owner equity is nearly 4 times greater.

Assets, liabilities and owners equity are 2.0-2.5 times greater for the larger operators and they also reflect a greater degree of financial flexibility in comparing the liquidity ratios. Both sets of operators demonstrate a relatively sound solvency position by their debt-asset ratios.

**CROP FARMS  
FINANCIAL CONDITION  
1988**

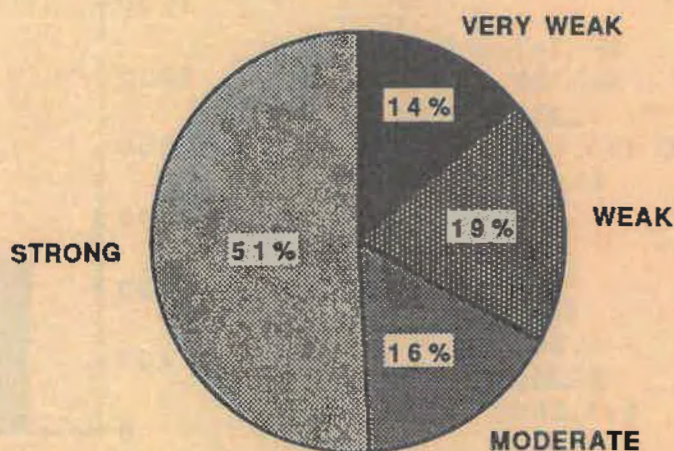


Figure 8

<u>DSCR<sup>1</sup></u>	<u>FINANCIAL CONDITION</u>	<u>EXPLANATION</u>
< 0	Very Weak	Insufficient income to meet family living and pay taxes
0 - 1.0	Weak	Problem in meeting debt service obligations
1.0 - 1.5	Moderate	Debt obligations are met, but limited funds for reinvestment in business
> 1.5	Strong	Funds available to reinvest in business

<sup>1</sup> Debt Service Coverage Ratio: Total net cash income plus interest payments less family living and income taxes divided by debt service costs (interest plus principal payments).

## ALL DAIRY FARMS

Table 8  
**SUMMARY INCOME STATEMENT**  
1988

ITEM	<u>&lt;\$150,000</u> (N=459)	<u>&gt;\$150,000</u> (N=142)
Operating Receipts	\$96,370	\$221,607
Operating Exp. b/f Int	\$59,287	\$139,392
Interest Expense	<u>\$10,126</u>	<u>\$21,289</u>
<b>NET CASH OPERATING INC</b>	<b>\$26,957</b>	<b>\$60,926</b>
Depreciation Expense	\$8,756	\$21,385
Change in Value of Inv.	\$1,563	\$6,733
Extra Ordinary Income		
Sale of Assets	\$26	-
Debt Forgiveness	<u>\$118</u>	<u>\$7</u>
<b>BEFORE TAX RETURN</b>	<b>\$19,908</b>	<b>\$46,281</b>
Inc Tax Paid (1987)	<u>\$1,017</u>	<u>\$1,920</u>
<b>AFTER TAX RETURN</b>	<b>\$18,891</b>	<b>\$44,360</b>
Off-Farm Income	\$5,831	\$4,382
Withdrawals (Fam Living)	<u>\$14,059</u>	<u>\$19,317</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$10,662</b>	<b>\$29,426</b>

Table 9  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

ITEM	<u>&lt;\$150,000</u> (N=459)	<u>&gt;\$150,000</u> (N=142)
<b>ASSETS</b>		
Current Assets	\$34,782	\$88,207
Intermediate Assets	\$75,731	\$169,128
Long-Term Assets	<u>\$90,735</u>	<u>\$212,782</u>
<b>Total Bus Assets</b>	<b>\$201,249</b>	<b>\$468,117</b>
Personal Assets	<u>\$28,766</u>	<u>\$42,855</u>
<b>TOTAL ASSETS</b>	<b>\$230,015</b>	<b>\$510,972</b>
<b>LIABILITIES</b>		
Current Liabilities	\$13,646	\$24,401
Intermediate Liabilities	\$49,099	\$84,265
Long-Term Liabilities	<u>\$72,824</u>	<u>\$160,161</u>
<b>Total Bus Liabilities</b>	<b>\$135,569</b>	<b>\$268,828</b>
Personal Liabilities	<u>\$2,011</u>	<u>\$1,172</u>
<b>TOTAL LIABILITIES</b>	<b>\$137,581</b>	<b>\$270,000</b>
<b>EQUITY</b>		
Business Equity	\$65,680	\$199,289
<b>TOTAL EQUITY</b>	<b>\$92,434</b>	<b>\$240,972</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$230,015</b>	<b>\$510,972</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	2.58	3.71
Working Capital Ratio <sup>2</sup>	1.79	2.46
Debt-Asset Ratio <sup>3</sup>	0.59	0.51

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**DAIRY FARMS**  
**AVERAGE FARM SIZE**

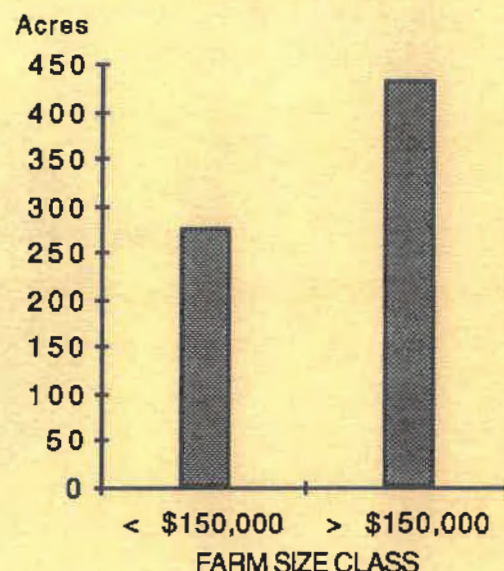


Figure 9

The larger dairy farms operate about 150 acres more than the smaller set. Their receipts, expenses, net cash operating income and the addition to owners equity is over twice that of the smaller units.

The comparison between the two sets of operators in terms of their assets and liabilities also reveals that the larger operators are about twice the size of the smaller units.

The larger units demonstrate a greater degree of financial flexibility in comparing their liquidity ratios and show a slightly better solvency position with a lower debt-asset ratio.

**DAIRY FARMS  
FINANCIAL CONDITION  
1988**

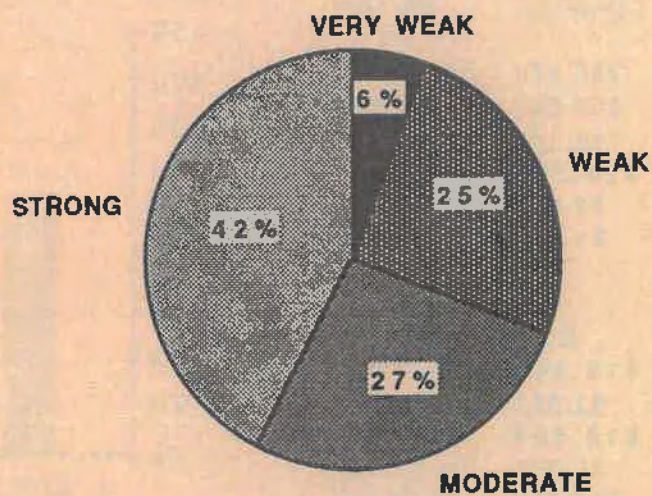


Figure 10

<u>DSCR<sup>1</sup></u>	<u>FINANCIAL CONDITION</u>	<u>EXPLANATION</u>
< 0	Very Weak	Insufficient income to meet family living and pay taxes
0 - 1.0	Weak	Problem in meeting debt service obligations
1.0 - 1.5	Moderate	Debt obligations are met, but limited funds for reinvestment in business
> 1.5	Strong	Funds available to reinvest in business

<sup>1</sup> Debt Service Coverage Ratio: Total net cash income plus Interest payments less family living and income taxes divided by debt service costs (interest plus principal payments).

# ALL CROP - DAIRY FARMS

Table 10  
**SUMMARY INCOME STATEMENT**  
1988

ITEM	<\$150,000 (N=137)	>\$150,000 (N=147)
Operating Receipts	\$97,287	\$234,215
Operating Exp. b/f Int	\$58,027	\$142,186
Interest Expense	\$10,056	\$22,303
<b>NET CASH OPERATING INC</b>	<b>\$29,203</b>	<b>\$69,726</b>
Depreciation Expense	\$9,446	\$22,825
Change in Value of Inv.	\$5,738	\$11,611
Extra Ordinary Income		
Sale of Assets	- -	- -
Debt Forgiveness	- -	\$136
<b>BEFORE TAX RETURN</b>	<b>\$25,495</b>	<b>\$58,647</b>
Inc Tax Paid (1987)	\$1,835	\$2,936
<b>AFTER TAX RETURN</b>	<b>\$23,660</b>	<b>\$55,711</b>
Off-Farm Income	\$7,289	\$6,580
Withdrawals (Fam Living)	\$15,317	\$22,621
<b>ADD TO OWNER EQUITY</b>	<b>\$15,633</b>	<b>\$39,670</b>

Table 11  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

ITEM	<\$150,000 (N=137)	>\$150,000 (N=147)
<b>ASSETS</b>		
Current Assets	\$50,793	\$118,900
Intermediate Assets	\$69,192	\$152,442
Long-Term Assets	\$113,151	\$225,610
<b>Total Bus Assets</b>	<b>\$233,136</b>	<b>\$496,951</b>
Personal Assets	\$30,804	\$43,456
<b>TOTAL ASSETS</b>	<b>\$263,940</b>	<b>\$540,408</b>
<b>LIABILITIES</b>		
Current Liabilities	\$12,783	\$25,124
Intermediate Liabilities	\$43,297	\$91,852
Long-Term Liabilities	\$80,727	\$148,413
<b>Total Bus Liabilities</b>	<b>\$136,807</b>	<b>\$265,389</b>
Personal Liabilities	\$4,766	\$1,836
<b>TOTAL LIABILITIES</b>	<b>\$141,573</b>	<b>\$267,225</b>
<b>EQUITY</b>		
Business Equity	\$96,329	\$231,563
<b>TOTAL EQUITY</b>	<b>\$122,367</b>	<b>\$273,183</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$263,940</b>	<b>\$540,408</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	4.05	4.86
Working Capital Ratio <sup>2</sup>	2.16	2.29
Debt-Asset Ratio <sup>3</sup>	0.53	0.50

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP-DAIRY FARMS**  
**AVERAGE FARM SIZE**

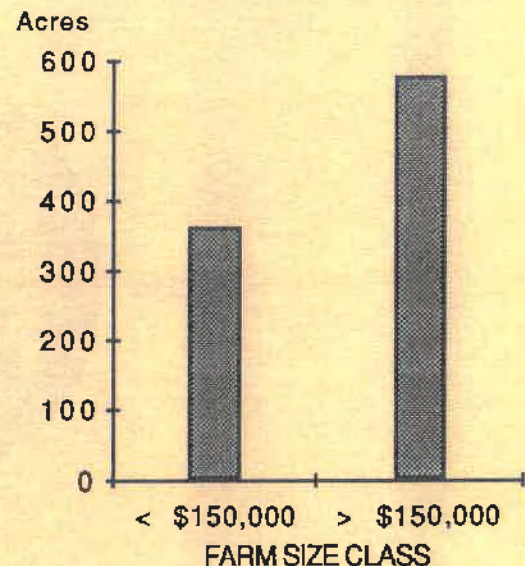


Figure 11

There is about a 200 acre difference in farm size between the two groups of farm operators.

In comparing the larger operations with the smaller, receipts, expenses, net cash operating income and the addition to owner equity is 2.0-2.5 times larger; assets, liabilities and owner equity is about 2 times greater; the larger units are in a slightly better liquidity and solvency position, but both sets of operators show a relatively sound financial position.

**CROP-DAIRY FARMS  
FINANCIAL CONDITION  
1988**

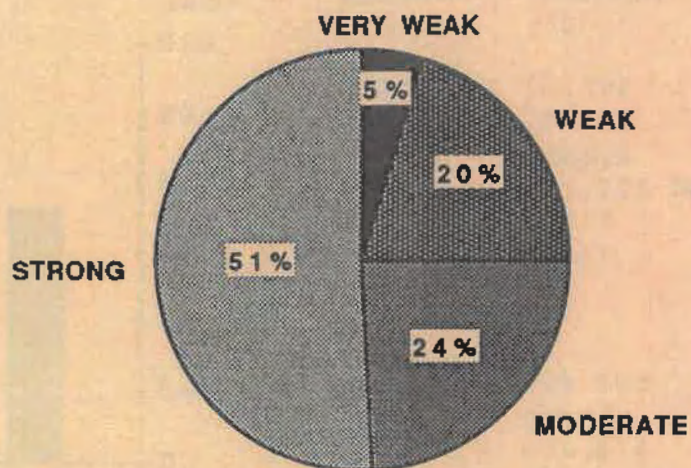


Figure 12

<u>DSCR<sup>1</sup></u>	<u>FINANCIAL CONDITION</u>	<u>EXPLANATION</u>
< 0	Very Weak	Insufficient income to meet family living and pay taxes
0 - 1.0	Weak	Problem in meeting debt service obligations
1.0 - 1.5	Moderate	Debt obligations are met, but limited funds for reinvestment in business
> 1.5	Strong	Funds available to reinvest in business

<sup>1</sup> Debt Service Coverage Ratio: Total net cash income plus interest payments less family living and income taxes divided by debt service costs (interest plus principal payments).

## ALL CROP - SWINE FARMS

Table 12  
**SUMMARY INCOME STATEMENT**  
1988

ITEM	<u>&lt;\$150,000</u> (N=229)	<u>&gt;\$150,000</u> (N=266)
Operating Receipts	\$97,129	\$258,977
Operating Exp. b/f Int	\$63,050	\$164,064
Interest Expense	<u>\$7,211</u>	<u>\$17,021</u>
<b>NET CASH OPERATING INC</b>	<b>\$26,867</b>	<b>\$77,892</b>
Depreciation Expense	\$9,349	\$19,747
Change in Value of Inv.	\$4,137	(\$1,131)
Extra Ordinary Income		
Sale of Assets	- -	\$813
Debt Forgiveness	<u>\$527</u>	<u>\$829</u>
<b>BEFORE TAX RETURN</b>	<b>\$22,182</b>	<b>\$58,655</b>
Inc Tax Paid (1987)	<u>\$2,500</u>	<u>\$5,561</u>
<b>AFTER TAX RETURN</b>	<b>\$19,682</b>	<b>\$53,094</b>
Off-Farm Income	\$10,067	\$7,502
Withdrawals (Fam Living)	<u>\$16,063</u>	<u>\$23,695</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$13,687</b>	<b>\$36,901</b>

Table 13  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

ITEM	<u>&lt;\$150,000</u> (N=229)	<u>&gt;\$150,000</u> (N=266)
<b>ASSETS</b>		
Current Assets	\$54,478	\$134,456
Intermediate Assets	\$41,594	\$81,579
Long-Term Assets	<u>\$88,126</u>	<u>\$217,513</u>
<b>Total Bus Assets</b>	<b>\$184,198</b>	<b>\$433,548</b>
Personal Assets	<u>\$33,349</u>	<u>\$47,162</u>
<b>TOTAL ASSETS</b>	<b>\$217,547</b>	<b>\$480,710</b>
<b>LIABILITIES</b>		
Current Liabilities	\$12,609	\$32,877
Intermediate Liabilities	\$36,961	\$56,409
Long-Term Liabilities	<u>\$62,690</u>	<u>\$124,443</u>
<b>Total Bus Liabilities</b>	<b>\$112,260</b>	<b>\$213,729</b>
Personal Liabilities	<u>\$2,768</u>	<u>\$3,061</u>
<b>TOTAL LIABILITIES</b>	<b>\$115,028</b>	<b>\$216,790</b>
<b>EQUITY</b>		
Business Equity	\$71,938	\$219,819
<b>TOTAL EQUITY</b>	<b>\$102,519</b>	<b>\$263,920</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$217,547</b>	<b>\$480,710</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	4.50	4.12
Working Capital Ratio <sup>2</sup>	2.06	2.53
Debt-Asset Ratio <sup>3</sup>	0.50	0.44

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP-SWINE FARMS**  
**AVERAGE FARM SIZE**

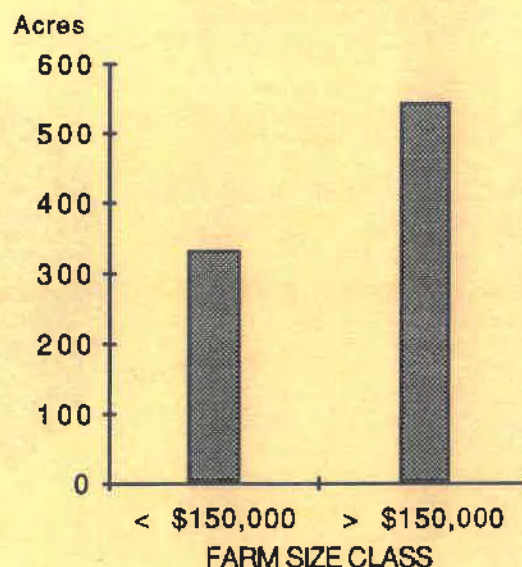


Figure 13

In comparing the larger operations with the smaller, there is about a 200 acre difference in total land operated; receipts, expenses, net cash operating income and the addition to owners equity are over 2.5 times larger; assets, liabilities and owners equity are approximately twice as large.

The liquidity position of both sets of operators is similar, but the larger operators have a slight advantage in their solvency situation with a lower debt-asset ratio.

**CROP-SWINE FARMS  
FINANCIAL CONDITION  
1988**

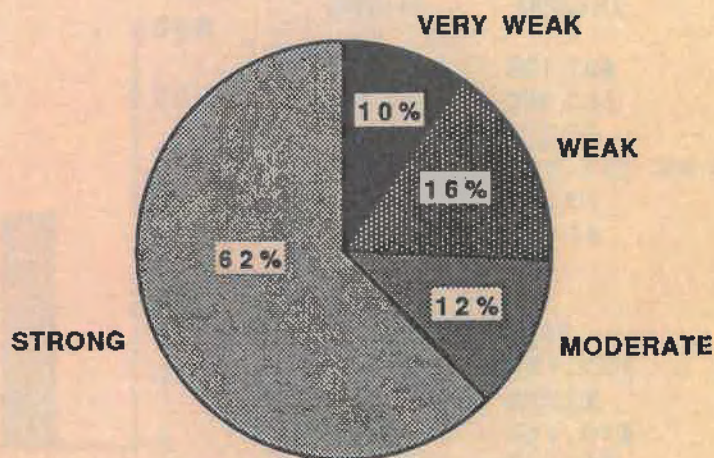


Figure 14

<u>DSCR<sup>1</sup></u>	<u>FINANCIAL CONDITION</u>	<u>EXPLANATION</u>
< 0	Very Weak	Insufficient income to meet family living and pay taxes
0 - 1.0	Weak	Problem in meeting debt service obligations
1.0 - 1.5	Moderate	Debt obligations are met, but limited funds for reinvestment in business
> 1.5	Strong	Funds available to reinvest in business

<sup>1</sup> Debt Service Coverage Ratio: Total net cash income plus interest payments less family living and income taxes divided by debt service costs (interest plus principal payments).

## ALL OTHER FARMS

Table 14  
**SUMMARY INCOME STATEMENT**  
1988

ITEM	<\$150,000 (N=290)	>\$150,000 (N=234)
Operating Receipts	\$84,794	\$313,310
Operating Exp. b/f Int	\$52,765	\$178,562
Interest Expense	\$8,145	\$23,921
<b>NET CASH OPERATING INC</b>	<b>\$23,884</b>	<b>110,827</b>
Depreciation Expense	\$7,374	\$18,991
Change in Value of Inv.	\$7,919	\$25,232
Extra Ordinary Income		
Sale of Assets	\$74	-
Debt Forgiveness	-	\$274
<b>BEFORE TAX RETURN</b>	<b>\$24,502</b>	<b>117,342</b>
Inc Tax Paid (1987)	\$1,538	\$3,528
<b>AFTER TAX RETURN</b>	<b>\$22,964</b>	<b>113,814</b>
Off-Farm Income	\$10,991	\$9,382
Withdrawals (Fam Living)	\$14,642	\$21,982
<b>ADD TO OWNER EQUITY</b>	<b>\$19,313</b>	<b>101,215</b>

Table 15  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

ITEM	< \$150,000 (N=290)	>\$150,000 (N=234)
<b>ASSETS</b>		
Current Assets	\$52,082	\$172,303
Intermediate Assets	\$52,598	\$110,375
Long-Term Assets	\$101,698	\$239,609
<b>Total Bus Assets</b>	<b>\$206,377</b>	<b>\$522,287</b>
Personal Assets	\$32,268	\$48,224
<b>TOTAL ASSETS</b>	<b>\$238,645</b>	<b>\$570,511</b>
<b>LIABILITIES</b>		
Current Liabilities	\$19,071	\$57,016
Intermediate Liabilities	\$34,691	\$87,769
Long-Term Liabilities	\$58,352	\$141,320
<b>Total Bus Liabilities</b>	<b>\$112,113</b>	<b>\$286,105</b>
Personal Liabilities	\$4,911	\$6,185
<b>TOTAL LIABILITIES</b>	<b>\$117,025</b>	<b>\$292,290</b>
<b>EQUITY</b>		
Business Equity	\$94,264	\$236,181
<b>TOTAL EQUITY</b>	<b>\$121,620</b>	<b>\$278,220</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$238,645</b>	<b>\$570,511</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	2.73	3.09
Working Capital Ratio <sup>2</sup>	1.95	1.95
Debt-Asset Ratio <sup>3</sup>	0.49	0.51

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**ALL OTHER FARMS**  
**AVERAGE FARM SIZE**

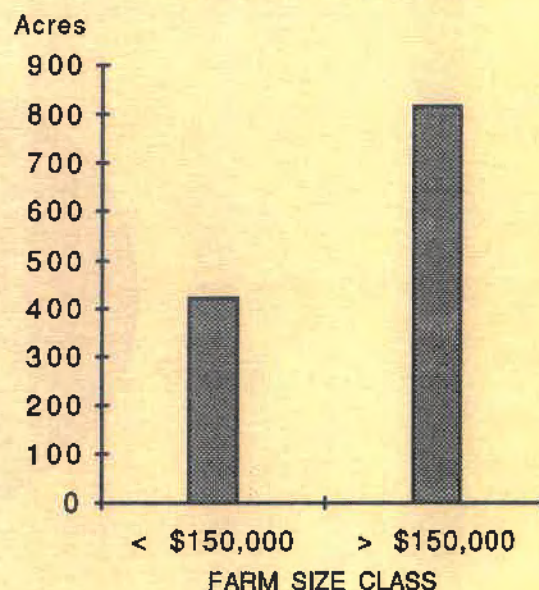


Figure 15

In comparing the larger operations with the smaller, there is about a 400 acre difference in farm size; receipts and expenses are over 3 times greater; the addition to owners equity is over 5 times greater; assets, liabilities and owners equity are approximately twice as great.

In comparing the financial ratios, there is not a significant difference between the two groups of operators.

**ALL OTHER FARMS  
FINANCIAL CONDITON  
1988**

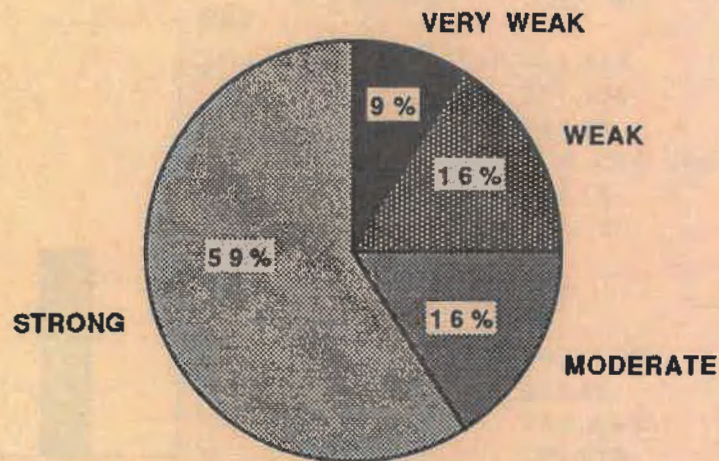


Figure 16

<u>DSCR<sup>1</sup></u>	<u>FINANCIAL CONDITION</u>	<u>EXPLANATION</u>
< 0	Very Weak	Insufficient income to meet family living and pay taxes
0 - 1.0	Weak	Problem in meeting debt service obligations
1.0 - 1.5	Moderate	Debt obligations are met, but limited funds for reinvestment in business
> 1.5	Strong	Funds available to reinvest in business

<sup>1</sup> Debt Service Coverage Ratio: Total net cash income plus interest payments less family living and income taxes divided by debt service costs (interest plus principal payments).

## LAND TENURE SUMMARY

This Section of the Task Force Report presents a summary of operators who rent all the land in their operation, versus 100-percent owner-operators. Figure 11, below, shows the distribution of operators according to the percent of rented land in their operations.

The distinguishing feature of those who rent all their operation is their age. Fully two-thirds of these farmers are less than 35 years old. Most of their operations were cash crop farms, dairy or crop-swine operations. Appendix G contains a selected set of descriptive statistics comparing these two groups of farm operators.

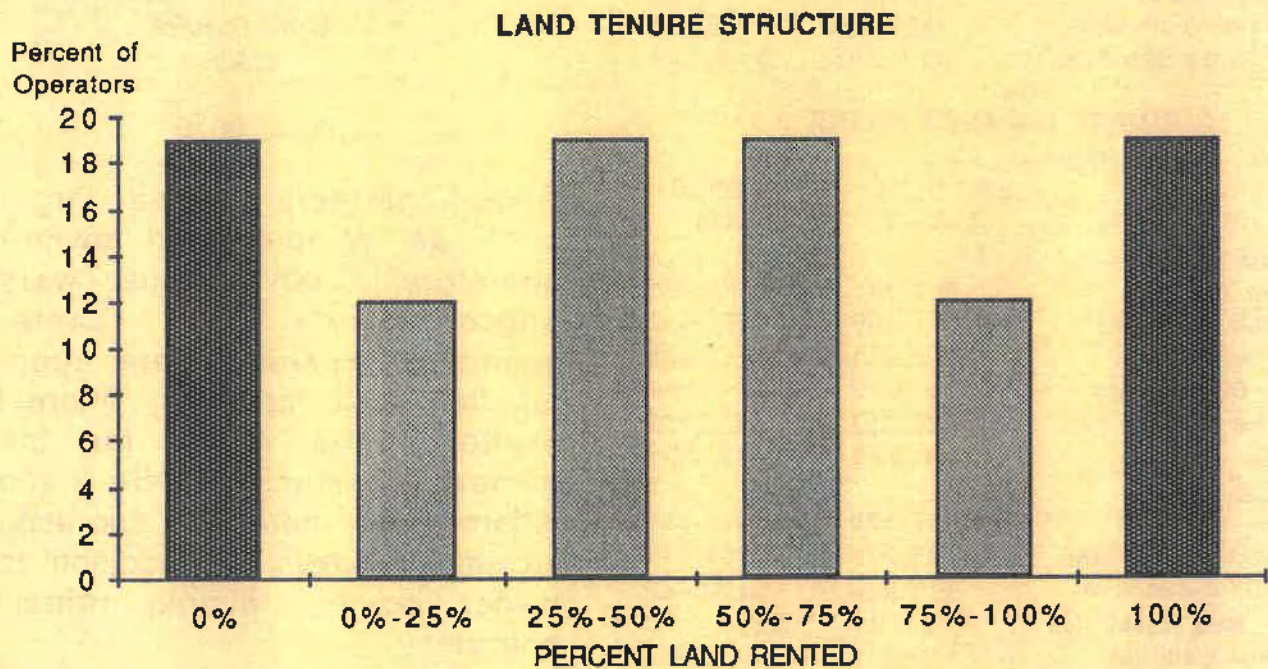


Figure 17

## RENTER-OPERATOR vs OWNER-OPERATOR

Table 16  
**SUMMARY INCOME STATEMENT**  
**1988**

ITEM	100% RENT (N=514)	100% OWNER (N=454)
Operating Receipts	\$126,634	\$121,453
Operating Exp. b/f Int	\$84,964	\$71,122
Interest Expense	<u>\$5,938</u>	<u>\$13,292</u>
<b>NET CASH OPERATING INC</b>	<b>\$35,733</b>	<b>\$37,039</b>
Depreciation Expense	\$8,686	\$11,194
Change in Value of Inv.	\$8,473	\$2,593
Extra Ordinary Income		
Sale of Assets	\$210	\$26
Debt Forgiveness	<u>\$146</u>	<u>\$346</u>
<b>BEFORE TAX RETURN</b>	<b>\$35,875</b>	<b>\$28,811</b>
Inc Tax Paid (1987)	<u>\$2,137</u>	<u>\$2,105</u>
<b>AFTER TAX RETURN</b>	<b>\$33,739</b>	<b>\$26,706</b>
Off-Farm Income	\$7,337	\$8,654
Withdrawals (Fam Living)	<u>\$16,495</u>	<u>\$16,416</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$24,580</b>	<b>\$18,944</b>

Table 17  
**SUMMARY BALANCE SHEET**  
**Dec. 31, 1988**

ITEM	100% RENT (N=595)	100% OWNER (N=484)
<b>ASSETS</b>		
Current Assets	\$69,341	\$60,895
Intermediate Assets	\$61,096	\$69,990
Long-Term Assets	<u>\$28,461</u>	<u>\$177,469</u>
<b>Total Bus Assets</b>	<b>\$158,899</b>	<b>\$308,354</b>
Personal Assets	<u>\$23,013</u>	<u>\$38,573</u>
<b>TOTAL ASSETS</b>	<b>\$181,912</b>	<b>\$346,930</b>
<b>LIABILITIES</b>		
Current Liabilities	\$18,170	\$17,180
Intermediate Liabilities	\$39,308	\$51,819
Long-Term Liabilities	<u>\$18,819</u>	<u>\$110,329</u>
<b>Total Bus Liabilities</b>	<b>\$76,296</b>	<b>\$179,138</b>
Personal Liabilities	<u>\$5,176</u>	<u>\$2,332</u>
<b>TOTAL LIABILITIES</b>	<b>\$81,473</b>	<b>\$181,470</b>
<b>EQUITY</b>		
Business Equity	\$82,603	\$129,217
<b>TOTAL EQUITY</b>	<b>\$100,439</b>	<b>\$165,460</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$181,912</b>	<b>\$346,930</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	3.82	3.54
Working Capital Ratio <sup>2</sup>	2.27	1.90
Debt-Asset Ratio <sup>3</sup>	0.44	0.52

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**RENTED vs OWNED**  
**AVERAGE FARM SIZE**

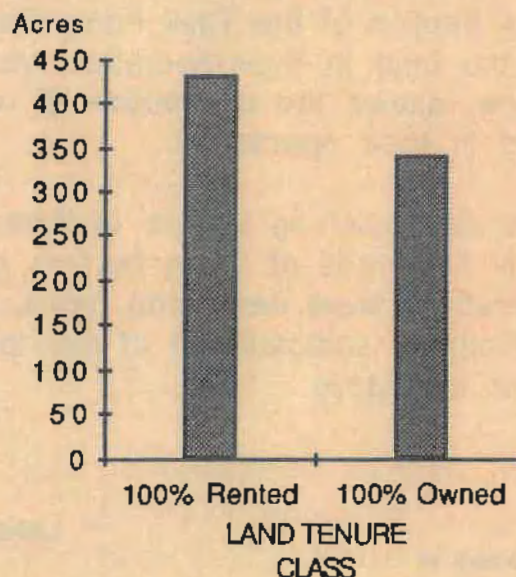


Figure 18

Renter-operators farmed larger units as compared to owner-operators. Cash receipts were approximately the same; operating expenses were larger for the renter-operator; interest expense was larger for the owner-operator. While the difference in net cash operating income is small, the addition to owner equity, favored renter-operators.

The distinguishing feature of the balance sheets is the difference in long-term assets and liabilities. Renter-operators show greater financial flexibility in their liquidity ratios and have an advance in their solvency position with a lower debt-asset ratio.

## MEASURES OF FINANCIAL PERFORMANCE

Below are a series of ratios which have been computed from the farm financial data. (Table 15). Each ratio has three principle values: The "Upper Quartile", "Median", and "Lower Quartile". For any given ratio, these figures are calculated by first computing the value of the ratio for each farm operator in the sample. These values are then arrayed - "listed" - in order from the strongest to the weakest.

In such an array of ratio values, the figure which falls in the middle between the strongest and the weakest ratios is the "Median". The figure that falls halfway between the median and the strongest ratio is the "Upper Quartile". The figure that falls halfway between the median and the weakest ratio is the "Lower Quartile".

The major reason for using medians and quartiles instead of an average is to eliminate the influence which extreme values would have on an average. The method used more accurately reflects the ranges of ratio values than would a straight averaging method.

The spread (range) between the Upper and Lower Quartiles represents the middle 50% of all the surveys in the sample. Ratio values greater than the upper or less than the lower quartiles, therefore, begin to approach "extreme" values.

In interpreting ratios, the "strongest" or "best" value is not always the largest numerical value, nor is the "weakest" always the lowest numerical value. The ratios are grouped into four principal categories: liquidity, solvency, profitability and efficiency. The "Definition of Terms" Section (Section II) provides additional details regarding the interpretation of these measures.

Table 18  
**MEASURES OF FINANCIAL PERFORMANCE**  
 1988

	<u>LOWER QUARTILE</u>	<u>MEDIAN</u>	<u>UPPER QUARTILE</u>
OPERATOR AGE	31	37	46
TOTAL LAND OPERATED	260	400	641

**FINANCIAL MEASURES**

**LIQUITY MEASURES**

NET CASH FARM INCOME	\$19,384	\$35,160	\$60,259
TOTAL CASH INCOME	\$27,466	\$43,471	\$68,457
CURRENT RATIO	1.45	2.9	7.06
WORKING CAPITAL RATIO	1.25	2.09	4.39
DEBT SERVICE COVERAGE RATIOS:			
FARM INCOME, ALONE	0.62	1.28	2.64
TOTAL CASH INCOME	1.01	1.68	3.35

**SOLVENCY MEASURES**

DEBT-ASSET RATIO	0.28	0.5	0.73
DEBT-EQUITY RATIO	0.21	0.77	1.76

**PROFITABILITY MEASURES**

RETURN ON EQUITY(%)	0.76	6.06	12.99
RETURN ON ASSETS(%)	2.92	5.38	8.25
PROFIT MARGIN RATIO	0.12	0.24	0.33

**EFFICIENCY MEASURES**

GROSS EXPENSE RATIO(%)	71.4	80.5	89.8
INTEREST EXPENSE(%)	3.7	7.7	12.9

## SECTION V

### AREA SUMMARIES

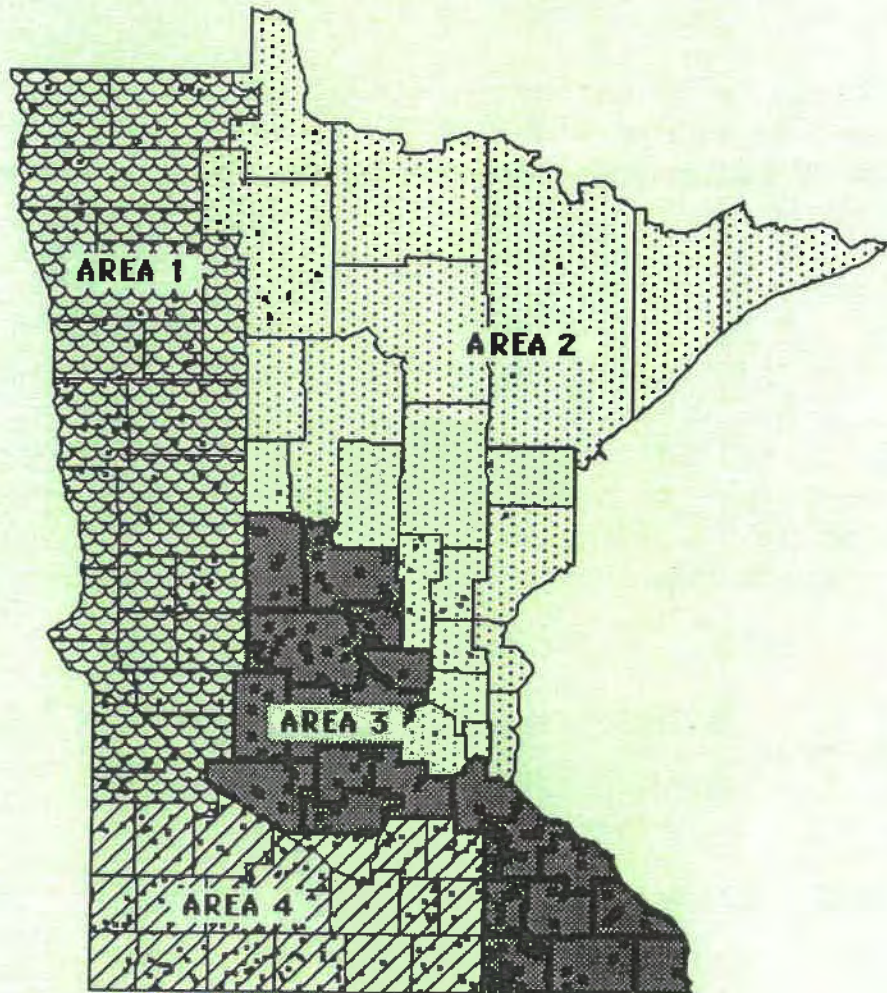


Figure 19

## AREA SUMMARIES

This Section of the 1989 Report of the Farm Financial Task Force contains a brief summary of the financial condition of the 2,652 Technical College farm program participants. This data is presented by area, by farm enterprise and by farm size. The accompanying Figures show the boundaries of each of the Areas.

Major farm enterprises were determined by the proportion of total cash farm receipts contributed by a given enterprise or combination of enterprises. If 75 percent, or more, of total receipts were contributed by an enterprise, it was classified accordingly.

Farm size was determined by the level of total cash farm receipts. Two sizes were determined: one, less than or equal to \$150,000 and the other, greater than \$150,000 in total cash farm receipts. (See Figure 5, Appendix B, page 44).

Table 16, below, reveals the distribution of operators by area, enterprise and size of operation. As seen, cash crop farms predominate in Area 1, dairy operations in Area 2 and 3, and crop-swine units in Area 4. Because of the relatively few operators from Area 2, only a summary of the dairy operations is presented.

Table 19  
DISTRIBUTION OF FARM OPERATORS  
BY  
AREA, ENTERPRISE AND FARM SIZE  
(Number of Operators)

<u>ENTERPRISE/SIZE</u>	<u>AREA 1</u>	<u>AREA 2</u>	<u>AREA 3</u>	<u>AREA 4</u>	<u>TOTAL</u>
<u>Crops</u>					
< \$150,000	157	11	44	157	369
> \$150,000	143	4	29	82	258
<u>Dairy</u>					
< \$150,000	140	60	253	32	485
> \$150,000	26	23	84	22	155
<u>Crops-Dairy</u>					
< \$150,000	43	3	49	51	146
> \$150,000	25	5	75	53	158
<u>Crops-Swine</u>					
< \$150,000	48	4	49	128	229
> \$150,000	28	1	62	175	266
<u>Other</u>					
< \$150,000	92	35	68	120	315
> \$150,000	74	6	80	111	271
AREA TOTAL	776	152	793	931	2652

**WEST-NORTHWEST  
AREA SUMMARY**

**AREA 1**

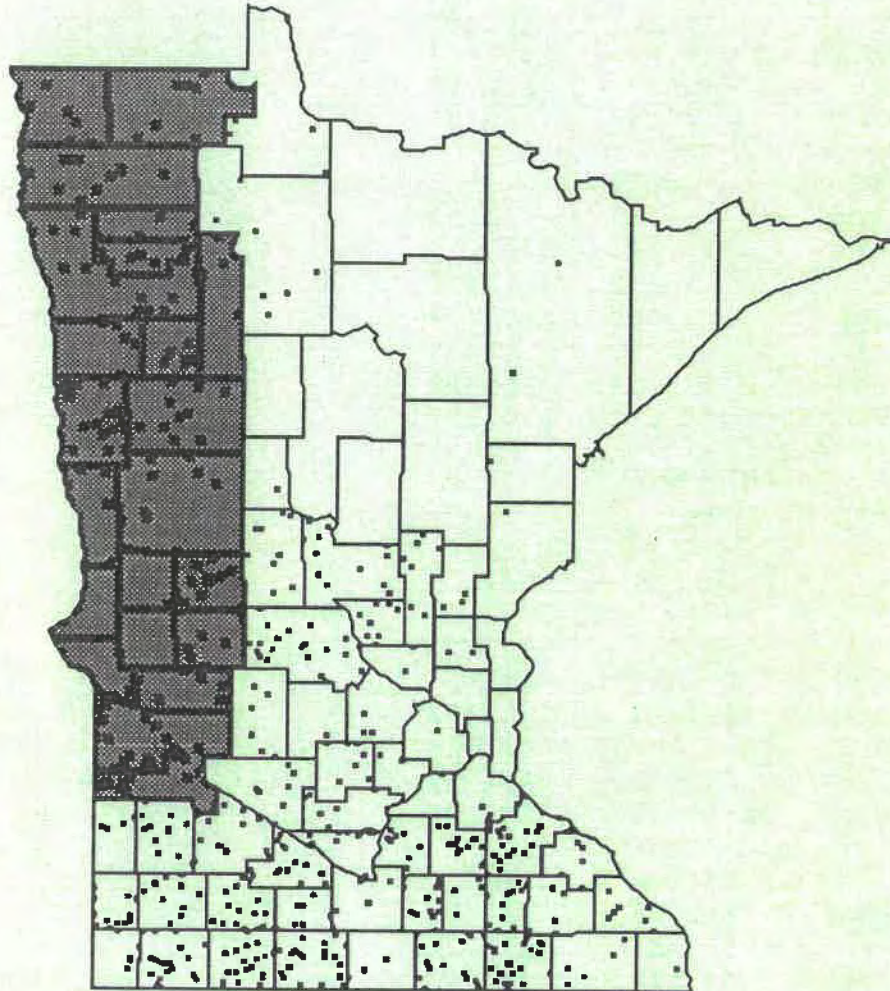


Figure 20

## CROP FARMS

Table 20  
**SUMMARY INCOME STATEMENT**  
1988

	<u>&lt;\$150,000</u>	<u>&gt;\$150,000</u>
	(N=146)	(N=129)
ITEM		
Operating Receipts	\$88,234	\$276,961
Operating Exp. b/f Int	\$62,383	\$186,322
Interest Expense	<u>\$7,885</u>	<u>\$21,459</u>
<b>NET CASH OPERATING INC</b>	<b>\$17,965</b>	<b>\$69,180</b>
Depreciation Expense	\$7,983	\$19,760
Change in Value of Inv.	\$7,663	\$14,254
Extra Ordinary Income		
Sale of Assets	\$333	-
Debt Forgiveness	<u>\$713</u>	<u>\$801</u>
<b>BEFORE TAX RETURN</b>	<b>\$18,691</b>	<b>\$64,475</b>
Inc Tax Paid (1987)	<u>\$1,633</u>	<u>\$3,668</u>
<b>AFTER TAX RETURN</b>	<b>\$17,058</b>	<b>\$60,807</b>
Off-Farm Income	\$10,062	\$8,636
Withdrawals (Fam Living)	<u>\$17,088</u>	<u>\$28,462</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$10,031</b>	<b>\$40,982</b>

Table 21  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

	<u>&lt; \$150,000</u>	<u>&gt;\$150,000</u>
	(N=146)	(N=129)
ITEM		
<b>ASSETS</b>		
Current Assets	\$51,125	\$141,950
Intermediate Assets	\$49,449	\$135,681
Long-Term Assets	<u>\$116,233</u>	<u>\$285,462</u>
<b>Total Bus Assets</b>	<b>\$216,808</b>	<b>\$563,074</b>
Personal Assets	<u>\$33,023</u>	<u>\$73,085</u>
<b>TOTAL ASSETS</b>	<b>\$249,831</b>	<b>\$636,159</b>
<b>LIABILITIES</b>		
Current Liabilities	\$24,094	\$53,224
Intermediate Liabilities	\$41,198	\$72,054
Long-Term Liabilities	<u>\$71,507</u>	<u>\$149,587</u>
<b>Total Bus Liabilities</b>	<b>\$136,799</b>	<b>\$274,865</b>
Personal Liabilities	<u>\$2,979</u>	<u>\$7,011</u>
<b>TOTAL LIABILITIES</b>	<b>\$139,779</b>	<b>\$281,877</b>
<b>EQUITY</b>		
Business Equity	\$80,008	\$288,209
<b>TOTAL EQUITY</b>	<b>\$110,052</b>	<b>\$354,282</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$249,831</b>	<b>\$636,159</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	2.06	2.88
Working Capital Ratio <sup>2</sup>	1.55	2.42
Debt-Asset Ratio <sup>3</sup>	0.56	0.43

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP FARMS**  
**AVERAGE FARM SIZE**

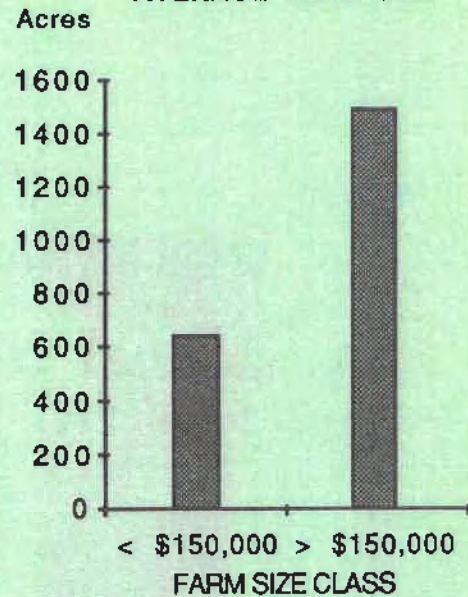


Figure 21

In comparing the larger operations with the smaller, there is about an 850 acre difference in farm size; receipts and expenses are approximately 3 times greater; the addition to owners equity is 4 times greater; assets and liabilities are about 2.5 times larger and owners equity is 3 times greater.

In comparing the ratios, the larger operations reflect greater liquidity and have a lower debt-asset ratio.

## CROP - DAIRY FARMS

Table 22  
**SUMMARY INCOME STATEMENT**  
1988

ITEM	<\$150,000 (N=41)	>\$150,000 (N=24)
Operating Receipts	\$97,808	\$240,912
Operating Exp. b/f Int	\$59,281	\$148,101
Interest Expense	<u>\$9,653</u>	<u>\$26,541</u>
<b>NET CASH OPERATING INC</b>	<b>\$28,875</b>	<b>\$66,269</b>
Depreciation Expense	\$7,994	\$23,098
Change in Value of Inv.	\$9,066	\$11,023
Extra Ordinary Income		
Sale of Assets	--	--
Debt Forgiveness	--	--
<b>BEFORE TAX RETURN</b>	<b>\$29,947</b>	<b>\$54,194</b>
Inc Tax Paid (1987)	<u>\$1,870</u>	<u>\$1,235</u>
<b>AFTER TAX RETURN</b>	<b>\$28,076</b>	<b>\$52,959</b>
Off-Farm Income	\$8,061	\$5,283
Withdrawals (Fam Living)	<u>\$13,844</u>	<u>\$30,503</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$22,293</b>	<b>\$27,739</b>

Table 23  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

ITEM	<\$150,000 (N=43)	>\$150,000 (N=25)
<b>ASSETS</b>		
Current Assets	\$45,036	\$99,946
Intermediate Assets	\$69,041	\$162,654
Long-Term Assets	<u>\$118,793</u>	<u>\$247,184</u>
<b>Total Bus Assets</b>	<b>\$232,870</b>	<b>\$509,785</b>
Personal Assets	<u>\$28,132</u>	<u>\$41,197</u>
<b>TOTAL ASSETS</b>	<b>\$261,002</b>	<b>\$550,981</b>
<b>LIABILITIES</b>		
Current Liabilities	\$17,002	\$40,385
Intermediate Liabilities	\$50,904	\$143,496
Long-Term Liabilities	<u>\$76,933</u>	<u>\$148,658</u>
<b>Total Bus Liabilities</b>	<b>\$144,839</b>	<b>\$332,540</b>
Personal Liabilities	<u>\$2,455</u>	<u>\$343</u>
<b>TOTAL LIABILITIES</b>	<b>\$147,294</b>	<b>\$332,883</b>
<b>EQUITY</b>		
Business Equity	\$88,031	\$177,245
<b>TOTAL EQUITY</b>	<b>\$113,708</b>	<b>\$218,098</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$261,002</b>	<b>\$550,981</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	2.65	2.47
Working Capital Ratio <sup>2</sup>	1.88	1.43
Debt-Asset Ratio <sup>3</sup>	0.56	0.60

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP-DAIRY FARMS**  
**AVERAGE FARM SIZE**

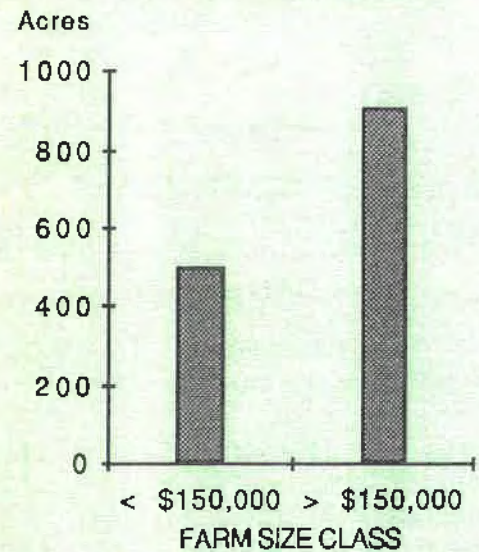


Figure 22

There is approximately a 400 acre difference in farm size in comparing the larger farming operations with the smaller ones; receipts and expenses are 2.5 times greater but the addition to owners equity is only slightly higher.

Assets and liabilities are about twice as large, as is owners equity.

Neither size of unit reflects a great deal of financial flexibility in comparing the ratios and the larger units have a higher debt-asset ratio.

## DAIRY FARMS

Table 24  
**SUMMARY INCOME STATEMENT**  
**1988**

ITEM	<u>&lt;\$150,000</u> (N=135)	<u>&gt;\$150,000</u> (N=22)
Operating Receipts	\$93,909	\$190,980
Operating Exp. b/f Int	\$56,726	\$125,441
Interest Expense	<u>\$10,148</u>	<u>\$17,650</u>
<b>NET CASH OPERATING INC</b>	<b>\$26,534</b>	<b>\$47,889</b>
Depreciation Expense	\$8,623	\$20,832
Change in Value of Inv.	\$932	\$1,868
Extra Ordinary Income		
Sale of Assets	\$89	--
Debt Forgiveness	<u>\$202</u>	<u>--</u>
<b>BEFORE TAX RETURN</b>	<b>\$19,134</b>	<b>\$28,925</b>
Inc Tax Paid (1987)	<u>\$615</u>	<u>\$400</u>
<b>AFTER TAX RETURN</b>	<b>\$18,518</b>	<b>\$28,525</b>
Off-Farm Income	\$6,012	\$4,304
Withdrawals (Fam Living)	<u>\$13,871</u>	<u>\$17,802</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$10,659</b>	<b>\$15,026</b>

Table 25  
**SUMMARY BALANCE SHEET**  
**Dec. 31, 1988**

ITEM	<u>&lt;\$150,000</u> (N=135)	<u>&gt;\$150,000</u> (N=22)
<b>ASSETS</b>		
Current Assets	\$32,072	\$69,914
Intermediate Assets	\$76,510	\$140,707
Long-Term Assets	<u>\$96,673</u>	<u>\$187,037</u>
<b>Total Bus Assets</b>	<b>\$205,255</b>	<b>\$397,658</b>
Personal Assets	<u>\$23,199</u>	<u>\$25,428</u>
<b>TOTAL ASSETS</b>	<b>\$228,455</b>	<b>\$423,087</b>
<b>LIABILITIES</b>		
Current Liabilities	\$14,356	\$40,239
Intermediate Liabilities	\$46,534	\$87,224
Long-Term Liabilities	<u>\$73,186</u>	<u>\$170,264</u>
<b>Total Bus Liabilities</b>	<b>\$134,076</b>	<b>\$297,727</b>
Personal Liabilities	<u>\$2,751</u>	<u>\$896</u>
<b>TOTAL LIABILITIES</b>	<b>\$136,827</b>	<b>\$298,623</b>
<b>EQUITY</b>		
Business Equity	\$71,179	\$99,931
<b>TOTAL EQUITY</b>	<b>\$91,628</b>	<b>\$124,464</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$228,455</b>	<b>\$423,087</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	2.31	2.33
Working Capital Ratio <sup>2</sup>	1.83	2.06
Debt-Asset Ratio <sup>3</sup>	0.58	0.58

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**DAIRY FARMS**  
**AVERAGE FARM SIZE**

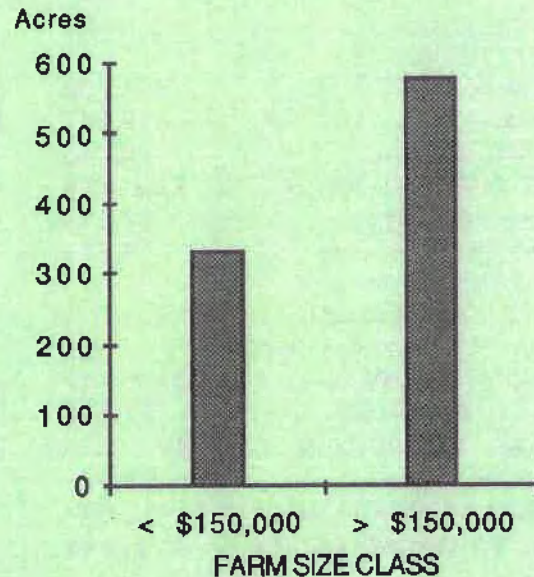


Figure 23

There is about a 250 acre difference in farm size between the larger and smaller operations. Receipts, expenses and net cash farm income of the larger units are about twice that of the smaller units.

The same is true about the relationship between assets and liabilities and owners equity is nearly 1.5 times greater for the larger operations.

In comparing the financial ratios, both sizes are very similar to one another.

## CROP - SWINE FARMS

Table 26  
**SUMMARY INCOME STATEMENT**  
1988

	<u>&lt;\$150,000</u> (N=43)	<u>&gt;\$150,000</u> (N=28)
<b>ITEM</b>		
Operating Receipts	\$92,392	\$228,611
Operating Exp. b/f Int	\$64,492	\$146,895
Interest Expense	<u>\$6,839</u>	<u>\$14,991</u>
<b>NET CASH OPERATING INC</b>	<b>\$21,061</b>	<b>\$66,724</b>
Depreciation Expense	\$8,613	\$19,214
Change in Value of Inv.	\$2,323	\$(5,997)
Extra Ordinary Income		
Sale of Assets	-	-
Debt Forgiveness	<u>\$11</u>	<u>\$3,928</u>
<b>BEFORE TAX RETURN</b>	<b>\$14,782</b>	<b>\$45,442</b>
Inc Tax Paid (1987)	<u>\$1,800</u>	<u>\$3,464</u>
<b>AFTER TAX RETURN</b>	<b>\$12,982</b>	<b>\$41,978</b>
Off-Farm Income	\$8,577	\$6,779
Withdrawals (Fam Living)	<u>\$16,425</u>	<u>\$25,425</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$5,135</b>	<b>\$23,331</b>

Table 27  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

	<u>&lt;\$150,000</u> (N=48)	<u>&gt;\$150,000</u> (N=28)
<b>ITEM</b>		
<b>ASSETS</b>		
Current Assets	\$36,039	\$91,434
Intermediate Assets	\$42,688	\$73,434
Long-Term Assets	<u>\$81,181</u>	<u>\$200,622</u>
<b>Total Bus Assets</b>	<b>\$159,908</b>	<b>\$365,489</b>
Personal Assets	<u>\$34,096</u>	<u>\$49,529</u>
<b>TOTAL ASSETS</b>	<b>\$194,005</b>	<b>\$415,018</b>
<b>LIABILITIES</b>		
Current Liabilities	\$16,696	\$33,144
Intermediate Liabilities	\$46,508	\$66,254
Long-Term Liabilities	<u>\$73,028</u>	<u>\$114,722</u>
<b>Total Bus Liabilities</b>	<b>\$136,232</b>	<b>\$214,120</b>
Personal Liabilities	<u>\$1,542</u>	<u>\$4,441</u>
<b>TOTAL LIABILITIES</b>	<b>\$137,774</b>	<b>\$218,561</b>
<b>EQUITY</b>		
Business Equity	\$23,676	\$151,370
<b>TOTAL EQUITY</b>	<b>\$56,231</b>	<b>\$196,457</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$194,005</b>	<b>\$415,018</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	2.16	2.76
Working Capital Ratio <sup>2</sup>	1.24	1.66
Debt-Asset Ratio <sup>3</sup>	0.71	0.53

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP-SWINE FARMS**  
**AVERAGE FARM SIZE**

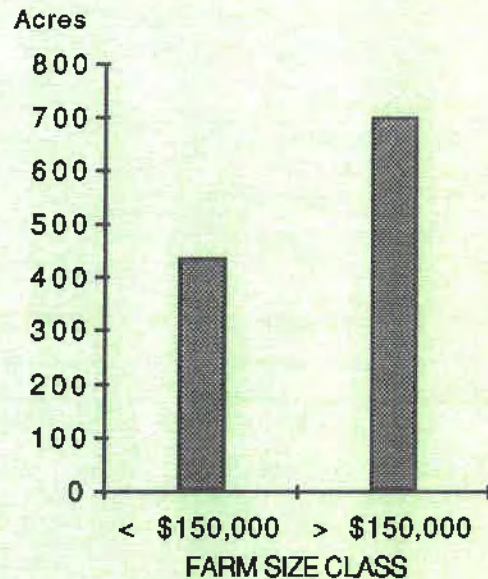


Figure 24

While there is only a 275 acre difference in farm size between the two sizes of operations, net cash farm income is 3 times greater for the larger units and the addition to owners equity is nearly 5 times greater.

Assets and liabilities are 1.5 to 2.5 times greater for the larger farms and net worth is 3.5 times greater.

In comparing the ratios, liquidity for both sizes is tight, but the larger units are in a better solvency position.

## ALL OTHER FARMS

Table 28  
**SUMMARY INCOME STATEMENT**  
1988

ITEM	< \$150,000 (N=87)	> \$150,000 (N=63)
Operating Receipts	\$81,020	\$360,450
Operating Exp. b/f Int	\$49,183	\$205,717
Interest Expense	<u>\$8,421</u>	<u>\$30,236</u>
<b>NET CASH OPERATING INC</b>	<b>\$23,416</b>	<b>124,497</b>
Depreciation Expense	\$7,278	\$21,378
Change in Value of Inv.	\$9,341	\$32,077
Extra Ordinary Income		
Sale of Assets	\$246	- -
Debt Forgiveness	<u>\$- -</u>	<u>\$1,016</u>
<b>BEFORE TAX RETURN</b>	<b>\$25,376</b>	<b>136,213</b>
Inc Tax Paid (1987)	<u>\$1,064</u>	<u>\$3,158</u>
<b>AFTER TAX RETURN</b>	<b>\$24,312</b>	<b>133,054</b>
Off-Farm Income	\$10,626	\$10,783
Withdrawals (Fam Living)	<u>\$14,238</u>	<u>\$24,722</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$20,699</b>	<b>119,115</b>

Table 29  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

ITEM	< \$150,000 (N=87)	> \$150,000 (N=63)
<b>ASSETS</b>		
Current Assets	\$47,105	\$190,027
Intermediate Assets	\$57,387	\$138,199
Long-Term Assets	<u>\$107,756</u>	<u>\$307,136</u>
<b>Total Bus Assets</b>	<b>\$212,248</b>	<b>\$635,362</b>
Personal Assets	<u>\$30,706</u>	<u>\$59,639</u>
<b>TOTAL ASSETS</b>	<b>\$242,954</b>	<b>\$695,001</b>
<b>LIABILITIES</b>		
Current Liabilities	\$26,299	\$90,837
Intermediate Liabilities	\$36,756	\$103,977
Long-Term Liabilities	<u>\$62,422</u>	<u>\$182,284</u>
<b>Total Bus Liabilities</b>	<b>\$125,478</b>	<b>\$377,098</b>
Personal Liabilities	<u>\$4,514</u>	<u>\$2,625</u>
<b>TOTAL LIABILITIES</b>	<b>\$129,992</b>	<b>\$379,723</b>
<b>EQUITY</b>		
Business Equity	\$86,771	\$258,264
<b>TOTAL EQUITY</b>	<b>\$112,962</b>	<b>\$315,278</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$242,954</b>	<b>\$695,001</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	1.75	2.03
Working Capital Ratio <sup>2</sup>	1.65	1.64
Debt-Asset Ratio <sup>3</sup>	0.54	0.54

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**ALL OTHER FARMS**  
**AVERAGE FARM SIZE**

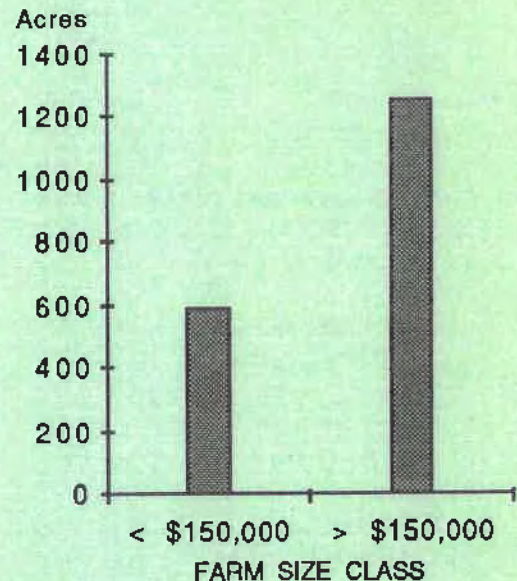


Figure 25

In comparing the larger operations with the smaller, there is about an 650 acre difference in farm size; receipts and expenses are approximately 3-4 times greater; the addition to owners equity is 5 times greater; assets, liabilities and owners equity is nearly 3 times greater.

In comparing the financial ratios, there is not a significant difference between the two groups of operators.

**NORTH-NORTHEAST  
AREA SUMMARY**

**AREA 2**

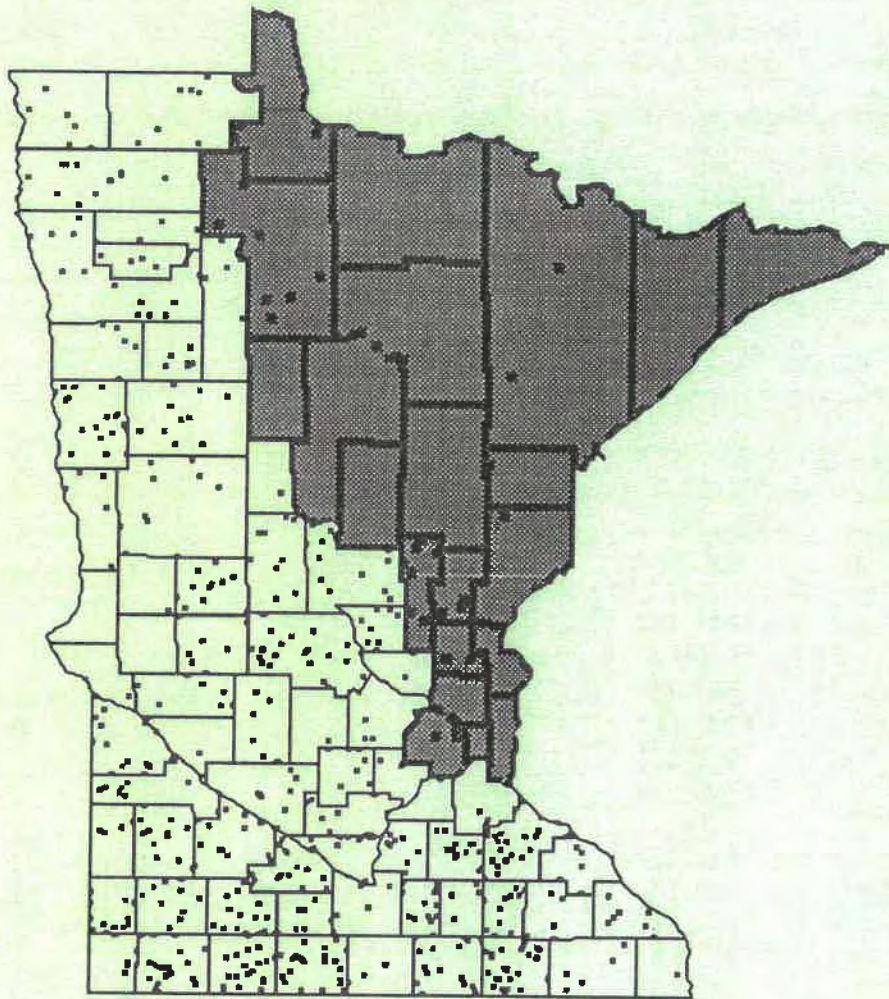


Figure 26

## DAIRY FARMS

Table 30  
**SUMMARY INCOME STATEMENT**  
1988

	<u>&lt;\$150,000</u>	<u>&gt;\$150,000</u>
	(N=60)	(N=23)
ITEM		
Operating Receipts	\$92,391	\$205,196
Operating Exp. b/f Int	\$62,044	\$126,220
Interest Expense	<u>\$8,162</u>	<u>\$18,317</u>
<b>NET CASH OPERATING INC</b>	<b>\$22,186</b>	<b>\$60,659</b>
Depreciation Expense	\$8,782	\$16,622
Change in Value of Inv.	\$4,522	\$8,095
Extra Ordinary Income		
Sale of Assets	--	--
Debt Forgiveness	--	--
<b>BEFORE TAX RETURN</b>	<b>\$17,926</b>	<b>\$52,131</b>
Inc Tax Paid (1987)	<u>\$1,033</u>	<u>\$1,386</u>
<b>AFTER TAX RETURN</b>	<b>\$16,893</b>	<b>\$50,746</b>
Off-Farm Income	\$7,548	\$2,563
Withdrawls (Fam Living)	<u>\$14,988</u>	<u>\$20,242</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$9,454</b>	<b>\$33,066</b>

Table 31  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

	<u>&lt;\$150,000</u>	<u>&gt;\$150,000</u>
	(N=60)	(N=23)
ITEM		
<b>ASSETS</b>		
Current Assets	\$31,757	\$73,243
Intermediate Assets	\$79,420	\$166,531
Long-Term Assets	<u>\$91,388</u>	<u>\$167,456</u>
<b>Total Bus Assets</b>	<b>\$202,566</b>	<b>\$407,231</b>
Personal Assets	<u>\$44,572</u>	<u>\$49,520</u>
<b>TOTAL ASSETS</b>	<b>\$247,138</b>	<b>\$456,751</b>
<b>LIABILITIES</b>		
Current Liabilities	\$16,702	\$24,682
Intermediate Liabilities	\$55,723	\$87,117
Long-Term Liabilities	<u>\$71,505</u>	<u>\$103,730</u>
<b>Total Bus Liabilities</b>	<b>\$143,930</b>	<b>\$215,528</b>
Personal Liabilities	<u>\$1,179</u>	<u>\$2,697</u>
<b>TOTAL LIABILITIES</b>	<b>\$145,109</b>	<b>\$218,226</b>
<b>EQUITY</b>		
Business Equity	\$58,636	\$191,702
<b>TOTAL EQUITY</b>	<b>\$102,029</b>	<b>\$238,525</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$247,138</b>	<b>\$456,751</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	1.87	3.15
Working Capital Ratio <sup>2</sup>	1.52	2.19
Debt-Asset Ratio <sup>3</sup>	0.59	0.47

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**DAIRY FARMS**  
**AVERAGE FARM SIZE**

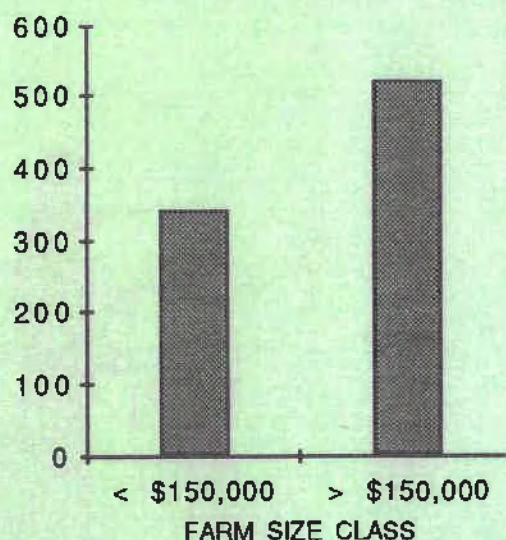


Figure 27

On average, the larger dairy operators farm about 180 acres more land than the smaller ones. Their receipts and expenses are about twice the size of the smaller units and the Addition to Owners Equity is over 3.5 times greater.

Asset holdings of the larger units are about twice the size of the smaller farms, while liabilities are about 1.5 times as great. Total Equity of the larger units is over twice that of the smaller operations.

The differences in the financial ratios reveals the tightness of the liquidity position of the smaller dairy units, and they are carrying a heavier debt load relative to their asset holdings.

**CENTRAL-SOUTHEAST  
AREA SUMMARY**

**AREA 3**

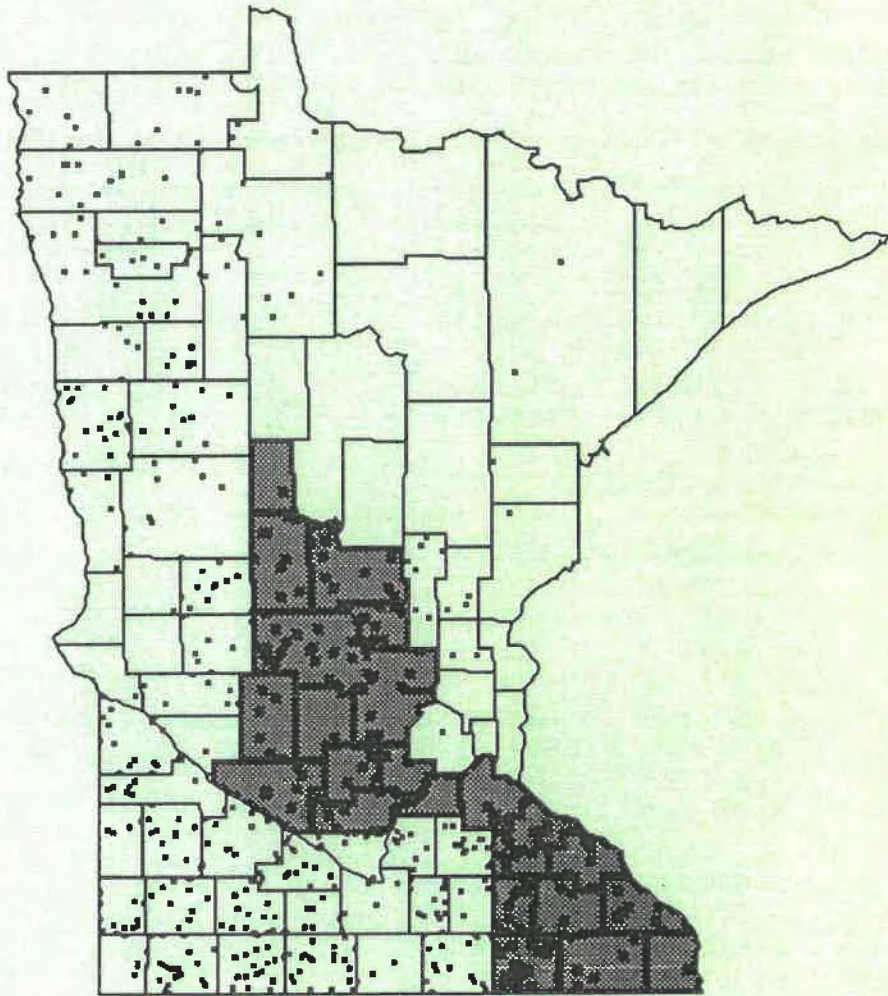


Figure 28

## CROP FARMS

Table 32  
**SUMMARY INCOME STATEMENT**  
**1988**

	<u>&lt;\$150,000</u> (N=41)	<u>&gt;\$150,000</u> (N=25)
ITEM		
Operating Receipts	\$86,139	\$247,571
Operating Exp. b/f Int	\$63,464	\$145,907
Interest Expense	<u>\$8,470</u>	<u>\$22,029</u>
<b>NET CASH OPERATING INC</b>	<b>\$14,205</b>	<b>\$79,635</b>
Depreciation Expense	\$10,700	\$24,281
Change in Value of Inv.	\$7,725	\$15,343
Extra Ordinary Income		
Sale of Assets	- -	\$3,004
Debt Forgiveness	- -	<u>\$3,004</u>
<b>BEFORE TAX RETURN</b>	<b>\$11,231</b>	<b>\$76,705</b>
Inc Tax Paid (1987)	<u>\$2,637</u>	<u>\$6,467</u>
<b>AFTER TAX RETURN</b>	<b>\$8,594</b>	<b>\$70,237</b>
Off-Farm Income	\$10,971	\$12,246
Withdrawals (Fam Living)	<u>\$17,648</u>	<u>\$24,473</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$1,916</b>	<b>\$58,010</b>

Table 33  
**SUMMARY BALANCE SHEET**  
**Dec. 31, 1988**

	<u>&lt;\$150,000</u> (N=41)	<u>&gt;\$150,000</u> (N=25)
ITEM		
<b>ASSETS</b>		
Current Assets	\$73,629	\$179,169
Intermediate Assets	\$47,414	\$80,148
Long-Term Assets	<u>\$123,998</u>	<u>\$249,707</u>
<b>Total Bus Assets</b>	<b>\$245,040</b>	<b>\$509,024</b>
Personal Assets	<u>\$45,166</u>	<u>\$45,003</u>
<b>TOTAL ASSETS</b>	<b>\$290,207</b>	<b>\$554,027</b>
<b>LIABILITIES</b>		
Current Liabilities	\$20,299	\$27,298
Intermediate Liabilities	\$35,603	\$79,651
Long-Term Liabilities	<u>\$73,506</u>	<u>\$157,016</u>
<b>Total Bus Liabilities</b>	<b>\$129,409</b>	<b>\$263,965</b>
Personal Liabilities	<u>\$7,212</u>	<u>\$3,528</u>
<b>TOTAL LIABILITIES</b>	<b>\$136,621</b>	<b>\$267,493</b>
<b>EQUITY</b>		
Business Equity	\$115,631	\$245,059
<b>TOTAL EQUITY</b>	<b>\$153,586</b>	<b>\$286,534</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$290,207</b>	<b>\$554,027</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	3.67	8.11
Working Capital Ratio <sup>2</sup>	2.26	2.29
Debt-Asset Ratio <sup>3</sup>	0.45	0.48

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP FARMS**  
**AVERAGE FARM SIZE**

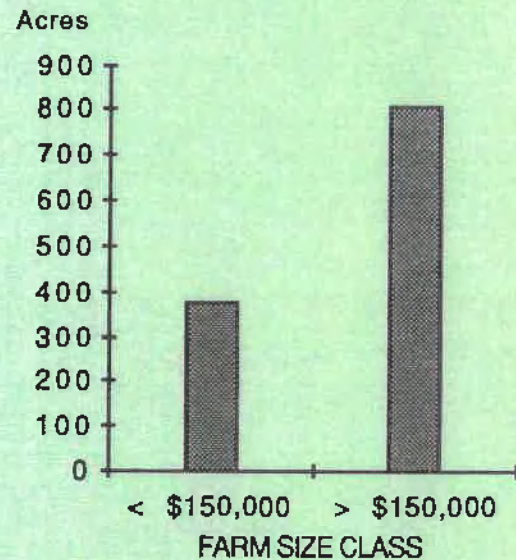


Figure 29

There is about a 425 acre difference in farm size between the two sizes of units. The difference in net farm income and the addition to owner equity between the two sizes is quite dramatic.

Assets, liabilities and owners equity for the larger units is about twice that of the smaller operations.

In comparing the ratios, the larger farms reflect a greater degree of liquidity, but both show a relatively good solvency position.

## CROP - DAIRY FARMS

Table 34  
**SUMMARY INCOME STATEMENT**  
**1988**

ITEM	<u>&lt;\$150,000</u> (N=46)	<u>&gt;\$150,000</u> (N=69)
Operating Receipts	\$95,247	\$225,306
Operating Exp. b/f Int	\$56,530	\$137,872
Interest Expense	<u>\$9,818</u>	<u>\$20,247</u>
<b>NET CASH OPERATING INC</b>	<b>\$28,898</b>	<b>\$67,186</b>
Depreciation Expense	\$10,265	\$19,554
Change in Value of Inv.	\$5,296	\$7,776
Extra Ordinary Income		
Sale of Assets	- -	- -
Debt Forgiveness	- -	<u>\$290</u>
<b>BEFORE TAX RETURN</b>	<b>\$23,930</b>	<b>\$55,698</b>
Inc Tax Paid (1987)	<u>\$1,666</u>	<u>\$3,156</u>
<b>AFTER TAX RETURN</b>	<b>\$22,264</b>	<b>\$52,542</b>
Off-Farm Income	\$6,773	\$5,541
Withdrawals (Fam Living)	<u>\$15,164</u>	<u>\$21,750</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$13,873</b>	<b>\$36,333</b>

Table 35  
**SUMMARY BALANCE SHEET**  
**Dec. 31, 1988**

ITEM	<u>&lt;\$150,000</u> (N=46)	<u>&gt;\$150,000</u> (N=69)
<b>ASSETS</b>		
Current Assets	\$49,672	\$112,189
Intermediate Assets	\$65,549	\$145,453
Long-Term Assets	<u>\$105,151</u>	<u>\$195,236</u>
<b>Total Bus Assets</b>	<b>\$220,373</b>	<b>\$452,873</b>
Personal Assets	<u>\$31,825</u>	<u>\$40,372</u>
<b>TOTAL ASSETS</b>	<b>\$251,998</b>	<b>\$493,245</b>
<b>LIABILITIES</b>		
Current Liabilities	\$10,774	\$24,049
Intermediate Liabilities	\$43,151	\$78,098
Long-Term Liabilities	<u>\$86,956</u>	<u>\$145,308</u>
<b>Total Bus Liabilities</b>	<b>\$140,881</b>	<b>\$247,454</b>
Personal Liabilities	<u>\$9,792</u>	<u>\$2,430</u>
<b>TOTAL LIABILITIES</b>	<b>\$150,673</b>	<b>\$249,884</b>
<b>EQUITY</b>		
Business Equity	\$79,492	\$205,418
<b>TOTAL EQUITY</b>	<b>\$101,324</b>	<b>\$243,361</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$251,998</b>	<b>\$493,245</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	4.75	4.86
Working Capital Ratio <sup>2</sup>	2.09	2.50
Debt-Asset Ratio <sup>3</sup>	0.59	0.51

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP-DAIRY FARMS**  
**AVERAGE FARM SIZE**

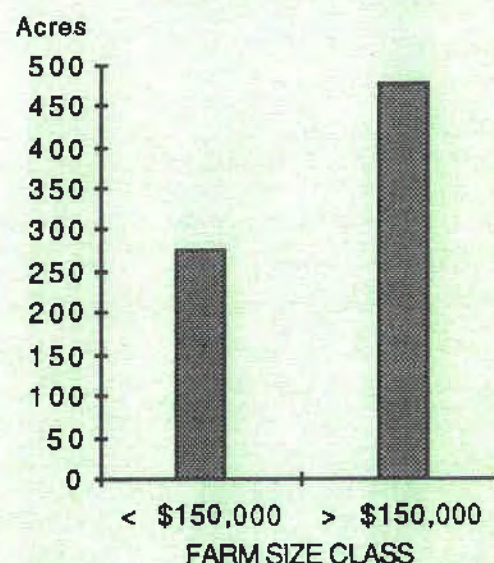


Figure 30

In comparing the larger operations with the smaller ones, receipts, expenditures, net operating income and the addition to owners equity are about 2.5 times greater.

Assets and liabilities are 1.5 times greater and net worth is over twice as large.

The larger operations reflect slightly more liquidity in comparing the ratios and both sizes of units have a higher debt-asset ratio compared to cash crop operations.

## DAIRY FARMS

Table 36  
**SUMMARY INCOME STATEMENT**  
**1988**

ITEM	<u>&lt;\$150,000</u> (N=234)	<u>&gt;\$150,000</u> (N=77)
Operating Receipts	\$99,202	\$243,518
Operating Exp. b/f Int	\$60,951	\$152,656
Interest Expense	<u>\$10,615</u>	<u>\$22,775</u>
<b>NET CASH OPERATING INC</b>	<b>\$28,235</b>	<b>\$68,087</b>
Depreciation Expense	\$8,668	\$22,680
Change in Value of Inv.	\$957	\$8,229
Extra Ordinary Income		
Sale of Assets	- -	- -
Debt Forgiveness	<u>\$115</u>	<u>\$13</u>
<b>BEFORE TAX RETURN</b>	<b>\$20,640</b>	<b>\$53,649</b>
Inc Tax Paid (1987)	<u>\$1,050</u>	<u>\$2,299</u>
<b>AFTER TAX RETURN</b>	<b>\$19,589</b>	<b>\$51,350</b>
Off-Farm Income	\$4,972	\$4,638
Withdrawals (Fam Living)	<u>\$13,921</u>	<u>\$19,964</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$10,640</b>	<b>\$36,023</b>

Table 37  
**SUMMARY BALANCE SHEET**  
**Dec. 31, 1988**

ITEM	<u>&lt;\$150,000</u> (N=234)	<u>&gt;\$150,000</u> (N=77)
<b><u>ASSETS</u></b>		
Current Assets	\$35,725	\$94,625
Intermediate Assets	\$74,964	\$186,535
Long-Term Assets	<u>\$85,362</u>	<u>\$231,734</u>
<b>Total Bus Assets</b>	<b>\$196,051</b>	<b>\$512,894</b>
Personal Assets	<u>\$28,249</u>	<u>\$42,245</u>
<b>TOTAL ASSETS</b>	<b>\$224,300</b>	<b>\$555,140</b>
<b><u>LIABILITIES</u></b>		
Current Liabilities	\$13,097	\$23,528
Intermediate Liabilities	\$50,817	\$87,199
Long-Term Liabilities	<u>\$74,568</u>	<u>\$169,620</u>
<b>Total Bus Liabilities</b>	<b>\$138,482</b>	<b>\$280,347</b>
Personal Liabilities	<u>\$1,796</u>	<u>\$833</u>
<b>TOTAL LIABILITIES</b>	<b>\$140,279</b>	<b>\$281,180</b>
<b><u>EQUITY</u></b>		
Business Equity	\$57,569	\$232,547
<b>TOTAL EQUITY</b>	<b>\$84,021</b>	<b>\$273,959</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$224,300</b>	<b>\$555,140</b>
<b><u>RATIOS:</u></b>		
Current Ratio <sup>1</sup>	2.76	4.05
Working Capital Ratio <sup>2</sup>	1.78	2.59
Debt-Asset Ratio <sup>3</sup>	0.61	0.49

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**DAIRY FARMS**  
**AVERAGE FARM SIZE**

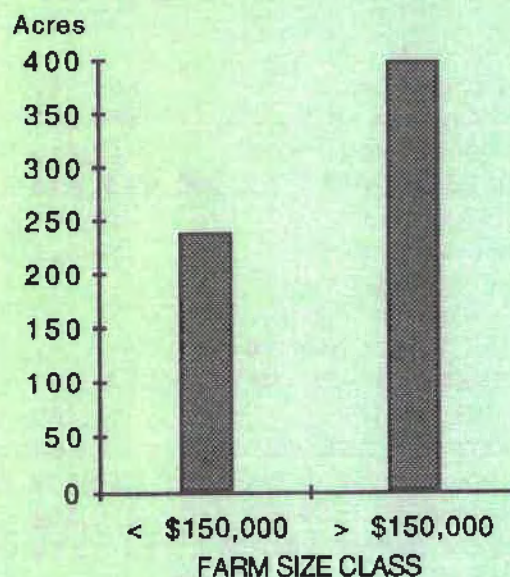


Figure 31

The number of smaller operations in this Area Summary is 3 times that of the larger units and reflect a much tighter financial situation. Receipts, expenses and net farm income is less than one-half that of the larger units and the addition to owner equity is less than one-third.

Assets and liabilities of the smaller farms are about one-half the size of the larger ones and their net worth is less than one-third of that of the larger units.

The differences in the ratios reveals the tightness of the liquidity and solvency position of the smaller dairy units.

## CROP - SWINE FARMS

Table 38  
**SUMMARY INCOME STATEMENT**  
**1988**

ITEM	<u>≤\$150,000</u> (N=45)	<u>&gt;\$150,000</u> (N=58)
Operating Receipts	\$95,247	\$225,306
Operating Exp. b/f Int	\$56,530	\$137,872
Interest Expense	<u>\$9,818</u>	<u>\$20,247</u>
<b>NET CASH OPERATING INC</b>	<b>\$28,898</b>	<b>\$67,186</b>
Depreciation Expense	\$10,265	\$19,554
Change in Value of Inv.	\$5,296	\$7,776
Extra Ordinary Income		
Sale of Assets	--	--
Debt Forgiveness	--	<u>\$290</u>
<b>BEFORE TAX RETURN</b>	<b>\$23,930</b>	<b>\$55,698</b>
Inc Tax Paid (1987)	<u>\$1,666</u>	<u>\$3,156</u>
<b>AFTER TAX RETURN</b>	<b>\$22,264</b>	<b>\$52,542</b>
Off-Farm Income	\$6,773	\$5,541
Withdrawals (Fam Living)	<u>\$15,164</u>	<u>\$21,750</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$13,873</b>	<b>\$36,333</b>

Table 39  
**SUMMARY BALANCE SHEET**  
**Dec. 31, 1988**

ITEM	<u>≤\$150,000</u> (N=45)	<u>&gt;\$150,000</u> (N=58)
<b>ASSETS</b>		
Current Assets	\$49,672	\$112,189
Intermediate Assets	\$65,549	\$145,453
Long-Term Assets	<u>\$105,151</u>	<u>\$195,236</u>
<b>Total Bus Assets</b>	<b>\$220,373</b>	<b>\$452,873</b>
Personal Assets	<u>\$31,625</u>	<u>\$40,372</u>
<b>TOTAL ASSETS</b>	<b>\$251,998</b>	<b>\$493,245</b>
<b>LIABILITIES</b>		
Current Liabilities	\$10,774	\$24,049
Intermediate Liabilities	\$43,151	\$78,098
Long-Term Liabilities	<u>\$86,956</u>	<u>\$145,308</u>
<b>Total Bus Liabilities</b>	<b>\$140,881</b>	<b>\$247,454</b>
Personal Liabilities	<u>\$9,792</u>	<u>\$2,430</u>
<b>TOTAL LIABILITIES</b>	<b>\$150,673</b>	<b>\$249,884</b>
<b>EQUITY</b>		
Business Equity	\$79,492	\$205,418
<b>TOTAL EQUITY</b>	<b>\$101,324</b>	<b>\$243,361</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$251,998</b>	<b>\$493,245</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	4.75	4.86
Working Capital Ratio <sup>2</sup>	2.09	2.50
Debt-Asset Ratio <sup>3</sup>	0.59	0.51

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP - SWINE FARMS**  
**AVERAGE FARM SIZE**

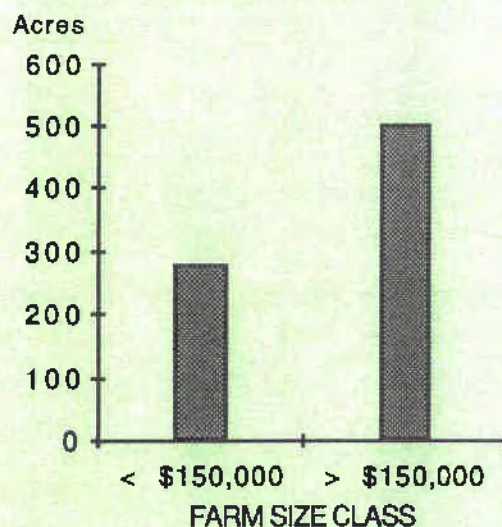


Figure 15

Figure 32

In comparing the larger units with the smaller operations, there is about a 225 acre difference in farm size; receipts, expenses, net cash farm income and the addition to owners equity are all about 2.5 times larger.

Assets, liabilities and owners equity are over 1.5 times greater for the larger units.

A comparison of the financial ratios for the two sets of operators reveals that the larger units have a slight edge in both their liquidity and solvency positions.

## ALL OTHER FARMS

Table 40  
**SUMMARY INCOME STATEMENT**  
1988

ITEM	<\$150,000 (N=60)	>\$150,000 (N=65)
Operating Receipts	\$90,740	\$278,385
Operating Exp. b/f Int	\$56,576	\$171,438
Interest Expense	<u>\$9,433</u>	<u>\$25,107</u>
<b>NET CASH OPERATING INC</b>	<b>\$24,731</b>	<b>\$81,840</b>
Depreciation Expense	\$8,204	\$18,892
Change in Value of Inv.	\$6,247	\$17,073
Extra Ordinary Income		
Sale of Assets	--	--
Debt Forgiveness	--	--
<b>BEFORE TAX RETURN</b>	<b>\$22,774</b>	<b>\$80,020</b>
Inc Tax Paid (1987)	<u>\$2,196</u>	<u>\$3,298</u>
<b>AFTER TAX RETURN</b>	<b>\$20,577</b>	<b>\$76,722</b>
Off-Farm Income	\$10,780	\$7,130
Withdrawals (Fam Living)	<u>\$14,129</u>	<u>\$19,932</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$17,248</b>	<b>\$83,921</b>

Table 41  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

ITEM	< \$150,000 (N=60)	>\$150,000 (N=65)
<b>ASSETS</b>		
Current Assets	\$56,340	\$153,009
Intermediate Assets	\$62,967	\$111,309
Long-Term Assets	<u>\$109,204</u>	<u>\$216,111</u>
<b>Total Bus Assets</b>	<b>\$228,511</b>	<b>\$480,426</b>
Personal Assets	<u>\$34,843</u>	<u>\$42,671</u>
<b>TOTAL ASSETS</b>	<b>\$263,354</b>	<b>\$523,096</b>
<b>LIABILITIES</b>		
Current Liabilities	\$16,817	\$27,853
Intermediate Liabilities	\$35,334	\$96,248
Long-Term Liabilities	<u>\$71,790</u>	<u>\$155,506</u>
<b>Total Bus Liabilities</b>	<b>\$123,940</b>	<b>\$279,606</b>
Personal Liabilities	<u>\$4,388</u>	<u>\$13,955</u>
<b>TOTAL LIABILITIES</b>	<b>\$128,329</b>	<b>\$293,560</b>
<b>EQUITY</b>		
Business Equity	\$104,571	\$200,819
<b>TOTAL EQUITY</b>	<b>\$135,025</b>	<b>\$229,536</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$263,354</b>	<b>\$523,096</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	3.21	5.90
Working Capital Ratio <sup>2</sup>	2.74	2.21
Debt-Asset Ratio <sup>3</sup>	0.49	0.54

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**ALL OTHER FARMS**  
**AVERAGE FARM SIZE**

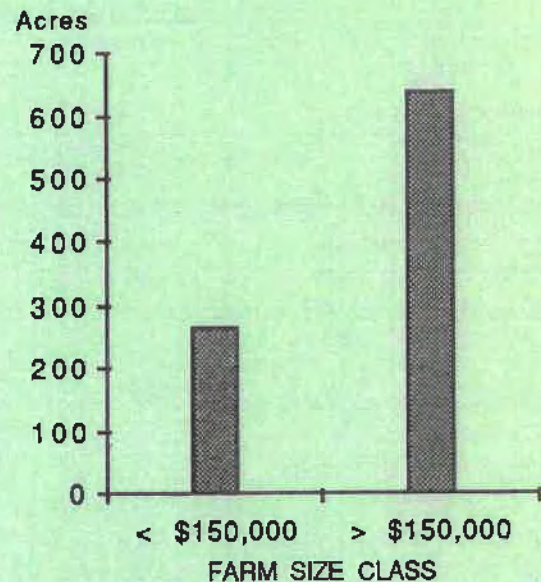


Figure 33

In comparing the larger operations with the smaller, there is about a 420 acre difference in farm size; receipts and expenses are approximately 3-4 times greater; the addition to owners equity is over 3 times greater; assets, liabilities and owners equity is approximately twice as great.

In comparing the financial ratios, both groups of operators are in a relatively strong position.

**SOUTH-SOUTHWEST  
AREA SUMMARY**

**AREA 4**

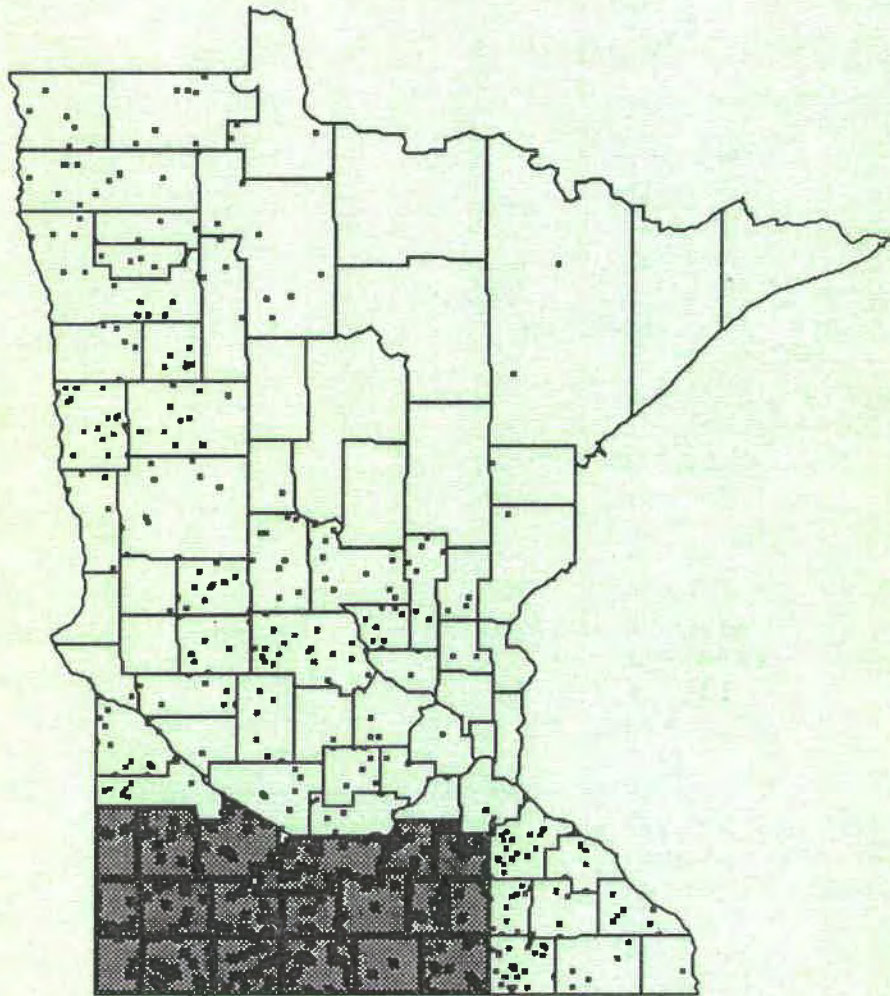


Figure 34

## CROP FARMS

Table 42  
**SUMMARY INCOME STATEMENT**  
1988

ITEM	<\$150,000 (N=137)	>\$150,000 (N=73)
Operating Receipts	\$83,022	\$235,953
Operating Exp. b/f Int	\$52,185	\$152,305
Interest Expense	<u>\$7,891</u>	<u>\$19,461</u>
<b>NET CASH OPERATING INC</b>	<b>\$22,945</b>	<b>\$64,177</b>
Depreciation Expense	\$7,422	\$17,219
Change in Value of Inv.	\$8,425	\$15,582
Extra Ordinary Income		
Sale of Assets	- -	- -
Debt Forgiveness	- -	- -
<b>BEFORE TAX RETURN</b>	<b>\$23,948</b>	<b>\$62,540</b>
Inc Tax Paid (1987)	<u>\$2,971</u>	<u>\$4,824</u>
<b>AFTER TAX RETURN</b>	<b>\$20,977</b>	<b>\$57,717</b>
Off-Farm Income	\$11,697	\$10,265
Withdrawals (Fam Living)	<u>\$15,455</u>	<u>\$20,539</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$17,219</b>	<b>\$47,443</b>

Table 43  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

ITEM	<\$150,000 (N=137)	>\$150,000 (N=73)
<b>ASSETS</b>		
Current Assets	\$58,291	\$142,119
Intermediate Assets	\$37,984	\$81,417
Long-Term Assets	<u>\$100,075</u>	<u>\$238,230</u>
<b>Total Bus Assets</b>	<b>\$196,349</b>	<b>\$461,766</b>
Personal Assets	<u>\$31,954</u>	<u>\$47,164</u>
<b>TOTAL ASSETS</b>	<b>\$228,303</b>	<b>\$508,930</b>
<b>LIABILITIES</b>		
Current Liabilities	\$15,285	\$42,738
Intermediate Liabilities	\$23,977	\$65,691
Long-Term Liabilities	<u>\$59,527</u>	<u>\$127,983</u>
<b>Total Bus Liabilities</b>	<b>\$98,789</b>	<b>\$236,412</b>
Personal Liabilities	<u>\$2,842</u>	<u>\$7,676</u>
<b>TOTAL LIABILITIES</b>	<b>\$101,631</b>	<b>\$244,088</b>
<b>EQUITY</b>		
Business Equity	\$97,560	\$225,354
<b>TOTAL EQUITY</b>	<b>\$126,672</b>	<b>\$264,841</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$228,303</b>	<b>\$508,930</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	3.74	3.63
Working Capital Ratio <sup>2</sup>	2.39	2.12
Debt-Asset Ratio <sup>3</sup>	0.45	0.47

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP FARMS**  
**AVERAGE FARM SIZE**

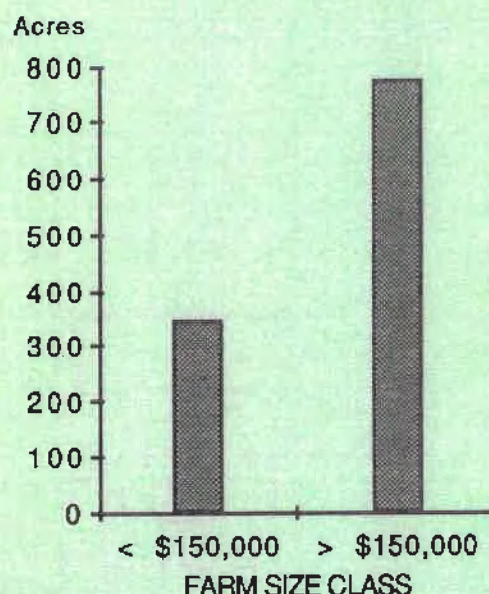


Figure 35

There is about a 400 acre difference in farm size between the two sizes of operations. Receipts, expenses, net cash operating income and the addition to owners equity are all over 2.5 times greater for the larger farming units.

Assets, liabilities and owners equity of the larger units are 2.0-2.5 times greater than the smaller ones.

A comparison of the financial ratios reveals that both sizes of operations are in a relatively good financial position in terms of liquidity and solvency.

## CROP - DAIRY FARMS

Table 44  
**SUMMARY INCOME STATEMENT**  
1988

ITEM	<\$150,000 (N=47)	>\$150,000 (N=49)
Operating Receipts	\$99,778	\$247,548
Operating Exp. b/f Int	\$58,516	\$148,244
Interest Expense	\$9,982	\$23,626
<b>NET CASH OPERATING INC</b>	<b>\$31,280</b>	<b>\$75,679</b>
Depreciation Expense	\$10,029	\$27,940
Change in Value of Inv.	\$3,926	\$17,302
Extra Ordinary Income		
Sale of Assets	--	--
Debt Forgiveness	--	--
<b>BEFORE TAX RETURN</b>	<b>\$25,177</b>	<b>\$65,040</b>
Inc Tax Paid (1987)	\$2,019	\$3,711
<b>AFTER TAX RETURN</b>	<b>\$23,158</b>	<b>\$61,330</b>
Off-Farm Income	\$5,872	\$8,016
Withdrawals (Farm Living)	\$16,032	\$20,498
<b>ADD TO OWNER EQUITY</b>	<b>\$12,997</b>	<b>\$48,849</b>

Table 45  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

ITEM	<\$150,000 (N=47)	>\$150,000 (N=49)
<b>ASSETS</b>		
Current Assets	\$55,498	\$138,988
Intermediate Assets	\$70,549	\$157,988
Long-Term Assets	\$108,927	\$265,235
<b>Total Bus Assets</b>	<b>\$234,975</b>	<b>\$562,211</b>
Personal Assets	\$32,007	\$43,186
<b>TOTAL ASSETS</b>	<b>\$266,982</b>	<b>\$605,397</b>
<b>LIABILITIES</b>		
Current Liabilities	\$9,920	\$16,728
Intermediate Liabilities	\$34,752	\$83,258
Long-Term Liabilities	\$68,053	\$159,973
<b>Total Bus Liabilities</b>	<b>\$112,725</b>	<b>\$259,959</b>
Personal Liabilities	\$2,062	\$702
<b>TOTAL LIABILITIES</b>	<b>\$114,787</b>	<b>\$260,662</b>
<b>EQUITY</b>		
Business Equity	\$122,250	\$302,251
<b>TOTAL EQUITY</b>	<b>\$152,195</b>	<b>\$349,735</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$266,982</b>	<b>\$605,397</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	5.70	8.39
Working Capital Ratio <sup>2</sup>	2.96	2.91
Debt-Asset Ratio <sup>3</sup>	0.42	0.44

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP-DAIRY FARMS**  
**AVERAGE FARM SIZE**

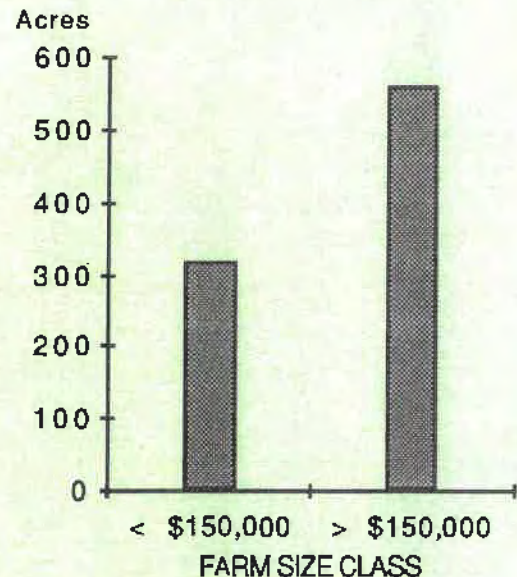


Figure 36

The larger units operate about 250 acres more than the smaller set of farms.

Receipts, expenses and net cash farm income is about 2.5 times greater for the larger farms and the addition to owners equity is nearly 4 times greater.

Assets, liabilities and owners equity for the larger operations are all over twice the level of the smaller units.

The financial ratios for both sizes of operation reflect a relatively good situation.

## DAIRY FARMS

Table 46  
**SUMMARY INCOME STATEMENT**  
1988

ITEM	<\$150,000 (N=32)	>\$150,000 (N=22)
Operating Receipts	\$95,371	\$191,211
Operating Exp. b/f Int	\$57,316	\$119,492
Interest Expense	<u>\$10,011</u>	<u>\$22,567</u>
<b>NET CASH OPERATING INC</b>	<b>\$28,043</b>	<b>\$49,151</b>
Depreciation Expense	\$9,916	\$21,951
Change in Value of Inv.	\$3,288	\$5,063
Extra Ordinary Income		
Sale of Assets	--	--
Debt Forgiveness	--	--
<b>BEFORE TAX RETURN</b>	<b>\$21,415</b>	<b>\$32,264</b>
Inc Tax Paid (1987)	<u>\$2,440</u>	<u>\$2,626</u>
<b>AFTER TAX RETURN</b>	<b>\$18,975</b>	<b>\$29,638</b>
Off-Farm Income	\$8,236	\$5,301
Withdrawals (Fam Living)	<u>\$14,185</u>	<u>\$17,683</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$13,026</b>	<b>\$17,257</b>

Table 47  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

ITEM	<\$150,000 (N=32)	>\$150,000 (N=22)
<b>ASSETS</b>		
Current Assets	\$44,806	\$85,411
Intermediate Assets	\$71,375	\$139,102
Long-Term Assets	<u>\$103,797</u>	<u>\$215,462</u>
<b>Total Bus Assets</b>	<b>\$219,977</b>	<b>\$439,974</b>
Personal Assets	<u>\$27,377</u>	<u>\$56,053</u>
<b>TOTAL ASSETS</b>	<b>\$247,354</b>	<b>\$496,027</b>
<b>LIABILITIES</b>		
Current Liabilities	\$9,127	\$11,351
Intermediate Liabilities	\$35,357	\$68,319
Long-Term Liabilities	<u>\$60,929</u>	<u>\$170,820</u>
<b>Total Bus Liabilities</b>	<b>\$105,413</b>	<b>\$250,490</b>
Personal Liabilities	<u>\$1,975</u>	<u>\$1,128</u>
<b>TOTAL LIABILITIES</b>	<b>\$107,388</b>	<b>\$251,668</b>
<b>EQUITY</b>		
Business Equity	\$114,563	\$189,484
<b>TOTAL EQUITY</b>	<b>\$139,966</b>	<b>\$244,359</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$247,354</b>	<b>\$496,027</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	4.91	7.52
Working Capital Ratio <sup>2</sup>	2.61	2.82
Debt-Asset Ratio <sup>3</sup>	0.43	0.51

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**DAIRY FARMS**  
**AVERAGE FARM SIZE**

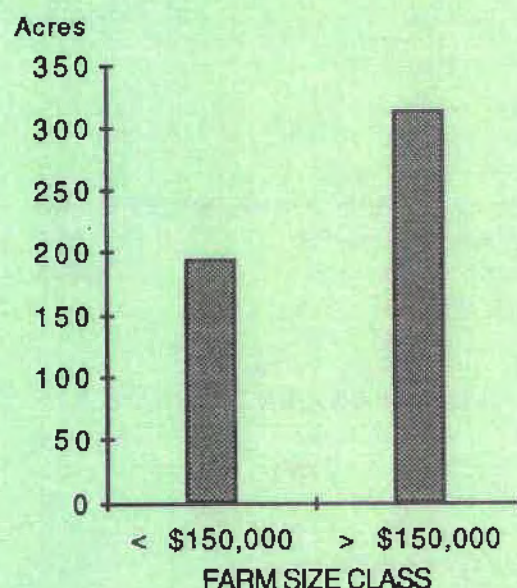


Figure 37

There is a little over a 100 acre difference in farm size between the two sizes of operation.

Receipts and expenses for the larger units are about twice that of the smaller units, but the difference in the "bottom line" is only about \$4,000.

For the larger units, assets and liabilities are about twice the size of the smaller units and the financial ratios reveal a relatively good position for both sets of operators.

## CROP - SWINE FARMS

Table 48  
**SUMMARY INCOME STATEMENT**  
**1988**

ITEM	<u>&lt;\$150,000</u> (N=109)	<u>&gt;\$150,000</u> (N=159)
Operating Receipts	\$99,024	\$261,139
Operating Exp. b/f Int	\$62,452	\$165,621
Interest Expense	<u>\$7,031</u>	<u>\$16,009</u>
<b>NET CASH OPERATING INC</b>	<b>\$29,540</b>	<b>\$79,510</b>
Depreciation Expense	\$8,889	\$20,119
Change in Value of Inv.	\$6,090	(\$964)
Extra Ordinary Income		
Sale of Assets	- -	\$1,258
Debt Forgiveness	- -	<u>\$590</u>
<b>BEFORE TAX RETURN</b>	<b>\$26,742</b>	<b>\$60,275</b>
Inc Tax Paid (1987)	<u>\$2,746</u>	<u>\$6,307</u>
<b>AFTER TAX RETURN</b>	<b>\$23,995</b>	<b>\$53,967</b>
Off-Farm Income	\$9,946	\$8,549
Withdrawals (Fam Living)	<u>\$16,685</u>	<u>\$23,217</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$17,256</b>	<b>\$39,300</b>

Table 49  
**SUMMARY BALANCE SHEET**  
**Dec. 31, 1988**

ITEM	<u>&lt;\$150,000</u> (N=109)	<u>&gt;\$150,000</u> (N=159)
<b><u>ASSETS</u></b>		
Current Assets	\$63,911	\$142,819
Intermediate Assets	\$40,512	\$81,341
Long-Term Assets	<u>\$91,089</u>	<u>\$218,596</u>
<b>Total Bus Assets</b>	<b>\$195,512</b>	<b>\$442,756</b>
Personal Assets	<u>\$32,095</u>	<u>\$45,005</u>
<b>TOTAL ASSETS</b>	<b>\$227,607</b>	<b>\$487,761</b>
<b><u>LIABILITIES</u></b>		
Current Liabilities	\$9,794	\$32,668
Intermediate Liabilities	\$31,313	\$49,263
Long-Term Liabilities	<u>\$49,667</u>	<u>\$113,959</u>
<b>Total Bus Liabilities</b>	<b>\$90,774</b>	<b>\$195,890</b>
Personal Liabilities	<u>\$2,162</u>	<u>\$3,133</u>
<b>TOTAL LIABILITIES</b>	<b>\$92,936</b>	<b>\$199,023</b>
<b><u>EQUITY</u></b>		
Business Equity	\$104,737	\$246,866
<b>TOTAL EQUITY</b>	<b>\$134,671</b>	<b>\$288,738</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$227,607</b>	<b>\$487,761</b>
<b><u>RATIOS:</u></b>		
Current Ratio <sup>1</sup>	6.49	4.37
Working Capital Ratio <sup>2</sup>	2.76	2.85
Debt-Asset Ratio <sup>3</sup>	0.37	0.40

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**CROP-SWINE FARMS**  
**AVERAGE FARM SIZE**

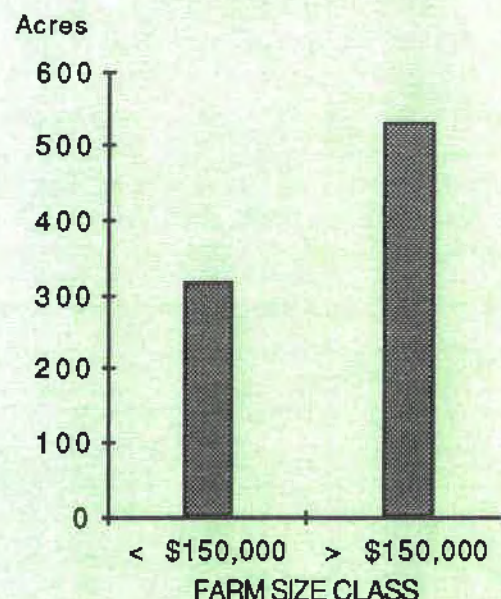


Figure 38

The larger units operate about 525 acres of land compared to 325 acres for the smaller farms.

Receipts, expenses, net cash operating income and the addition to owners equity are all 2.0-2.5 times greater for the larger sized farms.

Assets, liabilities and owners equity for the larger farms are about twice that of the smaller ones.

The financial ratios of both sets of operations reveals a relatively sound financial position.

## ALL OTHER FARMS

Table 50  
**SUMMARY INCOME STATEMENT**  
1988

	<u>&lt;\$150,000</u>	<u>&gt;\$150,000</u>
	(N=110)	(N=101)
ITEM		
Operating Receipts	\$92,459	\$306,050
Operating Exp. b/f Int	\$59,490	\$164,587
Interest Expense	<u>\$8,284</u>	<u>\$19,447</u>
<b>NET CASH OPERATING INC</b>	<b>\$24,685</b>	<b>122,015</b>
Depreciation Expense	\$7,394	\$17,570
Change in Value of Inv.	\$7,183	\$25,251
Extra Ordinary Income		
Sale of Assets	--	--
Debt Forgiveness	--	--
<b>BEFORE TAX RETURN</b>	<b>\$24,475</b>	<b>129,697</b>
Inc Tax Paid (1987)	<u>\$1,718</u>	<u>\$4,049</u>
<b>AFTER TAX RETURN</b>	<b>\$22,756</b>	<b>125,648</b>
Off-Farm Income	\$10,798	\$9,894
Withdrawals (Fam Living)	<u>\$15,648</u>	<u>\$22,036</u>
<b>ADD TO OWNER EQUITY</b>	<b>\$17,907</b>	<b>113,506</b>

Table 51  
**SUMMARY BALANCE SHEET**  
Dec. 31, 1988

	<u>&lt; \$150,000</u>	<u>&gt;\$150,000</u>
	(N=110)	(N=101)
ITEM		
<b>ASSETS</b>		
Current Assets	\$55,182	\$176,822
Intermediate Assets	\$42,580	\$92,971
Long-Term Assets	<u>\$95,061</u>	<u>\$216,789</u>
<b>Total Bus Assets</b>	<b>\$192,823</b>	<b>\$486,583</b>
Personal Assets	<u>\$30,155</u>	<u>\$45,139</u>
<b>TOTAL ASSETS</b>	<b>\$222,979</b>	<b>\$531,722</b>
<b>LIABILITIES</b>		
Current Liabilities	\$13,371	\$55,033
Intermediate Liabilities	\$34,900	\$73,029
Long-Term Liabilities	<u>\$54,553</u>	<u>\$109,904</u>
<b>Total Bus Liabilities</b>	<b>\$102,825</b>	<b>\$237,966</b>
Personal Liabilities	<u>\$5,678</u>	<u>\$3,711</u>
<b>TOTAL LIABILITIES</b>	<b>\$108,503</b>	<b>\$241,677</b>
<b>EQUITY</b>		
Business Equity	\$89,999	\$248,617
<b>TOTAL EQUITY</b>	<b>\$114,476</b>	<b>\$290,045</b>
<b>TOT LIAB &amp; OWNER EQUITY</b>	<b>\$222,979</b>	<b>\$531,722</b>
<b>RATIOS:</b>		
Current Ratio <sup>1</sup>	4.25	3.38
Working Capital Ratio <sup>2</sup>	2.05	2.08
Debt-Asset Ratio <sup>3</sup>	0.48	0.46

<sup>1</sup> Current assets divided by current liabilities.

<sup>2</sup> Current plus intermediate assets divided by current plus intermediate liabilities.

<sup>3</sup> Total liabilities divided by total assets.

**ALL OTHER FARMS**  
**AVERAGE FARM SIZE**

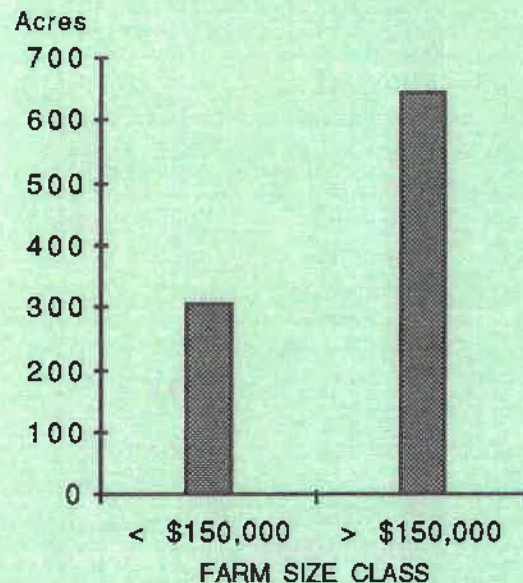


Figure 39

In comparing the larger operations with the smaller, there is about a 330 acre difference in farm size; receipts and expenses are approximately 3 times greater; the addition to owners equity is over 6 times greater; assets, liabilities and owners equity is approximately twice as great.

In comparing the financial ratios, both groups of operators are in a relatively strong position.

## **SECTION VI**

### **APPENDICES**

- A. MINNESOTA FARM FINANCIAL SURVEY
- B. FARM OPERATOR CHARACTERICS
- C. MINNESOTA PRICES FOR CROPS & LIVESTOCK
- D. MINESOTA FARM INCOME INDICATORS
- E. MINNESOTA BALANCE SHEET & MAJOR CREDITORS
- F. MINNESOTA FARMLAND VALUES
- G. RENTER-OPERATOR vs OWNER-OPERATOR CHARACTERICS
- H. FmHA AND FCS LOAN STATUS
- I. HISTORICAL INTEREST RATES

## APPENDIX A

### MINNESOTA FARM FINANCIAL SURVEY

#### MINNESOTA DEPARTMENT OF AGRICULTURE

1. County of Farming Operation

\_\_\_\_\_

3. Age of Operator

\_\_\_\_\_

2. Total Acres in 1988 Operation  
(Tillable and Nontillable)

a. Owned \_\_\_\_\_ Acres

b. Cash Rented \_\_\_\_\_ Acres

c. Share Rented \_\_\_\_\_ Acres

d. Rented to Others \_\_\_\_\_ Acres

Total Land Operated \_\_\_\_\_ Acres  
(a+b+c-d)

4. Report Current Asset Values and Outstanding Debt on Jan. 1, 1988 and Jan. 1, 1989, below:

#### ASSETS

##### Current Market Value

	<u>Jan. 1, 1988</u>	<u>Jan. 1, 1989</u>
<u>Current</u> Farm Bus. Assets	\$ _____	\$ _____
<u>Intermediate</u> Farm Bus. Assets	\$ _____	\$ _____
<u>Long-Term</u> Farm Bus. Assets	\$ _____	\$ _____
<u>Total</u> Business Assets	\$ _____	\$ _____
<u>Personal</u> (Non-Business) Assets	\$ _____	\$ _____
Total Assets	\$ _____	\$ _____

#### LIABILITIES

##### Outstanding Liabilities

	<u>Jan. 1, 1988</u>	<u>Jan. 1, 1989</u>
<u>Current</u> Farm Bus. Debt	\$ _____	\$ _____
<u>Intermediate</u> Farm Bus. Debt	\$ _____	\$ _____
<u>Long-Term</u> Farm Bus. Debt	\$ _____	\$ _____
<u>Total</u> Business Debt	\$ _____	\$ _____
<u>Personal</u> (Non-Business) Debt	\$ _____	\$ _____
Total Debt	\$ _____	\$ _____

5. Liquidation of Assets. Proceeds from the liquidation of assets in 1988. (Include the sale of real estate, equipment, breeding stock, etc.).

Real Estate \$ \_\_\_\_\_  
Non-Real Estate \$ \_\_\_\_\_

6. Debt Forgiveness. Write-downs or write-offs of principal and interest.

A. Principal

Real Estate \$ \_\_\_\_\_  
Non-Real Estate \$ \_\_\_\_\_

B. Interest

Real Estate \$ \_\_\_\_\_  
Non-Real Estate \$ \_\_\_\_\_

7. Total Cash Farm Receipts for agricultural products sold during 1988. (Include government payments and CCC "loans" on 1987 crops that were taken out after January 1, 1988, and forfeited before January 1, 1989).

Cash Grain	\$ _____	Other (Crops/Livestock):	
Dairy Livestock	\$ _____		\$ _____
Dairy Products	\$ _____	Govt. Payments	\$ _____
Poultry/Eggs	\$ _____	Other (Farm Related):	
Beef	\$ _____		\$ _____
Swine	\$ _____	TOTAL RECEIPTS	\$ _____

8. Total Off-Farm Income earned in 1988 by operator(s) and/or their spouses who work this farm.  
\$ \_\_\_\_\_

9. Change in Value of Inventories for 1988. (Feed, Grain, Marketing Livestock, Supplies, Prepaid Expenses, Accounts Receivable, Accounts Payable; **DO NOT INCLUDE** Breeding Livestock, Machinery, Buildings or Land).  
\$ \_\_\_\_\_

10. Total Cash Production Expenses for 1988. (Include the cost of feed, fuel, interest, taxes, seed, fertilizer, etc. **DO NOT** include depreciation. \$ \_\_\_\_\_

A. Total Depreciation Expense for 1988 \$ \_\_\_\_\_

Total Paid

B. Interest Expense for 1988 \$ \_\_\_\_\_

11. In Addition to the Production Expenses of Question 10, record the Other "Fixed" Obligations for 1988.

Total Paid

A. Annual Principal Reduction Payments

1. Real Estate \$ \_\_\_\_\_

2. Non-Real Estate \$ \_\_\_\_\_

B. Family Living Expenses \$ \_\_\_\_\_

C. Social Security & Income Taxes \$ \_\_\_\_\_

D. Other (Specify) \_\_\_\_\_ \$ \_\_\_\_\_

12. Purchase of New Capital Assets: Cash or Cash Down Payment for the purchase of real estate, equipment, breeding stock, etc.

A. Real Estate \$ \_\_\_\_\_

B. Non-Real Estate \$ \_\_\_\_\_

13. Major Creditors (Identify the major creditor for real estate and non-real estate loans).

A. Real Estate \_\_\_\_\_ (Code: 1-6)

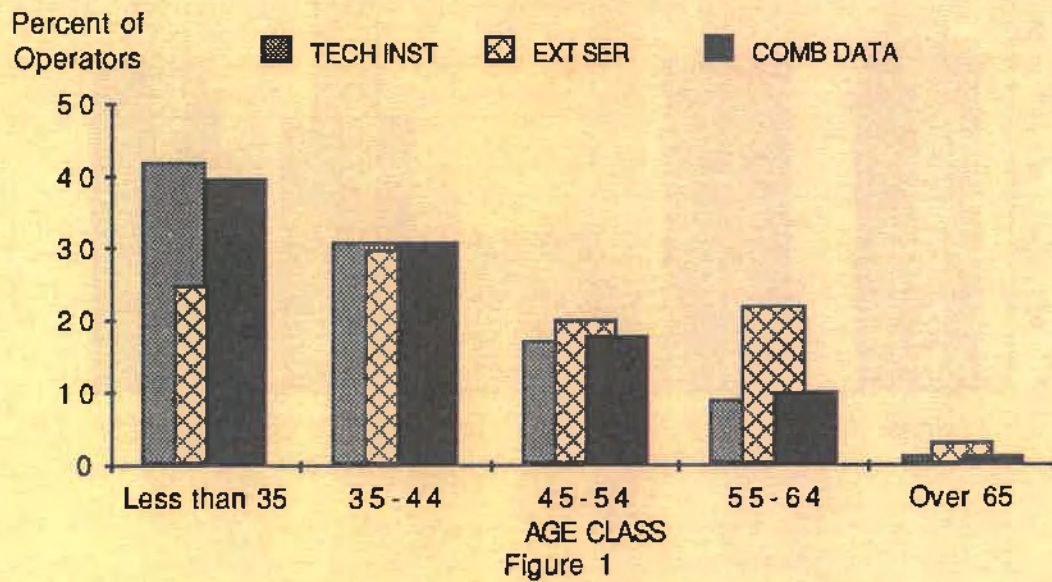
B. Non-Real Estate \_\_\_\_\_ (Code: 1-6)

(Codes: 1-FCS; 2-Com. Bank; 3-FmHA; 4-Private; 5-Ins. Co.; 6-Other)

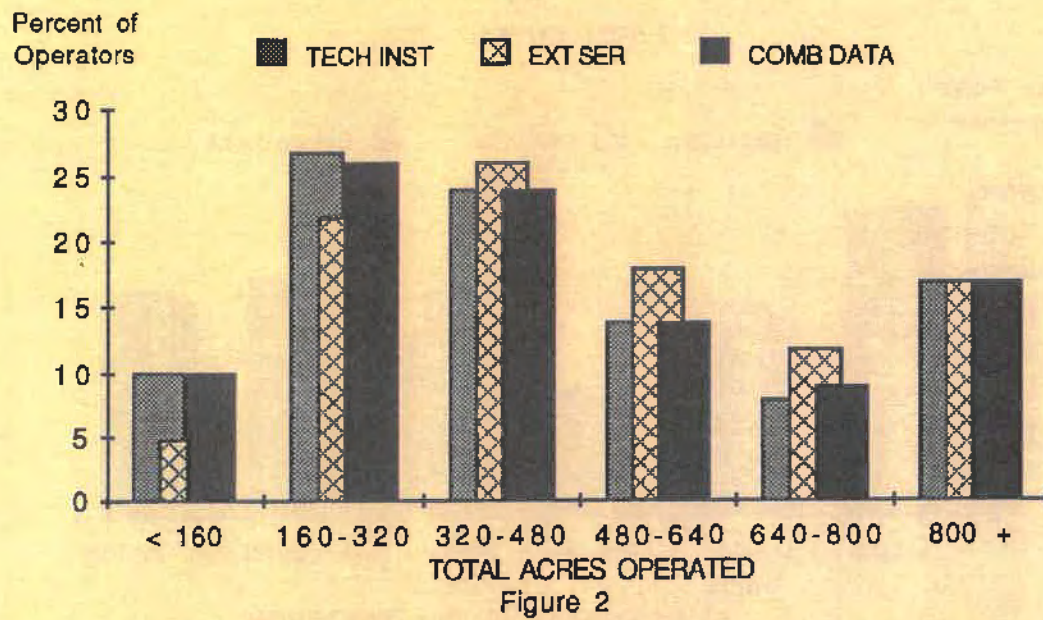
## APPENDIX B

### FARM OPERATOR CHARACTERISTICS

#### FARM OPERATOR AGE DISTRIBUTION 1988



#### FARM SIZE DISTRIBUTION 1988



### FARM ENTERPRISE DISTRIBUTION

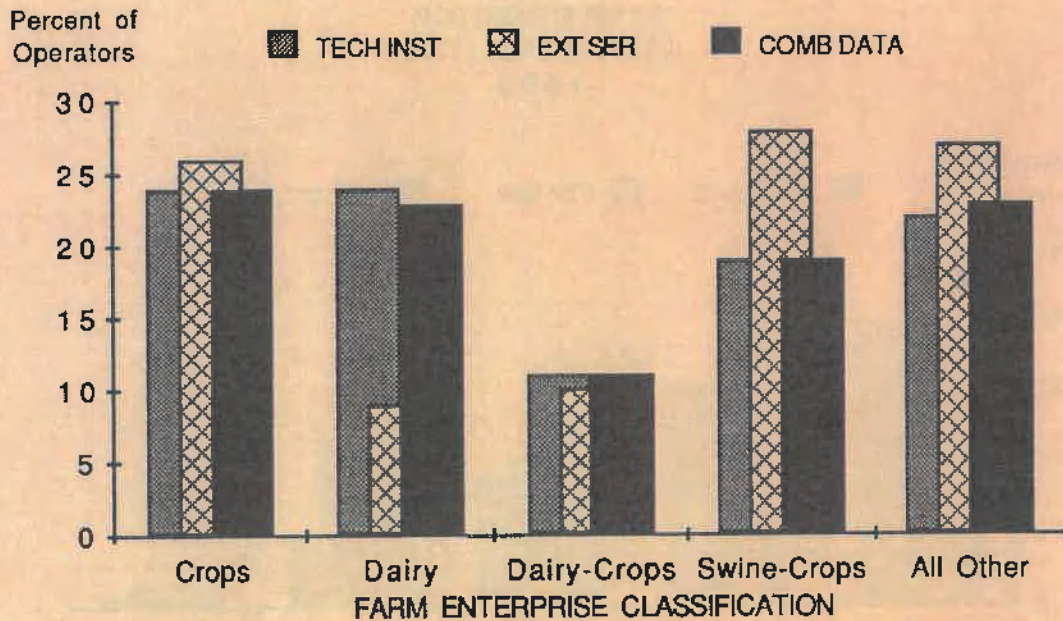


Figure 3

### AVERAGE FARM SIZE by FARM ENTERPRISE

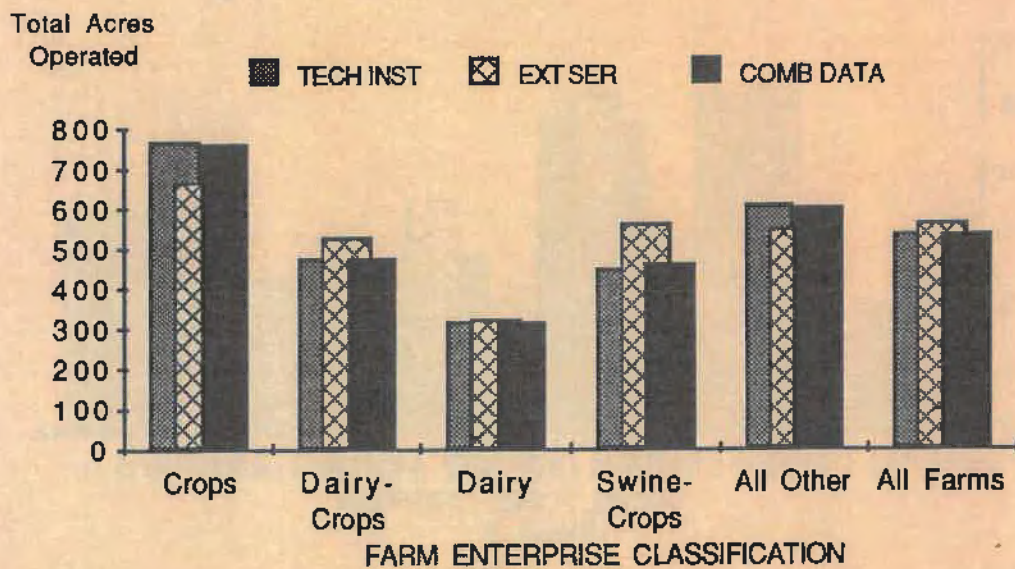


Figure 4

### CASH FARM RECEIPTS DISTRIBUTION 1988

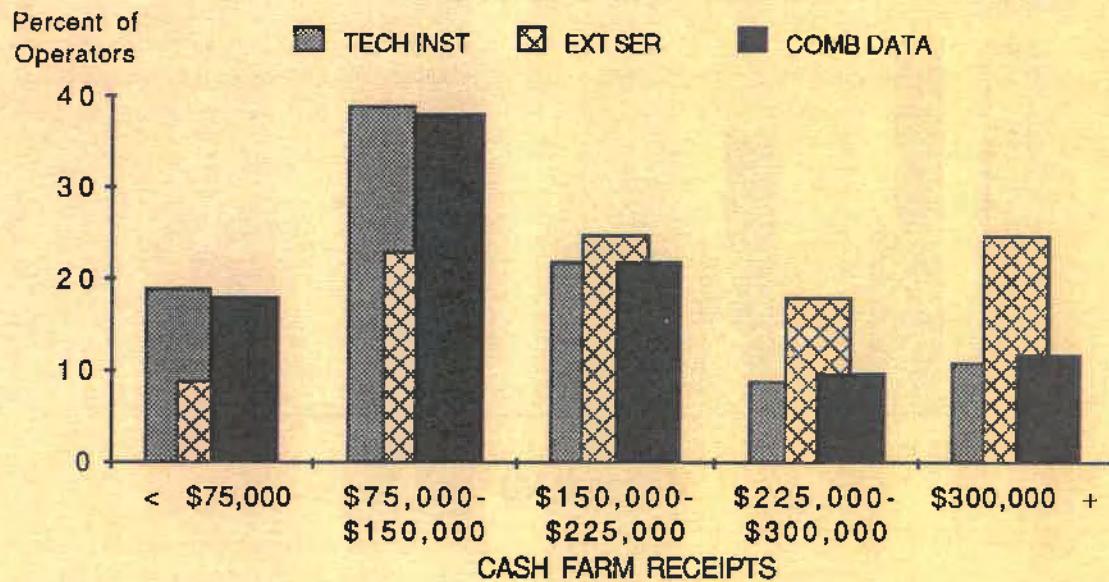


Figure 5

### OFF-FARM INCOME DISTRIBUTION 1988

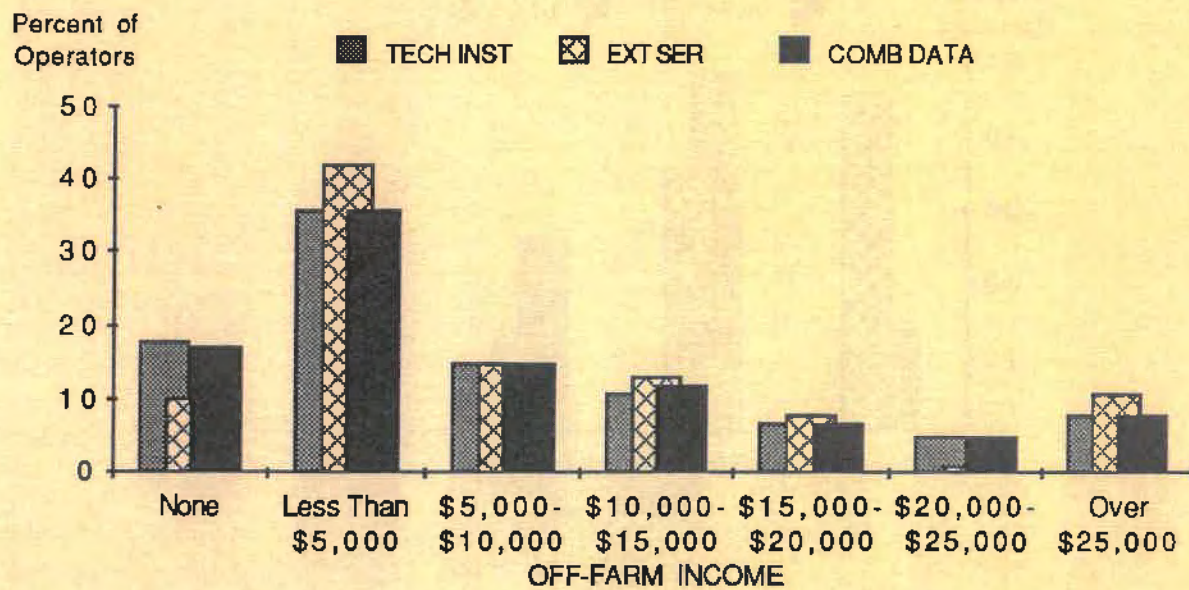


Figure 6

# **OPERATOR AGE DISTRIBUTION** **'88 MFFS vs '87 Census**

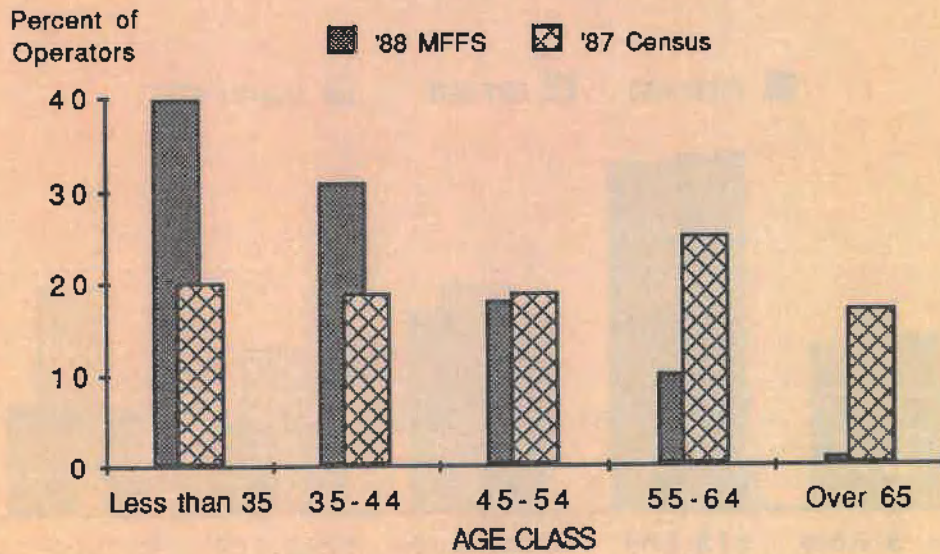


Figure 7

# **FARM SIZE DISTRIBUTION** **'88 MFFS vs '87 CENSUS**

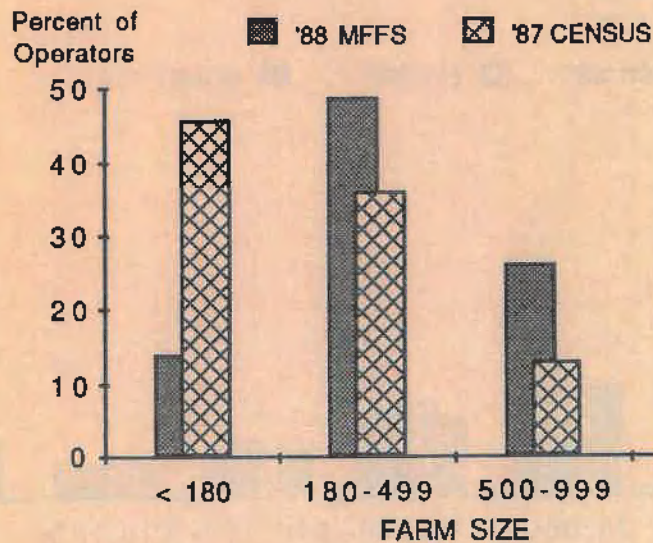


Figure 8

**VALUE OF SALES DISTRIBUTION  
'88 MFFS vs '87 CENSUS**

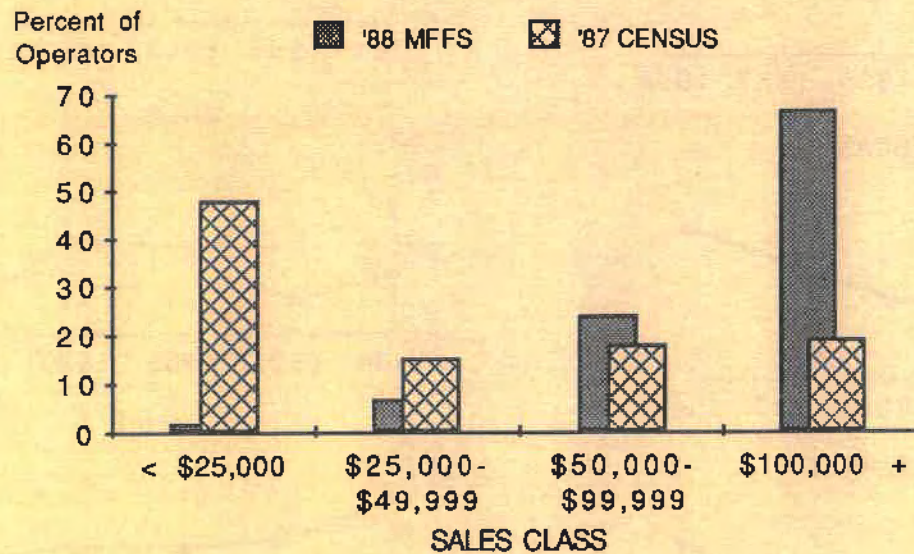


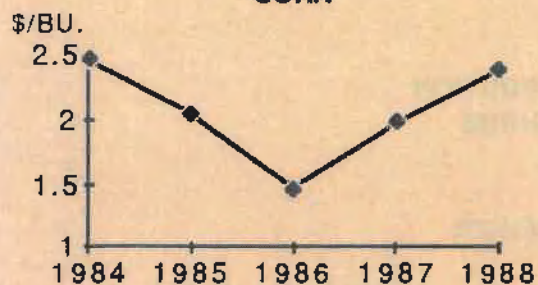
Figure 9

Table 1  
FARM FINANCIAL CONDITON  
BY  
DEBT-ASSET RATIO  
1988

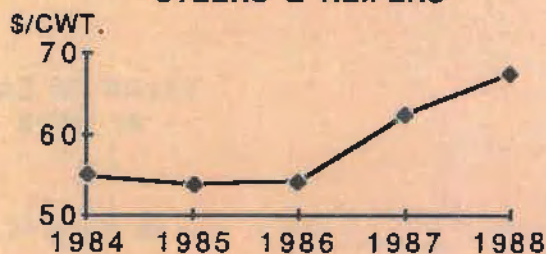
FINANCIAL CONDITION	DEBT-ASSET RATIO			Total
	< 40	40-70	> 70	
VERY WEAK	118	71	52	241
WEAK	50	163	305	518
MODERATE	59	232	207	498
STRONG	<u>760</u>	<u>471</u>	<u>164</u>	<u>1395</u>
Total	987	937	728	2652

# **APPENDIX C** **MINNESOTA PRICES FOR CROPS AND LIVESTOCK**

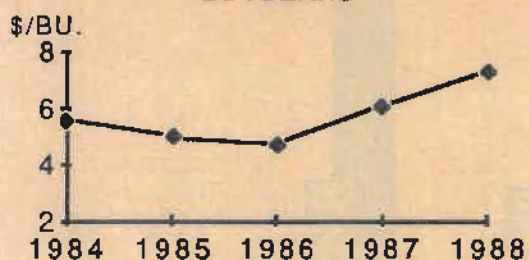
**CORN**



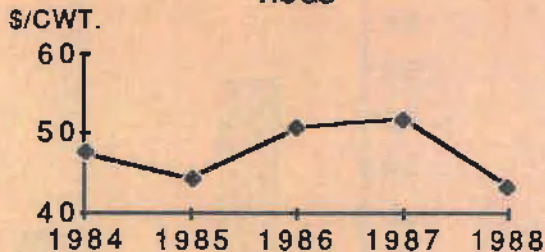
**STEERS & HEIFERS**



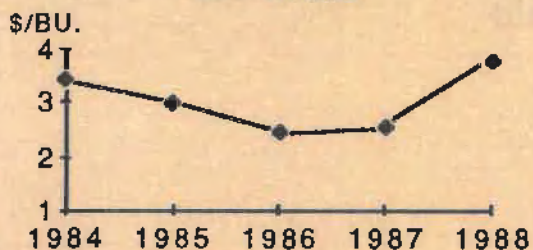
**SOYBEANS**



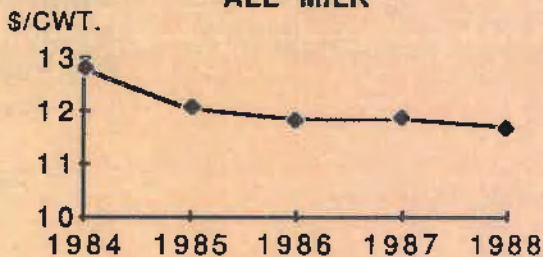
**HOGS**



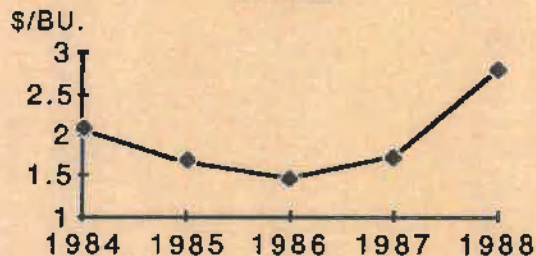
**ALL WHEAT**



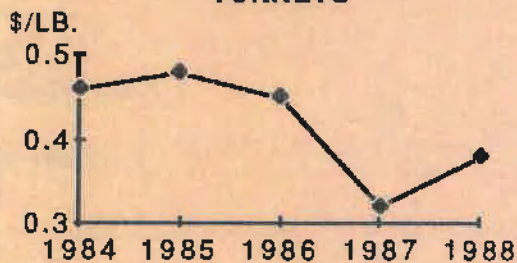
**ALL MILK**



**BARLEY**



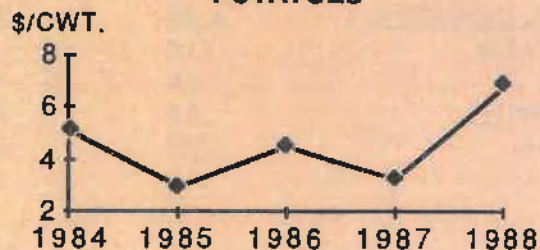
**TURKEYS**



**ALL HAY**



**POTATOES**



Source: Minnesota Agriculture Statistics, 1989; MINNESOTA AGRICULTURAL STATISTICS SERVICE.

## APPENDIX D

### MINNESOTA FARM INCOME INDICATORS

#### MINNESOTA FARM INCOME INDICATORS<sup>1</sup>

	<u>1983</u>	<u>1984</u>	<u>1985</u> (Million Dollars)	<u>1986</u>	<u>1987</u>
Cash Farm Receipts	\$7,118.30	\$6,699.90	\$7,229.10	\$6,965.30	\$7,149.50
Cash Production Exp.	\$5,127.80	\$5,261.10	\$4,916.00	\$4,401.00	\$4,446.00
Net Cash Farm Inc.	\$1,990.50	\$1,438.80	\$2,313.00	\$2,564.30	\$2,703.30
Off-Farm Income	\$984.20	\$1,035.00	\$1,132.60	\$1,186.80	\$1,243.40
Total Cash Income	\$2,974.70	\$2,473.80	\$3,445.60	\$3,751.10	\$3,946.70
Number of Farms	102,000	101,000	96,000	93,000	92,000

#### PER FARM

Cash Farm Receipts	\$69,787	\$66,336	\$75,303	\$74,896	\$77,712
Cash Production Exp.	\$50,273	\$52,090	\$51,209	\$47,323	\$48,326
Net Cash Farm Inc.	\$19,514	\$14,245	\$24,094	\$27,573	\$29,384
Off-Farm Income	\$9,649	\$10,248	\$11,798	\$12,761	\$13,515
Total Cash Income	\$29,163	\$24,493	\$35,892	\$40,334	\$42,899

<sup>1</sup> Source: Economic Indicators of the Farm Sector, State Financial Summary, 1987; U.S. Dept. of Agriculture, Washington, D.C. The USDA defines a "farm" as a place that sells or normally sells at least \$1,000 of agricultural products annually.

## APPENDIX E

### MINNESOTA BALANCE SHEET AND SOURCES OF CREDIT

#### MINNESOTA BALANCE SHEET

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
	(Millions of Dollars)				
<b>ASSETS</b>					
Real Estate	\$23,226	\$17,204	\$13,760	\$15,711	\$16,820
Nonreal Estate	\$13,034	\$12,686	\$9,912	\$9,901	\$10,984
Total	\$36,260	\$29,890	\$23,672	\$25,612	\$27,804
<b>DEBTS</b>					
Real Estate	\$5,377	\$5,091	\$4,511	\$4,030	\$3,753
Nonreal Estate	\$5,689	\$5,665	\$3,240	\$2,943	\$2,925
Total	\$11,066	\$10,756	\$7,751	\$6,973	\$6,678
<b>EQUITY</b>	\$25,194	\$19,134	\$15,921	\$18,639	\$21,126
Debt/Asset Ratio (%)	27.4	28.5	32.7	27.2	24.1

#### SOURCES OF FARM CREDIT

	<u>1984</u>	<u>1985</u>	<u>1986</u>	<u>1987</u>	<u>1988</u>
	(Millions of Dollars)				
<b>REAL ESTATE</b>					
Farm Credit Services	\$2,698	\$2,530	\$1,927	\$1,665	\$1,522
Commercial Banks	\$372	\$389	\$418	\$489	\$579
Farmers Home Adm	\$391	\$419	\$391	\$381	\$356
Private	\$1,917	\$1,744	\$1,431	\$1,229	\$1,074
Other	<u>\$415</u>	<u>\$396</u>	<u>\$344</u>	<u>\$266</u>	<u>\$222</u>
TOTAL	\$5,793	\$5,479	\$4,511	\$4,030	\$3,753
<b>NONREAL ESTATE</b>					
Farm Credit Services	\$1,104	\$843	\$542	\$492	\$447
Commercial Banks	\$2,408	\$2,051	\$1,580	\$1,400	\$1,454
Farmers Home Adm.	\$519	\$617	\$584	\$580	\$535
Private	<u>\$801</u>	<u>\$671</u>	<u>\$534</u>	<u>\$469</u>	<u>\$489</u>
TOTAL	\$4,832	\$4,181	\$3,240	\$2,943	\$2,925

#### PERCENT OF CREDIT MARKET

	<u>1980</u>	<u>1984</u>	<u>1988</u>
	(%)	(%)	(%)
<b>REAL ESTATE</b>			
Farm Credit Services	38.1	46.6	40.6
Commercial Banks	5.6	6.4	15.4
Farmers Home Adm	6.2	6.7	9.5
Private	40.6	33.1	28.6
Other	<u>9.5</u>	<u>7.2</u>	<u>5.9</u>
TOTAL	100.0	100.0	100.0
<b>NONREAL ESTATE</b>			
Farm Credit Services	25.6	22.8	15.3
Commercial Banks	46.2	49.9	49.7
Farmers Home Adm.	9.6	10.7	18.3
Private	<u>18.6</u>	<u>16.6</u>	<u>16.7</u>
TOTAL	100.0	100.0	100.0

Source: Economic Indicators of the Farm Sector, State Financial Summary; U.S. Dept. of Agriculture, Washington D.C.

## APPENDIX F

### MINNESOTA FARMLAND VALUES

#### ESTIMATED MINNESOTA FARMLAND VALUES<sup>1</sup> 1972-1988

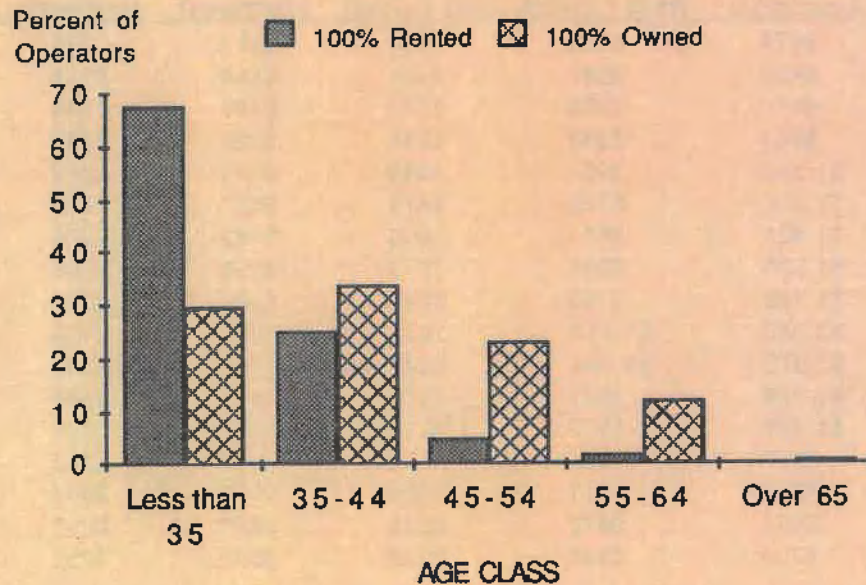
YEAR	Southeast	Southwest	West Central	East Central	Northwest	Northeast	State Average
1972	\$370	\$379	\$208	\$163	\$117	\$76	\$248
1973	\$433	\$459	\$247	\$194	\$146	\$115	\$298
1974	\$576	\$675	\$378	\$279	\$199	\$144	\$423
1975	\$674	\$844	\$503	\$296	\$295	\$163	\$525
1976	\$856	\$1,106	\$624	\$349	\$378	\$210	\$667
1977	\$1,027	\$1,316	\$730	\$415	\$427	\$279	\$794
1978	\$1,191	\$1,421	\$803	\$498	\$483	\$304	\$889
1979	\$1,453	\$1,620	\$883	\$573	\$599	\$368	\$1,040
1980	\$1,526	\$1,750	\$962	\$596	\$683	\$390	\$1,120
1981	\$1,709	\$2,083	\$1,135	\$679	\$813	\$460	\$1,310
1982	\$1,504	\$1,875	\$1,044	\$584	\$748	\$483	\$1,179
1983	\$1,354	\$1,669	\$981	\$581	\$658	\$411	\$1,065
1984	\$1,164	\$1,401	\$873	\$505	\$586	\$436	\$927
1985	\$861	\$967	\$690	\$374	\$510	\$362	\$686
1986	\$603	\$696	\$511	\$296	\$418	\$308	\$515
1987	\$558	\$671	\$472	\$259	\$375	\$293	\$480
1988	\$648	\$784	\$499	\$268	\$390	\$251	\$523

<sup>1</sup> Andrew Schwab and Phillip M. Raup; "The Minnesota Rural Real Estate Market in 1988"; MINNESOTA AGRICULTURAL ECONOMIST, March 1989.

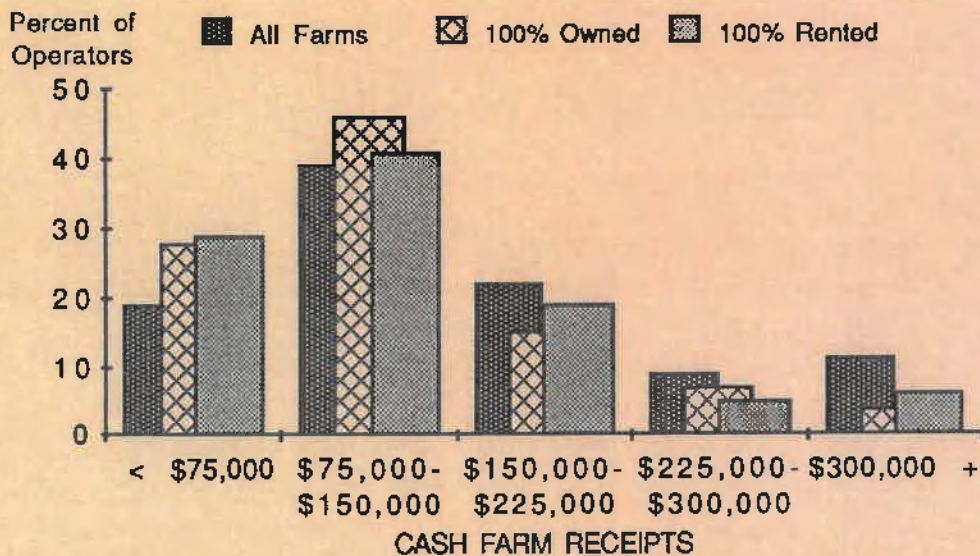
## APPENDIX G

### RENTER-OPERATOR vs OWNER-OPERATOR CHARACTERISTICS

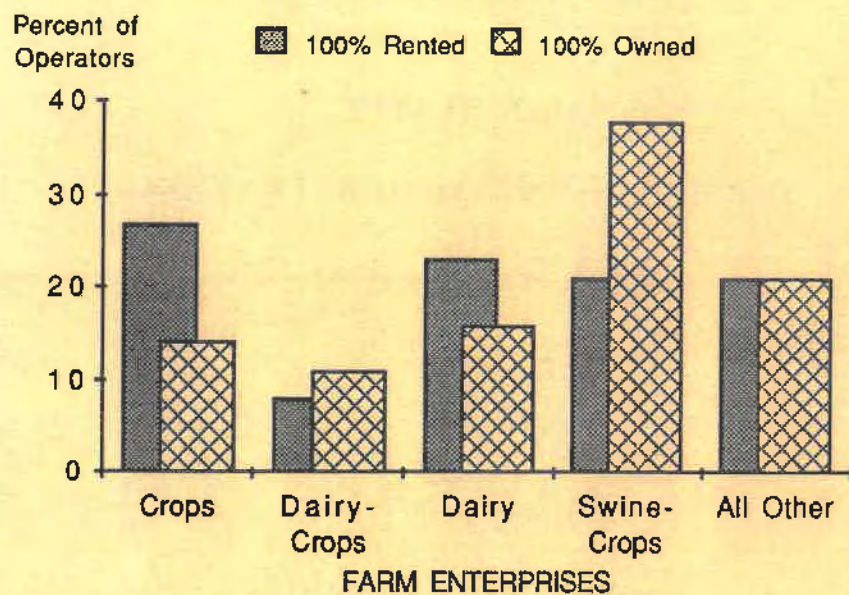
#### OPERATOR AGE DISTRIBUTION



#### CASH FARM RECEIPTS DISTRIBUTION



### MAJOR FARM ENTERPRISES



### DISTRIBUTION BY DEBT-ASSET RATIO

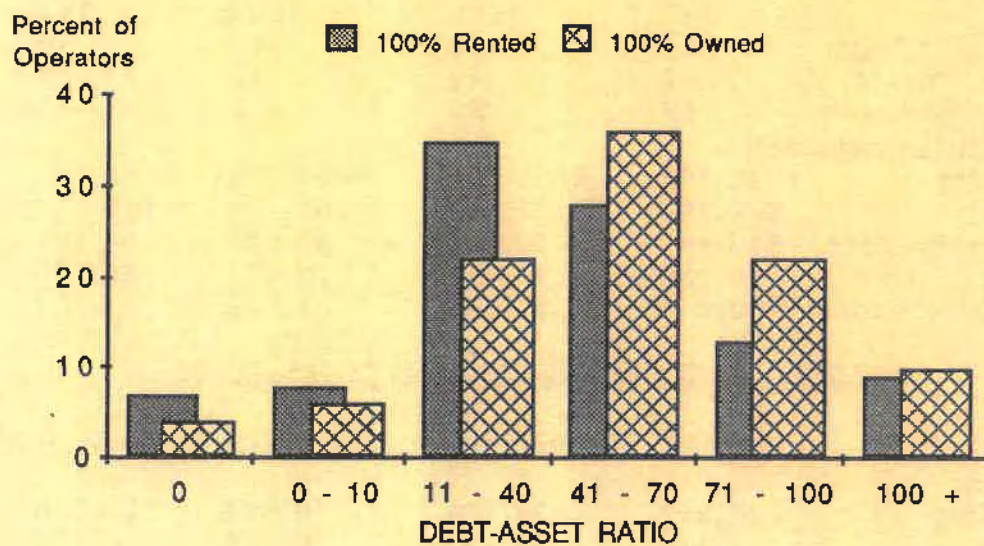


TABLE 1

	<u>% OF OPERATORS</u>	<u>% TOTAL LAND OPERATED</u>	<u>AVE. FARM SIZE</u>
RENTER-OPERATOR	19	12	342
OWNER-OPERATOR	19	16	431
ALL OTHER	62	72	628

# **APPENDIX H** **FARMERS HOME ADMINISTRATION** **AND** **FARM CREDIT SERVICES**

## **LOAN STATUS**

### **FARMERS HOME ADMINISTRATION**

	<u>Dec. 1985</u>	<u>Nov. 1986</u>	<u>Dec. 1987</u>	<u>Dec. 1988</u>
Total Active Borrowers	10,024	10,072	9,134	8,468
Total Delinquent Borrowers	2,922	3,327	2,820	2,778
Percent Delinquent (%)	29.2	33.0	30.9	32.8
Total Active Loans	27,034	26,941	23,918	22,374
Total Delinquent Loans	9,435	10,153	8,915	8,721
Percent Delinquent (%)	34.9	37.7	37.3	39.0

### **FARM CREDIT SERVICES**

#### PRODUCTION CREDIT ASSOCIATIONS OF MINNESOTA

	<u>June. 1985</u>	<u>Sept. 1986</u>	<u>Sept. 1987</u>	<u>Sept. 1988</u>
<u>NUMBER OF LOANS</u>				
Loans outstanding	11,935	10,832	9,685	8,044
Delinquencies	681	1648	833	348
Bankruptcies in Process	89	110	46	35
Foreclosures in Process	62	42	35	70
Foreclosure in Bankruptcy	27	22	12	7
<u>VOLUME OF LOANS (Thousand Dollars)</u>				
Loans outstanding	\$880,785	\$656,383	\$496,639	\$435,118
Delinquencies	\$70,490	\$151,650	\$65,336	\$20,065
Bankruptcies in Process	\$13,444	\$8,363	\$3,542	\$1,923
Foreclosures in Process	\$8,132	\$5,093	\$3,287	\$4,770
Foreclosure in Bankruptcy	\$3,204	\$1,884	\$1,182	\$359

#### FEDERAL LAND BANK ASSOCIATIONS OF MINNESOTA

	<u>June. 1985</u>	<u>Sept. 1986</u>	<u>Sept. 1987</u>	<u>Sept. 1988</u>
<u>NUMBER OF LOANS</u>				
Loans outstanding	29,803	26,231	25,384	23,378
Delinquencies	2,179	4,423	2,745	927
Bankruptcies in Process	90	178	141	81
Foreclosures in Process	466	1,195	1,069	637
Foreclosure in Bankruptcy	18	22	67	40
<u>VOLUME OF LOANS (Thousand Dollars)</u>				
Loans outstanding	\$2,472,440	\$2,094,257	\$1,904,736	\$1,668,987
Delinquencies	\$33,343	\$89,215	\$297,437	\$96,390
Bankruptcies in Process	\$17,660	\$23,628	\$14,083	\$8,172
Foreclosures in Process	\$92,268	\$177,393	\$125,441	\$66,919
Foreclosure in Bankruptcy	\$4,196	\$3,674	\$8,649	\$4,527

## APPENDIX I

### HISTORICAL INTEREST RATE SERIES

	<u>PRIME RATE<sup>1</sup></u>	<u>FEDERAL LAND BANK<sup>2</sup></u>	<u>FEDERAL INTERMEDIATE CREDIT BANK<sup>3</sup></u>
	(Percent)	(Percent)	(Percent)
1973	8.03	7.50	8.20
1974	10.81	8.50	9.10
1975	7.86	8.50	7.60
1976	6.84	8.50	7.10
1977	6.83	8.25	7.30
1978	9.06	8.25	9.10
1979	12.67	9.75	11.30
1980	15.27	10.25	12.80
1981	18.87	11.50	15.10
1982	14.84	12.50	12.40
1983	10.79	11.25	10.90
1984	12.04	12.00	11.70
1985	9.93	12.75	10.70
1986	8.33	11.75	9.30
1987	8.21	10.85	8.70
1988	9.32	11.25	9.00

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<sup>1</sup> Source: Federal Reserve Bank of Minneapolis

<sup>2</sup> Source: Farm Credit Bank, St. Paul

<sup>3</sup> Source: Farm Credit Bank, St. Paul