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Financial Characteristics of North Dakota Farms

1998-2000

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Acknowledgments

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Abstract

The performance of over 530 North Dakota farms, 1998-2000, is summarized using 16 financial measures. Farms are categorized by geographic region, farm type, farm size, gross cash sales, farm tenure, net farm income, debt-to-asset, and age of farmer to analyze relationships between financial performance and farm characteristics. Farm financial trends for the 1991-2000 period are also presented.

Financial performance in 2000 and 1999 was the highest since 1993. Performance was much improved from 1997 and 1998 when one-fourth of farms had negative net farm income and over one-half of farms were not able to make scheduled term debt payments with the year's income. Crop prices were low in 2000 and 1999, but yields were generally good, beef cattle prices were improved and there was extraordinary government and crop insurance payments. Median net farm income was $45,085 in 2000, $42,009 in 1999 and $19,491 in 1998.

Keywords: Farm financial management, farm management, farm income, liquidity, solvency, profitability, repayment capacity, financial efficiency, financial benchmarks, tenure, North Dakota.

INTRODUCTION

Financial statements such as the balance sheet and income statement provide a structured format to summarize financial information so it is more manageable for decision making. It is helpful to further simplify or summarize information contained in financial statements into key measures of financial performance. However, the calculation of a financial measure can be fruitless unless there is a meaningful basis of comparison to evaluate the number. Two methods of comparison are:

❶ **Past performance**. The progress of a business can be monitored by constructing financial measures on a periodic basis and comparing present to past performance.

❷ **Industry benchmarks**. The average or median of a financial measure from several similar businesses provides a good point of reference. Currently there is no nationwide database of farm records. However, there are statewide farm record programs in some states, including North Dakota. Each farm has its own unique aspects, so the most appropriate comparison would be farms that have similar enterprises and resources.

Whatever method of comparison is used, it is imperative that the procedures for construction of financial statements and performance measures are consistent over time and between farms to ensure an "apples-to-apples" comparison.

The Farm Financial Standards Task Force (FFSTF) was formed by the American Bankers Association in 1989 to develop standards for construction of financial statements and measures of financial performance in agriculture. In 1991, the task force provided recommendations for financial statement construction and the calculation of 16 measures of financial performance. These recommendations were adopted, in most part, by the North Dakota Farm Business Management Education Program and are the basis for the benchmarks presented in this publication.

The purpose of this study is to provide information to producers, lenders, educators, and others on the financial performance of a sample of North Dakota farms from 1998-2000. Similar studies for 1991 through 1997 are referenced on page 26 of this report. Table 1 lists the median operator age, farm size and selected financial factors, 1991-2000. The data are from financial summaries of farms participating in the North Dakota Farm Business Management Education program. In this study the median and upper and lower quartiles of 16 financial performance measures are presented for all farms in the data set and for groupings of farms by characteristic such as farm type, farm size, and age of producer. The results can be used by producers and lenders to evaluate the financial performance of a farm. Also, trends can be identified and relationships between farm characteristics and financial measures can be analyzed. However, because of the small number of farms in this study, the results should be used cautiously and only be considered guidelines.

SOURCE OF DATA

More than 700 farms are enrolled in the North Dakota Farm Business Management Education program. Instructors educate and assist producers in record keeping and review data for completeness and accuracy. Instructors use the Finpack farm financial management software program to generate financial summaries. From 1998-2000, the financial summaries of over 530 farms each year were considered usable for this study.

Most farms were represented in all three years (1998-2000) of this study, although there is a turnover of participants in farm management education programs and the number of farms that complete their annual records by a cutoff date varies from year to year.

The farms in this study are larger and the age of the farm operators younger than the state average. In 2000, there were 30,300 farms in North Dakota with gross agricultural sales of at least $1,000. Only 8,700, or 29%, had gross receipts greater than $100,000, whereas 82% of the 553 farms in this study exceed that sales volume (median gross sales was $205,659). The farms in the study are more representative of operations that provide the primary source of net family income. The average age of farm operators in this study is 44 compared to 51 for the state average.

DEFINITION OF FINANCIAL MEASURES

Sixteen measures of financial performance were calculated for each farm in this study. The recommendations of the farm financial standards council for calculating the ratios were followed as closely as possible, from the Finpack data.

The farm financial standards council stated that a more meaningful comparison between farms is achieved with market valuation of assets, but due to fluctuations in market values the cost method (acquisition cost less accumulated depreciation) is superior for comparisons over time for an individual farm operation. In fact, a dual column balance sheet is recommended: one column to value assets by the cost approach and a second column for market valuation of assets.

The valuation method used for current assets of farms in this study depended on what was most relevant and reliable. For example, current market value was used for grain and market livestock inventories, but prepaid expenses and supplies were listed at purchase cost.

Non-current asset valuation was:

- Machinery was valued at cost minus accumulated depreciation. Annual depreciation was 10 percent of undepreciated value.
- Purchased breeding livestock was valued at cost. Raised replacement animals were valued at a conservative market value when they enter the breeding herd. This value remains constant until the animal leaves the herd.
- Generally, land was valued at cost. However, when a farmer enrolls in the farm business program there may be a one-time revaluing of land to a conservative market value.

Assets and liabilities not associated with the farm business are excluded from the calculation of farm financial performance measures. Accrued liabilities were included on the balance sheets but deferred tax liabilities were not.

The calculations of all financial measures, unless otherwise noted, are accrual adjusted. Examples are:

- Gross farm revenue is gross cash revenue plus the changes in crop and market livestock inventories and accounts receivable.
- Interest expense is cash interest plus the change in accrued interest.

LIQUIDITY

Current Ratio

Computation: Current assets divided by current liabilities.

Interpretation: This ratio measures the extent current assets will cover liabilities that are due during the next 12 months. The higher the ratio the more cushion the business has to meet short-run obligations without disrupting normal business operations. The current ratio's limitation as a measure of liquidity is that it does not match the timing of financial obligations with the liquidation of current assets, nor does it consider any new debt incurred or assets that may be generated during the 12 months after the balance sheet date.

Working Capital

Computation: Current assets minus current liabilities.

Interpretation: This measure shows the dollar amount that current assets can or cannot cover current liabilities. The amount of working capital necessary to provide an adequate cushion for meeting debt obligations must be related to the size of the business. Working capital as a measure of liquidity has similar limitations as the current ratio.

SOLVENCY

Debt-to-Asset

Computation: Total liabilities divided by total assets.

Interpretation: This ratio shows the proportion of assets owed to creditors. The lower the debt-to-asset ratio the higher the solvency of the business. Solvency is a measure of risk exposure. As solvency decreases, the owner has less equity relative to debt, the ability to procure additional financing may decrease, and the business's ability

to survive adverse outcomes is diminished. However, solvency should be viewed in connection with profitability. A low solvency position may be desirable if debt capital provides returns in excess of its cost.

Equity-to-Asset

Computation: Owner equity divided by total assets.

Interpretation: This ratio shows the portion of total assets represented by owner equity. It is another way of expressing solvency.

Debt-to-Equity

Computation: Total liabilities divided by owner equity.

Interpretation: This ratio shows the extent to which debt capital is combined with equity capital. It is another way of expressing solvency.

PROFITABILITY

Rate of Return on Assets (ROA)

Computation: Net farm income plus interest expense minus a charge for unpaid operator labor and management, divided by average total assets.

Interpretation: This ratio measures the pre-tax rate of return on farm assets and is used to evaluate whether assets are employed profitability in the business. Two important factors affecting this measure are valuation of assets and the charge for unpaid operator labor and management. A $15,000 charge per full time operator plus five percent of gross revenue was used in the 2000 analysis.

Rate of Return on Equity (ROE)

Computation: Net farm income minus a charge for unpaid operator labor and management, divided by average owner equity.

Interpretation: This ratio measures the pre-tax rate of return on equity capital employed in the business. Two important factors affecting this measure are valuation of assets and the charge for unpaid operator labor and management. A $15,000 charge per full time operator plus five percent of gross revenue was used in the 2000 analysis. This ratio should be evaluated carefully and used in conjunction with other ratios when analyzing a farm business. If ROE is greater than ROA, debt capital is being employed profitably—it is earning more than it costs in interest. A high ratio may indicate an undercapitalized or highly leveraged business, and a low ratio may indicate a more conservative, high equity business.

Operating Profit Margin

Computation: Net farm income plus interest expense minus a charge for unpaid operator labor and management, divided by the value of farm production. Value of farm production is gross farm revenue less purchase of market livestock and feed.

Interpretation: This ratio measures net farm income per dollar of farm production. It is a pre-tax measure of profit margin from the employment of assets. An important factor is the charge for unpaid operator labor and management. There is a relationship between operating profit margin, asset turnover rate, and ROA. Operating profit margin multiplied by asset turnover rate equals ROA.

Net Farm Income

Computation: Net farm income is total revenue earned minus the costs incurred to generate those revenues. It is cash revenue less cash expense and depreciation plus capital adjustments (gain or loss from sale of capital assets). Accrual adjustments for changes in inventories are included to properly match revenues and expenses to the time period for which net farm income is being measured.

Interpretation: Net farm income is the return to the operator for unpaid labor and management and equity capital used in the farm business. Net farm income is an absolute amount and it is difficult to assign a standard to all farms because of differences in the amount of unpaid operator labor and equity used.

REPAYMENT CAPACITY

Term Debt Coverage Ratio

Calculation: Net farm income plus depreciation and other capital adjustments plus nonfarm income plus scheduled interest on term debt minus family living expense and income taxes, divided by scheduled

term debt principal and interest payments.

Interpretation: This ratio measures the capacity of the borrower to cover all term debt payments. The more the ratio exceeds 1, the greater the margin to cover term debt payments. The business may have sufficient earnings but the timing of cashflows may not be adequate to make the payments on a timely basis. Also, the ratio does not contain any provision for replacement of capital assets.

Capital Replacement and Term Debt Repayment Margin

Calculation: Net farm income plus depreciation and other capital adjustments plus nonfarm income minus family living expense, income taxes, and scheduled term debt principal payments.

Interpretation: This is a measure of the business's ability to make payments on term debt. A positive margin indicates the amount available, after making term debt payments, for acquiring capital assets or servicing additional debt. The capital replacement and term debt repayment margin is a dollar amount, so it is impossible to establish a standard for all farm businesses.

FINANCIAL EFFICIENCY

Asset Turnover

Calculation: Value of farm production divided by average total assets. Value of farm production is gross farm revenue less purchase of market livestock and feed.

Interpretion: This is a measure of how efficiently assets are used in the business. The higher the number, the more production is created per dollar of assets. Asset turnover can vary significantly by type of farm and by asset base. For example, dairy and hog farms will typically have higher asset turnovers than cow-calf or cash grain operations. Asset turnover will probably be higher if capital assets, such as machinery and land, are rented instead of owned.

Operating Expense Ratio

Calculation: Total expense less interest and depreciation and capital adjustment divided by gross farm revenue.

Interpretation: This ratio measures how efficiently operating expenses are managed to generate gross farm revenue. The operating expense ratio will typically vary by farm type.

Depreciation Expense Ratio

Calculation: Depreciation and capital adjustments divided by gross farm revenue.

Interpretation: This ratio expresses depreciation and capital adjustment relative to gross farm revenue. It will vary by farm type and from year to year. Caution must be used when evaluating this ratio. It does not comply with the farm financial standards because the Finpack program, used to generate the farm financial summaries, calculates depreciation and capital adjustment as one number (ending inventory plus capital sales less the sum of beginning inventory and capital purchases). Therefore depreciation cannot be isolated.

Interest Expense Ratio

Calculation: Interest expense divided by gross farm revenue.

Interpretation: This ratio shows the portion of gross farm revenue necessary to cover interest expense. It is often used as a measure of financial risk.

Net Farm Income Ratio

Calculation: Net farm income divided by gross farm revenue.

Interpretation: This is a measure of how efficient the farm business is at generating net income from gross revenue. It is the portion of gross farm revenue left after operating expense, depreciation and capital adjustment, and interest expense have been removed.

INTERPRETATION OF RESULTS

Each financial measure was calculated for each farm. Farms were grouped by characteristics such as region, type of farm, and size and were sorted in order from strongest to weakest by each of the 16 financial measures. The **median** is the midpoint value of the financial measure: one-half of the farms in the category had a higher value and one-half had a lower value than the median. The **upper quartile** is the value that was exceeded by one-fourth of the farms, and the **lower quartile** is

the value that was exceeded by three-fourths of the farms. (Another definition of lower quartile is the value for which one-quarter of the farms in the category had a weaker value.)

Individual farm operators and lenders can use the tables as a measure of comparison if their financial measures are calculated similarly. For example, a farm operator 30 years of age may compare his/her profitability and financial efficiency with those of other young operators. Or a lender may compare the solvency and repayment capacity of producers who rent all their cropland. The tables also can be used to look at relationships and trends. What is the relationship between age of farmer and rate of return on equity? How has operating profit margin of livestock farms changed over time?

One ratio is not sufficient to make conclusions about the overall financial performance of a farm business. For example, a crop farm may have a debt-to-asset ratio of 60%, which is worse than the median value of 52.5% (shown on table 7) for that farm enterprise category. However, other factors such as profitability, total assets, and age of operator should also be considered.

Also, a farm can be adversely affected by extraordinary circumstances. Profitability in the low quartile may not be reflective of management capability if the farm had localized bad weather that was not experienced by many other producers in the farm category.

Caution must be used when analyzing the tables because a small number of farms increases the possibility that results may not be representative of a farm category. In this study, for 2000, there are only 72 Red River Valley farms, 83 farms with operators younger than 35 years, 93 mixed livestock-crop enterprise farms, and 94 farms that rented all cropland. Performance of the Red River Valley region may not be representative of the central or northern areas of the Red River Valley because nearly all valley farms in the study are from the south.

There are some strong correlations between two or more classifications, so it is difficult to associate a financial measure with an individual farm characteristic.

For example, in 1998 the poor profitability of livestock, in comparison to crop farming, is reflected in farm categories that had a disproportionate number of livestock farms, such as the west region, farms with greater than 40% crop land ownership, and farms with less than $100,000 sales. Also, comparison of farms by enterprise type, farm size and gross sales can be affected by regional performance. The Red River Valley has the highest proportion, relative to other regions, of crop farms, farms of less than 1,600 acres, and farms with gross income greater than $250,000.

Tables 1 and 2 show the trends in financial performance and characteristics of North Dakota farms, 1991-2000. The trend has been for farms to get larger and for farmers to get older. In 2000, median farm acreage and gross cash revenue were 38% and 55% higher, respectively, than in 1991. Median age of operator was 44 in 2000 compared to 39 in 1991.

Overall, financial performance in 2000 and 1999 was the highest since 1993. The median net farm income, term debt coverage ratio, and working capital in 2000 was the highest in the decade. Solvency improved in 2000 and in 1999 after declining each year from 1994-1998. Crop prices were low in 2000 and 1999, as in 1998, but there was extraordinary government and crop insurance payments and improved beef cattle prices. Performance was much improved from 1997 and 1998, which had the lowest net farm income in the 1991-2000 period. In 1997 and 1998, over one out of four farms had negative net farm income and over one-half of farms could not make scheduled term debt payments with the year's income.

FARM CLASSIFICATION AND HIGHLIGHTS

ALL FARMS

Highlights

- Some consistent trends over the past decade, 1991-2001, for farms enrolled in the North Dakota Farm Business Management Education Program are:
  - farms are getting larger; median acreage increased 38% to 1,916 acres, median gross revenue increased 55% and median farm assets and liabilities increased 60% and 65% to $549,636 and $274,640, respectively.
  - farmers are getting older, the median age increased from 39 to 44.
  - off-farm wages and salaries per farm household more than doubled.
  - rented land increased from 62% to 70% of the crop land farmed.

- Median net farm income of $45,085 in 2000 was the highest in the decade, but 1993 and 1992 had the highest profit after adjusting for inflation. The poorest financial performance was in 1997, 1998 and 1995 because of low cattle prices, higher crop production costs, weather related production problems with small grains in 1995 and 1997 and low crop prices in 1998.

- Financial performance was strong in 2000 and 1999, despite very low crop prices, because of extraordinary government and crop insurance payments, higher beef prices, and generally strong yields. Yields and acreage of corn, soybeans and sugarbeets were at record levels. Record yields of flax, potatoes, winter wheat and rye were also attained. Small grain, canola and sunflower yields were below trend line in 1999 but improved in 2000.

- Median current ratio was 1.4 in 2000 and 1999 up from 1.2 in 1996-1998.

- Solvency improved in 2000 and 1999 after deteriorating each year from 46.4% in 1993 to 59.4% in 1998. The median debt-to-asset ratio was 53.9% in 2000.

- Median rates of return on equity and assets were 7.7% and 7.6%, respectively, in 2000. In the 1991-2000 period, the only other years that ROE exceeded ROA, which indicated that debt capital was employed profitably, was 1993 and 1999.

- Financial stress was evident in 1997 and 1998. Over one-half of all farms had a term debt coverage ratio below 1.0, indicating an inability to make all scheduled term debt payments with farm and non-farm income.

- In 1997, financial performance was poor regardless of farm type, acreage or level of gross sales. It was the only year when farms with gross sales less than $100,000 had better repayment capacity than farms with greater sales.

- Two ways to increase profit are increasing sales, while maintaining profit margins, or by increasing profit margins. In the 1991-2000 period median gross sales increased from $132,736 to $205,659 but profit margins have generally decreased. Median net farm income as a percent of gross revenue was the highest, averaging 26.5%, for the 1991-1993 period and lowest, averaging 13.8%, for the 1995-1998 period.

REGION

Farms were classified in one of four geographic region in North Dakota, based on the location of their Farm Business Management program. However, farms enrolled in the Bismarck program are classified as "west or "south central" according to which side of the Missouri River the farm is located. Also, some farms that are enrolled in the Kindred and Wahpeton programs are not in the Red River Valley and are classified as south-central. The southern areas of both the "Red River Valley" and the "west" region are better represented than the northern areas. Locations of North Dakota Farm Business Management programs that participated in the 1998-2000 summaries were:

Red River Valley: Kindred and Wahpeton
North Central: Bottineau, Devils Lake, Garrison (1999, 2000), Minot, and Rugby
South Central: Bismarck, Carrington, Enderlin, Jamestown, Napoleon, Oakes (1998, 1999), and Valley City
West: Bismarck, Dickinson, Glen Ullin, and Stanley

Highlights

- In 2000 the median farm size increased from the Red River Valley (1,516 acres, all crop land) to the west region (2,460 acres, including pasture). Median size of farms in the north central region was about 2,000 total acres with 1,600 acres crop land. Median farm size for the south central region was about 1,900 total acres with 1,400 crop acres.

- Several farm characteristics are strongly related to region. Red River Valley farms typically have smaller total acreage (crop land and pasture) and percent of cropland owned, but have much larger total farm sales, assets and liabilities than farms in other regions. The incidence of livestock and mixed enterprise farms goes from a mere 1% in the Red River Valley to 68% in the west.

- Overall, financial performance in 2000 was similar to 1999. In 1999, all regions, led by the Red River Valley, experienced strong improvement in financial performance compared to 1998.

- Liquidity and repayment capacity improved in all regions in 2000, except the south central region. Since 1998 the Red River Valley has made dramatic improvement in liquidity and repayment capacity measures, going from the worst in 1998 to the best in 1999 and 2000.

- In 2000 and 1999, solvency improved in all regions. Median debt to asset ranged from 49.9% in the Red River Valley to 55% in the south central region in 2000.

- In 2000, median net farm income remained at about $79,000 for the Red River Valley and $38,000 for the south central region but increased by about $5,000 to $46,219 and $40,388 in the north central and west regions, respectively, compared to 1999.

- The west was the only region where all profitability measures improved in 2000. Profitability improved greatly for all regions in 1999 compared to 1998.

- In 2000, over 60% of farms in the Red River Valley had net farm income greater than $50,000 compared to 45% in the other regions.

FARM ENTERPRISE

Farms were classified as "crop" if 70% or more of total sales were from crops, and "livestock" if livestock sales accounted for 70% or more of total sales. The remaining farms were classified as "mixed."

Highlights

- During 1998-2000 about 64% of all farms statewide were in the crop category, 20% were livestock and about 16% were mixed enterprise farms.
- Ninety-nine percent of Red River Valley farms,74% of north central farms, 58% of south central farms and 32% of west region farms were classified as crop in 2000.
- Forty-seven percent of the west region farms were classified as livestock in 2000.
- Crop farms tend to have more total assets and liabilities and greater gross and net income than livestock and mixed enterprise farms. In the 1991-2000 period profitability of livestock farms was similar to crop farms only in 1993 (all high) and 1997 (all low).
- In 2000 and 1999,financial performance of all farm types was much better than in 1998. Profitability of livestock and mixed farms was extremely weak, 1995-1998. In 1997 the performance of crop farms was also very poor.
- Every year, 1991-2000, crop farms had better solvency than other farm types. In 2000, crop farms had a median debt-to-asset ratio of 52.5%, livestock farms had 54.9% and mixed enterprise farms had 55.5%.
- In 2000, median net farm income for mixed enterprise farms increased 34% to $42,241. Median net farm income was $50,700 for crop farms and $29,446 for livestock farms.
- Repayment capacity of all farm types in 2000 and 1999 improved greatly from 1998, to the highest levels since 1993. However, in 2000 over one-fourth of all farm types were not able to meet scheduled term debt payments with farm and non-farm income.
- The median asset turnover ratio was 0.49 for crop farms, 0.33 for mixed enterprise farms and 0.26 for livestock farms in 2000. A higher ratio for crop farms is typical. Most livestock farms are beef cow-calf operations.
- Financial efficiency, as measured by the median of net farm income as percent of gross revenue, was 24.4% for mixed enterprise farms, 23% for livestock farms and 20.8% for crop farms in 2000.
- Median interest expense as percent of net farm income has typically been higher for livestock farms than for crop farms.

FARM SALES

Farms were classified in one of three cash farm sales categories. Farm sales include cash receipts from crop and livestock sales, government payments, and other farm income.

The categories were: less than $100,000
$100,000 to $249,999
$250,000 or over

Highlights

- Median farm sales were $205,659 in 2000. Sales per farm have increased over time; about 39% of farms had sales in excess of $250,000, compared to 12% in 1991.

- Three-fourths of Red River Valley farms had sales in excess of $250,000, compared to 29% of north central and west region farms, respectively, and 41% of south central farms in 2000.

- Farms in the north central and west tend to have lower sales than other regions.

- Farm type and sales are correlated. In 2000, crop farms were nearly four times more likely to have sales in excess of $250,000 than livestock farms. About one-third of livestock farms and one-quarter of mixed farms had farm sales less than $100,000, compared to only 11% of crop farms.

- A strong relationship between gross sales and financial performance is typical. Every year, 1991-2000, median rates of return on assets and equity increased with sales volume.

- As expected, young farmers typically have less sales than older farmers. However, farmers between the ages of 35 and 45 were more likely to have farm sales greater than $250,000 than farmers older than 45 years.

- In 2000, median current ratio improved as farm sales increased, but there has not been a clear relationship between farm sales and current ratio over the 1991-2000 period.

- Farms with low sales typically have higher debt-to-asset. In 2000, median debt-to-asset was 60.7%, 55.8% and 49.4% for low, medium, and high farm sale groups, respectively.

- In 2000, median net farm income was $13,806 for farms with less than $100,000 sales, $42,484 for farms with $100,000 to $250,000 sales, and $89,862 for farms with greater than $250,000 sales.

- Repayment capacity in 2000 and 1999 were much better than 1998 for all farm sale groups. Typically, repayment capacity is directly related to amount of sales. However, in 1997 farms had poor profitability regardless of sales level and farms with less than $100,000 sales had the best repayment capacity, in part because these farms have the most non-farm income.

- From 1997-2000, farms with sales under $100,000 had the best operating expense as percent of gross revenue, but had the worst interest expense ratio because of higher debt.

FARM SIZE

Both crop and pasture acres were included in determining farm size.

Farm size categories were: 1,600 acres or less
1,601 acres or more

Highlights

- Because of an increase in pasture land from east to west, median total farm acreage (crop land and pasture) ranged from 1,516 in the Red River Valley (all crop land) to 2,460 in the west region. Median farm crop acreage was lowest in the west region.

- In 2000, 64% of farms were greater than 1,600 acres, compared to 50% in 1996.

- In 2000, mixed enterprise farms were slightly larger than crop or livestock farms.

- In 2000, only 42% of farmers under 35 years old operate more than 1,600 acres, compared to 69% of farmers between 35 and 45 years old and 66% of farmers over 45 years.

- As expected, farms with greater than 1,600 acres have greater assets, liabilities, sales, and profitability than smaller farms. Larger farms also have better liquidity and solvency.

- All financial performance measures for both farm size categories were much better in 2000 and 1999 compared to 1998.

- Each year, 1994-1999, the median current ratio for the large farm category was slightly better than for the small farm category. In 2000 it was 1.5 for farms with greater than 1,000 acres and 1.3 for smaller farms.

- In 2000, median debt-to-asset was 59% for farms with less than 1,600 acres and 52.2% for larger farms.

- In 2000, median net farm income was $29,055 for farms with less than 1,600 acres and $57,202 for farms with more than 1,600 acres.

- In 2000 and 1999, median term debt coverage ratio was better for farms with more than 1,600 acres than for smaller farms. However, in most years median term debt coverage is similar between farm size groups. Although smaller acreage farms generate less cash income, they tend to have more non-farm income and lower payments than larger farms.

- Financial efficiency measures of farm size groups tend to be similar. This indicates that greater profitability of farms larger than 1,600 acres is due to larger sales volume and/or greater operator labor efficiencies not lower operating expenses per dollar of sales.

CROPLAND TENURE

This is a classification of the portion of crop land that is rented. Four categories were used.

Full tenant
1-20 percent owned
21-40 percent owned
41 percent or over owned

Highlights:

- Ownership of crop land is lowest in the Red River Valley. In 2000, about one-third of Red River Valley farms owned more than 20% of the crop land they operated, compared to about 60% of farms in other regions.

- Crop land ownership increases with age. In 2000, one-half of farmers older than 45 years owned more than 40% of their crop land, compared to one-fourth of farmers younger than 35 years. Also, 29% of farmers less than 35 years old rented all of their crop land, compared to 20% of farmers 35-45 years and only 10% of farmers older than 45 years old.

- Operators of livestock and mixed enterprise farms own a greater portion of their crop land than crop farms. About one-half of livestock and mixed enterprise farms own more than 40% of the crop land that they operate, compared to one-fourth of crop farms.

- Farms smaller than 1,600 acres were more likely to either own no crop land or to own more than 40% of crop land than were farms with more than 1,600 acres.

- Farms that own some land, but not a lot, are typically the most profitable. Farms in the 1 to 20% crop land ownership category are also more likely to be crop farms, farm more acreage, and have larger sales.

- During the past decade, 1991-2000, there is no clear relationship between the current ratio and land tenure except that the farms with greater than 40% crop land ownership tend to have a slighter better median current ratio.

- Farms with greater than 40% crop land ownership typically had better solvency in the 1991-2000 period than other crop land ownership groups.

- In 2000, median net farm income ranged from $36,603 for farms with all crop land rented, to $66,495 for operations which owned 1 to 20% of the crop land farmed.

- Farms with a smaller proportion of crop land ownership have fewer land assets and land interest costs and therefore have higher asset turnover ratios and lower interest expense ratios, but because of land rent costs they have higher operating expense ratios.

NET FARM INCOME

Four levels of net farm income were used to group farms.

Negative
$0 - $24,999
$25,000 - $49,999
$50,000 or more

Highlights

- Median net farm income increased to $45,085 in 2000 and $42,009 in 1999 after two extremely low years, $19,491 in 1998 and $14,290 in 1997.
- In 2000 and 1999, only one out of ten farms had negative net farm income compared to over one-fourth of the farms in 1998 and 1997.
- The strong associations between net farm income and farm type, farm sales, and farm size were renewed in 1998-2000, after being greatly reduced in 1997.
- From 1991-2000, crop farms have been more profitable than livestock or mixed enterprise farms. In 2000, 51% of crop farms had net farm income greater than $50,000 compared to 43% of mixed enterprise farms and 32% of livestock farms.
- In 2000, nearly 70% of the farms with sales greater than $250,000 had net farm income greater than $50,000, and only 15% had net farm income less than $25,000. Seventy-six percent of farms with sales less than $100,000, had net farm income below $25,000.
- The Red River Valley region had the highest median net farm income every year from 1991 to 2000, except for 1993 and 1998.
- In 2000, farms larger than 1,600 acres were over twice as likely to have net farm income greater than $50,000 than smaller farms.
- Farmers between the ages of 35 to 45 years old generally were more profitable than farmers that were younger or older.
- Solvency, liquidity, repayment capacity, and financial efficiency were strongly correlated with net farm income.
- During 1996-2000, low debt farms (less than 40% debt-to-asset) were over three times as likely to have net farm income in excess of $50,000, than high debt farms (greater than 70% debt).

DEBT-TO-ASSET RATIO

Three ranges of debt-to-asset ratio were used to group farms.

0 - 40 percent
41 - 70 percent
71 percent or more

Highlights

- Median debt-to-asset improved to 55.9% in 1999 and to 53.9% in 2000. This was the first improvements in solvency since 1993. However, over one-fourth of farms had debt-to-asset greater than 70%.

- There is a strong inverse relationship between level of debt and liquidity, repayment capacity, profitability and financial efficiency measures. As debt-to-asset increases, these measures deteriorate.

- In 2000, farms in the low debt category had the best median current ratio, 3.4, interest percent ratio, 4.4%, and term debt coverage ratio, 2.9, compared to any of the 26 farm categories used in this study.

- Median net farm income for the low, medium, and high debt categories in 2000 was $62,244, $52,075 and $20,710 respectively.

- Only 17% of farms with high debt had negative net farm income in 2000, compared to 40% in 1998.

- Red River Valley farms, crop farms, large farms (greater than 1,600 acres), and farms with high sales (greater than $250,000 sales) had lower median debt-to-asset than other regions, farm types, farm size, and farm sales groups, respectively, during the years 1996-2000.

- Only one-fourth of farms with less than $100,000 sales were in the low debt group compared to one-half of farms that had sales greater than $250,000.

- As expected, percent debt-to-asset tended to decrease as age of farmer increased.

FARMER AGE

Three groups were used to classify farms by age of operator:

34 years or less
35 - 44 years
45 years or older

Highlights

- In 2000, 15% of farm operators were under 35 years old and 40% were between 35 and 45 years old. The percent of farmers older than 45 has steadily increased from 21.9% in 1991 to 45% in 2000.

- Prior to 1999, the age of farmers tended to increase slightly from east to west, but in 1999 and 2000 the age distribution of farm operators has been similar for all regions except that Red River Valley farm operators are more likely to be 35 to 45 years old.

- In 2000, each type of farm (crop, livestock and mixed enterprise) had a similar proportion of farms by age of operator group.

- Farmers in the middle age group typically had more total farm liabilities, higher gross sales, larger farms and were more profitable than the younger or older age groups.

- Median total assets were greatest, 1991-2000, for farm operators older than 45 years and least for farmers under 35 years old. However, median total assets of the middle age group of farmers (35 to 45 years) is close to the asset level of the older farmer group.

- As expected, as the age of the farm operator increases there is a higher percent of the crop land in the farm that is owned, and the percent of farm debt tends to decrease.

- Typically, 1991-2000, the middle age group has the best liquidity measures. However, in 2000 the median current ratio was 1.4 for all age groups and in 1997 and 1998 the younger farmers had the best median current ratio, 1.3.

- In 2000, median net farm income increased to $39,634 for farmers under 35 years, $54,045 for farmers between 35 and 45 years old, and $39,868 for farmers older than 45 years. The largest increase was for farmers less than 35 years old.

- In each year, 1991-2000, the young age group of farmers employed assets more efficiently than farmers older than 45 years. The young group had better median measures of ROA, ROE, term debt repayment coverage ratio, asset turnover, and interest expense and net farm income as percent of gross revenue despite having much fewer total assets and higher debt-to-asset.

TABLE 1. MEDIAN FARM SIZE, FARM OPERATOR AGE, AND FINANCIAL FACTORS OF FARMS PARTICIPATING IN THE NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAM, 1991-2000.

	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991
Number of Farms	553	539	535	560	551	596	536	539	516	507
	---Median---									
Age of Operator	44	43	42	42	41	41	40	39	39	39
Farm Size (acres)	1,916	1,921	1,882	1,729	1,601	1,576	1,517	1,429	1,388	1,387
Gross Cash Revenue	205,659	190,676	173,972	179,052	177,152	165,134	162,427	161,426	142,262	132,736
Total Farm Assets	549,636	520,094	499,496	485,094	469,587	438,289	439,749	409,839	374,013	343,201
Total Farm Liabilities	274,640	266,401	270,802	263,406	251,480	225,793	201,037	178,509	163,132	166,223
Current Ratio	1.4	1.4	1.2	1.2	1.2	1.3	1.4	1.5	1.6	1.6
Working Capital	36,612	29,643	12,095	11,207	19,042	18,984	27,598	33,387	29,527	22,154
Debt-to-asset (%)	53.9	55.5	59.4	58.6	55.6	51.5	49.8	46.4	48.4	50.0
Rate of Return on Farm Assets (%)	7.6	8.4	4.0	2.5	6.5	4.7	6.4	8.6	6.8	5.5
Rate of Return on Farm Equity (%)	7.7	9.0	0.0	-1.4	4.9	2.2	5.8	10.1	6.0	2.1
Operating Profit Margin (%)	20.6	21.6	11.5	8.3	17.3	14.5	17.9	23.7	16.4	14.3
Net Farm Income	45,085	42,009	19,491	14,290	31,063	23,463	32,523	42,484	40,998	31,711
Term Debt Coverage Ratio	1.6	1.5	0.9	0.7	1.2	1.1	1.3	1.9	1.4	1.2
Term Debt & Capital Repayment Margin ($)	17,768	17,973	-2,680	-8,995	5,024	1,652	7,069	17,634	8,767	3,891
Asset Turnover Ratio	0.42	0.38	0.36	0.34	0.39	0.36	0.4	0.4	0.4	0.4
Operating Expense Ratio (%)	63.3	61.2	71.9	73.3	66.0	67.4	64.9	60.9	58.4	60.0
Depreciation Expense Ratio (%)	5.3	5.7	5.7	6.0	5.6	5.7	4.7	4.6	4.5	5.2
Interest Expense Ratio (%)	7.8	8.4	9.6	9.9	8.9	8.8	7.6	6.9	7.8	9.2
Net Farm Income Ratio (%)	21.7	22.4	12.7	8.1	18.0	16.2	21.7	26.6	28.0	24.8

TABLE 2. PERCENT DISTRIBUTION OF FARMS BY FARM GROUP CATEGORY, NORTH DAKOTA FARM BUSINESS MANAGEMENT PROGRAM, 1991-2000.

Farm Group/Category	2000	1999	1998	1997	1996	1995	1994	1993	1992	1991
All Farms	553	539	535	560	551	596	536	539	516	507
	---Percentage---									
Region										
Red River Valley	13.0	12.8	12.7	17.0	16.7	20.5	23.3	23.0	21.1	18.9
North Central	36.2	36.2	36.1	31.8	30.3	25.8	25.2	26.7	25.1	27.2
South Central	30.2	30.2	33.1	33.6	33.9	35.9	35.1	31.9	34.8	33.9
West	20.6	20.8	18.1	17.7	19.1	17.8	16.4	18.4	19.0	19.9
Farm Enterprise										
Crop	63.3	64.6	63.9	65.4	66.4	66.9	68.5	66.4*	52.8	49.3
Livestock	19.9	20.0	20.6	17.5	17.2	23.8	22.8	23.0*	22.8	21.7
Mixed	16.8	15.4	15.5	17.1	16.3	9.2	8.8	10.6*	24.4	29.0
Farm Sales										
$99,999 or less	17.7	20.0	23.2	20.7	26.3	26.0	24.1	23.0	29.0	35.9
$100,000 - $249,999	43.8	44.0	45.6	46.4	43.6	47.3	51.9	53.6	53.6	51.9
$250,000 or over	38.5	36.0	31.2	32.9	30.1	26.7	24.1	23.3	17.4	12.2
Farm Size										
1,600 acres or less	36.3	36.0	39.3	44.3	50.1**	30.7	34.1	35.8	36.9	37.7
1,600 acres or over	63.7	64.0	60.7	55.7	49.9**	69.3	65.9	64.2	63.1	62.3
Cropland Tenure										
Full tenant	17.1	17.8	18.2	19.6	20.8	20.7	22.0	23.1	22.5	23.2
1-20 percent owned	26.2	23.2	26.1	25.2	23.0	22.3	19.0	17.5	16.8	17.8
21-40 percent owned	22.2	24.7	21.8	20.7	20.8	19.9	20.3	22.5	21.3	17.8
41 percent or over owned	34.4	34.2	33.8	34.5	35.4	37.1	38.6	36.9	39.4	41.2
Farm Income										
Negative	10.3	8.0	25.6	29.5	18.0	22.1	12.9	9.6	7.4	11.2
$0-$24,999	20.6	23.2	29.7	32.1	25.0***	24.2	23.7	18.2	16.8	22.7
$25,000 - $49,000	23.5	25.6	20.4	21.4	20.9***	16.4	21.5	20.2	24.8	28.4
$50,000 or more	45.6	43.2	24.3	17.0	36.1***	37.2	42.0	57.9	51.1	37.7
Debt-to-asset Ratio										
0-40 percent	29.3	28.8	24.3	28.4	28.9	33.6	35.8	39.1	37.5	36.7
41-70 percent	45.9	44.5	41.9	39.1	42.6	42.4	45.1	44.0	42.0	40.6
71 percent or more	24.8	26.7	33.8	32.5	28.5	24.0	19.0	16.9	20.5	22.7
Farmer Age										
34 years or younger	15.0	17.8	18.5	20.0	18.7	22.1	25.6	26.8	28.6	28.4
35-44 years	40.0	39.7	41.9	40.9	44.3	43.0	43.7	46.1	45.6	49.7
45 years or older	45.0	42.5	39.6	39.1	37.0	34.9	30.8	27.2	25.7	21.9

* For 1991-1992, 60%, not 70%, of total sales was the criteria to determine farm type.
** For 1991-1995 farm sizes were 1,200 acres or less, and 1,201 acres or more.
*** For 1991-1995 farm income categories were negative, $0-$19,999, $20,000-$39,999, and $40,000 or more.

TABLE 3. FARM CLASSIFICATIONS AND PERCENT DISTRIBUTION OF FARM TYPES WITHIN REGIONS, NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAM, 2000.

			Farm Group Category Breakout by Region			
Farm Group Category	Number of Farms (553)	Percentage	Red River Valley	North Central	South Central	West
Region			72	200	167	114
Red River Valley	72	13.0				
North Central	200	36.2				
South Central	167	30.2				
West	114	20.6				
Farm Enterprise			----------percentage----------			
Crop	350	63.3	98.6	73.5	57.5	31.6
Livestock	110	19.9	0.0	15.0	16.2	46.5
Mixed	93	16.8	1.4	11.5	26.3	21.9
Farm Sales						
$99,999 or less	98	17.7	4.2	18.5	18.6	23.7
$100,000 - $249,999	242	43.8	20.8	52.5	40.7	47.4
$250,000 or over	213	38.5	75.0	29.0	40.7	28.9
Farm Size						
1,600 acres or less	201	36.3	54.2	33.5	37.7	28.1
1,600 acres or over	352	63.7	45.8	66.5	62.3	71.9
Cropland Tenure						
Full tenant	94	17.1	22.2	16.1	15.7	17.9
1-20 percent owned	144	26.2	45.8	27.1	23.5	16.1
21-40 percent owned	122	22.2	18.1	23.6	21.7	23.2
41 percent or over owned	189	34.4	13.9	33.2	39.2	42.9
Farm Income						
Negative	57	10.3	11.1	5.5	15.6	10.5
$0 - $24,999	114	20.6	8.3	22.5	20.4	25.4
$25,000 - $49,999	130	23.5	19.4	26.5	23.4	21.1
$50,000 or more	252	45.6	61.1	45.5	40.7	43.0
Debt-to-asset Ratio						
0 - 40 percent	162	29.3	36.1	28.5	30.5	24.6
41 - 70 percent	254	45.9	44.4	47.0	41.3	51.8
71 percent or more	137	24.8	19.4	24.5	28.1	23.7
Farmer Age						
34 years or younger	83	15.0	11.1	15.0	16.2	15.8
35 - 44 years	221	40.0	48.6	42.0	35.3	37.7
45 years or older	249	45.0	40.3	43.0	48.5	46.5

TABLE 4. CURRENT ASSETS AND CURRENT LIABILITIES, QUARTILE VALUES FOR 2000, MEDIAN VALUES FOR 1998 AND 1999, NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAM PARTICIPANTS

Farm Group	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median
	Current Farm Assets ($)					Current Farm Liabilities ($)				
All Farms	230,425	74,694	136,837	119,906	113,529	39,406	151,805	87,013	79,133	92,507
Region										
Red River Valley	401,301	151,769	236,860	234,088	169,197	83,578	245,939	141,932	124,495	130,937
North Central	198,010	69,855	126,638	109,041	102,533	36,291	134,172	82,048	64,393	84,425
South Central	233,384	73,140	123,374	125,087	124,716	43,894	169,702	91,274	86,585	98,547
West	206,184	59,955	120,156	104,906	101,762	25,072	120,874	59,820	58,989	80,403
Farm Enterprise										
Crop	269,610	89,068	150,353	137,658	140,908	48,270	166,325	102,677	98,026	111,391
Livestock	179,093	46,905	98,770	89,145	84,553	23,033	113,555	55,334	50,911	52,944
Mixed	212,108	79,933	125,378	110,034	98,066	39,406	134,681	79,493	71,674	84,827
Farm Sales										
$99,999 or less	69,423	25,819	40,449	43,436	47,936	14,754	56,172	29,744	32,391	42,017
$100,000-$249,999	165,232	79,337	117,014	108,599	106,169	40,751	120,874	79,739	69,668	90,831
$250,000 or over	396,058	175,673	260,491	236,798	238,082	83,578	234,759	148,322	148,247	167,088
Farm Size										
1,600 acres or less	130,249	36,496	69,423	63,128	71,173	23,066	92,228	50,498	45,507	55,429
1,601 acres or over	297,453	117,014	180,742	162,030	156,483	56,792	187,105	114,145	99,027	122,791
Cropland Tenure										
Full tenant	184,990	57,785	116,889	91,446	86,733	27,697	145,091	77,095	57,738	80,403
1-20 percent owned	308,806	118,122	194,846	177,009	156,041	69,671	208,588	125,253	112,303	115,787
21-40 percent owned	241,694	95,868	145,050	138,040	147,264	48,919	155,025	100,788	84,155	107,887
41 percent or over owned	188,339	56,465	114,797	94,365	95,540	26,684	112,845	61,000	63,036	75,584
Net Farm Income										
Negative	177,791	36,209	64,400	78,664	96,288	37,333	253,950	86,037	97,310	109,192
$0-$24,999	116,904	35,890	70,294	60,239	86,733	24,770	107,507	49,474	47,038	79,900
$25,000-$49,999	151,548	69,539	108,461	105,501	113,529	36,424	120,275	78,983	71,674	87,660
$50,000 or more	322,080	146,475	207,229	205,445	210,733	56,014	173,026	112,845	109,090	114,668
Debt-to-Asset Ratio										
0-40 percent	290,249	99,709	167,765	154,964	143,610	19,853	99,148	46,912	40,011	41,061
41-70 percent	227,236	81,726	148,176	121,371	120,816	53,530	168,760	100,788	88,888	104,401
71 percent or more	151,256	55,752	101,864	89,952	99,095	50,498	178,384	112,349	98,026	119,329
Farmer Age										
34 years or younger	165,963	43,044	107,907	98,078	90,270	24,589	105,340	57,124	51,510	64,990
35-44 years	292,421	90,616	176,192	161,931	142,300	50,196	184,468	110,689	95,182	104,379
45 years or older	212,108	75,727	132,415	116,986	109,895	39,203	139,857	84,868	80,039	92,507

TABLE 5. LIQUIDITY MEASURES, QUARTILE VALUES FOR 2000, MEDIAN VALUES FOR 1998 AND 1999, NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAM PARTICIPANTS.

Farm Group	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median
			Current Ratio					Working Capital($)		
All Farms	2.5	1.0	1.4	1.4	1.2	95,916	3,100	36,612	29,643	12,095
Region										
Red River Valley	3.4	1.1	1.4	1.3	1.0	200,655	5,143	63,837	53,870	4,449
North Central	2.5	1.1	1.5	1.4	1.1	86,523	8,439	39,058	27,387	9,115
South Central	2.0	0.9	1.3	1.3	1.2	80,410	-4,052	26,294	33,810	13,535
West	2.8	1.1	1.5	1.4	1.2	97,309	3,322	38,621	25,083	14,125
Farm Enterprise										
Crop	2.5	1.0	1.3	1.3	1.1	108,627	-759	35,412	29,641	12,198
Livestock	2.6	1.1	1.6	1.5	1.2	80,410	5,457	36,351	28,049	16,807
Mixed	2.3	1.1	1.5	1.4	1.1	80,885	6,355	41,449	37,735	7,840
Farm Sales										
$99,999 or less	1.9	0.8	1.2	1.3	1.1	25,638	-8,118	6,748	10,009	5,352
$100,000-$249,999	2.3	1.0	1.4	1.4	1.2	75,940	3,337	33,056	32,996	13,578
$250,000 or over	2.8	1.1	1.5	1.3	1.2	196,307	26,690	80,410	57,052	24,075
Farm Size										
1,600 acres or less	2.5	0.9	1.3	1.3	1.1	43,516	-4,128	12,996	12,212	5,753
1,601 acres or over	2.5	1.1	1.5	1.4	1.2	118,774	13,484	54,071	42,777	18,173
Cropland Tenure										
Full tenant	2.2	1.0	1.3	1.3	1.2	60,611	1,138	31,131	25,802	7,009
1-20 percent owned	2.0	1.1	1.4	1.4	1.2	108,477	9,270	47,683	43,554	15,333
21-40 percent owned	2.5	1.0	1.4	1.3	1.1	99,497	-1,480	34,797	36,627	11,689
41 percent or over owned	2.8	1.0	1.5	1.4	1.2	98,209	1,543	36,612	19,855	13,578
Net Farm Income										
Negative	1.0	0.6	0.9	0.8	0.8	3,322	-54,544	-13,485	-13,578	-13,946
$0-$24,999	1.8	0.9	1.2	1.2	1.1	30,096	-9,114	11,327	7,937	7,871
$25,000-$49,999	2.0	1.0	1.3	1.3	1.3	53,882	-759	26,891	22,666	30,586
$50,000 or more	3.4	1.3	1.8	1.6	1.5	176,954	42,809	88,463	74,848	53,028
Debt-to-Asset Ratio										
0-40 percent	6.8	2.0	3.4	3.6	2.8	226,869	48,509	111,695	102,792	71,762
41-70 percent	1.7	1.1	1.3	1.3	1.2	78,528	7,444	35,969	29,641	13,627
71 percent or more	1.2	0.7	1.0	1.0	0.9	19,775	-32,057	-2,987	3,180	-12,553
Farmer Age										
34 years or younger	2.8	1.1	1.4	1.4	1.3	74,203	5,561	29,454	27,077	12,198
35-44 years	2.4	1.1	1.4	1.4	1.1	104,403	7,020	42,198	40,631	12,208
45 years or older	2.4	1.0	1.4	1.3	1.1	98,209	-1,564	33,244	20,427	9,789

TABLE 6. TOTAL ASSETS AND TOTAL LIABILITIES, QUARTILE VALUES FOR 2000, MEDIAN VALUES FOR 1998 AND 1999 NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAM PARTICIPANTS

Farm Group	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median
	Total Farm Assets($)					Total Farm Liabilities($)				
All Farms	833,894	359,414	549,636	520,094	499,496	151,310	419,953	274,640	266,401	270,802
Region										
Red River Valley	1,289,886	517,761	714,742	753,157	727,513	230,622	591,211	368,246	388,383	386,642
North Central	749,478	348,050	517,231	486,637	466,665	140,606	374,787	256,791	238,985	249,562
South Central	825,634	351,642	527,892	525,562	486,735	146,455	439,319	267,315	269,355	280,786
West	768,087	345,274	527,146	470,232	488,397	156,310	414,760	254,486	231,772	248,889
Farm Enterprise										
Crop	918,182	386,371	595,034	569,907	571,140	156,760	441,165	282,791	272,748	298,097
Livestock	702,447	319,337	468,560	453,253	401,846	149,525	395,491	251,888	237,930	236,613
Mixed	696,422	350,241	509,242	444,915	419,503	152,992	414,140	262,145	266,417	259,032
Farm Sales										
$99,999 or less	372,676	160,957	279,141	275,160	280,424	66,006	227,326	157,532	161,018	169,548
$100,000-$249,999	634,549	351,642	472,070	465,568	459,525	150,986	369,656	254,484	241,489	259,032
$250,000 or over	1,209,539	635,336	886,118	839,211	833,314	247,561	564,574	395,491	397,166	439,360
Farm Size										
1,600 acres or less	524,511	221,440	356,698	331,881	318,264	102,641	298,242	193,362	187,337	187,165
1,601 acres or over	955,104	472,397	668,915	632,877	613,782	209,415	492,619	330,960	328,028	349,273
Cropland Tenure										
Full tenant	532,607	188,920	308,388	256,883	249,634	78,853	286,373	183,999	150,751	166,729
1-20 percent owned	856,572	426,193	569,119	573,919	509,818	207,923	448,680	299,497	321,073	305,521
21-40 percent owned	886,118	457,876	585,240	544,244	597,457	191,288	478,131	313,931	295,720	336,016
41 percent or over owned	914,650	372,676	601,338	561,646	545,329	149,525	433,040	261,302	269,898	279,988
Net Farm Income										
Negative	702,607	284,974	472,397	425,336	439,854	190,452	613,268	370,415	295,502	317,732
$0-$24,999	509,455	242,250	345,274	320,568	374,743	121,573	360,848	205,453	201,476	231,070
$25,000-$49,999	573,845	317,437	443,632	443,688	488,397	128,700	340,669	229,179	262,012	240,607
$50,000 or more	1,049,855	549,636	722,070	738,907	727,646	193,362	467,615	317,271	327,983	335,570
Debt-to-Asset Ratio										
0-40 percent	1,007,019	448,404	667,285	615,257	615,207	64,624	238,529	131,578	126,912	124,074
41-70 percent	864,197	393,626	576,111	560,973	524,450	203,623	477,951	311,697	319,841	295,249
71 percent or more	553,037	275,884	395,686	389,769	414,400	232,354	488,923	366,913	345,488	378,517
Farmer Age										
34 years or younger	496,820	224,718	375,419	326,471	319,988	104,799	328,630	210,959	185,253	203,060
35-44 years	899,259	373,811	569,119	541,243	527,339	179,433	448,680	300,828	310,624	301,616
45 years or older	874,909	408,595	598,700	562,023	551,566	145,922	438,470	276,267	274,693	279,988

TABLE 7. SOLVENCY MEASURES, QUARTILE VALUES FOR 2000, MEDIAN VALUES FOR 1998 AND 1999, NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAM PARTICIPANTS.

Farm Group	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median
	Debt-to-Asset (%)					Equity-to-Asset (%)					Debt-to-Equity				
All Farms	36.2	70.1	53.9	55.5	59.4	63.8	29.9	46.1	44.5	40.6	0.6	2.3	1.2	1.2	1.5
Region															
Red River Valley	36.1	66.2	49.9	52.3	56.9	63.9	33.8	50.1	47.7	43.1	0.6	2.0	1.0	1.1	1.3
North Central	38.1	68.5	52.7	55.9	59.2	61.9	31.5	47.3	44.1	40.8	0.6	2.2	1.1	1.3	1.5
South Central	35.0	73.1	55.0	55.1	60.0	65.0	26.9	45.0	44.9	40.0	0.5	2.7	1.2	1.2	1.5
West	41.2	68.9	54.6	55.8	60.7	58.8	31.1	45.4	44.2	39.3	0.7	2.2	1.2	1.3	1.5
Farm Enterprise															
Crop	35.7	68.0	52.5	53.9	58.4	64.3	32.0	47.5	46.1	41.6	0.6	2.1	1.1	1.2	1.4
Livestock	41.2	73.3	54.9	57.9	61.2	58.8	26.7	45.1	42.1	38.8	0.7	2.7	1.2	1.4	1.6
Mixed	36.4	70.9	55.5	55.5	61.3	63.6	29.1	44.5	44.5	38.7	0.6	2.4	1.2	1.2	1.6
Farm Sales															
$99,999 or less	45.6	78.9	60.7	61.4	66.5	54.4	21.1	39.3	38.6	33.5	0.8	3.7	1.5	1.6	2.0
$100,000-$249,999	39.6	74.6	55.8	55.5	58.8	60.4	25.4	44.2	44.5	41.2	0.7	2.9	1.3	1.2	1.4
$250,000 or over	31.2	62.7	49.4	51.8	55.7	68.8	37.3	50.6	48.2	44.3	0.5	1.7	1.0	1.1	1.3
Farm Size															
1,600 acres or less	36.5	77.5	59.0	58.5	61.7	63.5	22.5	41.0	41.5	38.3	0.6	3.4	1.4	1.4	1.6
1,601 acres or over	35.0	67.5	52.2	54.5	58.8	65.0	32.5	47.8	45.5	41.2	0.5	2.1	1.1	1.2	1.4
Cropland Tenure															
Full tenant	40.1	74.6	60.4	58.8	68.9	59.9	25.4	39.6	41.2	31.1	0.7	2.9	1.5	1.4	2.2
1-20 percent owned	38.2	68.1	54.9	56.8	60.8	61.8	31.9	45.1	43.2	39.2	0.6	2.1	1.2	1.3	1.6
21-40 percent owned	35.0	72.5	53.8	53.4	58.4	65.0	27.5	46.2	46.6	41.6	0.5	2.6	1.2	1.1	1.4
41 percent or over owned	31.2	67.5	50.6	55.1	56.5	68.8	32.5	49.4	44.9	43.5	0.5	2.1	1.0	1.2	1.3
Net Farm Income															
Negative	54.2	93.0	80.2	72.0	72.9	45.8	7.0	19.8	28.0	27.1	1.2	13.3	4.1	2.6	2.7
$0-$24,999	48.7	81.9	64.7	64.2	63.3	51.3	18.1	35.3	35.8	36.7	0.9	4.5	1.8	1.8	1.7
$25,000-$49,999	36.0	74.2	57.9	59.3	56.0	64.0	25.8	42.1	40.7	44.0	0.6	2.9	1.4	1.5	1.3
$50,000 or more	29.5	58.5	45.9	47.1	47.5	70.5	41.5	54.1	52.9	52.5	0.4	1.4	0.8	0.9	0.9
Debt-to-Asset Ratio															
0-40 percent	10.4	33.3	24.6	23.6	25.1	89.6	66.7	75.4	76.4	74.9	0.1	0.5	0.3	0.3	0.3
41-70 percent	48.5	62.6	55.0	55.8	57.1	51.5	37.4	45.0	44.2	42.9	0.9	1.7	1.2	1.3	1.3
71 percent	78.1	98.6	86.6	85.1	84.5	21.9	1.4	13.4	14.9	15.5	3.6	70.4	6.5	5.7	5.5
Farmer Age															
34 years or younger	43.1	77.5	59.7	56.5	66.9	56.9	22.5	40.3	43.5	33.1	0.8	3.4	1.5	1.3	2.0
35-44 years	38.2	70.5	55.0	54.9	58.3	61.8	29.5	45.0	45.1	41.7	0.6	2.4	1.2	1.2	1.4
45 years or older	29.7	67.3	51.4	55.0	57.3	70.3	32.7	48.6	45.0	42.7	0.4	2.1	1.1	1.2	1.3

TABLE 8. RATE OF RETURN ON ASSETS AND RATE OF RETURN ON EQUITY PROFITABILITY MEASURES, QUARTILE VALUES FOR 2000, MEDIAN VALUES FOR 1998 AND 1999, NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAM PARTICIPANTS.

Farm Group	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median
	Return on Farm Assets(%)					Return on Equity(%)				
All Farms	12.9	3.7	7.6	8.4	4.0	21.2	0.0	7.7	9.0	0.0
Region										
Red River Valley	14.2	5.0	9.5	9.6	3.0	22.9	4.5	12.7	14.4	-1.4
North Central	14.2	4.0	8.4	9.4	3.5	23.0	0.0	8.7	10.4	0.0
South Central	11.1	2.8	6.6	8.3	5.8	15.3	-4.0	5.8	6.4	1.7
West	12.6	2.9	7.5	6.6	3.3	23.4	0.0	7.6	6.5	0.0
Farm Enterprise										
Crop	14.8	4.0	8.3	9.2	5.0	22.8	0.0	8.8	10.3	1.5
Livestock	11.0	3.2	6.8	6.9	2.6	15.7	-0.8	5.9	6.4	-1.1
Mixed	12.1	3.1	7.0	6.5	1.6	24.6	-4.0	6.5	4.1	-3.9
Farm Sales										
$99,999 or less	7.1	-2.2	3.4	2.6	-0.6	5.8	-12.0	0.0	0.0	-7.2
$100,000-$249,999	12.9	4.3	8.0	8.3	3.8	22.0	0.0	8.2	8.8	0.0
$250,000 or over	15.1	5.5	9.9	10.7	6.7	23.2	3.5	11.0	15.0	5.5
Farm Size										
1,600 acres or less	11.9	1.6	6.6	5.9	2.6	17.2	-4.8	5.4	3.0	-0.6
1,601 acres or over	13.5	4.6	8.5	9.7	5.0	22.7	0.6	9.2	11.2	1.8
Cropland Tenure										
Full tenant	17.7	3.3	10.1	9.9	3.8	30.9	0.0	9.2	10.6	0.0
1-20 percent owned	15.8	5.5	10.4	11.3	6.6	26.7	3.5	13.2	16.5	4.9
21-40 percent owned	12.3	3.2	7.3	8.5	3.8	21.5	0.0	6.8	9.1	0.0
41 percent or over owned	9.8	2.9	6.5	5.6	2.6	12.3	-0.9	5.7	3.6	-1.1
Net Farm Income										
Negative	-0.8	-7.6	-3.5	-4.0	-4.0	-10.4	-73.6	-28.3	-20.7	-17.9
$0-$24,999	4.9	1.0	2.9	3.0	2.6	0.3	-11.2	-2.3	-1.4	-3.5
$25,000-$49,999	10.6	5.1	7.2	7.5	6.8	17.8	2.9	6.5	7.2	5.9
$50,000 or more	17.2	9.1	12.3	13.1	11.4	29.1	10.4	17.2	19.1	14.9
Debt-to-Asset Ratio										
0-40 percent	13.0	4.6	7.9	8.5	5.5	15.3	4.3	8.3	9.1	4.3
41-70 percent	13.6	4.2	8.5	8.9	4.4	24.5	0.5	10.3	11.4	0.6
71 percent or more	11.4	0.4	5.7	6.5	2.3	22.9	-24.3	0.0	0.0	-4.2
Farmer Age										
34 years or younger	16.2	5.7	9.7	9.2	5.1	30.3	0.5	13.3	10.4	3.0
35-44 years	15.1	4.6	9.0	9.6	5.2	25.2	0.4	10.5	11.1	0.9
45 years or older	10.9	2.8	6.1	6.9	2.5	13.3	-0.9	5.1	5.7	-1.3

TABLE 9. OPERATING PROFIT MARGIN AND NET FARM INCOME PROFITABILITY MEASURES, QUARTILE VALUES FOR 2000, MEDIAN VALUES FOR 1998 AND 1999, NORTH DAKOTA FARM BUSINESS MANAGEMENT PROGRAM PARTICIPANTS.

Farm Group	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median
	Operating Profit Margin(%)					Net Farm Income($)				
All Farms	29.0	9.8	20.6	21.6	11.5	87,830	18,514	45,085	42,009	19,491
Region										
Red River Valley	27.7	10.5	17.7	20.6	7.7	154,229	34,317	78,759	78,755	19,491
North Central	28.4	12.1	22.6	24.2	10.4	79,774	22,819	46,219	41,769	15,903
South Central	28.1	7.2	17.6	18.3	12.7	75,580	13,867	37,923	38,064	26,339
West	32.2	9.7	23.2	20.9	12.1	79,514	15,734	40,388	35,927	16,018
Farm Enterprise										
Crop	27.0	9.6	18.9	21.0	12.0	97,111	23,144	50,700	50,027	26,398
Livestock	32.3	12.1	23.2	24.1	12.3	54,777	15,432	29,446	34,796	14,944
Mixed	29.9	9.5	23.2	21.6	7.2	68,191	13,867	42,241	31,497	8,147
Farm Sales										
$99,999 or less	22.6	-11.4	11.3	12.3	-1.5	23,766	797	13,806	14,051	5,666
$100,000-$249,999	30.5	11.5	22.6	23.2	12.1	62,609	22,960	42,484	39,603	18,290
$250,000 or over	29.1	11.9	21.3	23.9	15.3	134,913	41,671	89,862	86,893	55,344
Farm Size										
1,600 acres or less	26.0	4.5	18.6	17.0	6.8	49,759	11,205	29,055	24,382	11,378
1,601 acres or over	29.8	11.1	22.3	24.4	12.9	99,654	29,094	57,202	61,476	28,431
Cropland Tenure										
Full tenant	25.3	6.6	17.1	18.6	7.4	59,217	17,148	36,518	35,005	12,119
1-20 percent owned	27.0	11.2	18.6	22.3	13.1	101,463	29,886	66,495	64,129	32,953
21-40 percent owned	29.5	10.2	20.8	23.1	10.9	93,599	20,710	48,086	49,205	20,642
41 percent or over owned	30.9	11.1	23.1	22.3	12.2	75,580	14,401	38,035	32,652	14,412
Net Farm Income										
Negative	-2.3	-32.2	-10.7	-12.2	-15.0	-6,441	-26,308	-14,170	-13,107	-12,528
$0-$24,999	18.0	1.9	9.6	9.7	7.7	20,710	9,874	15,110	14,429	11,995
$25,000-$49,999	24.5	11.7	18.2	21.2	16.5	42,869	31,885	37,471	36,603	34,601
$50,000 or more	34.4	22.3	28.4	28.4	24.8	121,405	65,573	93,316	87,426	77,791
Debt-to-Asset Ratio										
0-40 percent	30.3	13.6	22.7	24.4	15.9	114,873	35,463	62,244	62,021	37,196
41-70 percent	29.9	11.9	22.1	22.3	12.2	91,770	21,954	52,075	48,315	20,927
71 percent or more	23.2	1.5	12.3	16.7	6.4	41,262	601	20,710	22,641	5,708
Farmer Age										
34 years or younger	29.2	11.0	22.6	20.9	12.3	77,918	16,833	39,634	34,705	20,835
35-44 years	29.0	11.3	20.7	21.9	12.5	98,455	26,729	54,045	52,577	25,539
45 years or older	28.5	8.0	20.0	21.5	10.0	81,662	16,520	39,868	39,770	13,978

TABLE 10. REPAYMENT CAPACITY MEASURES, QUARTILE VALUES FOR 2000, MEDIAN VALUES FOR 1998 AND 1999, NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAM PARTICIPANTS.

Farm Group	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median
	Term Debt Coverage Ratio					Term Debt and Capital Repayment Margin($)				
All Farms	2.7	0.9	1.6	1.5	0.9	49,760	-5,332	17,768	17,973	-2,680
Region										
Red River Valley	2.8	1.0	2.0	1.6	0.7	100,804	-2,111	44,270	35,838	-7,661
North Central	2.8	0.8	1.6	1.5	0.7	44,111	-5,891	16,771	13,070	-6,245
South Central	2.3	0.8	1.3	1.6	1.2	35,839	-8,416	9,768	14,592	4,351
West	2.8	1.0	1.6	1.6	1.0	49,912	169	22,620	15,260	-778
Farm Enterprise										
Crop	2.9	0.8	1.6	1.7	1.0	60,488	-6,564	19,483	21,499	-1,867
Livestock	2.4	0.9	1.4	1.5	1.0	33,871	-2,303	8,981	18,282	-778
Mixed	2.5	0.9	1.6	1.4	0.6	43,841	-3,987	18,082	9,966	-5,819
Farm Sales										
$99,999 or less	1.8	0.5	1.2	1.3	0.7	16,414	-10,209	2,912	4,545	-5,021
$100,000-$249,999	2.5	0.8	1.5	1.5	0.8	37,764	-6,476	15,156	13,750	-5,327
$250,000 or over	2.9	1.0	1.9	1.9	1.2	95,633	1,257	43,577	46,738	5,929
Farm Size										
1,600 acres or less	2.7	0.8	1.3	1.4	0.9	26,607	-7,223	5,110	10,821	-1,867
1,601 acres or over	2.7	0.9	1.7	1.7	0.9	62,789	-2,303	25,435	27,192	-4,290
Cropland Tenure										
Full tenant	3.1	0.9	1.6	2.0	0.8	35,760	-2,220	10,574	19,191	-2,641
1-20 percent owned	2.9	0.9	1.7	1.7	1.1	76,121	-5,332	24,260	28,365	1,710
21-40 percent owned	2.7	0.7	1.6	1.6	0.8	53,734	-10,359	18,737	25,389	-5,021
41 percent or over owned	2.4	0.9	1.5	1.3	0.9	37,733	-3,988	16,637	9,932	-2,923
Net Farm Income										
Negative	0.8	-0.1	0.3	0.1	0.0	-5,924	-62,852	-17,844	-32,082	-32,359
$0-$24,999	1.3	0.5	1.0	1.2	0.7	6,371	-16,699	-1,313	3,626	-5,488
$25,000-$49,999	2.2	0.9	1.4	1.4	1.3	26,032	-3,987	14,069	12,518	9,948
$50,000 or more	3.7	1.6	2.3	2.3	1.8	86,663	25,593	53,344	48,869	28,297
Debt-to-Asset Ratio										
0-40 percent	5.7	1.7	2.9	2.5	1.8	85,000	16,414	38,650	36,997	19,255
41-70 percent	2.3	0.9	1.5	1.5	1.0	49,001	-5,287	18,868	20,710	1,025
71 percent or more	1.4	0.4	0.9	1.0	0.5	10,807	-23,099	-4,083	2,384	-16,470
Farmer Age										
34 years or younger	3.1	1.2	2.0	1.8	1.1	42,500	3,760	20,558	13,070	3,662
35-44 years	2.9	0.9	1.6	1.6	0.9	59,205	-3,988	22,620	22,831	-3,152
45 years or older	2.5	0.8	1.4	1.5	0.8	42,100	-9,535	12,533	15,251	-6,245

TABLE 11. ASSET TURNOVER AND OPERATING EXPENSE AND DEPRECIATION EXPENSE EFFICIENCY MEASURES (AS A PERCENTAGE OF GROSS FARM INCOME), QUARTILE VALUES FOR 2000, MEDIAN VALUES FOR 1998 AND 1999, FARM BUSINESS MANAGEMENT EDUCATION PROGRAM PARTICIPANTS.

	2000					2000					2000				
Farm Group	Upper Quartile	Lower Quartile	Median	1999 Median	1998 Median	Upper Quartile	Lower Quartile	Median	1999 Median	1998 Median	Upper Quartile	Lower Quartile	Median	1999 Median	1998 Median
	Asset Turnover					Operating Expense(%)					Depreciation Expense (%)				
All Farms	.57	.28	.42	.38	.36	55.9	73.5	63.3	61.2	71.9	2.5	8.2	5.3	5.7	5.7
Region															
Red River Valley	.64	.45	.51	.49	.43	59.5	76.9	69.2	66.5	76.2	3.2	7.5	4.7	5.6	5.8
North Central	.58	.27	.39	.36	.33	55.0	70.0	61.5	56.8	72.4	1.9	7.6	4.5	4.6	4.8
South Central	.60	.28	.43	.42	.43	56.9	75.4	66.8	64.4	70.9	2.8	9.1	5.8	6.3	6.9
West	.46	.24	.33	.32	.27	51.1	70.1	60.4	60.3	70.1	1.8	9.8	5.8	7.6	5.6
Farm Enterprise															
Crop	.64	.36	.49	.45	.44	57.1	74.9	65.1	62.7	72.6	3.1	7.7	5.4	5.6	5.3
Livestock	.37	.20	.26	.28	.22	49.9	69.1	59.8	56.8	66.7	-0.9	9.9	5.2	6.0	6.7
Mixed	.43	.25	.33	.31	.28	52.2	71.0	60.9	60.5	73.9	1.4	9.8	5.0	5.8	6.7
Farm Sales															
$99,999 or less	.42	.18	.26	.26	.23	50.6	74.1	59.6	58.7	69.7	0.4	11.9	6.3	5.8	6.4
$100,000-$249,999	.52	.28	.39	.35	.35	54.1	71.0	61.0	59.6	71.4	2.4	8.2	4.9	5.1	5.8
$250,000 or over	.64	.36	.50	.50	.45	59.0	75.7	67.5	63.3	72.8	2.9	7.6	5.2	6.0	5.3
Farm Size															
1,600 acres or less	.55	.24	.39	.35	.34	54.2	73.8	62.8	62.9	71.8	2.8	8.4	5.5	5.6	6.2
1,601 acres or over	.58	.30	.43	.40	.37	56.0	72.9	63.7	60.7	72.1	2.4	8.1	5.1	6.0	5.5
Cropland Tenure															
Full tenant	.99	.42	.56	.57	.55	57.1	77.4	66.3	66.3	74.4	1.5	8.2	4.5	4.3	4.0
1-20 percent owned	.68	.44	.54	.52	.50	59.9	73.8	67.1	63.2	72.3	2.7	7.7	4.8	5.6	4.7
21-40 percent owned	.51	.33	.41	.37	.34	55.4	74.1	63.6	62.1	73.2	3.0	7.9	5.6	5.8	5.6
41 percent or over owned	.36	.20	.28	.26	.24	52.0	69.2	59.5	56.8	68.1	1.8	9.1	5.7	6.5	7.8
Net Farm Income															
Negative	.49	.16	.25	.31	.27	77.5	93.8	85.9	89.0	88.0	4.5	13.3	8.3	10.5	8.6
$0-$24,999	.46	.21	.32	.29	.31	57.1	76.8	68.7	66.2	72.9	1.9	9.9	5.9	7.6	5.6
$25,000-$49,999	.57	.30	.43	.35	.39	54.2	72.9	63.0	60.3	68.1	3.3	8.7	5.4	6.3	4.7
$50,000 or more	.62	.35	.48	.48	.46	53.4	66.8	59.6	58.6	63.7	2.2	7.1	4.2	5.0	4.4
Debt-to-Asset Ratio															
0-40 percent	.50	.28	.37	.35	.32	53.2	70.0	59.8	60.0	66.7	3.9	9.0	6.2	7.2	6.5
41-70 percent	.58	.29	.41	.38	.36	55.2	70.8	62.4	59.6	71.2	2.2	7.9	5.0	5.6	5.6
71 percent or more	.65	.30	.46	.41	.40	61.4	80.6	71.0	66.6	75.7	1.5	7.6	4.1	5.3	5.4
Farmer Age															
34 years or younger	.70	.35	.48	.44	.44	51.1	70.0	63.3	62.6	72.2	2.1	7.7	4.2	4.1	3.5
35-44 years	.64	.33	.48	.45	.40	56.0	75.4	64.6	62.6	71.5	2.4	7.8	5.0	5.4	5.6
45 years or older	.49	.25	.35	.31	.29	56.4	73.2	62.4	59.9	72.1	2.6	9.0	5.9	6.8	7.0

TABLE 12. INTEREST EXPENSE AND FARM INCOME EFFICIENCY MEASURES (AS A PERCENTAGE OF GROSS FARM INCOME), QUARTILE VALUES FOR 2000, MEDIAN VALUES FOR 1998 AND 1999, NORTH DAKOTA FARM BUSINESS MANAGEMENT EDUCATION PROGRAM PARTICIPANTS.

Farm Group	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median	2000 Upper Quartile	2000 Lower Quartile	2000 Median	1999 Median	1998 Median
	Interest Expense(%)					Net Farm Income (%)				
All Farms	5.0	12.2	7.8	8.4	9.6	31.6	11.5	21.7	22.4	12.7
Region										
Red River Valley	3.6	8.6	5.7	6.5	8.9	27.9	11.8	19.9	21.1	5.9
North Central	4.7	12.2	8.0	9.7	9.8	32.9	15.2	24.8	27.6	12.7
South Central	5.2	12.2	7.4	7.8	8.7	30.9	7.9	17.8	19.5	13.2
West	5.7	15.0	9.7	9.6	11.6	31.5	12.1	22.3	20.1	13.3
Farm Enterprise										
Crop	4.3	10.4	6.5	7.7	8.6	30.5	11.0	20.8	22.5	13.3
Livestock	6.3	18.0	11.2	10.7	12.4	33.2	13.6	23.0	24.4	15.3
Mixed	5.8	14.9	8.8	10.8	12.3	33.9	9.9	24.4	20.4	7.8
Farm Sales										
$99,999 or less	7.2	18.5	12.0	11.8	16.7	31.1	1.5	18.4	20.4	7.9
$100,000-$249,999	5.7	12.8	8.5	9.4	9.7	32.8	13.6	24.5	23.2	12.7
$250,000 or over	3.7	9.0	6.0	7.2	7.8	30.3	12.4	20.1	22.4	13.8
Farm Size										
1,600 acres or less	5.1	13.0	8.2	9.0	9.5	30.9	9.0	22.1	21.1	11.3
1,601 acres or over	4.8	11.7	7.3	8.2	9.6	31.9	12.4	21.5	22.7	13.5
Cropland Tenure										
Full tenant	3.2	9.0	5.3	5.7	7.0	30.7	11.3	20.4	21.1	12.9
1-20 percent owned	4.8	9.1	6.2	7.3	7.7	27.8	12.9	20.7	22.6	15.3
21-40 percent owned	5.8	12.4	8.2	8.9	10.6	30.9	8.8	21.3	22.6	10.0
41 percent or over owned	6.4	16.5	10.6	11.9	13.2	33.2	12.4	24.6	22.5	10.8
Net Farm Income										
Negative	9.7	22.0	15.9	15.3	15.0	-3.6	-24.0	-7.5	-9.5	-10.7
$0-$24,999	8.2	17.1	11.6	12.0	11.6	20.0	6.2	10.2	12.8	9.1
$25,000-$49,999	4.7	11.9	7.3	9.0	7.8	27.9	15.1	19.6	22.4	18.6
$50,000 or more	3.7	8.5	5.9	6.9	6.7	36.0	22.3	30.3	28.9	24.6
Debt-to-Asset Ratio										
0-40 percent	1.8	6.2	4.0	4.4	4.6	37.3	19.7	29.2	29.0	21.8
41-70 percent	6.2	13.4	8.5	9.3	9.9	30.7	12.9	21.8	21.7	13.0
71 percent or more	7.5	17.4	11.3	12.3	13.5	21.4	0.3	13.0	14.9	3.7
Farmer Age										
34 years or younger	4.3	10.6	6.9	7.5	8.1	33.6	14.3	24.5	24.2	16.2
35-44 years	4.8	11.1	7.2	7.7	9.1	31.2	12.7	21.7	22.5	13.6
45 years or older	5.6	14.1	8.5	9.8	11.0	30.8	9.7	20.3	21.1	9.1

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