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Staff Paper

Dairy Farms in Michigan's U. P., 2001

Sherrill B. Nott
Warren Schauer
Steve Zimmerman

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Department of Agricultural Economics
MICHIGAN STATE UNIVERSITY
East Lansing, Michigan 48824

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DAIRY FARMS IN MICHIGAN'S U. P., 2001

Michigan Data from Telfarm/MicroTel, and Farm Credit Services
Staff Paper No. 2002-11, 16 pages

by

Sherrill B. Nott, Warren Schauer, and Steve Zimmerman¹

Introduction

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Data Source

Farm types were assigned using the 1992 Census of Agriculture's Standard Industrial Classification (SIC) definitions. Basically, any farm with 50 percent or more of value of farm sales from one item becomes a farm of that type. Dairy farms have 50 percent or more of value of combined sales from milk and cull dairy animals.

This report is a summary of the financial and production records kept by U.P. dairy farmers enrolled in the Telfarm/MicroTel record program through Michigan State University Extension, or were

¹ Professor and Farm Management Specialist, Extension Agriculture and Natural Resource Agent, and Farm Tax/Business Consultant for Farm Credit Services of Wisconsin, respectively; phone 517-353-4522 or nott@msu.edu Co-workers in the Telfarm/MicroTel project were R. Betz, L. Borton, R. Clark, B. Dartt, S. Harsh, M. Kelsey, G. Kole, T. Purdy, G. Schwab, D. Stein, and C. Wolf with the assistance of Michigan State University Extension Agents.

accounting clients of Farm Credit Services. Farm records were included if a Finan² summary was completed on 2001 data including beginning and ending balance sheets, plus income and expenses. The summary was included if cash discrepancy was less than 10% of gross cash inflow, and if the debt discrepancy was less than \$1,000. The averages are reported in the tables below; it should be recognized that considerable variability exists in the data. The unweighted mean of the net farm income for the 26 farms was \$53,386; the standard deviation of the mean was \$53,052 and the median was \$45,902. The unweighted mean of milk sold per cow for the 26 farms was 17,313 lbs.; the standard deviation of the mean was 3,277 lbs. and the median was 17,900 lbs.

This report has two purposes: 1) to provide statistical information about the financial results on U.P. dairy farms during 2001; and 2) to provide production costs for comparative analysis and forward planning.

RankEm³ allows rapid analysis of group averages with some degree of choice over how the results are presented. We prefer to show the average of the high or low 33 percent by net income, but only if the 33 percent means 6 or more farms. The farm was accepted in the average regardless of whether the farm was a proprietorship, partnership, limited liability company, or corporation. RankEm will produce a variety of report options; a subset is given in this publication.

The farms included in the averages below were not a random sample. They kept their financial records on a supervised system and received a variety of off-farm management help. The averages may be representative of bigger and better managed U.P. dairy farms.

This document may be found and downloaded from the following:

<http://www.msu.edu/user/nott>

² Finan = financial analysis, one of the parts of Finpack, a financial software package from the Center for Farm Financial Management at the University of Minnesota.

³ Rankem = software from the Center for Farm Financial Management at the University of Minnesota. It provides group statistics from Finan data.

Table 1

LIVESTOCK AND CROP PRODUCTION SUMMARY
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms sorted by Net Farm Income)

| | Avg. Of <u>All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
|-----------------------------|-----------------------------|----------------|-----------------|
| Number of farms | 26 | 8 | 9 |
| Dairy Summary | | | |
| Average number of cows | 127 | 139 | 144 |
| Milk sold per cow, lbs. | 17,313 | 17,907 | 17,281 |
| Average milk price per cwt. | \$15.09 | \$14.31 | \$15.31 |
| Acreage Summary | | | |
| Total acres owned | 607 | 588 | 673 |
| Total crop acres | 710 | 784 | 873 |
| Crop acres owned | 414 | 393 | 476 |
| Crop acres cash rented | 297 | 391 | 397 |
| Crop acres share rented | - | - | - |

Table 2

FARM INCOME STATEMENT
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms sorted by Net Farm Income)

| | <u>Avg. Of All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
|--------------------------------|------------------------------|----------------|-----------------|
| Number of farms | 26 | 8 | 9 |
| Cash Farm Income | | | |
| Cordwood | 921 | 1,120 | 1,665 |
| Corn | 308 | - | - |
| Hay, Mixed | 1,337 | 249 | 1,083 |
| Straw | 115 | - | 17 |
| Miscellaneous crop income | 10 | - | - |
| Beef Cow-Calf, Beef Calves | 352 | - | 1,017 |
| Beef, Background Beef | 254 | 826 | - |
| Dairy, Milk | 329,390 | 362,790 | 385,892 |
| Dairy, Dairy Calves | 1,305 | 1,397 | 1,306 |
| Dairy Heifers (for sale) | 574 | - | 330 |
| Dairy Replacement Heifers | 198 | 244 | 329 |
| Dairy Steers | 11,754 | 16,480 | 10,648 |
| Sheep, Market Lambs, Mkt Lambs | 221 | - | 638 |
| Cull breeding livestock | 17,244 | 20,466 | 21,380 |
| Misc. livestock income | 1,382 | - | 4 |
| Other government payments | 13,347 | 17,226 | 13,930 |
| Custom work income | 5,382 | 16,152 | - |
| Patronage dividends, cash | 1,269 | 629 | 2,729 |
| Insurance income | 11,880 | 21,607 | 12,830 |
| Other farm income | 8,879 | 16,934 | 3,895 |
| Gross Cash Farm Income | 406,122 | 476,120 | 457,693 |

Table 3

FARM INCOME STATEMENT (Continued)
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms sorted by Net Farm Income)

| Number of Farms | Avg. Of <u>All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
|---|-----------------------------|----------------|-----------------|
| | 26 | 8 | 9 |
| Cash Farm Expense | | | |
| Seed | 7,202 | 10,659 | 5,999 |
| Fertilizer | 15,679 | 30,350 | 11,143 |
| Crop chemicals | 5,733 | 11,909 | 3,002 |
| Crop insurance | 79 | 38 | 196 |
| Crop miscellaneous | 569 | 479 | 629 |
| Feeder livestock purchase | 1,279 | - | 702 |
| Purchased feed | 85,991 | 94,982 | 96,185 |
| Breeding fees | 2,745 | 3,030 | 3,462 |
| Veterinary | 6,940 | 8,777 | 8,291 |
| BST | 1,073 | 2,903 | 519 |
| Livestock supplies | 15,767 | 16,653 | 17,521 |
| DHIA | 97 | 131 | - |
| Livestock marketing | 6,226 | 6,262 | 8,200 |
| Interest | 19,726 | 27,406 | 13,717 |
| Fuel & oil | 12,691 | 14,001 | 13,873 |
| Repairs | 24,691 | 38,866 | 23,993 |
| Custom hire | 10,211 | 13,498 | 9,023 |
| Hired labor | 46,556 | 61,438 | 57,759 |
| Land rent | 8,474 | 10,262 | 7,613 |
| Machinery & bldg leases | 2,481 | 3,766 | 667 |
| Real estate taxes | 5,250 | 5,829 | 5,554 |
| Personal property taxes | 305 | - | - |
| Farm insurance | 5,038 | 6,223 | 3,461 |
| Utilities | 9,387 | 12,787 | 9,624 |
| Dues & professional fees | 3,751 | 4,683 | 4,027 |
| Miscellaneous | 12,764 | 14,294 | 12,489 |
| Total cash expense | 310,704 | 399,224 | 317,652 |
| Net cash farm income | 95,417 | 76,896 | 140,041 |
| Inventory Changes | | | |
| Crops and feed | -8,657 | -19,143 | -3,044 |
| Market livestock | 802 | 706 | -1,070 |
| Accounts receivable | 6,838 | 4,690 | 8,319 |
| Prepaid expenses and supplies | 112 | -1,540 | 1,193 |
| Accounts payable | 2,935 | -3,145 | 12,663 |
| Total inventory change | 2,031 | -18,432 | 18,062 |
| Net operating profit | 97,448 | 58,464 | 158,103 |
| Depreciation and Other Capital Adjustments | | | |
| Breeding livestock | 7,347 | -9,370 | 19,110 |
| Machinery and equipment | -35,552 | -39,032 | -45,134 |
| Buildings and improvements | -15,737 | -13,235 | -17,337 |
| Other farm capital | -160 | 1,145 | -632 |
| Total depr. and other capital adj | -44,102 | -60,492 | -43,992 |
| Net farm income | 53,346 | -2,029 | 114,111 |

Table 4

INVENTORY CHANGES
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms sorted by Net Farm Income)

| | <u>Avg. Of</u> <u>All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
|---|------------------------------------|----------------|-----------------|
| Number of farms | 26 | 8 | 9 |
| Net cash farm income | 95,417 | 76,896 | 140,041 |
| Crops and Feed | | | |
| Ending inventory | 66,218 | 79,265 | 73,035 |
| Beginning inventory | 74,874 | 98,408 | 76,079 |
| Inventory change | -8,657 | -19,143 | -3,044 |
| Market Livestock | | | |
| Ending inventory | 14,980 | 20,225 | 12,110 |
| Beginning inventory | 14,178 | 19,519 | 13,179 |
| Inventory change | 802 | 706 | -1,070 |
| Accts Receivable & Other Current Assets | | | |
| Ending inventory | 22,652 | 22,703 | 21,524 |
| Beginning inventory | 15,814 | 18,014 | 13,205 |
| Inventory change | 6,838 | 4,690 | 8,319 |
| Prepaid Expenses and Supplies | | | |
| Ending inventory | 10,145 | 15,984 | 11,473 |
| Beginning inventory | 10,033 | 17,524 | 10,280 |
| Inventory change | 112 | -1,540 | 1,193 |
| Accounts Payable & Accrued Expenses | | | |
| Beginning inventory | 10,137 | 634 | 21,364 |
| Ending inventory | 7,202 | 3,778 | 8,701 |
| Inventory change | 2,935 | -3,145 | 12,663 |
| Total inventory change | 2,031 | -18,432 | 18,062 |
| Net operating profit | 97,448 | 58,464 | 158,103 |

Table 5

DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms sorted by Net Farm Income)

| | Avg. Of <u>All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
|-----------------------------------|-----------------------------|----------------|-----------------|
| Number of farms | 26 | 8 | 9 |
| Net operating profit | 97,448 | 58,464 | 158,103 |
| Breeding Livestock | | | |
| Ending inventory | 282,383 | 295,775 | 311,086 |
| Capital sales | 272 | 883 | 2 |
| Beginning inventory | 264,341 | 294,269 | 291,900 |
| Capital purchases | 10,967 | 11,759 | 78 |
| Depreciation, capital adjust. | 7,347 | -9,370 | 19,110 |
| Machinery and Equipment | | | |
| Ending inventory | 99,978 | 137,321 | 103,974 |
| Capital sales | 880 | 1,198 | 1,476 |
| Beginning inventory | 96,001 | 131,805 | 98,903 |
| Capital purchases | 40,409 | 45,745 | 51,681 |
| Depreciation, capital adjust. | -35,552 | -39,032 | -45,134 |
| Buildings and Improvements | | | |
| Ending inventory | 121,753 | 106,214 | 97,331 |
| Capital sales | - | - | - |
| Beginning inventory | 101,291 | 109,055 | 103,326 |
| Capital purchases | 36,199 | 10,394 | 11,342 |
| Depreciation, capital adjust. | -15,737 | -13,235 | -17,337 |
| Other Capital Assets | | | |
| Ending inventory | 54,324 | 130,436 | 11,223 |
| Capital sales | 162 | 346 | 160 |
| Beginning inventory | 53,378 | 127,599 | 10,366 |
| Capital purchases | 1,267 | 2,038 | 1,649 |
| Depreciation, capital adjust. | -160 | 1,145 | -632 |
| Total depreciation, capital adj. | -44,102 | -60,492 | -43,992 |
| Net farm income | 53,346 | -2,029 | 114,111 |

Table 6

PROFITABILITY MEASURES
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms sorted by Net Farm Income)

| | <u>Avg. Of All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
|---|------------------------------|----------------|-----------------|
| Number of farms | 26 | 8 | 9 |
| Profitability (assets valued at cost) | | | |
| Net farm income | 53,346 | -2,029 | 114,111 |
| Labor and management earnings | 31,012 | -22,022 | 85,580 |
| Rate of return on assets | 2.8 % | -1.7 % | 8.6 % |
| Rate of return on equity | 0.1 % | -13.7 % | 10.2 % |
| Operating profit margin | 6.4 % | -4.1 % | 16.2 % |
| Asset turnover rate | 44.2 % | 40.0 % | 53.0 % |
| Interest on farm net worth | 22,334 | 19,994 | 28,531 |
| Farm interest expense | 20,366 | 29,487 | 13,717 |
| Value of operator lbr and mgmt. | 52,835 | 42,255 | 65,624 |
| Return on farm assets | 20,877 | -14,796 | 62,203 |
| Average farm assets | 735,832 | 894,947 | 725,373 |
| Return on farm equity | 511 | -44,283 | 48,487 |
| Average farm equity | 368,958 | 322,563 | 475,511 |
| Value of farm production | 325,416 | 358,022 | 384,800 |
| | <u>Avg. Of All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
| Number of farms | 26 | 8 | 9 |
| Profitability (assets valued at market) | | | |
| Net farm income | 93,276 | 29,325 | 179,719 |
| Labor and management earnings | 43,676 | -17,631 | 126,498 |
| Rate of return on assets | 5.1 % | 1.2 % | 11.2 % |
| Rate of return on equity | 4.9 % | -1.7 % | 12.9 % |
| Operating profit margin | 18.7 % | 4.6 % | 33.2 % |
| Asset turnover rate | 27.3 % | 26.4 % | 33.8 % |
| Interest on farm net worth | 49,600 | 46,956 | 53,221 |
| Farm interest expense | 20,366 | 29,487 | 13,717 |
| Value of operator lbr and mgmt. | 52,835 | 42,255 | 65,624 |
| Return on farm assets | 60,807 | 16,558 | 127,812 |
| Average farm assets | 1,193,544 | 1,354,989 | 1,136,886 |
| Return on farm equity | 40,441 | -12,930 | 114,095 |
| Average farm equity | 826,670 | 782,605 | 887,024 |
| Value of farm production | 325,416 | 358,022 | 384,800 |

Table 7

LIQUIDITY MEASURES
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms Sorted By Net Farm Income)

| | <u>Avg. Of</u> <u>All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
|---------------------------------|------------------------------------|----------------|-----------------|
| Number of farms | 26 | 8 | 9 |
| Liquidity (cash) | | | |
| Net cash farm income | 95,417 | 76,896 | 140,041 |
| Net nonfarm income | 9,717 | 5,466 | 9,587 |
| Family living and taxes | 42,960 | 22,246 | 69,067 |
| Real estate principal payments | 8,868 | 10,162 | 12,110 |
| Cash available for interm. debt | 53,306 | 49,954 | 68,451 |
| Average intermediate debt | 116,835 | 121,617 | 107,668 |
| Years to turnover interm. debt | 2.2 | 2.4 | 1.6 |
| Expense as a % of income | 77 % | 84 % | 69 % |
| Interest as a % of income | 5 % | 6 % | 3 % |
| Liquidity (accrual) | | | |
| Total accrual farm income | 405,105 | 462,373 | 461,899 |
| Total accrual operating expense | 307,657 | 403,909 | 303,796 |
| Net accrual operating income | 97,448 | 58,464 | 158,103 |
| Net nonfarm income | 9,717 | 5,466 | 9,587 |
| Family living and taxes | 42,960 | 22,246 | 69,067 |
| Real estate principal payments | 8,868 | 10,162 | 12,110 |
| Available for intermediate debt | 55,337 | 31,522 | 86,513 |
| Average intermediate debt | 116,835 | 121,617 | 107,668 |
| Years to turnover interm. debt | 2.1 | 3.9 | 1.2 |
| Expense as a % of income | 76 % | 87 % | 66 % |
| Interest as a % of income | 5 % | 6 % | 3 % |

Table 8

BALANCE SHEET AT COST VALUES
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms sorted by Net Farm Income)

| | Avg. Of All Farms | | Low 33% | | High 34% | |
|---|----------------------|----------------|----------------|----------------|----------------|----------------|
| | 26 | | 8 | | 9 | |
| Number of farms | Beginning | Ending | Beginning | Ending | Beginning | Ending |
| Assets | | | | | | |
| Current Farm Assets | | | | | | |
| Cash and checking balance | 15,550 | 5,939 | 4,606 | -664 | 8,867 | 8,418 |
| Prepaid expenses & supplies | 10,033 | 10,145 | 17,524 | 15,984 | 10,280 | 11,473 |
| Growing crops | 1,971 | 2,012 | 0 | 0 | 193 | 504 |
| Accounts receivable | 13,327 | 19,871 | 16,701 | 21,203 | 13,012 | 20,520 |
| Hedging accounts | 0 | 0 | 0 | 0 | 0 | 0 |
| Crops held for sale or feed | 74,874 | 66,218 | 98,408 | 79,265 | 76,079 | 73,035 |
| Crops under government loan | 0 | 0 | 0 | 0 | 0 | 0 |
| Market livestock held for sale | 14,178 | 14,980 | 19,519 | 20,225 | 13,179 | 12,110 |
| Other current assets | 516 | 769 | 1,313 | 1,500 | 0 | 500 |
| Total current farm assets | 130,450 | 119,934 | 158,071 | 137,514 | 121,610 | 126,560 |
| Intermediate Farm Assets | | | | | | |
| Breeding livestock | 264,341 | 282,383 | 294,269 | 295,775 | 291,900 | 311,086 |
| Machinery and equipment | 96,001 | 99,978 | 131,805 | 137,321 | 98,903 | 103,974 |
| Other intermediate assets | 38,930 | 38,954 | 120,789 | 122,581 | 1,694 | 2,177 |
| Total intermediate farm assets | 399,271 | 421,315 | 546,863 | 555,677 | 392,496 | 417,236 |
| Long Term Farm Assets | | | | | | |
| Farm land | 74,012 | 73,821 | 78,888 | 82,947 | 89,473 | 84,995 |
| Buildings and improvements | 101,291 | 121,753 | 109,055 | 106,214 | 103,326 | 97,331 |
| Other long-term assets | 14,448 | 15,370 | 6,810 | 7,855 | 8,672 | 9,046 |
| Total long-term farm assets | 189,751 | 210,944 | 194,753 | 197,016 | 201,472 | 191,372 |
| Total Farm Assets | 719,473 | 752,192 | 899,688 | 890,207 | 715,578 | 735,168 |
| Total Nonfarm Assets | 16,220 | 20,972 | 13,662 | 18,546 | 13,528 | 13,477 |
| Total Assets | 735,692 | 773,165 | 913,349 | 908,753 | 729,107 | 748,645 |
| Liabilities | | | | | | |
| Current Farm Liabilities | | | | | | |
| Accrued interest | 7 | 647 | 0 | 2,081 | 0 | 0 |
| Accounts payable | 10,130 | 6,555 | 634 | 1,697 | 21,364 | 8,701 |
| Current notes | 45,144 | 36,010 | 94,792 | 75,277 | 25,115 | 19,272 |
| Government crop loans | 0 | 0 | 0 | 0 | 0 | 0 |
| Principal due on term debt | 30,183 | 27,276 | 33,879 | 33,017 | 37,429 | 24,773 |
| Total current farm liabilities | 85,464 | 70,487 | 129,305 | 112,072 | 83,908 | 52,746 |
| Total intermediate farm liabs | 84,707 | 108,350 | 77,395 | 120,848 | 79,500 | 94,461 |
| Total long term farm liabilities | 189,455 | 195,285 | 362,747 | 342,402 | 101,625 | 87,484 |
| Total farm liabilities | 359,627 | 374,122 | 569,447 | 575,322 | 265,032 | 234,691 |
| Total nonfarm liabilities | 4,305 | 4,256 | 0 | 0 | 6,111 | 6,111 |
| Total liabilities | 363,932 | 378,377 | 569,447 | 575,322 | 271,144 | 240,802 |
| Net worth (farm and nonfarm) | 371,760 | 394,788 | 343,903 | 333,431 | 457,963 | 507,843 |
| Net worth change | | 23,027 | | -10,472 | | 49,880 |
| Ratio Analysis | | | | | | |
| Current farm liabilities / assets | 66 % | 59 % | 82 % | 81 % | 69 % | 42 % |
| Curr. & interm farm liab. / assets | 32 % | 33 % | 29 % | 34 % | 32 % | 27 % |
| Long term farm liab. / assets | 100 % | 93 % | 186 % | 174 % | 50 % | 46 % |
| Total debt to asset ratio | 49 % | 49 % | 62 % | 63 % | 37 % | 32 % |

Table 9

BALANCE SHEET AT MARKET VALUES
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms sorted by Net Farm Income)

| Number of farms | Avg. Of All Farms | | Low 33% | | High 34% | |
|---|----------------------|------------------|------------------|------------------|------------------|------------------|
| | 26 | | 8 | | 9 | |
| | Beginning | Ending | Beginning | Ending | Beginning | Ending |
| Assets | | | | | | |
| Current Farm Assets | | | | | | |
| Cash and checking balance | 15,550 | 5,939 | 4,606 | -664 | 8,867 | 8,418 |
| Prepaid expenses & supplies | 10,033 | 10,145 | 17,524 | 15,984 | 10,280 | 11,473 |
| Growing crops | 1,971 | 2,012 | 0 | 0 | 193 | 504 |
| Accounts receivable | 13,327 | 19,871 | 16,701 | 21,203 | 13,012 | 20,520 |
| Hedging accounts | 0 | 0 | 0 | 0 | 0 | 0 |
| Crops held for sale or feed | 74,874 | 66,218 | 98,408 | 79,265 | 76,079 | 73,035 |
| Crops under government loan | 0 | 0 | 0 | 0 | 0 | 0 |
| Market livestock held for sale | 14,178 | 14,980 | 19,519 | 20,225 | 13,179 | 12,110 |
| Other current assets | 516 | 769 | 1,313 | 1,500 | 0 | 500 |
| Total current farm assets | 130,450 | 119,934 | 158,071 | 137,514 | 121,610 | 126,560 |
| Intermediate Farm Assets | | | | | | |
| Breeding livestock | 264,341 | 282,383 | 294,269 | 295,775 | 291,900 | 311,086 |
| Machinery and equipment | 204,998 | 211,510 | 256,688 | 266,000 | 187,166 | 197,404 |
| Other intermediate assets | 50,407 | 50,119 | 123,116 | 124,706 | 1,694 | 2,177 |
| Total intermediate farm assets | 519,746 | 544,011 | 674,072 | 686,481 | 480,759 | 510,667 |
| Long Term Farm Assets | | | | | | |
| Farm land | 347,363 | 381,812 | 365,475 | 387,013 | 309,375 | 345,861 |
| Buildings and improvements | 145,108 | 168,339 | 139,625 | 147,063 | 172,980 | 185,813 |
| Other long-term assets | 14,553 | 15,773 | 6,810 | 7,855 | 9,562 | 10,585 |
| Total long-term farm assets | 507,024 | 565,924 | 511,910 | 541,930 | 491,917 | 542,259 |
| Total Farm Assets | 1,157,220 | 1,229,869 | 1,344,053 | 1,365,925 | 1,094,287 | 1,179,485 |
| Total Nonfarm Assets | 46,603 | 53,526 | 27,883 | 34,715 | 45,213 | 46,457 |
| Total Assets | 1,203,823 | 1,283,395 | 1,371,935 | 1,400,640 | 1,139,500 | 1,225,942 |
| Liabilities | | | | | | |
| Current Farm Liabilities | | | | | | |
| Accrued interest | 7 | 647 | 0 | 2,081 | 0 | 0 |
| Accounts payable | 10,130 | 6,555 | 634 | 1,697 | 21,364 | 8,701 |
| Current notes | 45,144 | 36,010 | 94,792 | 75,277 | 25,115 | 19,272 |
| Government crop loans | 0 | 0 | 0 | 0 | 0 | 0 |
| Principal due on term debt | 30,183 | 27,276 | 33,879 | 33,017 | 37,429 | 24,773 |
| Total current farm liabilities | 85,464 | 70,487 | 129,305 | 112,072 | 83,908 | 52,746 |
| Total intermediate farm liabs | 84,707 | 108,350 | 77,395 | 120,848 | 79,500 | 94,461 |
| Total long term farm liabilities | 189,455 | 195,285 | 362,747 | 342,402 | 101,625 | 87,484 |
| Total farm liabilities | 359,627 | 374,122 | 569,447 | 575,322 | 265,032 | 234,691 |
| Total nonfarm liabilities | 4,305 | 4,256 | 0 | 0 | 6,111 | 6,111 |
| Total liabs excluding deferreds | 363,932 | 378,377 | 569,447 | 575,322 | 271,144 | 240,802 |
| Total deferred liabilities | 0 | 0 | 0 | 0 | 0 | 0 |
| Total liabilities | 363,932 | 378,377 | 569,447 | 575,322 | 271,144 | 240,802 |
| Retained earnings | 371,760 | 394,788 | 343,903 | 333,431 | 457,963 | 507,843 |
| Market valuation equity | 468,131 | 510,230 | 458,586 | 491,887 | 410,393 | 477,297 |
| Net worth (farm and nonfarm) | 839,891 | 905,018 | 802,488 | 825,318 | 868,356 | 985,140 |
| Net worth excluding deferreds | 839,891 | 905,018 | 802,488 | 825,318 | 868,356 | 985,140 |
| Net worth change | | 65,127 | | 22,830 | | 116,783 |
| Ratio Analysis | | | | | | |
| Current farm liabilities / assets | 66 % | 59 % | 82 % | 81 % | 69 % | 42 % |
| Curr. & interm farm liab. / assets | 26 % | 27 % | 25 % | 28 % | 27 % | 23 % |
| Long term farm liab. / assets | 37 % | 35 % | 71 % | 63 % | 21 % | 16 % |
| Total debt to asset ratio | 30 % | 29 % | 42 % | 41 % | 24 % | 20 % |
| Debt to assets excl deferreds | 30 % | 29 % | 42 % | 41 % | 24 % | 20 % |

Table 10

STATEMENT OF CASH FLOWS
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms Sorted By Net Farm Income)

| | Avg. Of All Farms | Low 33% | High 34% |
|---------------------------------------|----------------------|----------|----------|
| Number of farms | 26 | 8 | 9 |
| Beginning cash (farm & nonfarm) | 15,639 | 4,606 | 8,867 |
| Cash From Operating Activities | | | |
| Gross cash farm income | 406,122 | 476,120 | 457,693 |
| Net nonfarm income | 9,717 | 5,466 | 9,587 |
| Total cash farm expense | -310,704 | -399,224 | -317,652 |
| Apparent family living expense | -35,998 | -19,968 | -50,771 |
| Income and social security tax | -6,962 | -2,278 | -18,296 |
| Cash from operations | 62,174 | 60,116 | 80,561 |
| Cash From Investing Activities | | | |
| Sale of breeding livestock | 272 | 883 | 2 |
| Sale of machinery & equipment | 880 | 1,198 | 1,476 |
| Sale of farm land | 3,425 | 11,133 | - |
| Sale of farm buildings | - | - | - |
| Sale of other farm assets | 162 | 346 | 160 |
| Sale of nonfarm assets | - | - | - |
| Purchase of breeding livestock | -10,967 | -11,759 | -78 |
| Purchase of machinery & equip. | -40,409 | -45,745 | -51,681 |
| Purchase of farm land | -2,000 | -6,500 | - |
| Purchase of farm buildings | -36,199 | -10,394 | -11,342 |
| Purchase of other farm assets | -1,267 | -2,038 | -1,649 |
| Purchase of nonfarm assets | -2,672 | -5,238 | - |
| Cash from investing activities | -88,775 | -68,115 | -63,111 |
| Cash From Financing Activities | | | |
| Money borrowed | 87,684 | 56,280 | 103,714 |
| Cash gifts and inheritances | 813 | - | - |
| Principal payments | -70,302 | -53,550 | -121,392 |
| Dividends paid | - | - | - |
| Gifts given | -1,294 | - | -222 |
| Cash from financing activities | 16,901 | 2,730 | -17,900 |
| Net change in cash balance | -9,700 | -5,270 | -449 |
| Ending cash (farm & nonfarm) | 5,939 | -664 | 8,418 |

Table 11

FINANCIAL STANDARDS MEASURES
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms Sorted By Net Farm Income)

| | <u>Avg. Of</u> <u>All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
|-------------------------------|------------------------------------|----------------|-----------------|
| Number of farms | 26 | 8 | 9 |
| Liquidity | | | |
| Current ratio | 1.70 | 1.23 | 2.40 |
| Working capital | 49,447 | 25,442 | 73,814 |
| Solvency (market) | | | |
| Farm debt to asset ratio | 30 % | 42 % | 20 % |
| Farm equity to asset ratio | 70 % | 58 % | 80 % |
| Farm debt to equity ratio | 44 % | 73 % | 25 % |
| Profitability (cost) | | | |
| Rate of return on farm assets | 2.8 % | -1.7 % | 8.6 % |
| Rate of return on farm equity | 0.1 % | -13.7 % | 10.2 % |
| Operating profit margin | 6.4 % | -4.1 % | 16.2 % |
| Net farm income | 53,346 | -2,029 | 114,111 |
| Repayment Capacity | | | |
| Term debt coverage ratio | 174 % | 113 % | 247 % |
| Capital replacement margin | 34,099 | 7,804 | 62,164 |
| Efficiency | | | |
| Asset turnover rate (cost) | 44.2 % | 40.0 % | 53.0 % |
| Operating expense ratio | 70.9 % | 81.0 % | 62.8 % |
| Depreciation expense ratio | 10.9 % | 13.1 % | 9.5 % |
| Interest expense ratio | 5.0 % | 6.4 % | 3.0 % |
| Net farm income ratio | 13.2 % | -0.4 % | 24.7 % |

Table 12

OPERATOR AND LABOR INFORMATION
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms Sorted By Net Farm Income)

| | Avg. Of <u>All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
|---------------------------------|-----------------------------|----------------|-----------------|
| Number of farms | 26 | 8 | 9 |
| Operator Information | | | |
| Average number of operators | 1.5 | 1.3 | 1.7 |
| Results Per Operator | | | |
| Working capital | 32,964 | 20,354 | 44,288 |
| Total assets (market) | 855,597 | 1,120,512 | 735,565 |
| Total liabilities | 252,251 | 460,258 | 144,481 |
| Net worth (market) | 603,345 | 660,255 | 591,084 |
| Net worth excl deferred liabs | 603,345 | 660,255 | 591,084 |
| Gross farm income | 270,070 | 369,898 | 277,139 |
| Total farm expense | 234,506 | 371,521 | 208,673 |
| Net farm income | 35,564 | -1,623 | 68,466 |
| Net nonfarm income | 6,478 | 4,373 | 5,752 |
| Family living withdrawals | 28,640 | 17,797 | 41,440 |
| Total acres owned | 404.7 | 470.4 | 403.5 |
| Total crop acres | 473.5 | 627.1 | 523.7 |
| Crop acres owned | 275.8 | 314.6 | 285.3 |
| Crop acres cash rented | 197.7 | 312.5 | 238.4 |
| Crop acres share rented | - | - | - |
| Total pasture acres | - | - | - |
| Labor Analysis | | | |
| Number of farms | 26 | 8 | 9 |
| Total unpaid labor hours | 5,407 | 4,625 | 6,507 |
| Total hired labor hours | 4,374 | 5,790 | 4,793 |
| Total labor hours per farm | 9,781 | 10,415 | 11,301 |
| Unpaid hours per operator | 3,604 | 3,700 | 3,904 |
| Value of farm production / hour | 33.27 | 34.38 | 34.05 |
| Net farm income / unpaid hour | 9.87 | -0.44 | 17.54 |

Table 13

FINANCIAL SUMMARY
Dairy Farms in Michigan's Upper Peninsula, 2001
(Farms Sorted By Net Farm Income)

| | Avg. Of <u>All Farms</u> | <u>Low 33%</u> | <u>High 34%</u> |
|---------------------------------|-----------------------------|----------------|-----------------|
| Number of farms | 26 | 8 | 9 |
| Income Statement | | | |
| Gross cash farm income | 406,122 | 476,120 | 457,693 |
| Total cash farm expense | 310,704 | 399,224 | 317,652 |
| Net cash farm income | 95,417 | 76,896 | 140,041 |
| Inventory change | 2,031 | -18,432 | 18,062 |
| Depreciation and capital adjust | -44,102 | -60,492 | -43,992 |
| Net farm income | 53,346 | -2,029 | 114,111 |
| Profitability (cost) | | | |
| Labor and management earnings | 31,012 | -22,022 | 85,580 |
| Rate of return on assets | 2.8 % | -1.7 % | 8.6 % |
| Rate of return on equity | 0.1 % | -13.7 % | 10.2 % |
| Operating profit margin | 6.4 % | -4.1 % | 16.2 % |
| Asset turnover rate | 44.2 % | 40.0 % | 53.0 % |
| Profitability (market) | | | |
| Labor and management earnings | 43,676 | -17,631 | 126,498 |
| Rate of return on assets | 5.1 % | 1.2 % | 11.2 % |
| Rate of return on equity | 4.9 % | -1.7 % | 12.9 % |
| Operating profit margin | 18.7 % | 4.6 % | 33.2 % |
| Asset turnover rate | 27.3 % | 26.4 % | 33.8 % |
| Liquidity | | | |
| Term debt coverage ratio | 173.7 % | 113.2 % | 246.7 % |
| Expense as a percent of income | 75.9 % | 87.4 % | 65.8 % |
| Interest as a percent of income | 5.0 % | 6.4 % | 3.0 % |
| Solvency (cost) | | | |
| Number of farms | 26 | 8 | 9 |
| Ending farm assets | 752,192 | 890,207 | 735,168 |
| Ending farm liabilities | 374,122 | 575,322 | 234,691 |
| Ending total assets | 773,165 | 908,753 | 748,645 |
| Ending total liabilities | 378,377 | 575,322 | 240,802 |
| Ending net worth | 394,788 | 333,431 | 507,843 |
| Net worth change | 23,027 | -10,472 | 49,880 |
| Ending farm debt to asset ratio | 50 % | 65 % | 32 % |
| Beg total debt to asset ratio | 49 % | 62 % | 37 % |
| End total debt to asset ratio | 49 % | 63 % | 32 % |
| Solvency (market) | | | |
| Number of farms | 26 | 8 | 9 |
| Ending farm assets | 1,229,869 | 1,365,925 | 1,179,485 |
| Ending farm liabilities | 374,122 | 575,322 | 234,691 |
| Ending total assets | 1,283,395 | 1,400,640 | 1,225,942 |
| Ending total liabilities | 378,377 | 575,322 | 240,802 |
| Ending net worth | 905,018 | 825,318 | 985,140 |
| Net worth change | 65,127 | 22,830 | 116,783 |
| Ending farm debt to asset ratio | 30 % | 42 % | 20 % |
| Beg total debt to asset ratio | 30 % | 42 % | 24 % |
| End total debt to asset ratio | 29 % | 41 % | 20 % |
| Nonfarm Information | | | |
| Net nonfarm income | 9,717 | 5,466 | 9,587 |