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# ***Staff Paper***

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

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**Staff Paper 2002-11**

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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 Zimmerman<sup>1</sup>

## Introduction

The body of this report is organized as follows:

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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

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accounting clients of Farm Credit Services. Farm records were included if a Finan<sup>2</sup> 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.

RankEm<sup>3</sup> 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>

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<sup>2</sup> 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.

<sup>3</sup> 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</u> <u>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
<b>Cash Farm Expense</b>			
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
<b>Inventory Changes</b>			
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
<b>Depreciation and Other Capital Adjustments</b>			
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 )

	Avg. Of <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
<b>Assets</b>						
<b>Current Farm Assets</b>						
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
<b>Total current farm assets</b>	<b>130,450</b>	<b>119,934</b>	<b>158,071</b>	<b>137,514</b>	<b>121,610</b>	<b>126,560</b>
<b>Intermediate Farm Assets</b>						
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
<b>Total intermediate farm assets</b>	<b>399,271</b>	<b>421,315</b>	<b>546,863</b>	<b>555,677</b>	<b>392,496</b>	<b>417,236</b>
<b>Long Term Farm Assets</b>						
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
<b>Total long-term farm assets</b>	<b>189,751</b>	<b>210,944</b>	<b>194,753</b>	<b>197,016</b>	<b>201,472</b>	<b>191,372</b>
<b>Total Farm Assets</b>	<b>719,473</b>	<b>752,192</b>	<b>899,688</b>	<b>890,207</b>	<b>715,578</b>	<b>735,168</b>
<b>Total Nonfarm Assets</b>	<b>16,220</b>	<b>20,972</b>	<b>13,662</b>	<b>18,546</b>	<b>13,528</b>	<b>13,477</b>
<b>Total Assets</b>	<b>735,692</b>	<b>773,165</b>	<b>913,349</b>	<b>908,753</b>	<b>729,107</b>	<b>748,645</b>
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
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
<b>Total current farm liabilities</b>	<b>85,464</b>	<b>70,487</b>	<b>129,305</b>	<b>112,072</b>	<b>83,908</b>	<b>52,746</b>
<b>Total intermediate farm liabs</b>	<b>84,707</b>	<b>108,350</b>	<b>77,395</b>	<b>120,848</b>	<b>79,500</b>	<b>94,461</b>
<b>Total long term farm liabilities</b>	<b>189,455</b>	<b>195,285</b>	<b>362,747</b>	<b>342,402</b>	<b>101,625</b>	<b>87,484</b>
<b>Total farm liabilities</b>	<b>359,627</b>	<b>374,122</b>	<b>569,447</b>	<b>575,322</b>	<b>265,032</b>	<b>234,691</b>
<b>Total nonfarm liabilities</b>	<b>4,305</b>	<b>4,256</b>	<b>0</b>	<b>0</b>	<b>6,111</b>	<b>6,111</b>
<b>Total liabilities</b>	<b>363,932</b>	<b>378,377</b>	<b>569,447</b>	<b>575,322</b>	<b>271,144</b>	<b>240,802</b>
<b>Net worth (farm and nonfarm)</b>	<b>371,760</b>	<b>394,788</b>	<b>343,903</b>	<b>333,431</b>	<b>457,963</b>	<b>507,843</b>
<b>Net worth change</b>		<b>23,027</b>		<b>-10,472</b>		<b>49,880</b>
<b>Ratio Analysis</b>						
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
<b>Assets</b>						
<b>Current Farm Assets</b>						
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
<b>Total current farm assets</b>	<b>130,450</b>	<b>119,934</b>	<b>158,071</b>	<b>137,514</b>	<b>121,610</b>	<b>126,560</b>
<b>Intermediate Farm Assets</b>						
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
<b>Total intermediate farm assets</b>	<b>519,746</b>	<b>544,011</b>	<b>674,072</b>	<b>686,481</b>	<b>480,759</b>	<b>510,667</b>
<b>Long Term Farm Assets</b>						
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
<b>Total long-term farm assets</b>	<b>507,024</b>	<b>565,924</b>	<b>511,910</b>	<b>541,930</b>	<b>491,917</b>	<b>542,259</b>
<b>Total Farm Assets</b>	<b>1,157,220</b>	<b>1,229,869</b>	<b>1,344,053</b>	<b>1,365,925</b>	<b>1,094,287</b>	<b>1,179,485</b>
<b>Total Nonfarm Assets</b>	<b>46,603</b>	<b>53,526</b>	<b>27,883</b>	<b>34,715</b>	<b>45,213</b>	<b>46,457</b>
<b>Total Assets</b>	<b>1,203,823</b>	<b>1,283,395</b>	<b>1,371,935</b>	<b>1,400,640</b>	<b>1,139,500</b>	<b>1,225,942</b>
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
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
<b>Total current farm liabilities</b>	<b>85,464</b>	<b>70,487</b>	<b>129,305</b>	<b>112,072</b>	<b>83,908</b>	<b>52,746</b>
<b>Total intermediate farm liabs</b>	<b>84,707</b>	<b>108,350</b>	<b>77,395</b>	<b>120,848</b>	<b>79,500</b>	<b>94,461</b>
<b>Total long term farm liabilities</b>	<b>189,455</b>	<b>195,285</b>	<b>362,747</b>	<b>342,402</b>	<b>101,625</b>	<b>87,484</b>
<b>Total farm liabilities</b>	<b>359,627</b>	<b>374,122</b>	<b>569,447</b>	<b>575,322</b>	<b>265,032</b>	<b>234,691</b>
<b>Total nonfarm liabilities</b>	<b>4,305</b>	<b>4,256</b>	<b>0</b>	<b>0</b>	<b>6,111</b>	<b>6,111</b>
<b>Total liabs excluding deferreds</b>	<b>363,932</b>	<b>378,377</b>	<b>569,447</b>	<b>575,322</b>	<b>271,144</b>	<b>240,802</b>
<b>Total deferred liabilities</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total liabilities</b>	<b>363,932</b>	<b>378,377</b>	<b>569,447</b>	<b>575,322</b>	<b>271,144</b>	<b>240,802</b>
<b>Retained earnings</b>	<b>371,760</b>	<b>394,788</b>	<b>343,903</b>	<b>333,431</b>	<b>457,963</b>	<b>507,843</b>
<b>Market valuation equity</b>	<b>468,131</b>	<b>510,230</b>	<b>458,586</b>	<b>491,887</b>	<b>410,393</b>	<b>477,297</b>
<b>Net worth (farm and nonfarm)</b>	<b>839,891</b>	<b>905,018</b>	<b>802,488</b>	<b>825,318</b>	<b>868,356</b>	<b>985,140</b>
<b>Net worth excluding deferreds</b>	<b>839,891</b>	<b>905,018</b>	<b>802,488</b>	<b>825,318</b>	<b>868,356</b>	<b>985,140</b>
<b>Net worth change</b>		<b>65,127</b>		<b>22,830</b>		<b>116,783</b>
<b>Ratio Analysis</b>						
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
<b>Cash From Operating Activities</b>			
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
<b>Cash From Investing Activities</b>			
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
<b>Cash From Financing Activities</b>			
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