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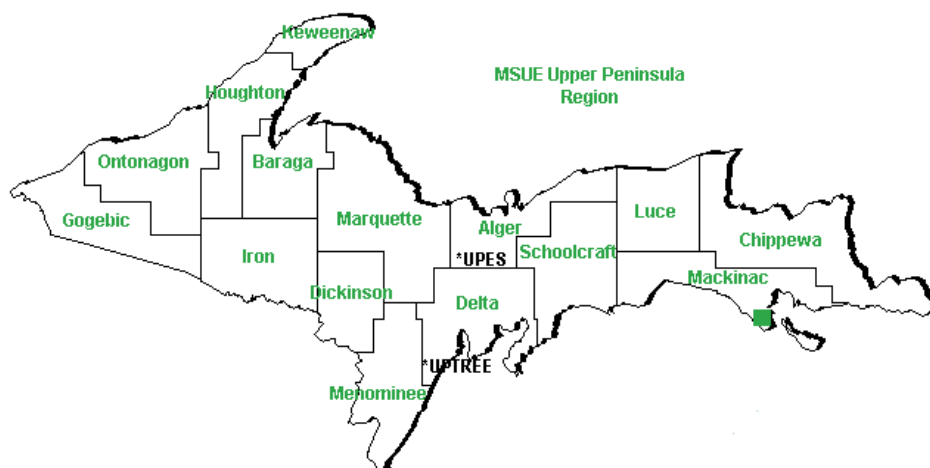
# *Staff Paper*

## **Dairy Farms in Michigan's U. P., 2000**

Sherrill B. Nott  
and  
Steve Smith

**Staff Paper 2001-22**

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# DAIRY FARMS IN MICHIGAN'S U. P., 2000

Michigan Data from Telfarm/MicroTel, and Farm Credit Services

Staff Paper No. 2001-22, 16 pages

by

Sherrill B. Nott and Steve Smith<sup>1</sup>



## Introduction

The body of this report is organized as follows:

- I. Introduction and Table of Contents for Upper Peninsula (U. P.) Dairy Farms
  - A. List of Tables
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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 accounting clients of Farm Credit Services. Farm records were included if a Finan<sup>2</sup> summary was completed on 2000 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 exist in the data. The unweighted mean of the net farm income for the 19 farms was \$18,401; the standard deviation of the mean was \$63,550 and the median was \$32,401. The unweighted mean of milk sold per cow for the 19 farms was 18,008 lbs.; the standard deviation of the mean was 3,373 lbs. and the median was 17,896 lbs.

This report has two purposes: 1) to provide statistical information about the financial results on U.P. dairy farms during 2000; 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, 2000

**Dairy Farms in Michigan's U. P.**

(Farms sorted by Net Farm Income)

	Avg. Of <u>All Farms</u>	<u>Low 33%</u>	<u>High 34%</u>
Number of farms	19	6	7
Dairy Summary			
Average number of cows	126	143	128
Milk sold per cow, lbs.	18,008	19,015	18,570
Average milk price per cwt.	\$12.54	\$12.40	\$12.54
Acreage Summary			
Total acres owned	611	959	642
Total crop acres	310	259	484
Crop acres owned	192	148	334
Crop acres cash rented	118	110	151
Crop acres share rented	-	-	-

Table 2

**FARM INCOME STATEMENT, 2000**  
**Dairy Farms in Michigan's U. P.**  
(Farms sorted by Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 33%</u>	<u>High 34%</u>
Number of farms	19	6	7
Cash Farm Income			
Cordwood	2,780	8,802	-
Corn	421	1,333	-
Corn, Ear	584	-	1,584
Hay, Mixed	2,303	2,421	4,098
Straw	93	250	37
Miscellaneous crop income	14	-	26
Beef, Background Beef	1,616	-	-
Dairy, Milk	289,595	353,632	304,664
Dairy, Dairy Calves	1,133	1,956	781
Dairy Heifers (for sale)	1,936	6,033	84
Dairy Replacement Heifers	547	532	-
Dairy Steers	10,455	10,070	10,454
Sheep, Market Lambs, Mkt Lambs	423	-	1,148
Cull breeding livestock	17,885	21,871	16,495
Misc. livestock income	18	-	3
Other government payments	30,136	29,543	29,801
Custom work income	11,435	19,351	1,319
Patronage dividends, cash	3,274	2,051	6,418
Insurance income	1,970	6,238	-
Other farm income	7,734	8,019	1,965
Gross Cash Farm Income	384,350	472,102	378,876

Table 3

**FARM INCOME STATEMENT, 2000 (Continued)**  
**Dairy Farms in Michigan's U. P.**  
(Farms sorted by Net Farm Income)

Number of Farms	Avg. Of <u>All Farms</u> 19	<u>Low 33%</u> 6	<u>High 34%</u> 7
<b>Cash Farm Expense</b>			
Seed	4,568	4,352	5,464
Fertilizer	12,441	10,806	5,428
Crop chemicals	3,493	2,019	2,269
Crop insurance	98	20	248
Crop miscellaneous	482	227	1,041
Feeder livestock purchase	1,473	-	3,974
Purchased feed	78,416	102,180	79,987
Breeding fees	1,989	821	3,071
Veterinary	6,701	7,724	8,898
Livestock supplies	13,008	12,252	11,811
Livestock leases	1,481	4,549	121
Livestock marketing	10,874	10,407	13,049
Interest	23,872	38,675	19,171
Fuel & oil	12,354	12,580	11,457
Repairs	26,559	30,303	19,452
Custom hire	9,815	20,209	8,350
Hired labor	49,833	78,158	49,995
Land rent	5,221	8,247	1,584
Machinery & bldg leases	1,565	2,653	1,817
Real estate taxes	5,511	6,524	5,140
Farm insurance	5,900	9,652	4,087
Utilities	8,898	12,831	7,875
Dues & professional fees	2,265	2,221	2,224
Miscellaneous	7,071	9,005	8,219
Total cash expense	293,888	386,412	274,732
Net cash farm income	90,462	85,689	104,144
<b>Inventory Changes</b>			
Crops and feed	-5,480	-24,396	1,922
Market livestock	1,653	355	3,292
Accounts receivable	-8,773	-10,403	-10,919
Prepaid expenses and supplies	-9,487	-16,767	-3,482
Accounts payable	-2,240	-3,798	-1,109
Total inventory change	-24,326	-55,008	-10,295
Net operating profit	66,136	30,681	93,849
<b>Depreciation and Other Capital Adjustments</b>			
Breeding livestock	-1,133	-20,667	9,896
Machinery and equipment	-34,971	-30,546	-31,183
Buildings and improvements	-14,150	-20,330	-14,021
Other farm capital	2,519	296	6,214
Total depr. and other capital adj	-47,734	-71,246	-29,093
Net farm income	18,402	-40,565	64,756

Table 4

**INVENTORY CHANGES, 2000**  
**Dairy Farms in Michigan's U. P.**  
(Farms sorted by Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 33%</u>	<u>High 34%</u>
Number of farms	19	6	7
Net cash farm income	90,462	85,689	104,144
Crops and Feed			
Ending inventory	82,706	84,126	95,286
Beginning inventory	88,185	108,522	93,364
Inventory change	-5,480	-24,396	1,922
Market Livestock			
Ending inventory	16,078	8,042	13,464
Beginning inventory	14,425	7,687	10,172
Inventory change	1,653	355	3,292
Accts Receivable & Other Current Assets			
Ending inventory	14,376	13,919	15,789
Beginning inventory	23,148	24,322	26,707
Inventory change	-8,773	-10,403	-10,919
Prepaid Expenses and Supplies			
Ending inventory	8,761	3,556	8,013
Beginning inventory	18,248	20,324	11,495
Inventory change	-9,487	-16,767	-3,482
Accounts Payable & Accrued Expenses			
Beginning inventory	2,902	9,057	92
Ending inventory	5,142	12,854	1,202
Inventory change	-2,240	-3,798	-1,109
Total inventory change	-24,326	-55,008	-10,295
Net operating profit	66,136	30,681	93,849



Table 5

## DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 2000

**Dairy Farms in Michigan's U. P.**  
(Farms sorted by Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 33%</u>	<u>High 34%</u>
Number of farms	19	6	7
Net operating profit	66,136	30,681	93,849
Breeding Livestock			
Ending inventory	243,645	287,813	238,754
Capital sales	-	-	-
Beginning inventory	244,199	306,821	228,857
Capital purchases	579	1,658	-
Depreciation, capital adjust.	-1,133	-20,667	9,896
Machinery and Equipment			
Ending inventory	110,800	114,021	100,917
Capital sales	1,563	3,417	1,107
Beginning inventory	114,556	112,940	104,270
Capital purchases	32,778	35,044	28,937
Depreciation, capital adjust.	-34,971	-30,546	-31,183
Buildings and Improvements			
Ending inventory	98,815	171,373	71,081
Capital sales	-	-	-
Beginning inventory	107,307	180,013	81,319
Capital purchases	5,658	11,689	3,784
Depreciation, capital adjust.	-14,150	-20,330	-14,021
Other Capital Assets			
Ending inventory	21,192	38,755	18,795
Capital sales	135	102	279
Beginning inventory	17,603	36,167	11,643
Capital purchases	1,204	2,394	1,217
Depreciation, capital adjust.	2,519	296	6,214
Total depreciation, capital adj.	-47,734	-71,246	-29,093
Net farm income	18,402	-40,565	64,756

Table 6

**PROFITABILITY MEASURES, 2000**  
**Dairy Farms in Michigan's U. P.**  
(Farms sorted by Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 33%</u>	<u>High 34%</u>
Number of farms	19	6	7
Profitability (assets valued at cost)			
Net farm income	18,402	-40,565	64,756
Labor and management earnings	-3,835	-61,103	40,990
Rate of return on assets	-0.8 %	-4.0 %	3.9 %
Rate of return on equity	-8.0 %	-21.8 %	1.5 %
Operating profit margin	-2.0 %	-11.5 %	8.4 %
Asset turnover rate	41.0 %	35.1 %	46.8 %
Interest on farm net worth	22,237	20,538	23,766
Farm interest expense	23,872	38,675	19,171
Value of operator lbr and mgmt.	48,153	34,167	58,770
Return on farm assets	-5,879	-36,057	25,156
Average farm assets	709,463	895,755	638,732
Return on farm equity	-29,751	-74,732	5,986
Average farm equity	370,613	342,304	396,107
Value of farm production	290,730	314,811	299,107
	<u>Avg. Of All Farms</u>	<u>Low 33%</u>	<u>High 34%</u>
Number of farms	19	6	7
Profitability (assets valued at market)			
Net farm income	76,274	-6,925	114,158
Labor and management earnings	25,067	-63,255	66,778
Rate of return on assets	4.4 %	-0.2 %	7.2 %
Rate of return on equity	3.3 %	-4.4 %	7.0 %
Operating profit margin	17.9 %	-0.8 %	24.9 %
Asset turnover rate	24.4 %	21.1 %	29.0 %
Interest on farm net worth	51,208	56,331	47,380
Farm interest expense	23,872	38,675	19,171
Value of operator lbr and mgmt.	48,153	34,167	58,770
Return on farm assets	51,994	-2,417	74,559
Average farm assets	1,192,314	1,492,294	1,032,292
Return on farm equity	28,122	-41,091	55,388
Average farm equity	853,465	938,843	789,667
Value of farm production	290,730	314,811	299,107

Table 7

**LIQUIDITY MEASURES, 2000**  
**Dairy Farms in Michigan's U.P.**  
(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	19	6	7
Liquidity (cash)			
Net cash farm income	90,462	85,689	104,144
Net nonfarm income	4,627	8,863	1,259
Family living and taxes	45,963	33,017	64,624
Real estate principal payments	7,658	10,084	9,943
Cash available for interm. debt	41,468	51,451	30,836
Average intermediate debt	113,168	142,728	110,587
Years to turnover interm. debt	2.7	2.8	3.6
Expense as a % of income	76 %	82 %	73 %
Interest as a % of income	6 %	8 %	5 %
Liquidity (accrual)			
Total accrual farm income	371,751	437,658	373,172
Total accrual operating expense	305,615	406,977	279,323
Net accrual operating income	66,136	30,681	93,849
Net nonfarm income	4,627	8,863	1,259
Family living and taxes	45,963	33,017	64,624
Real estate principal payments	7,658	10,084	9,943
Available for intermediate debt	17,142	-3,558	20,541
Average intermediate debt	113,168	142,728	110,587
Years to turnover interm. debt	6.6	**	5.4
Expense as a % of income	82 %	93 %	75 %
Interest as a % of income	6 %	9 %	5 %

\*\* Income insufficient to meet debt servicing requirements

Table 8

**BALANCE SHEET AT COST VALUES, 2000**  
**Dairy Farms in Michigan's U. P.**  
**(Farms sorted by Net Farm Income)**

	Avg. Of All Farms		Low 33%		High 34%	
Number of farms	19		6		7	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	1,705	11,104	3,679	19,417	-164	12,454
Prepaid expenses & supplies	18,248	8,761	20,324	3,556	11,495	8,013
Growing crops	5,705	2,697	0	0	15,484	7,321
Accounts receivable	15,887	10,973	21,113	12,169	10,183	8,468
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	88,185	82,706	108,522	84,126	93,364	95,286
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	14,425	16,078	7,687	8,042	10,172	13,464
Other current assets	1,556	706	3,208	1,750	1,040	0
Total current farm assets	145,711	133,024	164,533	129,060	141,574	145,006
<b>Intermediate Farm Assets</b>						
Breeding livestock	244,199	243,645	306,821	287,813	228,857	238,754
Machinery and equipment	114,556	110,800	112,940	114,021	104,270	100,917
Other intermediate assets	2,797	3,574	5,890	6,665	888	1,999
Total intermediate farm assets	361,552	358,019	425,650	408,498	334,015	341,670
<b>Long Term Farm Assets</b>						
Farm land	92,158	89,916	125,477	124,537	67,435	67,812
Buildings and improvements	107,307	98,815	180,013	171,373	81,319	71,081
Other long-term assets	14,806	17,618	30,278	32,091	10,755	16,797
Total long-term farm assets	214,271	206,349	335,768	328,000	159,509	155,690
Total Farm Assets	721,534	697,392	925,951	865,558	635,098	642,365
Total Nonfarm Assets	26,127	24,934	53,991	49,561	13,739	12,125
Total Assets	747,661	722,325	979,942	915,119	648,837	654,490
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	0	0	0	0	0	0
Accounts payable	2,902	5,142	9,057	12,854	92	1,202
Current notes	29,266	34,681	25,105	20,580	26,386	47,453
Government crop loans	0	0	0	0	0	0
Principal due on term debt	12,321	21,910	11,542	31,208	18,461	20,194
Total current farm liabilities	44,488	61,734	45,704	64,642	44,940	68,849
Total intermediate farm liabs	109,649	97,843	135,255	127,550	107,790	93,320
Total long term farm liabilities	185,646	178,339	369,366	364,384	89,712	80,638
Total farm liabilities	339,783	337,916	550,325	556,576	242,442	242,807
Total nonfarm liabilities	0	0	0	0	0	0
Total liabilities	339,783	337,916	550,325	556,576	242,442	242,807
Net worth (farm and nonfarm)	407,878	384,410	429,617	358,543	406,395	411,683
Net worth change	-23,468		-71,074		5,288	
<b>Ratio Analysis</b>						
Current farm liabilities / assets	31 %	46 %	28 %	50 %	32 %	47 %
Curr. & interm farm liab. / assets	30 %	32 %	31 %	36 %	32 %	33 %
Long term farm liab. / assets	87 %	86 %	110 %	111 %	56 %	52 %
Total debt to asset ratio	45 %	47 %	56 %	61 %	37 %	37 %

Table 9

**BALANCE SHEET AT MARKET VALUES, 2000**  
**Dairy Farms in Michigan's U. P.**  
**(Farms sorted by Net Farm Income)**

Number of farms	Avg. Of <u>All Farms</u>		<u>Low 33%</u>		<u>High 34%</u>	
	19		6		7	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	1,705	11,104	3,679	19,417	-164	12,454
Prepaid expenses & supplies	18,248	8,761	20,324	3,556	11,495	8,013
Growing crops	5,705	2,697	0	0	15,484	7,321
Accounts receivable	15,887	10,973	21,113	12,169	10,183	8,468
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	88,185	82,706	108,522	84,126	93,364	95,286
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	14,425	16,078	7,687	8,042	10,172	13,464
Other current assets	1,556	706	3,208	1,750	1,040	0
Total current farm assets	145,711	133,024	164,533	129,060	141,574	145,006
<b>Intermediate Farm Assets</b>						
Breeding livestock	244,199	243,645	306,821	287,813	228,857	238,754
Machinery and equipment	222,652	226,376	233,667	224,267	200,534	211,463
Other intermediate assets	16,553	18,300	6,116	7,751	38,031	41,040
Total intermediate farm assets	483,403	488,321	546,603	519,830	467,422	491,256
<b>Long Term Farm Assets</b>						
Farm land	375,592	417,293	606,430	636,958	243,371	274,614
Buildings and improvements	153,938	153,201	157,333	161,250	135,831	133,474
Other long-term assets	16,804	17,340	30,771	31,819	15,758	16,276
Total long-term farm assets	546,334	587,835	794,534	830,028	394,960	424,364
Total Farm Assets	1,175,449	1,209,180	1,505,670	1,478,918	1,003,957	1,060,627
Total Nonfarm Assets	52,585	53,941	109,305	111,334	40,621	40,320
Total Assets	1,228,033	1,263,120	1,614,975	1,590,252	1,044,578	1,100,947
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	0	0	0	0	0	0
Accounts payable	2,902	5,142	9,057	12,854	92	1,202
Current notes	29,266	34,681	25,105	20,580	26,386	47,453
Government crop loans	0	0	0	0	0	0
Principal due on term debt	12,321	21,910	11,542	31,208	18,461	20,194
Total current farm liabilities	44,488	61,734	45,704	64,642	44,940	68,849
Total intermediate farm liabs	109,649	97,843	135,255	127,550	107,790	93,320
Total long term farm liabilities	185,646	178,339	369,366	364,384	89,712	80,638
Total farm liabilities	339,783	337,916	550,325	556,576	242,442	242,807
Total nonfarm liabilities	0	0	0	0	0	0
Total liabs excluding deferreds	339,783	337,916	550,325	556,576	242,442	242,807
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	339,783	337,916	550,325	556,576	242,442	242,807
Retained earnings	407,878	384,410	429,617	358,543	406,395	411,683
Market valuation equity	480,372	540,795	635,033	675,133	395,741	446,457
Net worth (farm and nonfarm)	888,250	925,205	1,064,650	1,033,676	802,136	858,140
Net worth excluding deferreds	888,250	925,205	1,064,650	1,033,676	802,136	858,140
Net worth change	36,954		-30,974		56,004	
<b>Ratio Analysis</b>						
Current farm liabilities / assets	31 %	46 %	28 %	50 %	32 %	47 %
Curr. & interm farm liab. / assets	25 %	26 %	25 %	30 %	25 %	25 %
Long term farm liab. / assets	34 %	30 %	46 %	44 %	23 %	19 %
Total debt to asset ratio	28 %	27 %	34 %	35 %	23 %	22 %
Debt to assets excl deferreds	28 %	27 %	34 %	35 %	23 %	22 %

Table 10

**STATEMENT OF CASH FLOWS, 2000**  
**Dairy Farms in Michigan's U. P.**  
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 33%	High 34%
Number of farms	19	6	7
Beginning cash (farm & nonfarm)	1,705	3,679	-164
Cash From Operating Activities			
Gross cash farm income	384,350	472,102	378,876
Net nonfarm income	4,627	8,863	1,259
Total cash farm expense	-293,888	-386,412	-274,732
Apparent family living expense	-42,515	-27,123	-61,055
Income and social security tax	-3,448	-5,894	-3,569
Cash from operations	49,126	61,535	40,779
Cash From Investing Activities			
Sale of breeding livestock	-	-	-
Sale of machinery & equipment	1,563	3,417	1,107
Sale of farm land	1,297	-	-
Sale of farm buildings	-	-	-
Sale of other farm assets	135	102	279
Sale of nonfarm assets	-	-	-
Purchase of breeding livestock	-579	-1,658	-
Purchase of machinery & equip.	-32,778	-35,044	-28,937
Purchase of farm land	-398	-	-
Purchase of farm buildings	-5,658	-11,689	-3,784
Purchase of other farm assets	-1,204	-2,394	-1,217
Purchase of nonfarm assets	-311	-984	-
Cash from investing activities	-37,933	-48,250	-32,552
Cash From Financing Activities			
Money borrowed	60,255	74,988	61,820
Cash gifts and inheritances	2,492	-	5,563
Principal payments	-64,384	-72,535	-62,564
Dividends paid	-	-	-
Gifts given	-158	-	-429
Cash from financing activities	-1,795	2,453	4,391
Net change in cash balance	9,399	15,738	12,618
Ending cash (farm & nonfarm)	11,104	19,417	12,454

Table 11

**FINANCIAL STANDARDS MEASURES, 2000**  
**Dairy Farms in Michigan's U. P.**  
(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	19	6	7
Liquidity: end of year			
Current ratio	2.15	2.00	2.11
Working capital	71,291	64,418	76,157
Solvency (market): end of year			
Farm debt to asset ratio	28 %	38 %	23 %
Farm equity to asset ratio	72 %	62 %	77 %
Farm debt to equity ratio	39 %	60 %	30 %
Profitability (cost)			
Rate of return on farm assets	-0.8 %	-4.0 %	3.9 %
Rate of return on farm equity	-8.0 %	-21.8 %	1.5 %
Operating profit margin	-2.0 %	-11.5 %	8.4 %
Net farm income	18,402	-40,565	64,756
Repayment Capacity			
Term debt coverage ratio	178 %	55 %	146 %
Capital replacement margin	12,479	-5,016	12,022
Efficiency			
Asset turnover rate (cost)	41.0 %	35.1 %	46.8 %
Operating expense ratio	75.8 %	84.2 %	69.7 %
Depreciation expense ratio	12.8 %	16.3 %	7.8 %
Interest expense ratio	6.4 %	8.8 %	5.1 %
Net farm income ratio	4.9 %	-9.3 %	17.4 %

Table 12

**FINANCIAL SUMMARY, 2000**  
**Dairy Farms in Michigan's U. P.**  
**(Farms Sorted By Net Farm Income)**

	Avg. Of <u>All Farms</u>	<u>Low 33%</u>	<u>High 34%</u>
Number of farms	19	6	7
Income Statement			
Gross cash farm income	384,350	472,102	378,876
Total cash farm expense	293,888	386,412	274,732
Net cash farm income	90,462	85,689	104,144
Inventory change	-24,326	-55,008	-10,295
Depreciation and capital adjust	-47,734	-71,246	-29,093
Net farm income	18,402	-40,565	64,756
Profitability (cost)			
Labor and management earnings	-3,835	-61,103	40,990
Rate of return on assets	-0.8 %	-4.0 %	3.9 %
Rate of return on equity	-8.0 %	-21.8 %	1.5 %
Operating profit margin	-2.0 %	-11.5 %	8.4 %
Asset turnover rate	41.0 %	35.1 %	46.8 %
Profitability (market)			
Labor and management earnings	25,067	-63,255	66,778
Rate of return on assets	4.4 %	-0.2 %	7.2 %
Rate of return on equity	3.3 %	-4.4 %	7.0 %
Operating profit margin	17.9 %	-0.8 %	24.9 %
Asset turnover rate	24.4 %	21.1 %	29.0 %
Liquidity			
Term debt coverage ratio	177.5 %	55.1 %	146.4 %
Expense as a percent of income	82.2 %	93.0 %	74.9 %
Interest as a percent of income	6.4 %	8.8 %	5.1 %
Solvency (cost)			
Number of farms	19	6	7
Ending farm assets	697,392	865,558	642,365
Ending farm liabilities	337,916	556,576	242,807
Ending total assets	722,325	915,119	654,490
Ending total liabilities	337,916	556,576	242,807
Ending net worth	384,410	358,543	411,683
Net worth change	-23,468	-71,074	5,288
Ending farm debt to asset ratio	48 %	64 %	38 %
Beg total debt to asset ratio	45 %	56 %	37 %
End total debt to asset ratio	47 %	61 %	37 %
Solvency (market)			
Number of farms	19	6	7
Ending farm assets	1,209,180	1,478,918	1,060,627
Ending farm liabilities	337,916	556,576	242,807
Ending total assets	1,263,120	1,590,252	1,100,947
Ending total liabilities	337,916	556,576	242,807
Ending net worth	925,205	1,033,676	858,140
Net worth change	36,954	-30,974	56,004
Ending farm debt to asset ratio	28 %	38 %	23 %
Beg total debt to asset ratio	28 %	34 %	23 %
End total debt to asset ratio	27 %	35 %	22 %
Nonfarm Information			
Net nonfarm income	4,627	8,863	1,259



Table 13

**OPERATOR AND LABOR INFORMATION, 2000**  
**Dairy Farms in Michigan's U. P.**  
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 33%</u>	<u>High 34%</u>
Number of farms	19	6	7
Operator Information			
Average number of operators	1.6	1.2	2.0
Average age of operators	50.5	47.0	52.0
Average number of years farming	23.2	24.0	19.1
Results Per Operator			
Working capital	45,151	55,215	38,078
Total assets (market)	799,976	1,363,073	550,473
Total liabilities	214,013	477,065	121,404
Net worth (market)	585,963	886,008	429,070
Net worth excl deferred liabs	585,963	886,008	429,070
Gross farm income	235,442	375,135	186,586
Total farm expense	223,788	409,905	154,208
Net farm income	11,654	-34,770	32,378
Net nonfarm income	2,931	7,596	630
Family living withdrawals	29,110	28,300	32,312
Labor Analysis			
Number of farms	19	6	7
Total unpaid labor hours	4,878	3,133	6,174
Total hired labor hours	3,930	6,237	3,538
Total labor hours per farm	8,808	9,371	9,712
Unpaid hours per operator	3,090	2,686	3,087
Value of farm production / hour	33.01	33.60	30.80
Net farm income / unpaid hour	3.77	-12.95	10.49