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**2007 Michigan Upper Peninsula Dairy
Business Analysis Summary**

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Staff Paper 2008-06

December, 2008



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By

Eric Wittenberg and Christopher Wolf¹

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Executive Summary

This report summarizes the financial and production records of 24 dairy farms across the Upper Peninsula (UP) of Michigan. To be included, the farms must have produced at least 50 percent of gross cash farm income from milk and dairy animal sales. The records came from Michigan State University's TelFarm project and Farm Credit Service system in Michigan. Farm records checked for accuracy. While considerable variation in the data exists, average values are reported in the summary tables and discussion that follows.

In 2007, the average UP dairy farm in the business analysis had 150 cows producing an average of 18,240 pounds of milk per cow (Table 1). Milk price received averaged \$19.05/cwt. The total average acres owned were 676 and the average cropped acres were 786.

Table 1. Average Michigan UP Dairy Farm Characteristics, 2003-2007

	2003	2004	2005	2006	2007
Average number of cows	135	138	140	149	150
Milk sold per cow (pounds)	18,804	18,501	18,672	19,543	18,240
Average price of milk sold (\$/cwt)	12.69	16.96	15.94	13.50	19.05
Total acres owned	642	624	621	655	676
Total crop acres	808	789	689	756	786
Number of farms	19	23	30	27	24

Net farm income is the return to operator unpaid management, labor and capital invested. Net farm income in 2007 averaged \$83,990 (Table 2). The median was \$36,874 and the standard deviation was \$73,936 across the 24 dairy farms.

Table 2. Average Michigan UP Dairy Farm Income Statement, 2003-2007

	2003	2004	2005	2006	2007
	(\$)	(\$)	(\$)	(\$)	(\$)
Gross cash farm income	411,907	539,446	552,192	531,643	673,978
- Total cash expense	319,825	413,969	410,527	437,583	536,890
= Net cash farm income	92,082	125,478	141,665	94,060	137,088
+ Inventory change*	2,988	21,143	-7,345	16,610	12,378
+ Depreciation and capital adjustments*	-49,328	-61,178	-69,158	-78,541	-65,476
= Net farm income	45,742	85,442	65,162	32,129	83,990

*Changes calculated as ending value minus beginning value.

Gross cash farm income averaged \$673,978 in 2007. The largest component of these revenues was milk sales, which averaged \$542,286. The second largest revenue was culled breeding livestock at \$35,911 and third was insurance income at \$19,249. Average total cash expenses were \$536,890 and average net cash farm income was \$137,088. Inventory changes were \$12,378, on average farms were building inventories, while depreciation and capital adjustments averaged \$65,476. The net farm income value is the return to operator unpaid management, labor and capital invested averaged \$89,990 in 2007, the second highest average in the last five years (Table 2).

To put the profit values in perspective, we calculate profitability ratios. Rate of return on assets (ROA) is the farm operating profit (equal to net farm income plus interest expense less value of operator labor and management) divided by average total farm asset value (valued at current market value). Rate of return on assets is a measure of how much profit the farm business assets generated. The average 2007 dairy farm ROA (Market) was 4.7 percent, a positive return but not as high as 2004 or 2005 (Table 3). Return on equity tells a similar story. Operating profit margin is the operating profit (as defined in ROA above) divided by gross revenues. Operating profit margin measures the dollars of profit generated per dollar of revenue. In 2007, Michigan’s UP dairy farms generated 12.0 cents of profit per dollar of revenue. Asset turnover is the gross farm revenues divided by average asset value. Asset turnover measures the efficiency with which farm assets generate revenue. This value increased slightly from 2006 to 2007 to an average of 27.7 percent.

Table 3. Average Michigan UP Dairy Farm Profitability Indicators, 2003-2007

	2003	2004	2005	2006	2007
	(%)	(%)	(%)	(%)	(%)
Rate of return on assets*	2.9	11.4	5.9	4.1	4.7
Rate of return on equity	2.5	14.3	6.6	3.5	4.3
Operating profit margin	12.8	38.7	21.7	17.4	12.0
Asset turnover rate*	22.7	29.5	27.3	23.4	27.7

* Assets valued at market value (rather than cost).

Per Unit Income and Expenses

Table 4 displays average income and expenses items per hundredweight (cwt) of milk and per cow across 24 UP dairy farms. Both income and expenses were adjusted to an accrual basis where detailed financial information was provided. Average, accrual adjusted income and expenses per cropped acre are also included.

Income items related to the dairy herd are included in the first section. Government payments include all farm government payments—not just those related to the dairy herd. It was not possible to separate crop payments from dairy payments. *This table should not be interpreted as an estimate of the true cost of producing milk.* All farm sales are not included in the income items—only those that are related to the milking herd. Also, unpaid factors, including labor, management and capital, are not accounted for in the expense items. In addition, the allocation of resources amongst farm enterprises is not accurately reflected leaving the milking herd as the residual claimant on all expenses (especially labor costs).

The largest expense was purchased feed at \$5.24/cwt. and family living was the second largest at \$3.49/cwt and hired labor was third at \$2.10/cwt. Depreciation, livestock supplies, repairs and milk marketing and trucking combined were also significant expenses for 2007.

The bottom of Tables 4 presents crop related expenses divided by the total cropped acres. To accurately calculate a crop cost of production requires labor and management (among other) expenses that were not separated out in the financial records.

Table 4. Average income and expenses across all Upper Peninsula farms*, 2007

Income Items:	Per cwt.	Per Cow
Milk	\$19.06	\$3,461.78
Cull Cows and Calves	\$2.14	\$305.05
Dairy Steers	\$0.93	\$127.92
Dairy Heifers	\$0.89	\$120.66
Government Payments	\$0.52	\$83.42
Patronage Dividends, cash	\$0.04	\$6.19
Crop Sales	\$0.87	\$142.94
Other Cash Income	\$1.83	\$270.96
Expense Items:	Per cwt.	Per Cow
Purchased Feeds	\$5.24	\$956.50
Breeding Fees	\$ 0.16	\$29.44
Veterinary	\$0.50	\$91.12
BST	\$0.03	\$7.09
Livestock Supplies	\$0.88	\$143.97
DHIA	N/A	N/A
Milk & Livestock Mkt. & Trucking	\$0.96	\$169.55
Interest	\$1.14	\$185.44
Fuel and Oil	\$1.35	\$228.98
Repairs	\$1.54	\$264.93
Custom Hire	\$0.56	\$95.07
Hired Labor	\$2.10	\$388.58
Leases	\$0.15	\$30.94
Real Estate Taxes	\$0.41	\$68.92
Farm Insurance	\$0.56	\$82.05
Utilities	\$0.60	\$104.87
Dues, Professional Fees	\$0.23	\$37.60
Miscellaneous	\$0.37	\$60.89
Machinery Depreciation	\$2.24	\$384.94
Building Depreciation	\$0.98	\$183.87
Family Living	\$3.49	\$492.44
Expense Items per Cropped Acre:	Per Acre	
Seed	\$25.76	
Fertilizer	\$47.51	
Crop Chemicals	\$9.38	
Crop Insurance	\$0.66	
Crop Miscellaneous	\$1.36	
Land Rent	\$16.58	

All income and expense items averaged across all 24 farms whether they had this income or expense item or not. Other cash income includes custom work, insurance claims, and miscellaneous income.

Table 5

Crop Production and Marketing Summary
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Dairy		
Number of farms	24	7
Average number of cows,	150	178
Milk production per cows lbs.,	18,240	20,634
Average milk price per cwt.,	\$19.05	\$19.50
Acreage Summary		
Total acres owned	676	515
Total crop acres	786	867
Crop acres owned	446	414
Crop acres cash rented	340	454
Crop acres share rented	-	-
Total pasture acres	-	-
Average Price Received (Cash Sales Only)		
Hay, Alfalfa per ton	44.74	-

Table 6

Farm Income Statement
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Number of farms	24	7
Cash Farm Income		
Barley	612	-
Cordwood	132	-
Corn	5,147	13,616
Corn Silage	794	-
Hay, Alfalfa	7,546	1,068
Hay, Mixed	1,614	-
Soybeans	468	1,296
Straw	157	93
Beef Bulls	227	780
Beef Cow-Calf, Beef Calves	49	166
Dairy, Milk	542,286	725,825
Dairy, Dairy Calves	157	144
Dairy Heifers (for sale)	9,727	399
Dairy Replacement Heifers	595	2,038
Dairy Steer Finishing	6,980	16,608
Dairy Steer Feeders	2,267	-
Cull breeding livestock	35,911	31,887
Misc. livestock income	8,595	8,599
Direct & CC govt payments	11,577	6,260
Other government payments	1,761	3,105
Custom work income	6,318	189
Patronage dividends, cash	1,145	3,316
Insurance income	19,249	17,103
Other farm income	10,667	7,635
Gross Cash Farm Income	673,978	840,128

Table 6

Farm Income Statement (Continued)
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Number of farms	24	7
Cash Farm Expense		
Seed	18,213	23,874
Fertilizer	35,446	46,761
Crop chemicals	5,206	4,365
Crop insurance	782	2,581
Repair, machinery	216	-
Crop custom hire	7,711	2,665
Crop miscellaneous	279	7
Feeder livestock purchase	2,623	-
Purchased feed	155,683	215,372
Breeding fees	4,034	6,790
Veterinary	14,258	20,330
BST	924	2,283
Livestock supplies	19,270	17,851
DHIA	228	-
Livestock utilities	78	-
Hauling and trucking	10,873	9,901
Marketing	8,776	13,731
Bedding	2,862	2,358
Interest	29,281	26,554
Supplies	71	-
Fuel & oil	35,535	34,935
Repairs	40,301	52,933
Custom hire	8,333	15,258
Hired labor	61,626	92,491
Land rent	10,256	18,703
Machinery leases	6,135	13,519
Real estate taxes	9,415	9,994
Farm insurance	10,631	9,610
Utilities	15,658	19,890
Dues & professional fees	4,452	5,833
Miscellaneous	17,735	16,256
Total cash expense	536,890	684,845
Net cash farm income	137,088	155,282
Inventory Changes		
Crops and feed	-11,677	9,595
Market livestock	4,390	-1,561
Accounts receivable	10,275	27,509
Prepaid expenses and supplies	10,634	33,363
Accounts payable	-1,244	-649
Total inventory change	12,378	68,257
Net operating profit	149,466	223,540
Depreciation and Other Capital Adjustments		
Breeding livestock	8,138	46,948
Machinery and equipment	-51,752	-64,973
Buildings and improvements	-28,191	-41,803
Other farm capital	6,329	-3,812
Total depr. and other capital adj	-65,476	-63,641
Net farm income	83,990	159,899

Table 7

Inventory Changes
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Number of farms	24	7
Net cash farm income	137,088	155,282
Crops and Feed		
Ending inventory	108,273	115,606
Beginning inventory	119,950	106,011
Inventory change	-11,677	9,595
Market Livestock		
Ending inventory	25,357	21,954
Beginning inventory	20,968	23,514
Inventory change	4,390	-1,561
Accts Receivable & Other Current Assets		
Ending inventory	38,798	48,429
Beginning inventory	28,523	20,919
Inventory change	10,275	27,509
Prepaid Expenses and Supplies		
Ending inventory	18,601	52,297
Beginning inventory	7,966	18,934
Inventory change	10,634	33,363
Accounts Payable & Accrued Expenses		
Beginning inventory	25,690	9,850
Ending inventory	26,934	10,499
Inventory change	-1,244	-649
Total inventory change	12,378	68,257
Net operating profit	149,466	223,540

Table 8

Depreciation and Other Capital Adjustments
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Number of farms	24	7
Net operating profit	149,466	223,540
Breeding Livestock		
Ending inventory	362,108	452,556
Capital sales	460	1,208
Beginning inventory	345,828	401,154
Capital purchases	8,601	5,662
Depreciation, capital adjust.	8,138	46,948
Machinery and Equipment		
Ending inventory	94,067	83,387
Capital sales	7,212	2,254
Beginning inventory	111,948	96,031
Capital purchases	41,083	54,584
Depreciation, capital adjust.	-51,752	-64,973
Buildings and Improvements		
Ending inventory	167,582	141,039
Capital sales	516	-
Beginning inventory	186,947	162,813
Capital purchases	9,341	20,029
Depreciation, capital adjust.	-28,191	-41,803
Other Capital Assets		
Ending inventory	49,457	78,785
Capital sales	5,438	18,644
Beginning inventory	46,652	98,484
Capital purchases	1,914	2,758
Depreciation, capital adjust.	6,329	-3,812
Total depreciation, capital adj.	-65,476	-63,641
Net farm income	83,990	159,899

Table 9

Profitability Measures
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Number of farms	24	7
Profitability (assets valued at cost)		
Net farm income	83,990	159,899
Labor and management earnings	51,674	124,603
Rate of return on assets	6.8 %	13.4 %
Rate of return on equity	7.7 %	19.3 %
Operating profit margin	13.4 %	19.8 %
Asset turnover rate	50.7 %	67.4 %
Interest on farm net worth	32,316	35,296
Farm interest expense	29,281	26,554
Value of operator lbr and mgmt.	42,639	46,262
Return on farm assets	70,632	140,191
Average farm assets	1,039,990	1,049,461
Return on farm equity	41,351	113,637
Average farm equity	538,601	588,268
Value of farm production	526,798	707,246
	Avg. Of All Farms	High 25%
Number of farms	24	7
Profitability (assets valued at market)		
Net farm income	103,026	239,845
Labor and management earnings	19,200	177,096
Rate of return on assets	4.7 %	14.6 %
Rate of return on equity	4.3 %	18.5 %
Operating profit margin	17.0 %	31.1 %
Asset turnover rate	27.7 %	46.9 %
Interest on farm net worth	83,825	62,749
Farm interest expense	29,281	26,554
Value of operator lbr and mgmt.	42,639	46,262
Return on farm assets	89,667	220,137
Average farm assets	1,898,477	1,507,009
Return on farm equity	60,386	193,584
Average farm equity	1,397,089	1,045,816
Value of farm production	526,798	707,246

Table 10

Liquidity Measures
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Number of farms	24	7
Liquidity (cash)		
Net cash farm income	137,088	155,282
Net nonfarm income	9,750	1,277
Family living and taxes	58,321	61,466
Principal due on long term debt	15,186	16,424
Cash available for interm. debt	73,331	78,670
Average intermediate debt	159,797	161,042
Years to turnover interm. debt	2.2	2.0
Expense as a % of income	80 %	82 %
Interest as a % of income	4 %	3 %
Working capital to gross income	13 %	22 %
Liquidity (accrual)		
Total accrual farm income	676,966	875,671
Total accrual operating expense	527,499	652,131
Net accrual operating income	149,466	223,540
Net nonfarm income	9,750	1,277
Family living and taxes	58,321	61,466
Principal due on long term debt	15,186	16,424
Available for intermediate debt	85,709	146,927
Average intermediate debt	159,797	161,042
Years to turnover interm. debt	1.9	1.1
Expense as a % of income	78 %	74 %
Interest as a % of income	4 %	3 %
Working capital to gross income	13 %	21 %

Table 11

Balance Sheet at Cost Values
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		High 25%	
	All Farms			
Number of farms	24		7	
	Beginning	Ending	Beginning	Ending
Assets				
Current Farm Assets				
Cash and checking balance	16,867	23,216	7,876	14,136
Prepaid expenses & supplies	7,966	18,601	18,934	52,297
Growing crops	62	130	0	0
Accounts receivable	25,740	35,970	20,691	42,714
Hedging accounts	0	0	0	0
Crops held for sale or feed	119,950	108,273	106,011	115,606
Crops under government loan	0	0	0	0
Market livestock held for sale	20,968	25,357	23,514	21,954
Other current assets	2,722	2,698	229	5,714
Total current farm assets	194,274	214,245	177,255	252,421
Intermediate Farm Assets				
Breeding livestock	345,828	362,108	401,154	452,556
Machinery and equipment	111,948	94,067	96,031	83,387
Titled vehicles	0	0	0	0
Other intermediate assets	22,309	18,884	69,984	49,167
Total intermediate farm assets	480,085	475,059	567,169	585,110
Long Term Farm Assets				
Farm land	151,463	155,409	77,499	77,499
Buildings and improvements	186,947	167,582	162,813	141,039
Other long-term assets	24,342	30,573	28,500	29,618
Total long-term farm assets	362,753	353,564	268,812	248,156
Total Farm Assets	1,037,112	1,042,868	1,013,236	1,085,687
Total Nonfarm Assets	52,182	59,057	11,379	11,461
Total Assets	1,089,295	1,101,924	1,024,614	1,097,149
Liabilities				
Current Farm Liabilities				
Accrued interest	1	1	0	0
Accounts payable	25,689	26,933	9,850	10,499
Current notes	66,846	57,498	43,366	10,684
Government crop loans	0	0	0	0
Principal due on term debt	40,750	40,679	37,471	44,531
Total current farm liabilities	133,285	125,111	90,687	65,715
Total intermediate farm liabs	144,747	127,943	125,503	149,127
Total long term farm liabilities	242,406	229,285	258,629	232,725
Total farm liabilities	520,439	482,339	474,820	447,567
Total nonfarm liabilities	0	0	0	0
Total liabilities	520,439	482,339	474,820	447,567
Net worth (farm and nonfarm)	568,856	619,586	549,794	649,582
Net worth change		50,729		99,788
Ratio Analysis				
Current farm liabilities / assets	69 %	58 %	51 %	26 %
Curr. & interm farm liab. / assets	41 %	37 %	29 %	26 %
Long term farm liab. / assets	67 %	65 %	96 %	94 %
Total debt to asset ratio	48 %	44 %	46 %	41 %

Table 12

Balance Sheet at Market Values

2007 MI UP Dairy Farms

(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		High 25%	
	All Farms			
Number of farms	24		7	
	Beginning	Ending	Beginning	Ending
Assets				
Current Farm Assets				
Cash and checking balance	16,867	23,216	7,876	14,136
Prepaid expenses & supplies	7,966	18,601	18,934	52,297
Growing crops	62	130	0	0
Accounts receivable	25,740	35,970	20,691	42,714
Hedging accounts	0	0	0	0
Crops held for sale or feed	119,950	108,273	106,011	115,606
Crops under government loan	0	0	0	0
Market livestock held for sale	20,968	25,357	23,514	21,954
Other current assets	2,722	2,698	229	5,714
Total current farm assets	194,274	214,245	177,255	252,421
Intermediate Farm Assets				
Breeding livestock	350,253	362,108	401,154	452,556
Machinery and equipment	295,454	294,255	239,320	262,136
Titled vehicles	0	0	0	0
Other intermediate assets	33,142	30,479	107,126	88,923
Total intermediate farm assets	678,850	686,843	747,601	803,615
Long Term Farm Assets				
Farm land	695,140	692,994	295,084	311,941
Buildings and improvements	294,147	286,891	182,647	185,848
Other long-term assets	23,671	29,899	28,225	29,384
Total long-term farm assets	1,012,958	1,009,784	505,955	527,173
Total Farm Assets	1,886,082	1,910,872	1,430,810	1,583,208
Total Nonfarm Assets	98,634	122,703	12,551	12,634
Total Assets	1,984,717	2,033,576	1,443,361	1,595,842
Liabilities				
Current Farm Liabilities				
Accrued interest	1	1	0	0
Accounts payable	25,689	26,933	9,850	10,499
Current notes	66,846	57,498	43,366	10,684
Government crop loans	0	0	0	0
Principal due on term debt	40,750	40,679	37,471	44,531
Total current farm liabilities	133,285	125,111	90,687	65,715
Total intermediate farm liabs	144,747	127,943	125,503	149,127
Total long term farm liabilities	242,406	229,285	258,629	232,725
Total farm liabilities	520,439	482,339	474,820	447,567
Total nonfarm liabilities	0	0	0	0
Total liabs excluding deferreds	520,439	482,339	474,820	447,567
Total deferred liabilities	0	0	0	0
Total liabilities	520,439	482,339	474,820	447,567
Retained earnings	568,856	619,586	549,794	649,582
Market valuation equity	895,422	931,652	418,747	498,694
Net worth (farm and nonfarm)	1,464,278	1,551,237	968,541	1,148,275
Net worth excluding deferreds	1,464,278	1,551,237	968,541	1,148,275
Net worth change		86,960		179,734
Ratio Analysis				
Current farm liabilities / assets	69 %	58 %	51 %	26 %
Curr. & interm farm liab. / assets	32 %	28 %	23 %	20 %
Long term farm liab. / assets	24 %	23 %	51 %	44 %
Total debt to asset ratio	26 %	24 %	33 %	28 %
Debt to assets excl deferreds	26 %	24 %	33 %	28 %

Table 13

Statement Of Cash Flows
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Number of farms	24	7
Beginning cash (farm & nonfarm)	16,867	7,876
Cash From Operating Activities		
Gross cash farm income	673,978	840,128
Net nonfarm income	9,750	1,277
Total cash farm expense	-536,890	-684,845
Apparent family living expense	-55,817	-61,168
Income and social security tax	-2,505	-298
Cash from operations	88,517	95,094
Cash From Investing Activities		
Sale of breeding livestock	460	1,208
Sale of machinery & equipment	7,212	2,254
Sale of titled vehicles	-	-
Sale of farm land	15,000	-
Sale of farm buildings	516	-
Sale of other farm assets	5,438	18,644
Sale of nonfarm assets	-	-
Purchase of breeding livestock	-8,601	-5,662
Purchase of machinery & equip.	-41,083	-54,584
Purchase of titled vehicles	-	-
Purchase of farm land	-8,112	-
Purchase of farm buildings	-9,341	-20,029
Purchase of other farm assets	-1,914	-2,758
Purchase of nonfarm assets	-1,943	-
Cash from investing activities	-42,370	-60,926
Cash From Financing Activities		
Money borrowed	65,871	73,900
Cash gifts and inheritances	6,173	3,429
Principal payments	-105,215	-101,802
Dividends paid	-	-
Gifts given	-6,627	-3,434
Cash from financing activities	-39,798	-27,908
Net change in cash balance	6,349	6,260
Ending cash (farm & nonfarm)	23,216	14,136

Table 14

Financial Standards Measures
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Number of farms	24	7
Liquidity		
Current ratio	1.71	3.84
Working capital	89,134	186,706
Solvency (market)		
Farm debt to asset ratio	25 %	28 %
Farm equity to asset ratio	75 %	72 %
Farm debt to equity ratio	34 %	39 %
Profitability (cost)		
Rate of return on farm assets	6.8 %	13.4 %
Rate of return on farm equity	7.7 %	19.3 %
Operating profit margin	13.4 %	19.8 %
Net farm income	83,990	159,899
Repayment Capacity		
Term debt coverage ratio	229 %	358 %
Capital replacement margin	61,830	125,880
Efficiency		
Asset turnover rate (cost)	50.7 %	67.4 %
Operating expense ratio	73.6 %	71.4 %
Depreciation expense ratio	9.7 %	7.3 %
Interest expense ratio	4.3 %	3.0 %
Net farm income ratio	12.4 %	18.3 %

Table 15

Operator and Labor Information

2007 MI UP Dairy Farms

(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Number of farms	24	7
Operator Information		
Average number of operators	1.6	1.7
Average age of operators	51.4	51.1
Average number of years farming	25.8	27.4
Results Per Operator		
Working capital	56,295	108,912
Total assets (market)	1,284,364	930,908
Total liabilities	304,635	261,081
Net worth (market)	979,729	669,827
Net worth excl deferred liabs	979,729	669,827
Gross farm income	427,557	510,808
Total farm expense	374,511	417,534
Net farm income	53,047	93,274
Net nonfarm income	6,158	745
Family living & tax withdrawals	36,835	35,855
Total acres owned	426.8	300.6
Total crop acres	496.3	506.0
Crop acres owned	281.5	241.4
Crop acres cash rented	214.9	264.6
Crop acres share rented	-	-
Total pasture acres	-	-
Labor Analysis		
Number of farms	24	7
Total unpaid labor hours	4,458	5,143
Total hired labor hours	4,911	6,787
Total labor hours per farm	9,369	11,930
Unpaid hours per operator	2,816	3,000
Value of farm production / hour	56.23	59.28
Net farm income / unpaid hour	18.84	31.09
Average hourly hired labor wage	12.22	13.63
Partnerships & LLCs		
Number of farms	11	4
Number of operators	2.0	-
Owner withdrawals per farm	-	-
Withdrawals per operator	-	-

Table 16

Financial Summary
2007 MI UP Dairy Farms
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	High 25%
Number of farms	24	7
Income Statement		
Gross cash farm income	673,978	840,128
Total cash farm expense	536,890	684,845
Net cash farm income	137,088	155,282
Inventory change	12,378	68,257
Depreciation and capital adjust	-65,476	-63,641
Average net farm income	83,990	159,899
Median net farm income	71,110	131,754
Profitability (cost)		
Labor and management earnings	51,674	124,603
Rate of return on assets	6.8 %	13.4 %
Rate of return on equity	7.7 %	19.3 %
Operating profit margin	13.4 %	19.8 %
Asset turnover rate	50.7 %	67.4 %
Profitability (market)		
Labor and management earnings	19,200	177,096
Rate of return on assets	4.7 %	14.6 %
Rate of return on equity	4.3 %	18.5 %
Operating profit margin	17.0 %	31.1 %
Asset turnover rate	27.7 %	46.9 %
Liquidity		
Ending current ratio	1.71	3.84
Ending working capital	89,134	186,706
End working capital to gross inc	13.2 %	22.2 %
Term debt coverage ratio	229.2 %	358.1 %
Expense as a percent of income	77.9 %	74.5 %
Interest as a percent of income	4.3 %	3.0 %
Solvency (cost)		
Number of farms	24	7
Ending farm assets	1,042,868	1,085,687
Ending farm liabilities	482,339	447,567
Ending total assets	1,101,924	1,097,149
Ending total liabilities	482,339	447,567
Ending net worth	619,586	649,582
Net worth change	50,729	99,788
Ending farm debt to asset ratio	46 %	41 %
Beg total debt to asset ratio	48 %	46 %
End total debt to asset ratio	44 %	41 %
Solvency (market)		
Number of farms	24	7
Ending farm assets	1,910,872	1,583,208
Ending farm liabilities	482,339	447,567
Ending total assets	2,033,576	1,595,842
Ending total liabilities	482,339	447,567
Ending net worth	1,551,237	1,148,275
Net worth change	86,960	179,734
Ending farm debt to asset ratio	25 %	28 %
Beg total debt to asset ratio	26 %	33 %
End total debt to asset ratio	24 %	28 %
Nonfarm Information		
Net nonfarm income	9,750	1,277
Crop Acres		
Total acres owned	676	515
Total crop acres	786	867
Total crop acres owned	446	414
Total crop acres cash rented	340	454
Total crop acres share rented	-	-