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**2008 Michigan Upper Peninsula Dairy
Business Analysis Summary**

Eric Wittenberg
And
Christopher Wolf

Staff Paper 2009-10

November, 2009



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

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By

Eric Wittenberg and Christopher Wolf¹

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¹ Co-workers in the TelFarm project were: R. Betz, L. Borton, B. Battel, W. Schauer, D. Stein, and V. Varner with the assistance of Michigan State University Extension Agents. Greenstone Farm Credit Services co-workers were Kelly Tobin, Steve Eshelman, Janice Raymond, Anne Gerke, Kathleen Spranger, Sonya Pentecost, and Lynette Wood. Farm Credit Services of Wisconsin co-worker was Steve Zimmerman.

Executive Summary

This report summarizes the financial and production records of 23 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 2008, the average UP dairy farm in the business analysis had 153 cows producing an average of 17,897 pounds of milk per cow (Table 1). Milk price received averaged \$19.42/cwt. The total average acres owned were 671 and the average cropped acres were 783.

Table 1. Average Michigan UP Dairy Farm Characteristics, 2004-2008

	2004	2005	2006	2007	2008
Average number of cows	138	140	149	150	153
Milk sold per cow (pounds)	18,501	18,672	19,543	18,240	17,897
Average price of milk sold (\$/cwt)	16.96	15.94	13.50	19.05	19.42
Total acres owned	624	621	655	676	671
Total crop acres	789	689	756	786	783
Number of farms	23	30	27	24	23

Net farm income is the return to operator unpaid management, labor and capital invested. Net farm income in 2008 averaged \$94,783 (Table 2). The median was \$53,456 and the standard deviation was \$174,479 across the 23 dairy farms.

Table 2. Average Michigan UP Dairy Farm Income Statement, 2004-2008

	2004	2005	2006	2007	2008
	(\$)	(\$)	(\$)	(\$)	(\$)
Gross cash farm income	539,446	552,192	531,643	673,978	701,117
- Total cash expense	413,969	410,527	437,583	536,890	538,514
= Net cash farm income	125,478	141,665	94,060	137,088	162,602
+ Inventory change*	21,143	-7,345	16,610	12,378	17,513
+ Depreciation and capital adjustments*	-61,178	-69,158	-78,541	-65,476	-85,333
= Net farm income	85,442	65,162	32,129	83,990	94,783

*Changes calculated as ending value minus beginning value.

Gross cash farm income averaged \$701,117 in 2008. The largest component of these revenues was milk sales, which averaged \$557,407. The second largest revenue was insurance income at \$28,209 and third was cull livestock at \$23,799. Average total cash expenses were \$538,514 and average net cash farm income was \$162,602. Inventory changes were \$17,513, on average farms were building inventories, while depreciation and capital adjustments averaged \$85,333. The net farm income value is the return to operator unpaid management, labor and capital invested averaged \$94,783 in 2008, the 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 2008 dairy farm ROA (Market) was 6.1 percent, a positive return but not as high as 2004 of 11.4 percent (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 2008, Michigan’s UP dairy farms generated 23.2 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 decreased slightly from 2007 to 2008 to an average of 26.1 percent.

Table 3. Average Michigan UP Dairy Farm Profitability Indicators, 2004-2008

	2004	2005	2006	2007	2008
	(%)	(%)	(%)	(%)	(%)
Rate of return on assets*	11.4	5.9	4.1	4.7	6.1
Rate of return on equity	14.3	6.6	3.5	4.3	6.2
Operating profit margin	38.7	21.7	17.4	12.0	23.2
Asset turnover rate*	29.5	27.3	23.4	27.7	26.1

* 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 23 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 \$5.91/cwt. and family living was the second largest at \$2.45/cwt and hired labor was third at \$2.25/cwt. Depreciation, livestock supplies, repairs and milk marketing and trucking combined were also significant expenses for 2008.

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*, 2008

Income Items:	Per cwt.	Per Cow
Milk	\$19.42	\$3,486.00
Cull Cows and Calves	\$0.97	\$164.84
Dairy Steers	\$0.68	\$135.66
Dairy Heifers	\$1.97	\$229.37
Government Payments	\$0.97	\$172.50
Patronage Dividends, cash	\$0.23	\$38.35
Crop Sales	\$1.13	\$191.42
Other Cash Income	\$2.49	\$418.96
Expense Items:	Per cwt.	Per Cow
Purchased Feeds	\$5.91	\$1074.12
Breeding Fees	\$ 0.19	\$35.05
Veterinary	\$0.38	\$71.29
Livestock Supplies	\$0.90	\$154.31
DHIA	\$0.09	\$16.63
Milk & Livestock Mkt. & Trucking	\$0.90	\$157.60
Interest	\$1.51	\$223.92
Fuel and Oil	\$1.68	\$283.21
Repairs	\$1.41	\$233.70
Custom Hire	\$0.48	\$84.64
Hired Labor	\$2.25	\$422.19
Leases	\$0.71	\$130.69
Real Estate Taxes	\$0.38	\$65.84
Farm Insurance	\$0.53	\$93.05
Utilities	\$0.60	\$98.88
Dues, Professional Fees	\$0.23	\$40.31
Miscellaneous	\$0.31	\$52.42
Machinery Depreciation	\$2.17	\$388.02
Building Depreciation	\$0.97	\$178.10
Family Living	\$2.45	\$419.14
Expense Items per Cropped Acre:	Per Acre	
Seed	\$17.60	
Fertilizer	\$42.47	
Crop Chemicals	\$12.84	
Crop Insurance	\$1.91	
Crop Miscellaneous	\$3.17	
Land Rent	\$14.75	

All income and expense items averaged across all 23 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
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Dairy			
Number of farms	23	5	6
Average number of cows,	153	118	239
Milk production per cow lbs.,	17,897	16,628	18,817
Average price of milk cwt.,	\$19.42	\$18.43	\$19.96
Acreage Summary			
Total acres owned	671	365	1,288
Total crop acres	783	552	1,238
Crop acres owned	475	242	897
Crop acres cash rented	308	310	341
Crop acres share rented	-	-	-
Total pasture acres	-	-	-
Percent crop acres owned	61 %	44 %	72 %
Average Price Received (Cash Sales Only)			

Table 6

Farm Income Statement
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Cash Farm Income			
Barley	606	2,786	-
Cordwood	402	1,847	-
Corn	1,360	5,280	657
Corn Silage	707	3,250	-
Hay, Alfalfa	4,880	8,150	3,022
Hay, Grass	587	2,700	-
Hay, Mixed	1,929	126	-
Oats	45	-	173
Rye	28	129	-
Soybeans	3,701	-	14,189
Sunflowers	99	-	381
Wheat, Winter	643	-	2,464
Miscellaneous crop income	15	-	58
Beef Bulls	22	101	-
Dairy, Milk	557,407	400,162	954,030
Dairy, Dairy Calves	1,868	4,230	79
Dairy Heifers (for sale)	3,219	1,334	-
Dairy Replacement Heifers	503	2,315	-
Dairy Finishing	834	1,068	2,308
Hogs, Farrow To Finish, Raised Ho	85	-	324
Sheep, Market Lamb Prod, Mkt Lamb	221	-	847
Dairy Feeder	2,196	-	-
User Added Livestock, User Added	5,243	-	5,786
Cull breeding livestock	23,799	20,486	31,035
Misc. livestock income	40	-	-
Direct & CC govt payments	20,785	9,924	32,370
Other government payments	3,344	3,991	3,549
Custom work income	16,809	103	63,918
Patronage dividends, cash	1,547	510	3,324
Insurance income	28,209	5,986	53,635
Other farm income	19,985	5,021	45,624
Gross Cash Farm Income	701,117	479,501	1,217,771

Table 6

Farm Income Statement (Continued)
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Cash Farm Expense			
Seed	11,892	8,866	19,966
Fertilizer	25,555	21,461	42,134
Crop chemicals	6,443	4,638	11,991
Crop insurance	124	140	258
Drying expense	36	-	140
Storage	590	-	2,261
Crop miscellaneous	151	241	-
Feeder livestock purchase	597	-	2,219
Purchased feed	174,943	129,020	285,133
Breeding fees	4,241	3,307	5,382
Veterinary	11,777	10,633	20,082
BST	688	-	170
Supplies	24,195	18,863	46,025
DHIA	510	621	1,251
Hauling and trucking	14,855	13,465	21,070
Marketing	7,428	4,108	14,463
Bedding	3,513	2,155	5,985
Interest	29,486	28,545	57,700
Fuel & oil	43,769	32,584	76,922
Repairs	31,640	28,172	47,150
Custom hire	14,840	12,297	27,738
Repair, buildings	1,989	-	7,625
Hired labor	67,658	53,316	120,646
Land rent	7,435	9,914	6,497
Machinery leases	5,818	6,827	6,459
Real estate taxes	8,932	5,793	12,524
Farm insurance	13,865	8,857	25,440
Utilities	13,888	13,458	19,989
Dues & professional fees	5,263	4,647	6,255
Miscellaneous	6,391	3,423	9,645
Total cash expense	538,514	425,352	903,117
Net cash farm income	162,602	54,149	314,654
Inventory Changes			
Prepays and supplies	-1,024	-1,314	-8,677
Accounts receivable	434	-13,635	25,255
Hedging accounts	-	-	-
Other current assets	3,892	435	21,223
Crops and feed	8,480	-35,094	46,130
Market livestock	1,125	2,810	-1,867
Breeding livestock	8,134	1,385	50,360
Other assets	-2,744	-2,647	-3,619
Accounts payable	-783	-17,744	23,302
Accrued interest	0	-	-2
Total inventory change	17,513	-65,804	152,106
Net operating profit	180,116	-11,656	466,760

Depreciation			
Machinery and equipment	-46,954	-40,612	-37,792
Titled vehicles	-1,735	-	-6,650
Buildings and improvements	-36,644	-9,396	-93,098
Total depreciation	-85,333	-50,008	-137,540
Net farm income from operations	94,783	-61,664	329,220
Gain or loss on capital sales	-	-	-
Net farm income	94,783	-61,664	329,220

Table 7

Inventory Changes
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Net cash farm income	162,602	54,149	314,654
Crops and Feed			
Ending inventory	121,950	83,789	233,546
Beginning inventory	113,471	118,883	187,416
Inventory change	8,480	-35,094	46,130
Market Livestock			
Ending inventory	19,924	8,190	25,329
Beginning inventory	18,799	5,380	27,196
Inventory change	1,125	2,810	-1,867
Accts Receivable			
Ending inventory	36,914	22,880	58,676
Beginning inventory	36,480	36,515	33,422
Inventory change	434	-13,635	25,255
Prepaid Expenses and Supplies			
Ending inventory	11,607	1,695	14,614
Beginning inventory	12,630	3,009	23,290
Inventory change	-1,024	-1,314	-8,677
Hedging Activities			
Ending inventory	-	-	-
Withdrawals	-	-	-
Beginning inventory	-	-	-
Deposits	-	-	-
Gain or loss	-	-	-
Other Current Assets			
Ending inventory	7,586	1,060	28,180
Beginning inventory	3,694	625	6,957
Inventory change	3,892	435	21,223
Breeding Livestock			
Ending inventory	390,013	307,683	655,833
Capital sales	1,756	3,078	4,167
Beginning inventory	367,311	284,750	575,775
Capital purchases	16,324	24,626	33,865
Depreciation, capital adjust	8,134	1,385	50,360
Other Capital Assets			
Ending inventory	45,125	30,909	101,345
Capital sales	581	-	242
Beginning inventory	45,453	33,321	96,004
Capital purchases	2,997	235	9,202
Depreciation, capital adjust	-2,744	-2,647	-3,619
Accounts Payable			
Beginning inventory	28,161	6,028	80,709
Ending inventory	28,944	23,772	57,407
Inventory change	-783	-17,744	23,302
Accrued Interest			
Beginning inventory	1	-	-
Ending inventory	1	-	2
Inventory change	0	-	-2
Total inventory change	17,513	-65,804	152,106
Net operating profit	180,116	-11,656	466,760

Table 8

Depreciation
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Net operating profit	180,116	-11,656	466,760
Machinery and Equipment			
Ending inventory	96,462	58,223	175,147
Capital sales	3,408	-	2,868
Beginning inventory	96,657	71,180	164,929
Capital purchases	50,166	27,655	50,878
Depreciation, capital adjust.	-46,954	-40,612	-37,792
Titled Vehicles			
Ending inventory	0	-	0
Capital sales	-	-	-
Beginning inventory	1,735	-	6,651
Capital purchases	-	-	-
Depreciation, capital adjust.	-1,735	-	-6,650
Buildings and Improvements			
Ending inventory	169,807	52,754	390,117
Capital sales	102	-	-
Beginning inventory	168,559	53,180	376,600
Capital purchases	37,994	8,970	106,615
Depreciation, capital adjust.	-36,644	-9,396	-93,098
Total depreciation, capital adj.	-85,333	-50,008	-137,540
Net farm income from operations	94,783	-61,664	329,220
Gain or loss on capital sales	-	-	-
Net farm income	94,783	-61,664	329,220

Table 9

Profitability Measures
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Profitability (assets valued at cost)			
Net farm income from operations	94,783	-61,664	329,220
Rate of return on assets	7.4 %	-10.4 %	14.9 %
Rate of return on equity	9.0 %	-47.0 %	24.0 %
Operating profit margin	15.0 %	-23.2 %	29.2 %
Asset turnover rate	49.4 %	44.8 %	51.1 %
Farm interest expense	29,486	28,545	57,702
Value of operator lbr and mgmt.	42,332	37,250	74,833
Return on farm assets	81,937	-70,369	312,089
Average farm assets	1,102,396	677,509	2,088,545
Return on farm equity	52,451	-98,914	254,387
Average farm equity	580,817	210,263	1,060,126
Value of farm production	544,896	303,735	1,067,902
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Profitability (assets valued at market)			
Net farm income from operations	139,482	-43,683	401,170
Rate of return on assets	6.1 %	-3.5 %	10.2 %
Rate of return on equity	6.2 %	-7.8 %	11.9 %
Operating profit margin	23.2 %	-17.2 %	36.0 %
Asset turnover rate	26.1 %	20.2 %	28.4 %
Farm interest expense	29,486	28,545	57,702
Value of operator lbr and mgmt.	42,332	37,250	74,833
Return on farm assets	126,636	-52,388	384,039
Average farm assets	2,084,290	1,502,006	3,765,915
Return on farm equity	97,150	-80,933	326,337
Average farm equity	1,562,711	1,034,761	2,737,495
Value of farm production	544,896	303,735	1,067,902

Table 10

Liquidity & Repayment Capacity Measures

2008 MI UP Dairy Farms

(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Liquidity			
Current ratio	2.13	1.33	2.01
Working capital	128,645	37,062	225,025
Working capital to gross inc	17.9 %	8.6 %	16.6 %
Current assets	242,915	147,858	446,922
Current liabilities	114,270	110,796	221,897
Gross revenues (accrual)	720,437	432,755	1,355,254
Repayment capacity			
Net farm income from operations	94,783	-61,664	329,220
Depreciation	85,333	50,008	137,540
Personal income	7,821	15,285	648
Family living/owner withdrawals	-59,839	-61,791	-72,659
Payments on personal debt	-	-	-
Income taxes paid	-6,281	-1,179	-12,088
Interest on term debt	13,840	22,372	27,500
Capital debt repayment capacity	135,658	-36,969	410,161
Scheduled term debt payments	-56,199	-47,752	-106,539
Capital debt repayment margin	79,459	-84,721	303,622
Cash replacement allowance	-15,995	-9,319	-21,121
Replacement margin	63,464	-94,040	282,501
Term debt coverage ratio	2.41	-0.77	3.85
Replacement coverage ratio	1.88	-0.65	3.21

Table 11

Balance Sheet at Cost Values
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms		Low 25%		High 25%	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Number of farms	23		5		6	
Assets						
Current Farm Assets						
Cash and checking balance	37,434	44,935	12,489	30,244	76,038	86,578
Prepaid expenses & supplies	12,630	11,607	3,009	1,695	23,290	14,614
Growing crops	1,035	6,784	625	1,060	3,447	25,123
Accounts receivable	36,480	36,914	36,515	22,880	33,422	58,676
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	113,471	121,950	118,883	83,789	187,416	233,546
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	18,799	19,924	5,380	8,190	27,196	25,329
Other current assets	2,659	802	0	0	3,510	3,056
Total current farm assets	222,508	242,915	176,902	147,858	354,318	446,922
Intermediate Farm Assets						
Breeding livestock	367,311	390,013	284,750	307,683	575,775	655,833
Machinery and equipment	96,657	96,462	71,180	58,223	164,929	175,147
Titled vehicles	1,735	0	0	0	6,651	0
Other intermediate assets	7,915	7,872	329	272	12,323	13,397
Total intermediate farm assets	473,618	494,346	356,258	366,178	759,677	844,377
Long Term Farm Assets						
Farm land	173,498	184,750	69,129	69,129	400,675	432,775
Buildings and improvements	168,559	169,807	53,180	52,754	376,600	390,117
Other long-term assets	37,538	37,253	32,992	30,637	83,681	87,948
Total long-term farm assets	379,595	391,809	155,301	152,520	860,956	910,840
Total Farm Assets	1,075,721	1,129,071	688,461	666,556	1,974,951	2,202,140
Total Nonfarm Assets	53,859	66,557	22,772	37,520	45,172	51,069
Total Assets	1,129,580	1,195,628	711,233	704,076	2,020,122	2,253,209
Liabilities						
Current Farm Liabilities						
Accrued interest	1	1	0	0	0	2
Accounts payable	28,161	28,944	6,028	23,772	80,709	57,407
Current notes	60,177	59,729	37,525	64,498	175,572	116,672
Government crop loans	0	0	0	0	0	0
Principal due on term debt	42,358	25,596	25,380	22,526	79,039	47,816
Total current farm liabilities	130,698	114,270	68,932	110,796	335,320	221,897
Total intermediate farm liabs	134,893	159,328	98,021	173,527	228,893	260,210
Total long term farm liabilities	244,292	259,676	248,416	234,800	477,453	533,067
Total farm liabilities	509,883	533,274	415,369	519,123	1,041,665	1,015,174
Total nonfarm liabilities	0	0	0	0	0	0
Total liabilities	509,883	533,274	415,369	519,123	1,041,665	1,015,174
Net worth (farm and nonfarm)	619,696	662,354	295,864	184,953	978,457	1,238,035
Net worth change		42,657		-110,911		259,578
Ratio Analysis						
Current farm liabilities / assets	59 %	47 %	39 %	75 %	95 %	50 %
Intermediate farm liab. / assets	28 %	32 %	28 %	47 %	30 %	31 %
Long term farm liab. / assets	64 %	66 %	160 %	154 %	55 %	59 %
Total debt to asset ratio	45 %	45 %	58 %	74 %	52 %	45 %

Table 12

Balance Sheet at Market Values
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms		Low 25%		High 25%	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Number of farms	23		5		6	
Assets						
Current Farm Assets						
Cash and checking balance	37,434	44,935	12,489	30,244	76,038	86,578
Prepaid expenses & supplies	12,630	11,607	3,009	1,695	23,290	14,614
Growing crops	1,035	6,784	625	1,060	3,447	25,123
Accounts receivable	36,480	36,914	36,515	22,880	33,422	58,676
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	113,471	121,950	118,883	83,789	187,416	233,546
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	18,799	19,924	5,380	8,190	27,196	25,329
Other current assets	2,659	802	0	0	3,510	3,056
Total current farm assets	222,508	242,915	176,902	147,858	354,318	446,922
Intermediate Farm Assets						
Breeding livestock	368,861	390,882	291,879	307,683	575,775	655,833
Machinery and equipment	322,012	350,510	268,850	273,850	445,529	491,983
Titled vehicles	2,696	2,435	0	0	10,333	9,333
Other intermediate assets	20,014	19,984	55,987	55,987	12,323	13,397
Total intermediate farm assets	713,583	763,811	616,716	637,520	1,043,960	1,170,547
Long Term Farm Assets						
Farm land	750,290	757,490	457,600	457,600	1,571,979	1,583,646
Buildings and improvements	312,919	333,426	220,087	226,700	568,033	631,798
Other long-term assets	35,965	35,672	32,663	30,365	78,055	82,571
Total long-term farm assets	1,099,174	1,126,588	710,351	714,665	2,218,067	2,298,015
Total Farm Assets	2,035,265	2,133,314	1,503,969	1,500,044	3,616,345	3,915,484
Total Nonfarm Assets	131,832	144,965	29,772	41,520	89,023	94,920
Total Assets	2,167,097	2,278,279	1,533,741	1,541,564	3,705,368	4,010,405
Liabilities						
Current Farm Liabilities						
Accrued interest	1	1	0	0	0	2
Accounts payable	28,161	28,944	6,028	23,772	80,709	57,407
Current notes	60,177	59,729	37,525	64,498	175,572	116,672
Government crop loans	0	0	0	0	0	0
Principal due on term debt	42,358	25,596	25,380	22,526	79,039	47,816
Total current farm liabilities	130,698	114,270	68,932	110,796	335,320	221,897
Total intermediate farm liabs	134,893	159,328	98,021	173,527	228,893	260,210
Total long term farm liabilities	244,292	259,676	248,416	234,800	477,453	533,067
Total farm liabilities	509,883	533,274	415,369	519,123	1,041,665	1,015,174
Total nonfarm liabilities	0	0	0	0	0	0
Total liabs excluding deferreds	509,883	533,274	415,369	519,123	1,041,665	1,015,174
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	509,883	533,274	415,369	519,123	1,041,665	1,015,174
Retained earnings	619,696	662,354	295,864	184,953	978,457	1,238,035
Market valuation equity	1,037,518	1,082,652	822,508	837,488	1,685,245	1,757,196
Net worth (farm and nonfarm)	1,657,214	1,745,005	1,118,372	1,022,441	2,663,702	2,995,231
Net worth excluding deferreds	1,657,214	1,745,005	1,118,372	1,022,441	2,663,702	2,995,231
Net worth change		87,791		-95,931		331,528
Ratio Analysis						
Current farm liabilities / assets	59 %	47 %	39 %	75 %	95 %	50 %
Intermediate farm liab. / assets	19 %	21 %	16 %	27 %	22 %	22 %
Long term farm liab. / assets	22 %	23 %	35 %	33 %	22 %	23 %
Total debt to asset ratio	24 %	23 %	27 %	34 %	28 %	25 %
Debt to assets excl deferreds	24 %	23 %	27 %	34 %	28 %	25 %

Table 13

Statement Of Cash Flows
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Beginning cash (farm & nonfarm)	37,434	12,489	76,038
Cash Provided By Operating Activities			
Gross cash farm income	701,117	479,501	1,217,771
Total cash farm expense	-538,514	-425,352	-903,117
Net cash from hedging transactions	-	-	-
Cash provided by operating	162,602	54,149	314,654
Cash Provided By Investing Activities			
Sale of breeding livestock	1,756	3,078	4,167
Sale of machinery & equipment	3,408	-	2,868
Sale of titled vehicles	-	-	-
Sale of farm land	-	-	-
Sale of farm buildings	102	-	-
Sale of other farm assets	581	-	242
Sale of nonfarm assets	-	-	-
Purchase of breeding livestock	-16,324	-24,626	-33,865
Purchase of machinery & equip.	-50,166	-27,655	-50,878
Purchase of titled vehicles	-	-	-
Purchase of farm land	-8,957	-	-20,417
Purchase of farm buildings	-37,994	-8,970	-106,615
Purchase of other farm assets	-2,997	-235	-9,202
Purchase of nonfarm assets	-8,414	-11,700	-3,000
Cash provided by investing	-119,004	-70,108	-216,700
Cash Provided By Financing Activities			
Money borrowed	109,918	184,591	169,284
Principal payments	-87,311	-98,582	-172,475
Personal income	7,821	15,285	648
Family living/owner withdrawals	-59,839	-61,791	-72,659
Income and social security tax	-6,281	-1,179	-12,088
Capital contributions	-	-	-
Capital distributions	-	-	-
Dividends paid	-	-	-
Cash gifts and inheritances	2,973	390	-
Gifts given	-3,380	-5,000	-124
Cash provided by financing	-36,098	33,714	-87,414
Net change in cash balance	7,501	17,755	10,540
Ending cash (farm & nonfarm)	44,935	30,244	86,578

Table 14

Financial Standards Measures
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Liquidity			
Current ratio	2.13	1.33	2.01
Working capital	128,645	37,062	225,025
Working capital to gross inc	17.9 %	8.6 %	16.6 %
Solvency (market)			
Farm debt to asset ratio	25 %	35 %	26 %
Farm equity to asset ratio	75 %	65 %	74 %
Farm debt to equity ratio	0.33	0.53	0.35
Profitability (cost)			
Rate of return on farm assets	7.4 %	-10.4 %	14.9 %
Rate of return on farm equity	9.0 %	-47.0 %	24.0 %
Operating profit margin	15.0 %	-23.2 %	29.2 %
Net farm income	94,783	-61,664	329,220
EBIDTA	209,602	16,889	524,462
Repayment Capacity			
Capital debt repayment capacity	135,658	-36,969	410,161
Capital debt repayment margin	79,459	-84,721	303,622
Replacement margin	63,464	-94,040	282,501
Term debt coverage ratio	2.41	-0.77	3.85
Replacement coverage ratio	1.88	-0.65	3.21
Efficiency			
Asset turnover rate (cost)	49.4 %	44.8 %	51.1 %
Operating expense ratio	70.9 %	96.1 %	61.3 %
Depreciation expense ratio	11.8 %	11.6 %	10.1 %
Interest expense ratio	4.1 %	6.6 %	4.3 %
Net farm income ratio	13.2 %	-14.2 %	24.3 %

Table 15

Operator and Labor Information
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Operator Information			
Average number of operators	1.7	1.6	2.0
Average age of operators	49.6	51.4	44.8
Average number of years farming	24.5	27.8	21.5
Results Per Operator			
Working capital	75,868	23,164	112,513
Total assets (market)	1,343,600	963,477	2,005,202
Total liabilities	314,495	324,452	507,587
Net worth (market)	1,029,106	639,026	1,497,615
Net worth excl deferred liabs	1,029,106	639,026	1,497,615
Gross farm income	424,873	270,472	677,627
Total farm expense	368,975	309,011	513,017
Net farm income from operations	55,898	-38,540	164,610
Net nonfarm income	4,612	9,553	324
Family living & tax withdrawals	38,993	39,357	42,374
Total acres owned	395.6	228.3	643.9
Total crop acres	461.9	344.9	618.9
Crop acres owned	280.1	151.2	448.4
Crop acres cash rented	181.8	193.7	170.5
Crop acres share rented	-	-	-
Total pasture acres	-	-	-
Labor Analysis			
Number of farms	23	5	6
Total unpaid labor hours	4,565	4,860	5,617
Total hired labor hours	4,923	4,545	8,935
Total labor hours per farm	9,489	9,405	14,552
Unpaid hours per operator	2,692	3,038	2,808
Value of farm production / hour	57.43	32.30	73.39
Net farm income / unpaid hour	20.76	-12.69	58.61
Average hourly hired labor wage	13.79	11.69	13.50
Partnerships & LLCs			
Number of farms	10	2	3
Number of operators	2.2	-	-
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-

Table 16

Financial Summary
2008 MI UP Dairy Farms
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	23	5	6
Income Statement			
Gross cash farm income	701,117	479,501	1,217,771
Total cash farm expense	538,514	425,352	903,117
Net cash farm income	162,602	54,149	314,654
Inventory change	17,513	-65,804	152,106
Depreciation and capital adjust	-85,333	-50,008	-137,540
Net farm income from operations	94,783	-61,664	329,220
Gain or loss on capital sales	-	-	-
Average net farm income	94,783	-61,664	329,220
Median net farm income	53,456	-43,513	267,886
Profitability (cost)			
Rate of return on assets	7.4 %	-10.4 %	14.9 %
Rate of return on equity	9.0 %	-47.0 %	24.0 %
Operating profit margin	15.0 %	-23.2 %	29.2 %
Asset turnover rate	49.4 %	44.8 %	51.1 %
Profitability (market)			
Rate of return on assets	6.1 %	-3.5 %	10.2 %
Rate of return on equity	6.2 %	-7.8 %	11.9 %
Operating profit margin	23.2 %	-17.2 %	36.0 %
Asset turnover rate	26.1 %	20.2 %	28.4 %
Liquidity & Repayment (end of year)			
Current assets	242,915	147,858	446,922
Current liabilities	114,270	110,796	221,897
Current ratio	2.13	1.33	2.01
Working capital	128,645	37,062	225,025
Working capital to gross inc	17.9 %	8.6 %	16.6 %
Term debt coverage ratio	2.41	-0.77	3.85
Replacement coverage ratio	1.88	-0.65	3.21
Solvency (end of year at cost)			
Number of farms	23	5	6
Total farm assets	1,129,071	666,556	2,202,140
Total farm liabilities	533,274	519,123	1,015,174
Total assets	1,195,628	704,076	2,253,209
Total liabilities	533,274	519,123	1,015,174
Net worth	662,354	184,953	1,238,035
Net worth change	42,657	-110,911	259,578
Farm debt to asset ratio	47 %	78 %	46 %
Total debt to asset ratio	45 %	74 %	45 %
Solvency (end of year at market)			
Number of farms	23	5	6
Total farm assets	2,133,314	1,500,044	3,915,484
Total farm liabilities	533,274	519,123	1,015,174
Total assets	2,278,279	1,541,564	4,010,405
Total liabilities	533,274	519,123	1,015,174
Net worth	1,745,005	1,022,441	2,995,231
Net worth change	87,791	-95,931	331,528
Farm debt to asset ratio	25 %	35 %	26 %
Total debt to asset ratio	23 %	34 %	25 %
Nonfarm Information			
Net nonfarm income	7,821	15,285	648
Crop Acres			
Total acres owned	671	365	1,288
Total crop acres	783	552	1,238
Total crop acres owned	475	242	897
Total crop acres cash rented	308	310	341
Total crop acres share rented	-	-	-