

Staff Paper

2004 Michigan Dairy Farm Business Analysis Summary

**Eric Wittenberg
Christopher Wolf**

Staff Paper 2005-10

September 2005



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

MSU is an Affirmative Action/Equal Opportunity Institution

2004 Michigan Dairy Farm Business Analysis Summary

Staff Paper No. 05-10
September 2005

by

Eric Wittenberg
and
Christopher Wolf

Copyright (c) 2005 by Eric Wittenberg and Christopher Wolf. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

2004 Michigan Dairy Farm Business Analysis Summary

by

Eric Wittenberg and Christopher Wolf^d

Table of Contents Page

Summary..... 2

List of Tables

Summary Tables

1. Average Farm Characteristics, 2000-2004.....	2
2. Average Income Statement, 2000-2004.....	2
3. Average Profitability Indicators, 2000-2004.....	3
4. Average Income and Expenses--all herds.....	4
5. Average Income and Expenses--herds with that item...	5
6. Characteristics by Herd Size.....	6
7. Income Statement by Herd Size.....	6
8. Profitability Indicators by Herd Size.....	7

A) Averages of 144 Dairy farms, All Sizes

9. Livestock and Crop Production Summary.....	8
10. Farm Income Statement.....	9
11. Inventory Changes.....	11
12. Depreciation and Other Capital Adjustment.....	12
13. Profitability Measures.....	13
14. Liquidity Measures.....	14
15. Balance Sheet at Cost Values.....	15
16. Balance sheet at Market Values.....	16
17. Statement of Cash Flows.....	17
18. Financial Standards Measures.....	18
19. Operator Information and Nonfarm Summary...	19
20. Financial Summary.....	20

B) Average of 40 Dairy Farms, 42 to 99 Cows..... 21
Similar tables as previous summary, Tables 21 to 32

C) Average of 66 Dairy Farms, 100 to 249 Cows..... 34
Similar tables as previous summary, Tables 33 to 44

D) Average of 35 Dairy Farms, 250+ Cows 47
Similar tables as previous summary, Tables 45 to 56

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, Tiffany Aldrich, Anne Gerke, Kathleen Spranger, Sonya Pentecost, and Lynette Wood. Farm Credit Services of Wisconsin co-worker was Steve Zimmerman.

Summary

This report summarizes the financial and production records of 144 dairy farms from throughout 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 farms in this report were located throughout Michigan. The records came from Michigan State University's Telfarm project, the Farm Credit Service system, or by AgriSolutions in Michigan. The values were pooled into averages for reporting purposes. The farms are larger than would be the average of all dairy farms in Michigan. While considerable variation in the data exist, average values are reported in the summary tables and discussion that follows.

In 2004, the average dairy farm in the business analysis had 196 cows producing an average of 20,341 pounds of milk per cow (Table 1). Milk price, based on gross income, averaged \$16.42/cwt. Milk production was down slightly from 2003 while milk price was up almost \$4/cwt.

Table 1. Average Michigan Dairy Farm Business Analysis Characteristics, 2000-2004

	2000	2001	2002	2003	2004
Average number of cows	203	188	206	196	199
Milk sold per cow (pounds)	19,726	19,899	20,251	20,638	20,341
Average price of milk sold (\$/cwt)	13.02	15.23	12.47	12.59	16.42
Total acres owned	442	456	451	452	440
Total crop acres	532	613	757	761	751
Number of farms	150	158	150	141	144

Net farm income is the return to operator unpaid management, labor and capital invested. Net farm income in 2004 averaged \$121,120 which was 111 percent increase over the 2003 average. This average somewhat obscures a very large range of net farm income values. For example, the farms in the top 25 percent of the net farm income distribution averaged \$223,315 while those in the bottom 25 percent had \$22,210. Gross cash farm income averaged \$838,669 in 2004. The largest component of these revenues were milk sales which averaged \$704,241.

Table 2. Average Michigan Dairy Farm Income Statement, 2000-2004

	2000	2001	2002	2003	2004
			(\$)		
Gross cash farm income	677,530	711,077	705,145	695,048	838,669
- Total cash expense	<u>547,516</u>	<u>562,466</u>	<u>589,830</u>	<u>584,107</u>	<u>672,012</u>
= Net cash farm income	130,013	148,610	115,314	110,941	166,657
+ Inventory change*	2,125	5,511	-18,757	2,197	31,880
+ Depreciation + capital adjustments*	<u>-48,158</u>	<u>-67,364</u>	<u>-64,923</u>	<u>-55,619</u>	<u>-77,417</u>
= Net farm income	83,890	86,758	31,635	57,519	121,120

*Changes calculated as ending value minus beginning value.

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 2004 dairy farm ROA (Market) was 7.7 percent which was much improved over 2002 and 2003 and in line with 2001 which was also a high milk price year. 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 2004, Michigan dairy farms generated 23.3 cents of profit per dollar of revenue. Asset turnover (ATO) is the gross farm revenues divided by average asset value. Asset turnover measures the efficiency with which farm assets generate revenue. The average ATO value was a healthy 32.9 percent in 2004.

Table 3. Average Michigan Dairy Farm Profitability Indicators, 2000-2004

	2000	2001	2002	2003	2004
	(percent)				
Rate of return on assets*	7.1	7.6	3.2	4.3	7.7
Rate of return on equity	7.1	8.1	2.1	4.1	9.1
Operating profit margin	21.4	22.3	11.0	14.9	23.3
Asset turnover rate*	33.3	33.9	29.3	29.0	32.9

* Assets valued at market value.

Tables 4 and 5 display average income and expenses per hundredweight (cwt.) of milk and per cow. 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 includes all farm government payments—not just those related to the dairy herd. It was not possible to separate crop payments from dairy payments.

Table 4 contains the average income and expense items across all 144 dairy farms in the 2004 summary while Table 5 displays the average income and expense items for farms that reported that item. For example, all farms had milk income so that income is identical in the tables. In contrast, only some farms reported BST expense so that item is larger when averaged only across those farms with that expense. By reporting the income and expense items averaged two ways in the tables, it allows for comparison of individual items with farms that had that item. *These tables 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 bottom of Tables 4 and 5 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 farms*, 2004

Income Items:	Per cwt.	Per cow
Milk	\$16.42	\$3,329.31
Cull Cows and Calves	\$1.01	\$183.37
Dairy Steers	\$0.42	\$69.86
Dairy Heifers	\$0.15	\$27.79
Government Payments	\$0.71	\$129.95
Patronage Dividends, cash	\$0.08	\$17.53
Crop Sales	\$0.95	\$159.43
Other Cash Income	\$1.07	\$148.69
Expense Items:	Per cwt.	Per cow
Purchased Feeds	\$4.36	\$890.84
Breeding Fees	\$ 0.13	\$28.72
Veterinary	\$0.46	\$96.78
BST	\$0.02	\$4.13
Livestock Supplies	\$0.78	\$147.74
DHIA	\$0.02	\$3.57
Milk & Livestock Mkt. & Trucking	\$0.79	\$156.78
Interest	\$0.90	\$157.54
Fuel and Oil	\$0.66	\$121.35
Repairs	\$1.27	\$241.43
Custom Hire	\$0.54	\$109.43
Hired Labor	\$2.27	\$465.43
Leases	\$0.16	\$34.10
Real Estate Taxes	\$0.27	\$47.99
Farm Insurance	\$0.43	\$74.19
Utilities	\$0.44	\$84.68
Dues, Professional Fees	\$0.16	\$27.37
Miscellaneous	\$0.41	\$85.65
Machinery Depreciation	\$1.53	\$294.65
Building Depreciation	\$0.72	\$148.14
Expense Items per Cropped Acre:	Per acre	
Seed	\$26.90	
Fertilizer	\$64.45	
Crop Chemicals	\$15.10	
Crop Insurance	\$6.03	
Crop Miscellaneous	\$2.32	
Land Rent	\$37.79	

* All income and expense items averaged across all 144 farms whether they had this income or expense item or not. Other cash income includes custom work, insurance claims, and miscellaneous income.

Table 5. Average income and expenses across farms with that item*, 2004

Income Items:	Per cwt.	Per cow
Milk	\$16.42	\$3,329.31
Cull Cows and Calves	\$1.03	\$187.27
Dairy Steers	\$1.07	\$179.65
Dairy Heifers	\$0.28	\$54.08
Government Payments	\$0.71	\$130.86
Patronage Dividends, cash	\$0.15	\$32.37
Crop Sales	\$1.60	\$270.08
Other Cash Income	\$1.14	\$157.44
Expense Items:	Per cwt.	Per cow
Purchased Feeds	\$4.36	\$890.84
Breeding Fees	\$0.17	\$35.66
Veterinary	\$0.47	\$97.45
BST	\$0.26	\$59.49
Livestock Supplies	\$0.81	\$153.05
DHIA	\$0.13	\$22.38
Milk & Livestock Mkt. & Trucking	\$0.79	\$156.78
Interest	\$0.94	\$164.39
Fuel and Oil	\$0.67	\$122.20
Repairs	\$1.27	\$241.43
Custom Hire	\$0.59	\$119.38
Hired Labor	\$2.47	\$507.74
Leases	\$0.32	\$68.21
Real Estate Taxes	\$0.29	\$52.75
Farm Insurance	\$0.43	\$74.19
Utilities	\$0.44	\$84.68
Dues, Professional Fees	\$0.17	\$28.36
Miscellaneous	\$0.41	\$87.48
Machinery Depreciation	\$1.53	\$294.65
Building Depreciation	\$0.72	\$148.14
Expense Items per Cropped Acre:	Per acre	
Seed	\$27.67	
Fertilizer	\$70.85	
Crop Chemicals	\$16.99	
Crop Insurance	\$18.09	
Crop Miscellaneous	\$16.68	
Land Rent	\$42.51	

* Income and expense items averaged only across farms with that item. For example, all dairy farms had milk income but only some reported BST expense. Thus, milk income is the same as in Table 4 while BST is \$0.26/cwt across farms with that expense compared to \$0.02/cwt across all farms.

Results by Herd Size

To further facilitate financial comparisons and benchmarking, the financial summaries were divided into herd size categories. The smallest size category, 24 to 99 cows, includes 37 herds. The medium size category, 100 to 249 cows, includes 76 herds. The largest size category, 250 or more cows, contains the remaining 31 herds.

Table 6 displays some average characteristics by herd size category. As expected, average milk production per cow is correlated with herd size across the size categories. Milk price is slightly higher for the medium and large herds. The smallest herds operated 5.7 crop acres per cow; the medium herds about 4.1 acres/cow; and the largest category about 3.1 acres/cow.

Table 6. Average 2003 Michigan Dairy Farm Characteristics by Herd Size Category

	24-99 cows	100-249 cows	250+ cows
Average number of cows	70	162	444
Milk sold per cow (pounds)	17,130	21,025	22,499
Average price of milk sold (\$/cwt)	16.64	16.37	16.28
Total acres owned	342	398	659
Total crop acres	397	666	1,381
Number of farms	37	76	31

Table 7 is the average farm income statement by herd size. Net farm income represents the returns to unpaid factors (i.e., labor, management and equity capital). The smallest farms returned \$34,853; the medium farms \$108,816; and the largest farms \$254,246. The smallest herds had twice as much average net farm income as 2004; the medium herds just less than twice as large on average; while the largest herds increased by 2.5 times the 2004 average value.

**Table 7. Average
2003 Michigan Dairy Farm Income Statement by Herd Size**

	24-99 cows (\$)	100-249 cows (\$)	250+ cows (\$)
Gross cash farm income	266,842	671,589	1,930,787
- Total cash expense	<u>209,154</u>	<u>518,250</u>	<u>1,601,421</u>
= Net cash farm income	57,689	153,339	329,366
+ Inventory change *	6,854	20,755	89,023
+ Depreciation and capital adjustments*	<u>-29,690</u>	<u>-65,278</u>	<u>-164,143</u>
= Net farm income	34,853	108,816	254,246

*Changes calculated as ending value minus beginning value.

Table 8 compares profitability measures across herd size with assets valued at market value. ROA was highest on the largest farms in 2004. The middle size group (100-249 cows) realized the largest average operating profit margin while the largest herds had the largest average asset turnover rate.

Table 8. Average Michigan Dairy Farm Profitability Indicators by Herd Size

	24-99 cows	100-249 cows	250+ cows
	(percent)		
Rate of return on assets*	3.5	7.7	8.9
Rate of return on equity	3.1	9.2	11.2
Operating profit margin	16.6	26.0	22.1
Asset turnover rate*	21.2	29.7	40.4

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

A. Financial Summary Information, All 144 Farms

Table 9 Crop Production and Marketing Summary
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Dairy			
Number of farms	144	39	35
Average number of Cows	199	125	266
Milk production per Cow, lbs.	20,341	17,343	21,960
Average milk price per cwt.,	\$16.42	\$16.42	\$16.40
Acreage Summary			
Total acres owned	440	419	504
Total crop acres	751	555	885
Crop acres owned	402	302	580
Crop acres cash rented	347	253	305
Crop acres share rented	1	-	-
Total pasture acres	5	0	9
Average Price Received (Cash Sales Only)			
Wheat, Winter per bushel	2.95	3.13	2.85
Corn per bushel	2.21	2.11	-
Soybeans per bushel	6.35	6.17	6.94
Hay, Alfalfa per ton	55.65	-	-
Hay, Mixed per ton	9.94	-	-
Straw per ton	10.03	-	-
Oats per bushel	1.41	-	-
Corn Silage per ton	23.83	-	-

Table 10

Farm Income Statement
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	39	35
Cash Farm Income			
Asparagus	69	254	-
Barley	45	166	-
Corn	8,139	7,989	1,463
Corn Silage	1,101	2,622	182
Corn, Seed	112	6	405
Hay, Alfalfa	435	188	199
Hay, Mixed	833	459	617
Haylage, Mixed	525	-	909
Oats	203	12	-
Soybeans	8,908	5,341	7,397
Speltz	139	-	571
Straw	185	405	85
Sugar Beets	1,848	638	4,326
Wheat, Winter	3,668	3,138	3,507
Miscellaneous crop income	110	18	72
Beef Cow-Calf, Beef Calves	50	27	174
Beef, Background Beef	1,891	6,981	-
Beef, Finish Beef Calves	421	490	-
Dairy, Milk	704,241	367,586	1,015,211
Dairy, Dairy Calves	4,270	1,831	8,521
Dairy Heifers (for sale)	815	671	359
Dairy Replacement Heifers	821	62	1,928
Dairy Steers	8,595	7,087	9,814
Sheep, Market Lambs, Mkt Lambs	47	3	191
Beef, Finish Cull Cows	33	123	-
CCC market loan gain	0	0	-
Cull breeding livestock	35,871	22,021	50,516
Misc. livestock income	2,128	173	971
Direct & CC govt payments	8,199	8,102	7,297
Other government payments	14,965	9,151	18,368
Custom work income	5,403	2,753	6,579
Patronage dividends, cash	6,026	1,056	18,025
Insurance income	9,554	12,434	11,609
Other farm income	9,020	6,583	16,729
Gross Cash Farm Income	838,669	468,370	1,186,023

Table 10

Farm Income Statement (Continued)

Michigan Dairy, All Sizes, 2004

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	39	35
Cash Farm Expense			
Seed	16,711	8,660	19,168
Fertilizer	22,391	15,962	24,785
Crop chemicals	12,428	6,347	15,931
Crop insurance	1,113	517	2,362
Drying fuel	268	398	-
Crop custom hire	813	1,277	708
Crop marketing	252	5	733
Crop miscellaneous	1,501	702	2,482
Feeder livestock purchase	3,468	9,211	212
Purchased feed	188,631	93,975	267,176
Breeding fees	5,911	2,822	8,998
Veterinary	22,352	10,304	31,436
BST	794	328	680
Supplies	30,279	20,034	44,553
DHIA	437	249	523
Livestock leases	178	482	193
Livestock utilities	221	149	461
Livestock hauling and trucking	6,824	4,455	9,750
Livestock marketing	21,963	13,281	27,674
Bedding	735	104	231
Livestock miscellaneous	88	-	121
Interest	31,352	25,904	30,423
Packaging and supplies	281	315	650
Fuel & oil	22,881	15,122	28,322
Repairs	48,534	33,979	66,997
Custom hire	25,728	11,910	42,630
Hired labor	112,837	61,176	173,203
Land rent	24,643	13,106	33,272
Machinery & bldg leases	6,840	3,724	8,292
Real estate taxes	7,739	6,635	7,683
Personal property taxes	191	68	681
Farm insurance	12,663	12,050	13,795
Utilities	15,625	10,284	19,515
Hauling and trucking	119	-	385
Dues & professional fees	4,584	3,662	5,470
Hedging account deposits	2,219	-	4,527
Miscellaneous	18,418	10,031	24,702
Total cash expense	672,012	397,226	918,724
Net cash farm income	166,657	71,143	267,300
Inventory Changes			
Crops and feed	13,001	-954	36,583
Market livestock	1,181	-995	2,816
Accounts receivable	6,501	-965	13,959
Prepaid expenses and supplies	5,511	-885	16,584
Accounts payable	5,686	-1,290	9,241
Total inventory change	31,880	-5,088	79,183
Net operating profit	198,537	66,055	346,483
Depreciation and Other Capital Adjustments			
Breeding livestock	9,005	2,552	5,215
Machinery and equipment	-56,902	-21,639	-87,271
Buildings and improvements	-29,727	-26,217	-40,950
Other farm capital	207	1,459	-161
Total depr. and other capital adj	-77,417	-43,846	-123,168
Net farm income	121,120	22,210	223,315

Table 11

Inventory Changes
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	35	37
Net cash farm income	166,657	69,342	256,926
Crops and Feed			
Ending inventory	152,437	104,969	190,687
Beginning inventory	139,436	106,959	156,082
Inventory change	13,001	-1,991	34,605
Market Livestock			
Ending inventory	14,128	18,003	14,132
Beginning inventory	12,947	19,111	11,464
Inventory change	1,181	-1,108	2,667
Accts Receivable & Other Current Assets			
Ending inventory	45,482	25,711	52,514
Beginning inventory	38,982	25,236	39,295
Inventory change	6,501	475	13,219
Prepaid Expenses and Supplies			
Ending inventory	24,717	6,840	51,993
Beginning inventory	19,206	6,470	36,677
Inventory change	5,511	369	15,316
Accounts Payable & Accrued Expenses			
Beginning inventory	26,454	16,253	18,641
Ending inventory	20,769	19,156	9,756
Inventory change	5,686	-2,903	8,885
Total inventory change	31,880	-5,158	74,692
Net operating profit	198,537	64,184	331,618

Table 12 Depreciation and Other Capital Adjustments
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	35	37
Net operating profit	198,537	64,184	331,618
Breeding Livestock			
Ending inventory	444,656	290,998	568,084
Capital sales	7,249	895	6,118
Beginning inventory	426,810	274,795	543,510
Capital purchases	16,089	14,625	25,075
Depreciation, capital adjust.	9,005	2,473	5,618
Machinery and Equipment			
Ending inventory	166,386	114,562	223,124
Capital sales	3,021	1,415	3,768
Beginning inventory	148,904	103,052	186,787
Capital purchases	77,405	33,090	124,407
Depreciation, capital adjust.	-56,902	-20,166	-84,301
Buildings and Improvements			
Ending inventory	169,147	113,491	230,563
Capital sales	633	-	-
Beginning inventory	155,834	77,790	226,217
Capital purchases	43,673	64,410	43,212
Depreciation, capital adjust.	-29,727	-28,709	-38,866
Other Capital Assets			
Ending inventory	46,146	22,431	73,586
Capital sales	7,789	18,910	2,032
Beginning inventory	41,851	36,806	51,524
Capital purchases	11,877	2,537	24,220
Depreciation, capital adjust.	207	1,997	-126
Total depreciation, capital adj.	-77,417	-44,404	-117,675
Net farm income	121,120	19,780	213,942

Table 13

Profitability Measures
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	35	37
Profitability (assets valued at cost)			
Net farm income	121,120	19,780	213,942
Labor and management earnings	82,478	-5,259	160,464
Rate of return on assets	7.0 %	-0.7 %	11.7 %
Rate of return on equity	9.3 %	-8.1 %	17.0 %
Operating profit margin	13.4 %	-2.0 %	19.3 %
Asset turnover rate	52.3 %	37.1 %	60.6 %
Interest on farm net worth	38,642	25,039	53,478
Farm interest expense	31,443	25,778	29,409
Value of operator lbr and mgmt.	61,884	52,712	63,366
Return on farm assets	90,679	-7,154	179,986
Average farm assets	1,293,926	967,366	1,541,587
Return on farm equity	59,236	-32,932	150,576
Average farm equity	634,253	404,564	887,286
Value of farm production	676,258	358,681	934,507
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	35	37
Profitability (assets valued at market)			
Net farm income	188,071	35,101	384,578
Labor and management earnings	104,808	-40,033	285,595
Rate of return on assets	7.7 %	0.4 %	15.2 %
Rate of return on equity	9.1 %	-1.4 %	19.5 %
Operating profit margin	23.3 %	2.3 %	37.5 %
Asset turnover rate	32.9 %	19.7 %	40.6 %
Interest on farm net worth	83,263	75,135	98,983
Farm interest expense	31,443	25,778	29,409
Value of operator lbr and mgmt.	61,884	52,712	63,366
Return on farm assets	157,631	8,167	350,621
Average farm assets	2,055,724	1,822,621	2,304,020
Return on farm equity	126,188	-17,611	321,212
Average farm equity	1,387,719	1,252,246	1,649,718
Value of farm production	676,258	358,681	934,507

Table 14

Liquidity Measures
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	35	37
Liquidity (cash)			
Net cash farm income	166,657	69,342	256,926
Net nonfarm income	7,960	9,732	12,273
Family living and taxes	55,120	39,658	71,410
Principal due on long term debt	21,177	12,604	21,053
Cash available for interm. debt	98,320	26,813	176,737
Average intermediate debt	201,880	160,331	254,930
Years to turnover interm. debt	2.1	6.0	1.4
Expense as a % of income	80 %	85 %	77 %
Interest as a % of income	4 %	6 %	3 %
Liquidity (accrual)			
Total accrual farm income	859,352	456,834	1,184,126
Total accrual operating expense	660,815	392,650	852,509
Net accrual operating income	198,537	64,184	331,618
Net nonfarm income	7,960	9,732	12,273
Family living and taxes	55,120	39,658	71,410
Principal due on long term debt	21,177	12,604	21,053
Available for intermediate debt	130,200	21,655	251,429
Average intermediate debt	201,880	160,331	254,930
Years to turnover interm. debt	1.6	7.4	1.0
Expense as a % of income	77 %	86 %	72 %
Interest as a % of income	4 %	6 %	2 %

Table 15

Balance Sheet at Cost Values
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Number of farms	144		35		37	
Assets						
Current Farm Assets						
Cash and checking balance	20,203	20,291	11,603	8,420	30,077	19,112
Prepaid expenses & supplies	19,206	24,717	6,470	6,840	36,677	51,993
Growing crops	9,280	9,355	7,753	7,713	7,910	9,178
Accounts receivable	29,093	35,325	17,429	17,936	29,947	42,631
Hedging accounts	233	98	0	0	554	188
Crops held for sale or feed	138,903	152,000	105,624	104,214	156,082	190,508
Crops under government loan	532	437	1,336	754	0	179
Market livestock held for sale	12,947	14,128	19,111	18,003	11,464	14,132
Other current assets	376	704	55	62	885	517
Total current farm assets	230,773	257,055	169,380	163,942	273,596	328,438
Intermediate Farm Assets						
Breeding livestock	426,810	444,656	274,795	290,998	543,510	568,084
Machinery and equipment	148,680	166,175	103,052	114,562	185,991	222,377
Titled vehicles	224	211	0	0	796	747
Other intermediate assets	34,194	37,251	30,266	13,857	43,701	65,371
Total intermediate farm assets	609,909	648,293	408,114	419,416	773,998	856,579
Long Term Farm Assets						
Farm land	232,171	268,119	267,427	300,058	164,648	213,096
Buildings and improvements	155,834	169,147	77,790	113,491	226,217	230,563
Other long-term assets	7,657	8,895	6,540	8,574	7,823	8,216
Total long-term farm assets	395,662	446,161	351,758	422,123	398,688	451,875
Total Farm Assets	1,236,343	1,351,510	929,252	1,005,481	1,446,282	1,636,892
Total Nonfarm Assets	80,494	89,912	73,937	57,270	90,214	109,473
Total Assets	1,316,837	1,441,421	1,003,189	1,062,751	1,536,496	1,746,364
Liabilities						
Current Farm Liabilities						
Accrued interest	774	865	416	308	526	661
Accounts payable	25,681	19,904	15,836	18,848	18,115	9,095
Current notes	71,294	55,827	76,238	60,857	73,738	53,596
Government crop loans	532	409	1,336	638	0	179
Principal due on term debt	61,424	73,190	44,847	56,492	69,932	85,545
Total current farm liabilities	159,705	150,194	138,672	137,143	162,312	149,076
Total intermediate farm liabs	155,901	161,896	137,518	119,478	184,319	213,597
Total long term farm liabilities	330,522	361,127	255,717	337,075	288,720	310,579
Total farm liabilities	646,128	673,218	531,908	593,696	635,352	673,251
Total nonfarm liabilities	6,306	6,903	784	971	2,736	2,725
Total liabilities	652,435	680,121	532,692	594,667	638,087	675,977
Net worth (farm and nonfarm)	664,403	761,300	470,497	468,084	898,409	1,070,388
Net worth change		96,897		-2,413		171,979
Ratio Analysis						
Current farm liabilities / assets	69 %	58 %	82 %	84 %	59 %	45 %
Curr. & interm farm liab. / assets	38 %	34 %	48 %	44 %	33 %	31 %
Long term farm liab. / assets	84 %	81 %	73 %	80 %	72 %	69 %
Total debt to asset ratio	50 %	47 %	53 %	56 %	42 %	39 %

Table 16

Balance Sheet at Market Values
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		Low 25%		High 25%	
	All Farms					
Number of farms	144		35		37	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	20,203	20,291	11,603	8,420	30,077	19,112
Prepaid expenses & supplies	19,206	24,717	6,470	6,840	36,677	51,993
Growing crops	9,280	9,355	7,753	7,713	7,910	9,178
Accounts receivable	29,093	35,325	17,429	17,936	29,947	42,631
Hedging accounts	233	98	0	0	554	188
Crops held for sale or feed	138,903	152,000	105,624	104,214	156,082	190,508
Crops under government loan	532	437	1,336	754	0	179
Market livestock held for sale	12,947	14,128	19,111	18,003	11,464	14,132
Other current assets	376	704	55	62	885	517
Total current farm assets	230,773	257,055	169,380	163,942	273,596	328,438
Intermediate Farm Assets						
Breeding livestock	433,038	454,721	275,103	291,648	562,569	604,772
Machinery and equipment	329,841	370,585	306,123	326,620	333,258	406,016
Titled vehicles	1,706	2,179	1,526	1,834	3,147	3,530
Other intermediate assets	36,741	40,320	30,947	14,619	45,296	68,640
Total intermediate farm assets	801,326	867,806	613,698	634,720	944,270	1,082,958
Long Term Farm Assets						
Farm land	669,335	734,456	843,945	877,946	592,688	732,327
Buildings and improvements	253,744	276,173	142,292	182,331	302,431	329,284
Other long-term assets	9,599	11,182	7,477	9,510	10,411	11,636
Total long-term farm assets	932,678	1,021,810	993,714	1,069,787	905,531	1,073,246
Total Farm Assets	1,964,777	2,146,671	1,776,792	1,868,449	2,123,397	2,484,642
Total Nonfarm Assets	149,814	163,315	179,376	166,868	152,529	167,765
Total Assets	2,114,592	2,309,987	1,956,168	2,035,318	2,275,926	2,652,407
Liabilities						
Current Farm Liabilities						
Accrued interest	774	865	416	308	526	661
Accounts payable	25,681	19,904	15,836	18,848	18,115	9,095
Current notes	71,294	55,827	76,238	60,857	73,738	53,596
Government crop loans	532	409	1,336	638	0	179
Principal due on term debt	61,424	73,190	44,847	56,492	69,932	85,545
Total current farm liabilities	159,705	150,194	138,672	137,143	162,312	149,076
Total intermediate farm liabs	155,901	161,896	137,518	119,478	184,319	213,597
Total long term farm liabilities	330,522	361,127	255,717	337,075	288,720	310,579
Total farm liabilities	646,128	673,218	531,908	593,696	635,352	673,251
Total nonfarm liabilities	6,306	6,903	784	971	2,736	2,725
Total liabs excluding deferreds	652,435	680,121	532,692	594,667	638,087	675,977
Total deferred liabilities	8,693	8,475	8,640	8,747	0	0
Total liabilities	661,128	688,597	541,331	603,413	638,087	675,977
Retained earnings	664,403	761,300	470,497	468,084	898,409	1,070,388
Market valuation equity	789,061	860,090	944,339	963,820	739,430	906,043
Net worth (farm and nonfarm)	1,453,464	1,621,390	1,414,837	1,431,905	1,637,839	1,976,431
Net worth excluding deferreds	1,462,157	1,629,866	1,423,476	1,440,651	1,637,839	1,976,431
Net worth change		167,926		17,068		338,592
Ratio Analysis						
Current farm liabilities / assets	69 %	58 %	82 %	84 %	59 %	45 %
Curr. & interm farm liab. / assets	31 %	28 %	35 %	32 %	28 %	26 %
Long term farm liab. / assets	35 %	35 %	26 %	32 %	32 %	29 %
Total debt to asset ratio	31 %	30 %	28 %	30 %	28 %	25 %
Debt to assets excl deferreds	31 %	29 %	27 %	29 %	28 %	25 %

Table 17

Statement Of Cash Flows
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	35	37
Beginning cash (farm & nonfarm)	23,235	15,862	31,553
Cash From Operating Activities			
Gross cash farm income	838,669	459,458	1,133,635
Net nonfarm income	7,960	9,732	12,273
Total cash farm expense	-672,012	-390,116	-876,709
Apparent family living expense	-51,484	-38,544	-63,550
Income and social security tax	-3,637	-1,114	-7,859
Cash from operations	119,497	39,417	197,790
Cash From Investing Activities			
Sale of breeding livestock	7,249	895	6,118
Sale of machinery & equipment	3,021	1,415	3,768
Sale of titled vehicles	-	-	-
Sale of farm land	7,334	2,286	21,084
Sale of farm buildings	633	-	-
Sale of other farm assets	7,789	18,910	2,032
Sale of nonfarm assets	1,006	486	904
Purchase of breeding livestock	-16,089	-14,625	-25,075
Purchase of machinery & equip.	-77,280	-33,090	-123,920
Purchase of titled vehicles	-125	-	-486
Purchase of farm land	-30,618	-12,757	-56,139
Purchase of farm buildings	-43,673	-64,410	-43,212
Purchase of other farm assets	-11,877	-2,537	-24,220
Purchase of nonfarm assets	-8,455	-1,964	-12,297
Cash from investing activities	-161,086	-105,390	-251,443
Cash From Financing Activities			
Money borrowed	167,819	160,011	215,000
Cash gifts and inheritances	10,970	4,484	2,093
Principal payments	-134,633	-100,780	-168,357
Dividends paid	-	-	-
Gifts given	-3,379	-2,935	-6,842
Cash from financing activities	40,777	60,780	41,894
Net change in cash balance	-813	-5,194	-11,760
Ending cash (farm & nonfarm)	22,422	10,668	19,793

Table 18

Financial Standards Measures
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	35	37
Liquidity			
Current ratio	1.71	1.20	2.20
Working capital	106,861	26,799	179,362
Solvency (market)			
Farm debt to asset ratio	32 %	32 %	27 %
Farm equity to asset ratio	68 %	68 %	73 %
Farm debt to equity ratio	47 %	47 %	37 %
Profitability (cost)			
Rate of return on farm assets	7.0 %	-0.7 %	11.7 %
Rate of return on farm equity	9.3 %	-8.1 %	17.0 %
Operating profit margin	13.4 %	-2.0 %	19.3 %
Net farm income	121,120	19,780	213,942
Repayment Capacity			
Term debt coverage ratio	197 %	84 %	297 %
Capital replacement margin	88,687	-10,975	202,355
Efficiency			
Asset turnover rate (cost)	52.3 %	37.1 %	60.6 %
Operating expense ratio	73.2 %	80.3 %	69.5 %
Depreciation expense ratio	9.0 %	9.7 %	9.9 %
Interest expense ratio	3.7 %	5.6 %	2.5 %
Net farm income ratio	14.1 %	4.3 %	18.1 %

Table 19

Operator and Labor Information
Michigan Dairy, All Sizes, 2004

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	35	37
Operator Information			
Average number of operators	1.6	1.6	1.5
Average age of operators	51.4	55.1	49.1
Average number of years farming	27.3	30.3	23.9
Results Per Operator			
Working capital	67,050	17,210	120,662
Total assets (market)	1,449,403	1,307,085	1,784,347
Total liabilities	432,061	387,513	454,748
Net worth (market)	1,017,343	919,572	1,329,599
Net worth excl deferred liabs	1,022,661	925,189	1,329,599
Gross farm income	539,201	293,380	796,594
Total farm expense	463,205	280,677	652,669
Net farm income	75,997	12,703	143,925
Net nonfarm income	4,995	6,250	8,257
Family living & tax withdrawals	34,585	25,468	48,039
Total acres owned	275.8	269.5	325.3
Total crop acres	471.0	357.3	571.9
Crop acres owned	252.3	195.5	377.7
Crop acres cash rented	218.0	161.8	194.2
Crop acres share rented	0.7	-	-
Total pasture acres	3.1	0.3	5.8
Labor Analysis			
Number of farms	144	35	37
Total unpaid labor hours	4,870	4,883	4,854
Total hired labor hours	8,337	3,490	11,429
Total labor hours per farm	13,207	8,374	16,284
Unpaid hours per operator	3,055	3,136	3,266
Value of farm production / hour	51.21	42.84	57.39
Net farm income / unpaid hour	24.87	4.05	44.07
Average hourly hired labor wage	12.61	12.84	13.75
Partnerships & LLCs			
Number of farms	47	9	12
Number of operators	2.2	2.2	2.1
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-

Table 20

Financial Summary
Michigan Dairy, All Sizes, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	144	35	37
Income Statement			
Gross cash farm income	838,669	459,458	1,133,635
Total cash farm expense	672,012	390,116	876,709
Net cash farm income	166,657	69,342	256,926
Inventory change	31,880	-5,158	74,692
Depreciation and capital adjust	-77,417	-44,404	-117,675
Net farm income	121,120	19,780	213,942
Profitability (cost)			
Labor and management earnings	82,478	-5,259	160,464
Rate of return on assets	7.0 %	-0.7 %	11.7 %
Rate of return on equity	9.3 %	-8.1 %	17.0 %
Operating profit margin	13.4 %	-2.0 %	19.3 %
Asset turnover rate	52.3 %	37.1 %	60.6 %
Profitability (market)			
Labor and management earnings	104,808	-40,033	285,595
Rate of return on assets	7.7 %	0.4 %	15.2 %
Rate of return on equity	9.1 %	-1.4 %	19.5 %
Operating profit margin	23.3 %	2.3 %	37.5 %
Asset turnover rate	32.9 %	19.7 %	40.6 %
Liquidity			
Ending current ratio	1.71	1.20	2.20
Ending working capital	106,861	26,799	179,362
End working capital to gross inc	12.7 %	5.8 %	15.8 %
Term debt coverage ratio	197.0 %	83.7 %	297.0 %
Expense as a percent of income	76.9 %	86.0 %	72.0 %
Interest as a percent of income	3.7 %	5.6 %	2.5 %
Solvency (cost)			
Number of farms	144	35	37
Ending farm assets	1,351,510	1,005,481	1,636,892
Ending farm liabilities	673,218	593,696	673,251
Ending total assets	1,441,421	1,062,751	1,746,364
Ending total liabilities	680,121	594,667	675,977
Ending net worth	761,300	468,084	1,070,388
Net worth change	96,897	-2,413	171,979
Ending farm debt to asset ratio	50 %	59 %	41 %
Beg total debt to asset ratio	50 %	53 %	42 %
End total debt to asset ratio	47 %	56 %	39 %
Solvency (market)			
Number of farms	144	35	37
Ending farm assets	2,146,671	1,868,449	2,484,642
Ending farm liabilities	681,438	601,323	673,251
Ending total assets	2,309,987	2,035,318	2,652,407
Ending total liabilities	688,597	603,413	675,977
Ending net worth	1,621,390	1,431,905	1,976,431
Net worth change	167,926	17,068	338,592
Ending farm debt to asset ratio	32 %	32 %	27 %
Beg total debt to asset ratio	31 %	28 %	28 %
End total debt to asset ratio	30 %	30 %	25 %
Nonfarm Information			
Net nonfarm income	7,960	9,732	12,273
Farms reporting living expenses	12	2	3
Total family living expense	47,359	-	-
Total living, invest, & capital	69,477	-	-
Crop Acres			
Total acres owned	440	420	484
Total crop acres	751	556	850
Total crop acres owned	402	304	562
Total crop acres cash rented	347	252	289
Total crop acres share rented	1	-	-

B. Financial Summary Information, Herds with 24-99 Cows

Table 21	Crop Production and Marketing Summary Michigan Dairy, 24-99 Cows, 2004 (Farms Sorted By Rate of Return on Assets - Mkt)		
	Avg. Of All Farms	Low 25%	High 25%
Dairy			
Number of farms	37	10	7
Average number of Cows	70	71	75
Milk production per Cow, lbs.	17,130	15,823	18,426
Average milk price per cwt.,	\$16.64	\$17.27	\$16.72
Acreage Summary			
Total acres owned	342	326	288
Total crop acres	397	320	542
Crop acres owned	242	198	307
Crop acres cash rented	155	122	235
Crop acres share rented	-	-	-
Total pasture acres	-	-	-
Average Price Received (Cash Sales Only)			
Wheat, Winter per bushel	3.04	-	-
Soybeans per bushel	5.88	-	-
Corn per bushel	2.22	-	-

Table 22

Farm Income Statement
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	10	7
Cash Farm Income			
Cordwood	54	-	286
Corn	6,101	1,338	11,903
Corn Silage	228	650	276
Corn, Seed	54	-	249
Hay, Alfalfa	455	468	1,494
Hay, Mixed	1,285	380	418
Soybeans	5,018	-	16,300
Sugar Beets	3,102	-	-
Wheat, Winter	2,668	174	3,134
Miscellaneous crop income	84	-	29
Beef, Finish Beef Calves	516	-	-
Dairy, Milk	200,491	195,445	231,690
Dairy, Dairy Calves	976	97	2,150
Dairy Heifers (for sale)	1,425	1,422	1,194
Dairy Replacement Heifers	104	41	-
Dairy Steers	4,870	11,537	141
Hogs, Finish Feeder Pigs	42	157	-
Beef, Finish Cull Cows	130	481	-
Cull breeding livestock	11,925	11,840	18,720
Misc. livestock income	2,290	-	-
Direct & CC govt payments	5,732	4,782	6,225
Other government payments	5,233	1,707	10,822
Custom work income	2,250	-	10,080
Patronage dividends, cash	619	375	1,399
Insurance income	6,506	2,929	1,124
Other farm income	4,684	6,752	3,200
Gross Cash Farm Income	266,842	240,575	320,834

Table 22

Farm Income Statement (Continued)
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	10	7
Cash Farm Expense			
Seed	5,336	4,445	7,955
Fertilizer	10,613	3,840	15,570
Crop chemicals	4,961	2,442	10,031
Crop insurance	146	74	351
Drying fuel	89	-	468
Crop custom hire	660	183	1,442
Crop miscellaneous	192	-	401
Feeder livestock purchase	849	33	2,959
Purchased feed	56,537	56,287	62,295
Breeding fees	1,801	2,576	1,817
Veterinary	5,141	4,136	5,782
BST	197	-	1,043
Supplies	9,219	9,565	8,973
DHIA	450	681	357
Livestock utilities	222	-	-
Hauling and trucking	3,902	5,449	2,168
Marketing	6,616	6,158	9,218
Bedding	236	308	-
Interest	13,321	13,886	18,000
Packaging and supplies	478	-	-
Fuel & oil	8,984	8,556	9,508
Repairs	16,802	17,258	17,976
Custom hire	4,310	4,765	5,911
Hired labor	21,682	22,948	22,121
Land rent	10,230	7,111	19,454
Machinery & bldg leases	1,027	1,568	57
Real estate taxes	4,155	5,183	2,956
Farm insurance	7,005	5,016	6,784
Utilities	6,323	6,356	7,197
Dues & professional fees	2,443	2,284	2,293
Miscellaneous	5,226	4,964	4,378
Total cash expense	209,154	196,073	247,463
Net cash farm income	57,689	44,502	73,371
Inventory Changes			
Crops and feed	7,326	-4,549	29,833
Market livestock	424	1,793	733
Accounts receivable	829	109	1,946
Prepaid expenses and supplies	864	-1,050	1,112
Accounts payable	-2,589	-7,894	-1,626
Total inventory change	6,854	-11,591	31,999
Net operating profit	64,543	32,911	105,369
Depreciation and Other Capital Adjustments			
Breeding livestock	4,571	-609	5,986
Machinery and equipment	-25,643	-17,712	-37,358
Buildings and improvements	-7,979	-5,181	-7,708
Other farm capital	-639	90	-1,879
Total depr. and other capital adj	-29,690	-23,412	-40,959
Net farm income	34,853	9,499	64,411

Table 23

Inventory Changes
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	9	10
Net cash farm income	57,689	39,857	71,922
Crops and Feed			
Ending inventory	61,561	40,281	91,434
Beginning inventory	54,235	45,469	68,115
Inventory change	7,326	-5,188	23,319
Market Livestock			
Ending inventory	8,115	8,731	1,987
Beginning inventory	7,691	6,965	1,629
Inventory change	424	1,766	358
Accts Receivable & Other Current Assets			
Ending inventory	11,127	8,119	8,238
Beginning inventory	10,299	8,305	7,076
Inventory change	829	-186	1,162
Prepaid Expenses and Supplies			
Ending inventory	7,145	944	11,497
Beginning inventory	6,281	750	10,718
Inventory change	864	194	779
Accounts Payable & Accrued Expenses			
Beginning inventory	5,411	6,640	7,629
Ending inventory	8,000	15,319	8,767
Inventory change	-2,589	-8,679	-1,138
Total inventory change	6,854	-12,094	24,480
Net operating profit	64,543	27,763	96,402

Table 24

Depreciation and Other Capital Adjustments
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	9	10
Net operating profit	64,543	27,763	96,402
Breeding Livestock			
Ending inventory	155,032	146,993	166,490
Capital sales	831	391	-
Beginning inventory	148,295	147,632	154,671
Capital purchases	2,997	1,044	2,780
Depreciation, capital adjust.	4,571	-1,292	9,040
Machinery and Equipment			
Ending inventory	56,033	60,821	49,042
Capital sales	1,642	989	2,888
Beginning inventory	56,282	59,099	44,539
Capital purchases	27,037	19,421	39,070
Depreciation, capital adjust.	-25,643	-16,710	-31,678
Buildings and Improvements			
Ending inventory	44,235	51,781	62,610
Capital sales	-	-	-
Beginning inventory	41,768	48,677	54,788
Capital purchases	10,446	6,774	15,934
Depreciation, capital adjust.	-7,979	-3,670	-8,112
Other Capital Assets			
Ending inventory	11,739	11,102	16,608
Capital sales	1,441	-	180
Beginning inventory	10,730	10,249	16,443
Capital purchases	3,088	752	1,637
Depreciation, capital adjust.	-639	100	-1,293
Total depreciation, capital adj.	-29,690	-21,572	-32,044
Net farm income	34,853	6,191	64,358

Table 25

Profitability Measures
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	9	10
Profitability (assets valued at cost)			
Net farm income	34,853	6,191	64,358
Labor and management earnings	20,763	-683	48,991
Rate of return on assets	1.4 %	-5.6 %	7.6 %
Rate of return on equity	-2.6 %	-36.8 %	10.2 %
Operating profit margin	3.3 %	-13.5 %	15.6 %
Asset turnover rate	44.0 %	41.6 %	48.3 %
Interest on farm net worth	14,091	6,874	15,366
Farm interest expense	13,314	14,955	15,098
Value of operator lbr and mgmt.	40,853	45,271	38,107
Return on farm assets	7,314	-24,124	41,349
Average farm assets	506,432	428,486	547,287
Return on farm equity	-6,000	-39,079	26,251
Average farm equity	231,300	106,183	256,106
Value of farm production	222,606	178,338	264,397
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	9	10
Profitability (assets valued at market)			
Net farm income	64,484	2,877	131,780
Labor and management earnings	18,075	-30,043	94,101
Rate of return on assets	3.5 %	-3.2 %	11.8 %
Rate of return on equity	3.1 %	-7.7 %	14.9 %
Operating profit margin	16.6 %	-15.4 %	41.1 %
Asset turnover rate	21.2 %	20.5 %	28.8 %
Interest on farm net worth	46,409	32,920	37,679
Farm interest expense	13,314	14,955	15,098
Value of operator lbr and mgmt.	40,853	45,271	38,107
Return on farm assets	36,945	-27,438	108,771
Average farm assets	1,048,618	870,964	919,159
Return on farm equity	23,631	-42,394	93,673
Average farm equity	773,487	548,661	627,978
Value of farm production	222,606	178,338	264,397

Table 26

Liquidity Measures
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	9	10
Liquidity (cash)			
Net cash farm income	57,689	39,857	71,922
Net nonfarm income	10,600	21,444	10,905
Family living and taxes	34,587	35,118	39,157
Principal due on long term debt	8,354	9,371	10,768
Cash available for interm. debt	25,349	16,812	32,903
Average intermediate debt	82,432	112,126	76,202
Years to turnover interm. debt	3.3	6.7	2.3
Expense as a % of income	78 %	83 %	75 %
Interest as a % of income	5 %	6 %	5 %
Liquidity (accrual)			
Total accrual farm income	275,421	235,147	314,105
Total accrual operating expense	210,878	207,384	217,703
Net accrual operating income	64,543	27,763	96,402
Net nonfarm income	10,600	21,444	10,905
Family living and taxes	34,587	35,118	39,157
Principal due on long term debt	8,354	9,371	10,768
Available for intermediate debt	32,203	4,719	57,382
Average intermediate debt	82,432	112,126	76,202
Years to turnover interm. debt	2.6	23.8	1.3
Expense as a % of income	77 %	88 %	69 %
Interest as a % of income	5 %	6 %	5 %

Table 27

Balance Sheet at Cost Values
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Number of farms	37		9		10	
Assets						
Current Farm Assets						
Cash and checking balance	7,989	6,128	4,522	3,327	20,013	11,943
Prepaid expenses & supplies	6,281	7,145	750	944	10,718	11,497
Growing crops	4,419	4,383	2,556	2,455	3,998	3,639
Accounts receivable	5,720	6,354	5,669	5,556	3,078	4,411
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	54,235	61,561	45,469	40,281	68,115	91,434
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	7,691	8,115	6,965	8,731	1,629	1,987
Other current assets	160	390	80	108	0	188
Total current farm assets	86,496	94,078	66,010	61,401	107,551	125,098
Intermediate Farm Assets						
Breeding livestock	148,295	155,032	147,632	146,993	154,671	166,490
Machinery and equipment	56,282	56,033	59,099	60,821	44,539	49,042
Titled vehicles	0	0	0	0	0	0
Other intermediate assets	6,261	6,210	4,229	4,346	16,067	15,753
Total intermediate farm assets	210,838	217,275	210,960	212,161	215,276	231,286
Long Term Farm Assets						
Farm land	150,696	157,480	96,604	96,604	140,267	156,467
Buildings and improvements	41,768	44,235	48,677	51,781	54,788	62,610
Other long-term assets	4,469	5,528	6,020	6,755	376	854
Total long-term farm assets	196,933	207,243	151,301	155,140	195,431	219,931
Total Farm Assets	494,267	518,596	428,271	428,702	518,258	576,316
Total Nonfarm Assets	32,786	34,819	47,255	50,564	41,422	45,160
Total Assets	527,052	553,415	475,526	479,266	559,681	621,476
Liabilities						
Current Farm Liabilities						
Accrued interest	222	216	2	6	332	265
Accounts payable	5,189	7,784	6,638	15,313	7,297	8,502
Current notes	29,636	24,670	43,490	32,793	38,668	23,574
Government crop loans	0	0	0	0	0	0
Principal due on term debt	24,988	26,859	38,231	37,526	21,665	28,574
Total current farm liabilities	60,035	59,529	88,361	85,638	67,962	60,916
Total intermediate farm liabs	59,902	70,804	77,724	91,677	51,304	72,963
Total long term farm liabilities	150,592	149,401	153,484	147,723	161,255	167,964
Total farm liabilities	270,529	279,734	319,569	325,037	280,520	301,842
Total nonfarm liabilities	1,561	1,896	2,288	3,243	3,716	3,846
Total liabilities	272,090	281,629	321,857	328,280	284,236	305,688
Net worth (farm and nonfarm)	254,962	271,786	153,669	150,986	275,445	315,788
Net worth change		16,824		-2,684		40,343
Ratio Analysis						
Current farm liabilities / assets	69 %	63 %	134 %	139 %	63 %	49 %
Curr. & interm farm liab. / assets	40 %	42 %	60 %	65 %	37 %	38 %
Long term farm liab. / assets	76 %	72 %	101 %	95 %	83 %	76 %
Total debt to asset ratio	52 %	51 %	68 %	68 %	51 %	49 %

Table 28

Balance Sheet at Market Values
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

Number of farms	Avg. Of All Farms 37		Low 25% 9		High 25% 10	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	7,989	6,128	4,522	3,327	20,013	11,943
Prepaid expenses & supplies	6,281	7,145	750	944	10,718	11,497
Growing crops	4,419	4,383	2,556	2,455	3,998	3,639
Accounts receivable	5,720	6,354	5,669	5,556	3,078	4,411
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	54,235	61,561	45,469	40,281	68,115	91,434
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	7,691	8,115	6,965	8,731	1,629	1,987
Other current assets	160	390	80	108	0	188
Total current farm assets	86,496	94,078	66,010	61,401	107,551	125,098
Intermediate Farm Assets						
Breeding livestock	148,786	155,770	147,632	146,993	155,410	166,966
Machinery and equipment	198,217	211,067	194,098	196,989	173,336	190,924
Titled vehicles	443	208	0	0	0	0
Other intermediate assets	6,945	7,018	4,229	4,346	16,392	15,828
Total intermediate farm assets	354,391	374,064	345,959	348,328	345,137	373,718
Long Term Farm Assets						
Farm land	488,351	511,898	363,233	367,958	332,285	403,254
Buildings and improvements	87,095	89,194	91,183	85,080	71,070	78,974
Other long-term assets	5,305	6,364	6,020	6,755	376	854
Total long-term farm assets	580,752	607,456	460,437	459,793	403,731	483,082
Total Farm Assets	1,021,638	1,075,599	872,406	869,522	856,420	981,899
Total Nonfarm Assets	113,275	118,491	89,134	93,501	87,007	93,858
Total Assets	1,134,913	1,194,090	961,540	963,024	943,426	1,075,756
Liabilities						
Current Farm Liabilities						
Accrued interest	222	216	2	6	332	265
Accounts payable	5,189	7,784	6,638	15,313	7,297	8,502
Current notes	29,636	24,670	43,490	32,793	38,668	23,574
Government crop loans	0	0	0	0	0	0
Principal due on term debt	24,988	26,859	38,231	37,526	21,665	28,574
Total current farm liabilities	60,035	59,529	88,361	85,638	67,962	60,916
Total intermediate farm liabs	59,902	70,804	77,724	91,677	51,304	72,963
Total long term farm liabilities	150,592	149,401	153,484	147,723	161,255	167,964
Total farm liabilities	270,529	279,734	319,569	325,037	280,520	301,842
Total nonfarm liabilities	1,561	1,896	2,288	3,243	3,716	3,846
Total liabs excluding deferreds	272,090	281,629	321,857	328,280	284,236	305,688
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	272,090	281,629	321,857	328,280	284,236	305,688
Retained earnings	254,962	271,786	153,669	150,986	275,445	315,788
Market valuation equity	607,861	640,674	486,014	483,758	383,745	454,281
Net worth (farm and nonfarm)	862,823	912,460	639,683	634,743	659,190	770,068
Net worth excluding deferreds	862,823	912,460	639,683	634,743	659,190	770,068
Net worth change		49,637		-4,940		110,878
Ratio Analysis						
Current farm liabilities / assets	69 %	63 %	134 %	139 %	63 %	49 %
Curr. & interm farm liab. / assets	27 %	28 %	40 %	43 %	26 %	27 %
Long term farm liab. / assets	26 %	25 %	33 %	32 %	40 %	35 %
Total debt to asset ratio	24 %	24 %	33 %	34 %	30 %	28 %
Debt to assets excl deferreds	24 %	24 %	33 %	34 %	30 %	28 %

Table 29

Statement Of Cash Flows
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	9	10
Beginning cash (farm & nonfarm)	12,115	4,522	20,373
Cash From Operating Activities			
Gross cash farm income	266,842	238,756	289,266
Net nonfarm income	10,600	21,444	10,905
Total cash farm expense	-209,154	-198,899	-217,344
Apparent family living expense	-32,518	-33,618	-35,113
Income and social security tax	-2,068	-1,500	-4,043
Cash from operations	33,702	26,183	43,671
Cash From Investing Activities			
Sale of breeding livestock	831	391	-
Sale of machinery & equipment	1,642	989	2,888
Sale of titled vehicles	-	-	-
Sale of farm land	-	-	-
Sale of farm buildings	-	-	-
Sale of other farm assets	1,441	-	180
Sale of nonfarm assets	459	1,889	-
Purchase of breeding livestock	-2,997	-1,044	-2,780
Purchase of machinery & equip.	-27,037	-19,421	-39,070
Purchase of titled vehicles	-	-	-
Purchase of farm land	-5,009	-	-16,535
Purchase of farm buildings	-10,446	-6,774	-15,934
Purchase of other farm assets	-3,088	-752	-1,637
Purchase of nonfarm assets	-1,849	-399	-
Cash from investing activities	-46,053	-25,122	-72,888
Cash From Financing Activities			
Money borrowed	39,438	21,213	58,446
Cash gifts and inheritances	3,723	-	3,590
Principal payments	-32,489	-23,468	-38,141
Dividends paid	-	-	-
Gifts given	-2,154	-	-3,008
Cash from financing activities	8,518	-2,255	20,887
Net change in cash balance	-3,833	-1,195	-8,330
Ending cash (farm & nonfarm)	8,282	3,327	12,043

Table 30

Financial Standards Measures
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	9	10
Liquidity			
Current ratio	1.58	0.72	2.05
Working capital	34,549	-24,237	64,183
Solvency (market)			
Farm debt to asset ratio	26 %	37 %	31 %
Farm equity to asset ratio	74 %	63 %	69 %
Farm debt to equity ratio	35 %	60 %	44 %
Profitability (cost)			
Rate of return on farm assets	1.4 %	-5.6 %	7.6 %
Rate of return on farm equity	-2.6 %	-36.8 %	10.2 %
Operating profit margin	3.3 %	-13.5 %	15.6 %
Net farm income	34,853	6,191	64,358
Repayment Capacity			
Term debt coverage ratio	141 %	50 %	229 %
Capital replacement margin	15,026	-25,146	46,118
Efficiency			
Asset turnover rate (cost)	44.0 %	41.6 %	48.3 %
Operating expense ratio	71.7 %	81.8 %	64.5 %
Depreciation expense ratio	10.8 %	9.2 %	10.2 %
Interest expense ratio	4.8 %	6.4 %	4.8 %
Net farm income ratio	12.7 %	2.6 %	20.5 %

Table 31

Operator and Labor Information
Michigan Dairy, 24-99 Cows, 2004

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	9	10
Operator Information			
Average number of operators	1.4	1.7	1.2
Average age of operators	52.2	53.6	50.4
Average number of years farming	27.9	30.3	25.8
Results Per Operator			
Working capital	24,119	-14,542	53,486
Total assets (market)	833,610	577,814	896,464
Total liabilities	196,609	196,968	254,740
Net worth (market)	637,001	380,846	641,724
Net worth excl deferred liabs	637,001	380,846	641,724
Gross farm income	192,275	141,088	261,754
Total farm expense	167,944	137,374	208,122
Net farm income	24,332	3,715	53,631
Net nonfarm income	7,400	12,867	9,088
Family living & tax withdrawals	24,145	21,071	32,631
Total acres owned	238.7	164.1	225.6
Total crop acres	277.1	213.1	423.1
Crop acres owned	168.9	132.1	224.3
Crop acres cash rented	108.1	81.0	198.8
Crop acres share rented	-	-	-
Total pasture acres	-	-	-
Labor Analysis			
Number of farms	37	9	10
Total unpaid labor hours	4,464	5,176	4,019
Total hired labor hours	1,815	2,215	1,308
Total labor hours per farm	6,279	7,391	5,327
Unpaid hours per operator	3,116	3,105	3,349
Value of farm production / hour	35.45	24.13	49.64
Net farm income / unpaid hour	7.81	1.20	16.01
Average hourly hired labor wage	10.93	11.57	12.92
Partnerships & LLCs			
Number of farms	8	3	1
Number of operators	2.1	-	-
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-

Table 32

Financial Summary
Michigan Dairy, 24-99 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	37	9	10
Income Statement			
Gross cash farm income	266,842	238,756	289,266
Total cash farm expense	209,154	198,899	217,344
Net cash farm income	57,689	39,857	71,922
Inventory change	6,854	-12,094	24,480
Depreciation and capital adjust	-29,690	-21,572	-32,044
Net farm income	34,853	6,191	64,358
Profitability (cost)			
Labor and management earnings	20,763	-683	48,991
Rate of return on assets	1.4 %	-5.6 %	7.6 %
Rate of return on equity	-2.6 %	-36.8 %	10.2 %
Operating profit margin	3.3 %	-13.5 %	15.6 %
Asset turnover rate	44.0 %	41.6 %	48.3 %
Profitability (market)			
Labor and management earnings	18,075	-30,043	94,101
Rate of return on assets	3.5 %	-3.2 %	11.8 %
Rate of return on equity	3.1 %	-7.7 %	14.9 %
Operating profit margin	16.6 %	-15.4 %	41.1 %
Asset turnover rate	21.2 %	20.5 %	28.8 %
Liquidity			
Ending current ratio	1.58	0.72	2.05
Ending working capital	34,549	-24,237	64,183
End working capital to gross inc	12.9 %	-10.2 %	22.2 %
Term debt coverage ratio	140.5 %	50.5 %	229.4 %
Expense as a percent of income	76.6 %	88.2 %	69.3 %
Interest as a percent of income	4.8 %	6.4 %	4.8 %
Solvency (cost)			
Number of farms	37	9	10
Ending farm assets	518,596	428,702	576,316
Ending farm liabilities	279,734	325,037	301,842
Ending total assets	553,415	479,266	621,476
Ending total liabilities	281,629	328,280	305,688
Ending net worth	271,786	150,986	315,788
Net worth change	16,824	-2,684	40,343
Ending farm debt to asset ratio	54 %	76 %	52 %
Beg total debt to asset ratio	52 %	68 %	51 %
End total debt to asset ratio	51 %	68 %	49 %
Solvency (market)			
Number of farms	37	9	10
Ending farm assets	1,075,599	869,522	981,899
Ending farm liabilities	279,734	325,037	301,842
Ending total assets	1,194,090	963,024	1,075,756
Ending total liabilities	281,629	328,280	305,688
Ending net worth	912,460	634,743	770,068
Net worth change	49,637	-4,940	110,878
Ending farm debt to asset ratio	26 %	37 %	31 %
Beg total debt to asset ratio	24 %	33 %	30 %
End total debt to asset ratio	24 %	34 %	28 %
Nonfarm Information			
Net nonfarm income	10,600	21,444	10,905
Crop Acres			
Total acres owned	342	274	271
Total crop acres	397	355	508
Total crop acres owned	242	220	269
Total crop acres cash rented	155	135	239
Total crop acres share rented	-	-	-

C. Financial Summary Information, Herds with 100-249 Cows

Table 33 Crop Production and Marketing Summary			
Michigan Dairy, 100-249 Cows, 2004			
(Farms Sorted By Rate of Return on Assets - Mkt)			
	Avg. Of All Farms	Low 25%	High 25%
Dairy			
Number of farms	76	19	20
Average number of Cows	162	156	161
Milk production per Cow, lbs.	21,025	19,142	22,143
Average milk price per cwt.,	\$16.37	\$16.32	\$16.28
Acreage Summary			
Total acres owned	398	456	419
Total crop acres	666	709	614
Crop acres owned	348	310	427
Crop acres cash rented	316	399	187
Crop acres share rented	2	-	-
Total pasture acres	5	-	16
Average Price Received (Cash Sales Only)			
Corn per bushel	2.13	-	-
Wheat, Winter per bushel	2.77	-	2.76
Soybeans per bushel	5.90	-	-
Hay, Alfalfa per ton	57.92	-	-
Straw per ton	23.33	-	-

Table 34

Farm Income Statement
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	76	19	20
Cash Farm Income			
Asparagus	131	522	-
Barley	85	342	-
Corn	5,121	5,005	1,953
Corn Silage	654	-	-
Hay, Alfalfa	570	893	225
Hay, Mixed	917	625	798
Haylage, Mixed	518	-	-
Oats	226	26	-
Soybeans	2,650	1,409	3,706
Straw	137	202	138
Wheat, Winter	3,214	2,489	2,767
Miscellaneous crop income	100	37	-
Beef Cow-Calf, Beef Calves	80	-	305
Beef, Finish Beef Calves	546	-	-
Dairy, Milk	562,716	497,113	584,497
Dairy, Dairy Calves	2,907	2,440	4,222
Dairy Heifers (for sale)	851	629	210
Dairy Replacement Heifers	1,244	39	2,439
Dairy Steers	9,157	10,342	15,254
Hogs, Farrow-Fin, Raised Hogs	153	-	-
Hogs, Feeder Pigs, Feeder Pigs	176	-	-
Sheep, Market Lambs, Mkt Lambs	88	-	334
CCC market loan gain	0	0	-
Cull breeding livestock	32,873	28,010	32,552
Misc. livestock income	2,557	967	1,700
Direct & CC govt payments	8,333	8,218	8,750
Other government payments	11,881	10,740	9,431
Custom work income	4,113	3,739	1,389
Patronage dividends, cash	2,590	846	5,470
Insurance income	6,181	12,904	5,905
Other farm income	10,820	7,222	23,377
Gross Cash Farm Income	671,589	594,760	705,422

Table 34

Farm Income Statement (Continued)
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	76	19	20
Cash Farm Expense			
Seed	13,314	14,057	14,165
Fertilizer	17,758	19,583	17,280
Crop chemicals	8,923	9,028	9,916
Crop insurance	574	933	679
Drying fuel	302	817	-
Irrigation energy	30	119	-
Crop custom hire	1,005	1,834	735
Crop miscellaneous	1,702	984	839
Feeder livestock purchase	147	19	370
Purchased feed	151,833	123,635	158,938
Breeding fees	5,035	3,300	5,463
Veterinary	15,376	11,967	18,326
BST	620	864	386
Supplies	24,397	25,375	23,787
DHIA	470	95	675
Livestock leases	247	632	338
Livestock utilities	310	-	806
Livestock hauling and trucking	7,073	6,307	7,718
Marketing	17,508	16,131	17,731
Bedding	552	1,704	282
Livestock miscellaneous	166	-	212
Interest	22,695	24,901	15,998
Packaging and supplies	299	-	1,138
Fuel & oil	19,658	20,517	19,009
Repairs	37,195	40,470	35,290
Custom hire	18,395	11,825	23,951
Hired labor	77,583	88,216	77,551
Land rent	18,984	15,461	20,480
Machinery & bldg leases	7,231	2,716	12,417
Real estate taxes	7,583	8,101	7,734
Personal property taxes	114	-	385
Farm insurance	11,086	11,884	10,973
Utilities	13,016	12,838	11,376
Hauling and trucking	186	-	674
Dues & professional fees	4,202	4,480	4,142
Hedging account deposits	38	-	144
Miscellaneous	12,645	10,615	12,082
Total cash expense	518,250	489,407	531,987
Net cash farm income	153,339	105,353	173,435
Inventory Changes			
Crops and feed	4,999	-13,752	9,875
Market livestock	1,319	1,545	1,588
Accounts receivable	7,265	-2,938	10,225
Prepaid expenses and supplies	2,108	2,722	1,822
Accounts payable	5,065	5,837	1,949
Total inventory change	20,755	-6,585	25,459
Net operating profit	174,094	98,768	198,893
Depreciation and Other Capital Adjustments			
Breeding livestock	7,398	4,070	4,347
Machinery and equipment	-44,535	-20,065	-51,311
Buildings and improvements	-28,594	-49,982	-17,641
Other farm capital	454	3,510	-428
Total depr. and other capital adj	-65,278	-62,467	-65,033
Net farm income	108,816	36,301	133,860

Table 35

Inventory Changes
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	76	18	20
Net cash farm income	153,339	104,074	173,435
Crops and Feed			
Ending inventory	122,060	140,486	117,308
Beginning inventory	117,062	152,307	107,434
Inventory change	4,999	-11,820	9,875
Market Livestock			
Ending inventory	14,097	18,618	19,055
Beginning inventory	12,778	17,198	17,468
Inventory change	1,319	1,420	1,588
Accts Receivable & Other Current Assets			
Ending inventory	41,267	24,082	33,899
Beginning inventory	34,002	27,570	23,675
Inventory change	7,265	-3,488	10,225
Prepaid Expenses and Supplies			
Ending inventory	15,119	7,746	11,359
Beginning inventory	13,011	6,454	9,537
Inventory change	2,108	1,292	1,822
Accounts Payable & Accrued Expenses			
Beginning inventory	20,615	16,384	11,803
Ending inventory	15,550	10,223	9,854
Inventory change	5,065	6,162	1,949
Total inventory change	20,755	-6,435	25,459
Net operating profit	174,094	97,639	198,893

Table 36

Depreciation and Other Capital Adjustments
Michigan Dairy, 100-249 Cows, 2004

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	76	18	20
Net operating profit	174,094	97,639	198,893
Breeding Livestock			
Ending inventory	383,187	382,541	382,858
Capital sales	3,789	1,604	1,483
Beginning inventory	371,913	369,396	375,421
Capital purchases	7,665	8,892	4,573
Depreciation, capital adjust.	7,398	5,856	4,347
Machinery and Equipment			
Ending inventory	138,689	161,269	138,356
Capital sales	1,881	1,141	3,312
Beginning inventory	119,860	133,777	108,555
Capital purchases	65,245	46,980	84,424
Depreciation, capital adjust.	-44,535	-18,346	-51,311
Buildings and Improvements			
Ending inventory	157,391	200,892	128,086
Capital sales	1,159	-	-
Beginning inventory	128,000	115,484	100,319
Capital purchases	59,144	137,552	45,408
Depreciation, capital adjust.	-28,594	-52,145	-17,641
Other Capital Assets			
Ending inventory	37,547	44,533	31,462
Capital sales	11,251	38,735	779
Beginning inventory	39,364	74,892	28,336
Capital purchases	8,980	4,671	4,332
Depreciation, capital adjust.	454	3,705	-428
Total depreciation, capital adj.	-65,278	-60,929	-65,033
Net farm income	108,816	36,710	133,860

Table 37

Profitability Measures
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	76	18	20
Profitability (assets valued at cost)			
Net farm income	108,816	36,710	133,860
Labor and management earnings	72,094	-2,574	101,803
Rate of return on assets	6.2 %	0.5 %	9.9 %
Rate of return on equity	7.9 %	-3.0 %	14.9 %
Operating profit margin	13.0 %	1.3 %	16.5 %
Asset turnover rate	47.6 %	36.4 %	59.9 %
Interest on farm net worth	36,722	39,284	32,057
Farm interest expense	22,588	25,369	15,841
Value of operator lbr and mgmt.	61,355	56,171	55,336
Return on farm assets	70,049	5,908	94,364
Average farm assets	1,134,903	1,271,722	954,589
Return on farm equity	47,461	-19,461	78,524
Average farm equity	600,779	653,800	526,841
Value of farm production	540,588	462,611	572,147
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	76	18	20
Profitability (assets valued at market)			
Net farm income	179,529	56,751	321,675
Labor and management earnings	102,762	-32,870	253,726
Rate of return on assets	7.7 %	1.2 %	18.1 %
Rate of return on equity	9.2 %	0.0 %	23.5 %
Operating profit margin	26.0 %	5.6 %	49.3 %
Asset turnover rate	29.7 %	21.8 %	36.7 %
Interest on farm net worth	76,767	89,620	67,949
Farm interest expense	22,588	25,369	15,841
Value of operator lbr and mgmt.	61,355	56,171	55,336
Return on farm assets	140,761	25,948	282,179
Average farm assets	1,819,425	2,126,316	1,560,232
Return on farm equity	118,173	579	266,339
Average farm equity	1,279,444	1,493,669	1,132,484
Value of farm production	540,588	462,611	572,147

Table 38

Liquidity Measures
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	76	18	20
Liquidity (cash)			
Net cash farm income	153,339	104,074	173,435
Net nonfarm income	4,221	8,997	232
Family living and taxes	54,314	45,099	59,874
Principal due on long term debt	14,844	14,450	8,211
Cash available for interm. debt	88,402	53,522	105,582
Average intermediate debt	188,211	195,426	213,944
Years to turnover interm. debt	2.1	3.7	2.0
Expense as a % of income	77 %	82 %	75 %
Interest as a % of income	3 %	4 %	2 %
Liquidity (accrual)			
Total accrual farm income	685,171	574,816	727,108
Total accrual operating expense	511,077	477,177	528,215
Net accrual operating income	174,094	97,639	198,893
Net nonfarm income	4,221	8,997	232
Family living and taxes	54,314	45,099	59,874
Principal due on long term debt	14,844	14,450	8,211
Available for intermediate debt	109,157	47,087	131,040
Average intermediate debt	188,211	195,426	213,944
Years to turnover interm. debt	1.7	4.2	1.6
Expense as a % of income	75 %	83 %	73 %
Interest as a % of income	3 %	4 %	2 %

Table 39

Balance Sheet at Cost Values
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		Low 25%		High 25%	
	All Farms					
Number of farms	76		18		20	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	18,460	20,431	18,377	14,096	11,916	8,007
Prepaid expenses & supplies	13,011	15,119	6,454	7,746	9,537	11,359
Growing crops	8,512	8,577	9,449	9,168	5,032	4,717
Accounts receivable	24,962	32,124	18,121	14,914	17,231	27,927
Hedging accounts	59	79	0	0	225	298
Crops held for sale or feed	116,447	121,713	149,710	139,020	107,434	117,308
Crops under government loan	615	347	2,597	1,467	0	0
Market livestock held for sale	12,778	14,097	17,198	18,618	17,468	19,055
Other current assets	469	487	0	0	1,187	957
Total current farm assets	195,313	212,975	221,905	205,028	170,028	189,628
Intermediate Farm Assets						
Breeding livestock	371,913	383,187	369,396	382,541	375,421	382,858
Machinery and equipment	119,436	138,288	133,777	161,269	107,082	136,974
Titled vehicles	424	400	0	0	1,473	1,382
Other intermediate assets	28,796	25,801	68,826	34,528	17,102	20,324
Total intermediate farm assets	520,569	547,676	571,999	578,339	501,077	541,537
Long Term Farm Assets						
Farm land	211,848	273,720	280,223	353,504	84,642	171,487
Buildings and improvements	128,000	157,391	115,484	200,892	100,319	128,086
Other long-term assets	10,568	11,746	6,066	10,004	11,234	11,138
Total long-term farm assets	350,417	442,856	401,773	564,400	196,195	310,711
Total Farm Assets	1,066,298	1,203,507	1,195,677	1,347,767	867,301	1,041,877
Total Nonfarm Assets	92,409	96,405	101,275	66,856	50,016	57,863
Total Assets	1,158,707	1,299,912	1,296,952	1,414,622	917,316	1,099,739
Liabilities						
Current Farm Liabilities						
Accrued interest	1,047	941	702	493	266	109
Accounts payable	19,568	14,610	15,683	9,730	11,537	9,745
Current notes	56,529	52,473	108,792	116,587	47,771	37,388
Government crop loans	615	294	2,597	1,240	0	0
Principal due on term debt	50,955	61,053	48,838	58,756	46,225	65,157
Total current farm liabilities	128,714	129,370	176,611	186,806	105,799	112,399
Total intermediate farm liabs	151,188	149,039	181,557	139,669	149,897	187,349
Total long term farm liabilities	224,833	285,104	206,261	344,940	113,612	186,439
Total farm liabilities	504,735	563,513	564,429	671,415	369,308	486,187
Total nonfarm liabilities	9,229	9,709	380	127	4,109	4,092
Total liabilities	513,964	573,222	564,809	671,541	373,417	490,279
Net worth (farm and nonfarm)	644,743	726,690	732,142	743,081	543,899	609,460
Net worth change		81,947		10,939		65,561
Ratio Analysis						
Current farm liabilities / assets	66 %	61 %	80 %	91 %	62 %	59 %
Curr. & interm farm liab. / assets	39 %	37 %	45 %	42 %	38 %	41 %
Long term farm liab. / assets	64 %	64 %	51 %	61 %	58 %	60 %
Total debt to asset ratio	44 %	44 %	44 %	47 %	41 %	45 %

Table 40

Balance Sheet at Market Values
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

Number of farms	Avg. Of All Farms 76		Low 25% 18		High 25% 20	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	18,460	20,431	18,377	14,096	11,916	8,007
Prepaid expenses & supplies	13,011	15,119	6,454	7,746	9,537	11,359
Growing crops	8,512	8,577	9,449	9,168	5,032	4,717
Accounts receivable	24,962	32,124	18,121	14,914	17,231	27,927
Hedging accounts	59	79	0	0	225	298
Crops held for sale or feed	116,447	121,713	149,710	139,020	107,434	117,308
Crops under government loan	615	347	2,597	1,467	0	0
Market livestock held for sale	12,778	14,097	17,198	18,618	17,468	19,055
Other current assets	469	487	0	0	1,187	957
Total current farm assets	195,313	212,975	221,905	205,028	170,028	189,628
Intermediate Farm Assets						
Breeding livestock	375,704	387,613	369,601	382,552	386,193	396,453
Machinery and equipment	299,221	338,014	359,922	392,929	262,426	324,910
Titled vehicles	2,109	3,159	2,056	3,139	2,372	3,230
Other intermediate assets	32,900	29,994	69,659	35,519	18,412	21,668
Total intermediate farm assets	709,934	758,780	801,238	814,139	669,403	746,261
Long Term Farm Assets						
Farm land	580,466	679,399	824,785	902,702	369,251	589,264
Buildings and improvements	216,774	257,368	186,049	280,509	156,742	202,753
Other long-term assets	13,207	14,635	6,169	10,107	13,613	13,521
Total long-term farm assets	810,447	951,402	1,017,003	1,193,318	539,605	805,538
Total Farm Assets	1,715,694	1,923,156	2,040,147	2,212,485	1,379,037	1,741,427
Total Nonfarm Assets	150,832	157,903	165,465	134,999	116,055	126,271
Total Assets	1,866,525	2,081,059	2,205,611	2,347,484	1,495,091	1,867,699
Liabilities						
Current Farm Liabilities						
Accrued interest	1,047	941	702	493	266	109
Accounts payable	19,568	14,610	15,683	9,730	11,537	9,745
Current notes	56,529	52,473	108,792	116,587	47,771	37,388
Government crop loans	615	294	2,597	1,240	0	0
Principal due on term debt	50,955	61,053	48,838	58,756	46,225	65,157
Total current farm liabilities	128,714	129,370	176,611	186,806	105,799	112,399
Total intermediate farm liabs	151,188	149,039	181,557	139,669	149,897	187,349
Total long term farm liabilities	224,833	285,104	206,261	344,940	113,612	186,439
Total farm liabilities	504,735	563,513	564,429	671,415	369,308	486,187
Total nonfarm liabilities	9,229	9,709	380	127	4,109	4,092
Total liabs excluding deferreds	513,964	573,222	564,809	671,541	373,417	490,279
Total deferred liabilities	6,559	6,112	16,800	17,007	0	0
Total liabilities	520,523	579,334	581,609	688,548	373,417	490,279
Retained earnings	644,743	726,690	732,142	743,081	543,899	609,460
Market valuation equity	701,259	775,035	891,860	915,855	577,775	767,959
Net worth (farm and nonfarm)	1,346,003	1,501,726	1,624,003	1,658,936	1,121,674	1,377,419
Net worth excluding deferreds	1,352,562	1,507,837	1,640,802	1,675,943	1,121,674	1,377,419
Net worth change		155,723		34,933		255,746
Ratio Analysis						
Current farm liabilities / assets	66 %	61 %	80 %	91 %	62 %	59 %
Curr. & interm farm liab. / assets	31 %	29 %	35 %	32 %	30 %	32 %
Long term farm liab. / assets	28 %	30 %	20 %	29 %	21 %	23 %
Total debt to asset ratio	28 %	28 %	26 %	29 %	25 %	26 %
Debt to assets excl deferreds	28 %	28 %	26 %	29 %	25 %	26 %

Table 41

Statement Of Cash Flows
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	76	18	20
Beginning cash (farm & nonfarm)	22,197	18,377	14,466
Cash From Operating Activities			
Gross cash farm income	671,589	588,705	705,422
Net nonfarm income	4,221	8,997	232
Total cash farm expense	-518,250	-484,631	-531,987
Apparent family living expense	-51,254	-44,181	-57,188
Income and social security tax	-3,060	-919	-2,686
Cash from operations	103,246	67,972	113,793
Cash From Investing Activities			
Sale of breeding livestock	3,789	1,604	1,483
Sale of machinery & equipment	1,881	1,141	3,312
Sale of titled vehicles	-	-	-
Sale of farm land	3,205	4,444	1,800
Sale of farm buildings	1,159	-	-
Sale of other farm assets	11,251	38,735	779
Sale of nonfarm assets	431	869	-
Purchase of breeding livestock	-7,665	-8,892	-4,573
Purchase of machinery & equip.	-65,008	-46,980	-83,524
Purchase of titled vehicles	-237	-	-900
Purchase of farm land	-51,237	-34,639	-95,590
Purchase of farm buildings	-59,144	-137,552	-45,408
Purchase of other farm assets	-8,980	-4,671	-4,332
Purchase of nonfarm assets	-10,024	-972	-7,914
Cash from investing activities	-180,578	-186,912	-234,867
Cash From Financing Activities			
Money borrowed	175,962	257,794	233,150
Cash gifts and inheritances	17,134	3,832	2,257
Principal payments	-111,655	-144,589	-114,582
Dividends paid	-	-	-
Gifts given	-2,884	-2,377	-4,999
Cash from financing activities	78,556	114,660	115,826
Net change in cash balance	1,224	-4,281	-5,248
Ending cash (farm & nonfarm)	23,421	14,096	9,217

Table 42

Financial Standards Measures
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	76	18	20
Liquidity			
Current ratio	1.65	1.10	1.69
Working capital	83,604	18,222	77,229
Solvency (market)			
Farm debt to asset ratio	30 %	31 %	28 %
Farm equity to asset ratio	70 %	69 %	72 %
Farm debt to equity ratio	42 %	45 %	39 %
Profitability (cost)			
Rate of return on farm assets	6.2 %	0.5 %	9.9 %
Rate of return on farm equity	7.9 %	-3.0 %	14.9 %
Operating profit margin	13.0 %	1.3 %	16.5 %
Net farm income	108,816	36,710	133,860
Repayment Capacity			
Term debt coverage ratio	197 %	117 %	250 %
Capital replacement margin	70,913	12,448	92,850
Efficiency			
Asset turnover rate (cost)	47.6 %	36.4 %	59.9 %
Operating expense ratio	71.3 %	78.6 %	70.5 %
Depreciation expense ratio	9.5 %	10.6 %	8.9 %
Interest expense ratio	3.3 %	4.4 %	2.2 %
Net farm income ratio	15.9 %	6.4 %	18.4 %

Table 43

Operator and Labor Information
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	76	18	20
Operator Information			
Average number of operators	1.6	1.6	1.4
Average age of operators	50.3	56.3	49.7
Average number of years farming	25.7	30.2	23.8
Results Per Operator			
Working capital	52,730	11,119	57,207
Total assets (market)	1,312,535	1,432,363	1,383,481
Total liabilities	365,389	420,131	363,170
Net worth (market)	947,146	1,012,232	1,020,311
Net worth excl deferred liabs	951,001	1,022,609	1,020,311
Gross farm income	432,141	350,735	538,599
Total farm expense	363,510	328,336	439,443
Net farm income	68,631	22,399	99,156
Net nonfarm income	2,662	5,490	172
Family living & tax withdrawals	34,256	27,518	44,351
Total acres owned	250.9	270.8	310.5
Total crop acres	420.0	422.8	454.9
Crop acres owned	219.5	186.2	316.1
Crop acres cash rented	199.1	236.6	138.8
Crop acres share rented	1.4	-	-
Total pasture acres	3.3	-	11.8
Labor Analysis			
Number of farms	76	18	20
Total unpaid labor hours	4,947	4,426	4,829
Total hired labor hours	4,966	4,678	5,267
Total labor hours per farm	9,913	9,104	10,096
Unpaid hours per operator	3,120	2,701	3,577
Value of farm production / hour	54.54	50.81	56.67
Net farm income / unpaid hour	22.00	8.29	27.72
Average hourly hired labor wage	12.85	13.59	12.30
Partnerships & LLCs			
Number of farms	23	6	3
Number of operators	2.3	2.2	-
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-

Table 44

Financial Summary
Michigan Dairy, 100-249 Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		
	All Farms	Low 25%	High 25%
Number of farms	76	18	20
Income Statement			
Gross cash farm income	671,589	588,705	705,422
Total cash farm expense	518,250	484,631	531,987
Net cash farm income	153,339	104,074	173,435
Inventory change	20,755	-6,435	25,459
Depreciation and capital adjust	-65,278	-60,929	-65,033
Net farm income	108,816	36,710	133,860
Profitability (cost)			
Labor and management earnings	72,094	-2,574	101,803
Rate of return on assets	6.2 %	0.5 %	9.9 %
Rate of return on equity	7.9 %	-3.0 %	14.9 %
Operating profit margin	13.0 %	1.3 %	16.5 %
Asset turnover rate	47.6 %	36.4 %	59.9 %
Profitability (market)			
Labor and management earnings	102,762	-32,870	253,726
Rate of return on assets	7.7 %	1.2 %	18.1 %
Rate of return on equity	9.2 %	0.0 %	23.5 %
Operating profit margin	26.0 %	5.6 %	49.3 %
Asset turnover rate	29.7 %	21.8 %	36.7 %
Liquidity			
Ending current ratio	1.65	1.10	1.69
Ending working capital	83,604	18,222	77,229
End working capital to gross inc	12.4 %	3.1 %	10.9 %
Term debt coverage ratio	196.6 %	117.0 %	250.5 %
Expense as a percent of income	74.6 %	83.0 %	72.6 %
Interest as a percent of income	3.3 %	4.4 %	2.2 %
Solvency (cost)			
Number of farms	76	18	20
Ending farm assets	1,203,507	1,347,767	1,041,877
Ending farm liabilities	563,513	671,415	486,187
Ending total assets	1,299,912	1,414,622	1,099,739
Ending total liabilities	573,222	671,541	490,279
Ending net worth	726,690	743,081	609,460
Net worth change	81,947	10,939	65,561
Ending farm debt to asset ratio	47 %	50 %	47 %
Beg total debt to asset ratio	44 %	44 %	41 %
End total debt to asset ratio	44 %	47 %	45 %
Solvency (market)			
Number of farms	76	18	20
Ending farm assets	1,923,156	2,212,485	1,741,427
Ending farm liabilities	569,141	686,244	486,187
Ending total assets	2,081,059	2,347,484	1,867,699
Ending total liabilities	579,334	688,548	490,279
Ending net worth	1,501,726	1,658,936	1,377,419
Net worth change	155,723	34,933	255,746
Ending farm debt to asset ratio	30 %	31 %	28 %
Beg total debt to asset ratio	28 %	26 %	25 %
End total debt to asset ratio	28 %	29 %	26 %
Nonfarm Information			
Net nonfarm income	4,221	8,997	232
Farms reporting living expenses	9	2	3
Total family living expense	38,461	-	-
Total living, invest, & capital	65,132	-	-
Crop Acres			
Total acres owned	398	444	419
Total crop acres	666	693	614
Total crop acres owned	348	305	427
Total crop acres cash rented	316	388	187
Total crop acres share rented	2	-	-

D. Financial Summary Information, Herds with 250+ Cows

Table 45	Crop Production and Marketing Summary Michigan Dairy, 250 Plus Cows, 2004 (Farms Sorted By Rate of Return on Assets - Mkt)		
	Avg. Of All Farms	Low 25%	High 25%
Dairy			
Number of farms	31	9	5
Average number of Cows	444	361	409
Milk production per Cow, lbs.	22,499	21,663	21,992
Average milk price per cwt.,	\$16.28	\$15.60	\$17.90
Acreage Summary			
Total acres owned	659	842	481
Total crop acres	1,381	1,437	1,377
Crop acres owned	726	648	912
Crop acres cash rented	655	789	465
Crop acres share rented	-	-	-
Total pasture acres	10	35	-
Average Price Received (Cash Sales Only)			
Corn per bushel	2.26	-	-
Soybeans per bushel	6.55	-	-
Wheat, Winter per bushel	3.16	-	-

Table 46

Farm Income Statement
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	9	5
Cash Farm Income			
Corn	17,971	40,182	1,526
Corn Silage	3,240	10,639	-
Corn, Seed	457	-	2,835
Hay, Alfalfa	79	-	490
Haylage, Mixed	1,167	482	-
Oats	387	404	-
Soybeans	28,892	38,278	31,484
Speltz	645	-	4,000
Straw	422	1,254	-
Sugar Beets	4,884	-	-
Wheat, Winter	5,973	10,435	1,032
Miscellaneous crop income	290	6	-
Beef Cow-Calf, Beef Calves	34	118	-
Beef, Background Beef	8,782	30,250	-
Dairy, Milk	1,652,455	1,218,041	1,795,102
Dairy, Dairy Calves	11,544	7,407	18,389
Dairy Replacement Heifers	641	128	3,130
Dairy Steers	11,660	14,763	134
Cull breeding livestock	71,803	77,365	50,108
Misc. livestock income	30	103	-
Direct & CC govt payments	10,816	16,756	2,368
Other government payments	34,142	31,336	42,913
Custom work income	12,328	14,315	1,040
Patronage dividends, cash	20,905	6,834	83,028
Insurance income	21,461	22,756	53,833
Other farm income	9,780	5,835	3,290
Gross Cash Farm Income	1,930,787	1,547,687	2,094,703

Table 46

Farm Income Statement (Continued)
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	9	5
Cash Farm Expense			
Seed	38,617	44,690	28,384
Fertilizer	47,805	60,379	36,023
Crop chemicals	29,935	32,185	18,605
Crop insurance	3,588	2,445	12,566
Drying fuel	400	12	-
Crop custom hire	524	1,805	-
Crop marketing	1,134	994	-
Crop miscellaneous	2,572	1,022	7,725
Feeder livestock purchase	14,733	40,374	-
Purchased feed	436,506	328,683	552,900
Breeding fees	12,966	7,282	13,261
Veterinary	59,995	49,083	56,014
BST	1,931	2,796	3,216
Supplies	69,833	39,835	75,915
DHIA	342	-	-
Livestock leases	220	756	-
Hauling and trucking	9,700	6,643	15,617
Livestock marketing	51,204	43,856	29,045
Bedding	1,783	2,133	490
Interest	74,097	70,523	75,438
Fuel & oil	47,370	43,345	41,420
Repairs	114,210	102,615	151,710
Custom hire	69,270	52,333	105,260
Hired labor	308,064	225,573	359,726
Land rent	55,718	45,676	54,220
Machinery & bldg leases	12,819	18,067	5,701
Real estate taxes	12,400	11,445	9,488
Personal property taxes	521	-	2,685
Farm insurance	23,282	27,463	19,851
Utilities	33,123	28,397	43,976
Dues & professional fees	8,078	8,842	9,080
Hedging account deposits	10,216	-750	-
Miscellaneous	48,467	66,927	28,064
Total cash expense	1,601,421	1,365,431	1,756,378
Net cash farm income	329,366	182,256	338,325
Inventory Changes			
Crops and feed	39,395	16,799	135,954
Market livestock	1,747	-7,457	12,621
Accounts receivable	11,398	4,190	20,733
Prepaid expenses and supplies	19,400	-6,786	73,410
Accounts payable	17,084	27,529	43,448
Total inventory change	89,023	34,275	286,166
Net operating profit	418,389	216,531	624,491
Depreciation and Other Capital Adjustments			
Breeding livestock	18,237	1,445	56,812
Machinery and equipment	-124,530	-79,086	-99,067
Buildings and improvements	-58,460	-39,721	-101,884
Other farm capital	610	-545	-2,042
Total depr. and other capital adj	-164,143	-117,907	-146,181
Net farm income	254,246	98,624	478,310

Table 47

Inventory Changes
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	7	8
Net cash farm income	329,366	176,421	618,778
Crops and Feed			
Ending inventory	335,374	258,629	401,684
Beginning inventory	295,979	260,233	315,486
Inventory change	39,395	-1,604	86,198
Market Livestock			
Ending inventory	21,380	34,884	10,945
Beginning inventory	19,633	44,436	3,597
Inventory change	1,747	-9,552	7,348
Accts Receivable & Other Current Assets			
Ending inventory	96,822	114,630	124,634
Beginning inventory	85,425	100,285	84,568
Inventory change	11,398	14,345	40,066
Prepaid Expenses and Supplies			
Ending inventory	69,219	16,883	184,734
Beginning inventory	49,820	24,830	127,551
Inventory change	19,400	-7,947	57,183
Accounts Payable & Accrued Expenses			
Beginning inventory	65,885	67,186	29,979
Ending inventory	48,801	70,160	3,956
Inventory change	17,084	-2,974	26,023
Total inventory change	89,023	-7,731	216,818
Net operating profit	418,389	168,689	835,595

Table 48

Depreciation and Other Capital Adjustments

Michigan Dairy, 250 Plus Cows, 2004

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	7	8
Net operating profit	418,389	168,689	835,595
Breeding Livestock			
Ending inventory	941,033	674,014	1,207,344
Capital sales	23,391	4,816	24,589
Beginning inventory	893,819	608,434	1,142,619
Capital purchases	52,368	75,028	98,798
Depreciation, capital adjust.	18,237	-4,632	-9,484
Machinery and Equipment			
Ending inventory	366,003	301,250	511,684
Capital sales	7,462	6,347	5,037
Beginning inventory	330,659	304,986	438,766
Capital purchases	167,335	88,368	280,372
Depreciation, capital adjust.	-124,530	-85,757	-202,417
Buildings and Improvements			
Ending inventory	347,059	266,507	589,651
Capital sales	99	439	-
Beginning inventory	360,215	280,534	648,811
Capital purchases	45,403	26,810	34,536
Depreciation, capital adjust.	-58,460	-40,397	-93,695
Other Capital Assets			
Ending inventory	108,295	50,313	225,309
Capital sales	6,878	2,386	5,277
Beginning inventory	85,092	48,328	134,590
Capital purchases	29,471	5,127	96,989
Depreciation, capital adjust.	610	-756	-994
Total depreciation, capital adj.	-164,143	-131,542	-306,590
Net farm income	254,246	37,147	529,006

Table 49

Profitability Measures
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	7	8
Profitability (assets valued at cost)			
Net farm income	254,246	37,147	529,006
Labor and management earnings	181,594	-6,188	400,294
Rate of return on assets	9.2 %	1.0 %	14.7 %
Rate of return on equity	13.9 %	-7.9 %	20.8 %
Operating profit margin	15.5 %	1.8 %	23.8 %
Asset turnover rate	59.1 %	53.1 %	61.5 %
Interest on farm net worth	72,652	43,335	128,712
Farm interest expense	74,790	73,784	62,928
Value of operator lbr and mgmt.	88,281	90,610	83,579
Return on farm assets	240,755	20,322	508,354
Average farm assets	2,623,704	2,100,189	3,467,213
Return on farm equity	165,965	-53,463	445,426
Average farm equity	1,197,264	679,589	2,145,198
Value of farm production	1,550,325	1,116,122	2,131,563
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	7	8
Profitability (assets valued at market)			
Net farm income	356,523	107,424	704,256
Labor and management earnings	213,346	-4,152	490,987
Rate of return on assets	8.9 %	2.7 %	14.0 %
Rate of return on equity	11.2 %	0.9 %	17.5 %
Operating profit margin	22.1 %	8.1 %	32.1 %
Asset turnover rate	40.4 %	32.9 %	43.7 %
Interest on farm net worth	143,177	111,576	213,269
Farm interest expense	74,790	73,784	62,928
Value of operator lbr and mgmt.	88,281	90,610	83,579
Return on farm assets	343,031	90,599	683,604
Average farm assets	3,837,069	3,388,012	4,876,500
Return on farm equity	268,242	16,814	620,676
Average farm equity	2,386,285	1,859,601	3,554,486
Value of farm production	1,550,325	1,116,122	2,131,563

Table 50

Liquidity Measures
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	7	8
Liquidity (cash)			
Net cash farm income	329,366	176,421	618,778
Net nonfarm income	13,978	3,518	33,925
Family living and taxes	81,606	58,894	116,807
Principal due on long term debt	52,007	36,994	46,333
Cash available for interm. debt	209,730	84,051	489,563
Average intermediate debt	377,960	346,732	397,282
Years to turnover interm. debt	1.8	4.1	0.8
Expense as a % of income	83 %	88 %	76 %
Interest as a % of income	4 %	5 %	2 %
Liquidity (accrual)			
Total accrual farm income	1,983,327	1,513,247	2,725,563
Total accrual operating expense	1,564,938	1,344,557	1,889,968
Net accrual operating income	418,389	168,689	835,595
Net nonfarm income	13,978	3,518	33,925
Family living and taxes	81,606	58,894	116,807
Principal due on long term debt	52,007	36,994	46,333
Available for intermediate debt	298,753	76,320	706,381
Average intermediate debt	377,960	346,732	397,282
Years to turnover interm. debt	1.3	4.5	0.6
Expense as a % of income	79 %	89 %	69 %
Interest as a % of income	4 %	5 %	2 %

Table 51

Balance Sheet at Cost Values
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

Number of farms	Avg. Of All Farms		Low 25%		High 25%	
	31		7		8	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	39,052	36,849	20,458	30,453	67,943	32,817
Prepaid expenses & supplies	49,820	69,219	24,830	16,883	127,551	184,734
Growing crops	16,967	17,194	7,743	12,432	12,654	18,381
Accounts receivable	67,115	77,753	92,114	95,055	70,664	106,127
Hedging accounts	937	262	0	0	125	125
Crops held for sale or feed	295,015	334,196	260,233	258,629	315,486	400,856
Crops under government loan	964	1,178	0	0	0	828
Market livestock held for sale	19,633	21,380	44,436	34,884	3,597	10,945
Other current assets	406	1,613	429	7,143	1,125	0
Total current farm assets	489,908	559,645	450,241	455,479	599,145	754,814
Intermediate Farm Assets						
Breeding livestock	893,819	941,033	608,434	674,014	1,142,619	1,207,344
Machinery and equipment	330,659	366,003	304,986	301,250	438,766	511,684
Titled vehicles	0	0	0	0	0	0
Other intermediate assets	80,768	102,372	45,148	47,133	131,440	221,660
Total intermediate farm assets	1,305,246	1,409,408	958,568	1,022,397	1,712,825	1,940,687
Long Term Farm Assets						
Farm land	379,238	386,442	378,621	381,673	347,491	334,203
Buildings and improvements	360,215	347,059	280,534	266,507	648,811	589,651
Other long-term assets	4,325	5,923	3,180	3,180	3,150	3,649
Total long-term farm assets	743,777	739,425	662,334	651,359	999,452	927,503
Total Farm Assets	2,538,931	2,708,477	2,071,144	2,129,235	3,311,422	3,623,004
Total Nonfarm Assets	108,226	139,747	65,729	66,619	253,423	319,404
Total Assets	2,647,157	2,848,224	2,136,873	2,195,854	3,564,845	3,942,409
Liabilities						
Current Farm Liabilities						
Accrued interest	761	1,453	493	512	1,363	2,393
Accounts payable	65,125	47,348	66,693	69,648	28,616	1,563
Current notes	157,216	101,240	158,217	59,519	139,160	118,260
Government crop loans	964	1,178	0	0	0	828
Principal due on term debt	130,579	158,241	107,634	169,079	149,388	152,810
Total current farm liabilities	354,645	309,460	333,038	298,758	318,527	275,854
Total intermediate farm liabs	282,036	302,141	273,103	263,573	314,948	270,184
Total long term farm liabilities	804,385	800,212	777,713	895,017	772,649	691,869
Total farm liabilities	1,441,066	1,411,814	1,383,854	1,457,347	1,406,124	1,237,906
Total nonfarm liabilities	4,805	6,003	0	0	337	337
Total liabilities	1,445,871	1,417,816	1,383,854	1,457,347	1,406,461	1,238,243
Net worth (farm and nonfarm)	1,201,286	1,430,408	753,019	738,507	2,158,384	2,704,166
Net worth change		229,122		-14,512		545,782
Ratio Analysis						
Current farm liabilities / assets	72 %	55 %	74 %	66 %	53 %	37 %
Curr. & interm farm liab. / assets	35 %	31 %	43 %	38 %	27 %	20 %
Long term farm liab. / assets	108 %	108 %	117 %	137 %	77 %	75 %
Total debt to asset ratio	55 %	50 %	65 %	66 %	39 %	31 %

Table 52

Balance Sheet at Market Values
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

Number of farms	Avg. Of All Farms 31		Low 25% 7		High 25% 8	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	39,052	36,849	20,458	30,453	67,943	32,817
Prepaid expenses & supplies	49,820	69,219	24,830	16,883	127,551	184,734
Growing crops	16,967	17,194	7,743	12,432	12,654	18,381
Accounts receivable	67,115	77,753	92,114	95,055	70,664	106,127
Hedging accounts	937	262	0	0	125	125
Crops held for sale or feed	295,015	334,196	260,233	258,629	315,486	400,856
Crops under government loan	964	1,178	0	0	0	828
Market livestock held for sale	19,633	21,380	44,436	34,884	3,597	10,945
Other current assets	406	1,613	429	7,143	1,125	0
Total current farm assets	489,908	559,645	450,241	455,479	599,145	754,814
Intermediate Farm Assets						
Breeding livestock	912,869	976,057	608,434	674,100	1,176,938	1,245,175
Machinery and equipment	562,009	640,831	609,228	660,577	550,651	696,504
Titled vehicles	2,226	2,129	0	0	8,625	8,250
Other intermediate assets	81,721	105,382	45,148	47,133	135,136	233,325
Total intermediate farm assets	1,558,825	1,724,400	1,262,810	1,381,809	1,871,349	2,183,254
Long Term Farm Assets						
Farm land	1,103,220	1,135,068	1,296,123	1,307,572	1,361,760	1,382,225
Buildings and improvements	543,284	545,441	311,292	304,339	791,656	787,013
Other long-term assets	5,879	8,468	3,180	3,180	9,174	12,612
Total long-term farm assets	1,652,384	1,688,977	1,610,594	1,615,091	2,162,589	2,181,849
Total Farm Assets	3,701,117	3,973,021	3,323,646	3,452,379	4,633,084	5,119,917
Total Nonfarm Assets	190,931	230,084	120,385	121,333	328,199	369,519
Total Assets	3,892,047	4,203,106	3,444,031	3,573,712	4,961,282	5,489,436
Liabilities						
Current Farm Liabilities						
Accrued interest	761	1,453	493	512	1,363	2,393
Accounts payable	65,125	47,348	66,693	69,648	28,616	1,563
Current notes	157,216	101,240	158,217	59,519	139,160	118,260
Government crop loans	964	1,178	0	0	0	828
Principal due on term debt	130,579	158,241	107,634	169,079	149,388	152,810
Total current farm liabilities	354,645	309,460	333,038	298,758	318,527	275,854
Total intermediate farm liabs	282,036	302,141	273,103	263,573	314,948	270,184
Total long term farm liabilities	804,385	800,212	777,713	895,017	772,649	691,869
Total farm liabilities	1,441,066	1,411,814	1,383,854	1,457,347	1,406,124	1,237,906
Total nonfarm liabilities	4,805	6,003	0	0	337	337
Total liabs excluding deferreds	1,445,871	1,417,816	1,383,854	1,457,347	1,406,461	1,238,243
Total deferred liabilities	24,301	24,386	107,618	107,993	0	0
Total liabilities	1,470,172	1,442,202	1,491,472	1,565,340	1,406,461	1,238,243
Retained earnings	1,201,286	1,430,408	753,019	738,507	2,158,384	2,704,166
Market valuation equity	1,220,589	1,330,496	1,199,540	1,269,865	1,396,438	1,547,027
Net worth (farm and nonfarm)	2,421,875	2,760,904	1,952,559	2,008,372	3,554,821	4,251,193
Net worth excluding deferreds	2,446,176	2,785,289	2,060,177	2,116,365	3,554,821	4,251,193
Net worth change		339,029		55,813		696,371
Ratio Analysis						
Current farm liabilities / assets	72 %	55 %	74 %	66 %	53 %	37 %
Curr. & interm farm liab. / assets	31 %	27 %	35 %	31 %	26 %	19 %
Long term farm liab. / assets	49 %	47 %	48 %	55 %	36 %	32 %
Total debt to asset ratio	38 %	34 %	43 %	44 %	28 %	23 %
Debt to assets excl deferreds	37 %	34 %	40 %	41 %	28 %	23 %

Table 53

Statement Of Cash Flows
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	7	8
Beginning cash (farm & nonfarm)	39,052	20,458	67,943
Cash From Operating Activities			
Gross cash farm income	1,930,787	1,510,058	2,591,952
Net nonfarm income	13,978	3,518	33,925
Total cash farm expense	-1,601,421	-1,333,637	-1,973,174
Apparent family living expense	-74,683	-57,586	-91,199
Income and social security tax	-6,923	-1,308	-25,608
Cash from operations	261,737	121,045	535,896
Cash From Investing Activities			
Sale of breeding livestock	23,391	4,816	24,589
Sale of machinery & equipment	7,462	6,347	5,037
Sale of titled vehicles	-	-	-
Sale of farm land	26,207	-	93,011
Sale of farm buildings	99	439	-
Sale of other farm assets	6,878	2,386	5,277
Sale of nonfarm assets	3,069	871	4,183
Purchase of breeding livestock	-52,368	-75,028	-98,798
Purchase of machinery & equip.	-167,335	-88,368	-280,372
Purchase of titled vehicles	-	-	-
Purchase of farm land	-10,634	-3,052	-
Purchase of farm buildings	-45,403	-26,810	-34,536
Purchase of other farm assets	-29,471	-5,127	-96,989
Purchase of nonfarm assets	-12,494	-4,066	-36,192
Cash from investing activities	-250,599	-187,591	-414,790
Cash From Financing Activities			
Money borrowed	301,085	334,784	243,095
Cash gifts and inheritances	4,509	7,826	4,039
Principal payments	-312,882	-264,265	-385,289
Dividends paid	-	-	-
Gifts given	-6,053	-1,804	-18,077
Cash from financing activities	-13,341	76,542	-156,232
Net change in cash balance	-2,203	9,995	-35,126
Ending cash (farm & nonfarm)	36,849	30,453	32,817

Table 54

Financial Standards Measures
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	7	8
Liquidity			
Current ratio	1.81	1.52	2.74
Working capital	250,184	156,721	478,960
Solvency (market)			
Farm debt to asset ratio	36 %	45 %	24 %
Farm equity to asset ratio	64 %	55 %	76 %
Farm debt to equity ratio	57 %	83 %	32 %
Profitability (cost)			
Rate of return on farm assets	9.2 %	1.0 %	14.7 %
Rate of return on farm equity	13.9 %	-7.9 %	20.8 %
Operating profit margin	15.5 %	1.8 %	23.8 %
Net farm income	254,246	37,147	529,006
Repayment Capacity			
Term debt coverage ratio	210 %	103 %	359 %
Capital replacement margin	220,181	5,679	603,326
Efficiency			
Asset turnover rate (cost)	59.1 %	53.1 %	61.5 %
Operating expense ratio	75.1 %	84.0 %	67.0 %
Depreciation expense ratio	8.3 %	8.7 %	11.2 %
Interest expense ratio	3.8 %	4.9 %	2.3 %
Net farm income ratio	12.8 %	2.5 %	19.4 %

Table 55

Operator and Labor Information
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	7	8
Operator Information			
Average number of operators	1.8	1.7	1.8
Average age of operators	53.0	54.4	52.4
Average number of years farming	30.3	33.7	26.8
Results Per Operator			
Working capital	138,495	91,421	273,692
Total assets (market)	2,326,719	2,084,666	3,136,820
Total liabilities	798,362	913,115	707,567
Net worth (market)	1,528,358	1,171,550	2,429,253
Net worth excl deferred liabs	1,541,857	1,234,546	2,429,253
Gross farm income	1,097,913	882,727	1,557,465
Total farm expense	957,169	861,058	1,255,176
Net farm income	140,743	21,669	302,289
Net nonfarm income	7,738	2,052	19,386
Family living & tax withdrawals	45,175	34,355	66,747
Total acres owned	364.7	472.0	494.2
Total crop acres	764.3	739.0	878.1
Crop acres owned	401.7	383.7	584.2
Crop acres cash rented	362.7	355.4	293.9
Crop acres share rented	-	-	-
Total pasture acres	5.6	1.3	-
Labor Analysis			
Number of farms	31	7	8
Total unpaid labor hours	5,165	5,287	4,357
Total hired labor hours	24,386	17,279	29,761
Total labor hours per farm	29,551	22,566	34,118
Unpaid hours per operator	2,859	3,084	2,490
Value of farm production / hour	52.46	49.46	62.48
Net farm income / unpaid hour	49.23	7.03	121.43
Average hourly hired labor wage	12.63	12.19	14.60
Partnerships & LLCs			
Number of farms	16	1	5
Number of operators	2.1	-	2.0
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-

Table 56

Financial Summary
Michigan Dairy, 250 Plus Cows, 2004
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	31	7	8
Income Statement			
Gross cash farm income	1,930,787	1,510,058	2,591,952
Total cash farm expense	1,601,421	1,333,637	1,973,174
Net cash farm income	329,366	176,421	618,778
Inventory change	89,023	-7,731	216,818
Depreciation and capital adjust	-164,143	-131,542	-306,590
Net farm income	254,246	37,147	529,006
Profitability (cost)			
Labor and management earnings	181,594	-6,188	400,294
Rate of return on assets	9.2 %	1.0 %	14.7 %
Rate of return on equity	13.9 %	-7.9 %	20.8 %
Operating profit margin	15.5 %	1.8 %	23.8 %
Asset turnover rate	59.1 %	53.1 %	61.5 %
Profitability (market)			
Labor and management earnings	213,346	-4,152	490,987
Rate of return on assets	8.9 %	2.7 %	14.0 %
Rate of return on equity	11.2 %	0.9 %	17.5 %
Operating profit margin	22.1 %	8.1 %	32.1 %
Asset turnover rate	40.4 %	32.9 %	43.7 %
Liquidity			
Ending current ratio	1.81	1.52	2.74
Ending working capital	250,184	156,721	478,960
End working capital to gross inc	13.0 %	10.4 %	18.5 %
Term debt coverage ratio	209.9 %	103.2 %	359.4 %
Expense as a percent of income	78.9 %	88.9 %	69.3 %
Interest as a percent of income	3.8 %	4.9 %	2.3 %
Solvency (cost)			
Number of farms	31	7	8
Ending farm assets	2,708,477	2,129,235	3,623,004
Ending farm liabilities	1,411,814	1,457,347	1,237,906
Ending total assets	2,848,224	2,195,854	3,942,409
Ending total liabilities	1,417,816	1,457,347	1,238,243
Ending net worth	1,430,408	738,507	2,704,166
Net worth change	229,122	-14,512	545,782
Ending farm debt to asset ratio	52 %	68 %	34 %
Beg total debt to asset ratio	55 %	65 %	39 %
End total debt to asset ratio	50 %	66 %	31 %
Solvency (market)			
Number of farms	31	7	8
Ending farm assets	3,973,021	3,452,379	5,119,917
Ending farm liabilities	1,436,199	1,565,340	1,237,906
Ending total assets	4,203,106	3,573,712	5,489,436
Ending total liabilities	1,442,202	1,565,340	1,238,243
Ending net worth	2,760,904	2,008,372	4,251,193
Net worth change	339,029	55,813	696,371
Ending farm debt to asset ratio	36 %	45 %	24 %
Beg total debt to asset ratio	38 %	43 %	28 %
End total debt to asset ratio	34 %	44 %	23 %
Nonfarm Information			
Net nonfarm income	13,978	3,518	33,925
Crop Acres			
Total acres owned	659	809	865
Total crop acres	1,381	1,267	1,537
Total crop acres owned	726	658	1,022
Total crop acres cash rented	655	609	514
Total crop acres share rented	-	-	-