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# ***Staff Paper***

## **2003 Michigan Cash Grain Farm Business Analysis Summary**

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And  
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2003 Michigan TelFarm and AgriSolutions Data  
Staff Paper No. 04-25

By

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And  
Steve Harsh

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## 2003 Michigan Cash Grain Farm Business Analysis Summary

By

Eric Wittenberg and Steve Harsh<sup>1</sup>

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<sup>1</sup> 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. AgriSolutions 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.

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## Executive Summary

This report summarizes the 2003 financial and production records of 92 Michigan cash grain farms. To be included, the farms must have produced at least 50 percent of gross cash farm income from one or a combination of these items; corn, soybeans, wheat, all varieties of navy beans, oats, sugar beets and other small grains. The records came from Michigan State University's TelFarm/MicroTel project, the Farm Credit Service system, or by AgriSolutions in Michigan. The values were pooled into averages for reporting purposes.

Farm records were included if a farm financial analysis was completed on 2003 data including beginning and ending balance sheets, plus income and expenses. The data were checked to verify that cash discrepancy was less than 10% of gross cash inflow and that debt discrepancy was less than \$1,000. While considerable variation in the data exists, average values are reported in the summary tables below.

### *Summary of Results*

Average size of farms measured in acres is presented in Table 1. However, there is considerable range and variability around this average.

**Table 1. Average 2003 Michigan Cash Grain Farm Characteristics**

	2003
Total acres owned	379
Total crop acres (owned & rented)	1069
Number of farms	92

Net farm income is the profit (loss) remaining after all farm expenses and inventory changes have been recognized. The net farm income value is the return to unpaid operator management, labor and equity capital invested, as illustrated in Table 2. Net farm income in 2002 averaged \$12,778; and the median was \$19,719, with a standard deviation of \$124,527. This average somewhat obscures a very large range of net farm income values. As illustrated in Table 8, the farms in the top 25 percent of the net farm income distribution averaged \$95,118 while those in the bottom 25 percent had a negative \$92,346. The total difference across the averages of the top versus the bottom groups of farms is \$187,464.

Gross cash farm income averaged \$365,699 in 2003, (Table 2). The two largest components of these revenues were corn and soybeans sales, which averaged \$90,640 and \$77,674, respectively. Government payments averaged \$25,904 per farm in 2003.

Average total cash expenses were \$320,235 in 2003 and average net cash farm income was \$45,464. However, given less taxable income, crop farms were able to build total inventories. While prepaid expenses and supplies did decrease, crops and feed inventories increased, with total inventories increasing an average \$9,635.

**Table 2. Average 2003 Michigan Cash Grain Farm Income Statement**

	2003
	(\$)
Gross cash farm income	365,699
Total cash expense	320,235
Net cash farm income	45,464
Inventory change (positive)	9,635
Depreciation and capital adjustments	-42,311
Net farm income	12,788

Four key financial performance indicators are presented in Table 3. The rate of return on assets (ROA) is calculated as if the farm has no debt. ROA indicates the farm earnings, after subtracting out an allowance for unpaid operator labor and management, as a percentage of invested assets. ROA provides the key summary performance indicator for your farm. By multiplying the operating profit margin by the asset turnover rate, the ROA is determined. The average ROA was 3.1 percent, an improvement over 2002 and 2001, (Table 3).

The rate of return on equity (ROE) represents the farm earnings after interest payments expressed as a percentage of own equity capital. Ideally the ROE should be higher than the ROA indicating that profit is being made on borrowed money (and conversely which is the case in Table 3). This farm summary indicates that profitability on these farms is still a challenge.

Operating profit margin (OPM) measures the dollars of profit generated per dollar of revenue. In 2003, Michigan cash grain farms generated 12.4 cents of profit per dollar of revenue. Asset turnover ratio measures the efficiency with which farm assets generate revenue. In 2003, this ratio was 25.5 percent and was lower than the 2002 value of 49.9 percent, meaning that the farm assets generated less revenues per dollar invested in farm assets.

**Table 3. Average Michigan Cash Grain Farm Profitability Indicators, 2000-2003**

	2000	2001	2002	2003
	(percent)			
Rate of return on assets*	1.1	-1.3	-2.3	3.1
Rate of return on equity	-5.2	-11.3	-15.8	2.5
Operating profit margin	2.4	-3.1	-4.7	12.4
Asset turnover rate*	48.4	43.5	49.9	25.2

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

## Results by Farm Size

To further facilitate financial comparisons and benchmarking, the financial summaries were categorized by cropped acres, Table 4. The smallest size category, 140 to 799 cropped acres, includes 46 farms. The medium size category, 800 to 1199 cropped acres, includes 22 farms. The largest size category, 1200 plus cropped acres, contains the remaining 24 farms.

**Table 4. Ave. 2003 Michigan Cash Grain Farm Characteristics by Farm Size Category**

	140-799	800-1199	1200+
	Acres	Acres	Acres
Total acres owned	322	380	487
Total crop acres	436	1,017	2,329
Number of farms	46	22	24

Table 5 presents the average farm income statement by farm acreage size. The smallest farms returned \$14,117; the medium farms \$12,448; and the largest farms \$10,552.

**Table 5. Average 2003 Michigan Cash Grain Farm Income Statement by Size**

	140-799	800-1199	1200+
	Acres	Acres	Acres
	(\$)	(\$)	(\$)
Gross cash farm income	153,046	327,338	808,448
Total cash expense	124,831	278,199	733,292
Net cash farm income	28,215	49,139	75,156
Inventory change	2,385	1,627	30,874
Depreciation and capital adjustments	-16,482	-38,318	-95,477
Net farm income	14,117	12,448	10,552

Table 6 compares profitability measures across farm sizes with assets valued at cost. With assets valued on a cost basis, all farms sizes had either negative or very low values in three key financial performance indicators ROA, ROE and OPM. ROAs were similar for the smaller size farms (140-799 acres) and larger size farms (1200 + acres), while the mid-sized farms (800-1199 acres) were lightly lower at a negative 0.7 percent in 2003. All farm sizes had negative values for ROE with the larger-sized farms having the lowest ROE, a negative 23.0 percent and the lowest OPM, a negative 1.6 percent. The smaller size farms had the highest OPM and the lowest asset turnover ratio, 1.7 percent and 37.0 percent respectively. In contrast, the larger size farms had the highest average asset turnover, a 65.1 percent, but the smallest ROE, a negative 23.0 percent. Keep in mind that these larger farms tend to have less unpaid factors so that the expenses reported are closer to a true economic cost of production for these farms. If the unpaid labor and management



on the smaller farms were properly reimbursed, the profit margin would be smaller than the average value reported.

**Table 6. Average Michigan Cash Grain Farm Profitability Indicators by Size**

	140-799	800-1199	1200+
	Acres	Acres	Acres
	(Percent)		
Rate of return on assets*	0.6	-0.7	0.5
Rate of return on equity	-4.3	-6.5	-23.0
Operating profit margin	1.7	-1.6	0.7
Asset turnover rate*	37.0	42.9	65.1

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

Table 7 compares profitability measures across farm sizes with assets valued at market. The market value approach includes the impact of price appreciation (inflation) of the asset base (land primarily) as a form of income. Financial performance indicators like ROA can be looked upon in this comparison as the “opportunity cost” of farming versus alternative investments. Market value for assets is more appropriate when comparing across different farms (while cost is more appropriate to compare the same farm across time). The smaller size farms had the highest ROA and ROE in 2003. Also, the smaller size farms realized the largest average OPM but had the smallest average asset turnover rate. In contrast, the larger size farms had the highest average asset turnover rate.

**Table 7. Average Michigan Cash Grain Farm Profitability Indicators by Size**

	140-799	800-1199	1200+
	Acres	Acres	Acres
	(Percent)		
Rate of return on assets*	3.7	2.0	3.4
Rate of return on equity	3.5	1.3	2.3
Operating profit margin	24.3	9.3	9.5
Asset turnover rate*	15.2	21.1	35.9

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

The details in deriving these profitability measures are provided in the following pages. The data for the smallest sized farms starts in Section B, page 20, Tables 20 to 31. The data for the mid-sized farms starts in section C, page 33, Tables 32 to 43. The data for the largest size category of farms starts in section D, page 46, Tables 44 to 55.

*A) Average of 92 Cash Grain Farms, All sizes*

Table 8                      Crop Production and Marketing Summary			
<b>Michigan Cash Grain Farms, 2003</b>			
(Farms Sorted By Rate of Return on Assets - Mkt)			
	Avg. Of		
	All Farms	Low 25%	High 25%
Number of farms	92	22	20
Acreage Summary			
Total acres owned	379	362	327
Total crop acres	1,069	1,160	1,337
Crop acres owned	308	232	270
Crop acres cash rented	737	893	1,066
Crop acres share rented	23	35	-
Total pasture acres	1	3	-
Average Price Received (Cash Sales Only)			
Corn per bushel	2.26	2.07	2.43
Soybeans per bushel	5.64	5.59	5.62
Wheat, Winter per bushel	3.22	3.09	3.30
Straw per ton	5.39	-	-
Hay, Mixed per ton	26.72	-	-
Hay, Alfalfa per ton	15.31	-	-
Corn, Seed per bushel	2.38	-	-
Beans, Navy per cwt	3.14	-	-
Sugar Beets per ton	28.93	-	-
Oats per bushel	2.06	-	-

Table 9

Farm Income Statement  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	20
Cash Farm Income			
Alfalfa Seed	32	-	145
Barley	348	-	1,601
Beans, Black Turtle	260	-	-
Beans, Green	1,865	-	-
Beans, Light Red Kidney	335	-	-
Beans, Navy	8,267	8,827	19,869
Beans, Pinto	151	-	695
Beans, Small Red	305	-	-
Clover Seed	655	-	3,012
Corn	90,640	90,747	111,786
Corn Silage	1,602	-	679
Corn, Ear	103	-	475
Corn, Seed	18,401	12,163	2,742
Cucumbers	8,902	9,674	8,820
Hay, Alfalfa	1,944	2,144	3,255
Hay, Mixed	700	14	52
Haylage, Alfalfa	1,581	-	1,477
Haylage, Mixed	1,207	-	-
Oatlage	176	-	-
Oats	1,451	16	4,385
Potatoes	20,307	-	78,195
Soybeans	77,674	63,775	95,489
Soybeans Seed	559	-	2,571
Straw	1,108	744	2,764
Sugar Beets	16,428	18,593	23,099
Sweet Corn	2,775	9,232	2,610
Wheat, Winter	27,590	32,624	55,375
Barley, Seed	346	-	1,590
Oats, Seed	219	-	1,009
Wheat, Seed	239	-	1,098
Other crops	229	-	-
Miscellaneous crop income	118	48	75
Beef Bulls	111	-	413
Beef Cow-Calf, Beef Calves	978	-	173
Beef, Background Beef	169	348	-
Beef, Finish Beef Calves	1,910	-	-
Beef, Finish Yrlg Steers	793	1,807	569
Beef, Grazing Beef	203	847	-
Broilers	35	-	144
Chickens, Egg Product., Eggs	163	-	-
Dairy Heifers (for sale)	233	-	-
Dairy Steers	493	424	-
Hogs, Farrow-Fin, Raised Hogs	1,785	-	-
Horses, Boarding	125	-	-
Sheep, Lamb Finishing	371	-	-
Sheep, Market Lambs, Mkt Lambs	677	-	-
Hogs, Weaning to Finish	1,371	-	-
Cull breeding livestock	302	-	252
Misc. livestock income	521	-	1,191
Direct & CC govt payments	2,618	312	1,283
Other government payments	25,904	25,598	36,869
Custom work income	15,014	17,039	20,492
Patronage dividends, cash	103	62	57
Insurance income	6,056	5,802	12,497
Cash from hedging accts	304	-	-136
Contract livestock income	459	-	-
Other farm income	18,485	18,341	15,979
Gross Cash Farm Income	365,699	319,179	512,649

Table 9, (continued)

## Farm Income Statement

**Michigan Cash Grain Farms, 2003**

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	20
Cash Farm Expense			
Seed	28,594	27,051	40,991
Fertilizer	46,507	55,976	58,165
Crop chemicals	32,463	34,911	46,935
Crop insurance	2,968	3,272	3,282
Drying fuel	1,736	567	1,702
Irrigation energy	737	-	153
Crop livestock supplies	322	-	1,480
Crop custom hire	1,587	1,428	321
Crop hauling and trucking	771	113	3,195
Crop marketing	1,322	428	3,745
Crop miscellaneous	1,993	1,114	6,621
Feeder livestock purchase	3,038	1,429	211
Purchased feed	2,411	1,182	1,131
Veterinary	292	242	2
Livestock livestock supplies	632	152	418
Livestock marketing	121	40	27
Interest	21,755	22,477	27,173
Packaging and supplies	3,022	36	12,949
Fuel & oil	15,289	15,505	23,085
Repairs	26,924	28,473	32,869
Custom hire	11,508	15,887	9,133
Hired labor	21,362	27,610	37,977
Land rent	48,259	55,413	67,701
Machinery & bldg leases	4,451	1,929	5,654
Real estate taxes	9,876	12,284	11,594
Farm insurance	11,377	12,978	13,911
Utilities	7,046	5,352	8,559
Hauling and trucking	185	-	-
Dues & professional fees	5,062	7,430	6,038
Hedging account deposits	240	-	-415
Miscellaneous	8,385	7,738	12,517
Total cash expense	320,235	341,017	437,128
Net cash farm income	45,464	-21,838	75,521
Inventory Changes			
Crops and feed	16,230	-18,968	72,005
Market livestock	1,744	-7	2,595
Accounts receivable	-6,377	-10,886	-12,699
Prepaid expenses and supplies	-938	-6,812	5,653
Accounts payable	-1,024	8,442	-224
Total inventory change	9,635	-28,230	67,330
Net operating profit	55,099	-50,068	142,851
Depreciation and Other Capital Adjustments			
Breeding livestock	451	-284	-30
Machinery and equipment	-39,678	-37,123	-46,762
Buildings and improvements	-6,475	-5,678	-6,971
Other farm capital	3,391	808	6,031
Total depr. and other capital adj	-42,311	-42,278	-47,733
Net farm income	12,788	-92,346	95,118

Table 10

Inventory Changes  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	24
Net cash farm income	45,464	-21,838	81,746
Crops and Feed			
Ending inventory	151,892	109,381	235,803
Beginning inventory	135,662	128,349	175,951
Inventory change	16,230	-18,968	59,852
Market Livestock			
Ending inventory	7,634	2,857	9,238
Beginning inventory	5,890	2,864	7,109
Inventory change	1,744	-7	2,130
Accts Receivable & Other Current Assets			
Ending inventory	34,932	17,101	51,177
Beginning inventory	41,309	27,987	60,099
Inventory change	-6,377	-10,886	-8,922
Prepaid Expenses and Supplies			
Ending inventory	20,475	12,967	33,295
Beginning inventory	21,413	19,779	28,309
Inventory change	-938	-6,812	4,986
Accounts Payable & Accrued Expenses			
Beginning inventory	20,713	24,623	28,105
Ending inventory	21,737	16,181	28,927
Inventory change	-1,024	8,442	-822
Total inventory change	9,635	-28,230	57,224
Net operating profit	55,099	-50,068	138,970

Table 11                      Depreciation and Other Capital Adjustments  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	24
Net operating profit	55,099	-50,068	138,970
Breeding Livestock			
Ending inventory	8,682	-	18,417
Capital sales	1,215	-	-
Beginning inventory	8,877	284	18,491
Capital purchases	569	-	50
Depreciation, capital adjust.	451	-284	-124
Machinery and Equipment			
Ending inventory	112,466	94,115	127,150
Capital sales	4,789	5,366	2,032
Beginning inventory	117,409	97,246	126,982
Capital purchases	39,525	39,359	47,225
Depreciation, capital adjust.	-39,678	-37,123	-45,025
Buildings and Improvements			
Ending inventory	60,726	44,733	108,221
Capital sales	-	-	-
Beginning inventory	54,434	45,525	94,355
Capital purchases	12,767	4,886	22,556
Depreciation, capital adjust.	-6,475	-5,678	-8,690
Other Capital Assets			
Ending inventory	29,723	32,304	46,805
Capital sales	22,583	71,409	8,312
Beginning inventory	31,260	39,248	44,403
Capital purchases	17,655	63,657	4,014
Depreciation, capital adjust.	3,391	808	6,699
Total depreciation, capital adj.	-42,311	-42,278	-47,140
Net farm income	12,788	-92,346	91,830

Table 12

Profitability Measures  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	24
Profitability (assets valued at cost)			
Net farm income	12,788	-92,346	91,830
Labor and management earnings	-3,131	-101,864	75,102
Rate of return on assets	0.2 %	-15.0 %	8.6 %
Rate of return on equity	-9.5 %	-199.0 %	19.8 %
Operating profit margin	0.4 %	-33.1 %	14.0 %
Asset turnover rate	51.6 %	45.3 %	62.0 %
Interest on farm net worth	15,919	9,518	16,728
Farm interest expense	22,179	23,420	25,099
Value of operator lbr and mgmt.	33,426	25,996	40,965
Return on farm assets	1,542	-94,923	75,964
Average farm assets	721,459	631,732	878,551
Return on farm equity	-20,638	-118,342	50,865
Average farm equity	216,628	59,454	256,308
Value of farm production	372,298	286,424	544,290
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	24
Profitability (assets valued at market)			
Net farm income	57,501	-75,408	186,711
Labor and management earnings	-792	-117,726	125,517
Rate of return on assets	3.1 %	-6.1 %	10.4 %
Rate of return on equity	2.5 %	-14.5 %	14.3 %
Operating profit margin	12.4 %	-27.2 %	31.4 %
Asset turnover rate	25.2 %	22.5 %	33.1 %
Interest on farm net worth	58,293	42,318	61,194
Farm interest expense	22,179	23,420	25,099
Value of operator lbr and mgmt.	33,426	25,996	40,965
Return on farm assets	46,255	-77,985	170,845
Average farm assets	1,475,896	1,270,479	1,642,136
Return on farm equity	24,076	-101,404	145,746
Average farm equity	969,072	698,200	1,019,893
Value of farm production	372,298	286,424	544,290

Table 13

Liquidity Measures  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	24
Liquidity (cash)			
Net cash farm income	45,464	-21,838	81,746
Net nonfarm income	15,980	17,133	11,531
Family living and taxes	38,141	19,767	42,501
Real estate principal payments	12,098	14,587	8,809
Cash available for interm. debt	11,205	-39,059	41,968
Average intermediate debt	142,283	175,922	192,515
Years to turnover interm. debt	12.7	**	4.6
Expense as a % of income	88 %	107 %	83 %
Interest as a % of income	6 %	7 %	6 %
Liquidity (accrual)			
Total accrual farm income	377,296	289,319	546,184
Total accrual operating expense	322,197	339,387	407,214
Net accrual operating income	55,099	-50,068	138,970
Net nonfarm income	15,980	17,133	11,531
Family living and taxes	38,141	19,767	42,501
Real estate principal payments	12,098	14,587	8,809
Available for intermediate debt	20,841	-67,289	99,191
Average intermediate debt	142,283	175,922	192,515
Years to turnover interm. debt	6.8	**	1.9
Expense as a % of income	85 %	117 %	75 %
Interest as a % of income	6 %	8 %	5 %

\*\* Income insufficient to meet debt servicing requirements



Table 14

Balance Sheet at Cost Values  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
Number of farms	92		22		24	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	35,798	38,402	40,019	27,856	55,763	67,938
Prepaid expenses & supplies	21,413	20,475	19,779	12,967	28,309	33,295
Growing crops	8,691	8,248	7,759	8,196	12,200	11,639
Accounts receivable	19,284	16,512	19,312	8,873	25,925	19,239
Hedging accounts	501	190	916	32	915	12
Crops held for sale or feed	135,662	151,892	128,349	109,381	175,951	235,803
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	5,890	7,634	2,864	2,857	7,109	9,238
Other current assets	12,832	9,982	0	0	21,058	20,287
Total current farm assets	240,072	253,335	218,998	170,162	327,230	397,451
<b>Intermediate Farm Assets</b>						
Breeding livestock	8,877	8,682	284	0	18,491	18,417
Machinery and equipment	117,010	112,068	97,246	94,115	126,222	126,383
Titled vehicles	398	398	0	0	760	767
Other intermediate assets	24,288	20,963	25,684	20,373	38,506	36,664
Total intermediate farm assets	150,574	142,111	123,214	114,488	183,979	182,230
<b>Long Term Farm Assets</b>						
Farm land	258,133	267,800	258,469	262,381	222,025	225,573
Buildings and improvements	54,434	60,726	45,525	44,733	94,355	108,221
Other long-term assets	6,972	8,761	13,564	11,932	5,896	10,141
Total long-term farm assets	319,539	337,286	317,558	319,045	322,277	343,934
Total Farm Assets	710,185	732,733	659,770	603,695	833,486	923,616
Total Nonfarm Assets	140,535	147,361	261,210	280,334	62,062	68,502
Total Assets	850,720	880,094	920,979	884,029	895,547	992,117
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	5,569	5,994	3,513	4,456	3,955	1,480
Accounts payable	15,144	15,743	21,110	11,725	24,149	27,446
Current notes	130,922	124,297	151,376	156,170	161,814	140,929
Government crop loans	0	0	0	0	0	0
Principal due on term debt	35,427	42,951	52,100	46,006	36,160	57,250
Total current farm liabilities	187,062	188,985	228,099	218,357	226,079	227,105
Total intermediate farm liabs	116,673	113,350	146,533	131,116	158,449	156,659
Total long term farm liabilities	190,429	213,161	190,599	229,852	221,139	255,054
Total farm liabilities	494,165	515,496	565,231	579,325	605,667	638,818
Total nonfarm liabilities	8,846	8,092	6,580	6,635	796	1,137
Total liabilities	503,010	523,588	571,812	585,960	606,463	639,955
Net worth (farm and nonfarm)	347,710	356,506	349,168	298,069	289,085	352,162
Net worth change		8,796		-51,098		63,077
<b>Ratio Analysis</b>						
Current farm liabilities / assets	78 %	75 %	104 %	128 %	69 %	57 %
Curr. & interm farm liab. / assets	78 %	76 %	109 %	123 %	75 %	66 %
Long term farm liab. / assets	60 %	63 %	60 %	72 %	69 %	74 %
Total debt to asset ratio	59 %	59 %	62 %	66 %	68 %	65 %

Table 15

**Balance Sheet at Market Values**  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
Number of farms	92		22		24	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	35,798	38,402	40,019	27,856	55,763	67,938
Prepaid expenses & supplies	21,413	20,475	19,779	12,967	28,309	33,295
Growing crops	8,691	8,248	7,759	8,196	12,200	11,639
Accounts receivable	19,284	16,512	19,312	8,873	25,925	19,239
Hedging accounts	501	190	916	32	915	12
Crops held for sale or feed	135,662	151,892	128,349	109,381	175,951	235,803
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	5,890	7,634	2,864	2,857	7,109	9,238
Other current assets	12,832	9,982	0	0	21,058	20,287
Total current farm assets	240,072	253,335	218,998	170,162	327,230	397,451
<b>Intermediate Farm Assets</b>						
Breeding livestock	9,200	9,185	284	0	18,491	18,417
Machinery and equipment	355,837	367,874	309,654	320,768	362,325	394,453
Titled vehicles	803	2,127	1,023	955	0	2,583
Other intermediate assets	26,030	22,632	25,684	20,373	40,173	37,700
Total intermediate farm assets	391,869	401,818	336,645	342,095	420,988	453,153
<b>Long Term Farm Assets</b>						
Farm land	687,584	716,993	618,873	620,853	631,067	681,586
Buildings and improvements	115,391	128,985	101,967	105,814	164,449	192,311
Other long-term assets	6,972	8,774	13,564	11,987	5,896	10,141
Total long-term farm assets	809,947	854,751	734,404	738,653	801,412	884,038
Total Farm Assets	1,441,888	1,509,904	1,290,047	1,250,910	1,549,631	1,734,641
<b>Total Nonfarm Assets</b>	279,173	315,075	516,459	551,727	190,912	251,381
<b>Total Assets</b>	1,721,061	1,824,978	1,806,506	1,802,637	1,740,543	1,986,022
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	5,569	5,994	3,513	4,456	3,955	1,480
Accounts payable	15,144	15,743	21,110	11,725	24,149	27,446
Current notes	130,922	124,297	151,376	156,170	161,814	140,929
Government crop loans	0	0	0	0	0	0
Principal due on term debt	35,427	42,951	52,100	46,006	36,160	57,250
Total current farm liabilities	187,062	188,985	228,099	218,357	226,079	227,105
<b>Total intermediate farm liabs</b>	116,673	113,350	146,533	131,116	158,449	156,659
<b>Total long term farm liabilities</b>	190,429	213,161	190,599	229,852	221,139	255,054
<b>Total farm liabilities</b>	494,165	515,496	565,231	579,325	605,667	638,818
<b>Total nonfarm liabilities</b>	8,846	8,092	6,580	6,635	796	1,137
<b>Total liabs excluding deferreds</b>	503,010	523,588	571,812	585,960	606,463	639,955
<b>Total deferred liabilities</b>	1,579	2,385	0	0	0	0
<b>Total liabilities</b>	504,589	525,973	571,812	585,960	606,463	639,955
<b>Retained earnings</b>	347,710	356,506	349,168	298,069	289,085	352,162
<b>Market valuation equity</b>	868,762	942,499	885,527	918,608	844,996	993,905
<b>Net worth (farm and nonfarm)</b>	1,216,472	1,299,005	1,234,695	1,216,677	1,134,081	1,346,067
<b>Net worth excluding deferreds</b>	1,218,051	1,301,390	1,234,695	1,216,677	1,134,081	1,346,067
<b>Net worth change</b>		82,533		-18,018		211,986
<b>Ratio Analysis</b>						
Current farm liabilities / assets	78 %	75 %	104 %	128 %	69 %	57 %
Curr. & interm farm liab. / assets	48 %	46 %	67 %	68 %	51 %	45 %
Long term farm liab. / assets	24 %	25 %	26 %	31 %	28 %	29 %
Total debt to asset ratio	29 %	29 %	32 %	33 %	35 %	32 %
Debt to assets excl deferreds	29 %	29 %	32 %	33 %	35 %	32 %

Table 16

Statement Of Cash Flows  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	24
Beginning cash (farm & nonfarm)	39,627	44,570	58,318
Cash From Operating Activities			
Gross cash farm income	365,699	319,179	493,125
Net nonfarm income	15,980	17,133	11,531
Total cash farm expense	-320,235	-341,017	-411,379
Apparent family living expense	-35,179	-18,503	-38,720
Income and social security tax	-2,962	-1,264	-3,781
Cash from operations	23,303	-24,472	50,776
Cash From Investing Activities			
Sale of breeding livestock	1,215	-	-
Sale of machinery & equipment	4,789	5,366	2,032
Sale of titled vehicles	-	-	-
Sale of farm land	3,166	-	-
Sale of farm buildings	-	-	-
Sale of other farm assets	22,583	71,409	8,312
Sale of nonfarm assets	4,670	282	5,588
Purchase of breeding livestock	-569	-	-50
Purchase of machinery & equip.	-39,525	-39,359	-47,225
Purchase of titled vehicles	-	-	-
Purchase of farm land	-8,646	-3,912	-9,665
Purchase of farm buildings	-12,767	-4,886	-22,556
Purchase of other farm assets	-17,655	-63,657	-4,014
Purchase of nonfarm assets	-3,703	-2,237	-4,672
Cash from investing activities	-46,443	-36,993	-72,251
Cash From Financing Activities			
Money borrowed	187,791	204,251	200,202
Cash gifts and inheritances	16,741	26,231	1,913
Principal payments	-168,155	-181,417	-167,548
Dividends paid	0	-	-
Gifts given	-11,064	-496	-
Cash from financing activities	25,313	48,569	34,566
Net change in cash balance	2,174	-12,896	13,091
Ending cash (farm & nonfarm)	41,801	31,674	71,409

Table 17

Financial Standards Measures  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	24
Liquidity			
Current ratio	1.34	0.78	1.75
Working capital	64,350	-48,194	170,346
Solvency (market)			
Farm debt to asset ratio	34 %	46 %	37 %
Farm equity to asset ratio	66 %	54 %	63 %
Farm debt to equity ratio	52 %	86 %	58 %
Profitability (cost)			
Rate of return on farm assets	0.2 %	-15.0 %	8.6 %
Rate of return on farm equity	-9.5 %	-199.0 %	19.8 %
Operating profit margin	0.4 %	-33.1 %	14.0 %
Net farm income	12,788	-92,346	91,830
Repayment Capacity			
Term debt coverage ratio	86 %	-50 %	178 %
Capital replacement margin	-7,927	-105,179	52,728
Efficiency			
Asset turnover rate (cost)	51.6 %	45.3 %	62.0 %
Operating expense ratio	79.5 %	109.2 %	70.0 %
Depreciation expense ratio	11.2 %	14.6 %	8.6 %
Interest expense ratio	5.9 %	8.1 %	4.6 %
Net farm income ratio	3.4 %	-31.9 %	16.8 %

Table 18

Operator and Labor Information  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	24
Operator Information			
Average number of operators	1.3	1.1	1.5
Average age of operators	51.5	55.2	49.8
Average number of years farming	29.2	31.4	29.4
Results Per Operator			
Working capital	50,129	-45,899	116,808
Total assets (market)	1,421,660	1,716,797	1,361,844
Total liabilities	409,734	558,057	438,827
Net worth (market)	1,011,926	1,158,740	923,017
Net worth excl deferred liabs	1,013,784	1,158,740	923,017
Gross farm income	293,914	275,542	374,526
Total farm expense	283,952	363,490	311,557
Net farm income	9,962	-87,949	62,969
Net nonfarm income	12,448	16,317	7,907
Family living & tax withdrawals	29,712	18,826	29,144
Total acres owned	295.1	344.3	210.1
Total crop acres	832.5	1,104.8	866.0
Crop acres owned	240.1	220.8	182.0
Crop acres cash rented	574.5	850.3	678.0
Crop acres share rented	17.9	33.6	6.0
Total pasture acres	1.0	2.6	-
Labor Analysis			
Number of farms	90	21	24
Total unpaid labor hours	2,704	2,069	2,997
Total hired labor hours	1,665	1,748	2,901
Total labor hours per farm	4,369	3,817	5,898
Unpaid hours per operator	2,096	1,966	2,055
Value of farm production / hour	83.17	62.31	92.28
Net farm income / unpaid hour	6.83	-33.01	30.64
Partnerships			
Number of farms	14	2	6
Number of operators	2.1	-	2.5
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-

Table 19

Financial Summary  
**Michigan Cash Grain Farms, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	92	22	24
Income Statement			
Gross cash farm income	365,699	319,179	493,125
Total cash farm expense	320,235	341,017	411,379
Net cash farm income	45,464	-21,838	81,746
Inventory change	9,635	-28,230	57,224
Depreciation and capital adjust	-42,311	-42,278	-47,140
Net farm income	12,788	-92,346	91,830
Profitability (cost)			
Labor and management earnings	-3,131	-101,864	75,102
Rate of return on assets	0.2 %	-15.0 %	8.6 %
Rate of return on equity	-9.5 %	-199.0 %	19.8 %
Operating profit margin	0.4 %	-33.1 %	14.0 %
Asset turnover rate	51.6 %	45.3 %	62.0 %
Profitability (market)			
Labor and management earnings	-792	-117,726	125,517
Rate of return on assets	3.1 %	-6.1 %	10.4 %
Rate of return on equity	2.5 %	-14.5 %	14.3 %
Operating profit margin	12.4 %	-27.2 %	31.4 %
Asset turnover rate	25.2 %	22.5 %	33.1 %
Liquidity			
Ending current ratio	1.34	0.78	1.75
Ending working capital	64,350	-48,194	170,346
End working capital to gross inc	17.6 %	-15.1 %	34.5 %
Term debt coverage ratio	85.9 %	-50.5 %	178.5 %
Expense as a percent of income	85.4 %	117.3 %	74.6 %
Interest as a percent of income	5.9 %	8.1 %	4.6 %
Solvency (cost)			
Number of farms	92	22	24
Ending farm assets	732,733	603,695	923,616
Ending farm liabilities	515,496	579,325	638,818
Ending total assets	880,094	884,029	992,117
Ending total liabilities	523,588	585,960	639,955
Ending net worth	356,506	298,069	352,162
Net worth change	8,796	-51,098	63,077
Ending farm debt to asset ratio	70 %	96 %	69 %
Beg total debt to asset ratio	59 %	62 %	68 %
End total debt to asset ratio	59 %	66 %	65 %
Solvency (market)			
Number of farms	92	22	24
Ending farm assets	1,509,904	1,250,910	1,734,641
Ending farm liabilities	517,867	579,325	638,818
Ending total assets	1,824,978	1,802,637	1,986,022
Ending total liabilities	525,973	585,960	639,955
Ending net worth	1,299,005	1,216,677	1,346,067
Net worth change	82,533	-18,018	211,986
Ending farm debt to asset ratio	34 %	46 %	37 %
Beg total debt to asset ratio	29 %	32 %	35 %
End total debt to asset ratio	29 %	33 %	32 %
Nonfarm Information			
Net nonfarm income	15,980	17,133	11,531
Farms reporting living expenses	6	1	-
Total family living expense	30,243	-	-
Total living, invest, & capital	31,110	-	-
Crop Acres			
Total acres owned	379	362	306
Total crop acres	1,069	1,160	1,263
Total crop acres owned	308	232	265
Total crop acres cash rented	737	893	989
Total crop acres share rented	23	35	9

*B) Average of 46 Cash Grain Farms, 140 to 799 Acres*

Table 20                      Crop Production and Marketing Summary  
**Michigan Cash Grain, 140 to 799 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Acreage Summary			
Total acres owned	322	249	320
Total crop acres	436	418	494
Crop acres owned	258	193	267
Crop acres cash rented	163	209	210
Crop acres share rented	15	16	18
Total pasture acres	1	-	-
Average Price Received (Cash Sales Only)			
Corn per bushel	2.36	2.22	2.32
Soybeans per bushel	5.80	6.70	5.91
Wheat, Winter per bushel	3.29	3.10	3.48
Straw per ton	9.81	-	-
Hay, Mixed per ton	19.14	-	-
Oats per bushel	2.13	-	-
Sugar Beets per ton	27.85	-	-
Beans, Navy per cwt	1.71	-	-

Table 21

## Farm Income Statement

**Michigan Cash Grain, 140 to 799 Acres, 2003**

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Cash Farm Income			
Beans, Black Turtle	520	-	1,993
Beans, Light Red Kidney	669	-	278
Beans, Navy	6,609	13,849	7,503
Beans, Pinto	302	-	1,159
Beans, Small Red	610	-	1,227
Corn	37,344	27,949	45,233
Corn Silage	739	-	-
Corn, Seed	484	-	1,857
Cucumbers	1,329	-	5,096
Hay, Alfalfa	1,466	845	-
Hay, Mixed	891	-	86
Haylage, Mixed	2,414	-	-
Oats	727	-	635
Potatoes	1,521	-	5,832
Rye	149	96	-
Soybeans	28,373	23,019	32,549
Straw	388	344	386
Sugar Beets	11,885	11,031	19,046
Wheat, Winter	13,469	11,990	20,747
Oats, Seed	39	-	149
Wheat, Seed	478	-	1,831
Other crops	459	-	-
Miscellaneous crop income	59	-	-
Beef Bulls	222	-	689
Beef Cow-Calf, Beef Calves	871	-	288
Beef, Background Beef	171	-	-
Beef, Finish Beef Calves	3,361	-	-
Beef, Finish Yrlg Steers	1,360	3,614	948
Beef, Grazing Beef	405	1,694	-
Broilers	63	-	241
Dairy Steers	783	-	-
Horses, Boarding	251	-	-
Cull breeding livestock	332	-	421
Misc. livestock income	97	-	-
Direct & CC govt payments	2,535	623	2,138
Other government payments	11,409	12,667	13,982
Custom work income	4,888	3,577	1,319
Patronage dividends, cash	163	41	128
Insurance income	3,046	6,668	4,586
Contract livestock income	918	-	-
Other farm income	11,247	4,257	18,468
Gross Cash Farm Income	153,046	122,265	188,808



Table 21, continued

Farm Income Statement

**Michigan Cash Grain, 140 to 799 Acres, 2003**

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Cash Farm Expense			
Seed	12,096	13,304	11,959
Fertilizer	20,171	18,648	28,640
Crop chemicals	10,730	11,556	11,264
Crop insurance	1,499	2,169	1,323
Drying fuel	639	907	572
Irrigation energy	119	-	255
Crop packaging and supplies	130	-	-
Crop custom hire	535	1,609	535
Crop hauling and trucking	204	52	410
Marketing	640	31	676
Crop miscellaneous	719	544	1,472
Feeder livestock purchase	2,608	2,118	351
Purchased feed	1,568	1,116	319
Veterinary	256	80	3
Livestock supplies	967	304	34
Livestock hauling and trucking	31	130	-
Interest	10,086	6,563	15,526
Packaging and supplies	332	71	247
Fuel & oil	5,932	4,724	6,033
Repairs	12,136	12,181	12,143
Custom hire	5,773	2,192	10,639
Hired labor	4,653	4,900	6,112
Land rent	10,510	12,612	17,733
Machinery & bldg leases	949	318	288
Real estate taxes	6,655	4,616	6,563
Farm insurance	5,411	4,802	5,717
Utilities	3,007	2,344	2,221
Hauling and trucking	369	-	-
Dues & professional fees	1,394	1,245	1,676
Miscellaneous	4,714	4,609	3,143
Total cash expense	124,831	113,746	145,852
Net cash farm income	28,215	8,519	42,956
Inventory Changes			
Crops and feed	5,444	1,144	-3,772
Market livestock	588	-77	622
Accounts receivable	-6,064	1,748	-5,295
Prepaid expenses and supplies	623	-620	4,617
Accounts payable	1,794	3,750	4,165
Total inventory change	2,385	5,945	337
Net operating profit	30,600	14,464	43,293
Depreciation and Other Capital Adjustments			
Breeding livestock	452	-568	-50
Machinery and equipment	-15,761	-14,019	-16,136
Buildings and improvements	-3,510	-7,084	466
Other farm capital	2,337	1,666	2,755
Total depr. and other capital adj	-16,482	-20,004	-12,966
Net farm income	14,117	-5,540	30,327

Table 22

Inventory Changes  
**Michigan Cash Grain, 140 to 799 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Net cash farm income	28,215	8,519	42,956
Crops and Feed			
Ending inventory	50,072	21,001	65,441
Beginning inventory	44,629	19,856	69,213
Inventory change	5,444	1,144	-3,772
Market Livestock			
Ending inventory	5,237	4,233	3,150
Beginning inventory	4,649	4,309	2,528
Inventory change	588	-77	622
Accts Receivable & Other Current Assets			
Ending inventory	21,306	6,527	19,213
Beginning inventory	27,370	4,780	24,508
Inventory change	-6,064	1,748	-5,295
Prepaid Expenses and Supplies			
Ending inventory	10,621	5,343	19,278
Beginning inventory	9,998	5,963	14,661
Inventory change	623	-620	4,617
Accounts Payable & Accrued Expenses			
Beginning inventory	10,153	11,603	11,380
Ending inventory	8,359	7,853	7,215
Inventory change	1,794	3,750	4,165
Total inventory change	2,385	5,945	337
Net operating profit	30,600	14,464	43,293

Table 23                      Depreciation and Other Capital Adjustments  
**Michigan Cash Grain, 140 to 799 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Net operating profit	30,600	14,464	43,293
Breeding Livestock			
Ending inventory	3,009	-	1,838
Capital sales	2,301	-	-
Beginning inventory	4,487	568	1,788
Capital purchases	370	-	100
Depreciation, capital adjust.	452	-568	-50
Machinery and Equipment			
Ending inventory	51,395	44,783	55,889
Capital sales	2,818	4,401	425
Beginning inventory	46,439	38,941	45,277
Capital purchases	23,534	24,261	27,173
Depreciation, capital adjust.	-15,761	-14,019	-16,136
Buildings and Improvements			
Ending inventory	36,635	29,165	50,985
Capital sales	-	-	-
Beginning inventory	29,159	28,811	40,045
Capital purchases	10,986	7,438	10,475
Depreciation, capital adjust.	-3,510	-7,084	466
Other Capital Assets			
Ending inventory	18,316	16,528	34,084
Capital sales	7,963	3,262	4,553
Beginning inventory	19,820	11,708	35,590
Capital purchases	4,123	6,416	292
Depreciation, capital adjust.	2,337	1,666	2,755
Total depreciation, capital adj.	-16,482	-20,004	-12,966
Net farm income	14,117	-5,540	30,327

Table 24

Profitability Measures  
Michigan Cash Grain, 140 to 799 Acres, 2003  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Profitability (assets valued at cost)			
Net farm income	14,117	-5,540	30,327
Labor and management earnings	1,866	-11,969	15,318
Rate of return on assets	0.6 %	-8.4 %	3.8 %
Rate of return on equity	-4.3 %	-33.7 %	3.8 %
Operating profit margin	1.7 %	-17.6 %	11.2 %
Asset turnover rate	37.0 %	47.6 %	33.7 %
Interest on farm net worth	12,251	6,429	15,009
Farm interest expense	10,027	6,571	11,725
Value of operator lbr and mgmt.	21,583	22,366	21,921
Return on farm assets	2,561	-21,335	20,131
Average farm assets	403,009	254,741	533,762
Return on farm equity	-7,466	-27,906	8,406
Average farm equity	174,865	82,756	222,911
Value of farm production	149,290	121,278	179,643
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Profitability (assets valued at market)			
Net farm income	47,760	-10,629	123,390
Labor and management earnings	2,516	-39,036	72,133
Rate of return on assets	3.7 %	-4.1 %	9.7 %
Rate of return on equity	3.5 %	-7.0 %	11.9 %
Operating profit margin	24.3 %	-21.8 %	63.0 %
Asset turnover rate	15.2 %	18.8 %	15.4 %
Interest on farm net worth	45,244	28,407	51,257
Farm interest expense	10,027	6,571	11,725
Value of operator lbr and mgmt.	21,583	22,366	21,921
Return on farm assets	36,204	-26,424	113,195
Average farm assets	984,636	645,439	1,165,134
Return on farm equity	26,177	-32,995	101,470
Average farm equity	752,506	473,455	854,283
Value of farm production	149,290	121,278	179,643

Table 25

Liquidity Measures  
**Michigan Cash Grain, 140 to 799 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Liquidity (cash)			
Net cash farm income	28,215	8,519	42,956
Net nonfarm income	15,217	19,830	16,221
Family living and taxes	21,465	20,210	24,968
Real estate principal payments	5,643	4,247	7,621
Cash available for interm. debt	16,324	3,891	26,589
Average intermediate debt	64,225	56,903	86,970
Years to turnover interm. debt	3.9	14.6	3.3
Expense as a % of income	82 %	93 %	77 %
Interest as a % of income	7 %	5 %	8 %
Liquidity (accrual)			
Total accrual farm income	153,013	125,080	180,363
Total accrual operating expense	122,413	110,616	137,070
Net accrual operating income	30,600	14,464	43,293
Net nonfarm income	15,217	19,830	16,221
Family living and taxes	21,465	20,210	24,968
Real estate principal payments	5,643	4,247	7,621
Available for intermediate debt	18,709	9,837	26,925
Average intermediate debt	64,225	56,903	86,970
Years to turnover interm. debt	3.4	5.8	3.2
Expense as a % of income	80 %	88 %	76 %
Interest as a % of income	7 %	5 %	7 %

Table 26

Balance Sheet at Cost Values  
**Michigan Cash Grain, 140 to 799 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
Number of farms	46		11		12	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets						
Cash and checking balance	25,365	35,896	7,673	16,034	51,023	80,181
Prepaid expenses & supplies	9,998	10,621	5,963	5,343	14,661	19,278
Growing crops	5,720	5,640	2,078	3,087	6,362	7,028
Accounts receivable	6,974	6,279	2,702	3,441	17,397	11,435
Hedging accounts	12	20	0	0	0	0
Crops held for sale or feed	44,629	50,072	19,856	21,001	69,213	65,441
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	4,649	5,237	4,309	4,233	2,528	3,150
Other current assets	14,665	9,367	0	0	750	750
Total current farm assets	112,010	123,131	42,582	53,137	161,933	187,263

Intermediate Farm Assets						
Breeding livestock	4,487	3,009	568	0	1,788	1,838
Machinery and equipment	46,043	50,994	38,941	44,783	43,757	54,354
Titled vehicles	397	400	0	0	1,520	1,535
Other intermediate assets	16,388	14,740	2,049	5,336	33,219	32,567
Total intermediate farm assets	67,314	69,143	41,558	50,120	80,283	90,294
Long Term Farm Assets						
Farm land	178,134	183,482	121,629	121,629	226,417	226,417
Buildings and improvements	29,159	36,635	28,811	29,165	40,045	50,985
Other long-term assets	3,432	3,576	9,659	11,192	2,371	1,516
Total long-term farm assets	210,725	223,693	160,099	161,986	268,833	278,919
Total Farm Assets	390,049	415,968	244,239	265,243	511,049	556,475
Total Nonfarm Assets	100,125	107,483	59,806	69,552	89,311	95,965
Total Assets	490,174	523,451	304,046	334,794	600,360	652,440
Liabilities						
Current Farm Liabilities						
Accrued interest	4,056	3,997	3,454	3,462	5,111	1,310
Accounts payable	6,097	4,362	8,149	4,391	6,269	5,905
Current notes	40,550	44,209	37,713	43,510	48,232	65,711
Government crop loans	0	0	0	0	0	0
Principal due on term debt	12,295	19,181	11,530	17,203	13,144	20,344
Total current farm liabilities	62,997	71,749	60,846	68,566	72,755	93,270
Total intermediate farm liabs	52,476	55,380	36,942	57,467	84,715	70,307
Total long term farm liabilities	102,555	111,129	61,190	58,958	141,220	159,436
Total farm liabilities	218,029	238,258	158,978	184,991	298,690	323,013
Total nonfarm liabilities	5,870	5,640	0	1,128	1,591	2,274
Total liabilities	223,899	243,898	158,978	186,118	300,282	325,287
Net worth (farm and nonfarm)	266,276	279,553	145,067	148,676	300,078	327,153
Net worth change		13,277		3,609		27,075
Ratio Analysis						
Current farm liabilities / assets	56 %	58 %	143 %	129 %	45 %	50 %
Curr. & interm farm liab. / assets	64 %	66 %	116 %	122 %	65 %	59 %
Long term farm liab. / assets	49 %	50 %	38 %	36 %	53 %	57 %
Total debt to asset ratio	46 %	47 %	52 %	56 %	50 %	50 %

Table 27

Balance Sheet at Market Values  
**Michigan Cash Grain, 140 to 799 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
Number of farms	46		11		12	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	25,365	35,896	7,673	16,034	51,023	80,181
Prepaid expenses & supplies	9,998	10,621	5,963	5,343	14,661	19,278
Growing crops	5,720	5,640	2,078	3,087	6,362	7,028
Accounts receivable	6,974	6,279	2,702	3,441	17,397	11,435
Hedging accounts	12	20	0	0	0	0
Crops held for sale or feed	44,629	50,072	19,856	21,001	69,213	65,441
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	4,649	5,237	4,309	4,233	2,528	3,150
Other current assets	14,665	9,367	0	0	750	750
Total current farm assets	112,010	123,131	42,582	53,137	161,933	187,263
<b>Intermediate Farm Assets</b>						
Breeding livestock	5,132	4,014	568	0	1,788	1,838
Machinery and equipment	172,056	184,773	140,644	141,558	168,940	195,429
Titled vehicles	685	1,783	2,045	1,909	0	3,917
Other intermediate assets	17,065	15,488	2,049	5,336	35,302	34,651
Total intermediate farm assets	194,938	206,058	145,306	148,803	206,030	235,834
<b>Long Term Farm Assets</b>						
Farm land	584,391	610,495	392,147	385,920	660,295	723,824
Buildings and improvements	59,330	71,911	47,788	54,345	65,261	85,942
Other long-term assets	3,432	3,576	9,659	11,192	2,371	1,516
Total long-term farm assets	647,153	685,982	449,594	451,457	727,927	811,282
Total Farm Assets	954,101	1,015,171	637,482	653,397	1,095,890	1,234,379
Total Nonfarm Assets	222,897	237,367	301,961	323,625	147,647	158,005
Total Assets	1,176,998	1,252,539	939,443	977,021	1,243,537	1,392,385
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	4,056	3,997	3,454	3,462	5,111	1,310
Accounts payable	6,097	4,362	8,149	4,391	6,269	5,905
Current notes	40,550	44,209	37,713	43,510	48,232	65,711
Government crop loans	0	0	0	0	0	0
Principal due on term debt	12,295	19,181	11,530	17,203	13,144	20,344
Total current farm liabilities	62,997	71,749	60,846	68,566	72,755	93,270
Total intermediate farm liabs	52,476	55,380	36,942	57,467	84,715	70,307
Total long term farm liabilities	102,555	111,129	61,190	58,958	141,220	159,436
Total farm liabilities	218,029	238,258	158,978	184,991	298,690	323,013
Total nonfarm liabilities	5,870	5,640	0	1,128	1,591	2,274
Total liabs excluding deferreds	223,899	243,898	158,978	186,118	300,282	325,287
Total deferred liabilities	3,158	4,770	0	0	0	0
Total liabilities	227,056	248,668	158,978	186,118	300,282	325,287
Retained earnings	266,276	279,553	145,067	148,676	300,078	327,153
Market valuation equity	683,666	724,318	635,397	642,227	643,177	739,944
Net worth (farm and nonfarm)	949,942	1,003,870	780,464	790,903	943,255	1,067,097
Net worth excluding deferreds	953,100	1,008,641	780,464	790,903	943,255	1,067,097
Net worth change		53,928		10,438		123,842
<b>Ratio Analysis</b>						
Current farm liabilities / assets	56 %	58 %	143 %	129 %	45 %	50 %
Curr. & interm farm liab. / assets	38 %	39 %	52 %	62 %	43 %	39 %
Long term farm liab. / assets	16 %	16 %	14 %	13 %	19 %	20 %
Total debt to asset ratio	19 %	20 %	17 %	19 %	24 %	23 %
Debt to assets excl deferreds	19 %	19 %	17 %	19 %	24 %	23 %

Table 28

## Statement Of Cash Flows

**Michigan Cash Grain, 140 to 799 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Beginning cash (farm & nonfarm)	28,901	10,755	55,049
Cash From Operating Activities			
Gross cash farm income	153,046	122,265	188,808
Net nonfarm income	15,217	19,830	16,221
Total cash farm expense	-124,831	-113,746	-145,852
Apparent family living expense	-20,150	-18,786	-24,915
Income and social security tax	-1,314	-1,425	-52
Cash from operations	21,967	8,138	34,210
Cash From Investing Activities			
Sale of breeding livestock	2,301	-	-
Sale of machinery & equipment	2,818	4,401	425
Sale of titled vehicles	-	-	-
Sale of farm land	446	-	-
Sale of farm buildings	-	-	-
Sale of other farm assets	7,963	3,262	4,553
Sale of nonfarm assets	1,561	565	1,042
Purchase of breeding livestock	-370	-	-100
Purchase of machinery & equip.	-23,534	-24,261	-27,173
Purchase of titled vehicles	-	-	-
Purchase of farm land	-6,242	-	-3,458
Purchase of farm buildings	-10,986	-7,438	-10,475
Purchase of other farm assets	-4,123	-6,416	-292
Purchase of nonfarm assets	-1,280	-878	0
Cash from investing activities	-31,445	-30,765	-35,479
Cash From Financing Activities			
Money borrowed	67,180	81,044	69,767
Cash gifts and inheritances	4,497	1,584	3,375
Principal payments	-45,447	-50,158	-40,631
Dividends paid	-1	-	-
Gifts given	-5,549	-992	-
Cash from financing activities	20,681	31,477	32,511
Net change in cash balance	11,203	8,851	31,241
Ending cash (farm & nonfarm)	40,104	19,606	86,291



Table 29

## Financial Standards Measures

**Michigan Cash Grain, 140 to 799 Acres, 2003**

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Liquidity			
Current ratio	1.72	0.77	2.01
Working capital	51,382	-15,429	93,993
Solvency (market)			
Farm debt to asset ratio	24 %	28 %	26 %
Farm equity to asset ratio	76 %	72 %	74 %
Farm debt to equity ratio	31 %	39 %	35 %
Profitability (cost)			
Rate of return on farm assets	0.6 %	-8.4 %	3.8 %
Rate of return on farm equity	-4.3 %	-33.7 %	3.8 %
Operating profit margin	1.7 %	-17.6 %	11.2 %
Net farm income	14,117	-5,540	30,327
Repayment Capacity			
Term debt coverage ratio	150 %	113 %	174 %
Capital replacement margin	11,690	2,553	21,242
Efficiency			
Asset turnover rate (cost)	37.0 %	47.6 %	33.7 %
Operating expense ratio	73.4 %	83.2 %	69.5 %
Depreciation expense ratio	10.8 %	16.0 %	7.2 %
Interest expense ratio	6.6 %	5.3 %	6.5 %
Net farm income ratio	9.2 %	-4.4 %	16.8 %

Table 30

Operator and Labor Information  
**Michigan Cash Grain, 140 to 799 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Operator Information			
Average number of operators	1.1	1.0	1.2
Average age of operators	53.2	58.5	47.5
Average number of years farming	31.3	34.1	31.5
Results Per Operator			
Working capital	47,272	-15,429	80,566
Total assets (market)	1,152,336	977,021	1,193,472
Total liabilities	228,775	186,118	278,818
Net worth (market)	923,561	790,903	914,655
Net worth excl deferred liabs	927,949	790,903	914,655
Gross farm income	140,772	125,080	154,597
Total farm expense	127,784	130,620	128,603
Net farm income	12,988	-5,540	25,994
Net nonfarm income	14,000	19,830	13,904
Family living & tax withdrawals	19,748	20,210	21,401
Total acres owned	296.5	248.5	273.9
Total crop acres	401.2	417.8	423.7
Crop acres owned	237.3	192.8	229.0
Crop acres cash rented	150.1	209.4	179.7
Crop acres share rented	13.9	15.6	15.1
Total pasture acres	1.3	-	-
Labor Analysis			
Number of farms	45	11	12
Total unpaid labor hours	2,208	2,119	2,313
Total hired labor hours	337	410	467
Total labor hours per farm	2,545	2,529	2,780
Unpaid hours per operator	2,028	2,119	1,982
Value of farm production / hour	57.85	47.95	64.63
Net farm income / unpaid hour	5.41	-2.61	13.11

Table 31

Financial Summary  
**Michigan Cash Grain, 140 to 799 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	46	11	12
Income Statement			
Gross cash farm income	153,046	122,265	188,808
Total cash farm expense	124,831	113,746	145,852
Net cash farm income	28,215	8,519	42,956
Inventory change	2,385	5,945	337
Depreciation and capital adjust	-16,482	-20,004	-12,966
Net farm income	14,117	-5,540	30,327
Profitability (cost)			
Labor and management earnings	1,866	-11,969	15,318
Rate of return on assets	0.6 %	-8.4 %	3.8 %
Rate of return on equity	-4.3 %	-33.7 %	3.8 %
Operating profit margin	1.7 %	-17.6 %	11.2 %
Asset turnover rate	37.0 %	47.6 %	33.7 %
Profitability (market)			
Labor and management earnings	2,516	-39,036	72,133
Rate of return on assets	3.7 %	-4.1 %	9.7 %
Rate of return on equity	3.5 %	-7.0 %	11.9 %
Operating profit margin	24.3 %	-21.8 %	63.0 %
Asset turnover rate	15.2 %	18.8 %	15.4 %
Liquidity			
Ending current ratio	1.72	0.77	2.01
Ending working capital	51,382	-15,429	93,993
End working capital to gross inc	33.6 %	-12.6 %	49.8 %
Term debt coverage ratio	149.6 %	112.8 %	173.9 %
Expense as a percent of income	80.0 %	88.4 %	76.0 %
Interest as a percent of income	6.6 %	5.3 %	6.5 %
Solvency (cost)			
Number of farms	46	11	12
Ending farm assets	415,968	265,243	556,475
Ending farm liabilities	238,258	184,991	323,013
Ending total assets	523,451	334,794	652,440
Ending total liabilities	243,898	186,118	325,287
Ending net worth	279,553	148,676	327,153
Net worth change	13,277	3,609	27,075
Ending farm debt to asset ratio	57 %	70 %	58 %
Beg total debt to asset ratio	46 %	52 %	50 %
End total debt to asset ratio	47 %	56 %	50 %
Solvency (market)			
Number of farms	46	11	12
Ending farm assets	1,015,171	653,397	1,234,379
Ending farm liabilities	242,999	184,991	323,013
Ending total assets	1,252,539	977,021	1,392,385
Ending total liabilities	248,668	186,118	325,287
Ending net worth	1,003,870	790,903	1,067,097
Net worth change	53,928	10,438	123,842
Ending farm debt to asset ratio	24 %	28 %	26 %
Beg total debt to asset ratio	19 %	17 %	24 %
End total debt to asset ratio	20 %	19 %	23 %
Nonfarm Information			
Net nonfarm income	15,217	19,830	16,221
Crop Acres			
Total acres owned	322	249	320
Total crop acres	436	418	494
Total crop acres owned	258	193	267
Total crop acres cash rented	163	209	210
Total crop acres share rented	15	16	18

*C) Average of 22 Cash Grain Farms, 800 to 1199 Acres*

Table 32

Crop Production and Marketing Summary  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	6	5
Acreage Summary			
Total acres owned	380	271	427
Total crop acres	1,017	952	1,099
Crop acres owned	312	222	370
Crop acres cash rented	662	629	729
Crop acres share rented	43	101	-
Total pasture acres	3	10	-
Average Price Received (Cash Sales Only)			
Soybeans per bushel	5.89	5.54	5.92
Corn per bushel	2.32	2.12	-
Wheat, Winter per bushel	3.10	-	-
Straw per ton	3.69	-	-

Table 33

## Farm Income Statement

**Michigan Cash Grain, 800 to 1199 Acres, 2003**

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	6	5
Cash Farm Income			
Beans, Green	1,440	-	-
Beans, Navy	10,768	6,976	24,296
Corn	75,511	52,662	69,202
Corn, Seed	22,933	37,838	-
Cucumbers	14,913	35,473	23,049
Hay, Alfalfa	1,741	4,840	-
Hay, Mixed	445	50	-
Potatoes	35,108	-	154,476
Soybeans	64,781	43,011	92,467
Straw	719	430	530
Sugar Beets	15,688	9,282	-
Wheat, Winter	21,889	16,008	41,014
Miscellaneous crop income	16	57	-
Beef Cow-Calf, Beef Calves	2,267	-	203
Beef, Background Beef	348	-	-
Beef, Finish Beef Calves	959	-	-
Chickens, Egg Product., Eggs	669	-	2,942
Dairy Steers	424	1,553	-
Hogs, Finish Feeder Pigs	185	-	-
Sheep, Lamb Finishing	1,550	-	-
Sheep, Market Lambs, Mkt Lambs	2,833	-	-
Cull breeding livestock	191	-	-
Misc. livestock income	79	-	60
Direct & CC govt payments	3,335	-	-
Other government payments	21,523	16,892	30,240
Custom work income	7,626	14,317	3,464
Patronage dividends, cash	79	152	163
Insurance income	4,022	6,972	3,052
Cash from hedging accts	210	-	-
Other farm income	15,089	17,023	8,031
Gross Cash Farm Income	327,338	263,535	453,190

Table 33, continued

Farm Income Statement

**Michigan Cash Grain, 800 to 1199 Acres, 2003**

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	6	5
Cash Farm Expense			
Seed	29,055	29,934	36,208
Fertilizer	38,135	25,295	41,205
Crop chemicals	26,111	18,253	37,243
Crop insurance	2,917	2,861	2,767
Drying fuel	1,918	-	2,697
Crop livestock supplies	1,345	-	5,920
Crop custom hire	3,982	2,288	-
Hauling and trucking	1,975	-	8,527
Crop marketing	3,266	1,476	11,945
Crop miscellaneous	465	189	34
Feeder livestock purchase	5,153	740	760
Purchased feed	1,726	2,289	1,894
Veterinary	362	741	22
Livestock livestock supplies	258	-	142
Livestock marketing	231	-	43
Interest	15,019	13,594	20,881
Packaging and supplies	170	-	-
Fuel & oil	13,425	10,841	19,400
Repairs	27,874	24,900	35,397
Custom hire	9,176	15,353	6,111
Hired labor	13,965	16,531	31,262
Land rent	43,437	42,756	51,105
Machinery & bldg leases	4,553	535	7,133
Real estate taxes	6,974	7,847	8,913
Farm insurance	10,669	10,478	10,134
Utilities	7,349	7,209	9,704
Dues & professional fees	2,273	1,095	3,056
Miscellaneous	6,415	5,743	7,828
Total cash expense	278,199	240,949	360,332
Net cash farm income	49,139	22,586	92,858
Inventory Changes			
Crops and feed	12,425	-11,913	33,737
Market livestock	3,150	-25	-158
Accounts receivable	-7,312	-13,613	-11,788
Prepaid expenses and supplies	1,324	-5,657	509
Accounts payable	-7,961	-7,193	-2,839
Total inventory change	1,627	-38,401	19,461
Net operating profit	50,766	-15,815	112,319
Depreciation and Other Capital Adjustments			
Breeding livestock	681	-	-
Machinery and equipment	-36,872	-44,329	-32,506
Buildings and improvements	-6,113	-1,084	-9,189
Other farm capital	3,986	0	2,028
Total depr. and other capital adj	-38,318	-45,412	-39,667
Net farm income	12,448	-61,227	72,652

Table 34

Inventory Changes  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	5	6
Net cash farm income	49,139	26,128	76,520
Crops and Feed			
Ending inventory	199,936	110,770	323,707
Beginning inventory	187,511	123,063	291,460
Inventory change	12,425	-12,293	32,248
Market Livestock			
Ending inventory	6,809	1,500	160
Beginning inventory	3,659	1,530	292
Inventory change	3,150	-30	-132
Accts Receivable & Other Current Assets			
Ending inventory	17,081	10,044	31,228
Beginning inventory	24,393	26,394	40,766
Inventory change	-7,312	-16,350	-9,538
Prepaid Expenses and Supplies			
Ending inventory	26,021	17,436	32,934
Beginning inventory	24,697	23,373	31,306
Inventory change	1,324	-5,937	1,629
Accounts Payable & Accrued Expenses			
Beginning inventory	13,358	16,115	12,101
Ending inventory	21,319	25,203	14,963
Inventory change	-7,961	-9,088	-2,863
Total inventory change	1,627	-43,699	21,343
Net operating profit	50,766	-17,570	97,863

Table 35

Depreciation and Other Capital Adjustments  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	5	6
Net operating profit	50,766	-17,570	97,863
Breeding Livestock			
Ending inventory	9,254	-	375
Capital sales	266	-	-
Beginning inventory	7,352	-	375
Capital purchases	1,487	-	-
Depreciation, capital adjust.	681	-	-
Machinery and Equipment			
Ending inventory	116,005	79,554	90,384
Capital sales	7,252	700	5,033
Beginning inventory	119,178	75,356	95,667
Capital purchases	40,951	52,312	32,039
Depreciation, capital adjust.	-36,872	-47,414	-32,289
Buildings and Improvements			
Ending inventory	50,429	44,323	73,614
Capital sales	-	-	-
Beginning inventory	51,255	42,998	74,569
Capital purchases	5,287	2,337	6,703
Depreciation, capital adjust.	-6,113	-1,012	-7,657
Other Capital Assets			
Ending inventory	32,339	16,165	4,541
Capital sales	4,365	13,295	3,435
Beginning inventory	31,543	31,412	2,851
Capital purchases	1,175	-1,951	3,435
Depreciation, capital adjust.	3,986	0	1,690
Total depreciation, capital adj.	-38,318	-48,425	-38,256
Net farm income	12,448	-65,996	59,607



Table 36

Profitability Measures  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	5	6
Profitability (assets valued at cost)			
Net farm income	12,448	-65,996	59,607
Labor and management earnings	-7,332	-77,047	39,248
Rate of return on assets	-0.7 %	-14.0 %	5.0 %
Rate of return on equity	-6.5 %	-54.1 %	7.4 %
Operating profit margin	-1.6 %	-31.0 %	10.2 %
Asset turnover rate	42.9 %	45.3 %	49.0 %
Interest on farm net worth	19,780	11,051	20,360
Farm interest expense	15,832	19,418	18,492
Value of operator lbr and mgmt.	33,672	33,576	34,765
Return on farm assets	-5,392	-80,154	43,334
Average farm assets	767,858	570,716	868,335
Return on farm equity	-21,224	-99,572	24,842
Average farm equity	325,254	184,182	333,936
Value of farm production	329,405	258,493	425,699
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	5	6
Profitability (assets valued at market)			
Net farm income	48,343	-44,234	113,725
Labor and management earnings	-18,907	-91,987	66,880
Rate of return on assets	2.0 %	-4.9 %	7.4 %
Rate of return on equity	1.3 %	-9.8 %	10.1 %
Operating profit margin	9.3 %	-22.6 %	22.9 %
Asset turnover rate	21.1 %	21.9 %	32.4 %
Interest on farm net worth	67,251	47,753	46,845
Farm interest expense	15,832	19,418	18,492
Value of operator lbr and mgmt.	33,672	33,576	34,765
Return on farm assets	30,503	-58,392	97,452
Average farm assets	1,563,446	1,182,412	1,315,150
Return on farm equity	14,671	-77,810	78,960
Average farm equity	1,120,842	795,878	780,750
Value of farm production	329,405	258,493	425,699

Table 37

Liquidity Measures  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	5	6
Liquidity (cash)			
Net cash farm income	49,139	26,128	76,520
Net nonfarm income	28,408	28,608	12,881
Family living and taxes	56,222	27,969	21,871
Real estate principal payments	10,484	9,731	9,283
Cash available for interm. debt	10,841	17,036	58,248
Average intermediate debt	140,522	141,016	215,898
Years to turnover interm. debt	13.0	8.3	3.7
Expense as a % of income	85 %	91 %	81 %
Interest as a % of income	5 %	5 %	5 %
Liquidity (accrual)			
Total accrual farm income	335,602	262,128	427,910
Total accrual operating expense	284,836	279,698	330,047
Net accrual operating income	50,766	-17,570	97,863
Net nonfarm income	28,408	28,608	12,881
Family living and taxes	56,222	27,969	21,871
Real estate principal payments	10,484	9,731	9,283
Available for intermediate debt	12,467	-26,663	79,591
Average intermediate debt	140,522	141,016	215,898
Years to turnover interm. debt	11.3	**	2.7
Expense as a % of income	85 %	107 %	77 %
Interest as a % of income	5 %	7 %	4 %

\*\* Income insufficient to meet debt servicing requirements

Table 38

Balance Sheet at Cost Values  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
Number of farms	22		5		6	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	26,045	24,198	27,144	30,506	49,819	30,122
Prepaid expenses & supplies	24,697	26,021	23,373	17,436	31,306	32,934
Growing crops	5,731	4,956	3,502	3,948	7,760	5,600
Accounts receivable	15,378	11,194	18,864	5,956	26,370	25,628
Hedging accounts	1,088	543	4,028	140	8	0
Crops held for sale or feed	187,511	199,936	123,063	110,770	291,460	323,707
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	3,659	6,809	1,530	1,500	292	160
Other current assets	2,196	389	0	0	6,627	0
Total current farm assets	266,304	274,045	201,504	170,256	413,643	418,151
<b>Intermediate Farm Assets</b>						
Breeding livestock	7,352	9,254	0	0	375	375
Machinery and equipment	118,340	115,175	75,356	79,554	95,667	90,384
Titled vehicles	837	829	0	0	0	0
Other intermediate assets	16,371	15,031	3,653	1,457	2,320	4,010
Total intermediate farm assets	142,900	140,289	79,009	81,011	98,362	94,769
<b>Long Term Farm Assets</b>						
Farm land	276,891	301,121	231,326	248,538	273,835	288,668
Buildings and improvements	51,255	50,429	42,998	44,323	74,569	73,614
Other long-term assets	15,172	17,308	27,758	14,708	531	531
Total long-term farm assets	343,318	368,859	302,082	307,570	348,934	362,813
Total Farm Assets	752,523	783,193	582,596	558,837	860,938	875,733
Total Nonfarm Assets	150,084	151,478	388,703	408,570	28,830	34,605
Total Assets	902,607	934,671	971,299	967,407	889,768	910,338
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	3,710	4,523	922	6,383	3,284	1,871
Accounts payable	9,648	16,796	15,193	18,820	8,817	13,092
Current notes	147,121	124,009	117,644	64,270	193,246	166,175
Government crop loans	0	0	0	0	0	0
Principal due on term debt	33,141	41,818	35,414	50,196	52,746	53,224
Total current farm liabilities	193,620	187,145	169,173	139,669	258,092	234,362
Total intermediate farm liabs	107,603	120,766	78,726	133,804	167,950	178,250
Total long term farm liabilities	136,791	139,283	119,552	132,143	127,961	102,185
Total farm liabilities	438,014	447,194	367,451	405,617	554,002	514,797
Total nonfarm liabilities	6,580	6,177	28,953	26,715	0	388
Total liabilities	444,595	453,372	396,404	432,332	554,002	515,184
Net worth (farm and nonfarm)	458,012	481,299	574,895	535,075	335,766	395,153
Net worth change		23,287		-39,820		59,387
<b>Ratio Analysis</b>						
Current farm liabilities / assets	73 %	68 %	84 %	82 %	62 %	56 %
Curr. & interm farm liab. / assets	74 %	74 %	88 %	109 %	83 %	80 %
Long term farm liab. / assets	40 %	38 %	40 %	43 %	37 %	28 %
Total debt to asset ratio	49 %	49 %	41 %	45 %	62 %	57 %

Table 39

Balance Sheet at Market Values  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
Number of farms	22		5		6	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	26,045	24,198	27,144	30,506	49,819	30,122
Prepaid expenses & supplies	24,697	26,021	23,373	17,436	31,306	32,934
Growing crops	5,731	4,956	3,502	3,948	7,760	5,600
Accounts receivable	15,378	11,194	18,864	5,956	26,370	25,628
Hedging accounts	1,088	543	4,028	140	8	0
Crops held for sale or feed	187,511	199,936	123,063	110,770	291,460	323,707
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	3,659	6,809	1,530	1,500	292	160
Other current assets	2,196	389	0	0	6,627	0
Total current farm assets	266,304	274,045	201,504	170,256	413,643	418,151
<b>Intermediate Farm Assets</b>						
Breeding livestock	7,352	9,254	0	0	375	375
Machinery and equipment	410,507	412,366	288,596	310,980	298,138	297,989
Titled vehicles	1,926	5,166	0	0	7,061	11,075
Other intermediate assets	22,239	20,447	3,653	1,457	4,820	3,986
Total intermediate farm assets	442,023	447,232	292,249	312,437	310,393	313,425
<b>Long Term Farm Assets</b>						
Farm land	661,822	706,037	527,908	550,321	450,734	500,767
Buildings and improvements	144,842	152,106	133,991	133,691	105,393	116,732
Other long-term assets	15,172	17,308	27,758	14,708	531	531
Total long-term farm assets	821,836	875,451	689,658	698,720	556,658	618,030
Total Farm Assets	1,530,164	1,596,729	1,183,411	1,181,414	1,280,693	1,349,606
Total Nonfarm Assets	308,775	355,161	682,798	776,948	192,034	289,847
Total Assets	1,838,939	1,951,890	1,866,209	1,958,362	1,472,727	1,639,453
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	3,710	4,523	922	6,383	3,284	1,871
Accounts payable	9,648	16,796	15,193	18,820	8,817	13,092
Current notes	147,121	124,009	117,644	64,270	193,246	166,175
Government crop loans	0	0	0	0	0	0
Principal due on term debt	33,141	41,818	35,414	50,196	52,746	53,224
Total current farm liabilities	193,620	187,145	169,173	139,669	258,092	234,362
Total intermediate farm liabs	107,603	120,766	78,726	133,804	167,950	178,250
Total long term farm liabilities	136,791	139,283	119,552	132,143	127,961	102,185
Total farm liabilities	438,014	447,194	367,451	405,617	554,002	514,797
Total nonfarm liabilities	6,580	6,177	28,953	26,715	0	388
Total liabs excluding deferreds	444,595	453,372	396,404	432,332	554,002	515,184
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	444,595	453,372	396,404	432,332	554,002	515,184
Retained earnings	458,012	481,299	574,895	535,075	335,766	395,153
Market valuation equity	936,332	1,017,219	894,911	990,955	582,959	729,115
Net worth (farm and nonfarm)	1,394,344	1,498,518	1,469,806	1,526,030	918,725	1,124,268
Net worth excluding deferreds	1,394,344	1,498,518	1,469,806	1,526,030	918,725	1,124,268
Net worth change		104,174		56,224		205,543
<b>Ratio Analysis</b>						
Current farm liabilities / assets	73 %	68 %	84 %	82 %	62 %	56 %
Curr. & interm farm liab. / assets	43 %	43 %	50 %	57 %	59 %	56 %
Long term farm liab. / assets	17 %	16 %	17 %	19 %	23 %	17 %
Total debt to asset ratio	24 %	23 %	21 %	22 %	38 %	31 %
Debt to assets excl deferreds	24 %	23 %	21 %	22 %	38 %	31 %

Table 40

Statement Of Cash Flows  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	5	6
Beginning cash (farm & nonfarm)	34,659	31,735	52,203
Cash From Operating Activities			
Gross cash farm income	327,338	290,801	405,333
Net nonfarm income	28,408	28,608	12,881
Total cash farm expense	-278,199	-264,673	-328,813
Apparent family living expense	-52,656	-27,419	-21,438
Income and social security tax	-3,567	-550	-433
Cash from operations	21,325	26,767	67,530
Cash From Investing Activities			
Sale of breeding livestock	266	-	-
Sale of machinery & equipment	7,252	700	5,033
Sale of titled vehicles	-	-	-
Sale of farm land	12,306	-	-
Sale of farm buildings	-	-	-
Sale of other farm assets	4,365	13,295	3,435
Sale of nonfarm assets	15,414	-	20,267
Purchase of breeding livestock	-1,487	-	-
Purchase of machinery & equip.	-40,951	-52,312	-32,039
Purchase of titled vehicles	-	-	-
Purchase of farm land	-13,931	-17,212	-14,833
Purchase of farm buildings	-5,287	-2,337	-6,703
Purchase of other farm assets	-1,175	1,951	-3,435
Purchase of nonfarm assets	-11,671	-	-18,889
Cash from investing activities	-34,899	-55,915	-47,164
Cash From Financing Activities			
Money borrowed	155,468	194,390	134,635
Cash gifts and inheritances	7,284	-	901
Principal payments	-154,407	-166,471	-176,315
Dividends paid	-	-	-
Gifts given	-	-	-
Cash from financing activities	8,345	27,919	-40,780
Net change in cash balance	-5,230	-1,229	-20,414
Ending cash (farm & nonfarm)	29,430	30,506	31,789

Table 41

Financial Standards Measures  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	5	6
Liquidity			
Current ratio	1.46	1.22	1.78
Working capital	86,900	30,587	183,789
Solvency (market)			
Farm debt to asset ratio	28 %	34 %	38 %
Farm equity to asset ratio	72 %	66 %	62 %
Farm debt to equity ratio	39 %	52 %	62 %
Profitability (cost)			
Rate of return on farm assets	-0.7 %	-14.0 %	5.0 %
Rate of return on farm equity	-6.5 %	-54.1 %	7.4 %
Operating profit margin	-1.6 %	-31.0 %	10.2 %
Net farm income	12,448	-65,996	59,607
Repayment Capacity			
Term debt coverage ratio	78 %	-6 %	155 %
Capital replacement margin	-10,567	-54,003	36,128
Efficiency			
Asset turnover rate (cost)	42.9 %	45.3 %	49.0 %
Operating expense ratio	80.2 %	99.3 %	72.8 %
Depreciation expense ratio	11.4 %	18.5 %	8.9 %
Interest expense ratio	4.7 %	7.4 %	4.3 %
Net farm income ratio	3.7 %	-25.2 %	13.9 %

Table 42

Operator and Labor Information  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	5	6
Operator Information			
Average number of operators	1.4	1.0	1.3
Average age of operators	50.2	48.0	47.5
Average number of years farming	27.6	22.6	22.8
Results Per Operator			
Working capital	61,473	29,987	137,842
Total assets (market)	1,380,758	1,919,962	1,229,589
Total liabilities	320,713	423,855	386,388
Net worth (market)	1,060,045	1,496,108	843,201
Net worth excl deferred liabs	1,060,045	1,496,108	843,201
Gross farm income	237,403	256,988	320,933
Total farm expense	228,598	321,690	276,227
Net farm income	8,806	-64,702	44,706
Net nonfarm income	20,096	28,047	9,661
Family living & tax withdrawals	39,772	27,421	16,403
Total acres owned	268.5	248.6	273.4
Total crop acres	719.2	962.4	787.9
Crop acres owned	221.0	211.6	236.9
Crop acres cash rented	468.0	740.0	551.1
Crop acres share rented	30.2	10.8	-
Total pasture acres	1.9	11.8	-
Labor Analysis			
Number of farms	22	5	6
Total unpaid labor hours	3,071	2,428	3,095
Total hired labor hours	1,230	1,658	2,223
Total labor hours per farm	4,301	4,086	5,318
Unpaid hours per operator	2,173	2,380	2,322
Value of farm production / hour	76.59	63.27	80.05
Net farm income / unpaid hour	4.05	-27.18	19.26
Partnerships			
Number of farms	8	1	2
Number of operators	2.0	-	-
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-

Table 43

Financial Summary  
**Michigan Cash Grain, 800 to 1199 Acres, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	22	5	6
Income Statement			
Gross cash farm income	327,338	290,801	405,333
Total cash farm expense	278,199	264,673	328,813
Net cash farm income	49,139	26,128	76,520
Inventory change	1,627	-43,699	21,343
Depreciation and capital adjust	-38,318	-48,425	-38,256
Net farm income	12,448	-65,996	59,607
Profitability (cost)			
Labor and management earnings	-7,332	-77,047	39,248
Rate of return on assets	-0.7 %	-14.0 %	5.0 %
Rate of return on equity	-6.5 %	-54.1 %	7.4 %
Operating profit margin	-1.6 %	-31.0 %	10.2 %
Asset turnover rate	42.9 %	45.3 %	49.0 %
Profitability (market)			
Labor and management earnings	-18,907	-91,987	66,880
Rate of return on assets	2.0 %	-4.9 %	7.4 %
Rate of return on equity	1.3 %	-9.8 %	10.1 %
Operating profit margin	9.3 %	-22.6 %	22.9 %
Asset turnover rate	21.1 %	21.9 %	32.4 %
Liquidity			
Ending current ratio	1.46	1.22	1.78
Ending working capital	86,900	30,587	183,789
End working capital to gross inc	26.5 %	10.5 %	45.3 %
Term debt coverage ratio	78.1 %	-6.0 %	154.6 %
Expense as a percent of income	84.9 %	106.7 %	77.1 %
Interest as a percent of income	4.7 %	7.4 %	4.3 %
Solvency (cost)			
Number of farms	22	5	6
Ending farm assets	783,193	558,837	875,733
Ending farm liabilities	447,194	405,617	514,797
Ending total assets	934,671	967,407	910,338
Ending total liabilities	453,372	432,332	515,184
Ending net worth	481,299	535,075	395,153
Net worth change	23,287	-39,820	59,387
Ending farm debt to asset ratio	57 %	73 %	59 %
Beg total debt to asset ratio	49 %	41 %	62 %
End total debt to asset ratio	49 %	45 %	57 %
Solvency (market)			
Number of farms	22	5	6
Ending farm assets	1,596,729	1,181,414	1,349,606
Ending farm liabilities	447,194	405,617	514,797
Ending total assets	1,951,890	1,958,362	1,639,453
Ending total liabilities	453,372	432,332	515,184
Ending net worth	1,498,518	1,526,030	1,124,268
Net worth change	104,174	56,224	205,543
Ending farm debt to asset ratio	28 %	34 %	38 %
Beg total debt to asset ratio	24 %	21 %	38 %
End total debt to asset ratio	23 %	22 %	31 %
Nonfarm Information			
Net nonfarm income	28,408	28,608	12,881
Crop Acres			
Total acres owned	380	254	365
Total crop acres	1,017	982	1,051
Total crop acres owned	312	216	316
Total crop acres cash rented	662	755	735
Total crop acres share rented	43	11	-



*D) Average of 24 Cash Grain Farms, 1200 Acres plus*

Table 44                      Crop Production and Marketing Summary  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	7	7
Acreage Summary			
Total acres owned	487	682	291
Total crop acres	2,329	2,732	2,646
Crop acres owned	401	417	280
Crop acres cash rented	1,908	2,315	2,365
Crop acres share rented	20	-	-
Total pasture acres	-	-	-
Average Price Received (Cash Sales Only)			
Soybeans per bushel	5.49	5.43	5.43
Corn per bushel	2.19	2.02	2.47
Wheat, Winter per bushel	3.24	-	3.35
Straw per ton	5.54	-	-
Corn, Seed per bushel	2.34	-	-

Table 45

## Farm Income Statement

**Michigan Cash Grain, 1200 Acres Plus, 2003**

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	7	7
Cash Farm Income			
Alfalfa Seed	121	-	415
Barley	1,334	-	4,574
Beans, Green	5,831	7,566	-
Beans, Navy	9,153	-	31,383
Clover Seed	2,510	-	8,606
Corn	206,659	229,946	230,015
Corn Silage	4,726	-	1,940
Corn, Ear	396	-	1,358
Corn, Seed	48,587	60,539	4,650
Cucumbers	17,908	-	-
Grass Seed, Fescue	50	-	171
Hay, Alfalfa	3,047	-	9,299
Hay, Mixed	567	1,077	-
Haylage, Alfalfa	5,948	-	4,219
Maple Syrup	104	-	-
Oatlage	675	-	-
Oats	4,154	-	11,439
Potatoes	42,747	43,483	103,076
Soybeans	183,986	204,431	186,291
Soybeans Seed	2,142	-	7,345
Straw	2,843	2,019	7,237
Sugar Beets	25,815	33,144	55,364
Sweet Corn	10,637	29,014	7,457
Wheat, Winter	59,882	80,637	101,176
Barley, Seed	1,325	-	4,544
Oats, Seed	767	-	2,628
Miscellaneous crop income	13	-	43
Beef, Finish Yrlg Steers	432	-	-
Dairy Heifers (for sale)	894	-	-
Hogs, Farrow-Fin, Raised Hogs	6,842	-	-
Hogs, Weaning to Finish	5,257	-	-
Cull breeding livestock	347	-	-
Misc. livestock income	1,592	-	3,402
Direct & CC govt payments	2,121	-	-
Other government payments	57,700	60,344	68,627
Custom work income	41,193	50,474	57,891
Insurance income	13,690	1,784	27,844
Cash from hedging accts	1,214	-296	-389
Other farm income	35,240	45,005	12,624
Gross Cash Farm Income	808,448	849,169	953,232

Table 45, continued Farm Income Statement  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	7	7
Cash Farm Expense			
Seed	59,793	47,004	84,436
Fertilizer	104,658	151,175	104,877
Crop chemicals	79,939	98,089	99,273
Crop insurance	5,832	5,376	6,471
Drying fuel	3,673	2,214	2,017
Irrigation energy	2,597	3,750	-
Crop custom hire	1,410	-	-
Hauling and trucking	757	157	2,337
Crop marketing	846	32	1,140
Crop miscellaneous	5,835	2,361	16,369
Feeder livestock purchase	1,924	-	-
Purchased feed	4,654	56	2,685
Veterinary	296	-	-
Livestock supplies	332	-	1,137
Livestock marketing	114	-	29
Interest	50,295	55,989	39,596
Packaging and supplies	10,791	-	36,998
Fuel & oil	34,932	39,470	46,008
Repairs	54,396	59,941	57,098
Custom hire	24,639	51,608	6,772
Hired labor	60,167	82,513	78,610
Land rent	125,034	169,078	138,622
Machinery & bldg leases	11,070	15,883	10,652
Real estate taxes	18,712	26,464	21,577
Farm insurance	23,461	26,447	25,802
Utilities	14,509	12,882	14,804
Dues & professional fees	14,648	22,510	13,910
Hedging account deposits	838	-	-1,186
Miscellaneous	17,139	17,305	27,550
Total cash expense	733,292	890,304	837,584
Net cash farm income	75,156	-41,135	115,648
Inventory Changes			
Crops and feed	40,391	-60,164	187,574
Market livestock	2,672	-	6,348
Accounts receivable	-6,120	-25,210	-12,449
Prepaid expenses and supplies	-6,002	-18,978	8,818
Accounts payable	-67	26,263	-8,550
Total inventory change	30,874	-78,089	181,741
Net operating profit	106,029	-119,224	297,389
Depreciation and Other Capital Adjustments			
Breeding livestock	236	-	-
Machinery and equipment	-88,092	-94,038	-90,533
Buildings and improvements	-12,489	-8,656	-13,431
Other farm capital	4,868	-107	16,797
Total depr. and other capital adj	-95,477	-102,800	-87,167
Net farm income	10,552	-222,024	210,222

Table 46

Inventory Changes  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	5	7
Net cash farm income	75,156	-119,103	115,648
Crops and Feed			
Ending inventory	303,006	361,779	438,802
Beginning inventory	262,615	441,974	251,228
Inventory change	40,391	-80,195	187,574
Market Livestock			
Ending inventory	12,986	-	24,565
Beginning inventory	10,314	-	18,217
Inventory change	2,672	-	6,348
Accts Receivable & Other Current Assets			
Ending inventory	77,410	49,306	87,989
Beginning inventory	83,531	84,713	100,439
Inventory change	-6,120	-35,407	-12,449
Prepaid Expenses and Supplies			
Ending inventory	34,278	31,518	52,042
Beginning inventory	40,281	49,461	43,224
Inventory change	-6,002	-17,943	8,818
Accounts Payable & Accrued Expenses			
Beginning inventory	47,696	63,750	70,926
Ending inventory	47,763	26,222	79,476
Inventory change	-67	37,528	-8,550
Total inventory change	30,874	-96,017	181,741
Net operating profit	106,029	-215,120	297,389

Table 47                      Depreciation and Other Capital Adjustments  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	5	7
Net operating profit	106,029	-215,120	297,389
Breeding Livestock			
Ending inventory	19,033	-	-
Capital sales	2	-	-
Beginning inventory	18,691	-	-
Capital purchases	108	-	-
Depreciation, capital adjust.	236	-	-
Machinery and Equipment			
Ending inventory	226,277	271,229	244,852
Capital sales	6,309	12,480	2,339
Beginning inventory	251,812	316,991	256,600
Capital purchases	68,866	67,007	81,125
Depreciation, capital adjust.	-88,092	-100,289	-90,533
Buildings and Improvements			
Ending inventory	116,339	89,980	109,545
Capital sales	-	-	-
Beginning inventory	105,790	95,807	115,317
Capital purchases	23,038	2,800	7,658
Depreciation, capital adjust.	-12,489	-8,627	-13,431
Other Capital Assets			
Ending inventory	49,189	81,167	19,424
Capital sales	67,307	292,142	16,978
Beginning inventory	52,928	108,529	9,287
Capital purchases	58,700	264,929	10,318
Depreciation, capital adjust.	4,868	-150	16,797
Total depreciation, capital adj.	-95,477	-109,066	-87,167
Net farm income	10,552	-324,186	210,222

Table 48

Profitability Measures  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	5	7
Profitability (assets valued at cost)			
Net farm income	10,552	-324,186	210,222
Labor and management earnings	-8,860	-349,048	197,663
Rate of return on assets	0.5 %	-16.6 %	16.0 %
Rate of return on equity	-23.0 %	-1,117.2 %	80.6 %
Operating profit margin	0.7 %	-37.7 %	16.2 %
Asset turnover rate	65.1 %	44.1 %	98.9 %
Interest on farm net worth	19,412	24,862	12,559
Farm interest expense	51,290	66,922	39,082
Value of operator lbr and mgmt.	55,899	29,392	66,060
Return on farm assets	5,944	-286,656	183,244
Average farm assets	1,289,289	1,725,761	1,144,860
Return on farm equity	-45,346	-353,578	144,162
Average farm equity	197,101	31,649	178,870
Value of farm production	839,049	761,170	1,132,020
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	5	7
Profitability (assets valued at market)			
Net farm income	84,567	-254,671	319,625
Labor and management earnings	9,475	-327,877	241,709
Rate of return on assets	3.4 %	-7.5 %	12.9 %
Rate of return on equity	2.3 %	-23.9 %	19.5 %
Operating profit margin	9.5 %	-28.5 %	25.9 %
Asset turnover rate	35.9 %	26.4 %	50.0 %
Interest on farm net worth	75,093	73,207	77,916
Farm interest expense	51,290	66,922	39,082
Value of operator lbr and mgmt.	55,899	29,392	66,060
Return on farm assets	79,959	-217,141	292,647
Average farm assets	2,337,223	2,882,986	2,264,594
Return on farm equity	28,669	-284,063	253,565
Average farm equity	1,245,034	1,188,874	1,298,605
Value of farm production	839,049	761,170	1,132,020

Table 49

Liquidity Measures  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	5	7
Liquidity (cash)			
Net cash farm income	75,156	-119,103	115,648
Net nonfarm income	6,050	4,113	4,603
Family living and taxes	53,528	10,176	65,494
Real estate principal payments	25,948	44,821	13,917
Cash available for interm. debt	1,729	-169,987	40,840
Average intermediate debt	293,507	482,315	259,104
Years to turnover interm. debt	169.7	**	6.3
Expense as a % of income	91 %	114 %	88 %
Interest as a % of income	6 %	8 %	4 %
Liquidity (accrual)			
Total accrual farm income	845,391	761,170	1,134,705
Total accrual operating expense	739,361	976,290	837,316
Net accrual operating income	106,029	-215,120	297,389
Net nonfarm income	6,050	4,113	4,603
Family living and taxes	53,528	10,176	65,494
Real estate principal payments	25,948	44,821	13,917
Available for intermediate debt	32,603	-266,004	222,580
Average intermediate debt	293,507	482,315	259,104
Years to turnover interm. debt	9.0	**	1.2
Expense as a % of income	87 %	128 %	74 %
Interest as a % of income	6 %	9 %	3 %

\*\* Income insufficient to meet debt servicing requirements

Table 50

Balance Sheet at Cost Values  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
Number of farms	24		5		7	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	64,737	56,226	178,247	91,914	55,434	64,128
Prepaid expenses & supplies	40,281	34,278	49,461	31,518	43,224	52,042
Growing crops	17,099	16,263	25,047	24,124	27,828	26,766
Accounts receivable	46,461	41,002	59,666	25,182	39,909	28,583
Hedging accounts	903	191	0	0	3,138	41
Crops held for sale or feed	262,615	303,006	441,974	361,779	251,228	438,802
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	10,314	12,986	0	0	18,217	24,565
Other current assets	19,068	19,954	0	0	29,564	32,600
<b>Total current farm assets</b>	<b>461,477</b>	<b>483,907</b>	<b>754,395</b>	<b>534,517</b>	<b>468,542</b>	<b>667,527</b>
<b>Intermediate Farm Assets</b>						
Breeding livestock	18,691	19,033	0	0	0	0
Machinery and equipment	251,812	226,277	316,991	271,229	256,600	244,852
Titled vehicles	0	0	0	0	0	0
Other intermediate assets	46,687	38,327	101,582	74,462	8,194	1,544
<b>Total intermediate farm assets</b>	<b>317,189</b>	<b>283,637</b>	<b>418,573</b>	<b>345,691</b>	<b>264,794</b>	<b>246,396</b>
<b>Long Term Farm Assets</b>						
Farm land	394,272	398,864	599,454	599,454	199,588	199,037
Buildings and improvements	105,790	116,339	95,807	89,980	115,317	109,545
Other long-term assets	6,241	10,862	6,947	6,704	1,093	17,880
<b>Total long-term farm assets</b>	<b>506,303</b>	<b>526,065</b>	<b>702,208</b>	<b>696,138</b>	<b>315,999</b>	<b>326,461</b>
<b>Total Farm Assets</b>	<b>1,284,969</b>	<b>1,293,609</b>	<b>1,875,176</b>	<b>1,576,347</b>	<b>1,049,335</b>	<b>1,240,385</b>
<b>Total Nonfarm Assets</b>	<b>209,234</b>	<b>220,022</b>	<b>688,041</b>	<b>745,333</b>	<b>39,250</b>	<b>44,780</b>
<b>Total Assets</b>	<b>1,494,203</b>	<b>1,513,631</b>	<b>2,563,217</b>	<b>2,321,680</b>	<b>1,088,585</b>	<b>1,285,164</b>
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	10,175	11,170	4,994	4,061	2,507	1,994
Accounts payable	37,522	36,593	58,756	22,161	68,419	77,482
Current notes	289,287	278,061	456,035	508,456	318,198	237,568
Government crop loans	0	0	0	0	0	0
Principal due on term debt	81,858	89,548	165,293	110,147	63,320	90,183
<b>Total current farm liabilities</b>	<b>418,841</b>	<b>415,373</b>	<b>685,078</b>	<b>644,825</b>	<b>452,444</b>	<b>407,227</b>
<b>Total intermediate farm liabs</b>	<b>248,032</b>	<b>217,664</b>	<b>460,366</b>	<b>296,298</b>	<b>174,888</b>	<b>226,403</b>
<b>Total long term farm liabilities</b>	<b>408,023</b>	<b>476,444</b>	<b>567,657</b>	<b>734,002</b>	<b>310,276</b>	<b>360,741</b>
<b>Total farm liabilities</b>	<b>1,074,897</b>	<b>1,109,480</b>	<b>1,713,101</b>	<b>1,675,125</b>	<b>937,608</b>	<b>994,371</b>
<b>Total nonfarm liabilities</b>	<b>16,626</b>	<b>14,546</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>Total liabilities</b>	<b>1,091,523</b>	<b>1,124,026</b>	<b>1,713,101</b>	<b>1,675,125</b>	<b>937,608</b>	<b>994,371</b>
<b>Net worth (farm and nonfarm)</b>	<b>402,680</b>	<b>389,605</b>	<b>850,116</b>	<b>646,555</b>	<b>150,977</b>	<b>290,793</b>
<b>Net worth change</b>		<b>-13,075</b>		<b>-203,561</b>		<b>139,816</b>
<b>Ratio Analysis</b>						
Current farm liabilities / assets	91 %	86 %	91 %	121 %	97 %	61 %
Curr. & interm farm liab. / assets	86 %	82 %	98 %	107 %	86 %	69 %
Long term farm liab. / assets	81 %	91 %	81 %	105 %	98 %	111 %
Total debt to asset ratio	73 %	74 %	67 %	72 %	86 %	77 %



Table 51

Balance Sheet at Market Values  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

Number of farms	Avg. Of All Farms 24		Low 25% 5		High 25% 7	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	64,737	56,226	178,247	91,914	55,434	64,128
Prepaid expenses & supplies	40,281	34,278	49,461	31,518	43,224	52,042
Growing crops	17,099	16,263	25,047	24,124	27,828	26,766
Accounts receivable	46,461	41,002	59,666	25,182	39,909	28,583
Hedging accounts	903	191	0	0	3,138	41
Crops held for sale or feed	262,615	303,006	441,974	361,779	251,228	438,802
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	10,314	12,986	0	0	18,217	24,565
Other current assets	19,068	19,954	0	0	29,564	32,600
Total current farm assets	461,477	483,907	754,395	534,517	468,542	667,527
<b>Intermediate Farm Assets</b>						
Breeding livestock	18,691	19,033	0	0	0	0
Machinery and equipment	657,970	678,034	691,329	707,708	658,750	716,322
Titled vehicles	0	0	0	0	0	0
Other intermediate assets	46,687	38,327	101,582	74,462	8,194	1,544
Total intermediate farm assets	723,347	735,394	792,912	782,170	666,944	717,867
<b>Long Term Farm Assets</b>						
Farm land	908,986	931,155	1,226,107	1,226,107	760,025	791,053
Buildings and improvements	195,845	217,182	217,284	218,589	217,764	220,494
Other long-term assets	6,241	10,913	6,947	6,947	1,093	17,880
Total long-term farm assets	1,111,072	1,159,249	1,450,337	1,451,642	978,882	1,029,427
Total Farm Assets	2,295,895	2,378,551	2,997,644	2,768,329	2,114,368	2,414,821
Total Nonfarm Assets	359,899	427,268	977,347	1,004,640	244,702	350,232
Total Assets	2,655,794	2,805,819	3,974,991	3,772,969	2,359,070	2,765,052
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	10,175	11,170	4,994	4,061	2,507	1,994
Accounts payable	37,522	36,593	58,756	22,161	68,419	77,482
Current notes	289,287	278,061	456,035	508,456	318,198	237,568
Government crop loans	0	0	0	0	0	0
Principal due on term debt	81,858	89,548	165,293	110,147	63,320	90,183
Total current farm liabilities	418,841	415,373	685,078	644,825	452,444	407,227
Total intermediate farm liabs	248,032	217,664	460,366	296,298	174,888	226,403
Total long term farm liabilities	408,023	476,444	567,657	734,002	310,276	360,741
Total farm liabilities	1,074,897	1,109,480	1,713,101	1,675,125	937,608	994,371
Total nonfarm liabilities	16,626	14,546	0	0	0	0
Total liabs excluding deferreds	1,091,523	1,124,026	1,713,101	1,675,125	937,608	994,371
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	1,091,523	1,124,026	1,713,101	1,675,125	937,608	994,371
Retained earnings	402,680	389,605	850,116	646,555	150,977	290,793
Market valuation equity	1,161,592	1,292,188	1,411,774	1,451,289	1,270,485	1,479,888
Net worth (farm and nonfarm)	1,564,272	1,681,793	2,261,890	2,097,844	1,421,462	1,770,681
Net worth excluding deferreds	1,564,272	1,681,793	2,261,890	2,097,844	1,421,462	1,770,681
Net worth change		117,521		-164,046		349,219
<b>Ratio Analysis</b>						
Current farm liabilities / assets	91 %	86 %	91 %	121 %	97 %	61 %
Curr. & interm farm liab. / assets	56 %	52 %	74 %	71 %	55 %	46 %
Long term farm liab. / assets	37 %	41 %	39 %	51 %	32 %	35 %
Total debt to asset ratio	41 %	40 %	43 %	44 %	40 %	36 %
Debt to assets excl deferreds	41 %	40 %	43 %	44 %	40 %	36 %

Table 52

Statement Of Cash Flows  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	5	7
Beginning cash (farm & nonfarm)	64,737	178,247	55,434
Cash From Operating Activities			
Gross cash farm income	808,448	876,772	953,232
Net nonfarm income	6,050	4,113	4,603
Total cash farm expense	-733,292	-995,875	-837,584
Apparent family living expense	-47,962	-9,604	-52,621
Income and social security tax	-5,566	-572	-12,874
Cash from operations	27,677	-125,166	54,757
Cash From Investing Activities			
Sale of breeding livestock	2	-	-
Sale of machinery & equipment	6,309	12,480	2,339
Sale of titled vehicles	-	-	-
Sale of farm land	-	-	-
Sale of farm buildings	-	-	-
Sale of other farm assets	67,307	292,142	16,978
Sale of nonfarm assets	781	-	-
Purchase of breeding livestock	-108	-	-
Purchase of machinery & equip.	-68,866	-67,007	-81,125
Purchase of titled vehicles	-	-	-
Purchase of farm land	-8,410	-	-14,493
Purchase of farm buildings	-23,038	-2,800	-7,658
Purchase of other farm assets	-58,700	-264,929	-10,318
Purchase of nonfarm assets	-1,044	-	-
Cash from investing activities	-85,768	-30,114	-94,276
Cash From Financing Activities			
Money borrowed	448,594	513,121	388,843
Cash gifts and inheritances	48,876	106,559	-
Principal payments	-415,947	-513,568	-340,630
Dividends paid	-	-	-
Gifts given	-31,775	-37,164	-
Cash from financing activities	49,747	68,947	48,213
Net change in cash balance	-8,344	-86,333	8,694
Ending cash (farm & nonfarm)	56,393	91,914	64,128

Table 53

## Financial Standards Measures

**Michigan Cash Grain, 1200 Acres Plus, 2003**

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

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	5	7
Liquidity			
Current ratio	1.16	0.83	1.64
Working capital	68,535	-110,308	260,300
Solvency (market)			
Farm debt to asset ratio	47 %	61 %	41 %
Farm equity to asset ratio	53 %	39 %	59 %
Farm debt to equity ratio	87 %	153 %	70 %
Profitability (cost)			
Rate of return on farm assets	0.5 %	-16.6 %	16.0 %
Rate of return on farm equity	-23.0 %	-1,117.2 %	80.6 %
Operating profit margin	0.7 %	-37.7 %	16.2 %
Net farm income	10,552	-324,186	210,222
Repayment Capacity			
Term debt coverage ratio	66 %	-86 %	220 %
Capital replacement margin	-43,107	-386,476	107,926
Efficiency			
Asset turnover rate (cost)	65.1 %	44.1 %	98.9 %
Operating expense ratio	81.4 %	119.5 %	70.3 %
Depreciation expense ratio	11.3 %	14.3 %	7.7 %
Interest expense ratio	6.1 %	8.8 %	3.4 %
Net farm income ratio	1.2 %	-42.6 %	18.5 %

Table 54

Operator and Labor Information  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	5	7
Operator Information			
Average number of operators	1.5	1.4	1.9
Average age of operators	49.4	56.0	53.4
Average number of years farming	26.4	32.6	28.7
Results Per Operator			
Working capital	44,455	-78,791	140,161
Total assets (market)	1,819,991	2,694,978	1,488,874
Total liabilities	729,098	1,196,518	535,431
Net worth (market)	1,090,893	1,498,460	953,444
Net worth excl deferred liabs	1,090,893	1,498,460	953,444
Gross farm income	548,362	543,693	610,995
Total farm expense	541,517	775,254	497,798
Net farm income	6,845	-231,561	113,196
Net nonfarm income	3,924	2,938	2,478
Family living & tax withdrawals	34,721	7,268	35,266
Total acres owned	315.7	605.8	156.6
Total crop acres	1,510.5	2,202.0	1,424.6
Crop acres owned	260.0	356.9	151.0
Crop acres cash rented	1,237.4	1,845.1	1,273.7
Crop acres share rented	13.1	-	-
Total pasture acres	-	-	-
Labor Analysis			
Number of farms	23	4	7
Total unpaid labor hours	3,324	-	3,374
Total hired labor hours	4,679	-	6,917
Total labor hours per farm	8,003	-	10,291
Unpaid hours per operator	2,124	-	1,817
Value of farm production / hour	102.31	-	110.00
Net farm income / unpaid hour	11.13	-	62.31
Partnerships			
Number of farms	5	-	2
Number of operators	2.4	-	-
Owner withdrawals per farm	-	-	-
Withdrawals per operator	-	-	-

Table 55

Financial Summary  
**Michigan Cash Grain, 1200 Acres Plus, 2003**  
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	24	5	7
Income Statement			
Gross cash farm income	808,448	876,772	953,232
Total cash farm expense	733,292	995,875	837,584
Net cash farm income	75,156	-119,103	115,648
Inventory change	30,874	-96,017	181,741
Depreciation and capital adjust	-95,477	-109,066	-87,167
Net farm income	10,552	-324,186	210,222
Profitability (cost)			
Labor and management earnings	-8,860	-349,048	197,663
Rate of return on assets	0.5 %	-16.6 %	16.0 %
Rate of return on equity	-23.0 %	-1,117.2 %	80.6 %
Operating profit margin	0.7 %	-37.7 %	16.2 %
Asset turnover rate	65.1 %	44.1 %	98.9 %
Profitability (market)			
Labor and management earnings	9,475	-327,877	241,709
Rate of return on assets	3.4 %	-7.5 %	12.9 %
Rate of return on equity	2.3 %	-23.9 %	19.5 %
Operating profit margin	9.5 %	-28.5 %	25.9 %
Asset turnover rate	35.9 %	26.4 %	50.0 %
Liquidity			
Ending current ratio	1.16	0.83	1.64
Ending working capital	68,535	-110,308	260,300
End working capital to gross inc	8.5 %	-12.6 %	27.3 %
Term debt coverage ratio	65.8 %	-86.1 %	219.8 %
Expense as a percent of income	87.5 %	128.3 %	73.8 %
Interest as a percent of income	6.1 %	8.8 %	3.4 %
Solvency (cost)			
Number of farms	24	5	7
Ending farm assets	1,293,609	1,576,347	1,240,385
Ending farm liabilities	1,109,480	1,675,125	994,371
Ending total assets	1,513,631	2,321,680	1,285,164
Ending total liabilities	1,124,026	1,675,125	994,371
Ending net worth	389,605	646,555	290,793
Net worth change	-13,075	-203,561	139,816
Ending farm debt to asset ratio	86 %	106 %	80 %
Beg total debt to asset ratio	73 %	67 %	86 %
End total debt to asset ratio	74 %	72 %	77 %
Solvency (market)			
Number of farms	24	5	7
Ending farm assets	2,378,551	2,768,329	2,414,821
Ending farm liabilities	1,109,480	1,675,125	994,371
Ending total assets	2,805,819	3,772,969	2,765,052
Ending total liabilities	1,124,026	1,675,125	994,371
Ending net worth	1,681,793	2,097,844	1,770,681
Net worth change	117,521	-164,046	349,219
Ending farm debt to asset ratio	47 %	61 %	41 %
Beg total debt to asset ratio	41 %	43 %	40 %
End total debt to asset ratio	40 %	44 %	36 %
Nonfarm Information			
Net nonfarm income	6,050	4,113	4,603
Crop Acres			
Total acres owned	487	848	291
Total crop acres	2,329	3,083	2,646
Total crop acres owned	401	500	280
Total crop acres cash rented	1,908	2,583	2,365
Total crop acres share rented	20	-	-

