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# ***Staff Paper***

## **1999 Business Analysis Summary for Cash Grain Farms**

Sherrill B. Nott

**Staff Paper 2000-29**

**August 2000**



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# 1999 BUSINESS ANALYSIS SUMMARY FOR CASH GRAIN FARMS

1999, Southern Michigan  
Staff Paper No. 2000-29, 45 pages  
by

Sherrill B. Nott<sup>1</sup>

## Introduction

The body of this report is organized as follows:

- I. Introduction and Table of Contents
  - A. List of Tables
  - B. Data Source
  - C. Per Unit Income and Expense Worksheet
- II. List and sequence of Tables
  - A. Averages of 51 Cash Grain Farms, All Sizes
    - 1. Crop Production and Marketing Summary, 1999 . . . . . Page 5
    - 2. Farm Income Statement, 1999 . . . . . Page 6
    - 3. Farm Income Statement, (Con't) . . . . . Page 7
    - 4. Inventory Changes, 1999 . . . . . Page 8
    - 5. Depreciation, Capital Adjustments, 1999 . . . . . Page 9
    - 6. Profitability & Liquidity Analysis, 1999 . . . . . Page 10
    - 7. Balance Sheet at Cost Values, 1999 . . . . . Page 11
    - 8. Balance Sheet at Market Values, 1999 . . . . . Page 12
    - 9. Statement of Cash Flows, 1999 . . . . . Page 13
    - 10. Financial Guidelines Measures, 1999 . . . . . Page 14
  - B. Averages of 8 Cash Grain Farms, 1 to 399.9 acres
    - 11. Crop Production & Marketing Summary, 1999 . . . . . Page 15
    - 12. Farm Income Statement, 1999 . . . . . Page 16
    - 13. Farm Income Statement, (Con't.) . . . . . Page 17
    - 14. Inventory Changes, 1999 . . . . . Page 18
    - 15. Depreciation & Other Capital Adjustments, 1999 . . . . . Page 19
    - 16. Profitability & Liquidity Analysis, 1999 . . . . . Page 20
    - 17. Balance Sheet at Cost Values, 1999 . . . . . Page 21
    - 18. Balance Sheet at Market Values, 1999 . . . . . Page 22
    - 19. Statement of Cash Flows, 1999 . . . . . Page 23
    - 20. Financial Guidelines Measures, 1999 . . . . . Page 24
  - C. Averages of 19 Cash Grain Farms, 400 to 999.9 Acres
    - 21. Crop Production & Marketing Summary, 1999 . . . . . Page 25
    - 22. Farm Income Statement, 1999 . . . . . Page 26
    - 23. Farm Income Statement, (Con't.) . . . . . Page 27

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	24.	Inventory Changes, 1999 . . . . .	Page 28
	25.	Depreciation & Other Capital Adjustments, 1999 . . .	Page 29
	26.	Profitability & Liquidity Analysis, 1999 . . . . .	Page 30
	27.	Balance Sheet At Cost Values, 1999 . . . . .	Page 31
	28.	Balance Sheet At Market Values, 1999 . . . . .	Page 32
	29.	Statement of Cash Flows, 1999 . . . . .	Page 33
	30.	Financial Guidelines Measures, 1999 . . . . .	Page 34
D.		Averages of 18 Cash Grain Farms, 1,000 or more Acres	
	31.	Crop Production & Marketing Summary, 1999 . . . . .	Page 35
	32.	Farm Income Statement, 1999 . . . . .	Page 36
	33.	Farm Income Statement, (Con't.) . . . . .	Page 37
	34.	Inventory Changes, 1999 . . . . .	Page 38
	35.	Depreciation & Other Capital Adjustments, 1999 . . .	Page 39
	36.	Profitability & Liquidity Analysis, 1999 . . . . .	Page 40
	37.	Balance Sheet at Cost Values, 1999 . . . . .	Page 41
	38.	Balance Sheet at Market Values, 1999 . . . . .	Page 42
	39.	Statement of Cash Flows, 1999 . . . . .	Page 43
	40.	Financial Guidelines Measures, 1999 . . . . .	Page 44
E.	41.	Per Unit Income and Expense Worksheet (46 farms) . .	Page 45

## Data Source

The sources of the 51 cash grain farms analyzed in this report were Telfarm/MicroTel at Michigan State University, plus the AgriSolutions offices in East Lansing, Adrian, Mt. Pleasant, and Alpena.

Farm types were assigned using the 1992 Census of Agriculture's Standard Industrial Classification (SIC) definitions. Basically, any farm with 50 percent or more of value of farm sales from one item becomes a farm of that type. Cash grain farms have 50 percent or more of value of combined sales from corn, soybeans, wheat, all varieties of navy beans, oats, and other small grains.

This report is a summary of the financial and production records kept by cash grain farmers enrolled in the Telfarm/MicroTel record program through Michigan State University Extension., or were accounting clients of AgriSolutions in Michigan. Farm records were included if a Finan<sup>2</sup> summary was completed on 1999 data including beginning and ending balance sheets, plus income and expenses. The summary was included if cash discrepancy was less than 10% of gross cash inflow, and if the debt discrepancy was less than \$1,000. The averages are reported in the tables below; it should be recognized that considerable variability exist in the data. The unweighted mean of the net farm income for the 51 farms was \$39,049; the standard deviation of the mean was \$92,641; and the median was \$16,184. The unweighted mean of acres cropped (owned plus rented) on the 46 farms that reported crops and yields was 1,153 acres; the standard deviation of the mean was 1,083 acres and the median was 805 acres.

This report has three purposes: 1)to provide statistical information about the financial results on cash grain farms during 1999; 2)to provide production costs for comparative analysis and forward planning; and 3)to provide information on the trends in resource use, income and costs during the last few years. For cash grain farm averages for 1995, see Staff Paper No. 96-86, Michigan Farm Database, New Directions for 1995; it contains averages of 48 cash grain farms calculated with Finansum. Staff Paper No. 97-27, Business Analysis Summary for Cash Grain Farms, contains averages of 37 cash grain farms for 1996. Staff Paper No. 98-21, 1997 Business Analysis Summary for Cash Grain Farms,

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<sup>2</sup> Finan = financial analysis, one of the parts of Finpack, a financial software package from the Center for Farm Financial Management at the University of Minnesota.

contains averages of 38 cash grain farms for 1997. Staff Paper No. 99-35, 1998 Business Analysis Summary for Cash Grain Farms, contains averages of 60 cash grain farms for 1998. These staff papers are available from the author, or from the bottom of the list at: <http://www.msu.edu/user/nott>

Finansum allows rapid analysis of group averages with some degree of choice over how the results are presented. I prefer to show the average of the high or low 25 percent by net income, but only if the 25 percent means 6 or more farms. The farm was accepted in the average regardless of whether the farm was a proprietorship, partnership, limited liability company, or corporation. Finansum will produce a variety of report options; I included a subset in this publication.

The farms included in the averages below are not a random sample. They kept their financial records with Michigan State University's Telfarm/MicroTel accounting project, or had their accounting supervised by AgriSolutions. A higher percentage of these farms use debt capital than do all farms in the state. The averages may be representative of bigger and better managed cash grain farms.

This document may be found and downloaded from the following:

<http://www.msu.edu/user/nott>

Table 1

**CROP PRODUCTION AND MARKETING SUMMARY, 1999****Michigan Cash Grain Farms, All Sizes**

(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	51	13	13
ACREAGE SUMMARY			
Total Acres Owned	438	394	691
Total Crop Acres	1040	1265	1571
Crop Acres Owned	453	482	731
Crop Acres Cash Rented	563	775	833
Crop Acres Share Rented	23	9	6
AVERAGE PRICE RECEIVED (Cash Sales Only)			
Corn per bu.	1.97	1.83	2.05
Soybeans per bu.	4.49	4.38	4.05
Wheat, Winter per bu.	2.02	2.01	2.04
AVERAGE YIELD PER ACRE			
Soybeans (bu.)	44.78	40.06	46.54
Corn (bu.)	133.58	108.71	145.94
Wheat, Winter (bu.)	65.76	63.64	66.15
Sugar Beets (ton)	16.39	-	-
Beans, Navy (cwt.)	31.81	-	-
Hay, Alfalfa (ton)	3.56	-	-

Table 2

**FARM INCOME STATEMENT, 1999**  
**Michigan Cash Grain Farms, All Sizes**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	51	13	13
CASH FARM INCOME			
Black Turtle Beans	1496	-	5869
Dark Red Kidney Beans	1678	-	6582
Green Beans	761	-	-
Light Red Kidney Beans	3544	9312	4594
Navy Beans	7136	16293	11702
Small Red Beans	254	-	995
Carrots	224	-	880
Cordwood	238	-	935
Corn	108936	152271	155503
Corn Silage	113	-	444
Seed Corn	12915	-	35750
Cucumbers	2435	-	4736
Alfalfa Hay	1104	1075	2513
Mixed Hay	996	3057	-
Oats	467	100	1732
Potatoes	118	-	462
Pumpkins	33	130	-
Soybeans	87608	83710	144327
Straw	1179	796	3113
Sugar Beets	6262	13659	6053
Spring Wheat	62	-	-
Winter Wheat	22874	24547	43820
Other crops	423	-	-
Beef Calves	458	1347	-
Background Beef	594	496	1300
Finish Beef Calves	959	3762	-
Finish Yrlg Steers	365	-	-
Eggs	344	-	1350
Mkt Lambs	141	551	-
Weaning to Finish	1994	-	-
Cull breeding livestock	35	-	-
Misc. livestock income	218	7	36
Transition payments	9048	4806	20419
Other government payments	65267	72867	103087
Custom work income	16356	18946	34228
Patronage dividends, cash	726	1588	1092
Insurance income	3534	2231	10263
Cash from hedging accts	665	2303	203
Other farm income	13198	15067	24672
Gross Cash Farm Income	374,757	428,924	626,659

Table 3

**FARM INCOME STATEMENT, 1999 (Continued)****Michigan Cash Grain Farms, All Sizes**

(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	51	13	13
CASH FARM EXPENSE			
Seed	31845	45401	49814
Fertilizer	48511	67492	68555
Crop chemicals	28329	26845	56718
Crop insurance	2223	1191	5095
Drying fuel	669	934	811
Irrigation energy	59	40	-
Crop marketing	983	1336	783
Crop miscellaneous	1821	503	2437
Feeder livestock purchase	2526	1544	3592
Purchased feed	1746	559	3369
Breeding fees	41	38	4
Veterinary	102	49	94
Livestock supplies	195	154	338
Livestock marketing	37	78	33
Interest	29096	30895	44708
Fuel & oil	10420	10259	20373
Repairs	24006	24994	37449
Custom hire	16643	12067	41328
Hired labor	18920	24799	37467
Land rent	49347	56750	89740
Machinery & bldg leases	6961	6674	17886
Real estate taxes	9199	14087	12375
Personal property taxes	143	-	42
Farm insurance	8967	8592	15523
Utilities	4768	3684	8252
Dues & professional fees	2825	3166	3777
Hedging account deposits	1173	3132	272
Miscellaneous	12221	22767	11353
Total cash expense	313776	368031	532190
Net cash farm income	60982	60893	94470
INVENTORY CHANGES			
Crops and feed	3500	-48013	71150
Market livestock	486	-839	917
Accounts receivable	6892	-6526	31029
Prepaid expenses and supplies	3438	10097	4779
Accounts payable	3571	850	5758
Total inventory change	17887	-44431	113633
Net operating profit	78869	16462	208102
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS			
Breeding livestock	580	634	1379
Machinery and equipment	-33351	-39915	-51396
Buildings and improvements	-6644	-15264	-6213
Other farm capital	-405	227	2917
Total depr. and other capital adj	-39820	-54318	-53314
Net farm income	39,049	-7,856	154,789

Table 4

**INVENTORY CHANGES, 1999**  
**Michigan Cash Grain Farms, All Sizes**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
	-----	-----	-----
Number of Farms	51	13	13
Net cash farm income	60982	60893	94470
CROPS AND FEED			
Ending inventory	175741	161749	376943
Beginning inventory	172242	209763	305793
Inventory change	3500	-48013	71150
MARKET LIVESTOCK			
Ending inventory	2955	2911	3238
Beginning inventory	2470	3750	2321
Inventory change	486	-839	917
ACCTS RECEIVABLE & OTHER CURRENT ASSETS			
Ending inventory	36686	25253	88874
Beginning inventory	29794	31778	57845
Inventory change	6892	-6526	31029
PREPAID EXPENSES AND SUPPLIES			
Ending inventory	30200	41368	54072
Beginning inventory	26762	31270	49293
Inventory change	3438	10097	4779
ACCOUNTS PAYABLE			
Beginning inventory	18005	16679	26901
Ending inventory	14434	15829	21143
Inventory change	3571	850	5758
Total inventory change	17887	-44431	113633
Net operating profit	78869	16462	208102

Table 5

**DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1999**  
**Michigan Cash Grain Farms, All Sizes**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	51	13	13
Net operating profit	78869	16462	208102
BREEDING LIVESTOCK			
Ending inventory	2552	5080	2604
Capital sales	68	267	-
Beginning inventory	1771	3740	1142
Capital purchases	269	973	83
Depreciation, capital adj.	580	634	1379
MACHINERY AND EQUIPMENT			
Ending inventory	115930	136142	157840
Capital sales	6691	8542	10488
Beginning inventory	115671	156451	147290
Capital purchases	40301	28148	72434
Depreciation, capital adj.	-33351	-39915	-51396
BUILDINGS AND IMPROVEMENTS			
Ending inventory	46839	59562	61226
Capital sales	308	1105	101
Beginning inventory	46157	55469	62024
Capital purchases	7633	20463	5516
Depreciation, capital adj.	-6644	-15264	-6213
OTHER CAPITAL ASSETS			
Ending inventory	41255	22276	111747
Capital sales	2993	4650	283
Beginning inventory	33989	24349	78214
Capital purchases	10663	2350	30900
Depreciation, capital adj.	-405	227	2917
Total depreciation, capital adj.	-39820	-54318	-53314
Net farm income	39049	-37856	154789

Table 6

**PROFITABILITY AND LIQUIDITY ANALYSIS, 1999**  
**Michigan Cash Grain Farms, All Sizes**  
(Farms sorted by Net Farm Income)

	Avg. Of All Farms	Avg. Of Low 25%	Avg. Of High 25%	Avg. Of All Farms	Avg. Of Low 25%	Avg. Of High 25%
Number of Farms	51	13	13	51	13	13
<b>PROFITABILITY</b>	----- Cost -----			----- Market -----		
Net farm income	39049	-37856	154789	80031	50302	154777
Labor and management earnings	20184	-54730	122462	25105	-3005	74689
Rate of return on assets	4.7 %	-4.3 %	11.3 %	5.5 %	3.8 %	7.0 %
Rate of return on equity	2.5 %	-25.9 %	19.8 %	5.3 %	2.7 %	7.9 %
Operating profit margin	9.2 %	-9.1 %	20.1 %	20.0 %	14.6 %	20.1 %
Asset turnover rate	50.5 %	47.0 %	56.2 %	27.7 %	26.0 %	34.6 %
Interest on farm net worth	18865	16873	32327	54926	53308	80088
Farm interest expense	27942	30206	40196	27942	30206	40196
Value of operator lbr and mgmt.	31731	26121	49327	31731	26121	49327
Return on farm assets	35260	-33771	145657	76242	54387	145646
Average farm assets	757013	791097	1288174	1376851	1432710	2090981
Return on farm equity	7318	-63977	105461	48300	24182	105450
Average farm equity	295271	246846	531993	915110	888459	1334800
Value of farm production	381943	372076	724174	381943	372076	724174
				Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms				51	13	13
	LIQUIDITY (Cash)					
Net cash farm income				60982	60893	94470
Net nonfarm income				25198	28621	10977
Family living and taxes				42114	43101	54460
Real estate principal payments				12670	14171	22626
Cash available for interm. debt				31396	32241	28361
Average intermediate debt				110309	118155	218968
Years to turnover interm. debt				3.5	3.7	7.7
Expense as a % of income				84 %	86 %	85 %
Interest as a % of income				8 %	7 %	7 %
	LIQUIDITY (Accrual)					
Total accrual farm income				385634	373546	729755
Total accrual farm expense				306766	357084	521653
Net accrual operating income				78869	16462	208102
Net nonfarm income				25198	28621	10977
Family living and taxes				42114	43101	54460
Real estate principal payments				12670	14171	22626
Available for intermediate debt				49283	-12190	141994
Average intermediate debt				110309	118155	218968
Years to turnover interm. debt				2.2	**	1.5
Expense as a % of income				80 %	96 %	71 %
Interest as a % of income				7 %	8 %	6 %

\*\* Income insufficient to meet debt servicing requirements

Table 7

**BALANCE SHEET AT COST VALUES, 1999**  
**Michigan Cash Grain Farms, All Sizes**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 25 %		Average Of High 25 %	
	51		13		13	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>ASSETS</b>						
	Current Farm Assets					
Cash and checking balance	30227	16269	41801	16196	44807	8855
Prepaid expenses & supplies	26762	30200	31270	41368	49293	54072
Growing crops	10616	12179	13463	11374	17909	25588
Accounts receivable	14527	19285	14854	13879	28659	44912
Hedging accounts	940	172	3462	-	227	419
Crops held for sale or feed	169691	170445	209763	150852	297061	367062
Crops under government loan	2551	5297	-	10897	8732	9881
Market livestock held for sale	2470	2955	3750	2911	2321	3238
Other current assets	3712	5050	-	-	11051	17955
Total current farm assets	261495	261852	318362	247477	460059	531982
	Intermediate Farm Assets					
Breeding livestock	1771	2552	3740	5080	1142	2604
Machinery and equipment	115671	115930	156451	136142	147290	157840
Other intermediate assets	24102	31889	5158	5551	75377	109079
Total intermediate farm assets	141544	150370	165349	146773	223809	269523
	Long-Term Farm Assets					
Farm land	292108	294405	272204	281081	465821	496398
Buildings and improvements	46157	46839	55469	59562	62024	61226
Other long-term assets	9887	9367	19191	16725	2837	2668
Total long-term farm assets	348153	350611	346864	357368	530682	560292
Total Farm Assets	751192	762833	830575	751618	1214550	1361798
Total Nonfarm Assets	104167	135102	39339	43957	150198	234612
Total Assets	855358	897936	869914	795576	1364749	1596409
<b>LIABILITIES</b>						
	Current Farm Liabilities					
Accrued interest	8139	6984	7835	7146	11676	7163
Accounts payable	9867	7450	8844	8684	15225	13980
Current notes	143917	133606	217703	190516	200159	167828
Government crop loans	2500	5026	-	9835	8535	9881
Principal due on term debt	35412	35045	35830	29883	67141	71938
Total current farm liabilities	199836	188111	270212	246064	302736	270791
Intermediate Farm Liabilities	86258	89904	102067	97093	161285	185730
Long-term Farm Liabilities	177195	182180	182217	190849	282960	308860
Total Farm Liabilities	463290	460194	554496	534006	746981	765381
Total Nonfarm Liabilities	8000	7632	2453	4482	7701	6357
Total Liabilities	471290	467826	556949	538488	754682	771738
Net Worth (farm and nonfarm)	384069	430110	312965	257088	610067	824671
Net Worth Change		46041		-55877		214604
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	76 %	72 %	85 %	99 %	66 %	51 %
Curr. & Interm Farm Liab / Assets	71 %	67 %	77 %	87 %	68 %	57 %
Long Term Farm Liab. / Assets	51 %	52 %	53 %	53 %	53 %	55 %
Total Liabilities / Assets	55 %	52 %	64 %	68 %	55 %	48 %

Table 8

**BALANCE SHEET AT MARKET VALUES, 1999**  
**Michigan Cash Grain Farms, All Sizes**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 25 %		Average Of High 25 %	
	51		13		13	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>ASSETS</b>						
	Current Farm Assets					
Cash and checking balance	30227	16269	41801	16196	44807	8855
Prepaid expenses & supplies	26762	30200	31270	41368	49293	54072
Growing crops	10616	12179	13463	11374	17909	25588
Accounts receivable	14527	19285	14854	13879	28659	44912
Hedging accounts	940	172	3462	-	227	419
Crops held for sale or feed	169691	170445	209763	150852	297061	367062
Crops under government loan	2551	5297	-	10897	8732	9881
Market livestock held for sale	2470	2955	3750	2911	2321	3238
Other current assets	3712	5050	-	-	11051	17955
Total current farm assets	261495	261852	318362	247477	460059	531982
	Intermediate Farm Assets					
Breeding livestock	1777	2591	3763	5234	1142	2604
Machinery and equipment	316570	327121	358194	360442	414960	440465
Other intermediate assets	24102	31888	5158	5551	75377	109075
Total intermediate farm assets	342449	361600	367114	371227	491479	552145
	Long-Term Farm Assets					
Farm land	674619	703662	622548	681077	1011779	1030811
Buildings and improvements	62089	66678	100894	120806	51209	46992
Other long-term assets	9887	9371	19191	16725	2837	2668
Total long-term farm assets	746596	779711	742633	818607	1065825	1080472
Total Farm Assets	1350539	1403163	1428109	1437311	2017363	2164598
Total Nonfarm Assets	180537	213093	90458	85915	275714	355912
Total Assets	1531077	1616256	1518567	1523226	2293077	2520510
<b>LIABILITIES</b>						
	Current Farm Liabilities					
Accrued interest	8139	6984	7835	7146	11676	7163
Accounts payable	9867	7450	8844	8684	15225	13980
Current notes	143917	133606	217703	190516	200159	167828
Government crop loans	2500	5026	-	9835	8535	9881
Principal due on term debt	35412	35045	35830	29883	67141	71938
Total current farm liabilities	199836	188111	270212	246064	302736	270791
Intermediate Farm Liabilities	86258	89904	102067	97093	161285	185730
Long-term Farm Liabilities	177195	182180	182217	190849	282960	308860
Total Farm Liabilities	463290	460194	554496	534006	746981	765381
Total Nonfarm Liabilities	8000	7632	2453	4482	7701	6357
Total Deferred Liabilities	-	-	-	-	-	-
Total Liabilities	471290	467826	556949	538488	754682	771738
Net Worth (farm and nonfarm)	1059787	1148430	961618	984738	1538395	1748772
Net Worth Change		88643		23120		210377
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	76 %	72 %	85 %	99 %	66 %	51 %
Curr. & Inter Farm Liab. / Assets	47 %	45 %	54 %	55 %	49 %	42 %
Long Term Farm Liabilities / Assets	24 %	23 %	25 %	23 %	27 %	29 %
Total Liabilities / Assets	31 %	29 %	37 %	35 %	33 %	31 %

Table 9

**STATEMENT OF CASH FLOWS, 1999**  
**Michigan Cash Grain Farms, All Sizes**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	51	13	13
(a) Beginning cash balance (farm & nonfarm)	31914	42185	44807
CASH FROM OPERATING ACTIVITIES			
Gross cash farm income	374757	428924	626659
Net nonfarm income (+)	25198	28621	10977
Total cash farm expense (-)	313776	368031	532190
Apparent family living expense (-)	36426	30992	49278
Income and social security tax (-)	5688	12109	5182
(b) Cash from operations (=)	44066	46413	50987
CASH FROM INVESTING ACTIVITIES			
Sale of breeding livestock	68	267	-
Sale of machinery & equipment (+)	6691	8542	10488
Sale of farm land (+)	2050	8042	-
Sale of farm buildings (+)	308	1105	101
Sale of other farm assets (+)	2993	4650	283
Sale of nonfarm assets (+)	13989	3609	41913
Purchase of breeding livestock (-)	269	973	83
Purchase of machinery & equip. (-)	40301	28148	72434
Purchase of farm land (-)	8997	18923	15798
Purchase of farm buildings (-)	7633	20463	5516
Purchase of other farm assets (-)	10663	2350	30900
Purchase of nonfarm assets (-)	16675	9264	38933
(c) Cash from investing activities (=)	-58440	-53906	-110879
CASH FROM FINANCING ACTIVITIES			
Money borrowed	141314	150907	257680
Cash gifts and inheritances (+)	14818	567	53060
Principal payments (-)	140136	168490	233508
Dividends paid (-)	-	-	-
Gifts given (-)	15158	864	53292
(d) Cash from financing activities (=)	838	-17880	23940
(e) Net change in cash balance (b+c+d)	-13537	-25374	-35952
Ending cash balance (farm & nonfarm)	18377	16812	8855

Table 10

**FINANCIAL GUIDELINES MEASURES, 1999**  
**Michigan Cash Grain Farms, All Sizes**  
(Farms sorted by Net Farm Income)

	Average Of All Farms		Average Of Low 25 %		Average Of High 25 %	
Number of Farms	51		13		13	
<b>LIQUIDITY</b>	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current ratio	1.31	1.39	1.18	1.01	1.52	1.96
Working capital	61658	73742	48150	1414	157323	261191
<b>SOLVENCY (Market)</b>	Beginning	Ending	Beginning	Ending	Beginning	Ending
Farm debt to asset ratio	34 %	33 %	39 %	37 %	37 %	35 %
Farm equity to asset ratio	66 %	67 %	61 %	63 %	63 %	65 %
Farm debt to equity ratio	52 %	49 %	63 %	59 %	59 %	55 %
<b>PROFITABILITY</b>	Cost	Market	Cost	Market	Cost	Market
Rate of return on farm assets	4.7 %	5.5 %	-4.3 %	3.8 %	11.3 %	7.0 %
Rate of return on farm equity	2.5 %	5.3 %	-25.9 %	2.7 %	19.8 %	7.9 %
Operating profit margin	9.2 %	20.0 %	-9.1 %	14.6 %	20.1 %	20.1 %
Net farm income	39049	80031	-37856	50302	154789	154777
<b>REPAYMENT CAPACITY</b>	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	120 %	163 %	126 %	15 %	77 %	237 %
Capital replacement margin	8367	26254	10380	-34052	-16154	97479
	<b>EFFICIENCY</b>					
Asset turnover rate (market)	27.7 %		26.0 %		34.6 %	
Operating expense ratio	72.3 %		87.5 %		66.0 %	
Depreciation expense ratio	10.3 %		14.5 %		7.3 %	
Interest expense ratio	7.2 %		8.1 %		5.5 %	
Net farm income ratio	10.1 %		-10.1 %		21.2 %	

**LABOR ANALYSIS**

	Average Of All Farms	Average Of Low 25 %	Average Of High 25 %
Number of Farms	46	10	13
Total unpaid labor hours	2549	2150	3208
Total hired labor hours	1888	2025	3873
Total labor hours per farm	4437	4175	7081
Value of farm production / hour	88.39	82.72	102.27
Net farm income / unpaid hour	18.14	-17.64	48.25

Table 11

**CROP PRODUCTION AND MARKETING SUMMARY, 1999**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms
Number of Farms	8
ACREAGE SUMMARY	
Total Acres Owned	149
Total Crop Acres	211
Crop Acres Owned	119
Crop Acres Cash Rented	91
AVERAGE YIELD PER ACRE	
Corn (bu.)	132.13
Soybeans (bu.)	39.74
Wheat, Winter (bu.)	61.48
Hay, Alfalfa (ton)	2.34

Table 12

**FARM INCOME STATEMENT, 1999**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms
Number of Farms	8
CASH FARM INCOME	
Corn	19156
Seed Corn	8863
Mixed Hay	493
Soybeans	19887
Straw	135
Tomatoes	1011
Winter Wheat	1579
Miscellaneous crop income	694
Other government payments	10425
Custom work income	3738
Patronage dividends, cash	22
Cash from hedging accts	168
Other farm income	2378
Gross Cash Farm Income	68548

Table 13

**FARM INCOME STATEMENT, 1999 (Continued)**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms
	-----
Number of Farms	8
CASH FARM EXPENSE	
Seed	5300
Fertilizer	7708
Crop chemicals	4924
Crop insurance	539
Crop marketing	41
Crop miscellaneous	335
Feeder livestock purchase	321
Livestock supplies	59
Interest	4153
Fuel & oil	1504
Repairs	6079
Custom hire	4190
Hired labor	2703
Land rent	9361
Machinery & bldg leases	535
Real estate taxes	1341
Farm insurance	2210
Utilities	2624
Dues & professional fees	1028
Miscellaneous	3063
Total cash expense	58016
Net cash farm income	10531
INVENTORY CHANGES	
Crops and feed	-4720
Market livestock	-321
Accounts receivable	8470
Prepaid expenses and supplies	-1584
Accounts payable	-45
Total inventory change	1800
Net operating profit	12331
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS	
Breeding livestock	-
Machinery and equipment	-4720
Buildings and improvements	-1631
Other farm capital	-8456
Total depr. and other capital adj	-14806
Net farm income	-2,475

Table 14

**INVENTORY CHANGES, 1999**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms
	-----
Number of Farms	8
Net cash farm income	10531
CROPS AND FEED	
Ending inventory	12206
Beginning inventory	16927
Inventory change	-4720
MARKET LIVESTOCK	
Ending inventory	-
Beginning inventory	321
Inventory change	-321
ACCTS RECEIVABLE & OTHER CURRENT ASSETS	
Ending inventory	10743
Beginning inventory	2273
Inventory change	8470
PREPAID EXPENSES AND SUPPLIES	
Ending inventory	1770
Beginning inventory	3353
Inventory change	-1584
ACCOUNTS PAYABLE	
Beginning inventory	2604
Ending inventory	2649
Inventory change	-45
Total inventory change	1800
Net operating profit	12331

Table 15

**DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1999**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms
	-----
Number of Farms	8
Net operating profit	12331
BREEDING LIVESTOCK	
Ending inventory	-
Capital sales	-
Beginning inventory	-
Capital purchases	-
Depreciation, capital adj.	-
MACHINERY AND EQUIPMENT	
Ending inventory	49644
Capital sales	2479
Beginning inventory	43730
Capital purchases	13113
Depreciation, capital adj.	-4720
BUILDINGS AND IMPROVEMENTS	
Ending inventory	8110
Capital sales	-
Beginning inventory	9066
Capital purchases	675
Depreciation, capital adj.	-1631
OTHER CAPITAL ASSETS	
Ending inventory	5552
Capital sales	4377
Beginning inventory	5478
Capital purchases	12908
Depreciation, capital adj.	-8456
Total depreciation, capital adj.	-14806
Net farm income	-2475

Table 16

**PROFITABILITY AND LIQUIDITY ANALYSIS, 1999**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of all farms reporting)

	Average Of All Farms	Average Of All Farms
Number of Farms	8	8
PROFITABILITY	--- Cost ---	-- Market --
Net farm income	-2475	11425
Labor and management earnings	-9213	-8314
Rate of return on assets	-7.1 %	0.3 %
Rate of return on equity	-15.4 %	-1.0 %
Operating profit margin	-18.0 %	1.4 %
Asset turnover rate	39.4 %	18.0 %
Interest on farm net worth	6738	19739
Farm interest expense	4396	4396
Value of operator lbr and mgmt.	14806	14806
Return on farm assets	-12884	1016
Average farm assets	182097	398788
Return on farm equity	-17281	-3380
Average farm equity	112295	328986
Value of farm production	71656	71656
		Average Of All Farms
Number of Farms		8
	LIQUIDITY (Cash)	
Net cash farm income		10531
Net nonfarm income		40539
Family living and taxes		22819
Real estate principal payments		3672
Cash available for interm. debt		24581
Average intermediate debt		25622
Years to turnover interm. debt		1.0
Expense as a % of income		85 %
Interest as a % of income		6 %
	LIQUIDITY (Accrual)	
Total accrual farm income		71977
Total accrual farm expense		59645
Net accrual operating income		12331
Net nonfarm income		40539
Family living and taxes		22819
Real estate principal payments		3672
Available for intermediate debt		26381
Average intermediate debt		25622
Years to turnover interm. debt		1.0
Expense as a % of income		83 %
Interest as a % of income		6 %

Table 17

**BALANCE SHEET AT COST VALUES, 1999**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of all farms reporting)

Number of Farms	Average For All Farms	
	Beginning	8 Ending
<b>ASSETS</b>		
Current Farm Assets		
Cash and checking balance	16830	12478
Prepaid expenses & supplies	3353	1770
Growing crops	1447	1369
Accounts receivable	826	9374
Hedging accounts	-	-
Crops held for sale or feed	16927	12206
Crops under government loan	-	-
Market livestock held for sale	321	-
Other current assets	-	-
Total current farm assets	39703	37196
Intermediate Farm Assets		
Breeding livestock	-	-
Machinery and equipment	43730	49644
Other intermediate assets	650	680
Total intermediate farm assets	44380	50324
Long-Term Farm Assets		
Farm land	82857	82857
Buildings and improvements	9066	8110
Other long-term assets	4828	4872
Total long-term farm assets	96751	95839
Total Farm Assets	180834	183359
Total Nonfarm Assets	130233	145590
Total Assets	311067	328949
<b>LIABILITIES</b>		
Current Farm Liabilities		
Accrued interest	2029	2273
Accounts payable	575	376
Current notes	13430	16187
Government crop loans	-	-
Principal due on term debt	9031	9344
Total current farm liabilities	25065	28180
Intermediate Farm Liabilities	18439	18984
Long-term Farm Liabilities	25514	23422
Total Farm Liabilities	69018	70586
Total Nonfarm Liabilities	26755	26940
Total Liabilities	95773	97526
Net Worth (farm and nonfarm)	215294	231423
Net Worth Change		16129
<b>RATIO ANALYSIS</b>		
Current Farm Liabilities / Assets	63 %	76 %
Curr. & Interm Farm Liab / Assets	52 %	54 %
Long Term Farm Liab. / Assets	26 %	24 %
Total Liabilities / Assets	31 %	30 %

Table 18

**BALANCE SHEET AT MARKET VALUES, 1999**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of all farms reporting)

Number of Farms	Average For All Farms	
	Beginning	8 Ending
<b>ASSETS</b>		
Current Farm Assets		
Cash and checking balance	16830	12478
Prepaid expenses & supplies	3353	1770
Growing crops	1447	1369
Accounts receivable	826	9374
Hedging accounts	-	-
Crops held for sale or feed	16927	12206
Crops under government loan	-	-
Market livestock held for sale	321	-
Other current assets	-	-
Total current farm assets	39703	37196
Intermediate Farm Assets		
Breeding livestock	-	-
Machinery and equipment	95143	103702
Other intermediate assets	650	680
Total intermediate farm assets	95793	104382
Long-Term Farm Assets		
Farm land	212625	222300
Buildings and improvements	37625	38250
Other long-term assets	4828	4872
Total long-term farm assets	255078	265422
Total Farm Assets	390575	407000
Total Nonfarm Assets	213412	233062
Total Assets	603987	640062
<b>LIABILITIES</b>		
Current Farm Liabilities		
Accrued interest	2029	2273
Accounts payable	575	376
Current notes	13430	16187
Government crop loans	-	-
Principal due on term debt	9031	9344
Total current farm liabilities	25065	28180
Intermediate Farm Liabilities	18439	18984
Long-term Farm Liabilities	25514	23422
Total Farm Liabilities	69018	70586
Total Nonfarm Liabilities	26755	26940
Total Deferred Liabilities	-	-
Total Liabilities	95773	97526
Net Worth (farm and nonfarm)	508214	542536
Net Worth Change		34322
<b>RATIO ANALYSIS</b>		
Current Farm Liabilities / Assets	63 %	76 %
Curr. & Interm Farm Liab. / Assets	32 %	33 %
Long Term Farm Liabilities / Assets	10 %	9 %
Total Liabilities / Assets	16 %	15 %

Table 19

**STATEMENT OF CASH FLOWS, 1999**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms
	8
Number of Farms	8
 (a) Beginning cash balance (farm & nonfarm)	 26134
CASH FROM OPERATING ACTIVITIES	
Gross cash farm income	68548
Net nonfarm income (+)	40539
Total cash farm expense (-)	58016
Apparent family living expense (-)	20970
Income and social security tax (-)	1849
(b) Cash from operations (=)	28252
CASH FROM INVESTING ACTIVITIES	
Sale of breeding livestock	-
Sale of machinery & equipment (+)	2479
Sale of farm land (+)	-
Sale of farm buildings (+)	-
Sale of other farm assets (+)	4377
Sale of nonfarm assets (+)	-
Purchase of breeding livestock (-)	-
Purchase of machinery & equip. (-)	13113
Purchase of farm land (-)	-
Purchase of farm buildings (-)	675
Purchase of other farm assets (-)	12908
Purchase of nonfarm assets (-)	11743
(c) Cash from investing activities (=)	-31581
CASH FROM FINANCING ACTIVITIES	
Money borrowed	33393
Cash gifts and inheritances (+)	1
Principal payments (-)	31681
Dividends paid (-)	-
Gifts given (-)	-
(d) Cash from financing activities (=)	1712
 (e) Net change in cash balance (b+c+d)	 -1617
Ending cash balance (farm & nonfarm)	24517

Table 20

**FINANCIAL GUIDELINES MEASURES, 1999**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of all farms reporting)

	Average Of All Farms	
Number of Farms	8	
<b>LIQUIDITY</b>	<b>Beginning</b>	<b>Ending</b>
Current ratio	1.58	1.32
Working capital	14639	9016
<b>SOLVENCY (Market)</b>	<b>Beginning</b>	<b>Ending</b>
Farm debt to asset ratio	18 %	17 %
Farm equity to asset ratio	82 %	83 %
Farm debt to equity ratio	21 %	21 %
<b>PROFITABILITY (Cost)</b>		
Rate of return on farm assets		-7.1 %
Rate of return on farm equity		-15.4 %
Operating profit margin		-18.0 %
Net farm income		-2475
<b>REPAYMENT CAPACITY</b>	<b>Cash</b>	<b>Accrual</b>
Term debt coverage ratio	220 %	232 %
Capital replacement margin	17722	19522
<b>EFFICIENCY</b>		
Asset turnover rate (market)		18.0 %
Operating expense ratio		76.8 %
Depreciation expense ratio		20.6 %
Interest expense ratio		6.1 %
Net farm income ratio		-3.4 %

**LABOR ANALYSIS**

	Average Of All Farms	
Number of Farms	6	
Total unpaid labor hours	1682	
Total hired labor hours	515	
Total labor hours per farm	2197	
Value of farm production / hour	39.42	
Net farm income / unpaid hour	0.29	

Table 21

**CROP PRODUCTION AND MARKETING SUMMARY, 1999**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	19	6	6
ACREAGE SUMMARY			
Total Acres Owned	349	247	422
Total Crop Acres	661	638	721
Crop Acres Owned	303	228	361
Crop Acres Cash Rented	326	392	340
Crop Acres Share Rented	32	19	19
AVERAGE PRICE RECEIVED (Cash Sales Only)			
Corn per bu.	2.07	-	1.96
Soybeans per bu.	4.70	-	4.68
Wheat, Winter per bu.	2.10	-	-
AVERAGE YIELD PER ACRE			
Soybeans (bu.)	42.82	-	43.73
Corn (bu.)	115.56	-	131.69
Wheat, Winter (bu.)	58.38	-	-
Corn, Seed (bu.)	209.23	-	-
Hay, Alfalfa (ton)	3.56	-	-
Sugar Beets (ton)	18.97	-	-
Beans, Navy (cwt.)	23.59	-	-

Table 22

**FARM INCOME STATEMENT, 1999**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	19	6	6
CASH FARM INCOME			
Black Turtle Beans	1042	-	3301
Green Beans	2044	-	-
Light Red Kidney Beans	8491	20175	6715
Small Red Beans	681	-	2156
Corn	52538	55182	45797
Seed Corn	16599	-	32066
Cucumbers	6535	-	10261
Alfalfa Hay	507	-	1604
Mixed Hay	913	1481	-
Soybeans	49394	35579	78149
Straw	360	282	246
Sugar Beets	4142	-	13115
Spring Wheat	168	-	531
Winter Wheat	9030	10911	6638
Other crops	1134	-	-
Beef Calves	307	-	-
Background Beef	68	-	-
Finish Yrlg Steers	981	-	3105
Cull breeding livestock	94	-	-
Transition payments	6549	10414	-
Other government payments	39547	28913	53716
Custom work income	6326	6003	4427
Patronage dividends, cash	361	27	951
Insurance income	1181	1819	-
Other farm income	3931	2923	1738
Gross Cash Farm Income	212,924	173,708	264,518

Table 23

**FARM INCOME STATEMENT, 1999 (Continued)****Michigan Cash Grain Farms, 400 - 999.9 acres**

(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	19	6	6
CASH FARM EXPENSE			
Seed	17765	24649	15777
Fertilizer	21631	16210	28250
Crop chemicals	14246	11546	20113
Crop insurance	1843	1211	2940
Drying fuel	597	1779	111
Irrigation energy	27	86	-
Crop marketing	1557	2170	1486
Crop miscellaneous	994	1220	1695
Feeder livestock purchase	803	-	1918
Purchased feed	567	-	265
Breeding fees	80	-	-
Veterinary	104	-	96
Livestock supplies	53	-	-
Livestock marketing	23	-	13
Interest	19616	17754	25403
Fuel & oil	6340	5030	8075
Repairs	14934	12154	16104
Custom hire	9015	5213	11557
Hired labor	5323	4599	8438
Land rent	22322	24272	24862
Machinery & bldg leases	2863	4127	236
Real estate taxes	5292	3753	5645
Farm insurance	4881	2918	5808
Utilities	3015	1421	5555
Dues & professional fees	1526	964	1134
Hedging account deposits	18	-	-
Miscellaneous	7203	5376	8389
Total cash expense	162637	146451	193871
Net cash farm income	50287	27257	70647
INVENTORY CHANGES			
Crops and feed	-11865	-34196	2021
Market livestock	180	-	395
Accounts receivable	-2362	-4774	4899
Prepaid expenses and supplies	1184	5952	1349
Accounts payable	5529	10907	9371
Total inventory change	-7334	-22111	18036
Net operating profit	42952	5146	88682
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS			
Breeding livestock	626	1417	-
Machinery and equipment	-30404	-26674	-41910
Buildings and improvements	-5994	-10349	-4471
Other farm capital	2958	-712	10333
Total depr. and other capital adj	-32813	-36317	-36049
Net farm income	10,139	-31,171	52,634

Table 24

**INVENTORY CHANGES, 1999**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
	-----	-----	-----
Number of Farms	19	6	6
Net cash farm income	50287	27257	70647
CROPS AND FEED			
Ending inventory	97677	64453	139515
Beginning inventory	109543	98649	137494
Inventory change	-11865	-34196	2021
MARKET LIVESTOCK			
Ending inventory	1115	-	2153
Beginning inventory	935	-	1758
Inventory change	180	-	395
ACCTS RECEIVABLE & OTHER CURRENT ASSETS			
Ending inventory	9957	4516	14861
Beginning inventory	12319	9290	9962
Inventory change	-2362	-4774	4899
PREPAID EXPENSES AND SUPPLIES			
Ending inventory	15056	16993	17480
Beginning inventory	13872	11041	16131
Inventory change	1184	5952	1349
ACCOUNTS PAYABLE			
Beginning inventory	16543	17172	18886
Ending inventory	11014	6265	9515
Inventory change	5529	10907	9371
Total inventory change	-7334	-22111	18036
Net operating profit	42952	5146	88682

Table 25

**DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1999**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	19	6	6
Net operating profit	42952	5146	88682
BREEDING LIVESTOCK			
Ending inventory	2039	1417	-
Capital sales	-	-	-
Beginning inventory	1413	-	-
Capital purchases	-	-	-
Depreciation, capital adj.	626	1417	-
MACHINERY AND EQUIPMENT			
Ending inventory	98170	99760	113641
Capital sales	3079	4604	1306
Beginning inventory	95933	106519	106309
Capital purchases	35720	24518	50548
Depreciation, capital adj.	-30404	-26674	-41910
BUILDINGS AND IMPROVEMENTS			
Ending inventory	31963	26630	42371
Capital sales	-	-	-
Beginning inventory	32633	26829	45242
Capital purchases	5324	10149	1600
Depreciation, capital adj.	-5994	-10349	-4471
OTHER CAPITAL ASSETS			
Ending inventory	12310	12519	15729
Capital sales	2447	6432	767
Beginning inventory	10523	16238	5546
Capital purchases	1276	3425	617
Depreciation, capital adj.	2958	-712	10333
Total depreciation, capital adj.	-32813	-36317	-36049
Net farm income	10139	-31171	52634

Table 26

**PROFITABILITY AND LIQUIDITY ANALYSIS, 1999**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

	Avg. Of All Farms	Avg. Of Low 25%	Avg. Of High 25%	Avg. Of All Farms	Avg. Of Low 25%	Avg. Of High 25%
Number of Farms	19	6	6	19	6	6
<b>PROFITABILITY</b>	----- Cost -----			----- Market -----		
Net farm income	10139	-31171	52634	68670	64259	141431
Labor and management earnings	-7804	-43078	29824	18989	35080	76813
Rate of return on assets	0.8 %	-7.9 %	6.5 %	5.8 %	8.2 %	9.7 %
Rate of return on equity	-4.5 %	-25.8 %	6.1 %	5.5 %	9.8 %	10.4 %
Operating profit margin	2.1 %	-25.5 %	15.8 %	31.7 %	44.6 %	48.7 %
Asset turnover rate	36.2 %	30.9 %	41.2 %	18.3 %	18.4 %	19.9 %
Interest on farm net worth	17943	11907	22810	49681	29179	64618
Farm interest expense	17214	13141	19360	17214	13141	19360
Value of operator lbr and mgmt.	23148	16711	29351	23148	16711	29351
Return on farm assets	4205	-34741	42643	62736	60689	131441
Average farm assets	546674	440475	654844	1081796	740988	1351653
Return on farm equity	-13009	-47882	23283	45522	47549	112081
Average farm equity	292034	185811	380164	827156	486324	1076973
Value of farm production	198133	136155	269649	198133	136155	269649
				Average Of All Farms	Average Of Low 33%	Average Of High 33%
Number of Farms				19	6	6
				LIQUIDITY (Cash)		
Net cash farm income				50287	27257	70647
Net nonfarm income				26972	36558	32822
Family living and taxes				37796	47843	45274
Real estate principal payments				7240	9719	7265
Cash available for interm. debt				32223	6253	50929
Average intermediate debt				63784	65073	79891
Years to turnover interm. debt				2.0	10.4	1.6
Expense as a % of income				76 %	84 %	73 %
Interest as a % of income				9 %	10 %	10 %
				LIQUIDITY (Accrual)		
Total accrual farm income				198876	134738	271833
Total accrual farm expense				155924	129593	183150
Net accrual operating income				42952	5146	88682
Net nonfarm income				26972	36558	32822
Family living and taxes				37796	47843	45274
Real estate principal payments				7240	9719	7265
Available for intermediate debt				24888	-15858	68965
Average intermediate debt				63784	65073	79891
Years to turnover interm. debt				2.6	**	1.2
Expense as a % of income				78 %	96 %	67 %
Interest as a % of income				9 %	10 %	7 %

\*\* Income insufficient to meet debt servicing requirements

Table 27

**BALANCE SHEET AT COST VALUES, 1999**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 25 %		Average Of High 25 %	
	19		6		6	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>ASSETS</b>						
	Current Farm Assets					
Cash and checking balance	8466	3918	7820	3419	4329	2539
Prepaid expenses & supplies	13872	15056	11041	16993	16131	17480
Growing crops	5907	4971	7168	5626	2968	4979
Accounts receivable	5045	3882	2122	-1110	2798	6386
Hedging accounts	-	26	-	-	-	83
Crops held for sale or feed	108671	95843	98649	58645	134733	139515
Crops under government loan	872	1834	-	5808	2761	-
Market livestock held for sale	935	1115	-	-	1758	2153
Other current assets	1367	1077	-	-	4195	3412
Total current farm assets	145134	127723	126800	89381	169674	176548
	Intermediate Farm Assets					
Breeding livestock	1413	2039	-	1417	-	-
Machinery and equipment	95933	98170	106519	99760	106309	113641
Other intermediate assets	6344	9296	8902	10275	3793	12319
Total intermediate farm assets	103689	109505	115421	111451	110102	125960
	Long-Term Farm Assets					
Farm land	278312	257194	187429	187429	349147	285480
Buildings and improvements	32633	31963	26829	26630	45242	42371
Other long-term assets	4179	3014	7336	2244	1753	3410
Total long-term farm assets	315124	292171	221594	216303	396142	331262
Total Farm Assets	563948	529400	463815	417136	675918	633770
Total Nonfarm Assets	91350	107255	45620	43593	146487	183912
Total Assets	655298	636655	509435	460729	822406	817682
<b>LIABILITIES</b>						
	Current Farm Liabilities					
Accrued interest	8448	6046	5591	978	10161	4118
Accounts payable	8096	4969	11581	5287	8726	5397
Current notes	61223	57982	84495	77102	54797	65071
Government crop loans	872	1593	-	5043	2761	-
Principal due on term debt	25811	22571	35573	27493	26973	24897
Total current farm liabilities	104455	93160	137240	115904	103418	99483
Intermediate Farm Liabilities	47889	45390	45118	41876	62337	59563
Long-term Farm Liabilities	110604	107783	81183	88008	116804	107755
Total Farm Liabilities	262947	246333	263540	245788	282559	266801
Total Nonfarm Liabilities	1705	4396	5398	9828	-	4091
Total Liabilities	264652	250728	268938	255616	282559	270892
Net Worth (farm and nonfarm)	390646	385927	240497	205112	539847	546789
Net Worth Change		-4719		-35385		6942
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	72 %	73 %	108 %	130 %	61 %	56 %
Curr. & Interm Farm Liab / Assets	61 %	58 %	75 %	79 %	59 %	53 %
Long Term Farm Liab. / Assets	35 %	37 %	37 %	41 %	29 %	33 %
Total Liabilities / Assets	40 %	39 %	53 %	55 %	34 %	33 %

Table 28

**BALANCE SHEET AT MARKET VALUES, 1999**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 25 %		Average Of High 25 %	
	19		6		6	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>ASSETS</b>						
	Current Farm Assets					
Cash and checking balance	8466	3918	7820	3419	4329	2539
Prepaid expenses & supplies	13872	15056	11041	16993	16131	17480
Growing crops	5907	4971	7168	5626	2968	4979
Accounts receivable	5045	3882	2122	-1110	2798	6386
Hedging accounts	-	26	-	-	-	83
Crops held for sale or feed	108671	95843	98649	58645	134733	139515
Crops under government loan	872	1834	-	5808	2761	-
Market livestock held for sale	935	1115	-	-	1758	2153
Other current assets	1367	1077	-	-	4195	3412
Total current farm assets	145134	127723	126800	89381	169674	176548
	Intermediate Farm Assets					
Breeding livestock	1413	2145	-	1750	-	-
Machinery and equipment	279625	289413	219618	236679	314899	336891
Other intermediate assets	6344	9293	8902	10275	3793	12310
Total intermediate farm assets	287382	300851	228520	248704	318692	349201
	Long-Term Farm Assets					
Farm land	588341	614180	298027	359106	782402	789715
Buildings and improvements	44768	48007	55930	65928	55808	56067
Other long-term assets	4179	3026	7336	2244	1753	3447
Total long-term farm assets	637289	665213	361293	427278	839962	849228
Total Farm Assets	1069805	1093787	716613	765364	1328328	1374977
Total Nonfarm Assets	148053	169886	84907	70159	210094	246603
Total Assets	1217858	1263673	801520	835523	1538422	1621580
<b>LIABILITIES</b>						
	Current Farm Liabilities					
Accrued interest	8448	6046	5591	978	10161	4118
Accounts payable	8096	4969	11581	5287	8726	5397
Current notes	61223	57982	84495	77102	54797	65071
Government crop loans	872	1593	-	5043	2761	-
Principal due on term debt	25811	22571	35573	27493	26973	24897
Total current farm liabilities	104455	93160	137240	115904	103418	99483
Intermediate Farm Liabilities	47889	45390	45118	41876	62337	59563
Long-term Farm Liabilities	110604	107783	81183	88008	116804	107755
Total Farm Liabilities	262947	246333	263540	245788	282559	266801
Total Nonfarm Liabilities	1705	4396	5398	9828	-	4091
Total Deferred Liabilities	-	-	-	-	-	-
Total Liabilities	264652	250728	268938	255616	282559	270892
Net Worth (farm and nonfarm)	953206	1012944	532582	579906	1255864	1350688
Net Worth Change		59739		47325		94824
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	72 %	73 %	108 %	130 %	61 %	56 %
Curr. & Interm Farm Liab. / Assets	35 %	32 %	51 %	47 %	34 %	30 %
Long Term Farm Liabilities / Assets	17 %	16 %	22 %	21 %	14 %	13 %
Total Liabilities / Assets	22 %	20 %	34 %	31 %	18 %	17 %

Table 29

**STATEMENT OF CASH FLOWS, 1999**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	19	6	6
(a) Beginning cash balance (farm & nonfarm)	9077	8820	4329
CASH FROM OPERATING ACTIVITIES			
Gross cash farm income	212924	173708	264518
Net nonfarm income (+)	26972	36558	32822
Total cash farm expense (-)	162637	146451	193871
Apparent family living expense (-)	30341	33365	39783
Income and social security tax (-)	7455	14479	5491
(b) Cash from operations (=)	39463	15972	58194
CASH FROM INVESTING ACTIVITIES			
Sale of breeding livestock	-	-	-
Sale of machinery & equipment (+)	3079	4604	1306
Sale of farm land (+)	5502	17423	-
Sale of farm buildings (+)	-	-	-
Sale of other farm assets (+)	2447	6432	767
Sale of nonfarm assets (+)	408	-	1292
Purchase of breeding livestock (-)	-	-	-
Purchase of machinery & equip. (-)	35720	24518	50548
Purchase of farm land (-)	2862	7814	-
Purchase of farm buildings (-)	5324	10149	1600
Purchase of other farm assets (-)	1276	3425	617
Purchase of nonfarm assets (-)	487	317	1227
(c) Cash from investing activities (=)	-34234	-17764	-50628
CASH FROM FINANCING ACTIVITIES			
Money borrowed	86510	97357	100776
Cash gifts and inheritances (+)	3382	949	-
Principal payments (-)	96179	99748	107132
Dividends paid (-)	-	-	-
Gifts given (-)	3511	667	3000
(d) Cash from financing activities (=)	-9799	-2109	-9356
(e) Net change in cash balance (b+c+d)	-4570	-3901	-1790
Ending cash balance (farm & nonfarm)	4508	4919	2539

Table 30

**FINANCIAL GUIDELINES MEASURES, 1999**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 25 %		Average Of High 25 %	
	19		6		6	
<b>LIQUIDITY</b>						
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current ratio	1.39	1.37	0.92	0.77	1.64	1.77
Working capital	40680	34563	-10440	-26522	66256	77066
<b>SOLVENCY (Market)</b>						
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Farm debt to asset ratio	25 %	23 %	37 %	32 %	21 %	19 %
Farm equity to asset ratio	75 %	77 %	63 %	68 %	79 %	81 %
Farm debt to equity ratio	33 %	29 %	58 %	47 %	27 %	24 %
<b>PROFITABILITY</b>						
	Cost	Market	Cost	Market	Cost	Market
Rate of return on farm assets	0.8 %	5.8 %	-7.9 %	8.2 %	6.5 %	9.7 %
Rate of return on farm equity	-4.5 %	5.5 %	-25.8 %	9.8 %	6.1 %	10.4 %
Operating profit margin	2.1 %	31.7 %	-25.5 %	44.6 %	15.8 %	48.7 %
Net farm income	10139	68670	-31171	64259	52634	141431
<b>REPAYMENT CAPACITY</b>						
	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	133 %	115 %	61 %	18 %	173 %	215 %
Capital replacement margin	13513	6179	-20040	-42151	31221	49257
<b>EFFICIENCY</b>						
Asset turnover rate (market)		18.3 %		18.4 %		19.9 %
Operating expense ratio		69.7 %		86.4 %		60.3 %
Depreciation expense ratio		16.5 %		27.0 %		13.3 %
Interest expense ratio		8.7 %		9.8 %		7.1 %
Net farm income ratio		5.1 %		-23.1 %		19.4 %

**LABOR ANALYSIS**

Number of Farms	Average Of All Farms	Average Of High 33 %
	17	6
Total unpaid labor hours	2444	2549
Total hired labor hours	490	918
Total labor hours per farm	2934	3466
Value of farm production / hour	70.05	77.80
Net farm income / unpaid hour	6.45	20.65

Table 31

**CROP PRODUCTION AND MARKETING SUMMARY, 1999**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	18	6	6
ACREAGE SUMMARY			
Total Acres Owned	739	550	1031
Total Crop Acres	1832	2173	1996
Crop Acres Owned	908	799	1306
Crop Acres Cash Rented	891	1373	689
Crop Acres Share Rented	33	-	-
AVERAGE PRICE RECEIVED (Cash Sales Only)			
Corn per bu.	1.99	-	2.11
Soybeans per bu.	5.01	-	-
Wheat, Winter per bu.	1.96	-	-
AVERAGE YIELD PER ACRE			
Soybeans (bu.)	44.76	-	-
Corn (bu.)	149.74	-	-
Wheat, Winter (bu.)	69.93	-	-
Sugar Beets (ton)	15.69	-	-
Beans, Navy (cwt.)	32.96	-	-
Hay, Alfalfa (ton)	4.00	-	-

Table 32

**FARM INCOME STATEMENT, 1999**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	18	6	6
CASH FARM INCOME			
Black Turtle Beans	3138	-	9415
Light Red Kidney Beans	1079	-	3238
Navy Beans	14339	35301	7716
Corn	183980	272589	150074
Seed Corn	15131	-	45392
Mixed Hay	1638	4565	-
Oats	49	-	148
Pumpkins	94	283	-
Soybeans	124413	141687	116257
Straw	815	1436	482
Sugar Beets	13371	29594	-
Winter Wheat	30660	40368	31484
Beef Calves	973	2918	-
Background Beef	673	1075	-
Finish Beef Calves	2717	8151	-
Broilers	26	-	78
Eggs	975	-	2926
Mkt Lambs	398	1194	-
Weaning to Finish	5649	-	-
Misc. livestock income	593	15	-
Transition payments	18722	-	44241
Other government payments	89210	123431	71921
Custom work income	13748	37410	378
Patronage dividends, cash	1516	3372	1115
Insurance income	1887	3014	2544
Cash from hedging accts	1810	4991	-
Other farm income	20923	29610	18720
Gross Cash Farm Income	548,529	741,002	506,128

Table 33

**FARM INCOME STATEMENT, 1999 (Continued)****Michigan Cash Grain Farms; 1,000 or more acres**

(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	18	6	6
CASH FARM EXPENSE			
Seed	48286	73235	40941
Fertilizer	80539	126267	63235
Crop chemicals	43009	43186	57521
Crop insurance	1874	1043	1627
Drying fuel	990	244	1688
Irrigation energy	139	-	-
Crop marketing	544	704	357
Crop miscellaneous	3132	223	2316
Feeder livestock purchase	3608	2894	561
Purchased feed	2376	1170	1426
Breeding fees	31	83	10
Veterinary	116	107	12
Livestock supplies	228	334	-
Livestock leases	152	-	-
Livestock marketing	80	169	71
Interest	38762	48829	29356
Fuel & oil	14349	17146	16258
Repairs	35001	41388	38314
Custom hire	10675	19700	6608
Hired labor	28054	49096	20202
Land rent	71075	98452	54356
Machinery & bldg leases	8983	10333	16315
Real estate taxes	16905	26010	15457
Personal property taxes	404	-	92
Farm insurance	12341	14621	13173
Utilities	7184	6375	9576
Dues & professional fees	4671	6057	4795
Hedging account deposits	3306	6787	55
Miscellaneous	21495	44362	11915
Total cash expense	458308	638816	406236
Net cash farm income	90221	102185	99892
INVENTORY CHANGES			
Crops and feed	12242	-62036	115368
Market livestock	666	-1817	-
Accounts receivable	2153	-9500	18010
Prepaid expenses and supplies	10008	11578	11581
Accounts payable	-530	-3445	615
Total inventory change	24540	-65220	145574
Net operating profit	114761	36965	245466
DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS			
Breeding livestock	-15	-44	-
Machinery and equipment	-45340	-57729	-54372
Buildings and improvements	-13336	-21679	-17045
Other farm capital	-537	1298	-2394
Total depr. and other capital adj	-59228	-78155	-73811
Net farm income	55533	-41189	171655

Table 34

**INVENTORY CHANGES, 1999**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	18	6	6
Net cash farm income	90221	102185	99892
CROPS AND FEED			
Ending inventory	273861	294415	383323
Beginning inventory	261618	356451	267956
Inventory change	12242	-62036	115368
MARKET LIVESTOCK			
Ending inventory	4886	6308	83
Beginning inventory	4219	8125	83
Inventory change	666	-1817	-
ACCTS RECEIVABLE & OTHER CURRENT ASSETS			
Ending inventory	50932	48142	77127
Beginning inventory	48779	57642	59116
Inventory change	2153	-9500	18010
PREPAID EXPENSES AND SUPPLIES			
Ending inventory	45531	67890	40709
Beginning inventory	35523	56312	29128
Inventory change	10008	11578	11581
ACCOUNTS PAYABLE			
Beginning inventory	16782	12843	22902
Ending inventory	17312	16288	22286
Inventory change	-530	-3445	615
Total inventory change	24540	-65220	145574
Net operating profit	114761	36965	245466

Table 35

**DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1999**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	18	6	6
Net operating profit	114761	36965	245466
BREEDING LIVESTOCK			
Ending inventory	3197	9590	-
Capital sales	193	578	-
Beginning inventory	2701	8103	-
Capital purchases	703	2108	-
Depreciation, capital adj.	-15	-44	-
MACHINERY AND EQUIPMENT			
Ending inventory	137131	199734	110180
Capital sales	7724	14571	1908
Beginning inventory	144448	236374	107550
Capital purchases	45747	35661	58910
Depreciation, capital adj.	-45340	-57729	-54372
BUILDINGS AND IMPROVEMENTS			
Ending inventory	75177	92380	66986
Capital sales	798	2395	-
Beginning inventory	74200	81285	73866
Capital purchases	15112	35170	10164
Depreciation, capital adj.	-13336	-21679	-17045
OTHER CAPITAL ASSETS			
Ending inventory	37240	36266	34906
Capital sales	3951	4166	-
Beginning inventory	38037	37467	29278
Capital purchases	3692	1667	8022
Depreciation, capital adj.	-537	1298	-2394
Total depreciation, capital adj.	-59228	-78155	-73811
Net farm income	55533	-41189	171655

Table 36

**PROFITABILITY AND LIQUIDITY ANALYSIS, 1999**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

	Avg. Of All Farms	Avg. Of Low 25%	Avg. Of High 25%	Avg. Of All Farms	Avg. Of Low 25%	Avg. Of High 25%
Number of Farms	18	6	6	18	6	6
<b>PROFITABILITY</b>	----- Cost -----			----- Market -----		
Net farm income	55533	-41189	171655	111615	46191	183163
Labor and management earnings	30771	-65241	127878	34321	-35916	96183
Rate of return on assets	4.9 %	-1.7 %	11.7 %	5.5 %	2.9 %	8.0 %
Rate of return on equity	3.2 %	-21.7 %	16.5 %	5.3 %	1.0 %	8.9 %
Operating profit margin	9.3 %	-3.3 %	23.2 %	19.4 %	9.9 %	25.0 %
Asset turnover rate	52.6 %	53.5 %	50.4 %	28.4 %	29.2 %	31.9 %
Interest on farm net worth	24761	24052	43777	77293	82107	86981
Farm interest expense	39645	51965	30211	39645	51965	30211
Value of operator lbr and mgmt.	43285	32443	53690	43285	32443	53690
Return on farm assets	51893	-21668	148176	107975	65712	159684
Average farm assets	1059989	1240118	1266092	1963584	2269551	2000851
Return on farm equity	12248	-73632	117965	68330	13748	129474
Average farm equity	384625	339018	714919	1288220	1368451	1449678
Value of farm production	557591	663540	637519	557591	663540	637519
				Average Of All Farms	Average Of Low 33%	Average Of High 33%
Number of Farms				18	6	6
				LIQUIDITY (Cash)		
Net cash farm income				90221	102185	99892
Net nonfarm income				18298	23523	11027
Family living and taxes				62115	48851	77124
Real estate principal payments				22988	20819	31739
Cash available for interm. debt				23415	56038	2055
Average intermediate debt				123023	191981	115748
Years to turnover interm. debt				5.3	3.4	56.3
Expense as a % of income				84 %	86 %	80 %
Interest as a % of income				7 %	7 %	6 %
				LIQUIDITY (Accrual)		
Total accrual farm income				563590	667648	639506
Total accrual farm expense				448829	630683	394040
Net accrual operating income				114761	36965	245466
Net nonfarm income				18298	23523	11027
Family living and taxes				62115	48851	77124
Real estate principal payments				22988	20819	31739
Available for intermediate debt				47955	-9182	147630
Average intermediate debt				123023	191981	115748
Years to turnover interm. debt				2.6	**	0.8
Expense as a % of income				80 %	94 %	62 %
Interest as a % of income				7 %	8 %	5 %

\*\* Income insufficient to meet debt servicing requirements

Table 37

**BALANCE SHEET AT COST VALUES, 1999**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 25 %		Average Of High 25 %	
	18		6		6	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>ASSETS</b>						
	Current Farm Assets					
Cash and checking balance	32890	22605	75462	20641	9017	3649
Prepaid expenses & supplies	35523	45531	56312	67890	29128	40709
Growing crops	13198	13434	20079	17438	9466	11515
Accounts receivable	25104	35333	30062	30704	28995	60284
Hedging accounts	2519	315	7500	-	58	392
Crops held for sale or feed	255312	260790	356451	276613	249036	361914
Crops under government loan	6306	13071	-	17803	18919	21410
Market livestock held for sale	4219	4886	8125	6308	83	83
Other current assets	7958	1850	-	-	20598	4937
Total current farm assets	383031	397815	553992	437395	365300	504891
	Intermediate Farm Assets					
Breeding livestock	2701	3197	8103	9590	-	-
Machinery and equipment	144448	137131	236374	199734	107550	110180
Other intermediate assets	16913	16438	3389	2440	28599	34424
Total intermediate farm assets	164062	156765	247866	211764	136149	144605
	Long-Term Farm Assets					
Farm land	413501	413501	393825	393825	619613	619613
Buildings and improvements	74200	75177	81285	92380	73866	66986
Other long-term assets	21124	20803	34078	33826	679	482
Total long-term farm assets	508825	509481	509188	520032	694158	687080
Total Farm Assets	1055918	1064061	1311046	1169190	1195607	1336576
Total Nonfarm Assets	41537	43749	28515	38291	28820	28501
Total Assets	1097455	1107810	1339561	1207481	1224427	1365077
<b>LIABILITIES</b>						
	Current Farm Liabilities					
Accrued interest	10146	11029	10445	13581	8851	9705
Accounts payable	6636	6283	2398	2707	14051	12581
Current notes	213173	222383	392033	349150	52435	76032
Government crop loans	6164	12559	-	16266	18492	21410
Principal due on term debt	44118	44207	41275	39049	60893	66620
Total current farm liabilities	280237	296461	446152	420753	154722	186348
Intermediate Farm Liabilities	105493	99235	179794	165687	88031	80681
Long-term Farm Liabilities	287669	281635	298481	291335	293713	298851
Total Farm Liabilities	673398	677330	924427	877774	536467	565879
Total Nonfarm Liabilities	4247	1086	-	-	2500	2000
Total Liabilities	677645	678416	924427	877774	538967	567879
Net Worth (farm and nonfarm)	419810	429394	415134	329707	685460	797198
Net Worth Change		9584		-85427		111737
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	73 %	75 %	81 %	96 %	42 %	37 %
Curr. & Interm Farm Liab / Assets	71 %	71 %	78 %	90 %	48 %	41 %
Long Term Farm Liab. / Assets	57 %	55 %	59 %	56 %	42 %	43 %
Total Liabilities / Assets	62 %	61 %	69 %	73 %	44 %	42 %

Table 38

**BALANCE SHEET AT MARKET VALUES, 1999**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 25 %		Average Of High 25 %	
	18		6		6	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>ASSETS</b>						
	Current Farm Assets					
Cash and checking balance	32890	22605	75462	20641	9017	3649
Prepaid expenses & supplies	35523	45531	56312	67890	29128	40709
Growing crops	13198	13434	20079	17438	9466	11515
Accounts receivable	25104	35333	30062	30704	28995	60284
Hedging accounts	2519	315	7500	-	58	392
Crops held for sale or feed	255312	260790	356451	276613	249036	361914
Crops under government loan	6306	13071	-	17803	18919	21410
Market livestock held for sale	4219	4886	8125	6308	83	83
Other current assets	7958	1850	-	-	20598	4937
Total current farm assets	383031	397815	553992	437395	365300	504891
	Intermediate Farm Assets					
Breeding livestock	2718	3197	8153	9590	-	-
Machinery and equipment	405305	412875	558077	538586	342950	368065
Other intermediate assets	16913	16438	3389	2440	28599	34424
Total intermediate farm assets	424935	432509	569619	550616	371549	402489
	Long-Term Farm Assets					
Farm land	1001962	1035022	988202	1035768	1103724	1090166
Buildings and improvements	100419	109547	150899	184708	83360	79061
Other long-term assets	21124	20803	34078	33826	679	482
Total long-term farm assets	1123505	1165372	1173178	1254303	1187763	1169709
Total Farm Assets	1931471	1995696	2296789	2242314	1924612	2077089
Total Nonfarm Assets	97709	102068	99985	102632	68239	81493
Total Assets	2029180	2097765	2396774	2344945	1992852	2158582
<b>LIABILITIES</b>						
	Current Farm Liabilities					
Accrued interest	10146	11029	10445	13581	8851	9705
Accounts payable	6636	6283	2398	2707	14051	12581
Current notes	213173	222383	392033	349150	52435	76032
Government crop loans	6164	12559	-	16266	18492	21410
Principal due on term debt	44118	44207	41275	39049	60893	66620
Total current farm liabilities	280237	296461	446152	420753	154722	186348
Intermediate Farm Liabilities	105493	99235	179794	165687	88031	80681
Long-term Farm Liabilities	287669	281635	298481	291335	293713	298851
Total Farm Liabilities	673398	677330	924427	877774	536467	565879
Total Nonfarm Liabilities	4247	1086	-	-	2500	2000
Total Deferred Liabilities	-	-	-	-	-	-
Total Liabilities	677645	678416	924427	877774	538967	567879
Net Worth (farm and nonfarm)	1351535	1419349	1472347	1467171	1453885	1590703
Net Worth Change		67814		-5176		136818
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	73 %	75 %	81 %	96 %	42 %	37 %
Curr. & Interm Farm Liab. / Assets	48 %	48 %	56 %	59 %	33 %	29 %
Long Term Farm Liabilities / Assets	26 %	24 %	25 %	23 %	25 %	26 %
Total Liabilities / Assets	33 %	32 %	39 %	37 %	27 %	26 %

Table 39

**STATEMENT OF CASH FLOWS, 1999**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms	Average Of Low 25%	Average Of High 25%
Number of Farms	18	6	6
(a) Beginning cash balance (farm & nonfarm)	32890	75462	9017
CASH FROM OPERATING ACTIVITIES			
Gross cash farm income	548529	741002	506128
Net nonfarm income (+)	18298	23523	11027
Total cash farm expense (-)	458308	638816	406236
Apparent family living expense (-)	53569	36216	65898
Income and social security tax (-)	8546	12635	11226
(b) Cash from operations (=)	46403	76857	33794
CASH FROM INVESTING ACTIVITIES			
Sale of breeding livestock	193	578	-
Sale of machinery & equipment (+)	7724	14571	1908
Sale of farm land (+)	-	-	-
Sale of farm buildings (+)	798	2395	-
Sale of other farm assets (+)	3951	4166	-
Sale of nonfarm assets (+)	2167	-	6500
Purchase of breeding livestock (-)	703	2108	-
Purchase of machinery & equip. (-)	45747	35661	58910
Purchase of farm land (-)	4651	13952	-
Purchase of farm buildings (-)	15112	35170	10164
Purchase of other farm assets (-)	3692	1667	8022
Purchase of nonfarm assets (-)	4604	13812	-
(c) Cash from investing activities (=)	-59675	-80660	-68688
CASH FROM FINANCING ACTIVITIES			
Money borrowed	176809	203560	152464
Cash gifts and inheritances (+)	38414	279	114963
Principal payments (-)	172995	253654	122436
Dividends paid (-)	-	-	-
Gifts given (-)	39242	1205	115466
(d) Cash from financing activities (=)	2986	-51020	29526
(e) Net change in cash balance (b+c+d)	-10285	-54822	-5368
Ending cash balance (farm & nonfarm)	22605	20641	3649

Table 40

**FINANCIAL GUIDELINES MEASURES, 1999**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms		Average Of Low 25 %		Average Of High 25 %	
	18		6		6	
<b>LIQUIDITY</b>	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current ratio	1.37	1.34	1.24	1.04	2.36	2.71
Working capital	102794	101355	107840	16642	210578	318544
<b>SOLVENCY (Market)</b>	Beginning	Ending	Beginning	Ending	Beginning	Ending
Farm debt to asset ratio	35 %	34 %	40 %	39 %	28 %	27 %
Farm equity to asset ratio	65 %	66 %	60 %	61 %	72 %	73 %
Farm debt to equity ratio	54 %	51 %	67 %	64 %	39 %	37 %
<b>PROFITABILITY</b>	Cost	Market	Cost	Market	Cost	Market
Rate of return on farm assets	4.9 %	5.5 %	-1.7 %	2.9 %	11.7 %	8.0 %
Rate of return on farm equity	3.2 %	5.3 %	-21.7 %	1.0 %	16.5 %	8.9 %
Operating profit margin	9.3 %	19.4 %	-3.3 %	9.9 %	23.2 %	25.0 %
Net farm income	55533	111615	-41189	46191	171655	183163
<b>REPAYMENT CAPACITY</b>	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	105 %	159 %	193 %	22 %	57 %	289 %
Capital replacement margin	2286	26826	35582	-29638	-27099	118476
	<b>EFFICIENCY</b>					
Asset turnover rate (market)	28.4 %		29.2 %		31.9 %	
Operating expense ratio	72.6 %		86.7 %		56.9 %	
Depreciation expense ratio	10.5 %		11.7 %		11.5 %	
Interest expense ratio	7.0 %		7.8 %		4.7 %	
Net farm income ratio	9.9 %		-6.2 %		26.8 %	

**LABOR ANALYSIS**

Number of Farms	Average Of All Farms	Average Of High 33 %
	17	6
Total unpaid labor hours	3159	3936
Total hired labor hours	2343	1771
Total labor hours per farm	5502	5708
Value of farm production / hour	95.40	111.69
Net farm income / unpaid hour	19.31	43.61

## Per Unit Income and Expense

Table 41 gives the per acre cash income, cash expense and depreciation for 46 of the 51 cash grain farms. Five of the 51 did not report any crop acres, so the items in the table are based on the other 46. They had an unweighted average of 1,153 acres. These included owned acres plus land cash and share rented. Table 1 shows most leased ground was cash rented.

Table 41 **Average Income and Expense Items, Michigan, 1999**  
Cash Grain Farms, Per Acre

		<u>Your Farm</u>
Total Crop Acres	1,153.0	
<b>Income Items per Acre</b>		
Corn	\$107	_____
Soybeans	73	_____
Government	62	_____
Custom work	15	_____
Wheat	16	_____
All Other Income	37	_____
<b>Expense Items per Acre</b>		
Seed	\$26.85	_____
Fertilizer	39.38	_____
Crop chemicals	23.09	_____
Crop insurance	2.14	_____
Drying fuel	0.56	_____
Crop marketing	0.75	_____
Crop miscellaneous	1.57	_____
Livestock cost items	2.88	_____
Interest	21.48	_____
Fuel and oil	8.29	_____
Repairs	18.97	_____
Custom hire	15.23	_____
Hired labor	16.21	_____
Land rent	39.24	_____
Leases	6.69	_____
Real estate taxes	8.06	_____
Farm insurance	6.94	_____
Utilities	3.95	_____
Dues, prof. fees	2.29	_____
Miscellaneous	11.52	_____
Machinery depreciation	28.83	_____
Buildings depreciation	7.01	_____