



**AgEcon** SEARCH  
RESEARCH IN AGRICULTURAL & APPLIED ECONOMICS

*The World's Largest Open Access Agricultural & Applied Economics Digital Library*

**This document is discoverable and free to researchers across the globe due to the work of AgEcon Search.**

**Help ensure our sustainability.**

Give to AgEcon Search

AgEcon Search  
<http://ageconsearch.umn.edu>  
[aesearch@umn.edu](mailto:aesearch@umn.edu)

*Papers downloaded from **AgEcon Search** may be used for non-commercial purposes and personal study only. No other use, including posting to another Internet site, is permitted without permission from the copyright owner (not AgEcon Search), or as allowed under the provisions of Fair Use, U.S. Copyright Act, Title 17 U.S.C.*

# ***Staff Paper***

## **1998 Business Analysis Summary for Cash Grain Farms**

Sherrill B. Nott

**Staff Paper #99-35**

**July 1999**



Department of Agricultural Economics  
MICHIGAN STATE UNIVERSITY  
East Lansing, Michigan 48824  
MSU is an Affirmative Action/Equal Opportunity Institution

# 1998 BUSINESS ANALYSIS SUMMARY FOR CASH GRAIN FARMS

1998, Southern Michigan  
Staff Paper No. 99-35, 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 60 Cash Grain Farms, All Sizes
    - 1. Crop Production and Marketing Summary, 1998..... Page 5
    - 2. Farm Income Statement, 1998..... Page 6
    - 3. Farm Income Statement, (Con't)..... Page 7
    - 4. Inventory Changes, 1998..... Page 8
    - 5. Depreciation, Capital Adjustments, 1998..... Page 9
    - 6. Profitability & Liquidity Analysis, 1998..... Page 10
    - 7. Balance Sheet at Cost Values, 1998..... Page 11
    - 8. Balance Sheet at Market Values, 1998..... Page 12
    - 9. Statement of Cash Flows, 1998..... Page 13
    - 10. Financial Guidelines Measures, 1998..... Page 14
  - B. Averages of 9 Cash Grain Farms, 1 to 399.9 acres
    - 11. Crop Production & Marketing Summary, 1998..... Page 15
    - 12. Farm Income Statement, 1998..... Page 16
    - 13. Farm Income Statement, (Con't.)..... Page 17
    - 14. Inventory Changes, 1998..... Page 18
    - 15. Depreciation & Other Capital Adjustments, 1998..... Page 19
    - 16. Profitability & Liquidity Analysis, 1998..... Page 20
    - 17. Balance Sheet at Cost Values, 1998..... Page 21
    - 18. Balance Sheet at Market Values, 1998..... Page 22
    - 19. Statement of Cash Flows, 1999..... Page 23
    - 20. Financial Guidelines Measures, 1998..... Page 24
  - C. Averages of 23 Cash Grain Farms, 400 to 999.9 Acres
    - 21. Crop Production & Marketing Summary, 1998..... Page 25
    - 22. Farm Income Statement, 1998..... Page 26
    - 23. Farm Income Statement, (Con't.)..... Page 27

---

<sup>1</sup> Professor and Farm Management Specialist; phone 517-353-4522 or [nott@msu.edu](mailto:nott@msu.edu) Co-workers in the Telfarm/MicroTel project were R. Betz, L. Borton, R. Clark, S. Harsh, M. Kelsey, G. Kole, T. Purdy, W. Schauer, G. Schwab, D. Stein, and V. Varner with the assistance of Michigan State University Extension Agents. AgriSolutions co-workers were Kelly Tobin, Gary Lenneman, Steven Eshelman and Jan Raymond. Salisbury Management Services co-worker was Mike Fassler.

**Copyright:** 1999 by Sherrill B. Nott. All rights reserved. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

	24.	Inventory Changes, 1998.....	Page 28
	25.	Depreciation & Other Capital Adjustments, 1998.....	Page 29
	26.	Profitability & Liquidity Analysis, 1998.....	Page 30
	27.	Balance Sheet At Cost Values, 1998.....	Page 31
	28.	Balance Sheet At Market Values, 1998.....	Page 32
	29.	Statement of Cash Flows, 1998.....	Page 33
	30.	Financial Guidelines Measures, 1998.....	Page 34
D.		Averages of 28 Cash Grain Farms, 1,000 or more Acres	
	31.	Crop Production & Marketing Summary, 1998.....	Page 35
	32.	Farm Income Statement, 1998.....	Page 36
	33.	Farm Income Statement, (Con't.).....	Page 37
	34.	Inventory Changes, 1998.....	Page 38
	35.	Depreciation & Other Capital Adjustments, 1998.....	Page 39
	36.	Profitability & Liquidity Analysis, 1998.....	Page 40
	37.	Balance Sheet at Cost Values, 1998.....	Page 41
	38.	Balance Sheet at Market Values, 1998.....	Page 42
	39.	Statement of Cash Flows, 1998.....	Page 43
	40.	Financial Guidelines Measures, 1998.....	Page 44
E.	41.	Per Unit Income and Expense Worksheet (56 farms)....	Page 45

## Data Source

The sources of the 60 cash grain farms analyzed in this report were Telfarm/MicroTel at Michigan State University, the AgriSolutions offices in East Lansing and Adrian, and Salisbury Management Services in Eaton Rapids.

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, or of Salisbury Management Services in Michigan. Farm records were included if a Finan<sup>2</sup> summary was completed on 1998 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 60 farms was \$13,457; the standard deviation of the mean was \$120,153 and the median was \$7,145. The unweighted mean of acres cropped (owned plus rented) on the 56 farms that reported crops and yields was 1,136 acres; the standard deviation of the mean was 983 acres and the median was 887 acres.

This report has three purposes: 1)to provide statistical information about the financial results on cash grain farms during 1998; 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

---

<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.

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, contains averages of 38 cash grain farms for 1997. These staff papers are available from the author.

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, or by Salisbury Management Services. 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, 1998**  
**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	60	15	15
ACREAGE SUMMARY			
Total Crop Acres	1060	1251	1565
Crop Acres Owned	439	704	484
Crop Acres Cash Rented	600	547	1038
Crop Acres Share Rented	21	-	43
AVERAGE PRICE RECEIVED (Cash Sales Only)			
Corn per bu.	2.50	2.15	2.98
Soybeans per bu.	6.10	6.92	6.02
Wheat, Winter per bu.	2.51	2.30	2.58
Straw per ton	49.37	-	-
AVERAGE YIELD PER ACRE			
Soybeans (bu.)	46.70	39.57	48.37
Corn (bu.)	132.79	108.35	145.44
Wheat, Winter (bu.)	58.94	-	55.25
Beans, Black Turtle (cwt.)	14.90	-	-
Sugar Beets (ton)	15.81	-	-
Hay, Alfalfa (ton)	3.61	-	-
Beans, Navy (cwt.)	17.47	-	-
Haylage, Alfalfa (ton)	5.00	-	-

Table 2. **FARM INCOME STATEMENT, 1998**  
**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	60	15	15
<b>CASH FARM INCOME</b>			
Barley	67	268	-
Black Turtle Beans	2617	10469	-
Dark Red Kidney Beans	425	1699	-
Light Red Kidney Beans	345	-	-
Navy Beans	4970	14417	-
Bedding Plants	633	-	-
Corn	126936	157049	160313
Corn Silage	220	-	880
Seed Corn	3527	35	14036
Cucumbers	1152	-	4608
Brome Grass Seed	1369	5475	-
Orchard Grass Seed	90	359	-
Alfalfa Hay	345	62	184
Mixed Hay	1923	3593	-
Oats	1189	4624	-
Rye	36	-	-
Soybeans	111925	128893	174467
Straw	750	884	620
Sugar Beets	5501	14284	-
Sweet Corn	2452	9808	-
Winter Wheat	17846	22285	26815
Other crops	560	-	-
Beef Calves	1113	1045	49
Background Beef	63	250	-
Finish Beef Calves	4664	669	13019
Finish Yrlg Steers	2820	9083	-
Broilers	9	-	36
Eggs	319	-	1276
Dairy Heifers (for sale)	332	-	1327
Dairy Replacement Heifers	833	-	3333
Dairy Steers	66	-	262
Raised Hogs	5377	21503	7
Finish Feeder Pigs	403	-	-
Mkt Lambs	126	-	-
Wool	2	-	-
Finish Cull Cows	9	-	-
Cull breeding livestock	192	453	254
Misc. livestock income	276	-	-
Transition payments	3341	6350	347
Other government payments	39036	39959	58655
Custom work income	20173	4427	56607
Patronage dividends, cash	332	571	481
Insurance income	3791	8863	2417
Cash from hedging accts	281	1123	-
Other farm income	6706	1060	11526
<b>Gross Cash Farm Income</b>	<b>375141</b>	<b>469558</b>	<b>531517</b>

Table 3. **FARM INCOME STATEMENT, 1998 (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	60	15	15
<b>CASH FARM EXPENSE</b>			
Seed	23260	30450	30639
Fertilizer	49656	64294	71695
Crop chemicals	30843	34619	48132
Crop insurance	2379	970	5816
Drying fuel	1691	1522	2146
Irrigation energy	139	458	-
Crop marketing	1182	2232	551
Crop miscellaneous	1400	2277	1651
Feeder livestock purchase	3045	449	8167
Purchased feed	3552	8548	1880
Breeding fees	218	-	9
Veterinary	328	103	323
Livestock supplies	634	300	155
Livestock leases	96	385	-
Grazing fees	241	965	-
Livestock marketing	292	934	106
Interest	29451	46843	30290
Fuel & oil	9459	13093	11394
Repairs	24745	36431	28549
Custom hire	9822	6168	20086
Hired labor	17019	26194	27710
Land rent	49366	58196	78351
Machinery & bldg leases	8685	2502	20061
Real estate taxes	7691	10834	5862
Personal property taxes	33	110	-
Farm insurance	8385	13666	8489
Utilities	5790	7360	6686
Dues & professional fees	5488	16193	2535
Hedging account deposits	629	1604	-130
Miscellaneous	22911	41754	31422
Total cash expense	318431	429454	442573
Net cash farm income	56709	40104	88944
<b>INVENTORY CHANGES</b>			
Crops and feed	-11628	-74779	54501
Market livestock	-3000	-12493	2530
Accounts receivable	3175	13904	-2361
Prepaid expenses and supplies	3252	-6760	19853
Accounts payable	-227	-2125	-888
Total inventory change	-8428	-82254	73635
Net operating profit	48281	-42149	162579
<b>DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS</b>			
Breeding livestock	-300	-1528	-226
Machinery and equipment	-33692	-55476	-30730
Buildings and improvements	-5192	-4202	-9424
Other farm capital	142	1047	-713
Total depr. and other capital adj	-39042	-60159	-41092
Net farm income	9239	-102308	121487



Table 4. **INVENTORY CHANGES, 1998**  
**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	60	15	15
Net cash farm income	56709	40104	88944
CROPS AND FEED			
Ending inventory	179581	219048	264270
Beginning inventory	191209	293827	209769
Inventory change	-11628	-74779	54501
MARKET LIVESTOCK			
Ending inventory	6416	6003	14739
Beginning inventory	9415	18496	12210
Inventory change	-3000	-12493	2530
ACCTS RECEIVABLE & OTHER CURRENT ASSETS			
Ending inventory	30274	57601	34935
Beginning inventory	27099	43697	37296
Inventory change	3175	13904	-2361
PREPAID EXPENSES AND SUPPLIES			
Ending inventory	26048	18040	66225
Beginning inventory	22796	24800	46372
Inventory change	3252	-6760	19853
ACCOUNTS PAYABLE			
Beginning inventory	16823	31409	20279
Ending inventory	17050	33534	21167
Inventory change	-227	-2125	-888
Total inventory change	-8428	-82254	73635
Net operating profit	48281	-42149	162579

Table 5. **DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1998**  
**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	60	15	15
Net operating profit	48281	-42149	162579
<b>BREEDING LIVESTOCK</b>			
Ending inventory	3038	1983	147
Capital sales	916	2840	164
Beginning inventory	3557	6351	382
Capital purchases	698	-	155
Depreciation, capital adj.	-300	-1528	-226
<b>MACHINERY AND EQUIPMENT</b>			
Ending inventory	102829	153802	104199
Capital sales	10277	22974	7359
Beginning inventory	97555	156192	95050
Capital purchases	49243	76060	47237
Depreciation, capital adj.	-33692	-55476	-30730
<b>BUILDINGS AND IMPROVEMENTS</b>			
Ending inventory	44688	51780	39566
Capital sales	57	-	-
Beginning inventory	42301	46913	40729
Capital purchases	7636	9070	8261
Depreciation, capital adj.	-5192	-4202	-9424
<b>OTHER CAPITAL ASSETS</b>			
Ending inventory	38454	22978	73887
Capital sales	7774	3293	20396
Beginning inventory	40270	25224	75917
Capital purchases	5816	-	19079
Depreciation, capital adj.	142	1047	-713
Total depreciation, capital adj.	-39042	-60159	-41092
Net farm income	9239	-102308	121487

Table 6. **PROFITABILITY AND LIQUIDITY ANALYSIS, 1998**  
**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	60	15	15	60	15	15
<b>PROFITABILITY</b>						
	----- Cost -----			----- Market -----		
Net farm income	9239	-102308	121487	53842	-28281	158710
Labor and management earnings	-8455	-121320	105116	4824	-87844	111514
Rate of return on assets	0.3 %	-9.8 %	12.7 %	3.7 %	-1.2 %	10.3 %
Rate of return on equity	-9.7 %	-47.1 %	27.9 %	2.1 %	-6.7 %	13.7 %
Operating profit margin	0.7 %	-24.2 %	17.6 %	13.2 %	-5.0 %	24.1 %
Asset turnover rate	49.6 %	40.6 %	72.1 %	28.4 %	23.4 %	42.8 %
Interest on farm net worth	17694	19011	16371	49018	59562	47196
Farm interest expense	29740	46764	31195	29740	46764	31195
Value of operator lbr and mgmt.	36627	37818	51160	36627	37818	51160
Return on farm assets	2351	-93362	101522	46954	-19335	138746
Average farm assets	719801	950332	798814	1256290	1645785	1346027
Return on farm equity	-27389	-140126	70327	17214	-66099	107550
Average farm equity	283641	297251	252071	816960	992705	786606
Value of farm production	356791	385665	575914	356791	385665	575914
				Average Of All Farms ))))))	Average Of Low 25% ))))))	Average Of High 25% ))))))
Number of Farms				60	15	15
<b>LIQUIDITY (Cash)</b>						
Net cash farm income				56709	40104	88944
Net nonfarm income				41501	105643	34353
Family living and taxes				46814	56399	73268
Real estate principal payments				13434	15568	16713
Cash available for interm. debt				37962	73781	33316
Average intermediate debt				101917	133711	156787
Years to turnover interm. debt				2.7	1.8	4.7
Expense as a % of income				85 %	91 %	83 %
Interest as a % of income				8 %	10 %	6 %
<b>LIQUIDITY (Accrual)</b>						
Total accrual farm income				363688	396190	586187
Total accrual farm expense				315407	438339	423608
Net accrual operating income				48281	-42149	162579
Net nonfarm income				41501	105643	34353
Family living and taxes				46814	56399	73268
Real estate principal payments				13434	15568	16713
Available for intermediate debt				29533	-8473	106951
Average intermediate debt				101917	133711	156787
Years to turnover interm. debt				3.5	**	1.5
Expense as a % of income				87 %	111 %	72 %
Interest as a % of income				8 %	12 %	5 %

\*\* Income insufficient to meet debt servicing requirements

**Table 7. BALANCE SHEET AT COST VALUES, 1998**  
**Michigan Cash Grain Farms, All Sizes**  
(Farms sorted by Net Farm Income)

	Average Of All Farms ))))))))) 60		Average Of Low 25 % ))))))))) 15		Average Of High 25 % ))))))))) 15	
	Beginning )))))))))	Ending )))))))))	Beginning )))))))))	Ending )))))))))	Beginning )))))))))	Ending )))))))))
<b>ASSETS</b>						
Current Farm Assets						
Cash and checking balance	9870	18076	30402	31298	11088	43206
Prepaid expenses & supplies	22796	26048	24800	18040	46372	66225
Growing crops	12381	11375	15253	16196	22797	17805
Accounts receivable	10143	14270	19967	36101	10418	9936
Hedging accounts	118	799	473	197	-	3000
Crops held for sale or feed	187979	174970	287605	211281	209769	264270
Crops under government loan	3230	4610	6222	7768	-	-
Market livestock held for sale	9415	6416	18496	6003	12210	14739
Other current assets	4456	3830	8003	5107	4081	4193
Total current farm assets	260389	260394	411222	331990	316735	423376
Intermediate Farm Assets						
Breeding livestock	3557	3038	6351	1983	382	147
Machinery and equipment	97555	102829	156192	153802	95050	104199
Other intermediate assets	28674	26832	11064	9005	69307	68203
Total intermediate farm assets	129785	132699	173607	164791	164738	172549
Long-Term Farm Assets						
Farm land	258791	287338	338201	354027	198661	228982
Buildings and improvements	42301	44688	46913	51780	40729	39566
Other long-term assets	11596	11622	14160	13973	6610	5684
Total long-term farm assets	312688	343648	399273	419780	245999	274232
Total Farm Assets	702862	736741	984102	916561	727472	870156
Total Nonfarm Assets	81707	92013	77162	86868	116318	141988
Total Assets	784569	828754	1061264	1003429	843790	1012144
<b>LIABILITIES</b>						
Current Farm Liabilities						
Accrued interest	5159	5448	11321	11243	3502	4408
Accounts payable	11664	11602	20088	22291	16777	16760
Current notes	118176	138188	210593	199598	147241	230296
Government crop loans	2531	4523	6222	7578	-	-
Principal due on term debt	32292	31175	37658	33692	42630	39055
Total current farm liabilities	170150	191264	285889	274408	211458	291826
Intermediate Farm Liabilities	81871	83602	109674	116307	126506	130749
Long-term Farm Liabilities	172402	173032	263062	256820	176546	156400
Total Farm Liabilities	424423	447898	658625	647535	514510	578975
Total Nonfarm Liabilities	7549	6773	3566	5481	11573	6774
Total Liabilities	431972	454671	662191	653016	526084	585749
Net Worth (farm and nonfarm)	352597	374083	399073	350414	317706	426395
Net Worth Change		21486		-48659		108689
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	65 %	73 %	70 %	83 %	67 %	69 %
Curr. & Interm Farm Liab / Assets	65 %	70 %	68 %	79 %	70 %	71 %
Long Term Farm Liab. / Assets	55 %	50 %	66 %	61 %	72 %	57 %
Total Liabilities / Assets	55 %	55 %	62 %	65 %	62 %	58 %

Table 8. **BALANCE SHEET AT MARKET VALUES, 1998**  
**Michigan Cash Grain Farms, All Sizes**  
 (Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms ) ) ) ) ) ) ) ) ) ) 60		Average Of Low 25 % ) ) ) ) ) ) ) ) ) ) 15		Average Of High 25 % ) ) ) ) ) ) ) ) ) ) 15	
	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )
<b>ASSETS</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	9870	18076	30402	31298	11088	43206
Prepaid expenses & supplies	22796	26048	24800	18040	46372	66225
Growing crops	12381	11375	15253	16196	22797	17805
Accounts receivable	10143	14270	19967	36101	10418	9936
Hedging accounts	118	799	473	197	-	3000
Crops held for sale or feed	187979	174970	287605	211281	209769	264270
Crops under government loan	3230	4610	6222	7768	-	-
Market livestock held for sale	9415	6416	18496	6003	12210	14739
Other current assets	4456	3830	8003	5107	4081	4193
Total current farm assets	260389	260394	411222	331990	316735	423376
<b>Intermediate Farm Assets</b>						
Breeding livestock	3550	3043	6351	1983	353	147
Machinery and equipment	283042	299164	341356	384994	298872	301676
Other intermediate assets	29040	27480	11064	9005	69307	68203
Total intermediate farm assets	315632	329687	358771	395983	368532	370026
<b>Long-Term Farm Assets</b>						
Farm land	563698	620475	738083	777769	519406	590399
Buildings and improvements	65049	72957	120305	129313	44210	47078
Other long-term assets	12137	12164	14160	13973	6610	5684
Total long-term farm assets	640884	705596	872549	921055	570225	643161
Total Farm Assets	1216904	1295677	1642542	1649028	1255492	1436563
Total Nonfarm Assets	145860	163918	182317	199692	184548	223138
Total Assets	1362764	1459595	1824860	1848720	1440040	1659700
<b>LIABILITIES</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	5159	5448	11321	11243	3502	4408
Accounts payable	11664	11602	20088	22291	16777	16760
Current notes	118176	138188	210593	199598	147241	230296
Government crop loans	2531	4523	6222	7578	-	-
Principal due on term debt	32292	31175	37658	33692	42630	39055
Total current farm liabilities	170150	191264	285889	274408	211458	291826
Intermediate Farm Liabilities	81871	83602	109674	116307	126506	130749
Long-term Farm Liabilities	172402	173032	263062	256820	176546	156400
Total Farm Liabilities	424423	447898	658625	647535	514510	578975
Total Nonfarm Liabilities	7549	6773	3566	5481	11573	6774
Total Deferred Liabilities	3024	3315	-	-	12098	13260
Total Liabilities	434997	457986	662191	653016	538181	599010
Net Worth (farm and nonfarm)	927768	1001608	1162669	1195704	901859	1060691
Net Worth Change		73840		33035		158832
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	65 %	73 %	70 %	83 %	67 %	69 %
Curr. & Interim Farm Liab. / Assets	44 %	47 %	51 %	54 %	49 %	53 %
Long Term Farm Liabilities / Assets	27 %	25 %	30 %	28 %	31 %	24 %
Total Liabilities / Assets	32 %	31 %	36 %	35 %	37 %	36 %

Table 9. **STATEMENT OF CASH FLOWS, 1998**  
**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	60	15	15
(a) Beginning cash balance (farm & nonfarm)	11141	33920	11088
CASH FROM OPERATING ACTIVITIES			
Gross cash farm income	375141	469558	531517
Net nonfarm income (+)	41501	105643	34353
Total cash farm expense (-)	318431	429454	442573
Apparent family living expense (-)	42494	53937	63428
Income and social security tax (-)	4320	2462	9840
(b) Cash from operations (=)	51396	89348	50029
CASH FROM INVESTING ACTIVITIES			
Sale of breeding livestock	916	2840	164
Sale of machinery & equipment (+)	10277	22974	7359
Sale of farm land (+)	4554	5907	5747
Sale of farm buildings (+)	57	-	-
Sale of other farm assets (+)	7774	3293	20396
Sale of nonfarm assets (+)	2579	41	-
Purchase of breeding livestock (-)	698	-	155
Purchase of machinery & equip. (-)	49243	76060	47237
Purchase of farm land (-)	32444	25627	29328
Purchase of farm buildings (-)	7636	9070	8261
Purchase of other farm assets (-)	5816	-	19079
Purchase of nonfarm assets (-)	5486	53	14032
(c) Cash from investing activities (=)	-75167	-75754	-84427
CASH FROM FINANCING ACTIVITIES			
Money borrowed	211900	278789	313603
Cash gifts and inheritances (+)	22352	1267	18448
Principal payments (-)	188393	291540	250360
Dividends paid (-)	-	-	-
Gifts given (-)	13628	-231	15175
(d) Cash from financing activities (=)	32230	-11253	66516
(e) Net change in cash balance (b+c+d)	8459	2341	32118
Ending cash balance (farm & nonfarm)	19600	36261	43206

Table 10. **FINANCIAL GUIDELINES MEASURES, 1998**  
**Michigan Cash Grain Farms, All Sizes**  
(Farms sorted by Net Farm Income)

	Average Of All Farms ))))))))) 60		Average Of Low 25 % ))))))))) 15		Average Of High 25 % ))))))))) 15	
Number of Farms						
<b>LIQUIDITY</b>	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current ratio	1.53	1.36	1.44	1.21	1.50	1.45
Working capital	90239	69130	125333	57581	105277	131550
<b>SOLVENCY (Market)</b>	Beginning	Ending	Beginning	Ending	Beginning	Ending
Farm debt to asset ratio	35 %	35 %	40 %	39 %	42 %	41 %
Farm equity to asset ratio	65 %	65 %	60 %	61 %	58 %	59 %
Farm debt to equity ratio	54 %	53 %	67 %	65 %	72 %	70 %
<b>PROFITABILITY</b>	Cost	Market	Cost	Market	Cost	Market
Rate of return on farm assets	0.3 %	3.7 %	-9.8 %	-1.2 %	12.7 %	10.3 %
Rate of return on farm equity	-9.7 %	2.1 %	-47.1 %	-6.7 %	27.9 %	13.7 %
Operating profit margin	0.7 %	13.2 %	-24.2 %	-5.0 %	17.6 %	24.1 %
Net farm income	9239	53842	-102308	-28281	121487	158710
<b>REPAYMENT CAPACITY</b>	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	154 %	130 %	257 %	6 %	115 %	263 %
Capital replacement margin	18826	10398	51482	-30772	7399	81033
<b>EFFICIENCY</b>						
Asset turnover rate (market)	28.4 %		23.4 %		42.8 %	
Operating expense ratio	78.5 %		98.8 %		66.9 %	
Depreciation expense ratio	10.7 %		15.2 %		7.0 %	
Interest expense ratio	8.2 %		11.8 %		5.3 %	
Net farm income ratio	2.5 %		-25.8 %		20.7 %	

LABOR ANALYSIS

	Average Of All Farms ))))))))) 59		Average Of Low 25 % ))))))))) 15		Average Of High 25 % ))))))))) 15	
Number of Farms						
Total unpaid labor hours	2862		2955		3578	
Total hired labor hours	1624		2626		2687	
Total labor hours per farm	4486		5581		6265	
Value of farm production / hour	79.08		69.10		91.92	
Net farm income / unpaid hour	3.13		-34.62		33.96	

Table 11. **CROP PRODUCTION AND MARKETING SUMMARY, 1998**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms )))))))))
Number of Farms	9
ACREAGE SUMMARY	
Total Crop Acres	190
Crop Acres Owned	137
Crop Acres Cash Rented	53
Crop Acres Share Rented	-
AVERAGE PRICE RECEIVED (Cash Sales Only)	
Corn per bu.	2.23
Wheat, Winter per bu.	2.14
AVERAGE YIELD PER ACRE	
Corn (bu.)	127.57
Soybeans (bu.)	44.00
Wheat, Winter (bu.)	62.84
Hay, Alfalfa (ton)	3.50
Oats (bu.)	62.50



Table 12. **FARM INCOME STATEMENT, 1998**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms )))))))))
Number of Farms	9
CASH FARM INCOME	
Barley	135
Navy Beans	1143
Bedding Plants	4223
Corn	20146
Orchard Grass Seed	599
Alfalfa Hay	140
Mixed Hay	700
Oats	54
Rye	238
Soybeans	14111
Straw	251
Winter Wheat	2808
Other crops	1358
Finish Yrlg Steers	48
Finish Feeder Pigs	1204
Transition payments	408
Other government payments	6581
Custom work income	1953
Patronage dividends, cash	31
Other farm income	3028
Gross Cash Farm Income	59159

Table 13. **FARM INCOME STATEMENT, 1998 (Continued)**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms )))))))))
Number of Farms	9
<b>CASH FARM EXPENSE</b>	
Seed	6108
Fertilizer	8019
Crop chemicals	2990
Crop insurance	550
Drying fuel	886
Crop marketing	312
Crop miscellaneous	820
Feeder livestock purchase	20
Purchased feed	60
Veterinary	35
Livestock supplies	1158
Interest	5134
Fuel & oil	1508
Repairs	8068
Custom hire	1758
Hired labor	138
Land rent	5275
Machinery & bldg leases	286
Real estate taxes	2302
Farm insurance	2942
Utilities	2483
Dues & professional fees	1861
Miscellaneous	3604
Total cash expense	56317
Net cash farm income	2843
<b>INVENTORY CHANGES</b>	
Crops and feed	-8018
Market livestock	-450
Accounts receivable	-1061
Prepaid expenses and supplies	-319
Accounts payable	451
Total inventory change	-9397
Net operating profit	-6554
<b>DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS</b>	
Breeding livestock	-
Machinery and equipment	-3362
Buildings and improvements	-1086
Other farm capital	-114
Total depr. and other capital adj	-4562
Net farm income	-11116

Table 14. **INVENTORY CHANGES, 1998**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms )))))))))
Number of Farms	9
Net cash farm income	2843
<b>CROPS AND FEED</b>	
Ending inventory	23293
Beginning inventory	31311
Inventory change	-8018
<b>MARKET LIVESTOCK</b>	
Ending inventory	475
Beginning inventory	924
Inventory change	-450
<b>ACCTS RECEIVABLE &amp; OTHER CURRENT ASSETS</b>	
Ending inventory	3139
Beginning inventory	4201
Inventory change	-1061
<b>PREPAID EXPENSES AND SUPPLIES</b>	
Ending inventory	3881
Beginning inventory	4200
Inventory change	-319
<b>ACCOUNTS PAYABLE</b>	
Beginning inventory	3702
Ending inventory	3251
Inventory change	451
Total inventory change	-9397
Net operating profit	-6554

Table 15. **DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1998**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms )))))))))
Number of Farms	9
Net operating profit	-6554
BREEDING LIVESTOCK	
Ending inventory	-
Capital sales	-
Beginning inventory	-
Capital purchases	-
Depreciation, capital adj.	-
MACHINERY AND EQUIPMENT	
Ending inventory	10236
Capital sales	754
Beginning inventory	10228
Capital purchases	4125
Depreciation, capital adj.	-3362
BUILDINGS AND IMPROVEMENTS	
Ending inventory	6315
Capital sales	-
Beginning inventory	7270
Capital purchases	130
Depreciation, capital adj.	-1086
OTHER CAPITAL ASSETS	
Ending inventory	5464
Capital sales	352
Beginning inventory	1504
Capital purchases	4426
Depreciation, capital adj.	-114
Total depreciation, capital adj.	-4562
Net farm income	-11116

Table 16. **PROFITABILITY AND LIQUIDITY ANALYSIS, 1998**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of all farms reporting)

	Average Of All Farms ))))))))) 9	Average Of All Farms ))))))))) 9
Number of Farms		
PROFITABILITY	--- Cost ---	-- Market --
Net farm income	-11116	-17577
Labor and management earnings	-16956	-35160
Rate of return on assets	-12.3 %	-7.5 %
Rate of return on equity	-26.1 %	-10.9 %
Operating profit margin	-41.6 %	-54.6 %
Asset turnover rate	29.6 %	13.7 %
Interest on farm net worth	5840	17583
Farm interest expense	4810	4810
Value of operator lbr and mgmt.	14308	14308
Return on farm assets	-20614	-27074
Average farm assets	167211	362966
Return on farm equity	-25424	-31884
Average farm equity	97295	293050
Value of farm production	49550	49550
	Average Of All Farms ))))))))) 9	
Number of Farms		
LIQUIDITY (Cash)		
Net cash farm income	2843	
Net nonfarm income	33913	
Family living and taxes	24896	
Real estate principal payments	4668	
Cash available for interm. debt	7191	
Average intermediate debt	6167	
Years to turnover interm. debt	0.9	
Expense as a % of income	95 %	
Interest as a % of income	9 %	
LIQUIDITY (Accrual)		
Total accrual farm income	49630	
Total accrual farm expense	56185	
Net accrual operating income	-6554	
Net nonfarm income	33913	
Family living and taxes	24896	
Real estate principal payments	4668	
Available for intermediate debt	-2206	
Average intermediate debt	6167	
Years to turnover interm. debt	**	
Expense as a % of income	113 %	
Interest as a % of income	10 %	

\*\* Income insufficient to meet debt servicing requirements

Table 17. **BALANCE SHEET AT COST VALUES, 1998**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of all farms reporting)

	Average For All Farms	
	9	
Number of Farms	))))))))	))))))))
ASSETS	Beginning	Ending
Current Farm Assets	))))))))	))))))))
Cash and checking balance	4837	5745
Prepaid expenses & supplies	4200	3881
Growing crops	1653	1568
Accounts receivable	2547	1571
Hedging accounts	-	-
Crops held for sale or feed	31311	22960
Crops under government loan	-	333
Market livestock held for sale	924	475
Other current assets	-	-
Total current farm assets	45473	36533
Intermediate Farm Assets		
Breeding livestock	-	-
Machinery and equipment	10228	10236
Other intermediate assets	953	716
Total intermediate farm assets	11180	10952
Long-Term Farm Assets		
Farm land	106534	104867
Buildings and improvements	7270	6315
Other long-term assets	551	4748
Total long-term farm assets	114355	115930
Total Farm Assets	171008	163415
Total Nonfarm Assets	129004	141800
Total Assets	300012	305214
LIABILITIES		
Current Farm Liabilities		
Accrued interest	2144	1819
Accounts payable	1558	1432
Current notes	11371	11933
Government crop loans	-	302
Principal due on term debt	4157	4319
Total current farm liabilities	19230	19805
Intermediate Farm Liabilities	5411	5362
Long-term Farm Liabilities	50462	39561
Total Farm Liabilities	75103	64729
Total Nonfarm Liabilities	21325	21311
Total Liabilities	96429	86040
Net Worth (farm and nonfarm)	203583	219175
Net Worth Change		15592
RATIO ANALYSIS		
Current Farm Liabilities / Assets	42 %	54 %
Curr. & Interm Farm Liab / Assets	43 %	53 %
Long Term Farm Liab. / Assets	44 %	34 %
Total Liabilities / Assets	32 %	28 %

Table 18. **BALANCE SHEET AT MARKET VALUES, 1998**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of all farms reporting)

	Average For All Farms	
	9	
Number of Farms	Beginning	Ending
	)))))))))	)))))))))
<b>ASSETS</b>		
Current Farm Assets		
Cash and checking balance	4837	5745
Prepaid expenses & supplies	4200	3881
Growing crops	1653	1568
Accounts receivable	2547	1571
Hedging accounts	-	-
Crops held for sale or feed	31311	22960
Crops under government loan	-	333
Market livestock held for sale	924	475
Other current assets	-	-
Total current farm assets	45473	36533
Intermediate Farm Assets		
Breeding livestock	-	-
Machinery and equipment	56021	58567
Other intermediate assets	953	716
Total intermediate farm assets	56974	59283
Long-Term Farm Assets		
Farm land	225284	213597
Buildings and improvements	41711	41778
Other long-term assets	551	4748
Total long-term farm assets	267546	260123
Total Farm Assets	369992	355939
Total Nonfarm Assets	202358	216181
Total Assets	572350	572120
<b>LIABILITIES</b>		
Current Farm Liabilities		
Accrued interest	2144	1819
Accounts payable	1558	1432
Current notes	11371	11933
Government crop loans	-	302
Principal due on term debt	4157	4319
Total current farm liabilities	19230	19805
Intermediate Farm Liabilities	5411	5362
Long-term Farm Liabilities	50462	39561
Total Farm Liabilities	75103	64729
Total Nonfarm Liabilities	21325	21311
Total Deferred Liabilities	-	-
Total Liabilities	96429	86040
Net Worth (farm and nonfarm)	475922	486080
Net Worth Change		10158
<b>RATIO ANALYSIS</b>		
Current Farm Liabilities / Assets	42 %	54 %
Curr. & Interm Farm Liab. / Assets	24 %	26 %
Long Term Farm Liabilities / Assets	19 %	15 %
Total Liabilities / Assets	17 %	15 %

Table 19. **STATEMENT OF CASH FLOWS, 1998**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of All Farms)

	Average Of All Farms )))))))))
Number of Farms	9
(a) Beginning cash balance (farm & nonfarm)	10794
CASH FROM OPERATING ACTIVITIES	
Gross cash farm income	59159
Net nonfarm income	(+) 33913
Total cash farm expense	(-) 56317
Apparent family living expense	(-) 21754
Income and social security tax	(-) 3143
(b) Cash from operations	(= 11859
CASH FROM INVESTING ACTIVITIES	
Sale of breeding livestock	-
Sale of machinery & equipment	(+) 754
Sale of farm land	(+) 8796
Sale of farm buildings	(+) -
Sale of other farm assets	(+) 352
Sale of nonfarm assets	(+) 5261
Purchase of breeding livestock	(-) -
Purchase of machinery & equip.	(-) 4125
Purchase of farm land	(-) -
Purchase of farm buildings	(-) 130
Purchase of other farm assets	(-) 4426
Purchase of nonfarm assets	(-) 5498
(c) Cash from investing activities	(= 983
CASH FROM FINANCING ACTIVITIES	
Money borrowed	18588
Cash gifts and inheritances	(+) 6472
Principal payments	(-) 28529
Dividends paid	(-) -
Gifts given	(-) 4889
(d) Cash from financing activities	(= -8357
(e) Net change in cash balance (b+c+d)	4485
Ending cash balance (farm & nonfarm)	15279



Table 20. **FINANCIAL GUIDELINES MEASURES, 1998**  
**Michigan Cash Grain Farms, 1 - 399.9 acres**  
(Average of all farms reporting)

	Average Of All Farms ))))))))))))))))))))))))))))))))))))))	
Number of Farms	9	
<b>LIQUIDITY</b>	Beginning	Ending
Current ratio	2.36	1.84
Working capital	26243	16728
<b>SOLVENCY (Market)</b>	Beginning	Ending
Farm debt to asset ratio	20 %	18 %
Farm equity to asset ratio	80 %	82 %
Farm debt to equity ratio	25 %	22 %
<b>PROFITABILITY (Cost)</b>		
Rate of return on farm assets	-12.3 %	
Rate of return on farm equity	-26.1 %	
Operating profit margin	-41.6 %	
Net farm income	-11116	
<b>REPAYMENT CAPACITY</b>	Cash	Accrual
Term debt coverage ratio	167 %	68 %
Capital replacement margin	6359	-3038
<b>EFFICIENCY</b>		
Asset turnover rate (market)	13.7 %	
Operating expense ratio	103.5 %	
Depreciation expense ratio	9.2 %	
Interest expense ratio	9.7 %	
Net farm income ratio	-22.4 %	

**LABOR ANALYSIS**

	Average Of All Farms ))))))))))))))))))))))))))))))))))))))	
Number of Farms	9	
Total unpaid labor hours	1632	
Total hired labor hours	32	
Total labor hours per farm	1664	
Value of farm production / hour	29.78	
Net farm income / unpaid hour	-6.81	

Table 21. **CROP PRODUCTION AND MARKETING SUMMARY, 1998**  
**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	23	6	6
ACREAGE SUMMARY			
Total Crop Acres	664	669	640
Crop Acres Owned	277	400	290
Crop Acres Cash Rented	350	252	293
Crop Acres Share Rented	37	17	57
AVERAGE PRICE RECEIVED (Cash Sales Only)			
Corn per bu.	2.29	-	-
Soybeans per bu.	5.80	-	-
Wheat, Winter per bu.	2.70	-	-
AVERAGE YIELD PER ACRE			
Soybeans (bu.)	46.48	38.10	-
Corn (bu.)	121.02	93.51	-
Wheat, Winter (bu.)	58.91	-	-
Hay, Alfalfa (ton)	3.10	-	-
Sugar Beets (ton)	15.43	-	-

Table 22. **FARM INCOME STATEMENT, 1998**  
**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	23	6	6
<b>CASH FARM INCOME</b>			
Light Red Kidney Beans	900	-	-
Navy Beans	3115	-	-
Corn	74726	85749	75311
Seed Corn	9154	-	35089
Cucumbers	3005	-	11519
Alfalfa Hay	804	2604	460
Mixed Hay	2196	1676	2772
Oats	65	120	-
Soybeans	60480	76534	48670
Straw	433	866	519
Sugar Beets	5035	5548	-
Winter Wheat	10358	2587	5975
Other crops	929	-	-
Beef Calves	1609	2612	-
Finish Beef Calves	338	-	-
Finish Yrlg Steers	1414	5420	-
Dairy Heifers (for sale)	865	-	3317
Dairy Steers	171	-	656
Raised Hogs	5973	22880	17
Finish Cull Cows	24	94	-
Cull breeding livestock	500	1131	635
Misc. livestock income	715	-	-
Transition payments	4849	2946	869
Other government payments	24396	17639	33245
Custom work income	4139	301	6533
Patronage dividends, cash	177	70	56
Insurance income	5838	9853	8968
Other farm income	5420	2719	11247
<b>Gross Cash Farm Income</b>	<b>227628</b>	<b>241350</b>	<b>245858</b>

Table 23. **FARM INCOME STATEMENT, 1998 (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	23	6	6
<b>CASH FARM EXPENSE</b>			
Seed	14645	20594	13755
Fertilizer	24946	20618	23388
Crop chemicals	19503	17242	24023
Crop insurance	1718	2804	2336
Drying fuel	861	594	1157
Crop marketing	1240	1443	1
Crop miscellaneous	752	423	437
Feeder livestock purchase	1037	1894	-
Purchased feed	3774	11986	34
Breeding fees	401	-	-
Veterinary	139	156	13
Livestock supplies	445	171	-
Livestock marketing	565	2050	104
Interest	18214	18802	20798
Fuel & oil	6378	7017	6216
Repairs	14167	12564	17269
Custom hire	8579	8245	10340
Hired labor	6164	6222	5526
Land rent	20311	11733	20563
Machinery & bldg leases	1657	1174	1999
Real estate taxes	6373	6004	4665
Personal property taxes	14	53	-
Farm insurance	5153	6666	3613
Utilities	4285	4321	6001
Dues & professional fees	1543	871	2539
Hedging account deposits	681	-	-
Miscellaneous	25807	72389	7801
Total cash expense	189352	236034	172579
Net cash farm income	38276	5316	73279
<b>INVENTORY CHANGES</b>			
Crops and feed	-12527	-44501	1097
Market livestock	-2063	-4370	-1967
Accounts receivable	4209	17730	7201
Prepaid expenses and supplies	3358	1358	11351
Accounts payable	1894	11621	-5316
Total inventory change	-5130	-18163	12365
Net operating profit	33146	-12847	85645
<b>DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS</b>			
Breeding livestock	199	-568	-71
Machinery and equipment	-20091	-22751	-22985
Buildings and improvements	-3438	-2702	-5406
Other farm capital	772	1028	-1820
Total depr. and other capital adj	-22557	-24993	-30281
Net farm income	10588	-37839	55364

Table 24. **INVENTORY CHANGES, 1998**  
**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	23	6	6
Net cash farm income	38276	5316	73279
CROPS AND FEED			
Ending inventory	115007	96364	124156
Beginning inventory	127534	140865	123059
Inventory change	-12527	-44501	1097
MARKET LIVESTOCK			
Ending inventory	2368	6139	-
Beginning inventory	4431	10510	1967
Inventory change	-2063	-4370	-1967
ACCTS RECEIVABLE & OTHER CURRENT ASSETS			
Ending inventory	19124	32705	14361
Beginning inventory	14915	14975	7160
Inventory change	4209	17730	7201
PREPAID EXPENSES AND SUPPLIES			
Ending inventory	13023	6230	20475
Beginning inventory	9666	4872	9125
Inventory change	3358	1358	11351
ACCOUNTS PAYABLE			
Beginning inventory	16228	37598	12563
Ending inventory	14335	25977	17880
Inventory change	1894	11621	-5316
Total inventory change	-5130	-18163	12365
Net operating profit	33146	-12847	85645

Table 25. **DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1998**  
**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	23	6	6
Net operating profit	33146	-12847	85645
<b>BREEDING LIVESTOCK</b>			
Ending inventory	5070	5783	-
Capital sales	1465	4707	167
Beginning inventory	4701	11058	237
Capital purchases	1635	-	-
Depreciation, capital adj.	199	-568	-71
<b>MACHINERY AND EQUIPMENT</b>			
Ending inventory	60481	70595	39514
Capital sales	4397	838	4295
Beginning inventory	51592	58860	46512
Capital purchases	33378	35324	20281
Depreciation, capital adj.	-20091	-22751	-22985
<b>BUILDINGS AND IMPROVEMENTS</b>			
Ending inventory	32065	9738	49332
Capital sales	65	-	-
Beginning inventory	30068	12440	48432
Capital purchases	5500	-	6306
Depreciation, capital adj.	-3438	-2702	-5406
<b>OTHER CAPITAL ASSETS</b>			
Ending inventory	20038	1868	4387
Capital sales	1764	558	3649
Beginning inventory	19958	1398	5947
Capital purchases	1072	-	3910
Depreciation, capital adj.	772	1028	-1820
Total depreciation, capital adj.	-22557	-24993	-30281
Net farm income	10588	-37839	55364

Table 26. **PROFITABILITY AND LIQUIDITY ANALYSIS, 1998**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

	Avg. Of All Farms ))))))))) 23	Avg. Of Low 25% ))))))))) 6	Avg. Of High 25% ))))))))) 6	Avg. Of All Farms ))))))))) 23	Avg. Of Low 25% ))))))))) 6	Avg. Of High 25% ))))))))) 6
Number of Farms						
<b>PROFITABILITY</b>						
	-----	Cost	-----	-----	Market	-----
Net farm income	10588	-37839	55364	35861	-11513	55384
Labor and management earnings	-1393	-47358	49105	-6234	-50244	25471
Rate of return on assets	0.4 %	-10.8 %	9.8 %	2.8 %	-1.8 %	5.0 %
Rate of return on equity	-9.6 %	-48.0 %	33.7 %	1.1 %	-6.2 %	4.4 %
Operating profit margin	0.8 %	-21.8 %	17.4 %	12.7 %	-8.3 %	17.4 %
Asset turnover rate	47.3 %	49.6 %	56.5 %	22.0 %	21.7 %	28.6 %
Interest on farm net worth	11982	9518	6258	42095	38731	29913
Farm interest expense	19374	23556	22259	19374	23556	22259
Value of operator lbr and mgmt.	28169	28331	33682	28169	28331	33682
Return on farm assets	1793	-42614	43941	27065	-16288	43961
Average farm assets	449609	394560	446302	967358	902344	880450
Return on farm equity	-17581	-66170	21681	7691	-39844	21702
Average farm equity	183827	137727	64400	701577	645511	498547
Value of farm production	212634	195760	252085	212634	195760	252085
				Average Of All Farms ))))))))) 23	Average Of Low 25% ))))))))) 6	Average Of High 25% ))))))))) 6
Number of Farms						
<b>LIQUIDITY (Cash)</b>						
Net cash farm income			38276	5316	73279	
Net nonfarm income			25388	27586	54418	
Family living and taxes			31110	32350	53573	
Real estate principal payments			9641	3676	19196	
Cash available for interm. debt			22912	-3124	54928	
Average intermediate debt			65629	59914	68327	
Years to turnover interm. debt			2.9	**	1.2	
Expense as a % of income			83 %	98 %	70 %	
Interest as a % of income			8 %	8 %	8 %	
<b>LIQUIDITY (Accrual)</b>						
Total accrual farm income			217247	210208	252189	
Total accrual farm expense			184101	223054	166545	
Net accrual operating income			33146	-12847	85645	
Net nonfarm income			25388	27586	54418	
Family living and taxes			31110	32350	53573	
Real estate principal payments			9641	3676	19196	
Available for intermediate debt			17782	-21286	67294	
Average intermediate debt			65629	59914	68327	
Years to turnover interm. debt			3.7	**	1.0	
Expense as a % of income			85 %	106 %	66 %	
Interest as a % of income			9 %	11 %	9 %	

\*\* Income insufficient to meet debt servicing requirements

Table 27. **BALANCE SHEET AT COST VALUES, 1998**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms ) ) ) ) ) ) ) ) ) ) 23		Average Of Low 25 % ) ) ) ) ) ) ) ) ) ) 6		Average Of High 25 % ) ) ) ) ) ) ) ) ) ) 6	
	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )
<b>ASSETS</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	8454	6032	31008	21805	5310	2352
Prepaid expenses & supplies	9666	13023	4872	6230	9125	20475
Growing crops	5421	6444	2396	2654	3512	5748
Accounts receivable	5784	11224	8821	25856	3648	8196
Hedging accounts	-	-	-	-	-	-
Crops held for sale or feed	124337	112678	128610	90198	123059	124156
Crops under government loan	3197	2329	12255	6167	0	0
Market livestock held for sale	4431	2368	10510	6139	1967	-
Other current assets	3710	1455	3758	4195	-	417
Total current farm assets	165000	155554	202230	163244	146620	161344
<b>Intermediate Farm Assets</b>						
Breeding livestock	4701	5070	11058	5783	237	-
Machinery and equipment	51592	60481	58860	70595	46512	39514
Other intermediate assets	11253	11533	1398	1868	2661	2703
Total intermediate farm assets	67546	77084	71316	78245	49410	42217
<b>Long-Term Farm Assets</b>						
Farm land	172249	182441	128203	123703	187898	202383
Buildings and improvements	30068	32065	12440	9738	48432	49332
Other long-term assets	8704	8505	-	-	3286	1683
Total long-term farm assets	211022	223011	140643	133441	239615	253398
Total Farm Assets	443568	455649	414189	374931	435646	456959
Total Nonfarm Assets	78791	81359	79683	87915	71507	76682
Total Assets	522359	537008	493873	462845	507152	533641
<b>LIABILITIES</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	4524	5684	5934	10689	4715	6177
Accounts payable	11704	8651	31663	15288	7848	11703
Current notes	54229	59855	46384	62268	87589	90643
Government crop loans	2545	2225	9756	5766	0	0
Principal due on term debt	21438	21036	14901	21378	31282	19731
Total current farm liabilities	95297	98308	108656	115404	134704	131522
Intermediate Farm Liabilities	54198	52835	45464	48360	64426	48862
Long-term Farm Liabilities	123728	107197	104055	91726	213450	170841
Total Farm Liabilities	273223	258340	258175	255490	412580	351225
Total Nonfarm Liabilities	1166	1958	-	1278	742	2500
Total Liabilities	274389	260298	258175	256768	413322	353725
Net Worth (farm and nonfarm)	247970	276710	235697	206077	93830	179915
Net Worth Change		28740		-29620		86085
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	58 %	63 %	54 %	71 %	92 %	82 %
Curr. & Interm Farm Liab / Assets	64 %	65 %	56 %	68 %	102 %	89 %
Long Term Farm Liab. / Assets	59 %	48 %	74 %	69 %	89 %	67 %
Total Liabilities / Assets	53 %	48 %	52 %	55 %	81 %	66 %



Table 28. **BALANCE SHEET AT MARKET VALUES, 1998**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms ) ) ) ) ) ) ) ) ) ) 23		Average Of Low 25 % ) ) ) ) ) ) ) ) ) ) 6		Average Of High 25 % ) ) ) ) ) ) ) ) ) ) 6	
	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )
<b>ASSETS</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	8454	6032	31008	21805	5310	2352
Prepaid expenses & supplies	9666	13023	4872	6230	9125	20475
Growing crops	5421	6444	2396	2654	3512	5748
Accounts receivable	5784	11224	8821	25856	3648	8196
Hedging accounts	-	-	-	-	-	-
Crops held for sale or feed	124337	112678	128610	90198	123059	124156
Crops under government loan	3197	2329	12255	6167	0	0
Market livestock held for sale	4431	2368	10510	6139	1967	-
Other current assets	3710	1455	3758	4195	-	417
Total current farm assets	165000	155554	202230	163244	146620	161344
<b>Intermediate Farm Assets</b>						
Breeding livestock	4683	5070	11058	5783	167	-
Machinery and equipment	220349	226922	151995	165806	199404	189598
Other intermediate assets	11438	11574	2056	2025	2661	2703
Total intermediate farm assets	236469	243566	165110	173614	202231	192301
<b>Long-Term Farm Assets</b>						
Farm land	486346	517926	516600	531150	454729	471219
Buildings and improvements	52163	60485	24870	27870	62917	64569
Other long-term assets	8704	8505	-	-	3286	1683
Total long-term farm assets	547212	586916	541470	559020	520932	537471
Total Farm Assets	948682	986035	908810	895877	869783	891116
Total Nonfarm Assets	148096	151197	142674	155552	190991	183263
Total Assets	1096778	1137232	1051484	1051429	1060774	1074379
<b>LIABILITIES</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	4524	5684	5934	10689	4715	6177
Accounts payable	11704	8651	31663	15288	7848	11703
Current notes	54229	59855	46384	62268	87589	90643
Government crop loans	2545	2225	9756	5766	0	0
Principal due on term debt	21438	21036	14901	21378	31282	19731
Total current farm liabilities	95297	98308	108656	115404	134704	131522
Intermediate Farm Liabilities	54198	52835	45464	48360	64426	48862
Long-term Farm Liabilities	123728	107197	104055	91726	213450	170841
Total Farm Liabilities	273223	258340	258175	255490	412580	351225
Total Nonfarm Liabilities	1166	1958	-	1278	742	2500
Total Deferred Liabilities	-	-	-	-	-	-
Total Liabilities	274389	260298	258175	256768	413322	353725
Net Worth (farm and nonfarm)	822389	876934	793309	794661	647452	720654
Net Worth Change		54545		1352		73202
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	58 %	63 %	54 %	71 %	92 %	82 %
Curr. & Interm Farm Liab. / Assets	37 %	38 %	42 %	49 %	57 %	51 %
Long Term Farm Liabilities / Assets	23 %	18 %	19 %	16 %	41 %	32 %
Total Liabilities / Assets	25 %	23 %	25 %	24 %	39 %	33 %

Table 29. **STATEMENT OF CASH FLOWS, 1998**  
**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	23	6	6
(a) Beginning cash balance (farm & nonfarm)	9438	31008	5310
<b>CASH FROM OPERATING ACTIVITIES</b>			
Gross cash farm income	227628	241350	245858
Net nonfarm income (+)	25388	27586	54418
Total cash farm expense (-)	189352	236034	172579
Apparent family living expense (-)	28696	31577	48844
Income and social security tax (-)	2414	773	4729
(b) Cash from operations (=)	32554	552	74124
<b>CASH FROM INVESTING ACTIVITIES</b>			
Sale of breeding livestock	1465	4707	167
Sale of machinery & equipment (+)	4397	838	4295
Sale of farm land (+)	8438	9674	14367
Sale of farm buildings (+)	65	-	-
Sale of other farm assets (+)	1764	558	3649
Sale of nonfarm assets (+)	4668	-	-
Purchase of breeding livestock (-)	1635	-	-
Purchase of machinery & equip. (-)	33378	35324	20281
Purchase of farm land (-)	11377	-	14485
Purchase of farm buildings (-)	5500	-	6306
Purchase of other farm assets (-)	1072	-	3910
Purchase of nonfarm assets (-)	5690	-	10885
(c) Cash from investing activities (=)	-37853	-19546	-33389
<b>CASH FROM FINANCING ACTIVITIES</b>			
Money borrowed	121287	104024	104921
Cash gifts and inheritances (+)	18878	-	36230
Principal payments (-)	133209	93816	171629
Dividends paid (-)	-	-	-
Gifts given (-)	4818	417	13215
(d) Cash from financing activities (=)	2137	9791	-43693
(e) Net change in cash balance (b+c+d)	-3163	-9203	-2958
Ending cash balance (farm & nonfarm)	6276	21805	2352

Table 30. **FINANCIAL GUIDELINES MEASURES, 1998**  
**Michigan Cash Grain Farms, 400 - 999.9 acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms ))))))))) 23		Average Of Low 25 % ))))))))) 6		Average Of High 25 % ))))))))) 6	
Number of Farms						
<b>LIQUIDITY</b>	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current ratio	1.73	1.58	1.86	1.41	1.09	1.23
Working capital	69703	57246	93574	47840	11916	29821
<b>SOLVENCY (Market)</b>	Beginning	Ending	Beginning	Ending	Beginning	Ending
Farm debt to asset ratio	29 %	26 %	28 %	29 %	47 %	39 %
Farm equity to asset ratio	71 %	74 %	72 %	71 %	53 %	61 %
Farm debt to equity ratio	40 %	36 %	40 %	40 %	90 %	65 %
<b>PROFITABILITY</b>	Cost	Market	Cost	Market	Cost	Market
Rate of return on farm assets	0.4 %	2.8 %	-10.8 %	-1.8 %	9.8 %	5.0 %
Rate of return on farm equity	-9.6 %	1.1 %	-48.0 %	-6.2 %	33.7 %	4.4 %
Operating profit margin	0.8 %	12.7 %	-21.8 %	-8.3 %	17.4 %	17.4 %
Net farm income	10588	35861	-37839	-11513	55364	55384
<b>REPAYMENT CAPACITY</b>	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	140	122 %	7 %	-110 %	200	228 %
Capital replacement margin	11116	5985	-14349	-32512	42841	55207
<b>EFFICIENCY</b>						
Asset turnover rate (market)	22.0 %		21.7 %		28.6 %	
Operating expense ratio	75.8 %		94.9 %		57.2 %	
Depreciation expense ratio	10.4 %		11.9 %		12.0 %	
Interest expense ratio	8.9 %		11.2 %		8.8 %	
Net farm income ratio	4.9 %		-18.0 %		22.0 %	

LABOR ANALYSIS

	Average Of All Farms ))))))))) 23	Average Of Low 25 % ))))))))) 6	Average Of High 25 % ))))))))) 6
Number of Farms			
Total unpaid labor hours	2508	2667	2785
Total hired labor hours	746	1180	1022
Total labor hours per farm	3254	3847	3807
Value of farm production / hour	65.35	50.88	66.22
Net farm income / unpaid hour	4.22	-14.19	19.88

Table 31. **CROP PRODUCTION AND MARKETING SUMMARY, 1998**  
**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	28	7	7
ACREAGE SUMMARY			
Total Crop Acres	1666	1704	2382
Crop Acres Owned	669	980	640
Crop Acres Cash Rented	982	724	1742
Crop Acres Share Rented	15	-	-
AVERAGE PRICE RECEIVED (Cash Sales Only)			
Corn per bu.	2.59	-	3.28
Soybeans per bu.	6.22	-	6.01
Wheat, Winter per bu.	2.45	-	-
AVERAGE YIELD PER ACRE			
Soybeans (bu.)	46.88	-	-
Corn (bu.)	138.60	-	-
Wheat, Winter (bu.)	58.76	-	-
Beans, Black Turtle (cwt.)	14.42	-	-
Sugar Beets (ton)	16.04	-	-
Hay, Alfalfa (ton)	4.07	-	-
Beans, Navy (cwt.)	16.91	-	-

Table 32. **FARM INCOME STATEMENT, 1998**  
**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	28	7	7
<b>CASH FARM INCOME</b>			
Barley	100	400	-
Black Turtle Beans	5608	22433	-
Dark Red Kidney Beans	910	3642	-
Navy Beans	7723	30893	-
Corn	204148	208673	247822
Corn Silage	471	-	1885
Seed Corn	39	75	-
Brome Grass Seed	2933	11732	-
Alfalfa Hay	33	132	-
Mixed Hay	2092	5377	-
Oats	2477	9908	-
Soybeans	185623	191214	243089
Straw	1171	1210	994
Sugar Beets	7652	30608	-
Sweet Corn	5254	-	-
Winter Wheat	28831	41955	44953
Beef Calves	1063	-	104
Background Beef	134	536	-
Finish Beef Calves	9716	1434	27898
Finish Yrlg Steers	4866	19464	-
Broilers	19	-	77
Eggs	684	-	2735
Dairy Replacement Heifers	1785	-	7141
Raised Hogs	6617	26466	-
Finish Feeder Pigs	477	-	-
Mkt Lambs	269	-	-
Wool	5	-	-
Misc. livestock income	4	-	-
Transition payments	3044	12178	-
Other government payments	61494	60537	83907
Custom work income	39201	6987	108067
Patronage dividends, cash	555	1001	986
Insurance income	3329	5114	2368
Cash from hedging accts	602	2407	-
Other farm income	8945	-6238	10792
Gross Cash Farm Income	597877	688139	782817

Table 33. **FARM INCOME STATEMENT, 1998 (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	28	7	7
<b>CASH FARM EXPENSE</b>			
Seed	35850	40913	42600
Fertilizer	83336	113604	108301
Crop chemicals	49111	35516	76357
Crop insurance	3510	1299	11534
Drying fuel	2631	1537	2969
Irrigation energy	297	981	-
Crop marketing	1414	3393	1161
Crop miscellaneous	2119	4880	2826
Feeder livestock purchase	5666	937	17500
Purchased feed	4491	8796	3997
Breeding fees	139	-	18
Veterinary	577	194	680
Livestock supplies	621	501	333
Livestock leases	206	825	-
Grazing fees	517	2067	-
Livestock marketing	163	288	137
Interest	46496	59612	34373
Fuel & oil	14547	16460	14392
Repairs	38796	50941	38976
Custom hire	13434	3296	30837
Hired labor	31363	37536	53207
Land rent	87405	102549	109029
Machinery & bldg leases	17157	4582	36132
Real estate taxes	10505	8098	6597
Personal property taxes	59	236	-
Farm insurance	12790	18718	12237
Utilities	8089	9731	8446
Dues & professional fees	9895	27992	2660
Hedging account deposits	790	87	-
Miscellaneous	26737	24835	59402
Total cash expense	508712	580403	674701
Net cash farm income	89165	107736	108116
<b>INVENTORY CHANGES</b>			
Crops and feed	-12051	-121502	91057
Market livestock	-4588	-22600	6706
Accounts receivable	3688	-2267	-2343
Prepaid expenses and supplies	4313	-12663	35046
Accounts payable	-2187	-10748	5403
Total inventory change	-10826	-169779	135870
Net operating profit	78339	-62043	243986
<b>DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS</b>			
Breeding livestock	-807	-2978	-424
Machinery and equipment	-54613	-101435	-42776
Buildings and improvements	-7954	-3823	-10678
Other farm capital	-293	120	225
Total depr. and other capital adj	-63667	-108117	-53654
Net farm income	14673	-170160	190333

Table 34. **INVENTORY CHANGES, 1998**  
**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	28	7	7
Net cash farm income	89165	107736	108116
CROPS AND FEED			
Ending inventory	282859	372380	450446
Beginning inventory	294910	493881	359389
Inventory change	-12051	-121502	91057
MARKET LIVESTOCK			
Ending inventory	11651	8671	31584
Beginning inventory	16239	31270	24878
Inventory change	-4588	-22600	6706
ACCTS RECEIVABLE & OTHER CURRENT ASSETS			
Ending inventory	48155	69418	43016
Beginning inventory	44467	71685	45359
Inventory change	3688	-2267	-2343
PREPAID EXPENSES AND SUPPLIES			
Ending inventory	43871	28060	108396
Beginning inventory	39558	40724	73350
Inventory change	4313	-12663	35046
ACCOUNTS PAYABLE			
Beginning inventory	21528	35850	35775
Ending inventory	23715	46597	30371
Inventory change	-2187	-10748	5403
Total inventory change	-10826	-169779	135870
Net operating profit	78339	-62043	243986

Table 35. **DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 1998**  
**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	28	7	7
Net operating profit	78339	-62043	243986
<b>BREEDING LIVESTOCK</b>			
Ending inventory	2345	2121	314
Capital sales	761	2174	208
Beginning inventory	3760	7274	614
Capital purchases	153	-	332
Depreciation, capital adj.	-807	-2978	-424
<b>MACHINERY AND EQUIPMENT</b>			
Ending inventory	167376	267078	175380
Capital sales	18167	41295	11121
Beginning inventory	163379	265832	145707
Capital purchases	76777	143977	83569
Depreciation, capital adj.	-54613	-101435	-42776
<b>BUILDINGS AND IMPROVEMENTS</b>			
Ending inventory	67390	74454	30084
Capital sales	68	-	-
Beginning inventory	63609	70359	30149
Capital purchases	11803	7918	10614
Depreciation, capital adj.	-7954	-3823	-10678
<b>OTHER CAPITAL ASSETS</b>			
Ending inventory	64186	20721	118862
Capital sales	15097	7031	43512
Beginning inventory	69415	27632	142561
Capital purchases	10160	-	19588
Depreciation, capital adj.	-293	120	225
Total depreciation, capital adj.	-63667	-108117	-53654
Net farm income	14673	-170160	190333



Table 36. **PROFITABILITY AND LIQUIDITY ANALYSIS, 1998**  
**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	28	7	7	28	7	7
<b>PROFITABILITY</b>						
	----- Cost -----			----- Market -----		
Net farm income	14673	-170160	190333	91567	-12732	274271
Labor and management earnings	-11523	-195159	162003	26759	-81559	204693
Rate of return on assets	0.9 %	-11.8 %	13.6 %	4.9 %	0.0 %	12.9 %
Rate of return on equity	-8.5 %	-53.5 %	26.2 %	3.8 %	-5.1 %	17.9 %
Operating profit margin	1.8 %	-29.7 %	18.4 %	15.2 %	0.1 %	28.2 %
Asset turnover rate	51.3 %	39.9 %	73.9 %	32.2 %	25.6 %	45.7 %
Interest on farm net worth	26196	24998	28330	64808	68827	69578
Farm interest expense	46268	59267	33644	46268	59267	33644
Value of operator lbr and mgmt.	50749	46100	66449	50749	46100	66449
Return on farm assets	10192	-156994	157528	87086	434	241466
Average farm assets	1119364	1327580	1157974	1780768	2070422	1872604
Return on farm equity	-36077	-216261	123884	40818	-58832	207822
Average farm equity	425527	404279	472165	1080138	1147121	1159626
Value of farm production	573961	529060	856317	573961	529060	856317
				Average Of All Farms )))))))))	Average Of Low 25% )))))))))	Average Of High 25% )))))))))
Number of Farms				28	7	7
<b>LIQUIDITY (Cash)</b>						
Net cash farm income				89165	107736	108116
Net nonfarm income				57175	39594	25815
Family living and taxes				66759	77900	97432
Real estate principal payments				19367	16103	20020
Cash available for interm. debt				60214	53327	16479
Average intermediate debt				162501	221824	218220
Years to turnover interm. debt				2.7	4.2	13.2
Expense as a % of income				85 %	84 %	86 %
Interest as a % of income				8 %	9 %	4 %
<b>LIQUIDITY (Accrual)</b>						
Total accrual farm income				584925	541771	878237
Total accrual farm expense				506586	603814	634251
Net accrual operating income				78339	-62043	243986
Net nonfarm income				57175	39594	25815
Family living and taxes				66759	77900	97432
Real estate principal payments				19367	16103	20020
Available for intermediate debt				49389	-116453	152349
Average intermediate debt				162501	221824	218220
Years to turnover interm. debt				3.3	**	1.4
Expense as a % of income				87 %	111 %	72 %
Interest as a % of income				8 %	11 %	4 %

Table 37. **BALANCE SHEET AT COST VALUES, 1998**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of All Farms ) ) ) ) ) ) ) ) ) ) 28		Average Of Low 25 % ) ) ) ) ) ) ) ) ) ) 7		Average Of High 25 % ) ) ) ) ) ) ) ) ) ) 7	
	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )	Beginning ) ) ) ) ) ) ) ) ) )	Ending ) ) ) ) ) ) ) ) ) )
<b>ASSETS</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	12651	31934	34577	20764	16184	89197
Prepaid expenses & supplies	39558	43871	40724	28060	73350	108396
Growing crops	21547	18577	29360	32111	26408	15877
Accounts receivable	16166	20854	24211	25992	10206	12083
Hedging accounts	254	1712	964	371	-	6429
Crops held for sale or feed	290614	275000	480549	356163	359389	450446
Crops under government loan	4296	7859	13333	16216	-	-
Market livestock held for sale	16239	11651	31270	8671	24878	31584
Other current assets	6500	7011	17150	10944	8745	8627
Total current farm assets	407825	418469	672138	499292	519160	722640
<b>Intermediate Farm Assets</b>						
Breeding livestock	3760	2345	7274	2121	614	314
Machinery and equipment	163379	167376	265832	267078	145707	175380
Other intermediate assets	51894	47794	23078	18682	138176	114951
Total intermediate farm assets	219034	217516	296184	287882	284497	290645
<b>Long-Term Farm Assets</b>						
Farm land	378819	432154	355243	393015	199666	230809
Buildings and improvements	63609	67390	70359	74454	30149	30084
Other long-term assets	17521	16392	4554	2039	4386	3911
Total long-term farm assets	459948	515936	430157	469508	234201	264804
Total Farm Assets	1086806	1151921	1398479	1256682	1037858	1278090
Total Nonfarm Assets	68900	84762	48532	55237	198449	253043
Total Assets	1155707	1236683	1447010	1311919	1236307	1531133
<b>LIABILITIES</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	6649	6421	16232	15886	4905	4176
Accounts payable	14879	17295	19618	30711	30870	26195
Current notes	205034	243115	310529	331234	236209	393282
Government crop loans	3333	7768	13333	15851	-	-
Principal due on term debt	50252	48135	55057	38966	59591	56579
Total current farm liabilities	280147	322733	414768	432649	331575	480232
Intermediate Farm Liabilities	129179	134024	184836	193379	169076	182347
Long-term Farm Liabilities	251579	270012	291944	329026	113856	94531
Total Farm Liabilities	660905	726769	891548	955054	614507	757109
Total Nonfarm Liabilities	8363	6055	5714	8778	23949	12159
Total Liabilities	669268	732824	897263	963832	638456	769268
Net Worth (farm and nonfarm)	486438	503859	549748	348087	597851	761865
Net Worth Change		17421		-201660		164014
<b>RATIO ANALYSIS</b>						
Current Farm Liabilities / Assets	69 %	77 %	62 %	87 %	64 %	66 %
Curr. & Interm Farm Liab / Assets	65 %	72 %	62 %	80 %	62 %	65 %
Long Term Farm Liab. / Assets	55 %	52 %	68 %	70 %	49 %	36 %
Total Liabilities / Assets	58 %	59 %	62 %	73 %	52 %	50 %



Table 39. **STATEMENT OF CASH FLOWS, 1998**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

Number of Farms	Average Of	Average Of	Average Of
	All Farms ))))))))) 28	Low 25% ))))))))) 7	High 25% ))))))))) 7
(a) Beginning cash balance (farm & nonfarm)	12651	34577	16184
CASH FROM OPERATING ACTIVITIES			
Gross cash farm income	597877	688139	782817
Net nonfarm income (+)	57175	39594	25815
Total cash farm expense (-)	508712	580403	674701
Apparent family living expense (-)	60494	76192	81648
Income and social security tax (-)	6265	1708	15784
(b) Cash from operations (=)	79582	69430	36499
CASH FROM INVESTING ACTIVITIES			
Sale of breeding livestock	761	2174	208
Sale of machinery & equipment (+)	18167	41295	11121
Sale of farm land (+)	-	-	-
Sale of farm buildings (+)	68	-	-
Sale of other farm assets (+)	15097	7031	43512
Sale of nonfarm assets (+)	-	-	-
Purchase of breeding livestock (-)	153	-	332
Purchase of machinery & equip. (-)	76777	143977	83569
Purchase of farm land (-)	60179	37772	31155
Purchase of farm buildings (-)	11803	7918	10614
Purchase of other farm assets (-)	10160	-	19588
Purchase of nonfarm assets (-)	5314	-	21256
(c) Cash from investing activities (=)	-130294	-139166	-111673
CASH FROM FINANCING ACTIVITIES			
Money borrowed	348467	540098	486585
Cash gifts and inheritances (+)	30310	2714	26786
Principal payments (-)	285108	487386	338580
Dividends paid (-)	-	-	-
Gifts given (-)	23674	-496	26604
(d) Cash from financing activities (=)	69995	55922	148188
(e) Net change in cash balance (b+c+d)	19283	-13814	73014
Ending cash balance (farm & nonfarm)	31934	20764	89197

Table 40. **FINANCIAL GUIDELINES MEASURES, 1998**  
**Michigan Cash Grain Farms; 1,000 or more acres**  
(Farms sorted by Net Farm Income)

	Average Of All Farms ))))))))) 28		Average Of Low 25 % ))))))))) 7		Average Of High 25 % ))))))))) 7	
Number of Farms						
<b>LIQUIDITY</b>	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current ratio	1.46	1.30	1.62	1.15	1.57	1.50
Working capital	127677	95736	257369	66644	187585	242409
<b>SOLVENCY (Market)</b>	Beginning	Ending	Beginning	Ending	Beginning	Ending
Farm debt to asset ratio	39 %	40 %	43 %	46 %	37 %	38 %
Farm equity to asset ratio	61 %	60 %	57 %	54 %	63 %	62 %
Farm debt to equity ratio	64 %	66 %	76 %	85 %	60 %	62 %
<b>PROFITABILITY</b>	Cost	Market	Cost	Market	Cost	Market
Rate of return on farm assets	0.9 %	4.9 %	-11.8 %	0.0 %	13.6 %	12.9 %
Rate of return on farm equity	-8.5 %	3.8 %	-53.5 %	-5.1 %	26.2 %	17.9 %
Operating profit margin	1.8 %	15.2 %	-29.7 %	0.1 %	18.4 %	28.2 %
Net farm income	14673	91567	-170160	-12732	190333	274271
<b>REPAYMENT CAPACITY</b>	Cash	Accrual	Cash	Accrual	Cash	Accrual
Term debt coverage ratio	160 %	138 %	135 %	-279 %	62 %	286 %
Capital replacement margin	29167	18341	14373	-155406	-23092	112778
<b>EFFICIENCY</b>						
Asset turnover rate (market)	32.2 %		25.6 %		45.7 %	
Operating expense ratio	78.7 %		100.5 %		68.4 %	
Depreciation expense ratio	10.9 %		20.0 %		6.1 %	
Interest expense ratio	7.9 %		10.9 %		3.8 %	
Net farm income ratio	2.5 %		-31.4 %		21.7 %	

LABOR ANALYSIS

	Average Of All Farms ))))))))) 27	Average Of Low 25 % ))))))))) 7	Average Of High 25 % ))))))))) 7
Number of Farms			
Total unpaid labor hours	3574	3526	4300
Total hired labor hours	2903	3639	4711
Total labor hours per farm	6477	7165	9010
Value of farm production / hour	89.18	73.84	95.04
Net farm income / unpaid hour	3.98	-48.26	44.27

## Per Unit Income and Expense

Table 41 gives the per acre cash income, cash expense and depreciation for 56 of the 60 cash grain farms. Four of the 60 did not report any crop acres, so the items in the table are based on the other 56. They had an unweighted average of 1,136.0 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, 1998**  
56 Cash Grain Farms, Per Acre

	<u>1,136.0</u>	<u>Your Farm</u>
<b>Total Crop Acres</b>		
<b>Income Items per Acre:</b>		
Corn	\$115	_____
Soybeans	92	_____
Government	33	_____
Custom work	18	_____
Wheat	15	_____
All Other Income	49	_____
<b>Expense Items per Acre:</b>		
Seed	\$19.89	_____
Fertilizer	40.98	_____
Crop chemicals	26.89	_____
Crop insurance	2.24	_____
Drying fuel	1.44	_____
Crop marketing	1.01	_____
Crop miscellaneous	1.35	_____
Livestock cost items	7.66	_____
Interest	24.88	_____
Fuel and oil	7.59	_____
Repairs	20.04	_____
Custom hire	9.05	_____
Hired labor	14.95	_____
Land rent	41.24	_____
Leases	7.81	_____
Real estate taxes	6.84	_____
Farm insurance	7.44	_____
Utilities	5.09	_____
Dues, professional fees	4.91	_____
Miscellaneous	21.35	_____
Machinery depreciation	27.17	_____
Buildings depreciation	4.79	_____