



**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***

## **2000 Business Analysis Summary for Swine Farms**

by

**Sherrill B. Nott**

**Staff Paper 2001-32**

**August 2001**



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

MSU is an Affirmative Action/Equal Opportunity Institution

# 2000 BUSINESS ANALYSIS SUMMARY FOR SWINE FARMS

Michigan Data from Telfarm/MicroTel  
Staff Paper No. 2001-32, 28 pages

by

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

## **Introduction**

I. This report is organized as follows:

A. List and sequence of Tables

B. Data Source

## **II. List and sequence of Tables**

A. Averages of 9 Farrow to Finish Farms, All Sizes

1. Crop Production Summaries, 2000 .....	Page 4
2. Farm Income Statement .....	Page 5
3. Farm Income Statement, continued .....	Page 6
4. Inventory Changes .....	Page 7
5. Depreciation, Capital Adjustments .....	Page 8
6. Profitability & Liquidity Measures .....	Page 9
7. Balance Sheet at Cost Values .....	Page 10
8. Balance Sheet at Market Values .....	Page 11
9. Statement of Cash Flows. ....	Page 12
10. Financial Standards Measures .....	Page 13
11. Financial Summary .....	Page 14
12. Operator and Labor Summary .....	Page 15

B. Tables 13 to 25, similar to above, of all 14 swine farms .....Page 16

## **Data Source**

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. Swine farms have 50 percent or more of value of combined sales from fat hogs, feeder pigs and cull breeding hogs.

This report is a summary of the financial and production records kept by swine farmers enrolled in the Telfarm/MicroTel record program through Michigan State University Extension. Farm records were included if a Finan<sup>2</sup> summary was completed on 2000 data including

---

<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, B. Dartt, S. Harsh, M. Kelsey, G. Kole, T. Purdy, W. Schauer, G. Schwab, D. Stein, V. Varner, and C. Wolf with the assistance of Michigan State University Extension Agents.

<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.

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. Ten of the 14 farms grew crops in addition to hogs. The unweighted mean of acres cropped was 1,058 acres; the standard deviation of the mean was 585 acres and the median was 1,121 acres. The unweighted mean of the net farm income for all 14 farms was \$88,624. The standard deviation of the mean was \$99,344 and the median was \$73,823 of net farm income.

This report has three purposes: 1) to provide statistical information about the financial results on swine farms during 2000; 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 swine farm averages in 1995, see Staff Paper 96-86, Michigan Farm Database, New Directions for 1995; it contains averages of 19 swine farms calculated with Finansum. Staff Paper 97-30, Business Analysis Summary for Swine Farms, contains averages of 17 swine farms for 1996. Staff Paper 98-23, 1997 Business Analysis Summary for Swine Farms, contains averages of 20 swine farms for 1997. Staff Paper 99-34, 1998 Business Analysis Summary for Swine Farms, contains averages of 14 swine farms for 1998. Staff Paper 2000-28, 1999 Business Analysis Summary for Swine Farms, contains averages of 9 swine farms for 1999. These staff papers are available from the author at <http://www.msu.edu/user/nott>

Those farms indicating they were farrow to finish operations were included in the first set of tables. The 14 farms in Tables 13 to 25 included the 9 farrow to finish farms plus 5 that were primarily in other types of hog enterprises. The farm was accepted in the average regardless of whether it was a proprietorship, partnership, limited liability company, or corporation. RankEm<sup>3</sup> will produce a variety of report options; a subset is included in this publication.

The farms included in the averages below are not a random sample. Most of them kept their financial records with Michigan State University's Telfarm/MicroTel accounting project. The averages may be representative of bigger and better managed swine farms. The 14 farms were spread across the 12 counties of Allegan, Benzie, Berrien, Branch, Calhoun, Eaton, Hillsdale, Huron, Ingham, Kalamazoo, St. Joseph, and Van Buren.

This document may be found and downloaded from the following:

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

---

non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

<sup>3</sup> Rankem calculates statistical summaries from Finan data. It is provided by the Center for Farm Financial Management.

Table 1

CROP PRODUCTION SUMMARIES, 2000  
Farrow to Finish Swine Farms in Michigan

	Average Of All Farms
Number of Farms	9
ACREAGE SUMMARY	
Total Acres Owned	396
Total Crop Acres	778
Crop Acres Owned	291
Crop Acres Cash Rented	445
Crop Acres Share Rented	42

Table 2

**FARM INCOME STATEMENT, 2000**  
**Farrow to Finish Swine Farms in Michigan**

	Average Of All Farms
	<hr/>
Number of Farms	9
<b>CASH FARM INCOME</b>	
Corn	21,588
Mixed Hay	67
Soybeans	34,422
Straw	112
Winter Wheat	3,292
Other crops	4,377
Government payments	46,626
Beef Cow-Calf, Beef Calves	3,801
Beef, Finish Beef Calves	105,667
Hogs, Farrow-Fin, Raised Hogs	461,950
Hogs, Feeder Pigs	1,869
Hogs, Finish Feeder Pigs	22,600
Hogs, Weaning Pigs	93,726
Other farm income	52,125
<b>Gross Cash Farm Income</b>	<b>853,681</b>

Table 3

**FARM INCOME STATEMENT, 2000 (Continued)**  
**Farrow to Finish Swine Farms in Michigan**

	Average Of All Farms
Number of Farms	9
<b>CASH FARM EXPENSE</b>	
Seed	22,968
Fertilizer	18,490
Crop chemicals	22,532
Crop insurance	1,880
Drying fuel	5,357
Crop marketing	809
Crop miscellaneous	656
Feeder livestock purchase	80,486
Purchased feed	240,774
Breeding fees	11,093
Veterinary	17,636
Livestock supplies	3,413
Livestock leases	406
Livestock marketing	4,485
Interest	73,881
Fuel & oil	12,727
Repairs	25,813
Custom hire	37,027
Hired labor	75,176
Land rent	28,920
Machinery & bldg leases	7,387
Real estate taxes	13,571
Farm insurance	8,775
Utilities	26,104
Dues & professional fees	5,180
Miscellaneous	19,421
Total cash expense	764,966
<b>Net cash farm income</b>	<b>88,715</b>
<b>INVENTORY CHANGES</b>	
Crops and feed	36,533
Market livestock	22,215
Accounts receivable	392
Prepaid expenses and supplies	16,090
Accounts payable	22,655
Total inventory change	97,885
<b>Net operating profit</b>	<b>186,600</b>
<b>DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS</b>	
Breeding livestock	-15,355
Machinery and equipment	-32,350
Buildings and improvements	-28,745
Other farm capital	514
Total depr. and other capital adj	-75,935
<b>Net farm income</b>	<b>\$110,665</b>

Table 4

**INVENTORY CHANGES, 2000**  
**Farrow to Finish Swine Farms in Michigan**

	Average Of All Farms
	<hr/>
Number of Farms	9
Net cash farm income	88,715
CROPS AND FEED	
Ending inventory	150,889
Beginning inventory	114,356
Inventory change	36,533
MARKET LIVESTOCK	
Ending inventory	196,263
Beginning inventory	174,048
Inventory change	22,215
ACCTS RECEIVABLE & OTHER CURRENT ASSETS	
Ending inventory	4,085
Beginning inventory	3,692
Inventory change	392
PREPAID EXPENSES AND SUPPLIES	
Ending inventory	28,261
Beginning inventory	12,170
Inventory change	16,090
ACCOUNTS PAYABLE	
Beginning inventory	29,328
Ending inventory	6,673
Inventory change	22,655
Total inventory change	97,885
Net operating profit	186,600



Table 5

**DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 2000**  
**Farrow to Finish Swine Farms in Michigan**

	Average Of All Farms
	<hr/>
Number of Farms	9
Net operating profit	186,600
<b>BREEDING LIVESTOCK</b>	
Ending inventory	103,509
Capital sales	2,144
Beginning inventory	113,557
Capital purchases	7,451
Depreciation, capital adj.	-15,355
<b>MACHINERY AND EQUIPMENT</b>	
Ending inventory	120,933
Capital sales	7,128
Beginning inventory	124,640
Capital purchases	35,770
Depreciation, capital adj.	-32,350
<b>BUILDINGS AND IMPROVEMENTS</b>	
Ending inventory	201,724
Capital sales	-
Beginning inventory	219,272
Capital purchases	11,197
Depreciation, capital adj.	-28,745
<b>OTHER CAPITAL ASSETS</b>	
Ending inventory	16,025
Capital sales	20,818
Beginning inventory	22,348
Capital purchases	13,980
Depreciation, capital adj.	514
Total depreciation, capital adj.	-75,935
Net farm income	110,665

Table 6

**PROFITABILITY AND LIQUIDITY MEASURES, 2000**  
**Farrow to Finish Swine Farms in Michigan**

	Average Of All Farms	Average Of All Farms
	<hr/>	<hr/>
Number of Farms	9	9
PROFITABILITY	-- Cost --	-- Market --
Net farm income	110,665	122,294
Labor & mgmt earnings	91,837	72,737
Rate of return on assets	11.7 %	8.3 %
Rate of return on equity	19.5 %	8.5 %
Operating profit margin	20.9 %	22.9 %
Asset turnover rate	55.8 %	36.3 %
Interest on farm net worth	18,828	49,557
Farm interest expense	61,893	61,893
Value of operator lbr & mgmt.	52,006	52,006
Return on farm assets	120,552	132,181
Average farm assets	1,032,844	1,587,817
Return on farm equity	58,658	70,288
Average farm equity	300,703	825,955
Value of farm production	576,206	576,206
		Average Of All Farms
		<hr/>
Number of Farms		9
LIQUIDITY (Cash)		
Net cash farm income		88,715
Net nonfarm income		4,002
Family living and taxes		30,311
Real estate principal payments		23,909
Cash available for interm. debt		38,497
Average intermediate debt		171,402
Years to turnover interm. debt		4.5
Expense as a % of income		90 %
Interest as a % of income		9 %
LIQUIDITY (Accrual)		
Total accrual farm income		912,821
Total accrual farm expense		726,221
Net accrual operating income		186,600
Net nonfarm income		4,002
Family living and taxes		30,311
Real estate principal payments		23,909
Available for intermediate debt		136,382
Average intermediate debt		171,402
Years to turnover interm. debt		1.3
Expense as a % of income		80 %
Interest as a % of income		7 %

Table 7

**BALANCE SHEET AT COST VALUES, 2000**  
**Farrow to Finish Swine Farms in Michigan**

	Average Of All Farms	
Number of Farms	9	
	Beginning	Ending
ASSETS		
Current Farm Assets		
Cash and checking balance	17,901	21,199
Prepaid expenses & supplies	12,170	28,261
Growing crops	2,994	2,280
Accounts receivable	34	1,131
Hedging accounts	394	293
Crops held for sale or feed	114,356	149,323
Crops under government loan	-	1,566
Market livestock held for sale	174,048	196,263
Other current assets	321	381
Total current farm assets	322,168	400,696
Intermediate Farm Assets		
Breeding livestock	113,557	103,509
Machinery and equipment	124,640	120,933
Other intermediate assets	17,993	12,082
Total intermediate farm assets	256,191	236,524
Long-Term Farm Assets		
Farm land	221,313	199,504
Buildings and improvements	219,272	201,724
Other long-term assets	4,355	3,943
Total long-term farm assets	444,939	405,170
Total Farm Assets	1,023,298	1,042,390
Total Nonfarm Assets	65,673	67,453
Total Assets	1,088,971	1,109,844
LIABILITIES		
Current Farm Liabilities		
Accrued interest	15,020	3,032
Accounts payable	14,308	3,642
Current notes	125,618	137,019
Government crop loans	-	1,566
Principal due on term debt	65,415	61,974
Total current farm liabilities	220,362	207,232
Intermediate Farm Liabilities	165,511	103,996
Long-term Farm Liabilities	400,769	366,412
Total Farm Liabilities	786,642	677,640
Total Nonfarm Liabilities	3,560	2,807
Total Liabilities	790,202	680,446
Net Worth (farm and nonfarm)	298,769	429,397
Net Worth Change	130,629	
RATIO ANALYSIS		
Current Farm Liabilities / Assets	68 %	52 %
Curr. & Interm Farm Liab / Assets	67 %	49 %
Long Term Farm Liab. / Assets	90 %	90 %
Total Liabilities / Assets	73 %	61 %

Table 8

**BALANCE SHEET AT MARKET VALUES, 2000**  
**Farrow to Finish Swine Farms in Michigan**

	Average Of All Farms	
Number of Farms	9	
	Beginning	Ending
<b>ASSETS</b>		
Current Farm Assets		
Cash and checking balance	17,901	21,199
Prepaid expenses & supplies	12,170	28,261
Growing crops	2,944	2,280
Accounts receivable	34	1,131
Hedging accounts	394	293
Crops held for sale or feed	114,356	149,323
Crops under government loan	-	1,566
Market livestock held for sale	174,048	196,263
Other current assets	321	381
Total current farm assets	322,168	400,696
Intermediate Farm Assets		
Breeding livestock	115,425	106,154
Machinery and equipment	292,910	299,634
Other intermediate assets	17,993	12,082
Total intermediate farm assets	426,329	417,871
Long-Term Farm Assets		
Farm land	464,625	449,370
Buildings and improvements	349,166	337,112
Other long-term assets	4,355	3,943
Total long-term farm assets	818,145	790,425
Total Farm Assets	1,566,642	1,608,992
Total Nonfarm Assets	80,587	91,564
Total Assets	1,647,228	1,700,556
<b>LIABILITIES</b>		
Current Farm Liabilities		
Accrued interest	15,020	3,032
Accounts payable	14,308	3,642
Current notes	125,618	137,019
Government crop loans	-	1,566
Principal due on term debt	65,415	61,974
Total current farm liabilities	220,362	207,232
Intermediate Farm Liabilities	165,511	103,996
Long-term Farm Liabilities	400,769	366,412
Total Farm Liabilities	786,642	677,640
Total Nonfarm Liabilities	3,560	2,807
Total liabs excluding deferreds	790,202	680,446
Total deferred liabilities	28,444	38,976
Total liabilities	818,646	719,422
Retained earnings	298,769	429,397
Market valuation equity	529,813	551,737
Net worth (farm and nonfarm)	828,582	981,134
Net worth excluding deferreds	857,026	1,020,110
Net worth change	152,552	
<b>Ratio Analysis</b>		
Current farm liabilities / assets	68 %	52 %
Curr. & interm farm liab. / assets	52 %	38 %
Long term farm liab. / assets	49 %	46 %
Total debt to asset ratio	50 %	42 %
Debt to assets excl deferreds	48 %	40 %

Table 9

**STATEMENT OF CASH FLOWS, 2000**  
**Farrow to Finish Swine Farms in Michigan**

		Average Of All Farms
Number of Farms		<hr/> 9
(a) Beginning cash balance (farm & nonfarm)		17,901
<b>CASH FROM OPERATING ACTIVITIES</b>		
Gross cash farm income		853,681
Net nonfarm income	(+)	4,002
Total cash farm expense	(-)	-764,966
Apparent family living expense	(-)	-29,250
Income and social security tax	(-)	-1,061
(b) Cash from operations	(=)	62,407
<b>CASH FROM INVESTING ACTIVITIES</b>		
Sale of breeding livestock		2,144
Sale of machinery & equipment	(+)	7,128
Sale of farm land	(+)	63,710
Sale of farm buildings	(+)	-
Sale of other farm assets	(+)	20,818
Sale of nonfarm assets	(+)	-
Purchase of breeding livestock	(-)	-7,451
Purchase of machinery & equip.	(-)	-35,770
Purchase of farm land	(-)	-
Purchase of farm buildings	(-)	-11,197
Purchase of other farm assets	(-)	-13,980
Purchase of nonfarm assets	(-)	-12,157
(c) Cash from investing activities	(=)	13,245
<b>CASH FROM FINANCING ACTIVITIES</b>		
Money borrowed		302,679
Transfers in from nonfarm sources	(+)	14,444
Principal payments	(-)	-389,476
Dividends paid	(-)	-
Transfers out to nonfarm uses	(-)	-
(d) Cash from financing activities	(=)	-72,353
(e) Net change in cash balance	(b+c+d)	3,298
Ending cash balance (farm & nonfarm)		21,199

Table 10

**FINANCIAL STANDARDS MEASURES, 2000**  
**Farrow to Finish Swine Farms in Michigan**

	Average Of All Farms
Number of Farms	9
<b>LIQUIDITY</b>	
Current ratio	1.93
Working capital	193,464
<b>SOLVENCY (Market)</b>	
Farm debt to asset ratio	44 %
Farm equity to asset ratio	56 %
Farm debt to equity ratio	80 %
<b>PROFITABILITY (cost)</b>	
Rate of return on farm assets	11.7 %
Rate of return on farm equity	19.5 %
Operating profit margin	20.9 %
Net farm income	110,665
<b>REPAYMENT CAPACITY</b>	
Term debt coverage ratio	187 %
Capital replacement margin	94,443
<b>EFFICIENCY</b>	
Asset turnover rate(cost)	55.8 %
Operating expense ratio	72.8 %
Depreciation expense ratio	8.3 %
Interest expense ratio	6.8 %
Net farm income ratio	12.1 %

Table 11

**FINANCIAL SUMMARY, 2000**  
**Farrow to Finish Swine Farms in Michigan**

	Average Of All Farms
Number of Farms	9
Income Statement	
Gross cash farm income	853,681
Total cash farm expense	764,966
Net cash farm income	88,715
Inventory change	97,885
Depreciation and capital adj	-75,935
Net farm income	110,665
Profitability (cost)	
Labor and management earnings	91,837
Rate of return on assets	11.7 %
Rate of return on equity	19.5 %
Operating profit margin	20.9 %
Asset turnover rate	55.8 %
Profitability (market)	
Labor and management earnings	72,737
Rate of return on assets	8.3 %
Rate of return on equity	8.5 %
Operating profit margin	22.9 %
Asset turnover rate	36.3 %
Liquidity	
Term debt coverage ratio	186.6 %
Expense as a percent of income	79.6 %
Interest as a percent of income	6.8 %
Solvency (cost)	
Number of farms	9
Ending farm assets	1,042,390
Ending farm liabilities	677,640
Ending total assets	1,109,844
Ending total liabilities	680,446
Ending net worth	429,397
Net worth change	130,629
Ending farm debt to asset ratio	65 %
Beg total debt to asset ratio	73 %
End total debt to asset ratio	61 %
Solvency (market)	
Number of farms	9
Ending farm assets	1,608,992
Ending farm liabilities	713,175
Ending total assets	1,700,556
Ending total liabilities	719,422
Ending net worth	981,134
Net worth change	152,552
Ending farm debt to asset ratio	44 %
Beg total debt to asset ratio	50 %
End total debt to asset ratio	42 %
Nonfarm Information	
Net nonfarm income	4,002

Table 12

**OPERATOR AND LABOR SUMMARY, 2000**  
**Farrow to Finish Swine Farms in Michigan**

	Average Of All Farms
Number of Farms	9
OPERATOR INFORMATION	
Average number of operators	1.8
Average age of operators	54.9
Average number of years farming	32.2
Results Per Operator	
Working capital	108,824
Total assets (market)	956,563
Total liabilities	426,599
Net worth (market)	529,964
Net worth excl deferred liabs	551,888
Gross farm income	513,462
Total farm expense	451,213
Net farm income	62,249
Net nonfarm income	2,251
Family living withdrawals	17,050
Total acres owned	222.9
Total crop acres	437.5
Crop acres owned	163.9
Crop acres cash rented	250.1
Crop acres share rented	23.5
Labor Analysis	
Number of farms	9
Total unpaid labor hours	3,808
Total hired labor hours	6,044
Total labor hours per farm	9,852
Unpaid hours per operator	2,142
Value of farm production / hour	58.49
Net farm income / unpaid hour	29.06



Table 13

## CROP PRODUCTION SUMMARIES, 2000

## Swine Farms in Michigan

(Farms Sorted By Net Farm Income)

	Average Of All Farms	Average Of Low 50 %	Average Of High 50 %
	<hr/>	<hr/>	<hr/>
Number of Farms	14	7	7
Acreage Summary			
Total acres owned	358	131	586
Total crop acres	756	410	1,102
Crop acres owned	216	72	361
Crop acres cash rented	509	330	688
Crop acres share rented	31	7	54
Average Price Received (Cash Sales Only)			
Wheat, Winter per bushel, \$	1.84	-	-
Soybeans per bushel, \$	4.83	-	-

Table 14

## FARM INCOME STATEMENT, 2000

## Swine Farms in Michigan

(Farms Sorted By Net Farm Income)

	Average Of All Farms	Average Of Low 50 %	Average Of High 50 %
Number of Farms	14	7	7
Cash Farm Income			
Corn	20,625	13,493	27,756
Corn, Seed	1,796	3,593	-
Soybeans	29,654	6,922	52,385
Straw	379	-	759
Sugar Beets	13,006	26,011	-
Timber	938	-	1,876
Wheat, Winter	5,100	4,969	5,231
Beans, Dry	2,243	4,485	-
Other crops	2,814	-	5,628
Miscellaneous crop income	43	-	86
Beef Cow-Calf, Beef Calves	2,444	-	4,887
Beef, Finish Beef Calves	67,929	-	135,857
Hogs, Farrow-Fin, Raised Hogs	296,968	151,009	442,927
Hogs, Feeder Pigs	1,450	1,430	1,470
Hogs, Finish Feeder Pigs	202,933	193,489	212,377
Sheep, Market Lambs	1,481	2,961	-
Hogs, Weaning Pigs	60,252	-	120,505
Hogs, Weaning to Finish	41,828	83,656	-
Cull breeding livestock	24,095	3,471	44,719
Misc. livestock income	373	48	697
Transition payments	4,236	8,472	-
Other government payments	38,377	10,395	66,359
Custom work income	3,953	6,293	1,614
Insurance income	89	177	-
Cash from hedging accounts	2,456	-1,013	5,924
Other farm income	5,663	5,689	5,638
<b>Gross Cash Farm Income</b>	<b>831,124</b>	<b>525,552</b>	<b>1,136,695</b>

Table 15

## FARM INCOME STATEMENT, 2000 (Continued)

**Swine Farms in Michigan**  
(Farms Sorted By Net Farm Income)

	Average Of All Farms	Average Of Low 50 %	Average Of High 50 %
Number of Farms	14	7	7
Cash Farm Expense			
Seed	23,260	10,272	36,249
Fertilizer	20,513	12,100	28,925
Crop chemicals	21,969	11,429	32,509
Crop insurance	1,208	9	2,408
Drying fuel	4,584	499	8,670
Crop marketing	520	-	1,040
Crop miscellaneous	457	22	891
Feeder livestock purchase	129,995	95,446	164,544
Purchased feed	225,925	158,523	293,327
Breeding fees	7,131	1,098	13,165
Veterinary	13,547	7,087	20,007
Livestock supplies	2,355	1,394	3,316
Livestock leases	1,702	2,882	522
Livestock marketing	3,918	1,659	6,178
Interest	64,849	39,468	90,230
Fuel & oil	12,585	8,893	16,277
Repairs	23,903	16,532	31,273
Custom hire	29,199	7,670	50,729
Hired labor	54,281	25,069	83,492
Land rent	37,760	24,253	51,266
Machinery & bldg leases	12,415	640	24,191
Real estate taxes	9,697	3,676	15,718
Farm insurance	8,379	6,155	10,603
Utilities	23,090	15,632	30,548
Dues & professional fees	3,861	1,390	6,332
Hedging account deposits	2,395	3,790	1,000
Miscellaneous	22,689	27,380	17,997
Total cash expense	762,186	482,965	1,041,408
<b>Net cash farm income</b>	<b>68,937</b>	<b>42,588</b>	<b>95,287</b>
Inventory Changes			
Crops and feed	30,042	2,521	57,563
Market livestock	32,086	19,401	44,771
Accounts receivable	1,955	3,121	789
Prepaid expenses and supplies	19,813	3,609	36,017
Accounts payable	5,212	-14,236	24,659
Total inventory change	89,107	14,416	163,798
<b>Net operating profit</b>	<b>158,044</b>	<b>57,004</b>	<b>259,085</b>
Depreciation and Other Capital Adjustments			
Breeding livestock	-9,871	-4,745	-14,997
Machinery and equipment	-31,620	-20,968	-42,272
Buildings and improvements	-25,312	-18,037	-32,588
Other farm capital	-2,617	-1,075	-4,160
Total depr & other capital adj	-69,421	-44,824	-94,017
<b>Net farm income</b>	<b>88,624</b>	<b>12,180</b>	<b>165,068</b>

Table 16

**INVENTORY CHANGES, 2000**  
**Swine Farms in Michigan**  
(Farms Sorted By Net Farm Income)

	Average Of All Farms	Average Of Low 50 %	Average Of High 50 %
Number of Farms	14	7	7
Net cash farm income	68,937	42,588	95,287
Crops and Feed			
Ending inventory	141,591	61,880	221,303
Beginning inventory	111,549	59,358	163,740
Inventory change	30,042	2,521	57,563
Market Livestock			
Ending inventory	204,150	125,997	282,302
Beginning inventory	172,064	106,596	237,531
Inventory change	32,086	19,401	44,771
Accts Receivable & Other Current Assets			
Ending inventory	6,977	4,439	9,515
Beginning inventory	5,023	1,319	8,726
Inventory change	1,955	3,121	789
Prepaid Expenses and Supplies			
Ending inventory	30,026	9,025	51,027
Beginning inventory	10,213	5,416	15,010
Inventory change	19,813	3,609	36,017
Accounts Payable & Accrued Expenses			
Beginning inventory	25,636	17,619	33,652
Ending inventory	20,424	31,855	8,993
Inventory change	5,212	-14,236	24,659
Total inventory change	89,107	14,416	163,798
Net operating profit	158,044	57,004	259,085

Table 17

## DEPRECIATION AND OTHER CAPITAL ADJUSTMENTS, 2000

**Swine Farms in Michigan**  
(Farms Sorted By Net Farm Income)

	Average Of All Farms	Average Of Low 50 %	Average Of High 50 %
Number of Farms	14	7	7
Net operating profit	158,044	57,004	259,085
Breeding Livestock			
Ending inventory	67,622	21,664	113,579
Capital sales	1,379	2,324	433
Beginning inventory	74,081	22,890	125,272
Capital purchases	4,790	5,843	3,737
Depreciation, capital adjust.	-9,871	-4,745	-14,997
Machinery and Equipment			
Ending inventory	109,916	70,827	149,004
Capital sales	4,607	3,160	6,054
Beginning inventory	112,389	74,982	149,795
Capital purchases	33,754	19,973	47,536
Depreciation, capital adjust.	-31,620	-20,968	-42,272
Buildings and Improvements			
Ending inventory	164,219	95,588	232,850
Capital sales	-	-	-
Beginning inventory	182,065	110,976	253,154
Capital purchases	7,466	2,649	12,283
Depreciation, capital adjust.	-25,312	-18,037	-32,588
Other Capital Assets			
Ending inventory	29,350	7,071	51,630
Capital sales	14,112	2,142	26,082
Beginning inventory	36,132	8,361	63,902
Capital purchases	9,948	1,927	17,970
Depreciation, capital adjust.	-2,617	-1,075	-4,160
Total depreciation, capital adj.	-69,421	-44,824	-94,017
Net farm income	88,624	12,180	165,068

Table 18

## PROFITABILITY MEASURES, 2000

## Swine Farms in Michigan

(Farms Sorted By Net Farm Income)

	Average Of All Farms	Average Of Low 50 %	Average Of High 50 %
Number of Farms	14	7	7
Profitability (assets valued at cost)			
Net farm income	88,624	12,180	165,068
Labor and management earnings	73,285	5,989	140,581
Rate of return on assets	10.2 %	3.4 %	12.8 %
Rate of return on equity	17.5 %	-44.2 %	25.1 %
Operating profit margin	18.2 %	6.1 %	22.7 %
Asset turnover rate	56.0 %	55.8 %	56.1 %
Interest on farm net worth	15,339	6,191	24,487
Farm interest expense	56,754	39,715	73,793
Value of operator lbr & mgmt	49,276	34,162	64,389
Return on farm assets	96,102	17,733	174,472
Average farm assets	945,093	522,866	1,367,321
Return on farm equity	39,348	-21,983	100,679
Average farm equity	225,272	49,706	400,838
Value of farm production	529,415	291,882	766,949
Profitability (assets valued at market)			
Net farm income	108,352	39,692	177,012
Labor and management earnings	65,671	19,374	111,968
Rate of return on assets	8.0 %	5.6 %	8.9 %
Rate of return on equity	8.3 %	1.6 %	10.4 %
Operating profit margin	21.9 %	15.5 %	24.3 %
Asset turnover rate	36.5 %	36.0 %	36.7 %
Interest on farm net worth	42,681	20,318	65,043
Farm interest expense	56,754	39,715	73,793
Value of operator lbr and mgmt.	49,276	34,162	64,389
Return on farm assets	115,831	45,245	186,416
Average farm assets	1,450,274	811,796	2,088,752
Return on farm equity	59,076	5,530	112,623
Average farm equity	711,347	338,637	1,084,056
Value of farm production	529,415	291,882	766,949

Table 19

**LIQUIDITY MEASURES, 2000**  
**Swine Farms in Michigan**  
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Liquidity (cash)			
Net cash farm income	68,937	42,588	95,287
Net nonfarm income	4,594	8,771	417
Family living and taxes	26,628	15,088	38,168
Real estate principal payments	19,241	11,096	27,386
Cash available for interm. debt	27,662	25,174	30,149
Average intermediate debt	209,934	173,308	246,560
Years to turnover interm. debt	7.6	6.9	8.2
Expense as a % of income	92 %	92 %	92 %
Interest as a % of income	8 %	8 %	8 %
Liquidity (accrual)			
Total accrual farm income	895,206	550,595	1,239,817
Total accrual operating expense	737,162	493,592	980,732
Net accrual operating income	158,044	57,004	259,085
Net nonfarm income	4,594	8,771	417
Family living and taxes	26,628	15,088	38,168
Real estate principal payments	19,241	11,096	27,386
Available for intermediate debt	116,769	39,590	193,948
Average intermediate debt	209,934	173,308	246,560
Years to turnover interm. debt	1.8	4.4	1.3
Expense as a % of income	82 %	90 %	79 %
Interest as a % of income	6 %	7 %	6 %

Table 20

**BALANCE SHEET AT COST VALUES, 2000**  
**Swine Farms in Michigan**  
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms		Low 50%		High 50%	
Number of farms	14		7		7	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	21,092	20,704	21,944	15,483	20,241	25,925
Prepaid expenses & supplies	10,213	30,026	5,416	9,025	15,010	51,027
Growing crops	2,869	2,336	1,314	1,311	4,425	3,360
Accounts receivable	1,430	3,750	0	3,068	2,859	4,433
Hedging accounts	518	646	5	60	1,030	1,232
Crops held for sale or feed	111,549	140,585	59,358	61,880	163,740	219,290
Crops under government loan	0	1,006	0	0	0	2,013
Market livestock held for sale	172,064	204,150	106,596	125,997	237,531	282,302
Other current assets	206	245	0	0	412	490
<b>Total current farm assets</b>	<b>319,941</b>	<b>403,448</b>	<b>194,634</b>	<b>216,824</b>	<b>445,248</b>	<b>590,072</b>
<b>Intermediate Farm Assets</b>						
Breeding livestock	74,081	67,622	22,890	21,664	125,272	113,579
Machinery and equipment	112,389	109,916	74,982	70,827	149,795	149,004
Other intermediate assets	31,097	25,600	5,503	4,284	56,691	46,917
<b>Total intermediate farm assets</b>	<b>217,567</b>	<b>203,137</b>	<b>103,375</b>	<b>96,775</b>	<b>331,758</b>	<b>309,500</b>
<b>Long Term Farm Assets</b>						
Farm land	202,522	188,502	110,957	110,957	294,088	266,048
Buildings and improvements	182,065	164,219	110,976	95,588	253,154	232,850
Other long-term assets	5,035	3,750	2,857	2,788	7,212	4,713
<b>Total long-term farm assets</b>	<b>389,622</b>	<b>356,471</b>	<b>224,790</b>	<b>209,332</b>	<b>554,454</b>	<b>503,610</b>
<b>Total Farm Assets</b>	<b>927,130</b>	<b>963,057</b>	<b>522,800</b>	<b>522,932</b>	<b>1,331,459</b>	<b>1,403,182</b>
<b>Total Nonfarm Assets</b>	<b>59,802</b>	<b>58,552</b>	<b>9,452</b>	<b>16,040</b>	<b>110,153</b>	<b>101,064</b>
<b>Total Assets</b>	<b>986,932</b>	<b>1,021,609</b>	<b>532,251</b>	<b>538,972</b>	<b>1,441,612</b>	<b>1,504,246</b>
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	14,797	6,703	7,143	7,390	22,451	6,015
Accounts payable	10,839	13,721	10,476	24,464	11,201	2,979
Current notes	160,810	178,902	135,567	124,933	186,052	232,871
Government crop loans	0	1,006	0	0	0	2,013
Principal due on term debt	55,419	53,830	30,010	29,887	80,828	77,773
<b>Total current farm liabilities</b>	<b>241,865</b>	<b>254,162</b>	<b>183,197</b>	<b>186,674</b>	<b>300,532</b>	<b>321,650</b>
<b>Total intermediate farm liabs</b>	<b>198,266</b>	<b>155,369</b>	<b>162,334</b>	<b>148,188</b>	<b>234,198</b>	<b>162,551</b>
<b>Total long term farm liabilities</b>	<b>309,085</b>	<b>280,895</b>	<b>130,489</b>	<b>135,437</b>	<b>487,680</b>	<b>426,354</b>
<b>Total farm liabilities</b>	<b>749,215</b>	<b>690,427</b>	<b>476,020</b>	<b>470,299</b>	<b>1,022,410</b>	<b>910,555</b>
<b>Total nonfarm liabilities</b>	<b>2,646</b>	<b>2,947</b>	<b>0</b>	<b>0</b>	<b>5,292</b>	<b>5,895</b>
<b>Total liabilities</b>	<b>751,861</b>	<b>693,374</b>	<b>476,020</b>	<b>470,299</b>	<b>1,027,702</b>	<b>916,450</b>
<b>Net worth (farm and nonfarm)</b>	<b>235,070</b>	<b>328,235</b>	<b>56,231</b>	<b>68,673</b>	<b>413,910</b>	<b>587,796</b>
<b>Net worth change</b>	<b>93,164</b>		<b>12,442</b>		<b>173,887</b>	
<b>Ratio Analysis</b>						
Current farm liabilities / assets	76 %	63 %	94 %	86 %	67 %	55 %
Curr. & interm farm liab. / assets	82 %	68 %	116 %	107 %	69 %	54 %
Long term farm liab. / assets	79 %	79 %	58 %	65 %	88 %	85 %
Total debt to asset ratio	76 %	68 %	89 %	87 %	71 %	61 %



Table 21

## BALANCE SHEET AT MARKET VALUES, 2000

**Swine Farms in Michigan**  
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms		Low 50%		High 50%	
Number of farms	14		7		7	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
<b>Assets</b>						
Current Farm Assets						
Cash and checking balance	21,092	20,704	21,944	15,483	20,241	25,925
Prepaid expenses & supplies	10,213	30,026	5,416	9,025	15,010	51,027
Growing crops	2,869	2,336	1,314	1,311	4,425	3,360
Accounts receivable	1,430	3,750	0	3,068	2,859	4,433
Hedging accounts	518	646	5	60	1,030	1,232
Crops held for sale or feed	111,549	140,585	59,358	61,880	163,740	219,290
Crops under government loan	0	1,006	0	0	0	2,013
Market livestock held for sale	172,064	204,150	106,596	125,997	237,531	282,302
Other current assets	206	245	0	0	412	490
Total current farm assets	319,941	403,448	194,634	216,824	445,248	590,072
Intermediate Farm Assets						
Breeding livestock	75,282	69,381	25,299	25,182	125,265	113,579
Machinery and equipment	281,595	291,515	164,331	172,170	398,859	410,859
Other intermediate assets	31,097	25,600	5,503	4,284	56,691	46,917
Total intermediate farm assets	387,974	386,496	195,133	201,636	580,815	571,355
Long Term Farm Assets						
Farm land	413,416	406,409	242,029	243,871	584,803	568,947
Buildings and improvements	292,344	281,736	163,321	160,499	421,366	402,974
Other long-term assets	5,035	3,750	2,857	2,788	7,212	4,713
Total long-term farm assets	710,794	691,896	408,207	407,158	1,013,381	976,634
Total Farm Assets	1,418,709	1,481,839	797,974	825,619	2,039,444	2,138,060
Total Nonfarm Assets	85,555	90,753	45,484	50,326	125,626	131,181
Total Assets	1,504,264	1,572,593	843,458	875,944	2,165,070	2,269,241
<b>Liabilities</b>						
Current Farm Liabilities						
Accrued interest	14,797	6,703	7,143	7,390	22,451	6,015
Accounts payable	10,839	13,721	10,476	24,464	11,201	2,979
Current notes	160,810	178,902	135,567	124,933	186,052	232,871
Government crop loans	0	1,006	0	0	0	2,013
Principal due on term debt	55,419	53,830	30,010	29,887	80,828	77,773
Total current farm liabilities	241,865	254,162	183,197	186,674	300,532	321,650
Total intermediate farm liabs	198,266	155,369	162,334	148,188	234,198	162,551
Total long term farm liabilities	309,085	280,895	130,489	135,437	487,680	426,354
Total farm liabilities	749,215	690,427	476,020	470,299	1,022,410	910,555
Total nonfarm liabilities	2,646	2,947	0	0	5,292	5,895
Total liabs excluding deferreds	751,861	693,374	476,020	470,299	1,027,702	916,450
Total deferred liabilities	18,286	25,056	0	0	36,571	50,112
Total liabilities	770,147	718,430	476,020	470,299	1,064,273	966,561
Retained earnings	235,070	328,235	56,231	68,673	413,910	587,796
Market valuation equity	499,047	525,928	311,207	336,973	686,887	714,884
Net worth (farm and nonfarm)	734,117	854,163	367,438	405,646	1,100,797	1,302,680
Net worth excluding deferreds	752,403	879,219	367,438	405,646	1,137,368	1,352,792
Net worth change	120,045		38,208		201,883	
<b>Ratio Analysis</b>						
Current farm liabilities / assets	76 %	63 %	94 %	86 %	67 %	55 %
Curr. & interm farm liab. / assets	62 %	52 %	89 %	80 %	52 %	42 %
Long term farm liab. / assets	43 %	41 %	32 %	33 %	48 %	44 %
Total debt to asset ratio	51 %	46 %	56 %	54 %	49 %	43 %
Debt to assets excl deferreds	50 %	44 %	56 %	54 %	47 %	40 %

Table 22

**STATEMENT OF CASH FLOWS, 2000**  
**Swine Farms in Michigan**  
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Beginning cash (farm & nonfarm)	21,092	21,944	20,241
<b>Cash From Operating Activities</b>			
Gross cash farm income	831,124	525,552	1,136,695
Net nonfarm income	4,594	8,771	417
Total cash farm expense	-762,186	-482,965	-1,041,408
Apparent family living expense	-25,946	-15,088	-36,804
Income and social security tax	-682	-	-1,364
Cash from operations	46,903	36,270	57,536
<b>Cash From Investing Activities</b>			
Sale of breeding livestock	1,379	2,324	433
Sale of machinery & equipment	4,607	3,160	6,054
Sale of farm land	40,956	-	81,912
Sale of farm buildings	-	-	-
Sale of other farm assets	14,112	2,142	26,082
Sale of nonfarm assets	-	-	-
Purchase of breeding livestock	-4,790	-5,843	-3,737
Purchase of machinery & equip.	-33,754	-19,973	-47,536
Purchase of farm land	-	-	-
Purchase of farm buildings	-7,466	-2,649	-12,283
Purchase of other farm assets	-9,948	-1,927	-17,970
Purchase of nonfarm assets	-7,815	-	-15,630
Cash from investing activities	-2,720	-22,766	17,327
<b>Cash From Financing Activities</b>			
Money borrowed	244,134	128,211	360,058
Transfers in from nonfarm sources	9,583	-	19,166
Principal payments	-298,005	-148,177	-447,833
Dividends paid	-	-	-
Transfers out to nonfarm uses	-284	-	-569
Cash from financing activities	-44,572	-19,966	-69,178
Net change in cash balance	-388	-6,461	5,684
Ending cash (farm & nonfarm)	20,704	15,483	25,925

Table 23

**FINANCIAL STANDARDS MEASURES, 2000**  
**Swine Farms in Michigan**  
(Farms Sorted By Net Farm Income)

	Average Of All Farms	Average Of Low 50 %	Average Of High 50 %
Number of Farms	14	7	7
<b>LIQUIDITY</b>			
Current ratio	1.59	1.16	1.83
Working capital	149,286	30,150	268,422
<b>SOLVENCY (Market)</b>			
Farm debt to asset ratio	48 %	57 %	45 %
Farm equity to asset ratio	52 %	43 %	55 %
Farm debt to equity ratio	93 %	132 %	81 %
<b>PROFITABILITY (cost)</b>			
Rate of return on farm assets	10.2 %	3.4 %	12.8 %
Rate of return on farm equity	17.5 %	-44.2 %	25.1 %
Operating profit margin	18.2 %	6.1 %	22.7 %
Net farm income	88,624	12,180	165,068
<b>REPAYMENT CAPACITY</b>			
Term debt coverage ratio	194 %	160 %	203 %
Capital replacement margin	80,312	20,676	139,949
<b>EFFICIENCY</b>			
Asset turnover rate(cost)	56.0 %	55.8 %	56.1 %
Operating expense ratio	76.0 %	82.4 %	73.2 %
Depreciation expense ratio	7.8 %	8.1 %	7.6 %
Interest expense ratio	6.3 %	7.2 %	6.0 %
Net farm income ratio	9.9 %	2.2 %	13.3 %

Table 24

## FINANCIAL SUMMARY, 2000

## Swine Farms in Michigan

(Farms Sorted By Net Farm Income)

	Average Of All Farms	Average Of Low 50 %	Average Of High 50 %
Number of Farms	14	7	7
Income Statement			
Gross cash farm income	831,124	525,552	1,136,695
Total cash farm expense	762,186	482,965	1,041,408
Net cash farm income	68,937	42,588	95,287
Inventory change	89,107	14,416	163,798
Depreciation and capital adj	-69,421	-44,824	-94,017
Net farm income	88,624	12,180	165,068
Profitability (cost)			
Labor and management earnings	73,285	5,989	140,581
Rate of return on assets	10.2 %	3.4 %	12.8 %
Rate of return on equity	17.5 %	-44.2 %	25.1 %
Operating profit margin	18.2 %	6.1 %	22.7 %
Asset turnover rate	56.0 %	55.8 %	56.1 %
Profitability (market)			
Labor and management earnings	65,671	19,374	111,968
Rate of return on assets	8.0 %	5.6 %	8.9 %
Rate of return on equity	8.3 %	1.6 %	10.4 %
Operating profit margin	21.9 %	15.5 %	24.3 %
Asset turnover rate	36.5 %	36.0 %	36.7 %
Liquidity			
Term debt coverage ratio	194.3 %	159.8 %	203.1 %
Expense as a percent of income	82.3 %	89.6 %	79.1 %
Interest as a percent of income	6.3 %	7.2 %	6.0 %
Solvency (cost)			
Number of farms	14	7	7
Ending farm assets	963,057	522,932	1,403,182
Ending farm liabilities	690,057	470,299	910,555
Ending total assets	1,021,609	538,972	1,504,246
Ending total liabilities	693,374	470,299	916,450
Ending net worth	328,235	68,673	587,796
Net worth change	93,164	12,442	173,887
Ending farm debt to asset ratio	72 %	90 %	65 %
Beg total debt to asset ratio	76 %	89 %	71 %
End total debt to asset ratio	68 %	87 %	61 %
Solvency (market)			
Number of farms	14	7	7
Ending farm assets	1,481,839	825,619	2,138,060
Ending farm liabilities	713,271	470,299	956,243
Ending total assets	1,572,593	875,944	2,269,241
Ending total liabilities	718,430	470,299	966,561
Ending net worth	854,163	405,646	1,302,680
Net worth change	120,045	38,208	201,883
Ending farm debt to asset ratio	48 %	57 %	45 %
Beg total debt to asset ratio	51 %	56 %	49 %
End total debt to asset ratio	46 %	54 %	43 %
Nonfarm Information			
Net nonfarm income	4,594	8,771	417

Table 25

# OPERATOR AND LABOR SUMMARY, 2000

## Swine Farms in Michigan

(Farms Sorted By Net Farm Income)

	Average Of All Farms	Average Of Low 50 %	Average Of High 50 %
Number of Farms	14	7	7
OPERATOR INFORMATION			
Average number of operators	1.8	1.4	2.1
Average age of operators	53.2	46.7	59.7
Average number of years farming	28.2	19.6	36.9
Results Per Operator			
Working capital	83,600	21,105	125,263
Total assets (market)	880,652	613,161	1,058,979
Total liabilities	416,352	329,209	474,447
Net worth (market)	464,300	283,952	584,532
Net worth excl deferred liabs	478,331	283,952	607,917
Gross farm income	501,315	385,417	578,581
Total farm expense	451,686	376,891	501,550
Net farm income	49,629	8,526	77,032
Net nonfarm income	2,572	6,140	194
Family living withdrawals	14,912	10,562	17,812
Total acres owned	200.6	91.6	273.3
Total crop acres	423.3	287.1	514.2
Crop acres owned	121.2	50.7	168.3
Crop acres cash rented	285.0	231.2	320.9
Crop acres share rented	17.1	5.2	25.1
Labor Analysis			
Number of farms	14	7	7
Total unpaid labor hours	3,621	2,791	4,451
Total hired labor hours	4,584	2,010	7,158
Total labor hours per farm	8,205	4,800	11,609
Unpaid hours per operator	2,028	1,954	2,077
Value of farm production / hour	64.53	60.80	66.07
Net farm income / unpaid hour	24.47	4.36	37.08