# 2015 Michigan Dairy Farm Business Analysis Summary

Eric Wittenberg And Christopher Wolf

Staff Paper 2016-01

November, 2016







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

MSU is an Affirmative Action/Equal Opportunity Institution

# 2015 Michigan Dairy Farm Business Analysis Summary

Staff Paper No. 2016-01 November 2016

by

Eric Wittenberg and Christopher Wolf

**Copyright (c) 2016 by Eric Wittenberg and Christopher Wolf**. Readers may make verbatim copies of this document for non-commercial purposes by any means, provided that this copyright notice appears on all such copies.

Eric Wittenberg and Christopher Wolf <sup>1</sup>	
Table of Contents	Page
Summary	3
List of Tables	
Summary Tables	
1. Average Farm Characteristics, 2011-2015	3
2. Average Income Statement, 2011-2015	3
3. Average Profitability Indicators, 2011-2015	4
4. Average Income and Expensesall herds	5
5. Average Income and Expensesherds with that item	6
6. Average Income and Expenses, last five years	7
7. Characteristics by Herd Size	7
8. Income Statement by Herd Size	8
9. Profitability Indicators by Herd Size	8
5	
A) Financial Summary of Dairy farms, All Herd Sizes	
10. Livestock, Crop Production and Marketing Summary	9
11. Farm Income Statement	10
12. Inventory Changes	13
13. Depreciation and Other Capital Adjustment	14
14. Profitability Measures	15
15. Liquidity & Repayment Capacity Measures	16
16. Balance Sheet at Cost Values	17
17. Balance sheet at Market Values	18
18. Statement of Cash Flows	19
19. Financial Standards Measures	20
20. Operator and Labor Information	21
21. Financial Summary	22
22. Summary Farm Income Statement	23
	-0
<i>B) Financial Summary of Dairy Farms with 40 to 99 Cows</i> Tables 23 to 35	24
C) Financial Summary of Dairy Farms with 100 to 249 Cows Tables 36 to 48	39
D) Financial Summary of Dairy Farms with 250 to 449 Cows Tables 49 to 61	54
E) Financial Summary of Dairy Farms with 450+ Cows Tables 62 to 74	69

# 2015 Michigan Dairy Farm Business Analysis Summary

<sup>&</sup>lt;sup>1</sup> Co-workers in the TelFarm project were: R. Betz, A. Kantrovich, L. Borton, J. Jones, C. Talley, D. Stein, and K. Lee with the assistance of Michigan State University Extension Educators. Greenstone Farm Credit Services co-workers were Steve Zimmerman, Kelly Tobin, Steve Eshelman, Janice Raymond, and Lynette Wood.

### Summary

This report summarizes the financial and production records of 89 dairy farms from across Michigan in 2015. To be included, the farms must have produced at least 50 percent of gross cash farm income from milk and dairy animal sales. The records came from Michigan State University's TelFarm system and the Farm Credit Service system in Michigan. The average values of financial performance are reported. The average herd included here is larger than the average dairy herd in Michigan. Average values are reported in the summary tables and discussion that follows but one should be aware that considerable variation across herds exists in virtually every measure. In 2015, the average dairy farm in the business analysis had 338 cows producing an average of 24,394 pounds of milk per cow (Table 1). Milk price, based on gross milk income, averaged \$17.06/cwt.

Table 1. Average Michigan Dairy Farm Business Analysis Characteristics, 2011-2015						
	2011	2012	2013	2014	2015	
Average number of cows	303	291	271	306	338	
Milk sold per cow (pounds)	22,340	23,148	23,992	23,007	24,394	
Average price of milk sold (\$/cwt)	20.65	18.67	20.53	24.18	17.06	
Total acres owned	452	486	479	456	505	
Total crop acres	736	883	895	909	928	
Number of farms	101	92	76	86	89	

Net farm income is the return to operator unpaid management, labor and capital invested. Net farm income in 2015 averaged \$84,765 which was a \$369,680 decrease from 2014. Gross cash farm income for all farms averaged \$1,937,891. The largest component of these revenues was milk sales, which averaged \$1,476,954. Sorted by rate of return on assets (market), the net farm income for the low 25% group averaged a negative \$93,297 while the high 25% group averaged \$277,046.

Table 2. Average witchigan Dan y Farm income Statement, 2011-2015							
	2011	2012	2013	2014	2015		
	(\$)	(\$)	(\$)	(\$)	(\$)		
Gross cash farm income	1,742,837	1,701,956	1,767,942	2,133,396	1,937,891		
- Total cash expense	<u>1,408,613</u>	<u>1,425,349</u>	<u>1,411,038</u>	1,680,612	<u>1,656,769</u>		
= Net cash farm income	334,224	276,607	356,904	452,784	281,122		
+ Inventory change*	116,185	127,331	43,211	145,910	-67,108		
+ Depreciation + capital adjust*	-164,823	<u>-176,694</u>	<u>-178,679</u>	<u>-144,249</u>	<u>-129,249</u>		
= Net farm income	285,586	227,244	221,436	454,445	84,765		

### Table 2. Average Michigan Dairy Farm Income Statement, 2011-2015

\*Changes calculated as ending value minus beginning value.

To put the profit values in perspective across farm sizes and years, we calculate profitability ratios. Rate of return on assets (ROA) is the farm operating profit (equal to net farm income plus interest expense less value of operator labor and management) divided by average total farm asset value (valued at current market value). Rate of return on assets is a measure of how much profit the farm business assets generated. The average 2015 dairy farm ROA (market) was 2.6 percent. The average 2015 ROE (market) was 2.2 percent, with ROE less then ROA an indicator, borrowed

money was return nothing relating to profitability. Operating profit margin is the operating profit divided by gross revenues. Operating profit margin measures the dollars of profit generated per dollar of revenue. In 2015, Michigan dairy farms generated 10.4 cents of profit per dollar of revenue. Asset turnover (ATO) is gross farm revenue divided by average asset value. Asset turnover measures the efficiency with which farm assets generate revenue. Average ATO value was 25.2 percent in 2015.

I able 5. If thage mininga	Table 5. Average Micingan Dany Farm Frontability Indicators, 2011-2015						
	2011	2012	2013	2014	2015		
	(%)	(%)	(%)	(%)	(%)		
Rate of return on assets*	11.2	9.3	7.8	10.3	2.6		
Rate of return on equity	13.7	11.2	9.2	12.5	2.2		
Operating profit margin	33.5	30.3	26.2	31.2	10.4		
Asset turnover rate*	33.3	30.7	29.7	33.1	25.2		

Table 3. Average	Michigan Dairv	Farm Profitability	Indicators, 2011-2015
			······································

\* Assets valued at market value.

Tables 4 and 5 display average income and expenses per hundredweight (cwt) of milk and per cow. Income and expenses were adjusted to an accrual basis. Average, accrual adjusted income and expenses per cropped acre were also included. Government payments include all farm government payments as it was not possible to separate crop from dairy payments.

Table 4 contains the average income and expense items across <u>all 89 dairy farms</u> in the 2015 summary while Table 5 displays the average income and expense items for <u>farms that</u> <u>reported that item</u>. For example, all farms had milk income so that income is identical in both tables. In contrast, only some farms reported DHIA expense so that item is larger when averaged only across those farms with that expense. *These tables should not be interpreted as an estimate of* <u>the true cost of producing milk</u>. Income related to the milking herd and cash crop sales are reported in Tables 4 and 5. Unpaid factors, including labor, management and capital, are not accounted for in the expense items. In addition, the allocation of resources amongst farm enterprises is not accurately reflected leaving the milking herd as the residual claimant on all expenses (especially labor costs).

The bottom section of Tables 4 and 5 presents crop related expenses divided by the total cropped acres. Again, these values should not be interpreted as cost of crop production. To accurately calculate a crop cost of production requires labor and management (among other) expenses that could not be separated out in these financial records.

Income Items:	Per cwt.	Per Cow
Milk	\$17.06	\$4,141.63
Cull Cows & Calves	\$1.84	\$420.74
Dairy Steers	\$1.10	\$275.26
Dairy Heifers	\$0.66	\$169.37
Government Payments	\$0.48	\$107.81
Patronage Dividends, cash	\$0.19	\$47.14
Crop Sales	\$1.94	\$428.15
Other Cash Income	\$1.02	\$231.09
Expense Items:	Per cwt.	Per Cow
Purchased Feeds	\$5.89	\$1,418.18
Breeding Fees	\$0.20	\$49.64
Veterinary	\$0.53	\$127.76
Livestock Supplies	\$0.90	\$212.54
DHIA	\$0.09	\$23.82
Milk & Livestock Mkt. & Trucking	\$1.02	\$240.12
Interest	\$0.72	\$168.13
Fuel & Oil	\$0.85	\$194.15
Repairs	\$1.33	\$313.70
Custom Hire	\$0.70	\$168.51
Hired Labor	\$2.94	\$714.45
Leases	\$0.44	\$102.85
Real Estate Taxes	\$0.31	\$67.63
Farm Insurance	\$0.43	\$99.14
Utilities	\$0.58	\$134.59
Dues, Professional Fees	\$0.15	\$34.93
Miscellaneous	\$0.63	\$159.93
Machinery Depreciation	\$1.13	\$261.61
Building Depreciation	\$0.60	\$143.11
Family Living	\$1.45	\$321.55
Expense Items per Cropped Acre:	Per Acre	
Seed	\$82.75	
Fertilizer	\$78.88	
Crop Chemicals	\$25.50	
Crop Insurance	\$17.36	
Crop Miscellaneous	\$37.15	
Land Rent	\$68.16	

Table 4. Average income and expenses across *all farms*\*, 2015

\* All income and expense items averaged across all 89 farms whether or not they had that income or expense item. Other cash income includes custom work, insurance claims, and miscellaneous income.

Income Items:	Per cwt.	Per Cow
Milk	\$17.06	\$4,141.63
Cull Cows & Calves	\$1.84	\$420.74
Dairy Steers	\$2.78	\$569.72
Dairy Heifers	\$1.40	\$358.90
Government Payments	\$0.57	\$127.93
Patronage Dividends, cash	\$0.21	\$52.44
Crop Sales	\$3.57	\$568.74
Other Cash Income	\$1.06	\$239.15
Expense Items:	Per cwt.	Per Cow
Purchased Feeds	\$5.89	\$1,418.18
Breeding Fees	\$0.23	\$58.13
Veterinary	\$0.53	\$127.76
Livestock Supplies	\$0.90	\$212.54
DHIA	\$0.26	\$68.39
Milk & Livestock Mkt. & Trucking	\$1.02	\$240.12
Interest	\$0.77	\$180.28
Fuel & Oil	\$0.85	\$194.15
Repairs	\$1.33	\$313.70
Custom Hire	\$0.83	\$199.97
Hired Labor	\$3.12	\$756.98
Leases	\$0.80	\$186.81
Real Estate Taxes	\$0.34	\$74.31
Farm Insurance	\$0.43	\$99.14
Utilities	\$0.58	\$134.59
Dues, Professional Fees	\$0.15	\$34.93
Miscellaneous	\$0.63	\$159.93
Machinery Depreciation	\$1.13	\$261.61
Building Depreciation	\$0.60	\$143.11
Family Living	\$1.45	\$321.55
Expense Items per Cropped Acre:	Per Acre	
Seed	\$87.67	
Fertilizer	\$84.58	
Crop Chemicals	\$30.26	
Crop Insurance	\$19.14	
Crop Miscellaneous	\$38.28	
Land Rent	\$69.73	

Table 5. Average income and expenses across farms with that item\*, 2015

\* Income and expense items averaged only across farms with that item.

Table 6 compares major production, income and expense items across all farms over a five year time frame. The average milk price dropped \$7 2015.

Table 6. Average of Major Production, Income and Expenses Items (across all farms)						
	2011	2012	2013	2014	2015	
Milk sold per cow (pounds)	22,340	23,148	23,992	23,007	24,394	
Average price of milk sold (\$/cwt)	20.65	18.67	20.53	24.18	17.06	
Purchased Feeds (\$/cwt)	6.01	6.14	6.71	7.33	5.89	
Interest Paid (\$/cwt)	0.91	0.90	0.90	0.82	0.72	
Hired Labor (\$/cwt)	2.78	2.63	2.72	2.97	2.94	
Fuel and Oil (\$/cwt)	1.29	1.31	1.22	1.34	0.85	
Total Depreciation (\$/cwt)	2.58	2.43	2.44	2.29	1.73	

Table 6. Average of Major Production, Income and Expenses Items (across all farms)
--

### **Results by Herd Size**

To further facilitate financial comparisons and benchmarking, the financial summaries were divided into herd size categories. Beginning with the 2010 summary we have utilized four herd size categories: 40 to 99 cows (14 herds), 100 to 249 cows (38 herds), 250 to 449 cows (16 herds), and 450+ cows (21 herds). These size categories are meant facilitate benchmarking performance to similar sized farms.

Table 7 displays average characteristics by herd size category. As expected, average milk production per cow was correlated with herd size across most size categories. Milk price was similar across all herd sizes. The smallest herds operated 4.5 crop acres per cow, the medium herds about 4.2 crop acres per cow, the medium-large herds about 2.2 crop acres per cow, and the largest herds about 2.2 crop acres per cow.

Table 7. Average 2015 Michigan Dairy Farm Characteristics by Herd Size Category						
	40-99	100-249	250-449	450+		
	cows	cows	cows	cows		
Average number of cows	73	179	325	812		
Milk sold per cow (pounds)	21,332	23,449	26,889	26,253		
Average price of milk sold (\$/cwt)	16.83	16.98	16.55	17.75		
Total acres owned	199	438	377	928		
Total crop acres	325	744	728	1,815		
Number of farms	14	38	16	21		

### 2015 34.1. D. . . .

Table 8 displays the average farm income statement by herd size. Net farm income represents the returns to unpaid factors (i.e., labor, management and equity capital). Farms in the small herd size category had essentially no income left for returns to unpaid management and labor while the larger herd sizes recorded small, positive net farm incomes for 2015.

ible 6. Average 2015 Michigan Dan y Farm medine Statement by meru Size						
40-99	100-249	250-449	450+			
cows	cows	cows	cows			
(\$)	(\$)	(\$)	(\$)			
366,305	949,074	1,764,249	4,907,200			
<u>318,870</u>	<u>817,178</u>	<u>1,563,670</u>	4,138,894			
47,436	131,896	200,578	768,306			
-21,3398	-25,252	-26,357	-204,367			
-26,007	-74,079	<u>-110,019</u>	-312,561			
31	32,564	64,202	251,378			
	40-99 cows (\$) 366,305 <u>318,870</u> 47,436 -21,3398 <u>-26,007</u>	40-99         100-249           cows         cows           (\$)         (\$)           366,305         949,074 <u>318,870</u> <u>817,178</u> 47,436         131,896           -21,3398         -25,252           -26,007         -74,079	40-99         100-249         250-449           cows         cows         cows           (\$)         (\$)         (\$)           366,305         949,074         1,764,249 <u>318,870</u> <u>817,178</u> 1,563,670           47,436         131,896         200,578           -21,3398         -25,252         -26,357           -26,007         -74,079         -110,019			

### Table 8. Average 2015 Michigan Dairy Farm Income Statement by Herd Size

\*Changes calculated as ending value minus beginning value.

Table 9 compares profitability measures across herd size with assets valued at market value. Farms in the smallest herd size category reported negative profitability while the other herd sizes realized positive values in 2015.

e 9. Average 2015 Michigan Dairy Farm Frontability indicators by Herd Size								
40-99	100-249	250-449	450+					
cows	COWS	cows	cows					
(%)	(%)	(%)	(%)					
-2.2	1.8	2.2	3.5					
-3.5	1.2	1.5	3.2					
-13.1	7.6	8.9	12.9					
16.8	23.2	24.8	26.8					
	40-99 cows (%) -2.2 -3.5 -13.1	40-99         100-249           cows         cows           (%)         (%)           -2.2         1.8           -3.5         1.2           -13.1         7.6	40-99         100-249         250-449           cows         cows         cows           (%)         (%)         (%)           -2.2         1.8         2.2           -3.5         1.2         1.5           -13.1         7.6         8.9					

# Table 9. Average 2015 Michigan Dairy Farm Profitability Indicators by Herd Size

\* Assets valued at market value.

# A. Financial Summary Information, All 89 Herds

2015 MI Dair (Farms Sorted By Rate	e of Return of Avg. Of All Farms		Ikt)
	-		
	-		
	All Farms		
	MII Idimo	Low 25%	High 25%
Dairy			
Number of farms	89	23	23
Average number of cows	338	289	401
Milk production per cow, lbs.,	24,394	22,584	25,416
Average milk price per cwt.,	\$17.06	\$16.03	\$18.04
Acreage Summary			
Total acres owned	505	252	774
Total crop acres	928	576	1,314
Crop acres owned	493	270	719
Crop acres cash rented	434	306	595
Crop acres share rented	1	0	-
Total pasture acres	3	1	11
Percent crop acres owned	53 %	47 %	55 %
Mach invest/crop acre cost	640	608	498
Mach invest/crop acre market	1,046	921	1,072
Average Price Received (Cash Sales O	nly)		
Corn per bushel	3.34	3.76	3.85
Soybeans per bushel	9.51	9.05	9.21
Wheat, Winter per bushel	4.54	5.07	3.52
Oats per bushel	1.80	-	1.72
Corn Silage per ton	44.98	39.98	73.78
Hay, Alfalfa per ton	54.82	-	-
Wheat, Spring per bushel	5.17	4.85	-
Straw per ton	109.59	119.63	-
Haylage, Mixed per ton	105.01	-	-
Hay, Mixed per ton	126.03	-	_
Average Yield Per Acre	10.00	0 01	0 60
Haylage, Alfalfa (ton)	10.26	8.21	9.60
Corn Silage (ton)	17.68	19.35	16.39
Corn (bushel)	156.84	131.25	150.12
Soybeans (bushel)	47.53		42.65
Corn snaplage (ton)	7.55	6.91	
Wheat, Winter (bushel)	67.15	24.87	66.99
Hay, Grass (ton)	7.35 2.73	24.0/	-
Hay, Alfalfa (ton)	2.13	-	-

# Farm Income Statement **2015 MI Dairy Herds (All Herds)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		
	All Farms	Low 25%	High 25%
Number of farms	89	23	23
Cash Farm Income			
Barley	230	-	-
Beans, Black Turtle	332	-	1,285
Cordwood	245	880	63
Corn	43,320	11,845	96,377
Corn Silage	1,426	1,163	2,222
Hay, Alfalfa	1,037	1,664	158
Hay, Mixed	216	217	273
Hay, Mixed Alfalfa/Grass	151	-	-
Haylage, Alfalfa	9,314	-	36,043
Haylage, Mixed	214	-	56
Oats	312	-	981
Soybeans	34,239	15,012	61,484
Speltz	54	-	209
Straw	478	1,131	587
Sugar Beets	3,933	-	12,587
Wheat, Soft Red Winter	443	-	1,714
Wheat, Spring	2,531	955	5,820
Wheat, Winter	6,878	5,988	6,655
Soybeans, Organic	109	-	424
User Added Crop	4,265	-	16,502
Miscellaneous crop income	10	-	37
Beef Cow-Calf, Beef Calves	2,914	-	7,814
Beef Finishing	149	259	-
Dairy, Milk	1,476,954	1,206,588	1,858,830
Dairy, Dairy Calves	36,965	33,258	37,644
Dairy Heifers (for sale)	4,549	2,970	3,987
Dairy Replacement Heifers	12,841	4,498	57
Dairy Finishing	16,186	2,282	19,970
Dairy Feeder	16,152	4,642	40,911
Dairy Backgrounding	188	-	727
User Added Livestock, User Adde	d 351	1,357	-
Cull breeding livestock	135,938	99,418	189,158
Misc. livestock income	212	52	200
Crop government payments	17,615	10,368	24,015
CRP payments	414	317	526
Other government payments	8,937	4,939	12,683
Custom work income	12,745	9,670	31,400
Patronage dividends, cash	13,143	7,365	19,402
Crop insurance income	9,820	479	6,064
Property insurance income	13,044	8,679	23,638
Sale of resale items	9,529	-	36,871
Livestock insurance inc	152	587	-
Contract livestock income	101	-	-
Real estate tax refund	865	-	-
Other farm income	38,260	78,433	52 <b>,</b> 621
Gross Cash Farm Income	1,937,891	1,515,017	2,609,996

### Farm Income Statement (continued) **2015 MI Dairy Herds (All Herds)** (Farms Sorted By Rate of Return on Assets - Mkt)

Avg. Of Low 25% High 25% All Farms Number of farms 89 23 23 Cash Farm Expense 52,897 35,162 69,698 Seed 42,036 78,320 Fertilizer 53,187 7,494 24,001 33,486 Crop chemicals 695 Crop insurance 5,126 13,561 Drying expense 1,108 171 794 Storage 557 272 345 Crop packaging and supplies 775 \_ \_ \_ \_ Crop fuel & oil 516 Crop hauling and trucking 617 682 44 3,855 1,444 Crop marketing 132 Crop miscellaneous 11,244 2,016 33,174 Crop consultants 92 -283 Feeder livestock purchase 31 \_ 120 457,500 628,467 10,866 18,776 Purchased feed 507,052 18,776 10,866 Breeding fees 14,528 44,063 Veterinary 45,641 50,311 203 225 \_ BST 45,205 41,457 59,873 Livestock supplies 2,131 1,863 1,844 DHIA 1,641 23,727 Contract production exp. 26,835 Livestock insurance 119 \_ -\_ \_ Livestock fuel & oil 291 3,098 Livestock leases 801 \_ \_ Grazing fees 324 \_ 36,925 18,228 Livestock hauling and trucking 48,283 57,286 Livestock marketing 19,833 26,549 18,801 13,947 22,559 Bedding \_ 718 875 Livestock miscellaneous 338 1,734 1,293 Livestock consultants 58,451 37,948 67,869 Interest Packaging and supplies 3**,**547 869 176 25,165 24,434 44,265 Supplies Fuel & oil 56,953 40,191 80,754 Repairs 77,182 59,924 122,282 Repair, machinery 755 15,955 24,822 Repair, livestock equip 656 \_ Custom hire 53,532 64,938 86,108 Repair, buildings 8,167 6,807 10,393 Hired labor 263,484 188,733 336,415 Land rent 60,981 64,980 86,904 Machinery leases 16,926 31**,**761 11,692 Building leases 19,584 71**,**707 3,153 Real estate taxes 16,354 10,281 26,470 368 277 Personal property taxes 295 28,783 Farm insurance 24,386 36,265

Utilities Hauling and trucking Marketing Dues & professional fees Purchase of resale items Miscellaneous Total cash expense Net cash farm income	42,741 1,937 1,238 10,050 1,517 10,661 1,656,769 281,122	31,432 2,228 - 7,415 - 8,106 1,395,011 120,006	-
Inventory Changes Prepaids and supplies Accounts receivable Hedging accounts Other current assets Crops and feed Market livestock Breeding livestock Other assets Accounts payable Accrued interest Total inventory change Net operating profit	-43,115 -32,349 497 3,237 6,768 -3,517 13,355 -3,436 -7,705 -841 -67,108 214,014	104 -4,385 -2,423 -741 -200	
Depreciation Machinery and equipment Titled vehicles Buildings and improvements Total depreciation Net farm income from operations Gain or loss on capital sales Net farm income	-79,348 -710 -49,192 -129,249 84,765 - 84,765	-41,620 -1,414 -50,436 -93,470 -93,297 - -93,297	-202,700 277,046

Table 12		ry Change		
( <del>-</del>	2015 MI Dairy			
(Farm:	s Sorted By Rate	of Return	on Assets	- Mkt)
	Avg. Of All Farms	Low 25%	High 25%	
	niii i aimo	104 200	niigii 200	
Number of farms	89	23	23	
Net cash farm income	281,122	115,465	459,994	
Crops and Feed	201,122	110,400	-33,334	
Ending inventory	472,208	318,391	747,323	
Beginning inventory	465,440	346,854	688,461	
Inventory change	6,768	-28,463	58,862	
Market Livestock				
Ending inventory	30,663	8,188	65,023	
Beginning inventory	34,181			
Inventory change	-3,517	108	-16,414	
Accts Receivable Ending inventory	7/ 010	60 400	00 670	
Ending inventory Beginning inventory	74,812 107,162			
Inventory change	-32,349			
invencery change	52,549	13,000	45,152	
Prepaid Expenses and Suppli				
Ending inventory	81,526			
Beginning inventory	124,641	,		
Inventory change	-43,115	-73,378	-44,615	
Hedging Activities				
Ending inventory	219	-	-	
Withdrawals	278	-	-	
Beginning inventory	-	-	-	
Deposits	-	-	-	
Gain or loss	497	-	-	
Other Current Assets				
Ending inventory	33,338	13,542	67,382	
Beginning inventory	30,101			
Inventory change	3,237			
Durally Theorem				
Breeding Livestock	1 020 221	016 007	1 200 125	
Ending inventory Capital sales	1,020,321 24,354			
Beginning inventory	954,686			
Capital purchases	76,634			
Depreciation, capital adj				
± , 1 _				
Other Capital Assets				
Ending inventory	117,650			
Capital sales	17,716			
Beginning inventory	105,987			
Capital purchases Depreciation, capital adj	32,815 ust -3,436			
Sepreciation, capital au		2,000	0,014	
Accounts Payable				
Beginning inventory	68,716			
Ending inventory	76,421			
Inventory change	-7,705	-775	29,328	
Accrued Interest				
Beginning inventory	1,325	365	1,499	
Ending inventory	2,166		,	
Inventory change	-841			
Total inventory change	-67,108	-125,280	19,753	
Net operating profit	214,014	-9,815	479,746	
Het operating protic	211,011	,010	1,0,140	

Table 1	.3
---------	----

# Depreciation **2015 MI Dairy Herds (All Herds)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Net operating profit	214,014	-9,815	479,746
Machinery and Equipment Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	635,465 4,981 570,585 149,208 -79,348	377,329 2,782 309,778 112,322 -41,989	680,788 8,130 611,843 213,596 -136,522
Titled Vehicles Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	52,208 	6,286 5,354 2,410 -1,478	7,440 7,848 - 408
Buildings and Improvements Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	765,063 158 707,255 152,505 -49,192	63	760,555 319 631,633 195,011 -65,770
Total depreciation, capital adj.	-129,249	-89,542	-202,700
Net farm income from operations Gain or loss on capital sales	84,765 -	-99,356 -	277,046
Net farm income	84,765	-99,356	277,046

### Profitability Measures **2015 MI Dairy Herds (All Herds)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Profitability (assets valued at cost) Net farm income from operations Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	80,092 1.4 % -0.1 % 4.0 % 35.7 %	-99,356 -4.5 % -11.2 % -12.7 % 35.0 %	277,046 5.1 % 5.9 % 12.4 % 41.0 %
Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	59,127 83,121 56,098 3,922,620 -3,029 2,395,991 1,400,565	39,882 65,728 -125,203 2,807,029 -165,084 1,476,393 982,131	67,716 94,639 250,124 4,912,194 182,407 3,103,069 2,016,169
	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Profitability (assets valued at marke Net farm income from operations Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	et) 172,850 2.6 % 2.2 % 10.4 % 25.2 %	-153,046 -5.0 % -9.7 % -18.2 % 27.4 %	633,483 7.8 % 9.0 % 30.1 % 25.8 %
Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	59,292 84,996 147,145 5,605,489 87,854 4,055,075 1,413,606	39,882 65,728 -178,893 3,587,197 -218,774 2,256,561 982,131	67,716 94,639 606,560 7,823,349 538,844 6,014,223 2,016,169

## Liquidity & Repayment Capacity Measures **2015 MI Dairy Herds (All Herds)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Liquidity			
Current ratio	2.25	1.45	3.26
Working capital	440,626	152 <b>,</b> 454	
Working capital to gross inc	22.9 %	10.6 %	33.6 %
Current assets	792,212	489,546	1,281,334
Current liabilities	351 <b>,</b> 586	337 <b>,</b> 093	392,560
Gross revenues (accrual)	1,922,206	1,432,416	2,644,756
Repayment capacity			
Net farm income from operations	84 <b>,</b> 765	-99 <b>,</b> 356	277,046
Depreciation	129,249	89,542	202,700
Personal income	19 <b>,</b> 995	21,100	27,697
Family living/owner withdrawals	-84,458	-54 <b>,</b> 246	-125,956
Cash discrepancy	0	0	0
Payments on personal debt	-2,615	-2 <b>,</b> 720	-4,484
Income taxes paid	-10,292	-1,041	-37,737
Interest on term debt	66 <b>,</b> 737	45 <b>,</b> 318	85,300
Capital debt repayment capacity	203,382	-1,403	424,566
Scheduled term debt payments	-176,267	-112,995	-216,981
Capital debt repayment margin	27,115	-114,398	207,584
Cash replacement allowance	-43,968	-32,651	-69,404
Replacement margin	-16,853	-147,050	138,180
Term debt coverage ratio	1.15	-0.01	1.96
Replacement coverage ratio	0.92	-0.01	1.48

# Balance Sheet at Cost Values **2015 MI Dairy Herds (All Herds)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25	5%	High 25	do
Number of farms	89	23	3	23	
Assets	Beginning E	nding Beginning	Ending	Beginning	Ending
Current Farm Assets Cash and checking balance Prepaid expenses & supplies Growing crops Accounts receivable Hedging accounts Crops held for sale or feed	124,882 8 28,455 2 107,050 7 0	6,608 44,830 1,305 148,531 8,682 13,111 4,397 83,126 222 0 1,389 346,854	0	164,072 45,447	181,222 119,457 45,574 99,673 0 747,323
Crops under government loan Market livestock held for sale Other current assets Total current farm assets	328 34,569 3 1,695	1,322         0           1,007         8,079           4,727         2,210           9,659         646,742	0 8,188 569	1,253 81,437 16,311 1,358,965	1,253 65,023 21,808
Intermediate Farm Assets Breeding livestock Machinery and equipment Titled vehicles Other intermediate assets Total intermediate farm assets	560,659 62 7,055 78,671 8	9,624 750,574 5,756 309,778 6,940 5,354 7,853 40,132 0,172 1,105,838	377,329 6,286 37,635	93,056	680,788 7,440 104,017
Long Term Farm Assets Farm land Buildings and improvements Other long-term assets Total long-term farm assets Total Farm Assets	672,115 77 24,209 2 1,354,087 1,51	7,056 22,828	779,190 21,438 1,158,301	631,633 34,518 1,516,256	760,555 43,304 1,802,429
Total Nonfarm Assets Total Assets		9,924 118,618 3,368 2,746,672			345,835 5,430,969
Liabilities Current Farm Liabilities Accrued interest Accounts payable Current notes Government crop loans Principal due on term debt Total current farm liabilities	69,142 7 88,716 13 213 108,755 13	2,190 365 7,244 65,517 6,572 104,175 736 0 4,494 67,677 1,236 237,734	66,292 166,473 0 103,753	87,878 116,820 815 131,681	1,345 58,550 178,089 815 153,761 392,560
Total intermediate farm liabs Total long term farm liabilities Total farm liabilities	811,706 88	8,782 333,001 0,287 519,506 0,305 1,090,241	569,943	922,332	378,480 1,162,745 1,933,785
Total nonfarm liabilities Total liabilities		9,648 33,086 9,953 1,123,327			50,036 1,983,821
Net worth (farm and nonfarm) Net worth change Percent net worth change		3,415 1,623,345 5,281 0 %	1,504,790 -118,555 -7 %	3,321,367	3,447,148 125,782 4 %
Ratio Analysis Current farm liabilities / assets Intermediate farm liab. / assets Long term farm liab. / assets Total debt to asset ratio	31 % 21 % 60 % 36 %	44     %     37     %       24     %     30     %       58     %     59     %       39     %     41     %	69 % 50 % 49 % 52 %	25 % 23 % 61 % 34 %	31 % 19 % 65 % 37 %

# Balance Sheet at Market Values 2015 MI Dairy Herds (All Herds) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. O All Farm		Low 2	5%	High 2	5%
Number of farms	8	9	2	3	23	3
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets	5 5	2	5 5	-	5 5	2
Current Farm Assets						
Cash and checking balance	101,619					
Prepaid expenses & supplies	124,641					
Growing crops	28,425		,			
Accounts receivable	107,162					,
Hedging accounts	0					
Crops held for sale or feed	465,673					
Crops under government loan Market livestock held for sale	324 34,181		0	0 8,188	,	
Other current assets	1,676	-		°,100 569		
Total current farm assets	863,699				1,358,965	
Iotal cullent laim assets	003,099	192,212	040,742	409,040	1,330,903	1,201,334
Intermediate Farm Assets						
Breeding livestock		1,023,942			1,151,417	
Machinery and equipment	910 <b>,</b> 538				1,298,683	
Titled vehicles				19,509		30,404
Other intermediate assets			40,132			
Total intermediate farm assets	1,972,642	2,132,633	1,321,797	1,499,318	2,571,683	2,812,804
Long Term Farm Assets						
Farm land	1,624,158	1,728,877	740,653	754,369	2,357,234	2,653,557
Buildings and improvements				973,508		
Other long-term assets				22,587		
Total long-term farm assets	2,607,890	2,842,418	1,466,529	1,750,463	3,541,542	4,080,368
Total Farm Assets	5,444,232	5,767,264	3,435,067	3,739,327	7,472,191	8,174,506
Total Nonfarm Assets	279,495	,		181,672		
Total Assets	5,723,727	6,052,421	3,612,869	3,920,999	7,925,114	8,641,722
Liabilities						
Current Farm Liabilities						
Accrued interest	1,325	2,166	365	575	1,499	1,345
Accounts payable	68,716	76,421		66,292	87,878	58,550
Current notes	88,566	135,923	104,175	166,473	116,820	178,089
Government crop loans	211	727	0	0	815	815
Principal due on term debt	109 <b>,</b> 530	136,348	67 <b>,</b> 677	103,753	131,681	153 <b>,</b> 761
Total current farm liabilities	268,347	351 <b>,</b> 586	237,734	337,093	338,692	392 <b>,</b> 560
Total intermediate farm liabs	336,105	408,791	333,001	663,995	423,443	378,480
Total long term farm liabilities	827,314	909,202				1,162,745
Total farm liabilities				1,571,030		
	1,101,100	1,000,010	1,000,211			
Total nonfarm liabilities	30,698	29,315	33,086	31,308	50,921	50,036
Total liabs excluding deferreds	1,462,464	1,698,893	1,123,327	1,602,339		
Total deferred liabilities	0	0	0	0	0	0
Total liabilities	1,462,464	1,698,893	1,123,327	1,602,339	1,735,388	1,983,821
Net worth (farm and nonfarm)	1 261 263	1 353 528	2 189 512	2,318,661	6 189 727	6 657 901
Net worth excluding deferreds				2,318,661		
Net worth change	4,201,205	92,265		-170,881		468,175
Percent net worth change		2 %		-7 %		8 %
		·				
Ratio Analysis						
Current farm liabilities / assets	31 %	44 %	37 %			31 %
Intermediate farm liab. / assets	17 %	19 %	25 %		16 %	13 %
Long term farm liab. / assets	32 %	32 %	35 %			28 %
Total debt to asset ratio	26 %	28 %	31 %		22 %	23 %
Debt to assets excl deferreds	26 %	28 %	31 %	41 %	22 %	23 %

Table	1	8

# Statement Of Cash Flows **2015 MI Dairy Herds (All Herds)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Beginning cash (farm & nonfarm)	102,112	44,830	213,370
Cash Provided By Operating Activities			
Gross cash farm income Total cash farm expense		1,483,197 -1,367,731	
Net cash from hedging transactions	278		2,100,000
Cash provided by operating	281,399	115,465	459,994
Cash Provided By Investing Activities			
Sale of breeding livestock	24,354	76,415	53
Sale of machinery & equipment Sale of titled vehicles	4,981	2,782	8,130
Sale of farm land	5,731	13,636	- 5,835
Sale of farm buildings	158	63	319
Sale of other farm assets	17,716	26,449	12,739
Sale of nonfarm assets	811	23	-
Purchase of breeding livestock	-76,634	-247,333	-12,970
Purchase of machinery & equip.	-149,208	-112,322	-213,596
Purchase of titled vehicles	-596	-2,410	-
Purchase of farm land	-66,947	-27 <b>,</b> 515	-154,301
Purchase of farm buildings	-152,505	-316,476	-195,011
Purchase of other farm assets	-32,815	-25,095	-41,400
Purchase of nonfarm assets	-3,819		-4,210
Cash provided by investing	-428,772	-612,102	-594,413
Cash Provided By Financing Activities			
Money borrowed	507,891	768 <b>,</b> 649	586,009
Principal payments	-280,668	-290,617	-308,095
Personal income	19,995	21,100	27,697
Family living/owner withdrawals	-84,458	-54,246	-125,956
Income and social security tax	-10,292		-37,737
Capital contributions	6,347	10,320 -1,091	12,525
Capital distributions Dividends paid	-15,136	-1,091	-51,906
Cash gifts and inheritances	2,680	9,894	_
Gifts given	-2,006	-6,350	-13
Other cash flows	2,000	-	-
Cash provided by financing	144,353	456,619	102,523
Net change in cash balance	-3,020	-40,018	-31,896
Ending cash (farm & nonfarm)	99,092	4,813	181,474
Discrepancy	0	0	0

# Financial Standards Measures **2015 MI Dairy Herds (All Herds)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Liquidity Current ratio Working capital Working capital to gross inc	2.25 440,626 22.9 %	1.45 152,454 10.6 %	3.26 888,774 33.6 %
Solvency (market) Farm debt to asset ratio Farm equity to asset ratio Farm debt to equity ratio	29 % 71 % 0.41	42 % 58 % 0.72	24 % 76 % 0.31
Profitability (cost) Rate of return on farm assets Rate of return on farm equity Operating profit margin Net farm income EBITDA	1.4 % -0.1 % 4.0 % 85,728 276,411	-12.7 %	12.4 %
Repayment Capacity Capital debt repayment capacity Capital debt repayment margin Replacement margin Term debt coverage ratio Replacement coverage ratio	203,382 27,115 -16,853 1.15 0.92	-1,403 -114,398 -147,050 -0.01 -0.01	424,566 207,584 138,180 1.96 1.48
Efficiency Asset turnover rate (cost) Operating expense ratio Depreciation expense ratio Interest expense ratio Net farm income ratio	35.7 % 85.8 % 6.7 % 3.1 % 4.4 %	35.0 % 97.9 % 6.3 % 2.8 % -6.9 %	41.0 % 79.3 % 7.7 % 2.6 % 10.5 %

# Operator and Labor Information **2015 MI Dairy Herds (All Herds)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%
Number of farms	89	23	23
Operator Information Average number of operators Average age of operators Average number of years farming	1.5 51.8 24.2	1.4 50.6 23.9	1.6 53.4 25.5
Results Per Operator Working capital Total assets (market) Total liabilities Net worth (market) Net worth excl deferred liabs	288,351 3,960,776 1,111,776 2,849,000 2,849,000	1,175,048	552,481 5,371,881 1,233,186 4,138,695 4,138,695
Gross farm income Total farm expense Net farm income from operations	1,257,914 1,202,443 55,471		1,644,038 1,471,820 172,218
Net nonfarm income Family living & tax withdrawals	13,085 62,005	15,474 40,544	
Total acres owned Total crop acres Crop acres owned Crop acres cash rented Crop acres share rented Total pasture acres	330.5 607.2 322.4 284.3 0.5 2.1	193.2 414.6 191.7 222.6 0.3 0.5	481.1 816.7 446.7 369.9 - 6.8
Labor Analysis Number of farms Total unpaid labor hours Total hired labor hours Total labor hours per farm Unpaid hours per operator Value of farm production / hour Net farm income / unpaid hour Average hourly hired labor wage	89 4,674 16,557 21,230 3,059 66.58 18.14 16.11	23 4,324 10,769 15,093 3,171 65.07 -22.98 17.39	23 4,752 20,956 25,709 2,954 78.42 58.30 16.33
Partnerships & LLCs Number of farms Number of operators Owner withdrawals per farm Withdrawals per operator	42 2.0 86,275 40,867	8 1.9 157,957 63,183	11 2.1 _

### Financial Summary 2015 MI Dairy Herds (All Herds)

20	015 MI Dairy H	erds (All	Herds)
(Farms Sor	ted By Rate of	E Return o	n Assets - Mkt)
<b>`</b>	Avg. Of		· · ·
	All Farms	Low 25%	High 25%
Number of farms	89	23	23
Income Statement	0.5	20	20
Gross cash farm income	1,937,891	1 /83 197	2 609 996
Total cash farm expense			
	1,030,709	1,367,731	2,130,003
Net cash farm income	281,122		459,994
Inventory change	-67,108	-125,280	19,753 -202,700
Depreciation	-129,249		
Net farm income from operation		-99,356	
Gain or loss on capital sales		-	-
Average net farm income	84,765	-99,356	277,046
Median net farm income	41,195	-55,204	140,179
Profitability (cost)			
Rate of return on assets	1.4 %		
Rate of return on equity	-0.1 %		
Operating profit margin	3.9 %		12.4 %
Asset turnover rate	36.4 %	35.0 %	41.0 %
Profitability (market)			
Rate of return on assets	2.6 %	-5.0 %	7.8 %
Rate of return on equity	2.2 %	-9.7 %	9.0 %
Operating profit margin	10.4 %	-18.2 %	30.1 %
Asset turnover rate	25.2 %	27.4 %	25.8 %
Liquidity & Repayment (end of yea	ar)		
Current assets	792,212	489,546	1,281,334
Current liabilities	351,586		392,560
Current ratio	2.25		-
Working capital	440,626		888,774
Working capital to gross inc			
Term debt coverage ratio	1.15		
Replacement coverage ratio	0.92		
Term debt to EBITDA	4.40	28.35	2.46
TETM debt to EBIIDA	4.40	20.33	2.40
Columnary (and of year at cost)			
Solvency (end of year at cost) Number of farms	89	23	23
Total assets	4,253,368		5,430,969
Total liabilities	1,669,953		1,983,821
Net worth	2,583,415		
Net worth change		-118,555	
Farm debt to asset ratio	41 %		38 %
Total debt to asset ratio	39 %		
Change in earned net worth %	0 %	-7 %	4 %
Solvency (end of year at market)			
Number of farms	89	22	23
Total assets	6,052,421		8,641,722
Total liabilities	1,698,893	1,602,339	1,983,821
Net worth	4,353,528	2,318,661	6,657,901
Total net worth change	92,265	-170,881	468,175
Farm debt to asset ratio	29 %	42 %	24 %
Total debt to asset ratio	28 %	41 %	23 %
Change in total net worth %	2 %	-7 %	8 %
Nonfarm Information			
Net nonfarm income	19,995	21,100	27,697
Farms reporting living expense		_	_
Total family living expense	68,282	-	_
Total living, invest, cap. put		_	-
Crop Acres			
Total crop acres	928	565	1,314
-	928 493	261	719
Total crop acres owned			
Total crop acres cash rented	434	304	595
Total crop acres share rented		0	-
Machinery value per crop acre	1,046	951	1,072

Table	22
TUNTO	~ ~

# Summary Farm Income Statement 2015 MI Dairy Herds (All Herds) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 25%	High 25%	
Number of farms	89	23	23	
Crop sales Crop inventory change Gross crop income	109,867 6,768 116,635	38,856 -27,226 11,630	243,478 58,862 302,340	
Livestock sales Livestock inventory change Gross livestock income	1,567,247 -3,517 1,563,730	104	- /	
Government payments Other cash farm income Change in accounts receivable Gain or loss on hedging accounts Change in other assets Gain or loss on breeding lvst Gross farm income	26,972 233,804 -32,349 497 -438 13,355 1,922,206	15,644 204,663 -13,072 - -3,993 -4,385 1,466,444		
Cash operating expenses Change in prepaids and supplies Change in growing crops Change in accounts payable Depreciation Total operating expense	1,598,319 43,115 -238 7,705 129,249 1,778,150	1,357,063 70,188 132 741 93,470 1,521,593		
Interest paid Change in accrued interest Total interest expense Total expenses	841 59,292	37,948 200 38,148 1,559,741	67,716	
Net farm income from operations Gain or loss on capital sales	84,765 -	-93,297 -	277,046	
Net farm income	84,765	-93,297	277,046	

	ion and Marketi				
<b>2015 MI Dairy Herds (40-99 Cows)</b> (Farms Sorted By Rate of Return on Assets - Mkt)					
	Avg. Of	Tata EOS	Ilish EOS		
- i m.	All Farms	Low 50%	High 50%		
airy Number of farms	14	7	7		
Average number of cows	73	72	73		
Milk production per cow lbs.,	21,323	, <b>_</b>	23,231		
Average milk price per cwt.,	\$16.83	\$17.28	\$16.37		
5 1 1		,			
creage Summary					
Total acres owned	199	168	231		
Total crop acres	325	355	294		
Crop acres owned	180	142	219		
Crop acres cash rented	144	213	74		
Crop acres share rented	1	-	2		
Total pasture acres	1 55 %	-	1 74 %		
Percent crop acres owned	55 8	40 %	/4 8		
Mach invest/crop acre cost	546	424	694		
Mach invest/crop acre market	943	674	1,267		
· •			,		
verage Price Received (Cash Sale	s Only)				
Corn per bushel	3.53	-	-		
Soybeans per bushel	10.06	-	9.95		
verage Yield Per Acre					
Corn Silage (ton)	23.22	_	_		
Haylage, Alfalfa (ton)	8.10	_	_		

## B. Financial Summary Information, Herds with 40-99 Cows

Table	24
TUNTO	~ -

# Farm Income Statement **2015 MI Dairy Herds (40-99 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Cash Farm Income			
Corn	10,976	10,083	11,869
Corn Silage	546	857	236
Hay, Alfalfa	2,747	4,938	557
Soybeans	17,056	5 <b>,</b> 980	28,132
Straw	190	380	-
Sugar Beets	4,323	-	8,646
Wheat, Spring	1,569	3,137	-
Wheat, Winter	1,363	-	2,727
Beef Cow-Calf, Beef Calves	2,198	-	4,396
Beef Finishing	425	851	-
Dairy, Milk	262,804	246,404	279,204
Dairy, Dairy Calves	6,995	6,803	7,187
Dairy Heifers (for sale)	694	-	1,388
Dairy Replacement Heifers	93	-	186
Dairy Feeder	2,187	4,373	-
Cull breeding livestock	29,483	28,873	30,093
Misc. livestock income	864	-	1,728
Crop government payments	6,051	7,488	4,615
Other government payments	2,015	1,126	2,904
Custom work income	1,070	73	2,067
Patronage dividends, cash	2,402	807	3,998
Crop insurance income	854	-	1,708
Property insurance income	3,145	6,289	-
Contract livestock income	643	-	1,286
Other farm income	5,610	3,776	7,445
Gross Cash Farm Income	366,305	332,238	400,373

### Farm Income Statement (continued) **2015 MI Dairy Herds (40-99 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Cash Farm Expense			
Seed	11 <b>,</b> 758	6,887	16,628
Fertilizer	18,831	18,024	19,638
Crop chemicals	4,703	2,999	6,408
Crop insurance	614	939	288
Drying expense	370	345	395
Crop hauling and trucking	679	1,358	-
Crop marketing	696	416	976
Crop miscellaneous	1,592	1,979	1,206
Purchased feed	93,030	80,248	
Breeding fees	2,116	2,267	1,964
Veterinary	7,777	4,448	11,107
BST	919	-	1,837
Livestock supplies	9,469 616	12,060 251	6,878 982
DHIA Livestock custom hire	164	251	982 327
Livestock hauling and trucking	12,585	13 <b>,</b> 132	12,039
Livestock marketing	4,961	5,454	4,469
Bedding	3,229	1,766	4,692
Consultants	344	-	689
Interest	10,678	3,650	17,705
Packaging and supplies	813	-	1,626
Supplies	2,006	1,157	2,856
Fuel & oil	14,390	14,007	14,773
Repairs	26,090	25,210	26,970
Custom hire	6,374	8,495	4,254
Repair, buildings	566	-	1,132
Hired labor	32,694	32,548	32,839
Land rent	11 <b>,</b> 668	11,826	
Machinery leases	5,810	9,288	2,332
Real estate taxes	5,503	4,458	6,548
Farm insurance	7,809	7,859	7,759
Utilities	10,295	9,010	11,579
Dues & professional fees	2,797	2,932	2,662
Miscellaneous	6,923	4,647	9,200
Total cash expense Net cash farm income	318,870	287,658	350,081
Net cash faim income	47,436	44,579	50,292
Inventory Changes			
Prepaids and supplies	-13,082	-12,833	-13,330
Accounts receivable	<b>-</b> 7,374	-10,443	-4,306
Hedging accounts	-	-	-
Other current assets	-3,532	-7,447	383
Crops and feed	1,018	-6,685	8,722
Market livestock	-2,232	211	-4,674
Breeding livestock	7,668	4,764	10,573
Other assets	-1,599	-547	-2,651

Accounts payable Accrued interest Total inventory change Net operating profit	-2,266 0 -21,398 26,038	-1,565 -45 -34,590 9,990	-2,967 45 -8,206 42,086
Depreciation			
Machinery and equipment	-17,947	-13,422	-22,473
Titled vehicles	-1,787	-2,716	-857
Buildings and improvements	-6,272	-4,426	-8,119
Total depreciation	-26,007	-20,565	-31,448
Net farm income from operations	31	-10,575	10,638
Gain or loss on capital sales	-	_	-
Net farm income	31	-10,575	10,638

Table 25	Inventory		••• • •	
	15 MI Dairy He			
(Farms Sort	ted By Rate of	i Return	on Assets	- MKT)
	Avg. Of All Farms	Low 50%	High 50%	
			2	
Number of farms	14	7	7	
Net cash farm income	47,436	44,579	50,292	
Crops and Feed				
Ending inventory	127,987	117,912		
Beginning inventory	126,968	124,597		
Inventory change	1,018	-6,685	8,722	
Market Livestock				
Ending inventory	8,385	7,744	9,026	
Beginning inventory	10,616	7 <b>,</b> 533		
Inventory change	-2,232	211	-4,674	
Accts Receivable				
Ending inventory	11,264	9,830	12,697	
Beginning inventory	18,638	20,273	17,003	
Inventory change	-7,374	-10,443	-4,306	
Prepaid Expenses and Supplies				
Ending inventory	14,078	10,725	17,431	
Beginning inventory	27,160	23 <b>,</b> 558	30,761	
Inventory change	-13,082	-12,833	-13,330	
Hedging Activities				
Ending inventory	-	-	-	
Withdrawals	-	-	-	
Beginning inventory	-	-	-	
Deposits	-	-	-	
Gain or loss	-	-	-	
Other Current Assets				
Ending inventory	6,889	5 <b>,</b> 385	8,394	
Beginning inventory	10,422	12,832	8,011	
Inventory change	-3,532	-7,447	383	
Breeding Livestock				
Ending inventory	189,036	187,871	190,200	
Capital sales	4,242	-	8,483	
Beginning inventory	181,971	182,871		
Capital purchases	3,638	236	7,039	
Depreciation, capital adjust	7,668	4,764	10,573	
Other Capital Assets				
Ending inventory	23,152	4,300	42,003	
Capital sales	210	98	323	
Beginning inventory	23,923	4,477		
Capital purchases Depreciation, capital adjust	1,038 -1,599	468 -547	1,609 -2,651	
	_,	01/	_,	
Accounts Payable	2 202	1 0 4 1	4 000	
Beginning inventory	3,322	1,841		
Ending inventory Inventory change	5,588 -2,266	3,406 -1,565		
Inventory change	-2,200	-1,JUJ	-2,907	
Accrued Interest				
Beginning inventory	341	134		
Ending inventory	341	179		
Inventory change	0	-45	45	
Fotal inventory change	-21,398	-34,590	-8,206	
		·		
Net operating profit	26,038	9,990	42,086	

Table	26
TUDIC	20

# Depreciation **2015 MI Dairy Herds (40-99 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%	
Number of farms	14	7	7	
Net operating profit	26,038	9,990	42,086	
Machinery and Equipment Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	176,120 4,157 172,589 25,636 -17,947	3,071 145,338 18,228	205,169 5,243 199,840 33,044 -22,473	
Titled Vehicles Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	4,126 2,126 3,787 -1,787	7,038 2,181 7,574 -2,716	1,214 2,071 -857	
Buildings and Improvements Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	113,741  96,504  6,272	69,110 - 59,173 14,363 -4,426	-	
Total depreciation, capital adj.	-26,007	-20,565	-31,448	
Net farm income from operations Gain or loss on capital sales	31 -	-10,575	10,638	
Net farm income	31	-10,575	10,638	

## Profitability Measures 2015 MI Dairy Herds (40-99 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Profitability (assets valued at cost) Net farm income from operations Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	) -5.1 % -9.6 % -16.1 % 31.5 %	-10,575 -9.2 % -12.3 % -25.8 % 35.9 %	10,638 -2.5 % -7.3 % -8.7 % 28.8 %
Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	10,678 53,826 -43,117 849,095 -53,795 562,242 267,350	3,695 53,008 -59,889 647,670 -63,584 518,203 232,447	17,661 54,644 -26,346 1,050,520 -44,007 606,282 302,252
	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Profitability (assets valued at marke Net farm income from operations Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	et) 8,050 -2.2 % -3.5 % -13.1 % 16.8 %	-8,371 -5.5 % -6.7 % -24.8 % 22.3 %	24,471 -0.6 % -1.8 % -4.1 % 14.2 %
Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	10,678 53,826 -35,098 1,588,934 -45,776 1,302,081 267,350	3,695 53,008 -57,684 1,043,934 -61,379 914,466 232,447	17,661 54,644 -12,513 2,133,935 -30,174 1,689,696 302,252

## Liquidity & Repayment Capacity Measures 2015 MI Dairy Herds (40-99 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Liquidity Current ratio Working capital Working capital to gross inc	3.55 134,003 37.2 %		
Current assets Current liabilities Gross revenues (accrual)	186,498 52,495 360,380	185,507 29,481 312,695	75,508
Repayment capacity Net farm income from operations Depreciation Personal income Family living/owner withdrawals Cash discrepancy Payments on personal debt Income taxes paid Interest on term debt Capital debt repayment capacity	31 26,007 38,712 -36,992 0 -2,589 -1,688 13,264 36,745	-10,575 20,565 46,451 -41,947 - -3,796 -2,942 3,870 11,625	30,974 -32,037 0 -1,382 -435
Scheduled term debt payments Capital debt repayment margin Cash replacement allowance Replacement margin	-39,456 -2,711 -20,033 -22,744	-19,387 -7,762 -18,242 -26,004	
Term debt coverage ratio Replacement coverage ratio	0.93	0.60 0.31	

# Balance Sheet at Cost Values 2015 MI Dairy Herds (40-99 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

Number of farms         14         7         7           Assets         Beginning         Ending Beginning		Avg. Of All Farms	5	Low 50%		High 5	0%
Assets         Current Farm Assets           Cash and checking balance         24,090         17,895         33,710         33,911         14,470         1,877           Cash and checking balance         24,090         17,895         33,710         33,911         14,470         1,877           Prepaid expenses a supplies         6,934         6,809         5,956         5,333         7,911         8,269           Accounts receivable         18,618         11,264         20,273         9,833         17,003         12,499           Hedding accounts         0         0         0         0         0         0         0           Crops under government loan         0	Number of farms	14		7			7
Current Farm Assets         24,090         17,895         33,710         33,911         14,470         1,879           Cash and checking balance         24,090         17,895         33,710         33,911         14,470         1,879           Growing crops         6,934         6,809         5,953         17,703         12,697           Hedging accounts         0         0         0         0         0         0           Crops held for sale or feed         126,988         127,987         124,597         117,912         129,339         138,062           Crops wher government loan         0		Beginning	Ending	Beginning	Ending	Beginning	Ending
Cash and checking balance         24,090         17,895         33,710         33,911         14,470         1,479           Prepaid expenses & supplies         27,160         14,078         23,558         10,725         30,761         17,431           Growing crops         6,934         6,809         5,956         5,333         7,911         8,265           Accounts receivable         18,638         112,642         20,273         9,830         17,003         12,697           Growing accounts         0							
Growing crops         6,934         6,809         5,956         5,353         7,911         8,266           Accounts receivable         18,638         11,264         20,273         9,830         17,003         12,697           Crops hold for sale or feed         126,978         124,597         117,912         129,339         138,062           Crops under government loan         0         0         0         0         0         0           Market livestock held for sale         3,488         80         6,675         32         100         129           Total current farm assets         217,694         186,498         222,503         185,507         213,284         187,488           Intermediate Earn Assets         191,911         199,036         182,871         187,971         199,840         205,169           Titled vehicles         2,126         4,126         2,181         7,033         2,071         1,214           Other intermediate assets         377,575         389,409         38,499         28,949         28,949         28,949         240,942         433,176           Long Term Farm Assets         96,504         113,741         59,173         69,940         313,265         35,333 <td< td=""><td>Cash and checking balance</td><td>24,090</td><td>17,895</td><td>33,710</td><td>33,911</td><td>14,470</td><td>1,879</td></td<>	Cash and checking balance	24,090	17,895	33,710	33,911	14,470	1,879
$\begin{array}{c c c c c c c c c c c c c c c c c c c $							
Hedging accounts         0 <th0< th="">         0         0</th0<>	5 1	,		,			
Crops wider government loan         126,968         127,987         124,597         117,912         129,339         138,062           Crops wider government loan         0         <							,
Crops under government loan         0<							
Other current assets         3,488         80         6,875         32         100         129           Total current farm assets         217,894         186,498         222,503         185,507         213,284         187,488           Intermediate Farm Assets         Breeding livestock         181,971         189,036         182,871         187,871         181,071         190,200           Machinery and equipment         172,589         176,120         145,338         147,072         199,440         205,169           Titled vehicles         2,126         4,126         2,181         7,038         2,071         1,214           Other intermediate farm assets         377,575         389,400         334,208         345,623         420,942         433,176           Long Term Farm Assets         Farm land         155,256         38,949         271,562         271,562         271,562           Buildings and inprovements         96,504         137,413         109,177         188,84         1,048,06         435,343           Total long-term farm assets         550,262         847,928         655,492         639,848         1,045,00         31,215,567           Total Nonfarm Assets         130,119         137,143         109,167         118,718 <td></td> <td></td> <td>. 0</td> <td></td> <td></td> <td>-</td> <td>0</td>			. 0			-	0
Total current farm assets         217,894         186,498         222,503         185,507         213,284         187,488           Intermediate Farm Assets         Breeding livestock         181,971         189,036         182,871         187,871         181,071         190,200           Machinery and equipment         172,589         176,120         145,338         147,072         199,840         205,169           Titled vehicles         2,126         4,126         2,181         7,038         2,071         1,214           Other intermediate farm assets         2,0689         20,117         3,018         3,641         37,959         36,594           Total long-term farm assets         3,034         0,334         208         345,623         420,942         433,176           Dong Term Parm Assets         3,034         3,034         69,949         211,562         211,562           Dididings and improvements         96,504         113,741         59,173         69,110         133,835         158,372           Other long-term farm assets         3,034         3,034         655,492         639,848         1,045,033         1,056,008           Total long-term farm assets         130,119         137,143         109,167         118,718         15							
Intermediate Farm Assets         Breeding livestock       181,971       189,036       182,871       187,871       181,071       190,200         Machinery and equipment       172,569       176,120       145,338       147,072       199,840       205,169         Total intermediate assets       20,889       20,117       3,818       3,641       37,959       36,594         Total intermediate farm assets       377,575       389,400       334,208       345,623       420,942       433,176         Long Term Farm Assets       72,556       155,256       158,972       36,594       36,409       37,1562       271,562							
Breeding livestock         181,971         189,036         182,871         187,871         181,071         190,200           Machinery and equipment         172,589         176,120         145,338         147,072         199,840         205,169           Titled vehicles         2,126         4,126         2,181         7,038         2,011         1,214           Other intermediate farm assets         377,575         389,400         334,208         345,623         420,942         433,176           Long Term Farm Assets         Farm land         155,256         155,256         38,949         38,949         271,562         271,563         373         37043         373,373         363,362	Total current farm assets	217,894	186,498	222,503	185,507	213,284	187,488
Machinery and equipment       172,589       176,120       145,338       147,072       199,840       205,169         Titled vehicles       2,126       4,126       2,181       7,038       2,071       1,214         Other intermediate assets       20,889       20,117       3,818       3,641       37,959       36,554         Total intermediate farm assets       377,575       389,400       334,208       345,623       420,942       433,176         Long Term Farm Assets       56,564       113,741       59,173       69,110       133,835       158,372         Other long-term assets       24,794       272,031       98,781       108,718       410,806       435,433         Total long-term farm assets       254,794       272,031       98,781       108,718       110,806       435,333         Total Nonfarm Assets       130,119       137,143       109,167       118,718       151,071       155,567         Total Assets       980,381       985,071       764,659       758,566       1,916,103       1,211,575         Liabilities       341       341       134       179       548       504         Accound interest       341       341       144       126,777       29,397							
Titled vehicles       2,126       4,126       2,181       7,038       2,071       1,214         Other intermediate farm assets       20,889       20,117       3,818       3,641       37,959       36,594         Total intermediate farm assets       377,575       389,400       334,208       345,623       420,942       433,176         Long Term Farm Assets       Farm land       155,256       155,256       38,949       38,949       271,562       271,562         Buildings and improvements       96,504       113,741       59,173       69,110       133,835       158,372         Other long-term assets       3,034       3,034       659       659       5,409       5,409       5,409       5,409       5,433         Total long-term farm assets       254,794       272,031       98,781       108,718       410,806       435,333         Total Assets       130,119       137,143       109,167       118,718       151,071       155,567         Total Assets       130,119       137,143       109,167       118,718       51,071       1,214,575         Liabilities       3,222       5,588       1,841       3,406       4,803       7,770         Current ream Liabilities       341<							
Other         intermediate assets         20,889         20,117         3,818         3,641         37,959         36,594           Total intermediate farm assets         377,575         389,400         334,208         345,623         420,942         433,176           Long Term Farm Assets         Farm land         155,256         155,256         38,949         38,949         271,562         271,555         271,562         271,555         271,556         271,555         271,555			,	,			
Total intermediate farm assets       377,575       389,400       334,208       345,623       420,942       433,176         Long Term Farm Assets       Farm land       155,256       155,256       38,949       38,949       271,562       271,562         Buildings and improvements       96,504       113,741       59,173       659,110       138,835       158,372         Other long-term assets       3,034       3,034       655,492       659,5409       5,409       5,409         Total Farm Assets       850,262       847,928       655,492       639,848       1,045,033       1,056,008         Total Nonfarm Assets       130,119       137,143       109,167       118,718       151,071       155,567         Total Assets       3,322       5,588       1,841       3,406       4,803       7,770         Current Farm Liabilities       0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>							
Farm land       155,256       155,256       38,949       38,949       271,562       271,562         Buildings and improvements       96,504       113,741       59,173       69,110       133,835       158,372         Other long-term assets       3,034       3,034       659       659       5,409       5,409         Total long-term farm assets       254,794       272,031       98,781       108,718       410,806       435,343         Total Nonfarm Assets       130,119       137,143       109,167       118,718       151,071       155,567         Total Assets       980,381       985,071       764,659       758,566       1,96,103       1,211,575         Liabilities       130,119       137,143       109,167       118,718       151,071       155,567         Current Parm Liabilities       3,322       5,588       1,841       3,406       4,803       7,770         Current notes       20,632       22,153       11,867       12,077       29,397       32,229         Government crop loans       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       116,867 <td< td=""><td>Total intermediate farm assets</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Total intermediate farm assets						
Farm land       155,256       155,256       38,949       38,949       271,562       271,562         Buildings and improvements       96,504       113,741       59,173       69,110       133,835       158,372         Other long-term assets       3,034       3,034       659       659       5,409       5,409         Total long-term farm assets       254,794       272,031       98,781       108,718       410,806       435,343         Total Nonfarm Assets       130,119       137,143       109,167       118,718       151,071       155,567         Total Assets       980,381       985,071       764,659       758,566       1,96,103       1,211,575         Liabilities       130,119       137,143       109,167       118,718       151,071       155,567         Current Parm Liabilities       3,322       5,588       1,841       3,406       4,803       7,770         Current notes       20,632       22,153       11,867       12,077       29,397       32,229         Government crop loans       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       0       116,867 <td< td=""><td>Long Term Farm Assets</td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	Long Term Farm Assets						
Other long-term assets         3,034         3,034         3,034         659         659         5,409         5,409           Total long-term farm assets         254,794         272,031         98,781         108,718         410,806         435,343           Total Farm Assets         850,262         847,928         655,492         639,848         1,045,033         1,056,008           Total Nonfarm Assets         130,119         137,143         109,167         118,718         151,071         155,567           Total Assets         341         341         134         179         548         504           Current Farm Liabilities         341         341         134         179         548         504           Accounts payable         3,322         5,588         1,841         3,406         4,803         7,770           Current notes         20,632         22,153         11,867         12,077         29,397         32,229           Government crop loans         0         0         0         0         0         0         0         0         0         0         0         0         0         0         0         32,229         35,950         29,481         71,615         75,508	Farm land	155,256	155,256	38,949	38,949	271 <b>,</b> 562	271,562
Total long-term farm assets       254,794       272,031       98,781       108,718       410,806       435,343         Total Farm Assets       850,262       847,928       655,492       639,848       1,045,033       1,056,008         Total Nonfarm Assets       130,119       137,143       109,167       118,718       151,071       155,567         Total Assets       980,381       985,071       764,659       758,566       1,196,103       1,211,575         Liabilities       Accounds payable       3,322       5,588       1,841       3,406       4,803       7,770         Current notes       0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Total Farm Assets       850,262       847,928       655,492       639,848       1,045,033       1,056,008         Total Nonfarm Assets       130,119       137,143       109,167       118,718       151,071       155,567         Total Assets       980,381       985,071       764,659       758,566       1,196,103       1,211,575         Liabilities       Accrued interest       341       341       134       179       548       504         Accounts payable       3,322       5,588       1,841       3,406       4,803       7,770         Current notes       20,632       22,153       11,867       12,077       29,397       32,229         Government crop loans       0 </td <td>2</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>	2						
Total Assets       980,381       985,071       764,659       758,566       1,196,103       1,211,575         Liabilities       Current Farm Liabilities       341       341       134       179       548       504         Accounts payable       3,322       5,588       1,841       3,406       4,803       7,770         Current notes       20,632       22,153       11,867       12,077       29,397       32,229         Government crop loans       0       0       0       0       0       0       0         Principal due on term debt       26,192       24,412       15,517       13,819       36,867       35,005         Total current farm liabilities       50,487       52,495       29,359       29,481       71,615       75,508         Total intermediate farm liabs       46,239       37,856       37,997       27,902       54,481       47,809         Total farm liabilities       189,856       196,774       63,763       70,433       315,950       323,114         Total nonfarm liabilities       31,614       27,395       36,526       33,185       26,701       21,604         Total nonfarm liabilities       318,196       314,518       167,645       161,001	5	,					
Total Assets       980,381       985,071       764,659       758,566       1,196,103       1,211,575         Liabilities       Current Farm Liabilities       341       341       134       179       548       504         Accounts payable       3,322       5,588       1,841       3,406       4,803       7,770         Current notes       20,632       22,153       11,867       12,077       29,397       32,229         Government crop loans       0       0       0       0       0       0       0         Principal due on term debt       26,192       24,412       15,517       13,819       36,867       35,005         Total current farm liabilities       50,487       52,495       29,359       29,481       71,615       75,508         Total intermediate farm liabs       46,239       37,856       37,997       27,902       54,481       47,809         Total farm liabilities       189,856       196,774       63,763       70,433       315,950       323,114         Total nonfarm liabilities       31,614       27,395       36,526       33,185       26,701       21,604         Total nonfarm liabilities       318,196       314,518       167,645       161,001		100 110	107 140	100 107	110 710	151 051	155 563
Current Farm Liabilities       341       341       134       179       548       504         Accounts payable       3,322       5,588       1,841       3,406       4,803       7,770         Current notes       20,632       22,153       11,867       12,077       29,397       32,229         Government crop loans       0 </td <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>							
Accrued interest       341       341       134       179       548       504         Accounts payable       3,322       5,588       1,841       3,406       4,803       7,770         Current notes       20,632       22,153       11,867       12,077       29,397       32,229         Government crop loans       0	Liabilities						
Accounts payable       3,322       5,588       1,841       3,406       4,803       7,770         Current notes       20,632       22,153       11,867       12,077       29,397       32,229         Government crop loans       0	Current Farm Liabilities						
Current notes       20,632       22,153       11,867       12,077       29,397       32,229         Government crop loans       0							
Government crop loans       0							
Principal due on term debt Total current farm liabilities26,192 50,48724,412 52,49515,517 							
Total intermediate farm liabs       46,239       37,856       37,997       27,902       54,481       47,809         Total long term farm liabilities       189,856       196,774       63,763       70,433       315,950       323,114         Total farm liabilities       286,582       287,124       131,118       127,817       442,046       446,431         Total nonfarm liabilities       31,614       27,395       36,526       33,185       26,701       21,604         Total liabilities       318,196       314,518       167,645       161,001       468,747       468,035         Net worth (farm and nonfarm)       662,186       670,552       597,015       597,565       727,356       743,540         Net worth change       1 %       0 %       2 %       2 %       13 %       16 %       34 %       40 %         Ratio Analysis       23 %       28 %       13 %       16 %       34 %       40 %         Intermediate farm liab. / assets       12 %       10 %       11 %       8 %       13 %       11 %         Long term farm liab. / assets       75 %       72 %       65 %       65 %       77 %       74 %	-						
Total long term farm liabilities       189,856       196,774       63,763       70,433       315,950       323,114         Total farm liabilities       286,582       287,124       131,118       127,817       442,046       446,431         Total nonfarm liabilities       31,614       27,395       36,526       33,185       26,701       21,604         Total liabilities       318,196       314,518       167,645       161,001       468,747       468,035         Net worth (farm and nonfarm)       662,186       670,552       597,015       597,565       727,356       743,540         Net worth change       1 %       0 %       2 %         Ratio Analysis       23 %       28 %       13 %       16 %       34 %       40 %         Intermediate farm liab. / assets       12 %       10 %       11 %       8 %       13 %       11 %         Long term farm liab. / assets       75 %       72 %       65 %       65 %       77 %       74 %	Total current farm liabilities	50,487	52 <b>,</b> 495	29,359	29,481	71 <b>,</b> 615	75,508
Total farm liabilities       286,582       287,124       131,118       127,817       442,046       446,431         Total nonfarm liabilities       31,614       27,395       36,526       33,185       26,701       21,604         Total liabilities       318,196       314,518       167,645       161,001       468,747       468,035         Net worth (farm and nonfarm)       662,186       670,552       597,015       597,565       727,356       743,540         Net worth change       1 %       0 %       2 %         Ratio Analysis       23 %       28 %       13 %       16 %       34 %       40 %         Intermediate farm liab. / assets       12 %       10 %       11 %       8 %       13 %       11 %         Long term farm liab. / assets       75 %       72 %       65 %       65 %       77 %       74 %	Total intermediate farm liabs	46,239	37,856	37,997	27,902	54,481	47,809
Total nonfarm liabilities       31,614       27,395       36,526       33,185       26,701       21,604         Total liabilities       318,196       314,518       167,645       161,001       468,747       468,035         Net worth (farm and nonfarm)       662,186       670,552       597,015       597,565       727,356       743,540         Net worth change       1%       0%       2%         Ratio Analysis       23%       28%       13%       16%       34%       40%         Intermediate farm liab. / assets       12%       10%       11%       8%       13%       11%         Long term farm liab. / assets       75%       72%       65%       65%       77%       74%							,
Total liabilities       318,196       314,518       167,645       161,001       468,747       468,035         Net worth (farm and nonfarm)       662,186       670,552       597,015       597,565       727,356       743,540         Net worth change       1%       0%       2%         Ratio Analysis       23%       28%       13%       16%       34%       40%         Intermediate farm liab. / assets       12%       10%       11%       8%       13%       11%         Long term farm liab. / assets       75%       72%       65%       65%       77%       74%	Total farm liabilities	286,582	287,124	131,118	127,817	442,046	446,431
Net worth (farm and nonfarm)       662,186       670,552       597,015       597,565       727,356       743,540         Net worth change       8,367       550       550       16,184         Percent net worth change       1%       0%       2%         Ratio Analysis       23%       28%       13%       16%       34%       40%         Intermediate farm liab. / assets       12%       10%       11%       8%       13%       11%         Long term farm liab. / assets       75%       72%       65%       65%       77%       74%							
Net worth change         8,367         550         16,184           Percent net worth change         1 %         0 %         2 %           Ratio Analysis	Total liabilities	318,196	314,518	167,645	161,001	468,747	468,035
Percent net worth change       1 %       0 %       2 %         Ratio Analysis		662,186					
Ratio Analysis         Current farm liabilities / assets       23 %       28 %       13 %       16 %       34 %       40 %         Intermediate farm liab. / assets       12 %       10 %       11 %       8 %       13 %       11 %         Long term farm liab. / assets       75 %       72 %       65 %       65 %       77 %       74 %	5						
Current farm liabilities / assets       23 %       28 %       13 %       16 %       34 %       40 %         Intermediate farm liab. / assets       12 %       10 %       11 %       8 %       13 %       11 %         Long term farm liab. / assets       75 %       72 %       65 %       65 %       77 %       74 %	Percent net worth change		1 %		0 %		2 %
Intermediate farm liab. / assets         12 %         10 %         11 %         8 %         13 %         11 %           Long term farm liab. / assets         75 %         72 %         65 %         65 %         77 %         74 %	-						
Long term farm liab. / assets 75 % 72 % 65 % 65 % 77 % 74 %							

# Balance Sheet at Market Values **2015 MI Dairy Herds (40-99 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	All Farm	Avg. Of All Farms Low 50%			High 50%		
Number of farms	14 Beginning		Beginning	7 Ending		7 Ending	
Assets		- J		- <u>-</u>		2	
Current Farm Assets							
Cash and checking balance	24,090	17 <b>,</b> 895		33,911			
Prepaid expenses & supplies	27,160	14,078					
Growing crops	6,934	6,809					
Accounts receivable	18,638	11,264		9,830	-		
Hedging accounts Crops held for sale or feed	126.069	107 007		117 010			
Crops under government loan	126,968 0	127,987 0		117,912 0			
Market livestock held for sale	10,616	8,385	7,533	7,744			
Other current assets	3,488	80			100		
Total current farm assets	217,894	186,498					
Intermediate Farm Assets							
Breeding livestock	205,600	213,339	183,314	188,314	227,886	238,364	
Machinery and equipment	298,488	305,829	232,928	236,266	364,048	375 <b>,</b> 392	
Titled vehicles	2,979		2,500				
Other intermediate assets	20,889		3,818		37 <b>,</b> 959		
Total intermediate farm assets	527 <b>,</b> 955	544,264	422,561	435,578	633 <b>,</b> 350	652 <b>,</b> 950	
Long Term Farm Assets							
Farm land	646,934					1,009,529	
Buildings and improvements	190,275	,	112,123		268,427		
Other long-term assets	3,034			659	,		
Total long-term farm assets Total Farm Assets	840,243 1,586,092			,		1,305,900	
TOLAL FARM ASSELS	1,380,092	1,391,770					
Total Nonfarm Assets	168,894				201,436		
Total Assets	1,754,986	1,/08,392	1,187,006	1,103,11/	2,322,900	2,354,007	
Liabilities Current Farm Liabilities							
Accrued interest	341	341	134	179	548	504	
Accounts payable	3,322	5,588					
Current notes	20,632	22,153					
Government crop loans	20,002	0	0	12,0,1			
Principal due on term debt	26,192	24,412					
Total current farm liabilities	50,487				-		
Total intermediate farm liabs	46,239	37 <b>,</b> 856	37,997	27,902	54,481	47,809	
Total long term farm liabilities	189,856	196,774	63 <b>,</b> 763	70,433	315 <b>,</b> 950	323,114	
Total farm liabilities	286,582	287,124	131,118	127,817	442,046	446,431	
Total nonfarm liabilities	31,614	27,395	36,526	33 <b>,</b> 185	26,701	21,604	
Total liabs excluding deferreds	318,196	314,518	167 <b>,</b> 645	161,001	468,747	468,035	
Total deferred liabilities	0	0	0	0	0	0	
Total liabilities	318,196	314,518	167,645	161,001	468,747	468,035	
Retained earnings	662,186	670 <b>,</b> 552					
Market valuation equity	774,605	783,522	422,347			1,142,492	
Net worth (farm and nonfarm)	1,436,790						
Net worth excluding deferreds	1,436,790		1,019,361				
Net worth change Percent net worth change		17,284 1 %		2,755 0 %		31,813 2 %	
Ratio Analysis							
Current farm liabilities / assets	23 %	28 %	13 %	16 %	34 %	40 %	
Intermediate farm liab. / assets	9 %	7 %	9 %	6 %	9 %	7 %	
	23 %	23 %	16 %	17 %	25 %	25 %	
Long term farm liab. / assets	2.0 %	25 0	TO .0	±, 0	20 0	20 0	
Long term farm liab. / assets Total debt to asset ratio Debt to assets excl deferreds	18 % 18 %	18 % 18 %	14 % 14 %	14 % 14 %	20 % 20 % 20 %	20 % 20 % 20 %	

# Statement Of Cash Flows **2015 MI Dairy Herds (40-99 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Beginning cash (farm & nonfarm)	26,815	33,710	19,919
Cash Provided By Operating Activities			
Gross cash farm income		332,238	
Total cash farm expense	-318,870	-287,658	-350,081
Net cash from hedging transactions	-	-	-
Cash provided by operating	47,436	44,579	50,292
Cash Provided By Investing Activities	5		
Sale of breeding livestock	4,242	-	8,483
Sale of machinery & equipment	4,157	3,071	5,243
Sale of titled vehicles	-	-	-
Sale of farm land	-	-	-
Sale of farm buildings	-	-	-
Sale of other farm assets	210	98	323
Sale of nonfarm assets	471	-	942
Purchase of breeding livestock	-3,638	-236	-7,039
Purchase of machinery & equip.	-25,636	-18,228	-33,044
Purchase of titled vehicles	-3,787	-7,574	
Purchase of farm land	-	-	-
Purchase of farm buildings	-23,509	-14,363	-32,656
Purchase of other farm assets	-1,038	-468	-1,609
Purchase of nonfarm assets	0	_	0
Cash provided by investing	-48,528	-37,699	-59,356
Cash Provided By Financing Activities	5		
Money borrowed	72,780	34,766	110,794
Principal payments	-77,020	-43,007	-111,032
Personal income	38,712	46,451	30,974
Family living/owner withdrawals	-36,992	-41,947	-32,037
Income and social security tax	-1,688	-2,942	-435
Capital contributions	2,250	-	4,500
Capital distributions	-2,722	-	-5,443
Dividends paid	-	-	-
Cash gifts and inheritances	23	-	46
Gifts given	-74	-	-149
Other cash flows	-	_	_
Cash provided by financing	-4,731	-6,679	-2,782
Net change in cash balance	-5,823	201	-11,847
Ending cash (farm & nonfarm)	20,992	33 <b>,</b> 911	8,072
Discrepancy	0	_	0

Table	32

# Financial Standards Measures 2015 MI Dairy Herds (40-99 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Liquidity Current ratio Working capital Working capital to gross inc	3.55 134,003 37.2 %	6.29 156,027 49.9 %	2.48 111,980 27.4 %
Solvency (market) Farm debt to asset ratio Farm equity to asset ratio Farm debt to equity ratio	18 % 82 % 0.22	12 % 88 % 0.14	21 % 79 % 0.26
Profitability (cost) Rate of return on farm assets Rate of return on farm equity Operating profit margin Net farm income EBITDA	-5.1 % -9.6 % -16.1 % 31 36,716	-12.3 % -25.8 %	
Repayment Capacity Capital debt repayment capacity Capital debt repayment margin Replacement margin Term debt coverage ratio Replacement coverage ratio	36,745 -2,711 -22,744 0.93 0.62	11,625 -7,762 -26,004 0.60 0.31	61,864 2,340 -19,484 1.04 0.76
Efficiency Asset turnover rate (cost) Operating expense ratio Depreciation expense ratio Interest expense ratio Net farm income ratio	31.5 % 89.8 % 7.2 % 3.0 % 0.0 %	35.9 % 95.6 % 6.6 % 1.2 % -3.4 %	28.8 % 85.4 % 7.7 % 4.3 % 2.6 %

Table	33
TUDIC	55

# Operator and Labor Information 2015 MI Dairy Herds (40-99 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Operator Information Average number of operators Average age of operators Average number of years farming	1.1 52.6 25.6	1.3 53.0 28.2	1.0 52.1 22.1
Results Per Operator Working capital Total assets (market) Total liabilities Net worth (market) Net worth excl deferred liabs	117,253 1,547,518 275,203 1,272,315 1,272,315	121,354 920,202 125,223 794,979 794,979	111,980 2,354,067 468,035 1,886,032 1,886,032
Gross farm income Total farm expense Net farm income from operations	315,332 315,305 27	243,207 251,432 -8,225	408,065 397,427 10,638
Net nonfarm income Family living & tax withdrawals	33,873 33,845	36,128 34,914	30,974 32,472
Total acres owned Total crop acres Crop acres owned Crop acres cash rented Crop acres share rented Total pasture acres	174.5 284.2 157.7 125.7 0.8 0.6	130.9 276.3 110.3 166.0	230.6 294.2 218.6 73.8 1.9 1.4
Labor Analysis Number of farms Total unpaid labor hours Total hired labor hours Total labor hours per farm Unpaid hours per operator Value of farm production / hour Net farm income / unpaid hour Average hourly hired labor wage	14 4,188 2,053 6,241 3,665 42.84 0.01 17.21	7 4,289 1,450 5,738 3,336 40.51 -2.47 28.44	7 4,087 2,656 6,743 4,087 44.82 2.60 12.36

Table 34Financial Summary2015 MI Dairy Herds (40-99 Cows)				
	_			N(1-+)
(Farms Sorted		t Return o	n Assets -	Mkt)
	Avg. Of All Farms	Low 50%	High 50%	
Number of farms	14	7	7	
Income Statement				
Gross cash farm income	366,305	332,238	400,373	
Total cash farm expense	318,870		350,081	
Net cash farm income	47,436			
Inventory change	-21,398	44,579 -34,590	-8,206	
Depreciation	-26,007	-20,565	-31,448	
Net farm income from operations	31	-10,575	10,638	
Gain or loss on capital sales	-	-	-	
Average net farm income	31	-10,575	10,638	
Median net farm income	-8,535	-14,865	-6,240	
Profitability (cost)				
Rate of return on assets	-5.1 %	-9.2 %	-2.5 %	
Rate of return on equity				
Operating profit margin	-16.1 %	-12.3 % -25.8 %	-8.7 %	
Asset turnover rate		-25.8 %		
Asset turnover fale	JT.J &	JJ.9 8	20.0 5	
Profitability (market)				
Rate of return on assets	-2.2 %		-0.6 %	
Rate of return on equity		-6.7 %	-1.8 %	
Operating profit margin	-13.1 %		-4.1 %	
Asset turnover rate	16.8 %	22.3 %	14.2 %	
Liquidity & Repayment (end of year)				
Current assets	186,498	185,507	187,488	
Current liabilities	52,495	29,481	75 <b>,</b> 508	
Current ratio	3.55	6.29	2.48	
Working capital	134,003	156 <b>,</b> 027	111,980	
Working capital to gross inc	37.2 %		27.4 %	
Term debt coverage ratio	0.93	0.60	1.04	
Replacement coverage ratio	0.62	0.31	0.76	
Term debt to EBITDA	6.43	7.44	6.20	
Solvency (end of year at cost)				
Number of farms	14	7	7	
Total assets		758 <b>,</b> 566		
Total liabilities	314,518	161,001	468.035	
Net worth	670,552		743,540	
Net worth change	8,367	550	16,184	
Farm debt to asset ratio	34 %	20 %	42 %	
Total debt to asset ratio	32 %	20 8	39 %	
Change in earned net worth %	1 %			
Columnate (and of your of market)				
Solvency (end of year at market) Number of farms	14	7	7	
Total assets		1,183,117		
Total assets Total liabilities				
	314,318 1 454 074	161,001 1,022,116	400,UJJ 1 006 030	
Net worth				
Total net worth change	17,284		31,813	
Farm debt to asset ratio	18 %		21 %	
Total debt to asset ratio	18 %	14 %	20 %	
Change in total net worth %	1 %	0 %	2 %	
Nonfarm Information				
Net nonfarm income	38,712	46,451	30,974	
Crop Acres				
Total crop acres	325	355	294	
		1 4 0	219	
Total crop acres owned	180	142	219	
Total crop acres cash rented	180 144	213	74	
-				

\_\_\_\_\_

Table	35
TUDIC	55

# Summary Farm Income Statement 2015 MI Dairy Herds (40-99 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	14	7	7
Crop sales	38,772	25,376	52,168
Crop inventory change	1,018	-6,685	8,722
Gross crop income	39,790	18,690	60,890
Livestock sales	275,395	258,430	292,361
Livestock inventory change	-2,232	211	-4,674
Gross livestock income	273,164	258,641	287,686
Government payments	8,066	8,614	
Other cash farm income	44,072	39,818	
Change in accounts receivable	-7,374	-10,443	
Gain or loss on hedging accounts	-	-	
Change in other assets	5,007	-7,390	
Gain or loss on breeding lvst	7,668	4,764	
Gross farm income	360,380	312,695	
Cash operating expenses	308,192	284,008	332,375
Change in prepaids and supplies	13,082	12,833	13,330
Change in growing crops	125	604	-354
Change in accounts payable	2,266	1,565	2,967
Depreciation	26,007	20,565	31,448
Total operating expense	349,671	319,575	379,766
Interest paid	10,678	3,650	17,705
Change in accrued interest	0	45	-45
Total interest expense	10,678	3,695	17,661
Total expenses	360,349	323,270	397,427
Net farm income from operations	31	-10,575	10,638
Gain or loss on capital sales	-	_	
Net farm income	31	-10,575	10,638

able 36 Crop Production <b>2015 MI Dair</b>	n and Marketin <b>y Herds (100-2</b>			
(Farms Sorted By Rat	te of Return o	n Assets - M	lkt)	
	Avg. Of All Farms	Low 50%	High 50%	
Dairy				
Number of farms	38	19	19	
Average number of cows	179	182	176	
Milk production per cow lbs.,	23,449	22,715	24,182	
Average milk price per cwt.,	\$16.98	\$16.83	\$17.13	
Acreage Summary				
Total acres owned	438	302	574	
Total crop acres	744	565	922	
Crop acres owned	384	261	507	
Crop acres cash rented	360	304	416	
Crop acres share rented	-	-	-	
Total pasture acres	0	-	1	
Percent crop acres owned	52 %	46 %	55 %	
Mach invest/crop acre cost	485	553	444	
Mach invest/crop acre market	948	1,000	915	
Average Price Received (Cash Sales (	-			
Corn per bushel	3.81	3.77	3.82	
Oats per bushel	1.81	-	-	
Average Yield Per Acre				
Corn Silage (ton)	17.07	17.07	-	

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

Tabl	e	3	7

### Farm Income Statement 2015 MI Dairy Herds (100-249 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of		
	All Farms	Low 50%	High 50%
Number of farms	38	19	19
Cash Farm Income			
Asparagus	301	602	-
Barley	540	1,080	-
Cordwood	545	1,066	24
Corn	20,007	14,693	25,321
Corn Silage	1,542	1,092	1,993
Hay, Alfalfa	1,119	1,912	326
Hay, Mixed	315	263	366
Hay, Mixed Alfalfa/Grass	353	-	706
Oats	329	224	434
Soybeans	11,356	14,094	8,618
Speltz	127	-	254
Straw	564	418	711
Wheat, Soft Red Winter	1,037	-	2,075
Wheat, Winter	1,054	1,260	847
Miscellaneous crop income	22	-	44
Beef Cow-Calf, Beef Calves	1,068	-	2,136
Dairy, Milk	721,570	702,148	740,991
Dairy, Dairy Calves	14,965	14,245	15 <b>,</b> 685
Dairy Heifers (for sale)	2,747	765	4,729
Dairy Replacement Heifers	1,238	1,108	1,369
Dairy Finishing	4,730	3,626	5,835
Dairy Feeder	13,600	7,106	20,093
User Added Livestock, User Added	821	1,643	-
Cull breeding livestock	82,626	72,469	92,783
Misc. livestock income	9	-	18
Crop government payments	12,502	9,942	15,062
CRP payments	492	383	600
Other government payments	3,339	3,531	3,146
Custom work income	10,728	12,058	9,399
Patronage dividends, cash	8,701	7,383	10,018
Crop insurance income	2,416	1,295	3,537
Property insurance income	15,129	8,322	21,937
Other farm income	13,181	8,478	17,883
Gross Cash Farm Income	949,074	891,207	1,006,941

### Farm Income Statement (continued) 2015 MI Dairy Herds (100-249 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Cash Farm Expense			
Seed	26,465	24,127	28,802
Fertilizer	36,379	31,835	40,923
Crop chemicals	12,442	8,044	16,841
Crop insurance	1,258	614	1,902
Drying expense	307	80	533
Storage	706	881	530
Crop hauling and trucking	78	155	-
Crop marketing	232	7	458
Crop miscellaneous	333	373	294
Purchased feed	237,844	249,174	226,515
Breeding fees	8,723	9,387	8,059
Veterinary	22 <b>,</b> 987	25,467	20,508
BST	136	272	-
Livestock supplies	35 <b>,</b> 266	34,205	36,328
DHIA	1,740	2,325	1,155
Contract production exp.	1,205	1,987	424
Livestock fuel & oil	682	-	1,364
Livestock leases	1 <b>,</b> 875	-	3 <b>,</b> 750
Livestock hauling and trucking	26,028	23,305	28 <b>,</b> 751
Livestock marketing	13,088	15 <b>,</b> 687	10,489
Bedding	7,887	8,261	7,512
Livestock miscellaneous	357	-	713
Consultants	166	-	333
Interest	26,690	28,730	24,650
Packaging and supplies	107	-	213
Supplies	10,133	10,490	9 <b>,</b> 775
Fuel & oil	40,677	34,669	46,684
Repairs	48,922	39,319	58,526
Repair, machinery	1,221	1,006	1,437
Custom hire	30,446	35,496	25 <b>,</b> 397
Repair, buildings	3,604	1 <b>,</b> 657	5 <b>,</b> 552
Hired labor	110 <b>,</b> 923	125 <b>,</b> 938	95 <b>,</b> 907
Land rent	24,486	26,606	22,366
Machinery leases	10,254	12,892	7,615
Building leases	2,707	5,225	189
Real estate taxes	11,406	9,493	13,318
Personal property taxes	325	37	613
Farm insurance	20 <b>,</b> 556	19,020	22,091
Utilities	23,417	23,488	23,346
Hauling and trucking	1,766	2,698	834
Dues & professional fees	5,490	5,301	5 <b>,</b> 678
Miscellaneous	7,866	6,419	9,313
Total cash expense	817,178	824,667	809,689
Net cash farm income	131,896	66,540	197,252

Inventory Changes			
Prepaids and supplies	-16,524	-17,015	-16,033
Accounts receivable	-3,199	-6,215	-182
Hedging accounts	_	_	_
Other current assets	-763	1,363	-2,890
Crops and feed	5,409	-5,441	16,258
Market livestock	-40	-266	186
Breeding livestock	-2,089	-13,680	9,501
Other assets	3,324	-1,117	7,764
Accounts payable	-11,182	-19,338	-3,026
Accrued interest	-188	-242	-134
Total inventory change	-25,252	-61,950	11,445
Net operating profit	106,643	4,590	208,697
Depreciation			
Machinery and equipment	-51,303	-44,601	-58,004
Titled vehicles	-565	-711	-420
Buildings and improvements	-22,211		-24,943
Total depreciation	-74,079		-83,367
Net farm income from operations	32,564	-60,202	125,330
Gain or loss on capital sales	-	-	-
Net farm income	32 <b>,</b> 564	-60,202	125 <b>,</b> 330

Table 38	Inventory	-		
	2015 MI Dairy Her			
(Farms	Sorted By Rate of	f Return	on Assets	- Mkt)
	Avg. Of All Farms	Low 50%	High 50%	
Number of farms	AII FAINS 38	19	-	
Net cash farm income	131,896	66,540	197,252	
Crops and Feed				
Ending inventory	271,708	238,630		
Beginning inventory Inventory change	266,300 5,409	244,071 -5,441		
intencer, enange	0,100	0,111	10,200	
Market Livestock	15 540	11 000	00 007	
Ending inventory	15,743 15,782	11,398 11,664		
Beginning inventory Inventory change	-40	-266		
Accts Receivable	26.000	00 614		
Ending inventory Beginning inventory	36,080 39,279	29,614 35,829		
Inventory change	-3,199	-6,215		
	-,	•, ==•		
Prepaid Expenses and Supplie		21 120	26.000	
Ending inventory Beginning inventory	34,069 50,593	31,139 48,154		
Inventory change	-16,524	-17,015	,	
		<b>,</b>		
Hedging Activities	_			
Ending inventory Withdrawals		-	-	
Beginning inventory	_	-	-	
Deposits	-	-	-	
Gain or loss	-	-	-	
Other Current Assets				
Ending inventory	22,710	14,311	31,109	
Beginning inventory	23,474	12,948	33,999	
Inventory change	-763	1,363	-2,890	
Breeding Livestock				
Ending inventory	538,467	549,838	527,096	
Capital sales	3,319	6,639		
Beginning inventory	527,315	539,170		
Capital purchases Depreciation, capital adju	16,561 st -2,089	30,987 -13,680		
Depreciation, capital adju	st -2,009	-13,000	9,301	
Other Capital Assets				
Ending inventory	58,941	45,026	,	
Capital sales Beginning inventory	6,494 51,079	2,552 45,060		
Capital purchases	11,032	3,635	,	
Depreciation, capital adju		-1,117		
Accounts Payable Beginning inventory	43,598	45,907	41,288	
Ending inventory	54,780	65,245		
Inventory change	-11,182	-19,338		
Accrued Interest				
Accrued Interest Beginning inventory	670	376	964	
Ending inventory	858	618		
Inventory change	-188	-242	,	
Total inventory charge		61 050	11 //-	
Total inventory change	-25,252	-61,950	11,445	
Net operating profit	106,643	4,590	208,697	

# Depreciation 2015 MI Dairy Herds (100-249 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Net operating profit	106,643	4,590	208,697
Machinery and Equipment Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	357,386 2,235 350,189 60,735 -51,303	2,453 310,950 38,881	2,018 389,428 82,589
Titled Vehicles Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	6,509 - 7,074 - 565	4,844 	8,174 8,594 -420
Buildings and Improvements Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	249,410 36 231,715 39,943 -22,211	73 276,960 46,813	33,073
Total depreciation, capital adj.	-74,079	-64,791	-83,367
Net farm income from operations Gain or loss on capital sales	32,564	-60,202	125,330
Net farm income	32,564	-60,202	125,330

### Profitability Measures **2015 MI Dairy Herds (100-249 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Profitability (assets valued at cost) Net farm income from operations Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	32,564 -0.3 % -2.8 % -0.7 % 36.3 %	-60,202 -5.0 % -11.9 % -15.3 % 32.8 %	125,330 4.1 % 4.6 % 10.3 % 39.5 %
Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	26,878 64,610 -5,168 1,968,092 -32,046 1,161,426 714,155	28,972 62,892 -94,121 1,878,399 -123,093 1,034,871 615,962	24,784 66,328 83,785 2,057,784 59,001 1,287,981 812,348
	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Profitability (assets valued at marke Net farm income from operations Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	et) 92,338 1.8 % 1.2 % 7.6 % 23.2 %	-59,142 -3.5 % -6.8 % -15.1 % 23.4 %	243,819 5.7 % 6.5 % 24.9 % 23.1 %
Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	26,878 64,610 54,606 3,076,582 27,728 2,269,916 714,155	28,972 62,892 -93,062 2,632,356 -122,034 1,788,828 615,962	24,784 66,328 202,274 3,520,807 177,491 2,751,004 812,348

### Liquidity & Repayment Capacity Measures 2015 MI Dairy Herds (100-249 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Liquidity			
Current ratio	1.82	1.72	1.91
Working capital	178,639	133,806	223,472
Working capital to gross inc	18.8 %	15.5 %	21.5 %
Current assets	395,194	320,405	469,984
Current liabilities	216,556	186,600	246,512
Gross revenues (accrual)	951,999	865,136	1,038,862
Repayment capacity			
Net farm income from operations	32,564	-60,202	125,330
Depreciation	74,079	64 <b>,</b> 791	83,367
Personal income	12,867	12,363	13,371
Family living/owner withdrawals	-59,668	-57,358	-61,978
Cash discrepancy	0	0	0
Payments on personal debt	-1,073	-1,398	-747
Income taxes paid	-1,071	-649	-1,493
Interest on term debt	36,208	37,953	34,463
Capital debt repayment capacity	93,906	-4,500	192,313
Scheduled term debt payments	-103,205	-91,001	-115,409
Capital debt repayment margin	-9,299	-95,501	76,904
Cash replacement allowance	-35,531	-32,745	-38,316
Replacement margin	-44,829	-128,246	38,588
Term debt coverage ratio	0.91		1.67
Replacement coverage ratio	0.68	-0.04	1.25

## Balance Sheet at Cost Values 2015 MI Dairy Herds (100-249 Cows)

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

	Avg. Of					
	All Farm	ns	Low 50	00	High 5	0%
Number of farms	38	3	1	9	1	9
2 + -	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets Current Farm Assets						
Cash and checking balance	23,508	14,125				
Prepaid expenses & supplies	50,593	34,069				
Growing crops Accounts receivable	21,884 39,279	21,600 36,080	,			
Hedging accounts	0	30,000		,		
Crops held for sale or feed	266,300					
Crops under government loan	759	759	0	0	1,517	1,517
Market livestock held for sale	15,782					
Other current assets	1,590	1,110				
Total current farm assets	419,694	395,194	372,282	320,405	467,106	469,984
Intermediate Farm Assets						
Breeding livestock	527,315	538,467				
Machinery and equipment Titled vehicles	350,189 7,074	357,386 6,509		,		
Other intermediate assets	27,102	31,369				
Total intermediate farm assets	911,679					
Long Term Farm Assets						
Farm land	373,634	369,576	347,751	331,961	399,518	407,190
Buildings and improvements	231,715					
Other long-term assets	23,977	27,572	21,844			
Total long-term farm assets	629,326	646,558	646,555			
Total Farm Assets	1,960,700	1,975,483	1,897,727	1,859,072	2,023,673	2,091,895
Total Nonfarm Assets	86 <b>,</b> 270	90,184	107,950	106,369	64,589	73,999
Total Assets	2,046,970	2,065,667	2,005,677	1,965,441	2,088,262	2,165,893
Liabilities						
Current Farm Liabilities						
Accrued interest	670	858	376			1,097
Accounts payable Current notes	43,598 54,359	54,780 91,916		65,245 65,529		44,314 118,302
Government crop loans	493	493				
Principal due on term debt	66,997					
Total current farm liabilities	166 <b>,</b> 117	216 <b>,</b> 556	140,186	186,600	192,047	246,512
Total intermediate farm liabs	191,163	179,735	209,992	180,140	172,335	179,330
Total long term farm liabilities	422,233	437,527	,	,		
Total farm liabilities	779 <b>,</b> 513	833,818	811,111	875,946	747,916	791,690
Total nonfarm liabilities	16,125	15,525	23,244	22,790	9,007	8,259
Total liabilities	795 <b>,</b> 639	849,343	834,355	898,735	756 <b>,</b> 922	799,950
Net worth (farm and nonfarm)	1,251,331	1,216,325	1,171,323	1,066,706	1,331,340	1,365,943
Net worth change		-35,007		-104,617		34,604
Percent net worth change		-3 %		-9 %		3 %
Ratio Analysis						
Current farm liabilities / assets	40 %	55 %	38 %	58 %		52 %
Intermediate farm liab. / assets	21 %	19 %				
Long term farm liab. / assets Total debt to asset ratio	67 % 39 %	68 % 41 %				
10041 4000 00 40000 14010	55 %	- T - 0	- 2 E	0.01	50 %	5, 0

## Balance Sheet at Market Values 2015 MI Dairy Herds (100-249 Cows)

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

(1411.0 5010)	Avg. Of All Farm	E	Low 5		High 5	<u><u><u></u></u></u>
Number of farms		3		9	nigii 5	
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets Current Farm Assets						
Cash and checking balance	23,508	14,125	19.616	-4.687	27,400	32,938
Prepaid expenses & supplies	50,593	34,069	48,154	31,139	53,031	36,999
Growing crops	21,884			13,841	53,031 30,642	29,359
Accounts receivable	39,279					
Hedging accounts	0					
Crops held for sale or feed	266,300					
Crops under government loan	759	759	0	0	1,517	1,517
Market livestock held for sale Other current assets	15,782	15,743	11,664	11,398	19,901	20,087 1,751
Total current farm assets	419,694					
Intermediate Farm Assets						
Breeding livestock	527,394	538,467	539,170	549,838	515,617	527,096
Machinery and equipment			549,837			
Titled vehicles	18,319	18,031	14,224	14,317	22,415	21,746
Other intermediate assets		41,702			52 <b>,</b> 305	
Total intermediate farm assets	1,250,201	1,304,215	1,126,447	1,138,859	1,373,955	1,469,572
Long Term Farm Assets					1 1 - 0 0 0 0	
Farm land					1,170,320	
Buildings and improvements Other long-term assets	26,343				390,770	
Total long-term farm assets					1,586,390	
Total Farm Assets					3,427,451	
Total Nonfarm Assets Total Assets	172,741 3,212,043				169,468 3,596,919	
	-,,	-,,	_, ,	_,,	-,,	-, ,
Liabilities						
Current Farm Liabilities						
Accrued interest	670					
Accounts payable	43,598				41,288	
Current notes	54,359					
Government crop loans Principal due on term debt	493 66,997					
Total current farm liabilities	166,117					
Total intermediate farm liabs	191,163	179,735	209,992	180,140	172,335	179,330
Total long term farm liabilities	422,233	437,527	460,933			
Total farm liabilities	779 <b>,</b> 513	833,818	811,111	875 <b>,</b> 946	747,916	791 <b>,</b> 690
Total nonfarm liabilities	16,125	15,525	23,244	22,790	9,007	8,259
Total liabs excluding deferreds	795,639	849,343				
Total deferred liabilities	0	0	0	0		
Total liabilities	795 <b>,</b> 639	849,343	834,355	898 <b>,</b> 735	756 <b>,</b> 922	799 <b>,</b> 950
Retained earnings					1,331,340	
Market valuation equity		1,215,578			1,508,657	
Net worth (farm and nonfarm)					2,839,997	
Net worth excluding deferreds	2,416,405		1,992,812		2,839,997	
Net worth change Percent net worth change		15,498 1 %		-102,613 -5 %		133,610 5 %
Ratio Analysis						
Current farm liabilities / assets	40 %	55 %	38 %	58 %	41 %	52 %
Intermediate farm liab. / assets	15 %	14 %				12 %
Long term farm liab. / assets	31 %	31 %				
Total debt to asset ratio	25 %	26 %	30 %			
Debt to assets excl deferreds	25 %	26 %	30 %	32 %	21 %	21 %

Table	44

# Statement Of Cash Flows **2015 MI Dairy Herds (100-249 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	I our 50%	High 50%
	AII FAIMS	HOW 20%	iirgii 50%
Number of farms	38	19	19
Beginning cash (farm & nonfarm)	23,508	19,616	27,400
Cash Provided By Operating Activities	5		
Gross cash farm income		891,207	1,006,941
Total cash farm expense		-824,667	
Net cash from hedging transactions	-	_	_
Cash provided by operating	131,896	66,540	197,252
Cash Provided By Investing Activities	3		
Sale of breeding livestock	3,319	6,639	_
Sale of machinery & equipment	2,235	2,453	2,018
Sale of titled vehicles	, _	, _	, _
Sale of farm land	7,895	15,789	-
Sale of farm buildings	. 36	73	-
Sale of other farm assets	6,494	2,552	10,436
Sale of nonfarm assets	1,673	. 26	
Purchase of breeding livestock	-16,561		-2,136
Purchase of machinery & equip.	-60 <b>,</b> 735	-38,881	
Purchase of titled vehicles	, _	, _	, –
Purchase of farm land	-3,836	-	-7,672
Purchase of farm buildings	-39,943	-46,813	
Purchase of other farm assets	-11,032	-3,635	
Purchase of nonfarm assets	-1,749	-623	
Cash provided by investing	-112,204	-93,407	
Cash Provided By Financing Activities	3		
Money borrowed	254,094	258,366	249,822
Principal payments	-211,759	-213,564	-209,954
Personal income	12,867	12,363	13,371
Family living/owner withdrawals	-59,668	-57,358	-61,978
Income and social security tax	-1,071	-649	<b>-</b> 1,493
Capital contributions	-	-	-
Capital distributions	-25,872	-1,263	-50,480
Dividends paid	-	-	-
Cash gifts and inheritances	6 <b>,</b> 077	12,154	-
Gifts given	-3,742	-7,484	-
Other cash flows	-	-	-
Cash provided by financing	-29,074	2,564	-60,713
Net change in cash balance	-9,383	-24,303	5,538
Ending cash (farm & nonfarm)	14,125	-4,687	32,938
Discrepancy	0	0	0

# Financial Standards Measures 2015 MI Dairy Herds (100-249 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Liquidity Current ratio Working capital Working capital to gross inc	1.82 178,639 18.8 %	1.72 133,806 15.5 %	1.91 223,472 21.5 %
Solvency (market) Farm debt to asset ratio Farm equity to asset ratio Farm debt to equity ratio	27 % 73 % 0.37	34 % 66 % 0.50	22 % 78 % 0.28
Profitability (cost) Rate of return on farm assets Rate of return on farm equity Operating profit margin Net farm income EBITDA	-0.3 % -2.8 % -0.7 % 32,564 133,521		4.1 % 4.6 % 10.3 % 125,330 233,481
Repayment Capacity Capital debt repayment capacity Capital debt repayment margin Replacement margin Term debt coverage ratio Replacement coverage ratio	93,906 -9,299 -44,829 0.91 0.68	-4,500 -95,501 -128,246 -0.05 -0.04	192,313 76,904 38,588 1.67 1.25
Efficiency Asset turnover rate (cost) Operating expense ratio Depreciation expense ratio Interest expense ratio Net farm income ratio	36.3 % 86.0 % 7.8 % 2.8 % 3.4 %	32.8 % 96.1 % 7.5 % 3.3 % -7.0 %	39.5 % 77.5 % 8.0 % 2.4 % 12.1 %

# Operator and Labor Information **2015 MI Dairy Herds (100-249 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Operator Information Average number of operators Average age of operators Average number of years farming	1.5 51.9 24.8	1.5 49.0 22.2	1.5 54.8 27.4
Results Per Operator Working capital Total assets (market) Total liabilities Net worth (market) Net worth excl deferred liabs	117,039 2,149,782 556,466 1,593,316 1,593,316	588,827 1,238,406	524,105
Gross farm income Total farm expense Net farm income from operations	623,724 602,389 21,335	566,813 606,256 -39,443	680,634 598,521 82,112
Net nonfarm income Family living & tax withdrawals	8,430 39,795	8,100 38,005	8,760 41,585
Total acres owned Total crop acres Crop acres owned Crop acres cash rented Crop acres share rented Total pasture acres	286.8 487.1 251.3 235.8 - 0.2	197.6 370.0 170.7 199.3	375.9 604.2 331.9 272.4 
Labor Analysis Number of farms Total unpaid labor hours Total hired labor hours Total labor hours per farm Unpaid hours per operator Value of farm production / hour Net farm income / unpaid hour Average hourly hired labor wage	38 4,358 7,835 12,193 2,855 58.57 7.47 14.97	19 4,426 7,727 12,153 2,900 50.68 -13.60 17.21	19 4,289 7,944 12,233 2,810 66.41 29.22 12.75
Partnerships & LLCs Number of farms Number of operators Owner withdrawals per farm Withdrawals per operator	16 2.1 _	8 2.1 _ _	8 2.0 _

249 Cows) on Assets - High 50% 19 1,006,941 809,689 197,252 11,445 -83,367 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67 1.25	- Mkt)
High 50% 19 1,006,941 809,689 197,252 11,445 -83,367 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	MKC)
19 1,006,941 809,689 197,252 11,445 -83,367 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
1,006,941 809,689 197,252 11,445 -83,367 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
809,689 197,252 11,445 -83,367 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
809,689 197,252 11,445 -83,367 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
197,252 11,445 -83,367 125,330 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
11,445 -83,367 125,330 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
-83,367 125,330 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
- 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
- 125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
125,330 114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
114,214 4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
4.1 % 4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
4.6 % 10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
10.3 % 39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
39.5 % 5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
5.7 % 6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
6.5 % 24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
24.9 % 23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
23.1 % 469,984 246,512 1.91 223,472 21.5 % 1.67	
469,984 246,512 1.91 223,472 21.5 % 1.67	
246,512 1.91 223,472 21.5 % 1.67	
246,512 1.91 223,472 21.5 % 1.67	
246,512 1.91 223,472 21.5 % 1.67	
223,472 21.5 % 1.67	
21.5 % 1.67	
1.67	
1 25	
1.20	
2.38	
19	
2,165,893	
799,950	
1,365,943	
34,604	
38 %	
37 %	
3 %	
19	
3,773,557	
799,950	
2,973,607	
133,610	
13,371	
-,	
507	
	21 % 5 % 13,371 922

# Summary Farm Income Statement 2015 MI Dairy Herds (100-249 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	38	19	19
Crop sales Crop inventory change Gross crop income	39,211 5,409 44,620	36,704 -5,441 31,263	41,718 16,258 57,976
Livestock sales Livestock inventory change Gross livestock income	760,741 -40 760,701	730,642 -266 730,376	790,840 186 791,026
Government payments Other cash farm income Change in accounts receivable Gain or loss on hedging accounts Change in other assets	16,333 132,790 -3,199 - 2,844		-182 - 6,158
Gain or loss on breeding lvst Gross farm income	-2,089 951,999	-13,680 865,136	
Cash operating expenses Change in prepaids and supplies Change in growing crops Change in accounts payable Depreciation Total operating expense		795,937 17,015 -716 19,338 64,791 896,365	83,367
Interest paid Change in accrued interest Total interest expense Total expenses	26,690 188 26,878 919,435	28,730 242 28,972 925,338	•
Net farm income from operations Gain or loss on capital sales	32,564	-60,202	125,330
Net farm income	32,564	-60,202	125,330

	on and Marketin <b>y Herds (250-4</b>						
(Farms Sorted By Ra			[kt)				
	Avg. Of						
	All Farms	Low 50%	High 50%				
Dairy							
Number of farms	16	8	8				
Average number of cows	325	329	318				
Milk production per cow lbs.,	26,889	25 <b>,</b> 678	28,238				
Average milk price per cwt.,	\$16.55	\$15.69	\$16.50				
Acreage Summary							
Total acres owned	377	275	480				
Total crop acres	728	788	668				
Crop acres owned	388	454	321				
Crop acres cash rented	341	334	347				
Crop acres share rented	-	-	-				
Total pasture acres	-	-	-				
Percent crop acres owned	53 %	58 %	48 %				
Mach invest/crop acre cost	773	554	1,032				
Mach invest/crop acre market	1,050	784	1,364				
Average Price Received (Cash Sales							
Wheat, Winter per bushel	4.23	-	4.90				
Corn per bushel	3.42	-	-				
Average Yield Per Acre							
Haylage, Alfalfa (ton)	10.94	-	-				
Corn (bushel)	174.40	165.21	-				
Soybeans (bushel)	54.05		-				

### D. Financial Summary Information, Herds with 250-449 Cows

Table	50
10.010	~ ~

# Farm Income Statement **2015 MI Dairy Herds (250-449 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Cash Farm Income			
Corn	19 <b>,</b> 545	19 <b>,</b> 251	19,840
Oats	444	-	887
Soybeans	26,152	43,085	9,220
Wheat, Winter	10,208	14,042	6 <b>,</b> 375
Miscellaneous crop income	47	93	-
Beef Finishing	458	915	-
Dairy, Milk	1,449,460	1,403,027	1,495,894
Dairy, Dairy Calves	27,900	28 <b>,</b> 375	27,424
Dairy Heifers (for sale)	13,946	17 <b>,</b> 661	10,231
Dairy Finishing	30,713	1,059	60,367
Dairy Feeder	6,989	13,900	79
Dairy Backgrounding	298	-	597
Cull breeding livestock	127,003	112,661	141,344
Misc. livestock income	326	90	563
Crop government payments	10,637	2,501	18,773
CRP payments	1,091	2,181	-
Other government payments	12,098	15 <b>,</b> 339	8,857
Custom work income	3 <b>,</b> 777	-	7,554
Patronage dividends, cash	12 <b>,</b> 537	12,568	12,506
Crop insurance income	866	-	1,733
Property insurance income	5,291	-	10,581
Sale of resale items	188	-	375
Personal wages & salary	122	243	-
Other farm income	4,154	3 <b>,</b> 758	4,550
Gross Cash Farm Income	1,764,249	1,690,749	1,837,748

Table	50
10.010	~ ~

#### Farm Income Statement (continued) **2015 MI Dairy Herds (250-449 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

Avg. Of All Farms Low 50% High 50% Number of farms 16 8 8 Cash Farm Expense 20,737 Seed 27,571 34,404 Fertilizer 36,110 30,248 41,972 Crop chemicals 14,200 14,057 14,343 Crop insurance 2,535 1,609 3,460 Drying expense 1,423 2,846 \_ Crop packaging and supplies 163 \_ 325 \_ Crop hauling and trucking 885 1,771 Crop marketing 349 697 Crop miscellaneous 3,584 2,114 5,053 173 Feeder livestock purchase \_ 346 Purchased feed 554,404 601**,**067 507,742 Breeding fees 15,826 12,947 18,705 Veterinary 51,127 50,472 51,783 Livestock supplies 45,767 53,553 37,980 3,084 2,767 DHIA 3,401 Contract production exp. 27,248 4,274 50,222 Grazing fees 1,802 -3,604 \_ Govt program expense 223 446 59,790 Livestock hauling and trucking 59,329 58,867 Livestock marketing 19,193 20,481 17,905 26,043 29,829 22,258 Bedding Livestock miscellaneous 1,033 -2,065 354 Consultants \_ 709 Interest 53,459 53,970 52,948 12,832 Packaging and supplies 25,665 \_ Supplies 7**,**982 3,518 12,446 Fuel & oil 48,273 50,257 46,289 66,786 78,580 Repairs 54,992 Repair, machinery 8,307 10,842 5,772 1,211 Repair, livestock equip 606 \_ 27,321 34,693 19,949 Custom hire Repair, buildings 9,900 7**,**700 12,099 Hired labor 272,683 250,139 295,227 Land rent 32,109 38,772 25,446 Machinery leases 17,907 14,191 10,476 750 Building leases 1,500 \_ 9,620 Real estate taxes 13,716 17,811 Personal property taxes 124 67 10 26,938 24,744 29,131 Farm insurance Utilities 45,490 46,134 44,847 6,951 Dues & professional fees 12,074 17,198 Purchase of resale items 8,438 16,875 \_ Miscellaneous 9,324 10,326 8,323 Total cash expense 1,563,670 1,576,953 1,550,387 Net cash farm income 200,578 113**,**796 287,361

Inventory Changes			
Prepaids and supplies	5,365	-117	10,846
Accounts receivable	-7,672	-3,535	-11,810
Hedging accounts	364	728	-
Other current assets	19,114	34,982	3,247
Crops and feed	-28,955	-55,896	-2,014
Market livestock	967	213	1,721
Breeding livestock	-8,409	9,207	-26,025
Other assets	9,155	13,010	5,301
Accounts payable	-15,374	-21,151	-9,596
Accrued interest	-913	-949	-876
Total inventory change	-26,357	-23,509	-29,206
Net operating profit	174,221	90,287	258 <b>,</b> 155
Depreciation			
Machinery and equipment	-55,013	-36,716	-73,310
Titled vehicles	-488	-	-975
Buildings and improvements	-54,518	-46,251	-62,785
Total depreciation	-110,019	-82,967	-137,071
Net farm income from operations	64,202	7,320	121,085
Gain or loss on capital sales	_	-	
Net farm income	64,202	7,320	121,085
		, , , , ,	/ 000

Table 51	Inventory (			
	2015 MI Dairy Her			
(Farms S	Sorted By Rate of	t Return	on Assets	- Mkt)
	Avg. Of All Farms	Low 50%	High 50%	
Number of farms	16	8	8	
Net cash farm income	200,578	113,796	287,361	
Crops and Feed				
Ending inventory	356,388	346,276	366,499	
Beginning inventory	385,342	402,172		
Inventory change	-28,955	-55,896	-2,014	
Market Livestock				
Ending inventory	18,805	5,847	31,763	
Beginning inventory	17,838	5,634		
Inventory change	967	213		
Accts Receivable				
Ending inventory	54,954	56,463		
Beginning inventory	62,627	59,998		
Inventory change	-7,672	-3,535	-11,810	
Prepaid Expenses and Supplies				
Ending inventory	63,093	26,219	99 <b>,</b> 967	
Beginning inventory	57,728	26,336		
Inventory change	5,365	-117	10,846	
Hedging Activities				
Ending inventory	-	_	_	
Withdrawals	364	728	-	
Beginning inventory	_	_	-	
Deposits	-	-	-	
Gain or loss	364	728	-	
Other Current Assets				
Ending inventory	30,282	28,076	32,489	
Beginning inventory	11,168	-6,906		
Inventory change	19,114	34,982		
Breeding Livestock	000 045	700 415	077 074	
Ending inventory	830,345	783,415		
Capital sales Beginning inventory	11,268 841,181	22,537 779,382		
Capital purchases	8,840	17,362		
Depreciation, capital adjust		9,207		
1 1 1	·	·	-	
Other Capital Assets				
Ending inventory	94,464	65,293		
Capital sales	8,574 82,201	13,485		
Beginning inventory Capital purchases	83,201 10,681	56,996 8,773		
Depreciation, capital adjust		13,010		
	5,200	, 010	-,	
Accounts Payable		_		
Beginning inventory	36,218	53,803		
Ending inventory	51,592	74,954		
Inventory change	-15,374	-21,151	-9,596	
Accrued Interest				
Beginning inventory	842	1,471		
Ending inventory	1,754	2,421		
Inventory change	-913	-949	-876	
Total inventory change	-26 357	-23 500	-20 206	
Total inventory change	-26,357	-23,509	-29,206	
Net operating profit	174,221	90,287	258,155	
- <u>)</u>	-,	, =	, =	

Table	52

# Depreciation 2015 MI Dairy Herds (250-449 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Net operating profit	174,221	90,287	258,155
Machinery and Equipment Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	579,054 2,022 532,091 103,998 -55,013	460,314 3,481 401,992 98,520 -36,716	109,477
Titled Vehicles Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	7,513 8,000 -488	5,625 _ 5,625 _ _	9,400  10,375  -975
Buildings and Improvements Ending inventory Capital sales Beginning inventory Capital purchases Depreciation, capital adjust.	853,555 88 821,869 86,293 -54,518	670,754 176 656,093 61,089 -46,251	111,497
Total depreciation, capital adj.	-110,019	-82,967	-137,071
Net farm income from operations Gain or loss on capital sales	64,202	7,320	121,085
Net farm income	64,202	7,320	121,085

### Profitability Measures **2015 MI Dairy Herds (250-449 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Profitability (assets valued at cost) Net farm income from operations Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	64,202 1.0 % -0.9 % 3.0 % 32.7 %	7,320 -0.6 % -4.1 % -1.9 % 33.2 %	121,085 2.3 % 1.5 % 7.0 % 32.3 %
Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	54,371 83,194 35,380 3,602,626 -18,991 2,129,781 1,177,279	54,919 82,637 -20,399 3,187,405 -75,318 1,841,594 1,058,409	53,824 83,750 91,159 4,017,847 37,335 2,417,968 1,296,150
	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Profitability (assets valued at marke Net farm income from operations Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	et) 133,352 2.2 % 1.5 % 8.9 % 24.8 %	28,638 0.0 % -2.0 % 0.1 % 26.5 %	238,067 3.8 % 4.0 % 16.1 % 23.6 %
Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	54,371 83,194 104,530 4,745,846 50,159 3,273,001 1,177,279	54,919 82,637 920 3,988,019 -53,999 2,642,208 1,058,409	53,824 83,750 208,140 5,503,674 154,317 3,903,794 1,296,150

### Liquidity & Repayment Capacity Measures **2015 MI Dairy Herds (250-449 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Liquidity			
Current ratio	2.28	1.98	2.58
Working capital	317 <b>,</b> 630	249 <b>,</b> 708	385,551
Working capital to gross inc	18.3 %	14.9 %	21.4 %
Current assets	566,410	503,864	628,955
Current liabilities	248,780	254 <b>,</b> 156	243,404
Gross revenues (accrual)	1,740,294	1,676,350	1,804,238
Repayment capacity			
Net farm income from operations	64,202	7,320	121,085
Depreciation	110,019	82 <b>,</b> 967	137,071
Personal income	6 <b>,</b> 778	11 <b>,</b> 197	2,360
Family living/owner withdrawals	-73,822	-67,684	-79,960
Cash discrepancy	0	0	-
Payments on personal debt	-2,199	-2,114	-2,283
Income taxes paid	-983	-1,201	-765
Interest on term debt	69 <b>,</b> 279	69 <b>,</b> 177	69,381
Capital debt repayment capacity	173,275	99,661	246,888
Scheduled term debt payments	-164,221	-149,856	-178,586
Capital debt repayment margin	9,054	-50,195	68,303
Cash replacement allowance	-33,384	-24,132	-42,636
Replacement margin	-24,330	-74,327	25,666
Term debt coverage ratio	1.06	0.67	1.38
Replacement coverage ratio	0.88	0.57	1.12

### Balance Sheet at Cost Values 2015 MI Dairy Herds (250-449 Cows)

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

	Avg. O			-		
	All Far	ns	Low 50		High 5	
Number of farms	1	6		8	:	8
Assets	Beginning	Ending	Beginning	Ending	Beginning	Ending
Current Farm Assets						
Cash and checking balance	52 <b>,</b> 667	42,888	37,544	40,984	67 <b>,</b> 791	44,793
Prepaid expenses & supplies	57 <b>,</b> 728	-				
Growing crops	28,091	-		,		-
Accounts receivable Hedging accounts	62,627	-		-	-	-
Crops held for sale or feed	0 385,342					
Crops under government loan	000,042				-	0
Market livestock held for sale	17,838					
Other current assets	-16,923			-		-
Total current farm assets	587,371	566,410	524,777	503,864	649,964	628,955
Intermediate Farm Assets						
Breeding livestock	841,181					
Machinery and equipment	532,091			460,314		
Titled vehicles	8,000		5,625			
Other intermediate assets Total intermediate farm assets	65,777	,	39,607 1,226,606			
Total intermediate faim assets	1,11,019	1,407,401	1,220,000	1,200,204	1,007,491	1,000,111
Long Term Farm Assets						
Farm land	675,625				620,910	
Buildings and improvements Other long-term assets	821,869 17,425	-		-		1,036,356 21,386
Total long-term farm assets			1,403,821			
Total Farm Assets			3,155,204			
Total Nonfarm Assets	409,755	412,365	104,640	108,827	714,869	715,903
Total Assets		-		-		4,808,127
Liabilities						
Current Farm Liabilities						
Accrued interest	842	,	1,471	-		1,088
Accounts payable	36,218	-		-		-
Current notes	57,677	-		-		-
Government crop loans Principal due on term debt	0 94,942					
Total current farm liabilities	189,680	-				,
Total intermediate farm liabs	280,897	317,635	160,406	262,570	401,387	372,700
Total long term farm liabilities	939,232	-	,			1,045,582
Total farm liabilities	1,409,808	1,535,882	1,281,544	1,410,078	1,538,073	1,661,685
Total nonfarm liabilities			35,232			
Total liabilities	1,430,136	1,555,925	1,316,775	1,442,985	1,543,498	1,668,864
Net worth (farm and nonfarm)	2,528,956				3,114,842	3,139,263
Net worth change Percent net worth change		-16,601 -1 %		-57,624 -3 %		24,421 1 %
Ratio Analysis						
Current farm liabilities / assets	32 %	44 %	39 %	50 %	27 %	39 %
Intermediate farm liab. / assets	19 %		13 %	20 %		22 %
Long term farm liab. / assets	62 %			63 %		59 %
Total debt to asset ratio	36 %	38 %	40 %	43 %	33 %	35 %

## Balance Sheet at Market Values 2015 MI Dairy Herds (250-449 Cows)

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

	Avg. Of					
	AVG. OI All Farm		Low 50	)응	High 5	0 %
Number of farms			8	3	-	8
	Beginning	Ending	Beginning	Ending	Beginning	Ending
Assets						
Current Farm Assets		40.000		40.004	C7 701	44 700
Cash and checking balance Prepaid expenses & supplies	52,667 57,728				67,791 89,121	
Growing crops	28,091	36,610	26,336	20,219 41 201	89,121 28,089	32,020
Accounts receivable	62,627	54,954				
Hedging accounts	02,027	01,001				
Crops held for sale or feed	385,342					
Crops under government loan			. 0	. 0	0	0
Market livestock held for sale	17,838	18,805	5,634	5,847	30,041 1,153	31,763
Other current assets	-16 <b>,</b> 923	-6,328	-35,000			
Total current farm assets	587,371	566,410	524 <b>,</b> 777	503,864	649,964	628,955
Intermediate Farm Assets						
Breeding livestock	841.181	830.345	779,382	783,415	902,980	877,274
Machinery and equipment			560,612			
Titled vehicles			17,878			
Other intermediate assets	65 <b>,</b> 777	70,549	39,607	38,851	91 <b>,</b> 947	102,248
Total intermediate farm assets	1,638,556	1,699,067	1,397,479	1,480,396	1,879,633	1,917,737
Long Term Farm Assets						
Farm land	1,400,100	1,486,950	1,265,154	1,265,154	1,535,046	1,708,746
Buildings and improvements	1,014,755					
Other long-term assets	17,201	23,691	16,942	25,996	17,461	21,386
Total long-term farm assets	2,432,056					
Total Farm Assets	4,657,983	4,833,710	3,945,159	4,030,878	5,370,806	5,636,541
Total Nonfarm Assets	486,711	489,321	169,953	174,139	803,469	804,502
Total Assets	5,144,693	,	,			
Liabilities Current Farm Liabilities						
Accrued interest	842	1 754	1,471	2 121	213	1,088
Accounts payable	36,218					
Current notes	57,677	82,144				
Government crop loans	, 0	. 0				
Principal due on term debt	94,942	113,289	80,680		109,205	143,863
Total current farm liabilities	189,680	248,780	206,232	254 <b>,</b> 156	173 <b>,</b> 127	243,404
Total intermediate farm liabs	280,897	317,635	160,406	262,570	401,387	372,700
Total long term farm liabilities	939,232	,				1,045,582
Total farm liabilities	1,409,808	,	,			
Total nonfarm liabilities	20,328	20 042	35,232	22 007	E 40E	7 170
Total liabs excluding deferreds	1,430,136	20,043	,			7,178
Total deferred liabilities	1,430,130	1,000,020		1,442,505		
Total liabilities	1,430,136					
Retained earnings	2,528,956					
Market valuation equity	1,185,601					
Net worth (farm and nonfarm)	3,714,557					
Net worth excluding deferreds Net worth change	3,714,557	52,549	2,198,331	-36,305		4,772,179
Percent net worth change		1 %		-30,303		3 %
_						
Ratio Analysis Current farm liabilities / assets	32 %	44 %	39 %	50 %	27 %	39 %
Intermediate farm liab. / assets	52 8 17 8	44 8 19 8		50 % 18 %		39 8 19 8
Long term farm liab. / assets	39 %	38 %		44 %		34 %
Total debt to asset ratio	28 %	29 %	32 %	34 %		
Debt to assets excl deferreds	28 %	29 %	32 %	34 %		

Table	57

# Statement Of Cash Flows **2015 MI Dairy Herds (250-449 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Beginning cash (farm & nonfarm)	53,030	37,544	68,516
Cash Provided By Operating Activities Gross cash farm income Total cash farm expense Net cash from hedging transactions Cash provided by operating	1,764,249		-1,550,387
Cash Provided By Investing Activities Sale of breeding livestock Sale of machinery & equipment Sale of titled vehicles	11,268 2,022	22,537 3,481 -	_ 563 _
Sale of farm land Sale of farm buildings Sale of other farm assets Sale of nonfarm assets	4,742 88 8,574	176	
Purchase of breeding livestock Purchase of machinery & equip. Purchase of titled vehicles	-8,840 -103,998 -	-17,362 -98,520 -	-109,477
Purchase of farm land Purchase of farm buildings Purchase of other farm assets Purchase of nonfarm assets	-53,692 -86,293 -10,681 -11,572	-61,089 -8,773 -9,767	-12,588 -13,376
Cash provided by investing Cash Provided By Financing Activities	-248,382	-155,830	-340,933
Money borrowed Principal payments Personal income Family living/owner withdrawals Income and social security tax Capital contributions Capital distributions Dividends paid	325,558 -218,339 6,778 -73,822 -983 1,141 -	-248,741 11,197 -67,684	-187,938 2,360 -79,960
Cash gifts and inheritances Gifts given Other cash flows Cash provided by financing	453 -2,188 - 38,598	- - 46,623	906 -4,375 _ 30,573
Net change in cash balance Ending cash (farm & nonfarm) Discrepancy	-8,842 44,188 0	5,315 42,859 0	-22,999 45,518 -

Table	58

# Financial Standards Measures 2015 MI Dairy Herds (250-449 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Liquidity Current ratio Working capital Working capital to gross inc	2.28 317,630 18.3 %	1.98 249,708 14.9 %	2.58 385,551 21.4 %
Solvency (market) Farm debt to asset ratio Farm equity to asset ratio Farm debt to equity ratio	32 % 68 % 0.47	35 % 65 % 0.54	29 % 71 % 0.42
Profitability (cost) Rate of return on farm assets Rate of return on farm equity Operating profit margin Net farm income EBITDA	1.0 % -0.9 % 3.0 % 64,202 228,593	-0.6 % -4.1 % -1.9 % 7,320 145,206	2.3 % 1.5 % 7.0 % 121,085 311,979
Repayment Capacity Capital debt repayment capacity Capital debt repayment margin Replacement margin Term debt coverage ratio Replacement coverage ratio	173,275 9,054 -24,330 1.06 0.88	99,661 -50,195 -74,327 0.67 0.57	246,888 68,303 25,666 1.38 1.12
Efficiency Asset turnover rate (cost) Operating expense ratio Depreciation expense ratio Interest expense ratio Net farm income ratio	32.7 % 86.9 % 6.3 % 3.1 % 3.7 %	33.2 % 91.3 % 4.9 % 3.3 % 0.4 %	32.3 % 82.7 % 7.6 % 3.0 % 6.7 %

Table 5	59
---------	----

# Operator and Labor Information **2015 MI Dairy Herds (250-449 Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	16	8	8
Operator Information Average number of operators Average age of operators Average number of years farming	1.6 52.5 24.6	1.5 50.6 21.4	1.6 54.2 27.5
Results Per Operator Working capital Total assets (market) Total liabilities Net worth (market) Net worth excl deferred liabs	203,283 3,406,739 995,792 2,410,948 2,410,948	166,472 2,803,345 961,990 1,841,355 1,841,355	1,026,993 2,936,726
Gross farm income Total farm expense Net farm income from operations	1,113,788 1,072,699 41,089	1,117,567 1,112,687 4,880	1,110,300 1,035,786 74,514
Net nonfarm income Family living & tax withdrawals	4,338 47,875	7,465 45,923	1,452 49,677
Total acres owned Total crop acres Crop acres owned Crop acres cash rented Crop acres share rented Total pasture acres	241.5 466.1 248.2 217.9 _	183.4 525.6 302.8 222.7	295.1 411.2 197.7 213.5 _
Labor Analysis Number of farms Total unpaid labor hours Total hired labor hours Total labor hours per farm Unpaid hours per operator Value of farm production / hour Net farm income / unpaid hour Average hourly hired labor wage	16 4,870 17,691 22,562 3,117 52.18 13.18 15.41	8 5,162 17,913 23,075 3,441 45.87 1.42 13.96	8 4,579 17,470 22,049 2,818 58.78 26.44 16.90
Partnerships & LLCs Number of farms Number of operators Owner withdrawals per farm Withdrawals per operator	8 2.1 80,116 35,607	4 2.0 _ _	4 2.3 -

## Financial Summary 2015 MI Dairy Herds (250-449 Cows)

2015 M	I Dairy Her	as (250-4	49 Cows)	
(Farms Sorted	By Rate of	Return o	n Assets -	· Mkt)
	Avg. Of			
	All Farms	Low 50%	High 50%	
Number of farms	16	8	8	
Income Statement				
Gross cash farm income	1,764,249	1,690,749	1,837,748	
Total cash farm expense	1,563,670	1,576,953	1,550,387	
Net cash farm income	200,578	113,796 -23,509	287,361	
Inventory change		-23,509	-29,206	
Depreciation	-110,019	-82,967	-137,071	
Net farm income from operations	64,202	,,520	121,000	
Gain or loss on capital sales	-			
Average net farm income	64,202		121,085	
Median net farm income	92,324	22,299	135,862	
Profitability (cost)	1 0 0	0 6 0	0 0 0	
Rate of return on assets	1.0 %	-0.6 %		
Rate of return on equity	-0.9 %			
Operating profit margin	3.0 %	-1.9 %		
Asset turnover rate	32.7 %	33.2 %	32.3 %	
Profitability (market)				
Profitability (market) Rate of return on assets	2.2 %	0.0 %	3.8 %	
	1.5 %			
Rate of return on equity	1.5 % 8.9 %	-2.0 %		
Operating profit margin Asset turnover rate	8.9 % 24.8 %	0.1 % 26.5 %		
Asset turnover rate	24.0 %	20.0 %	23.0 %	
Liquidity & Repayment (end of year)				
Current assets	566,410	503,864	628,955	
Current liabilities	248,780			
Current ratio	2.28	1.98		
Working capital		249,708		
Working capital to gross inc	18.3 %	14.9 %		
Term debt coverage ratio	1.06	0.67		
Replacement coverage ratio	0.88	0.57		
Term debt to EBITDA	5.34	7.41		
Solvency (end of year at cost)				
Number of farms	16	8	8	
Total assets	4,068,279	3,328,431	4,808,127	
Total liabilities		1,442,985		
Net worth	2,512,354	1,885,446	3,139,263	
Net worth change	-16,601	-57,624	24,421	
Farm debt to asset ratio	42 %	44 %	41 %	
Total debt to asset ratio	38 %	43 %	35 %	
Change in earned net worth %	-1 %	-3 %	1 %	
Solvency (end of year at market)				
Number of farms	16	8		
Total assets		4,205,018		
Total liabilities	1,555,925	1,442,985	1,668,864	
Net worth		2,762,032	4,772,179	
Total net worth change	52,549			
Farm debt to asset ratio	32 %	35 %	29 %	
Total debt to asset ratio	29 %	34 %		
Change in total net worth %	1 %	-1 %	3 %	
Neg form To formation				
Nonfarm Information	C 330	11 100	0 0 0 0	
Net nonfarm income	6 <b>,</b> 778	11,197	2,360	
Crop Jaros				
Crop Acres	728	788	668	
Total crop acres Total crop acres owned	388	454	321	
Total crop acres owned Total crop acres cash rented	341	454 334	347	
Total crop acres share rented	541	- 554	- 547	
Machinery value per crop acre	1,050	784	1,364	
machinery varac ber crop acte	1,000	/04	1,004	

Table (	61
---------	----

# Summary Farm Income Statement 2015 MI Dairy Herds (250-449 Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%	
Number of farms	16	8	8	
Crop sales Crop inventory change Gross crop income	56,396 -28,955 27,441	76,470 -55,896 20,574	36,321 -2,014 34,307	
Livestock sales Livestock inventory change Gross livestock income	1,529,764 967 1,530,731	213	1,721	
Government payments Other cash farm income Change in accounts receivable Gain or loss on hedging accounts Change in other assets Gain or loss on breeding lvst Gross farm income		20,021 129,321 -3,535 728 34,885 9,207 1,676,350		
Cash operating expenses Change in prepaids and supplies Change in growing crops Change in accounts payable Depreciation Total operating expense	15,374	1,522,983 117 -13,107 21,151 82,967 1,614,112	-3,931 9,596 137,071	
Interest paid Change in accrued interest Total interest expense Total expenses	53,459 913 54,371 1,676,092	53,970 949 54,919 1,669,031	,	
Net farm income from operations Gain or loss on capital sales	64,202	7,320	121,085	
Net farm income	64,202	7,320	121,085	

Table 62 Crop Production 2015 MI Dai	n and Marketin <b>ry Herds (450+</b>			
(Farms Sorted By Rat			Ikt)	
	Avg. Of			
	All Farms	Low 50%	High 50%	
Dairy				
Number of farms	21	10	11	
Average number of cows	812	846	764	
Milk production per cow lbs.,	26,253	27,156	25 <b>,</b> 356	
Average milk price per cwt.,	\$17.75	\$16.44	\$18.90	
Acreage Summary				
Total acres owned	928	673	1,160	
Total crop acres	1,815	1,673	1,945	
Crop acres owned	978	726	1,207	
Crop acres cash rented	834	941	738	
Crop acres share rented	3	6	-	
Total pasture acres	13	2	23	
Percent crop acres owned	54 %	43 %	62 %	
Mach invest/crop acre cost	724	785	677	
Mach invest/crop acre market	1,129	895	1,312	
Average Price Received (Cash Sales (	Only)			
Corn per bushel	3.79	-	-	
Soybeans per bushel	9.27	9.33	-	
Wheat, Winter per bushel	4.58	-	-	
Average Yield Per Acre				
Corn Silage (ton)	22.24	_	22.83	
Haylage, Alfalfa (ton)	10.60	_	10.50	
Corn (bushel)	152.12	_	156.27	

## E. Financial Summary Information, Herds with 450 + Cows

Тa	ble	63

# Farm Income Statement **2015 MI Dairy Herds (450+ Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Cash Farm Income			
Beans, Black Turtle	1,408	-	2,687
Corn	125,181	49,277	194,186
Corn Silage	2,888	-	5,514
Hay, Alfalfa	540	1,133	-
Hay, Mixed	320	-	611
Haylage, Alfalfa	39,475	-	75 <b>,</b> 362
Haylage, Mixed	907	-	1,732
Oats	389	-	742
Soybeans	93,261	68 <b>,</b> 074	116,159
Straw	880	1,848	-
Sugar Beets	13,786	-	26,319
Wheat, Spring	9,682	6,945	12,170
Wheat, Winter	18,556	21,082	16,260
Soybeans, Organic	464	-	886
User Added Crop	18,074	-	34,504
Miscellaneous crop income	49	-	93
Beef Cow-Calf, Beef Calves	8,950	3,420	13 <b>,</b> 977
Dairy, Milk	3,674,219	3,764,369	3,592,265
Dairy, Dairy Calves	103,659	110,302	97 <b>,</b> 619
Dairy Heifers (for sale)	3,221	6,686	71
Dairy Replacement Heifers	52,119	51,446	52 <b>,</b> 731
Dairy Finishing	36,636	32,169	40,696
Dairy Feeder	37,062	159	70,610
Dairy Backgrounding	569	-	1,085
Cull breeding livestock	310,187	269,116	347,524
Misc. livestock income	57	120	-
Crop government payments	39,894	48,423	32,140
Other government payments	21,275	12,388	29 <b>,</b> 355
Custom work income	31,009	5,252	54,424
Patronage dividends, cash	28,802	25 <b>,</b> 951	31,394
Crop insurance income	36,019	65 <b>,</b> 040	9,636
Property insurance income	21,778	5,614	36,472
Sale of resale items	40,240	-	76,822
Livestock insurance inc	643	1,350	-
Real estate tax refund	3,650	7,665	-
Other farm income	131,353	179 <b>,</b> 027	88,012
Gross Cash Farm Income	4,907,200	4,736,855	5,062,059

## Farm Income Statement (continued) **2015 MI Dairy Herds (450+ Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Cash Farm Expense			
Seed	147,448	149,830	145,282
Fertilizer	119,517	102,193	135,266
Crop chemicals	65,248	64,800	65,655
Crop insurance	17,107	6,601	26,657
Drying expense	2,812	3,681	2,022
Storage	1,077	14	2,044
Irrigation energy	240	_	459
Crop packaging and supplies	3,160	6,636	-
Crop fuel & oil	2,185	-	4,172
Crop hauling and trucking	1,349	1,872	873
Crop marketing	4,970	1,226	8,373
Crop miscellaneous	43,258	10,479	73,058
Crop consultants	388	119	632
Purchased feed	1,234,125		
Breeding fees	32,318	27,879	36,353
Veterinary	107,697	122,682	94,075
Livestock supplies	86,588	78,144	94,264
DHIA	3,121	4,994	1,418
Contract production exp.	90,786	64,092	115,054
Livestock insurance	, 504	1,058	-
Livestock hauling and trucking	103,935	103,480	104,349
Livestock marketing	42,438	35,244	48,979
Bedding	43,414	40,763	45,825
Livestock consultants	4,681	7,710	1,927
Interest	151 <b>,</b> 574	178,987	126,653
Packaging and supplies	4,520	8,053	1,308
Supplies	77 <b>,</b> 798	59 <b>,</b> 540	94,397
Fuel & oil	121 <b>,</b> 395	108,228	133,365
Repairs	170,302	137,683	199,956
Repair, machinery	59 <b>,</b> 082	53 <b>,</b> 091	64,529
Repair, livestock equip	2,318	4,868	-
Custom hire	146,714	125 <b>,</b> 553	165,951
Repair, buildings	20,171	14,426	25,395
Hired labor	686,398	664 <b>,</b> 107	706,662
Land rent	181,894	206,110	159,881
Machinery leases	38,493	62 <b>,</b> 167	16,970
Building leases	77 <b>,</b> 529	155 <b>,</b> 920	6,265
Real estate taxes	34,552	24,177	43,985
Personal property taxes	893	1,294	529
Farm insurance	59 <b>,</b> 059	55 <b>,</b> 786	62,035
Utilities	97,242	92,889	101,200
Hauling and trucking	5,014	-	9,571
Marketing	5,237	10,871	115
Dues & professional fees	21,597	22,736	20,561
Miscellaneous	18,745	16,725	20,581

Total cash expense Net cash farm income	4,138,894 768,306	4,225,889 510,966	4,059,807 1,002,251
Inventory Changes			
Prepaids and supplies	-148,190	-134,959	-160,218
Accounts receivable	-120,549	-129,855	-112,089
Hedging accounts	1,828	3,838	
Other current assets	2,890	-3,905	9,068
Crops and feed	40,277	-59,123	130,641
Market livestock	-14,084	6,301	-32,615
Breeding livestock	61,675	38,628	82,627
Other assets	-26,486	2,100	-52,474
Accounts payable	801	-73,823	68,641
Accrued interest	-2,529	-5,515	185
Total inventory change	-204,367	-356,313	-66,234
Net operating profit	563,939	154,653	936,018
Depreciation			
Machinery and equipment	-189,570	-125,408	-247,899
Titled vehicles	-423	, _	-808
Buildings and improvements	-122,568	-122,204	-122,898
Total depreciation	-312,561	-247,612	-371,605
Net farm income from operations	251,378	-92,959	564,413
Gain or loss on capital sales		-	-
Net farm income	251,378	-92,959	564,413
	, _, 0	52,505	001,110

Table 64		y Changes		
	015 MI Dairy			<b>.</b>
(Farms Sor	ted By Rate o	of Return	on Assets	- Mkt)
	Avg. Of All Farms	Low 50%	High 50%	
Number of farms	21	10	11 III III	
Net cash farm income	768,306	510,966	1,002,251	
rops and Feed				
Ending inventory	1,152,741	892,088	1,389,699	
Beginning inventory	1,112,464	951,211	1,259,058	
Inventory change	40,277	-59,123	130,641	
Market Livestock				
Ending inventory	81,550	31,185	127,336	
Beginning inventory	95,633	24,884	159,951	
Inventory change	-14,084	6,301	-32,615	
Accts Receivable				
Ending inventory	202.395	234,213	173,469	
Beginning inventory	322,944	364,068		
Inventory change	-120,549			
Prepaid Expenses and Supplies Ending inventory	226,411	218,980	233,166	
Beginning inventory	374,601	353,938	393,384	
Inventory change	-148,190			
Hedging Activities Ending inventory	929	1,950	_	
Withdrawals	899	1,888	_	
Beginning inventory	-	-	-	
Deposits	-	-	-	
Gain or loss	1,828	3,838	-	
ther Current Assets				
Ending inventory	72,528	44,265	98,222	
Beginning inventory	69,638	48,170	89,154	
Inventory change	2,890	-3,905	9,068	
Breeding Livestock				
Ending investory	2,591,183	2,738,968	2,456,833	
Capital sales		171,047	8,292	
Beginning inventory	2,329,649			
Capital purchases		538,002		
Depreciation, capital adjust	61 <b>,</b> 675	38,628	82,627	
Other Capital Assets				
Ending inventory	304,549	266,740	338,920	
Capital sales	56,657	59,976	53,640	
Beginning inventory Capital purchases	277,412 110,280	228,263 96,352	322,093 122,941	
Depreciation, capital adjust	-26,486	2,100	-52,474	
		· ·		
Accounts Payable	100 505	010 550	154 400	
Beginning inventory Ending inventory	182,523 181,722	213,753 287,576	154,132 85,491	
Inventory change	801	-73,823	68,641	
		-,0		
Accrued Interest			<b>.</b>	
Beginning inventory	3,533	3,632	3,443	
Ending inventory Inventory change	6,062 -2,529	9,147 -5,515	3,258 185	
	2,323	0,010	100	
Total inventory change	-204,367	-356,313	-66,234	
Net mention of the		154 650	000 010	
Net operating profit	563,939	154,653	936,018	

Table (	65
---------	----

### Depreciation **2015 MI Dairy Herds (450+ Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

Avg. Of All Farms Low 50% High 50%	
All Farms Low 50% High 50%	
Number of farms 21 10 11	
Net operating profit 563,939 154,653 936,018	
Machinery and Equipment	
Ending inventory 1,487,863 1,437,328 1,533,804	
Capital sales 12,753 10,031 15,227	
Beginning inventory 1,264,055 1,171,207 1,348,463	
Capital purchases 426,130 401,560 448,467	
Depreciation, capital adjust189,570 -125,408 -247,899	
Titled Vehicles	
Ending inventory         201,009         9,225         375,358           Capital sales         - <td></td>	
Beginning inventory 9,251 9,225 9,274	
Capital purchases	
Depreciation, capital adjust423808	
Buildings and Improvements	
Ending inventory 2,064,943 2,566,502 1,608,980	
Capital sales 538 396 667	
Beginning inventory 1,887,597 2,048,501 1,741,322	
Capital purchases 492,634 640,602 358,117	
Depreciation, capital adjust122,568 -122,204 -122,898	
Total depreciation, capital adj312,561 -247,612 -371,605	
Net farm income from operations 251,378 -92,959 564,413	
Gain or loss on capital sales	
Net farm income 251,378 -92,959 564,413	

### Profitability Measures **2015 MI Dairy Herds (450+ Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	20	10	11
Profitability (assets valued at cost Net farm income from operations Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	239,150 2.6 % 1.6 % 7.0 % 36.6 %	-92,959 -0.3 % -4.2 % -0.9 % 34.5 %	571,260 5.0 % 5.6 % 13.1 % 38.4 %
Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	158,119 138,740 258,529 10,043,687 100,410 6,238,259 3,676,625	184,502 119,149 -27,606 9,289,905 -212,107 5,081,554 3,209,645	131,736 158,332 544,663 10,797,469 412,928 7,394,963 4,143,605
	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Profitability (assets valued at mark Net farm income from operations Rate of return on assets Rate of return on equity Operating profit margin Asset turnover rate	et) 458,497 3.5 % 3.2 % 12.9 % 26.8 %	-192,163 -1.1 % -4.4 % -4.0 % 28.4 %	1,050,005 6.5 % 7.3 % 25.2 % 25.8 %
Farm interest expense Value of operator lbr and mgmt. Return on farm assets Average farm assets Return on farm equity Average farm equity Value of farm production	154,103 144,038 468,561 13,514,276 314,458 9,716,560 3,623,510	184,502 119,149 -126,809 11,299,664 -311,311 7,091,313 3,209,645	126,468 166,665 1,009,807 15,527,560 883,339 12,103,148 3,999,752

### Liquidity & Repayment Capacity Measures 2015 MI Dairy Herds (450+ Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Liquidity			
Current ratio	2.39	1.36	4.05
Working capital	1,212,824	413,736	1,939,267
Working capital to gross inc	25.0 %	9.0 %	38.1 %
Current assets	2,086,473	1,548,714	2,575,345
Current liabilities	873 <b>,</b> 649	1,134,978	636 <b>,</b> 078
Gross revenues (accrual)	4,857,635	4,598,828	5,092,915
Repayment capacity			
Net farm income from operations	251 <b>,</b> 378	-92 <b>,</b> 959	564,413
Depreciation	312 <b>,</b> 561	247,612	371 <b>,</b> 605
Personal income	30,486	5 <b>,</b> 558	53,148
Family living/owner withdrawals	-169,062	-92 <b>,</b> 758	-238,428
Cash discrepancy	0	0	0
Payments on personal debt	<b>-</b> 5,739	-1,738	-9,377
Income taxes paid	-39,805	-	-75,992
Interest on term debt	155,691	165 <b>,</b> 417	146,850
Capital debt repayment capacity	535 <b>,</b> 510	231,131	812,219
Scheduled term debt payments	-408,860	-407,104	-410,457
Capital debt repayment margin	126,650	-175,973	401,762
Cash replacement allowance	-83,255	-52,251	
Replacement margin	43,395	-228,224	290,321
Term debt coverage ratio	1.31	0.57	
Replacement coverage ratio	1.09	0.50	1.56

### Balance Sheet at Cost Values 2015 MI Dairy Herds (450+ Cows)

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

	Avg. Of All Farms	Low 50	% High 50	8
Number of farms	21	1	0 1	1
Accoto	Beginning End	ng Beginning	Ending Beginning	Ending
Assets Current Farm Assets Cash and checking balance Prepaid expenses & supplies	366,700 351, 388,160 232,			
Growing crops Accounts receivable Hedging accounts Crops held for sale or feed	56,297 51, 333,240 206, 0 1,141,680 1,183,	46 364,068 75 0	1,950 0	179,678 0
Crops under government loan Market livestock held for sale Other current assets	0 4, 100,415 85, 15,533 23,	75 0 07 24,884 96 851	8,750 0 31,185 175,946 935 30,215	0 140,030 46,457
Total current farm assets	2,402,025 2,139,	56 1,894,762	1,548,714 2,909,287	2,731,197
Intermediate Farm Assets Breeding livestock Machinery and equipment Titled vehicles Other intermediate assets Total intermediate farm assets	1,255,057 1,487, 9,713 9, 227,415 256,	66 1,171,207 69 9,225 28 168,413	2,738,968 2,362,688 1,437,328 1,338,908 9,225 10,201 210,233 286,418 4,395,754 3,998,214	1,538,205 9,313 302,624
Long Term Farm Assets	5,040,222 4,570,	21 3,002,230	4,393,734 3,990,214	4,330,407
Farm land Buildings and improvements Other long-term assets	1,791,999 2,168, 44,898 45,	90 2,048,501 05 59,850	1,208,325 1,946,882 2,566,502 1,535,497 56,507 29,947	1,769,878 34,303
Total long-term farm assets Total Farm Assets			3,831,334 3,512,325 9,775,80310,419,8273	
Total Nonfarm Assets Total Assets			58,244 630,666 9,834,04711,050,493	-
Liabilities Current Farm Liabilities Accrued interest Accounts payable Current notes Government crop loans Principal due on term debt Total current farm liabilities		08         213,753           53         243,622           00         0           87         241,687	287,576 166,423 413,825 209,347 4,600 0	276,282 0 287,948
Total intermediate farm liabs Total long term farm liabilities Total farm liabilities		47 1,952,165	1,716,972 702,475 1,921,840 1,817,793 4,773,790 3,172,009	2,335,454
Total nonfarm liabilities Total liabilities			16,406 117,118 4,790,196 3,289,127	
Net worth (farm and nonfarm) Net worth change Percent net worth change	97,		5,043,851 7,761,366 -153,911 -3 %	8,109,628 348,262 4 %
Ratio Analysis Current farm liabilities / assets Intermediate farm liab. / assets Long term farm liab. / assets Total debt to asset ratio	22 % 2 56 % 5	%     37 %       %     27 %       %     60 %       %     41 %	39 % 18 % 50 % 52 %	15 % 57 %

# Balance Sheet at Market Values 2015 MI Dairy Herds (450+ Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	2		,
	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
	Beginning Endi	ng Beginning Ending	g Beginning Ending
Assets			5 5 5
Current Farm Assets			
Cash and checking balance	331,944 346,7	40 150,419 119,35	7 496,966 553,453
Prepaid expenses & supplies	374,601 226,4		393,384 233,166
Growing crops	54,845 49,9		
Accounts receivable	322,944 202,3		
Hedging accounts		29 0 1,950	
Crops held for sale or feed	1,113,451 1,151,7		5 1,259,058 1,389,699
Crops under government loan			0 0
Market livestock held for sale		50 24,884 31,18	
Other current assets			5 27,468 42,234
Total current farm assets		73 1,894,762 1,548,714	
	2,000,210 2,000,1		
Intermediate Farm Assets			
Breeding livestock		26 2,333,385 2,738,968	
Machinery and equipment		36 1,391,981 1,550,988	
Titled vehicles	19,538 25,8	72 27,015 24,95	5 12,741 26,706
Other intermediate assets		91 168,413 210,233	
Total intermediate farm assets	4,497,583 5,020,9	25 3,920,794 4,525,14	4 5,021,936 5,471,635
Long Term Farm Assets			
Farm land	2 702 770 4 025 5	53 2,741,864 2,804,64	5 4 576 221 5 154 550
Buildings and improvements		89 2,250,702 2,800,949	
Other long-term assets		57 59,850 56,50 <sup>°</sup>	
Total long-term farm assets		99 5,052,416 5,662,102	
Total Farm Assets	12,967,14814,063,5	9710,867,97311,735,960	J14,8/5,48816,1/9,631
Total Nonfarm Assets	388,526 414,9	46 95,161 98,704	4 655,222 702,438
Total Assets	13,355,67314,478,5	4310,963,13311,834,664	415,530,71016,882,069
Liabilities			
Current Farm Liabilities			
Accrued interest	3,533 6,0	65 3,632 9,152	2 3,443 3,258
Accounts payable	182,523 181,7		
Current notes	219,287 332,3		
Government crop loans	0 2,1		
Principal due on term debt	253,169 351,2	-	
Total current farm liabilities	658,511 873,6		
iotal cullent laim liabilities	000,011 070,0	49 102,094 1,134,976	5 010,545 050,078
Total intermediate farm liabs	833,689 1,140,0	14 992,657 1,716,972	2 689,173 615,507
Total long term farm liabilities	1,900,018 2,191,7	43 1,952,165 1,921,840	0 1,852,611 2,437,110
Total farm liabilities		07 3,647,515 4,773,790	
Total nonfarm liabilities		14 18,035 16,40	
Total liabs excluding deferreds	3,456,576 4,268,0	21 3,665,550 4,790,19	6 3,266,600 3,793,315
Total deferred liabilities	0	0 0 0	
Total liabilities	3,456,576 4,268,0	21 3,665,550 4,790,19	6 3,266,600 3,793,315
Net worth (farm and nonfarm)	0 000 00710 210 5	22 7,297,583 7,044,468	212 264 11012 000 754
Net worth excluding deferreds		22 7,297,583 7,044,468	
Net worth change	311,4	-	
Percent net worth change	3	°s −3 °	8 7 8
Ratio Analysis			
Current farm liabilities / assets	29 % 42	8 37 8 73 9	8 23 8 25 8
Intermediate farm liab. / assets	19 % 23		
Long term farm liab. / assets	31 % 32		
Total debt to asset ratio	26 % 29		
Debt to assets excl deferreds	26 % 29		
Pere co append ever dererreda	20 0 29	5 55 % 40	

Table	70

# Statement Of Cash Flows **2015 MI Dairy Herds (450+ Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Beginning cash (farm & nonfarm)	331,944	150,419	496,966
Cash Provided By Operating Activities Gross cash farm income Total cash farm expense Net cash from hedging transactions	4,907,200 -4,138,894	4,736,855 -4,225,889 1,888	-4,059,807
Cash provided by operating		512,854	
Cash Provided By Investing Activities Sale of breeding livestock Sale of machinery & equipment	85,794 12,753	171,047 10,031	
Sale of titled vehicles Sale of farm land	6,391		12,201
Sale of farm buildings Sale of other farm assets Sale of nonfarm assets	538 56,657 95		667 53,640 182
Purchase of breeding livestock Purchase of machinery & equip. Purchase of titled vehicles	-285,653 -426,130 -	-538,002 -401,560	-56,245 -448,467 -
Purchase of farm land Purchase of farm buildings Purchase of other farm assets	-235,876 -492,634 -110,280	-85,056 -640,602	-372,986 -358,117
Purchase of nonfarm assets Cash provided by investing	-4,203 -1,392,548	-	-8,024
Cash Provided By Financing Activities Money borrowed	1,396,138		
Principal payments Personal income Family living/owner withdrawals	-588,615 30,486 -169,062	5,558	53,148
Income and social security tax Capital contributions Capital distributions	-39,805 24,530 -15,518	-	-75 <b>,</b> 992
Dividends paid Cash gifts and inheritances	-15,516 - -	-	-29,023
Gifts given Other cash flows Cash provided by financing	-15 - 638,140	- - 976,206	-28 - 330,806
Net change in cash balance	14,797	-31,063	56,487
Ending cash (farm & nonfarm) Discrepancy	346,740 0	119,357 0	553,453 0

Table	71
-------	----

# Financial Standards Measures **2015 MI Dairy Herds (450+ Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Liquidity Current ratio Working capital Working capital to gross inc	2.39 1,212,824 25.0 %	1.36 413,736 9.0 %	
Solvency (market) Farm debt to asset ratio Farm equity to asset ratio Farm debt to equity ratio	30 % 70 % 0.43	41 % 59 % 0.69	23 % 77 % 0.30
Profitability (cost) Rate of return on farm assets Rate of return on farm equity Operating profit margin Net farm income EBITDA	2.6 % 1.6 % 7.0 % 263,947 753,944		13.1 %
Repayment Capacity Capital debt repayment capacity Capital debt repayment margin Replacement margin Term debt coverage ratio Replacement coverage ratio	535,510 126,650 43,395 1.31 1.09	231,131 -175,973 -228,224 0.57 0.50	812,219 401,762 290,321 1.98 1.56
Efficiency Asset turnover rate (cost) Operating expense ratio Depreciation expense ratio Interest expense ratio Net farm income ratio	36.6 % 85.2 % 6.4 % 3.2 % 5.2 %	34.5 % 92.6 % 5.4 % 4.0 % -2.0 %	38.4 % 79.1 % 7.3 % 2.5 % 11.1 %

Table	72
10.010	

# Operator and Labor Information **2015 MI Dairy Herds (450+ Cows)** (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Operator Information Average number of operators Average age of operators Average number of years farming	1.8 51.0 22.5	1.5 54.7 25.1	2.0 48.5 20.8
Results Per Operator Working capital Total assets (market) Total liabilities Net worth (market) Net worth excl deferred liabs	688,360 8,217,551 2,422,390 5,795,161 5,795,161	3,193,464 4,696,312	8,441,034 1,896,658 6,544,377
Gross farm income Total farm expense Net farm income from operations	2,757,036 2,614,362 142,674	3,065,886 3,127,858 -61,973	
Net nonfarm income Family living & tax withdrawals	17,303 118,546	3,705 61,839	•
Total acres owned Total crop acres Crop acres owned Crop acres cash rented Crop acres share rented Total pasture acres	526.6 1,030.4 555.1 473.6 1.6 7.2	448.5 1,115.4 484.0 627.4 4.0 1.0	580.0 972.4 603.6 368.8 _ 11.4
Labor Analysis Number of farms Total unpaid labor hours Total hired labor hours Total labor hours per farm Unpaid hours per operator Value of farm production / hour Net farm income / unpaid hour Average hourly hired labor wage	21 5,419 41,142 46,561 3,076 77.82 46.39 16.68	10 5,100 40,194 45,294 3,400 70.86 -18.23 16.52	11 5,709 42,004 47,713 2,854 83.83 98.87 16.82
Partnerships & LLCs Number of farms Number of operators Owner withdrawals per farm Withdrawals per operator	16 1.9 _ _	8 1.5 _ _	8 2.4 _ _

#### Financial Summary 2015 MI Dairy Herds (450+ Cows)

2	015 MI Dairy H	lerds (450	+ Cows)	
(Farms Sor	ted By Rate o	f Return o	on Assets -	- Mkt)
	Avg. Of			
	All Farms	Low 50%	High 50%	
Number of farms	21	10	11	
Income Statement				
Gross cash farm income	4,907,200	4,736,855	5,062,059	
Total cash farm expense		4,225,889		
Net cash farm income		510,966		
Inventory change		-356,313		
Depreciation	-312,561	-247,612	-371,605	
Net farm income from operatio				
Gain or loss on capital sales		-	-	
Average net farm income	251,378	-92,959	564,413	
Median net farm income	264,406	39,535	544,609	
Profitability (cost)				
Rate of return on assets	2.6 %	-0.3 %	5.0 %	
Rate of return on equity	1.6 %	-4.2 %	5.6 %	
Operating profit margin	6.8 %			
Asset turnover rate	37.9 %			
Profitability (market)				
Rate of return on assets	3.5 %	-1.1 %	6.5 %	
Rate of return on equity	3.2 %			
Operating profit margin				
Asset turnover rate	26.8 %			
Liquidity & Repayment (end of ye	ar)			
Current assets		1,548,714	2,575,345	
Current liabilities		1,134,978		
Current ratio				
Working capital	1,212,824	1.36 413,736	1,939,267	
Working capital to gross inc	25.0 %			
Term debt coverage ratio	1.31			
Replacement coverage ratio				
Term debt to EBITDA	4.02	8.68		
Solvency (end of year at cost)				
Number of farms	20	10	10	
Total assets	10,845,881	9,834,047	11,857,715	
Total liabilities		4,790,196		
Net worth		5,043,851		
Net worth change		-153,911		
Farm debt to asset ratio	40 %			
Total debt to asset ratio	39 %	49 %	32 %	
Change in earned net worth %		-3 %	4 %	
Solvency (end of year at market)				
Number of farms	21	10	11	
Total assets	14,478,543	11,834,664	16,882,069	
Total liabilities	4,268,021	4,790,196	3,793,315	
Net worth	10,210,522	7,044,468	13,088,754	
Total net worth change	311,425	-253,115	824,644	
Farm debt to asset ratio	30 %	41 %	23 %	
Total debt to asset ratio	29 %	40 %	22 %	
Change in total net worth %	3 %	-3 %	7 %	
Nonfarm Information				
Net nonfarm income	30,486	5 <b>,</b> 558	53,148	
Crop Acres				
Total crop acres	1,815	1,673	1,945	
Total crop acres owned	978	726	1,207	
Total crop acres cash rented	834	941	738	
Total crop acres share rented	. 3	6	-	
Machinery value per crop acre		895	1,312	
			•	

### Summary Farm Income Statement 2015 MI Dairy Herds (450+ Cows) (Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms	Low 50%	High 50%
Number of farms	21	10	11
Crop sales	325,859	148,357	487,225
Crop inventory change	40,277	-59,123	130,641
Gross crop income	366,137	89,234	617,866
Livestock sales	3,916,434	3,968,551	3,869,054
Livestock inventory change	-14,084	6,301	-32,615
Gross livestock income	3,902,350	3,974,852	3,836,440
Government payments	61,225	60,859	61,559
Other cash farm income	603,681	559,088	644,221
Change in accounts receivable	-120,549	-129,855	-112,089
Gain or loss on hedging accounts	1,828	3,838	-
Change in other assets	-18,712	2,185	37,709
Gain or loss on breeding lvst	61,675	38,628	82,627
Gross farm income	4,857,635	4,598,828	5,092,915
Cash operating expenses	3,987,320	4,046,903	3,933,154
Change in prepaids and supplies	148,190	134,959	160,218
Change in growing crops	4,884	3,990	5,698
Change in accounts payable	-801	73,823	-68,641
Depreciation	312,561	247,612	371,605
Total operating expense	4,452,154	4,507,286	4,402,034
Interest paid	151,574	178,986	126,653
Change in accrued interest	2,529	5,515	-185
Total interest expense	154,103	184,502	126,468
Total expenses	4,606,257	4,691,787	4,528,502
Net farm income from operations	251,378	-92,959	564,413
Gain or loss on capital sales	-	-	-
Net farm income	251 <b>,</b> 378	-92,959	564,413