



June 2018

2017 Michigan Farm Business Summary

Preliminary Report



Department of Food, Agriculture and Resource Economics
MICHIGAN STATE UNIVERSITY

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Overview

The Whole-Farm Business Analysis is the first report of all participating farms. Only early reporting farms are included in this report. In the past, about thirty more farms are included in a final report.

Also included are two subsets of Whole Farm Analyses -- Crop Farms and Dairy Farms. Farms are included as "dairy" or "crop" if over 70% of their gross farm income comes from that milk sales/dairy cattle or crop sales, respectively.

Highlights

	2014	2015	2016	2017
Dairy Farms				
Net Farm Income	\$454,445	\$84,765	\$19,984	\$142,861
Return on Farm Assets (FMV)	10.3	2.6	-0.01	2.3
Net Worth Change (FMV)	\$461,651	\$92,265	\$(25,138)	\$96,628
Debt Replacement Margin	\$367,733	\$(16,853)	\$(126,875)	\$(30,734)
Crop Farms				
Net Farm Income	\$103,530	\$23,585	\$62,353	\$77,293
Return on Farm Assets (FMV)	3.1	0.3	0.9	1.7
Net Worth Change (FMV)	\$114,786	\$40,988	\$108,412	\$161,552
Debt Replacement Margin	\$(5,145)	\$(61,811)	\$(22,455)	\$(44,737)

Enterprise Analysis

Enterprise Analysis calculates the cost of production and then adjusted by government payments received and unpaid operator labor. Crop enterprises include corn, corn silage, soybeans, alfalfa hay, alfalfa haylage, and winter wheat. Crop enterprise reports are sorted by owned and cash rent as well as by net return, in instances where there were not enough farms for analysis.

Dairy is the only livestock enterprise with enough farms to produce an enterprise report.

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Financial Summary
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	35
Income Statement			
Gross cash farm income	1,675,699	959,431	2,406,604
Total cash farm expense	1,465,177	909,937	2,056,682
Net cash farm income	210,522	49,494	349,922
Inventory change	-20,735	-65,106	40,432
Depreciation	-101,591	-59,417	-123,719
Net farm income from operations	88,196	-75,028	266,634
Gain or loss on capital sales	-	-	-
Average net farm income	88,196	-75,028	266,634
Median net farm income	42,204	-35,586	174,440
Profitability (cost)			
Rate of return on assets	1.6 %	-5.0 %	5.1 %
Rate of return on equity	0.4 %	-11.5 %	6.0 %
Operating profit margin	4.8 %	-16.6 %	12.5 %
Asset turnover rate	34.1 %	30.2 %	41.0 %
Profitability (market)			
Rate of return on assets	1.5 %	-5.5 %	6.4 %
Rate of return on equity	0.6 %	-9.6 %	7.6 %
Operating profit margin	6.0 %	-26.9 %	20.2 %
Asset turnover rate	24.8 %	20.6 %	31.9 %
Liquidity & Repayment (end of year)			
Current assets	839,046	448,495	1,152,239
Current liabilities	415,436	292,713	607,990
Current ratio	2.02	1.53	1.90
Working capital	423,610	155,783	544,248
Change in working capital	-20,185	-55,114	-6,320
Working capital to gross inc	25.3 %	17.2 %	21.8 %
Term debt coverage ratio	1.06	-0.14	1.69
Replacement coverage ratio	0.81	-0.10	1.33
Term debt to EBITDA	4.44	33.07	2.94
Solvency (end of year at cost)			
Number of farms	138	33	35
Total assets	4,311,395	2,495,190	5,412,471
Total liabilities	1,529,851	973,422	2,014,683
Net worth	2,781,544	1,521,769	3,397,789
Net worth change	103,184	61,139	224,799
Farm debt to asset ratio	38 %	43 %	39 %
Total debt to asset ratio	35 %	39 %	37 %
Change in earned net worth %	4 %	4 %	7 %
Solvency (end of year at market)			
Number of farms	139	34	35
Total assets	5,922,937	3,678,308	7,008,430
Total liabilities	1,540,686	996,651	2,014,683
Net worth	4,382,250	2,681,657	4,993,747
Total net worth change	144,431	23,027	386,528
Farm debt to asset ratio	28 %	31 %	30 %
Total debt to asset ratio	26 %	27 %	29 %
Change in total net worth %	3 %	1 %	8 %
Nonfarm Information			
Net nonfarm income	25,668	25,822	33,162
Crop Acres			
Total crop acres	1,012	603	1,266
Total crop acres owned	410	196	319
Total crop acres cash rented	588	407	903
Total crop acres share rented	14	-	44
Machinery value per crop acre	965	927	1,026

Whole Farm Report - All Farms

Financial Standards Measures
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	35
Liquidity			
Current ratio	2.02	1.53	1.90
Working capital	423,610	155,783	544,248
Working capital to gross inc	25.3 %	17.2 %	21.8 %
Solvency (market)			
Farm debt to asset ratio	28 %	31 %	30 %
Farm equity to asset ratio	72 %	69 %	70 %
Farm debt to equity ratio	0.39	0.46	0.43
Profitability (cost)			
Rate of return on farm assets	1.6 %	-5.0 %	5.1 %
Rate of return on farm equity	0.4 %	-11.5 %	6.0 %
Operating profit margin	4.9 %	-17.5 %	12.5 %
Net farm income	88,835	-77,302	266,634
EBITDA	247,265	22,355	463,844
Repayment Capacity			
Capital debt repayment capacity	180,924	-14,090	394,180
Capital debt repayment margin	10,446	-113,477	161,049
Replacement margin	-43,204	-148,528	97,449
Term debt coverage ratio	1.06	-0.14	1.69
Replacement coverage ratio	0.81	-0.10	1.33
Efficiency			
Asset turnover rate (cost)	33.9 %	28.6 %	41.0 %
Operating expense ratio	85.3 %	97.6 %	81.4 %
Depreciation expense ratio	6.1 %	6.6 %	5.0 %
Interest expense ratio	3.3 %	4.1 %	2.9 %
Net farm income ratio	5.3 %	-8.3 %	10.7 %

Whole Farm Report - All Farms

Summary Farm Income Statement
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	34
Crop sales	486,562	214,600	641,870
Crop inventory change	2,981	-28,492	80,976
Gross crop income	489,543	186,108	722,845
Livestock sales	1,007,911	646,152	1,554,016
Livestock inventory change	1,622	-11,097	9,244
Gross livestock income	1,009,533	635,056	1,563,260
Government payments	34,339	17,833	39,486
Other cash farm income	146,888	80,847	206,913
Change in accounts receivable	7,053	2,644	30,478
Gain or loss on hedging accounts	1,436	113	7,166
Change in other assets	-4,766	-6,126	-6,707
Gain or loss on breeding lvst	-9,660	-12,734	-32,587
Gross farm income	1,674,364	903,740	2,530,855
Cash operating expenses	1,409,883	874,184	2,015,768
Change in prepaids and supplies	19,729	9,698	35,438
Change in growing crops	-4,048	868	-14,735
Change in accounts payable	3,315	-2,707	26,778
Depreciation	101,591	59,417	124,225
Total operating expense	1,530,470	941,459	2,187,474
Interest paid	55,294	35,754	71,464
Change in accrued interest	405	1,555	1,216
Total interest expense	55,699	37,309	72,680
Total expenses	1,586,169	978,768	2,260,154
Net farm income from operations	88,196	-75,028	270,700
Gain or loss on capital sales	-	-	-
Net farm income	88,196	-75,028	270,700

Whole Farm Report - All Farms

Profitability Measures
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	138	33	35
Profitability (assets valued at cost)			
Net farm income from operations	90,184	-71,659	266,634
Rate of return on assets	1.6 %	-5.0 %	5.1 %
Rate of return on equity	0.4 %	-11.5 %	6.0 %
Operating profit margin	4.9 %	-17.5 %	12.5 %
Asset turnover rate	33.9 %	28.6 %	41.0 %
Farm interest expense	55,398	35,494	73,491
Value of operator lbr and mgmt.	81,213	75,742	85,873
Return on farm assets	64,369	-111,907	254,252
Average farm assets	3,915,245	2,235,668	4,956,974
Return on farm equity	8,971	-147,401	180,761
Average farm equity	2,415,247	1,286,761	3,007,902
Value of farm production	1,326,145	638,330	2,034,835

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	35
Profitability (assets valued at market)			
Net farm income from operations	106,158	-135,569	424,073
Rate of return on assets	1.5 %	-5.5 %	6.4 %
Rate of return on equity	0.6 %	-9.6 %	7.6 %
Operating profit margin	6.0 %	-26.9 %	20.2 %
Asset turnover rate	24.8 %	20.6 %	31.9 %
Farm interest expense	55,699	37,309	73,491
Value of operator lbr and mgmt.	81,708	77,926	85,873
Return on farm assets	80,149	-176,186	411,691
Average farm assets	5,345,194	3,188,951	6,387,821
Return on farm equity	24,450	-213,495	338,200
Average farm equity	3,834,163	2,215,888	4,438,749
Value of farm production	1,325,552	656,139	2,034,835

Whole Farm Report - All Farms

Liquidity & Repayment Capacity Measures
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	35
Liquidity			
Current ratio	2.02	1.53	1.90
Working capital	423,610	155,783	544,248
Working capital to gross inc	25.3 %	17.2 %	21.8 %
Current assets	839,046	448,495	1,152,239
Current liabilities	415,436	292,713	607,990
Gross revenues (accrual)	1,674,364	903,740	2,491,513
Repayment capacity			
Net farm income from operations	88,196	-75,028	266,634
Depreciation	101,591	59,417	123,719
Personal income	25,668	25,822	33,162
Family living/owner withdrawals	-72,002	-46,493	-81,132
Cash discrepancy	-27	-144	-8
Payments on personal debt	-1,753	-1,024	-2,481
Income taxes paid	-7,109	-1,368	-4,133
Interest on term debt	46,332	24,583	58,411
Capital debt repayment capacity	180,924	-14,090	394,180
Scheduled term debt payments	-170,478	-99,386	-233,132
Capital debt repayment margin	10,446	-113,477	161,049
Cash replacement allowance	-53,651	-35,051	-63,600
Replacement margin	-43,204	-148,528	97,449
Term debt coverage ratio	1.06	-0.14	1.69
Replacement coverage ratio	0.81	-0.10	1.33

Whole Farm Report - All Farms

Balance Sheet at Market Values
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	Avg. Of All Farms		Low 25%		High 25%	
Number of farms	139		34		35	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Assets						
Current Farm Assets						
Cash and checking balance	86,776	74,594	41,488	45,223	128,572	68,714
Prepaid expenses & supplies	117,357	97,628	35,664	25,967	174,673	142,484
Growing crops	26,831	30,880	31,247	30,379	24,860	39,277
Accounts receivable	73,122	80,175	43,684	46,328	87,082	117,524
Hedging accounts	843	709	353	441	435	395
Crops held for sale or feed	496,548	499,528	286,567	258,076	668,832	745,530
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	52,769	54,391	53,179	42,082	28,629	37,608
Other current assets	667	1,142	0	0	743	707
Total current farm assets	854,914	839,046	492,183	448,495	1,113,825	1,152,239
Intermediate Farm Assets						
Breeding livestock	557,690	549,312	425,773	379,641	801,136	831,919
Machinery and equipment	980,327	1,004,678	650,320	649,381	1,270,802	1,372,764
Titled vehicles	40,548	43,304	26,715	28,252	61,095	66,414
Other intermediate assets	94,517	95,290	57,249	67,163	135,112	129,460
Total intermediate farm assets	1,673,082	1,692,585	1,160,056	1,124,438	2,268,144	2,400,557
Long Term Farm Assets						
Farm land	1,853,520	1,892,196	1,083,671	1,060,267	1,553,658	1,666,800
Buildings and improvements	862,115	877,467	514,417	470,413	1,204,206	1,290,441
Other long-term assets	72,163	73,301	11,935	12,027	55,219	70,554
Total long-term farm assets	2,787,798	2,842,963	1,610,023	1,542,706	2,813,083	3,027,795
Total Farm Assets	5,315,794	5,374,594	3,262,262	3,115,640	6,195,052	6,580,591
Total Nonfarm Assets	460,991	548,342	387,428	562,668	389,275	427,839
Total Assets	5,776,785	5,922,937	3,649,690	3,678,308	6,584,326	7,008,430
Liabilities						
Current Farm Liabilities						
Accrued interest	7,444	7,849	2,621	4,176	5,192	5,942
Accounts payable	67,808	71,123	50,850	48,143	115,131	141,086
Current notes	211,722	215,557	153,011	177,226	268,213	285,090
Government crop loans	0	0	0	0	0	0
Principal due on term debt	124,145	120,908	74,803	63,167	174,721	175,872
Total current farm liabilities	411,119	415,436	281,286	292,713	563,256	607,990
Total intermediate farm liabs	299,400	286,160	195,601	183,618	619,957	602,336
Total long term farm liabilities	789,420	802,350	492,557	500,353	744,258	760,346
Total farm liabilities	1,499,939	1,503,946	969,444	976,683	1,927,472	1,970,673
Total nonfarm liabilities	29,510	27,583	21,617	19,967	49,635	44,010
Total liabs excluding deferreds	1,529,449	1,531,530	991,060	996,651	1,977,107	2,014,683
Total deferred liabilities	9,516	9,157	0	0	0	0
Total liabilities	1,538,965	1,540,686	991,060	996,651	1,977,107	2,014,683
Net worth (farm and nonfarm)	4,237,820	4,382,250	2,658,630	2,681,657	4,607,219	4,993,747
Net worth excluding deferreds	4,247,335	4,391,407	2,658,630	2,681,657	4,607,219	4,993,747
Net worth change		144,431		23,027		386,528
Percent net worth change		3 %		1 %		8 %
Ratio Analysis						
Current farm liabilities / assets	48 %	50 %	57 %	65 %	51 %	53 %
Intermediate farm liab. / assets	18 %	17 %	17 %	16 %	27 %	25 %
Long term farm liab. / assets	28 %	28 %	31 %	32 %	26 %	25 %
Total debt to asset ratio	27 %	26 %	27 %	27 %	30 %	29 %
Debt to assets excl deferreds	26 %	26 %	27 %	27 %	30 %	29 %

Whole Farm Report - All Farms

Balance Sheet at Cost Values
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of</u> <u>All Farms</u>		<u>Low 25%</u>		<u>High 25%</u>	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Number of farms	138		33		35	
Assets						
Current Farm Assets						
Cash and checking balance	87,290	75,106	42,264	46,475	128,572	68,714
Prepaid expenses & supplies	117,710	98,164	34,663	26,035	174,673	142,484
Growing crops	26,374	30,277	29,467	27,845	24,860	39,277
Accounts receivable	72,008	79,807	38,135	43,763	87,082	117,524
Hedging accounts	850	714	364	455	435	395
Crops held for sale or feed	497,726	501,036	285,134	257,065	668,832	745,530
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	52,847	54,470	53,516	42,039	28,629	37,608
Other current assets	672	1,150	0	0	743	707
Total current farm assets	855,476	840,724	483,541	443,676	1,113,825	1,152,239
Intermediate Farm Assets						
Breeding livestock	555,565	558,391	410,615	399,062	804,185	822,542
Machinery and equipment	785,346	806,140	530,082	524,458	970,487	1,045,645
Titled vehicles	24,921	27,023	15,573	17,241	35,449	37,725
Other intermediate assets	91,609	91,717	52,373	61,712	127,819	120,386
Total intermediate farm assets	1,457,441	1,483,271	1,008,642	1,002,472	1,937,940	2,026,298
Long Term Farm Assets						
Farm land	829,688	854,187	366,932	344,991	804,369	877,244
Buildings and improvements	686,258	697,176	406,405	391,503	931,571	964,146
Other long-term assets	64,849	61,423	11,539	11,633	55,219	51,097
Total long-term farm assets	1,580,794	1,612,786	784,876	748,128	1,791,159	1,892,487
Total Farm Assets	3,893,710	3,936,780	2,277,060	2,194,276	4,842,924	5,071,024
Total Nonfarm Assets	312,264	374,615	150,643	300,914	307,173	341,447
Total Assets	4,205,975	4,311,395	2,427,703	2,495,190	5,150,097	5,412,471
Liabilities						
Current Farm Liabilities						
Accrued interest	7,498	7,905	2,701	4,303	5,192	5,942
Accounts payable	67,176	71,284	47,694	48,121	115,131	141,086
Current notes	212,583	216,360	154,834	179,421	268,213	285,090
Government crop loans	0	0	0	0	0	0
Principal due on term debt	123,748	120,439	71,647	59,456	174,721	175,872
Total current farm liabilities	411,005	415,988	276,876	291,300	563,256	607,990
Total intermediate farm liabs	298,749	284,774	189,734	174,715	619,957	602,336
Total long term farm liabilities	788,151	801,329	478,256	486,932	744,258	760,346
Total farm liabilities	1,497,906	1,502,091	944,865	952,948	1,927,472	1,970,673
Total nonfarm liabilities	29,709	27,760	22,208	20,474	49,635	44,010
Total liabilities	1,527,615	1,529,851	967,073	973,422	1,977,107	2,014,683
Net worth (farm and nonfarm)	2,678,360	2,781,544	1,460,630	1,521,769	3,172,990	3,397,789
Net worth change		103,184		61,139		224,799
Percent net worth change		4 %		4 %		7 %
Ratio Analysis						
Current farm liabilities / assets	48 %	49 %	57 %	66 %	51 %	53 %
Intermediate farm liab. / assets	20 %	19 %	19 %	17 %	32 %	30 %
Long term farm liab. / assets	50 %	50 %	61 %	65 %	42 %	40 %

Whole Farm Report - All Farms

Balance Sheet at Cost Values (continued)
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>		<u>Low 25%</u>		<u>High 25%</u>	
Number of farms	138		33		35	
Total debt to asset ratio	<u>Beginning</u> 36 %	<u>Ending</u> 35 %	<u>Beginning</u> 40 %	<u>Ending</u> 39 %	<u>Beginning</u> 38 %	<u>Ending</u> 37 %

Statement Of Cash Flows
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	35
Beginning cash (farm & nonfarm)	90,204	41,606	139,796
Cash Provided By Operating Activities			
Gross cash farm income	1,675,699	959,431	2,406,604
Total cash farm expense	-1,465,177	-909,937	-2,056,682
Net cash from hedging transactions	1,570	25	7,001
Cash provided by operating	212,093	49,519	356,922
Cash Provided By Investing Activities			
Sale of breeding livestock	11,734	11,809	26,105
Sale of machinery & equipment	11,534	7,519	17,076
Sale of titled vehicles	79	-	-
Sale of farm land	7,813	28,431	-
Sale of farm buildings	15,189	9,982	3,333
Sale of other farm assets	32,208	26,872	35,867
Sale of nonfarm assets	6,534	1,695	14,393
Purchase of breeding livestock	-24,371	-14,029	-76,118
Purchase of machinery & equip.	-102,188	-41,916	-178,483
Purchase of titled vehicles	-2,808	-2,643	-3,340
Purchase of farm land	-32,177	-7,136	-72,897
Purchase of farm buildings	-56,351	-11,530	-72,313
Purchase of other farm assets	-34,420	-43,242	-30,792
Purchase of nonfarm assets	-11,422	-2,045	-31,046
Cash provided by investing	-178,646	-36,233	-368,216
Cash Provided By Financing Activities			
Money borrowed	497,507	366,694	642,304
Principal payments	-498,855	-359,079	-630,959
Personal income	25,668	25,822	33,162
Family living/owner withdrawals	-71,143	-46,493	-81,132
Income and social security tax	-7,265	-1,368	-4,609
Capital contributions	16,423	11,747	23,845
Capital distributions	-14,752	-9,075	-32,357
Dividends paid	-858	-	-
Cash gifts and inheritances	7,611	2,339	-
Gifts given	-264	-	-1,048
Other cash flows	18	-	-
Cash provided by financing	-45,911	-9,411	-50,794
Net change in cash balance	-12,465	3,875	-62,088
Ending cash (farm & nonfarm)	77,713	45,337	77,701
Discrepancy	27	144	8

Whole Farm Report - All Farms

Crop Production and Marketing Summary
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	34
Acreage Summary			
Total acres owned	182	105	230
Total crop acres	1,012	603	1,246
Crop acres owned	410	196	306
Crop acres cash rented	588	407	894
Crop acres share rented	14	-	45
Total pasture acres	5	6	12
Percent crop acres owned	41 %	32 %	25 %
Mach invest/crop acre cost	753	702	755
Mach invest/crop acre market	965	927	1,036
Average Price Received (Cash Sales Only)			
Soybeans per bushel	9.77	9.11	9.90
Corn per bushel	3.68	3.54	3.68
Wheat, Winter per bushel	4.42	4.76	-
Hay, Alfalfa per ton	65.01	-	-
Average Yield Per Acre			
Corn (bushel)	157.41	138.37	172.87
Soybeans (bushel)	44.05	39.80	46.04
Corn Silage (ton)	18.75	18.00	18.44
Haylage, Alfalfa (ton)	9.11	7.97	7.69
Hay, Alfalfa (ton)	4.04	3.31	-
Oats (bushel)	60.39	-	-

Operator and Labor Information
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	35
Operator Information			
Average number of operators	1.6	1.7	1.6
Average age of operators	53.8	55.3	51.6
Average number of years farming	30.3	32.5	27.6
Results Per Operator			
Working capital	265,233	89,773	346,340
Total assets (market)	3,708,506	2,119,703	4,459,910
Total liabilities	964,664	574,341	1,282,071
Net worth (market)	2,743,841	1,545,362	3,177,839
Net worth excl deferred liabs	2,749,575	1,545,362	3,177,839
Gross farm income	1,048,363	520,799	1,585,508
Total farm expense	993,142	564,036	1,415,832
Net farm income from operations	55,222	-43,237	169,676
Net nonfarm income	16,072	14,881	21,103
Family living & tax withdrawals	49,550	27,664	54,265
Total acres owned	113.8	60.4	149.9
Total crop acres	633.8	347.6	805.8
Crop acres owned	257.0	112.9	203.0
Crop acres cash rented	368.4	234.7	574.7
Crop acres share rented	8.5	-	28.1
Total pasture acres	3.1	3.5	7.5
Labor Analysis			
Number of farms	139	34	35
Total unpaid labor hours	4,358	4,737	4,199
Total hired labor hours	16,353	8,498	21,929
Total labor hours per farm	20,711	13,235	26,128
Unpaid hours per operator	2,729	2,730	2,672
Value of farm production / hour	64.00	49.58	77.88
Net farm income / unpaid hour	20.24	-15.84	63.50
Average hourly hired labor wage	14.71	14.71	14.57
Partnerships & LLCs			
Number of farms	65	15	14
Number of operators	2.0	2.1	2.1
Owner withdrawals per farm	98,641	-	125,491
Withdrawals per operator	48,248	-	57,919

Whole Farm Report - All Farms

Farm Income Statement
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	34
Cash Farm Income			
Aftermath Grazing	249	207	-
Apples	7,557	-	8,528
Asparagus	276	116	1,014
Beans, Black Turtle	3,071	-	11,624
Beans, Green	507	2,071	-
Beans, Light Red Kidney	758	-	3,099
Beans, Small Red	1,333	-	2,726
Blueberries	76,548	19,875	-
Cherries	358	-	1,465
Cherries, Sweet	243	-	-
Cherries, Tart	274	-	1,017
Clover Seed	296	-	-
Corn	143,613	77,028	176,311
Corn Silage	2,925	2,573	4,559
Corn, Seed	23,104	15,288	29,059
Cranberries	216	882	-
Cucumbers	21,485	-	87,837
Eggplant	6,480	-	26,491
Grapes	137	-	560
Hay, Alfalfa	7,851	8,811	11,912
Hay, Mixed	646	-	43
Haylage, Mixed	3,107	94	9
Oats	637	-	163
Peaches	905	-	3,148
Peas, Processing	384	-	1,572
Peppers	4,918	-	20,105
Plums	162	-	531
Potatoes	4,483	-	18,326
Rye	40	132	-
Soybeans	128,460	70,107	135,820
Soybeans Seed	481	-	-
Squash	129	-	528
Sugar Beets	4,691	5,252	13,467
Tomatoes	15,791	-	64,091
Wheat, Soft Red Winter	182	-	744
Wheat, Soft Wht Winter	33	-	135
Wheat, Spring	356	1,104	-
Wheat, Winter	18,254	8,953	11,610
Beans, Dry	440	-	1,801
Barley, Seed	110	-	-
Oats, Seed	332	-	-
Wheat, Winter, Organic	247	-	1,008
User Added Crop	900	833	1,662
Miscellaneous crop income	6,006	1,279	3,400
Beef Cow-Calf, Beef Calves	3,927	1,457	6,983
Beef Backgrounding	396	1,620	-
Beef Finishing	15,666	8,024	7,169

Whole Farm Report - All Farms

Farm Income Statement (continued)
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	34
Beef Finish Yearlings	401	535	-
Broilers	1,039	96	4,151
Dairy, Milk	891,827	588,882	1,464,829
Dairy, Dairy Calves	20,859	7,793	12,412
Dairy Replacement Heifers	17,276	96	27,472
Dairy Finishing	13,852	29,160	20,159
Goats, Dairy, Goats	51	62	146
Hogs, Farrow To Finish, Raised Hog	9,936	-	463
Hogs, Feeder Pig Prod, Feeder Pigs	1,090	-	-
Hogs, Finish Feeder Pigs	13,364	-	653
Sheep, Feeder Lamb Prod, Fdr Lambs	504	-	-
Sheep, Market Lamb Prod, Mkt Lambs	1,794	4,200	402
Hogs, Weaning to Finish	12,499	-	-
Dairy Feeder	3,232	4,035	9,178
Cull breeding livestock	49,231	35,056	61,948
Misc. livestock income	1,762	210	1,590
LDP payments	541	-	-
Crop government payments	32,688	17,399	38,585
Livestock govt payments	68	-	276
Other government payments	1,029	434	572
Custom work income	17,767	8,758	22,808
Patronage dividends, cash	15,786	12,556	31,083
Crop insurance income	8,057	13,541	5,598
Property insurance income	220	92	-
Sale of resale items	327	-	-
Contract livestock income	8,893	-	34,021
Real estate tax refund	827	-	1,248
Other farm income	41,817	10,823	46,177
Gross Cash Farm Income	1,675,699	959,431	2,442,285

Whole Farm Report - All Farms

Farm Income Statement (continued)
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	34
Cash Farm Expense			
Seed and plants	77,142	35,485	98,462
Fertilizer	81,780	44,891	95,115
Crop chemicals	36,882	21,828	60,927
Crop insurance	9,019	6,278	14,882
Drying expense	3,861	1,625	5,380
Crop storage	1,292	1,859	574
Irrigation energy	2,134	717	5,071
Crop packaging and supplies	5,488	2,241	2,560
Crop supplies	297	-	-
Crop repair, irrigation equip	345	29	1,146
Crop land rent	117	-	479
Crop miscellaneous	14,100	5,087	33,993
Feeder livestock purchase	17,686	5,597	4,111
Livestock storage	466	1,276	-
Livestock packaging and supplies	485	1,024	866
Purchased feed	309,743	242,004	465,291
Breeding fees	10,232	6,206	19,876
Veterinary	30,169	23,591	44,805
Livestock supplies	47,373	36,783	64,719
DHIA	806	766	1,139
Contract production exp.	11,565	1,325	6,548
Livestock fuel & oil	309	-	-
Livestock hired labor	1,483	-	6,061
Livestock machinery leases	159	-	66
Livestock leases	39	159	-
Livestock grazing fees	243	-	-
Livestock utilities	223	-	853
Bedding	10,862	5,393	20,200
Livestock consultants	203	122	313
Interest	55,294	35,754	71,464
Packaging and supplies	2,495	-	3,235
Supplies	6,558	3,592	15,850
Fuel & oil	44,906	30,205	62,704
Repairs	49,615	36,212	82,627
Repair, machinery	39,715	25,079	50,938
Repair, livestock equip	1,293	1,490	2,472
Custom hire	44,996	31,630	86,224
Repair, buildings	5,212	1,916	5,185
Repair, irrigation equip	593	486	956
Hired labor	241,391	130,869	324,260
Land rent	92,482	58,355	153,475
Machinery leases	12,167	8,507	28,132
Building leases	10,578	1,240	30,910
Grazing fees	66	268	-
Real estate taxes	17,217	8,021	17,133
Personal property taxes	552	591	809
Farm insurance	28,373	19,187	34,684

Whole Farm Report - All Farms

Farm Income Statement (continued)
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	34
Utilities	36,014	25,489	46,518
Hauling and trucking	30,069	18,376	59,458
Marketing	22,016	12,968	25,703
Dues & professional fees	9,514	5,335	15,188
Purchase of resale items	21,383	-	-
Miscellaneous	17,652	10,083	13,971
Consultants	520	-	1,900
Total cash expense	1,465,177	909,937	2,087,232
Net cash farm income	210,522	49,494	355,053
Inventory Changes			
Prepays and supplies	-19,729	-9,698	-35,438
Accounts receivable	7,053	2,644	30,478
Hedging accounts	1,436	113	7,166
Other current assets	4,523	-868	14,698
Crops and feed	2,981	-28,492	80,976
Market livestock	1,622	-11,097	9,244
Breeding livestock	-9,660	-12,734	-32,587
Other assets	-5,241	-6,126	-6,671
Accounts payable	-3,315	2,707	-26,778
Accrued interest	-405	-1,555	-1,216
Total inventory change	-20,735	-65,106	39,872
Net operating profit	189,787	-15,611	394,925
Depreciation			
Machinery and equipment	-70,201	-40,638	-86,362
Titled vehicles	-641	-1,024	-522
Buildings and improvements	-30,749	-17,755	-37,341
Total depreciation	-101,591	-59,417	-124,225
Net farm income from operations	88,196	-75,028	270,700
Gain or loss on capital sales	-	-	-
Net farm income	88,196	-75,028	270,700

Whole Farm Report - All Farms

FINPACK Score Card Items
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	139	34	35
Liquidity			
Current ratio	2.02	1.53	1.90
Working capital	423,610	155,783	544,248
Working capital to gross inc	25.3 %	17.2 %	21.8 %
Solvency (market)			
Farm debt to asset ratio	28 %	31 %	30 %
Farm equity to asset ratio	72 %	69 %	70 %
Farm debt to equity ratio	0.39	0.46	0.43
Profitability (cost)			
Rate of ret on fm assets - mkt	1.5 %	-5.5 %	6.4 %
Rate of ret on fm assets - cst	1.6 %	-5.0 %	5.1 %
Rate of ret on fm equity - mkt	0.6 %	-9.6 %	7.6 %
Rate of ret on fm equity - cst	0.4 %	-11.5 %	6.0 %
Operating profit margin - mkt	6.0 %	-26.9 %	20.2 %
Operating profit margin - cst	4.9 %	-17.5 %	12.5 %
Net farm income - mkt	106,158	-135,569	424,073
Net farm income - cst	88,835	-77,302	266,634
EBITDA - cst	247,265	22,355	463,844
Repayment Capacity			
Capital debt repayment capacity	180,924	-14,090	394,180
Capital debt repayment margin	10,446	-113,477	161,049
Replacement margin	-43,204	-148,528	97,449
Term debt coverage ratio	1.06	-0.14	1.69
Replacement coverage ratio	0.81	-0.10	1.33
Efficiency			
Asset turnover rate (cost)	33.9 %	28.6 %	41.0 %
Asset turnover rate (market)	24.8 %	20.6 %	31.9 %
Operating expense ratio	85.3 %	97.6 %	81.4 %
Depreciation expense ratio	6.1 %	6.6 %	5.0 %
Interest expense ratio	3.3 %	4.1 %	2.9 %
Net farm income ratio	5.3 %	-8.3 %	10.7 %

Financial Summary
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Income Statement			
Gross cash farm income	2,600,277	1,515,364	4,426,665
Total cash farm expense	2,312,361	1,445,281	3,885,779
Net cash farm income	287,916	70,084	540,886
Inventory change	-15,611	-72,540	16,397
Depreciation	-129,445	-68,378	-192,737
Net farm income from operations	142,861	-70,834	364,546
Gain or loss on capital sales	-	-	-
Average net farm income	142,861	-70,834	364,546
Median net farm income	64,994	-29,486	289,991
Profitability (cost)			
Rate of return on assets	2.3 %	-4.2 %	4.8 %
Rate of return on equity	1.4 %	-11.1 %	5.5 %
Operating profit margin	6.5 %	-11.8 %	12.4 %
Asset turnover rate	35.4 %	35.9 %	38.8 %
Profitability (market)			
Rate of return on assets	1.5 %	-6.2 %	5.0 %
Rate of return on equity	0.6 %	-12.0 %	5.6 %
Operating profit margin	5.6 %	-24.4 %	16.1 %
Asset turnover rate	27.1 %	25.4 %	31.2 %
Liquidity & Repayment (end of year)			
Current assets	959,570	504,523	1,477,473
Current liabilities	473,814	372,774	862,047
Current ratio	2.03	1.35	1.71
Working capital	485,755	131,749	615,426
Change in working capital	-27,164	-120,131	2,595
Working capital to gross inc	18.6 %	9.0 %	13.7 %
Term debt coverage ratio	1.09	-0.23	1.43
Replacement coverage ratio	0.90	-0.20	1.24
Term debt to EBITDA	4.54	22.40	4.03
Solvency (end of year at cost)			
Number of farms	53	12	14
Total assets	5,789,111	2,915,616	8,893,161
Total liabilities	2,048,619	1,354,195	3,720,847
Net worth	3,740,492	1,561,421	5,172,314
Net worth change	118,924	-101,985	373,110
Farm debt to asset ratio	37 %	47 %	42 %
Total debt to asset ratio	35 %	46 %	42 %
Change in earned net worth %	3 %	-6 %	8 %
Solvency (end of year at market)			
Number of farms	54	13	14
Total assets	7,358,333	3,757,828	11,101,775
Total liabilities	2,049,226	1,385,658	3,720,847
Net worth	5,309,107	2,372,170	7,380,929
Total net worth change	96,628	-211,336	499,674
Farm debt to asset ratio	29 %	37 %	34 %
Total debt to asset ratio	28 %	37 %	34 %
Change in total net worth %	2 %	-8 %	7 %
Nonfarm Information			
Net nonfarm income	17,190	5,004	35,069
Crop Acres			
Total crop acres	943	483	1,489
Total crop acres owned	403	146	379
Total crop acres cash rented	528	337	1,066
Total crop acres share rented	11	-	44
Machinery value per crop acre	1,211	1,447	1,089

Whole Farm Report - Dairy Farms

Financial Standards Measures
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Liquidity			
Current ratio	2.03	1.35	1.71
Working capital	485,755	131,749	615,426
Working capital to gross inc	18.6 %	9.0 %	13.7 %
Solvency (market)			
Farm debt to asset ratio	29 %	37 %	34 %
Farm equity to asset ratio	71 %	63 %	66 %
Farm debt to equity ratio	0.40	0.60	0.51
Profitability (cost)			
Rate of return on farm assets	2.3 %	-4.2 %	4.8 %
Rate of return on farm equity	1.4 %	-11.1 %	5.5 %
Operating profit margin	6.5 %	-13.1 %	12.4 %
Net farm income	145,556	-76,737	364,546
EBITDA	356,363	55,205	699,533
Repayment Capacity			
Capital debt repayment capacity	286,835	-36,801	656,552
Capital debt repayment margin	23,307	-195,104	196,707
Replacement margin	-30,734	-224,271	126,361
Term debt coverage ratio	1.09	-0.23	1.43
Replacement coverage ratio	0.90	-0.20	1.24
Efficiency			
Asset turnover rate (cost)	35.0 %	32.3 %	38.8 %
Operating expense ratio	86.6 %	96.5 %	84.5 %
Depreciation expense ratio	4.9 %	4.7 %	4.3 %
Interest expense ratio	3.0 %	3.6 %	3.2 %
Net farm income ratio	5.5 %	-4.8 %	8.1 %

Whole Farm Report - Dairy Farms

Summary Farm Income Statement
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Crop sales	95,307	77,924	74,647
Crop inventory change	22,374	-33,797	128,979
Gross crop income	117,681	44,127	203,626
Livestock sales	2,279,716	1,316,726	3,946,931
Livestock inventory change	2,426	-12,065	20,774
Gross livestock income	2,282,142	1,304,661	3,967,705
Government payments	28,530	15,390	46,081
Other cash farm income	196,724	105,324	359,006
Change in accounts receivable	7,630	330	-7,066
Gain or loss on hedging accounts	388	65	-209
Change in other assets	-7,003	-4,076	-5,659
Gain or loss on breeding lvst	-8,848	2,770	-57,383
Gross farm income	2,617,245	1,468,591	4,506,102
Cash operating expenses	2,234,947	1,392,253	3,744,305
Change in prepaids and supplies	16,806	7,474	26,213
Change in growing crops	-7,918	-518	-33,082
Change in accounts payable	23,646	18,423	69,133
Depreciation	129,445	68,378	192,737
Total operating expense	2,396,925	1,486,010	3,999,305
Interest paid	77,415	53,028	141,474
Change in accrued interest	44	387	776
Total interest expense	77,459	53,414	142,250
Total expenses	2,474,384	1,539,424	4,141,556
Net farm income from operations	142,861	-70,834	364,546
Gain or loss on capital sales	-	-	-
Net farm income	142,861	-70,834	364,546

Whole Farm Report - Dairy Farms

Profitability Measures
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	53	12	14
Profitability (assets valued at cost)			
Net farm income from operations	149,070	-61,219	364,546
Rate of return on assets	2.3 %	-4.2 %	4.8 %
Rate of return on equity	1.4 %	-11.1 %	5.5 %
Operating profit margin	6.5 %	-13.1 %	12.4 %
Asset turnover rate	35.0 %	32.3 %	38.8 %
Farm interest expense	77,086	49,765	142,250
Value of operator lbr and mgmt.	100,097	112,330	96,043
Return on farm assets	126,059	-123,784	410,753
Average farm assets	5,510,435	2,926,583	8,556,282
Return on farm equity	48,973	-173,549	268,503
Average farm equity	3,473,763	1,557,972	4,889,455
Value of farm production	1,927,317	946,178	3,324,078

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Profitability (assets valued at market)			
Net farm income from operations	131,271	-174,489	488,202
Rate of return on assets	1.5 %	-6.2 %	5.0 %
Rate of return on equity	0.6 %	-12.0 %	5.6 %
Operating profit margin	5.6 %	-24.4 %	16.1 %
Asset turnover rate	27.1 %	25.4 %	31.2 %
Farm interest expense	77,459	53,414	142,250
Value of operator lbr and mgmt.	101,021	115,228	96,043
Return on farm assets	107,709	-236,302	534,409
Average farm assets	7,065,917	3,813,818	10,669,131
Return on farm equity	30,250	-289,717	392,158
Average farm equity	5,028,126	2,414,312	7,002,303
Value of farm production	1,914,659	969,075	3,324,078

Whole Farm Report - Dairy Farms

Liquidity & Repayment Capacity Measures
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Liquidity			
Current ratio	2.03	1.35	1.71
Working capital	485,755	131,749	615,426
Working capital to gross inc	18.6 %	9.0 %	13.7 %
Current assets	959,570	504,523	1,477,473
Current liabilities	473,814	372,774	862,047
Gross revenues (accrual)	2,617,245	1,468,591	4,506,102
Repayment capacity			
Net farm income from operations	142,861	-70,834	364,546
Depreciation	129,445	68,378	192,737
Personal income	17,190	5,004	35,069
Family living/owner withdrawals	-67,491	-74,130	-63,562
Cash discrepancy	-56	-97	-21
Payments on personal debt	-967	-486	-1,201
Income taxes paid	-7,545	-	-2,500
Interest on term debt	73,344	35,267	131,463
Capital debt repayment capacity	286,835	-36,801	656,552
Scheduled term debt payments	-263,528	-158,302	-459,844
Capital debt repayment margin	23,307	-195,104	196,707
Cash replacement allowance	-54,041	-29,168	-70,347
Replacement margin	-30,734	-224,271	126,361
Term debt coverage ratio	1.09	-0.23	1.43
Replacement coverage ratio	0.90	-0.20	1.24

Whole Farm Report - Dairy Farms

Balance Sheet at Market Values
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>		<u>Low 25%</u>		<u>High 25%</u>	
Number of farms	54		13		14	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Assets						
Current Farm Assets						
Cash and checking balance	142,806	120,381	54,966	32,087	165,239	76,251
Prepaid expenses & supplies	93,511	76,705	32,584	25,109	118,948	92,735
Growing crops	44,039	51,956	46,779	47,298	57,087	90,169
Accounts receivable	105,492	113,123	74,082	74,412	131,481	124,415
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	548,697	571,071	311,909	278,112	941,267	1,070,246
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	24,336	26,762	59,570	47,505	10,286	31,060
Other current assets	-454	-429	0	0	-6,786	-7,402
Total current farm assets	958,427	959,570	579,891	504,523	1,417,521	1,477,473
Intermediate Farm Assets						
Breeding livestock	1,308,804	1,293,509	831,910	752,569	2,187,180	2,259,396
Machinery and equipment	1,180,766	1,218,156	808,374	819,538	1,642,986	1,802,639
Titled vehicles	29,537	31,614	30,304	31,572	38,535	42,267
Other intermediate assets	142,349	156,495	91,124	122,678	185,386	205,353
Total intermediate farm assets	2,661,455	2,699,773	1,761,712	1,726,357	4,054,087	4,309,656
Long Term Farm Assets						
Farm land	1,910,738	1,953,578	855,719	776,881	2,278,027	2,368,648
Buildings and improvements	1,458,399	1,469,835	716,650	656,043	2,562,871	2,734,594
Other long-term assets	29,887	30,172	24,811	25,050	66,624	68,758
Total long-term farm assets	3,399,023	3,453,585	1,597,180	1,457,973	4,907,522	5,172,000
Total Farm Assets	7,018,906	7,112,928	3,938,783	3,688,854	10,379,131	10,959,130
Total Nonfarm Assets	244,299	245,406	66,371	68,974	141,149	142,645
Total Assets	7,263,205	7,358,333	4,005,154	3,757,828	10,520,280	11,101,775
Liabilities						
Current Farm Liabilities						
Accrued interest	2,092	2,135	953	1,339	1,114	1,890
Accounts payable	81,640	105,286	92,583	111,006	109,146	178,279
Current notes	171,592	180,555	111,440	150,824	366,048	356,914
Government crop loans	0	0	0	0	0	0
Principal due on term debt	190,185	185,838	123,036	109,605	328,382	324,964
Total current farm liabilities	445,508	473,814	328,012	372,774	804,690	862,047
Total intermediate farm liabs	536,244	499,241	365,878	371,987	1,181,385	1,178,629
Total long term farm liabilities	1,050,204	1,058,466	723,656	636,705	1,639,247	1,667,656
Total farm liabilities	2,031,957	2,031,521	1,417,546	1,381,466	3,625,322	3,708,332
Total nonfarm liabilities	12,557	11,813	4,102	4,191	13,704	12,514
Total liabs excluding deferreds	2,044,513	2,043,334	1,421,648	1,385,658	3,639,025	3,720,847
Total deferred liabilities	6,212	5,892	0	0	0	0
Total liabilities	2,050,726	2,049,226	1,421,648	1,385,658	3,639,025	3,720,847
Net worth (farm and nonfarm)	5,212,479	5,309,107	2,583,506	2,372,170	6,881,255	7,380,929
Net worth excluding deferreds	5,218,692	5,315,000	2,583,506	2,372,170	6,881,255	7,380,929
Net worth change		96,628		-211,336		499,674
Percent net worth change		2 %		-8 %		7 %
Ratio Analysis						
Current farm liabilities / assets	46 %	49 %	57 %	74 %	57 %	58 %
Intermediate farm liab. / assets	20 %	18 %	21 %	22 %	29 %	27 %
Long term farm liab. / assets	31 %	31 %	45 %	44 %	33 %	32 %
Total debt to asset ratio	28 %	28 %	35 %	37 %	35 %	34 %
Debt to assets excl deferreds	28 %	28 %	35 %	37 %	35 %	34 %

Whole Farm Report - Dairy Farms

Balance Sheet at Cost Values
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of</u> <u>All Farms</u>		<u>Low 25%</u>		<u>High 25%</u>	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Number of farms	53		12		14	
Assets						
Current Farm Assets						
Cash and checking balance	145,201	122,578	58,224	34,435	165,239	76,251
Prepaid expenses & supplies	93,979	77,705	29,572	25,225	118,948	92,735
Growing crops	43,172	50,786	43,178	41,739	57,087	90,169
Accounts receivable	103,203	112,786	61,354	69,699	131,481	124,415
Hedging accounts	0	0	0	0	0	0
Crops held for sale or feed	552,750	576,347	310,079	277,002	941,267	1,070,246
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	24,001	26,446	61,028	47,838	10,286	31,060
Other current assets	-463	-437	0	0	-6,786	-7,402
Total current farm assets	961,844	966,212	563,435	495,937	1,417,521	1,477,473
Intermediate Farm Assets						
Breeding livestock	1,317,212	1,336,749	818,112	822,536	2,196,773	2,259,396
Machinery and equipment	925,124	960,224	624,771	628,333	1,247,829	1,391,055
Titled vehicles	12,736	14,520	10,255	11,587	13,649	16,419
Other intermediate assets	141,333	155,028	83,205	114,315	185,229	205,339
Total intermediate farm assets	2,396,406	2,466,521	1,536,343	1,576,771	3,643,480	3,872,210
Long Term Farm Assets						
Farm land	911,439	951,634	334,871	254,316	1,213,887	1,323,673
Buildings and improvements	1,154,492	1,151,131	536,166	501,311	1,986,597	2,042,340
Other long-term assets	30,451	30,742	26,878	27,137	66,624	68,758
Total long-term farm assets	2,096,381	2,133,507	897,915	782,764	3,267,109	3,434,771
Total Farm Assets	5,454,631	5,566,239	2,997,694	2,855,473	8,328,110	8,784,454
Total Nonfarm Assets	216,391	222,872	57,279	60,143	110,119	108,707
Total Assets	5,671,022	5,789,111	3,054,972	2,915,616	8,438,230	8,893,161
Liabilities						
Current Farm Liabilities						
Accrued interest	2,131	2,176	1,032	1,451	1,114	1,890
Accounts payable	80,256	106,351	87,382	116,183	109,146	178,279
Current notes	173,077	181,984	112,989	154,659	366,048	356,914
Government crop loans	0	0	0	0	0	0
Principal due on term debt	190,397	185,842	118,376	103,270	328,382	324,964
Total current farm liabilities	445,861	476,352	319,778	375,563	804,690	862,047
Total intermediate farm liabs	539,018	499,652	363,934	363,202	1,181,385	1,178,629
Total long term farm liabilities	1,051,821	1,060,640	703,585	611,162	1,639,247	1,667,656
Total farm liabilities	2,036,700	2,036,645	1,387,297	1,349,926	3,625,322	3,708,332
Total nonfarm liabilities	12,754	11,974	4,268	4,268	13,704	12,514
Total liabilities	2,049,454	2,048,619	1,391,565	1,354,195	3,639,025	3,720,847
Net worth (farm and nonfarm)	3,621,568	3,740,492	1,663,407	1,561,421	4,799,204	5,172,314
Net worth change		118,924		-101,985		373,110
Percent net worth change		3 %		-6 %		8 %
Ratio Analysis						
Current farm liabilities / assets	46 %	49 %	57 %	76 %	57 %	58 %
Intermediate farm liab. / assets	22 %	20 %	24 %	23 %	32 %	30 %
Long term farm liab. / assets	50 %	50 %	78 %	78 %	50 %	49 %

Whole Farm Report - Dairy Farms

Balance Sheet at Cost Values (continued)
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>		<u>Low 25%</u>		<u>High 25%</u>	
Number of farms	53		12		14	
Total debt to asset ratio	<u>Beginning</u> 36 %	<u>Ending</u> 35 %	<u>Beginning</u> 46 %	<u>Ending</u> 46 %	<u>Beginning</u> 43 %	<u>Ending</u> 42 %

Statement Of Cash Flows
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Beginning cash (farm & nonfarm)	144,165	55,236	165,239
Cash Provided By Operating Activities			
Gross cash farm income	2,600,277	1,515,364	4,426,665
Total cash farm expense	-2,312,361	-1,445,281	-3,885,779
Net cash from hedging transactions	388	65	-209
Cash provided by operating	288,304	70,148	540,677
Cash Provided By Investing Activities			
Sale of breeding livestock	30,136	30,629	73,019
Sale of machinery & equipment	10,653	11,938	23,978
Sale of titled vehicles	-	-	-
Sale of farm land	17,901	74,359	-
Sale of farm buildings	6,962	26,105	686
Sale of other farm assets	32,662	8,883	27,341
Sale of nonfarm assets	2,476	97	-
Purchase of breeding livestock	-58,600	-33,773	-193,024
Purchase of machinery & equip.	-128,670	-59,869	-281,624
Purchase of titled vehicles	-2,461	-	-4,886
Purchase of farm land	-57,445	-	-109,785
Purchase of farm buildings	-47,239	-12,291	-132,629
Purchase of other farm assets	-54,102	-44,759	-54,628
Purchase of nonfarm assets	-7,463	-	-
Cash provided by investing	-255,191	1,319	-651,553
Cash Provided By Financing Activities			
Money borrowed	590,466	366,781	1,182,371
Principal payments	-615,367	-421,670	-1,170,550
Personal income	17,190	5,004	35,069
Family living/owner withdrawals	-67,491	-74,130	-63,562
Income and social security tax	-7,545	-	-2,500
Capital contributions	32,235	23,644	50,322
Capital distributions	-6,239	-	-9,241
Dividends paid	-	-	-
Cash gifts and inheritances	1,877	6,117	-
Gifts given	-	-	-
Other cash flows	-	-	-
Cash provided by financing	-54,875	-94,254	21,909
Net change in cash balance	-21,762	-22,786	-88,967
Ending cash (farm & nonfarm)	122,346	32,353	76,251
Discrepancy	56	97	21

Whole Farm Report - Dairy Farms

Crop Production and Marketing Summary
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Acreage Summary			
Total acres owned	193	168	220
Total crop acres	943	483	1,489
Crop acres owned	403	146	379
Crop acres cash rented	528	337	1,066
Crop acres share rented	11	-	44
Total pasture acres	8	-	29
Percent crop acres owned	43 %	30 %	25 %
Mach invest/crop acre cost	911	991	801
Mach invest/crop acre market	1,211	1,447	1,089
Average Price Received (Cash Sales Only)			
Corn per bushel	3.31	-	-
Soybeans per bushel	9.22	-	-
Wheat, Winter per bushel	4.53	-	-
Average Yield Per Acre			
Haylage, Alfalfa (ton)	9.27	-	7.63
Corn Silage (ton)	18.35	-	18.36
Corn (bushel)	154.64	-	158.87
Soybeans (bushel)	46.77	-	-

Whole Farm Report - Dairy Farms

Operator and Labor Information
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Operator Information			
Average number of operators	1.8	2.0	1.4
Average age of operators	52.2	52.0	45.1
Average number of years farming	29.3	31.6	21.2
Results Per Operator			
Working capital	270,420	65,874	430,798
Total assets (market)	4,096,392	1,878,914	7,771,243
Total liabilities	1,140,806	692,829	2,604,593
Net worth (market)	2,955,586	1,186,085	5,166,650
Net worth excl deferred liabs	2,958,866	1,186,085	5,166,650
Gross farm income	1,457,023	734,295	3,154,271
Total farm expense	1,377,492	769,712	2,899,089
Net farm income from operations	79,531	-35,417	255,182
Net nonfarm income	9,570	2,502	24,548
Family living & tax withdrawals	41,804	37,113	46,258
Total acres owned	107.7	84.2	153.8
Total crop acres	524.8	241.6	1,042.6
Crop acres owned	224.5	73.1	265.6
Crop acres cash rented	294.0	168.5	746.4
Crop acres share rented	6.3	-	30.7
Total pasture acres	4.4	-	20.5
Labor Analysis			
Number of farms	54	13	14
Total unpaid labor hours	5,604	6,555	4,979
Total hired labor hours	26,661	15,511	44,407
Total labor hours per farm	32,265	22,065	49,387
Unpaid hours per operator	3,120	3,277	3,486
Value of farm production / hour	59.34	43.92	67.31
Net farm income / unpaid hour	25.49	-10.81	73.21
Average hourly hired labor wage	14.32	13.85	13.96
Partnerships & LLCs			
Number of farms	30	8	5
Number of operators	2.1	-	-
Owner withdrawals per farm	91,182	-	-
Withdrawals per operator	43,192	-	-

Whole Farm Report - Dairy Farms

Farm Income Statement
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Cash Farm Income			
Aftermath Grazing	144	-	-
Corn	36,349	27,369	12,447
Corn Silage	1,853	831	-
Hay, Alfalfa	5,513	9,645	6,211
Oatlage	233	-	-
Oats	153	-	591
Rye	65	272	-
Sorghum, Grain	36	-	138
Soybeans	39,559	34,703	42,220
Wheat, Spring	695	2,887	-
Wheat, Winter	9,365	2,216	8,531
Beans, Dry	1,134	-	4,373
Miscellaneous crop income	531	9	167
Beef Cow-Calf, Beef Calves	4,370	-	16,855
Beef Finishing	5,180	-	-
Dairy, Milk	2,200,946	1,249,800	3,864,748
Dairy, Dairy Calves	44,613	15,375	33,306
Dairy Replacement Heifers	4,140	161	9,136
Dairy Finishing	12,070	40,749	596
Dairy Feeder	8,319	10,552	22,289
Cull breeding livestock	114,179	58,748	173,790
Misc. livestock income	907	89	3,195
LDP payments	763	-	2,943
Crop government payments	25,663	14,298	39,463
Livestock govt payments	33	-	129
Other government payments	2,071	1,092	3,547
Custom work income	9,559	1,990	10,725
Patronage dividends, cash	33,208	26,005	72,333
Crop insurance income	3,477	10,446	2,664
Property insurance income	502	240	-
Contract livestock income	20,190	-	72,200
Real estate tax refund	1,546	-	3,641
Other farm income	12,911	7,887	20,426
Gross Cash Farm Income	2,600,277	1,515,364	4,426,665

Whole Farm Report - Dairy Farms

Farm Income Statement (continued)
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Cash Farm Expense			
Seed and plants	84,322	41,325	128,414
Fertilizer	60,792	39,651	78,313
Crop chemicals	25,647	16,826	39,055
Crop insurance	7,212	4,160	14,795
Drying expense	2,732	1,216	1,781
Crop storage	1,047	392	481
Irrigation energy	472	577	1,286
Crop packaging and supplies	1,818	-	5,029
Crop supplies	691	-	-
Repair, irrigation equip	160	-	617
Crop land rent	302	-	1,164
Crop miscellaneous	4,685	9,465	3,861
Feeder livestock purchase	108	-	241
Livestock storage	377	2	-
Livestock packaging and supplies	1,248	2,678	2,104
Purchased feed	702,477	499,516	1,181,783
Breeding fees	25,467	14,354	53,851
Veterinary	71,058	49,781	122,866
Livestock supplies	108,282	69,173	156,216
DHIA	2,076	1,579	2,766
Contract production exp.	29,249	3,466	34,077
Livestock fuel & oil	795	-	-
Livestock machinery leases	368	-	1,420
Livestock leases	100	415	-
Grazing fees	313	-	-
Bedding	24,264	8,903	50,390
Livestock consultants	522	318	761
Interest	77,415	53,028	141,474
Packaging and supplies	4,956	-	8,689
Supplies	12,482	9,393	30,777
Fuel & oil	66,588	40,882	106,635
Repairs	90,788	60,749	143,453
Repair, machinery	48,430	41,654	65,179
Repair, livestock equip	3,328	3,896	9,218
Custom hire	81,628	39,429	181,525
Repair, buildings	5,389	3,841	4,524
Hired labor	379,679	213,429	614,104
Land rent	87,809	48,082	143,397
Machinery leases	20,945	16,767	51,705
Building leases	22,888	3,116	72,425
Real estate taxes	19,424	7,997	24,773
Personal property taxes	203	8	366
Farm insurance	36,120	23,307	53,679
Utilities	59,187	36,425	94,678
Hauling and trucking	67,216	31,474	143,283
Marketing	46,448	29,259	72,679
Dues & professional fees	13,186	4,618	25,636

Whole Farm Report - Dairy Farms

Farm Income Statement (continued)
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Miscellaneous	11,525	14,129	16,312
Consultants	143	-	-
Total cash expense	2,312,361	1,445,281	3,885,779
Net cash farm income	287,916	70,084	540,886
Inventory Changes			
Prepays and supplies	-16,806	-7,474	-26,213
Accounts receivable	7,630	330	-7,066
Hedging accounts	388	65	-209
Other current assets	7,943	518	32,466
Crops and feed	22,374	-33,797	128,979
Market livestock	2,426	-12,065	20,774
Breeding livestock	-8,848	2,770	-57,383
Other assets	-7,029	-4,076	-5,042
Accounts payable	-23,646	-18,423	-69,133
Accrued interest	-44	-387	-776
Total inventory change	-15,611	-72,540	16,397
Net operating profit	272,305	-2,456	557,283
Depreciation			
Machinery and equipment	-84,061	-46,689	-114,420
Titled vehicles	-711	1,230	-2,116
Buildings and improvements	-44,673	-22,918	-76,201
Total depreciation	-129,445	-68,378	-192,737
Net farm income from operations	142,861	-70,834	364,546
Gain or loss on capital sales	-	-	-
Net farm income	142,861	-70,834	364,546

Whole Farm Report - Dairy Farms

FINPACK Score Card Items
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Liquidity			
Current ratio	2.03	1.35	1.71
Working capital	485,755	131,749	615,426
Working capital to gross inc	18.6 %	9.0 %	13.7 %
Solvency (market)			
Farm debt to asset ratio	29 %	37 %	34 %
Farm equity to asset ratio	71 %	63 %	66 %
Farm debt to equity ratio	0.40	0.60	0.51
Profitability (cost)			
Rate of ret on fm assets - mkt	1.5 %	-6.2 %	5.0 %
Rate of ret on fm assets - cst	2.3 %	-4.2 %	4.8 %
Rate of ret on fm equity - mkt	0.6 %	-12.0 %	5.6 %
Rate of ret on fm equity - cst	1.4 %	-11.1 %	5.5 %
Operating profit margin - mkt	5.6 %	-24.4 %	16.1 %
Operating profit margin - cst	6.5 %	-13.1 %	12.4 %
Net farm income - mkt	131,271	-174,489	488,202
Net farm income - cst	145,556	-76,737	364,546
EBITDA - cst	356,363	55,205	699,533
Repayment Capacity			
Capital debt repayment capacity	286,835	-36,801	656,552
Capital debt repayment margin	23,307	-195,104	196,707
Replacement margin	-30,734	-224,271	126,361
Term debt coverage ratio	1.09	-0.23	1.43
Replacement coverage ratio	0.90	-0.20	1.24
Efficiency			
Asset turnover rate (cost)	35.0 %	32.3 %	38.8 %
Asset turnover rate (market)	27.1 %	25.4 %	31.2 %
Operating expense ratio	86.6 %	96.5 %	84.5 %
Depreciation expense ratio	4.9 %	4.7 %	4.3 %
Interest expense ratio	3.0 %	3.6 %	3.2 %
Net farm income ratio	5.5 %	-4.8 %	8.1 %

Financial Summary
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Income Statement			
Gross cash farm income	1,138,884	877,121	1,121,891
Total cash farm expense	943,831	808,120	940,922
Net cash farm income	195,053	69,002	180,969
Inventory change	-30,576	-47,944	81,830
Depreciation	-87,183	-63,895	-69,814
Net farm income from operations	77,293	-42,838	192,985
Gain or loss on capital sales	-	-	-
Average net farm income	77,293	-42,838	192,985
Median net farm income	45,029	-29,863	66,265
Profitability (cost)			
Rate of return on assets	1.5 %	-3.4 %	5.6 %
Rate of return on equity	0.5 %	-8.6 %	6.7 %
Operating profit margin	4.4 %	-9.6 %	12.5 %
Asset turnover rate	34.1 %	35.4 %	45.2 %
Profitability (market)			
Rate of return on assets	1.7 %	-2.3 %	7.4 %
Rate of return on equity	1.2 %	-4.0 %	8.5 %
Operating profit margin	7.2 %	-11.5 %	21.8 %
Asset turnover rate	23.9 %	20.4 %	33.8 %
Liquidity & Repayment (end of year)			
Current assets	799,951	689,684	885,137
Current liabilities	384,922	437,408	411,236
Current ratio	2.08	1.58	2.15
Working capital	415,029	252,276	473,900
Change in working capital	-42,549	55,298	-32,983
Working capital to gross inc	36.5 %	29.8 %	38.5 %
Term debt coverage ratio	1.15	0.28	3.46
Replacement coverage ratio	0.73	0.19	1.72
Term debt to EBITDA	3.85	18.38	1.26
Solvency (end of year at cost)			
Number of farms	54	13	14
Total assets	3,750,603	2,751,798	3,291,219
Total liabilities	1,222,085	1,279,482	806,459
Net worth	2,528,518	1,472,316	2,484,761
Net worth change	61,576	-32,726	126,993
Farm debt to asset ratio	37 %	53 %	28 %
Total debt to asset ratio	33 %	46 %	25 %
Change in earned net worth %	2 %	-2 %	5 %
Solvency (end of year at market)			
Number of farms	54	13	14
Total assets	5,491,047	5,124,140	4,430,695
Total liabilities	1,239,763	1,352,913	806,459
Net worth	4,251,284	3,771,227	3,624,237
Total net worth change	161,552	35,096	247,886
Farm debt to asset ratio	26 %	32 %	21 %
Total debt to asset ratio	23 %	26 %	18 %
Change in total net worth %	4 %	1 %	7 %
Nonfarm Information			
Net nonfarm income	31,252	21,166	35,760
Crop Acres			
Total crop acres	1,190	1,391	900
Total crop acres owned	437	506	298
Total crop acres cash rented	730	885	538
Total crop acres share rented	24	-	64
Machinery value per crop acre	810	545	969

Whole Farm Report - Crop Farms

Financial Standards Measures
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Liquidity			
Current ratio	2.08	1.58	2.15
Working capital	415,029	252,276	473,900
Working capital to gross inc	36.5 %	29.8 %	38.5 %
Solvency (market)			
Farm debt to asset ratio	26 %	32 %	21 %
Farm equity to asset ratio	74 %	68 %	79 %
Farm debt to equity ratio	0.36	0.48	0.26
Profitability (cost)			
Rate of return on farm assets	1.5 %	-3.4 %	5.6 %
Rate of return on farm equity	0.5 %	-8.6 %	6.7 %
Operating profit margin	4.4 %	-9.6 %	12.5 %
Net farm income	77,293	-42,838	192,985
EBITDA	202,275	38,093	284,330
Repayment Capacity			
Capital debt repayment capacity	122,123	25,851	230,676
Capital debt repayment margin	15,918	-65,863	164,015
Replacement margin	-44,737	-112,447	96,914
Term debt coverage ratio	1.15	0.28	3.46
Replacement coverage ratio	0.73	0.19	1.72
Efficiency			
Asset turnover rate (cost)	34.1 %	35.4 %	45.2 %
Operating expense ratio	82.2 %	95.5 %	76.9 %
Depreciation expense ratio	7.7 %	7.5 %	5.7 %
Interest expense ratio	3.3 %	2.0 %	1.7 %
Net farm income ratio	6.8 %	-5.1 %	15.7 %

Whole Farm Report - Crop Farms

Summary Farm Income Statement
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Crop sales	984,962	765,547	997,595
Crop inventory change	-21,545	-20,180	20,808
Gross crop income	963,417	745,367	1,018,403
Livestock sales	16,287	10,200	19,929
Livestock inventory change	-980	-1,773	1,420
Gross livestock income	15,307	8,427	21,350
Government payments	41,806	27,823	34,110
Other cash farm income	95,830	73,552	70,257
Change in accounts receivable	16,975	2,517	71,265
Gain or loss on hedging accounts	3,701	-216	17,502
Change in other assets	3,302	276	-413
Gain or loss on breeding lvst	-3,028	-9,927	-1,950
Gross farm income	1,137,309	847,817	1,230,524
Cash operating expenses	907,367	790,099	920,773
Change in prepaids and supplies	33,554	28,975	28,815
Change in growing crops	-2,397	-8,928	-32
Change in accounts payable	-3,491	-421	-3,362
Depreciation	87,183	63,895	69,814
Total operating expense	1,022,217	873,619	1,016,008
Interest paid	36,464	18,021	20,149
Change in accrued interest	1,335	-985	1,382
Total interest expense	37,799	17,036	21,532
Total expenses	1,060,015	890,655	1,037,539
Net farm income from operations	77,293	-42,838	192,985
Gain or loss on capital sales	-	-	-
Net farm income	77,293	-42,838	192,985

Profitability Measures
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Profitability (assets valued at cost)			
Net farm income from operations	77,293	-42,838	192,985
Rate of return on assets	1.5 %	-3.4 %	5.6 %
Rate of return on equity	0.5 %	-8.6 %	6.7 %
Operating profit margin	4.4 %	-9.6 %	12.5 %
Asset turnover rate	34.1 %	35.4 %	45.2 %
Farm interest expense	37,799	17,036	21,532
Value of operator lbr and mgmt.	67,826	54,782	62,711
Return on farm assets	47,266	-80,584	151,805
Average farm assets	3,166,192	2,375,991	2,694,108
Return on farm equity	9,467	-97,620	130,274
Average farm equity	1,993,893	1,140,349	1,952,247
Value of farm production	1,078,157	840,725	1,217,104

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Profitability (assets valued at market)			
Net farm income from operations	107,561	-58,893	306,061
Rate of return on assets	1.7 %	-2.3 %	7.4 %
Rate of return on equity	1.2 %	-4.0 %	8.5 %
Operating profit margin	7.2 %	-11.5 %	21.8 %
Asset turnover rate	23.9 %	20.4 %	33.8 %
Farm interest expense	37,799	17,036	21,532
Value of operator lbr and mgmt.	67,826	54,782	62,711
Return on farm assets	77,534	-96,639	264,881
Average farm assets	4,513,601	4,127,429	3,601,513
Return on farm equity	39,735	-113,675	243,350
Average farm equity	3,323,962	2,819,758	2,859,652
Value of farm production	1,078,157	840,725	1,217,104

Whole Farm Report - Crop Farms

Liquidity & Repayment Capacity Measures
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Liquidity			
Current ratio	2.08	1.58	2.15
Working capital	415,029	252,276	473,900
Working capital to gross inc	36.5 %	29.8 %	38.5 %
Current assets	799,951	689,684	885,137
Current liabilities	384,922	437,408	411,236
Gross revenues (accrual)	1,137,309	847,817	1,230,524
Repayment capacity			
Net farm income from operations	77,293	-42,838	192,985
Depreciation	87,183	63,895	69,814
Personal income	31,252	21,166	35,760
Family living/owner withdrawals	-90,045	-40,034	-78,525
Cash discrepancy	-2	-7	0
Payments on personal debt	-2,876	-	-3,329
Income taxes paid	-9,608	-4,019	-1,886
Interest on term debt	28,923	27,681	15,857
Capital debt repayment capacity	122,123	25,851	230,676
Scheduled term debt payments	-106,205	-91,713	-66,661
Capital debt repayment margin	15,918	-65,863	164,015
Cash replacement allowance	-60,655	-46,585	-67,101
Replacement margin	-44,737	-112,447	96,914
Term debt coverage ratio	1.15	0.28	3.46
Replacement coverage ratio	0.73	0.19	1.72

Whole Farm Report - Crop Farms

Balance Sheet at Market Values
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>		<u>Low 25%</u>		<u>High 25%</u>	
	54		13		14	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Number of farms						
Assets						
Current Farm Assets						
Cash and checking balance	63,822	57,252	30,442	55,918	110,597	61,501
Prepaid expenses & supplies	173,363	139,809	98,642	69,667	233,761	204,946
Growing crops	14,922	17,319	24,384	33,312	8,891	8,923
Accounts receivable	56,496	73,470	53,410	55,927	45,589	116,854
Hedging accounts	84	12	216	0	0	0
Crops held for sale or feed	520,905	499,360	474,591	454,411	455,428	476,236
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	11,456	10,477	19,582	17,809	13,489	14,909
Other current assets	1,093	2,253	1,541	2,640	1,857	1,768
Total current farm assets	842,141	799,951	702,808	689,684	869,611	885,137
Intermediate Farm Assets						
Breeding livestock	28,116	26,463	101,401	95,158	11,053	10,986
Machinery and equipment	928,598	944,097	732,720	699,733	877,386	931,873
Titled vehicles	44,640	49,728	39,200	45,058	40,429	46,750
Other intermediate assets	70,124	58,070	72,133	74,012	67,003	38,441
Total intermediate farm assets	1,071,478	1,078,358	945,454	913,960	995,870	1,028,049
Long Term Farm Assets						
Farm land	1,950,470	2,001,231	1,890,955	1,917,111	1,324,519	1,462,232
Buildings and improvements	487,680	522,474	598,599	596,288	270,927	296,061
Other long-term assets	140,504	132,914	0	0	35,310	35,310
Total long-term farm assets	2,578,654	2,656,620	2,489,554	2,513,399	1,630,756	1,793,603
Total Farm Assets	4,492,274	4,534,929	4,137,816	4,117,043	3,496,238	3,706,789
Total Nonfarm Assets	821,324	956,118	890,512	1,007,097	649,643	723,907
Total Assets	5,313,598	5,491,047	5,028,328	5,124,140	4,145,881	4,430,695
Liabilities						
Current Farm Liabilities						
Accrued interest	12,051	13,386	20,619	19,634	3,269	4,651
Accounts payable	57,085	53,594	13,444	13,022	165,740	162,378
Current notes	238,143	241,859	407,735	346,437	142,915	191,866
Government crop loans	0	0	0	0	0	0
Principal due on term debt	77,283	76,082	64,033	58,315	50,804	52,341
Total current farm liabilities	384,563	384,922	505,831	437,408	362,728	411,236
Total intermediate farm liabs	152,590	161,952	93,338	171,374	65,792	71,455
Total long term farm liabilities	625,187	635,385	606,793	656,541	292,727	279,786
Total farm liabilities	1,162,340	1,182,259	1,205,961	1,265,323	721,246	762,477
Total nonfarm liabilities	43,245	39,826	10,298	14,159	48,284	43,982
Total liabs excluding deferreds	1,205,584	1,222,085	1,216,259	1,279,482	769,530	806,459
Total deferred liabilities	18,282	17,678	75,939	73,431	0	0
Total liabilities	1,223,866	1,239,763	1,292,198	1,352,913	769,530	806,459
Retained earnings	2,466,943	2,528,518	1,505,042	1,472,316	2,357,768	2,484,761
Market valuation equity	1,622,789	1,722,765	2,231,089	2,298,911	1,018,583	1,139,476
Net worth (farm and nonfarm)	4,089,732	4,251,284	3,736,130	3,771,227	3,376,351	3,624,237
Net worth excluding deferreds	4,108,013	4,268,961	3,812,069	3,844,658	3,376,351	3,624,237
Net worth change		161,552		35,096		247,886
Percent net worth change		4 %		1 %		7 %
Ratio Analysis						
Current farm liabilities / assets	46 %	48 %	72 %	63 %	42 %	46 %
Intermediate farm liab. / assets	14 %	15 %	10 %	19 %	7 %	7 %
Long term farm liab. / assets	24 %	24 %	24 %	26 %	18 %	16 %
Total debt to asset ratio	23 %	23 %	26 %	26 %	19 %	18 %
Debt to assets excl deferreds	23 %	22 %	24 %	25 %	19 %	18 %

Whole Farm Report - Crop Farms

Balance Sheet at Cost Values
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of</u> <u>All Farms</u>		<u>Low 25%</u>		<u>High 25%</u>	
Number of farms	54		13		14	
	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>	<u>Beginning</u>	<u>Ending</u>
Assets						
Current Farm Assets						
Cash and checking balance	63,822	57,252	30,442	55,918	110,597	61,501
Prepaid expenses & supplies	173,363	139,809	98,642	69,667	233,761	204,946
Growing crops	14,922	17,319	24,384	33,312	8,891	8,923
Accounts receivable	56,496	73,470	53,410	55,927	45,589	116,854
Hedging accounts	84	12	216	0	0	0
Crops held for sale or feed	520,905	499,360	474,591	454,411	455,428	476,236
Crops under government loan	0	0	0	0	0	0
Market livestock held for sale	11,456	10,477	19,582	17,809	13,489	14,909
Other current assets	1,093	2,253	1,541	2,640	1,857	1,768
Total current farm assets	842,141	799,951	702,808	689,684	869,611	885,137
Intermediate Farm Assets						
Breeding livestock	27,605	25,737	101,401	95,158	9,081	8,186
Machinery and equipment	780,147	797,718	571,676	550,142	767,982	812,191
Titled vehicles	26,884	31,469	18,509	26,086	29,088	32,307
Other intermediate assets	68,927	57,351	70,902	73,396	64,432	37,155
Total intermediate farm assets	903,563	912,276	762,488	744,781	870,583	889,839
Long Term Farm Assets						
Farm land	890,718	914,431	555,400	582,800	644,284	691,330
Buildings and improvements	402,128	431,961	355,541	358,480	225,583	241,231
Other long-term assets	120,940	114,275	0	0	35,310	35,310
Total long-term farm assets	1,413,785	1,460,668	910,942	941,280	905,177	967,870
Total Farm Assets	3,159,490	3,172,894	2,376,237	2,375,745	2,645,371	2,742,846
Total Nonfarm Assets	513,037	577,709	345,063	376,053	481,927	548,374
Total Assets	3,672,527	3,750,603	2,721,300	2,751,798	3,127,298	3,291,219
Liabilities						
Current Farm Liabilities						
Accrued interest	12,051	13,386	20,619	19,634	3,269	4,651
Accounts payable	57,085	53,594	13,444	13,022	165,740	162,378
Current notes	238,143	241,859	407,735	346,437	142,915	191,866
Government crop loans	0	0	0	0	0	0
Principal due on term debt	77,283	76,082	64,033	58,315	50,804	52,341
Total current farm liabilities	384,563	384,922	505,831	437,408	362,728	411,236
Total intermediate farm liabs	152,590	161,952	93,338	171,374	65,792	71,455
Total long term farm liabilities	625,187	635,385	606,793	656,541	292,727	279,786
Total farm liabilities	1,162,340	1,182,259	1,205,961	1,265,323	721,246	762,477
Total nonfarm liabilities	43,245	39,826	10,298	14,159	48,284	43,982
Total liabilities	1,205,584	1,222,085	1,216,259	1,279,482	769,530	806,459
Net worth (farm and nonfarm)	2,466,943	2,528,518	1,505,042	1,472,316	2,357,768	2,484,761
Net worth change		61,576		-32,726		126,993
Percent net worth change		2 %		-2 %		5 %
Ratio Analysis						
Current farm liabilities / assets	46 %	48 %	72 %	63 %	42 %	46 %
Intermediate farm liab. / assets	17 %	18 %	12 %	23 %	8 %	8 %
Long term farm liab. / assets	44 %	43 %	67 %	70 %	32 %	29 %

Whole Farm Report - Crop Farms

Balance Sheet at Cost Values (continued)
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>		<u>Low 25%</u>		<u>High 25%</u>	
Number of farms	54		13		14	
Total debt to asset ratio	<u>Beginning</u> 33 %	<u>Ending</u> 33 %	<u>Beginning</u> 45 %	<u>Ending</u> 46 %	<u>Beginning</u> 25 %	<u>Ending</u> 25 %

Statement Of Cash Flows
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Beginning cash (farm & nonfarm)	71,138	30,442	115,162
Cash Provided By Operating Activities			
Gross cash farm income	1,138,884	877,121	1,121,891
Total cash farm expense	-943,831	-808,120	-940,922
Net cash from hedging transactions	3,773	-	17,502
Cash provided by operating	198,826	69,002	198,470
Cash Provided By Investing Activities			
Sale of breeding livestock	6	-	25
Sale of machinery & equipment	15,154	4,502	1,521
Sale of titled vehicles	204	-	-
Sale of farm land	1,654	-	-
Sale of farm buildings	25,097	-	1,786
Sale of other farm assets	34,534	13,844	47,056
Sale of nonfarm assets	12,275	-	2,811
Purchase of breeding livestock	-1,167	-3,684	-1,079
Purchase of machinery & equip.	-97,247	-32,811	-109,745
Purchase of titled vehicles	-4,318	-4,773	-
Purchase of farm land	-25,381	-27,397	-47,100
Purchase of farm buildings	-78,062	-19,794	-26,452
Purchase of other farm assets	-14,151	-17,161	-20,103
Purchase of nonfarm assets	-20,931	-1,232	-25,199
Cash provided by investing	-152,333	-88,506	-176,479
Cash Provided By Financing Activities			
Money borrowed	442,807	417,062	334,899
Principal payments	-423,501	-350,592	-295,876
Personal income	31,252	21,166	35,760
Family living/owner withdrawals	-87,835	-40,034	-78,525
Income and social security tax	-10,009	-4,019	-1,958
Capital contributions	4,292	4,904	-
Capital distributions	-26,395	-2,747	-64,201
Dividends paid	-2,210	-	-
Cash gifts and inheritances	17,714	-752	-
Gifts given	-679	-	-2,619
Other cash flows	48	-	-
Cash provided by financing	-54,516	44,987	-72,519
Net change in cash balance	-8,024	25,483	-50,528
Ending cash (farm & nonfarm)	63,113	55,918	64,634
Discrepancy	2	7	0

Whole Farm Report - Crop Farms

Crop Production and Marketing Summary
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Acreage Summary			
Total acres owned	203	282	212
Total crop acres	1,190	1,391	900
Crop acres owned	437	506	298
Crop acres cash rented	730	885	538
Crop acres share rented	24	-	64
Total pasture acres	2	7	0
Percent crop acres owned	37 %	36 %	33 %
Mach invest/crop acre cost	671	419	827
Mach invest/crop acre market	810	545	969
Average Price Received (Cash Sales Only)			
Soybeans per bushel	9.89	9.16	9.91
Corn per bushel	3.73	3.56	3.62
Wheat, Winter per bushel	4.36	-	-
Average Yield Per Acre			
Soybeans (bushel)	44.65	37.34	49.16
Corn (bushel)	155.95	141.55	163.22
Hay, Alfalfa (ton)	4.17	-	-

Operator and Labor Information
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Operator Information			
Average number of operators	1.4	1.2	1.4
Average age of operators	55.0	57.7	56.1
Average number of years farming	32.1	36.1	31.4
Results Per Operator			
Working capital	307,008	204,974	331,730
Total assets (market)	4,061,870	4,163,364	3,101,487
Total liabilities	917,085	1,099,242	564,521
Net worth (market)	3,144,785	3,064,122	2,536,966
Net worth excl deferred liabs	3,157,862	3,123,784	2,536,966
Gross farm income	841,297	688,852	861,367
Total farm expense	784,121	723,657	726,278
Net farm income from operations	57,176	-34,806	135,089
Net nonfarm income	23,118	17,197	25,032
Family living & tax withdrawals	73,717	35,799	56,288
Total acres owned	150.3	229.2	148.3
Total crop acres	880.0	1,130.2	630.0
Crop acres owned	322.9	411.4	208.4
Crop acres cash rented	539.7	718.8	376.8
Crop acres share rented	17.4	-	44.9
Total pasture acres	1.2	5.3	0.1
Labor Analysis			
Number of farms	54	13	14
Total unpaid labor hours	3,067	2,846	2,666
Total hired labor hours	12,666	6,026	12,786
Total labor hours per farm	15,734	8,872	15,453
Unpaid hours per operator	2,269	2,313	1,867
Value of farm production / hour	68.53	94.76	78.76
Net farm income / unpaid hour	25.20	-15.05	72.38
Average hourly hired labor wage	15.08	15.76	16.21
Partnerships & LLCs			
Number of farms	22	3	6
Number of operators	1.7	-	-
Owner withdrawals per farm	112,434	-	-
Withdrawals per operator	63,713	-	-

Farm Income Statement
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Ava. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Cash Farm Income			
Aftermath Grazing	497	65	-
Apples	19,452	57,701	5,509
Asparagus	638	-	2,462
Barley	206	856	-
Beans, Black Turtle	7,906	-	6,884
Beans, Green	1,304	5,416	-
Beans, Light Red Kidney	1,951	-	7,527
Beans, Small Red	3,431	7,120	6,621
Blueberries	197,041	51,980	-
Cherries	923	-	-
Cherries, Sweet	625	2,598	-
Cherries, Tart	706	274	2,470
Clover Seed	762	3,167	-
Corn	273,300	225,447	279,628
Corn Silage	5,441	10,678	-
Corn, Seed	39,898	29,762	-
Cranberries	555	2,306	-
Cucumbers	55,305	-	184,574
Eggplant	16,679	-	64,335
Grapes	353	-	-
Hay, Alfalfa	8,302	12,192	755
Hay, Mixed	1,059	4,285	105
Haylage, Grass	252	-	-
Haylage, Mixed	7,933	-	-
Melon, Honeydew	37	154	-
Nectarines	29	121	-
Oats	1,486	5,083	-
Peaches	2,328	1,439	-
Peas, Processing	990	-	3,817
Peppers	12,659	-	48,826
Plums	418	347	-
Potatoes	10,469	-	-
Pumpkins	46	191	-
Soybeans	225,124	233,422	190,694
Soybeans Seed	1,238	5,141	-
Squash	332	-	1,281
Sugar Beets	3,296	5,075	7,737
Tomatoes	40,647	1,221	155,649
Wheat, Soft Red Winter	469	-	-
Wheat, Spring	222	-	-
Wheat, Winter	28,863	67,978	20,735
Barley, Seed	283	1,177	-
Oats, Seed	854	3,545	-
Wheat, Winter, Organic	635	-	2,449
User Added Crop	1,785	3,100	4,007
Miscellaneous crop income	12,970	33,935	7,514
Beef Cow-Calf, Beef Calves	1,077	2,911	104
Beef Finishing	4,802	1,200	17,410
Beef Finish Yearlings	694	2,884	-
Broilers	60	251	-
Dairy Replacement Heifers	7,380	-	-
Dairy Finishing	243	-	938
Goats, Dairy, Goats	92	-	354
Hogs, Farrow To Finish, Raised Hog	292	-	1,125
Hogs, Feeder Pig Prod, Feeder Pigs	428	-	-
Hogs, Finish Feeder Pigs	411	-	-
Sheep, Market Lamb Prod, Mkt Lambs	711	2,954	-
Cull breeding livestock	572	393	1,062
Misc. livestock income	279	45	666
LDP payments	472	-	-
Crop government payments	40,592	27,823	33,424
CRP payments	33	-	129
Livestock govt payments	140	-	542
Other government payments	568	-	14
Custom work income	23,904	24,315	5,370
Patronage dividends, cash	4,445	5,649	4,005
Crop insurance income	10,814	21,415	7,762
Sale of resale items	841	-	-
Contract livestock income	2,702	-	10,422
Real estate tax refund	458	-	-
Other farm income	47,174	11,504	34,986
Gross Cash Farm Income	1,138,884	877,121	1,121,891

Whole Farm Report - Crop Farms

Farm Income Statement (continued)
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Cash Farm Expense			
Seed and plants	82,922	105,331	85,875
Fertilizer	112,576	132,232	113,155
Crop chemicals	55,424	69,597	74,732
Crop insurance	13,722	16,345	14,107
Drying expense	4,889	2,783	10,233
Storage	2,045	3,807	982
Irrigation energy	3,508	732	1,621
Packaging and supplies	12,016	7,917	498
Crop miscellaneous	30,818	8,862	77,912
Crop consultants	197	718	-
Feeder livestock purchase	1,563	114	5,543
Purchased feed	6,076	6,978	7,877
Breeding fees	220	61	791
Veterinary	825	1,899	697
Livestock supplies	847	217	550
Repair, livestock equip	112	-	-
Bedding	189	-	-
Interest	36,464	18,021	20,149
Supplies	3,098	2,843	566
Fuel & oil	29,978	26,385	21,652
Repairs	29,885	32,480	25,814
Repair, machinery	33,219	13,793	30,143
Custom hire	18,073	19,421	20,042
Repair, buildings	4,136	1,781	3,037
Repair, irrigation equip	1,223	85	2,251
Hired labor	197,599	111,843	210,818
Land rent	105,565	114,667	112,424
Machinery leases	7,865	9,737	9,903
Building leases	685	-	2,643
Grazing fees	169	702	-
Real estate taxes	16,513	15,406	11,134
Personal property taxes	796	1,577	1,285
Farm insurance	25,470	33,778	19,910
Utilities	21,665	16,679	17,623
Hauling and trucking	6,710	11,692	9,711
Marketing	2,956	5,024	1,060
Dues & professional fees	6,878	6,077	10,343
Purchase of resale items	51,513	-	-
Miscellaneous	14,225	8,535	11,227
Consultants	1,196	-	4,615
Total cash expense	943,831	808,120	940,922
Net cash farm income	195,053	69,002	180,969
Inventory Changes			
Prepays and supplies	-33,554	-28,975	-28,815
Accounts receivable	16,975	2,517	71,265
Hedging accounts	3,701	-216	17,502
Other current assets	3,557	10,027	-57
Crops and feed	-21,545	-20,180	20,808
Market livestock	-980	-1,773	1,420
Breeding livestock	-3,028	-9,927	-1,950
Other assets	2,142	-823	-324
Accounts payable	3,491	421	3,362
Accrued interest	-1,335	985	-1,382
Total inventory change	-30,576	-47,944	81,830
Net operating profit	164,477	21,057	262,799
Depreciation			
Machinery and equipment	-64,523	-49,843	-64,015
Titled vehicles	472	2,804	3,220
Buildings and improvements	-23,132	-16,856	-9,019
Total depreciation	-87,183	-63,895	-69,814
Net farm income from operations	77,293	-42,838	192,985
Gain or loss on capital sales	-	-	-
Net farm income	77,293	-42,838	192,985

FINPACK Score Card Items
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Rate of Return on Assets - Mkt)

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	54	13	14
Liquidity			
Current ratio	2.08	1.58	2.15
Working capital	415,029	252,276	473,900
Working capital to gross inc	36.5 %	29.8 %	38.5 %
Solvency (market)			
Farm debt to asset ratio	26 %	32 %	21 %
Farm equity to asset ratio	74 %	68 %	79 %
Farm debt to equity ratio	0.36	0.48	0.26
Profitability (cost)			
Rate of ret on fm assets - mkt	1.7 %	-2.3 %	7.4 %
Rate of ret on fm assets - cst	1.5 %	-3.4 %	5.6 %
Rate of ret on fm equity - mkt	1.2 %	-4.0 %	8.5 %
Rate of ret on fm equity - cst	0.5 %	-8.6 %	6.7 %
Operating profit margin - mkt	7.2 %	-11.5 %	21.8 %
Operating profit margin - cst	4.4 %	-9.6 %	12.5 %
Net farm income - mkt	107,561	-58,893	306,061
Net farm income - cst	77,293	-42,838	192,985
EBITDA - cst	202,275	38,093	284,330
Repayment Capacity			
Capital debt repayment capacity	122,123	25,851	230,676
Capital debt repayment margin	15,918	-65,863	164,015
Replacement margin	-44,737	-112,447	96,914
Term debt coverage ratio	1.15	0.28	3.46
Replacement coverage ratio	0.73	0.19	1.72
Efficiency			
Asset turnover rate (cost)	34.1 %	35.4 %	45.2 %
Asset turnover rate (market)	23.9 %	20.4 %	33.8 %
Operating expense ratio	82.2 %	95.5 %	76.9 %
Depreciation expense ratio	7.7 %	7.5 %	5.7 %
Interest expense ratio	3.3 %	2.0 %	1.7 %
Net farm income ratio	6.8 %	-5.1 %	15.7 %

Livestock Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Enterprise Size)

Dairy -- Average Per Cwt. Of Milk

	<u>Ava. Of All Farms</u>		<u>200 500</u>		<u>Over 500</u>	
	38		18		12	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	100.00	17.18	100.00	16.22	100.00	17.73
Dairy Calves sold (hd)	0.00	0.19	0.00	0.19	0.00	0.17
Transferred out (hd)	0.00	0.00	0.00	0.01	-	-
Cull sales (hd)	0.00	1.05	0.00	0.97	0.00	1.09
Other income		0.29		0.23		0.33
Purchased (hd)	0.00	-0.06	-	-0.17	0.00	0.00
Transferred in (hd)	0.00	-0.03	0.00	-0.09	-	-
Inventory change (hd)	0.00	0.13	0.00	0.23	0.00	0.08
Gross margin		18.75		17.61		19.39
Direct Expenses						
Protein Vit Minerals (lb.)	20.84	3.22	15.30	2.27	23.96	3.76
Complete Ration (lb.)	8.96	1.62	14.95	3.07	5.77	0.86
Corn (bu.)	0.26	0.85	0.25	0.84	0.25	0.83
Corn Silage (lb.)	82.81	1.52	91.02	1.66	78.62	1.45
Hay, Alfalfa (lb.)	0.60	0.05	1.30	0.10	0.00	0.00
Haylage, Alfalfa (lb.)	40.58	1.22	41.51	1.26	39.25	1.20
Other feed stuffs (lb)	15.24	0.69	18.35	0.64	14.14	0.75
Breeding fees		0.21		0.19		0.22
Veterinary		0.53		0.56		0.51
Supplies		1.75		1.64		1.81
Contract production exp.		0.20		0.07		0.28
Repairs		0.30		0.24		0.35
Repair, machinery		0.15		0.20		0.11
Hired labor		2.01		2.19		1.96
Utilities		0.34		0.36		0.33
Hauling and trucking		0.47		0.41		0.53
Marketing		0.33		0.48		0.23
Total direct expenses		15.45		16.18		15.17
Return over direct expense		3.31		1.44		4.23
Overhead Expenses						
Hired labor		0.55		0.26		0.74
Farm insurance		0.21		0.21		0.20
Interest		0.31		0.33		0.31
Mach & bldg depreciation		0.62		0.49		0.67
Miscellaneous		0.51		0.48		0.51
Total overhead expenses		2.20		1.77		2.43
Total dir & ovhd expenses		17.65		17.95		17.60
Net return		1.11		-0.33		1.79
Labor & management charge		0.58		0.81		0.38
Net return over lbr & mgt		0.52		-1.14		1.41
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		15.45		16.18		15.17
Total dir & ovhd expense per unit		17.65		17.95		17.60
With other revenue adjustments		16.07		16.55		15.93
With labor and management		16.66		17.35		16.31
Est. labor hours per unit		0.22		0.22		0.21
Other Information						
Number of cows		444.8		315.3		871.6
Milk produced per cow		26,959		26,857		27,322
Total milk sold	11,991,766		8,467,096		23,814,053	
Lb. of milk sold per FTE	1,291,465		1,249,208		1,352,681	
Culling percentage		31.4		27.1		34.3
Turnover rate		33.0		27.7		36.1
Cow death loss percent		1.5		0.6		1.9
Percent of barn capacity		102.2		99.2		104.6
Feed cost per day		6.76		7.24		6.62
Feed cost per cwt. of milk		9.16		9.84		8.85
Feed cost per cow	2,469.22		2,642.36		2,417.37	
Hired labor per cow	691.62		659.10		738.54	
Avg. milk price per cwt.		17.18		16.22		17.73
Milk price / feed margin		8.02		6.38		8.88

Livestock Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Enterprise Size)

Dairy -- Average Per Cow

	<u>Avg. Of</u> <u>All Farms</u>		<u>200</u> <u>500</u>		<u>Over</u> <u>500</u>	
	38		18		12	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	26,958.8	4,630.97	26,857.4	4,355.47	27,321.7	4,843.05
Dairy Calves sold (hd)	0.3	51.18	0.2	51.67	0.4	45.68
Transferred out (hd)	0.0	1.28	0.0	3.33	-	-
Cull sales (hd)	0.3	282.79	0.3	259.18	0.3	298.86
Other income		76.86		61.65		89.87
Purchased (hd)	0.0	-15.43	-	-45.69	0.0	-0.14
Transferred in (hd)	0.0	-7.80	0.1	-23.24	-	-
Inventory change (hd)	0.1	33.82	0.1	60.94	0.1	20.97
Gross margin		5,056.11		4,730.56		5,298.30
Direct Expenses						
Protein Vit Minerals (lb.)	5,617.9	867.21	4,108.6	609.76	6,545.9	1,027.67
Complete Ration (lb.)	2,416.3	437.28	4,014.8	825.04	1,575.6	236.30
Corn (bu.)	68.8	228.79	67.2	224.41	67.7	226.17
Corn Silage (lb.)	22,324.4	409.14	24,444.4	446.73	21,480.0	395.55
Hay, Alfalfa (lb.)	161.9	12.62	350.0	26.25	1.0	0.06
Haylage, Alfalfa (lb.)	10,939.8	327.91	11,149.1	339.42	10,724.0	326.58
Other feed stuffs (lb)	4,109.8	186.26	4,928.0	170.74	3,861.9	205.05
Breeding fees		56.09		51.46		59.40
Veterinary		141.66		151.06		138.99
Supplies		516.15		460.62		554.40
Repairs		81.16		64.07		95.05
Custom hire		48.65		51.78		46.48
Hired labor		542.26		589.15		535.12
Utilities		92.55		95.41		89.05
Hauling and trucking		127.31		109.65		145.07
Marketing		88.92		129.58		63.02
Total direct expenses		4,163.97		4,345.14		4,143.95
Return over direct expense		892.14		385.42		1,154.35
Overhead Expenses						
Hired labor		149.36		69.95		203.42
Farm insurance		56.43		55.57		54.39
Interest		84.86		88.00		84.82
Mach & bldg depreciation		165.81		131.97		183.08
Miscellaneous		137.14		129.16		139.01
Total overhead expenses		593.59		474.65		664.71
Total dir & ovhd expenses		4,757.56		4,819.78		4,808.67
Net return		298.55		-89.22		489.63
Labor & management charge		157.67		216.21		103.03
Net return over lbr & mgt		140.89		-305.44		386.60
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		15.45		16.18		15.17
Total dir & ovhd expense per unit		17.65		17.95		17.60
With other revenue adjustments		16.07		16.55		15.93
With labor and management		16.66		17.35		16.31
Est. labor hours per unit		58.45		60.20		56.55
Other Information						
Number of cows		444.8		315.3		871.6
Milk produced per cow		26,959		26,857		27,322
Total milk sold	11,991,766		8,467,096		23,814,053	
Lb. of milk sold per FTE	1,291,465		1,249,208		1,352,681	
Culling percentage	31.4		27.1		34.3	
Turnover rate	33.0		27.7		36.1	
Cow death loss percent	1.5		0.6		1.9	
Percent of barn capacity	102.2		99.2		104.6	
Feed cost per day	6.76		7.24		6.62	
Feed cost per cwt. of milk	9.16		9.84		8.85	
Feed cost per cow	2,469.22		2,642.36		2,417.37	
Hired labor per cow	691.62		659.10		738.54	
Avg. milk price per cwt.	17.18		16.22		17.73	
Milk price / feed margin	8.02		6.38		8.88	

Livestock Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Dairy -- Average Per Cwt. Of Milk

	<u>Ava. Of All Farms</u>		<u>25 - 50%</u>		<u>High 25%</u>	
	38		10		10	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	100.00	17.18	100.00	16.71	100.00	18.84
Dairy Calves sold (hd)	0.00	0.19	0.00	0.23	0.00	0.18
Transferred out (hd)	0.00	0.00	0.00	0.02	0.00	0.00
Cull sales (hd)	0.00	1.05	0.00	0.94	0.00	1.23
Other income		0.29		0.23		0.60
Purchased (hd)	0.00	-0.06	-	-0.05	0.00	0.00
Transferred in (hd)	0.00	-0.03	0.00	-0.12	-	-
Inventory change (hd)	0.00	0.13	0.00	0.01	0.00	0.29
Gross margin		18.75		18.01		21.14
Direct Expenses						
Protein Vit Minerals (lb.)	20.84	3.22	30.26	4.21	14.45	2.18
Complete Ration (lb.)	8.96	1.62	6.40	1.88	8.06	1.21
Corn (bu.)	0.26	0.85	0.33	1.06	0.27	0.92
Corn Silage (lb.)	82.81	1.52	81.46	1.47	79.00	1.49
Haylage, Alfalfa (lb.)	40.58	1.22	27.75	0.77	42.60	1.39
Corn, Organic (bu.)	0.03	0.14	-	-	0.09	0.43
Corn snaplage (lb.)	3.09	0.13	0.11	0.01	0.11	0.00
Other feed stuffs (lb)	12.73	0.47	14.68	0.33	11.72	0.59
Breeding fees		0.21		0.18		0.25
Veterinary		0.53		0.61		0.47
Supplies		1.72		1.19		2.16
Contract production exp.		0.20		0.21		0.06
Repairs		0.30		0.21		0.53
Custom hire		0.18		0.21		0.15
Hired labor		2.01		1.66		1.90
Utilities		0.34		0.27		0.40
Hauling and trucking		0.47		0.99		0.41
Marketing		0.33		0.32		0.21
Total direct expenses		15.45		15.57		14.76
Return over direct expense		3.31		2.44		6.38
Overhead Expenses						
Hired labor		0.55		0.43		1.05
Interest		0.31		0.51		0.11
Mach & bldg depreciation		0.62		0.58		0.83
Miscellaneous		0.72		0.89		0.84
Total overhead expenses		2.20		2.42		2.83
Total dir & ovhd expenses		17.65		17.99		17.59
Net return		1.11		0.02		3.55
Labor & management charge		0.58		0.70		0.54
Net return over lbr & mgt		0.52		-0.68		3.01
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		15.45		15.57		14.76
Total dir & ovhd expense per unit		17.65		17.99		17.59
With other revenue adjustments		16.07		16.70		15.29
With labor and management		16.66		17.39		15.83
Est. labor hours per unit		0.22		0.21		0.23
Other Information						
Number of cows		444.8		401.5		546.4
Milk produced per cow		26,959		26,955		26,794
Total milk sold	11,991,766		10,823,068		14,641,399	
Lb. of milk sold per FTE	1,291,465		1,347,016		1,222,391	
Culling percentage	31.4		30.9		33.5	
Turnover rate	33.0		33.0		35.5	
Cow death loss percent	1.5		2.1		2.0	
Percent of barn capacity	102.2		102.2		100.0	
Feed cost per day	6.76		7.19		6.02	
Feed cost per cwt. of milk	9.16		9.73		8.21	
Feed cost per cow	2,469.22		2,622.96		2,198.73	
Hired labor per cow	691.62		563.95		790.58	
Avg. milk price per cwt.	17.18		16.71		18.84	
Milk price / feed margin	8.02		6.98		10.63	

Livestock Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Dairy -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>25 - 50%</u>		<u>High 25%</u>	
	38		10		10	
	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms						
Milk sold (hd)	26,958.8	4,630.97	26,955.2	4,505.32	26,794.1	5,047.34
Dairy Calves sold (hd)	0.3	51.18	0.3	62.55	0.4	49.31
Transferred out (hd)	0.0	1.28	0.0	4.71	0.0	0.51
Cull sales (hd)	0.3	282.79	0.3	253.56	0.3	328.68
Other income		76.86		60.86		162.10
Purchased (hd)	0.0	-15.43	-	-13.27	0.0	-0.27
Transferred in (hd)	0.0	-7.80	0.0	-32.85	-	-
Inventory change (hd)	0.1	33.82	0.0	2.54	0.1	76.41
Gross margin		5,056.11		4,853.68		5,664.08
Direct Expenses						
Protein Vit Minerals (lb.)	5,617.9	867.21	8,155.5	1,134.94	3,872.0	583.13
Complete Ration (lb.)	2,416.3	437.28	1,725.9	507.79	2,159.4	323.90
Corn (bu.)	68.8	228.79	87.9	284.94	71.5	247.22
Corn Silage (lb.)	22,324.4	409.14	21,956.9	396.06	21,166.9	398.43
Haylage, Alfalfa (lb.)	10,939.8	327.91	7,480.5	207.14	11,414.3	371.50
Corn, Organic (bu.)	7.5	37.57	-	-	23.2	116.21
Corn snaplage (lb.)	831.9	35.38	29.9	1.87	29.3	1.10
Other feed stuffs (lb)	3,432.3	125.93	3,956.7	90.21	3,141.0	157.23
Breeding fees		56.09		49.19		67.52
Veterinary		141.66		164.00		125.39
Supplies		564.79		432.66		637.94
Repairs		81.16		55.75		142.07
Hired labor		542.26		447.50		510.36
Utilities		92.55		71.59		108.15
Hauling and trucking		127.31		267.62		109.06
Marketing		88.92		85.30		55.63
Total direct expenses		4,163.97		4,196.56		3,954.84
Return over direct expense		892.14		657.12		1,709.25
Overhead Expenses						
Hired labor		149.36		116.45		280.22
Interest		84.86		138.15		29.66
Mach & bldg depreciation		165.81		156.65		222.11
Miscellaneous		193.57		240.83		225.87
Total overhead expenses		593.59		652.09		757.86
Total dir & ovhd expenses		4,757.56		4,848.65		4,712.70
Net return		298.55		5.03		951.39
Labor & management charge		157.67		188.40		144.67
Net return over lbr & mgt		140.89		-183.36		806.72
Cost of Production Per Cwt. Of Milk						
Total direct expense per unit		15.45		15.57		14.76
Total dir & ovhd expense per unit		17.65		17.99		17.59
With other revenue adjustments		16.07		16.70		15.29
With labor and management		16.66		17.39		15.83
Est. labor hours per unit		58.45		56.03		61.37
Other Information						
Number of cows		444.8		401.5		546.4
Milk produced per cow		26,959		26,955		26,794
Total milk sold	11,991,766		10,823,068		14,641,399	
Lb. of milk sold per FTE	1,291,465		1,347,016		1,222,391	
Culling percentage		31.4		30.9		33.5
Turnover rate		33.0		33.0		35.5
Cow death loss percent		1.5		2.1		2.0
Percent of barn capacity		102.2		102.2		100.0
Feed cost per day		6.76		7.19		6.02
Feed cost per cwt. of milk		9.16		9.73		8.21
Feed cost per cow		2,469.22		2,622.96		2,198.73
Hired labor per cow		691.62		563.95		790.58
Avg. milk price per cwt.		17.18		16.71		18.84
Milk price / feed margin		8.02		6.98		10.63

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Crop Tenure Type)

Corn

	<u>Ava. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	70	51	52
Acres	361.97	195.05	295.97
Yield per acre (bu.)	157.27	160.79	155.00
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.39	3.37	3.40
Total product return per acre	532.53	541.41	526.79
Hedging gains/losses per acre	0.02	-0.24	0.19
Crop insurance per acre	9.20	4.67	12.13
LDP income per acre	1.86	1.75	1.94
Other crop income per acre	11.10	6.29	14.21
Gross return per acre	554.72	553.89	555.26
Direct Expenses			
Seed and plants	98.12	101.09	96.21
Fertilizer	103.00	103.97	102.38
Crop chemicals	33.42	33.08	33.64
Non-chemical crop protect	2.12	0.11	3.42
Crop insurance	10.89	11.25	10.66
Drivng expense	8.92	10.68	7.78
Storage	2.00	1.34	2.42
Packaging and supplies	0.65	0.61	0.67
Supplies	0.58	0.79	0.44
Fuel & oil	17.62	15.70	18.86
Repairs	18.90	21.06	17.50
Repair, machinery	17.20	16.76	17.49
Custom hire	19.81	17.63	21.22
Repair, buildings	0.86	1.26	0.60
Hired labor	15.33	13.91	16.24
Land rent	43.56	-	71.71
Machinery leases	2.15	1.84	2.35
Utilities	4.07	3.89	4.19
Hauling and trucking	3.51	3.33	3.63
Marketing	5.07	5.25	4.96
Operating interest	5.32	5.19	5.40
Miscellaneous	1.98	1.04	2.59
Total direct expenses per acre	415.08	369.77	444.37
Return over direct exp per acre	139.64	184.11	110.89
Overhead Expenses			
Supplies	0.46	0.35	0.54
Fuel & oil	6.12	7.10	5.49
Repairs	4.19	2.48	5.30
Repair, machinery	3.94	3.24	4.39
Custom hire	0.80	1.33	0.46
Hired labor	12.90	13.48	12.52
Land rent	22.67	-	37.32
Machinery leases	5.33	3.83	6.30
Building leases	0.96	1.29	0.74
RE & pers. property taxes	10.58	26.72	0.15
Farm insurance	11.48	13.34	10.28
Utilities	5.78	6.67	5.21
Dues & professional fees	2.41	3.10	1.97
Interest	18.03	34.29	7.51
Mach & bldg depreciation	48.03	52.00	45.46
Miscellaneous	5.05	4.57	5.36
Total overhead expenses per acre	158.73	173.77	149.01
Total dir & ovhd exp per acre	573.81	543.54	593.38
Net return per acre	-19.09	10.34	-38.12
Government payments	16.54	18.34	15.37
Net return with govt pmts	-2.55	28.68	-22.74
Labor & management charge	41.32	47.80	37.14
Net return over lbr & mgt	-43.88	-19.11	-59.88
Cost of Production			
Total direct expense per bu.	2.64	2.30	2.87
Total dir & ovhd exp per bu.	3.65	3.38	3.83
Less govt & other income	3.40	3.19	3.55
With labor & management	3.67	3.49	3.78
Net value per unit	3.40	3.38	3.41
Machinery cost per acre	142.27	136.67	145.88
Est. labor hours per acre	3.53	4.16	3.13

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Crop Tenure Type)

Corn Silage

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	43	29	28
Acres	231.34	137.60	212.76
Yield per acre (ton)	18.83	19.17	18.60
Operators share of yield %	100.00	100.00	100.00
Value per ton	35.61	35.38	35.76
Total product return per acre	670.45	678.32	665.18
Hedging gains/losses per acre	0.47	0.08	0.73
Crop insurance per acre	1.61	0.62	2.27
LDP income per acre	2.28	4.69	0.66
Other crop income per acre	8.79	14.44	5.01
Gross return per acre	683.59	698.15	673.84
Direct Expenses			
Seed and plants	102.85	107.36	99.83
Fertilizer	92.07	82.96	98.18
Crop chemicals	31.12	32.53	30.18
Non-chemical crop protect	1.46	-	2.44
Crop insurance	7.60	7.09	7.95
Storage	1.06	2.04	0.40
Packaging and supplies	0.56	1.36	0.03
Supplies	1.08	1.12	1.06
Fuel & oil	30.14	28.37	31.33
Repairs	27.11	25.90	27.92
Repair, machinery	26.65	28.73	25.27
Custom hire	30.94	26.22	34.10
Repair, buildings	1.37	1.82	1.06
Hired labor	23.51	21.14	25.10
Land rent	43.90	-	73.31
Machinery leases	2.61	3.94	1.72
Utilities	2.05	1.16	2.64
Hauling and trucking	7.03	6.21	7.58
Operating interest	3.65	5.32	2.54
Miscellaneous	1.91	2.34	1.63
Total direct expenses per acre	438.69	385.61	474.26
Return over direct exp per acre	244.90	312.55	199.58
Overhead Expenses			
Packaging and supplies	0.89	0.88	0.90
Supplies	0.80	0.35	1.10
Fuel & oil	10.08	12.46	8.48
Repairs	0.91	1.00	0.85
Repair, machinery	9.78	11.58	8.58
Custom hire	1.45	3.42	0.14
Hired labor	29.02	32.23	26.87
Land rent	17.98	-	30.02
Machinery leases	3.77	5.36	2.70
Building leases	0.97	2.38	0.02
RE & pers. property taxes	12.49	30.74	0.26
Farm insurance	8.48	7.43	9.19
Utilities	3.31	4.31	2.65
Dues & professional fees	1.55	1.88	1.33
Interest	27.00	50.49	11.27
Mach & bldg depreciation	50.59	56.25	46.80
Miscellaneous	3.20	3.17	3.22
Total overhead expenses per acre	182.27	223.92	154.37
Total dir & ovhd expenses per acre	620.97	609.53	628.63
Net return per acre	62.62	88.63	45.21
Government payments	16.91	18.71	15.70
Net return with govt pmts	79.53	107.34	60.91
Labor & management charge	22.28	26.71	19.32
Net return over lbr & mgt	57.25	80.63	41.59
Cost of Production			
Total direct expense per ton	23.30	20.11	25.50
Total dir & ovhd exp per ton	32.98	31.80	33.80
Less govt & other income	31.38	29.78	32.49
With labor & management	32.57	31.18	33.53
Net value per unit	35.75	35.63	35.84
Machinery cost per acre	199.19	204.75	195.46
Est. labor hours per acre	4.65	5.05	4.39

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Crop Tenure Type)

Hay, Alfalfa

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>
Number of farms	22	17
Acres	100.42	78.81
Yield per acre (ton)	4.06	4.58
Operators share of yield %	100.00	100.00
Value per ton	132.21	128.91
Total product return per acre	536.37	590.23
LDP income per acre	-0.24	-
Other crop income per acre	7.87	3.89
Gross return per acre	544.00	594.12
Direct Expenses		
Seed and plants	8.29	4.24
Fertilizer	41.04	50.17
Crop chemicals	1.05	0.07
Crop insurance	0.73	-
Fuel & oil	23.37	24.27
Repairs	10.94	7.11
Repair, machinery	44.66	52.68
Custom hire	6.92	2.72
Repair, buildings	0.55	0.82
Hired labor	16.63	23.69
Land rent	12.20	-
Machinery leases	0.56	0.27
Utilities	2.46	2.51
Hauling and trucking	0.50	-
Operating interest	2.07	1.66
Miscellaneous	10.08	1.18
Total direct expenses per acre	182.05	171.39
Return over direct exp per acre	361.96	422.73
Overhead Expenses		
Supplies	0.93	0.03
Fuel & oil	0.41	0.68
Repair, machinery	0.79	1.30
Hired labor	14.73	7.82
Land rent	13.87	-
Machinery leases	1.02	1.47
RE & pers. property taxes	11.35	18.71
Farm insurance	9.89	11.89
Utilities	2.73	2.30
Dues & professional fees	1.83	1.78
Interest	17.21	18.12
Mach & bldg depreciation	41.35	40.14
Miscellaneous	6.45	5.13
Total overhead expenses per acre	122.56	109.38
Total dir & ovhd expenses per acre	304.61	280.77
Net return per acre	239.40	313.35
Government payments	10.72	13.24
Net return with govt pmts	250.11	326.59
Labor & management charge	31.18	30.60
Net return over lbr & mgt	218.93	295.99
Cost of Production		
Total direct expense per ton	44.87	37.43
Total dir & ovhd exp per ton	75.08	61.32
Less govt & other income	70.56	57.58
With labor & management	78.24	64.26
Net value per unit	132.15	128.91
Machinery cost per acre	131.97	125.66
Est. labor hours per acre	3.57	3.51

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Crop Tenure Type)

Haylage, Alfalfa

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	35	27	26
Acres	286.59	149.15	230.91
Yield per acre (ton)	9.11	9.94	8.56
Operators share of yield %	100.00	100.00	100.00
Value per ton	58.72	54.02	62.37
Total product return per acre	535.13	536.98	533.88
Hedging gains/losses per acre	0.59	-	0.99
Crop insurance per acre	0.49	0.43	0.53
LDP income per acre	1.52	1.58	1.48
Other crop income per acre	8.21	8.49	8.02
Gross return per acre	545.94	547.49	544.90
Direct Expenses			
Seed and plants	14.40	10.87	16.77
Fertilizer	48.50	36.24	56.73
Crop chemicals	5.64	6.77	4.88
Non-chemical crop protect	1.66	1.58	1.72
Crop insurance	0.93	0.18	1.43
Storage	0.69	0.98	0.49
Packaging and supplies	2.20	1.59	2.61
Supplies	0.49	0.65	0.39
Fuel & oil	28.91	26.35	30.62
Repairs	30.80	30.58	30.95
Repair, machinery	20.14	16.53	22.56
Custom hire	29.92	24.37	33.64
Repair, buildings	1.07	1.00	1.11
Hired labor	16.41	17.58	15.63
Land rent	60.40	-	100.91
Machinery leases	7.01	4.10	8.96
Utilities	2.05	1.10	2.68
Hauling and trucking	3.06	1.75	3.94
Operating interest	3.78	4.78	3.11
Miscellaneous	4.76	3.17	5.82
Total direct expenses per acre	282.81	190.18	344.95
Return over direct exp per acre	263.12	357.30	199.95
Overhead Expenses			
Packaging and supplies	0.52	0.23	0.72
Supplies	0.87	0.59	1.05
Fuel & oil	7.25	5.59	8.36
Repairs	1.39	2.02	0.98
Repair, machinery	6.40	5.71	6.86
Custom hire	0.43	0.66	0.28
Hired labor	37.08	26.06	44.47
Land rent	7.56	-	12.64
Machinery leases	3.40	4.17	2.88
Building leases	1.20	2.99	0.01
RE & pers. property taxes	11.75	28.81	0.30
Farm insurance	9.16	8.14	9.85
Utilities	3.27	4.68	2.32
Dues & professional fees	2.45	2.07	2.70
Interest	19.31	33.12	10.04
Mach & bldg depreciation	41.45	39.98	42.44
Miscellaneous	9.15	3.46	12.96
Total overhead expenses per acre	162.65	168.29	158.86
Total dir & ovhd expenses per acre	445.46	358.47	503.81
Net return per acre	100.48	189.01	41.09
Government payments	8.83	6.06	10.69
Net return with govt pmts	109.31	195.08	51.78
Labor & management charge	19.58	22.27	17.78
Net return over lbr & mgt	89.73	172.81	34.00
Cost of Production			
Total direct expense per ton	31.03	19.13	40.30
Total dir & ovhd exp per ton	48.88	36.06	58.86
Less govt & other income	46.72	34.40	56.33
With labor & management	48.87	36.64	58.40
Net value per unit	58.95	54.18	62.66
Machinery cost per acre	181.27	162.11	194.13
Est. labor hours per acre	4.79	4.53	4.96

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Crop Tenure Type)

Soybeans

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	61	44	47
Acres	306.89	162.76	245.93
Yield per acre (bu.)	43.99	45.39	43.12
Operators share of yield %	100.00	100.00	100.00
Value per bu.	9.43	9.40	9.44
Total product return per acre	414.66	426.83	407.12
Hedging gains/losses per acre	0.18	-0.13	0.37
Crop insurance per acre	13.05	10.94	14.36
LDP income per acre	2.65	1.94	3.09
Other crop income per acre	13.11	7.62	16.51
Gross return per acre	443.65	447.20	441.45
Direct Expenses			
Seed and plants	64.07	59.91	66.64
Fertilizer	30.40	30.50	30.33
Crop chemicals	30.69	28.61	31.97
Non-chemical crop protect	1.43	0.65	1.91
Crop insurance	9.86	7.39	11.39
Drying expense	0.33	0.00	0.53
Storage	1.69	0.77	2.25
Packaging and supplies	0.86	0.36	1.17
Fuel & oil	10.91	10.25	11.33
Repairs	9.03	10.64	8.03
Repair, machinery	17.67	16.87	18.17
Custom hire	13.50	12.15	14.33
Repair, buildings	1.29	1.64	1.08
Hired labor	9.76	10.19	9.49
Land rent	46.44	-	75.21
Machinery leases	2.56	0.91	3.58
Utilities	2.07	1.76	2.26
Hauling and trucking	1.37	0.76	1.74
Marketing	1.91	1.81	1.98
Operating interest	3.92	2.81	4.60
Miscellaneous	1.93	1.27	2.34
Total direct expenses per acre	261.67	199.26	300.34
Return over direct exp per acre	181.98	247.94	141.11
Overhead Expenses			
Fuel & oil	6.67	6.47	6.79
Repairs	4.76	1.64	6.69
Repair, machinery	3.53	5.24	2.46
Custom hire	0.55	0.37	0.66
Hired labor	8.99	7.14	10.13
Land rent	17.83	-	28.87
Machinery leases	4.85	4.21	5.25
Building leases	0.39	0.11	0.56
RE & pers. property taxes	9.54	24.83	0.07
Farm insurance	12.86	13.59	12.41
Utilities	4.38	4.15	4.52
Dues & professional fees	2.39	2.96	2.04
Interest	13.90	28.08	5.11
Mach & bldg depreciation	43.57	43.65	43.52
Miscellaneous	4.30	3.20	4.97
Total overhead expenses per acre	138.50	145.65	134.07
Total dir & ovhd expenses per acre	400.17	344.91	434.41
Net return per acre	43.48	102.29	7.04
Government payments	17.28	18.91	16.27
Net return with govt pmts	60.76	121.20	23.31
Labor & management charge	42.29	45.97	40.01
Net return over lbr & mgt	18.47	75.23	-16.70
Cost of Production			
Total direct expense per bu.	5.95	4.39	6.97
Total dir & ovhd exp per bu.	9.10	7.60	10.07
Less govt & other income	8.05	6.73	8.90
With labor & management	9.01	7.75	9.83
Net value per unit	9.49	9.44	9.52
Machinery cost per acre	114.33	106.09	119.43
Est. labor hours per acre	3.02	3.42	2.77

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Crop Tenure Type)

Wheat, Winter

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>
Number of farms	36	27	17
Acres	107.38	80.87	98.95
Yield per acre (bu.)	71.21	73.05	68.83
Operators share of yield %	100.00	100.00	100.00
Value per bu.	4.46	4.42	4.52
Total product return per acre	317.70	322.58	311.36
Hedging gains/losses per acre	0.43	0.06	0.90
Crop insurance per acre	6.64	6.77	6.47
LDP income per acre	1.75	3.30	-0.26
Other crop income per acre	14.98	12.66	18.00
Gross return per acre	341.49	345.36	336.47
Direct Expenses			
Seed and plants	46.40	28.16	70.08
Fertilizer	64.45	61.52	68.25
Crop chemicals	34.44	31.38	38.42
Crop insurance	7.98	8.66	7.09
Supplies	0.79	0.35	1.36
Fuel & oil	14.08	11.39	17.57
Repairs	7.43	7.24	7.68
Repair, machinery	19.14	15.20	24.24
Custom hire	18.42	14.59	23.39
Hired labor	9.23	7.64	11.30
Land rent	21.89	-	50.31
Machinery leases	1.40	0.00	3.22
Utilities	1.01	0.91	1.13
Hauling and trucking	2.68	1.56	4.12
Marketing	0.68	0.78	0.55
Operating interest	2.16	1.37	3.17
Miscellaneous	3.03	1.85	4.57
Total direct expenses per acre	255.20	192.60	336.45
Return over direct exp per acre	86.29	152.76	0.01
Overhead Expenses			
Supplies	0.43	0.08	0.89
Fuel & oil	3.34	3.62	2.99
Repairs	1.67	1.69	1.63
Repair, machinery	2.61	1.70	3.78
Custom hire	1.90	2.54	1.07
Hired labor	10.72	13.47	7.16
Land rent	15.00	-	34.47
Machinery leases	1.75	0.78	3.00
RE & pers. property taxes	13.07	23.15	-
Farm insurance	8.19	8.73	7.49
Utilities	3.55	4.19	2.72
Dues & professional fees	1.89	2.37	1.27
Interest	22.38	35.63	5.17
Mach & bldg depreciation	40.78	45.33	34.86
Miscellaneous	4.05	4.57	3.37
Total overhead expenses per acre	131.33	147.86	109.87
Total dir & ovhd expenses per acre	386.53	340.46	446.32
Net return per acre	-45.04	4.90	-109.86
Government payments	15.04	16.83	12.71
Net return with govt pmts	-30.00	21.73	-97.15
Labor & management charge	28.43	35.07	19.82
Net return over lbr & mgt	-58.43	-13.33	-116.97
Cost of Production			
Total direct expense per bu.	3.58	2.64	4.89
Total dir & ovhd exp per bu.	5.43	4.66	6.48
Less govt & other income	4.88	4.12	5.94
With labor & management	5.28	4.60	6.22
Net value per unit	4.49	4.46	4.53
Machinery cost per acre	109.22	96.79	125.36
Est. labor hours per acre	2.73	3.14	2.20

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Corn on Owned Land

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	51	12	13
Acres	195.05	253.78	182.76
Yield per acre (bu.)	160.79	146.38	193.10
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.37	3.38	3.36
Total product return per acre	541.41	495.37	649.51
Hedging gains/losses per acre	-0.24	-	-
Crop insurance per acre	4.67	5.10	4.85
LDP income per acre	1.75	-	4.96
Other crop income per acre	6.29	7.12	1.66
Gross return per acre	553.89	507.59	660.98
Direct Expenses			
Seed and plants	101.09	105.68	97.09
Fertilizer	103.97	94.27	121.98
Crop chemicals	33.08	48.17	23.59
Crop insurance	11.25	16.45	4.62
Drying expense	10.68	16.78	2.65
Storage	1.34	1.62	-
Packaging and supplies	0.61	1.42	0.39
Supplies	0.79	2.58	-
Fuel & oil	15.70	23.98	6.46
Repairs	21.06	28.41	13.62
Repair, machinery	16.76	25.33	9.81
Custom hire	17.63	36.64	8.05
Repair, buildings	1.26	0.17	3.26
Hired labor	13.91	17.97	20.21
Machinery leases	1.84	6.01	-
Utilities	3.89	5.00	2.85
Hauling and trucking	3.33	6.93	2.91
Marketing	5.25	12.25	0.13
Operating interest	5.19	5.21	1.89
Miscellaneous	1.15	0.67	2.03
Total direct expenses per acre	369.77	455.53	321.52
Return over direct exp per acre	184.11	52.06	339.46
Overhead Expenses			
Supplies	0.35	0.76	0.38
Fuel & oil	7.10	5.25	12.12
Repairs	2.48	3.41	0.00
Repair, machinery	3.24	0.00	9.70
Custom hire	1.33	2.78	-
Hired labor	13.48	18.73	4.49
Machinery leases	3.83	3.98	-
Building leases	1.29	4.22	-
RE & pers. property taxes	26.72	28.15	20.52
Farm insurance	13.34	8.80	16.87
Utilities	6.67	7.70	4.73
Dues & professional fees	3.10	1.31	3.66
Interest	34.29	66.80	17.89
Mach & bldg depreciation	52.00	60.16	31.27
Miscellaneous	4.57	4.97	5.64
Total overhead expenses per acre	173.77	217.02	127.28
Total dir & ovhd expenses per acre	543.54	672.55	448.80
Net return per acre	10.34	-164.96	212.18
Government payments	18.34	14.77	14.14
Net return with govt pmts	28.68	-150.19	226.32
Labor & management charge	47.80	29.17	69.75
Net return over lbr & mgt	-19.11	-179.36	156.57
Cost of Production			
Total direct expense per bu.	2.30	3.11	1.67
Total dir & ovhd exp per bu.	3.38	4.59	2.32
Less govt & other income	3.19	4.41	2.19
With labor & management	3.49	4.61	2.55
Net value per unit	3.38	3.38	3.39
Machinery cost per acre	136.67	198.14	86.01
Est. labor hours per acre	4.16	3.46	5.51

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Corn on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	52	12	14
Acres	295.97	294.23	377.24
Yield per acre (bu.)	155.00	145.87	182.48
Operators share of yield %	100.00	100.00	100.00
Value per bu.	3.40	3.39	3.34
Total product return per acre	526.79	495.11	609.80
Hedging gains/losses per acre	0.19	-	-
Crop insurance per acre	12.13	10.36	0.98
LDP income per acre	1.94	2.33	0.41
Other crop income per acre	14.21	12.52	9.42
Gross return per acre	555.26	520.33	620.60
Direct Expenses			
Seed and plants	96.21	105.19	90.98
Fertilizer	102.38	115.43	87.57
Crop chemicals	33.64	44.10	31.59
Non-chemical crop protect	3.42	1.78	8.45
Crop insurance	10.66	17.30	4.92
Drying expense	7.78	12.01	7.69
Storage	2.42	1.51	0.23
Packaging and supplies	0.67	1.00	0.33
Supplies	0.44	1.91	-
Fuel & oil	18.86	30.09	21.55
Repairs	17.50	40.25	18.24
Repair, machinery	17.49	21.42	15.46
Custom hire	21.22	35.87	17.68
Repair, buildings	0.60	0.13	0.69
Hired labor	16.24	14.81	24.23
Land rent	71.71	44.16	65.92
Machinery leases	2.35	3.84	2.12
Utilities	4.19	5.61	6.67
Hauling and trucking	3.63	4.11	2.57
Marketing	4.96	10.95	0.92
Operating interest	5.40	9.61	2.88
Miscellaneous	2.59	0.38	3.11
Total direct expenses per acre	444.37	521.45	413.80
Return over direct exp per acre	110.89	-1.12	206.80
Overhead Expenses			
Supplies	0.54	1.31	0.06
Fuel & oil	5.49	0.60	3.64
Repairs	5.30	0.49	1.58
Repair, machinery	4.39	-	1.95
Custom hire	0.46	0.52	-
Hired labor	12.52	25.52	1.48
Land rent	37.32	103.97	34.30
Machinery leases	6.30	5.09	10.42
Building leases	0.74	1.01	0.11
Farm insurance	10.28	9.64	11.02
Utilities	5.21	4.00	4.48
Dues & professional fees	1.97	1.42	2.09
Interest	7.51	9.11	8.13
Mach & bldg depreciation	45.46	57.77	39.20
Miscellaneous	5.51	8.80	5.08
Total overhead expenses per acre	149.01	229.24	123.52
Total dir & ovhd expenses per acre	593.38	750.69	537.33
Net return per acre	-38.12	-230.36	83.28
Government payments	15.37	15.10	12.45
Net return with govt pmts	-22.74	-215.26	95.73
Labor & management charge	37.14	30.31	36.49
Net return over lbr & mgt	-59.88	-245.56	59.24
Cost of Production			
Total direct expense per bu.	2.87	3.57	2.27
Total dir & ovhd exp per bu.	3.83	5.15	2.94
Less govt & other income	3.55	4.87	2.82
With labor & management	3.78	5.08	3.02
Net value per unit	3.41	3.41	3.34
Machinery cost per acre	145.88	200.46	136.19
Est. labor hours per acre	3.13	2.76	2.78

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Corn Silage on Owned Land

	<u>Ava. Of</u> <u>All Farms</u>
Number of farms	29
Acres	137.60
Yield per acre (ton)	19.17
Operators share of yield %	100.00
Value per ton	35.38
Total product return per acre	678.32
Hedging gains/losses per acre	0.08
Crop insurance per acre	0.62
LDP income per acre	4.69
Other crop income per acre	14.44
Gross return per acre	698.15
Direct Expenses	
Seed and plants	107.36
Fertilizer	82.96
Crop chemicals	32.53
Crop insurance	7.09
Storage	2.04
Packaging and supplies	1.36
Supplies	1.12
Fuel & oil	28.37
Repairs	25.90
Repair, machinery	28.73
Custom hire	26.22
Repair, buildings	1.82
Hired labor	21.14
Machinery leases	3.94
Utilities	1.16
Hauling and trucking	6.21
Marketing	0.25
Operating interest	5.32
Miscellaneous	2.09
Total direct expenses per acre	385.61
Return over direct exp per acre	312.55
Overhead Expenses	
Packaging and supplies	0.88
Supplies	0.35
Fuel & oil	12.46
Repairs	1.00
Repair, machinery	11.58
Custom hire	3.42
Hired labor	32.23
Machinery leases	5.36
Building leases	2.38
RE & pers. property taxes	30.74
Farm insurance	7.43
Utilities	4.31
Dues & professional fees	1.88
Interest	50.49
Mach & bldg depreciation	56.25
Miscellaneous	3.17
Total overhead expenses per acre	223.92
Total dir & ovhd expenses per acre	609.53
Net return per acre	88.63
Government payments	18.71
Net return with govt pmts	107.34
Labor & management charge	26.71
Net return over lbr & mgt	80.63
Cost of Production	
Total direct expense per ton	20.11
Total dir & ovhd exp per ton	31.80
Less govt & other income	29.78
With labor & management	31.18
Net value per unit	35.63
Machinery cost per acre	204.75
Est. labor hours per acre	5.05

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Corn Silage on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	28
Acres	212.76
Yield per acre (ton)	18.60
Operators share of yield %	100.00
Value per ton	35.76
Total product return per acre	665.18
Hedging gains/losses per acre	0.73
Crop insurance per acre	2.27
LDP income per acre	0.66
Other crop income per acre	5.01
Gross return per acre	673.84
Direct Expenses	
Seed and plants	99.83
Fertilizer	98.18
Crop chemicals	30.18
Non-chemical crop protect	2.44
Crop insurance	7.95
Storage	0.40
Supplies	1.06
Fuel & oil	31.33
Repairs	27.92
Repair, machinery	25.27
Custom hire	34.10
Repair, buildings	1.06
Hired labor	25.10
Land rent	73.31
Machinery leases	1.72
Utilities	2.64
Hauling and trucking	7.58
Operating interest	2.54
Miscellaneous	1.66
Total direct expenses per acre	474.26
Return over direct exp per acre	199.58
Overhead Expenses	
Packaging and supplies	0.90
Supplies	1.10
Fuel & oil	8.48
Repairs	0.85
Repair, machinery	8.58
Hired labor	26.87
Land rent	30.02
Machinery leases	2.70
Farm insurance	9.19
Utilities	2.65
Dues & professional fees	1.33
Interest	11.27
Mach & bldg depreciation	46.80
Miscellaneous	3.64
Total overhead expenses per acre	154.37
Total dir & ovhd expenses per acre	628.63
Net return per acre	45.21
Government payments	15.70
Net return with govt pmts	60.91
Labor & management charge	19.32
Net return over lbr & mgt	41.59
Cost of Production	
Total direct expense per ton	25.50
Total dir & ovhd exp per ton	33.80
Less govt & other income	32.49
With labor & management	33.53
Net value per unit	35.84
Machinery cost per acre	195.46
Est. labor hours per acre	4.39

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Hay, Alfalfa on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	17
Acres	78.81
Yield per acre (ton)	4.58
Operators share of yield %	100.00
Value per ton	128.91
Total product return per acre	590.23
Other crop income per acre	3.89
Gross return per acre	594.12
Direct Expenses	
Seed and plants	4.24
Fertilizer	50.17
Fuel & oil	24.27
Repairs	7.11
Repair, machinery	52.68
Custom hire	2.72
Repair, buildings	0.82
Hired labor	23.69
Utilities	2.51
Operating interest	1.66
Miscellaneous	1.53
Total direct expenses per acre	171.39
Return over direct exp per acre	422.73
Overhead Expenses	
Fuel & oil	0.68
Repair, machinery	1.30
Hired labor	7.82
Machinery leases	1.47
RE & pers. property taxes	18.71
Farm insurance	11.89
Utilities	2.30
Dues & professional fees	1.78
Interest	18.12
Mach & bldg depreciation	40.14
Miscellaneous	5.16
Total overhead expenses per acre	109.38
Total dir & ovhd expenses per acre	280.77
Net return per acre	313.35
Government payments	13.24
Net return with govt pmts	326.59
Labor & management charge	30.60
Net return over lbr & mgt	295.99
Cost of Production	
Total direct expense per ton	37.43
Total dir & ovhd exp per ton	61.32
Less govt & other income	57.58
With labor & management	64.26
Net value per unit	128.91
Machinery cost per acre	125.66
Est. labor hours per acre	3.51

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Haylage, Alfalfa on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	27
Acres	149.15
Yield per acre (ton)	9.94
Operators share of yield %	100.00
Value per ton	54.02
Total product return per acre	536.98
Crop insurance per acre	0.43
LDP income per acre	1.58
Other crop income per acre	8.49
Gross return per acre	547.49
Direct Expenses	
Seed and plants	10.87
Fertilizer	36.24
Crop chemicals	6.77
Non-chemical crop protect	1.58
Storage	0.98
Packaging and supplies	1.59
Supplies	0.65
Fuel & oil	26.35
Repairs	30.58
Repair, machinery	16.53
Custom hire	24.37
Repair, buildings	1.00
Hired labor	17.58
Machinery leases	4.10
Utilities	1.10
Hauling and trucking	1.75
Operating interest	4.78
Miscellaneous	3.35
Total direct expenses per acre	190.18
Return over direct exp per acre	357.30
Overhead Expenses	
Packaging and supplies	0.23
Supplies	0.59
Fuel & oil	5.59
Repairs	2.02
Repair, machinery	5.71
Custom hire	0.66
Hired labor	26.06
Machinery leases	4.17
Building leases	2.99
RE & pers. property taxes	28.81
Farm insurance	8.14
Utilities	4.68
Dues & professional fees	2.07
Interest	33.12
Mach & bldg depreciation	39.98
Miscellaneous	3.46
Total overhead expenses per acre	168.29
Total dir & ovhd expenses per acre	358.47
Net return per acre	189.01
Government payments	6.06
Net return with govt pmts	195.08
Labor & management charge	22.27
Net return over lbr & mgt	172.81
Cost of Production	
Total direct expense per ton	19.13
Total dir & ovhd exp per ton	36.06
Less govt & other income	34.40
With labor & management	36.64
Net value per unit	54.18
Machinery cost per acre	162.11
Est. labor hours per acre	4.53

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Haylage, Alfalfa on Cash Rent

	<u>Ava. Of</u> <u>All Farms</u>
Number of farms	26
Acres	230.91
Yield per acre (ton)	8.56
Operators share of yield %	100.00
Value per ton	62.37
Total product return per acre	533.88
Hedging gains/losses per acre	0.99
Crop insurance per acre	0.53
LDP income per acre	1.48
Other crop income per acre	8.02
Gross return per acre	544.90
Direct Expenses	
Seed and plants	16.77
Fertilizer	56.73
Crop chemicals	4.88
Non-chemical crop protect	1.72
Crop insurance	1.43
Storage	0.49
Packaging and supplies	2.61
Fuel & oil	30.62
Repairs	30.95
Repair, machinery	22.56
Custom hire	33.64
Repair, buildings	1.11
Hired labor	15.63
Land rent	100.91
Machinery leases	8.96
Utilities	2.68
Hauling and trucking	3.94
Marketing	0.14
Operating interest	3.11
Miscellaneous	6.07
Total direct expenses per acre	344.95
Return over direct exp per acre	199.95
Overhead Expenses	
Packaging and supplies	0.72
Supplies	1.05
Fuel & oil	8.36
Repairs	0.98
Repair, machinery	6.86
Custom hire	0.28
Hired labor	44.47
Land rent	12.64
Machinery leases	2.88
RE & pers. property taxes	0.30
Farm insurance	9.85
Utilities	2.32
Dues & professional fees	2.70
Interest	10.04
Mach & bldg depreciation	42.44
Miscellaneous	12.97
Total overhead expenses per acre	158.86
Total dir & ovhd expenses per acre	503.81
Net return per acre	41.09
Government payments	10.69
Net return with govt pmts	51.78
Labor & management charge	17.78
Net return over lbr & mgt	34.00
Cost of Production	
Total direct expense per ton	40.30
Total dir & ovhd exp per ton	58.86
Less govt & other income	56.33
With labor & management	58.40
Net value per unit	62.66
Machinery cost per acre	194.13
Est. labor hours per acre	4.96

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Soybeans on Owned Land

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	44	10	12
Acres	162.76	135.62	193.20
Yield per acre (bu.)	45.39	38.14	51.46
Operators share of yield %	100.00	100.00	100.00
Value per bu.	9.40	9.30	9.30
Total product return per acre	426.83	354.74	478.55
Hedging gains/losses per acre	-0.13	0.00	-
Crop insurance per acre	10.94	10.41	-
LDP income per acre	1.94	-	1.23
Other crop income per acre	7.62	5.56	8.44
Gross return per acre	447.20	370.72	488.22
Direct Expenses			
Seed and plants	59.91	67.97	51.86
Fertilizer	30.50	64.86	26.78
Crop chemicals	28.61	25.37	23.82
Non-chemical crop protect	0.65	-	-
Crop insurance	7.39	8.23	3.60
Storage	0.77	0.79	0.62
Packaging and supplies	0.36	0.71	-
Fuel & oil	10.25	12.17	5.20
Repairs	10.64	10.69	8.16
Repair, machinery	16.87	34.56	5.24
Custom hire	12.15	16.63	13.05
Repair, buildings	1.64	2.09	3.71
Hired labor	10.19	9.95	16.39
Machinery leases	0.91	1.98	-
Utilities	1.76	1.25	1.60
Hauling and trucking	0.76	1.78	0.46
Marketing	1.81	6.55	0.32
Operating interest	2.81	3.16	2.61
Miscellaneous	1.27	0.19	1.18
Total direct expenses per acre	199.26	268.94	164.61
Return over direct exp per acre	247.94	101.78	323.62
Overhead Expenses			
Fuel & oil	6.47	10.43	8.49
Repairs	1.64	3.57	1.34
Repair, machinery	5.24	1.90	5.29
Custom hire	0.37	1.69	-
Hired labor	7.14	9.67	3.06
Machinery leases	4.21	5.22	-
Building leases	0.11	0.59	-
RE & pers. property taxes	24.83	20.80	15.84
Farm insurance	13.59	8.89	19.25
Utilities	4.15	3.28	6.65
Dues & professional fees	2.96	1.31	3.73
Interest	28.08	43.73	10.75
Mach & bldg depreciation	43.65	43.85	33.83
Miscellaneous	3.20	4.40	3.64
Total overhead expenses per acre	145.65	159.34	111.86
Total dir & ovhd expenses per acre	344.91	428.28	276.47
Net return per acre	102.29	-57.56	211.75
Government payments	18.91	44.10	15.86
Net return with govt pmts	121.20	-13.47	227.62
Labor & management charge	45.97	26.38	57.56
Net return over lbr & mgt	75.23	-39.85	170.06
Cost of Production			
Total direct expense per bu.	4.39	7.05	3.20
Total dir & ovhd exp per bu.	7.60	11.23	5.37
Less govt & other income	6.73	9.65	4.88
With labor & management	7.75	10.34	6.00
Net value per unit	9.44	9.30	9.32
Machinery cost per acre	106.09	141.18	72.22
Est. labor hours per acre	3.42	2.06	4.30

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Soybeans on Cash Rent

	<u>Avg. Of All Farms</u>	<u>Low 25%</u>	<u>High 25%</u>
Number of farms	47	11	12
Acres	245.93	188.95	211.84
Yield per acre (bu.)	43.12	37.82	49.56
Operators share of yield %	100.00	100.00	100.00
Value per bu.	9.44	9.26	9.50
Total product return per acre	407.12	350.09	471.05
Hedging gains/losses per acre	0.37	0.00	0.65
Crop insurance per acre	14.36	16.95	-
LDP income per acre	3.09	-	0.69
Other crop income per acre	16.51	18.07	28.96
Gross return per acre	441.45	385.12	501.36
Direct Expenses			
Seed and plants	66.64	83.33	50.93
Fertilizer	30.33	47.19	21.21
Crop chemicals	31.97	40.50	28.50
Non-chemical crop protect	1.91	-	-
Crop insurance	11.39	16.52	15.27
Drying expense	0.53	-	0.21
Storage	2.25	0.38	7.37
Packaging and supplies	1.17	2.17	1.46
Fuel & oil	11.33	22.55	6.78
Repairs	8.03	26.60	1.80
Repair, machinery	18.17	19.03	11.25
Custom hire	14.33	18.67	6.34
Repair, buildings	1.08	0.15	0.42
Hired labor	9.49	8.41	7.90
Land rent	75.21	53.54	91.41
Machinery leases	3.58	4.97	-
Utilities	2.26	4.12	0.30
Hauling and trucking	1.74	0.28	1.89
Marketing	1.98	0.83	4.57
Operating interest	4.60	10.79	2.17
Miscellaneous	2.34	0.04	0.19
Total direct expenses per acre	300.34	360.08	259.95
Return over direct exp per acre	141.11	25.04	241.41
Overhead Expenses			
Supplies	0.46	1.67	-
Fuel & oil	6.79	0.32	5.98
Repairs	6.69	-	18.75
Repair, machinery	2.46	0.71	2.00
Custom hire	0.66	-	-
Hired labor	10.13	25.01	8.52
Land rent	28.87	62.05	0.58
Machinery leases	5.25	5.37	0.35
Building leases	0.56	2.11	0.01
Farm insurance	12.41	11.47	10.82
Utilities	4.52	5.38	6.94
Dues & professional fees	2.04	2.05	2.49
Interest	5.11	8.69	1.06
Mach & bldg depreciation	43.52	40.09	42.40
Miscellaneous	4.58	6.42	5.43
Total overhead expenses per acre	134.07	171.33	105.32
Total dir & ovhd expenses per acre	434.41	531.41	365.27
Net return per acre	7.04	-146.29	136.09
Government payments	16.27	16.31	20.53
Net return with govt pmts	23.31	-129.98	156.62
Labor & management charge	40.01	36.65	54.74
Net return over lbr & mgt	-16.70	-166.63	101.87
Cost of Production			
Total direct expense per bu.	6.97	9.52	5.24
Total dir & ovhd exp per bu.	10.07	14.05	7.37
Less govt & other income	8.90	12.69	6.34
With labor & management	9.83	13.66	7.45
Net value per unit	9.52	9.26	9.53
Machinery cost per acre	119.43	142.73	89.92
Est. labor hours per acre	2.77	2.74	3.48

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Wheat, Winter on Owned Land

	<u>Avg. Of All Farms</u>
Number of farms	27
Acres	80.87
Yield per acre (bu.)	73.05
Operators share of yield %	100.00
Value per bu.	4.42
Total product return per acre	322.58
Hedging gains/losses per acre	0.06
Crop insurance per acre	6.77
LDP income per acre	3.30
Other crop income per acre	12.66
Gross return per acre	345.36
Direct Expenses	
Seed and plants	28.16
Fertilizer	61.52
Crop chemicals	31.38
Non-chemical crop protect	0.36
Crop insurance	8.66
Fuel & oil	11.39
Repairs	7.24
Repair, machinery	15.20
Custom hire	14.59
Hired labor	7.64
Utilities	0.91
Hauling and trucking	1.56
Marketing	0.78
Operating interest	1.37
Miscellaneous	1.83
Total direct expenses per acre	192.60
Return over direct exp per acre	152.76
Overhead Expenses	
Fuel & oil	3.62
Repairs	1.69
Repair, machinery	1.70
Custom hire	2.54
Hired labor	13.47
Machinery leases	0.78
RE & pers. property taxes	23.15
Farm insurance	8.73
Utilities	4.19
Dues & professional fees	2.37
Interest	35.63
Mach & bldg depreciation	45.33
Miscellaneous	4.66
Total overhead expenses per acre	147.86
Total dir & ovhd expenses per acre	340.46
Net return per acre	4.90
Government payments	16.83
Net return with govt pmts	21.73
Labor & management charge	35.07
Net return over lbr & mgt	-13.33
Cost of Production	
Total direct expense per bu.	2.64
Total dir & ovhd exp per bu.	4.66
Less govt & other income	4.12
With labor & management	4.60
Net value per unit	4.46
Machinery cost per acre	96.79
Est. labor hours per acre	3.14

Crop Enterprise Analysis
2017 Michigan Farm Business Analysis
MSU Telfarm Program
(Farms Sorted By Net Return)

Wheat, Winter on Cash Rent

	<u>Avg. Of All Farms</u>
Number of farms	17
Acres	98.95
Yield per acre (bu.)	68.83
Operators share of yield %	100.00
Value per bu.	4.52
Total product return per acre	311.36
Hedging gains/losses per acre	0.90
Crop insurance per acre	6.47
LDP income per acre	-0.26
Other crop income per acre	18.00
Gross return per acre	336.47
Direct Expenses	
Seed and plants	70.08
Fertilizer	68.25
Crop chemicals	38.42
Crop insurance	7.09
Storage	0.24
Supplies	1.36
Fuel & oil	17.57
Repairs	7.68
Repair, machinery	24.24
Custom hire	23.39
Hired labor	11.30
Land rent	50.31
Machinery leases	3.22
Utilities	1.13
Hauling and trucking	4.12
Marketing	0.55
Operating interest	3.17
Miscellaneous	4.32
Total direct expenses per acre	336.45
Return over direct exp per acre	0.01
Overhead Expenses	
Supplies	0.89
Fuel & oil	2.99
Repairs	1.63
Repair, machinery	3.78
Custom hire	1.07
Hired labor	7.16
Land rent	34.47
Machinery leases	3.00
Farm insurance	7.49
Utilities	2.72
Dues & professional fees	1.27
Interest	5.17
Mach & bldg depreciation	34.86
Miscellaneous	3.37
Total overhead expenses per acre	109.87
Total dir & ovhd expenses per acre	446.32
Net return per acre	-109.86
Government payments	12.71
Net return with govt pmts	-97.15
Labor & management charge	19.82
Net return over lbr & mgt	-116.97
Cost of Production	
Total direct expense per bu.	4.89
Total dir & ovhd exp per bu.	6.48
Less govt & other income	5.94
With labor & management	6.22
Net value per unit	4.53
Machinery cost per acre	125.36
Est. labor hours per acre	2.20