



2017

FARM
BUSINESS
SUMMARY

EXECUTIVE SUMMARY

2017 ANNUAL REPORT OF MISSOURI FARM BUSINESS MANAGEMENT ANALYSIS PROGRAM

By
Bruce Fowler, Missouri FBMA Specialist

The average net farm income (NFI) for the 117 farms included in the 2017 annual report of the Missouri Farm Business Management Analysis Program was \$37,616. As is the case every year, there was a wide range in income among program participants. The lowest 20% of the farms (23) showed an average NFI of -\$117,390, while the highest 20% (24) averaged \$178,155. Of the 117 farms, 22 had a negative net farm income.

Median net farm income, or the income earned by the middle farm, was \$36,054.

2017 Distribution of Net Farm Income (Cost)
(NFI from all farms are included in the Median and Average figures.)

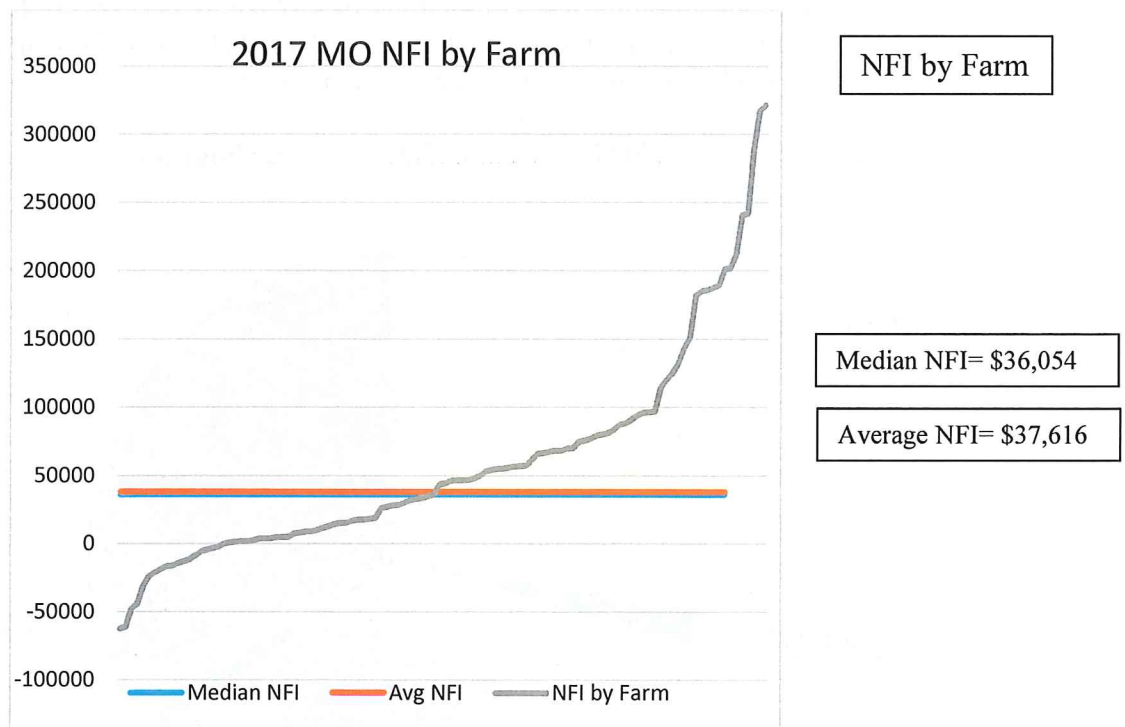


Figure 1

Highlights

- The average age of the operator on the 117 FBMA farms was 53.0 years, with a range from 93 years old down to 19 years old. The average years in farming was 29.1 years, with a range from 74 years to 1 year.
- The net farm income/unpaid labor hour averaged \$25.79 and ranged from -\$96.13 in the low profit group to \$84.90 in the high profit group. This figure is used for comparison to a per-hour wage in non-farm occupations. Average hourly hired labor wage paid was \$20.32.

- Government payments (including CRP, but not crop insurance proceeds) averaged \$15,433, representing approximately 2.99% of the gross cash farm income.
- The relationship of farm income and expense sources as compared to gross farm income and total farm expenses maintains a very durable pattern from year to year. Even though some new farms are added to the group each year while others drop out, the income and expense patterns change slowly.
 - As an example, the only income sources that increased its share of the total by more than two percentage points from 2016 was corn crop income which increased from 20.34% in 2016 to 23.65% in 2017. Dairy income was the only income source that decreased by more than two percentage points dropping to 0% in 2017 from 3.32% of gross income in 2016. All other income sources remained within two percent of where they were in 2016.
 - Likewise, there were only two expense sources that changed more than two percentage point's share of the total from 2016 to 2017. Seed, fertilizer and chemical expense increased from 24.23% in 2016 to 26.54% in 2017, and feeder livestock purchase decreased from 6.15% to 3.71%.

2017 Missouri FBMA Income Sources

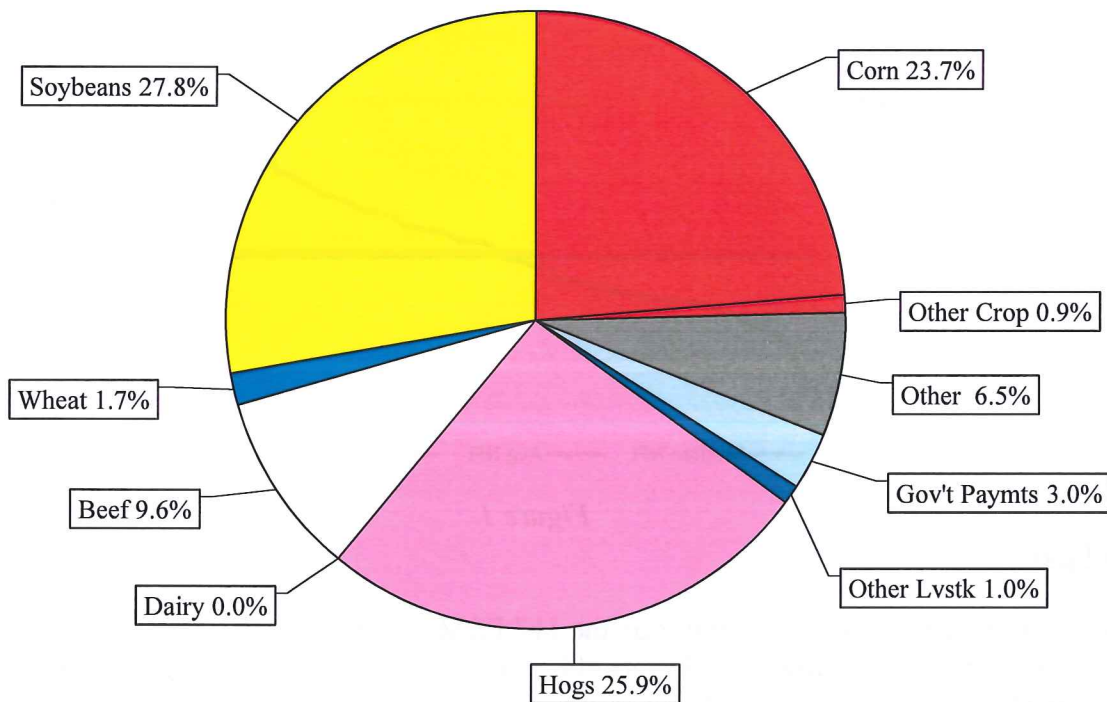


Figure 2

2017 Missouri FBMA Expense Sources

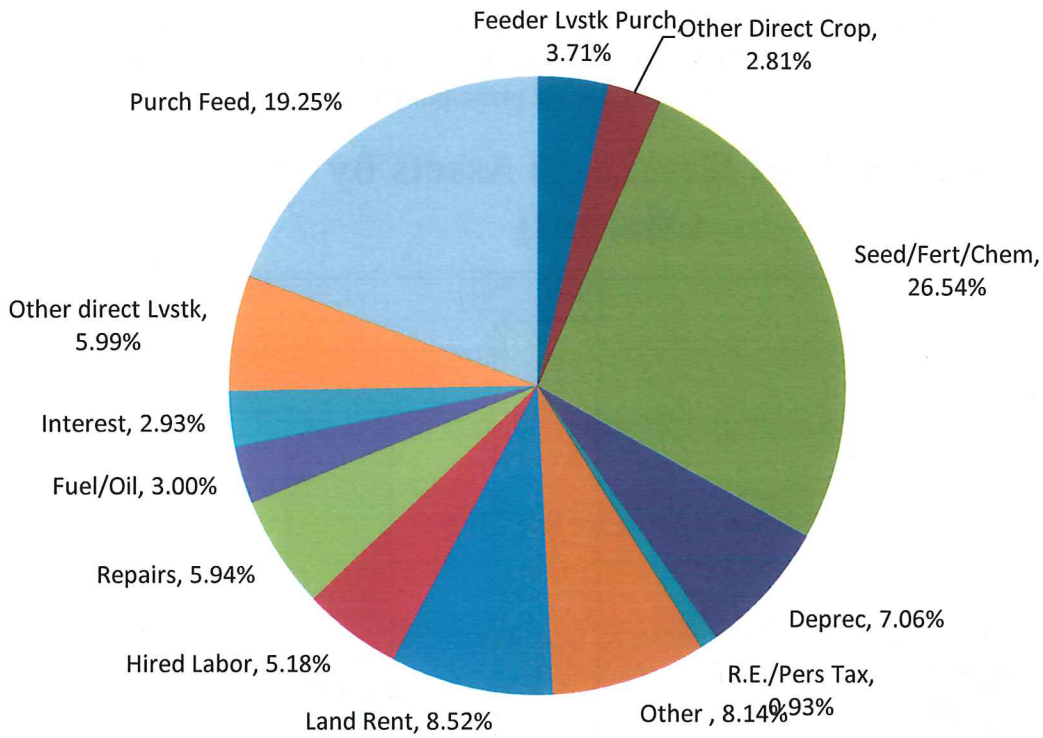


Figure 3

- The average rates of returns on assets (ROA) and equity (ROE) decreased in comparing 2017 to 2016. ROA decreased 0.7%, moving from 1.9% in 2016 to 1.2% in 2017. ROE was also lower, decreasing from 1.2% in 2016 to 0.3% in 2017.

2017 Rate of Return on Assets by Type (Cost)

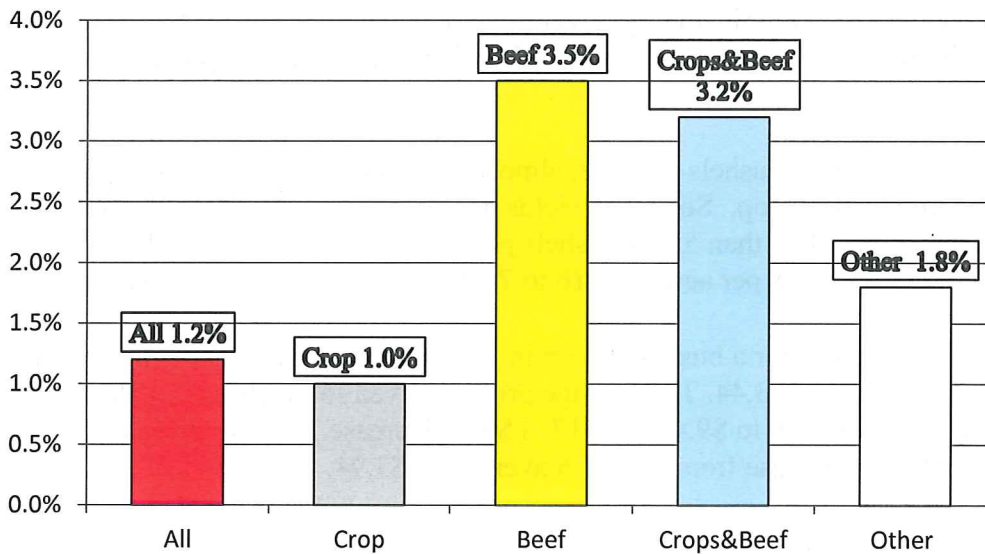


Figure 4

- On the cost balance sheet, the average farm reported net worth increase of \$16,016. The average farm market value balance sheet increased \$34,226. The average farm debt to asset ratio (farm) was 18% at market values and 26% at cost values. The average farm borrowed \$262,513 and paid \$230,468 in principal payments in 2017.

2017 Rate of Return on Assets by Type (Market)

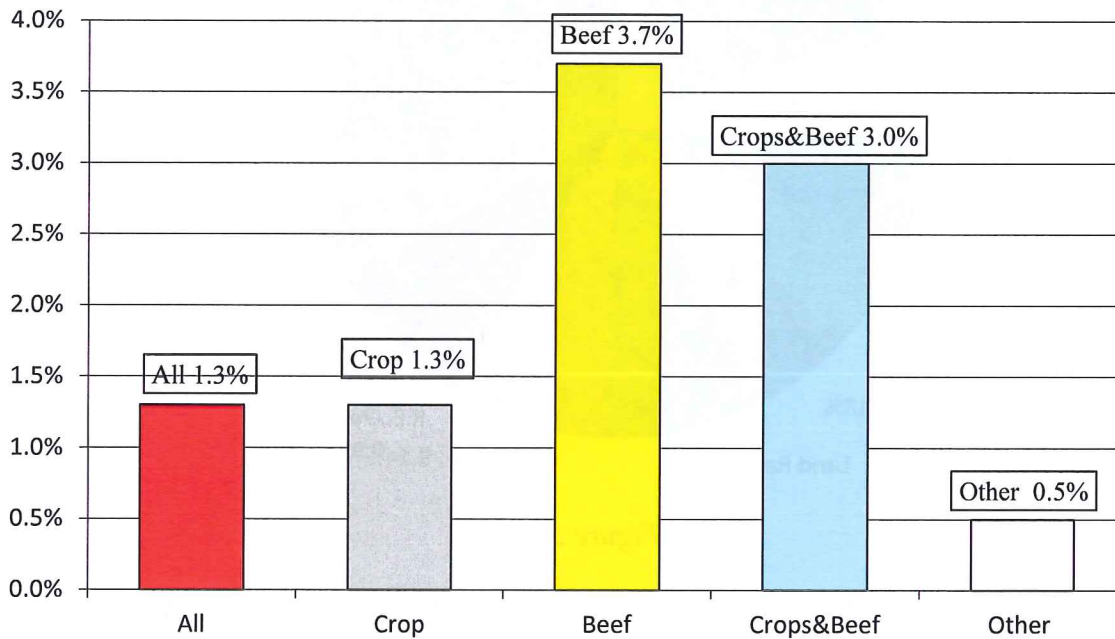


Figure 5

- Average gross cash income was down 1.5% from 2016, while cash expenses decreased by 3.7 %.
- Crop sales accounted for 57% (including government payments) of gross income (up from 52% in 2016), while livestock sales were 36.5 % (down from 41.6% in 2016).

Crops

- Corn yields averaged 164.5 bushels per acre, almost 13 bushels lower than the 177.32 bushel average in the 2016 crop. Soybeans yields decreased to 51.7 bushels per acre, nearly 4 bushels per acre less than 55.58 bushels per acre in 2016. Wheat yields increased from 75.31 bushels per acre in 2016 to 78.42 bushels per acre in 2017.
- The average price received for a bushel of corn in 2017 was \$3.41, a \$.03 decline from the previous year's price of \$3.44. The average price received for soybeans in 2017 increased from \$9.28 in 2016 to \$9.48 in 2017, a \$0.20 increase. Wheat prices averaged \$4.45 in 2017, a \$0.49 increase from the 2016 average of \$3.94.

Corn Cost Per Acre (cash rent)*
Missouri FBMA Program Data

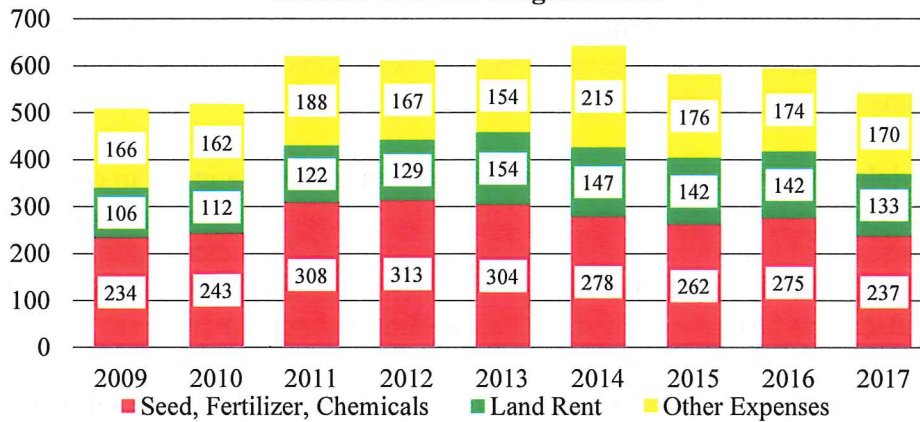


Figure 6

* FBMA farms that included a complete crop enterprise analysis, including all direct and overhead costs (28 farms with cash rent corn in 2017).

Soybean Cost Per Acre (cash rent)*
Missouri FBMA Program Data

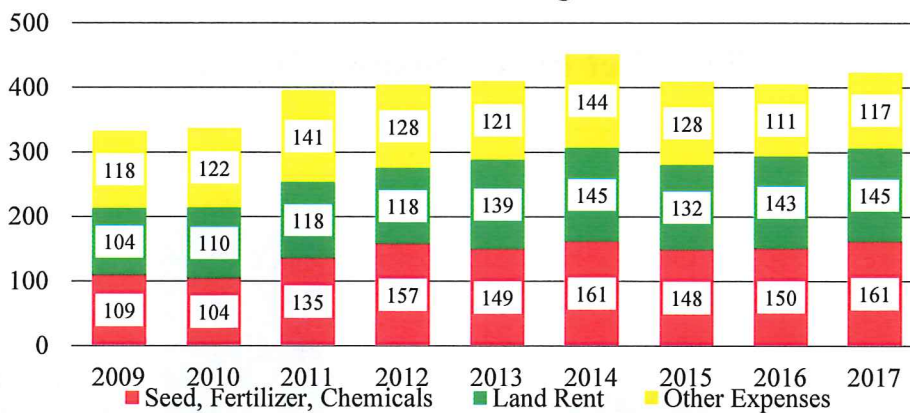


Figure 7

* FBMA farms that included a complete crop enterprise analysis, including all direct and overhead costs (36 farms with cash rent soybeans in 2017).

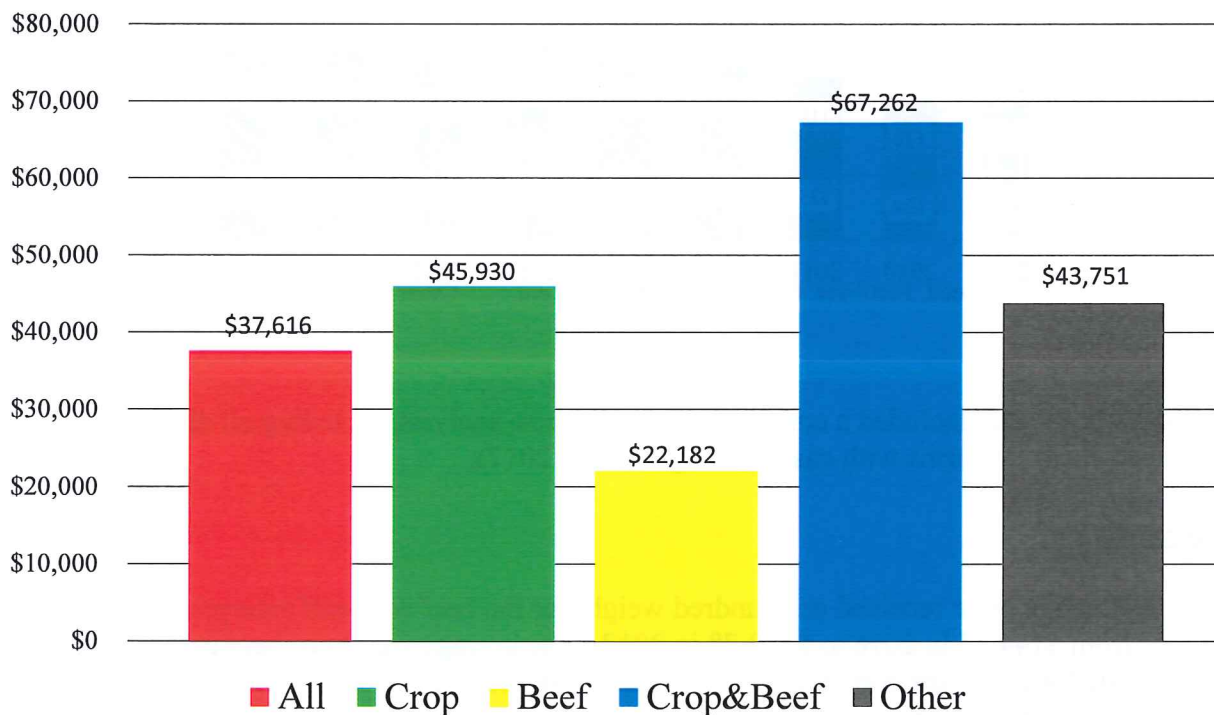
Livestock

- Average price received per hundred weight for the beef cow-calf enterprise decreased from \$144.43 in 2016 to \$142.78 in 2017. The average weight of beef calves sold in 2017 was 619 lbs compared to 581 lb. average in 2016. 25 farms completed a beef cow-calf enterprise analysis in 2017.
- 6 farms completed a sheep-market lamb production enterprise analysis for 2017. These farms had a return over direct and overhead expenses of \$48.29, and a -\$1.61 net return over all costs (including labor and management) per ewe for that enterprise.

Observations from the 2017 Summary

- Even though making comparisons between annual record summaries is imperfect when a few farms drop out and new farms are added each year, a large percentage of the farms in the summary are the same ones as 2016, so it is reasonable to make several general observations when comparing this year's summary to 2016.
- Average yields and prices for crop farms did not change dramatically in comparing 2017 to 2016, but individual farm yields vary quite a bit. While the average corn yield was 164 bushels, individual yields actually ranged from over 270 bushels per acre to less than 40. Soybean yields had a similar degree of variation, with the average yield being just over 50 yet several farms were over 70, and several were under 30.
- Cow-calf producers continue to face challenging times in 2017 due to continued low calf prices and high cost of production.
- The 117 farms in the report were classified by type (e.g. crop, beef, hog) on the basis of having at least 70% of gross sales in each category (reference page 39). Using this 70% rule, there were 62 crop farms, 17 beef farms, 19 crop and beef farms, and 9 "other" farms. "Other" farms were those that did not have a single source (or pair of sources) of income over 70%. Also, when there are less than four farms with a single source of income over 70%, they are not reported as a group.

2017 Net Farm Income By Type



* Groups of less than four farms are not reported here.

Figure 8

Key Points and Limitations in Interpreting the Data

1. There is a wide range in size and type of farms included in the group of 117. A few large farms can have considerable input on the averages, particularly when sorted down to a small number for comparison (e.g. five hog enterprises or five wheat enterprises).
2. Farm financial information throughout the report was carefully checked for complete and defensible farm data. However, the non-farm income and expenses and non-farm assets and liabilities, while complete on many farms, were incomplete on a number of others, making any data resulting from non-farm information less useful for accurate comparisons.
3. Naturally, the greater the number of farms or enterprises in a database, the more reliable the output information will be. Consequently, when as small a group as five farms is averaged for crop or livestock enterprise data, comparisons are more limited than for a larger group.
4. People often think of farm operations as one-family units, but it's important to note that many of the farms in the group represented here provide the primary livelihood for more than one family.

***2017 ANNUAL REPORT OF MISSOURI FARM BUSINESS MANAGEMENT ANALYSIS PROGRAM**

By

Bruce Fowler, Missouri FBMA Specialist

This report summarizes the individual farm records of the cooperators of the Missouri Farm Business Management Analysis (FBMA) Program for 2017. The Farm Business Management Analysis Program is a component of the public school agriculture offerings for adults. The state of Missouri, through the Division of College and Career Readiness of the Department of Elementary and Secondary Education and the National Institute of Food and Agriculture (USDA), through the Farm Business Management and Benchmarking Program, provided funds in support of the program. The staff of the Department of Agricultural Education and Leadership at the University of Missouri developed the program and worked with staff in the Department of Elementary and Secondary Education in implementing the program.

The purpose of FBMA is to help farm families achieve their farm business and family goals through improved management, organization, and efficiency of their farm businesses. To accomplish the purpose, local adult agricultural education instructors assist enrollees in establishing a solid accounting system, make regular on-site visits to enrollees' farms to assist in developing strategies to improve the profitability of the farm business, teach in-depth classes relating to farm business management skills, and use FinPack along with the enrollees' accounting program to complete an annual analysis of records, providing a comparative database for assisting in management decisions.

Whole-farm financial information and enterprise costs and returns are reported. The year-end analysis of the individual farms was performed by local adult agriculture instructors of Missouri. The individual analyses were checked and summarized by Bruce Fowler, FBMA Specialist. Tables in this report were created using FinPack and RankEm Central, copyrighted software of the Center for Farm Financial Management, University of Minnesota.

Data from 117 Missouri farms are included in this report. Additional farms' records were submitted, but omitted from the summary because of incomplete information at the time the report was prepared.

All of the farms in the Missouri database submitted information for a *whole farm* financial analysis. A smaller number submitted data for complete *crop and livestock enterprise* analyses in addition to the whole farm data. This summary includes crop and livestock reports on each enterprise with four or more farms submitting complete enterprise records.

Leon Busdieker, Director
Agricultural Education Section
Dept of Elementary
& Secondary Education

Bruce Fowler, FBMA Specialist
Dept of Agricultural Education and Leadership
University of Missouri

Missouri Farm Business Management Analysis Program Program Locations – 2017

Central / South Central / Southwest

Boonville	John Sponaugle
California	Dale Hodges
Fatima/ Westphalia	John Juergensmeyer
Lebanon	Craig Evans
Pleasant Hill	A. J. Wingard & Mike Keilholz
Santa Fe (Alma)	Jarred Lewis
Sweet Springs	Dennis Dohrman

Northeast

Edina (Knox Co.)	Joanie Baker
Kirksville	Tom Primmer
Mexico	Ted DeVault
Monroe City	Steve Yates
North Shelby	Jenny Bradley
Pike/Lincoln Tech	Mike McCrory
Ralls Co. (Center)	Joe Dameron

Northwest

Chillicothe	Michael Slater & Jim Grozinger
Maryville	Jackie Lacy

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Whole-Farm Report

The whole-farm report summarizes the financial performance of FBMA member farms in 2016. Each table includes the average of the 108 farms included in the report and the average of five equally divided brackets from the lowest to highest profits (based on Net Farm Income). Appendix I provides detail on how the whole-farm measures are calculated. Below is a short summary of the whole farm reports.

Farm Income Statement

The Income Statement calculates the accrual Net Farm Income generated by the average farm for year 2016. Net Farm Income represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). It is the amount the farm contributed to owner family living, income taxes, and net worth growth. However, it does not include any asset appreciation, debt forgiveness or asset repossessions. The *Inventory Changes* and *Depreciation and Other Capital Adjustments* tables provide further detail on the non-cash adjustments made to calculate the accrual Net Farm Income.

Profitability Measures

The profitability measures are calculated based on both the cost value of assets and the market value. When calculated based on the market value of assets, the profitability measures can be compared to interest rates and returns available on alternative investments. When based on cost values, the returns more closely estimate the actual returns from the actual investment. (Cost values do not necessarily reflect the tax basis of farm assets. Instead, a method of calculating depreciation is used that estimates economic depreciation over the useful life of the assets).

The *Rate of Return on Assets* (ROA) can be thought of as the interest rate earned by all investment in farm assets. *Rate of Return on Equity* (ROE) is the rate earned on the operator's equity or net worth in the farm business. If ROE is higher than ROA, borrowed funds more than paid for their cost in interest expense. *Operating Profit Margin* measures efficiency in farm operations. The higher the margin, the more of the farm income remained in pockets of the farm operator. *Asset Turnover Rate* measures efficiency in use of capital. Again, the higher the better. Farms with high investment in fixed assets will generally have a lower turnover rate than those who lease a major share of their capital.

Liquidity Measures

Liquidity reflects the ability of the farm family to meet cash obligations including family living withdrawals, income taxes, and debt repayment. *Current Ratio* is current farm assets divided by current farm liabilities. *Working Capital* is current farm assets minus current farm liabilities. Businesses with more working capital are generally in a better position to overcome short-term financial downturns or production problems. Working Capital to Gross Income measures liquidity relative to business size.

Repayment capacity measures the ability of the business to meet debt payments and replace capital assets. The *Term Debt Coverage Ratio* reflects the ability of the business to repay intermediate and long term liabilities. A term debt coverage ratio of greater than 1.0 indicates that the business produced more than enough earnings to meet its scheduled debt payments. The *Replacement Coverage Ratio* is an indication of the business's capital replacement capacity. A replacement coverage ratio of greater than 1.0 indicates that the business produced more than enough earnings to meet its payments and replace its depreciable assets.

Balance Sheets

Balance sheet reports are included for both the cost and market value of assets. In both tables, current assets are identical, with crop and livestock inventories generally valued at market value. This conforms to the methodology recommended by the Farm Financial Standards Council. Intermediate and long term assets are shown at depreciated value using estimated economic depreciation, not tax, on the cost-based table. On the market table, they are valued at estimated market value.

Liabilities are the same on the cost and market tables.

Net Worth Change on the cost value table is the amount of earned net worth growth or loss for the year. Net worth change on the market value table includes both earned growth and changes in the market valuation of capital assets.

Statement of Cash Flows

The statement of Cash Flows displays the sources and uses of cash for the year. *Cash From Operating Activities* includes sources and uses of cash related to normal farm operations. *Cash From Financing Activities* reflect cash used to buy and sell capital assets. *Cash From Financing Activities* includes sources and uses of borrowed funds as well as cash from non-farm activities.

Financial Standards Measures

The Farm Financial Standards Council recommends that farms use these measures as standard measures of farm financial performance. Many are repeated from the Profitability, Liquidity, and Balance Sheet tables. For a complete description, see the Financial Guidelines for Agricultural Producers at www.ffsc.org/html/guidelin.htm.

Crop Production and Marketing

This table reports farm size in acres farmed, average crop yields for major commodities and average crop sales prices for the calendar year. Yields and prices are reported for the average of all farms for more commodities than those included in the High and Low columns because a minimum of four farms are required to report the yield or price for any group.

Household and Personal Expenses

This table reports family living and other non-farm expenditures from thirteen sole proprietors who provided detailed family living records.

Operator and Labor Information

All previous tables report results per farm, regardless of the number of families or operators involved in the operation. This report repeats several measures from previous tables on a *Per Operator* basis. It also summarizes estimated labor hours used and labor performance.

Financial Summary

The Financial Summary report provides a summary of the key financial measures and ratios included on the other detailed whole farm reports.

Farm Income Statement
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Cash Farm Income						
Clover Seed	49	-	-	-	-	240
Corn	121,980	127,170	20,495	57,569	147,586	254,132
CRP	897	505	-	1,433	204	2,262
Grass Seed, Fescue	170	-	-	-	864	-
Hay, Alfalfa	90	-	-	85	371	-
Hay, Fescue Grass	20	-	-	-	100	-
Hay, Mixed	1,049	954	165	2,187	1,681	243
Oats	50	-	-	243	-	-
Pasture	42	-	-	193	13	-
Sorghum, Grain	548	-	-	747	390	1,554
Soybeans	143,307	107,452	41,186	90,433	185,336	288,128
Wheat, Winter	8,586	3,549	2,209	9,001	5,986	21,600
Custom Work	2,233	843	-	1,238	1,432	7,469
Rented Out	1,632	313	6,533	1,333	-	63
Miscellaneous crop income	666	9	818	1,299	715	472
Beef Bulls	266	1,353	-	-	-	-
Beef Cow-Calf, Beef Calves	22,262	9,377	13,066	23,877	43,679	21,282
Beef Replacement Heifers	965	2,508	2,402	-	-	-
Beef Backgrounding	10,288	1,820	-	17,495	26,413	5,605
Beef Finishing	15,760	243	78	23,564	1,515	51,507
Beef Finish Yearlings	48	194	51	-	-	-
Hogs, Farrow To Finish, Raised Hog	132,148	604,870	-	7,641	3,176	53,867
Hogs, Feeder Pig Prod, Feeder Pigs	77	-	-	375	-	-
Sheep, Feeder Lamb Prod, Fdr Lambs	328	-	418	96	1,151	-
Sheep, Market Lamb Prod, Mkt Lambs	1,511	1,447	658	898	4,644	-
Hogs, Farrow to Weaning, Weaning P	1,425	7,249	-	-	-	-
Cull breeding livestock	2,792	1,806	813	2,928	6,019	2,406
Misc. livestock income	411	1,380	-	579	85	19
CCC market loan gain	906	-	-	-	4,609	-
Crop government payments	9,267	5,825	1,840	5,171	9,604	23,457
CRP payments	72	97	126	91	33	14
Other government payments	4,291	1,762	59	4,956	8,182	6,377
Custom work income	5,546	680	2,862	4,001	9,961	10,099
Patronage dividends, cash	8,126	6,070	865	2,010	13,373	18,142
Crop insurance income	2,115	1,604	693	787	4,401	3,105
Property insurance income	216	291	-	513	273	-
Sale of resale items	4,159	302	9	6,073	2,659	11,356
Contract livestock income	29	-	-	143	-	-
Other farm income	11,438	7,261	7,681	11,319	17,034	13,798
Gross Cash Farm Income	515,765	896,932	103,027	278,274	501,487	797,196

Farm Income Statement (continued)
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	Avg. Of All Farms	Low 20%	20 - 40%	40 - 60%	60 - 80%	High 20%
Number of farms	117	23	23	24	23	24
Cash Farm Expense						
Seed and plants	46,966	40,148	6,113	27,696	56,912	102,391
Fertilizer	44,034	36,760	9,614	31,081	54,712	86,710
Crop chemicals	35,100	38,983	7,987	20,674	44,045	63,215
Crop insurance	10,831	13,755	1,879	6,262	13,149	18,955
Drying expense	612	464	86	140	626	1,715
Crop storage	605	490	62	31	1,228	1,212
Crop miscellaneous	1,302	909	140	2,776	1,281	1,338
Feeder livestock purchase	17,617	14,242	1,793	23,617	28,612	19,479
Livestock storage	270	503	-	199	556	102
Purchased feed	91,440	386,503	3,936	10,335	16,518	45,433
Breeding fees	3,012	14,671	37	391	144	58
Veterinary	8,142	28,342	956	1,993	3,214	6,542
Supplies	1,282	3,673	491	1,057	628	603
Contract production exp.	14,406	72,169	-	1,068	-	-
Livestock insurance	29	-	17	15	117	-
Livestock leases	1,333	6,783	-	-	-	-
Consultants	63	11	-	-	-	294
Interest	13,921	23,111	4,054	8,347	12,918	21,106
Fuel & oil	14,253	10,237	3,982	11,131	15,465	29,907
Repairs	28,242	26,681	9,731	19,737	30,840	53,494
Custom hire	9,773	5,810	1,971	10,239	15,403	15,188
Hired labor	24,624	63,970	3,692	8,461	16,346	31,075
Land rent	40,457	23,448	6,468	23,299	45,049	102,086
Machinery leases	3,214	249	112	1,278	807	13,269
Building leases	351	27	-	-	22	1,664
Real estate taxes	3,052	5,453	882	2,250	2,627	4,039
Personal property taxes	1,380	1,451	767	1,165	2,013	1,510
Farm insurance	7,621	9,174	3,232	4,838	9,848	10,990
Utilities	6,600	17,735	2,041	2,878	3,264	7,217
Marketing	5,330	24,730	311	522	743	752
Dues & professional fees	2,763	6,496	290	1,203	2,974	2,915
Purchase of resale items	2,948	2,449	2,306	3,059	4,939	2,022
Miscellaneous	10,023	24,999	5,307	1,944	12,181	6,202
Total cash expense	451,597	904,424	78,253	227,686	397,184	651,484
Net cash farm income	64,168	-7,492	24,774	50,588	104,303	145,712
Inventory Changes						
Prepays and supplies	-2,276	-8,897	-794	-4,360	970	1,624
Accounts receivable	112	474	-987	257	-2,840	3,504
Hedging accounts	-5,332	-24,479	-	-75	89	-2,543
Other current assets	16	-299	459	-526	848	-363
Crops and feed	11,073	-50,791	-370	12,080	5,169	85,979
Market livestock	11,231	34,603	1,237	3,760	7,897	9,076
Breeding livestock	-2,854	-17,184	-673	-1,445	-1,283	5,877
Other assets	-5,443	-13,631	-1,771	-2,515	-437	-8,838
Accounts payable	-814	-3,589	288	-191	-353	-275
Accrued interest	-608	-394	-60	-733	-676	-1,146
Total inventory change	5,108	-84,189	-2,671	6,252	9,383	92,895
Net operating profit	69,275	-91,681	22,103	56,840	113,686	238,607
Depreciation						
Machinery and equipment	-27,942	-27,244	-11,683	-15,252	-28,864	-56,000
Titled vehicles	-2,554	-2,459	-838	-2,803	-3,810	-2,838
Buildings and improvements	-3,029	-1,120	-1,623	-1,674	-5,320	-5,367
Total depreciation	-33,525	-30,823	-14,144	-19,728	-37,994	-64,204
Net farm income from operations	35,750	-122,504	7,960	37,111	75,692	174,403
Gain or loss on capital sales	1,866	5,114	239	390	-182	3,752
Net farm income	37,616	-117,390	8,199	37,502	75,510	178,155

Inventory Changes
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Net cash farm income	64,168	-7,492	24,774	50,588	104,303	145,712
Crops and Feed						
Ending inventory	218,999	129,653	37,836	157,340	269,562	491,441
Beginning inventory	207,926	180,444	38,206	145,260	264,394	405,462
Inventory change	11,073	-50,791	-370	12,080	5,169	85,979
Market Livestock						
Ending inventory	82,502	211,828	7,735	46,401	60,391	87,509
Beginning inventory	71,271	177,224	6,497	42,641	52,494	78,433
Inventory change	11,231	34,603	1,237	3,760	7,897	9,076
Accts Receivable						
Ending inventory	7,000	17,350	317	2,468	3,242	11,618
Beginning inventory	6,888	16,877	1,305	2,211	6,082	8,114
Inventory change	112	474	-987	257	-2,840	3,504
Prepaid Expenses and Supplies						
Ending inventory	36,080	18,394	5,289	15,429	55,438	84,636
Beginning inventory	38,356	27,291	6,083	19,789	54,468	83,013
Inventory change	-2,276	-8,897	-794	-4,360	970	1,624
Hedging Activities						
Ending inventory	1,533	4,972	-	-	831	1,913
Withdrawals	7,293	36,930	-	-	170	-
Beginning inventory	2,132	5,890	-	75	869	3,840
Deposits	12,026	60,491	-	-	43	615
Gain or loss	-5,332	-24,479	-	-75	89	-2,543
Other Current Assets						
Ending inventory	3,395	1,334	1,542	3,136	3,198	7,594
Beginning inventory	3,379	1,632	1,083	3,662	2,350	7,956
Inventory change	16	-299	459	-526	848	-363
Breeding Livestock						
Ending inventory	58,599	62,646	27,236	57,164	73,927	71,521
Capital sales	4,898	14,953	410	1,138	1,158	6,905
Beginning inventory	57,471	74,606	25,531	55,149	70,534	61,461
Capital purchases	8,879	20,177	2,787	4,598	5,835	11,088
Depreciation, capital adjust	-2,854	-17,184	-673	-1,445	-1,283	5,877
Other Capital Assets						
Ending inventory	97,965	59,002	83,815	82,469	94,072	168,093
Capital sales	-	-	-	-	-	-
Beginning inventory	103,259	72,633	85,586	84,892	94,091	176,697
Capital purchases	149	-	-	92	418	233
Depreciation, capital adjust	-5,443	-13,631	-1,771	-2,515	-437	-8,838
Accounts Payable						
Beginning inventory	7,885	26,947	950	2,082	3,548	6,225
Ending inventory	8,699	30,536	662	2,273	3,901	6,499
Inventory change	-814	-3,589	288	-191	-353	-275
Accrued Interest						
Beginning inventory	3,671	4,123	2,434	4,080	3,884	3,808
Ending inventory	4,278	4,518	2,494	4,813	4,559	4,954
Inventory change	-608	-394	-60	-733	-676	-1,146
Total inventory change	5,108	-84,189	-2,671	6,252	9,383	92,895
Net operating profit	69,275	-91,681	22,103	56,840	113,686	238,607

Depreciation
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Net operating profit	69,275	-91,681	22,103	56,840	113,686	238,607
Machinery and Equipment						
Ending inventory	327,931	303,976	128,837	206,249	309,501	681,031
Capital sales	9,389	26,010	719	3,821	9,001	7,710
Beginning inventory	321,913	281,702	128,026	212,318	310,217	667,063
Capital purchases	43,349	75,528	13,212	13,004	37,148	77,677
Depreciation, capital adjust.	-27,942	-27,244	-11,683	-15,252	-28,864	-56,000
Titled Vehicles						
Ending inventory	29,482	25,520	20,085	27,731	28,505	44,973
Capital sales	992	1,121	54	357	1,866	1,563
Beginning inventory	28,549	24,714	19,971	27,298	27,217	42,971
Capital purchases	4,480	4,386	1,007	3,593	6,965	6,402
Depreciation, capital adjust.	-2,554	-2,459	-838	-2,803	-3,810	-2,838
Buildings and Improvements						
Ending inventory	127,646	319,893	46,955	63,126	66,863	143,506
Capital sales	920	1,630	-	1,358	-	1,563
Beginning inventory	125,117	320,837	45,810	56,596	63,623	141,007
Capital purchases	6,477	1,806	2,767	9,562	8,561	9,428
Depreciation, capital adjust.	-3,029	-1,120	-1,623	-1,674	-5,320	-5,367
Total depreciation, capital adj.	-33,525	-30,823	-14,144	-19,728	-37,994	-64,204
Net farm income from operations	35,750	-122,504	7,960	37,111	75,692	174,403
Gain or loss on capital sales	1,866	5,114	239	390	-182	3,752
Net farm income	37,616	-117,390	8,199	37,502	75,510	178,155

Profitability Measures
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Profitability (assets valued at cost)						
Net farm income from operations	35,750	-122,504	7,960	37,111	75,692	174,403
Rate of return on assets	1.2 %	-7.4 %	0.2 %	2.1 %	3.3 %	5.2 %
Rate of return on equity	0.3 %	-13.4 %	-0.5 %	1.7 %	3.2 %	5.8 %
Operating profit margin	4.4 %	-30.5 %	1.5 %	8.8 %	10.7 %	17.1 %
Asset turnover rate	27.1 %	24.3 %	15.0 %	24.4 %	31.0 %	30.3 %
Farm interest expense	14,529	23,506	4,114	9,079	13,594	22,252
Value of operator lbr and mgmt.	32,155	30,038	10,698	23,908	40,022	55,456
Return on farm assets	18,124	-129,036	1,376	22,282	49,265	141,200
Average farm assets	1,525,113	1,736,283	617,688	1,036,882	1,483,592	2,720,377
Return on farm equity	3,595	-152,541	-2,738	13,203	35,670	118,947
Average farm equity	1,120,665	1,135,679	521,874	757,651	1,113,841	2,049,670
Value of farm production	412,640	422,706	92,619	253,321	460,088	823,526

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Profitability (assets valued at market)						
Net farm income from operations	45,593	-122,359	11,408	49,127	87,679	195,442
Rate of return on assets	1.3 %	-4.9 %	0.6 %	2.3 %	2.8 %	4.5 %
Rate of return on equity	0.8 %	-7.5 %	0.1 %	2.0 %	2.6 %	4.8 %
Operating profit margin	6.8 %	-30.5 %	5.2 %	13.5 %	13.3 %	19.7 %
Asset turnover rate	19.2 %	16.0 %	11.5 %	16.7 %	21.2 %	23.0 %
Farm interest expense	14,529	23,506	4,114	9,079	13,594	22,252
Value of operator lbr and mgmt.	32,155	30,038	10,698	23,908	40,022	55,456
Return on farm assets	27,967	-128,891	4,824	34,299	61,251	162,238
Average farm assets	2,149,403	2,634,468	804,024	1,520,319	2,174,149	3,579,242
Return on farm equity	13,438	-152,397	710	25,219	47,657	139,986
Average farm equity	1,744,956	2,033,863	708,210	1,241,088	1,804,398	2,908,535
Value of farm production	412,640	422,706	92,619	253,321	460,088	823,526

Liquidity & Repayment Capacity Measures
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Liquidity						
Current ratio	2.26	1.76	3.60	2.23	2.62	2.43
Working capital	220,425	210,436	50,836	128,079	265,736	441,446
Working capital to gross inc	42.0 %	25.5 %	50.5 %	44.1 %	52.1 %	49.6 %
Current assets	395,739	486,469	70,379	232,341	429,933	751,220
Current liabilities	175,314	276,033	19,544	104,262	164,197	309,774
Gross revenues (accrual)	524,644	825,900	100,653	290,333	510,159	890,460
Repayment capacity						
Net farm income from operations	35,750	-122,504	7,960	37,111	75,692	174,403
Depreciation	33,525	30,823	14,144	19,728	37,994	64,204
Personal income	40,621	41,824	32,678	38,883	46,916	42,785
Family living/owner withdrawals	-47,523	-37,689	-33,697	-41,466	-54,583	-69,486
Cash discrepancy	0	15	9	1	-30	5
Payments on personal debt	-1,763	-679	-1,422	-2,635	-1,560	-2,450
Income taxes paid	-6,450	-3,768	-1,946	-4,969	-3,685	-17,469
Interest on term debt	10,154	23,175	3,972	6,624	8,544	8,671
Capital debt repayment capacity	64,314	-68,817	21,688	53,277	109,317	200,658
Scheduled term debt payments	-40,029	-60,989	-11,241	-25,803	-36,798	-64,856
Capital debt repayment margin	24,285	-129,806	10,447	27,474	72,520	135,802
Cash replacement allowance	-21,800	-23,304	-10,914	-14,917	-24,052	-35,517
Replacement margin	2,485	-153,110	-467	12,557	48,468	100,285
Term debt coverage ratio	1.61	-1.13	1.93	2.06	2.97	3.09
Replacement coverage ratio	1.04	-0.82	0.98	1.31	1.80	2.00

Balance Sheet at Cost Values
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Assets						
Current Farm Assets						
Cash and checking balance	46,229	102,938	17,661	7,567	37,271	66,509
Prepaid expenses & supplies	36,080	18,394	5,289	15,429	55,438	84,636
Growing crops	2,743	1,227	625	2,456	1,831	7,385
Accounts receivable	7,000	17,350	317	2,468	3,242	11,618
Hedging accounts	1,533	4,972	-	-	831	1,913
Crops held for sale or feed	218,999	129,653	37,836	157,340	269,562	491,441
Crops under government loan	-	-	-	-	-	-
Market livestock held for sale	82,502	211,828	7,735	46,401	60,391	87,509
Other current assets	652	106	917	680	1,368	208
Total current farm assets	395,739	486,469	70,379	232,341	429,933	751,220
Intermediate Farm Assets						
Breeding livestock	58,599	62,646	27,236	57,164	73,927	71,521
Machinery and equipment	327,931	303,976	128,837	206,249	309,501	681,031
Titled vehicles	29,482	25,520	20,085	27,731	28,505	44,973
Other intermediate assets	70,933	7,917	83,766	81,544	85,208	94,734
Total intermediate farm assets	486,945	400,060	259,924	372,688	497,141	892,260
Long Term Farm Assets						
Farm land	506,765	457,453	240,054	381,213	506,850	935,092
Buildings and improvements	127,646	319,893	46,955	63,126	66,863	143,506
Other long-term assets	27,032	51,084	49	925	8,864	73,358
Total long-term farm assets	661,443	828,430	287,058	445,264	582,577	1,151,956
Total Farm Assets	1,544,127	1,714,959	617,361	1,050,294	1,509,651	2,795,436
Total Nonfarm Assets	221,139	127,470	100,501	197,321	260,280	412,823
Total Assets	1,765,266	1,842,429	717,862	1,247,615	1,769,931	3,208,259
Liabilities						
Current Farm Liabilities						
Accrued interest	4,278	4,518	2,494	4,813	4,559	4,954
Accounts payable	8,699	30,536	662	2,273	3,901	6,499
Current notes	132,570	203,208	8,288	78,922	130,318	239,786
Government crop loans	-	-	-	-	-	-
Principal due on term debt	29,766	37,771	8,100	18,255	25,419	58,535
Total current farm liabilities	175,314	276,033	19,544	104,262	164,197	309,774
Total intermediate farm liabs	57,523	52,290	16,490	34,256	84,880	98,910
Total long term farm liabilities	185,706	315,124	60,169	149,012	128,140	273,850
Total farm liabilities	418,543	643,447	96,203	287,530	377,217	682,534
Total nonfarm liabilities	36,057	10,286	22,012	22,781	29,098	94,159
Total liabilities	454,600	653,733	118,215	310,311	406,316	776,693
Net worth (farm and nonfarm)	1,310,666	1,188,696	599,647	937,303	1,363,616	2,431,566
Net worth change	16,016	-120,616	10,984	24,875	59,353	101,388
Percent net worth change	1 %	-9 %	2 %	3 %	5 %	4 %
Ratio Analysis						
Current farm liabilities / assets	44 %	57 %	28 %	45 %	38 %	41 %
Intermediate farm liab. / assets	12 %	13 %	6 %	9 %	17 %	11 %
Long term farm liab. / assets	28 %	38 %	21 %	33 %	22 %	24 %
Total debt to asset ratio	26 %	35 %	16 %	25 %	23 %	24 %

Balance Sheet at Market Values
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of</u> <u>All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Assets						
Current Farm Assets						
Cash and checking balance	46,229	102,938	17,661	7,567	37,271	66,509
Prepaid expenses & supplies	36,080	18,394	5,289	15,429	55,438	84,636
Growing crops	2,743	1,227	625	2,456	1,831	7,385
Accounts receivable	7,000	17,350	317	2,468	3,242	11,618
Hedging accounts	1,533	4,972	-	-	831	1,913
Crops held for sale or feed	218,999	129,653	37,836	157,340	269,562	491,441
Crops under government loan	-	-	-	-	-	-
Market livestock held for sale	82,502	211,828	7,735	46,401	60,391	87,509
Other current assets	652	106	917	680	1,368	208
Total current farm assets	395,739	486,469	70,379	232,341	429,933	751,220
Intermediate Farm Assets						
Breeding livestock	69,285	67,658	30,577	73,219	87,411	86,634
Machinery and equipment	363,548	347,925	127,227	220,396	395,113	717,898
Titled vehicles	31,413	24,432	20,739	31,550	31,413	48,197
Other intermediate assets	77,995	8,824	84,267	83,416	84,902	126,235
Total intermediate farm assets	542,242	448,839	262,811	408,582	598,840	978,963
Long Term Farm Assets						
Farm land	1,052,337	1,273,400	420,934	815,104	1,078,173	1,658,052
Buildings and improvements	144,978	351,753	51,248	82,197	89,392	152,693
Other long-term assets	38,044	52,755	49	1,516	9,864	123,892
Total long-term farm assets	1,235,359	1,677,907	472,231	898,817	1,177,429	1,934,638
Total Farm Assets	2,173,339	2,613,215	805,421	1,539,740	2,206,201	3,664,821
Total Nonfarm Assets	300,295	141,356	136,208	309,984	322,739	578,664
Total Assets	2,473,634	2,754,571	941,629	1,849,723	2,528,940	4,243,484
Liabilities						
Current Farm Liabilities						
Accrued interest	4,278	4,518	2,494	4,813	4,559	4,954
Accounts payable	8,699	30,536	662	2,273	3,901	6,499
Current notes	132,570	203,208	8,288	78,922	130,318	239,786
Government crop loans	-	-	-	-	-	-
Principal due on term debt	29,766	37,771	8,100	18,255	25,419	58,535
Total current farm liabilities	175,314	276,033	19,544	104,262	164,197	309,774
Total intermediate farm liab	57,523	52,290	16,490	34,256	84,880	98,910
Total long term farm liabilities	185,706	315,124	60,169	149,012	128,140	273,850
Total farm liabilities	418,543	643,447	96,203	287,530	377,217	682,534
Total nonfarm liabilities	36,057	10,286	22,012	22,781	29,098	94,159
Total liab excluding deferreds	454,600	653,733	118,215	310,311	406,316	776,693
Total deferred liabilities	-	-	-	-	-	-
Total liabilities	454,600	653,733	118,215	310,311	406,316	776,693
Retained earnings	1,310,666	1,188,696	599,647	937,303	1,363,616	2,431,566
Market valuation equity	708,369	912,142	223,767	602,109	759,009	1,035,225
Net worth (farm and nonfarm)	2,019,035	2,100,838	823,414	1,539,412	2,122,624	3,466,791
Net worth excluding deferreds	2,019,035	2,100,838	823,414	1,539,412	2,122,624	3,466,791
Net worth change	34,226	-119,531	18,956	60,651	69,723	135,766
Percent net worth change	2 %	-5 %	2 %	4 %	3 %	4 %
Ratio Analysis						
Current farm liabilities / assets	44 %	57 %	28 %	45 %	38 %	41 %
Intermediate farm liab. / assets	11 %	12 %	6 %	8 %	14 %	10 %
Long term farm liab. / assets	15 %	19 %	13 %	17 %	11 %	14 %
Total debt to asset ratio	18 %	24 %	13 %	17 %	16 %	18 %
Debt to assets excl deferreds	18 %	24 %	13 %	17 %	16 %	18 %

Statement Of Cash Flows
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Beginning cash (farm & nonfarm)	74,697	144,625	25,210	32,145	60,585	111,186
Cash Provided By Operating Activities						
Gross cash farm income	515,765	896,932	103,027	278,274	501,487	797,196
Total cash farm expense	-451,597	-904,424	-78,253	-227,686	-397,184	-651,484
Net cash from hedging transactions	-4,733	-23,561	-	-	127	-615
Cash provided by operating	59,435	-31,054	24,774	50,588	104,430	145,097
Cash Provided By Investing Activities						
Sale of breeding livestock	4,516	13,639	368	980	1,148	6,514
Sale of machinery & equipment	8,483	22,553	1,000	3,669	9,175	6,322
Sale of titled vehicles	958	1,130	54	515	1,522	1,563
Sale of farm land	10,179	21,441	4,272	3,521	-	21,458
Sale of farm buildings	920	1,630	-	1,358	-	1,563
Sale of other farm assets	-	-	-	-	-	-
Sale of nonfarm assets	3,029	913	-	10,625	972	2,334
Purchase of breeding livestock	-8,879	-20,177	-2,787	-4,598	-5,835	-11,088
Purchase of machinery & equip.	-43,349	-75,528	-13,212	-13,004	-37,148	-77,677
Purchase of titled vehicles	-4,480	-4,386	-1,007	-3,593	-6,965	-6,402
Purchase of farm land	-25,098	-4,391	-	-21,444	-52,276	-46,604
Purchase of farm buildings	-6,477	-1,806	-2,767	-9,562	-8,561	-9,428
Purchase of other farm assets	-149	-	-	-92	-418	-233
Purchase of nonfarm assets	-12,763	-2,513	-9,274	-13,608	-3,822	-33,652
Cash provided by investing	-73,110	-47,495	-23,353	-45,233	-102,208	-145,332
Cash Provided By Financing Activities						
Money borrowed	262,513	777,357	22,592	125,511	166,896	227,679
Principal payments	-230,468	-694,881	-17,590	-117,615	-148,941	-180,397
Personal income	40,621	41,824	32,678	38,883	46,916	42,785
Family living/owner withdrawals	-47,523	-37,689	-33,697	-41,466	-54,583	-69,486
Income and social security tax	-6,557	-3,768	-2,198	-5,250	-3,685	-17,469
Capital contributions	319	-	13	749	830	-
Capital distributions	-5,128	-	-	-	-26,087	-
Dividends paid	-	-	-	-	-	-
Cash gifts and inheritances	2,287	61	10,887	424	243	-
Gifts given	-1,414	-1,200	-2,942	-1,433	-652	-867
Other cash flows	-	-	-	-	-	-
Cash provided by financing	14,649	81,704	9,742	-196	-19,064	2,245
Net change in cash balance	974	3,156	11,163	5,158	-16,841	2,010
Ending cash (farm & nonfarm)	75,672	147,796	36,381	37,304	43,713	113,201
Discrepancy	0	-15	-9	-1	30	-5

Financial Standards Measures
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Liquidity						
Current ratio	2.26	1.76	3.60	2.23	2.62	2.43
Working capital	220,425	210,436	50,836	128,079	265,736	441,446
Working capital to gross inc	42.0 %	25.5 %	50.5 %	44.1 %	52.1 %	49.6 %
Solvency (market)						
Farm debt to asset ratio	19 %	25 %	12 %	19 %	17 %	19 %
Farm equity to asset ratio	81 %	75 %	88 %	81 %	83 %	81 %
Farm debt to equity ratio	0.24	0.33	0.14	0.23	0.21	0.23
Profitability (cost)						
Rate of return on farm assets	1.2 %	-7.4 %	0.2 %	2.1 %	3.3 %	5.2 %
Rate of return on farm equity	0.3 %	-13.4 %	-0.5 %	1.7 %	3.2 %	5.8 %
Operating profit margin	4.4 %	-30.5 %	1.5 %	8.8 %	10.7 %	17.1 %
Net farm income	37,616	-117,390	8,199	37,502	75,510	178,155
EBITDA	83,804	-68,175	26,217	65,919	127,280	260,860
Repayment Capacity						
Capital debt repayment capacity	64,314	-68,817	21,688	53,277	109,317	200,658
Capital debt repayment margin	24,285	-129,806	10,447	27,474	72,520	135,802
Replacement margin	2,485	-153,110	-467	12,557	48,468	100,285
Term debt coverage ratio	1.61	-1.13	1.93	2.06	2.97	3.09
Replacement coverage ratio	1.04	-0.82	0.98	1.31	1.80	2.00
Efficiency						
Asset turnover rate (cost)	27.1 %	24.3 %	15.0 %	24.4 %	31.0 %	30.3 %
Operating expense ratio	84.0 %	108.3 %	74.0 %	77.3 %	75.1 %	70.7 %
Depreciation expense ratio	6.4 %	3.7 %	14.1 %	6.8 %	7.4 %	7.2 %
Interest expense ratio	2.8 %	2.8 %	4.1 %	3.1 %	2.7 %	2.5 %
Net farm income ratio	7.2 %	-14.2 %	8.1 %	12.9 %	14.8 %	20.0 %

Crop Production and Marketing Summary
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Acreage Summary						
Total acres owned	369	395	167	301	416	560
Total crop acres	761	747	206	536	854	1,444
Crop acres owned	193	249	52	131	231	301
Crop acres cash rented	275	155	47	200	338	622
Crop acres share rented	293	342	107	205	285	521
Total pasture acres	102	54	57	147	157	94
Percent crop acres owned	25 %	33 %	25 %	24 %	27 %	21 %
Mach invest/crop acre cost	455	380	707	440	395	497
Mach invest/crop acre market	497	435	705	466	492	515
Average Price Received (Cash Sales Only)						
Soybeans per bushel	9.48	9.39	9.43	9.57	9.38	9.54
Corn per bushel	3.41	3.51	3.61	3.29	3.43	3.36
Wheat, Winter per bushel	4.45	4.35	-	4.13	4.42	4.62
Hay, Mixed per ton	66.99	-	-	67.19	-	-
CRP per \$	1.00	-	-	-	-	-
Sorghum, Grain per bushel	2.93	-	-	-	-	-
Average Yield Per Acre						
Soybeans (bushel)	51.89	40.81	51.61	50.97	51.74	57.55
Corn (bushel)	166.37	142.35	158.17	169.62	167.29	177.03

Household and Personal Expenses
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>
Number of farms	14
Average family size	3.3
Family Living Expenses	
Food and meals expense	7,119
Medical care	2,106
Health insurance	3,968
Cash donations	3,383
Household supplies	934
Clothing	988
Personal care	208
Child / Dependent care	1,925
Alimony and child support	-
Gifts	1,222
Education	909
Recreation	2,086
Utilities (household share)	2,890
Personal vehicle operating exp	5,414
Household real estate taxes	817
Dwelling rent	-
Household repairs	458
Personal interest	1,513
Disability / Long term care ins	1,014
Life insurance payments	1,509
Personal property insurance	1,268
Miscellaneous	9,237
Total cash family living expense	48,968
Family living from the farm	74
Total family living	49,043
Other Nonfarm Expenditures	
Income taxes	5,801
Furnishing & appliance purchases	-
Nonfarm vehicle purchases	2,157
Nonfarm real estate purchases	9,464
Other nonfarm capital purchases	446
Nonfarm savings & investments	12,404
Total other nonfarm expenditures	30,274
 Total cash family living investment & nonfarm capital purch	 79,242

Operator and Labor Information
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Operator Information						
Average number of operators	1.1	1.3	1.1	1.0	1.2	1.1
Average age of operators	53.0	56.2	45.3	55.3	54.5	53.3
Average number of years farming	29.1	32.0	20.1	30.7	32.0	29.9
Results Per Operator						
Working capital	195,377	161,334	44,970	130,804	230,639	407,488
Total assets (market)	2,192,539	2,111,838	832,979	1,889,079	2,194,929	3,917,063
Total liabilities	402,941	501,195	104,575	316,914	352,651	716,947
Net worth (market)	1,789,599	1,610,643	728,405	1,572,165	1,842,278	3,200,115
Net worth excl deferred liabs	1,789,599	1,610,643	728,405	1,572,165	1,842,278	3,200,115
Gross farm income	465,025	633,190	89,039	296,510	442,779	821,963
Total farm expense	433,338	727,109	81,998	258,609	377,084	660,975
Net farm income from operations	31,687	-93,919	7,041	37,901	65,695	160,988
Net nonfarm income	36,005	32,065	28,908	39,710	40,719	39,493
Family living & tax withdrawals	47,840	31,772	31,523	47,422	50,598	80,262
Total acres owned	327.1	303.0	148.2	307.4	361.0	517.1
Total crop acres	674.8	572.5	182.0	547.3	741.6	1,332.6
Crop acres owned	171.2	191.1	45.8	133.4	200.9	277.7
Crop acres cash rented	243.5	119.1	41.4	204.7	293.0	574.0
Crop acres share rented	260.0	262.3	94.9	209.3	247.8	480.9
Total pasture acres	90.4	41.4	50.1	150.6	136.0	86.5
Labor Analysis						
Number of farms	117	23	23	24	23	24
Total unpaid labor hours	1,386	1,274	728	1,181	1,674	2,054
Total hired labor hours	1,318	3,157	234	419	1,084	1,718
Total labor hours per farm	2,705	4,432	963	1,601	2,758	3,772
Unpaid hours per operator	1,229	977	644	1,206	1,453	1,896
Value of farm production / hour	152.57	95.38	96.20	158.27	166.84	218.32
Net farm income / unpaid hour	25.79	-96.13	10.93	31.42	45.22	84.90
Average hourly hired labor wage	20.32	22.63	16.84	20.18	18.10	18.09
Partnerships & LLCs						
Number of farms	16	5	1	3	3	4
Number of operators	1.5	1.8	-	-	-	-
Owner withdrawals per farm	-	-	-	-	-	-
Withdrawals per operator	-	-	-	-	-	-

Financial Summary
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Income Statement						
Gross cash farm income	515,765	896,932	103,027	278,274	501,487	797,196
Total cash farm expense	451,597	904,424	78,253	227,686	397,184	651,484
Net cash farm income	64,168	-7,492	24,774	50,588	104,303	145,712
Inventory change	5,108	-84,189	-2,671	6,252	9,383	92,895
Depreciation	-33,525	-30,823	-14,144	-19,728	-37,994	-64,204
Net farm income from operations	35,750	-122,504	7,960	37,111	75,692	174,403
Gain or loss on capital sales	1,866	5,114	239	390	-182	3,752
Average net farm income	37,616	-117,390	8,199	37,502	75,510	178,155
Median net farm income	36,054	-18,814	7,666	35,466	70,150	183,480
Profitability (cost)						
Rate of return on assets	1.2 %	-7.4 %	0.2 %	2.1 %	3.3 %	5.2 %
Rate of return on equity	0.3 %	-13.4 %	-0.5 %	1.7 %	3.2 %	5.8 %
Operating profit margin	4.4 %	-30.5 %	1.5 %	8.8 %	10.7 %	17.1 %
Asset turnover rate	27.1 %	24.3 %	15.0 %	24.4 %	31.0 %	30.3 %
Profitability (market)						
Rate of return on assets	1.3 %	-4.9 %	0.6 %	2.3 %	2.8 %	4.5 %
Rate of return on equity	0.8 %	-7.5 %	0.1 %	2.0 %	2.6 %	4.8 %
Operating profit margin	6.8 %	-30.5 %	5.2 %	13.5 %	13.3 %	19.7 %
Asset turnover rate	19.2 %	16.0 %	11.5 %	16.7 %	21.2 %	23.0 %
Liquidity & Repayment (end of year)						
Current assets	395,739	486,469	70,379	232,341	429,933	751,220
Current liabilities	175,314	276,033	19,544	104,262	164,197	309,774
Current ratio	2.26	1.76	3.60	2.23	2.62	2.43
Working capital	220,425	210,436	50,836	128,079	265,736	441,446
Change in working capital	-3,074	-71,529	-2,246	-4,146	-17,274	76,414
Working capital to gross inc	42.0 %	25.5 %	50.5 %	44.1 %	52.1 %	49.6 %
Term debt coverage ratio	1.61	-1.13	1.93	2.06	2.97	3.09
Replacement coverage ratio	1.04	-0.82	0.98	1.31	1.80	2.00
Term debt to EBITDA	2.78	-4.71	3.04	2.71	1.63	1.43
Solvency (end of year at cost)						
Number of farms	117	23	23	24	23	24
Total assets	1,765,266	1,842,429	717,862	1,247,615	1,769,931	3,208,259
Total liabilities	454,600	653,733	118,215	310,311	406,316	776,693
Net worth	1,310,666	1,188,696	599,647	937,303	1,363,616	2,431,566
Net worth change	16,016	-120,616	10,984	24,875	59,353	101,388
Farm debt to asset ratio	27 %	38 %	16 %	27 %	25 %	24 %
Total debt to asset ratio	26 %	35 %	16 %	25 %	23 %	24 %
Change in earned net worth %	1 %	-9 %	2 %	3 %	5 %	4 %
Solvency (end of year at market)						
Number of farms	117	23	23	24	23	24
Total assets	2,473,634	2,754,571	941,629	1,849,723	2,528,940	4,243,484
Total liabilities	454,600	653,733	118,215	310,311	406,316	776,693
Net worth	2,019,035	2,100,838	823,414	1,539,412	2,122,624	3,466,791
Total net worth change	34,226	-119,531	18,956	60,651	69,723	135,766
Farm debt to asset ratio	19 %	25 %	12 %	19 %	17 %	19 %
Total debt to asset ratio	18 %	24 %	13 %	17 %	16 %	18 %
Change in total net worth %	2 %	-5 %	2 %	4 %	3 %	4 %
Nonfarm Information						
Net nonfarm income	40,621	41,824	32,678	38,883	46,916	42,785
Farms reporting living expenses	14	2	4	4	4	-
Total family living expense	49,043	-	-	-	-	-
Total living, invest, cap. purch	79,242	-	-	-	-	-
Crop Acres						
Total crop acres	761	747	206	536	854	1,444
Total crop acres owned	193	249	52	131	231	301
Total crop acres cash rented	275	155	47	200	338	622
Total crop acres share rented	293	342	107	205	285	521
Machinery value per crop acre	497	435	705	466	492	515

Summary Farm Income Statement
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Crop sales	280,869	240,787	70,835	165,111	344,139	575,690
Crop inventory change	11,073	-50,791	-370	12,080	5,169	85,979
Gross crop income	291,943	189,995	70,465	177,191	349,308	661,669
Livestock sales	185,300	630,035	16,674	74,025	80,651	132,261
Livestock inventory change	11,231	34,603	1,237	3,760	7,897	9,076
Gross livestock income	196,531	664,638	17,911	77,785	88,548	141,338
Government payments	13,630	7,684	2,025	10,218	17,819	29,848
Other cash farm income	35,965	18,427	13,493	28,920	58,878	59,396
Change in accounts receivable	112	474	-987	257	-2,840	3,504
Gain or loss on hedging accounts	-5,332	-24,479	-	-75	89	-2,543
Change in other assets	-5,353	-13,654	-1,582	-2,519	-359	-8,630
Gain or loss on breeding lvst	-2,854	-17,184	-673	-1,445	-1,283	5,877
Gross farm income	524,644	825,900	100,653	290,333	510,159	890,460
Cash operating expenses	437,676	881,313	74,199	219,340	384,265	630,378
Change in prepaids and supplies	2,276	8,897	794	4,360	-970	-1,624
Change in growing crops	74	275	-270	523	-770	571
Change in accounts payable	814	3,589	-288	191	353	275
Depreciation	33,525	30,823	14,144	19,728	37,994	64,204
Total operating expense	474,365	924,898	88,579	244,142	420,872	693,804
Interest paid	13,921	23,111	4,054	8,347	12,918	21,106
Change in accrued interest	608	394	60	733	676	1,146
Total interest expense	14,529	23,506	4,114	9,079	13,594	22,252
Total expenses	488,894	948,403	92,693	253,221	434,467	716,057
Net farm income from operations	35,750	-122,504	7,960	37,111	75,692	174,403
Gain or loss on capital sales	1,866	5,114	239	390	-182	3,752
Net farm income	37,616	-117,390	8,199	37,502	75,510	178,155

Nonfarm Summary
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Nonfarm Income						
Personal wages & salary	23,052	21,013	23,069	33,277	19,903	17,782
Net nonfarm business income	23	1,571	1,192	-2,791	1,024	-724
Personal rental income	3,655	11,097	2,628	1,736	1,246	1,737
Personal interest income	135	26	130	146	129	239
Personal cash dividends	4,195	1,177	1	1,028	3,405	15,032
Tax refunds	1,543	1,210	826	1,335	2,031	2,289
Other nonfarm income	8,017	5,730	4,834	4,152	19,177	6,430
Total nonfarm income	40,621	41,824	32,678	38,883	46,916	42,785
Gifts and inheritances	2,287	61	10,887	424	243	-
Nonfarm Assets (market)						
Checking & savings	29,442	44,858	18,720	29,737	6,443	46,691
Stocks & bonds	36,828	4,675	12,674	7,575	87,914	71,085
Other current assets	9,415	960	435	5,935	39,643	634
Furniture & appliances	6,723	3,747	5,891	9,580	11,297	3,133
Nonfarm vehicles	14,412	12,681	7,105	16,160	14,710	21,040
Cash value of life ins.	8,490	3,043	5,996	13,134	12,560	7,554
Retirement accounts	63,579	18,842	38,789	103,170	30,754	122,077
Other intermediate assets	8,256	5,862	8,404	8,936	9,967	8,088
Nonfarm real estate	90,461	29,083	35,978	110,245	91,426	180,788
Personal bus. investment	9,787	2,435	-	-	14,733	31,258
Other long term assets	22,901	15,170	2,216	5,512	3,291	86,317
Total nonfarm assets	300,295	141,356	136,208	309,984	322,739	578,664
Nonfarm Liabilities						
Accrued interest	97	57	60	30	21	313
Accounts payable	667	-	565	417	2,391	-
Current notes	2,595	1,016	759	-	1,559	9,458
Princ due on term debt	1,666	711	1,460	1,069	1,697	3,346
Total current liabilities	5,026	1,784	2,844	1,516	5,668	13,117
Intermediate liabilities	3,047	2,143	2,897	1,451	3,525	5,197
Long term liabilities	27,984	6,358	16,271	19,815	19,906	75,844
Total nonfarm liabilities	36,057	10,286	22,012	22,781	29,098	94,159
Nonfarm net worth	264,238	131,070	114,196	287,202	293,640	484,505
Nonfarm debt to asset ratio	12 %	7 %	16 %	7 %	9 %	16 %

Financial Summary Excluding Deferred Liabilities
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Income Statement						
Gross cash farm income	515,765	896,932	103,027	278,274	501,487	797,196
Total cash farm expense	451,597	904,424	78,253	227,686	397,184	651,484
Net cash farm income	64,168	-7,492	24,774	50,588	104,303	145,712
Inventory change	5,108	-84,189	-2,671	6,252	9,383	92,895
Depreciation	-33,525	-30,823	-14,144	-19,728	-37,994	-64,204
Net farm income from operations	35,750	-122,504	7,960	37,111	75,692	174,403
Gain or loss on capital sales	1,866	5,114	239	390	-182	3,752
Average net farm income	37,616	-117,390	8,199	37,502	75,510	178,155
Median net farm income	36,054	-18,814	7,666	35,466	70,150	183,480
Profitability (cost)						
Rate of return on assets	1.2 %	-7.4 %	0.2 %	2.1 %	3.3 %	5.2 %
Rate of return on equity	0.3 %	-13.4 %	-0.5 %	1.7 %	3.2 %	5.8 %
Operating profit margin	4.4 %	-30.5 %	1.5 %	8.8 %	10.7 %	17.1 %
Asset turnover rate	27.1 %	24.3 %	15.0 %	24.4 %	31.0 %	30.3 %
Profitability (market)						
Rate of return on assets	1.3 %	-4.9 %	0.6 %	2.3 %	2.8 %	4.5 %
Rate of return on equity	0.8 %	-7.5 %	0.1 %	2.1 %	2.7 %	5.0 %
Operating profit margin	6.8 %	-30.5 %	5.2 %	13.5 %	13.3 %	19.7 %
Asset turnover rate	19.2 %	16.0 %	11.5 %	16.7 %	21.2 %	23.0 %
Liquidity & Repayment (end of year)						
Current assets	395,739	486,469	70,379	232,341	429,933	751,220
Current liabilities	175,314	276,033	19,544	104,262	164,197	309,774
Current ratio	2.26	1.76	3.60	2.23	2.62	2.43
Working capital	220,425	210,436	50,836	128,079	265,736	441,446
Change in working capital	-3,074	-71,529	-2,246	-4,146	-17,274	76,414
Working capital to gross inc	42.0 %	25.5 %	50.5 %	44.1 %	52.1 %	49.6 %
Term debt coverage ratio	1.61	-1.13	1.93	2.06	2.97	3.09
Replacement coverage ratio	1.04	-0.82	0.98	1.31	1.80	2.00
Term debt to EBITDA	2.78	-4.71	3.04	2.71	1.63	1.43
Solvency (end of year at cost)						
Number of farms	117	23	23	24	23	24
Total assets	1,765,266	1,842,429	717,862	1,247,615	1,769,931	3,208,259
Total liabilities	454,600	653,733	118,215	310,311	406,316	776,693
Net worth	1,310,666	1,188,696	599,647	937,303	1,363,616	2,431,566
Net worth change	16,016	-120,616	10,984	24,875	59,353	101,388
Farm debt to asset ratio	27 %	38 %	16 %	27 %	25 %	24 %
Total debt to asset ratio	26 %	35 %	16 %	25 %	23 %	24 %
Change in earned net worth %	1 %	-9 %	2 %	3 %	5 %	4 %
Solvency (end of year at market)						
Number of farms	117	23	23	24	23	24
Total assets	2,473,634	2,754,571	941,629	1,849,723	2,528,940	4,243,484
Total liabilities	454,600	653,733	118,215	310,311	406,316	776,693
Net worth	2,019,035	2,100,838	823,414	1,539,412	2,122,624	3,466,791
Total net worth change	34,226	-119,531	18,956	60,651	69,723	135,766
Farm debt to asset ratio	19 %	25 %	12 %	19 %	17 %	19 %
Total debt to asset ratio	18 %	24 %	13 %	17 %	16 %	18 %
Change in total net worth %	2 %	-5 %	2 %	4 %	3 %	4 %
Nonfarm Information						
Net nonfarm income	40,621	41,824	32,678	38,883	46,916	42,785
Farms reporting living expenses	14	2	4	4	4	-
Total family living expense	49,043	-	-	-	-	-
Total living, invest, cap. purch	79,242	-	-	-	-	-
Crop Acres						
Total crop acres	761	747	206	536	854	1,444
Total crop acres owned	193	249	52	131	231	301
Total crop acres cash rented	275	155	47	200	338	622
Total crop acres share rented	293	342	107	205	285	521
Machinery value per crop acre	497	435	705	466	492	515

FINPACK Score Card Items
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Liquidity						
Current ratio	2.26	1.76	3.60	2.23	2.62	2.43
Working capital	220,425	210,436	50,836	128,079	265,736	441,446
Working capital to gross inc	42.0 %	25.5 %	50.5 %	44.1 %	52.1 %	49.6 %
Solvency (market)						
Farm debt to asset ratio	19 %	25 %	12 %	19 %	17 %	19 %
Farm equity to asset ratio	81 %	75 %	88 %	81 %	83 %	81 %
Farm debt to equity ratio	0.24	0.33	0.14	0.23	0.21	0.23
Profitability (cost)						
Rate of ret on fm assets - mkt	1.3 %	-4.9 %	0.6 %	2.3 %	2.8 %	4.5 %
Rate of ret on fm assets - cst	1.2 %	-7.4 %	0.2 %	2.1 %	3.3 %	5.2 %
Rate of ret on fm equity - mkt	0.8 %	-7.5 %	0.1 %	2.0 %	2.6 %	4.8 %
Rate of ret on fm equity - cst	0.3 %	-13.4 %	-0.5 %	1.7 %	3.2 %	5.8 %
Operating profit margin - mkt	6.8 %	-30.5 %	5.2 %	13.5 %	13.3 %	19.7 %
Operating profit margin - cst	4.4 %	-30.5 %	1.5 %	8.8 %	10.7 %	17.1 %
Net farm income - mkt	47,459	-117,245	11,647	49,518	87,497	199,194
Net farm income - cst	37,616	-117,390	8,199	37,502	75,510	178,155
EBITDA - cst	83,804	-68,175	26,217	65,919	127,280	260,860
Repayment Capacity						
Capital debt repayment capacity	64,314	-68,817	21,688	53,277	109,317	200,658
Capital debt repayment margin	24,285	-129,806	10,447	27,474	72,520	135,802
Replacement margin	2,485	-153,110	-467	12,557	48,468	100,285
Term debt coverage ratio	1.61	-1.13	1.93	2.06	2.97	3.09
Replacement coverage ratio	1.04	-0.82	0.98	1.31	1.80	2.00
Efficiency						
Asset turnover rate (cost)	27.1 %	24.3 %	15.0 %	24.4 %	31.0 %	30.3 %
Asset turnover rate (market)	19.2 %	16.0 %	11.5 %	16.7 %	21.2 %	23.0 %
Operating expense ratio	84.0 %	108.3 %	74.0 %	77.3 %	75.1 %	70.7 %
Depreciation expense ratio	6.4 %	3.7 %	14.1 %	6.8 %	7.4 %	7.2 %
Interest expense ratio	2.8 %	2.8 %	4.1 %	3.1 %	2.7 %	2.5 %
Net farm income ratio	7.2 %	-14.2 %	8.1 %	12.9 %	14.8 %	20.0 %

Crop Reports

The Crop Enterprise Analysis tables show the average physical production, gross return, direct costs, overhead costs, and net returns per acre. There are potentially four tables for each crop depending on the farmer's tenure on the land: owned land, cash rented land, share rented land (share-rent returns and costs represent only the producer's share) and land rented out. It is possible for an individual farm to have data in all four tables if all three land tenure categories are represented in that farm business.

Gross Return Per Acre includes the value of the crop produced plus any other income directly associated with production of the crop, including crop insurance proceeds and any disaster payments that might have been received. It does not include direct and counter-cyclical government payments (see Net Return With Government Payments).

The *Value Per Unit* is assigned by the producer. For cash crops, the value is based on the actual price for crops sold or contracted before year-end and the inventory value for crops still in inventory at year-end. The local harvest-time price is used for forages and other feed crops.

Net Return Per Acre is the amount contributed toward operator labor, management, and equity capital. Any wages and benefits paid to the operator are removed from labor costs (and added to *Labor and Management Charge*) so that all farms are on equal footing. **Land costs include land rent on the rented land pages but only actual interest paid and real estate taxes on owned land. For this reason, net returns from owned and rented land should only be compared with that in mind.**

Net Return With Government Payments is the net return per acre after decoupled government payments such as direct and counter-cyclical government payments have been added. These payments are often allocated evenly to all crops except vegetables and pasture.

Net Return Over Labor and Management is the return, including government payments, remaining after compensating the operator for unpaid labor and management. This is the per acre return to equity capital.

Cost of Production shows the average cost per unit produced in each cost category. *Total Direct and Overhead Expense per Unit* is the breakeven price needed to cover cash costs and depreciation. *Less Government and Other Income* is the breakeven price if government payments and any miscellaneous income are used to offset some of the expenses. *With Labor and Management* is the breakeven price to provide a labor and management return for the operator(s).

Machinery Cost Per Acre includes fuel and oil, repairs, custom hire, machinery lease payments, machinery depreciation, and interest on intermediate debt.

Crop Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Corn

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>	<u>Share Rent</u>	<u>Rented Out</u>
Number of farms	55	37	28	33	6
Acres	398.25	138.34	247.50	265.89	180.14
Yield per acre (bu.)	164.50	169.60	163.07	165.95	137.68
Operator's share of yield %	77.36	100.00	100.00	49.25	48.28
Value per bu.	3.38	3.32	3.46	3.33	3.18
Total product return per acre	429.49	562.62	564.79	271.85	211.10
Crop insurance per acre	2.95	6.47	2.71	1.26	1.58
Other crop income per acre	12.19	21.64	9.76	4.65	44.29
Gross return per acre	444.63	590.74	577.26	277.76	256.97
Direct Expenses					
Seed and plants	68.31	89.05	85.81	46.91	31.59
Fertilizer	79.63	112.15	95.26	53.15	40.47
Crop chemicals	46.45	62.78	55.92	32.60	20.83
Cover crop expense	0.15	0.63	-	-	-
Crop insurance	16.43	17.42	22.18	12.19	9.26
Drying expense	1.92	3.13	2.75	0.75	0.40
Storage	1.00	1.47	0.80	0.50	4.04
Fuel & oil	17.60	15.85	19.86	17.66	11.00
Repairs	32.06	34.47	33.08	30.37	27.72
Custom hire	6.46	14.44	5.09	2.68	8.03
Hired labor	3.72	1.89	5.18	4.09	-
Land rent	42.02	-	132.82	-	-
Machinery leases	2.57	2.08	3.79	2.21	-
Utilities	1.60	2.14	1.99	1.18	-
Marketing	0.47	0.79	0.67	0.18	-
Operating interest	4.24	4.67	5.70	3.34	-
Miscellaneous	1.12	0.87	0.35	1.99	0.11
Total direct expenses per acre	325.32	363.82	470.71	209.19	153.44
Return over direct exp per acre	119.31	226.92	106.55	68.56	103.53
Overhead Expenses					
Custom hire	4.88	12.45	2.05	2.24	8.56
Hired labor	8.73	15.92	8.60	5.14	4.77
Machinery leases	0.46	0.79	0.84	0.03	0.01
RE & pers. property taxes	3.68	10.23	1.70	1.25	5.12
Farm insurance	8.00	9.29	8.36	7.01	7.66
Utilities	2.07	2.48	1.41	1.94	5.40
Dues & professional fees	2.45	4.64	1.75	1.56	3.83
Interest	8.04	24.08	3.56	3.12	0.68
Mach & bldg depreciation	37.36	44.18	33.47	38.87	17.80
Miscellaneous	10.09	12.53	7.89	10.59	8.57
Total overhead expenses per acre	85.11	136.57	68.81	70.77	62.40
Total dir & ovhd expenses per acre	410.43	500.39	539.52	279.96	215.84
Net return per acre	34.20	90.35	37.74	-2.21	41.12
Government payments	10.59	12.26	14.10	6.43	13.99
Net return with govt pmts	44.79	102.61	51.84	4.22	55.12
Labor & management charge	32.49	38.66	31.79	29.23	34.25
Net return over lbr & mgt	12.30	63.95	20.05	-25.02	20.87
Cost of Production					
Total direct expense per bu.	2.56	2.15	2.89	2.56	2.31
Total dir & ovhd exp per bu.	3.23	2.95	3.31	3.43	3.25
Less govt & other income	3.02	2.71	3.15	3.27	2.35
With labor & management	3.28	2.94	3.34	3.63	2.86
Net value per unit	3.38	3.32	3.46	3.33	3.18
Machinery cost per acre	99.75	118.71	97.76	93.56	72.86
Est. labor hours per acre	2.10	2.64	1.95	1.92	1.95

Crop Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

CRP

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>
Number of farms	11	10
Acres	89.49	98.04
Yield per acre (\$)	95.14	95.53
Operators share of yield %	100.00	100.00
Value per \$	1.02	1.02
Total product return per acre	97.03	97.42
Other crop income per acre	10.20	10.24
Gross return per acre	107.23	107.66
Direct Expenses		
Seed and plants	25.57	25.68
Crop chemicals	1.18	1.18
Fuel & oil	1.55	1.49
Repairs	2.41	2.36
Miscellaneous	0.01	0.01
Total direct expenses per acre	30.72	30.72
Return over direct exp per acre	76.51	76.94
Overhead Expenses		
Custom hire	1.71	1.72
RE & pers. property taxes	5.64	5.66
Farm insurance	2.88	2.81
Utilities	0.84	0.84
Dues & professional fees	1.27	1.28
Interest	0.98	0.98
Mach & bldg depreciation	15.77	15.64
Miscellaneous	0.90	0.87
Total overhead expenses per acre	29.99	29.80
Total dir & ovhd expenses per acre	60.71	60.52
Net return per acre	46.52	47.14
Government payments	21.36	21.45
Net return with govt pmts	67.88	68.59
Labor & management charge	5.21	5.17
Net return over lbr & mgt	62.67	63.42
Cost of Production		
Total direct expense per \$	0.32	0.32
Total dir & ovhd exp per \$	0.64	0.63
Less govt & other income	0.31	0.30
With labor & management	0.36	0.36
Net value per unit	1.02	1.02
Machinery cost per acre	20.54	20.31
Est. labor hours per acre	0.44	0.44

Crop Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Hay, Mixed

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>	<u>Share Rent</u>
Number of farms	24	15	10	13
Acres	113.40	60.70	53.36	94.43
Yield per acre (ton)	2.18	1.94	3.26	1.92
Operators share of yield %	84.97	100.00	100.00	62.12
Value per ton	56.18	56.07	48.98	64.68
Total product return per acre	104.23	108.99	159.62	77.19
Crop insurance per acre	1.22	-	-	2.71
Other crop income per acre	4.97	10.15	3.32	2.04
Gross return per acre	110.42	119.14	162.95	81.95
Direct Expenses				
Seed and plants	0.15	0.03	0.70	-
Fertilizer	11.65	7.75	20.25	11.28
Crop insurance	1.20	0.60	2.28	1.23
Fuel & oil	8.16	7.41	4.52	10.47
Repairs	13.18	15.08	4.90	15.81
Custom hire	8.38	6.41	24.63	3.13
Hired labor	2.10	1.91	5.85	0.70
Land rent	10.31	-	52.58	-
Operating interest	3.36	2.43	0.70	5.33
Miscellaneous	0.36	0.52	-	0.40
Total direct expenses per acre	57.04	36.73	116.42	48.36
Return over direct exp per acre	53.38	82.41	46.53	33.59
Overhead Expenses				
Custom hire	4.54	6.31	6.53	2.55
Hired labor	3.61	5.01	1.08	3.82
RE & pers. property taxes	4.81	12.58	0.37	1.10
Farm insurance	3.81	4.90	2.67	3.48
Utilities	1.08	1.68	1.21	0.62
Dues & professional fees	1.20	1.39	0.60	1.37
Interest	6.55	17.08	0.31	1.71
Mach & bldg depreciation	21.21	33.54	6.07	19.51
Miscellaneous	4.41	2.55	2.05	6.99
Total overhead expenses per acre	48.26	76.26	20.89	41.15
Total dir & ovhd expenses per acre	105.30	112.99	137.31	89.51
Net return per acre	5.11	6.14	25.64	-7.56
Government payments	0.15	-	0.76	-
Net return with govt pmts	5.26	6.14	26.39	-7.56
Labor & management charge	17.71	19.30	7.42	20.83
Net return over lbr & mgt	-12.45	-13.16	18.97	-28.39
Cost of Production				
Total direct expense per ton	30.75	18.89	35.72	40.52
Total dir & ovhd exp per ton	56.76	58.13	42.13	75.00
Less govt & other income	53.35	52.91	40.88	71.02
With labor & management	62.90	62.84	43.16	88.47
Net value per unit	56.18	56.07	48.98	64.68
Machinery cost per acre	52.61	58.49	46.88	52.62
Est. labor hours per acre	1.23	1.27	0.63	1.48

Crop Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Pasture

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>	<u>Share Rent</u>
Number of farms	33	22	19	8
Acres	151.22	106.51	102.03	88.55
Yield per acre (aum)	3.29	3.44	3.12	3.27
Operators share of yield %	98.43	100.00	100.00	88.86
Value per aum	11.79	11.80	11.64	12.22
Total product return per acre	38.17	40.54	36.29	35.49
Crop insurance per acre	1.05	1.35	0.28	2.14
Other crop income per acre	7.33	6.21	10.77	1.62
Gross return per acre	46.55	48.11	47.35	39.24
Direct Expenses				
Fertilizer	16.73	12.39	24.19	10.66
Crop chemicals	0.45	0.40	0.67	-
Crop insurance	1.06	1.49	0.51	1.13
Fuel & oil	1.51	1.45	1.58	1.51
Repairs	3.38	3.41	3.75	2.26
Hired labor	1.63	0.80	1.68	4.26
Land rent	11.18	-	28.77	-
Utilities	0.37	0.16	0.08	1.86
Operating interest	0.39	0.41	0.15	0.97
Miscellaneous	0.47	0.58	0.37	0.41
Total direct expenses per acre	36.55	19.79	61.74	23.06
Return over direct exp per acre	10.00	28.31	-14.40	16.18
Overhead Expenses				
Custom hire	0.50	0.84	0.23	0.08
Hired labor	0.59	0.55	0.67	0.52
RE & pers. property taxes	3.92	8.07	0.17	0.45
Farm insurance	0.81	1.02	0.60	0.66
Interest	2.73	5.43	0.36	0.27
Mach & bldg depreciation	4.40	6.07	2.83	3.19
Miscellaneous	1.19	1.30	0.97	1.45
Total overhead expenses per acre	13.19	21.26	5.82	6.62
Total dir & ovhd expenses per acre	49.74	41.06	67.56	29.67
Net return per acre	-3.19	7.05	-20.22	9.57
Government payments	-	-	-	-
Net return with govt prmts	-3.19	7.05	-20.22	9.57
Labor & management charge	2.96	3.55	2.06	3.48
Net return over lbr & mgt	-6.14	3.50	-22.27	6.09
Cost of Production				
Total direct expense per aum	11.29	5.76	19.81	7.94
Total dir & ovhd exp per aum	15.37	11.95	21.67	10.22
Less govt & other income	12.78	9.75	18.13	8.92
With labor & management	13.69	10.78	18.79	10.12
Net value per unit	11.79	11.80	11.64	12.22
Machinery cost per acre	8.27	8.45	8.44	7.19
Est. labor hours per acre	0.19	0.19	0.17	0.23

Crop Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Soybeans

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>	<u>Share Rent</u>	<u>Rented Out</u>
Number of farms	57	39	36	34	9
Acres	517.02	171.24	277.57	317.56	222.47
Yield per acre (bu.)	51.70	51.11	50.16	53.82	49.89
Operators share of yield %	77.06	100.00	100.00	49.47	44.13
Value per bu.	9.31	9.20	9.33	9.38	9.33
Total product return per acre	370.73	470.07	468.19	249.72	205.51
Hedging gains/losses per acre	0.07	0.16	0.02	0.06	-
Crop insurance per acre	1.68	2.95	1.84	0.84	1.19
Other crop income per acre	13.39	25.06	10.91	5.45	29.63
Gross return per acre	385.86	498.24	480.95	256.07	236.33
Direct Expenses					
Seed and plants	51.71	71.82	63.55	33.41	24.21
Fertilizer	32.09	40.48	40.35	22.30	15.68
Crop chemicals	48.21	67.05	57.22	34.11	16.46
Crop insurance	11.07	11.70	15.43	7.56	6.20
Storage	0.47	1.05	0.16	0.30	0.96
Fuel & oil	12.18	11.98	12.98	12.42	7.61
Repairs	21.44	22.20	22.27	20.74	18.53
Custom hire	3.95	7.31	3.65	2.24	3.40
Hired labor	2.88	1.02	3.98	3.54	-
Land rent	49.03	-	144.60	-	-
Machinery leases	2.11	2.07	2.50	2.16	-
Utilities	0.98	0.70	1.44	0.90	-
Operating interest	2.14	1.69	2.94	2.02	0.28
Miscellaneous	0.85	0.74	0.89	1.04	0.06
Total direct expenses per acre	238.90	239.81	371.76	142.38	93.39
Return over direct exp per acre	146.96	258.44	109.20	113.69	142.94
Overhead Expenses					
Custom hire	2.71	6.54	1.16	1.64	3.47
Hired labor	6.59	10.70	6.95	3.35	8.57
Machinery leases	0.29	0.19	0.54	0.01	0.84
RE & pers. property taxes	2.69	7.22	1.17	0.76	5.53
Farm insurance	5.79	6.15	6.13	5.53	4.25
Utilities	1.67	2.08	1.41	1.51	2.41
Dues & professional fees	1.42	2.18	1.28	1.03	1.68
Interest	6.01	18.23	2.41	1.69	6.51
Mach & bldg depreciation	32.14	37.41	24.85	38.10	18.76
Miscellaneous	5.98	5.81	5.09	7.25	4.08
Total overhead expenses per acre	64.96	96.52	50.67	60.31	56.10
Total dir & ovhd expenses per acre	303.86	336.32	422.42	202.69	149.49
Net return per acre	82.00	161.92	58.53	53.38	86.84
Government payments	10.87	16.89	12.52	5.46	11.69
Net return with govt pmts	92.86	178.81	71.05	58.84	98.53
Labor & management charge	24.00	24.70	22.75	25.67	18.91
Net return over lbr & mgt	68.86	154.11	48.30	33.17	79.62
Cost of Production					
Total direct expense per bu.	6.00	4.69	7.41	5.35	4.24
Total dir & ovhd exp per bu.	7.63	6.58	8.42	7.61	6.79
Less govt & other income	6.97	5.70	7.92	7.17	4.86
With labor & management	7.58	6.18	8.37	8.13	5.72
Net value per unit	9.31	9.20	9.33	9.38	9.33
Machinery cost per acre	74.13	85.58	68.01	76.99	51.06
Est. labor hours per acre	1.53	1.55	1.39	1.70	1.22

Crop Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Wheat, Winter

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>	<u>Share Rent</u>
Number of farms	21	9	12	12
Acres	128.44	50.17	86.18	80.69
Yield per acre (bu.)	78.42	76.90	77.66	83.62
Operators share of yield %	75.76	100.00	100.00	46.26
Value per bu.	4.54	4.56	4.71	4.20
Total product return per acre	269.56	350.42	365.81	162.40
Crop insurance per acre	0.43	1.35	0.26	0.19
Other crop income per acre	6.50	6.96	3.98	4.04
Gross return per acre	276.49	358.73	370.05	166.63
Direct Expenses				
Seed and plants	34.25	39.44	41.52	19.79
Fertilizer	70.79	101.21	96.41	40.79
Crop chemicals	37.11	54.91	57.39	13.26
Crop insurance	8.06	10.72	10.81	5.25
Storage	0.47	0.04	0.67	0.59
Fuel & oil	10.83	10.85	11.23	10.06
Repairs	21.38	21.54	22.06	17.33
Custom hire	1.82	0.14	3.52	1.26
Hired labor	11.61	16.01	19.33	4.25
Land rent	41.02	-	106.99	-
Machinery leases	3.71	5.53	7.26	-
Operating interest	2.05	2.69	3.25	1.00
Miscellaneous	2.56	0.79	3.09	3.48
Total direct expenses per acre	245.68	263.87	383.51	117.05
Return over direct exp per acre	30.81	94.86	-13.46	49.58
Overhead Expenses				
Custom hire	1.35	0.27	0.36	2.03
Hired labor	2.30	3.38	1.38	1.25
RE & pers. property taxes	2.12	7.39	0.57	0.56
Farm insurance	4.18	4.49	4.87	3.33
Utilities	1.07	0.93	0.31	1.50
Dues & professional fees	0.85	0.62	0.56	1.09
Interest	7.76	37.47	2.59	0.33
Mach & bldg depreciation	16.33	10.14	12.04	23.58
Miscellaneous	2.48	1.42	2.29	2.92
Total overhead expenses per acre	38.45	66.12	24.95	36.59
Total dir & ovhd expenses per acre	284.13	329.98	408.47	153.64
Net return per acre	-7.64	28.74	-38.41	12.99
Government payments	16.98	20.65	31.23	1.78
Net return with govt pmts	9.34	49.40	-7.18	14.77
Labor & management charge	13.72	9.87	11.37	16.26
Net return over lbr & mgt	-4.37	39.52	-18.55	-1.49
Cost of Production				
Total direct expense per bu.	4.14	3.43	4.94	3.03
Total dir & ovhd exp per bu.	4.78	4.29	5.26	3.97
Less govt & other income	4.38	3.91	4.80	3.82
With labor & management	4.61	4.04	4.95	4.24
Net value per unit	4.54	4.56	4.71	4.20
Machinery cost per acre	55.47	49.82	56.83	53.60
Est. labor hours per acre	0.92	0.88	0.88	0.82

Crop Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Custom Work

	<u>Avg. Of All Farms</u>	<u>Share Rent</u>
Number of farms	5	5
Acres	592.97	592.97
Yield per acre (\$)	88.12	88.12
Operators share of yield %	100.00	100.00
Value per \$	1.00	1.00
Total product return per acre	88.12	88.12
Other crop income per acre	57.82	57.82
Gross return per acre	145.95	145.95
Direct Expenses		
Fuel & oil	13.20	13.20
Repairs	25.46	25.46
Operating interest	3.83	3.83
Miscellaneous	0.02	0.02
Total direct expenses per acre	42.51	42.51
Return over direct exp per acre	103.44	103.44
Overhead Expenses		
Custom hire	5.47	5.47
Hired labor	25.54	25.54
Machinery leases	3.80	3.80
Building leases	1.25	1.25
RE & pers. property taxes	1.25	1.25
Farm insurance	4.34	4.34
Utilities	2.20	2.20
Dues & professional fees	2.56	2.56
Interest	1.61	1.61
Mach & bldg depreciation	41.76	41.76
Miscellaneous	2.93	2.93
Total overhead expenses per acre	92.73	92.73
Total dir & ovhd expenses per acre	135.24	135.24
Net return per acre	10.71	10.71
Government payments	-	-
Net return with govt pmts	10.71	10.71
Labor & management charge	23.77	23.77
Net return over lbr & mgt	-13.06	-13.06
Cost of Production		
Total direct expense per \$	0.48	0.48
Total dir & ovhd exp per \$	1.53	1.53
Less govt & other income	0.88	0.88
With labor & management	1.15	1.15
Net value per unit	1.00	1.00
Machinery cost per acre	83.62	83.62
Est. labor hours per acre	2.14	2.14

Crop Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Rented Out

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>
Number of farms	7	6
Acres	294.36	288.25
Yield per acre (\$)	92.67	110.41
Operators share of yield %	100.00	100.00
Value per \$	1.05	1.00
Total product return per acre	97.74	110.41
Other crop income per acre	1.63	1.94
Gross return per acre	99.37	112.35
Direct Expenses		
Fertilizer	2.08	2.48
Fuel & oil	0.80	0.96
Repairs	2.66	3.16
Land rent	3.88	-
Miscellaneous	0.25	0.29
Total direct expenses per acre	9.67	6.89
Return over direct exp per acre	89.70	105.46
Overhead Expenses		
Custom hire	0.96	1.15
RE & pers. property taxes	3.35	3.99
Farm insurance	2.48	2.95
Utilities	2.17	2.58
Interest	12.28	14.63
Mach & bldg depreciation	12.89	15.36
Miscellaneous	1.17	1.39
Total overhead expenses per acre	35.30	42.05
Total dir & ovhd expenses per acre	44.96	48.94
Net return per acre	54.41	63.41
Government payments	0.26	0.31
Net return with govt pmts	54.66	63.71
Labor & management charge	4.84	5.76
Net return over lbr & mgt	49.83	57.95
Cost of Production		
Total direct expense per \$	0.10	0.06
Total dir & ovhd exp per \$	0.49	0.44
Less govt & other income	0.46	0.42
With labor & management	0.52	0.48
Net value per unit	1.05	1.00
Machinery cost per acre	15.14	18.04
Est. labor hours per acre	0.33	0.40

Livestock Reports

The Livestock Enterprise Analysis tables show the average physical production, gross margin over purchase costs, direct costs, overhead costs, and net returns per budget unit.

Gross Margin is the accrual gross value produced by the enterprise. It includes income from sale of offspring and livestock products, cull income, non-cash transfers to other enterprises, and the value of production used in the home or for feed. It also includes the value of inventory change from beginning to the end of the year. The cost of livestock purchased and the value of animals transferred in are deducted.

Net Return is the amount contributed by a unit of the enterprise toward operator labor, management, and equity capital. Any wages and benefits paid to the operator are removed from labor costs (and added to *Labor and Management Charge*) so that all farms are on equal footing.

Net Return Over Labor and Management is the return remaining after compensating the operator for unpaid labor and management. This is the per unit return to equity capital.

Cost of Production section shows the average cost per unit sold in each cost category. *Total direct and overhead expense per unit* is the breakeven price needed to cover cash costs and depreciation. For grow/finish enterprises, this includes the purchase cost or transfer-in value of the animal. *With other revenue adjustments* is the final breakeven price adjusted for cull sales, other offspring sales, the cost of replacement stock, and other miscellaneous income. *With labor and management* is the breakeven price to provide labor and management return for the operator.

Other Information contains both economic and technical efficiency measures for each enterprise.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms complete analysis on any given livestock enterprise, information for that enterprise is not reported.

Livestock Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cwt. Produced

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>20 - 40%</u>		<u>40 - 60%</u>		<u>60 - 80%</u>		<u>High 20%</u>	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms	25		5		5		5		5		5	
Beef Calves sold (lb)	88.82	126.82	110.67	167.78	54.81	72.29	95.16	126.83	100.23	151.52	73.86	104.83
Transferred out (lb)	8.24	10.74	-	-	27.27	39.33	6.84	7.98	9.57	13.92	6.13	6.13
Cull sales (lb)	22.74	21.29	22.28	14.90	24.69	31.48	22.97	26.42	6.72	8.89	31.73	23.53
Other income		1.10		3.98		1.19		-		-		0.46
Purchased (lb)	-24.42	-36.77	-50.43	-72.84	-18.28	-54.94	-11.73	-15.78	-6.79	-8.24	-29.99	-36.85
Transferred in (lb)	-2.75	-2.99	-	-	-0.54	-	-6.84	-7.98	-5.70	-5.70	-	-
Inventory change (lb)	6.46	31.68	14.59	13.07	10.86	37.18	-6.40	22.68	-4.02	-2.30	17.64	75.47
Gross margin		151.87		126.89		126.53		160.15		158.08		173.58
Direct Expenses												
Protein Vit Minerals (lb.)	45.17	7.11	159.13	24.23	-	6.40	41.02	3.53	1.51	1.30	2.48	0.28
Creep / Starter (lb.)	30.06	3.02	-	-	126.40	14.84	52.41	4.24	-	-	-	-
Complete Ration (lb.)	18.66	6.59	31.83	10.20	71.55	6.03	-	12.36	8.92	1.48	6.19	0.64
Corn (bu.)	2.63	8.35	4.30	13.66	0.17	0.55	5.11	16.31	0.92	2.85	0.84	2.56
Hay, Grass (lb.)	1,340.88	35.72	1,250.92	31.65	1,359.86	47.79	1,454.76	38.79	2,010.92	56.84	871.33	16.60
Pasture (aum)	1.90	22.00	2.32	27.90	2.31	27.73	1.99	22.59	1.58	16.29	1.43	16.84
Wheat, Spring (bu.)	0.50	0.91	-	-	3.93	7.15	-	-	-	-	-	-
Hay (lb.)	259.49	8.43	1,236.24	40.18	-	-	-	-	-	-	-	-
Other feed stuffs (lb)	5.72	0.39	-	-	9.54	0.61	13.90	0.96	5.29	0.34	-	-
Veterinary		2.67		2.18		7.25		1.31		2.88		2.05
Supplies		3.73		4.84		8.25		3.10		1.98		2.21
Contract production exp.		3.89		-		-		-		-		15.87
Fuel & oil		7.46		21.88		5.23		4.47		3.66		1.87
Repairs		15.67		50.86		8.31		8.41		3.99		4.45
Custom hire		1.47		4.82		3.56		-		-		-
Total direct expenses		127.40		232.41		143.71		116.09		91.62		63.38
Return over direct expense		24.47		-105.52		-17.17		44.06		66.47		110.21
Overhead Expenses												
Hired labor		7.58		32.24		0.18		2.76		0.23		0.07
RE & pers. property taxes		3.66		9.07		3.71		1.29		3.84		1.46
Farm insurance		5.73		16.60		3.93		3.48		2.16		2.00
Utilities		2.26		6.15		2.63		1.25		1.77		0.16
Interest		5.61		14.47		4.45		6.09		0.65		1.14
Mach & bldg depreciation		25.30		90.13		12.64		11.89		2.50		4.98
Miscellaneous		7.68		25.07		8.76		2.08		1.66		2.04
Total overhead expenses		57.82		193.73		36.30		28.84		12.82		11.86
Total dir & ovhd expenses		185.22		426.14		180.00		144.93		104.44		75.23
Net return		-33.35		-299.25		-53.47		15.22		53.65		98.35
Labor & management charge		23.87		44.06		12.99		16.68		22.48		20.93
Net return over lbr & mgt		-57.22		-343.31		-66.46		-1.46		31.16		77.42
Cost of Production Per Cwt. Produced												
Total direct expense per unit		127.40		232.41		143.71		116.09		91.62		63.38
Total dir & ovhd expense per unit		185.22		426.14		180.00		144.93		104.44		75.23
With other revenue adjustments		181.35		471.75		204.36		135.38		107.90		16.00
With labor and management		205.22		515.80		217.35		152.06		130.39		36.93
Est. labor hours per unit		1.96		4.12		1.59		1.42		1.75		1.04
Other Information												
Number of cows		49.9		45.2		36.4		72.3		41.2		54.2
Pregnancy percentage		91.1		96.8		68.1		92.7		96.1		95.6
Pregnancy loss percentage		3.0		2.5		0.8		4.3		0.3		5.0
Culling percentage		13.9		17.7		14.1		14.1		4.9		17.3
Calving percentage		88.4		94.3		67.6		88.7		95.9		90.7
Weaning percentage		84.3		90.3		71.4		83.3		91.7		83.3
Calves sold per cow		0.83		1.12		0.64		0.73		0.97		0.77
Calf death loss percent		5.5		6.5		4.4		5.0		2.9		8.3
Cow death loss percent		1.9		3.1		2.2		1.7		2.2		0.7
Cows per FTE		269.7		111.0		381.3		406.7		331.9		452.6
Average weaning weight		459		446		425		477		445		480
Lb. weaned/exposed female		387		402		303		397		408		400
Feed cost per cow		488.83		904.26		511.97		479.78		382.10		220.04
Avg wgt/ Beef Calves sold		619		607		666		666		568		602
Avg price / cwt.		142.78		151.61		131.90		133.28		151.17		141.93

Livestock Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cow

	<u>Avg. Of All Farms</u>		<u>Low 20%</u>		<u>20 - 40%</u>		<u>40 - 60%</u>		<u>60 - 80%</u>		<u>High 20%</u>	
	25		5		5		5		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms												
Beef Calves sold (lb)	469.3	670.10	677.0	1,026.35	252.5	333.11	462.1	615.90	484.1	731.90	440.1	624.66
Transferred out (lb)	43.6	56.75	-	-	125.6	181.22	33.2	38.73	46.2	67.24	36.5	36.53
Cull sales (lb)	120.1	112.49	136.3	91.14	113.8	145.05	111.5	128.29	32.4	42.93	189.1	140.23
Other income		5.82		24.34		5.49		-		-		2.77
Purchased (lb)	-129.0	-194.29	-308.5	-445.57	-84.2	-253.14	-57.0	-76.63	-32.8	-39.83	-178.7	-219.58
Transferred in (lb)	-14.5	-15.78	-	-	-2.5	-	-33.2	-38.73	-27.5	-27.52	-	-
Inventory change (lb)	34.1	167.38	89.3	79.95	50.0	171.30	-31.1	110.12	-19.4	-11.11	105.1	449.71
Gross margin		802.46		776.20		583.03		777.67		763.61		1,034.32
Direct Expenses												
Protein Vit Minerals (lb.)	238.7	37.55	973.5	148.25	-	29.47	199.2	17.15	7.3	6.27	14.8	1.66
Creep / Starter (lb.)	158.8	15.96	-	-	582.4	68.39	254.5	20.61	-	-	-	-
Complete Ration (lb.)	98.6	34.80	194.7	62.40	329.7	27.80	-	60.04	43.1	7.17	36.9	3.84
Corn (bu.)	13.9	44.10	26.3	83.58	0.8	2.55	24.8	79.22	4.5	13.79	5.0	15.28
Hay, Grass (lb.)	7,085.1	188.77	7,652.2	193.61	6,265.9	220.20	7,064.3	188.37	9,713.6	274.56	5,191.9	98.93
Pasture (aum)	10.0	116.23	14.2	170.65	10.6	127.79	9.7	109.71	7.6	78.68	8.5	100.34
Wheat, Spring (bu.)	2.6	4.81	-	-	18.1	32.97	-	-	-	-	-	-
Hay (lb.)	1,371.1	44.56	7,562.4	245.78	-	-	-	-	-	-	-	-
Other feed stuffs (lb)	30.2	2.03	-	-	44.0	2.79	67.5	4.68	25.5	1.63	-	-
Veterinary		14.11		13.34		33.41		6.38		13.92		12.23
Supplies		19.71		29.59		37.99		15.03		9.57		13.14
Contract production exp.		20.56		-		-		-		-		94.57
Fuel & oil		39.43		133.86		24.09		21.71		17.69		11.13
Repairs		82.79		311.14		38.31		40.82		19.26		26.53
Custom hire		7.74		29.50		16.40		-		-		-
Total direct expenses		673.17		1,421.68		662.17		563.72		442.54		377.63
Return over direct expense		129.29		-645.49		-79.14		213.95		321.07		656.68
Overhead Expenses												
Hired labor		40.05		197.24		0.83		13.42		1.09		0.41
RE & pers. property taxes		19.32		55.46		17.08		6.27		18.55		8.68
Farm insurance		30.28		101.53		18.13		16.91		10.45		11.94
Utilities		11.96		37.62		12.10		6.05		8.55		0.95
Interest		29.62		88.52		20.52		29.57		3.16		6.81
Mach & bldg depreciation		133.67		551.36		58.25		57.75		12.10		29.69
Miscellaneous		40.60		153.37		40.35		10.09		8.03		12.18
Total overhead expenses		305.51		1,185.11		167.25		140.06		61.93		70.66
Total dir & ovhd expenses		978.67		2,606.80		829.42		703.78		504.47		448.29
Net return		-176.21		-1,830.60		-246.38		73.89		259.13		586.03
Labor & management charge		126.15		269.51		59.84		81.00		108.60		124.72
Net return over lbr & mgt		-302.37		-2,100.11		-306.23		-7.11		150.54		461.31
Cost of Production Per Cwt. Produced												
Total direct expense per unit		127.40		232.41		143.71		116.09		91.62		63.38
Total dir & ovhd expense per unit		185.22		426.14		180.00		144.93		104.44		75.23
With other revenue adjustments		181.35		471.75		204.36		135.38		107.90		16.00
With labor and management		205.22		515.80		217.35		152.06		130.39		36.93
Est. labor hours per unit		10.38		25.23		7.34		6.88		8.44		6.19
Other Information												
Number of cows		49.9		45.2		36.4		72.3		41.2		54.2
Pregnancy percentage		91.1		96.8		68.1		92.7		96.1		95.6
Pregnancy loss percentage		3.0		2.5		0.8		4.3		0.3		5.0
Culling percentage		13.9		17.7		14.1		14.1		4.9		17.3
Calving percentage		88.4		94.3		67.6		88.7		95.9		90.7
Weaning percentage		84.3		90.3		71.4		83.3		91.7		83.3
Calves sold per cow		0.83		1.12		0.64		0.73		0.97		0.77
Calf death loss percent		5.5		6.5		4.4		5.0		2.9		8.3
Cow death loss percent		1.9		3.1		2.2		1.7		2.2		0.7
Cows per FTE		269.7		111.0		381.3		406.7		331.9		452.6
Average weaning weight		459		446		425		477		445		480
Lb. weaned/exposed female		387		402		303		397		408		400
Feed cost per cow		488.83		904.26		511.97		479.78		382.10		220.04
Avg wgt/ Beef Calves sold		619		607		666		666		568		602
Avg price / cwt.		142.78		151.61		131.90		133.28		151.17		141.93

Livestock Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Return)

Sheep, Market Lamb Prod -- Average Per Cwt. Produced

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	6	
	Quantity	Value
Lambs sold (lb)	1.74	0.50
Mkt Lambs sold (lb)	41.24	122.68
Cull sales (lb)	15.27	38.10
Other income		2.22
Purchased (lb)	-8.05	-14.47
Inventory change (lb)	50.83	83.32
Gross margin		232.35
Direct Expenses		
Protein Vit Minerals (lb.)	31.25	9.18
Complete Ration (lb.)	168.35	30.18
Barley (bu.)	0.57	3.41
Corn (bu.)	1.18	4.14
Hay, Alfalfa (lb.)	31.74	2.10
Hay, Grass (lb.)	49.23	1.80
Pasture (aum)	1.91	17.09
Other feed stuffs (lb)	1.51	0.83
Supplies		18.66
Fuel & oil		8.73
Repairs		11.76
Utilities		0.76
Total direct expenses		108.62
Return over direct expense		123.72
Overhead Expenses		
Hired labor		0.52
RE & pers. property taxes		1.56
Farm insurance		9.83
Utilities		6.33
Dues & professional fees		3.14
Interest		6.18
Mach & bldg depreciation		25.62
Miscellaneous		9.99
Total overhead expenses		63.19
Total dir & ovhd expenses		171.81
Net return		60.54
Labor & management charge		62.55
Net return over lbr & mgt		-2.01
Cost of Production Per Cwt. Produced		
Total direct expense per unit		108.62
Total dir & ovhd expense per unit		171.81
With other revenue adjustments		138.14
With labor and management		200.70
Est. labor hours per unit		11.77
Other Information		
Number of ewes		55.2
Pregnancy percentage		105.8
Pregnancy loss percentage		3.2
Female turnover rate		14.20
Lambs born / ewe exposed		1.25
Lambs born / ewe lambing		1.22
Lambs weaned/ewe exposed		1.11
Lambs sold per ewe		0.55
Lamb dth loss (died/born)		14.0
Ewe death loss percentage		2.7
Ewes per FTE		298.1
Average weaning weight		48
Lb. weaned/exposed female		53
Feed cost per ewe		54.82
Avg wgt/Mkt Lambs sold		60
Avg price / cwt.		297.46

**Livestock Enterprise Analysis
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Return)**

Sheep, Market Lamb Prod -- Average Per Ewe

	<u>Avg. Of All Farms</u>	
Number of farms	6	
	Quantity	Value
Lambs sold (lb)	1.4	0.40
Mkt Lambs sold (lb)	32.9	97.86
Cull sales (lb)	12.2	30.39
Other income		1.77
Purchased (lb)	-6.4	-11.54
Inventory change (lb)	40.5	66.46
Gross margin		185.35
Direct Expenses		
Protein Vit Minerals (lb.)	24.9	7.33
Complete Ration (lb.)	134.3	24.08
Barley (bu.)	0.5	2.72
Corn (bu.)	0.9	3.30
Hay, Alfalfa (lb.)	25.3	1.67
Hay, Grass (lb.)	39.3	1.44
Pasture (aum)	1.5	13.63
Other feed stuffs (lb)	1.2	0.66
Supplies		14.89
Fuel & oil		6.97
Repairs		9.38
Utilities		0.60
Total direct expenses		86.65
Return over direct expense		98.70
Overhead Expenses		
RE & pers. property taxes		1.24
Farm insurance		7.84
Utilities		5.05
Dues & professional fees		2.51
Interest		4.93
Mach & bldg depreciation		20.44
Miscellaneous		8.39
Total overhead expenses		50.40
Total dir & ovhd expenses		137.05
Net return		48.29
Labor & management charge		49.90
Net return over lbr & mgt		-1.61
Cost of Production Per Cwt. Produced		
Total direct expense per unit		108.62
Total dir & ovhd expense per unit		171.81
With other revenue adjustments		138.14
With labor and management		200.70
Est. labor hours per unit		9.39
Other Information		
Number of ewes		55.2
Pregnancy percentage		105.8
Pregnancy loss percentage		3.2
Female turnover rate		14.20
Lambs born / ewe exposed		1.25
Lambs born / ewe lambing		1.22
Lambs weaned/ewe exposed		1.11
Lambs sold per ewe		0.55
Lamb dth loss (died/born)		14.0
Ewe death loss percentage		2.7
Ewes per FTE		298.1
Average weaning weight		48
Lb. weaned/exposed female		53
Feed cost per ewe		54.82
Avg wgt/Mkt Lambs sold		60
Avg price / cwt.		297.46

Financial Summary Tables

The following pages are one-page financial summaries of the whole farm analysis sorted different ways. A group of the most meaningful factors are highlighted here when the farms are sorted as follows:

Financial Summary by Net Farm Income (page 37)

This table summarizes whole-farm financial performance by net farm income. Farms are categorized into 4 groups from low to high net farm income.

Financial Summary by Farm Size (Gross Farm Income) (page 38)

This table summarizes whole-farm financial performance by size of farm. Farms are categorized based on gross farm income.

Financial Summary by Farm Type (page 39)

This table summarizes whole-farm financial performance by debt level. Farm type is assigned based on greater than 70 percent of sales from that commodity or combination of commodities. If a given type includes less than four farms, they are not reported here.

Financial Summary by Debt To Asset Ratio (page 40)

This table summarizes whole-farm financial performance by debt level. Farms are categorized based on total farm and non-farm Debt to Asset Ratio.

Financial Summary by Age of Operator (page 41)

This table summarizes whole-farm financial performance based on age of the primary operator.

Financial Summary
2017 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>Low 20%</u>	<u>20 - 40%</u>	<u>40 - 60%</u>	<u>60 - 80%</u>	<u>High 20%</u>
Number of farms	117	23	23	24	23	24
Income Statement						
Gross cash farm income	515,765	896,932	103,027	278,274	501,487	797,196
Total cash farm expense	451,597	904,424	78,253	227,686	397,184	651,484
Net cash farm income	64,168	-7,492	24,774	50,588	104,303	145,712
Inventory change	5,108	-84,189	-2,671	6,252	9,383	92,895
Depreciation	-33,525	-30,823	-14,144	-19,728	-37,994	-64,204
Net farm income from operations	35,750	-122,504	7,960	37,111	75,692	174,403
Gain or loss on capital sales	1,866	5,114	239	390	-182	3,752
Average net farm income	37,616	-117,390	8,199	37,502	75,510	178,155
Median net farm income	36,054	-18,814	7,666	35,466	70,150	183,480
Profitability (cost)						
Rate of return on assets	1.2 %	-7.4 %	0.2 %	2.1 %	3.3 %	5.2 %
Rate of return on equity	0.3 %	-13.4 %	-0.5 %	1.7 %	3.2 %	5.8 %
Operating profit margin	4.4 %	-30.5 %	1.5 %	8.8 %	10.7 %	17.1 %
Asset turnover rate	27.1 %	24.3 %	15.0 %	24.4 %	31.0 %	30.3 %
Profitability (market)						
Rate of return on assets	1.3 %	-4.9 %	0.6 %	2.3 %	2.8 %	4.5 %
Rate of return on equity	0.8 %	-7.5 %	0.1 %	2.0 %	2.6 %	4.8 %
Operating profit margin	6.8 %	-30.5 %	5.2 %	13.5 %	13.3 %	19.7 %
Asset turnover rate	19.2 %	16.0 %	11.5 %	16.7 %	21.2 %	23.0 %
Liquidity & Repayment (end of year)						
Current assets	395,739	486,469	70,379	232,341	429,933	751,220
Current liabilities	175,314	276,033	19,544	104,262	164,197	309,774
Current ratio	2.26	1.76	3.60	2.23	2.62	2.43
Working capital	220,425	210,436	50,836	128,079	265,736	441,446
Change in working capital	-3,074	-71,529	-2,246	-4,146	-17,274	76,414
Working capital to gross inc	42.0 %	25.5 %	50.5 %	44.1 %	52.1 %	49.6 %
Term debt coverage ratio	1.61	-1.13	1.93	2.06	2.97	3.09
Replacement coverage ratio	1.04	-0.82	0.98	1.31	1.80	2.00
Term debt to EBITDA	2.78	-4.71	3.04	2.71	1.63	1.43
Solvency (end of year at cost)						
Number of farms	117	23	23	24	23	24
Total assets	1,765,266	1,842,429	717,862	1,247,615	1,769,931	3,208,259
Total liabilities	454,600	653,733	118,215	310,311	406,316	776,693
Net worth	1,310,666	1,188,696	599,647	937,303	1,363,616	2,431,566
Net worth change	16,016	-120,616	10,984	24,875	59,353	101,388
Farm debt to asset ratio	27 %	38 %	16 %	27 %	25 %	24 %
Total debt to asset ratio	26 %	35 %	16 %	25 %	23 %	24 %
Change in earned net worth %	1 %	-9 %	2 %	3 %	5 %	4 %
Solvency (end of year at market)						
Number of farms	117	23	23	24	23	24
Total assets	2,473,634	2,754,571	941,629	1,849,723	2,528,940	4,243,484
Total liabilities	454,600	653,733	118,215	310,311	406,316	776,693
Net worth	2,019,035	2,100,838	823,414	1,539,412	2,122,624	3,466,791
Total net worth change	34,226	-119,531	18,956	60,651	69,723	135,766
Farm debt to asset ratio	19 %	25 %	12 %	19 %	17 %	19 %
Total debt to asset ratio	18 %	24 %	13 %	17 %	16 %	18 %
Change in total net worth %	2 %	-5 %	2 %	4 %	3 %	4 %
Nonfarm Information						
Net nonfarm income	40,621	41,824	32,678	38,883	46,916	42,785
Farms reporting living expenses	14	2	4	4	4	-
Total family living expense	49,043	-	-	-	-	-
Total living, invest, cap. purch	79,242	-	-	-	-	-
Crop Acres						
Total crop acres	761	747	206	536	854	1,444
Total crop acres owned	193	249	52	131	231	301
Total crop acres cash rented	275	155	47	200	338	622
Total crop acres share rented	293	342	107	205	285	521
Machinery value per crop acre	497	435	705	466	492	515

Financial Summary
2017 Missouri FBMA Farm Summary
(Farms Sorted By Gross Farm Income)

	<u>Avg. Of All Farms</u>	<u>Less than 100,000</u>	<u>100,001 - 250,000</u>	<u>250,001 - 500,000</u>	<u>500,001 - 1,000,000</u>	<u>1,000,001 - 2,000,000</u>
Number of farms	117	38	15	23	31	6
Income Statement						
Gross cash farm income	515,765	33,869	166,205	347,365	674,477	1,257,448
Total cash farm expense	451,597	25,814	118,480	291,064	542,538	1,029,489
Net cash farm income	64,168	8,055	47,725	56,301	131,939	227,959
Inventory change	5,108	734	9,183	34,133	16,292	-219,836
Depreciation	-33,525	-2,508	-9,889	-38,157	-49,941	-124,553
Net farm income from operations	35,750	6,282	47,019	52,277	98,290	-116,431
Gain or loss on capital sales	1,866	327	7,381	523	4,450	-9,132
Average net farm income	37,616	6,609	54,401	52,801	102,740	-125,563
Median net farm income	36,054	4,814	53,335	55,115	74,818	-5,524
Profitability (cost)						
Rate of return on assets	1.2 %	0.1 %	4.7 %	1.7 %	3.1 %	-4.5 %
Rate of return on equity	0.3 %	-0.2 %	4.8 %	1.3 %	3.1 %	-5.8 %
Operating profit margin	4.4 %	0.9 %	20.1 %	9.1 %	10.3 %	-15.6 %
Asset turnover rate	27.1 %	9.2 %	23.4 %	19.2 %	30.1 %	28.7 %
Profitability (market)						
Rate of return on assets	1.3 %	0.1 %	1.3 %	2.2 %	3.4 %	-3.0 %
Rate of return on equity	0.8 %	-0.2 %	0.9 %	1.9 %	3.5 %	-3.7 %
Operating profit margin	6.8 %	0.9 %	11.1 %	16.4 %	15.6 %	-15.8 %
Asset turnover rate	19.2 %	7.5 %	11.8 %	13.3 %	22.0 %	18.9 %
Liquidity & Repayment (end of year)						
Current assets	395,739	57,511	177,055	403,845	569,760	855,804
Current liabilities	175,314	4,706	40,631	126,423	274,274	158,475
Current ratio	2.26	12.22	4.36	3.19	2.08	5.40
Working capital	220,425	52,805	136,424	277,422	295,486	697,329
Change in working capital	-3,074	4,459	16,416	10,738	-10,961	-174,406
Working capital to gross inc	42.0 %	152.5 %	76.0 %	73.2 %	42.9 %	63.3 %
Term debt coverage ratio	1.61	4.06	3.38	3.47	2.25	-0.52
Replacement coverage ratio	1.04	1.72	2.01	1.67	1.53	-0.29
Term debt to EBITDA	2.78	4.08	1.96	1.88	1.76	12.21
Solvency (end of year at cost)						
Number of farms	117	38	15	23	31	6
Total assets	1,765,266	411,109	996,936	2,163,456	2,364,459	3,696,896
Total liabilities	454,600	57,890	216,981	379,002	633,960	483,469
Net worth	1,310,666	353,219	779,954	1,784,454	1,730,499	3,213,426
Net worth change	16,016	13,417	44,381	54,716	38,905	-193,310
Farm debt to asset ratio	27 %	14 %	22 %	18 %	28 %	14 %
Total debt to asset ratio	26 %	14 %	22 %	18 %	27 %	13 %
Change in earned net worth %	1 %	4 %	6 %	3 %	2 %	-6 %
Solvency (end of year at market)						
Number of farms	117	38	15	23	31	6
Total assets	2,473,634	530,234	1,748,440	3,165,403	3,202,396	5,586,817
Total liabilities	454,600	57,890	216,981	379,002	633,960	483,469
Net worth	2,019,035	472,343	1,531,458	2,786,401	2,568,436	5,103,348
Total net worth change	34,226	18,394	38,006	99,616	71,618	-195,003
Farm debt to asset ratio	19 %	12 %	11 %	12 %	21 %	9 %
Total debt to asset ratio	18 %	11 %	12 %	12 %	20 %	9 %
Change in total net worth %	2 %	4 %	3 %	4 %	3 %	-4 %
Nonfarm Information						
Net nonfarm income	40,621	30,242	40,202	73,412	29,717	48,196
Farms reporting living expenses	14	4	2	6	2	-
Total family living expense	49,043	-	-	51,570	-	-
Total living, invest, cap. purch	79,242	-	-	80,919	-	-
Crop Acres						
Total crop acres	761	64	383	798	1,217	2,299
Total crop acres owned	193	28	110	226	307	627
Total crop acres cash rented	275	10	81	123	474	960
Total crop acres share rented	293	27	193	449	435	711
Machinery value per crop acre	497	680	331	503	490	603

Financial Summary
2017 Missouri FBMA Farm Summary
(Farms Sorted By Farm Type)

	<u>Avg. Of All Farms</u>	<u>Crop</u>	<u>Beef</u>	<u>Crop and Beef</u>	<u>Other</u>
Number of farms	117	62	17	19	9
Income Statement					
Gross cash farm income	515,765	484,733	131,504	364,638	306,112
Total cash farm expense	451,597	391,812	119,596	294,883	238,708
Net cash farm income	64,168	92,921	11,907	69,755	67,404
Inventory change	5,108	-2,101	13,077	26,884	-5,555
Depreciation	-33,525	-47,503	-2,771	-30,026	-21,727
Net farm income from operations	35,750	43,317	22,213	66,612	40,122
Gain or loss on capital sales	1,866	2,613	-31	650	3,629
Average net farm income	37,616	45,930	22,182	67,262	43,751
Median net farm income	36,054	50,570	14,488	55,021	43,609
Profitability (cost)					
Rate of return on assets	1.2 %	1.0 %	3.5 %	3.2 %	1.8 %
Rate of return on equity	0.3 %	0.4 %	3.7 %	3.4 %	1.2 %
Operating profit margin	4.4 %	3.8 %	13.5 %	12.4 %	11.9 %
Asset turnover rate	27.1 %	26.8 %	25.8 %	25.5 %	15.2 %
Profitability (market)					
Rate of return on assets	1.3 %	1.3 %	3.7 %	3.0 %	0.5 %
Rate of return on equity	0.8 %	0.9 %	3.9 %	3.1 %	-0.1 %
Operating profit margin	6.8 %	7.0 %	22.3 %	17.7 %	5.3 %
Asset turnover rate	19.2 %	18.7 %	16.6 %	16.8 %	10.2 %
Liquidity & Repayment (end of year)					
Current assets	395,739	453,277	126,291	325,413	202,737
Current liabilities	175,314	142,249	81,568	182,818	72,132
Current ratio	2.26	3.19	1.55	1.78	2.81
Working capital	220,425	311,028	44,723	142,595	130,605
Change in working capital	-3,074	-10,284	8,987	16,007	3,298
Working capital to gross inc	42.0 %	63.7 %	29.8 %	36.3 %	43.8 %
Term debt coverage ratio	1.61	1.70	7.46	2.22	5.08
Replacement coverage ratio	1.04	1.08	2.85	1.50	2.00
Term debt to EBITDA	2.78	2.18	1.58	1.95	3.32
Solvency (end of year at cost)					
Number of farms	117	62	17	19	9
Total assets	1,765,266	2,035,143	510,242	1,679,336	1,676,270
Total liabilities	454,600	408,268	147,481	447,685	312,294
Net worth	1,310,666	1,626,876	362,761	1,231,650	1,363,977
Net worth change	16,016	22,523	25,685	41,112	-4,292
Farm debt to asset ratio	27 %	20 %	34 %	29 %	22 %
Total debt to asset ratio	26 %	20 %	29 %	27 %	19 %
Change in earned net worth %	1 %	1 %	8 %	3 %	0 %
Solvency (end of year at market)					
Number of farms	117	62	17	19	9
Total assets	2,473,634	2,884,177	769,825	2,559,631	2,453,287
Total liabilities	454,600	408,268	147,481	447,685	312,294
Net worth	2,019,035	2,475,909	622,343	2,111,945	2,140,994
Total net worth change	34,226	46,419	40,418	80,330	-29,991
Farm debt to asset ratio	19 %	14 %	22 %	19 %	15 %
Total debt to asset ratio	18 %	14 %	19 %	17 %	13 %
Change in total net worth %	2 %	2 %	7 %	4 %	-1 %
Nonfarm Information					
Net nonfarm income	40,621	39,956	40,882	40,944	64,710
Farms reporting living expenses	14	5	3	2	4
Total family living expense	49,043	51,776	-	-	-
Total living, invest, cap. purch	79,242	95,281	-	-	-
Crop Acres					
Total crop acres	761	1,064	97	691	271
Total crop acres owned	193	267	35	185	135
Total crop acres cash rented	275	371	30	255	50
Total crop acres share rented	293	426	32	251	85
Machinery value per crop acre	497	482	608	505	945

Financial Summary
2017 Missouri FBMA Farm Summary
(Farms Sorted By Debt to Asset Ratio)

	<u>Avg. Of All Farms</u>	<u>Less than 20%</u>	<u>20% - 40%</u>	<u>40% - 60%</u>	<u>60% - 80%</u>
Number of farms	117	68	29	14	6
Income Statement					
Gross cash farm income	515,765	364,301	438,580	1,326,753	713,115
Total cash farm expense	451,597	282,730	365,159	1,362,113	658,675
Net cash farm income	64,168	81,571	73,421	-35,360	54,439
Inventory change	5,108	-12,646	20,578	32,192	68,347
Depreciation	-33,525	-35,774	-37,987	-22,177	-12,964
Net farm income from operations	35,750	33,152	56,012	-25,345	109,822
Gain or loss on capital sales	1,866	1,246	4,373	485	-
Average net farm income	37,616	34,398	60,384	-24,859	109,822
Median net farm income	36,054	34,230	46,658	39,593	91,243
Profitability (cost)					
Rate of return on assets	1.2 %	0.6 %	2.6 %	-1.3 %	7.9 %
Rate of return on equity	0.3 %	0.4 %	2.1 %	-11.1 %	20.2 %
Operating profit margin	4.4 %	3.1 %	8.0 %	-3.2 %	18.4 %
Asset turnover rate	27.1 %	20.8 %	32.4 %	41.3 %	42.7 %
Profitability (market)					
Rate of return on assets	1.3 %	0.5 %	3.2 %	0.8 %	5.7 %
Rate of return on equity	0.8 %	0.3 %	3.2 %	-3.8 %	9.7 %
Operating profit margin	6.8 %	3.7 %	13.0 %	2.1 %	15.5 %
Asset turnover rate	19.2 %	13.6 %	25.0 %	36.8 %	36.8 %
Liquidity & Repayment (end of year)					
Current assets	395,739	375,818	325,785	578,610	532,916
Current liabilities	175,314	61,427	215,099	534,402	435,865
Current ratio	2.26	6.12	1.51	1.08	1.22
Working capital	220,425	314,392	110,687	44,208	97,051
Change in working capital	-3,074	-11,163	9,935	-5,532	31,456
Working capital to gross inc	42.0 %	88.2 %	23.6 %	3.3 %	12.5 %
Term debt coverage ratio	1.61	2.71	1.65	0.06	2.29
Replacement coverage ratio	1.04	1.17	1.32	0.05	1.90
Term debt to EBITDA	2.78	1.26	2.87	12.81	4.31
Solvency (end of year at cost)					
Number of farms	117	68	29	14	6
Total assets	1,765,266	1,838,007	1,589,836	1,846,624	1,598,939
Total liabilities	454,600	177,494	608,161	1,194,826	1,125,725
Net worth	1,310,666	1,660,513	981,676	651,798	473,215
Net worth change	16,016	10,609	44,498	-56,312	108,395
Farm debt to asset ratio	27 %	10 %	39 %	66 %	71 %
Total debt to asset ratio	26 %	10 %	38 %	65 %	70 %
Change in earned net worth %	1 %	1 %	5 %	-8 %	30 %
Solvency (end of year at market)					
Number of farms	117	68	29	14	6
Total assets	2,473,634	2,778,951	2,069,619	2,097,970	1,842,672
Total liabilities	454,600	177,494	608,161	1,194,826	1,125,725
Net worth	2,019,035	2,601,457	1,461,459	903,143	716,947
Total net worth change	34,226	18,051	80,960	-12,299	100,219
Farm debt to asset ratio	19 %	7 %	30 %	58 %	62 %
Total debt to asset ratio	18 %	6 %	29 %	57 %	61 %
Change in total net worth %	2 %	1 %	6 %	-1 %	16 %
Nonfarm Information					
Net nonfarm income	40,621	44,087	44,192	26,510	16,998
Farms reporting living expenses	14	5	7	2	-
Total family living expense	49,043	52,556	45,071	-	-
Total living, invest, cap. purch	79,242	58,711	98,678	-	-
Crop Acres					
Total crop acres	761	637	963	835	1,028
Total crop acres owned	193	243	147	81	113
Total crop acres cash rented	275	178	413	385	441
Total crop acres share rented	293	215	403	369	475
Machinery value per crop acre	497	611	464	269	281

Financial Summary
2017 Missouri FBMA Farm Summary
(Farms Sorted By Age of Operator)

	<u>Avg. Of All Farms</u>	<u>Less Than 31</u>	<u>31 - 40</u>	<u>41 - 50</u>	<u>51 - 60</u>	<u>Over 60</u>
Number of farms	117	12	19	19	18	49
Income Statement						
Gross cash farm income	515,765	126,460	417,680	1,044,034	511,681	445,800
Total cash farm expense	451,597	110,323	338,113	1,037,116	419,167	364,054
Net cash farm income	64,168	16,137	79,566	6,919	92,514	81,746
Inventory change	5,108	25,944	5,589	27,081	-12,172	-11,298
Depreciation	-33,525	-12,373	-29,396	-27,676	-52,617	-35,562
Net farm income from operations	35,750	29,708	55,759	6,323	52,069	34,887
Gain or loss on capital sales	1,866	339	9,964	719	-3,027	1,343
Average net farm income	37,616	30,047	65,724	7,042	49,042	36,229
Median net farm income	36,054	5,762	44,476	46,566	15,112	48,163
Profitability (cost)						
Rate of return on assets	1.2 %	6.6 %	3.5 %	-0.1 %	1.3 %	0.9 %
Rate of return on equity	0.3 %	9.5 %	3.3 %	-2.9 %	0.9 %	0.3 %
Operating profit margin	4.4 %	17.4 %	8.8 %	-0.2 %	5.3 %	3.8 %
Asset turnover rate	27.1 %	38.0 %	39.4 %	31.2 %	25.4 %	22.7 %
Profitability (market)						
Rate of return on assets	1.3 %	7.3 %	5.7 %	1.1 %	1.8 %	0.3 %
Rate of return on equity	0.8 %	10.8 %	6.7 %	-0.7 %	1.5 %	-0.1 %
Operating profit margin	6.8 %	19.8 %	16.7 %	3.8 %	9.4 %	2.3 %
Asset turnover rate	19.2 %	36.9 %	34.4 %	27.9 %	18.9 %	13.9 %
Liquidity & Repayment (end of year)						
Current assets	395,739	114,140	311,170	538,983	474,739	412,930
Current liabilities	175,314	76,660	154,312	394,635	137,811	136,351
Current ratio	2.26	1.49	2.02	1.37	3.44	3.03
Working capital	220,425	37,480	156,857	144,348	336,928	276,579
Change in working capital	-3,074	16,058	-10,083	3,909	9,369	-12,321
Working capital to gross inc	42.0 %	25.9 %	35.7 %	13.5 %	63.7 %	63.0 %
Term debt coverage ratio	1.61	2.15	2.60	0.26	1.86	1.98
Replacement coverage ratio	1.04	2.07	1.88	0.19	1.19	1.08
Term debt to EBITDA	2.78	2.40	2.21	5.88	2.48	2.31
Solvency (end of year at cost)						
Number of farms	117	12	19	19	18	49
Total assets	1,765,266	399,338	1,275,291	2,082,088	2,239,028	1,992,884
Total liabilities	454,600	217,068	456,337	900,927	483,984	328,237
Net worth	1,310,666	182,271	818,954	1,181,161	1,755,044	1,664,647
Net worth change	16,016	35,192	76,272	-30,755	33,745	-421
Farm debt to asset ratio	27 %	55 %	38 %	45 %	22 %	18 %
Total debt to asset ratio	26 %	54 %	36 %	43 %	22 %	16 %
Change in earned net worth %	1 %	24 %	10 %	-3 %	2 %	0 %
Solvency (end of year at market)						
Number of farms	117	12	19	19	18	49
Total assets	2,473,634	426,362	1,504,397	2,339,766	3,019,191	3,202,333
Total liabilities	454,600	217,068	456,337	900,927	483,984	328,237
Net worth	2,019,035	209,294	1,048,060	1,438,839	2,535,207	2,874,096
Total net worth change	34,226	50,433	116,330	-6,201	76,805	-1,546
Farm debt to asset ratio	19 %	53 %	33 %	40 %	16 %	11 %
Total debt to asset ratio	18 %	51 %	30 %	39 %	16 %	10 %
Change in total net worth %	2 %	32 %	12 %	0 %	3 %	0 %
Nonfarm Information						
Net nonfarm income	40,621	16,321	49,488	20,093	48,189	48,314
Farms reporting living expenses	14	2	4	3	2	3
Total family living expense	49,043	-	-	-	-	-
Total living, invest, cap. purch	79,242	-	-	-	-	-
Crop Acres						
Total crop acres	761	281	923	717	996	747
Total crop acres owned	193	4	89	93	251	297
Total crop acres cash rented	275	56	395	270	408	234
Total crop acres share rented	293	221	439	354	336	215
Machinery value per crop acre	497	326	319	499	582	557

Percentile Rank Report w/Group Medians

With the exception of the information presented on the following page, all of the data tables in this summary report represent “average” or “mean” data. For example, the 2016 “average” or “mean” net farm income of the 108 farms in this summary was \$49,743. This is found by simply adding the NFI of each farm in the group to a total and then dividing by 108 for the “mean” or “average.” Sometimes, a few farms at the high end of the range with extremely high NFI’s can skew the mean. The same could be true of a few extreme NFI farms at the low end. For that reason, “median” figures can be very helpful when comparing summary data to an individual farm operation. The median is often described as the halfway point in the middle-figure, in other words, half of the farms fell below, the other half above. For example, in 2016, the “average” or “mean” NFI for 108 farms in the summary was \$49,743. However, the NFI of the “median”, or farm at the half-way point, was \$33,576. This indicates there were a group of farms with low NFI’s included in the group that more than offset the higher NFI’s of farms at the other end of the scale.

The “median” figures for selected factors on 2016 FBMA farms are reported on page 45 along with percentile ranks in 10% intervals. Each line is independent from the next with the data for each line broken into percentile ranks in 10% intervals. This presentation can be helpful in understanding the range of data for each factor for the entire group of farms.

Financial Summary - Detail 2017

Benchmark Report, 117 Farms

RankEm

Group	Count	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Gross cash farm income	117	12,253	28,157	47,032	118,185	217,145	325,986	493,003	594,740	801,224	1,297,229
Total cash operating expense	117	1,171,887	644,664	491,817	412,414	275,312	169,067	96,338	36,426	17,815	5,825
Net cash farm income	117	-14,189	419	8,713	15,336	25,550	52,435	78,108	102,690	169,829	283,598
Inventory change	117	-113,792	-45,480	-16,993	-4,318	0	3,172	13,311	36,318	74,930	201,487
Depreciation	117	-139,371	-80,179	-45,694	-27,703	-17,321	-10,061	-5,394	-1,667	0	0
Net farm income from operations	117	-61,578	-8,572	2,995	12,318	28,462	46,802	61,368	79,400	126,135	211,801
Gain or Loss from capital sales	117	-6,267	-113	0	0	0	0	0	0	351	7,036
Net farm income	117	-60,994	-11,462	3,178	12,318	28,462	46,802	64,201	80,732	128,482	211,801
Rate of return on assets (cost)	117	-11.1	-4.0	-0.6	1.1	1.8	2.9	4.2	5.4	8.6	12.9
Rate of return on equity (cost)	117	-20.2	-5.7	-1.9	0.6	1.6	3.1	4.6	6.6	11.3	24.8
Operating profit margin (cost)	117	-113.8	-21.1	-2.8	5.0	8.4	12.9	18.5	25.1	33.1	49.9
Asset turnover rate (cost)	117	3.3	7.3	13.9	17.7	21.1	23.5	28.0	34.2	47.1	65.2
Rate of return on assets (mkt)	117	-9.8	-3.6	-0.4	1.0	1.9	2.9	4.1	5.8	8.7	13.3
Rate of return on equity (mkt)	117	-16.0	-3.6	-1.4	0.5	1.6	2.7	4.4	6.3	10.8	24.2
Operating profit margin (mkt)	117	-167.5	-19.2	-1.4	7.0	13.2	16.6	22.0	31.1	37.9	55.4
Asset turnover rate (mkt)	117	2.7	5.7	8.2	11.2	15.4	18.9	22.0	28.1	40.2	55.3
Current ratio	117	0.80	1.04	1.18	1.53	2.00	3.04	5.17	6.94	16.66	51.28
Working capital	117	-22,537	6,628	17,300	43,303	65,121	138,524	186,986	263,136	569,843	881,410
Working capital to revenue ratio	117	-9.9	4.5	20.4	35.3	44.1	65.2	87.6	113.1	138.0	247.2
Term debt coverage ratio	117	-1.47	0.00	0.19	0.87	1.37	1.65	2.21	2.54	6.64	15.25
Replacement coverage ratio	117	-1.41	-0.01	0.51	0.79	1.19	1.74	2.20	3.02	4.72	13.67
Term debt to EBITDA	117	10.51	4.46	2.31	1.72	0.93	0.23	0.00	0.00	0.00	-4.43
Total assets	117	63,850	369,229	609,257	924,898	1,314,866	2,176,360	2,591,071	3,321,073	4,585,853	8,067,052
Total liabilities	117	1,373,051	837,663	543,177	399,361	298,258	161,005	71,480	12,419	0	0
Net worth	117	38,137	264,410	393,878	606,361	1,039,819	1,622,406	2,149,792	2,745,347	3,748,902	6,776,526
Change in retained earnings	117	-80,914	-36,190	-603	5,293	12,917	23,848	48,145	70,919	121,651	209,300
Net worth change	117	-254,593	-25,919	-1,862	5,111	18,725	37,262	79,925	108,716	189,809	310,831
Farm debt to asset ratio	117	60	45	36	26	19	12	4	0	0	0
Total debt to asset ratio	117	60	43	37	26	19	12	6	1	0	0
Change in earned net worth %	117	-12	-3	-1	1	3	5	7	11	20	37
Net nonfarm income	117	0	0	0	99	7,767	19,832	39,864	62,766	87,613	172,382
Family living / owner withdrawals	117	117,700	77,704	66,278	56,958	43,257	35,948	20,590	8,977	0	0
Income tax (accrued)	117	29,943	11,831	6,070	2,082	51	0	0	0	0	0
Farm capital purchases	117	0	0	3,269	8,661	18,896	32,864	60,225	114,989	185,090	395,902
Total crop acres	117	0	35	80	146	342	612	817	1,118	1,513	2,833
Crop acres owned	117	0	0	3	36	62	95	124	234	445	901
Crop acres cash rented	117	0	0	0	0	0	48	145	283	549	1,560
Crop acres share rented	117	0	0	0	0	30	124	212	415	657	1,389
Machinery investment per acre	117	1,544	1,034	806	632	515	392	333	234	18	0

Appendix I

Whole Farm Analysis Procedures and Measures

The whole-farm reports include summary financial statements and measures for all farms included in this report. Rounding of individual items may have caused minor discrepancies between those items and the printed totals which are calculated before rounding.

Financial Summary

This table summarizes key measures reported in several of the following tables.

Income Statement

This section summarizes key totals from the Income Statement table. *Average Net Farm Income* is the mean or average farm earnings of the group calculated on an accrual adjusted basis. *Median Net Farm Income* is the farm earnings of the median or middle farm in the group. If it is lower than the average, the average earnings are skewed because some farms had much higher earnings than the rest of the group. If it is higher than the average, the average earnings are skewed because some farms had much lower earnings than the rest of the group.

Profitability

See the Profitability Measures section below for an explanation of these measures.

Liquidity and Repayment

See the Financial Standards Measures and Liquidity Measures sections below for an explanation of these measures.

Solvency

This section summarizes key measures from the Balance Sheet reports.

Nonfarm Information

This section summarizes non-farm earnings for all farms and family living withdrawals for those sole proprietors who kept accurate family living records. More detail is included on the Household and Personal Expenses and Nonfarm Summary pages.

Crop Acres

This section summarizes acres used for cropping the Crop Production and Marketing Table.

Financial Standards Measures

This table contains the Farm Financial Standards Council's 21 financial measures for evaluating a farm's financial position and performance.

Liquidity

Current Ratio is calculated by dividing the total current farm assets by the total current farm liabilities.

Working Capital is calculated by subtracting current farm liabilities from current farm assets.

Working Capital to Gross Income is *Working Capital* divided by *Gross Revenues (accrual)*.

Solvency

Farm Debt to Asset Ratio is calculated by dividing the total farm liabilities by the total farm assets. It measures the proportion of farm assets financed by debt capital.

Farm Equity to Asset Ratio is calculated by dividing farm equity or net worth by the total farm assets. It measures the proportion of the farm assets financed by the owner's equity as opposed to debt. This is the opposite of the debt to asset ratio. These two measures always add up to 100% because they describe how total farm assets are financed.

Farm Debt to Equity Ratio measures farm debt relative to farm equity. It is calculated by dividing the total farm liabilities by the total farm net worth. The debt to equity ratio measures the amount of borrowed capital being employed for every dollar of equity capital.

Profitability

Rate of Return on Farm Assets can be thought of as the average interest rate being earned on all investments in the farm or ranch business. If assets are valued at market value, the rate of return on assets can be looked at as the "opportunity cost" of farming versus alternate investments. If assets are valued at cost value, the rate of return on assets more closely represents the actual return on the average dollar invested in the farm. The rate of return on farm assets is calculated as follows: $\text{Rate of Return on Assets} = \text{Return on Farm Assets} \div \text{Average Farm Investment}$, where: $\text{Return on Farm Assets} = \text{Net Farm Income} + \text{Farm Interest} - \text{Value of Operator's Labor \& Management}$, and $\text{Average Farm Investment} = (\text{Beginning Total Farm Assets} + \text{Ending Total Farm Assets}) \div 2$.

Rate of Return on Farm Equity represents the interest rate being earned on farm net worth. If assets are valued at market value, this return can be compared to returns available if the assets were liquidated and invested in alternate investments. If assets are valued at cost value, this more closely represents the actual return on the funds that have been invested or retained in the business. The rate of return on farm equity is calculated as follows: $\text{Rate of Return on Equity} = \text{Return on Farm Equity} \div \text{Average Farm Net Worth}$, where: $\text{Return on Farm Equity} = \text{Net Farm Income} - \text{Value of Operator's Labor \& Management}$, and $\text{Average Farm Net Worth} = (\text{Beginning Farm Net Worth} + \text{Ending Farm Net Worth}) \div 2$.

Operating Profit Margin is a measure of the operating efficiency of the business. It is calculated as follows: $\text{Operating Profit Margin} = \text{Return to Farm Assets} \div \text{Value of Farm Production}$. If expenses are held in line relative to the value of output produced, the farm will have a healthy operating profit margin. A low net profit margin may be caused by low prices, high operating expenses, or inefficient production.

Net Farm Income represents the returns to unpaid labor, management, and equity capital invested in the business.

EBITDA is Earnings Before Interest, Taxes, Depreciation and Amortization. It is Net Farm Income from Operations from the income statement plus interest expense and depreciation expense. This measure is common in commercial financial analysis but is not commonly used in agriculture.

Repayment Capacity

Capital Debt Repayment Capacity is *Net Farm Income From Operations* plus *Depreciation, Personal Income*, and *Interest on Term Debt* minus *Family Living/Owner Withdrawals, Payments on Personal Debt* and *Income Taxes Paid*. This represents total earnings available for debt repayment and cash capital replacement.

Capital Debt Repayment Margin is *Capital Debt Repayment Capacity* minus *Scheduled Term Debt Payments*. This is the amount by which earnings available for debt repayment exceeded payments due.

Replacement Margin is *Capital Debt Repayment Margin* minus *Cash Replacement Allowance*. This is the amount by which earnings available for debt repayment and replacement exceed payments due and cash replacement needs.

Term Debt Coverage Ratio measures whether the business generated enough income to cover term debt payments. It is calculated by dividing the funds generated by the business for debt repayment (net cash farm income + nonfarm income + interest expense – family living expense – income taxes) by total term debt payments (annual scheduled principal and interest payments on intermediate and long term debt). A ratio less than 1.0 indicates that the business did not generate sufficient cash to meet scheduled payments in the past year. A ratio greater than 1.0 indicates the business generated enough cash to pay all term debt payments.

Replacement Coverage Ratio measures whether the business generated enough income to cover scheduled term debt payments plus estimated cash capital replacement needs. A ratio less than 1.0 indicates that the business did not generate sufficient income to meet replacement needs. A ratio greater than 1.0 indicates the business generated enough income to pay all term debt payments and cover an allowance for capital replacement.

Efficiency

Asset turnover Rate is a measure of efficiency in using capital. It is calculated as follows: $\text{Asset Turnover Rate} = \text{Value of Farm Production} \div \text{Total Farm Assets}$.

The last four ratios reflect the distribution of gross income to cover operating expenses and generate farm income. The sum of the operating expense ratio, the depreciation expense ratio, and the interest expense ratio equals the percent of gross income used to pay business expenses. The amount remaining is net farm income. The gross farm income used to calculate these ratios is the accrual gross farm income.

Operating Expense Ratio is calculated as $(\text{Total Farm Operating Expense} - \text{Farm Interest Expense}) \div \text{Gross Farm Income}$. This ratio indicates the percent of the gross farm income that was used to pay operating expenses. Total farm operating expense is the accrual total operating expense.

Depreciation Expense Ratio is calculated as $\text{Depreciation} \div \text{Gross Farm Income}$. This ratio indicates the percent of the gross farm income that was used to cover depreciation and other capital adjustments.

Interest Expense Ratio is calculated as $\text{Farm Interest Expenses} \div \text{Gross Farm Income}$. This ratio indicates the percent of the gross farm income used for farm interest expenses. This is the same ratio as the accrual interest as a percent of income from the Liquidity table.

Net Farm Income Ratio is calculated as $\text{Net Farm Income} \div \text{Gross Farm Income}$. This ratio indicates the percent of the gross farm income that remained after all expenses.

Farm Income Statement

The farm Income Statement is a summary of income, expenses, and resultant profit or loss from farming operations during the calendar year. The first section lists cash farm income from all sources. The second section lists *cash* expenses. "Interest" includes only interest actually paid. No opportunity charges on farm equity capital or unpaid labor are included. The difference between *Gross Cash Farm Income* and *Total Cash Expense* is the *Net Cash Farm Income*. This is net farm income on a *cash* basis.

The third and fourth sections deal with noncash changes in the farm business. The *Inventory Changes* and *Depreciation* sections are used to convert the cash income statement (Net Cash Farm Income) derived from the first two sections into an accrual income statement. The resulting "Net Farm Income" represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). In other words, it represents the return to all of the resources which are owned by the farm family and, hence, not purchased or paid a wage. However, it does not include any asset appreciation, debt forgiveness or asset repossessions.

Profitability Measures

Profitability is measured using assets valued first at cost and then at market. The reports include five measures of profit followed by the values used to calculate the measures.

Net Farm Income is repeated from the Farm Income Statement report. When assets are valued at market, it includes the change in market valuation of capital for the year.

Rate of Return on Assets is the *Return to Farm Assets* divided by *Average Farm Assets*.

Rate of Return on Equity is the *Return to Farm Equity* divided by *Average Farm Equity*.

Operating Profit Margin is the *Return to Farm Assets* divided by *Value of Farm Production*.

Asset Turnover Rate is the *Value of Farm Production* divided by *Average Farm Assets*.

Farm Interest Expense is the accrued interest cost so it will be different from the cash interest paid shown in the Farm Income Statement.

Value of Operator's Labor and Management is its opportunity cost. It is assigned by farm within suggested guidelines.

Return on Farm Assets is calculated by adding *Farm Interest Expense* and *Net Farm Income* and then subtracting the *Value of Operator's Labor and Management*.

Average Farm Assets is the average of beginning and ending total farm assets for all farms, not just those included in the Balance Sheet report.

Return to Farm Equity is calculated by subtracting the *Value of Operator's Labor and Management* from *Net Farm Income*.

Average Farm Equity is the average of beginning and ending farm net worth.

Value of Farm Production is gross farm income minus feeder livestock and feed purchased and adjusted for inventory changes in crops, market livestock and breeding livestock.

Liquidity and Repayment Capacity Measures

Current Ratio is total *Current Assets* divided by total *Current Liabilities*.

Working Capital is total *Current Assets* minus total *Current Liabilities*.

Working Capital to Gross Income is *Working Capital* divided by *Gross Revenues (accrual)*.

Current Assets are taken from the ending balance sheet and include all assets that will be sold or used up in production within one business year.

Current Liabilities are taken from the ending balance sheet and include all loans and other debt due to be repaid within one business year. Principal due within a twelve months on intermediate and long term loans is included.

Gross Revenues (accrual) is gross cash farm income from the income statement adjusted for inventory changes in crops and feed, market livestock, accounts receivable, hedging accounts, breeding livestock and other income related inventories.

Net Farm Income from Operations is from the Income Statement.

Depreciation is the total depreciation from the Income Statement. It is added as a source of repayment because it is a non-cash expense that was subtracted to arrive at *Net Farm Income From Operations*.

Personal Income is the average for all farms, not including *Gifts and Inheritances*.

Family Living/Owner Withdrawals is the amount of owner withdrawals for family living, partnership withdrawals, and corporate dividends. Reported withdrawals are adjusted to include any discrepancy with actual cash disappearance.

Payments on personal debt is the total principal payments made during the year on all non-farm loans.

Income Taxes Paid are total federal, state, and social security taxes paid during the year on farm and personal earnings.

Interest on Term Debt is the amount of interest paid on intermediate and long term loans during the year. Interest is added as a source of repayment because it was previously subtracted to arrive at *Net Farm Income from Operations*.

Capital Debt Repayment Capacity is *Net Farm Income From Operations* plus *Depreciation*, *Personal Income*, and *Interest on Term Debt* minus *Family Living/Owner Withdrawals*, *Payments on Personal Debt* and *Income Taxes Paid*. This represents total earnings available for debt repayment and cash capital replacement.

Scheduled Term Debt Payments is the scheduled amount of principal and interest payments due on farm intermediate and long term loans from the beginning balance sheet.

Capital Debt Repayment Margin is *Capital Debt Repayment Capacity* minus *Scheduled Term Debt Payments*. This is the amount by which earnings available for debt repayment exceeded payments due.

Cash Replacement Allowance is the estimated amount of cash needed to cover the portion of capital replacement needs that normally come from cash flow. It is estimated for each operator based on their financial structure.

Replacement Margin is *Capital Debt Repayment Margin* minus *Cash Replacement Allowance*. This is the amount by which earnings available for debt repayment and replacement exceed payments due and cash replacement needs.

Term Debt Coverage Ratio is *Capital Debt Repayment Capacity* divided by *Scheduled Term Debt Payments*. This represents how many times scheduled payments are covered by repayment capacity.

Replacement Coverage Ratio is *Capital Debt Repayment Capacity* divided by the total of *Scheduled Term Debt Payments* and the *Cash Replacement Allowance*. This represents how many times scheduled payments and cash replacement needs are covered by repayment capacity.

Balance Sheets at Cost and Market Values

These tables include all farm and personal assets and liabilities reported by these farms on their beginning and ending balance sheets. Government crop loans are treated consistently as loans on these tables, meaning that the full asset value is included as an asset and total accrued interest and outstanding principal balances are included as liabilities. Capital assets are valued at original purchase price minus economic depreciation on the Cost Value table.

Statement of Cash Flows

This table reports the sources from which cash was available or obtained and where that cash was used or remains at the end of the year.

Crop Production and Marketing Summary

This table contains three sections. The first section reports average acreage by tenure and general use. The next two sections show average price received from cash sales and average yields for major crops.

Household and Personal Expenses

For those farms that kept records, the household and personal expenses are summarized in this table. Since not all farms keep these records, the number of farms may be different for each group. Averages are determined by the number of farms keeping these records.

Operator and Labor Information

This table has four sections. The first reports the averages for the number of operators per farm, the operator's age, and the number of years farming. The second section reports various measures and results per operator compared to per farm in other reports.

The third section reports the amount of labor used and the returns to that labor. *Total Unpaid Labor Hours* and *Total Hired Labor Hours* are based on farmers' estimates of labor use. No labor records are kept for unpaid labor. *Value of Farm Production/Hour* is the Value of Farm Production divided by Total Labor Hours per Farm. *Net Farm Income/Unpaid Hour* is Net Farm Income divided by Total Unpaid Labor Hours.

The fourth section reports the number of partnerships and withdrawals in each grouping.

Appendix II

Crop Enterprise Analysis Procedures and Measures

The Crop Enterprise Analysis tables show the profitability of each crop enterprise produced by four or more farms.

Gross Return is the average Yield multiplied by the Value Per Unit plus any other production or income related to the crop. Value Per Unit for cash crops is the average sales price for crops sold or an average sale price during the harvest season. For feed crops, it is the estimated average cost for the year. LDP repayments and other commodity-specific income are added to estimate the total value received for crop production.

Direct Expenses include expenses that are directly related to the production of the specific crop. Most direct expenses are directly assigned to production of the crop and simply divided by acres. Some, such as Fuel and Oil and Repairs, which are difficult to assign directly to specific fields or crops, are determined by allocating the total annual expense across all enterprises using allocation factors entered for each crop.

Overhead Expenses are also determined by allocating the total annual expense across all enterprises using allocation factors entered for each crop.

Net Return per Acre is the Gross Return per Acre minus Total Direct and Overhead Expenses.

Net return with government payments is Net Return Over Lbr & Mgt plus Government Payments. Government Payments includes only direct payments and counter-cyclical payments. Payments that are directly attached to production of the crop, such as LDP and disaster payments are included in Gross Return. Because direct government payments have been decoupled from actual production, these payments are generally allocated to all crops excluding vegetables and pasture. This is done for each farm by allocating the direct payments from the whole farm to these crops.

Net Return over Labor and Management is calculated by allocating the farmer's charge for unpaid labor and management across all enterprises and subtracting it from Net Return With Government Payments.

Cost of Production is calculated by dividing the total expense for each category by the yield per acre. *Total Expense Less Government and Other Income* is total expense minus government payments, income from secondary products, and other income, divided by yield per acre.

Machinery Cost Per Acre is the sum of fuel and oil, repairs, custom hire expense, machinery lease payments, machinery depreciation, and interest on intermediate debt divided by acres.

Estimated Labor Hours Per Acre is calculated by allocating the farmer's estimate of total operator and hired labor hours for the year across all enterprises.

note - Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 4 farms have a certain crop enterprise, that information is not reported.

Appendix III

Livestock Enterprise Analysis Procedures and Measures

The Livestock Enterprise Analysis tables show the profitability of each livestock enterprise produced by four or more farms.

Gross Margin includes product and livestock sales, cull sales, the value of offspring transferred out of the enterprise, the value of inventory change from beginning to end of year, and any other income assigned to the enterprise. Livestock purchases and the value of animals transferred in from other enterprises are subtracted.

Direct Expenses include expenses that are directly related to the specific livestock enterprise. Feed and most other direct expenses are directly assigned based on farm records. Some, such as Fuel and Oil and Repairs, which are difficult to assign directly to enterprises, are determined by allocating the total annual expense across all enterprises using a percentage factor entered for each enterprise.

Overhead Expenses are also determined by allocating the total annual expense across all enterprises by entering a percentage factor for each enterprise.

Net Return is the Gross Return minus Total Direct and Overhead Expenses.

Net Return over Labor and Management is calculated by allocating the farmer's charge for unpaid labor and management across all enterprises and subtracting it from Net Return.

Estimated Labor Hours is calculated by allocating the farmer's estimate of total operator and hired labor hours for the year across all enterprises.

Cost of Production is calculated by dividing the total expense for each category by Total Production. For grow/finish enterprises, the Purchases and Transfers In are included in direct expense. Cull sales, other offspring sales, and any other miscellaneous income are subtracted and replacement purchases and transfers in are added to arrive at the cost *With other revenue adjustments*. *With Labor and Management* is the cost with other revenue adjustments plus the producer's charge for operator's labor and management. This is the breakeven price for the primary product to provide a return for operator labor and management.

The last section of each livestock table contains both economic and technical efficiency measures. *Lbs. feed per lb. of gain* is the pounds of total feed divided by total production. For grains, these pounds per bushel are used: corn, 56; oats, 32; barley, 48; grain sorghum, 56; wheat, 60; and millet, 48. For these forages, the units are converted to pounds and then adjusted by these factors: alfalfa haylage, 0.5; corn silage, 0.33; oatlage, 0.5; sorghum silage, 0.33; and small grain silage, 0.33.

The calving and weaning percentages are calculated as the number of calves which are calved and weaned, respectively, divided by the number of cows which are supposed to bear young.

Rounding of individual items for the report may have caused minor discrepancies with the calculated totals. If fewer than 5 farms have a certain crop enterprise, that information is not reported.



