



Missouri

2015

Farm Business Management Analysis Record Summary

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Department of Agricultural Education
College of Agriculture, Food and Natural Resources
University of Missouri - Columbia

EXECUTIVE SUMMARY 2015 ANNUAL REPORT OF MISSOURI FARM BUSINESS MANAGEMENT ANALYSIS PROGRAM

By
Bruce Fowler Missouri FBMA Specialist

The average net farm income (NFI) for the 132 farms included in the 2015 annual report of the Missouri Farm Business Management Analysis Program was -\$2,352. As is the case every year, there was a wide range in income among program participants. The lowest 20% of the farms (26) showed an average NFI of -\$150,399, while the highest 20% (27) averaged \$127,428. Of the 132 farms, 62 had a negative net farm income.

Median net farm income, or the income earned by the middle farm, was \$3,153.

2015 Distribution of Net Farm Income (Cost)
(NFI from all farms are included in the Median and Average figures.)

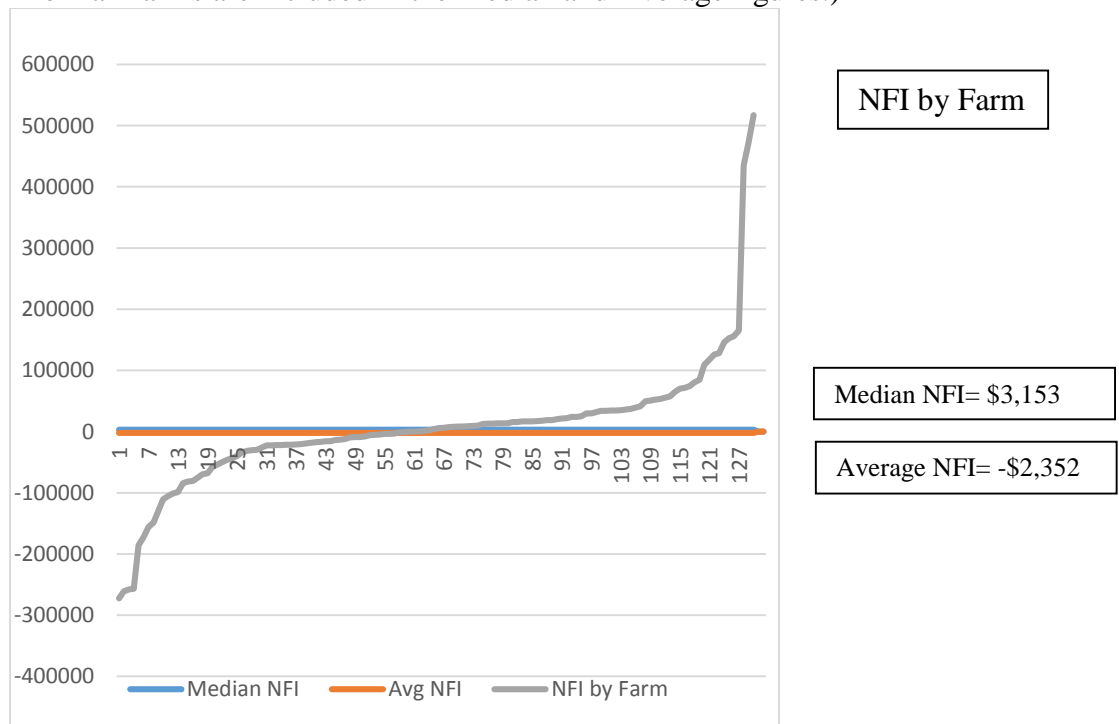


Figure 1

Highlights

- The average age of the operator on the 132 FBMA farms was 51.8 years, with a range from 91 years old down to 17 years old. The average years in farming was 28.3 years, with a range from 72 years to 2 years.

- The net farm income/unpaid labor hour averaged -\$5.11 and ranged from -\$90.58 in the low profit group to \$55.39 in the high profit group. This figure is used for comparison to a per-hour wage in non-farm occupations.
- Government payments (including CRP, but not crop insurance proceeds) averaged \$4,063, representing approximately 0.78% 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 2014 was other crop income which increased from 2.7% in 2014 to 5.99% in 2015. Hogs were the only income source that decreased by more than two percentage points dropping to 24.39% in 2015 from 26.8% of gross income in 2014. All other income sources remained within two percent of where they were in 2014.
 - Likewise, there were only two expense sources that changed more than two percentage point's share of the total from 2014 to 2015. Other direct livestock expense decreased from 5.5% in 2014 to 3.28% in 2015, and other expenses increased from 8.3% to 13.61%.

2015 Missouri FBMA Income Sources

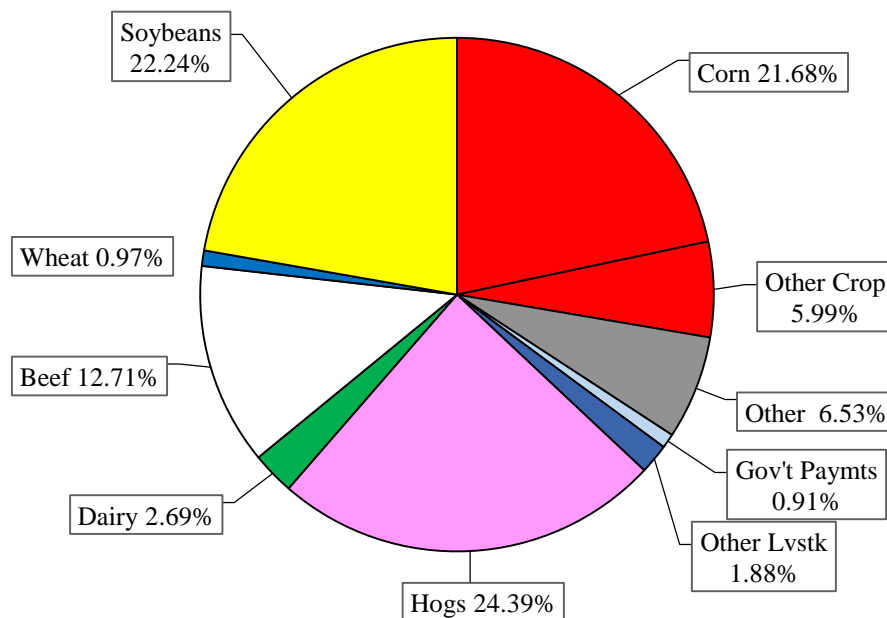


Figure 2

2015 Missouri FBMA Expense Sources

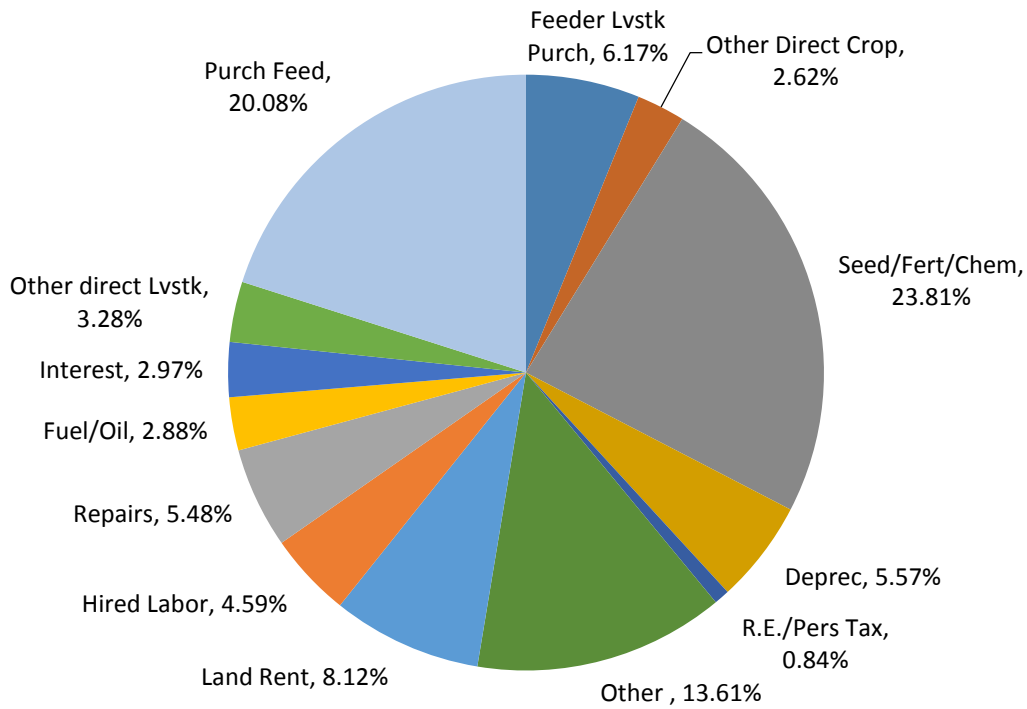


Figure 3

- The average rates of returns on assets (ROA) and equity (ROE) changed significantly in comparing 2015 to 2014. ROA decreased 8.4%, moving from 6.9% in 2014 to -1.5% in 2015. ROE was even more negative, decreasing from 7.9% in 2014 to -3.5% in 2015.

2015 Rate of Return on Assets by Type (Cost)

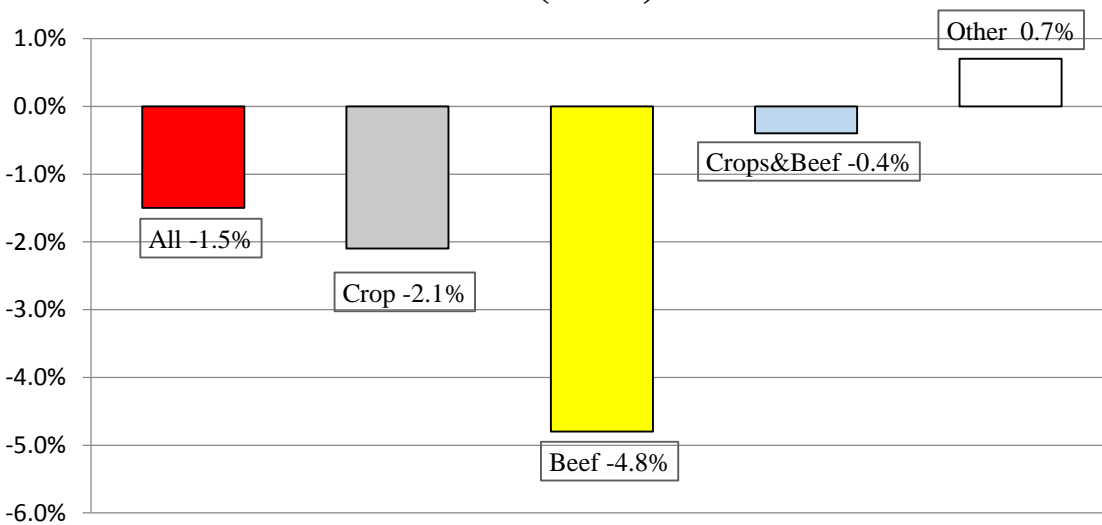


Figure 4

- On the cost balance sheet, the average farm reported net worth decrease of \$60,682. The average farm market value balance sheet decreased \$3,710. The average farm debt to asset ratio (farm) was 21% at market values and 28% at cost values. The average farm borrowed \$193,143 and paid \$168,107 in principal payments in 2015.

2015 Rate of Return on Assets by Type (Market)

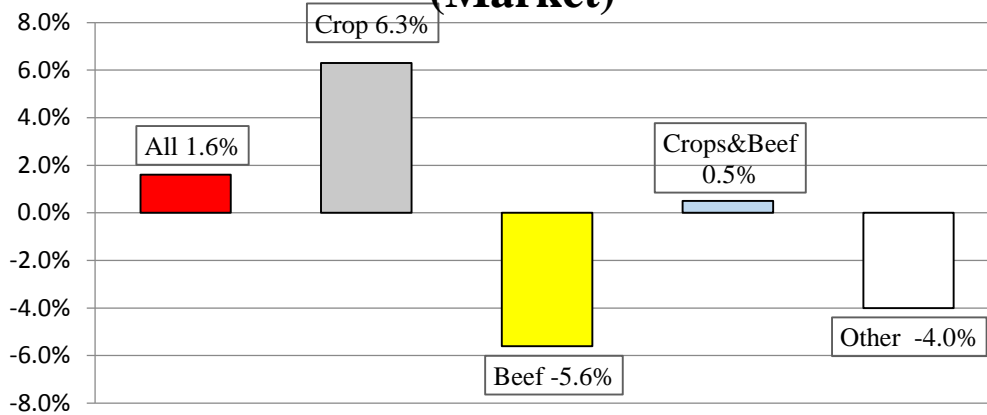


Figure 5

- Average gross cash income was down 16% from 2014, while cash expenses decreased by just short of 15%.
- Crop sales accounted for 45% (including government payments) of gross income (down from 46% in 2014), while livestock sales were 40% (down from 43% in 2014).

Crops

- Corn yields averaged 138.34 bushels per acre, a 30% decrease from the 195 bushel average in the 2014 crop. Soybeans yields decreased nearly 17%, dropping from 49.62 bushels per acre in 2014 to 41.22 bushels per acre in 2015. Wheat yields also decreased from 66.99 bushels per acre in 2014 to 48.37 bushels per acre in 2015.
- The average price received for a bushel of corn in 2015 was \$3.60, a \$.25 drop from the previous year's price of \$3.85. The average price received for soybeans in 2015 was \$8.79, a \$2.88 decrease from 2014 (and \$5 less than 2013). Wheat prices averaged \$2.28, which was a \$3.38 decrease from 2014 prices. At least a portion of the wheat price decline was due to quality issues at wheat harvest due to excessive spring rains.

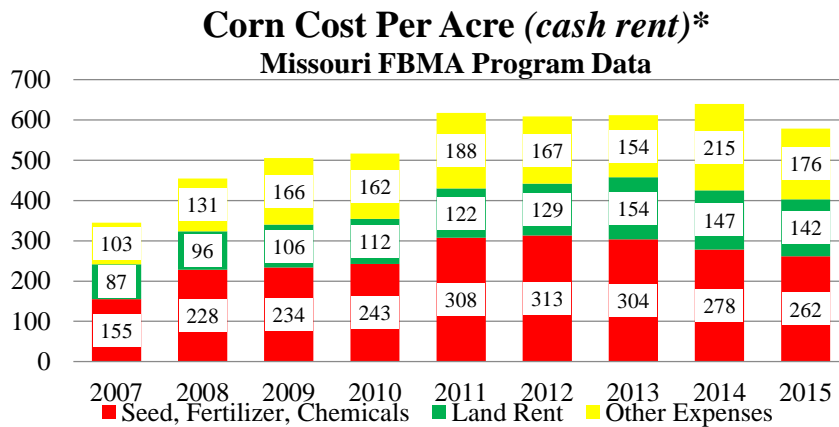


Figure 6

* FBMA farms that included a complete crop enterprise analysis, including all direct and overhead costs (38 farms with cash rent corn in 2015).

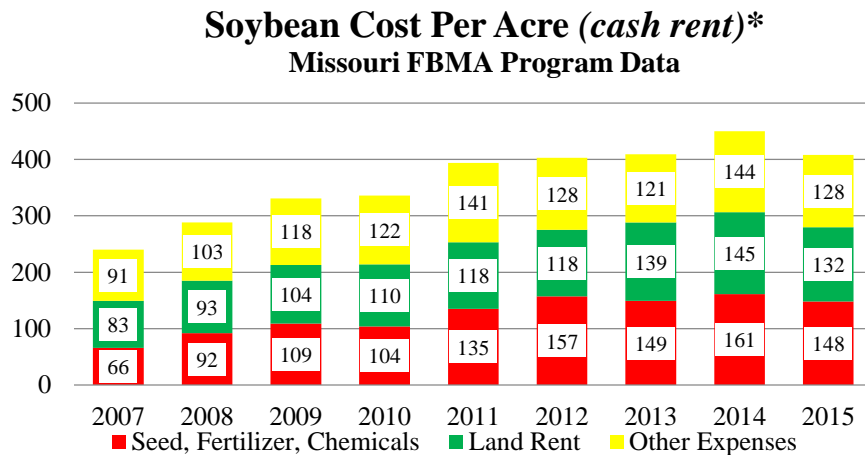


Figure 7

* FBMA farms that included a complete crop enterprise analysis, including all direct and overhead costs (39 farms with cash rent soybeans in 2015).

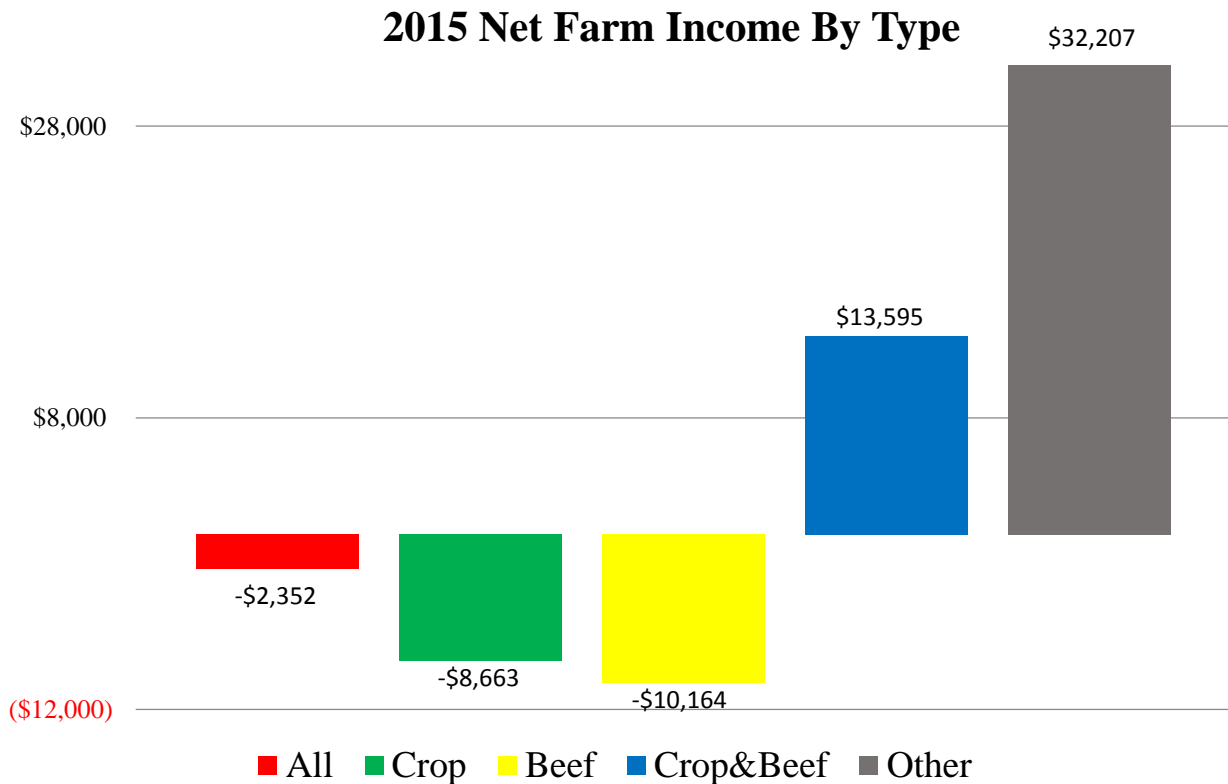
Livestock

- Average price received per hundred weight for the beef cow-calf enterprise increased from \$189.99 in 2014 to \$212.02 in 2015. The average weight of beef calves sold in 2015 was 591 lbs. 31 farms completed a beef cow-calf enterprise analysis in 2015.
- Five farms completed the beef backgrounding enterprise analysis for 2015. The average net return per head over all costs (including labor and management) was -\$106.58. This was significantly less than the \$334.72 profit received by backgrounding in 2014.

- Five farms completed the sheep market lamb production enterprise analysis for 2015. These farms averaged a \$165.90 loss per ewe net return over all costs (including labor and management). Return over direct for this sheep enterprise was \$15.20 per ewe.

Observations from the 2015 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 2014, so it is reasonable to make several general observations when comparing this year’s summary to 2014. From the weather to the decrease in farm commodity prices to declining yields, 2015 was a challenging year for almost all Missouri producers.
- The 132 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. Using this 70% rule, there were 55 crop farms, 17 beef farms, 25 crop and beef farms, and 28 “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.



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

Figure 8

- The old adage of “rain makes grain” did not hold true for many Missouri crop producers in 2015. Many farms in the summary had large crop insurance claims for prevent plant and yield loss due to the extreme rains.
- After the extremely wet spring, many areas in Missouri (particularly northern Missouri) experienced a prolonged dry period which further decreased yields. Lower yields coupled with reduced commodity prices made for a challenging financial year for many producers, as evidenced in almost every graphic in this summary.
- Livestock producers were not left out of the financial challenges of 2015. Decreasing prices for both feeder cattle and fat cattle created financial hardships for both of these sectors of the beef industry.

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 132. 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.

***2015 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 2015. 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 132 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.

This report was partially funded by a Farm Business Management and Benchmarking Grant from the USDA National Institute of Food and Agriculture.

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.

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**Missouri Farm Business Management Analysis Program
Program Locations – 2015**

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
Ralls Co. (Center)	Joe Dameron

Northwest

Chillicothe	Brian Thompson & 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 2015. Each table includes the average of the 132 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 2015. 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 of the guidelines and ordering information, see the website <http://www.ffsc.org/guidelines/>.

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
2015 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	132	26	26	27	26	27
Cash Farm Income						
Clover Seed	50	253	-	-	-	-
Corn	113,313	264,626	85,075	38,407	32,884	147,151
CRP	681	-	447	167	-	2,732
Hay, Alfalfa	73	49	308	-	-	15
Hay, Grass	537	-	829	-	1,892	4
Hay, Mixed	776	958	1,546	638	3	741
Pasture	36	13	-	161	-	-
Sorghum, Grain	998	-	577	98	-	4,228
Soybeans	116,244	247,396	75,470	37,172	39,103	182,567
Straw	210	584	208	73	157	38
Timber	246	-	124	-	-	1,084
Wheat, Winter	4,872	14,558	3,158	496	231	6,039
Custom Work	502	-	1,111	-	-	1,383
Rented Out	227	-	1,092	-	-	56
Prevented planting	3,378	3,233	1,605	163	760	10,960
DDGS, dry	27	-	-	133	-	-
Miscellaneous crop income	56	2	136	-	-	138
Beef Bulls	350	-	-	-	625	1,108
Beef Cow-Calf, Beef Calves	36,923	46,694	36,863	8,225	35,393	57,746
Beef Backgrounding	16,981	30,912	19,837	5,101	15,576	14,049
Beef Finishing	10,293	26,925	1,228	-	1,268	21,988
Beef Finish Yearlings	1,889	-	2,815	-	6,778	-
Dairy, Milk	3,656	-	-	-	-	17,874
Dairy Finishing	8,209	41,676	-	-	-	-
Hogs, Farrow To Finish, Raised Hog	127,484	628,821	366	409	5,345	11,814
Sheep, Feeder Lamb Prod, Fdr Lambs	258	-	-	750	529	-
Sheep, Market Lamb Prod, Mkt Lambs	2,737	1,369	316	1,830	10,095	205
Goats, Meat, Meat Goats	105	-	109	-	-	407
Dairy Backgrounding	2,180	11,069	-	-	-	-
Cull breeding livestock	5,715	4,220	4,885	898	6,754	11,772
Misc. livestock income	209	-	456	121	254	219
Crop government payments	328	215	143	254	238	776
CRP payments	444	1,045	417	11	18	736
Other government payments	3,291	5,515	5,857	24	537	4,600
Custom work income	4,382	8,758	2,187	1,139	2,672	7,171
Patronage dividends, cash	8,981	9,124	2,280	964	2,988	29,086
Crop insurance income	24,949	55,499	16,876	3,198	4,132	45,104
Property insurance income	302	286	197	-	105	910
Sale of resale items	6,089	11,950	1,733	3,039	6,143	7,640
Livestock insurance inc	116	-	496	17	-	74
Contract livestock income	691	-	-	-	-	3,378
Other farm income	13,845	29,012	4,415	4,468	10,549	20,874
Gross Cash Farm Income	522,632	1,444,762	273,160	107,955	185,027	614,666

Farm Income Statement (continued)
2015 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	132	26	26	27	26	27
Cash Farm Expense						
Seed	35,301	80,895	25,091	10,023	13,261	47,730
Fertilizer	47,562	105,021	32,527	16,311	22,469	62,124
Crop chemicals	27,429	53,215	20,382	10,654	8,276	44,604
Crop insurance	9,638	20,098	6,500	3,176	2,411	16,006
Drying expense	283	674	126	-	129	490
Storage	466	994	953	9	-	395
Crop marketing	183	-	8	-	194	701
Crop miscellaneous	1,556	2,585	1,005	159	537	3,476
Feeder livestock purchase	28,590	86,223	20,429	2,734	11,663	23,104
Purchased feed	92,979	410,242	8,598	3,427	19,317	29,208
Breeding fees	2,658	12,369	131	77	312	580
Veterinary	6,699	26,477	1,539	487	2,020	3,339
Supplies	2,430	7,329	1,189	573	1,158	1,988
Contract production exp.	11,875	57,094	-	-	-	3,074
Livestock insurance	80	218	109	24	-	51
Grazing fees	33	-	56	7	104	-
Livestock marketing	4,645	22,571	94	30	42	814
Livestock miscellaneous	1,070	2,596	132	30	986	1,625
Consultants	61	312	-	-	-	-
Interest	13,756	41,328	7,788	3,523	4,213	12,373
Fuel & oil	13,351	29,480	8,296	3,695	7,139	18,327
Repairs	25,360	58,339	18,914	4,206	12,904	32,959
Custom hire	10,599	23,376	6,058	3,078	4,764	15,805
Hired labor	21,239	70,341	5,391	1,997	3,968	25,090
Land rent	37,599	97,042	25,017	5,261	14,364	47,185
Machinery leases	1,605	6,329	824	49	42	872
Building leases	1,482	7,469	-	-	-	52
Real estate taxes	2,904	5,995	2,232	984	829	4,493
Personal property taxes	967	2,327	542	390	640	959
Farm insurance	6,557	13,308	4,103	1,421	2,895	11,081
Utilities	6,027	19,791	2,024	1,922	1,628	4,967
Dues & professional fees	2,563	7,518	1,462	475	440	2,984
Purchase of resale items	6,651	9,391	1,554	2,791	5,087	14,287
Miscellaneous	13,162	29,945	7,588	4,316	8,806	15,408
Total cash expense	437,359	1,310,891	210,661	81,828	150,599	446,152
Net cash farm income	85,273	133,870	62,498	26,126	34,428	168,514
Inventory Changes						
Prepays and supplies	-32	5,313	1,032	643	1,310	-8,171
Accounts receivable	-2,636	-13,035	1,262	144	-234	-1,466
Hedging accounts	-1,036	-4,662	-180	-	-	-401
Other current assets	-31	-1,673	148	-33	952	435
Crops and feed	-51,275	-169,479	-50,175	-15,805	418	-23,756
Market livestock	-8,572	-17,153	-14,436	-3,166	-5,140	-3,373
Breeding livestock	-782	-9,188	2,265	2,071	-2,554	3,234
Other assets	1,004	163	-470	108	3,150	2,061
Accounts payable	-1,264	-6,789	242	-188	948	-599
Accrued interest	-1,679	-7,934	-301	122	-264	-146
Total inventory change	-66,302	-224,438	-60,614	-16,103	-1,414	-32,182
Net operating profit	18,971	-90,567	1,884	10,023	33,015	136,331
Depreciation						
Machinery and equipment	-20,987	-50,351	-18,062	-5,252	-7,504	-24,247
Titled vehicles	-3,040	-5,056	-3,117	-248	-2,064	-4,757
Buildings and improvements	-1,760	-3,187	-2,789	-443	-235	-2,178
Total depreciation	-25,787	-58,595	-23,969	-5,943	-9,803	-31,182
Net farm income from operations	-6,816	-149,162	-22,084	4,080	23,212	105,149
Gain or loss on capital sales	4,464	-1,237	1,478	-660	-28	22,279
Net farm income	-2,352	-150,399	-20,607	3,420	23,184	127,428

Inventory Changes
2015 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	132	26	26	27	26	27
Net cash farm income	85,273	133,870	62,498	26,126	34,428	168,514
Crops and Feed						
Ending inventory	171,255	357,574	92,550	44,374	60,817	300,855
Beginning inventory	222,530	527,053	142,725	60,180	60,399	324,611
Inventory change	-51,275	-169,479	-50,175	-15,805	418	-23,756
Market Livestock						
Ending inventory	101,552	347,329	40,188	9,100	38,324	77,306
Beginning inventory	110,124	364,481	54,624	12,266	43,463	80,679
Inventory change	-8,572	-17,153	-14,436	-3,166	-5,140	-3,373
Accts Receivable						
Ending inventory	8,516	18,008	2,798	144	3,604	17,982
Beginning inventory	11,151	31,043	1,536	-	3,838	19,448
Inventory change	-2,636	-13,035	1,262	144	-234	-1,466
Prepaid Expenses and Supplies						
Ending inventory	43,589	93,319	31,028	6,799	9,011	77,886
Beginning inventory	43,621	88,006	29,996	6,156	7,701	86,057
Inventory change	-32	5,313	1,032	643	1,310	-8,171
Hedging Activities						
Ending inventory	1,931	8,345	753	-	-	677
Withdrawals	273	869	517	-	-	-
Beginning inventory	1,499	5,069	1,450	-	-	1,049
Deposits	1,741	8,808	-	-	-	29
Gain or loss	-1,036	-4,662	-180	-	-	-401
Other Current Assets						
Ending inventory	3,770	9,630	1,433	875	2,132	4,851
Beginning inventory	3,801	11,303	1,285	908	1,181	4,416
Inventory change	-31	-1,673	148	-33	952	435
Breeding Livestock						
Ending inventory	63,421	87,615	55,148	15,414	80,751	79,408
Capital sales	7,014	12,936	925	7,706	1,761	11,540
Beginning inventory	63,890	106,499	47,224	17,751	69,563	79,583
Capital purchases	7,327	3,241	6,584	3,299	15,504	8,131
Depreciation, capital adjust	-782	-9,188	2,265	2,071	-2,554	3,234
Other Capital Assets						
Ending inventory	83,601	150,544	42,490	1,703	106,183	118,879
Capital sales	37	-	-	-	-	179
Beginning inventory	80,537	150,381	42,960	1,595	103,033	106,746
Capital purchases	2,097	-	-	-	-	10,252
Depreciation, capital adjust	1,004	163	-470	108	3,150	2,061
Accounts Payable						
Beginning inventory	6,638	22,851	4,154	339	1,375	4,787
Ending inventory	7,902	29,640	3,912	527	427	5,386
Inventory change	-1,264	-6,789	242	-188	948	-599
Accrued Interest						
Beginning inventory	3,269	8,766	2,103	1,009	933	3,607
Ending inventory	4,948	16,700	2,404	886	1,197	3,753
Inventory change	-1,679	-7,934	-301	122	-264	-146
Total inventory change	-66,302	-224,438	-60,614	-16,103	-1,414	-32,182
Net operating profit	18,971	-90,567	1,884	10,023	33,015	136,331

Depreciation
2015 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	132	26	26	27	26	27
Net operating profit	18,971	-90,567	1,884	10,023	33,015	136,331
Machinery and Equipment						
Ending inventory	311,884	698,828	220,612	59,290	163,380	422,761
Capital sales	21,284	34,342	15,630	3,072	2,800	50,164
Beginning inventory	301,262	661,161	208,930	58,074	149,601	432,836
Capital purchases	52,894	122,360	45,375	9,541	24,083	64,337
Depreciation, capital adjust.	-20,987	-50,351	-18,062	-5,252	-7,504	-24,247
Titled Vehicles						
Ending inventory	23,803	38,064	19,544	10,999	15,218	35,245
Capital sales	2,132	1,784	38	2,613	-	6,056
Beginning inventory	23,878	37,477	17,745	10,115	15,077	38,927
Capital purchases	5,097	7,427	4,954	3,744	2,205	7,131
Depreciation, capital adjust.	-3,040	-5,056	-3,117	-248	-2,064	-4,757
Buildings and Improvements						
Ending inventory	89,498	249,001	77,495	10,576	24,928	88,561
Capital sales	2,621	-	-	-	-	12,813
Beginning inventory	78,569	218,361	73,140	9,555	17,960	76,560
Capital purchases	15,310	33,827	7,144	1,464	7,203	26,992
Depreciation, capital adjust.	-1,760	-3,187	-2,789	-443	-235	-2,178
Total depreciation, capital adj.	-25,787	-58,595	-23,969	-5,943	-9,803	-31,182
Net farm income from operations	-6,816	-149,162	-22,084	4,080	23,212	105,149
Gain or loss on capital sales	4,464	-1,237	1,478	-660	-28	22,279
Net farm income	-2,352	-150,399	-20,607	3,420	23,184	127,428

Profitability Measures
2015 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	132	26	26	27	26	27

Profitability (assets valued at cost)

Net farm income from operations	-6,816	-149,162	-22,084	4,080	23,212	105,149
Rate of return on assets	-1.5 %	-5.1 %	-3.1 %	-1.2 %	1.4 %	3.0 %
Rate of return on equity	-3.5 %	-11.3 %	-4.7 %	-2.8 %	1.0 %	3.1 %
Operating profit margin	-6.8 %	-21.8 %	-19.5 %	-5.7 %	6.5 %	13.6 %
Asset turnover rate	21.8 %	23.5 %	16.0 %	21.9 %	21.1 %	22.5 %
Farm interest expense	15,434	49,262	8,089	3,401	4,476	12,519
Value of operator lbr and mgmt.	31,146	58,127	21,190	12,153	18,231	46,181
Return on farm assets	-22,528	-158,027	-35,186	-4,672	9,457	71,487
Average farm assets	1,522,149	3,088,938	1,129,226	375,997	685,071	2,343,990
Return on farm equity	-37,962	-207,288	-43,275	-8,073	4,981	58,968
Average farm equity	1,092,155	1,841,235	914,934	291,700	490,555	1,921,247
Value of farm production	331,502	725,434	180,836	82,384	144,626	526,319

	<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	132	26	26	27	26	27

Profitability (assets valued at market)

Net farm income from operations	50,516	-151,240	23,886	14,528	28,267	327,855
Rate of return on assets	1.6 %	-4.0 %	0.7 %	0.9 %	1.4 %	8.1 %
Rate of return on equity	1.1 %	-7.7 %	0.2 %	0.4 %	1.2 %	8.8 %
Operating profit margin	10.5 %	-22.1 %	6.0 %	7.0 %	10.0 %	55.9 %
Asset turnover rate	15.4 %	18.3 %	12.1 %	12.9 %	14.2 %	14.5 %
Farm interest expense	15,434	49,262	8,089	3,401	4,476	12,519
Value of operator lbr and mgmt.	31,146	58,127	21,190	12,153	18,231	46,181
Return on farm assets	34,804	-160,105	10,784	5,776	14,512	294,193
Average farm assets	2,151,271	3,963,750	1,499,012	638,128	1,015,874	3,640,509
Return on farm equity	19,369	-209,367	2,695	2,375	10,035	281,673
Average farm equity	1,721,276	2,716,047	1,284,721	553,831	821,359	3,217,766
Value of farm production	331,502	725,434	180,836	82,384	144,626	526,319

Liquidity & Repayment Capacity Measures
2015 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	132	26	26	27	26	27
Liquidity						
Current ratio	2.40	1.67	3.14	6.73	2.22	4.22
Working capital	234,322	359,348	170,246	91,347	72,433	474,498
Working capital to gross inc	51.0 %	29.2 %	80.5 %	100.0 %	40.1 %	80.0 %
Current assets	401,248	898,545	249,835	107,277	131,733	621,681
Current liabilities	166,926	539,197	79,589	15,930	59,299	147,184
Gross revenues (accrual)	459,722	1,231,291	211,417	91,337	180,694	592,919
Repayment capacity						
Net farm income from operations	-6,816	-149,162	-22,084	4,080	23,212	105,149
Depreciation	25,787	58,595	23,969	5,943	9,803	31,182
Personal income	30,474	34,547	50,924	17,123	30,855	19,845
Family living/owner withdrawals	-45,801	-71,056	-38,565	-25,150	-30,909	-63,439
Cash discrepancy	730	4,067	-19	2	-114	-221
Payments on personal debt	-1,509	-1,170	-1,192	-1,480	-1,831	-1,860
Income taxes paid	-8,214	-15,632	-5,982	-1,858	-1,478	-16,061
Interest on term debt	10,836	35,337	5,213	1,895	2,867	9,273
Capital debt repayment capacity	4,758	-108,541	12,282	554	32,518	84,089
Scheduled term debt payments	-38,611	-113,660	-13,669	-7,173	-15,227	-44,316
Capital debt repayment margin	-33,853	-222,201	-1,387	-6,619	17,291	39,773
Cash replacement allowance	-23,495	-38,958	-22,232	-4,605	-10,654	-41,076
Replacement margin	-57,348	-261,160	-23,619	-11,224	6,637	-1,304
Term debt coverage ratio	0.12	-0.95	0.90	0.08	2.14	1.90
Replacement coverage ratio	0.08	-0.71	0.34	0.05	1.26	0.98

Balance Sheet at Cost Values
2015 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	132	26	26	27	26	27
Assets						
Current Farm Assets						
Cash and checking balance	66,212	42,228	80,734	45,985	17,845	142,124
Prepaid expenses & supplies	43,589	93,319	31,028	6,799	9,011	77,886
Growing crops	2,785	9,115	1,432	799	1,228	1,475
Accounts receivable	8,516	18,008	2,798	144	3,604	17,982
Hedging accounts	1,931	8,345	753	-	-	677
Crops held for sale or feed	170,785	355,540	92,200	44,374	60,817	300,855
Crops under government loan	4,894	24,147	701	-	-	-
Market livestock held for sale	101,552	347,329	40,188	9,100	38,324	77,306
Other current assets	985	514	1	75	904	3,376
Total current farm assets	401,248	898,545	249,835	107,277	131,733	621,681
Intermediate Farm Assets						
Breeding livestock	63,421	87,615	55,148	15,414	80,751	79,408
Machinery and equipment	311,884	698,828	220,612	59,290	163,380	422,761
Titled vehicles	23,803	38,064	19,544	10,999	15,218	35,245
Other intermediate assets	48,087	1,788	27,436	1,027	105,423	104,403
Total intermediate farm assets	447,195	826,295	322,739	86,731	364,772	641,817
Long Term Farm Assets						
Farm land	528,868	923,080	468,861	161,022	187,593	903,522
Buildings and improvements	89,498	249,001	77,495	10,576	24,928	88,561
Other long-term assets	35,515	148,755	15,054	675	760	14,476
Total long-term farm assets	653,881	1,320,837	561,410	172,274	213,281	1,006,559
Total Farm Assets	1,502,324	3,045,676	1,133,984	366,282	709,787	2,270,057
Total Nonfarm Assets	190,639	216,761	165,446	74,936	170,546	324,794
Total Assets	1,692,963	3,262,437	1,299,430	441,217	880,333	2,594,852
Liabilities						
Current Farm Liabilities						
Accrued interest	4,953	16,726	2,404	886	1,197	3,753
Accounts payable	7,883	29,640	3,912	527	331	5,386
Current notes	122,592	402,445	60,115	9,365	44,128	102,053
Government crop loans	2,721	13,113	701	-	-	-
Principal due on term debt	28,777	77,272	12,458	5,152	13,644	35,991
Total current farm liabilities	166,926	539,197	79,589	15,930	59,299	147,184
Total intermediate farm liabs	64,656	149,913	42,454	14,496	43,634	74,341
Total long term farm liabilities	213,720	616,254	105,759	50,788	107,200	195,561
Total farm liabilities	445,302	1,305,363	227,802	81,214	210,134	417,085
Total nonfarm liabilities	32,607	16,469	38,574	15,643	37,253	54,890
Total liabilities	477,909	1,321,833	266,376	96,857	247,387	471,975
Net worth (farm and nonfarm)	1,215,054	1,940,604	1,033,054	344,360	632,946	2,122,877
Net worth change	-60,682	-195,131	-13,679	-2,527	26,444	-118,529
Percent net worth change	-5 %	-9 %	-1 %	-1 %	4 %	-5 %
Ratio Analysis						
Current farm liabilities / assets	42 %	60 %	32 %	15 %	45 %	24 %
Intermediate farm liab. / assets	14 %	18 %	13 %	17 %	12 %	12 %
Long term farm liab. / assets	33 %	47 %	19 %	29 %	50 %	19 %
Total debt to asset ratio	28 %	41 %	20 %	22 %	28 %	18 %

Balance Sheet at Market Values
2015 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	132	26	26	27	26	27
Assets						
Current Farm Assets						
Cash and checking balance	66,212	42,228	80,734	45,985	17,845	142,124
Prepaid expenses & supplies	43,589	93,319	31,028	6,799	9,011	77,886
Growing crops	2,785	9,115	1,432	799	1,228	1,475
Accounts receivable	8,516	18,008	2,798	144	3,604	17,982
Hedging accounts	1,931	8,345	753	-	-	677
Crops held for sale or feed	170,785	355,540	92,200	44,374	60,817	300,855
Crops under government loan	4,894	24,147	701	-	-	-
Market livestock held for sale	101,552	347,329	40,188	9,100	38,324	77,306
Other current assets	985	514	1	75	904	3,376
Total current farm assets	401,248	898,545	249,835	107,277	131,733	621,681
Intermediate Farm Assets						
Breeding livestock	85,791	101,939	70,647	20,494	99,333	137,083
Machinery and equipment	345,857	756,360	263,534	62,873	174,120	478,191
Titled vehicles	25,738	43,105	23,741	9,299	14,744	37,962
Other intermediate assets	53,273	1,837	27,442	2,150	114,501	119,841
Total intermediate farm assets	510,659	903,240	385,365	94,816	402,697	773,077
Long Term Farm Assets						
Farm land	1,107,733	1,687,750	765,315	418,882	481,830	2,170,508
Buildings and improvements	104,182	279,514	110,253	11,980	26,097	96,895
Other long-term assets	36,288	150,401	15,988	682	760	15,768
Total long-term farm assets	1,248,204	2,117,665	891,556	431,544	508,687	2,283,171
Total Farm Assets	2,160,111	3,919,449	1,526,755	633,636	1,043,117	3,677,929
Total Nonfarm Assets	244,561	302,497	198,548	97,898	230,329	393,446
Total Assets	2,404,672	4,221,946	1,725,303	731,534	1,273,447	4,071,375
Liabilities						
Current Farm Liabilities						
Accrued interest	4,953	16,726	2,404	886	1,197	3,753
Accounts payable	7,883	29,640	3,912	527	331	5,386
Current notes	122,592	402,445	60,115	9,365	44,128	102,053
Government crop loans	2,721	13,113	701	-	-	-
Principal due on term debt	28,777	77,272	12,458	5,152	13,644	35,991
Total current farm liabilities	166,926	539,197	79,589	15,930	59,299	147,184
Total intermediate farm liabs	64,656	149,913	42,454	14,496	43,634	74,341
Total long term farm liabilities	213,720	616,254	105,759	50,788	107,200	195,561
Total farm liabilities	445,302	1,305,363	227,802	81,214	210,134	417,085
Total nonfarm liabilities	32,607	16,469	38,574	15,643	37,253	54,890
Total liabs excluding deferreds	477,909	1,321,833	266,376	96,857	247,387	471,975
Total deferred liabilities	-	-	-	-	-	-
Total liabilities	477,909	1,321,833	266,376	96,857	247,387	471,975
Retained earnings	1,215,054	1,940,604	1,033,054	344,360	632,946	2,122,877
Market valuation equity	711,709	959,509	425,874	290,317	393,114	1,476,524
Net worth (farm and nonfarm)	1,926,763	2,900,114	1,458,927	634,677	1,026,060	3,599,400
Net worth excluding deferreds	1,926,763	2,900,114	1,458,927	634,677	1,026,060	3,599,400
Net worth change	-3,710	-200,404	30,583	9,333	32,831	104,444
Percent net worth change	0 %	-6 %	2 %	1 %	3 %	3 %
Ratio Analysis						
Current farm liabilities / assets	42 %	60 %	32 %	15 %	45 %	24 %
Intermediate farm liab. / assets	13 %	17 %	11 %	15 %	11 %	10 %
Long term farm liab. / assets	17 %	29 %	12 %	12 %	21 %	9 %
Total debt to asset ratio	20 %	31 %	15 %	13 %	19 %	12 %
Debt to assets excl deferreds	20 %	31 %	15 %	13 %	19 %	12 %

Statement Of Cash Flows
2015 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	132	26	26	27	26	27
Beginning cash (farm & nonfarm)	75,621	37,688	96,622	52,052	30,934	158,527
Cash Provided By Operating Activities						
Gross cash farm income	522,632	1,444,762	273,160	107,955	185,027	614,666
Total cash farm expense	-437,359	-1,310,891	-210,661	-81,828	-150,599	-446,152
Net cash from hedging transactions	-1,468	-7,939	517	-	-	-29
Cash provided by operating	83,805	125,931	63,015	26,126	34,428	168,485
Cash Provided By Investing Activities						
Sale of breeding livestock	6,402	12,981	827	4,765	1,761	11,540
Sale of machinery & equipment	21,107	33,184	16,107	2,448	2,772	50,608
Sale of titled vehicles	1,965	1,660	115	1,843	-	6,056
Sale of farm land	33,966	-	5,253	519	163	160,324
Sale of farm buildings	2,621	-	-	-	-	12,813
Sale of other farm assets	37	-	-	-	-	179
Sale of nonfarm assets	964	2,226	423	370	19	1,775
Purchase of breeding livestock	-7,327	-3,241	-6,584	-3,299	-15,504	-8,131
Purchase of machinery & equip.	-52,894	-122,360	-45,375	-9,541	-24,083	-64,337
Purchase of titled vehicles	-5,097	-7,427	-4,954	-3,744	-2,205	-7,131
Purchase of farm land	-14,736	-5,000	-41,720	-	-13,071	-14,468
Purchase of farm buildings	-15,310	-33,827	-7,144	-1,464	-7,203	-26,992
Purchase of other farm assets	-2,097	-	-	-	-	-10,252
Purchase of nonfarm assets	-8,067	-2,224	-8,777	-4,481	-6,998	-17,624
Cash provided by investing	-38,465	-124,028	-91,828	-12,586	-64,348	94,362
Cash Provided By Financing Activities						
Money borrowed	193,143	650,392	121,985	14,543	66,917	121,502
Principal payments	-168,107	-570,240	-92,505	-20,726	-35,818	-128,439
Personal income	30,474	34,547	50,924	17,123	30,855	19,845
Family living/owner withdrawals	-45,801	-71,056	-38,565	-25,150	-30,909	-63,439
Income and social security tax	-8,231	-15,721	-5,982	-1,858	-1,478	-16,061
Capital contributions	828	2,743	321	-	-	1,098
Capital distributions	-41,474	-609	-	-	-	-202,175
Dividends paid	-	-	-	-	-	-
Cash gifts and inheritances	7,250	4,372	2,800	3,180	5,454	20,107
Gifts given	-2,563	-2,545	-674	-1,496	-83	-7,856
Other cash flows	-	-	-	-	-	-
Cash provided by financing	-34,480	31,883	38,305	-14,383	34,937	-255,418
Net change in cash balance	10,860	33,786	9,492	-842	5,017	7,429
Ending cash (farm & nonfarm)	87,211	75,542	106,095	51,212	35,837	165,734
Discrepancy	-730	-4,067	19	-2	114	221

Financial Standards Measures
2015 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	132	26	26	27	26	27
Liquidity						
Current ratio	2.40	1.67	3.14	6.73	2.22	4.22
Working capital	234,322	359,348	170,246	91,347	72,433	474,498
Working capital to gross inc	51.0 %	29.2 %	80.5 %	100.0 %	40.1 %	80.0 %
Solvency (market)						
Farm debt to asset ratio	21 %	33 %	15 %	13 %	20 %	11 %
Farm equity to asset ratio	79 %	67 %	85 %	87 %	80 %	89 %
Farm debt to equity ratio	0.26	0.50	0.18	0.15	0.25	0.13
Profitability (cost)						
Rate of return on farm assets	-1.5 %	-5.1 %	-3.1 %	-1.2 %	1.4 %	3.0 %
Rate of return on farm equity	-3.5 %	-11.3 %	-4.7 %	-2.8 %	1.0 %	3.1 %
Operating profit margin	-6.8 %	-21.8 %	-19.5 %	-5.7 %	6.5 %	13.6 %
Net farm income	-2,352	-150,399	-20,607	3,420	23,184	127,428
EBITDA	34,405	-41,306	9,973	13,424	37,491	148,850
Repayment Capacity						
Capital debt repayment capacity	4,758	-108,541	12,282	554	32,518	84,089
Capital debt repayment margin	-33,853	-222,201	-1,387	-6,619	17,291	39,773
Replacement margin	-57,348	-261,160	-23,619	-11,224	6,637	-1,304
Term debt coverage ratio	0.12	-0.95	0.90	0.08	2.14	1.90
Replacement coverage ratio	0.08	-0.71	0.34	0.05	1.26	0.98
Efficiency						
Asset turnover rate (cost)	21.8 %	23.5 %	16.0 %	21.9 %	21.1 %	22.5 %
Operating expense ratio	92.5 %	103.4 %	95.3 %	85.3 %	79.3 %	74.9 %
Depreciation expense ratio	5.6 %	4.8 %	11.3 %	6.5 %	5.4 %	5.3 %
Interest expense ratio	3.4 %	4.0 %	3.8 %	3.7 %	2.5 %	2.1 %
Net farm income ratio	-0.5 %	-12.2 %	-9.7 %	3.7 %	12.8 %	21.5 %

Crop Production and Marketing Summary
2015 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	132	26	26	27	26	27
Acreage Summary						
Total acres owned	380	472	248	143	214	815
Total crop acres	718	1,442	498	262	273	1,119
Crop acres owned	235	376	159	61	75	499
Crop acres cash rented	242	627	190	35	112	254
Crop acres share rented	241	440	149	166	85	366
Total pasture acres	115	118	150	37	113	159
Percent crop acres owned	33 %	26 %	32 %	23 %	27 %	45 %
Mach invest/crop acre cost	438	480	468	227	531	400
Mach invest/crop acre market	495	529	555	230	558	474
Average Price Received (Cash Sales Only)						
Soybeans per bushel	9.91	10.10	9.78	9.66	9.67	9.81
Corn per bushel	3.54	3.54	3.64	3.50	3.52	3.49
Wheat, Winter per bushel	3.03	3.39	3.43	-	2.08	2.37
Hay, Mixed per ton	63.00	52.45	-	-	-	-
Prevented planting per unit	0.986	-	-	-	-	1.00
Straw per ton	119.09	-	-	-	-	-
Hay, Grass per ton	70.77	-	-	-	-	-
CRP per \$	1.00	-	-	-	-	-
Sorghum, Grain per bushel	3.33	-	-	-	-	-
Average Yield Per Acre						
Soybeans (bushel)	42.19	35.99	34.69	52.22	46.94	50.11
Corn (bushel)	138.50	139.81	120.75	145.67	136.45	142.87
Pasture (aum)	4.43	4.10	6.13	7.21	3.51	3.51
Hay, Mixed (ton)	1.93	2.05	2.78	1.30	1.87	1.67
Wheat, Winter (bushel)	51.00	47.80	-	-	-	60.29
CRP (\$)	80.17	-	-	-	-	73.13
Custom Work (\$)	89.30	-	108.42	-	-	-
Rented Out (\$)	58.10	-	-	-	-	-
Hay, Grass (ton)	0.989	-	-	-	-	-

Household and Personal Expenses
2015 Missouri FBMA Farm Summary
(Farms Sorted By Net Farm Income)

	<u>Avg. Of All Farms</u>	<u>20 - 40%</u>
Number of farms	13	5
Average family size	2.7	3.2
Family Living Expenses		
Food and meals expense	6,442	5,576
Medical care	3,717	4,441
Health insurance	4,076	5,140
Cash donations	2,750	968
Household supplies	1,358	640
Clothing	1,537	1,784
Personal care	294	322
Child / Dependent care	2,046	3,458
Alimony and child support	-	-
Gifts	367	279
Education	787	1,158
Recreation	3,131	3,680
Utilities (household share)	2,171	2,910
Personal vehicle operating exp	3,956	5,352
Household real estate taxes	534	633
Dwelling rent	-	-
Household repairs	487	535
Personal interest	877	1,240
Disability / Long term care ins	542	-
Life insurance payments	657	549
Personal property insurance	392	366
Miscellaneous	5,847	8,180
Total cash family living expense	41,968	47,208
Family living from the farm	54	-
Total family living	42,022	47,208
Other Nonfarm Expenditures		
Income taxes	10,999	6,272
Furnishing & appliance purchases	-	-
Nonfarm vehicle purchases	2,685	-
Nonfarm real estate purchases	2,555	-
Other nonfarm capital purchases	1,092	-
Nonfarm savings & investments	1,847	535
Total other nonfarm expenditures	19,178	6,808
Total cash family living investment & nonfarm capital purch	61,146	54,016

Operator and Labor Information
2015 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	132	26	26	27	26	27
Operator Information						
Average number of operators	1.1	1.3	1.1	1.0	1.1	1.1
Average age of operators	51.8	54.0	49.3	46.9	50.5	57.1
Average number of years farming	28.3	31.5	25.1	23.7	26.3	33.9
Results Per Operator						
Working capital	212,216	274,796	160,959	94,860	67,866	420,047
Total assets (market)	2,177,816	3,228,547	1,631,196	759,670	1,193,139	3,604,168
Total liabilities	432,823	1,010,813	251,847	100,583	231,786	417,814
Net worth (market)	1,744,993	2,217,734	1,379,349	659,088	961,353	3,186,354
Net worth excl deferred liabs	1,744,993	2,217,734	1,379,349	659,088	961,353	3,186,354
Gross farm income	416,352	941,575	199,885	94,850	169,299	524,879
Total farm expense	422,525	1,055,640	220,765	90,613	147,551	431,796
Net farm income from operations	-6,173	-114,065	-20,880	4,237	21,748	93,083
Net nonfarm income	27,599	26,418	48,147	17,781	28,909	17,567
Family living & tax withdrawals	48,257	63,181	42,136	28,044	30,452	70,572
Total acres owned	344.1	360.9	234.2	148.8	200.5	721.8
Total crop acres	650.6	1,103.1	470.9	272.5	255.4	990.2
Crop acres owned	212.6	287.7	150.6	63.5	70.2	441.6
Crop acres cash rented	219.3	479.3	179.9	36.5	105.3	224.5
Crop acres share rented	218.7	336.1	140.4	172.5	79.9	324.0
Total pasture acres	104.3	90.6	141.7	38.7	106.0	140.4
Labor Analysis						
Number of farms	132	26	26	27	26	27
Total unpaid labor hours	1,334	1,647	1,222	745	1,159	1,898
Total hired labor hours	1,401	4,372	299	330	229	1,804
Total labor hours per farm	2,736	6,018	1,521	1,076	1,388	3,702
Unpaid hours per operator	1,208	1,259	1,155	774	1,086	1,680
Value of farm production / hour	121.18	120.54	118.88	76.59	104.22	142.18
Net farm income / unpaid hour	-5.11	-90.58	-18.07	5.48	20.02	55.39
Average hourly hired labor wage	17.26	19.04	17.96	6.69	17.06	14.64
Partnerships & LLCs						
Number of farms	15	10	-	1	2	2
Number of operators	1.7	1.7	-	-	-	-
Owner withdrawals per farm	-	-	-	-	-	-
Withdrawals per operator	-	-	-	-	-	-
Corporations						
Number of farms	5	2	-	-	1	2
Number of operators	1.6	-	-	-	-	-

Nonfarm Summary
2015 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	132	26	26	27	26	27
Nonfarm Income						
Personal wages & salary	19,892	19,249	31,270	15,824	23,843	9,816
Net nonfarm business income	3,436	4,488	9,632	125	2,351	812
Personal rental income	475	1,675	-	-42	693	83
Personal interest income	289	600	263	121	36	428
Personal cash dividends	561	798	438	7	236	1,317
Tax refunds	540	173	599	376	201	1,326
Other nonfarm income	5,282	7,564	8,722	713	3,495	6,063
Total nonfarm income	30,474	34,547	50,924	17,123	30,855	19,845
Gifts and inheritances	7,250	4,372	2,800	3,180	5,454	20,107
Nonfarm Assets (market)						
Checking & savings	20,999	33,314	25,361	5,226	17,992	23,610
Stocks & bonds	27,570	29,325	5,166	3,948	15,145	83,039
Other current assets	6,250	3,561	2,660	98	385	24,097
Furniture & appliances	6,530	4,770	13,783	4,515	7,609	2,217
Nonfarm vehicles	11,993	18,381	11,831	8,650	7,308	13,852
Cash value of life ins.	8,619	2,435	4,349	6,331	12,629	17,110
Retirement accounts	48,571	28,881	41,013	17,878	71,218	83,693
Other intermediate assets	10,116	9,244	7,715	6,330	15,093	12,261
Nonfarm real estate	81,300	100,591	82,385	33,347	78,912	111,933
Personal bus. investment	5,427	4,615	4,259	-	-	17,988
Other long term assets	17,185	67,380	27	11,573	4,038	3,645
Total nonfarm assets	244,561	302,497	198,548	97,898	230,329	393,446
Nonfarm Liabilities						
Accrued interest	108	267	193	12	5	68
Accounts payable	211	962	-	104	-	-
Current notes	1,781	385	5,774	-	-	2,778
Princ due on term debt	1,662	996	1,391	1,656	2,120	2,131
Total current liabilities	3,838	2,693	7,660	1,773	2,125	4,977
Intermediate liabilities	3,264	4,495	4,781	3,942	1,178	1,946
Long term liabilities	25,505	9,281	26,133	9,927	33,950	47,967
Total nonfarm liabilities	32,607	16,469	38,574	15,643	37,253	54,890
Nonfarm net worth	211,954	286,028	159,974	82,255	193,076	338,556
Nonfarm debt to asset ratio	13 %	5 %	19 %	16 %	16 %	14 %

Financial Summary
2015 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	132	26	26	27	26	27
Income Statement						
Gross cash farm income	522,632	1,444,762	273,160	107,955	185,027	614,666
Total cash farm expense	437,359	1,310,891	210,661	81,828	150,599	446,152
Net cash farm income	85,273	133,870	62,498	26,126	34,428	168,514
Inventory change	-66,302	-224,438	-60,614	-16,103	-1,414	-32,182
Depreciation	-25,787	-58,595	-23,969	-5,943	-9,803	-31,182
Net farm income from operations	-6,816	-149,162	-22,084	4,080	23,212	105,149
Gain or loss on capital sales	4,464	-1,237	1,478	-660	-28	22,279
Average net farm income	-2,352	-150,399	-20,607	3,420	23,184	127,428
Median net farm income	4,732	-99,832	-20,618	4,198	20,717	73,995
Profitability (cost)						
Rate of return on assets	-1.5 %	-5.1 %	-3.1 %	-1.2 %	1.4 %	3.0 %
Rate of return on equity	-3.5 %	-11.3 %	-4.7 %	-2.8 %	1.0 %	3.1 %
Operating profit margin	-6.8 %	-21.8 %	-19.5 %	-5.7 %	6.5 %	13.6 %
Asset turnover rate	21.8 %	23.5 %	16.0 %	21.9 %	21.1 %	22.5 %
Profitability (market)						
Rate of return on assets	1.6 %	-4.0 %	0.7 %	0.9 %	1.4 %	8.1 %
Rate of return on equity	1.1 %	-7.7 %	0.2 %	0.4 %	1.2 %	8.8 %
Operating profit margin	10.5 %	-22.1 %	6.0 %	7.0 %	10.0 %	55.9 %
Asset turnover rate	15.4 %	18.3 %	12.1 %	12.9 %	14.2 %	14.5 %
Liquidity & Repayment (end of year)						
Current assets	401,248	898,545	249,835	107,277	131,733	621,681
Current liabilities	166,926	539,197	79,589	15,930	59,299	147,184
Current ratio	2.40	1.67	3.14	6.73	2.22	4.22
Working capital	234,322	359,348	170,246	91,347	72,433	474,498
Working capital to gross inc	51.0 %	29.2 %	80.5 %	100.0 %	40.1 %	80.0 %
Term debt coverage ratio	0.12	-0.95	0.90	0.08	2.14	1.90
Replacement coverage ratio	0.08	-0.71	0.34	0.05	1.26	0.98
Term debt to EBITDA	8.01	-18.63	12.03	5.00	3.46	2.01
Solvency (end of year at cost)						
Number of farms	132	26	26	27	26	27
Total assets	1,692,963	3,262,437	1,299,430	441,217	880,333	2,594,852
Total liabilities	477,909	1,321,833	266,376	96,857	247,387	471,975
Net worth	1,215,054	1,940,604	1,033,054	344,360	632,946	2,122,877
Net worth change	-60,682	-195,131	-13,679	-2,527	26,444	-118,529
Farm debt to asset ratio	30 %	43 %	20 %	22 %	30 %	18 %
Total debt to asset ratio	28 %	41 %	20 %	22 %	28 %	18 %
Change in earned net worth %	-5 %	-9 %	-1 %	-1 %	4 %	-5 %
Solvency (end of year at market)						
Number of farms	132	26	26	27	26	27
Total assets	2,404,672	4,221,946	1,725,303	731,534	1,273,447	4,071,375
Total liabilities	477,909	1,321,833	266,376	96,857	247,387	471,975
Net worth	1,926,763	2,900,114	1,458,927	634,677	1,026,060	3,599,400
Total net worth change	-3,710	-200,404	30,583	9,333	32,831	104,444
Farm debt to asset ratio	21 %	33 %	15 %	13 %	20 %	11 %
Total debt to asset ratio	20 %	31 %	15 %	13 %	19 %	12 %
Change in total net worth %	0 %	-6 %	2 %	1 %	3 %	3 %
Nonfarm Information						
Net nonfarm income	30,474	34,547	50,924	17,123	30,855	19,845
Farms reporting living expenses	13	2	5	1	3	2
Total family living expense	42,022	-	47,208	-	-	-
Total living, invest, cap. purch	61,146	-	54,016	-	-	-
Crop Acres						
Total crop acres	718	1,442	498	262	273	1,119
Total crop acres owned	235	376	159	61	75	499
Total crop acres cash rented	242	627	190	35	112	254
Total crop acres share rented	241	440	149	166	85	366
Machinery value per crop acre	495	529	555	230	558	474

Summary Farm Income Statement
2015 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	132	26	26	27	26	27
Crop sales	242,223	531,672	171,684	77,508	75,029	357,135
Crop inventory change	-51,275	-169,479	-50,175	-15,805	418	-23,756
Gross crop income	190,948	362,193	121,509	61,702	75,448	333,380
Livestock sales	211,109	787,465	61,548	16,414	75,718	125,192
Livestock inventory change	-8,572	-17,153	-14,436	-3,166	-5,140	-3,373
Gross livestock income	202,537	770,313	47,112	13,248	70,578	121,818
Government payments	4,064	6,775	6,417	288	792	6,112
Other cash farm income	65,237	118,849	33,510	13,745	33,488	126,227
Change in accounts receivable	-2,636	-13,035	1,262	144	-234	-1,466
Gain or loss on hedging accounts	-1,036	-4,662	-180	-	-	-401
Change in other assets	1,390	47	-478	138	3,177	4,015
Gain or loss on breeding lvst	-782	-9,188	2,265	2,071	-2,554	3,234
Gross farm income	459,722	1,231,291	211,417	91,337	180,694	592,919
Cash operating expenses	423,604	1,269,563	202,874	78,305	146,386	433,779
Change in prepaids and supplies	32	-5,313	-1,032	-643	-1,310	8,171
Change in growing crops	417	1,557	-156	63	-925	1,519
Change in accounts payable	1,264	6,789	-242	188	-948	599
Depreciation	25,787	58,595	23,969	5,943	9,803	31,182
Total operating expense	451,104	1,331,191	225,412	83,856	153,006	475,250
Interest paid	13,756	41,328	7,788	3,523	4,213	12,373
Change in accrued interest	1,679	7,934	301	-122	264	146
Total interest expense	15,434	49,262	8,089	3,401	4,476	12,519
Total expenses	466,538	1,380,453	233,501	87,257	157,482	487,769
Net farm income from operations	-6,816	-149,162	-22,084	4,080	23,212	105,149
Gain or loss on capital sales	4,464	-1,237	1,478	-660	-28	22,279
Net farm income	-2,352	-150,399	-20,607	3,420	23,184	127,428

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
2015 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	72	43	38	40	13
Acres	398.10	153.91	257.37	255.74	156.58
Yield per acre (bu.)	138.34	138.09	127.72	146.60	148.60
Operators share of yield %	75.51	100.00	100.00	45.82	47.56
Value per bu.	3.60	3.62	3.60	3.60	3.48
Total product return per acre	376.15	499.58	460.27	241.72	246.19
Hedging gains/losses per acre	0.49	0.95	0.29	0.49	-
Crop insurance per acre	15.44	13.40	27.04	5.29	17.35
Other crop income per acre	2.76	3.58	4.20	1.33	0.29
Gross return per acre	394.84	517.50	491.81	248.84	263.83
Direct Expenses					
Seed	75.36	101.34	92.91	50.25	32.76
Fertilizer	105.61	140.23	125.26	74.24	56.22
Crop chemicals	37.43	50.13	43.60	26.75	20.21
Crop insurance	17.43	22.46	21.52	11.54	11.06
Drying expense	0.75	0.90	0.60	0.89	0.25
Storage	0.74	0.65	1.44	0.23	0.18
Fuel & oil	16.51	18.90	19.21	14.47	6.05
Repairs	24.51	27.13	24.87	24.90	12.32
Custom hire	9.92	14.77	8.88	8.32	7.15
Hired labor	6.50	6.44	10.02	4.47	-
Land rent	48.36	-	141.73	-	-
Machinery leases	1.66	0.35	3.26	1.17	0.72
Utilities	3.61	4.80	3.36	3.16	3.14
Marketing	0.28	0.77	0.19	0.07	0.19
Operating interest	4.82	3.63	7.11	4.21	0.80
Miscellaneous	1.19	1.03	2.22	0.56	-
Total direct expenses per acre	354.68	393.54	506.18	225.23	151.04
Return over direct exp per acre	40.15	123.96	-14.37	23.61	112.80
Overhead Expenses					
Custom hire	2.65	8.34	0.00	1.12	4.62
Hired labor	2.69	5.28	2.30	1.24	3.41
Machinery leases	0.57	0.52	1.03	0.29	0.00
RE & pers. property taxes	3.85	10.96	1.61	0.91	6.33
Farm insurance	5.88	7.80	6.08	4.58	5.14
Utilities	1.09	1.13	0.89	1.00	2.39
Dues & professional fees	2.68	3.91	2.24	1.82	5.12
Interest	6.11	18.64	2.79	1.49	4.53
Mach & bldg depreciation	31.70	33.19	38.49	27.36	16.08
Miscellaneous	16.63	25.37	17.61	12.34	5.04
Total overhead expenses per acre	73.85	115.14	73.03	52.14	52.66
Total dir & ovhd expenses per acre	428.54	508.68	579.21	277.37	203.70
Net return per acre	-33.70	8.82	-87.41	-28.54	60.14
Government payments	0.37	0.45	0.66	0.10	-
Net return with govt pmts	-33.33	9.27	-86.74	-28.44	60.14
Labor & management charge	32.44	36.20	32.51	30.77	28.26
Net return over lbr & mgt	-65.77	-26.93	-119.25	-59.20	31.87
Cost of Production					
Total direct expense per bu.	3.40	2.85	3.96	3.35	2.14
Total dir & ovhd exp per bu.	4.10	3.68	4.53	4.13	2.88
Less govt & other income	3.92	3.55	4.28	4.02	2.63
With labor & management	4.23	3.81	4.54	4.48	3.03
Net value per unit	3.61	3.62	3.61	3.61	3.48
Machinery cost per acre	87.98	103.04	96.35	78.59	46.02
Est. labor hours per acre	2.12	2.56	2.12	1.93	1.69

Crop Enterprise Analysis
2015 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

CRP

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>
Number of farms	13	12
Acres	100.62	108.67
Yield per acre (\$)	80.17	80.14
Operators share of yield %	99.83	100.00
Value per \$	1.00	1.00
Total product return per acre	80.04	80.14
Other crop income per acre	0.67	0.68
Gross return per acre	80.71	80.82
Direct Expenses		
Crop chemicals	0.98	0.98
Fuel & oil	3.60	3.61
Repairs	4.34	4.35
Custom hire	0.58	0.58
Total direct expenses per acre	9.68	9.71
Return over direct exp per acre	71.03	71.11
Overhead Expenses		
Custom hire	2.64	2.65
RE & pers. property taxes	4.24	4.25
Farm insurance	3.19	3.20
Utilities	1.18	1.18
Dues & professional fees	1.60	1.61
Interest	2.17	2.18
Mach & bldg depreciation	22.84	22.91
Miscellaneous	1.63	1.64
Total overhead expenses per acre	39.49	39.62
Total dir & ovhd expenses per acre	49.18	49.33
Net return per acre	31.53	31.49
Government payments	-	-
Net return with govt pmts	31.53	31.49
Labor & management charge	15.31	15.35
Net return over lbr & mgt	16.23	16.14
Cost of Production		
Total direct expense per \$	0.12	0.12
Total dir & ovhd exp per \$	0.61	0.62
Less govt & other income	0.61	0.61
With labor & management	0.80	0.80
Net value per unit	1.00	1.00
Machinery cost per acre	31.66	31.75
Est. labor hours per acre	0.76	0.76

Crop Enterprise Analysis
2015 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Hay, Grass

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>
Number of farms	6	6
Acres	65.00	64.17
Yield per acre (ton)	0.94	0.92
Operators share of yield %	100.00	100.00
Value per ton	53.03	53.31
Total product return per acre	49.87	49.07
Gross return per acre	49.87	49.07
Direct Expenses		
Fertilizer	30.30	30.16
Fuel & oil	7.39	7.43
Repairs	12.06	11.90
Custom hire	6.49	5.39
Land rent	0.28	-
Utilities	0.64	0.64
Operating interest	3.00	3.00
Miscellaneous	11.94	12.10
Total direct expenses per acre	72.11	70.62
Return over direct exp per acre	-22.24	-21.55
Overhead Expenses		
Custom hire	2.50	2.53
RE & pers. property taxes	9.79	9.92
Farm insurance	2.90	2.89
Utilities	1.67	1.64
Dues & professional fees	1.27	1.18
Interest	7.02	7.10
Mach & bldg depreciation	26.71	26.89
Miscellaneous	8.79	8.82
Total overhead expenses per acre	60.65	60.97
Total dir & ovhd expenses per acre	132.76	131.59
Net return per acre	-82.88	-82.52
Government payments	-	-
Net return with govt pmts	-82.88	-82.52
Labor & management charge	24.09	24.02
Net return over lbr & mgt	-106.98	-106.54
Cost of Production		
Total direct expense per ton	76.67	76.73
Total dir & ovhd exp per ton	141.15	142.97
Less govt & other income	141.15	142.97
With labor & management	166.77	169.07
Net value per unit	53.03	53.31
Machinery cost per acre	54.33	53.33
Est. labor hours per acre	1.60	1.59

Crop Enterprise Analysis
2015 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Hay, Mixed

	<u>Avg. Of</u> <u>All Farms</u>	<u>Owned</u> <u>Land</u>	<u>Cash</u> <u>Rent</u>	<u>Share</u> <u>Rent</u>
Number of farms	41	27	18	14
Acres	159.71	108.37	107.94	84.73
Yield per acre (ton)	1.54	1.10	1.83	1.65
Operators share of yield %	92.86	100.00	100.00	64.18
Value per ton	52.03	53.63	51.68	59.93
Total product return per acre	74.55	58.97	94.55	63.37
Crop insurance per acre	1.01	0.20	0.33	3.45
Other crop income per acre	0.50	1.12	-	-
Gross return per acre	76.06	60.28	94.89	66.81
Direct Expenses				
Seed	0.42	0.74	0.31	-
Fertilizer	15.45	12.81	24.35	8.53
Crop insurance	0.31	0.14	-	1.33
Fuel & oil	10.30	11.07	10.13	8.76
Repairs	20.83	22.00	19.49	22.24
Custom hire	4.81	2.39	8.73	3.62
Hired labor	1.66	1.20	2.51	2.09
Land rent	11.23	-	37.84	-
Utilities	0.32	0.09	0.32	0.73
Operating interest	3.82	3.12	4.88	2.41
Miscellaneous	0.49	0.33	0.95	0.22
Total direct expenses per acre	68.77	53.71	109.50	45.57
Return over direct exp per acre	7.29	6.58	-14.62	21.24
Overhead Expenses				
Custom hire	1.29	2.69	0.21	0.00
Hired labor	8.35	16.31	1.14	1.88
Machinery leases	1.05	2.10	0.37	0.00
RE & pers. property taxes	3.03	5.97	0.39	0.64
Farm insurance	4.91	6.41	3.62	4.31
Utilities	1.15	1.45	0.69	0.83
Dues & professional fees	1.14	1.40	0.88	1.13
Interest	4.81	6.44	0.65	1.74
Mach & bldg depreciation	20.03	21.98	20.28	21.31
Miscellaneous	7.81	8.32	7.46	7.39
Total overhead expenses per acre	52.77	72.86	35.70	35.41
Total dir & ovhd expenses per acre	121.54	126.57	145.20	80.98
Net return per acre	-45.49	-66.28	-50.31	-14.17
Government payments	-	-	-	-
Net return with govt pmts	-45.49	-66.28	-50.31	-14.17
Labor & management charge	20.83	24.30	16.44	21.84
Net return over lbr & mgt	-66.31	-90.58	-66.75	-36.01
Cost of Production				
Total direct expense per ton	48.00	48.84	59.86	43.10
Total dir & ovhd exp per ton	84.84	115.11	79.37	76.59
Less govt & other income	83.79	113.91	79.19	73.33
With labor & management	98.32	136.01	88.17	93.98
Net value per unit	52.03	53.63	51.68	59.93
Machinery cost per acre	57.42	62.33	58.62	51.62
Est. labor hours per acre	1.91	2.53	1.27	1.38

Crop Enterprise Analysis
2015 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	51	36	25	6
Acres	183.54	136.15	131.95	97.46
Yield per acre (aum)	4.09	3.84	2.99	7.75
Operators share of yield %	96.36	100.00	100.00	69.25
Value per aum	10.01	8.99	11.75	10.72
Total product return per acre	39.44	34.51	35.08	57.51
Crop insurance per acre	1.60	0.63	2.05	2.24
Other crop income per acre	0.03	0.05	-	-
Gross return per acre	41.07	35.19	37.14	59.76
Direct Expenses				
Seed	0.68	0.42	1.09	-
Fertilizer	14.77	15.63	14.87	5.91
Crop chemicals	1.80	2.15	1.02	-
Crop insurance	0.73	0.57	0.67	0.86
Fuel & oil	1.58	1.42	1.86	1.71
Repairs	2.75	2.71	2.85	3.09
Custom hire	0.44	0.40	0.44	-
Hired labor	0.78	0.42	0.90	3.86
Land rent	15.56	-	44.16	-
Utilities	0.67	0.27	0.76	3.56
Operating interest	0.46	0.39	0.55	0.10
Miscellaneous	0.54	0.79	0.30	-
Total direct expenses per acre	40.32	25.18	68.94	14.89
Return over direct exp per acre	0.75	10.01	-31.81	44.87
Overhead Expenses				
Hired labor	1.07	1.82	0.17	0.40
RE & pers. property taxes	1.79	3.06	0.32	0.45
Farm insurance	0.68	0.66	0.80	0.51
Interest	3.61	4.91	0.16	0.32
Mach & bldg depreciation	2.66	2.74	2.90	2.96
Miscellaneous	1.69	2.04	1.39	1.19
Total overhead expenses per acre	11.44	15.23	5.74	4.88
Total dir & ovhd expenses per acre	51.75	40.41	74.69	19.77
Net return per acre	-10.68	-5.22	-37.55	39.99
Government payments	-	-	-	-
Net return with govt pmnts	-10.68	-5.22	-37.55	39.99
Labor & management charge	2.96	3.37	2.23	4.62
Net return over lbr & mgt	-13.64	-8.59	-39.78	35.37
Cost of Production				
Total direct expense per aum	10.24	6.56	23.09	2.78
Total dir & ovhd exp per aum	13.14	10.53	25.02	3.69
Less govt & other income	12.73	10.35	24.33	3.27
With labor & management	13.48	11.23	25.08	4.13
Net value per unit	10.01	8.99	11.75	10.72
Machinery cost per acre	7.93	8.27	8.11	6.72
Est. labor hours per acre	0.27	0.32	0.20	0.18

Crop Enterprise Analysis
2015 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	75	44	39	44	11
Acres	440.02	210.94	262.03	262.75	176.36
Yield per acre (bu.)	41.22	40.41	37.88	44.77	41.51
Operators share of yield %	74.48	100.00	100.00	41.51	44.90
Value per bu.	8.79	8.79	8.75	8.84	8.71
Total product return per acre	269.74	355.39	331.53	164.37	162.31
Hedging gains/losses per acre	0.22	0.26	0.24	0.22	-
Crop insurance per acre	12.35	13.27	22.10	4.89	1.03
Other crop income per acre	1.99	2.64	1.24	2.45	-
Gross return per acre	284.30	371.57	355.12	171.92	163.35
Direct Expenses					
Seed	47.46	62.51	56.14	31.79	23.11
Fertilizer	34.19	47.13	40.00	21.77	15.71
Crop chemicals	50.00	69.93	51.90	35.73	29.74
Crop insurance	11.19	15.55	12.56	7.15	7.22
Storage	0.48	0.21	0.54	0.67	0.25
Fuel & oil	11.41	12.85	14.06	9.21	3.68
Repairs	16.56	18.81	17.62	15.56	6.23
Custom hire	7.40	9.48	7.28	6.31	4.63
Hired labor	5.30	4.86	9.54	2.80	-
Land rent	40.90	-	132.07	-	-
Machinery leases	1.37	0.91	3.08	0.47	-
Utilities	1.80	2.94	1.75	1.24	-
Operating interest	3.55	4.81	4.45	2.31	0.10
Miscellaneous	1.29	1.63	1.80	0.79	-
Total direct expenses per acre	232.92	251.62	352.79	135.81	90.67
Return over direct exp per acre	51.38	119.95	2.33	36.11	72.67
Overhead Expenses					
Custom hire	1.74	3.17	0.50	1.12	5.08
Hired labor	3.82	7.11	3.24	2.06	1.51
Machinery leases	0.84	0.97	1.63	0.17	-
RE & pers. property taxes	3.58	10.14	0.89	0.60	4.17
Farm insurance	4.71	6.85	4.83	3.25	2.53
Utilities	0.99	1.04	0.90	0.96	1.35
Dues & professional fees	1.55	1.80	1.38	1.15	3.62
Interest	7.21	22.06	2.05	1.01	0.34
Mach & bldg depreciation	24.46	28.94	28.81	19.79	7.86
Miscellaneous	11.18	16.70	10.66	8.59	2.91
Total overhead expenses per acre	60.07	98.78	54.90	38.71	29.37
Total dir & ovhd expenses per acre	292.98	350.40	407.69	174.52	120.04
Net return per acre	-8.69	21.17	-52.57	-2.59	43.31
Government payments	0.41	0.45	0.81	0.09	-
Net return with govt pmts	-8.28	21.61	-51.76	-2.50	43.31
Labor & management charge	22.56	26.04	21.86	21.57	15.51
Net return over lbr & mgt	-30.84	-4.43	-73.62	-24.07	27.79
Cost of Production					
Total direct expense per bu.	7.59	6.23	9.31	7.31	4.86
Total dir & ovhd exp per bu.	9.54	8.67	10.76	9.39	6.44
Less govt & other income	9.06	8.26	10.12	8.98	6.38
With labor & management	9.79	8.90	10.70	10.14	7.22
Net value per unit	8.79	8.80	8.76	8.85	8.71
Machinery cost per acre	64.34	75.60	73.91	53.23	26.25
Est. labor hours per acre	1.61	1.90	1.59	1.53	0.89

Crop Enterprise Analysis
2015 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Timber

	<u>Avg. Of All Farms</u>
Number of farms	5
Acres	171.62
Yield per acre (bdft)	-
Operators share of yield %	-
Value per bdft	-
Total product return per acre	-
Gross return per acre	-
Direct Expenses	
Fuel & oil	0.83
Repairs	2.03
Custom hire	4.23
Operating interest	0.77
Total direct expenses per acre	7.87
Return over direct exp per acre	-7.87
Overhead Expenses	
Hired labor	0.50
RE & pers. property taxes	0.47
Farm insurance	0.55
Utilities	0.27
Dues & professional fees	1.93
Interest	7.31
Mach & bldg depreciation	1.58
Miscellaneous	2.18
Total overhead expenses per acre	14.79
Total dir & ovhd expenses per acre	22.66
Net return per acre	-22.66
Government payments	-
Net return with govt pmts	-22.66
Labor & management charge	2.77
Net return over lbr & mgt	-25.42
Cost of Production	
Total direct expense per bdft	-
Total dir & ovhd exp per bdft	-
Less govt & other income	-
With labor & management	-
Net value per unit	-
Machinery cost per acre	8.10
Est. labor hours per acre	0.22

Crop Enterprise Analysis
2015 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Wheat, Winter

	<u>Avg. Of</u> <u>All Farms</u>	<u>Owned</u> <u>Land</u>	<u>Cash</u> <u>Rent</u>	<u>Share</u> <u>Rent</u>
Number of farms	31	13	13	13
Acres	127.28	73.88	79.95	116.82
Yield per acre (bu.)	48.37	45.90	43.20	51.56
Operators share of yield %	73.29	100.00	100.00	47.33
Value per bu.	2.28	1.64	2.54	2.52
Total product return per acre	80.72	75.08	109.55	61.46
Hedging gains/losses per acre	-0.05	-	-	-0.13
Crop insurance per acre	66.59	94.64	69.02	55.37
Other crop income per acre	0.65	1.30	0.85	0.29
Gross return per acre	147.91	171.03	179.41	116.99
Direct Expenses				
Seed	33.57	33.28	54.49	22.17
Fertilizer	66.60	66.71	97.76	49.38
Crop chemicals	14.18	23.85	18.30	7.96
Crop insurance	7.34	7.59	11.72	5.35
Drying expense	0.71	0.36	2.35	-
Fuel & oil	9.40	9.60	11.95	7.98
Repairs	15.71	18.72	17.71	13.29
Custom hire	12.09	11.77	17.61	9.84
Hired labor	4.13	1.32	9.18	3.60
Land rent	26.61	-	101.00	-
Machinery leases	1.81	1.43	5.06	0.35
Utilities	1.86	1.13	3.71	1.58
Operating interest	2.43	2.42	4.18	1.75
Miscellaneous	1.63	4.95	0.78	0.57
Total direct expenses per acre	198.08	183.15	355.81	123.84
Return over direct exp per acre	-50.17	-12.12	-176.40	-6.84
Overhead Expenses				
Custom hire	1.05	2.49	0.00	0.61
Hired labor	3.82	10.42	3.02	0.19
RE & pers. property taxes	1.87	5.48	0.56	0.02
Farm insurance	4.56	5.55	5.19	4.04
Utilities	0.60	1.47	0.18	0.02
Dues & professional fees	1.62	1.12	0.98	1.20
Interest	6.88	26.11	1.78	0.10
Mach & bldg depreciation	27.01	29.87	30.89	27.24
Miscellaneous	3.48	4.38	3.04	3.13
Total overhead expenses per acre	50.90	86.90	45.65	36.54
Total dir & ovhd expenses per acre	248.97	270.05	401.46	160.37
Net return per acre	-101.06	-99.02	-222.05	-43.38
Government payments	0.15	-	0.26	0.22
Net return with govt pmts	-100.91	-99.02	-221.79	-43.16
Labor & management charge	18.80	23.49	18.12	17.61
Net return over lbr & mgt	-119.71	-122.51	-239.91	-60.78
Cost of Production				
Total direct expense per bu.	5.59	3.99	8.24	5.07
Total dir & ovhd exp per bu.	7.02	5.88	9.29	6.57
Less govt & other income	5.12	3.79	7.67	4.29
With labor & management	5.65	4.31	8.09	5.01
Net value per unit	2.28	1.64	2.54	2.51
Machinery cost per acre	67.45	75.18	83.40	59.75
Est. labor hours per acre	1.29	1.69	1.28	1.09

Crop Enterprise Analysis
2015 Missouri FBMA Farm Summary
(Farms Sorted By Crop Tenure Type)

Prevented planting

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>	<u>Share Rent</u>
Number of farms	38	22	18	17
Acres	240.04	132.71	194.31	134.73
Yield per acre	197.14	182.38	213.09	184.34
Operators share of yield %	86.77	100.00	100.00	55.30
Value per 0	1.03	1.00	1.05	1.00
Total product return per acre	175.37	182.38	224.32	101.93
Gross return per acre	175.37	182.38	224.32	101.93
Direct Expenses				
Seed	4.03	2.20	7.93	1.11
Fertilizer	27.84	15.45	41.28	21.82
Crop chemicals	10.99	8.47	17.11	4.03
Crop insurance	15.16	16.85	16.93	11.68
Fuel & oil	6.99	4.60	8.19	9.25
Repairs	11.91	9.77	12.33	15.51
Custom hire	3.77	4.53	5.22	0.77
Hired labor	6.48	5.50	8.57	5.72
Land rent	56.47	-	147.27	-
Machinery leases	2.25	0.57	4.80	0.88
Utilities	0.51	0.13	1.04	0.26
Operating interest	2.56	0.74	4.81	1.88
Miscellaneous	0.12	0.36	0.02	-
Total direct expenses per acre	149.07	69.19	275.52	72.91
Return over direct exp per acre	26.30	113.19	-51.20	29.02
Overhead Expenses				
Custom hire	1.80	5.31	0.00	0.38
Hired labor	2.85	6.63	0.96	1.42
Machinery leases	0.30	0.56	0.21	0.15
RE & pers. property taxes	3.07	7.19	0.70	0.74
Farm insurance	3.09	2.92	2.92	3.48
Utilities	0.66	0.86	0.62	0.54
Dues & professional fees	2.04	2.26	2.44	0.92
Interest	4.54	11.34	1.15	1.86
Mach & bldg depreciation	15.70	13.33	14.52	22.73
Miscellaneous	4.07	2.66	4.90	4.67
Total overhead expenses per acre	38.12	53.05	28.43	36.88
Total dir & ovhd expenses per acre	187.18	122.24	303.95	109.79
Net return per acre	-11.81	60.14	-79.63	-7.86
Government payments	-	-	-	-
Net return with govt pmts	-11.81	60.14	-79.63	-7.86
Labor & management charge	17.73	15.04	16.79	23.55
Net return over lbr & mgt	-29.54	45.10	-96.42	-31.41
Cost of Production				
Total direct expense per 0	0.87	0.38	1.29	0.72
Total dir & ovhd exp per 0	1.09	0.67	1.43	1.08
Less govt & other income	1.09	0.67	1.43	1.08
With labor & management	1.20	0.75	1.51	1.31
Net value per unit	1.03	1.00	1.05	1.00
Machinery cost per acre	43.24	39.24	45.30	51.25
Est. labor hours per acre	1.13	1.27	1.11	1.13

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
2015 Missouri FBMA Farm Summary
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cwt. Produced

	<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	31		6		6		6		6		7	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	73.68	156.22	91.63	182.54	60.25	117.62	80.17	157.12	66.35	144.16	86.28	235.43
Transferred out (lb)	4.43	7.88	-	-	4.14	6.97	12.32	21.55	2.12	4.09	0.48	0.97
Cull sales (lb)	17.90	22.14	9.26	9.17	20.99	32.80	1.56	1.39	30.18	34.47	9.96	21.93
Other income		1.47		-		-		-		2.74		3.64
Purchased (lb)	-9.10	-24.20	-17.51	-39.90	-19.93	-45.35	-2.22	-28.59	-4.49	-8.56	-24.14	-37.18
Transferred in (lb)	-1.65	-2.65	-	-	-	-0.76	-6.87	-10.63	-	-	-	-
Inventory change (lb)	13.85	-2.39	16.61	-56.38	34.55	-16.56	15.03	9.09	4.15	-3.49	25.46	72.68
Gross margin		159.66		95.43		94.71		154.82		173.41		297.46
Direct Expenses												
Protein Vit Minerals (lb.)	3.33	11.31	3.84	8.77	-	3.40	7.92	23.20	0.37	8.08	9.66	9.20
Creep / Starter (lb.)	11.43	1.38	75.53	7.36	-	-	8.58	1.94	-	-	-	-
Complete Ration (lb.)	7.93	8.42	30.72	20.34	19.10	3.96	-	-	2.59	12.44	7.73	0.90
Corn (bu.)	2.81	10.30	8.55	30.73	2.22	7.78	3.17	11.98	1.19	4.42	2.41	9.13
Corn Silage (lb.)	198.36	4.96	-	-	-	-	-	-	462.51	11.56	-	-
Hay, Grass (lb.)	1,046.91	25.65	1,286.50	30.11	977.12	21.50	1,043.87	21.43	997.83	27.35	1,056.45	28.73
Pasture (aum)	1.73	15.27	2.55	28.20	1.29	14.89	2.53	10.33	1.18	14.19	1.77	16.36
Other feed stuffs (lb)	4.73	0.56	-	-	13.56	1.50	6.29	0.47	0.76	0.15	14.58	2.41
Veterinary		5.25		1.66		2.26		11.14		4.08		4.11
Supplies		2.27		1.64		4.01		2.70		0.48		8.69
Fuel & oil		7.29		15.03		11.48		7.86		3.56		7.10
Repairs		10.65		24.15		7.26		12.28		6.26		13.52
Hired labor		7.23		1.88		1.02		-		15.94		0.38
Utilities		1.72		0.90		3.98		1.00		1.61		2.21
Operating interest		2.52		0.24		7.31		2.73		1.65		2.61
Total direct expenses		114.79		171.01		90.35		107.05		111.78		105.36
Return over direct expense		44.87		-75.58		4.36		47.77		61.63		192.10
Overhead Expenses												
Custom hire		0.40		3.65		0.00		-0.23		-		0.00
Hired labor		0.79		5.31		0.00		0.28		0.02		0.74
RE & pers. property taxes		1.22		2.57		2.14		0.55		0.53		3.36
Farm insurance		2.29		4.79		1.91		1.62		1.98		2.69
Interest		3.89		5.59		5.35		9.49		0.48		0.55
Mach & bldg depreciation		7.70		20.51		10.00		4.73		4.39		10.84
Miscellaneous		4.83		7.61		7.60		1.54		5.06		4.83
Total overhead expenses		21.12		50.05		27.00		17.97		12.45		23.00
Total dir & ovhd expenses		135.91		221.06		117.35		125.02		124.23		128.35
Net return		23.75		-125.62		-22.64		29.80		49.17		169.11
Labor & management charge		15.39		18.96		23.88		15.44		10.17		24.21
Net return over lbr & mgt		8.36		-144.59		-46.52		14.35		39.00		144.90
Cost of Production Per Cwt. Produced												
Total direct expense per unit		114.79		171.01		90.35		107.05		111.78		105.36
Total dir & ovhd expense per unit		135.91		221.06		117.35		125.02		124.23		128.35
With other revenue adjustments		123.81		241.21		119.88		120.78		97.12		100.92
With labor and management		139.21		260.17		143.76		136.22		107.29		125.13
Est. labor hours per unit		1.63		1.46		2.15		1.19		1.64		2.28
Other Information												
Number of cows		73.9		51.2		38.7		96.8		155.8		33.9
Pregnancy percentage		92.4		95.1		92.7		95.5		88.2		97.5
Pregnancy loss percentage		1.6		1.4		1.9		1.3		2.1		0.4
Culling percentage		9.7		5.0		14.2		0.7		16.4		6.8
Calving percentage		90.9		93.8		90.9		94.3		86.4		97.0
Weaning percentage		85.3		87.9		84.1		86.1		84.4		84.8
Calves sold per cow		0.74		0.78		0.70		0.84		0.65		0.81
Calf death loss percent		2.8		3.6		4.8		2.1		3.0		0.9
Cow death loss percent		1.5		2.6		2.2		1.2		1.7		-
Cows per FTE		313.3		377.3		192.0		450.3		295.8		281.2
Average weaning weight		492		470		527		465		500		521
Lb. weaned/exposed female		420		413		443		400		422		442
Feed cost per cow		428.12		638.68		359.13		361.51		452.09		291.60
Avg wgt/ Beef Calves sold		591		631		640		570		619		469
Avg price / cwt.		212.02		199.22		195.21		195.97		217.26		272.87

Livestock Enterprise Analysis
2015 Missouri FBMA Farm Summary
(Farms Sorted By Net Return)

Beef Cow-Calf -- Average Per Cow

	<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>	
	31		6		6		6		6		7	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Number of farms												
Beef Calves sold (lb)	405.2	859.02	466.3	928.91	408.0	796.45	418.0	819.16	383.6	833.37	377.0	1,028.69
Transferred out (lb)	24.3	43.34	-	-	28.0	47.20	64.3	112.33	12.3	23.67	2.1	4.22
Cull sales (lb)	98.4	121.77	47.1	46.65	142.1	222.08	8.1	7.23	174.5	199.29	43.5	95.80
Other income		8.10		-		-		-		15.83		15.89
Purchased (lb)	-50.0	-133.05	-89.1	-203.04	-135.0	-307.06	-11.6	-149.04	-25.9	-49.50	-105.5	-162.45
Transferred in (lb)	-9.1	-14.57	-	-	-	-5.17	-35.8	-55.42	-	-	-	-
Inventory change (lb)	76.2	-13.16	84.5	-286.89	234.0	-112.13	78.3	47.40	24.0	-20.19	111.3	317.55
Gross margin		877.91		485.63		641.36		807.15		1,002.47		1,299.71
Direct Expenses												
Protein Vit Minerals (lb.)	18.3	62.19	19.5	44.65	-	23.03	41.3	120.96	2.1	46.73	42.2	40.19
Creep / Starter (lb.)	62.8	7.57	384.4	37.44	-	-	44.8	10.09	-	-	-	-
Complete Ration (lb.)	43.6	46.32	156.4	103.49	129.3	26.81	-	-	15.0	71.92	33.8	3.92
Corn (bu.)	15.4	56.66	43.5	156.37	15.1	52.68	16.6	62.45	6.9	25.56	10.5	39.91
Corn Silage (lb.)	1,090.8	27.27	-	-	-	-	-	-	2,673.8	66.84	-	-
Hay, Grass (lb.)	5,756.7	141.07	6,546.7	153.24	6,616.6	145.60	5,442.2	111.71	5,768.4	158.12	4,616.0	125.55
Pasture (aum)	9.5	83.95	13.0	143.50	8.7	100.82	13.2	53.87	6.8	82.06	7.7	71.49
Other feed stuffs (lb)	26.0	3.08	-	-	91.8	10.19	32.8	2.43	4.4	0.85	63.7	10.54
Veterinary		28.88		8.45		15.31		58.07		23.60		17.95
Supplies		12.48		8.33		27.13		14.09		2.75		37.95
Fuel & oil		40.11		76.48		77.70		40.98		20.60		31.03
Repairs		58.53		122.90		49.15		64.05		36.17		59.07
Hired labor		39.74		9.55		6.92		-		92.14		1.67
Utilities		9.47		4.59		26.96		5.19		9.34		9.67
Operating interest		13.84		1.24		49.53		14.22		9.51		11.39
Total direct expenses		631.17		870.23		611.84		558.10		646.19		460.34
Return over direct expense		246.74		-384.60		29.52		249.05		356.28		839.37
Overhead Expenses												
Custom hire		2.19		18.59		0.00		-1.19		-		0.00
Hired labor		4.37		27.01		0.00		1.46		0.12		3.23
Farm insurance		12.59		24.40		12.94		8.43		11.43		11.74
Utilities		3.15		16.94		2.15		-0.16		0.45		5.00
Interest		21.39		28.47		36.22		49.46		2.76		2.38
Mach & bldg depreciation		42.32		104.38		67.69		24.64		25.36		47.37
Miscellaneous		30.13		34.89		63.81		11.08		31.88		30.76
Total overhead expenses		116.13		254.67		182.81		93.70		72.00		100.48
Total dir & ovhd expenses		747.30		1,124.90		794.65		651.80		718.19		560.82
Net return		130.61		-639.27		-153.29		155.35		284.28		738.89
Labor & management charge		84.63		96.50		161.72		80.52		58.81		105.78
Net return over lbr & mgt		45.98		-735.77		-315.01		74.83		225.47		633.12
Cost of Production Per Cwt. Produced												
Total direct expense per unit		114.79		171.01		90.35		107.05		111.78		105.36
Total dir & ovhd expense per unit		135.91		221.06		117.35		125.02		124.23		128.35
With other revenue adjustments		123.81		241.21		119.88		120.78		97.12		100.92
With labor and management		139.21		260.17		143.76		136.22		107.29		125.13
Est. labor hours per unit		8.94		7.42		14.58		6.22		9.47		9.96
Other Information												
Number of cows		73.9		51.2		38.7		96.8		155.8		33.9
Pregnancy percentage		92.4		95.1		92.7		95.5		88.2		97.5
Pregnancy loss percentage		1.6		1.4		1.9		1.3		2.1		0.4
Culling percentage		9.7		5.0		14.2		0.7		16.4		6.8
Calving percentage		90.9		93.8		90.9		94.3		86.4		97.0
Weaning percentage		85.3		87.9		84.1		86.1		84.4		84.8
Calves sold per cow		0.74		0.78		0.70		0.84		0.65		0.81
Calf death loss percent		2.8		3.6		4.8		2.1		3.0		0.9
Cow death loss percent		1.5		2.6		2.2		1.2		1.7		-
Cows per FTE		313.3		377.3		192.0		450.3		295.8		281.2
Average weaning weight		492		470		527		465		500		521
Lb. weaned/exposed female		420		413		443		400		422		442
Feed cost per cow		428.12		638.68		359.13		361.51		452.09		291.60
Avg wgt/ Beef Calves sold		591		631		640		570		619		469
Avg price / cwt.		212.02		199.22		195.21		195.97		217.26		272.87

Livestock Enterprise Analysis
2015 Missouri FBMA Farm Summary
(Farms Sorted By Net Return)

Beef Backgrounding -- Average Per Cwt. Produced

	<u>Avg. Of</u>	
	<u>All Farms</u>	
Number of farms	5	
	Quantity	Value
Backgnd Beef sold (lb)	215.94	418.12
Other income		0.47
Purchased (lb)	-156.30	-342.12
Transferred in (lb)	-19.44	-38.13
Inventory change (lb)	59.32	10.70
Gross margin		49.05
Direct Expenses		
Protein Vit Minerals (lb.)	25.66	5.03
Creep / Starter (lb.)	8.10	2.44
Complete Ration (lb.)	216.05	14.44
Corn (bu.)	2.34	8.18
Hay, Grass (lb.)	189.06	6.35
Pasture (aum)	0.60	6.74
Sorghum, Grain (bu.)	0.91	3.20
Wheat, Spring (bu.)	0.66	1.98
DDGS, dry (lb.)	63.05	5.30
Veterinary		7.11
Supplies		0.60
Livestock insurance		0.29
Fuel & oil		2.17
Repairs		2.65
Custom hire		0.23
Utilities		0.55
Operating interest		0.79
Total direct expenses		68.07
Return over direct expense		-19.02
Overhead Expenses		
Dues & professional fees		0.58
Interest		2.41
Mach & bldg depreciation		3.54
Miscellaneous		2.44
Total overhead expenses		8.97
Total dir & ovhd expenses		77.04
Net return		-27.99
Labor & management charge		7.99
Net return over lbr & mgt		-35.98
Cost of Production Per Cwt. Produced		
Total direct expense per unit		202.43
Total dir & ovhd expense per unit		206.59
With other revenue adjustments		206.59
With labor and management		210.29
Est. labor hours per unit		0.97
Other Information		
No. purchased or trans in		115
Number sold or trans out		82
Percentage death loss		2.1
Avg. daily gain (lb.)		1.31
Lb. of conc / lb. of gain		5.35
Lb. of feed / lb. of gain		7.24
Feed cost per cwt. of gain		53.68
Feed cost per head		159.01
Average purchase weight		458
Avg wgt / Backgnd Beef sold		779
Avg purch price / cwt.		218.89
Avg sales price / cwt.		193.63

Livestock Enterprise Analysis
2015 Missouri FBMA Farm Summary
(Farms Sorted By Net Return)

Beef Backgrounding -- Average Per Head

	Avg. Of All Farms	
Number of farms	5	
	Quantity	Value
Backgnd Beef sold (lb)	639.7	1,238.66
Other income		1.40
Purchased (lb)	-463.0	-1,013.49
Transferred in (lb)	-57.6	-112.96
Inventory change (lb)	175.7	31.70
Gross margin		145.31
Direct Expenses		
Protein Vit Minerals (lb.)	76.0	14.91
Creep / Starter (lb.)	24.0	7.24
Complete Ration (lb.)	640.0	42.77
Corn (bu.)	6.9	24.24
Hay, Grass (lb.)	560.1	18.83
Pasture (aum)	1.8	19.98
Sorghum, Grain (bu.)	2.7	9.47
Wheat, Spring (bu.)	2.0	5.87
DDGS, dry (lb.)	186.8	15.71
Veterinary		21.07
Supplies		2.47
Livestock insurance		0.86
Fuel & oil		6.43
Repairs		7.85
Utilities		1.63
Operating interest		2.33
Total direct expenses		201.65
Return over direct expense		-56.34
Overhead Expenses		
Farm insurance		2.06
Dues & professional fees		1.71
Interest		7.14
Mach & bldg depreciation		10.49
Miscellaneous		5.17
Total overhead expenses		26.57
Total dir & ovhd expenses		228.22
Net return		-82.92
Labor & management charge		23.66
Net return over lbr & mgt		-106.58
Cost of Production Per Cwt. Produced		
Total direct expense per unit		202.43
Total dir & ovhd expense per unit		206.59
With other revenue adjustments		206.59
With labor and management		210.29
Est. labor hours per unit		2.87
Other Information		
No. purchased or trans in		115
Number sold or trans out		82
Percentage death loss		2.1
Avg. daily gain (lb.)		1.31
Lb. of conc / lb. of gain		5.35
Lb. of feed / lb. of gain		7.24
Feed cost per cwt. of gain		53.68
Feed cost per head		159.01
Average purchase weight		458
Avg wgt / Backgnd Beef sold		779
Avg purch price / cwt.		218.89
Avg sales price / cwt.		193.63

Livestock Enterprise Analysis
2015 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	5	
	Quantity	Value
Lambs sold (lb)	1.17	1.83
Mkt Lambs sold (lb)	86.98	173.91
Transferred out (lb)	3.52	3.71
Cull sales (lb)	3.60	2.45
Other income		-
Purchased (lb)	-5.28	-8.32
Transferred in (lb)	-3.52	-3.71
Inventory change (lb)	14.70	5.40
Gross margin		175.27
Direct Expenses		
Protein Vit Minerals (lb.)	29.31	10.60
Creep / Starter (lb.)	62.52	11.82
Complete Ration (lb.)	125.04	23.03
Corn (bu.)	2.75	10.35
Hay, Alfalfa (lb.)	585.91	46.23
Hay, Grass (lb.)	101.60	2.01
Pasture (aum)	0.96	11.49
Other feed stuffs (lb)	0.65	1.76
Breeding fees		0.18
Veterinary		6.44
Supplies		9.79
Fuel & oil		12.44
Repairs		10.14
Marketing		7.74
Miscellaneous		1.63
Total direct expenses		165.65
Return over direct expense		9.63
Overhead Expenses		
Farm insurance		6.19
Utilities		3.40
Interest		14.73
Mach & bldg depreciation		10.73
Miscellaneous		11.16
Total overhead expenses		46.22
Total dir & ovhd expenses		211.86
Net return		-36.59
Labor & management charge		68.43
Net return over lbr & mgt		-105.02
Cost of Production Per Cwt. Produced		
Total direct expense per unit		165.65
Total dir& ovhd expense per unit		211.86
With other revenue adjustments		214.39
With labor and management		282.82
Est. labor hours per unit		7.75
Other Information		
Number of ewes		32.4
Pregnancy percentage		97.5
Female turnover rate		3.70
Lambs born / ewe exposed		1.54
Lambs born / ewe lambing		1.58
Lambs weaned/ewe exposed		1.35
Lambs sold per ewe		1.23
Lamb dth loss (died/born)		13.6
Ewe death loss percentage		15.4
Ewes per FTE		228.6
Average weaning weight		48
Lb. weaned/exposed female		64
Feed cost per ewe		185.28
Avg wgt/Mkt Lambs sold		117
Avg price / cwt.		199.94

Livestock Enterprise Analysis
2015 Missouri FBMA Farm Summary
(Farms Sorted By Net Return)

Sheep, Market Lamb Prod -- Average Per Ewe

	<u>Avg. Of</u> <u>All Farms</u>	
Number of farms	5	
	Quantity	Value
Lambs sold (lb)	1.9	2.90
Mkt Lambs sold (lb)	137.4	274.73
Transferred out (lb)	5.6	5.86
Cull sales (lb)	5.7	3.88
Other income		-
Purchased (lb)	-8.3	-13.15
Transferred in (lb)	-5.6	-5.86
Inventory change (lb)	23.2	8.52
Gross margin		276.88
Direct Expenses		
Protein Vit Minerals (lb.)	46.3	16.75
Creep / Starter (lb.)	98.8	18.67
Complete Ration (lb.)	197.5	36.38
Corn (bu.)	4.3	16.35
Hay, Alfalfa (lb.)	925.6	73.02
Pasture (aum)	1.5	18.15
Other feed stuffs (lb)	161.5	5.96
Breeding fees		0.29
Veterinary		10.18
Supplies		15.47
Fuel & oil		19.64
Repairs		16.01
Marketing		12.22
Miscellaneous		2.57
Total direct expenses		261.67
Return over direct expense		15.20
Overhead Expenses		
Farm insurance		9.78
Utilities		5.37
Interest		23.27
Mach & bldg depreciation		16.96
Miscellaneous		17.63
Total overhead expenses		73.01
Total dir & ovhd expenses		334.68
Net return		-57.81
Labor & management charge		108.10
Net return over lbr & mgt		-165.90
Cost of Production Per Cwt. Produced		
Total direct expense per unit		165.65
Total dir & ovhd expense per unit		211.86
With other revenue adjustments		214.39
With labor and management		282.82
Est. labor hours per unit		12.25
Other Information		
Number of ewes		32.4
Pregnancy percentage		97.5
Female turnover rate		3.70
Lambs born / ewe exposed		1.54
Lambs born / ewe lambing		1.58
Lambs weaned/ewe exposed		1.35
Lambs sold per ewe		1.23
Lamb dth loss (died/born)		13.6
Ewe death loss percentage		15.4
Ewes per FTE		228.6
Average weaning weight		48
Lb. weaned/exposed female		64
Feed cost per ewe		185.28
Avg wgt/Mkt Lambs sold		117
Avg price / cwt.		199.94

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

This table summarizes whole-farm financial performance by net farm income. Farms are categorized into 5 groups from low to high net farm income.

Financial Summary by Farm Size (Gross Farm Income)

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

Financial Summary by Farm Type

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

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

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

Financial Summary
2015 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	132	26	26	27	26	27
Income Statement						
Gross cash farm income	522,632	1,444,762	273,160	107,955	185,027	614,666
Total cash farm expense	437,359	1,310,891	210,661	81,828	150,599	446,152
Net cash farm income	85,273	133,870	62,498	26,126	34,428	168,514
Inventory change	-66,302	-224,438	-60,614	-16,103	-1,414	-32,182
Depreciation	-25,787	-58,595	-23,969	-5,943	-9,803	-31,182
Net farm income from operations	-6,816	-149,162	-22,084	4,080	23,212	105,149
Gain or loss on capital sales	4,464	-1,237	1,478	-660	-28	22,279
Average net farm income	-2,352	-150,399	-20,607	3,420	23,184	127,428
Median net farm income	4,732	-99,832	-20,618	4,198	20,717	73,995
Profitability (cost)						
Rate of return on assets	-1.5 %	-5.1 %	-3.1 %	-1.2 %	1.4 %	3.0 %
Rate of return on equity	-3.5 %	-11.3 %	-4.7 %	-2.8 %	1.0 %	3.1 %
Operating profit margin	-6.8 %	-21.8 %	-19.5 %	-5.7 %	6.5 %	13.6 %
Asset turnover rate	21.8 %	23.5 %	16.0 %	21.9 %	21.1 %	22.5 %
Profitability (market)						
Rate of return on assets	1.6 %	-4.0 %	0.7 %	0.9 %	1.4 %	8.1 %
Rate of return on equity	1.1 %	-7.7 %	0.2 %	0.4 %	1.2 %	8.8 %
Operating profit margin	10.5 %	-22.1 %	6.0 %	7.0 %	10.0 %	55.9 %
Asset turnover rate	15.4 %	18.3 %	12.1 %	12.9 %	14.2 %	14.5 %
Liquidity & Repayment (end of year)						
Current assets	401,248	898,545	249,835	107,277	131,733	621,681
Current liabilities	166,926	539,197	79,589	15,930	59,299	147,184
Current ratio	2.40	1.67	3.14	6.73	2.22	4.22
Working capital	234,322	359,348	170,246	91,347	72,433	474,498
Working capital to gross inc	51.0 %	29.2 %	80.5 %	100.0 %	40.1 %	80.0 %
Term debt coverage ratio	0.12	-0.95	0.90	0.08	2.14	1.90
Replacement coverage ratio	0.08	-0.71	0.34	0.05	1.26	0.98
Term debt to EBITDA	8.01	-18.63	12.03	5.00	3.46	2.01
Solvency (end of year at cost)						
Number of farms	132	26	26	27	26	27
Total assets	1,692,963	3,262,437	1,299,430	441,217	880,333	2,594,852
Total liabilities	477,909	1,321,833	266,376	96,857	247,387	471,975
Net worth	1,215,054	1,940,604	1,033,054	344,360	632,946	2,122,877
Net worth change	-60,682	-195,131	-13,679	-2,527	26,444	-118,529
Farm debt to asset ratio	30 %	43 %	20 %	22 %	30 %	18 %
Total debt to asset ratio	28 %	41 %	20 %	22 %	28 %	18 %
Change in earned net worth %	-5 %	-9 %	-1 %	-1 %	4 %	-5 %
Solvency (end of year at market)						
Number of farms	132	26	26	27	26	27
Total assets	2,404,672	4,221,946	1,725,303	731,534	1,273,447	4,071,375
Total liabilities	477,909	1,321,833	266,376	96,857	247,387	471,975
Net worth	1,926,763	2,900,114	1,458,927	634,677	1,026,060	3,599,400
Total net worth change	-3,710	-200,404	30,583	9,333	32,831	104,444
Farm debt to asset ratio	21 %	33 %	15 %	13 %	20 %	11 %
Total debt to asset ratio	20 %	31 %	15 %	13 %	19 %	12 %
Change in total net worth %	0 %	-6 %	2 %	1 %	3 %	3 %
Nonfarm Information						
Net nonfarm income	30,474	34,547	50,924	17,123	30,855	19,845
Farms reporting living expenses	13	2	5	1	3	2
Total family living expense	42,022	-	47,208	-	-	-
Total living, invest, cap. purch	61,146	-	54,016	-	-	-
Crop Acres						
Total crop acres	718	1,442	498	262	273	1,119
Total crop acres owned	235	376	159	61	75	499
Total crop acres cash rented	242	627	190	35	112	254
Total crop acres share rented	241	440	149	166	85	366
Machinery value per crop acre	495	529	555	230	558	474

Financial Summary
2015 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	132	43	25	22	28	12
Income Statement						
Gross cash farm income	522,632	41,828	169,661	407,708	695,021	1,443,256
Total cash farm expense	437,359	35,043	131,890	327,575	516,214	1,196,526
Net cash farm income	85,273	6,786	37,771	80,133	178,807	246,730
Inventory change	-66,302	-66	-17,402	-42,848	-130,777	-225,072
Depreciation	-25,787	-2,906	-10,279	-23,508	-54,393	-75,011
Net farm income from operations	-6,816	3,814	10,090	13,777	-6,364	-53,353
Gain or loss on capital sales	4,464	37	1,247	12	571	45,019
Average net farm income	-2,352	3,851	11,338	13,789	-5,793	-8,335
Median net farm income	4,732	8,175	7,717	11,031	-30,237	-19,143
Profitability (cost)						
Rate of return on assets	-1.5 %	-0.9 %	-0.4 %	-0.6 %	-1.5 %	-2.6 %
Rate of return on equity	-3.5 %	-1.5 %	-1.9 %	-1.9 %	-2.6 %	-5.7 %
Operating profit margin	-6.8 %	-8.0 %	-2.1 %	-3.2 %	-7.4 %	-8.4 %
Asset turnover rate	21.8 %	11.0 %	20.4 %	18.1 %	20.1 %	30.9 %
Profitability (market)						
Rate of return on assets	1.6 %	-0.5 %	4.4 %	2.3 %	-1.1 %	5.6 %
Rate of return on equity	1.1 %	-0.8 %	4.7 %	2.2 %	-1.8 %	6.3 %
Operating profit margin	10.5 %	-6.3 %	41.3 %	19.5 %	-7.2 %	26.7 %
Asset turnover rate	15.4 %	7.4 %	10.8 %	11.8 %	15.0 %	21.1 %
Liquidity & Repayment (end of year)						
Current assets	401,248	76,513	147,701	356,312	595,651	1,091,721
Current liabilities	166,926	8,573	42,462	141,092	228,705	510,008
Current ratio	2.40	8.93	3.48	2.53	2.60	2.14
Working capital	234,322	67,940	105,239	215,220	366,946	581,713
Working capital to gross inc	51.0 %	166.5 %	68.4 %	62.6 %	63.2 %	46.7 %
Term debt coverage ratio	0.12	5.46	0.47	0.44	0.37	-0.19
Replacement coverage ratio	0.08	1.18	0.27	0.25	0.20	-0.12
Term debt to EBITDA	8.01	3.72	5.91	5.10	3.50	11.97
Solvency (end of year at cost)						
Number of farms	132	43	25	22	28	12
Total assets	1,692,963	411,213	848,545	1,672,338	2,796,520	3,531,496
Total liabilities	477,909	67,732	247,693	451,217	504,113	1,245,847
Net worth	1,215,054	343,481	600,852	1,221,121	2,292,407	2,285,650
Net worth change	-60,682	8,071	4,133	9,920	-47,261	-535,507
Farm debt to asset ratio	30 %	16 %	31 %	27 %	19 %	37 %
Total debt to asset ratio	28 %	16 %	29 %	27 %	18 %	35 %
Change in earned net worth %	-5 %	2 %	1 %	1 %	-2 %	-19 %
Solvency (end of year at market)						
Number of farms	132	43	25	22	28	12
Total assets	2,404,672	597,960	1,530,517	2,550,632	3,742,978	5,407,003
Total liabilities	477,909	67,732	247,693	451,217	504,113	1,245,847
Net worth	1,926,763	530,228	1,282,824	2,099,415	3,238,865	4,161,156
Total net worth change	-3,710	9,081	65,404	69,477	-49,325	-146,561
Farm debt to asset ratio	21 %	11 %	16 %	17 %	14 %	24 %
Total debt to asset ratio	20 %	11 %	16 %	18 %	13 %	23 %
Change in total net worth %	0 %	2 %	5 %	3 %	-2 %	-3 %
Nonfarm Information						
Net nonfarm income	30,474	27,629	29,810	28,988	37,473	31,799
Farms reporting living expenses	13	5	2	4	2	-
Total family living expense	42,022	45,482	-	-	-	-
Total living, invest, cap. purch	61,146	55,723	-	-	-	-
Crop Acres						
Total crop acres	718	76	327	925	1,101	2,469
Total crop acres owned	235	41	128	231	427	688
Total crop acres cash rented	242	15	85	121	356	1,358
Total crop acres share rented	241	20	113	573	319	423
Machinery value per crop acre	495	680	381	457	560	478

Financial Summary
2015 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	132	55	17	25	28
Income Statement					
Gross cash farm income	522,632	474,610	170,171	411,149	414,219
Total cash farm expense	437,359	372,449	148,033	312,602	335,677
Net cash farm income	85,273	102,161	22,138	98,547	78,541
Inventory change	-66,302	-75,754	-29,395	-58,519	-42,295
Depreciation	-25,787	-38,891	-2,900	-27,456	-16,538
Net farm income from operations	-6,816	-12,484	-10,157	12,572	19,708
Gain or loss on capital sales	4,464	3,820	-7	1,023	12,499
Average net farm income	-2,352	-8,663	-10,164	13,595	32,207
Median net farm income	4,732	-3,660	9,763	-4,757	14,432
Profitability (cost)					
Rate of return on assets	-1.5 %	-2.1 %	-4.8 %	-0.4 %	0.7 %
Rate of return on equity	-3.5 %	-3.7 %	-10.4 %	-1.7 %	-0.9 %
Operating profit margin	-6.8 %	-9.4 %	-40.5 %	-2.1 %	4.0 %
Asset turnover rate	21.8 %	22.6 %	11.8 %	19.1 %	18.5 %
Profitability (market)					
Rate of return on assets	1.6 %	6.3 %	-5.6 %	0.5 %	-4.0 %
Rate of return on equity	1.1 %	6.9 %	-8.8 %	0.0 %	-6.7 %
Operating profit margin	10.5 %	39.4 %	-73.5 %	4.6 %	-28.0 %
Asset turnover rate	15.4 %	16.0 %	7.7 %	11.4 %	14.2 %
Liquidity & Repayment (end of year)					
Current assets	401,248	419,634	122,531	377,723	402,289
Current liabilities	166,926	174,934	76,718	141,556	158,270
Current ratio	2.40	2.40	1.60	2.67	2.54
Working capital	234,322	244,700	45,813	236,167	244,020
Working capital to gross inc	51.0 %	62.8 %	32.3 %	66.7 %	60.6 %
Term debt coverage ratio	0.12	0.23	-1.52	0.33	0.88
Replacement coverage ratio	0.08	0.14	-0.84	0.21	0.48
Term debt to EBITDA	8.01	5.22	-30.43	4.58	6.73
Solvency (end of year at cost)					
Number of farms	132	55	17	25	28
Total assets	1,692,963	1,818,664	516,906	1,853,969	1,681,527
Total liabilities	477,909	412,152	218,695	473,269	557,508
Net worth	1,215,054	1,406,512	298,211	1,380,699	1,124,019
Net worth change	-60,682	-30,488	-9,545	-16,900	-167,985
Farm debt to asset ratio	30 %	23 %	47 %	25 %	37 %
Total debt to asset ratio	28 %	23 %	42 %	26 %	33 %
Change in earned net worth %	-5 %	-2 %	-3 %	-1 %	-13 %
Solvency (end of year at market)					
Number of farms	132	55	17	25	28
Total assets	2,404,672	2,613,207	781,529	2,987,958	2,234,436
Total liabilities	477,909	412,152	218,695	473,269	557,508
Net worth	1,926,763	2,201,055	562,834	2,514,688	1,676,928
Total net worth change	-3,710	150,327	-26,209	2,306	-261,512
Farm debt to asset ratio	21 %	16 %	31 %	15 %	29 %
Total debt to asset ratio	20 %	16 %	28 %	16 %	25 %
Change in total net worth %	0 %	7 %	-4 %	0 %	-13 %
Nonfarm Information					
Net nonfarm income	30,474	28,498	28,287	36,658	29,985
Farms reporting living expenses	13	4	3	2	4
Total family living expense	42,022	-	-	-	-
Total living, invest, cap. purch	61,146	-	-	-	-
Crop Acres					
Total crop acres	718	1,029	73	759	503
Total crop acres owned	235	265	31	363	220
Total crop acres cash rented	242	381	17	184	114
Total crop acres share rented	241	383	25	212	169
Machinery value per crop acre	495	505	677	468	505

Financial Summary
2015 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	132	79	27	20	6
Income Statement					
Gross cash farm income	522,632	337,355	443,737	1,444,266	245,021
Total cash farm expense	437,359	248,399	361,708	1,357,230	199,527
Net cash farm income	85,273	88,956	82,029	87,036	45,495
Inventory change	-66,302	-50,182	-65,474	-131,221	-65,867
Depreciation	-25,787	-26,010	-25,535	-31,932	-3,508
Net farm income from operations	-6,816	12,764	-8,980	-76,117	-23,879
Gain or loss on capital sales	4,464	4,745	8,880	-1,267	-
Average net farm income	-2,352	17,509	-100	-77,385	-23,879
Median net farm income	4,732	8,571	2,108	-23,803	15,662
Profitability (cost)					
Rate of return on assets	-1.5 %	-0.7 %	-2.2 %	-2.3 %	-4.9 %
Rate of return on equity	-3.5 %	-1.1 %	-5.5 %	-11.0 %	-19.3 %
Operating profit margin	-6.8 %	-3.5 %	-9.6 %	-8.8 %	-31.1 %
Asset turnover rate	21.8 %	19.4 %	23.3 %	25.9 %	15.9 %
Profitability (market)					
Rate of return on assets	1.6 %	3.1 %	1.4 %	-2.1 %	-3.9 %
Rate of return on equity	1.1 %	3.1 %	0.7 %	-8.5 %	-14.6 %
Operating profit margin	10.5 %	25.5 %	7.8 %	-9.0 %	-25.8 %
Asset turnover rate	15.4 %	12.1 %	17.8 %	23.0 %	15.2 %
Liquidity & Repayment (end of year)					
Current assets	401,248	340,470	322,174	806,975	204,914
Current liabilities	166,926	42,648	218,456	583,349	183,302
Current ratio	2.40	7.98	1.47	1.38	1.12
Working capital	234,322	297,822	103,717	223,626	21,612
Working capital to gross inc	51.0 %	100.8 %	27.8 %	17.1 %	11.7 %
Term debt coverage ratio	0.12	1.41	0.15	-0.45	-1.39
Replacement coverage ratio	0.08	0.46	0.11	-0.40	-1.22
Term debt to EBITDA	8.01	1.60	10.30	55.68	-24.54
Solvency (end of year at cost)					
Number of farms	132	79	27	20	6
Total assets	1,692,963	1,515,192	1,615,029	2,794,197	713,528
Total liabilities	477,909	126,928	627,067	1,654,350	506,476
Net worth	1,215,054	1,388,264	987,962	1,139,847	207,052
Net worth change	-60,682	-67,498	1,963	-127,070	-31,548
Farm debt to asset ratio	30 %	9 %	39 %	60 %	69 %
Total debt to asset ratio	28 %	8 %	39 %	59 %	71 %
Change in earned net worth %	-5 %	-5 %	0 %	-10 %	-13 %
Solvency (end of year at market)					
Number of farms	132	79	27	20	6
Total assets	2,404,672	2,441,507	2,118,453	3,141,194	752,576
Total liabilities	477,909	126,928	627,067	1,654,350	506,476
Net worth	1,926,763	2,314,580	1,491,386	1,486,844	246,100
Total net worth change	-3,710	7,831	60,702	-129,576	-25,967
Farm debt to asset ratio	21 %	6 %	30 %	53 %	66 %
Total debt to asset ratio	20 %	5 %	30 %	53 %	67 %
Change in total net worth %	0 %	0 %	4 %	-8 %	-10 %
Nonfarm Information					
Net nonfarm income	30,474	31,274	34,470	25,695	17,889
Farms reporting living expenses	13	7	5	1	-
Total family living expense	42,022	35,937	46,913	-	-
Total living, invest, cap. purch	61,146	51,356	78,688	-	-
Crop Acres					
Total crop acres	718	563	964	1,163	173
Total crop acres owned	235	291	164	177	9
Total crop acres cash rented	242	130	360	591	25
Total crop acres share rented	241	142	440	396	139
Machinery value per crop acre	495	581	482	349	393

Financial Summary
2015 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	132	14	23	21	27	47
Income Statement						
Gross cash farm income	522,632	138,362	366,778	1,102,512	523,230	453,925
Total cash farm expense	437,359	121,743	316,799	1,010,054	412,085	349,004
Net cash farm income	85,273	16,618	49,978	92,458	111,146	104,921
Inventory change	-66,302	-1,859	-30,191	-122,999	-72,871	-74,062
Depreciation	-25,787	-5,839	-21,401	-42,652	-37,562	-19,576
Net farm income from operations	-6,816	8,920	-1,613	-73,193	712	11,284
Gain or loss on capital sales	4,464	-	448	295	-26	12,201
Average net farm income	-2,352	8,920	-1,166	-72,898	687	23,485
Median net farm income	4,732	8,330	4,198	-9,227	13,389	6,418
Profitability (cost)						
Rate of return on assets	-1.5 %	0.2 %	-1.4 %	-4.9 %	-0.4 %	-0.8 %
Rate of return on equity	-3.5 %	-3.5 %	-4.8 %	-9.8 %	-2.2 %	-1.7 %
Operating profit margin	-6.8 %	0.7 %	-5.7 %	-16.7 %	-2.6 %	-4.0 %
Asset turnover rate	21.8 %	28.5 %	24.2 %	29.1 %	16.6 %	21.2 %
Profitability (market)						
Rate of return on assets	1.6 %	-0.3 %	-0.6 %	-2.3 %	0.6 %	3.9 %
Rate of return on equity	1.1 %	-3.7 %	-3.0 %	-5.2 %	-0.3 %	4.0 %
Operating profit margin	10.5 %	-1.0 %	-3.0 %	-8.9 %	5.0 %	31.8 %
Asset turnover rate	15.4 %	25.8 %	21.4 %	25.6 %	12.5 %	12.4 %
Liquidity & Repayment (end of year)						
Current assets	401,248	108,037	252,155	545,634	531,114	422,432
Current liabilities	166,926	63,703	163,078	260,828	236,774	117,476
Current ratio	2.40	1.70	1.55	2.09	2.24	3.60
Working capital	234,322	44,334	89,077	284,806	294,340	304,957
Working capital to gross inc	51.0 %	33.4 %	28.4 %	29.0 %	63.9 %	77.3 %
Term debt coverage ratio	0.12	2.04	0.67	-0.81	0.28	0.36
Replacement coverage ratio	0.08	1.53	0.53	-0.61	0.16	0.18
Term debt to EBITDA	8.01	4.91	8.40	-56.10	7.40	4.01
Solvency (end of year at cost)						
Number of farms	132	14	23	21	27	47
Total assets	1,692,963	389,044	1,274,615	1,846,159	2,374,911	1,825,880
Total liabilities	477,909	205,019	548,483	704,701	732,410	277,123
Net worth	1,215,054	184,025	726,132	1,141,457	1,642,501	1,548,757
Net worth change	-60,682	20,148	9,941	-111,832	-34,564	-111,469
Farm debt to asset ratio	30 %	53 %	43 %	38 %	32 %	17 %
Total debt to asset ratio	28 %	53 %	43 %	38 %	31 %	15 %
Change in earned net worth %	-5 %	12 %	1 %	-9 %	-2 %	-7 %
Solvency (end of year at market)						
Number of farms	132	14	23	21	27	47
Total assets	2,404,672	425,865	1,456,376	2,130,108	3,147,318	3,154,214
Total liabilities	477,909	205,019	548,483	704,701	732,410	277,123
Net worth	1,926,763	220,846	907,893	1,425,406	2,414,908	2,877,091
Total net worth change	-3,710	18,491	14,706	-72,687	-6,710	13,206
Farm debt to asset ratio	21 %	48 %	38 %	33 %	24 %	10 %
Total debt to asset ratio	20 %	48 %	38 %	33 %	23 %	9 %
Change in total net worth %	0 %	9 %	2 %	-5 %	0 %	0 %
Nonfarm Information						
Net nonfarm income	30,474	24,036	38,019	36,121	29,663	26,643
Farms reporting living expenses	13	2	3	3	1	4
Total family living expense	42,022	-	-	-	-	-
Total living, invest, cap. purch	61,146	-	-	-	-	-
Crop Acres						
Total crop acres	718	237	816	719	844	741
Total crop acres owned	235	7	109	98	339	365
Total crop acres cash rented	242	78	336	299	232	225
Total crop acres share rented	241	152	371	321	273	151
Machinery value per crop acre	495	276	303	550	574	543

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 2015 “average” or “mean” net farm income of the 132 farms in this summary was -\$2,352. This is found by simply adding the NFI of each farm in the group to a total and then dividing by 132 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 2015, the “average” or “mean” NFI for 132 farms in the summary was -\$2,352. However, the NFI of the “median”, or farm at the half-way point, was \$3,153. This indicates there were a group of farms with high NFI’s included in the group that more than offset lower NFI’s of farms at the other end of the scale.

The “median” figures for selected factors on 2015 FBMA farms are reported on page 43 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 2015

Benchmark Report, 132 Farms

	Group Median	Count	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Gross cash farm income	234,346	132	16,958	29,529	61,085	115,161	195,316	358,239	481,614	623,331	785,677	1,462,344
Total cash operating expense	210,108	132	1,336,673	644,164	497,655	364,138	245,350	141,831	84,885	44,277	25,196	10,739
Net cash farm income	39,038	132	-18,908	-3,660	5,441	16,884	30,943	49,559	79,745	113,159	187,402	332,381
Inventory change	-25,086	132	-345,978	-190,817	-76,141	-43,628	-33,258	-13,784	-2,312	600	13,556	62,714
Depreciation	-7,509	132	-102,292	-65,768	-34,364	-18,330	-8,974	-5,710	-3,651	-1,483	0	0
Net farm income from operations	2,572	132	-257,125	-75,440	-30,669	-15,616	-3,451	8,518	16,884	29,796	52,227	145,993
Gain or Loss from capital sales	0	132	-542	0	0	0	0	0	0	0	0	4,000
Net farm income	3,153	132	-185,555	-69,461	-22,798	-15,583	-2,162	8,490	16,884	31,608	53,246	145,993
Rate of return on assets (cost)	-1.0	132	-12.7	-8.1	-4.6	-3.3	-1.9	-0.4	0.9	3.0	5.3	11.3
Rate of return on equity (cost)	-2.5	132	-41.0	-13.9	-10.2	-7.0	-3.3	-1.6	0.9	2.5	5.6	12.8
Operating profit margin (cost)	-5.1	132	-168.2	-41.5	-25.3	-17.8	-8.1	-2.3	4.8	16.8	23.9	41.4
Asset turnover rate (cost)	20.4	132	2.6	8.5	12.4	16.2	19.1	21.0	24.1	27.6	38.8	51.5
Rate of return on assets (mkt)	-0.4	132	-12.4	-6.4	-3.9	-2.1	-0.8	0.0	0.9	2.6	6.9	13.8
Rate of return on equity (mkt)	-1.7	132	-26.0	-10.0	-7.2	-4.0	-2.4	-0.7	0.8	2.5	7.7	17.9
Operating profit margin (mkt)	-2.7	132	-180.9	-52.0	-27.8	-11.2	-5.3	-0.2	8.5	19.4	34.2	90.0
Asset turnover rate (mkt)	14.7	132	2.2	5.4	7.7	9.5	13.5	15.8	18.6	23.1	32.7	48.1
Current ratio	2.23	132	0.58	0.95	1.11	1.39	1.92	3.06	4.94	7.77	13.47	30.55
Working capital	93,561	132	-41,688	1,159	14,648	43,390	78,670	118,340	195,334	274,692	509,531	1,056,499
Working capital to revenue ratio	59.6	132	-18.1	3.1	18.8	36.4	51.4	68.9	95.2	116.4	160.7	362.3
Term debt coverage ratio	0.00	132	-3.25	-1.17	-0.62	-0.14	0.00	0.00	0.00	0.83	1.69	4.07
Replacement coverage ratio	0.18	132	-5.05	-1.36	-0.74	-0.29	-0.03	0.41	0.94	1.46	2.31	7.51
Term debt to EBITDA	0.00	132	36.59	7.48	3.44	1.30	0.27	0.00	0.00	0.00	-2.34	-22.84
Total assets	1,576,658	132	108,585	345,348	633,118	788,041	1,287,272	1,895,682	2,548,792	3,157,529	4,430,956	8,449,162
Total liabilities	208,834	132	1,844,383	828,262	537,853	367,360	246,236	149,870	73,391	15,214	0	0
Net worth	1,239,713	132	96,075	243,414	394,070	551,579	1,038,350	1,398,566	2,045,667	2,734,904	3,655,536	7,314,393
Change in retained earnings	-3,829	132	-269,826	-112,986	-41,593	-18,820	-8,414	-40	10,397	22,623	44,699	114,276
Net worth change	-869	132	-318,899	-101,114	-55,927	-18,750	-7,623	4,273	14,157	29,225	62,419	404,125
Farm debt to asset ratio	13	132	65	47	35	25	17	11	6	1	0	0
Total debt to asset ratio	13	132	63	47	35	25	16	11	6	1	0	0
Change in earned net worth %	-1	132	-21	-11	-6	-3	-1	0	2	5	9	36
Net nonfarm income	15,806	132	0	0	0	2,162	8,466	20,623	32,932	50,430	67,953	96,224
Family living / owner withdrawals	36,055	132	119,442	78,792	64,885	55,811	45,339	29,320	17,556	1,618	0	0
Income tax (accrued)	0	132	35,025	13,051	8,540	4,835	0	0	0	0	0	0
Farm capital purchases	26,950	132	0	0	3,800	11,763	21,101	46,871	83,981	113,323	228,500	453,791
Total crop acres	407	132	0	10	68	140	293	534	783	1,102	1,529	2,833
Crop acres owned	87	132	0	0	0	20	61	107	157	302	528	937
Crop acres cash rented	0	132	0	0	0	0	0	47	122	232	463	1,238
Crop acres share rented	23	132	0	0	0	0	0	76	148	323	584	1,046
Machinery investment per acre	424	132	1,503	907	723	603	465	404	308	164	11	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 (Total Farm Operating Expense – Farm Interest Expense) ÷ 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 Depreciation ÷ 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 Farm Interest Expenses ÷ 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 Net Farm Income ÷ 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.

