



# Missouri

## 2019

### Farm Business Management Analysis Record Summary

[adultaged.missouri.edu](http://adultaged.missouri.edu)

Agricultural Education and Leadership  
Division of Applied Social Sciences  
College of Agriculture, Food and Natural Resources  
University of Missouri - Columbia

# EXECUTIVE SUMMARY

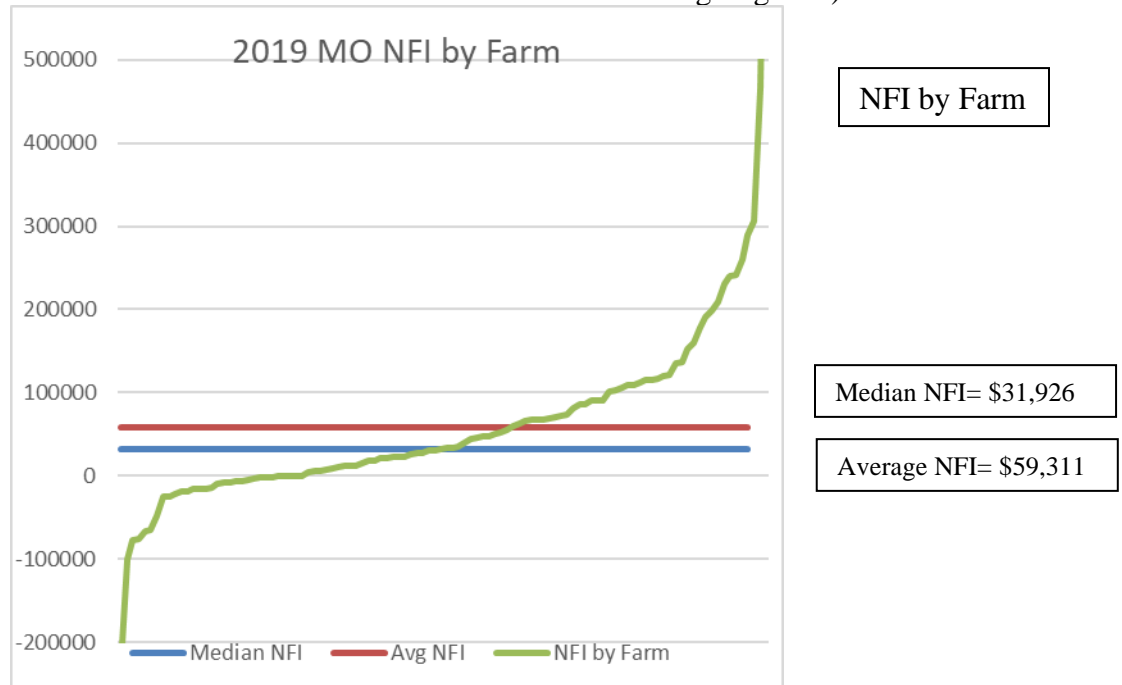
## 2019 ANNUAL REPORT OF MISSOURI FARM BUSINESS MANAGEMENT ANALYSIS PROGRAM

By  
Bruce Fowler, Missouri FBMA Specialist

The average net farm income (NFI) for the 109 farms included in the 2019 annual report of the Missouri Farm Business Management Analysis Program was \$59,311. As is the case every year, there was a wide range in income among program participants. The lowest 20% of the farms (21) showed an average NFI of -\$53,321, while the highest 20% (22) averaged \$226,379. Of the 109 farms, 31 had a negative net farm income.

Median net farm income, or the income earned by the middle farm, was \$31,926.

**2019 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 109 FBMA farms was 52.3 years, with a range from 95 years old down to 18 years old. The average years in farming was 28.2 years, with a range from 76 years to 1 year.
- The net farm income/unpaid labor hour averaged \$42.48 and ranged from -\$36.62 in the low profit group to \$109.29 in the high profit group. This figure is used for comparison to a per-hour wage in non-farm occupations. Average hourly hired labor wage paid was \$17.72.

- Government payments (including CRP, but not crop insurance proceeds) averaged \$52,839 representing approximately 8.79% of the gross cash farm income. This is 70% higher than the 5.15% that government payments were of 2018 GFCL.
- 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 one income source increased their share of the total by more than two percentage points from 2018. Government Payments increased from 5.1% in 2018 to 8.79% in 2019. Beef income and soybean income both decreased by more than two percentage points with beef dropping to 7.95% in 2019 from 10.6% of gross income in 2018 and soybean income dropping from 26.7% in 2018 to 23.4% in 2019. All other income sources remained within two percent of where they were in 2018.
  - While total expenses increased by 4.5% from 2018 to 2019, no expense sources changed by more than 2% from 2018 to 2019.

### 2019 Missouri FBMA Income Sources

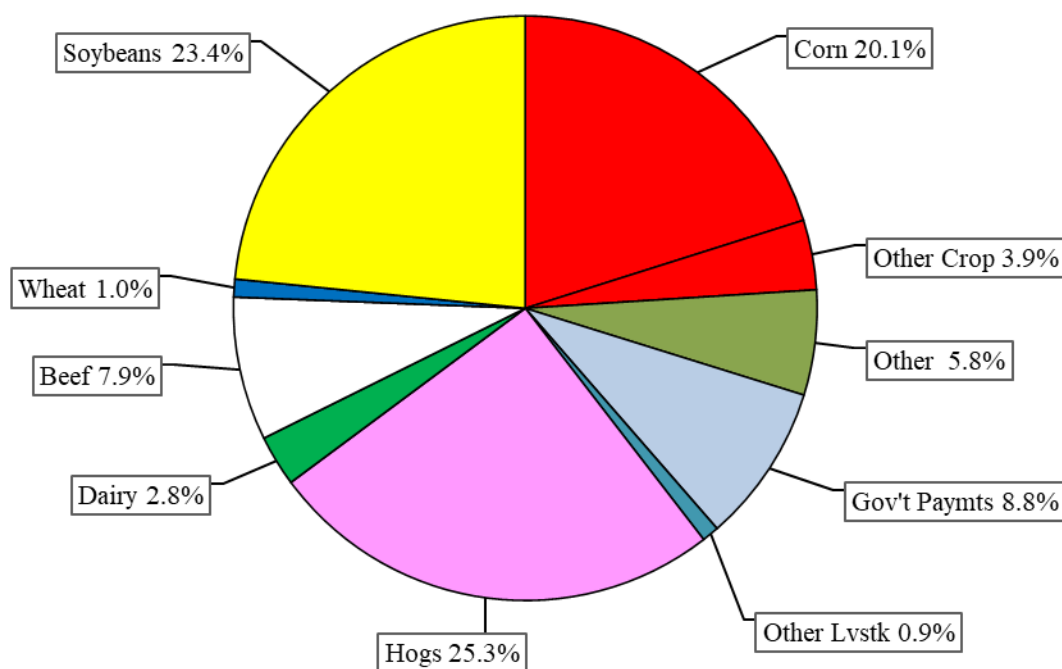


Figure 2

### 2019 Missouri FBMA Expense Sources

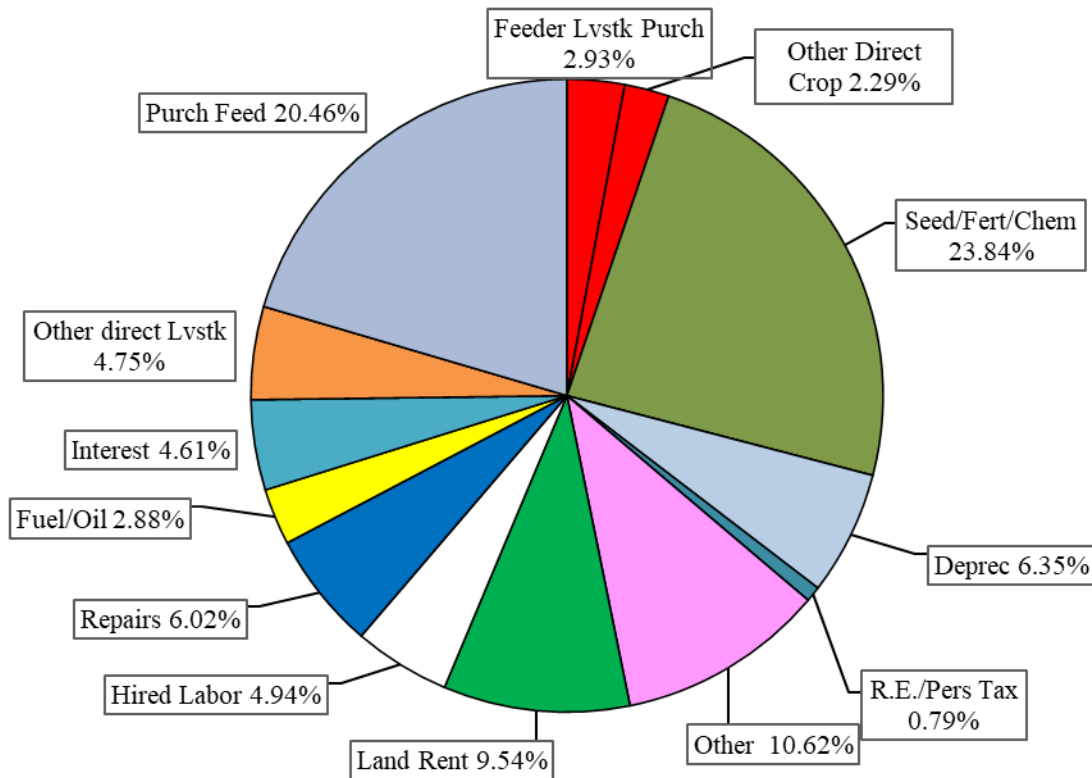


Figure 3

- The average rates of returns on assets (ROA) and equity (ROE) each increased half a percentage point in comparing 2019 to 2018 on the cost value balance sheets. ROA moved from 2.3% in 2018 to 2.8% in 2019 and ROE also increased, moving from 1.3% in 2018 to 1.8% in 2019.

### 2019 Rate of Return on Assets by Type (Cost)

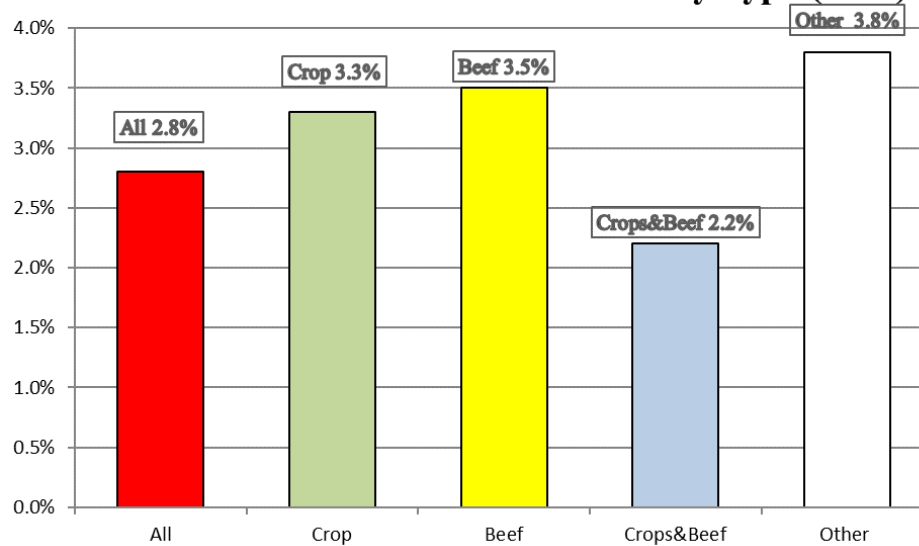


Figure 4

- On the cost balance sheet, the average farm reported net worth increase of \$63,305. The average farm market value balance sheet increased \$104,183. The average farm debt to asset ratio (farm) was 22% at market values and 9% at cost values. The average farm borrowed \$284,739 and paid \$269,932 in principal payments in 2019.

### 2019 Rate of Return on Assets by Type (Market)

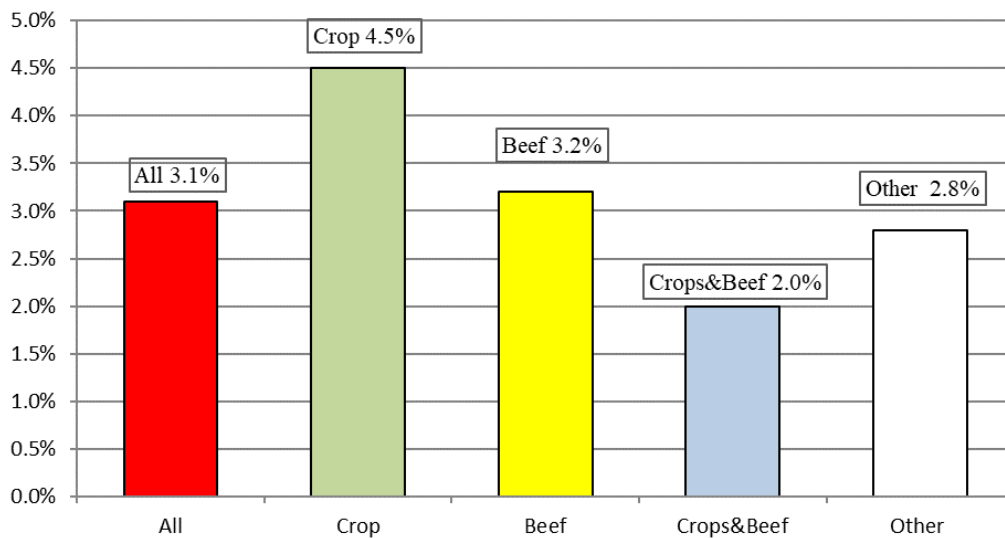


Figure 5

- Average gross cash income increased 1.8% from 2018, while cash expenses increased by 3.8 %.
- Gross Crop Income accounted for 47.8% (excluding government payments) of gross farm income (up from 46.6% in 2018), while Gross Livestock Income was 36.1% (down from 37.3% in 2018). Government Payments were 8.3% of gross farm income in 2019, up from 4.6% in 2018.

### Crops

- Corn yields averaged 130.4 bushels per acre, almost 12 bushels lower than the 142.1 bushel average in the 2018 crop. Soybeans yields decreased to 46.3 bushels per acre, nearly 3 bushels per acre less than 49.16 bushels per acre in 2018. Wheat yields decreased from 54.98 bushels per acre in 2018 to 52.4 bushels per acre in 2019.
- The average price received for a bushel of corn in 2019 was \$3.76, a \$.34 increase over the previous year's price of \$3.42. The average price received for soybeans in 2017 moved from \$9.44 in 2018 to 8.63 in 2019, a \$0.81 decrease. Wheat prices averaged \$4.91 in 2019, a \$0.01 increase from the 2018 average of \$4.90. A major decrease was also seen in the price received for mixed grass hay in 2019, moving to \$676.59 per ton in 2019 from \$88.73 per ton in 2018.

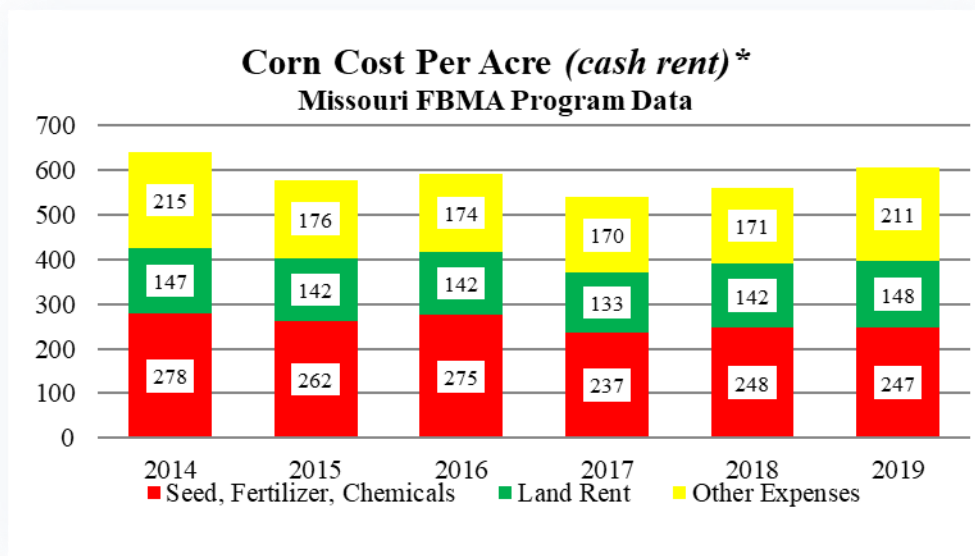


Figure 6

\* FBMA farms that included a complete crop enterprise analysis, including all direct and overhead costs (25 farms with cash rent corn in 2019).

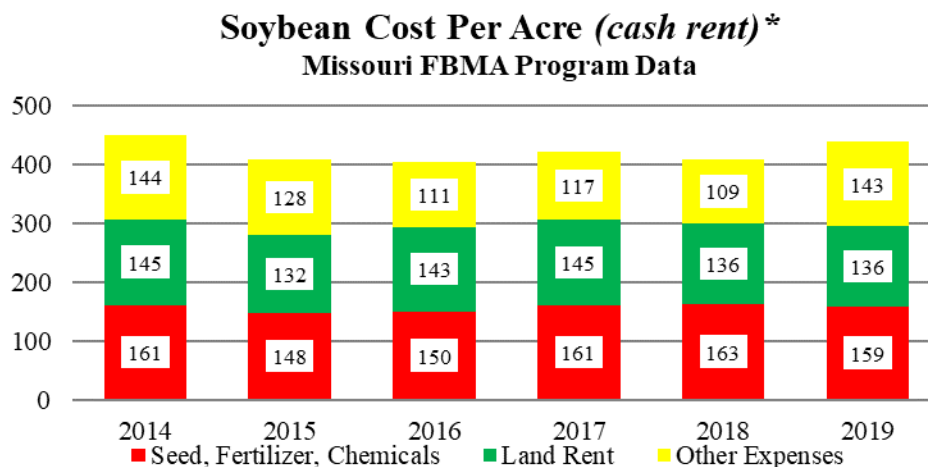


Figure 7

\* FBMA farms that included a complete crop enterprise analysis, including all direct and overhead costs (33 farms with cash rent soybeans in 2019).

### Livestock

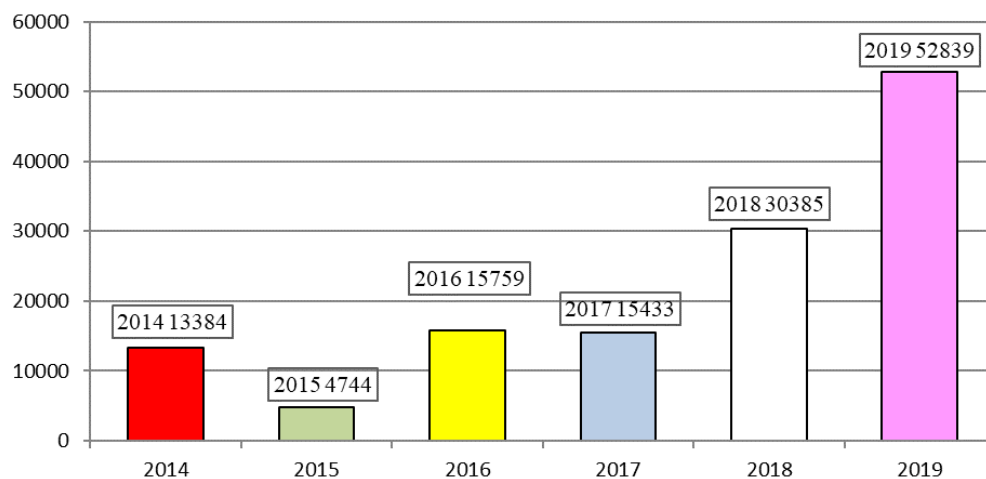
- Average price received per hundred weight for the beef cow-calf enterprise increased to \$171.06 in 2019 from \$165.59 in 2018. The average weight of beef calves sold in 2019 was 515 pounds compared to 540 pounds average in 2018. 25 farms completed a beef cow-calf enterprise analysis in 2019.

- 6 farms completed a hogs, farrow to finish production enterprise analysis for 2019. These farms had a return over direct and overhead expenses of \$47.84 per litter, and a return over all costs (including labor and management) of \$30.13 per litter. On a per hundredweight of carcass sold basis, these farms had a return over direct expenses of \$7.81 and net return over all costs (including labor and management) of \$1.67.

### **Observations from the 2019 Summary**

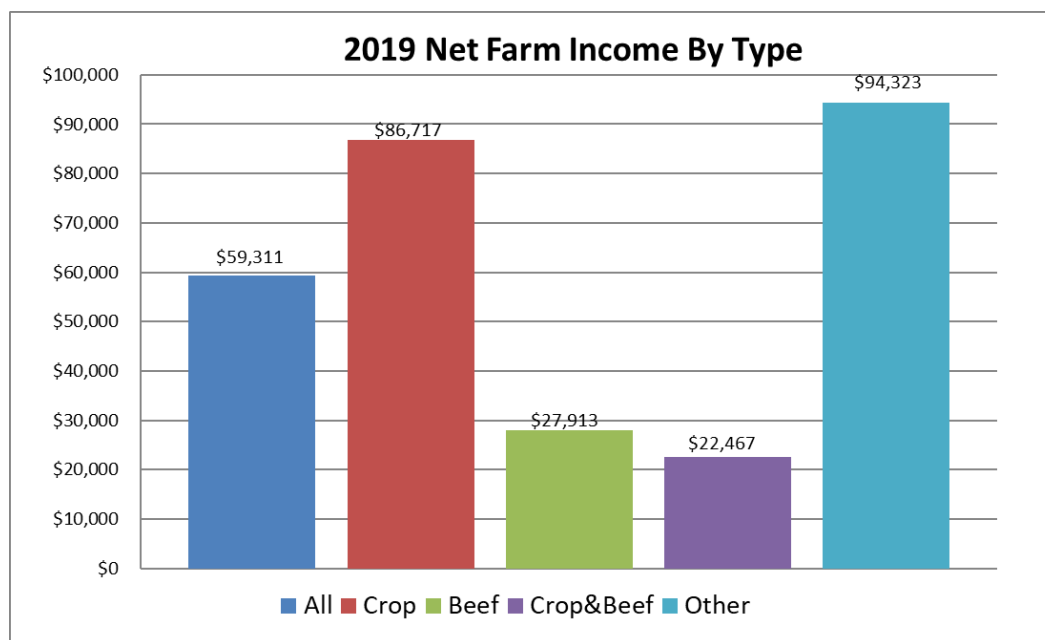
- Even though making comparisons between annual record summaries is imperfect when a few farms drop out and new farms are added each year, a large percentage of the farms in the summary are the same ones as 2018, so it is reasonable to make several general observations when comparing this year's summary to 2018.
- Missouri experienced weather challenges again in 2019, with much of the state getting a late start to planting season due to extremely wet conditions. Some areas experienced good growing conditions while others proved to be quite challenging. Corn yields range from 204 bushels per acre to zero, and soybean yields were even more variable ranging from over 100 bushels per acre to zero.

### **Government Payments per average farm Comparison Missouri FBMA 2014-2019**



- The average Missouri FBMA farm received \$52,839 in government payments in 2019. This is a \$22,454 increase from 2018, and \$37,406 more than received in 2017.
- Missouri FBMA cow-calf producers experienced another challenging year in 2019. On a per cow basis, the average farm had a negative return over direct expenses of -\$14.13. This compares to a positive return over direct expenses of \$162.73 in 2018. Average feed cost per cow for 2018 was \$420.21, nearly \$50 less than the 2019 average of \$469.14. There were 25 farms reporting a cow-calf enterprise for the 2019 Missouri FBMA Summary.

- The 109 farms in the report were classified by type (e.g. crop, beef, hog) on the basis of having at least 70% of gross sales in each category (reference page 39). Using this 70% rule, there were 50 crop farms, 16 beef farms, 18 crop and beef farms, and 17 “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

### 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 109. 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.



# **\*2019 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 2019. 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 109 Missouri farms are included in this report. Additional farms' records were submitted, but omitted from the summary because of incomplete information at the time the report was prepared.

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

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

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

## **Missouri Farm Business Management Analysis Program Program Locations – 2019**

### Central / South Central / Southwest

Boonville	John Sponaugle
California	Dale Hodges
Fatima/ Westphalia	John Juergensmeyer
Lebanon	Craig Evans
Santa Fe (Alma)	Brittany Hemme
Sweet Springs	Dennis Dohrman

### Northeast

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

### Northwest

Chillicothe	Michael Slater & Jim Grozinger
Maryville	Jackie Lacy

## Table of Contents

	Page
<b>Whole-farm Report</b> .....	1
Detailed Farm Income Statement.....	4
Inventory Changes .....	6
Depreciation and Other Capital Adjustments .....	7
Profitability Measures .....	8
Liquidity Measures .....	9
Balance Sheet at COST Values.....	10
Balance Sheet at MARKET Values .....	11
Statement of Cash Flows .....	12
Financial Standards Measures.....	13
Crop Production and Marketing Summary .....	14
Household & Personal Expenses .....	15
Operator and Labor Information .....	16
Financial Summary (Farms Sorted By Net Farm Income) .....	17
Summary Farm Income Statement.....	18
Nonfarm Summary (Farms Sorted By Net Farm Income).....	19
Financial Summary Excluding Deferred Liabilities .....	20
FINPACK Scorecard Items .....	21
<b>Crop Reports</b> .....	22
Corn on Owned Land, Cash Rent, Share Rent, Rented Out .....	23
CRP .....	24
Hay, Mixed on Owned Land, Cash Rent, Share Rent. ....	25
Pasture on Owned Land, Cash Rent, Share Rent.....	26
Soybeans on Owned Land, Cash Rent, Share Rent, Rented Out .....	27
Wheat, Winter on Cash Rent .....	28
Custom Work .....	29
Rented Out .....	30
Prevent Plant on Owned Land, Cash Rent.....	31
<b>Livestock</b> .....	32
Beef Cow-Calf--Average Per Cwt. Produced.....	33
Beef Cow-Calf—Average Per Cow .....	34
Hogs, Farrow to Finish—Average per Cwt Carcass Sold .....	35
Hogs, Farrow to Finish—Average per Litter.....	36
<b>Financial Summary Tables</b> .....	37
Financial Summary of the Whole-Farm Analysis by Net Farm Income .....	38
Financial Summary—by Gross Farm Income .....	39
Financial Summary—Farm Type .....	40
Financial Summary—by Debt to Asset Ratio.....	41
Financial Summary—by Age of Operator .....	42
Percentile Rank Report w/Group Medians .....	43
Percentile Rank Report (various factors w/group median at left).....	44
<b>Appendices</b> .....	45
Appendix I - Whole Farm Analysis Procedures and Measures .....	45
Appendix II - Crop Enterprise Analysis Procedures and Measures .....	52
Appendix III - Livestock Enterprise Analysis Procedures and Measures .....	54

## Whole-Farm Report

The whole-farm report summarizes the financial performance of FBMA member farms in 2019. Each table includes the average of the 109 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 2019. Net Farm Income represents the return to the operator's and family's unpaid labor, management, and equity capital (net worth). It is the amount the farm contributed to owner family living, income taxes, and net worth growth. However, it does not include any asset appreciation, debt forgiveness or asset repossessions. The *Inventory Changes* and *Depreciation and Other Capital Adjustments* tables provide further detail on the non-cash adjustments made to calculate the accrual Net Farm Income.

### Profitability Measures

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

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

### Liquidity Measures

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

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

## **Balance Sheets**

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

Liabilities are the same on the cost and market tables.

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

## **Statement of Cash Flows**

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

## **Financial Standards Measures**

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

## **Crop Production and Marketing**

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

## **Household and Personal Expenses**

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

## **Operator and Labor Information**

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

## **Financial Summary**

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

**Farm Income Statement**  
**2019 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	109	21	22	22	22	22
<b>Cash Farm Income</b>						
Corn	120,671	73,095	51,295	126,715	104,673	245,412
Corn Silage	384	1,996	-	-	-	-
CRP	629	553	278	-	1,514	798
Grass Seed, Fescue	63	-	20	290	-	-
Grass Seed, Tall Fescue	89	-	-	-	-	443
Hay, Alfalfa	100	-	-	495	-	-
Hay, Mixed	1,220	892	134	1,426	2,864	771
Pasture	44	-	-	216	-	-
Sorghum, Grain	70	-	-	345	-	-
Soybeans	140,714	125,657	77,132	77,201	157,313	265,582
Wheat, Winter	5,923	9,256	956	1,512	6,432	11,613
Custom Work	3,117	-	843	-	4,902	9,700
Rented Out	1,799	221	91	-	8,544	68
Prevented planting	1,736	7,013	251	194	1,460	-
Miscellaneous crop income	481	332	154	19	1,026	867
Beef Bulls	132	-	656	-	-	-
Beef Cow-Calf, Beef Calves	22,656	16,363	13,940	28,087	22,657	31,947
Beef Backgrounding	17,550	76	921	47,551	27,854	10,555
Beef Finishing	7,331	-	-	19,787	-	16,534
Beef Finish Yearlings	115	538	-	55	-	-
Dairy, Milk	4,307	-	-	-	-	21,342
Hogs, Farrow To Finish, Raised Hog	150,503	708,249	-	3,885	36,101	29,633
Sheep, Feeder Lamb Prod, Fdr Lambs	35	45	132	-	-	-
Sheep, Market Lamb Prod, Mkt Lambs	2,218	1,452	1,219	6,553	1,829	-
Hogs, Weaning to Finish	1,696	8,803	-	-	-	-
Dairy Feeder	12,688	65,857	-	-	-	-
Cull breeding livestock	2,622	2,076	1,043	2,952	2,593	4,421
Misc. livestock income	691	151	412	217	1,570	1,083
Crop government payments	19,234	8,980	6,075	18,830	12,234	49,585
CRP payments	371	1,220	199	-	15	458
Other government payments	32,068	59,583	15,662	11,382	37,804	37,159
Conservation govt payment	537	54	-	741	1,870	-
Custom work income	6,034	1,740	704	1,524	4,020	21,987
Patronage dividends, cash	6,731	17,708	912	1,931	4,971	8,630
Crop insurance income	19,415	25,739	7,479	11,922	21,421	30,802
Property insurance income	410	530	-	171	396	960
Sale of resale items	3,533	-	59	6,981	3,316	7,150
Livestock insurance inc	29	-	142	-	-	-
Contract livestock income	56	-	-	-	275	-
Other farm income	13,305	4,338	6,332	3,346	9,878	42,224
Gross Cash Farm Income	601,307	1,142,516	187,040	374,327	477,530	849,722

**Farm Income Statement (continued)**  
**2019 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	109	21	22	22	22	22
<b>Cash Farm Expense</b>						
Seed and plants	44,526	32,080	15,250	30,928	49,143	94,665
Fertilizer	57,909	52,478	22,306	50,856	60,820	102,841
Crop chemicals	32,179	29,920	16,931	24,812	40,214	48,917
Crop insurance	8,921	5,793	3,106	7,429	7,459	20,677
Drying expense	540	164	184	492	1,339	504
Crop storage	384	635	17	20	198	1,061
Irrigation energy	50	-	-	-	-	246
Crop miscellaneous	3,015	213	940	610	1,526	11,661
Feeder livestock purchase	16,550	17,639	-	33,330	17,770	14,063
Livestock storage	638	471	311	577	426	1,396
Purchased feed	115,525	471,376	4,441	30,263	37,627	50,092
Breeding fees	3,458	17,252	92	80	-	492
Veterinary	10,767	44,007	666	1,368	4,664	4,640
Supplies	2,363	8,344	673	1,670	204	1,193
Contract production exp.	10,310	52,417	-	-	1,044	-
Livestock leases	1,477	7,667	-	-	-	-
Grazing fees	174	-	-	-	-	864
Interest	26,035	60,465	13,146	9,432	21,137	27,558
Fuel & oil	16,279	15,185	5,914	10,767	20,163	29,317
Repairs	34,010	42,117	15,407	22,970	24,606	65,318
Custom hire	10,267	8,265	5,118	10,188	7,696	19,977
Hired labor	27,919	78,597	4,436	9,510	18,226	31,132
Land rent	53,850	82,948	29,357	47,505	48,545	62,216
Machinery leases	2,348	2,115	-	2,061	4,364	3,190
Building leases	363	6	-	5	1,629	159
Real estate taxes	2,699	3,785	1,513	1,132	2,621	4,492
Personal property taxes	1,736	2,760	957	996	1,315	2,696
Farm insurance	8,978	11,576	3,704	4,501	9,095	16,134
Utilities	7,516	21,184	2,363	2,408	4,609	7,637
Marketing	5,663	26,281	353	12	1,747	861
Dues & professional fees	2,141	4,894	785	399	2,458	2,293
Purchase of resale items	2,692	44	-	3,777	6,039	3,479
Miscellaneous	17,628	24,609	7,564	9,339	8,580	38,368
Total cash expense	528,909	1,125,283	155,532	317,435	405,265	668,139
Net cash farm income	72,398	17,233	31,507	56,892	72,266	181,584
<b>Inventory Changes</b>						
Prepays and supplies	846	472	-6,833	2,913	6,413	1,247
Accounts receivable	-3,530	-10,606	6,883	-5,787	-1,350	-7,114
Hedging accounts	-1,086	-2,041	1,137	363	426	-5,356
Other current assets	127	-158	1,001	385	992	-1,595
Crops and feed	22,258	-44,413	-3,339	-3,231	37,751	121,490
Market livestock	5,897	32,498	1,259	683	-5,100	1,355
Breeding livestock	-2,632	-2,325	-4,271	-130	-2,659	-3,760
Other assets	2,336	-11	-122	-324	1,137	10,895
Accounts payable	-416	-2,164	878	-106	-839	70
Accrued interest	-1,510	-2,500	-289	355	-5,195	33
Total inventory change	22,290	-31,250	-3,698	-4,878	31,576	117,266
Net operating profit	94,688	-14,017	27,809	52,013	103,842	298,850
<b>Depreciation</b>						
Machinery and equipment	-30,785	-25,231	-21,490	-16,293	-23,441	-67,219
Titled vehicles	-2,104	-2,488	-2,495	-742	-1,699	-3,114
Buildings and improvements	-2,956	-915	-1,071	-265	-8,214	-4,224
Total depreciation	-35,845	-28,634	-25,056	-17,300	-33,353	-74,556
Net farm income from operations	58,842	-42,651	2,753	34,713	70,489	224,293
Gain or loss on capital sales	469	-10,670	1,278	-1,282	10,429	2,085
Net farm income	59,311	-53,321	4,032	33,431	80,917	226,379



**Inventory Changes**  
**2019 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	109	21	22	22	22	22
Net cash farm income	72,398	17,233	31,507	56,892	72,266	181,584
<b>Crops and Feed</b>						
Ending inventory	239,421	165,529	116,356	148,593	212,711	550,557
Beginning inventory	217,163	209,942	119,695	151,824	174,959	429,066
Inventory change	22,258	-44,413	-3,339	-3,231	37,751	121,490
<b>Market Livestock</b>						
Ending inventory	102,721	335,903	11,986	66,541	44,655	65,120
Beginning inventory	96,824	303,405	10,727	65,858	49,755	63,765
Inventory change	5,897	32,498	1,259	683	-5,100	1,355
<b>Accts Receivable</b>						
Ending inventory	15,113	36,469	8,321	7,848	8,420	15,478
Beginning inventory	18,644	47,076	1,438	13,635	9,770	22,591
Inventory change	-3,530	-10,606	6,883	-5,787	-1,350	-7,114
<b>Prepaid Expenses and Supplies</b>						
Ending inventory	39,983	28,765	20,728	21,980	43,268	84,666
Beginning inventory	39,138	28,294	27,561	19,067	36,855	83,419
Inventory change	846	472	-6,833	2,913	6,413	1,247
<b>Hedging Activities</b>						
Ending inventory	2,449	5,733	2,542	1,466	435	2,218
Withdrawals	936	4,286	-	114	432	-
Beginning inventory	1,524	4,132	1,405	1,103	439	659
Deposits	2,946	7,929	-	114	2	6,915
Gain or loss	-1,086	-2,041	1,137	363	426	-5,356
<b>Other Current Assets</b>						
Ending inventory	3,752	2,831	1,831	2,852	5,928	5,275
Beginning inventory	3,625	2,990	831	2,467	4,936	6,870
Inventory change	127	-158	1,001	385	992	-1,595
<b>Breeding Livestock</b>						
Ending inventory	65,606	89,312	37,556	79,301	33,178	89,758
Capital sales	7,834	29,193	1,376	1,750	4,051	3,774
Beginning inventory	66,429	101,733	38,600	72,284	34,230	86,901
Capital purchases	9,643	19,098	4,604	8,897	5,657	10,391
Depreciation, capital adjust	-2,632	-2,325	-4,271	-130	-2,659	-3,760
<b>Other Capital Assets</b>						
Ending inventory	91,598	57,080	11,110	2,933	38,881	346,415
Capital sales	857	-	-	-	4,248	-
Beginning inventory	89,884	57,044	11,232	2,933	41,992	334,728
Capital purchases	234	48	-	324	-	792
Depreciation, capital adjust	2,336	-11	-122	-324	1,137	10,895
<b>Accounts Payable</b>						
Beginning inventory	8,818	32,114	3,486	1,038	2,251	6,258
Ending inventory	9,234	34,278	2,609	1,144	3,091	6,188
Inventory change	-416	-2,164	878	-106	-839	70
<b>Accrued Interest</b>						
Beginning inventory	8,105	14,865	3,461	6,516	8,744	7,250
Ending inventory	9,616	17,365	3,750	6,161	13,939	7,216
Inventory change	-1,510	-2,500	-289	355	-5,195	33
Total inventory change	22,290	-31,250	-3,698	-4,878	31,576	117,266
Net operating profit	94,688	-14,017	27,809	52,013	103,842	298,850

**Depreciation**  
**2019 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	109	21	22	22	22	22
Net operating profit	94,688	-14,017	27,809	52,013	103,842	298,850
<b>Machinery and Equipment</b>						
Ending inventory	355,529	366,984	121,161	199,220	275,923	814,878
Capital sales	15,502	33,368	2,001	24,551	9,217	9,186
Beginning inventory	343,009	361,623	116,052	197,365	266,420	774,433
Capital purchases	58,807	63,959	28,599	42,699	42,161	116,851
Depreciation, capital adjust.	-30,785	-25,231	-21,490	-16,293	-23,441	-67,219
<b>Titled Vehicles</b>						
Ending inventory	29,429	22,435	29,721	20,010	19,455	55,203
Capital sales	793	1,069	642	1,705	45	516
Beginning inventory	29,568	22,848	32,051	19,030	17,998	55,606
Capital purchases	2,757	3,143	807	3,427	3,201	3,227
Depreciation, capital adjust.	-2,104	-2,488	-2,495	-742	-1,699	-3,114
<b>Buildings and Improvements</b>						
Ending inventory	139,562	368,292	20,682	48,789	116,649	153,797
Capital sales	-	-	-	-	-	-
Beginning inventory	137,315	364,682	18,164	46,611	117,317	150,138
Capital purchases	5,203	4,524	3,589	2,444	7,546	7,883
Depreciation, capital adjust.	-2,956	-915	-1,071	-265	-8,214	-4,224
Total depreciation, capital adj.	-35,845	-28,634	-25,056	-17,300	-33,353	-74,556
Net farm income from operations	58,842	-42,651	2,753	34,713	70,489	224,293
Gain or loss on capital sales	469	-10,670	1,278	-1,282	10,429	2,085
Net farm income	59,311	-53,321	4,032	33,431	80,917	226,379

**Profitability Measures**  
**2019 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	109	21	22	22	22	22

**Profitability (assets valued at cost)**

Net farm income from operations	58,842	-42,651	2,753	34,713	70,489	224,293
Rate of return on assets	2.8 %	-0.7 %	-0.3 %	1.5 %	4.5 %	5.3 %
Rate of return on equity	1.8 %	-7.0 %	-2.5 %	0.8 %	4.6 %	5.7 %
Operating profit margin	10.2 %	-2.6 %	-1.1 %	5.1 %	15.2 %	20.3 %
Asset turnover rate	27.0 %	26.3 %	23.7 %	29.5 %	29.7 %	26.3 %

Farm interest expense	27,545	62,965	13,436	9,076	26,333	27,524
Value of operator lbr and mgmt.	36,392	36,889	18,304	28,547	29,149	69,095
Return on farm assets	49,995	-16,574	-2,115	15,242	67,673	182,723
Average farm assets	1,812,805	2,383,541	776,312	1,011,369	1,501,859	3,416,884
Return on farm equity	22,450	-79,540	-15,551	6,166	41,340	155,199
Average farm equity	1,224,095	1,137,812	624,973	727,684	899,155	2,726,930
Value of farm production	489,748	626,559	184,088	298,537	446,118	899,657

	<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	109	21	22	22	22	22

**Profitability (assets valued at market)**

Net farm income from operations	84,231	-60,089	11,966	76,790	89,828	296,097
Rate of return on assets	3.1 %	-1.2 %	0.6 %	4.6 %	3.5 %	5.8 %
Rate of return on equity	2.6 %	-6.3 %	-0.6 %	5.0 %	3.3 %	6.1 %
Operating profit margin	15.4 %	-5.4 %	3.9 %	19.2 %	19.5 %	28.3 %
Asset turnover rate	20.4 %	22.5 %	16.2 %	23.8 %	18.2 %	20.4 %

Farm interest expense	27,545	62,965	13,436	9,076	26,333	27,524
Value of operator lbr and mgmt.	36,392	36,889	18,304	28,547	29,149	69,095
Return on farm assets	75,383	-34,012	7,098	57,319	87,011	254,527
Average farm assets	2,403,992	2,787,838	1,134,123	1,256,758	2,453,854	4,404,836
Return on farm equity	47,838	-96,978	-6,338	48,243	60,679	227,003
Average farm equity	1,815,283	1,542,109	982,784	973,073	1,851,150	3,714,881
Value of farm production	489,748	626,559	184,088	298,537	446,118	899,657

**Liquidity & Repayment Capacity Measures**  
**2019 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	109	21	22	22	22	22
<b>Liquidity</b>						
Current ratio	2.08	1.12	4.17	2.33	1.88	4.31
Working capital	238,926	64,415	175,092	152,736	188,997	605,459
Working capital to gross inc	38.3 %	5.8 %	92.9 %	41.7 %	37.2 %	62.6 %
Current assets	460,917	621,163	230,403	267,873	403,867	788,563
Current liabilities	221,991	556,748	55,311	115,136	214,870	183,104
Gross revenues (accrual)	624,515	1,115,617	188,528	365,908	507,554	967,291
<b>Repayment capacity</b>						
Net farm income from operations	58,842	-42,651	2,753	34,713	70,489	224,293
Depreciation	35,845	28,634	25,056	17,300	33,353	74,556
Personal income	46,667	49,845	26,697	45,624	29,572	81,744
Family living/owner withdrawals	-48,260	-54,141	-25,070	-51,544	-42,633	-68,177
Cash discrepancy	-35	-	-58	8	-11	-115
Payments on personal debt	-1,891	-1,057	-1,188	-1,036	-3,125	-3,010
Income taxes paid	-7,624	-4,646	-4,453	-4,990	-6,364	-17,531
Interest on term debt	15,799	38,749	4,619	9,965	10,929	15,775
Capital debt repayment capacity	99,344	14,733	28,356	50,040	92,209	307,536
Scheduled term debt payments	-51,605	-85,542	-17,891	-25,388	-50,720	-80,028
Capital debt repayment margin	47,738	-70,809	10,465	24,652	41,489	227,507
Cash replacement allowance	-24,308	-27,301	-12,781	-14,478	-13,079	-54,035
Replacement margin	23,431	-98,109	-2,316	10,173	28,410	173,472
Term debt coverage ratio	1.93	0.17	1.58	1.97	1.82	3.84
Replacement coverage ratio	1.31	0.13	0.92	1.26	1.45	2.29

**Balance Sheet at Cost Values**  
**2019 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	109	21	22	22	22	22
<b>Assets</b>						
Current Farm Assets						
Cash and checking balance	57,477	45,932	68,639	18,592	88,449	65,250
Prepaid expenses & supplies	39,983	28,765	20,728	21,980	43,268	84,666
Growing crops	3,032	2,820	1,391	1,110	5,362	4,466
Accounts receivable	15,113	36,469	8,321	7,848	8,420	15,478
Hedging accounts	2,449	5,733	2,542	1,466	435	2,218
Crops held for sale or feed	239,421	165,529	116,356	148,593	212,711	550,557
Crops under government loan	-	-	-	-	-	-
Market livestock held for sale	102,721	335,903	11,986	66,541	44,655	65,120
Other current assets	721	12	440	1,743	566	810
Total current farm assets	460,917	621,163	230,403	267,873	403,867	788,563
Intermediate Farm Assets						
Breeding livestock	65,606	89,312	37,556	79,301	33,178	89,758
Machinery and equipment	355,529	366,984	121,161	199,220	275,923	814,878
Titled vehicles	29,429	22,435	29,721	20,010	19,455	55,203
Other intermediate assets	62,726	1,476	1,391	2,125	38,174	267,681
Total intermediate farm assets	513,289	480,207	189,829	300,656	366,729	1,227,520
Long Term Farm Assets						
Farm land	704,273	842,536	337,856	408,354	669,956	1,268,948
Buildings and improvements	139,562	368,292	20,682	48,789	116,649	153,797
Other long-term assets	28,872	55,604	9,719	808	707	78,734
Total long-term farm assets	872,707	1,266,432	368,257	457,951	787,312	1,501,479
Total Farm Assets	1,846,913	2,367,802	788,488	1,026,480	1,557,908	3,517,563
Total Nonfarm Assets	5,164,284	148,229	154,875	235,684	231,792	24,822,836
Total Assets	7,011,197	2,516,031	943,364	1,262,164	1,789,700	28,340,398
<b>Liabilities</b>						
Current Farm Liabilities						
Accrued interest	9,616	17,365	3,750	6,161	13,939	7,216
Accounts payable	9,234	34,278	2,609	1,144	3,091	6,188
Current notes	160,066	417,935	34,935	91,219	160,656	107,307
Government crop loans	-	-	-	-	-	-
Principal due on term debt	43,075	87,171	14,017	16,613	37,185	62,392
Total current farm liabilities	221,991	556,748	55,311	115,136	214,870	183,104
Total intermediate farm liabs	83,749	80,187	29,942	52,419	83,591	172,447
Total long term farm liabilities	292,721	625,649	76,533	111,803	332,758	331,992
Total farm liabilities	598,461	1,262,585	161,786	279,358	631,219	687,543
Total nonfarm liabilities	28,459	19,488	18,465	27,539	14,689	61,707
Total liabilities	626,920	1,282,072	180,251	306,897	645,908	749,250
Net worth (farm and nonfarm)	6,384,277	1,233,959	763,113	955,267	1,143,792	27,591,148
Net worth change	63,305	-64,125	15,690	42,381	87,760	229,027
Percent net worth change	1 %	-5 %	2 %	5 %	8 %	1 %
<b>Ratio Analysis</b>						
Current farm liabilities / assets	48 %	90 %	24 %	43 %	53 %	23 %
Intermediate farm liab. / assets	16 %	17 %	16 %	17 %	23 %	14 %
Long term farm liab. / assets	34 %	49 %	21 %	24 %	42 %	22 %
Total debt to asset ratio	9 %	51 %	19 %	24 %	36 %	3 %

**Balance Sheet at Market Values**  
**2019 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	109	21	22	22	22	22
<b>Assets</b>						
<b>Current Farm Assets</b>						
Cash and checking balance	57,477	45,932	68,639	18,592	88,449	65,250
Prepaid expenses & supplies	39,983	28,765	20,728	21,980	43,268	84,666
Growing crops	3,032	2,820	1,391	1,110	5,362	4,466
Accounts receivable	15,113	36,469	8,321	7,848	8,420	15,478
Hedging accounts	2,449	5,733	2,542	1,466	435	2,218
Crops held for sale or feed	239,421	165,529	116,356	148,593	212,711	550,557
Crops under government loan	-	-	-	-	-	-
Market livestock held for sale	102,721	335,903	11,986	66,541	44,655	65,120
Other current assets	721	12	440	1,743	566	810
Total current farm assets	460,917	621,163	230,403	267,873	403,867	788,563
<b>Intermediate Farm Assets</b>						
Breeding livestock	74,194	98,146	42,700	93,848	45,826	91,541
Machinery and equipment	395,774	419,179	175,019	223,672	300,236	861,827
Titled vehicles	31,277	22,301	29,844	23,320	21,223	59,288
Other intermediate assets	70,929	2,474	1,841	4,304	37,957	304,960
Total intermediate farm assets	572,174	542,100	249,403	345,143	405,241	1,317,617
<b>Long Term Farm Assets</b>						
Farm land	1,222,340	1,176,053	623,859	596,430	1,584,658	2,128,594
Buildings and improvements	151,360	368,184	35,541	63,547	123,876	175,507
Other long-term assets	44,004	55,880	11,700	19,914	1,931	131,134
Total long-term farm assets	1,417,704	1,600,117	671,100	679,892	1,710,465	2,435,236
Total Farm Assets	2,450,795	2,763,381	1,150,906	1,292,907	2,519,572	4,541,416
Total Nonfarm Assets	339,875	204,998	175,483	380,743	294,754	637,267
Total Assets	2,790,670	2,968,379	1,326,389	1,673,650	2,814,326	5,178,683
<b>Liabilities</b>						
<b>Current Farm Liabilities</b>						
Accrued interest	9,616	17,365	3,750	6,161	13,939	7,216
Accounts payable	9,234	34,278	2,609	1,144	3,091	6,188
Current notes	160,066	417,935	34,935	91,219	160,656	107,307
Government crop loans	-	-	-	-	-	-
Principal due on term debt	43,075	87,171	14,017	16,613	37,185	62,392
Total current farm liabilities	221,991	556,748	55,311	115,136	214,870	183,104
Total intermediate farm liabs	83,749	80,187	29,942	52,419	83,591	172,447
Total long term farm liabilities	292,721	625,649	76,533	111,803	332,758	331,992
Total farm liabilities	598,461	1,262,585	161,786	279,358	631,219	687,543
Total nonfarm liabilities	28,459	19,488	18,465	27,539	14,689	61,707
Total liabs excluding deferreds	626,920	1,282,072	180,251	306,897	645,908	749,250
Total deferred liabilities	-	-	-	-	-	-
Total liabilities	626,920	1,282,072	180,251	306,897	645,908	749,250
Retained earnings	6,384,277	1,233,959	763,113	955,267	1,143,792	27,591,148
Market valuation equity	-4,220,527	452,348	383,025	411,486	1,024,626	-23,161,715
Net worth (farm and nonfarm)	2,163,750	1,686,307	1,146,138	1,366,753	2,168,418	4,429,433
Net worth excluding deferreds	2,163,750	1,686,307	1,146,138	1,366,753	2,168,418	4,429,433
Net worth change	104,183	-79,514	31,057	97,987	110,837	352,197
Percent net worth change	5 %	-5 %	3 %	8 %	5 %	9 %
<b>Ratio Analysis</b>						
Current farm liabilities / assets	48 %	90 %	24 %	43 %	53 %	23 %
Intermediate farm liab. / assets	15 %	15 %	12 %	15 %	21 %	13 %
Long term farm liab. / assets	21 %	39 %	11 %	16 %	19 %	14 %
Total debt to asset ratio	22 %	43 %	14 %	18 %	23 %	14 %
Debt to assets excl deferreds	22 %	43 %	14 %	18 %	23 %	14 %

**Statement Of Cash Flows**  
**2019 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	109	21	22	22	22	22
Beginning cash (farm & nonfarm)	86,901	85,018	77,648	58,092	80,881	132,781
<b>Cash Provided By Operating Activities</b>						
Gross cash farm income	601,307	1,142,516	187,040	374,327	477,530	849,722
Total cash farm expense	-528,909	-1,125,283	-155,532	-317,435	-405,265	-668,139
Net cash from hedging transactions	-2,011	-3,643	-	-	430	-6,915
Cash provided by operating	70,387	13,590	31,507	56,892	72,696	174,669
<b>Cash Provided By Investing Activities</b>						
Sale of breeding livestock	7,344	27,917	1,350	1,344	4,279	2,766
Sale of machinery & equipment	15,802	24,161	3,130	23,788	19,312	8,999
Sale of titled vehicles	784	881	818	1,591	45	591
Sale of farm land	5,440	-	568	-	-	26,386
Sale of farm buildings	-	-	-	-	-	-
Sale of other farm assets	878	-	-	-	4,352	-
Sale of nonfarm assets	4,592	5,975	-	8,497	318	8,233
Purchase of breeding livestock	-9,643	-19,098	-4,604	-8,897	-5,657	-10,391
Purchase of machinery & equip.	-58,807	-63,959	-28,599	-42,699	-42,161	-116,851
Purchase of titled vehicles	-2,757	-3,143	-807	-3,427	-3,201	-3,227
Purchase of farm land	-34,602	-2,119	-13,609	-32,787	-56,816	-66,202
Purchase of farm buildings	-5,203	-4,524	-3,589	-2,444	-7,546	-7,883
Purchase of other farm assets	-234	-48	-	-324	-	-792
Purchase of nonfarm assets	-11,304	-10,116	-3,937	-11,199	-20,082	-11,130
Cash provided by investing	-87,709	-44,073	-49,279	-66,557	-107,156	-169,499
<b>Cash Provided By Financing Activities</b>						
Money borrowed	284,739	897,676	94,819	51,133	237,897	170,031
Principal payments	-269,932	-864,560	-75,534	-61,364	-191,887	-183,346
Personal income	46,667	49,845	26,697	45,624	29,572	81,744
Family living/owner withdrawals	-48,260	-54,141	-25,070	-51,544	-42,633	-68,177
Income and social security tax	-7,674	-4,646	-4,453	-5,237	-6,364	-17,531
Capital contributions	319	1,388	-	255	-	-
Capital distributions	-183	-952	-	-	-	-
Dividends paid	-	-	-	-	-	-
Cash gifts and inheritances	10,850	-	7,266	23,273	23,219	-
Gifts given	-2,349	-1,517	-620	-2,538	-3,848	-3,182
Other cash flows	-	-	-	-	-	-
Cash provided by financing	14,178	23,093	23,105	-398	45,955	-20,461
Net change in cash balance	-3,144	-7,390	5,334	-10,063	11,495	-15,291
Ending cash (farm & nonfarm)	83,722	77,628	82,924	48,036	92,365	117,376
Discrepancy	35	-	58	-8	11	115

**Financial Standards Measures**  
**2019 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	109	21	22	22	22	22
<b>Liquidity</b>						
Current ratio	2.08	1.12	4.17	2.33	1.88	4.31
Working capital	238,926	64,415	175,092	152,736	188,997	605,459
Working capital to gross inc	38.3 %	5.8 %	92.9 %	41.7 %	37.2 %	62.6 %
<b>Solvency (market)</b>						
Farm debt to asset ratio	24 %	46 %	14 %	22 %	25 %	15 %
Farm equity to asset ratio	76 %	54 %	86 %	78 %	75 %	85 %
Farm debt to equity ratio	0.32	0.84	0.16	0.28	0.33	0.18
<b>Profitability (cost)</b>						
Rate of return on farm assets	2.8 %	-0.7 %	-0.3 %	1.5 %	4.5 %	5.3 %
Rate of return on farm equity	1.8 %	-7.0 %	-2.5 %	0.8 %	4.6 %	5.7 %
Operating profit margin	10.2 %	-2.6 %	-1.1 %	5.1 %	15.2 %	20.3 %
Net farm income	59,311	-53,321	4,032	33,431	80,917	226,379
EBITDA	122,232	48,949	41,245	61,090	130,175	326,374
<b>Repayment Capacity</b>						
Capital debt repayment capacity	99,344	14,733	28,356	50,040	92,209	307,536
Capital debt repayment margin	47,738	-70,809	10,465	24,652	41,489	227,507
Replacement margin	23,431	-98,109	-2,316	10,173	28,410	173,472
Term debt coverage ratio	1.93	0.17	1.58	1.97	1.82	3.84
Replacement coverage ratio	1.31	0.13	0.92	1.26	1.45	2.29
<b>Efficiency</b>						
Asset turnover rate (cost)	27.0 %	26.3 %	23.7 %	29.5 %	29.7 %	26.3 %
Operating expense ratio	80.4 %	95.6 %	78.1 %	83.3 %	74.4 %	66.3 %
Depreciation expense ratio	5.7 %	2.6 %	13.3 %	4.7 %	6.6 %	7.7 %
Interest expense ratio	4.4 %	5.6 %	7.1 %	2.5 %	5.2 %	2.8 %
Net farm income ratio	9.4 %	-3.8 %	1.5 %	9.5 %	13.9 %	23.2 %



**Crop Production and Marketing Summary**  
**2019 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	109	21	22	22	22	22
<b>Acreage Summary</b>						
Total acres owned	391	277	276	211	449	736
Total crop acres	795	646	431	501	851	1,539
Crop acres owned	219	189	164	72	207	459
Crop acres cash rented	313	314	168	295	335	454
Crop acres share rented	263	142	98	134	308	627
Total pasture acres	98	66	51	136	78	158
Percent crop acres owned	28 %	29 %	38 %	14 %	24 %	30 %
Mach invest/crop acre cost	464	549	339	434	325	552
Mach invest/crop acre market	510	626	457	475	351	577
<b>Average Price Received (Cash Sales Only)</b>						
Soybeans per bushel	8.63	8.44	8.08	8.54	8.38	9.08
Corn per bushel	3.76	3.69	3.86	3.80	3.55	3.84
Wheat, Winter per bushel	4.91	5.26	-	4.37	4.52	-
Hay, Mixed per ton	67.59	-	-	-	-	-
CRP per \$	1.00	-	-	-	-	-
Rented Out per \$	1.01	-	-	-	-	-
Prevented planting per unit	1.00	-	-	-	-	-
Hay per ton	74.03	-	-	-	-	-
<b>Average Yield Per Acre</b>						
Soybeans (bushel)	46.55	47.16	35.35	48.89	45.61	47.59
Corn (bushel)	141.28	139.74	125.17	140.08	143.72	141.74
Hay (ton)	2.70	-	-	2.48	-	-

---

**Household and Personal Expenses**  
**2019 Missouri FBMA Farm Summary**  
**(Farms Sorted By Net Farm Income)**

---

	<u>Avg. Of All Farms</u>
Number of farms	10
Average family size	3.6
Family Living Expenses	
Food and meals expense	7,551
Medical care	3,998
Health insurance	6,303
Cash donations	2,586
Household supplies	5,086
Clothing	1,176
Personal care	464
Child / Dependent care	2,556
Alimony and child support	-
Gifts	2,023
Education	162
Recreation	2,321
Utilities (household share)	3,618
Personal vehicle operating exp	4,045
Household real estate taxes	407
Dwelling rent	112
Household repairs	532
Personal interest	1,636
Disability / Long term care ins	395
Life insurance payments	932
Personal property insurance	520
Miscellaneous	5,656
Total cash family living expense	52,079
Family living from the farm	256
Total family living	52,335
Other Nonfarm Expenditures	
Income taxes	13,309
Furnishing & appliance purchases	-
Nonfarm vehicle purchases	100
Nonfarm real estate purchases	8,484
Other nonfarm capital purchases	640
Nonfarm savings & investments	-7,421
Total other nonfarm expenditures	15,112
Total cash family living investment & nonfarm capital purch	67,191

**Operator and Labor Information**  
**2019 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	109	21	22	22	22	22
<b>Operator Information</b>						
Average number of operators	1.1	1.2	1.0	1.1	1.1	1.1
Average age of operators	52.3	52.0	54.3	48.6	54.6	52.3
Average number of years farming	28.2	26.5	28.6	24.1	33.0	28.8
<b>Results Per Operator</b>						
Working capital	213,467	55,213	167,479	134,408	166,317	543,677
Total assets (market)	2,493,303	2,544,325	1,268,720	1,472,812	2,476,607	4,650,246
Total liabilities	560,117	1,098,919	172,414	270,070	568,399	672,796
Net worth (market)	1,933,187	1,445,406	1,096,306	1,202,742	1,908,208	3,977,450
Net worth excl deferred liabs	1,933,187	1,445,406	1,096,306	1,202,742	1,908,208	3,977,450
Gross farm income	557,968	956,243	180,332	321,999	446,648	868,587
Total farm expense	505,396	992,801	177,698	291,451	384,618	667,181
Net farm income from operations	52,572	-36,558	2,634	30,547	62,030	201,406
Net nonfarm income	41,695	42,724	25,536	40,149	26,023	73,403
Family living & tax withdrawals	49,960	50,389	28,295	49,743	43,127	77,066
Total acres owned	349.2	237.7	263.7	185.7	395.0	660.8
Total crop acres	710.1	553.4	412.0	441.0	748.6	1,382.0
Crop acres owned	195.3	162.4	157.2	63.4	182.2	411.9
Crop acres cash rented	279.9	269.5	160.6	259.9	295.0	407.4
Crop acres share rented	234.9	121.6	94.2	117.7	271.3	562.7
Total pasture acres	87.5	56.3	49.0	119.3	68.9	141.6
<b>Labor Analysis</b>						
Number of farms	109	21	22	22	22	22
Total unpaid labor hours	1,385	1,165	1,049	1,425	1,226	2,052
Total hired labor hours	1,652	4,339	315	415	1,019	2,294
Total labor hours per farm	3,037	5,504	1,364	1,840	2,244	4,347
Unpaid hours per operator	1,238	998	1,003	1,254	1,079	1,843
Value of farm production / hour	161.24	113.84	134.96	162.21	198.77	206.98
Net farm income / unpaid hour	42.48	-36.62	2.63	24.36	57.50	109.29
Average hourly hired labor wage	17.72	19.76	13.99	22.77	17.89	13.57
<b>Partnerships &amp; LLCs</b>						
Number of farms	13	3	2	3	1	4
Number of operators	1.5	-	-	-	-	-
Owner withdrawals per farm	-	-	-	-	-	-
Withdrawals per operator	-	-	-	-	-	-

**Financial Summary**  
**2019 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	109	21	22	22	22	22
<b>Income Statement</b>						
Gross cash farm income	601,307	1,142,516	187,040	374,327	477,530	849,722
Total cash farm expense	528,909	1,125,283	155,532	317,435	405,265	668,139
Net cash farm income	72,398	17,233	31,507	56,892	72,266	181,584
Inventory change	22,290	-31,250	-3,698	-4,878	31,576	117,266
Depreciation	-35,845	-28,634	-25,056	-17,300	-33,353	-74,556
Net farm income from operations	58,842	-42,651	2,753	34,713	70,489	224,293
Gain or loss on capital sales	469	-10,670	1,278	-1,282	10,429	2,085
Average net farm income	59,311	-53,321	4,032	33,431	80,917	226,379
Median net farm income	33,869	-18,964	2,271	31,392	77,215	184,042
<b>Profitability (cost)</b>						
Rate of return on assets	2.8 %	-0.7 %	-0.3 %	1.5 %	4.5 %	5.3 %
Rate of return on equity	1.8 %	-7.0 %	-2.5 %	0.8 %	4.6 %	5.7 %
Operating profit margin	10.2 %	-2.6 %	-1.1 %	5.1 %	15.2 %	20.3 %
Asset turnover rate	27.0 %	26.3 %	23.7 %	29.5 %	29.7 %	26.3 %
<b>Profitability (market)</b>						
Rate of return on assets	3.1 %	-1.2 %	0.6 %	4.6 %	3.5 %	5.8 %
Rate of return on equity	2.6 %	-6.3 %	-0.6 %	5.0 %	3.3 %	6.1 %
Operating profit margin	15.4 %	-5.4 %	3.9 %	19.2 %	19.5 %	28.3 %
Asset turnover rate	20.4 %	22.5 %	16.2 %	23.8 %	18.2 %	20.4 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	460,917	621,163	230,403	267,873	403,867	788,563
Current liabilities	221,991	556,748	55,311	115,136	214,870	183,104
Current ratio	2.08	1.12	4.17	2.33	1.88	4.31
Working capital	238,926	64,415	175,092	152,736	188,997	605,459
Change in working capital	6,395	-84,254	-9,493	-19,162	31,544	109,220
Working capital to gross inc	38.3 %	5.8 %	92.9 %	41.7 %	37.2 %	62.6 %
Term debt coverage ratio	1.93	0.17	1.58	1.97	1.82	3.84
Replacement coverage ratio	1.31	0.13	0.92	1.26	1.45	2.29
Term debt to EBITDA	3.06	14.84	2.48	2.90	2.90	1.53
<b>Solvency (end of year at cost)</b>						
Number of farms	109	21	22	22	22	22
Total assets	7,011,197	2,516,031	943,364	1,262,164	1,789,700	28,340,398
Total liabilities	626,920	1,282,072	180,251	306,897	645,908	749,250
Net worth	6,384,277	1,233,959	763,113	955,267	1,143,792	27,591,148
Net worth change	63,305	-64,125	15,690	42,381	87,760	229,027
Farm debt to asset ratio	32 %	53 %	21 %	27 %	41 %	20 %
Total debt to asset ratio	9 %	51 %	19 %	24 %	36 %	3 %
Change in earned net worth %	1 %	-5 %	2 %	5 %	8 %	1 %
<b>Solvency (end of year at market)</b>						
Number of farms	109	21	22	22	22	22
Total assets	2,790,670	2,968,379	1,326,389	1,673,650	2,814,326	5,178,683
Total liabilities	626,920	1,282,072	180,251	306,897	645,908	749,250
Net worth	2,163,750	1,686,307	1,146,138	1,366,753	2,168,418	4,429,433
Total net worth change	104,183	-79,514	31,057	97,987	110,837	352,197
Farm debt to asset ratio	24 %	46 %	14 %	22 %	25 %	15 %
Total debt to asset ratio	22 %	43 %	14 %	18 %	23 %	14 %
Change in total net worth %	5 %	-5 %	3 %	8 %	5 %	9 %
<b>Nonfarm Information</b>						
Net nonfarm income	46,667	49,845	26,697	45,624	29,572	81,744
Farms reporting living expenses	10	2	1	3	3	1
Total family living expense	52,335	-	-	-	-	-
Total living, invest, cap. purch	67,191	-	-	-	-	-
<b>Crop Acres</b>						
Total crop acres	795	646	431	501	851	1,539
Total crop acres owned	219	189	164	72	207	459
Total crop acres cash rented	313	314	168	295	335	454
Total crop acres share rented	263	142	98	134	308	627
Machinery value per crop acre	510	626	457	475	351	577

**Summary Farm Income Statement**  
**2019 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	109	21	22	22	22	22
Crop sales	276,788	219,016	131,018	208,411	287,700	535,168
Crop inventory change	22,258	-44,413	-3,339	-3,231	37,751	121,490
Gross crop income	299,046	174,603	127,679	205,180	325,452	656,659
Livestock sales	219,468	801,484	16,874	105,946	88,441	111,050
Livestock inventory change	5,897	32,498	1,259	683	-5,100	1,355
Gross livestock income	225,365	833,982	18,133	106,630	83,341	112,405
Government payments	51,702	69,784	22,027	30,212	50,053	87,258
Other cash farm income	53,349	52,233	17,121	29,757	51,336	116,246
Change in accounts receivable	-3,530	-10,606	6,883	-5,787	-1,350	-7,114
Gain or loss on hedging accounts	-1,086	-2,041	1,137	363	426	-5,356
Change in other assets	2,301	-11	-179	-317	955	10,953
Gain or loss on breeding lvst	-2,632	-2,325	-4,271	-130	-2,659	-3,760
Gross farm income	624,515	1,115,617	188,528	365,908	507,554	967,291
Cash operating expenses	502,875	1,064,818	142,386	308,004	384,127	640,581
Change in prepaids and supplies	-846	-472	6,833	-2,913	-6,413	-1,247
Change in growing crops	-163	158	-1,058	-378	-1,174	1,652
Change in accounts payable	416	2,164	-878	106	839	-70
Depreciation	35,845	28,634	25,056	17,300	33,353	74,556
Total operating expense	538,128	1,095,303	172,339	322,118	410,733	715,473
Interest paid	26,035	60,465	13,146	9,432	21,137	27,558
Change in accrued interest	1,510	2,500	289	-355	5,195	-33
Total interest expense	27,545	62,965	13,436	9,076	26,333	27,524
Total expenses	565,673	1,158,268	185,775	331,195	437,066	742,997
Net farm income from operations	58,842	-42,651	2,753	34,713	70,489	224,293
Gain or loss on capital sales	469	-10,670	1,278	-1,282	10,429	2,085
Net farm income	59,311	-53,321	4,032	33,431	80,917	226,379

**Nonfarm Summary**  
**2019 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	109	21	22	22	22	22
<b>Nonfarm Income</b>						
Personal wages & salary	24,281	27,323	20,539	35,883	19,618	18,181
Net nonfarm business income	1,655	2,732	619	3,608	1,816	-450
Personal rental income	1,865	6,130	-136	-	620	2,907
Personal interest income	822	1,180	442	285	455	1,764
Personal cash dividends	85	-	25	116	260	18
Tax refunds	1,126	1,111	767	1,424	1,062	1,267
Other nonfarm income	16,833	11,368	4,441	4,309	5,741	58,056
Total nonfarm income	46,667	49,845	26,697	45,624	29,572	81,744
Gifts and inheritances	10,850	-	7,266	23,273	23,219	-
<b>Nonfarm Assets (market)</b>						
Checking & savings	26,244	31,697	14,285	29,444	3,916	52,126
Stocks & bonds	49,138	2,452	4,282	30,297	88,670	117,868
Other current assets	11,948	1,562	45,020	6,395	2,273	4,018
Furniture & appliances	7,073	5,760	3,533	12,648	8,669	4,694
Nonfarm vehicles	13,000	19,414	2,899	13,341	12,821	16,818
Cash value of life ins.	13,320	10,602	8,143	11,298	15,048	21,386
Retirement accounts	75,827	55,348	36,951	134,165	19,036	132,703
Other intermediate assets	7,286	-	5,552	9,188	11,849	9,512
Nonfarm real estate	91,930	64,734	49,136	111,646	93,641	139,254
Personal bus. investment	13,434	5,641	-	17,216	1,507	42,452
Other long term assets	30,675	7,789	5,682	5,104	37,325	96,435
Total nonfarm assets	339,875	204,998	175,483	380,743	294,754	637,267
<b>Nonfarm Liabilities</b>						
Accrued interest	345	158	35	484	8	1,034
Accounts payable	135	560	-	136	-	-
Current notes	726	1,961	356	797	572	-
Princ due on term debt	1,570	1,101	1,238	876	2,302	2,312
Total current liabilities	2,891	3,780	1,630	2,857	2,882	3,346
Intermediate liabilities	5,244	6,846	672	996	2,105	15,674
Long term liabilities	20,324	8,862	16,163	23,686	9,702	42,688
Total nonfarm liabilities	28,459	19,488	18,465	27,539	14,689	61,707
Nonfarm net worth	311,416	185,511	157,017	353,204	280,065	575,560
Nonfarm debt to asset ratio	8 %	10 %	11 %	7 %	5 %	10 %

**Financial Summary Excluding Deferred Liabilities**  
**2019 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	109	21	22	22	22	22
<b>Income Statement</b>						
Gross cash farm income	601,307	1,142,516	187,040	374,327	477,530	849,722
Total cash farm expense	528,909	1,125,283	155,532	317,435	405,265	668,139
Net cash farm income	72,398	17,233	31,507	56,892	72,266	181,584
Inventory change	22,290	-31,250	-3,698	-4,878	31,576	117,266
Depreciation	-35,845	-28,634	-25,056	-17,300	-33,353	-74,556
Net farm income from operations	58,842	-42,651	2,753	34,713	70,489	224,293
Gain or loss on capital sales	469	-10,670	1,278	-1,282	10,429	2,085
Average net farm income	59,311	-53,321	4,032	33,431	80,917	226,379
Median net farm income	33,869	-18,964	2,271	31,392	77,215	184,042
<b>Profitability (cost)</b>						
Rate of return on assets	2.8 %	-0.7 %	-0.3 %	1.5 %	4.5 %	5.3 %
Rate of return on equity	1.8 %	-7.0 %	-2.5 %	0.8 %	4.6 %	5.7 %
Operating profit margin	10.2 %	-2.6 %	-1.1 %	5.1 %	15.2 %	20.3 %
Asset turnover rate	27.0 %	26.3 %	23.7 %	29.5 %	29.7 %	26.3 %
<b>Profitability (market)</b>						
Rate of return on assets	3.1 %	-1.2 %	0.6 %	4.6 %	3.5 %	5.8 %
Rate of return on equity	2.7 %	-6.4 %	-0.7 %	5.1 %	3.3 %	6.2 %
Operating profit margin	15.4 %	-5.4 %	3.9 %	19.2 %	19.5 %	28.3 %
Asset turnover rate	20.4 %	22.5 %	16.2 %	23.8 %	18.2 %	20.4 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	460,917	621,163	230,403	267,873	403,867	788,563
Current liabilities	221,991	556,748	55,311	115,136	214,870	183,104
Current ratio	2.08	1.12	4.17	2.33	1.88	4.31
Working capital	238,926	64,415	175,092	152,736	188,997	605,459
Change in working capital	6,395	-84,254	-9,493	-19,162	31,544	109,220
Working capital to gross inc	38.3 %	5.8 %	92.9 %	41.7 %	37.2 %	62.6 %
Term debt coverage ratio	1.93	0.17	1.58	1.97	1.82	3.84
Replacement coverage ratio	1.31	0.13	0.92	1.26	1.45	2.29
Term debt to EBITDA	3.06	14.84	2.48	2.90	2.90	1.53
<b>Solvency (end of year at cost)</b>						
Number of farms	109	21	22	22	22	22
Total assets	7,011,197	2,516,031	943,364	1,262,164	1,789,700	28,340,398
Total liabilities	626,920	1,282,072	180,251	306,897	645,908	749,250
Net worth	6,384,277	1,233,959	763,113	955,267	1,143,792	27,591,148
Net worth change	63,305	-64,125	15,690	42,381	87,760	229,027
Farm debt to asset ratio	32 %	53 %	21 %	27 %	41 %	20 %
Total debt to asset ratio	9 %	51 %	19 %	24 %	36 %	3 %
Change in earned net worth %	1 %	-5 %	2 %	5 %	8 %	1 %
<b>Solvency (end of year at market)</b>						
Number of farms	109	21	22	22	22	22
Total assets	2,790,670	2,968,379	1,326,389	1,673,650	2,814,326	5,178,683
Total liabilities	626,920	1,282,072	180,251	306,897	645,908	749,250
Net worth	2,163,750	1,686,307	1,146,138	1,366,753	2,168,418	4,429,433
Total net worth change	104,183	-79,514	31,057	97,987	110,837	352,197
Farm debt to asset ratio	24 %	46 %	14 %	22 %	25 %	15 %
Total debt to asset ratio	22 %	43 %	14 %	18 %	23 %	14 %
Change in total net worth %	5 %	-5 %	3 %	8 %	5 %	9 %
<b>Nonfarm Information</b>						
Net nonfarm income	46,667	49,845	26,697	45,624	29,572	81,744
Farms reporting living expenses	10	2	1	3	3	1
Total family living expense	52,335	-	-	-	-	-
Total living, invest, cap. purch	67,191	-	-	-	-	-
<b>Crop Acres</b>						
Total crop acres	795	646	431	501	851	1,539
Total crop acres owned	219	189	164	72	207	459
Total crop acres cash rented	313	314	168	295	335	454
Total crop acres share rented	263	142	98	134	308	627
Machinery value per crop acre	510	626	457	475	351	577

**FINPACK Score Card Items**  
**2019 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	109	21	22	22	22	22
<b>Liquidity</b>						
Current ratio	2.08	1.12	4.17	2.33	1.88	4.31
Working capital	238,926	64,415	175,092	152,736	188,997	605,459
Working capital to gross inc	38.3 %	5.8 %	92.9 %	41.7 %	37.2 %	62.6 %
<b>Solvency (market)</b>						
Farm debt to asset ratio	24 %	46 %	14 %	22 %	25 %	15 %
Farm equity to asset ratio	76 %	54 %	86 %	78 %	75 %	85 %
Farm debt to equity ratio	0.32	0.84	0.16	0.28	0.33	0.18
<b>Profitability (cost)</b>						
Rate of ret on fm assets - mkt	3.1 %	-1.2 %	0.6 %	4.6 %	3.5 %	5.8 %
Rate of ret on fm assets - cst	2.8 %	-0.7 %	-0.3 %	1.5 %	4.5 %	5.3 %
Rate of ret on fm equity - mkt	2.6 %	-6.3 %	-0.6 %	5.0 %	3.3 %	6.1 %
Rate of ret on fm equity - cst	1.8 %	-7.0 %	-2.5 %	0.8 %	4.6 %	5.7 %
Operating profit margin - mkt	15.4 %	-5.4 %	3.9 %	19.2 %	19.5 %	28.3 %
Operating profit margin - cst	10.2 %	-2.6 %	-1.1 %	5.1 %	15.2 %	20.3 %
Net farm income - mkt	84,700	-70,759	13,245	75,508	100,256	298,183
Net farm income - cst	59,311	-53,321	4,032	33,431	80,917	226,379
EBITDA - cst	122,232	48,949	41,245	61,090	130,175	326,374
<b>Repayment Capacity</b>						
Capital debt repayment capacity	99,344	14,733	28,356	50,040	92,209	307,536
Capital debt repayment margin	47,738	-70,809	10,465	24,652	41,489	227,507
Replacement margin	23,431	-98,109	-2,316	10,173	28,410	173,472
Term debt coverage ratio	1.93	0.17	1.58	1.97	1.82	3.84
Replacement coverage ratio	1.31	0.13	0.92	1.26	1.45	2.29
<b>Efficiency</b>						
Asset turnover rate (cost)	27.0 %	26.3 %	23.7 %	29.5 %	29.7 %	26.3 %
Asset turnover rate (market)	20.4 %	22.5 %	16.2 %	23.8 %	18.2 %	20.4 %
Operating expense ratio	80.4 %	95.6 %	78.1 %	83.3 %	74.4 %	66.3 %
Depreciation expense ratio	5.7 %	2.6 %	13.3 %	4.7 %	6.6 %	7.7 %
Interest expense ratio	4.4 %	5.6 %	7.1 %	2.5 %	5.2 %	2.8 %
Net farm income ratio	9.5 %	-4.8 %	2.1 %	9.1 %	15.9 %	23.4 %



## 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**  
**2019 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	45	25	25	21	8
Acres	356.40	132.85	281.93	215.40	143.14
Yield per acre (bu.)	130.41	131.72	128.62	139.59	101.41
Operators share of yield %	82.72	100.00	100.00	52.43	47.50
Value per bu.	3.77	3.77	3.78	3.72	3.76
Total product return per acre	406.36	496.23	486.52	272.53	181.06
Hedging gains/losses per acre	0.16	0.13	0.29	-	-
Crop insurance per acre	32.69	43.10	44.16	10.93	17.86
Other crop income per acre	48.62	58.91	54.04	30.85	55.55
Gross return per acre	487.83	598.37	585.01	314.31	254.48
<b>Direct Expenses</b>					
Seed and plants	67.92	75.66	82.95	47.14	35.10
Fertilizer	93.41	92.12	117.88	67.43	49.12
Crop chemicals	41.03	49.17	46.65	31.14	21.92
Crop insurance	13.52	11.86	17.36	10.00	8.60
Drying expense	2.25	1.42	3.11	1.96	0.58
Storage	1.13	1.19	1.40	0.40	2.13
Fuel & oil	20.31	19.72	23.04	19.62	7.86
Repairs	35.97	35.34	38.61	37.13	16.88
Custom hire	4.99	17.38	1.88	0.61	5.52
Hired labor	5.06	7.51	4.65	5.16	-
Land rent	65.25	-	148.46	-	-
Machinery leases	2.90	1.54	3.70	3.40	-
Utilities	1.52	1.11	1.78	1.82	-
Marketing	0.44	0.52	0.75	-	-
Operating interest	7.93	6.36	11.65	5.28	0.06
Miscellaneous	0.83	0.75	0.77	1.17	0.05
Total direct expenses per acre	364.45	321.63	504.66	232.25	147.81
Return over direct exp per acre	123.38	276.74	80.35	82.06	106.67
<b>Overhead Expenses</b>					
Custom hire	0.57	0.70	0.29	0.23	3.29
Hired labor	9.04	11.22	8.78	8.73	5.53
Machinery leases	2.46	1.20	4.70	0.50	0.06
RE & pers. property taxes	3.87	10.75	1.79	1.55	5.86
Farm insurance	9.31	9.59	9.30	9.07	9.42
Utilities	1.90	2.65	1.27	1.75	4.23
Dues & professional fees	1.45	2.92	1.07	0.79	2.18
Interest	9.68	28.13	4.07	5.28	8.03
Mach & bldg depreciation	42.89	44.09	53.98	28.64	27.39
Miscellaneous	19.02	26.23	17.43	16.08	19.50
Total overhead expenses per acre	100.19	137.48	102.69	72.63	85.50
Total dir & ovhd expenses per acre	464.63	459.11	607.35	304.88	233.31
Net return per acre	23.19	139.26	-22.34	9.44	21.16
Government payments	13.16	18.60	12.26	11.61	9.04
Net return with govt pmts	36.35	157.86	-10.08	21.05	30.20
Labor & management charge	34.72	36.56	34.18	34.50	33.54
Net return over lbr & mgt	1.64	121.30	-44.26	-13.45	-3.34
<b>Cost of Production</b>					
Total direct expense per bu.	3.38	2.44	3.92	3.17	3.07
Total dir & ovhd exp per bu.	4.31	3.49	4.72	4.17	4.84
Less govt & other income	3.43	2.57	3.86	3.44	3.13
With labor & management	3.75	2.85	4.13	3.91	3.83
Net value per unit	3.77	3.77	3.78	3.72	3.76
Machinery cost per acre	110.97	120.33	126.59	93.55	56.56
Est. labor hours per acre	1.94	2.25	1.80	2.05	1.52

**Crop Enterprise Analysis**  
**2019 Missouri FBMA Farm Summary**  
**(Farms Sorted By Crop Tenure Type)**

**CRP**

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>
Number of farms	9	9
Acres	84.93	84.93
Gross return per acre	106.07	106.07
<b>Direct Expenses</b>		
Seed and plants	0.62	0.62
Fuel & oil	1.80	1.80
Repairs	2.06	2.06
Total direct expenses per acre	4.48	4.48
Return over direct exp per acre	101.60	101.60
<b>Overhead Expenses</b>		
Hired labor	0.67	0.67
RE & pers. property taxes	5.16	5.16
Farm insurance	5.18	5.18
Utilities	0.59	0.59
Dues & professional fees	1.27	1.27
Mach & bldg depreciation	10.02	10.02
Miscellaneous	1.49	1.49
Total overhead expenses per acre	24.38	24.38
Total dir & ovhd expenses per acre	28.85	28.85
Net return per acre	77.22	77.22
Government payments	-	-
Net return with govt pmts	77.22	77.22
Labor & management charge	4.87	4.87
Net return over lbr & mgt	72.35	72.35
Net value per unit	1.05	1.05
Machinery cost per acre	12.69	12.69
Est. labor hours per acre	0.38	0.38

**Crop Enterprise Analysis**  
**2019 Missouri FBMA Farm Summary**  
**(Farms Sorted By Crop Tenure Type)**

**Hay, Mixed**

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>	<u>Share Rent</u>
Number of farms	22	11	6	11
Acres	121.59	74.06	70.50	126.12
Yield per acre (ton)	2.71	1.92	3.95	2.81
Operators share of yield %	84.27	100.00	100.00	70.83
Value per ton	55.18	58.11	43.72	59.55
Total product return per acre	125.78	111.51	172.62	118.65
Crop insurance per acre	0.19	-	-	0.36
Other crop income per acre	5.30	10.93	8.04	1.36
Gross return per acre	131.27	122.44	180.66	120.37
<b>Direct Expenses</b>				
Fertilizer	20.00	29.40	17.48	15.97
Crop insurance	1.14	0.78	-	1.74
Fuel & oil	6.78	5.55	6.95	7.54
Repairs	14.23	11.04	18.50	15.04
Custom hire	13.51	12.17	53.24	2.67
Hired labor	1.03	0.69	2.58	0.78
Land rent	6.51	-	41.15	-
Operating interest	2.18	0.25	0.41	3.93
Miscellaneous	0.43	0.30	0.52	0.49
Total direct expenses per acre	65.80	60.17	140.81	48.17
Return over direct exp per acre	65.47	62.27	39.84	72.20
<b>Overhead Expenses</b>				
Custom hire	0.58	1.09	-	0.48
Hired labor	3.66	7.10	2.66	2.09
Machinery leases	0.44	0.64	1.23	0.10
RE & pers. property taxes	2.90	7.49	1.04	0.80
Farm insurance	4.75	7.08	7.54	2.57
Utilities	1.57	3.39	1.54	0.57
Dues & professional fees	0.87	1.29	1.23	0.55
Interest	2.60	6.53	0.16	1.12
Mach & bldg depreciation	14.13	28.68	6.71	8.36
Miscellaneous	5.59	11.55	4.34	2.64
Total overhead expenses per acre	37.10	74.84	26.46	19.28
Total dir & ovhd expenses per acre	102.90	135.02	167.27	67.45
Net return per acre	28.37	-12.58	13.39	52.92
Government payments	-	-	-	-
Net return with govt pmts	28.37	-12.58	13.39	52.92
Labor & management charge	17.40	16.72	16.22	17.94
Net return over lbr & mgt	10.97	-29.30	-2.84	34.98
<b>Cost of Production</b>				
Total direct expense per ton	28.87	31.35	35.66	24.18
Total dir & ovhd exp per ton	45.14	70.35	42.36	33.85
Less govt & other income	42.73	64.66	40.33	32.99
With labor & management	50.37	73.37	44.44	41.99
Net value per unit	55.18	58.11	43.72	59.55
Machinery cost per acre	50.65	60.97	86.33	35.10
Est. labor hours per acre	1.03	1.24	1.22	0.85

**Crop Enterprise Analysis**  
**2019 Missouri FBMA Farm Summary**  
**(Farms Sorted By Crop Tenure Type)**

**Pasture**

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>	<u>Cash Rent</u>	<u>Share Rent</u>
Number of farms	33	18	20	8
Acres	139.54	110.61	84.30	97.70
Yield per acre (aum)	3.21	3.23	3.14	3.50
Operators share of yield %	96.70	100.00	100.00	85.51
Value per aum	13.02	13.24	12.89	12.87
Total product return per acre	40.43	42.72	40.46	38.50
Crop insurance per acre	0.05	-	-	0.28
Other crop income per acre	1.67	0.02	3.51	2.20
Gross return per acre	42.14	42.74	43.97	40.97
<b>Direct Expenses</b>				
Seed and plants	1.16	0.17	0.48	5.37
Fertilizer	13.90	18.67	12.07	6.22
Crop chemicals	0.64	0.63	1.01	-
Crop insurance	1.57	1.43	1.60	2.15
Fuel & oil	2.36	2.31	2.96	1.59
Repairs	4.99	5.60	5.44	3.32
Hired labor	1.41	0.27	1.22	5.00
Land rent	16.21	-	44.26	-
Miscellaneous	0.56	0.29	0.99	0.45
Total direct expenses per acre	42.18	29.36	70.04	20.39
Return over direct exp per acre	-0.03	13.38	-26.07	20.58
<b>Overhead Expenses</b>				
Hired labor	0.83	1.19	0.61	0.54
RE & pers. property taxes	1.77	3.55	0.23	0.27
Farm insurance	1.28	1.55	1.13	0.87
Utilities	0.35	0.51	0.23	0.29
Interest	3.69	7.41	0.69	0.50
Mach & bldg depreciation	3.86	4.20	4.15	3.07
Miscellaneous	3.09	3.33	3.69	1.69
Total overhead expenses per acre	14.77	21.74	10.73	6.72
Total dir & ovhd expenses per acre	56.95	51.10	80.77	27.12
Net return per acre	-14.81	-8.36	-36.80	13.86
Government payments	-	-	-	-
Net return with govt pmts	-14.81	-8.36	-36.80	13.86
Labor & management charge	5.07	5.35	5.30	4.45
Net return over lbr & mgt	-19.87	-13.70	-42.10	9.41
<b>Cost of Production</b>				
Total direct expense per aum	13.58	9.10	22.32	6.82
Total dir & ovhd exp per aum	18.33	15.84	25.73	9.07
Less govt & other income	17.78	15.83	24.61	8.24
With labor & management	19.41	17.49	26.30	9.72
Net value per unit	13.02	13.24	12.89	12.87
Machinery cost per acre	11.66	12.51	13.30	8.05
Est. labor hours per acre	0.28	0.29	0.30	0.23

**Crop Enterprise Analysis**  
**2019 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	49	33	33	24	10
Acres	574.98	190.84	315.40	360.23	282.28
Yield per acre (bu.)	46.30	43.65	47.12	47.31	46.11
Operators share of yield %	80.10	100.00	100.00	54.63	43.12
Value per bu.	8.69	8.45	8.81	8.72	8.63
Total product return per acre	322.11	368.64	415.19	225.28	171.62
Hedging gains/losses per acre	0.09	0.06	0.16	0.06	-
Crop insurance per acre	14.79	24.59	12.90	11.80	9.08
Other crop income per acre	53.23	80.45	51.45	37.49	47.26
Gross return per acre	390.22	473.75	479.69	274.64	227.96
<b>Direct Expenses</b>					
Seed and plants	49.77	55.40	62.29	40.64	19.03
Fertilizer	38.56	47.52	45.77	32.47	10.67
Crop chemicals	38.83	41.12	51.00	31.23	12.13
Crop insurance	9.19	6.56	13.79	7.12	4.46
Storage	0.26	0.84	-	-	0.68
Fuel & oil	12.10	11.16	15.25	11.99	2.87
Repairs	22.39	26.25	24.33	22.12	7.43
Custom hire	4.29	10.99	3.32	0.94	3.23
Hired labor	4.61	5.75	5.12	4.68	-
Land rent	50.14	-	135.74	-	-
Machinery leases	1.87	0.73	3.26	1.65	-
Utilities	0.95	0.44	1.55	0.91	-
Operating interest	4.64	6.52	5.73	3.45	0.07
Miscellaneous	8.53	8.13	3.29	17.92	0.02
Total direct expenses per acre	246.15	221.44	370.43	175.13	60.60
Return over direct exp per acre	144.06	252.31	109.25	99.51	167.36
<b>Overhead Expenses</b>					
Custom hire	0.37	0.27	0.06	0.17	2.32
Hired labor	5.87	8.05	4.70	6.59	3.07
Machinery leases	1.57	2.03	2.44	0.69	0.04
RE & pers. property taxes	2.89	7.20	1.21	1.05	5.15
Farm insurance	6.84	5.02	7.04	7.67	7.68
Utilities	1.55	2.21	0.98	1.49	2.30
Dues & professional fees	0.96	1.68	0.67	0.57	1.57
Interest	10.58	24.69	3.07	2.86	30.44
Mach & bldg depreciation	28.17	33.70	33.78	20.23	19.47
Miscellaneous	12.11	13.49	13.43	11.08	7.31
Total overhead expenses per acre	70.91	98.35	67.39	52.39	79.36
Total dir & ovhd expenses per acre	317.06	319.79	437.82	227.52	139.96
Net return per acre	73.16	153.96	41.87	47.12	88.00
Government payments	11.55	18.89	11.42	6.68	10.55
Net return with govt pmts	84.71	172.85	53.29	53.80	98.55
Labor & management charge	24.01	25.74	24.87	24.01	17.01
Net return over lbr & mgt	60.69	147.11	28.42	29.80	81.53
<b>Cost of Production</b>					
Total direct expense per bu.	6.64	5.07	7.86	6.78	3.05
Total dir & ovhd exp per bu.	8.55	7.33	9.29	8.80	7.04
Less govt & other income	6.40	4.49	7.68	6.64	3.67
With labor & management	7.05	5.08	8.21	7.56	4.53
Net value per unit	8.69	8.45	8.81	8.72	8.63
Machinery cost per acre	70.89	83.69	83.55	59.34	31.00
Est. labor hours per acre	1.36	1.52	1.38	1.43	0.72

**Crop Enterprise Analysis**  
**2019 Missouri FBMA Farm Summary**  
**(Farms Sorted By Crop Tenure Type)**

**Wheat, Winter**

	<u>Avg. Of</u> <u>All Farms</u>	<u>Cash</u> <u>Rent</u>
Number of farms	12	6
Acres	140.24	163.04
Yield per acre (bu.)	52.36	60.97
Operators share of yield %	90.46	100.00
Value per bu.	5.26	5.30
Total product return per acre	248.91	323.36
Crop insurance per acre	40.46	33.44
Other crop income per acre	61.09	55.49
Gross return per acre	350.46	412.29
<b>Direct Expenses</b>		
Seed and plants	35.16	40.82
Fertilizer	94.55	110.95
Crop chemicals	30.47	29.65
Cover crop expense	0.36	-
Crop insurance	6.85	7.14
Fuel & oil	13.64	14.72
Repairs	25.69	23.36
Custom hire	1.30	1.63
Hired labor	8.18	13.54
Land rent	67.82	116.67
Machinery leases	4.03	6.92
Utilities	0.55	0.61
Operating interest	3.93	5.08
Miscellaneous	0.09	0.15
Total direct expenses per acre	291.74	371.25
Return over direct exp per acre	58.72	41.04
<b>Overhead Expenses</b>		
Custom hire	0.95	-
Hired labor	6.39	5.07
RE & pers. property taxes	2.29	0.61
Farm insurance	5.61	4.71
Utilities	1.26	0.19
Dues & professional fees	0.72	0.44
Interest	8.04	2.19
Mach & bldg depreciation	27.21	30.97
Miscellaneous	13.22	5.42
Total overhead expenses per acre	65.15	49.59
Total dir & ovhd expenses per acre	356.89	420.84
Net return per acre	-6.43	-8.55
Government payments	16.23	22.52
Net return with govt pmts	9.80	13.97
Labor & management charge	18.24	11.99
Net return over lbr & mgt	-8.44	1.98
<b>Cost of Production</b>		
Total direct expense per bu.	6.16	6.09
Total dir & ovhd exp per bu.	7.54	6.90
Less govt & other income	5.05	5.07
With labor & management	5.43	5.27
Net value per unit	5.26	5.30
Machinery cost per acre	71.62	77.18
Est. labor hours per acre	1.03	0.79

**Crop Enterprise Analysis**  
**2019 Missouri FBMA Farm Summary**  
**(Farms Sorted By Crop Tenure Type)**

**Custom Work**

	<u><b>Avg. Of All Farms</b></u>
Number of farms	6
Acres	432.88
Gross return per acre	117.52
<b>Direct Expenses</b>	
Fertilizer	7.95
Crop insurance	0.33
Fuel & oil	10.55
Repairs	20.49
Operating interest	8.34
Total direct expenses per acre	47.66
Return over direct exp per acre	69.86
<b>Overhead Expenses</b>	
Custom hire	0.91
Hired labor	9.05
Machinery leases	1.13
RE & pers. property taxes	1.98
Farm insurance	5.34
Utilities	2.13
Dues & professional fees	1.85
Interest	1.90
Mach & bldg depreciation	33.32
Miscellaneous	3.86
Total overhead expenses per acre	61.47
Total dir & ovhd expenses per acre	109.13
Net return per acre	8.39
Government payments	-
Net return with govt pmts	8.39
Labor & management charge	24.02
Net return over lbr & mgt	-15.63
<b>Cost of Production</b>	
Total direct expense per \$	0.41
Total dir & ovhd exp per \$	0.93
Less govt & other income	0.93
With labor & management	1.13
Net value per unit	1.00
Machinery cost per acre	64.68
Est. labor hours per acre	1.62



**Crop Enterprise Analysis**  
**2019 Missouri FBMA Farm Summary**  
**(Farms Sorted By Crop Tenure Type)**

**Rented Out**

	<u>Avg. Of All Farms</u>	<u>Owned Land</u>
Number of farms	7	6
Acres	287.55	290.47
Gross return per acre	105.02	115.54
<b>Direct Expenses</b>		
Fertilizer	0.89	1.03
Fuel & oil	0.99	0.77
Repairs	6.78	3.54
Land rent	3.77	-
Operating interest	0.33	0.23
Total direct expenses per acre	12.33	5.08
Return over direct exp per acre	92.69	110.46
<b>Overhead Expenses</b>		
RE & pers. property taxes	1.62	1.59
Farm insurance	4.12	4.41
Utilities	2.76	3.19
Dues & professional fees	0.89	0.98
Interest	12.13	13.59
Mach & bldg depreciation	12.43	13.40
Miscellaneous	2.86	2.86
Total overhead expenses per acre	32.83	35.44
Total dir & ovhd expenses per acre	45.16	40.52
Net return per acre	59.86	75.02
Government payments	-	-
Net return with govt pmts	59.86	75.02
Labor & management charge	6.87	3.75
Net return over lbr & mgt	52.99	71.26
Net value per unit	1.01	1.01
Machinery cost per acre	15.00	11.29
Est. labor hours per acre	0.30	0.17

**Crop Enterprise Analysis**  
**2019 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>
Number of farms	9	5	6
Acres	197.58	125.94	174.10
Yield per acre	160.31	68.24	226.17
Operators share of yield %	98.97	100.00	100.00
Value per 0	1.00	1.00	1.00
Total product return per acre	158.67	68.24	226.17
Crop insurance per acre	129.71	83.13	163.40
Other crop income per acre	26.14	54.22	9.26
Gross return per acre	314.53	205.60	398.82
<b>Direct Expenses</b>			
Seed and plants	8.31	16.48	4.21
Fertilizer	15.21	26.72	9.78
Crop chemicals	1.95	-	3.32
Cover crop expense	7.84	11.28	4.15
Crop insurance	14.04	12.54	15.09
Fuel & oil	5.88	4.13	6.88
Repairs	8.35	6.45	9.65
Custom hire	9.30	23.50	1.66
Hired labor	13.66	30.05	4.03
Land rent	65.97	-	112.31
Utilities	0.85	0.91	0.83
Operating interest	1.42	0.06	2.37
Total direct expenses per acre	152.75	132.13	174.30
Return over direct exp per acre	161.78	73.47	224.52
<b>Overhead Expenses</b>			
Custom hire	0.21	0.59	-
Hired labor	1.45	2.56	0.90
Machinery leases	0.10	0.02	0.02
RE & pers. property taxes	4.39	11.09	0.39
Farm insurance	7.92	8.95	7.01
Utilities	0.53	1.08	0.15
Dues & professional fees	3.10	7.75	0.56
Interest	2.86	5.60	1.48
Mach & bldg depreciation	14.19	16.13	14.05
Miscellaneous	9.48	7.73	11.17
Total overhead expenses per acre	43.88	61.51	35.72
Total dir & ovhd expenses per acre	196.62	193.64	210.03
Net return per acre	117.90	11.96	188.80
Government payments	20.50	20.87	20.30
Net return with govt pmts	138.40	32.83	209.10
Labor & management charge	17.98	22.41	15.55
Net return over lbr & mgt	120.42	10.42	193.55
Net value per unit	1.00	1.00	1.00
Machinery cost per acre	38.00	50.45	32.52
Est. labor hours per acre	1.52	2.42	0.98

## 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**  
**2019 Missouri FBMA Farm Summary**  
**(Farms Sorted By Net Return)**

**Beef Cow-Calf -- Average Per Cwt. Produced**

	<b>Avg. Of All Farms</b>		<b>Low 20%</b>		<b>20 - 40%</b>		<b>40 - 60%</b>		<b>60 - 80%</b>		<b>High 20%</b>	
Number of farms	25		5		5		5		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	88.58	151.52	98.80	263.85	100.67	139.92	63.10	90.94	88.97	136.23	95.67	132.56
Transferred out (lb)	7.73	10.02	-	-	12.92	12.92	13.42	20.58	10.93	13.86	-	-
Cull sales (lb)	15.24	16.99	16.76	24.89	34.89	53.76	11.24	6.34	7.45	6.13	16.52	10.74
Government payments		0.27		-		-		-		0.89		-
Other income		0.66		-		-		-		1.61		0.95
Purchased (lb)	-10.26	-39.55	-11.33	-49.81	-36.33	-31.20	-7.29	-112.96	-5.60	-11.34	-0.14	-3.03
Transferred in (lb)	-1.61	-2.28	-	-	-	-	-	-	-5.21	-5.79	-	-2.84
Inventory change (lb)	0.04	9.10	-4.23	-35.26	-12.16	-34.00	19.53	121.15	3.09	-43.89	-13.00	61.37
Gross margin		146.74		203.66		141.40		126.05		97.69		199.74
<b>Direct Expenses</b>												
Protein Vit Minerals (lb.)	18.69	8.28	73.92	15.11	-	31.32	-	0.41	15.16	3.47	-	-
Creep / Starter (lb.)	-	2.02	-	-	-	11.64	-	-	-	1.41	-	-
Complete Ration (lb.)	957.54	20.18	-	81.04	-	-	-	11.20	2.90	0.81	5,564.29	14.01
Corn (bu.)	1.81	6.57	4.95	18.88	1.91	6.73	0.82	2.74	0.94	3.22	0.94	3.21
Corn Silage (lb.)	113.96	2.85	601.69	15.04	-	-	-	-	-	-	-	-
Hay, Grass (lb.)	1,324.26	35.82	2,297.60	49.70	1,802.21	40.20	834.01	22.74	601.68	23.62	1,724.78	53.74
Pasture (aum)	1.89	24.67	3.35	43.93	1.83	20.72	1.69	23.43	1.24	15.28	1.73	24.89
Hay (lb.)	389.81	9.75	1,035.77	25.89	-	-	622.50	15.56	236.90	5.92	-	-
Other feed stuffs (lb)	100.10	2.83	386.80	8.49	-	-	131.44	5.78	4.61	0.33	-	-
Veterinary		2.86		1.81		14.05		-		0.87		1.93
Fuel & oil		11.52		39.31		8.55		7.09		3.46		2.72
Repairs		19.62		69.33		11.64		12.51		3.32		8.50
Miscellaneous		3.18		0.27		15.10		2.60		0.64		2.15
Total direct expenses		150.14		368.81		159.96		104.07		62.36		111.15
Return over direct expense		-3.40		-165.14		-18.56		21.97		35.33		88.58
<b>Overhead Expenses</b>												
Hired labor		10.33		52.74		0.10		0.30		0.58		0.50
RE & pers. property taxes		3.22		9.04		2.34		1.39		0.63		4.22
Farm insurance		8.61		33.09		7.86		0.84		2.08		2.74
Utilities		2.80		11.36		0.00		1.01		1.25		0.42
Interest		4.10		8.34		6.69		1.83		4.06		-
Mach & bldg depreciation		12.66		39.14		17.63		10.53		0.92		3.10
Miscellaneous		24.42		78.97		39.34		15.91		1.91		2.59
Total overhead expenses		66.14		232.67		73.96		31.80		11.42		13.56
Total dir & ovhd expenses		216.28		601.47		233.92		135.87		73.79		124.71
Net return		-69.54		-397.81		-92.52		-9.82		23.90		75.03
Labor & management charge		26.86		66.62		25.99		16.62		12.92		20.33
Net return over lbr & mgt		-96.40		-464.43		-118.51		-26.44		10.98		54.70
<b>Cost of Production Per Cwt. Produced</b>												
Total direct expense per unit		150.14		368.81		159.96		104.07		62.36		111.15
Total dir & ovhd expense per unit		216.28		601.47		233.92		135.87		73.79		124.71
With other revenue adjustments		233.17		643.73		221.26		139.21		125.37		89.88
With labor and management		260.03		710.35		247.25		155.83		138.29		110.21
Est. labor hours per unit		2.08		4.43		3.16		1.22		0.96		1.61
<b>Other Information</b>												
Number of cows		59.2		66.2		45.2		46.4		86.8		51.2
Pregnancy percentage		92.8		97.9		85.0		91.8		93.9		92.2
Pregnancy loss percentage		2.3		2.2		2.1		4.7		2.7		-0.4
Culling percentage		11.5		12.4		30.1		7.0		6.7		6.3
Calving percentage		90.7		95.8		83.2		87.5		91.4		92.6
Weaning percentage		85.3		91.5		72.1		81.0		86.9		90.2
Calves sold per cow		0.78		0.94		0.67		0.73		0.79		0.71
Calf death loss percent		4.5		1.0		12.5		5.1		3.7		3.0
Cow death loss percent		0.9		0.6		1.3		2.0		0.8		-
Cows per FTE		324.3		179.7		239.6		450.1		665.9		420.6
Average weaning weight		507		550		412		520		522		483
Lb. weaned/exposed female		433		503		297		421		454		436
Feed cost per cow		469.14		907.11		409.06		419.09		236.64		395.39
Avg wgt/ Beef Calves sold		515		387		603		583		550		552
Avg price / cwt.		171.06		267.05		138.99		144.11		153.11		138.55

**Livestock Enterprise Analysis**  
**2019 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>	
Number of farms	25		5		5		5		5		5	
	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value	Quantity	Value
Beef Calves sold (lb)	367.9	629.24	347.3	927.36	372.3	517.42	323.0	465.51	389.4	596.26	394.7	546.81
Transferred out (lb)	32.1	41.63	-	-	47.8	47.79	68.7	105.36	47.8	60.65	-	-
Cull sales (lb)	63.3	70.58	58.9	87.48	129.0	198.79	57.6	32.44	32.6	26.82	68.2	44.29
Government payments		1.14		-		-		-		3.88		-
Other income		2.75		-		-		-		7.05		3.91
Purchased (lb)	-42.6	-164.25	-39.8	-175.08	-134.3	-115.39	-37.3	-578.26	-24.5	-49.64	-0.6	-12.50
Transferred in (lb)	-6.7	-9.47	-	-	-	-	-	-	-22.8	-25.35	-	-11.72
Inventory change (lb)	0.2	37.79	-14.9	-123.94	-45.0	-125.73	100.0	620.19	13.5	-192.08	-53.6	253.14
Gross margin		609.40		715.83		522.88		645.25		427.58		823.93
<b>Direct Expenses</b>												
Protein Vit Minerals (lb.)	77.6	34.38	259.8	53.12	-	115.83	-	2.09	66.4	15.20	-	-
Creep / Starter (lb.)	-	8.39	-	-	-	43.04	-	-	-	6.19	-	-
Complete Ration (lb.)	3,976.7	83.79	-	284.83	-	-	-	57.35	12.7	3.57	22,953.1	57.78
Corn (bu.)	7.5	27.28	17.4	66.35	7.1	24.89	4.2	14.04	4.1	14.09	3.9	13.25
Corn Silage (lb.)	473.3	11.83	2,114.8	52.87	-	-	-	-	-	-	-	-
Hay, Grass (lb.)	5,499.7	148.78	8,075.5	174.70	6,664.6	148.67	4,269.4	116.43	2,633.4	103.36	7,114.8	221.68
Pasture (aum)	7.8	102.47	11.8	154.39	6.8	76.62	8.6	119.93	5.4	66.88	7.1	102.68
Hay (lb.)	1,618.9	40.47	3,640.5	91.01	-	-	3,186.6	79.67	1,036.9	25.92	-	-
Other feed stuffs (lb)	415.7	11.74	1,359.5	29.83	-	-	672.8	29.58	20.2	1.43	-	-
Veterinary		11.86		6.37		51.95		-		3.82		7.96
Fuel & oil		47.84		138.17		31.61		36.32		15.16		11.22
Repairs		81.50		243.67		43.05		64.05		14.54		35.08
Miscellaneous		13.19		0.94		55.85		13.32		2.79		8.86
Total direct expenses		623.53		1,296.27		591.52		532.77		272.95		458.51
Return over direct expense		-14.13		-580.45		-68.64		112.48		154.62		365.42
<b>Overhead Expenses</b>												
Hired labor		42.89		185.38		0.37		1.54		2.54		2.05
RE & pers. property taxes		13.36		31.76		8.65		7.09		2.75		17.40
Farm insurance		35.76		116.29		29.06		4.29		9.09		11.29
Utilities		11.65		39.91		0.00		5.19		5.47		1.71
Mach & bldg depreciation		52.59		137.55		65.18		53.88		4.04		12.77
Miscellaneous		118.45		306.87		170.24		90.78		26.11		10.70
Total overhead expenses		274.69		817.77		273.50		162.77		50.00		55.92
Total dir & ovhd expenses		898.22		2,114.04		865.02		695.54		322.95		514.44
Net return		-288.82		-1,398.21		-342.14		-50.29		104.62		309.49
Labor & management charge		111.55		234.16		96.12		85.06		56.56		83.86
Net return over lbr & mgt		-400.37		-1,632.37		-438.26		-135.35		48.06		225.63
<b>Cost of Production Per Cwt. Produced</b>												
Total direct expense per unit		150.14		368.81		159.96		104.07		62.36		111.15
Total dir & ovhd expense per unit		216.28		601.47		233.92		135.87		73.79		124.71
With other revenue adjustments		233.17		643.73		221.26		139.21		125.37		89.88
With labor and management		260.03		710.35		247.25		155.83		138.29		110.21
Est. labor hours per unit		8.63		15.58		11.68		6.22		4.20		6.66
<b>Other Information</b>												
Number of cows		59.2		66.2		45.2		46.4		86.8		51.2
Pregnancy percentage		92.8		97.9		85.0		91.8		93.9		92.2
Pregnancy loss percentage		2.3		2.2		2.1		4.7		2.7		-0.4
Culling percentage		11.5		12.4		30.1		7.0		6.7		6.3
Calving percentage		90.7		95.8		83.2		87.5		91.4		92.6
Weaning percentage		85.3		91.5		72.1		81.0		86.9		90.2
Calves sold per cow		0.78		0.94		0.67		0.73		0.79		0.71
Calf death loss percent		4.5		1.0		12.5		5.1		3.7		3.0
Cow death loss percent		0.9		0.6		1.3		2.0		0.8		-
Cows per FTE		324.3		179.7		239.6		450.1		665.9		420.6
Average weaning weight		507		550		412		520		522		483
Lb. weaned/exposed female		433		503		297		421		454		436
Feed cost per cow		469.14		907.11		409.06		419.09		236.64		395.39
Avg wgt/ Beef Calves sold		515		387		603		583		550		552
Avg price / cwt.		171.06		267.05		138.99		144.11		153.11		138.55

**Livestock Enterprise Analysis**  
**2019 Missouri FBMA Farm Summary**  
**(Farms Sorted By Net Return)**

**Hogs, Farrow To Finish -- Average Per Cwt. Carcass Sold**

	<u>Avg. Of All Farms</u>	
Number of farms	6	
	Quantity	Value
Raised Hogs sold (lb)	134.68	72.85
Cull sales (lb)	7.97	2.46
Government payments		1.91
Other income		1.65
Purchased (lb)	-1.03	-1.25
Inventory change (lb)	12.61	0.97
Gross margin		78.59
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	8.22	2.17
Complete Ration (lb.)	351.71	34.44
Corn (bu.)	2.58	10.38
Other feed stuffs (lb)	0.02	0.00
Veterinary		4.10
Supplies		0.35
Contract production exp.		5.12
Repairs		1.32
Hired labor		4.41
Livestock leases		0.75
Utilities		1.69
Marketing		2.59
Miscellaneous		3.47
Total direct expenses		70.78
Return over direct expense		7.81
<b>Overhead Expenses</b>		
Hired labor		1.96
Farm insurance		0.51
Mach & bldg depreciation		0.48
Miscellaneous		2.20
Total overhead expenses		5.15
Total dir & ovhd expenses		75.93
Net return		2.65
Labor & management charge		0.98
Net return over lbr & mgt		1.67
<b>Cost of Production/Cwt. Carcass Sold</b>		
Total direct expense per unit		70.78
Total dir & ovhd expense per unit		75.93
With other revenue adjustments		72.49
With labor and management		73.47
Est. labor hours per unit		0.36
<b>Other Information</b>		
Average number of sows		926.3
Litters farrowed		1,989
Litters per sow		2.15
Litters per crate		15.28
Pigs born per litter		13.21
Pigs weaned per litter		11.43
Pigs weaned per sow		24.16
Pigs sold per litter		9.80
Percent substandard hogs		3
Lb. of feed / lb. of gain		3.27
Feed cost / cwt. of gain		30.45
Feed cost per litter		847.12
Hired labor per sow		246.45
Avg wgt/Raised Hogs sold		248
Avg price / cwt.		54.09
Average carcass weight		189
Average price / cwt. carcass		72.12

**Livestock Enterprise Analysis**  
**2019 Missouri FBMA Farm Summary**  
**(Farms Sorted By Net Return)**

**Hogs, Farrow To Finish -- Average Per Litter**

	<u>Avg. Of All Farms</u>	
Number of farms	6	
	Quantity	Value
Raised Hogs sold (lb)	2,428.1	1,313.44
Cull sales (lb)	143.8	44.29
Government payments		34.36
Other income		29.75
Purchased (lb)	-18.6	-22.56
Inventory change (lb)	227.4	17.57
Gross margin		1,416.84
<b>Direct Expenses</b>		
Protein Vit Minerals (lb.)	148.2	39.10
Complete Ration (lb.)	6,340.9	620.88
Corn (bu.)	46.5	187.12
Other feed stuffs (lb)	0.3	0.02
Veterinary		73.89
Supplies		6.35
Contract production exp.		92.25
Repairs		23.82
Hired labor		79.48
Livestock leases		13.49
Utilities		30.45
Marketing		46.63
Miscellaneous		62.61
Total direct expenses		1,276.10
Return over direct expense		140.74
<b>Overhead Expenses</b>		
Hired labor		35.32
Mach & bldg depreciation		8.73
Miscellaneous		48.85
Total overhead expenses		92.90
Total dir & ovhd expenses		1,369.01
Net return		47.84
Labor & management charge		17.71
Net return over lbr & mgt		30.13
<b>Cost of Production/Cwt. Carcass Sold</b>		
Total direct expense per unit		70.78
Total dir & ovhd expense per unit		75.93
With other revenue adjustments		72.49
With labor and management		73.47
Est. labor hours per unit		6.46
<b>Other Information</b>		
Average number of sows		926.3
Litters farrowed		1,989
Litters per sow		2.15
Litters per crate		15.28
Pigs born per litter		13.21
Pigs weaned per litter		11.43
Pigs weaned per sow		24.16
Pigs sold per litter		9.80
Percent substandard hogs		3
Lb. of feed / lb. of gain		3.27
Feed cost / cwt. of gain		30.45
Feed cost per litter		847.12
Hired labor per sow		246.45
Avg wgt/Raised Hogs sold		248
Avg price / cwt.		54.09
Average carcass weight		189
Average price / cwt. carcass		72.12

## **Financial Summary Tables**

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

### **Financial Summary by Net Farm Income (page 38)**

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

### **Financial Summary by Farm Size (Gross Farm Income) (page 39)**

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

### **Financial Summary by Farm Type (page 40)**

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

### **Financial Summary by Debt To Asset Ratio (page 41)**

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

### **Financial Summary by Age of Operator (page 42)**

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



**Financial Summary**  
**2019 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	109	21	22	22	22	22
<b>Income Statement</b>						
Gross cash farm income	601,307	1,142,516	187,040	374,327	477,530	849,722
Total cash farm expense	528,909	1,125,283	155,532	317,435	405,265	668,139
Net cash farm income	72,398	17,233	31,507	56,892	72,266	181,584
Inventory change	22,290	-31,250	-3,698	-4,878	31,576	117,266
Depreciation	-35,845	-28,634	-25,056	-17,300	-33,353	-74,556
Net farm income from operations	58,842	-42,651	2,753	34,713	70,489	224,293
Gain or loss on capital sales	469	-10,670	1,278	-1,282	10,429	2,085
Average net farm income	59,311	-53,321	4,032	33,431	80,917	226,379
Median net farm income	33,869	-18,964	2,271	31,392	77,215	184,042
<b>Profitability (cost)</b>						
Rate of return on assets	2.8 %	-0.7 %	-0.3 %	1.5 %	4.5 %	5.3 %
Rate of return on equity	1.8 %	-7.0 %	-2.5 %	0.8 %	4.6 %	5.7 %
Operating profit margin	10.2 %	-2.6 %	-1.1 %	5.1 %	15.2 %	20.3 %
Asset turnover rate	27.0 %	26.3 %	23.7 %	29.5 %	29.7 %	26.3 %
<b>Profitability (market)</b>						
Rate of return on assets	3.1 %	-1.2 %	0.6 %	4.6 %	3.5 %	5.8 %
Rate of return on equity	2.6 %	-6.3 %	-0.6 %	5.0 %	3.3 %	6.1 %
Operating profit margin	15.4 %	-5.4 %	3.9 %	19.2 %	19.5 %	28.3 %
Asset turnover rate	20.4 %	22.5 %	16.2 %	23.8 %	18.2 %	20.4 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	460,917	621,163	230,403	267,873	403,867	788,563
Current liabilities	221,991	556,748	55,311	115,136	214,870	183,104
Current ratio	2.08	1.12	4.17	2.33	1.88	4.31
Working capital	238,926	64,415	175,092	152,736	188,997	605,459
Change in working capital	6,395	-84,254	-9,493	-19,162	31,544	109,220
Working capital to gross inc	38.3 %	5.8 %	92.9 %	41.7 %	37.2 %	62.6 %
Term debt coverage ratio	1.93	0.17	1.58	1.97	1.82	3.84
Replacement coverage ratio	1.31	0.13	0.92	1.26	1.45	2.29
Term debt to EBITDA	3.06	14.84	2.48	2.90	2.90	1.53
<b>Solvency (end of year at cost)</b>						
Number of farms	109	21	22	22	22	22
Total assets	7,011,197	2,516,031	943,364	1,262,164	1,789,700	28,340,398
Total liabilities	626,920	1,282,072	180,251	306,897	645,908	749,250
Net worth	6,384,277	1,233,959	763,113	955,267	1,143,792	27,591,148
Net worth change	63,305	-64,125	15,690	42,381	87,760	229,027
Farm debt to asset ratio	32 %	53 %	21 %	27 %	41 %	20 %
Total debt to asset ratio	9 %	51 %	19 %	24 %	36 %	3 %
Change in earned net worth %	1 %	-5 %	2 %	5 %	8 %	1 %
<b>Solvency (end of year at market)</b>						
Number of farms	109	21	22	22	22	22
Total assets	2,790,670	2,968,379	1,326,389	1,673,650	2,814,326	5,178,683
Total liabilities	626,920	1,282,072	180,251	306,897	645,908	749,250
Net worth	2,163,750	1,686,307	1,146,138	1,366,753	2,168,418	4,429,433
Total net worth change	104,183	-79,514	31,057	97,987	110,837	352,197
Farm debt to asset ratio	24 %	46 %	14 %	22 %	25 %	15 %
Total debt to asset ratio	22 %	43 %	14 %	18 %	23 %	14 %
Change in total net worth %	5 %	-5 %	3 %	8 %	5 %	9 %
<b>Nonfarm Information</b>						
Net nonfarm income	46,667	49,845	26,697	45,624	29,572	81,744
Farms reporting living expenses	10	2	1	3	3	1
Total family living expense	52,335	-	-	-	-	-
Total living, invest, cap. purch	67,191	-	-	-	-	-
<b>Crop Acres</b>						
Total crop acres	795	646	431	501	851	1,539
Total crop acres owned	219	189	164	72	207	459
Total crop acres cash rented	313	314	168	295	335	454
Total crop acres share rented	263	142	98	134	308	627
Machinery value per crop acre	510	626	457	475	351	577

**Financial Summary**  
**2019 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>	<u>Over 2,000,000</u>
Number of farms	109	33	16	24	20	11	5
<b>Income Statement</b>							
Gross cash farm income	601,307	37,920	160,987	378,325	674,352	1,280,548	5,012,495
Total cash farm expense	528,909	30,006	126,177	279,257	562,866	1,092,335	4,933,381
Net cash farm income	72,398	7,914	34,810	99,068	111,486	188,213	79,113
Inventory change	22,290	5,076	6,992	4,366	54,661	20,114	146,195
Depreciation	-35,845	-1,638	-13,949	-26,082	-44,728	-113,162	-172,920
Net farm income from operations	58,842	11,351	27,853	77,352	121,419	95,165	52,388
Gain or loss on capital sales	469	-35	933	-501	985	-14,385	37,579
Average net farm income	59,311	11,316	28,787	76,851	122,404	80,780	89,967
Median net farm income	33,869	7,048	24,682	68,492	118,996	-494	74,300
<b>Profitability (cost)</b>							
Rate of return on assets	2.8 %	1.5 %	2.6 %	3.0 %	4.2 %	1.5 %	2.4 %
Rate of return on equity	1.8 %	1.1 %	2.3 %	2.7 %	4.4 %	0.3 %	-1.6 %
Operating profit margin	10.2 %	13.1 %	12.5 %	16.2 %	14.5 %	4.4 %	7.3 %
Asset turnover rate	27.0 %	11.3 %	21.0 %	18.6 %	28.9 %	34.8 %	32.6 %
<b>Profitability (market)</b>							
Rate of return on assets	3.1 %	2.0 %	1.6 %	3.0 %	4.8 %	2.9 %	2.6 %
Rate of return on equity	2.6 %	1.8 %	1.1 %	2.8 %	5.1 %	2.2 %	-0.3 %
Operating profit margin	15.4 %	21.2 %	12.8 %	25.7 %	21.8 %	9.7 %	8.9 %
Asset turnover rate	20.4 %	9.5 %	12.8 %	11.5 %	22.2 %	29.4 %	29.0 %
<b>Liquidity &amp; Repayment (end of year)</b>							
Current assets	460,917	58,182	142,235	421,105	633,279	870,534	2,739,246
Current liabilities	221,991	5,836	61,764	77,373	258,626	303,963	2,528,624
Current ratio	2.08	9.97	2.30	5.44	2.45	2.86	1.08
Working capital	238,926	52,345	80,471	343,732	374,653	566,571	210,622
Change in working capital	6,395	323	8,690	6,103	57,016	-39,105	-61,849
Working capital to gross inc	38.3 %	124.3 %	47.4 %	89.1 %	51.2 %	43.6 %	4.1 %
Term debt coverage ratio	1.93	8.46	1.88	3.58	2.41	1.72	0.79
Replacement coverage ratio	1.31	2.53	1.46	2.07	1.53	0.96	0.72
Term debt to EBITDA	3.06	2.01	5.06	1.60	2.27	1.80	6.72
<b>Solvency (end of year at cost)</b>							
Number of farms	109	33	16	24	20	11	5
Total assets	7,011,197	482,017	942,543	24,803,378	2,514,236	3,526,434	9,775,317
Total liabilities	626,920	54,624	359,784	329,486	743,552	779,571	5,884,225
Net worth	6,384,277	427,393	582,759	24,473,892	1,770,684	2,746,863	3,891,091
Net worth change	63,305	36,066	33,443	111,359	106,777	18,715	32,195
Farm debt to asset ratio	32 %	12 %	42 %	15 %	30 %	23 %	60 %
Total debt to asset ratio	9 %	11 %	38 %	1 %	30 %	22 %	60 %
Change in earned net worth %	1 %	9 %	6 %	0 %	6 %	1 %	1 %
<b>Solvency (end of year at market)</b>							
Number of farms	109	33	16	24	20	11	5
Total assets	2,790,670	612,543	1,466,557	3,878,944	3,290,976	4,170,200	11,143,560
Total liabilities	626,920	54,624	359,784	329,486	743,552	779,571	5,884,225
Net worth	2,163,750	557,920	1,106,773	3,549,458	2,547,423	3,390,629	5,259,334
Total net worth change	104,183	47,180	39,417	190,751	151,030	86,117	124,479
Farm debt to asset ratio	24 %	10 %	26 %	10 %	23 %	20 %	54 %
Total debt to asset ratio	22 %	9 %	25 %	8 %	23 %	19 %	53 %
Change in total net worth %	5 %	9 %	4 %	6 %	6 %	3 %	2 %
<b>Nonfarm Information</b>							
Net nonfarm income	46,667	39,307	44,041	73,854	45,509	15,777	45,744
Farms reporting living expenses	10	3	2	3	2	-	-
Total family living expense	52,335	-	-	-	-	-	-
Total living, invest, cap. purch	67,191	-	-	-	-	-	-
<b>Crop Acres</b>							
Total crop acres	795	72	310	621	1,269	2,133	3,110
Total crop acres owned	219	32	94	325	278	364	778
Total crop acres cash rented	313	16	163	138	386	1,063	1,661
Total crop acres share rented	263	25	52	158	605	705	671
Machinery value per crop acre	510	561	404	521	537	557	410

**Financial Summary**  
**2019 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	109	50	16	18	17
<b>Income Statement</b>					
Gross cash farm income	601,307	545,645	182,150	407,933	499,231
Total cash farm expense	528,909	444,335	153,039	357,442	391,023
Net cash farm income	72,398	101,310	29,111	50,492	108,208
Inventory change	22,290	38,103	4,293	-7,523	24,392
Depreciation	-35,845	-50,210	-5,289	-20,254	-38,186
Net farm income from operations	58,842	89,202	28,116	22,715	94,414
Gain or loss on capital sales	469	-2,485	-203	-248	-91
Average net farm income	59,311	86,717	27,913	22,467	94,323
Median net farm income	33,869	51,344	22,190	29,245	68,786
<b>Profitability (cost)</b>					
Rate of return on assets	2.8 %	3.3 %	3.5 %	2.2 %	3.8 %
Rate of return on equity	1.8 %	2.9 %	3.4 %	-0.9 %	3.9 %
Operating profit margin	10.2 %	11.3 %	19.8 %	11.9 %	17.3 %
Asset turnover rate	27.0 %	29.4 %	17.5 %	18.6 %	22.0 %
<b>Profitability (market)</b>					
Rate of return on assets	3.1 %	4.5 %	3.2 %	2.0 %	2.8 %
Rate of return on equity	2.6 %	4.5 %	3.1 %	-0.2 %	2.6 %
Operating profit margin	15.4 %	21.2 %	23.9 %	13.7 %	17.7 %
Asset turnover rate	20.4 %	21.4 %	13.4 %	14.2 %	15.8 %
<b>Liquidity &amp; Repayment (end of year)</b>					
Current assets	460,917	498,759	165,295	426,949	393,694
Current liabilities	221,991	160,802	61,882	276,743	89,687
Current ratio	2.08	3.10	2.67	1.54	4.39
Working capital	238,926	337,957	103,413	150,206	304,007
Change in working capital	6,395	27,747	-1,488	-10,519	34,229
Working capital to gross inc	38.3 %	57.6 %	55.9 %	36.7 %	59.3 %
Term debt coverage ratio	1.93	2.58	3.79	0.89	3.00
Replacement coverage ratio	1.31	1.60	2.03	0.76	1.87
Term debt to EBITDA	3.06	1.71	2.11	6.07	3.08
<b>Solvency (end of year at cost)</b>					
Number of farms	109	50	16	18	17
Total assets	7,011,197	13,000,271	767,004	2,033,342	2,425,765
Total liabilities	626,920	471,876	174,817	871,741	620,750
Net worth	6,384,277	12,528,395	592,187	1,161,601	1,805,015
Net worth change	63,305	89,696	35,959	48,379	86,549
Farm debt to asset ratio	32 %	22 %	26 %	46 %	27 %
Total debt to asset ratio	9 %	4 %	23 %	43 %	26 %
Change in earned net worth %	1 %	1 %	6 %	4 %	5 %
<b>Solvency (end of year at market)</b>					
Number of farms	109	50	16	18	17
Total assets	2,790,670	3,141,211	1,030,866	2,649,957	3,334,163
Total liabilities	626,920	471,876	174,817	871,741	620,750
Net worth	2,163,750	2,669,335	856,049	1,778,216	2,713,413
Total net worth change	104,183	166,186	58,067	59,690	108,139
Farm debt to asset ratio	24 %	16 %	20 %	35 %	19 %
Total debt to asset ratio	22 %	15 %	17 %	33 %	19 %
Change in total net worth %	5 %	7 %	7 %	3 %	4 %
<b>Nonfarm Information</b>					
Net nonfarm income	46,667	54,686	47,430	37,243	44,661
Farms reporting living expenses	10	3	2	2	3
Total family living expense	52,335	-	-	-	-
Total living, invest, cap. purch	67,191	-	-	-	-
<b>Crop Acres</b>					
Total crop acres	795	1,082	171	773	591
Total crop acres owned	219	242	59	290	280
Total crop acres cash rented	313	449	24	224	220
Total crop acres share rented	263	391	88	259	90
Machinery value per crop acre	510	514	635	452	571

**Financial Summary**  
**2019 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>	<u>Over 80%</u>
Number of farms	109	61	25	13	5	5
<b>Income Statement</b>						
Gross cash farm income	601,307	378,377	570,459	680,384	898,763	2,972,237
Total cash farm expense	528,909	286,804	497,132	639,534	855,771	3,027,000
Net cash farm income	72,398	91,573	73,328	40,850	42,992	-54,763
Inventory change	22,290	6,025	34,251	63,972	-17,525	92,359
Depreciation	-35,845	-28,625	-47,726	-54,452	-43,276	-8,721
Net farm income from operations	58,842	68,972	59,854	50,370	-17,809	28,875
Gain or loss on capital sales	469	410	1,089	27	512	-800
Average net farm income	59,311	69,382	60,943	50,397	-17,297	28,075
Median net farm income	33,869	31,926	44,348	73,111	-6,484	27,666
<b>Profitability (cost)</b>						
Rate of return on assets	2.8 %	2.6 %	3.2 %	2.9 %	2.1 %	3.4 %
Rate of return on equity	1.8 %	2.4 %	2.0 %	2.0 %	-5.7 %	-2.9 %
Operating profit margin	10.2 %	12.3 %	9.8 %	7.9 %	9.4 %	7.7 %
Asset turnover rate	27.0 %	21.0 %	32.5 %	36.4 %	22.4 %	44.0 %
<b>Profitability (market)</b>						
Rate of return on assets	3.1 %	3.2 %	3.7 %	3.2 %	3.0 %	0.6 %
Rate of return on equity	2.6 %	3.1 %	3.2 %	3.0 %	-2.9 %	-19.5 %
Operating profit margin	15.4 %	21.7 %	15.6 %	10.8 %	13.8 %	1.4 %
Asset turnover rate	20.4 %	14.7 %	24.0 %	29.5 %	21.7 %	43.3 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	460,917	401,893	396,408	485,324	790,763	1,110,250
Current liabilities	221,991	51,300	204,311	394,617	763,185	1,402,793
Current ratio	2.08	7.83	1.94	1.23	1.04	0.79
Working capital	238,926	350,593	192,097	90,707	27,578	-292,543
Change in working capital	6,395	13,911	10,375	26,801	-61,663	-90,186
Working capital to gross inc	38.3 %	91.9 %	31.9 %	12.1 %	3.0 %	-9.5 %
Term debt coverage ratio	1.93	4.04	1.68	1.34	0.48	0.48
Replacement coverage ratio	1.31	1.82	1.21	1.21	0.45	0.43
Term debt to EBITDA	3.06	0.97	3.17	5.22	8.28	8.65
<b>Solvency (end of year at cost)</b>						
Number of farms	109	61	25	13	5	5
Total assets	7,011,197	10,801,765	1,873,084	1,899,727	3,706,875	3,050,963
Total liabilities	626,920	178,375	687,727	1,193,360	2,335,543	2,613,764
Net worth	6,384,277	10,623,391	1,185,357	706,367	1,371,332	437,200
Net worth change	63,305	85,727	53,413	47,075	-49,892	-5,376
Farm debt to asset ratio	32 %	9 %	39 %	65 %	63 %	86 %
Total debt to asset ratio	9 %	2 %	37 %	63 %	63 %	86 %
Change in earned net worth %	1 %	1 %	5 %	7 %	-4 %	-1 %
<b>Solvency (end of year at market)</b>						
Number of farms	109	61	25	13	5	5
Total assets	2,790,670	2,878,100	2,533,591	2,365,330	3,848,582	3,057,385
Total liabilities	626,920	178,375	687,727	1,193,360	2,335,543	2,613,764
Net worth	2,163,750	2,699,726	1,845,864	1,171,970	1,513,039	443,621
Total net worth change	104,183	138,555	101,274	68,045	-14,854	-87,620
Farm debt to asset ratio	24 %	7 %	29 %	52 %	61 %	85 %
Total debt to asset ratio	22 %	6 %	27 %	50 %	61 %	85 %
Change in total net worth %	5 %	5 %	6 %	6 %	-1 %	-16 %
<b>Nonfarm Information</b>						
Net nonfarm income	46,667	56,550	36,099	39,536	27,264	16,887
Farms reporting living expenses	10	6	3	1	-	-
Total family living expense	52,335	53,960	-	-	-	-
Total living, invest, cap. purch	67,191	59,075	-	-	-	-
<b>Crop Acres</b>						
Total crop acres	795	671	882	1,276	1,283	129
Total crop acres owned	219	257	140	214	317	53
Total crop acres cash rented	313	154	558	540	691	70
Total crop acres share rented	263	260	185	522	275	6
Machinery value per crop acre	510	596	490	366	415	373

**Financial Summary**  
**2019 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	109	14	17	20	15	43
<b>Income Statement</b>						
Gross cash farm income	601,307	161,267	636,951	1,073,713	569,627	521,811
Total cash farm expense	528,909	134,800	547,026	1,026,954	483,494	434,255
Net cash farm income	72,398	26,467	89,925	46,760	86,133	87,556
Inventory change	22,290	27,012	58,644	52,920	-40,580	14,065
Depreciation	-35,845	-14,008	-47,904	-31,229	-37,239	-39,849
Net farm income from operations	58,842	39,472	100,665	68,450	8,314	61,772
Gain or loss on capital sales	469	-961	4,706	-912	-1,643	639
Average net farm income	59,311	38,511	105,371	67,538	6,671	62,411
Median net farm income	33,869	25,326	47,357	52,594	9,436	34,596
<b>Profitability (cost)</b>						
Rate of return on assets	2.8 %	6.4 %	5.8 %	3.8 %	0.5 %	2.3 %
Rate of return on equity	1.8 %	8.9 %	6.9 %	3.2 %	-2.1 %	1.6 %
Operating profit margin	10.2 %	17.6 %	12.2 %	10.2 %	2.9 %	10.6 %
Asset turnover rate	27.0 %	36.3 %	47.5 %	37.5 %	17.9 %	21.3 %
<b>Profitability (market)</b>						
Rate of return on assets	3.1 %	9.2 %	8.7 %	4.1 %	1.1 %	2.1 %
Rate of return on equity	2.6 %	15.0 %	10.9 %	3.8 %	-0.8 %	1.7 %
Operating profit margin	15.4 %	25.9 %	22.4 %	12.4 %	7.5 %	14.9 %
Asset turnover rate	20.4 %	35.4 %	38.9 %	32.9 %	15.3 %	14.2 %
<b>Liquidity &amp; Repayment (end of year)</b>						
Current assets	460,917	135,422	395,049	563,304	592,604	499,373
Current liabilities	221,991	81,778	199,647	449,651	243,785	162,984
Current ratio	2.08	1.66	1.98	1.25	2.43	3.06
Working capital	238,926	53,644	195,402	113,653	348,819	336,390
Change in working capital	6,395	8,311	40,765	-629	-48,459	14,586
Working capital to gross inc	38.3 %	27.9 %	28.2 %	10.0 %	65.7 %	62.9 %
Term debt coverage ratio	1.93	1.97	3.03	1.83	0.77	2.02
Replacement coverage ratio	1.31	1.88	2.31	1.22	0.51	1.27
Term debt to EBITDA	3.06	2.89	1.87	3.14	5.48	3.04
<b>Solvency (end of year at cost)</b>						
Number of farms	109	14	17	20	15	43
Total assets	7,011,197	611,186	1,537,707	1,983,651	2,689,696	15,104,752
Total liabilities	626,920	326,972	581,912	873,683	792,418	569,865
Net worth	6,384,277	284,213	955,795	1,109,968	1,897,278	14,534,887
Net worth change	63,305	78,344	108,664	54,495	-7,588	69,304
Farm debt to asset ratio	32 %	56 %	39 %	47 %	32 %	24 %
Total debt to asset ratio	9 %	53 %	38 %	44 %	29 %	4 %
Change in earned net worth %	1 %	38 %	13 %	5 %	0 %	0 %
<b>Solvency (end of year at market)</b>						
Number of farms	109	14	17	20	15	43
Total assets	2,790,670	644,264	1,894,984	2,327,825	3,174,692	3,924,924
Total liabilities	626,920	326,972	581,912	873,683	792,418	569,865
Net worth	2,163,750	317,292	1,313,072	1,454,142	2,382,274	3,355,058
Total net worth change	104,183	97,536	174,474	78,155	17,351	120,953
Farm debt to asset ratio	24 %	54 %	31 %	42 %	27 %	16 %
Total debt to asset ratio	22 %	51 %	31 %	38 %	25 %	15 %
Change in total net worth %	5 %	44 %	15 %	6 %	1 %	4 %
<b>Nonfarm Information</b>						
Net nonfarm income	46,667	19,901	50,439	49,221	39,647	55,153
Farms reporting living expenses	10	1	3	3	1	2
Total family living expense	52,335	-	-	-	-	-
Total living, invest, cap. purch	67,191	-	-	-	-	-
<b>Crop Acres</b>						
Total crop acres	795	343	982	670	971	864
Total crop acres owned	219	24	120	115	292	344
Total crop acres cash rented	313	162	523	275	165	349
Total crop acres share rented	263	157	339	280	515	171
Machinery value per crop acre	510	317	384	552	595	542

## **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 2019 “average” or “mean” net farm income of the 109 farms in this summary was \$59,311. This is found by simply adding the NFI of each farm in the group to a total and then dividing by 109 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 2019, the “average” or “mean” NFI for 109 farms in the summary was \$59,311. However, the NFI of the “median”, or farm at the half-way point, was \$31,926. This indicates there were a group of farms with low NFI’s included in the group that more than offset the higher NFI’s of farms at the other end of the scale.

The “median” figures for selected factors on 2019 FBMA farms are reported on page 44 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.

## Benchmark Report, 109 Farms

	Group Median	Count	10%	20%	30%	40%	50%	60%	70%	80%	90%	100%
Gross cash farm income	314,885	109	15,988	30,385	58,761	115,085	237,202	389,144	489,351	589,078	964,784	1,662,507
Total cash operating expense	214,611	109	1,692,563	889,696	576,228	371,133	278,664	187,380	98,116	39,691	25,474	13,210
Net cash farm income	35,722	109	-23,199	-5,690	732	8,343	26,188	50,033	83,195	108,521	207,557	321,528
Inventory change	3,004	109	-148,491	-50,390	-13,700	-3,553	350	5,286	18,091	61,536	105,743	209,250
Depreciation	-9,209	109	-182,705	-79,967	-40,897	-22,011	-13,572	-6,331	-4,449	-1,505	0	0
Net farm income from operations	31,997	109	-71,530	-12,812	-2,194	9,436	27,391	44,348	65,766	90,341	122,082	240,794
Gain or Loss from capital sales	0	109	-10,532	-1,105	0	0	0	0	0	0	0	3,871
Net farm income	31,926	109	-71,036	-15,345	-2,033	10,180	23,336	44,348	67,104	90,982	122,082	242,329
Rate of return on assets (cost)	3.2	109	-16.0	-3.8	-1.4	0.7	2.4	3.4	4.2	5.3	7.8	15.5
Rate of return on equity (cost)	2.6	109	-18.4	-6.7	-3.4	-0.8	1.9	3.0	4.4	6.2	9.3	33.7
Operating profit margin (cost)	12.8	109	-101.4	-26.4	-8.3	2.8	9.9	15.4	17.5	24.7	34.8	56.9
Asset turnover rate (cost)	21.2	109	3.1	8.8	11.7	15.4	19.2	22.6	26.9	38.3	53.0	70.2
Rate of return on assets (mkt)	2.5	109	-14.4	-2.8	-0.7	0.9	2.2	2.9	3.9	6.6	8.2	15.2
Rate of return on equity (mkt)	2.4	109	-21.0	-4.9	-2.1	-0.1	1.3	2.8	4.3	6.8	11.7	27.8
Operating profit margin (mkt)	15.2	109	-108.0	-17.4	-7.0	5.2	11.3	16.8	21.2	29.1	51.4	72.8
Asset turnover rate (mkt)	15.8	109	2.6	5.5	9.0	11.1	14.3	18.8	22.7	31.9	47.2	64.1
Current ratio	2.41	109	0.76	1.10	1.27	1.58	2.24	3.20	4.34	5.79	9.89	38.62
Working capital	94,506	109	-33,092	10,550	25,164	38,639	73,273	140,099	231,666	366,368	578,538	1,012,323
Working capital to revenue ratio	54.6	109	-6.4	6.2	16.9	32.8	49.0	61.9	79.7	104.4	142.9	220.6
Term debt coverage ratio	1.36	109	-0.20	0.00	0.12	0.82	1.27	1.65	2.37	3.01	4.40	8.11
Replacement coverage ratio	1.39	109	-1.04	-0.02	0.43	0.94	1.24	1.61	2.04	2.85	3.80	7.33
Term debt to EBITDA	0.94	109	16.78	6.11	3.56	1.67	1.09	0.41	0.00	0.00	0.00	-2.17
Total assets	1,860,192	109	129,373	431,045	624,565	968,392	1,430,900	2,172,410	2,965,058	3,848,716	5,063,272	8,562,121
Total liabilities	244,330	109	2,464,262	973,061	550,556	436,333	328,803	200,893	95,649	28,310	0	0
Net worth	1,369,569	109	76,423	251,073	470,202	703,428	1,055,872	1,648,942	2,306,292	3,178,142	4,033,985	6,621,696
Change in retained earnings	29,542	109	-109,637	-15,284	-2,033	9,063	21,496	33,073	54,839	89,315	110,657	313,570
Net worth change	40,246	109	-154,245	-8,779	1,315	12,498	32,619	54,301	88,555	122,601	263,005	516,165
Farm debt to asset ratio	17	109	68	56	43	30	21	12	7	1	0	0
Total debt to asset ratio	16	109	75	51	37	29	20	14	7	2	0	0
Change in earned net worth %	5	109	-5	-3	0	1	3	5	7	12	23	56
Net nonfarm income	25,545	109	0	0	450	10,706	18,778	35,707	48,169	68,000	83,946	183,655
Family living / owner withdrawals	40,776	109	124,433	91,276	72,166	61,929	45,279	36,355	24,512	15,000	0	0
Income tax (accrued)	0	109	45,273	14,398	8,418	5,586	1,551	0	0	0	0	0
Farm capital purchases	44,932	109	0	500	6,800	21,000	31,276	59,889	84,132	133,106	265,043	440,000
Total crop acres	435	109	0	35	101	155	272	510	773	1,069	1,659	3,242
Crop acres owned	88	109	0	0	0	29	60	97	151	269	450	906
Crop acres cash rented	75	109	0	0	0	0	32	127	222	319	599	1,722
Crop acres share rented	16	109	0	0	0	0	0	30	146	299	681	1,377
Machinery investment per acre	432	109	1,786	1,088	761	595	459	416	338	251	59	0

## **Appendix I**

### **Whole Farm Analysis Procedures and Measures**

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

#### **Financial Summary**

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

##### ***Income Statement***

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

##### ***Profitability***

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

##### ***Liquidity and Repayment***

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

##### ***Solvency***

This section summarizes key measures from the Balance Sheet reports.

##### ***Nonfarm Information***

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

##### ***Crop Acres***

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



## Financial Standards Measures

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

### ***Liquidity***

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

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

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

### ***Solvency***

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

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

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

### ***Profitability***

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

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

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

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

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

### ***Repayment Capacity***

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

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

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

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

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

### ***Efficiency***

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

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

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

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

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

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

## **Farm Income Statement**

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

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

## **Profitability Measures**

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

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

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

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

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

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

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

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

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

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

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

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

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

## **Liquidity and Repayment Capacity Measures**

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

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

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

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

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

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

*Net Farm Income from Operations* is from the Income Statement.

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

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

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

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

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

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

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

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

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

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

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

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

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

## **Balance Sheets at Cost and Market Values**

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

## **Statement of Cash Flows**

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

## **Crop Production and Marketing Summary**

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

## **Household and Personal Expenses**

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

## **Operator and Labor Information**

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

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

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

## **Appendix II**

### **Crop Enterprise Analysis Procedures and Measures**

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

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

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

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

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

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

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

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

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

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

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



## Appendix III

### Livestock Enterprise Analysis Procedures and Measures

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

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

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

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

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

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

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

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

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

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

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

