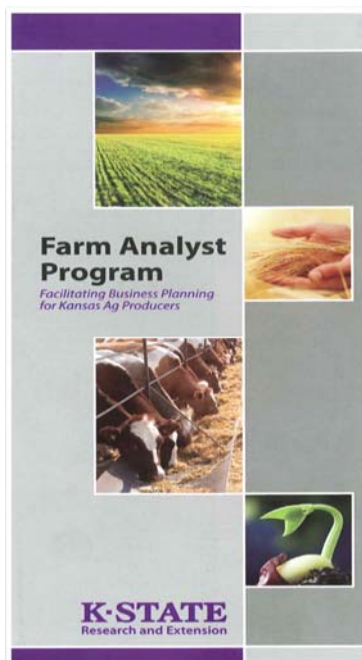


Financial Benchmarking to Assess a Farm's Financial Position in a Difficult Ag. Economy

Robin Reid
Extension Associate
K-State Department of Ag. Economics

KANSAS STATE
UNIVERSITY



- Analysts travel to the producer's home, providing private and confidential business advice
- Uses nationally recognized financial analysis software, FINPACK, to develop a balance sheet, enterprise budgets, and a base long-range business plan.
- Can explore business changes such as alternative enterprises, debt re-structure, farm transitions, etc.
- Develops balance sheets, budgets, base business plan, and even cash flow statements
- Assistance when working with creditors
- Facilitates discussion among family members and sets goals for the farm business
- \$450 base fee

Were 5 Farm Analysts across the state...Now 30!!!

Call 1-800-321-FARM to set up an appointment with a Farm Analyst

KANSAS STATE
UNIVERSITY



KANSAS AGRICULTURAL MEDIATION SERVICES

1-800-321-FARM

Connect you to helpful resources

- Farm analysts
- Attorneys
- Mediators
- Referrals

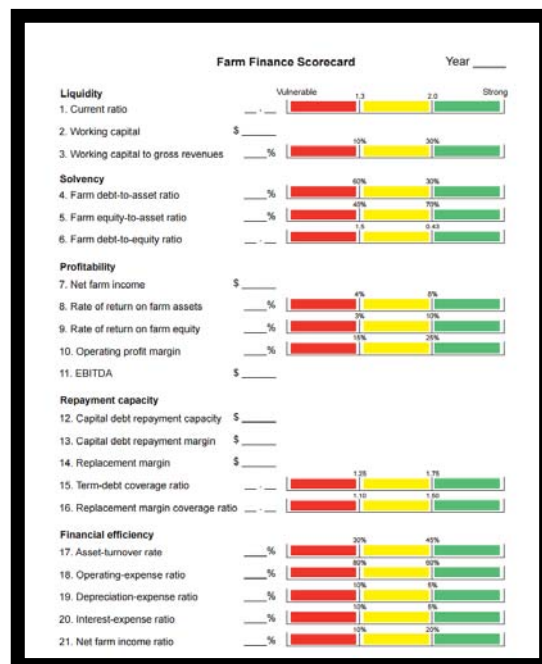
Discuss appeal options for adverse decisions

- Farm loan delinquency or denial
- USDA Farm Programs



Provide resources for farm families

- Successions
- Transitions
- Communication
- Disputes



- How well does this represent Kansas Farms?
 - Regions of KS?
- Do these values change by farm type?
- How are farms performing in the current agricultural economy?



Source: Center for Farm Financial Management
<http://www.cffm.umn.edu/Publications/pubs/FarmMgtTopics/FarmFinanceScorecard.pdf>



KSU-Farm Financial Benchmarking Tool



- 1,172 KFMA Farms in 2015 benchmark
- 1,289 KFMA Farms in 10-Year benchmark
 - (6 out of 10 years to be included)

- | | | |
|--------------------------|--------------------------------|--------------------------------|
| -Current Ratio | -Working Capital Ratio | -Debt-to-Asset Ratio |
| -Operating Profit Margin | -Rate of Return on Farm Assets | -Rate of Return on Farm Equity |
| -Asset Turnover Rate | -Operating Expense Ratio | -Depreciation Expense Ratio |
| -Interest Expense Ratio | -Net Farm Income Ratio | |



Categories

- State-level
 - Dairy
 - Operator Age (<40 years, 40-60 years, 60+ years)
 - Acres (<500, 500-1000, 1000-2000, 2000+), Cattle (None, Feedyard, <100 Cows, >100 Cows)
- Regional Level
 - Acres
 - Cowherd
 - Backgrounding/Feedyard



Find it on our website
www.AgManager.info
 under "Tools"

- Need Microsoft Excel
- Enable Macros
- Will be updated each year (May/June?)

KSU-Farm Financial Benchmarking Tool

A spreadsheet tool for benchmarking your farm's financial measures based on regions of Kansas, crop acres, and cattle numbers

Version- 8.18.2016

INTRODUCTION
 The KSU-Farm Financial Benchmarking tool is designed for producers to compare their financial ratios to farms of similar region, size and enterprise type. The percentage of farms that falls within a range of ratio values gives a distribution so a producer can see where they rank among their peers. Ten-year averages and past year values give two different distributions to benchmark from.

INSTRUCTIONS FOR THE USER:
 Be sure to "Enable Content" and "Enable Macros" for the spreadsheet to function correctly. Select the tab for what region of Kansas you would like to benchmark against or "State" to benchmark additional categories. Use the dropdown menus in the tabs below to select the benchmark category. If the benchmark shows N/A, you have mismatched categories and need to "Start Over". You may add your own farm values to be graphed against benchmark values in the green boxes or leave them as 2015 benchmark averages.

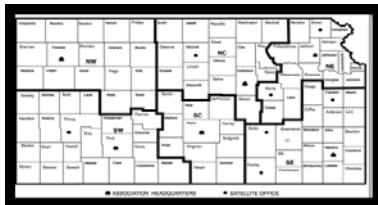
FOR MORE INFORMATION:
 Developed by: Robin Reid, Extension Associate, Kansas State University, rreid@ksu.edu, 785-532-0964
 With Assistance From: Kevin Herbst, Kansas Farm Management Association, Kansas State University, kherbst@ksu.edu, 785-532-8706
 Mark Dikeman, Kansas Farm Management Association, Kansas State University, mdikeman@ksu.edu, 785-539-0373

ACKNOWLEDGEMENTS:
 Funded in part through the 2016/2017 CoBank Research Fellow program.

KANSAS STATE UNIVERSITY Agricultural Economics

COBANK
 COOPERATIVE. CONNECTED. COMmitted.

Introduction State NorthWest NorthCentral NorthEast SouthEast SouthCentral SouthWest Ratio Calculations



BENCHMARK CATEGORY

Benchmark by: Dairy

Select category here using dropdown lists

Start Over

Print Summary

Enter Your Farm Values

Return to 2015 Averages

See Ratio Calculations

YOUR FARM VALUES*

Current Ratio:	3.13
Working Capital Ratio:	40.5%
Debt to Asset Ratio:	0.19
Operating Profit Margin:	0.00
Rate of Return on Farm Assets:	0.0%
Rate of Return on Farm Equity:	0.0%
Asset Turnover Rate:	21.9%
Operating Expense Ratio:	0.82
Depreciation Expense Ratio:	0.07
Interest Expense Ratio:	0.02
Net Farm Income Ratio:	0.09

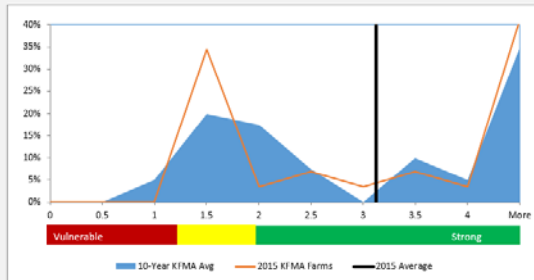
*Defaults to Averages for 2015 if not entered

KSU FARM FINANCIAL BENCHMARKING TOOL-State of Kansas

Benchmarked by: Dairy

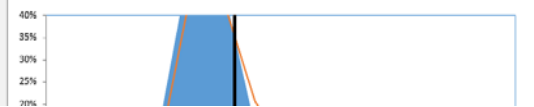
Current Ratio

	2015	10 Year
0	0.0%	0.0%
0.5	0.0%	0.0%
1	0.0%	5.0%
1.5	34.5%	20.0%
2	3.4%	17.5%
2.5	6.9%	7.5%
3	3.4%	0.0%
3.5	6.9%	10.0%
4	3.4%	5.0%
More	41.4%	35.0%
Count	29	40
Average	3.1	3.5



Working Capital Ratio

	2015	10 Year
-50.0%	0.0%	0.0%
-25.0%	0.0%	0.0%
0.0%	0.0%	5.0%
25.0%	58.6%	67.5%
50.0%	20.7%	15.0%
75.0%	3.4%	2.5%



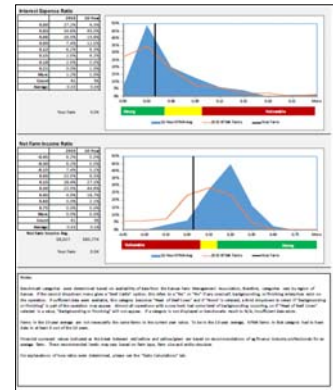
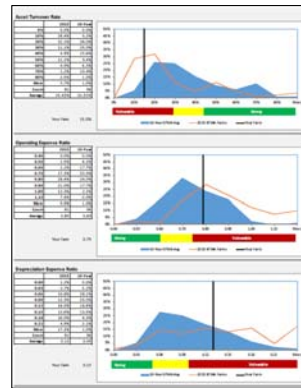
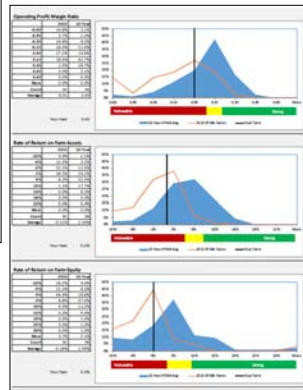
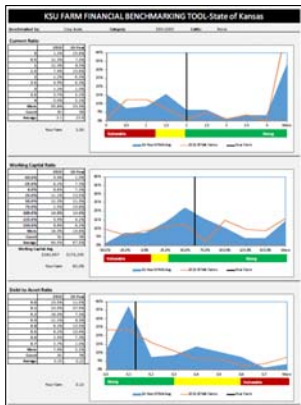
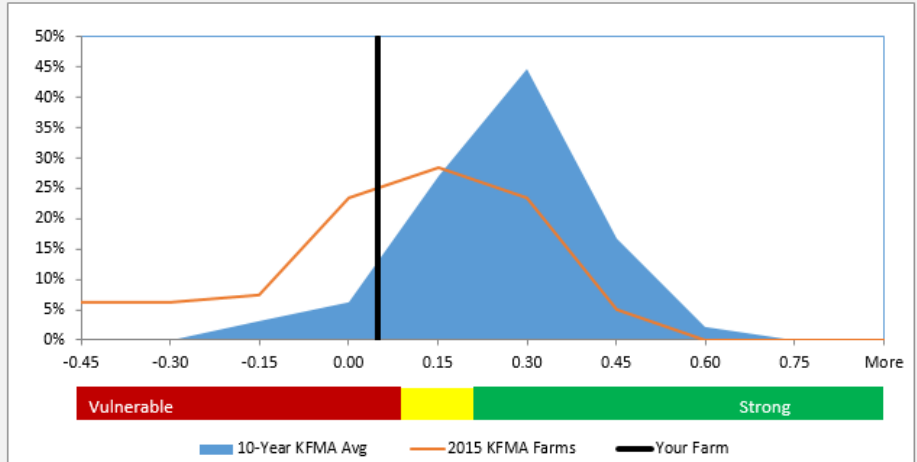
Net Farm Income Ratio

	2015	10-Year
-0.45	6.2%	0.0%
-0.30	6.2%	0.0%
-0.15	7.4%	3.1%
0.00	23.5%	6.3%
0.15	28.4%	27.1%
0.30	23.5%	44.8%
0.45	4.9%	16.7%
0.60	0.0%	2.1%
0.75	0.0%	0.0%
More	0.0%	0.0%
Count	81	96
Average	0.03	0.18

Net Farm Income Avg.

\$8,027 \$60,774

Your Farm 0.05



Dropdown Categories and "Your Farm" features

BENCHMARK CATEGORY	
Benchmark by:	Crop Acres
Category:	500-1000
Cattle:	None
	No Cows-Feedlot
	<100 Cows
	100+ Cows

Select category here using dropdown lists

Start Over

Print Summary

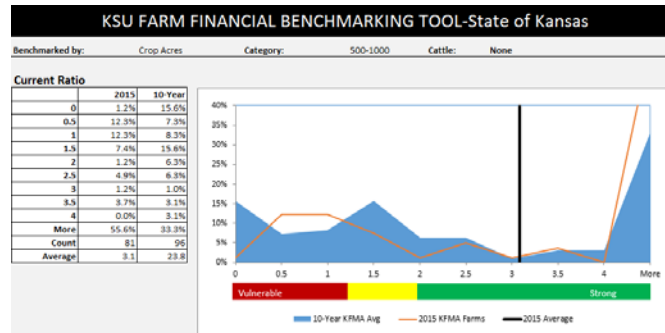
Enter Your Farm Values

Return to 2015 Averages

See Ratio Calculations

YOUR FARM	
Current Ratio:	N/A
Working Capital Ratio:	N/A
Debt to Asset Ratio:	N/A
Operating Profit Margin	N/A
Rate of Return on Farm Assets	N/A
Rate of Return on Farm Equity	N/A
Asset Turnover Rate	N/A
Operating Expense Ratio	N/A
Depreciation Expense Ratio	N/A
Interest Expense Ratio	N/A
Net Farm Income Ratio:	N/A

*Defaults to Averages for 2015 if not entered



Dropdown Categories and "Your Farm" features

BENCHMARK CATEGORY	
Benchmark by:	Dairy
Category:	500-1000
Cattle:	None

Select category here using dropdown lists

Start Over

Print Summary

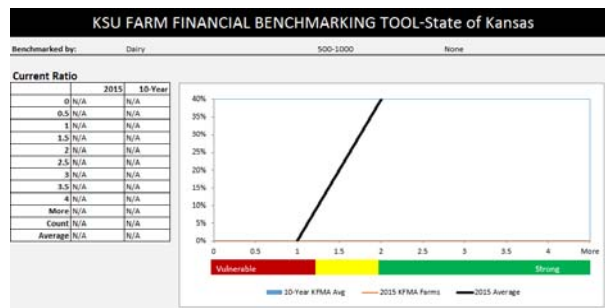
Enter Your Farm Values

Return to 2015 Averages

See Ratio Calculations

YOUR FARM VALUES*	
Current Ratio:	N/A
Working Capital Ratio:	N/A
Debt to Asset Ratio:	N/A
Operating Profit Margin	N/A
Rate of Return on Farm Assets	N/A
Rate of Return on Farm Equity	N/A
Asset Turnover Rate	N/A
Operating Expense Ratio	N/A
Depreciation Expense Ratio	N/A
Interest Expense Ratio	N/A
Net Farm Income Ratio:	N/A

*Defaults to Averages for 2015 if not entered



Dropdown Categories and “Your Farm” features

BENCHMARK CATEGORY	
Benchmark by:	Crop Acres
Category:	500-1000
Cattle:	None

Select category here using dropdown lists

YOUR FARM VALUES*	
Current Ratio:	3.08
Working Capital Ratio:	64.5%
Debt to Asset Ratio:	0.15
Operating Profit Margin	-0.01
Rate of Return on Farm Assets	-0.1%
Rate of Return on Farm Equity	-0.2%
Asset Turnover Rate	15.4%
Operating Expense Ratio	0.80
Depreciation Expense Ratio	0.13
Interest Expense Ratio	0.03
Net Farm Income Ratio:	0.03

*Defaults to Averages for 2015 if not entered

Start Over

Print Summary

Enter Your Farm Values

Return to 2015 Averages

See Ratio Calculations

Ratio Calculations

*Note that Kansas Farm Management Association uses accrual methods for recordkeeping and performance analysis.

Current Ratio = Ending Current Assets/Ending Current Liabilities

Working Capital Ratio = Working Capital/ **Accrual Gross Farm Revenue**

•where Working Capital = (Ending current assets –Ending current liabilities)

•where Accrual Gross Farm Revenue= Cash Farm Income from crops and livestock+/- changes in inventories - less purchases of re-sale items

Debt to Asset Ratio = Total Farm Liabilities/ Total Farm Assets

Rate of return on farm assets = (Net Farm Income + Farm Interest Paid – Value of Operators Labor & Management)/Average Total Farm Assets

Rate of Return on farm equity = (Net Farm Income – Value of Operators Labor & Management)/ Average Total Farm Net Worth

Ratio Calculations

Asset-turnover rate= **Value of Farm Production**/Average total assets
 where Value of Farm Production = Accrual Gross Farm Revenue– Purchased Feed

Operating Profit Margin = Return on Farm Assets/**Value of Farm Production**
 where Return on Farm Assets= (NFI + Farm Interest – Value of Operator Labor & Management)
 where Value of Farm Production = Accrual Gross Farm Revenue– Purchased Feed

Operating Expense Ratio = (Farm Operating Expense)/ **Accrual Gross Farm Revenue**
 where Farm Operating Expense = Total Farm Expense + Purchased Feed- Farm Interest -Depreciation

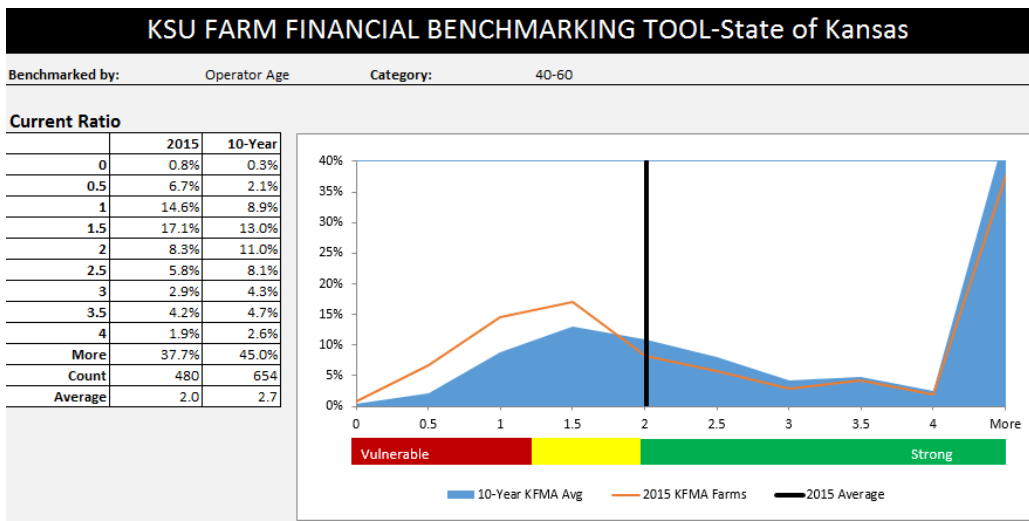
Depreciation Expense Ratio = Depreciation/ **Accrual Gross Farm Revenue**

Interest Expense Ratio = Farm Interest/ **Accrual Gross Farm Revenue**

Net Farm Income ratio = Net Farm Income/**Accrual Gross Farm Revenue**



Where are we at?



Where are we at?

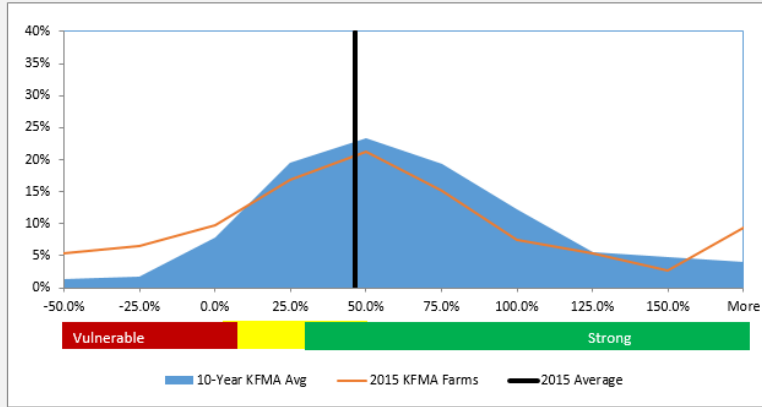
Working Capital Ratio

	2015	10-Year
-50.0%	5.4%	1.4%
-25.0%	6.5%	1.8%
0.0%	9.8%	7.8%
25.0%	16.9%	19.6%
50.0%	21.3%	23.4%
75.0%	15.2%	19.4%
100.0%	7.5%	12.2%
125.0%	5.4%	5.7%
150.0%	2.7%	4.7%
More	9.4%	4.0%
Count	480	654
Average	46.5%	51.8%

Working Capital Avg.

\$303,143

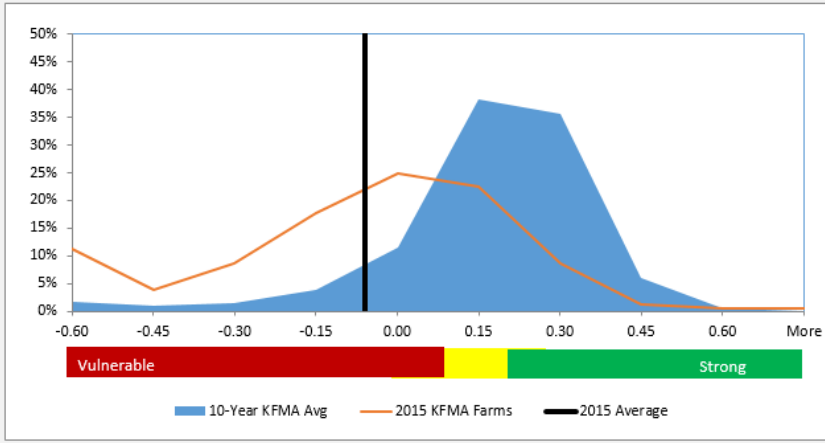
\$310,028



Where are we at?

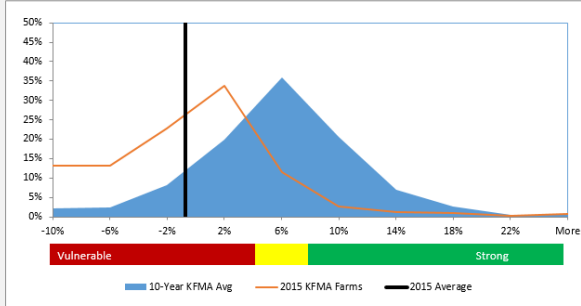
Operating Profit Margin Ratio

	2015	10-Year
-0.60	11.3%	1.7%
-0.45	4.0%	0.9%
-0.30	8.8%	1.5%
-0.15	17.7%	3.8%
0.00	25.0%	11.6%
0.15	22.5%	38.2%
0.30	8.5%	35.6%
0.45	1.3%	6.1%
0.60	0.6%	0.5%
More	0.4%	0.0%
Count	480	654
Average	-0.06	0.17



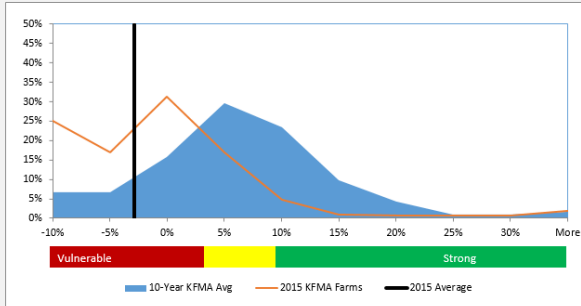
Rate of Return on Farm Assets

	2015	10-Year
-10%	13.1%	2.1%
-6%	13.1%	2.4%
-2%	22.7%	8.1%
2%	33.8%	19.9%
6%	11.5%	35.9%
10%	2.7%	20.6%
14%	1.3%	7.0%
18%	1.0%	2.8%
22%	0.2%	0.6%
More	0.6%	0.5%
Count	480	654
Average	-1.26%	5.19%



Rate of Return on Farm Equity

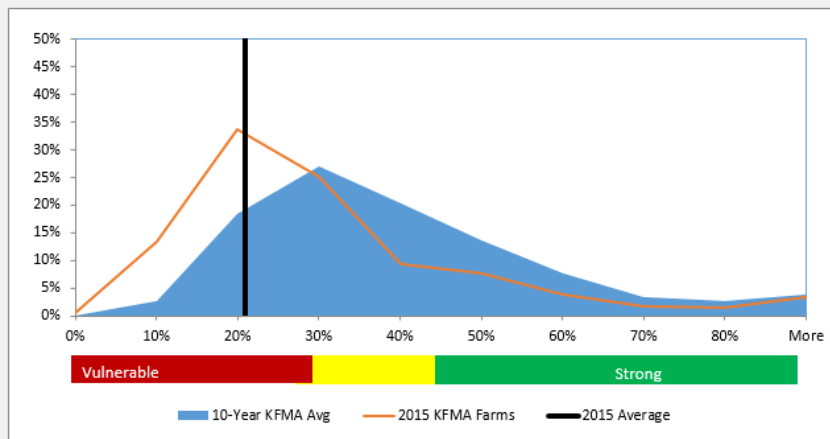
	2015	10-Year
-10%	25.2%	6.7%
-5%	16.9%	6.7%
0%	31.3%	15.7%
5%	16.9%	29.7%
10%	4.8%	23.4%
15%	1.0%	9.8%
20%	0.8%	4.3%
25%	0.6%	0.9%
30%	0.6%	1.1%
More	1.9%	1.7%
Count	480	654
Average	-2.86%	5.28%



Where are we at?

Asset Turnover Rate

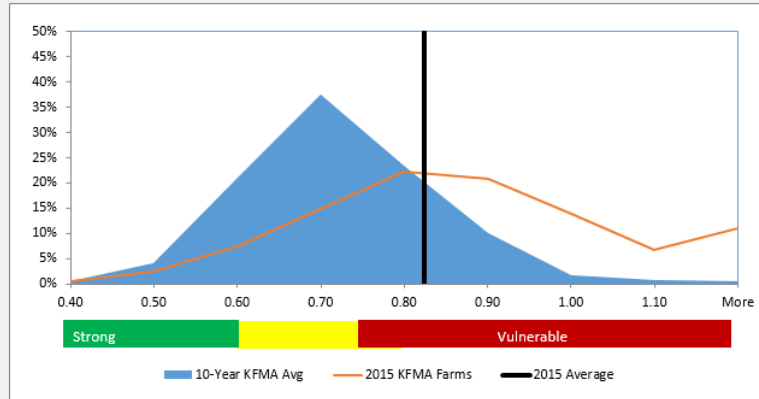
	2015	10-Year
0%	0.4%	0.0%
10%	13.3%	2.8%
20%	33.8%	18.5%
30%	25.2%	27.1%
40%	9.4%	20.3%
50%	7.7%	13.8%
60%	3.8%	7.8%
70%	1.7%	3.4%
80%	1.5%	2.6%
More	3.3%	3.8%
Count	480	654
Average	20.93%	30.76%



Where are we at?

Operating Expense Ratio

	2015	10-Year
0.40	0.4%	0.6%
0.50	2.5%	4.1%
0.60	7.5%	21.1%
0.70	14.8%	37.6%
0.80	22.3%	23.5%
0.90	20.8%	10.1%
1.00	14.0%	1.7%
1.10	6.7%	0.8%
More	11.0%	0.5%
Count	480	654
Average	0.82	0.67

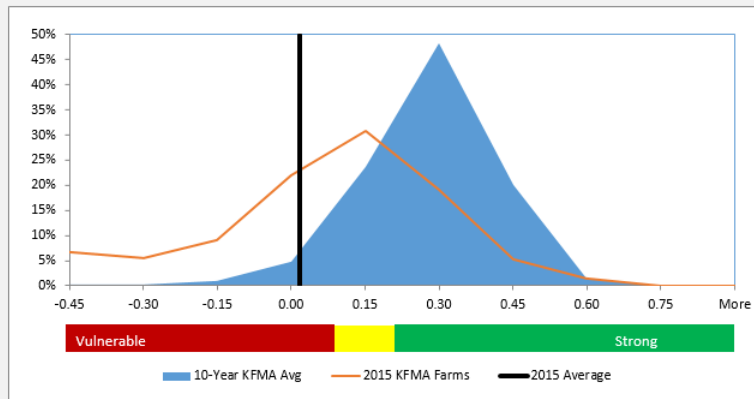


Where are we at?

Net Farm Income Ratio

	2015	10-Year
-0.45	6.7%	0.2%
-0.30	5.4%	0.3%
-0.15	9.2%	1.1%
0.00	22.1%	4.9%
0.15	30.8%	23.7%
0.30	19.2%	48.3%
0.45	5.2%	20.0%
0.60	1.5%	1.5%
0.75	0.0%	0.0%
More	0.0%	0.0%
Count	480	654
Average	0.02	0.21

Net Farm Income Avg.
 \$11,967 \$128,519

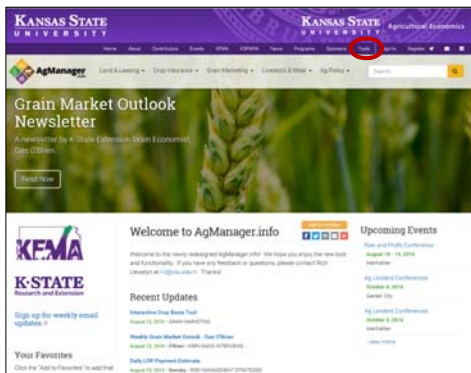


Conclusions

- Farmers need support/understanding from their lenders
- Most farmers are in a vulnerable financial position, regardless of how “good” of a farmer they are
- I hope this tool can benefit you, as lenders, to get a snapshot of the financial position of farmers in your area and have benchmark values to compare to for your clients



Time for Questions



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Check out our new website!
www.AgManager.info

