Farm Income Update

ALLEN M. FEATHERSTONE KANSAS STATE UNIVERSITY





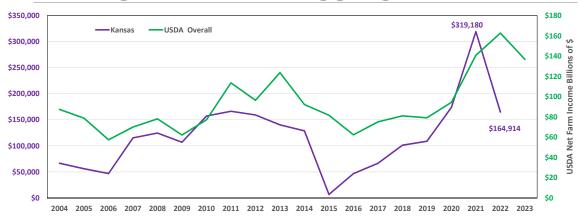
Introduction

- ❖A decent 2022 farm economy with a steady year for 2023
- ❖Net farm income
- Probability of Default
- ❖Debt to Asset Ratio
- Working Capital Position
- Capital Debt Repayment Capacity
- **❖**2022 and 2023
- **❖**Farm Interest Rates





Net Farm Income – Kansas Farm Management and Aggregate U.S.





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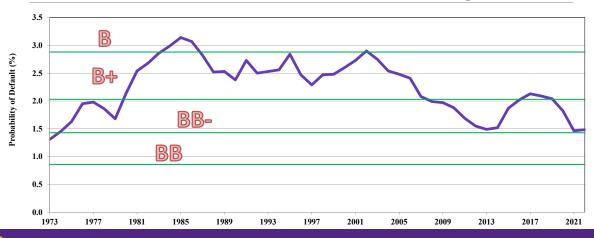
Distribution of 2021 and 2022 Net Farm Income





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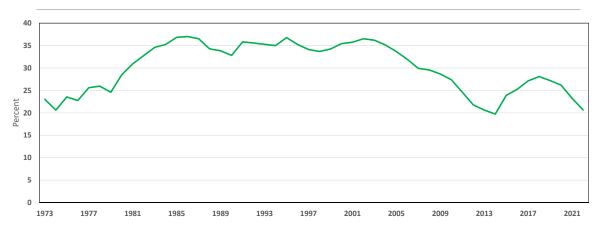
Default Risk for KFMA farms 1973 through 2022





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KFMA Farms Debt to Asset Ratio





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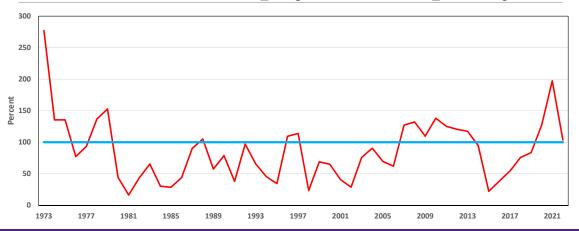
KFMA Farms Working Capital to Asset Ratio







KFMA Farms Repayment Capacity



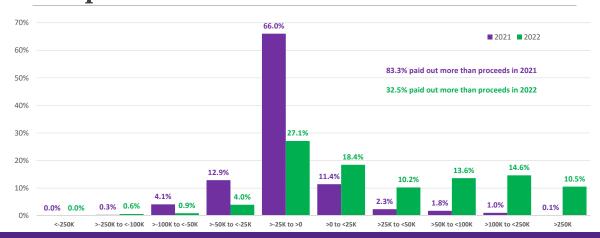
KFMA 2021 and 2022 Average Net Crop Insurance per Farm and 2022 Net Farm Income





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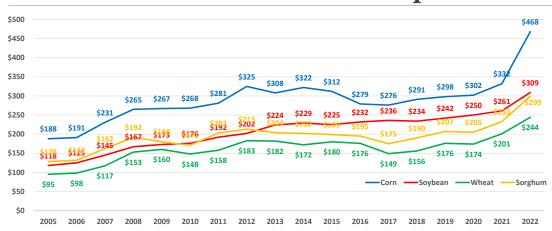
Distribution of 2021 and 2022 Net Crop Insurance





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KFMA Enterprise Non-Irrigated Variable Cost of Production per Acre





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Input Cost Changes (2022 vs 5-year Average)

Category	Corn	Sorghum	Soybean	Wheat
Seed	28.3%	18.0%	2.3%	63.3%
Crop Insurance	38.2%	25.1%	39.6%	31.0%
Fertilizer	125.9%	128.5%	82.2%	89.2%
Machine Hire	11.8%	1.3%	12.5%	4.3%
Miscellaneous	-51.4%	-28.3%	26.9%	-36.5%
Cash Rent	67.9%	34.3%	31.9%	38.5%
Pesticide	40.7%	35.2%	43.1%	24.6%
Total Variable	63.6%	57.3%	29.3%	54.2%



2022 Enterprise Information

- Kansas Corn 2022 Yield 19.0% below the previous 5-year average
 - Revenue \$634 per acre
 - Variable Cost \$468 per acre
 - Total Cost \$631 per acre
- Kansas Soybeans 2022 Yield 43.0% below previous 5-year average
 - Revenue \$407 per acre
 - Variable Cost \$309 per acre
 - Total Cost \$438 per acre
- Kansas Wheat 2022 Yield 10.4% below the previous 5-year average
 - Revenue \$342 per acre
 - Variable Cost \$244 per acre
 - Total Cost \$352 per acre
- Kansas Sorghum 2022 Yield 32.8% below the previous 5-year average
 - Revenue \$410 per acre
 - Variable Cost \$299 per acre
 - Total Cost \$404 per acre





Crop Insurance – Corn Contract Price





Crop Insurance – Soybean Contract Price







Crop Insurance – Wheat Contract Price



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2023 Price Outlook

May 17th Bid at Salina Kansas

Commodity	Cash Bid (5/17)	Forward Bid (2023 Crop)	Difference
Wheat	\$8.86	\$8.86	\$0.00
Corn	\$6.21	\$4.84	\$1.37
Sorghum	\$6.07	\$4.79	\$1.28
Soybean	\$13.17	\$11.38	\$1.79
		August :	16 th Bid at Salina Kansas

Commodity	Cash Bid (8/16)	Forward Bid (2023 Crop)	Difference
Wheat	\$7.25	\$6.92 in Bennington	
Corn	\$4.86	\$4.62	\$0.24
Sorghum	\$4.79	\$4.72	\$0.07
Soybean	\$13.18	\$12.60	\$0.58



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Cost of Nitrogen per pound





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2023 Non-Irrigated Crop Income Estimates

Crop (August 1 yield)	2023 Estimated Total Expenses	Net Income (2023 August 1 Yield)
Corn (124)	\$631	-\$58
Sorghum (73)	\$438	-\$93
Soybean (35)	\$352	\$89
Wheat (32)	\$404	-\$172



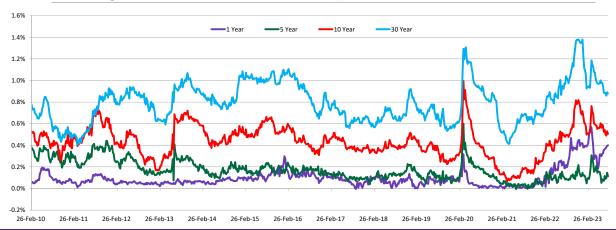


Weekly Farm Credit Acquisition Cost





Weekly Farm Credit Spreads







Farm Credit – Treasury Spread Summary

- Farm Credit acquisition cost has generally followed treasuries
- ➤ Acquisition rates for 30-year money is right at 5.1%
- Acquisition rates for 10-year money has increased to 4.6%
- Acquisition rates for 5- year money has increased to 4.3%
- ➤ Acquisition rates for 1-year money has increased to 5.5%
- ➤ Farm Credit Treasury Spreads are low:
 - > At 0.40% for 1-year money
 - > At 0.11% for 5-year money
 - > At 0.51% for 10-year money
 - > At 0.88% for 30-year money
- ▶ Investor's view lending to the U.S. government and U.S. farmers of equal risk for the next 5 years
 - ≥ 10-year spread has remained the same over the last 12 months
- Decrease in the 30-year spread of 0.1% in the last 12 months





Summary

- ➤ Net Farm Income fell by nearly 50% in 2022
- ➤ Crop Insurance was key to preventing additional deterioration
- ➤ Crop Farmers income will O.K. in 2023
- ➤ Crop Insurance will be key for 2023 especially for wheat
- Early pricing will be key for 2023
- ➤ Government Payments will be limited in 2023
- ▶ Crop expenses will be stable in 2023 with fertilizer expenses lessening
- ➤ Net Farm Income may be tough in 2023



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