

# 2024 CROP ENTERPRISE BUDGET UPDATE

*March 19 | 11 a.m.-12 p.m. CST*



*Ben Brown  
University of Missouri*



*Chris DeMoss  
MFA Incorporated*



*Jordan Tomlinson  
MFA Incorporated*

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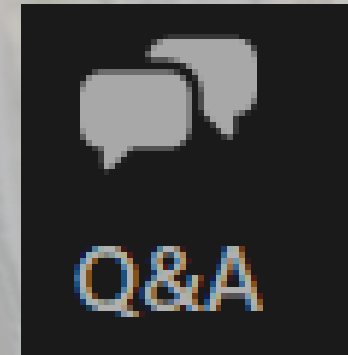
University of Missouri

Food & Agricultural Policy Research Institute  
Rural & Farm Finance Policy Analysis Center



# Questions??

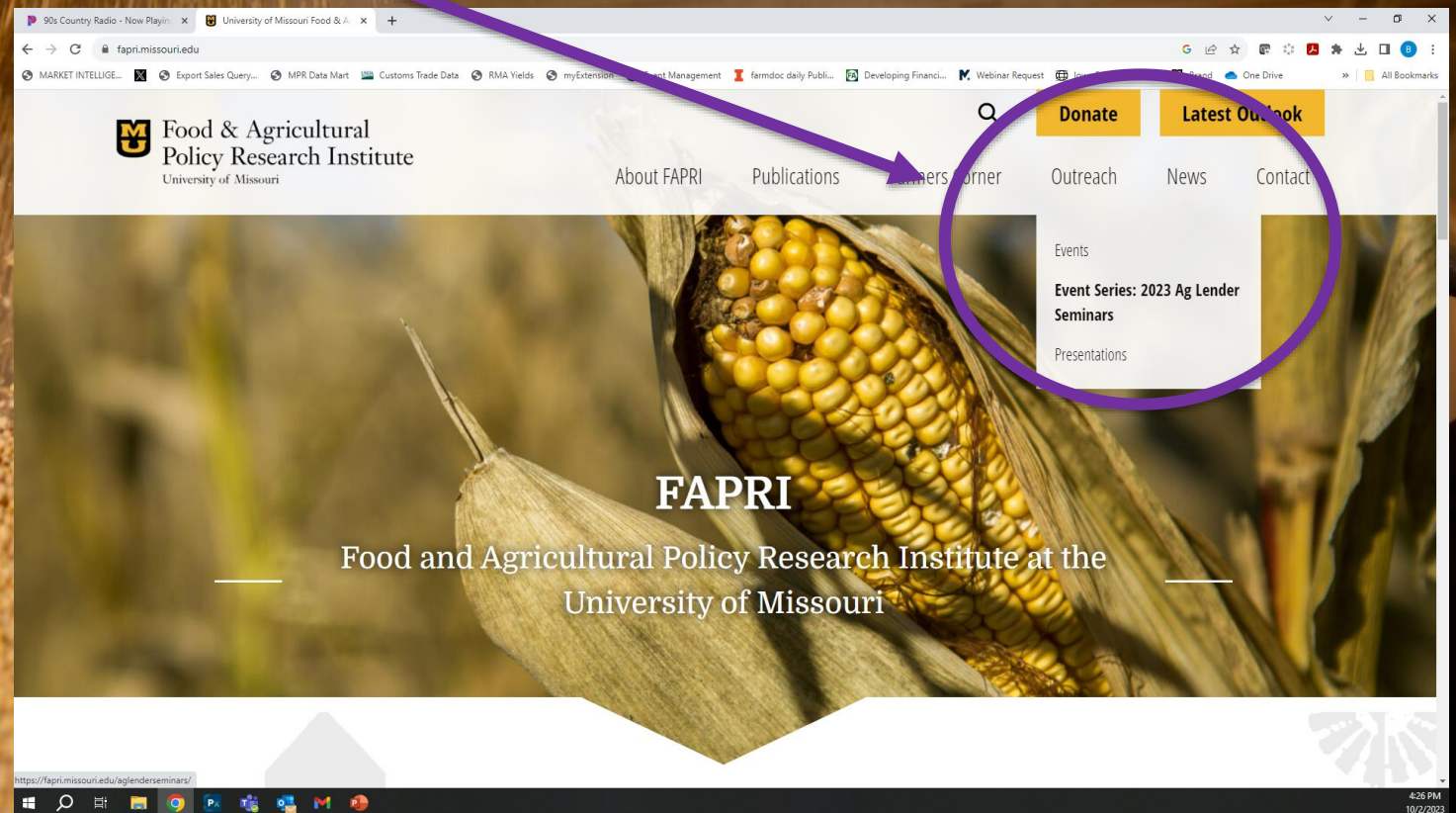
- ❖ Feel free to submit questions at any time using the Q/A chat feature at the bottom of your screen.
- ❖ You can also email questions to Ben at [bpbrown@missouri.edu](mailto:bpbrown@missouri.edu)
- ❖ We will try to answer as many questions as we can at the end. A full list of questions with responses will be available at [fapri.missouri.edu](http://fapri.missouri.edu) under “events”.





# Slides for today's presentations can be found at:

FAPRI.missouri.edu -> Outreach -> Event Series: 2023 Ag Lender



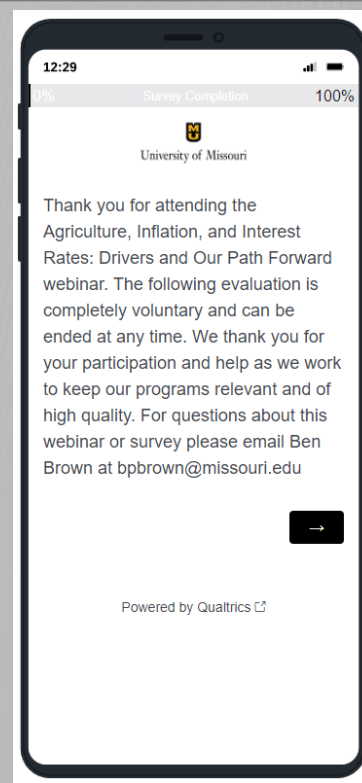
The screenshot shows the FAPRI website interface. The header includes the FAPRI logo and navigation links: About FAPRI, Publications, Farmers Corner, Outreach, News, and Contact. A purple circle highlights the 'Outreach' link, which has opened a dropdown menu. This menu contains the following items: Events, Event Series: 2023 Ag Lender Seminars, and Presentations. A purple arrow points from the text above to the 'Event Series: 2023 Ag Lender Seminars' option in the dropdown. The main content area features a large image of a corn cob with the text 'FAPRI Food and Agricultural Policy Research Institute at the University of Missouri' overlaid. The browser's address bar shows the URL 'https://fapri.missouri.edu/aglenderseminars/'.



# Evaluations

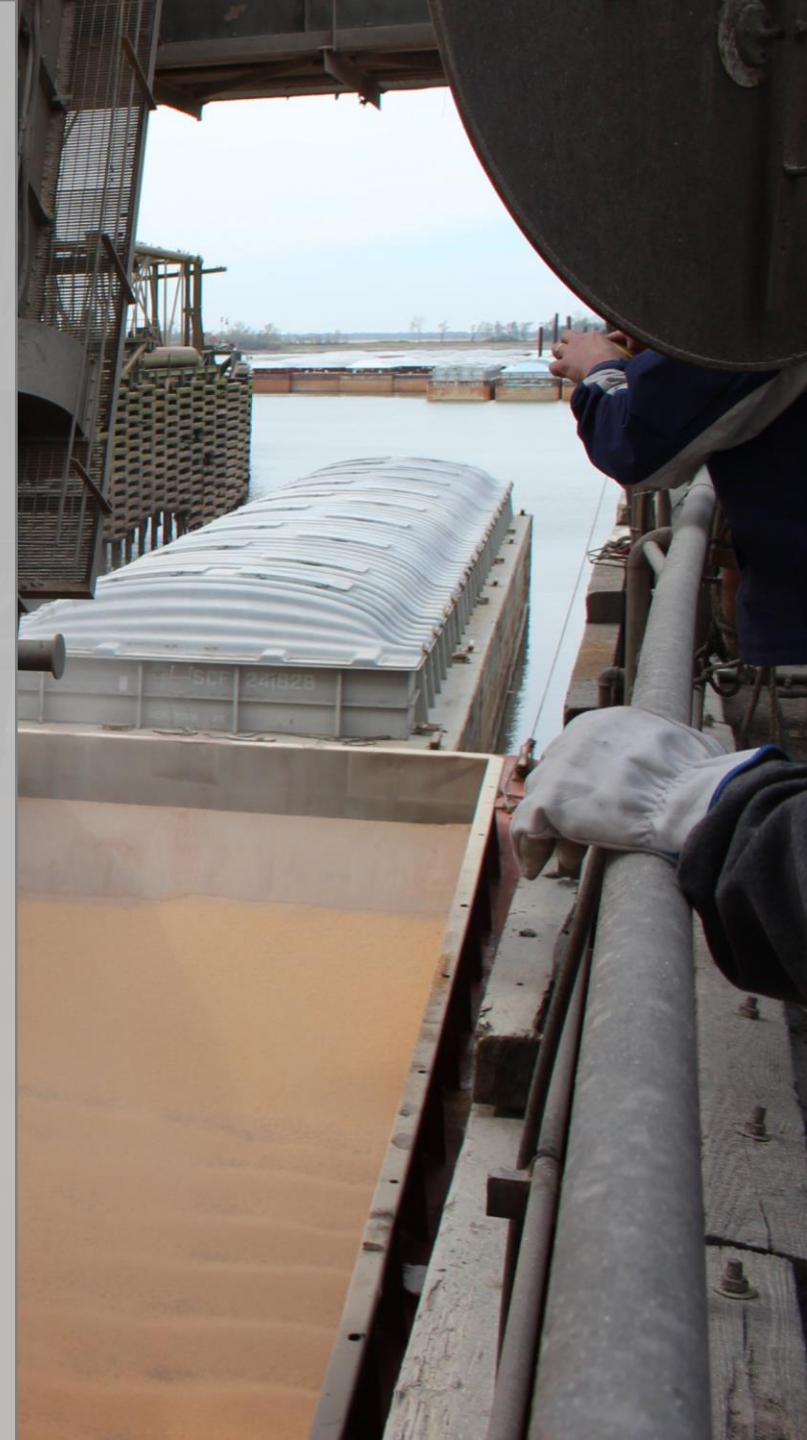
**Please help us continue to offer high quality programs by completing our evaluation upon completion of the webinar.**

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**The evaluation is designed to capture how effective our program was at meeting key objectives.**

1. Provide and update on prices for key crop production inputs including seed, crop protection, and fertilizer for 2024 growing season.
2. Overview 2024 crop margins and returns above variable costs.
3. Highlight opportunities for producers to apply input cost and enterprise analysis in their farm management decisions.



# Share your view of Missouri farm finance conditions in the **AG LENDER PULSE SURVEY**



- Open to all Missouri agricultural lenders
- Conducted three times annually and takes 10 minutes to respond
- Respondents receive a summary of the results

**Spring 2024 survey opens March 12!**



**Scan to sign up  
for pulse survey  
invitations**



# 2024 AG LENDERS WEBINARS

***United States and Agricultural Trade Outlook***

*January 24 | 10-11 a.m. CST*

***2024 Federal Commodity Program Update***

*February 7 | 1-2 p.m. CST*

***2024 Crop Insurance Decisions***

*February 28 | 11 a.m.-12 p.m. CST*

***2024 Crop Enterprise Budget Update***

*March 19 | 11 a.m.-12 p.m. CST*

***2024 Crop Markets and Weather Outlook***

*March 29 | 1-2 p.m. CST*

***Register for free:***

***[fapri.missouri.edu/aglenderseminars-webinars/](https://fapri.missouri.edu/aglenderseminars-webinars/)***



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# Poll Question #1: What is your expectation of producer fertilizer management with lower crop prices?

- A. Decrease fertilizer application rates to decrease costs
- B. Increase fertilizer application rates to seek higher yields
- C. No change to fertilizer management
- D. Unsure

**Poll Question #2: Given how warm it was this February, how much anhydrous has been applied in your area?**

- A. About normal
- B. More than normal
- C. Less than normal
- D. Unsure



# Crop Input Prices and Budgets for Missouri Crop Farmers in 2024



**Chris DeMoss**  
MFA Incorporated



**Extension**  
*University of Missouri*

# Poll Question #3: What is your current feeling toward the recent District Court ruling on Dicamba herbicide products?

- A. Aware, very concerned
- B. Aware, somewhat concerned
- C. Aware, not concerned
- D. Unaware of ruling
- E. Unsure



# Crop Input Prices and Budgets for Missouri Crop Farmers in 2024



**Jordan Tomlinson**

MFA Incorporated



# Crop Input Prices and Budgets for Missouri Crop Farmers in 2024



**Ben Brown**  
University of Missouri



**Extension**  
*University of Missouri*





# 2024 Crop Budgets





# 2024 ENTERPRISE BUDGETS

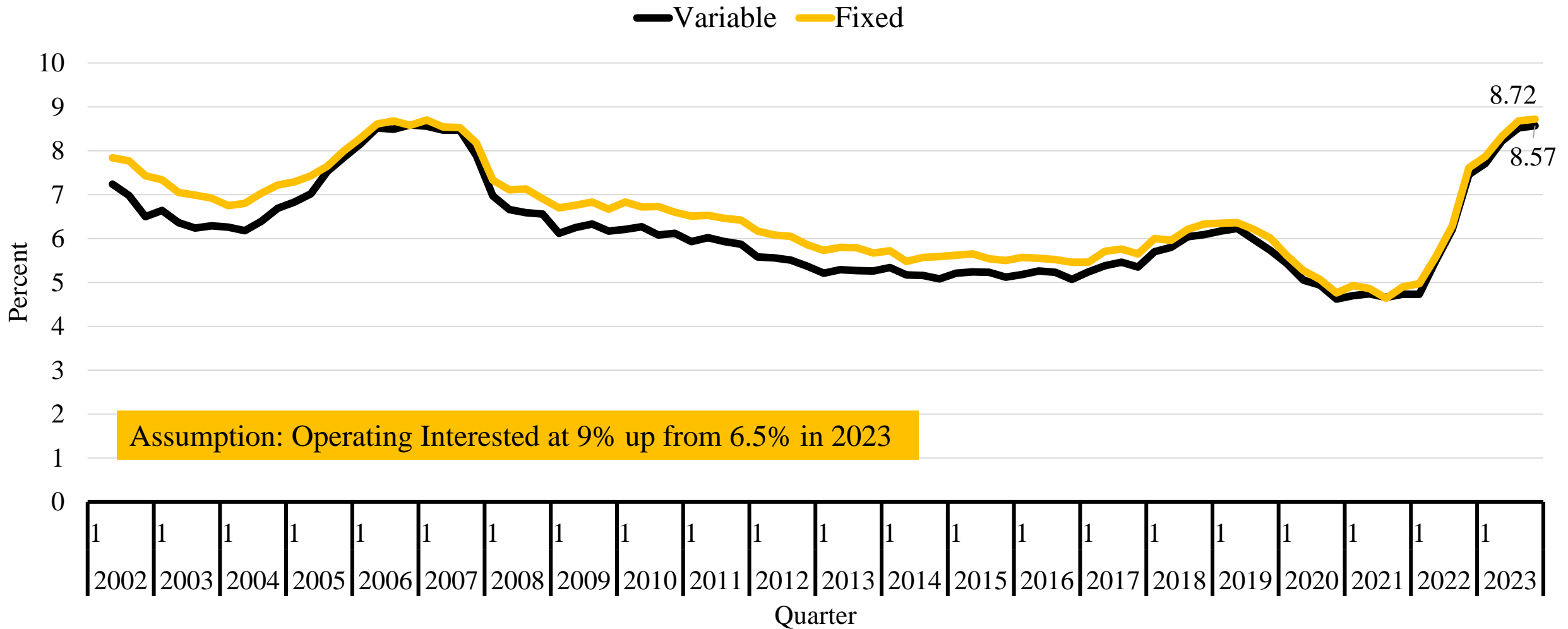
Manage costs and project revenue for the coming year with more than 30 free, state-specific budgets and calculators

**DOWNLOAD AT [MUEXT.US/MISSOURIAGBUDGETS](https://mnext.us/missouriagbudgets)**



# Economy: Cost of Capital

## Average Fixed and Variable Interest Rate for Operating Notes In Missouri by Quarter



Assumption: Operating Interest rate at 9% up from 6.5% in 2023

# Economy: High Interest Rates for Longer

CME FEDWATCH TOOL - MEETING PROBABILITIES								
MEETING DATE	350-375	375-400	400-425	425-450	450-475	475-500	500-525	525-550
3/20/2024			0.0%	0.0%	0.0%	0.0%	1.0%	99.0%
5/1/2024	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	5.2%	94.7%
6/12/2024	0.0%	0.0%	0.0%	0.0%	0.0%	3.0%	55.7%	41.3%
7/31/2024	0.0%	0.0%	0.0%	0.0%	1.2%	24.7%	49.8%	24.3%
9/18/2024	0.0%	0.0%	0.0%	0.9%	17.7%	42.2%	31.9%	7.3%
11/7/2024	0.0%	0.0%	0.4%	8.8%	29.2%	37.4%	20.3%	3.9%
12/18/2024	0.0%	0.3%	5.8%	21.9%	34.5%	26.4%	9.8%	1.4%
1/29/2025	0.1%	3.0%	13.8%	28.2%	30.5%	18.1%	5.6%	0.7%
3/19/2025	1.6%	8.4%	21.0%					

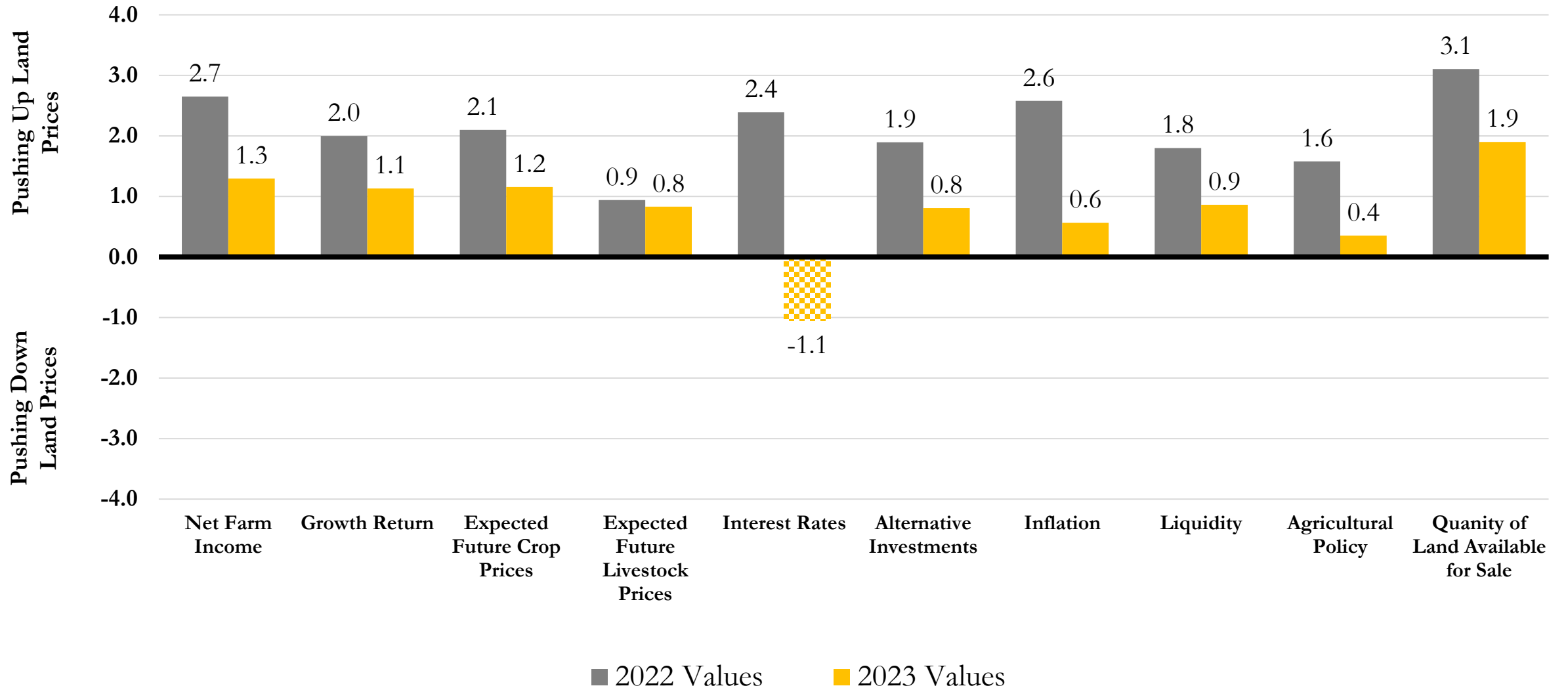
Source: CME Group 3/18/24

**Question:** How can we modernize lessons of 1980 for today's managers? Liquidity and solvency ratios analysis, interest expenses, grain storage, higher breakeven levels on investments...



# Economy: Land Values

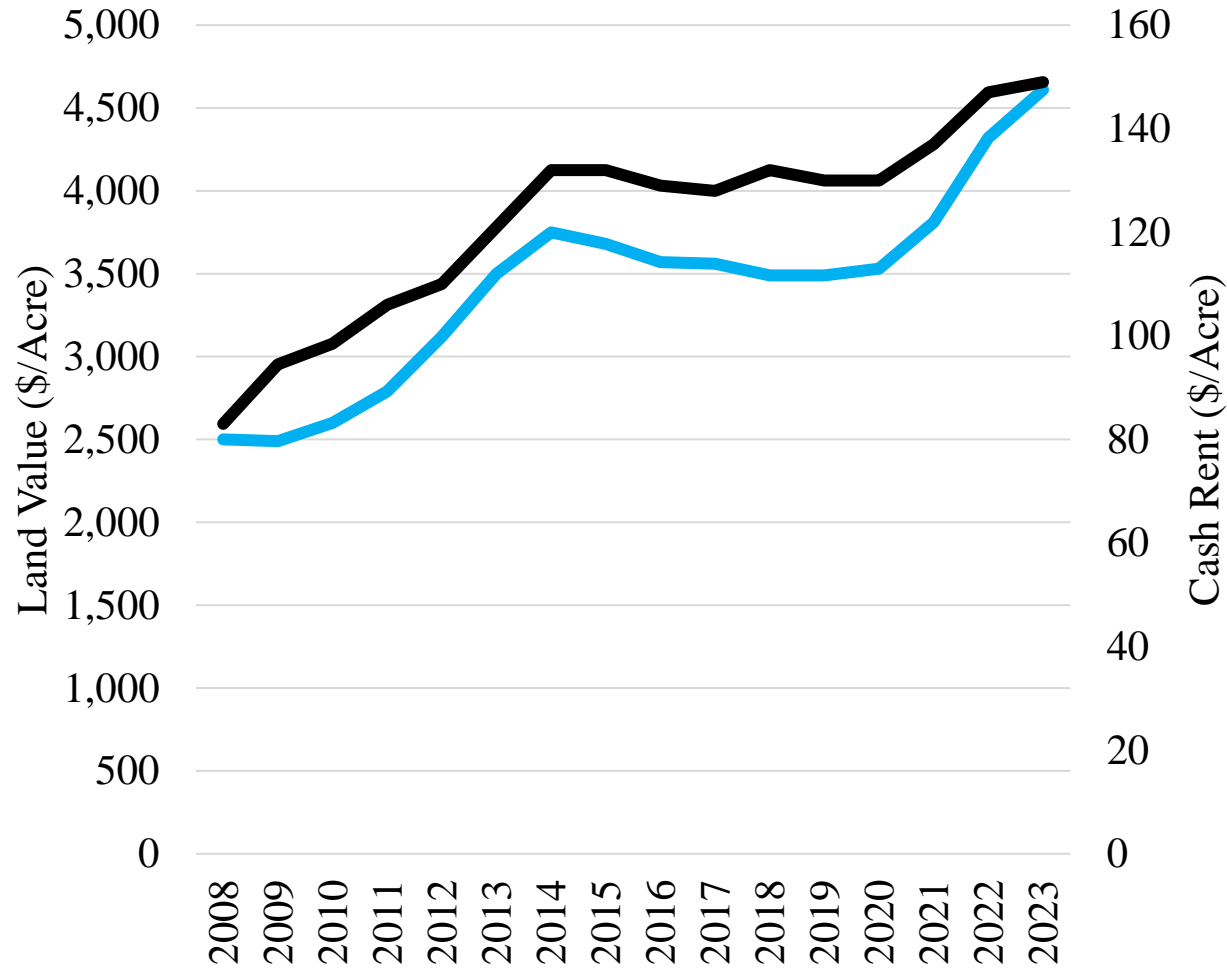
## Factors Impacting Land Values: 2021 & 2022



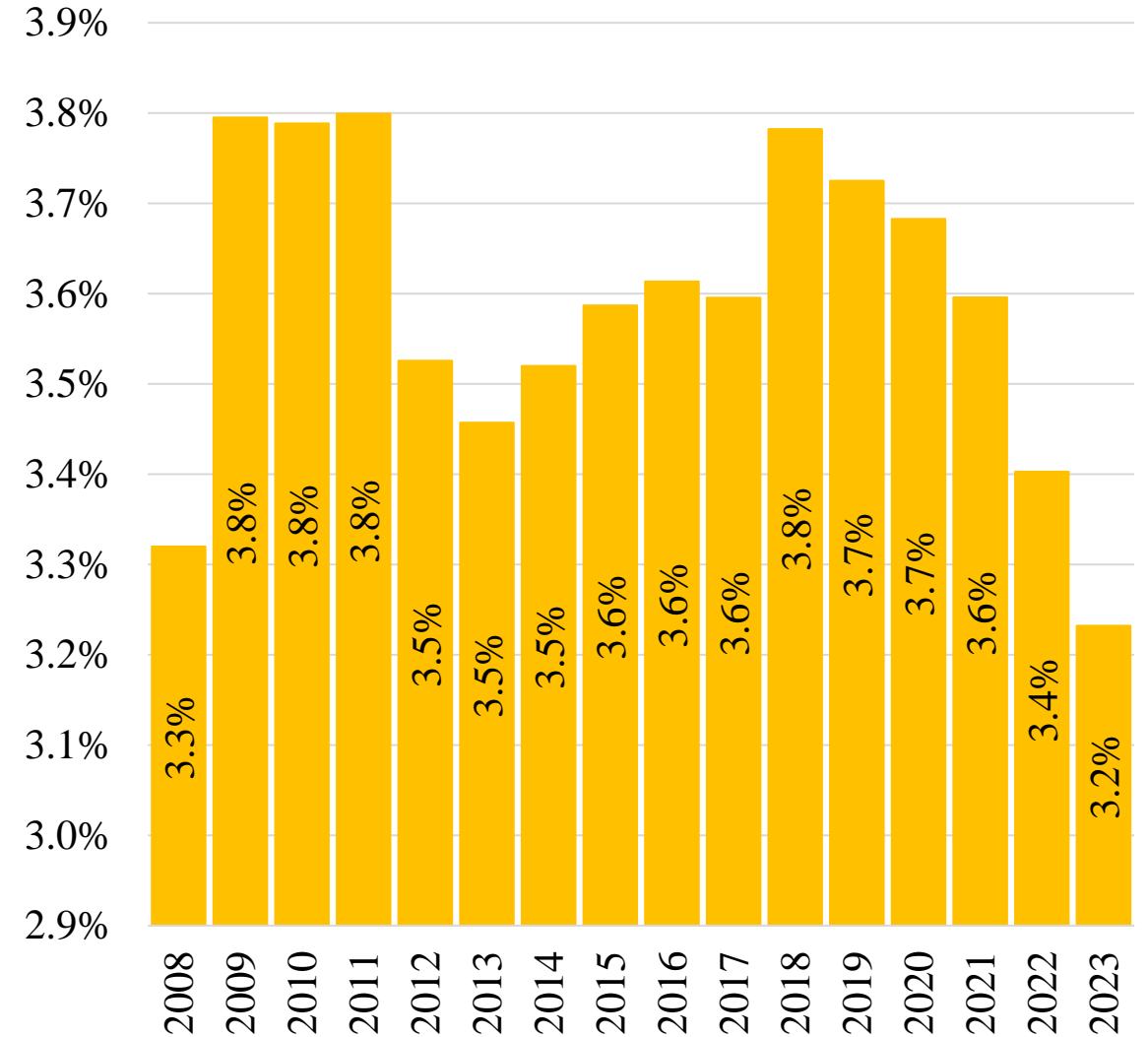
# Economy: Land Values

## Missouri Land Values and Cash Rental Rates

Land Value Cash Rent



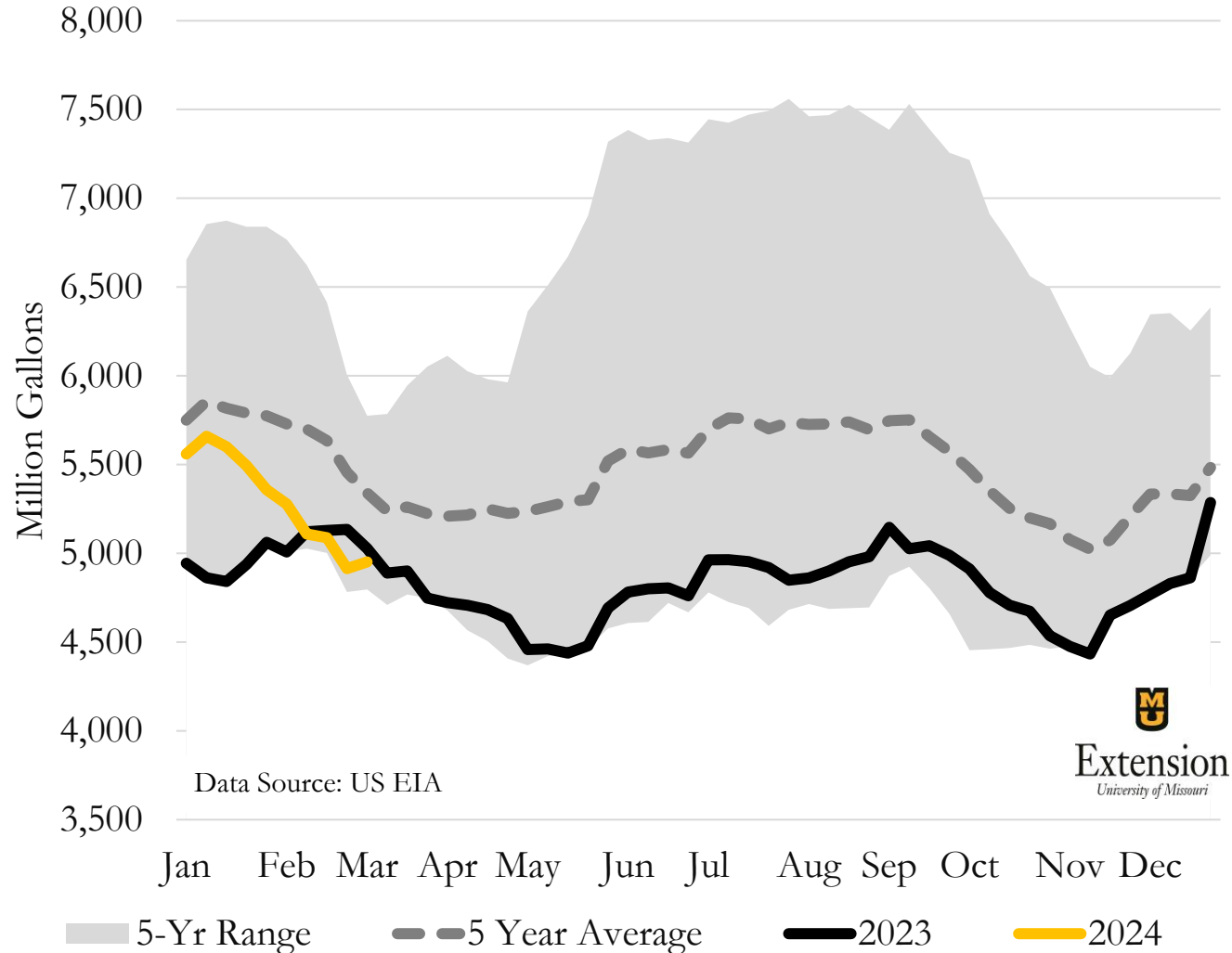
## Cash Rent as a Share of Missouri Land Values



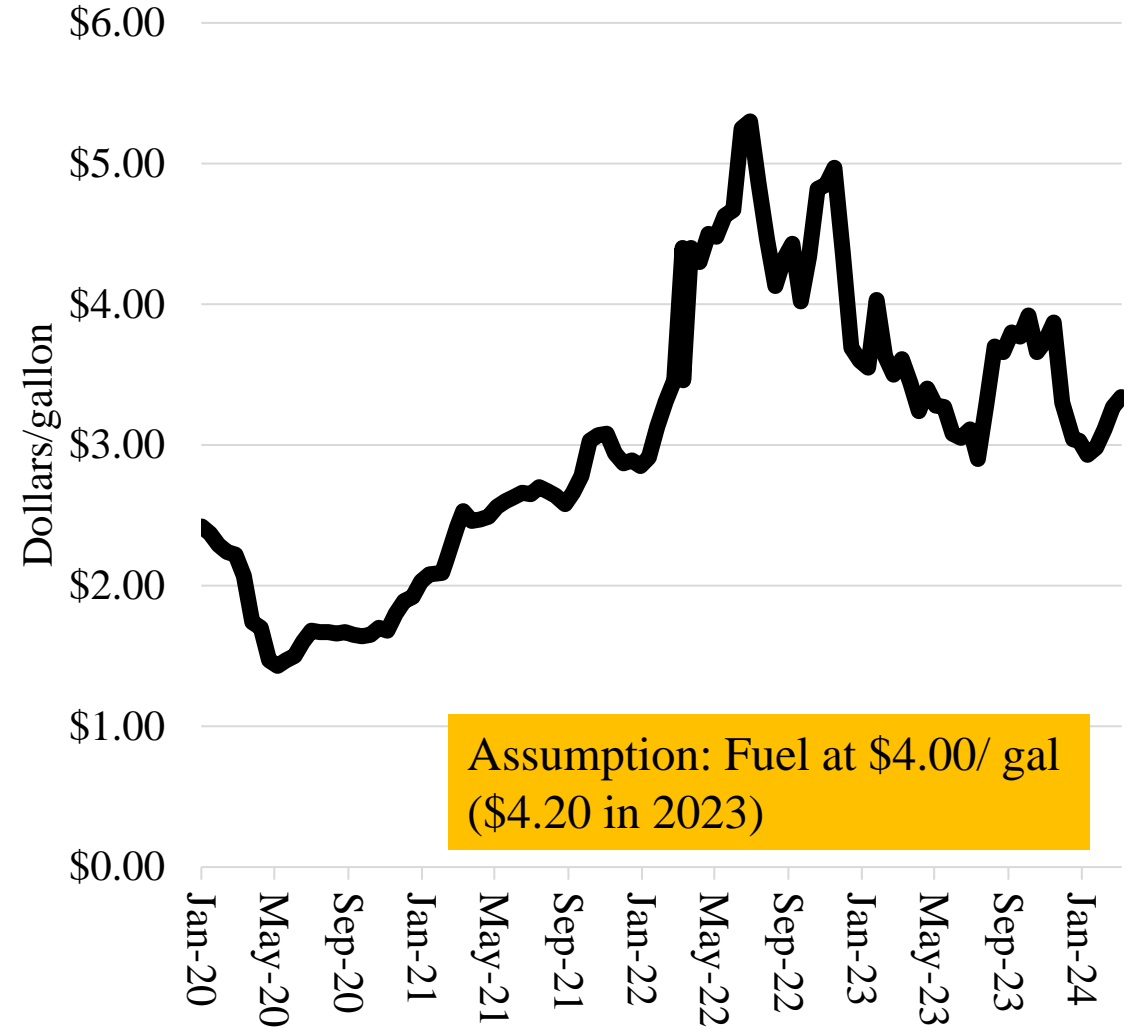


# Input Costs: Fuel

## United States Ending Stocks of Distillate Fuel Oil - 03/08/2024

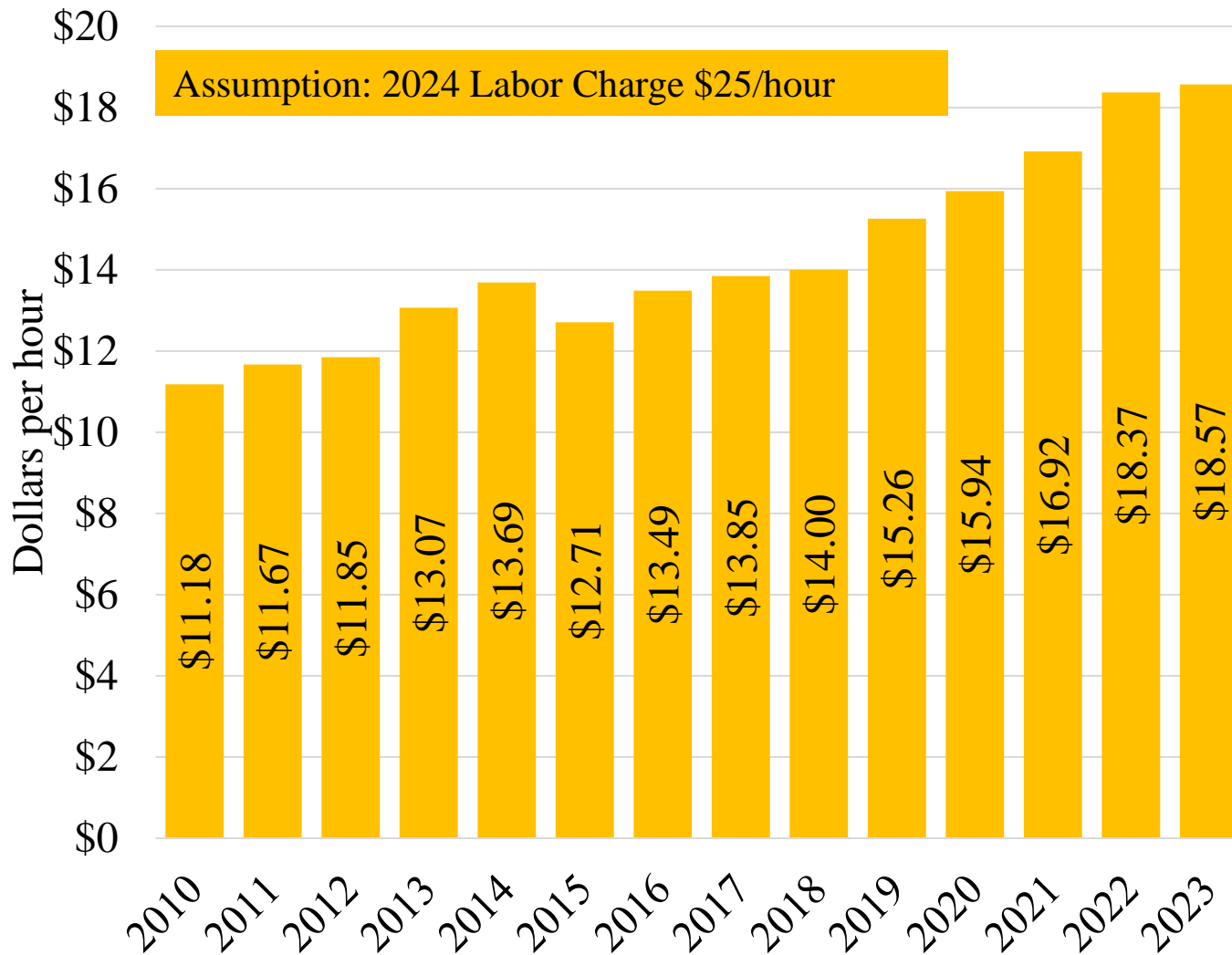


## Farm Diesel Retail Prices



# Input Costs: Labor and Custom Rates

## Hired Labor Rates for Missouri Farm Activity



## Custom Rates for Farm Services in Missouri

The rates reported in this guide summarize a statewide survey conducted online and by solicitations of University of Missouri Extension specialists in the spring of 2023. We asked farmers, agribusiness firms and land improvement contractors to provide the rates they were charging or paying in 2022 for custom services, excluding the cost of materials being applied. Thank you to those who provided information — even if it was just for one activity.

Fewer people respond to this survey every time it is taken — every three years. There may be fewer farmers using custom operators or fewer businesses conducting custom activities. But it is still a very popular Extension guide.

The number of responses to many questions asked was too low to have statistical confidence in the results. However, the results presented here have been compared to custom rates guides in Iowa to see if our rates are in line with their rates. These results have also been compared to previous custom rates surveys to see if the direction and magnitude of changes seems reasonable.

There is no assurance that the average rates reported in this guide will cover your costs for performing the service or that you will be able to hire a custom operator in your area for the rates shown.

Calculate your own costs carefully before deciding the rate to charge or pay. Before entering into an agreement, discuss with the other party all the details of the specific job to be performed.

Custom rates cover the cost of machinery, fuel, labor and, occasionally, a product such as lime or bale wrap. The USDA reports that machinery values and labor costs have increased by about 23 percent and 18 percent,

respectively, since our last custom rate survey in 2019. Diesel prices have increased by 38 percent in the last three years. This increase in the costs of inputs into custom activities suggest that custom rates should have increased over the past several years.

### Explanation of the rates in this guide

Rates in this guide reflect each respondent's judgment of a "normal" job. Operators may add charges if they consider a job abnormal, such as distance from the operator's base location, the amount of product or labor involved, the difficulty of the terrain, or special requirements of the customer or location.

The "Number reporting" and "Range of responses" columns are important. They indicate the number of responses for that activity and the variation in those responses. A small number of responses combined with a large range of responses means that there is less confidence in those results. The "Average rate" column indicates the average charge for all of the rates in that row. The "Median rate" had an equal number of responses higher and lower.

As in past years, this guide reports the average rate, and the low, mid and high rates reported by those providing responses. When few responses are averaged, a single response can move the average a lot. In this situation, the extremes may have unduly influenced the average reported. The range of responses also give the user an idea of how variable the rates charged for field activities might be.

Possible explanations of the wide ranges are the type or size of equipment used, the mix of labor and equipment used, or different business objectives of full-time custom operators compared to local farmers supplementing their income.

Source: Drew Kientzy- MU Extension (g302)



# Farm Income: Corn Returns

## Missouri corn planning budgets, 2024

Category	Irrigated per acre	Dryland per acre
Yield	220	168
<b>Income</b>		
Grain sales	924	705
<b>Costs</b>		
Seed	106	99
Fertilizer	201	163
Other operating costs	357	271
Ownership costs	379	295
Total costs	1,043	828
<b>Income over total costs</b>	<b>(\$119.53)</b>	<b>(\$122.38)</b>
<b>Breakeven price/bushel</b>	<b>\$4.74</b>	<b>\$4.94</b>

\$4.20 market price

## Dryland corn change from previous year

	2024	2023	% chg.
Income/acre	705	1,003	-29%
Operating costs/acre	533	602	-11%
Ownership costs/acre	295	262	+13%
Total costs/acre	828	864	-4%
Breakeven/bushel	\$4.94	\$5.08	-3%

# Farm Income: Soybean Returns

Missouri soybean planning budget, 2024

<b>Category</b>	<b>Dryland per acre</b>
Yield	55
<b>Income</b>	
Grain sales	615
<b>Costs</b>	
Seed	56
Fertilizer	75
Other operating costs	194
Ownership costs	257
Total costs	581
<b>Income over total costs</b>	<b>34</b>
<b>Breakeven price/bushel</b>	<b>\$10.57</b>

\$11.19 soybean market price

Change from previous year

	<b>2024</b>	<b>2023</b>	<b>% chg.</b>
Income/acre	615	699	-12%
Operating costs/acre	325	346	-6%
Ownership costs/acre	257	240	+7%
Total costs/acre	581	586	-1%
Breakeven/bushel	\$10.57	\$10.65	-1%



# Farm Income: Wheat and Double Crop Returns

Missouri planning budgets, 2024

Category	Wheat per acre	DC Beans per acre
Yield	65	35
<b>Income</b>		
Grain sales	407	392
<b>Costs</b>		
Seed	48	72
Fertilizer	105	39
Other operating costs	144	123
Ownership costs	211	56
Total costs	507	290
<b>Income over total costs</b>	<b>(100)</b>	<b>102</b>
<b>Return to land and mgt.</b>	<b>57</b>	<b>114</b>

## Market price in each budget

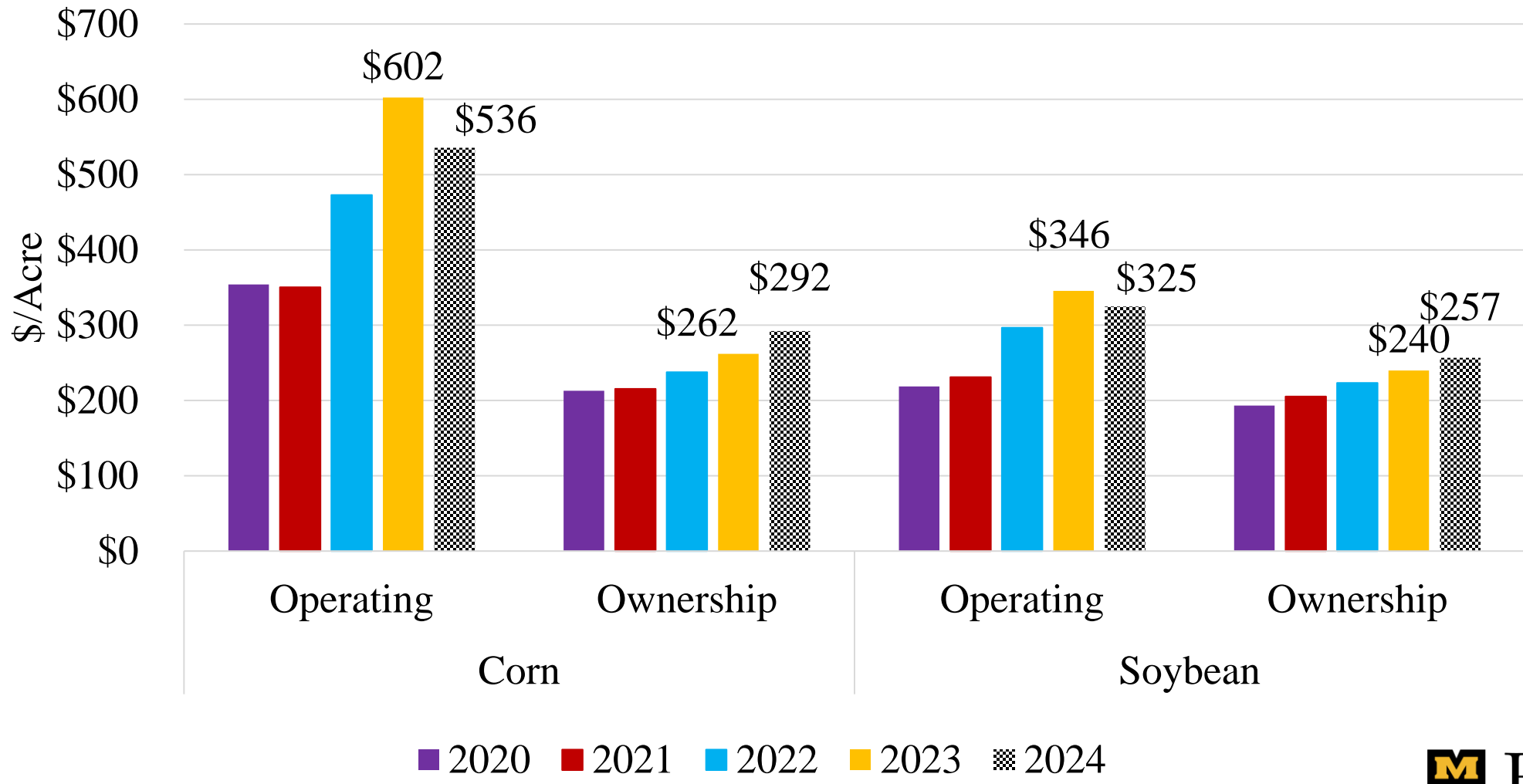
- \$6.26 per wheat bushel
- \$11.19 per soybean bushel

## Wheat change from previous year

	2024	2023	% chg.
Income/acre	407	542.00	-25%
Operating costs/acre	297	314.94	-6%
Ownership costs/acre	211	203.56	3%
Total costs/acre	507	518.50	-2%
Breakeven/bushel	7.80	7.98	-2%

# Farm Income: Cost Structure

## Missouri Case Farm Operating and Ownership Costs for 2024





# Crop Budgets: Key Takeaways

1. Expectations are for Missouri crop costs to decrease slightly in 2024. Ownership costs like, cash rent, labor and interest are all up year over year.
2. Returns to land are down across the board from expectations last spring due to lower prices. Returns to land from actual 2023 production aren't terribly different on lower 2023 yields for most of Missouri.
3. Soybean profitability is expected to outperform corn profitability strongly in 2024 with average yields.
4. Current expectations are that ARC and PLC could trigger roughly \$10 per acre payments for the 2024 crop on lower returns and prices, but those payments will not be made until fall of 2025 if realized.
5. At current crop prices and average yields, Missouri crop producers will work through liquidity in 2024.

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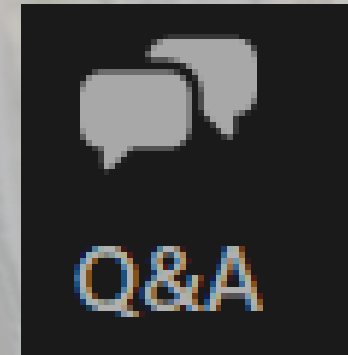
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# 2024 CROP MARKETS AND WEATHER OUTLOOK

March 29 | 1-2 p.m. CST



Ben Brown  
University of Missouri



Zachary Leasor  
Missouri Climatology Office

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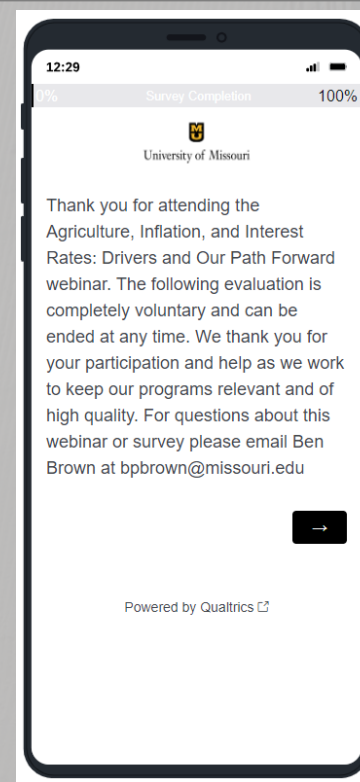
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# Evaluations

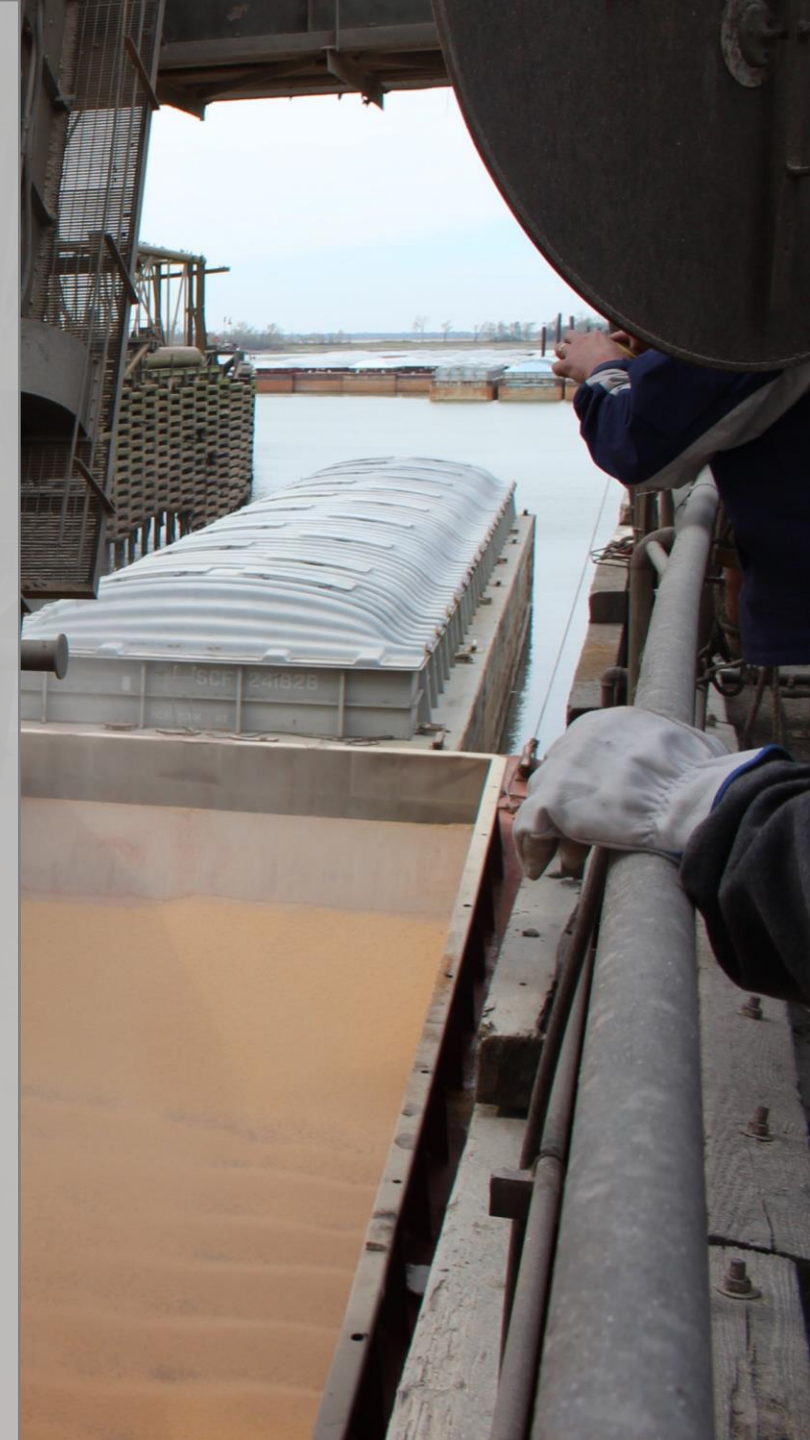
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# *Thank you!*



University of Missouri

This program is possible due to the work of the presenters, the Food and Agricultural Policy Research Institute, the Rural and Farm Finance Policy Analysis Center, and MU Extension.

All conference materials and presentations will be available at [fapri.missouri.edu](http://fapri.missouri.edu) for any comments about the conference please email Ben Brown at [bbbrown@missouri.edu](mailto:bbbrown@missouri.edu).