



Navigating Markets in
2024 and Beyond

Introduction: Roadmap for Today

1. Commodity Market Outlooks
2. Alternative Revenue Streams
3. Risk Management Tools for 2024
 - Livestock Risk Protection
 - Building a marketing plan
4. Strategic Risk Management Planning for 2024





Commodity Markets

Crop Outlook: Price Prospects

	2018-2022 average	2018	2019	2020	2021	2022	2023	2024	Change 2024
Corn (\$/Bu.)	4.85	3.61	3.56	4.53	6	6.54	4.84	4.31	-11%
All Rice (\$ cwt)	15.18	12.6	13.6	14.4	16.1	19.2	17.56	15.58	-11%
Sorghum (\$/bu.)	4.70	3.26	3.34	5.04	5.94	5.94	4.80	4.19	-13%
Soybeans (\$/bu.)	11.07	8.48	8.57	10.8	13.3	14.2	12.89	11.28	-12%
Upland Cotton (\$/lb)	0.74	0.7	0.6	0.66	0.91	0.85	0.77	0.70	-8%
Wheat (\$/bu.)	6.25	5.16	4.58	5.05	7.63	8.83	7.23	6.25	-14%
Barley (\$/bu.)	5.35	4.62	4.69	4.75	5.31	7.4	7.34	6.33	-14%
Oats (\$/bu.)	3.47	2.66	2.82	2.77	4.55	4.57	3.72	3.47	-7%

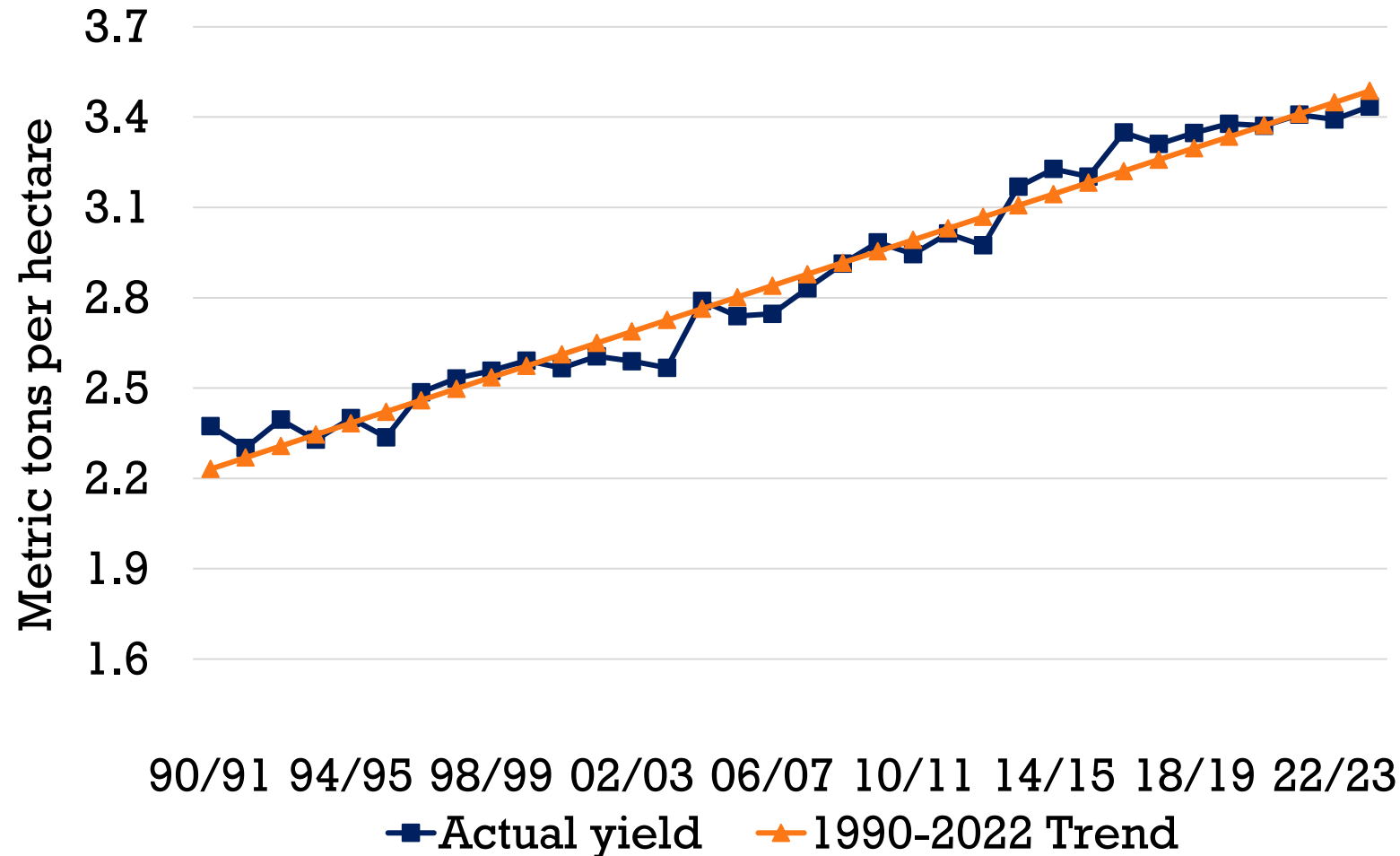
The Big Picture

- Global grain and oilseed production and use has increased dramatically
- Drivers of demand
 - Population growth (slowing)
 - China demand for livestock feed
 - Biofuels
- Yields per acre
 - Increasing over time
 - Variation helps explain prices



The Big Picture

Global grain and oilseed yields per hectare

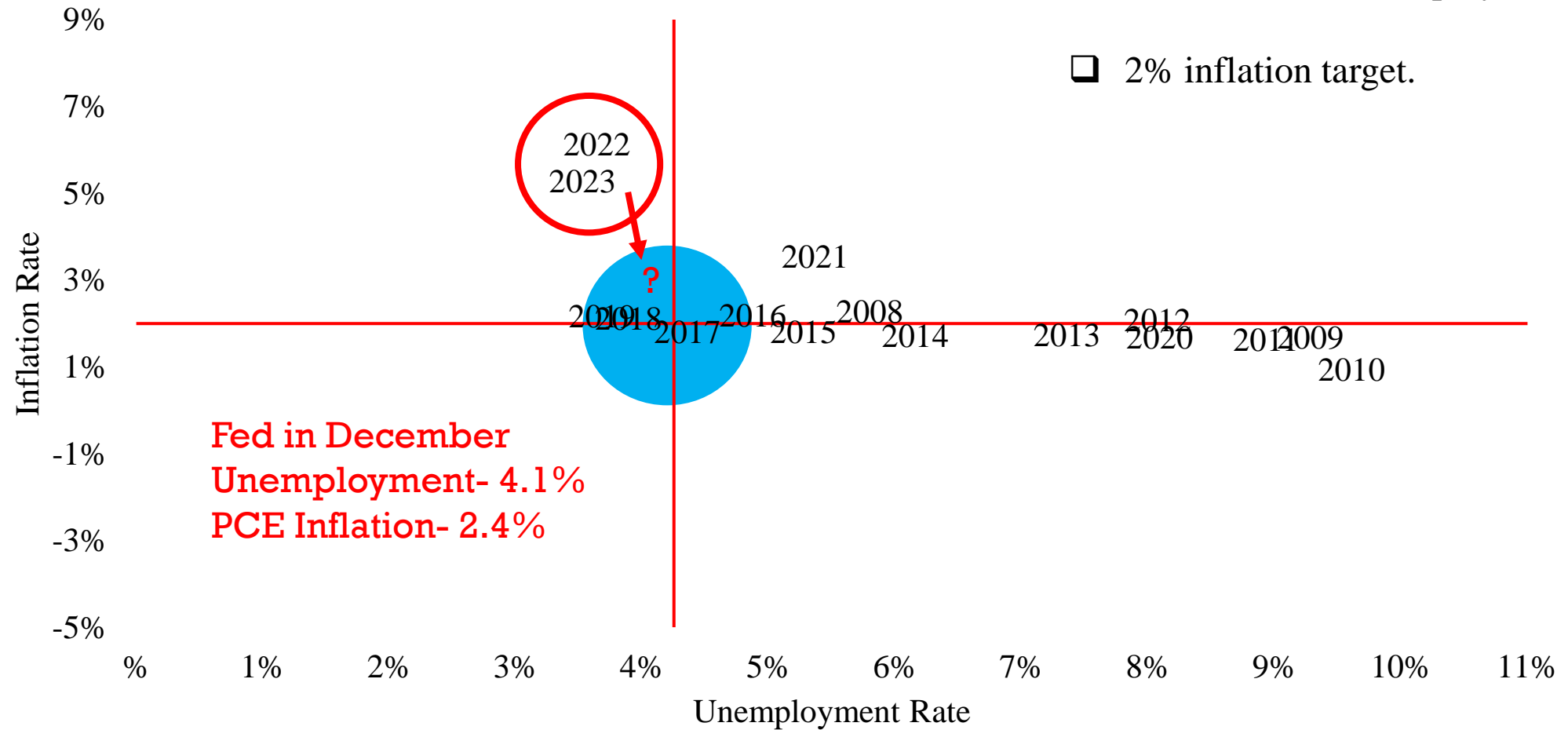


Rate of growth:
38 kg/ha/year
(1.1%/year in 2022)

Yields per hectare for an aggregate of 9 grains (corn, wheat, rice, sorghum, barley, oats, rye, millet and mixed grains) and 5 oilseeds (soybeans, rapeseed, sunflower seed, peanuts and cottonseed).

Economy: Federal Reserve Policy

The Bullseye Chart



The Dual Mandate

□ 4.25% to 4.5% unemployment target

□ 2% inflation target.

Economy: Federal Reserve Policy

CME FEDWATCH TOOL - MEETING PROBABILITIES									
MEETING DATE	325-350	350-375	375-400	400-425	425-450	450-475	475-500	500-525	525-550
1/31/2024				0.0%	0.0%	0.0%	0.0%	4.7%	95.3%
3/20/2024	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	2.9%	60.9%	36.2%
5/1/2024	0.0%	0.0%	0.0%	0.0%	0.0%	2.3%	48.8%	41.4%	7.5%
6/12/2024	0.0%	0.0%	0.0%	0.0%	2.2%	47.0%	41.7%	8.9%	0.3%
7/31/2024	0.0%	0.0%	0.0%	1.9%	41.0%	42.4%	13.2%	1.4%	0.0%
9/18/2024	0.0%	0.0%	1.7%	36.0%	42.2%	17.0%	3.0%	0.2%	0.0%
11/7/2024	0.0%	1.0%	21.8%	39.6%	27.4%	8.8%	1.4%	0.1%	0.0%
12/18/2024	0.8%	17.7%	36.1%	29.8%	12.4%	2.8%	0.3%	0.0%	0.0%

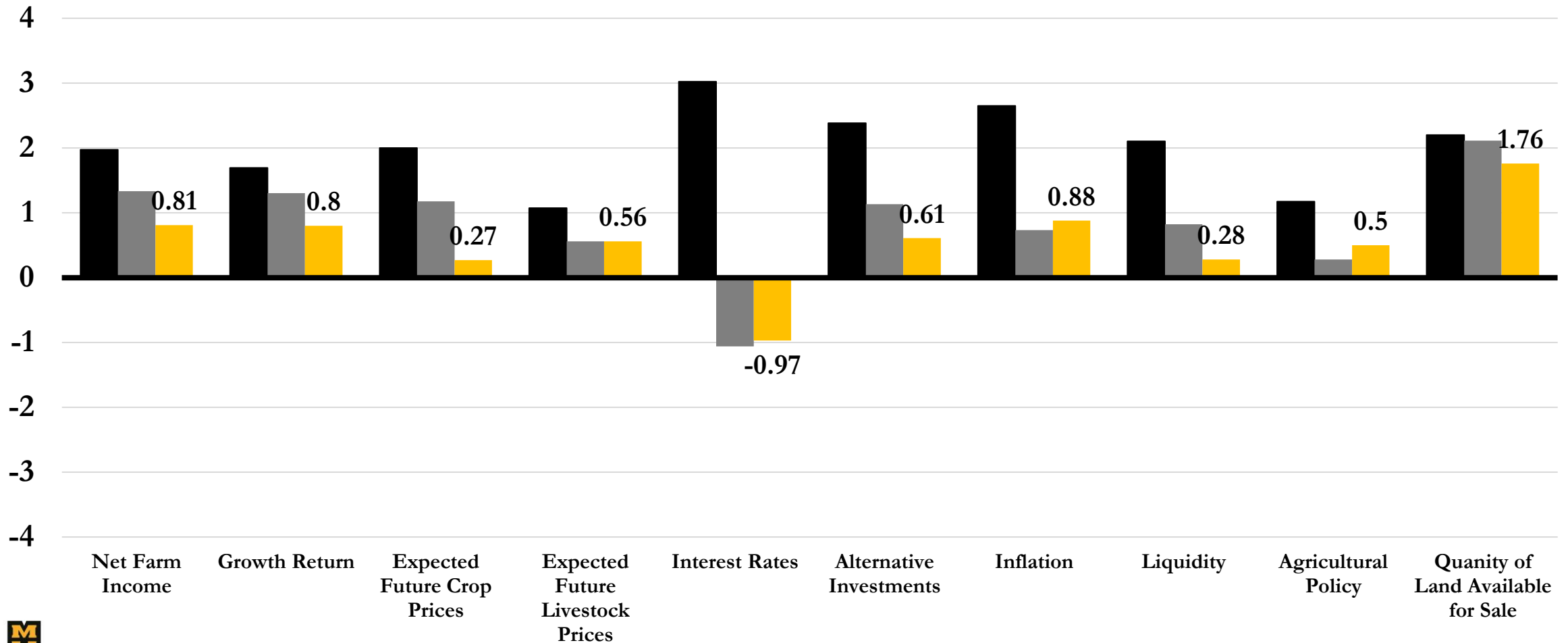
Source: CME Group 1/9/24

Economy: Federal Reserve Board Hurdles

- ❖ **Credibility-** The FED has done a remarkable job communicating the plans and allowing the market to adjust to their plans. The problem? For roughly a year- the market had ignored it and got disappointed every month.
- ❖ **Political Influence-** The Fed is an independent board... but they receive substantial political pressure. Both parties love artificially low interest rates.
- ❖ **The Limits of their Mandate-** The Fed can only influence the demand for goods and service through short term interest rates. But they are facing:
 - ❖ A rapid decline in cheap goods,
 - ❖ A rapid decline in cheap labor, and
 - ❖ A rapid decline in cheap capital.
- ❖ Through the increase in interest rates- the demand for goods has drastically declined.
 - ❖ The housing market has cooled after average mortgage rates went to 7.7% up from 3% two years ago.
 - ❖ The energy sector has cooled. Oil prices down 20% in a year.
- ❖ However, we continue to see strong inflation in services like wage rates and rent and that's going to be hard for the FED.
 - ❖ Companies continue to add workers. The economy added 216,000 jobs in December. 2.7 in 2023

Economy: Land Values

Factors Impacting Missouri Land Values

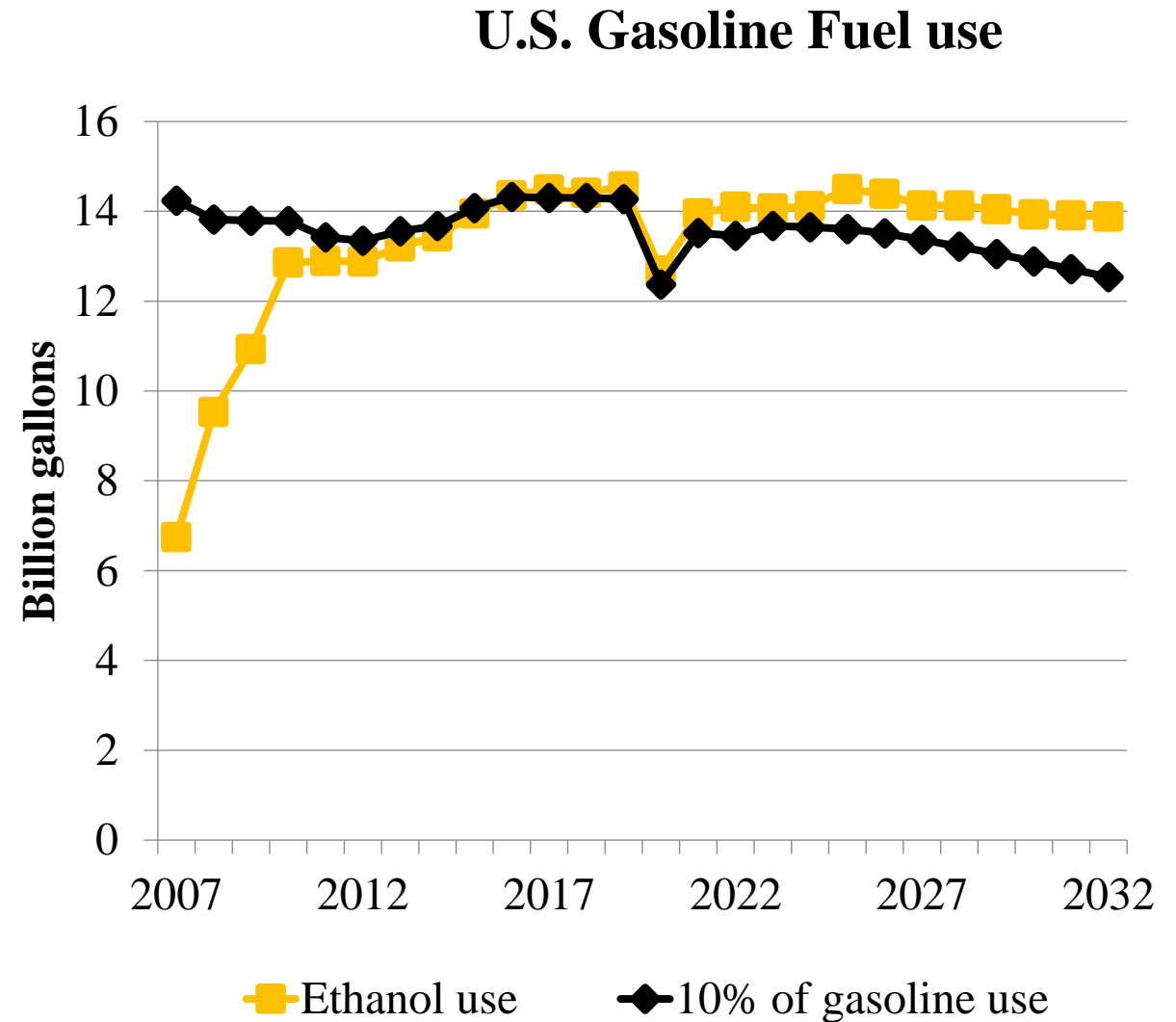


Corn Outlook



Corn Demand: Domestic gasoline and ethanol use

- ❑ Since 2010, almost all gasoline sold in U.S. is a 10% ethanol blend
- ❑ Gasoline use dropped in 2020 with pandemic, only partially recovered
- ❑ Could slide in the future with adoption of electric vehicles
- ❑ Thus, will require some higher-level blends just to hold current ethanol use levels



Source: FAPRI baseline update, Sept. 2023

Corn Demand: Corn Feed and Residual Use

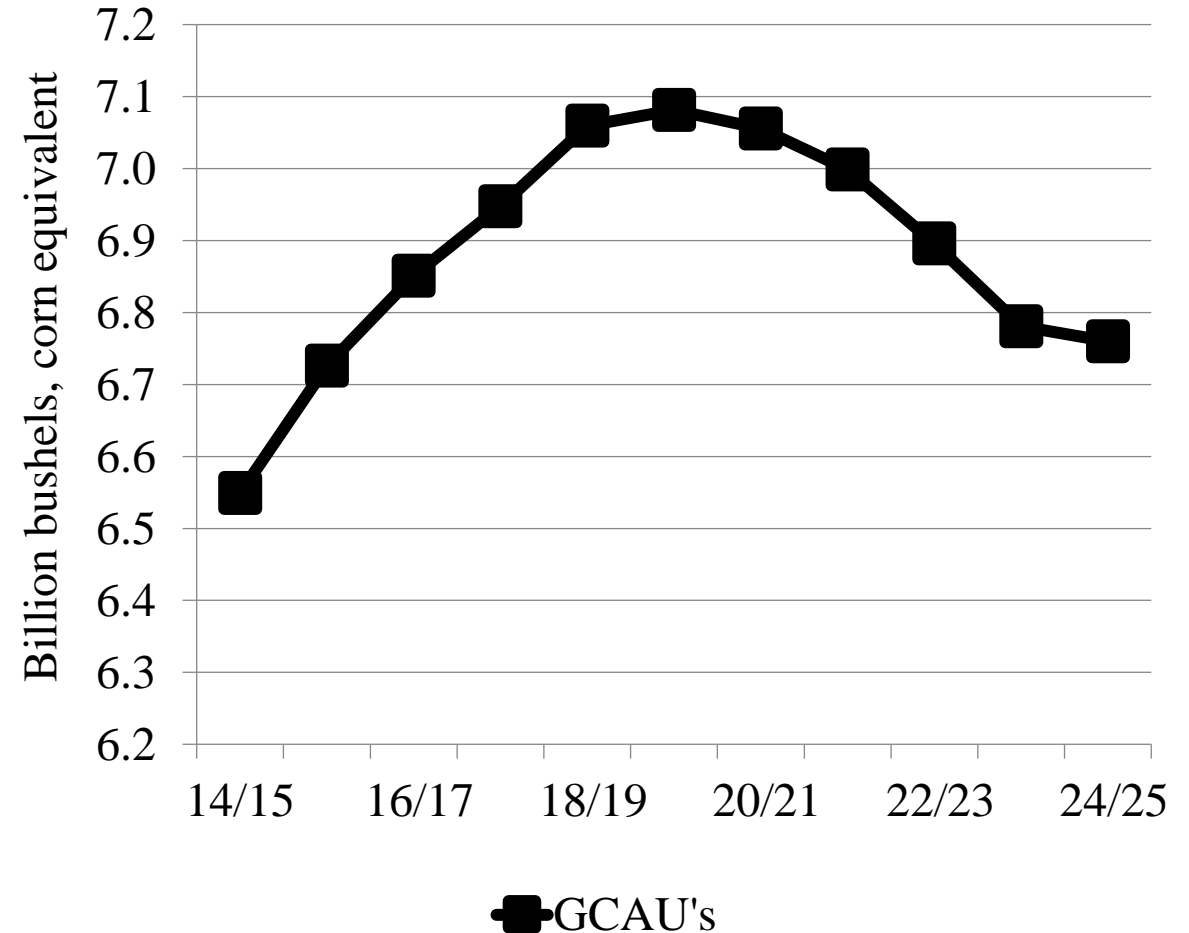
□ Our measure of GCAU's:

- Reflects production of meat, milk and trends in feed efficiency, ration shares
- Has declined recently, largely due to lower cattle numbers
- Projected to be about flat in 24/25

□ Corn feed use also depends on prices/availability of feedstuffs

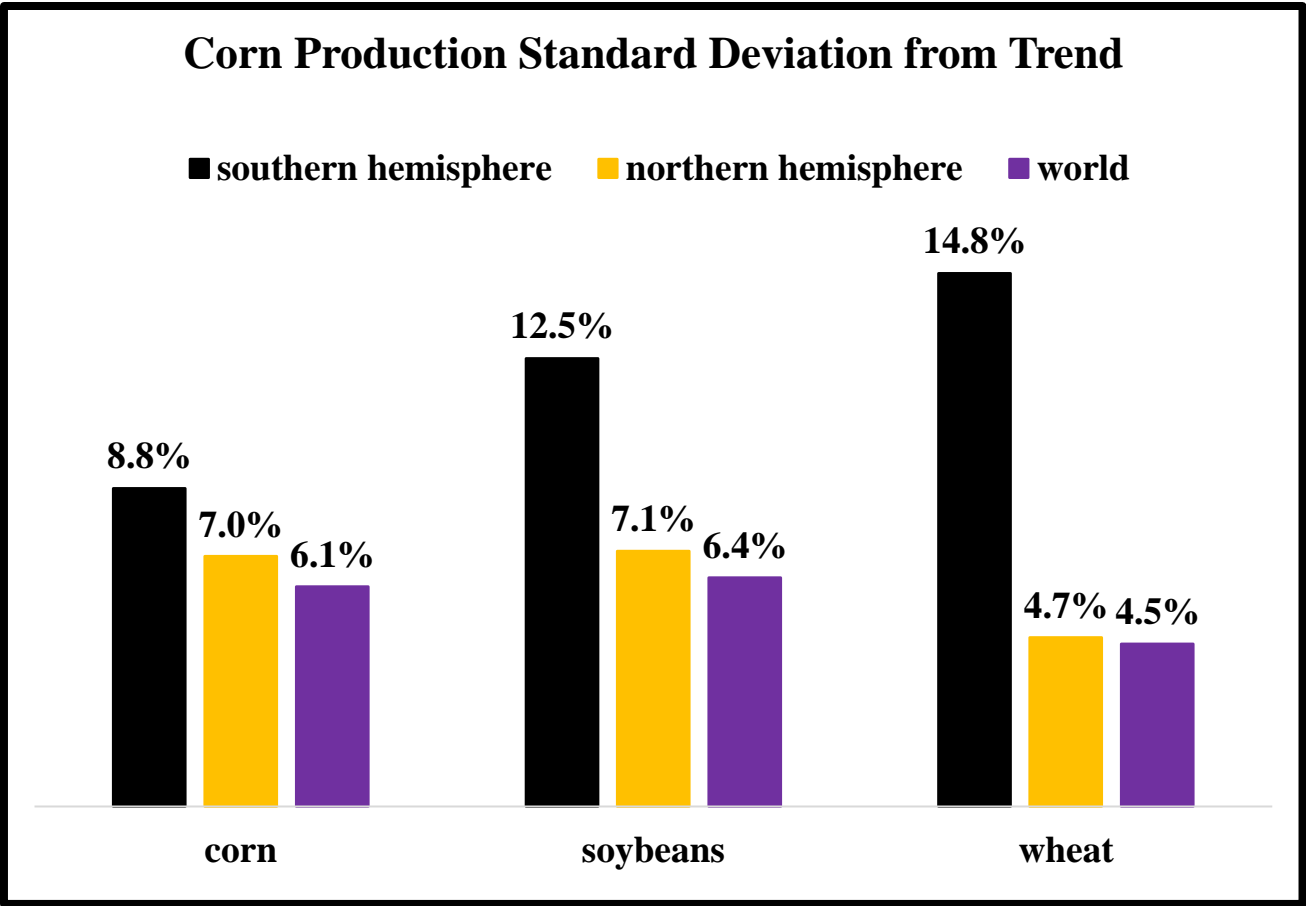
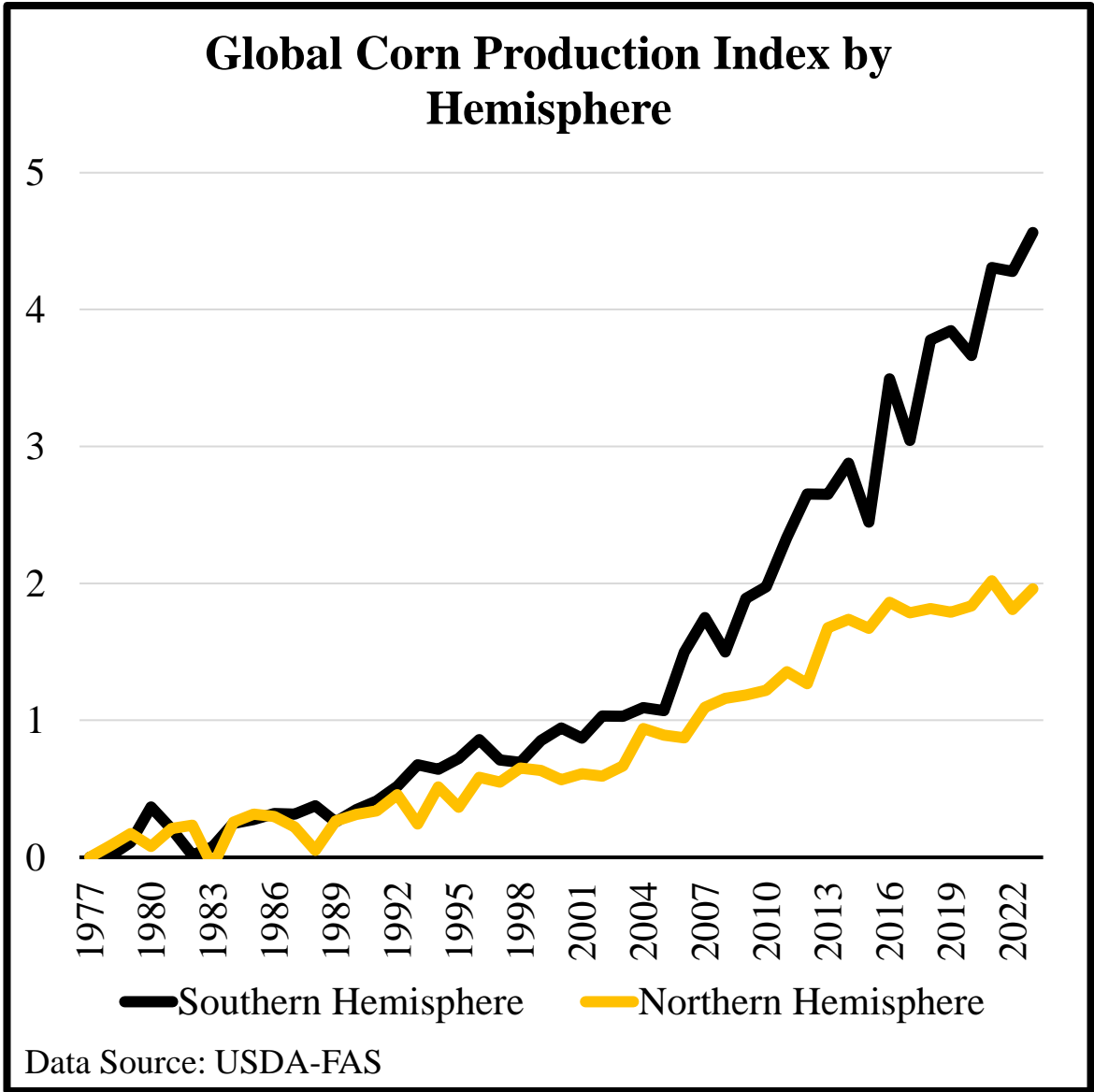
□ Residual can be large, reflecting any errors in estimating supply or other demand categories

Grain-Consuming Animal Units



Source: FAPRI baseline update, Sept. 2023

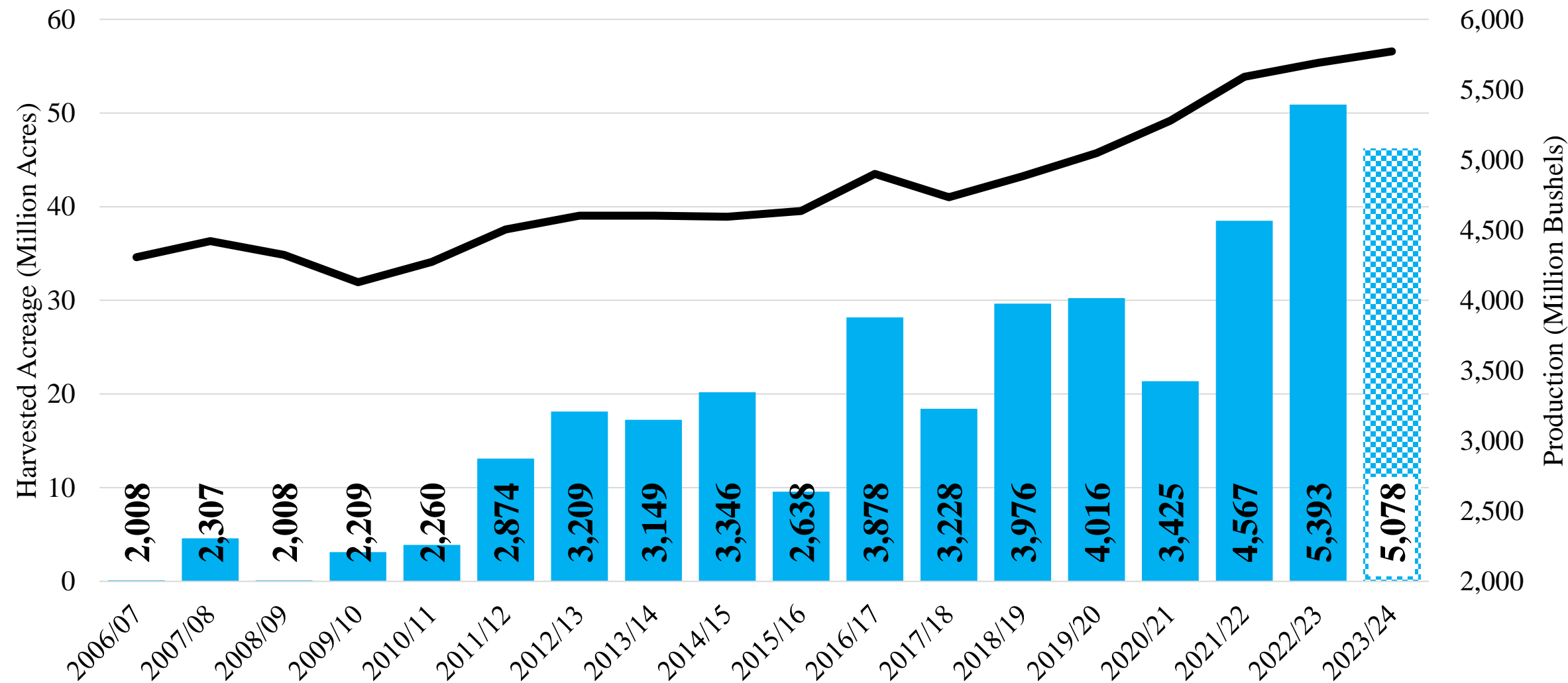
Corn Outlook: South America Production Growth



Zulauf, C., J. Colussi, G.Schnitkey and N. Paulson,. “Comparing Variability of Southern and Northern Hemisphere Production of Corn, Soybeans, and Wheat.” *farmdoc daily* (13):141, Department of Agricultural and Consumer Economics, University of Illinois at Urbana-Champaign, July 31, 2023.

Corn Outlook: South America Production Growth

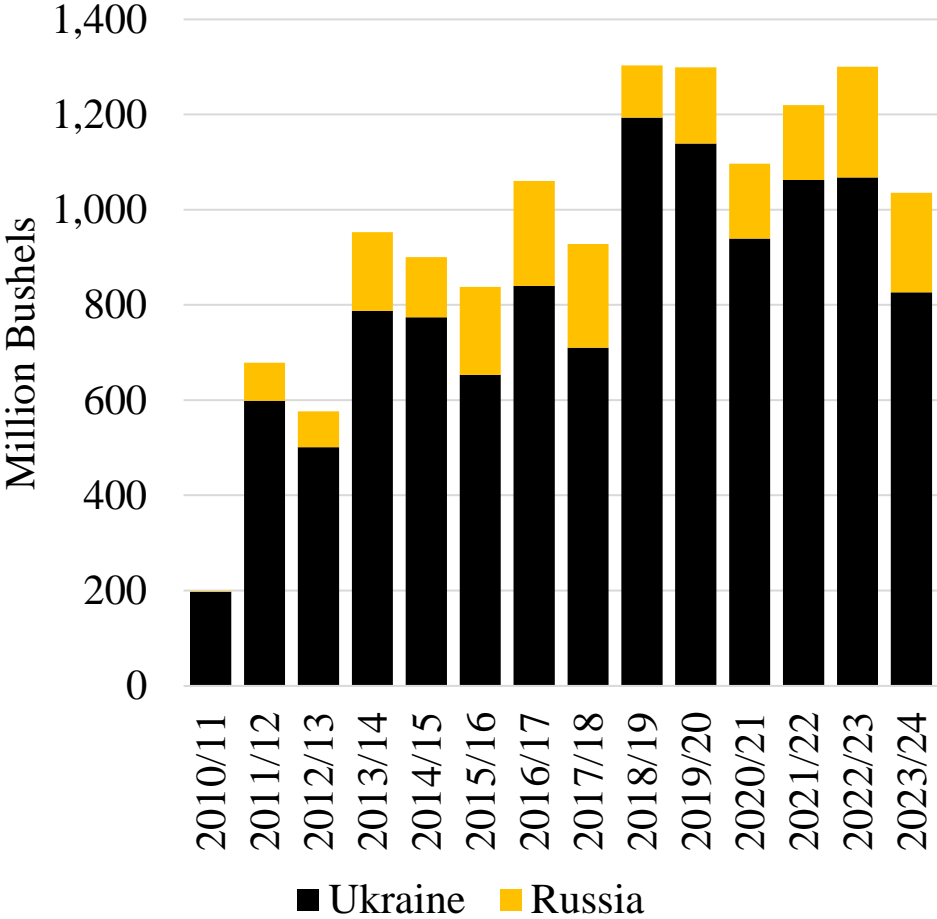
Brazil Corn Acreage and Production



Data Source: USDA-FAS

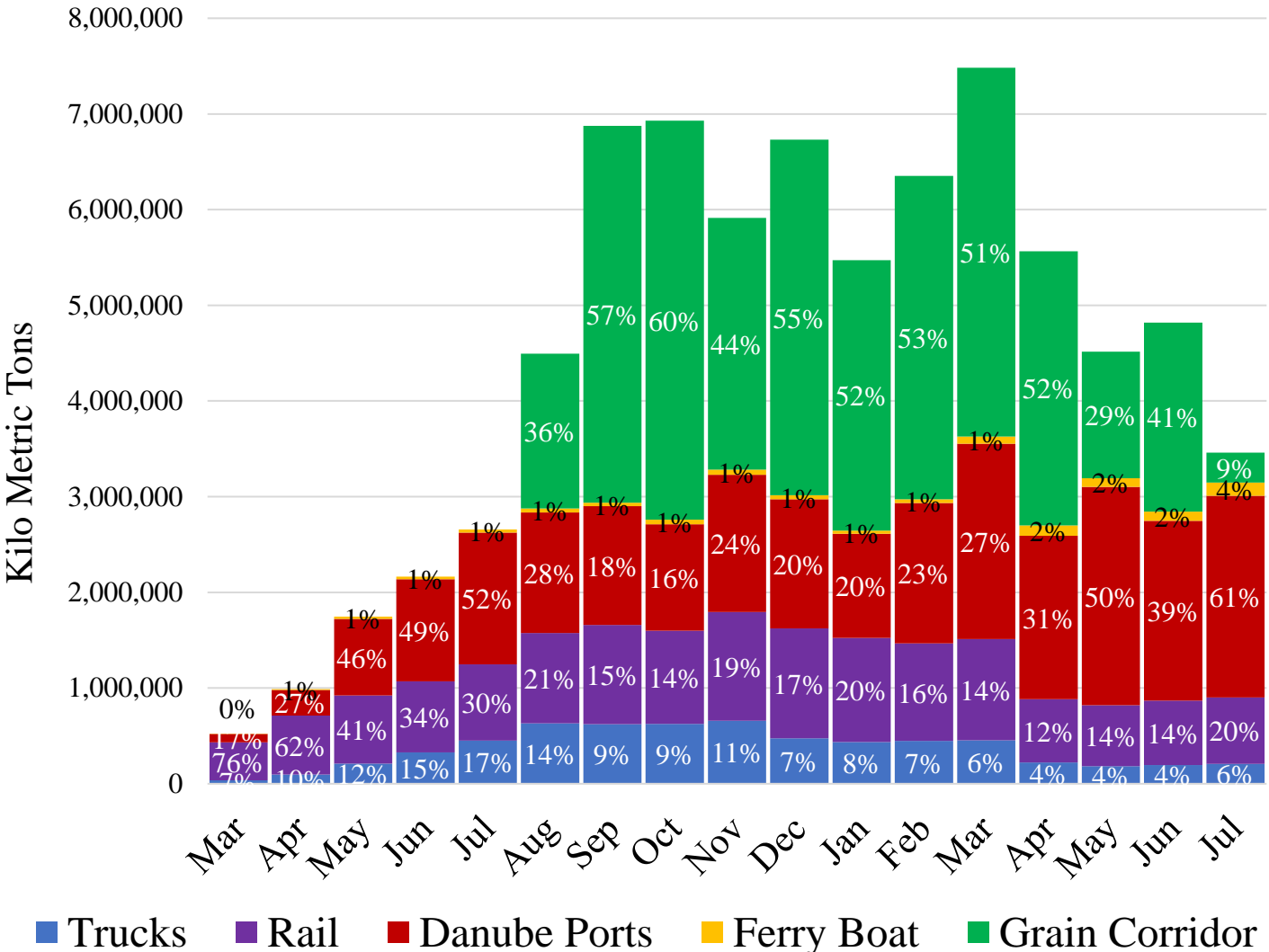
Corn Outlook: Ukraine & Russia Production

Corn Exports from Ukraine and Russia



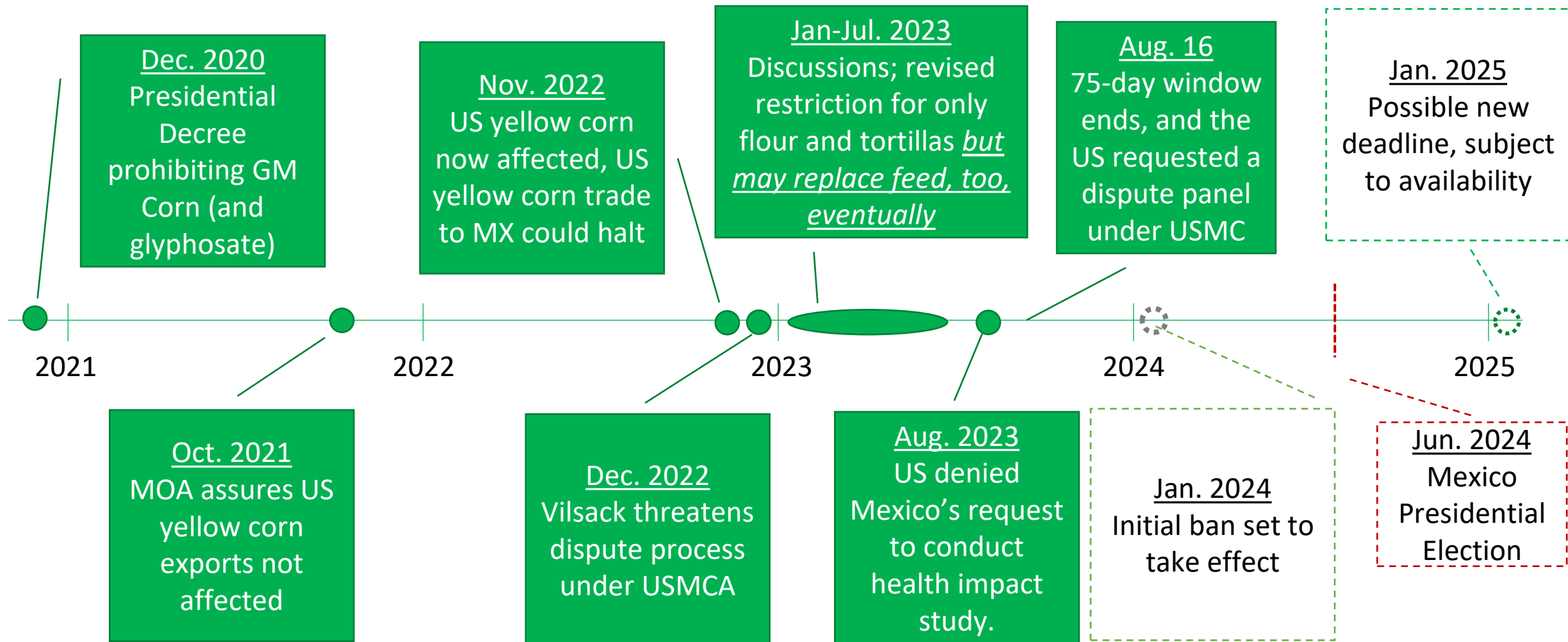
Data Source: USDA FAS

Ukraine Exports by Transportation Source



Data Source: Ministry of Agrarian Policy and Food of Ukraine

Corn Outlook: GMO Dispute with Mexico



What would it take for the US to supply Mexico with Non-GM corn? (roughly 650 mil. bu.)

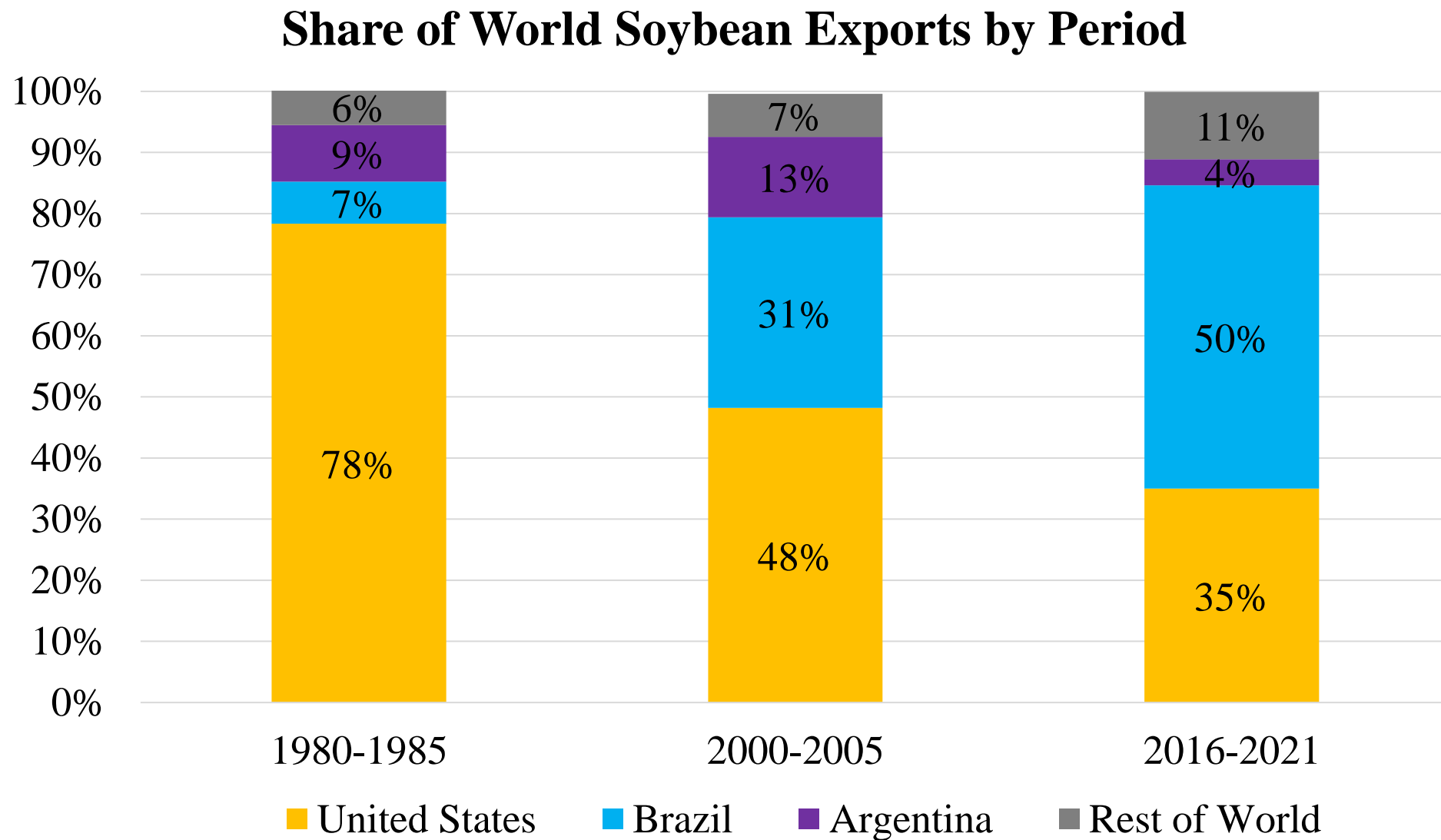
US Corn Outlook: Price Path

	2022/23 (USDA)	2023/24 (USDA)	2024/25 (FAPRI)	% Change 2023 to 2024
Area planted (mil. acres)	88.6	94.9	90.4	-5%
Yield (bu./harvested acre)	173.4	174.9	181.5	4%
Production (mil. bu.)	13,715	15,234	14,986	-2%
Feed use	5,549	5,650	5,615	-1%
Ethanol and other domestic use	6,559	6,740	6,802	1%
Exports	1,661	2,100	2,482	18%
Ending stocks	1,361	2,131	2,360	11%
Marketing year avg. price (\$/bu.)	\$6.54	\$4.85	\$4.31	-11%

2024 Soybean Outlook



Soybean Outlook: Changing Models

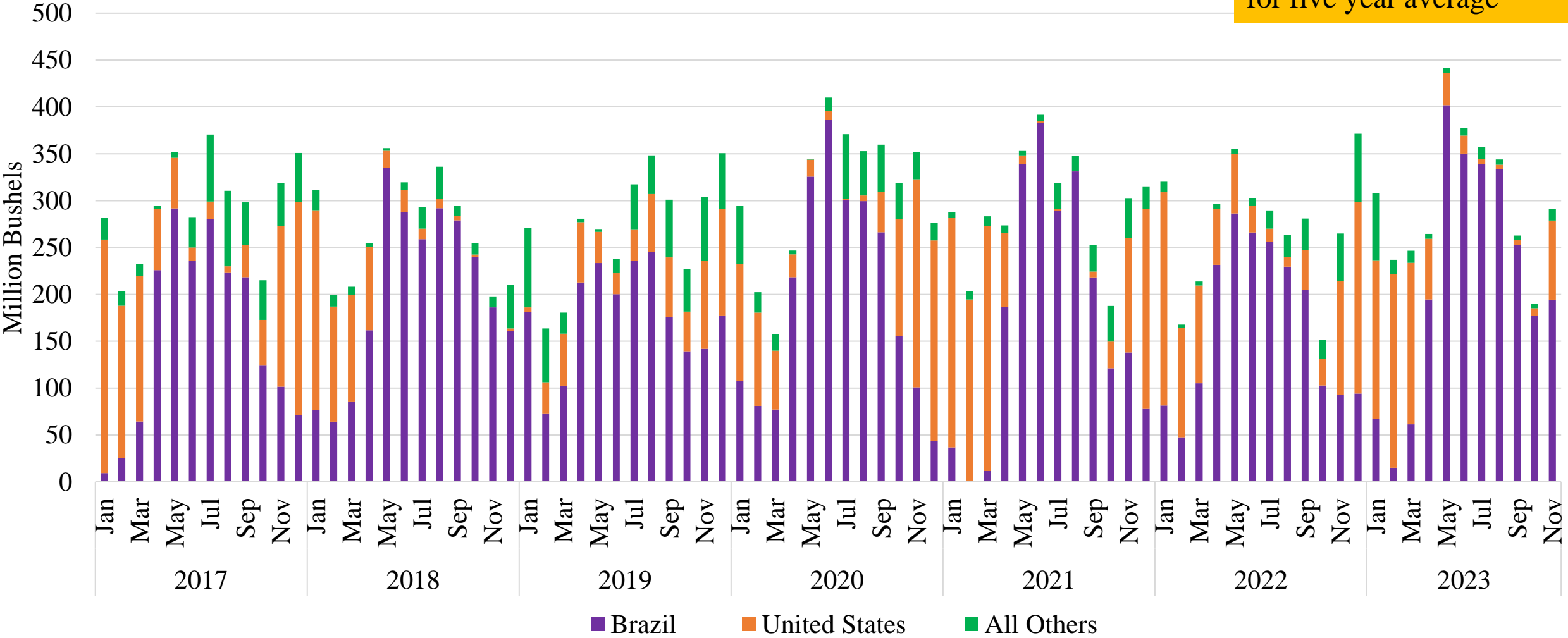


Source: Author Calculations Using USDA FAS

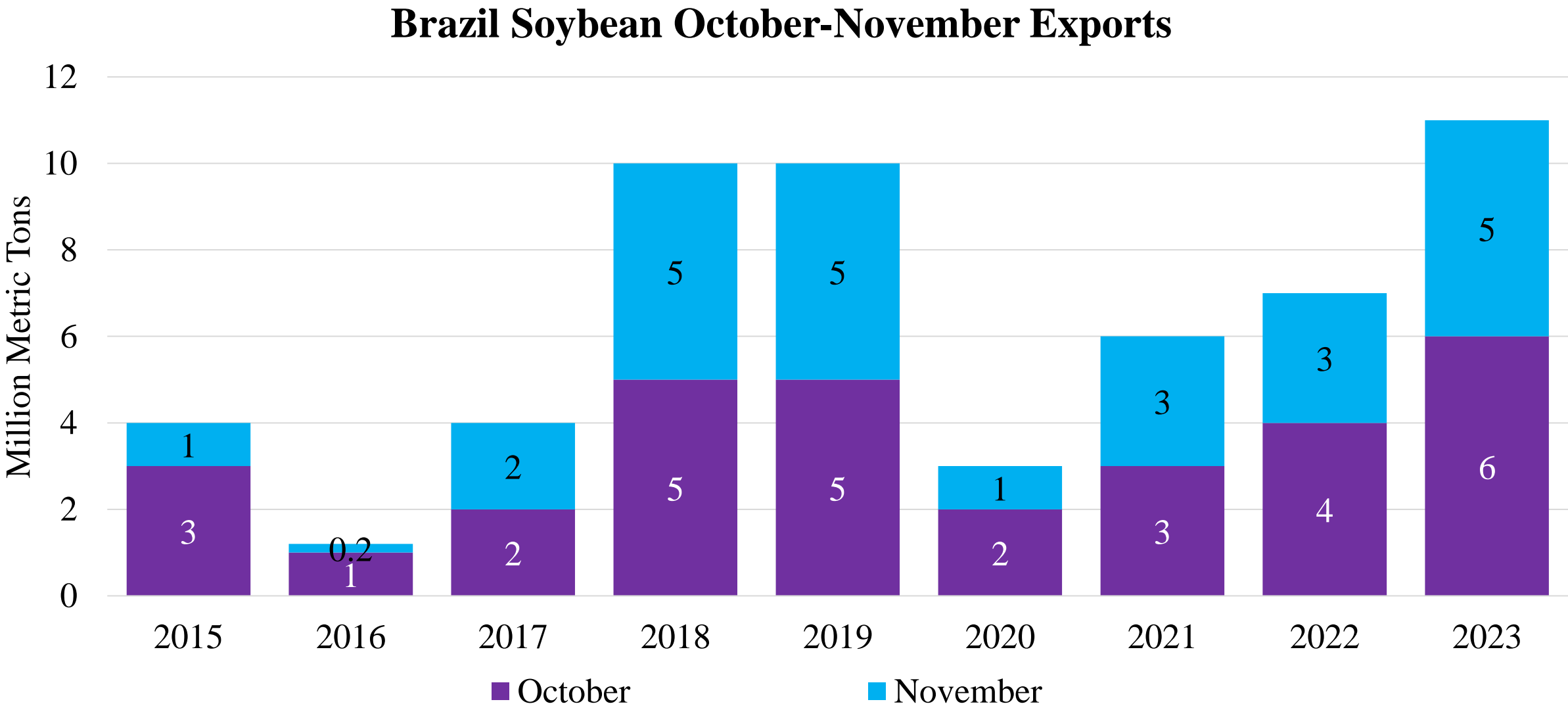
Soybean Outlook: Disappointing Exports

China's Soybean Imports by Origin Thru November
Source: China Customs

US Share: 29% in November compared to 46% last year and 43% for five year average

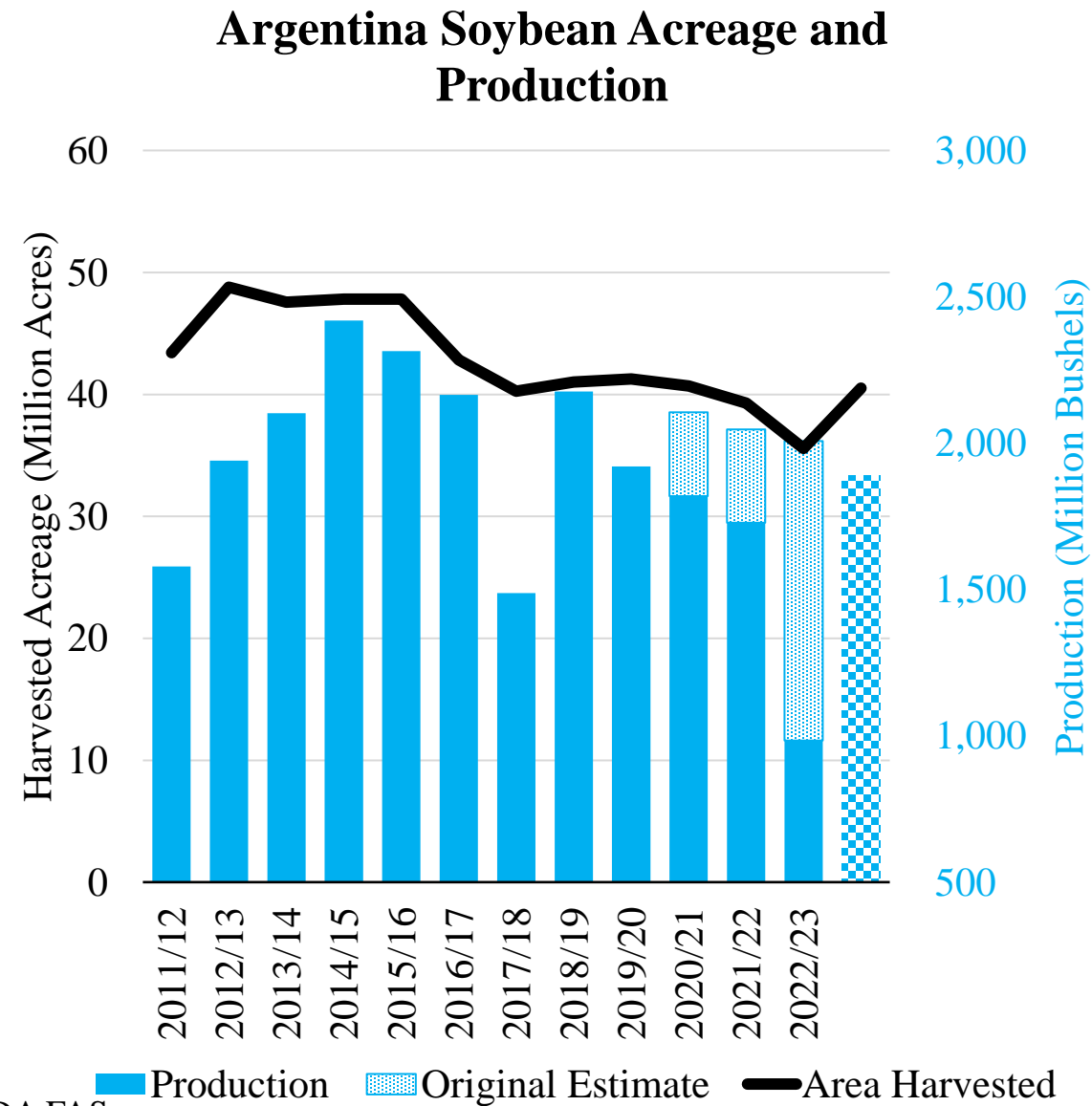
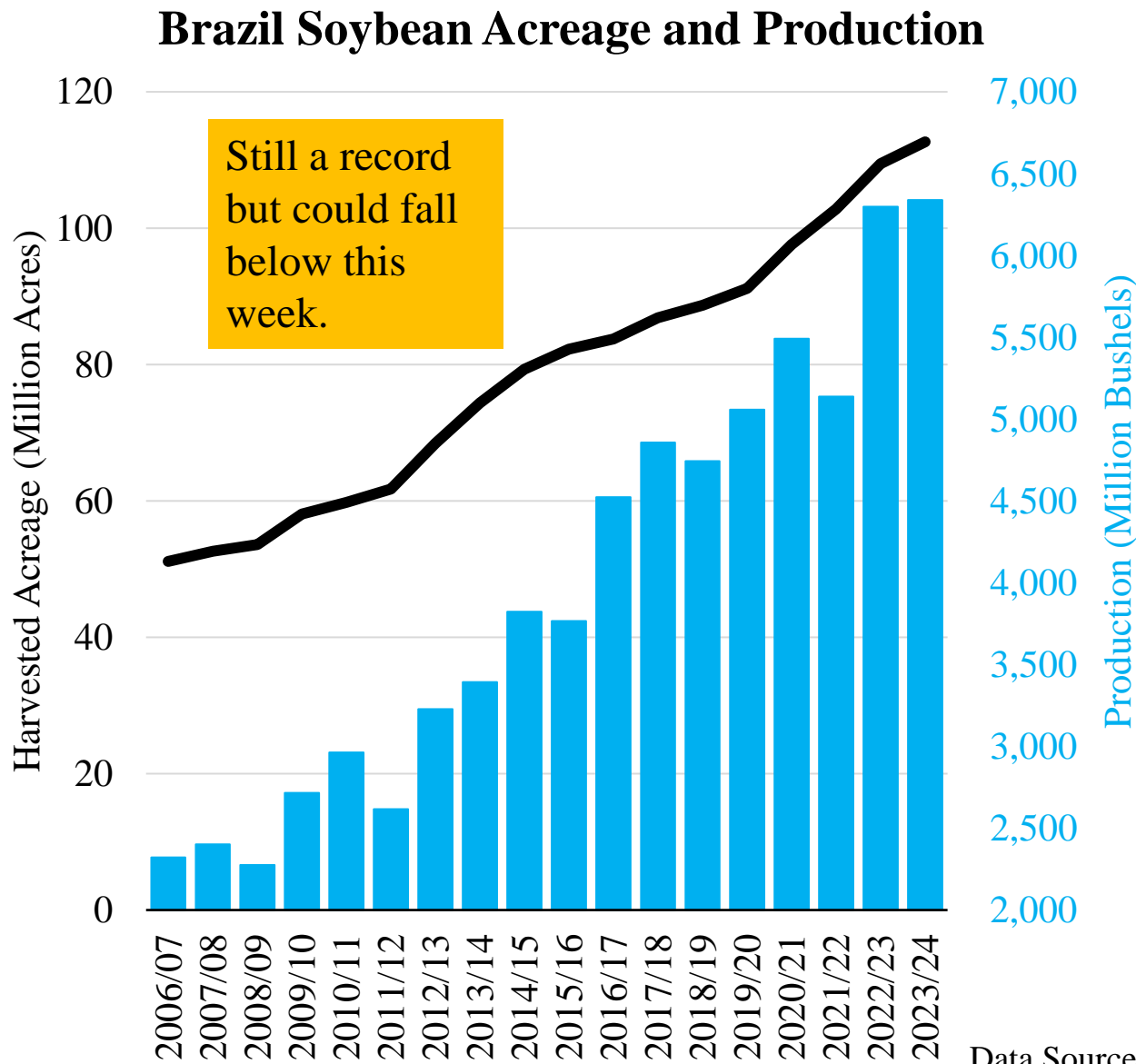


Soybean Outlook: Disappointing Exports



Data Source: USDA FAS

Soybean Outlook: South America Production



Soybean Outlook: South America Competition


 RFD-TV

[Drought on the Panama Canal continues to slow down global ag trade](#)

Returning from a recent trip to the Panama Canal, an Indiana farmer says drought in Central America continues to impact global trade.

2 weeks ago



 Digital Journal

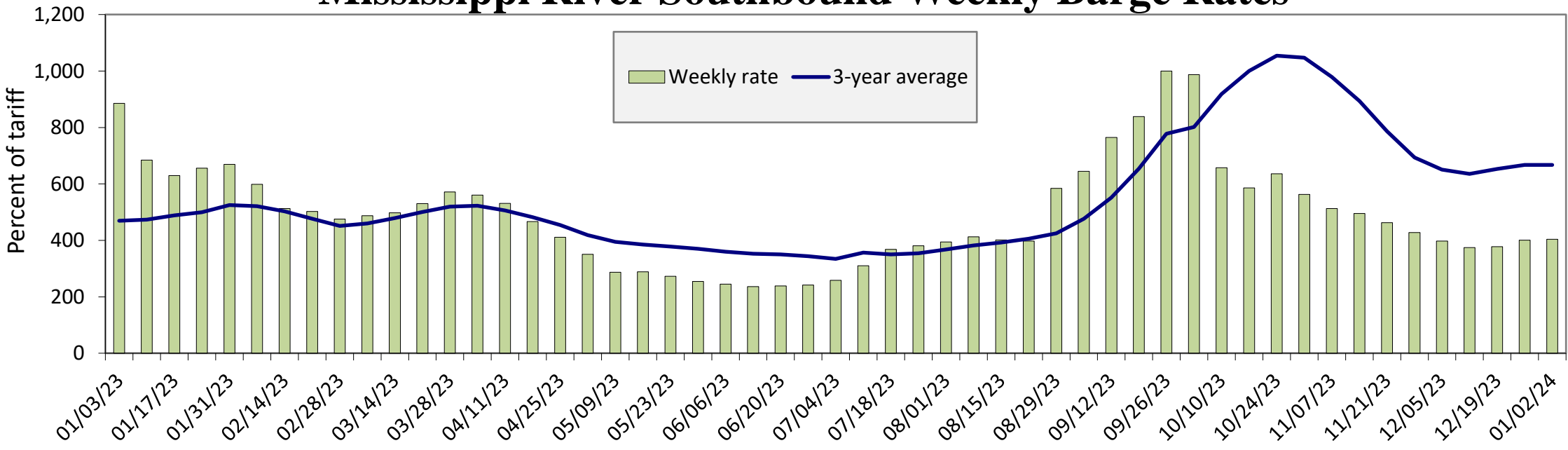
[Global maritime trade sails into geopolitical storm](#)

International maritime trade has hit stormy waters as attacks by Yemen's Huthi rebels on ships in the Red Sea has reduced the availability of ships,

2 days ago



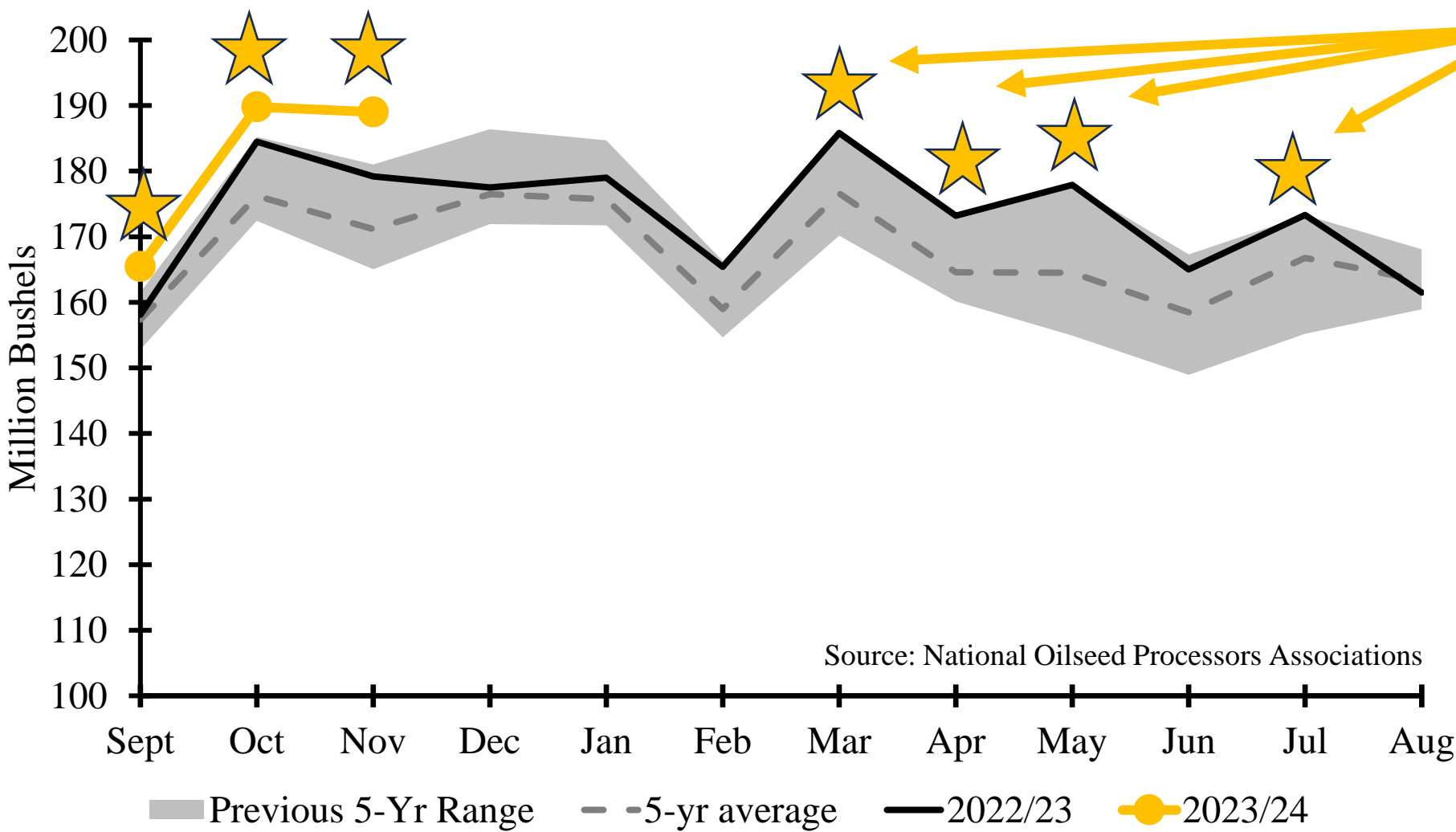
Mississippi River Southbound Weekly Barge Rates



Data Source:
USDA AMS

Soybean Outlook: Growth in Crush

NOPA Soybean Monthly Crush - November Estimates



Seven of the last nine months have set new monthly soybean crush records.

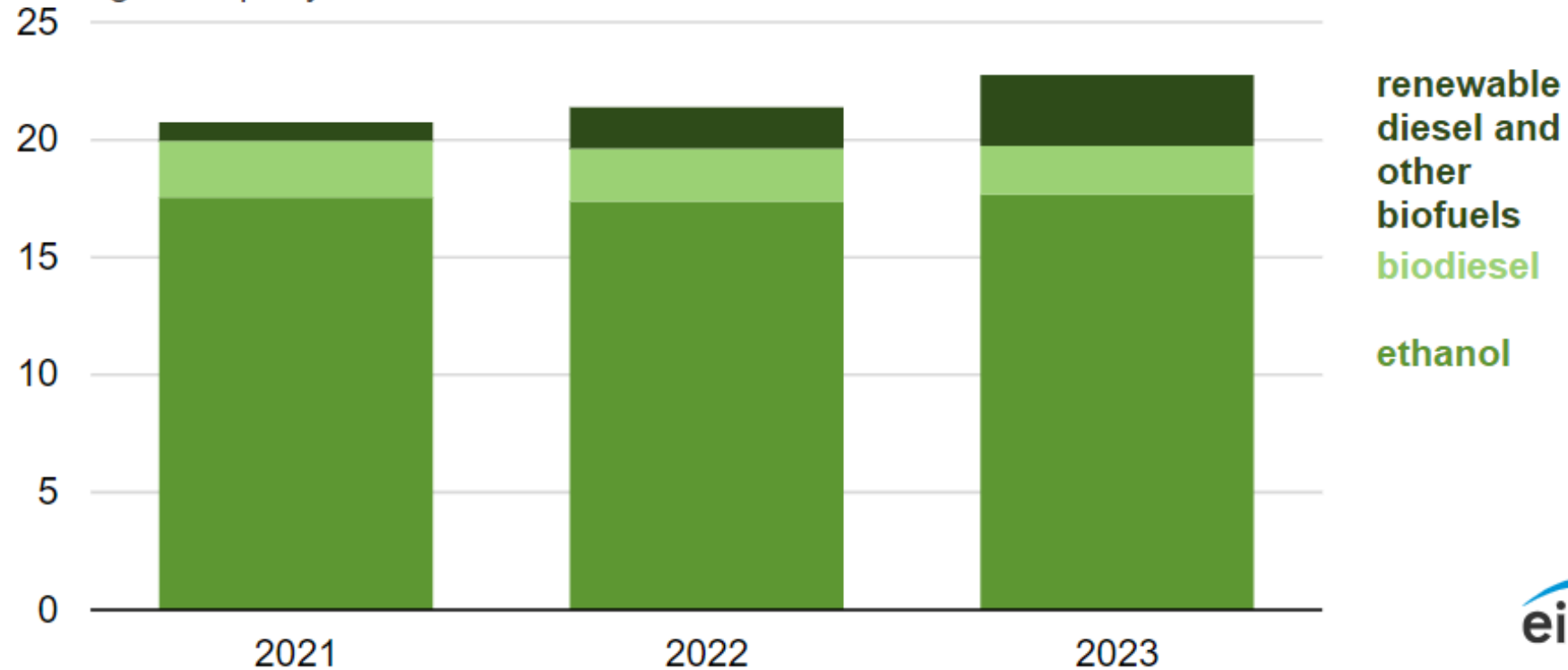
- ❑ The expectation is 2023/24 will be a big soybean crush year.
- ❑ The demand for soybean oil has been extremely high this year as more and more gets used for renewable fuels.

Source: National Oilseed Processors Associations

Soybean Outlook: Renewable Fuels

In 2023, U.S. renewable diesel production capacity surpassed biodiesel production capacity

Annual U.S. biofuels production capacity as of Jan 1 (2021–2023)
billion gallons per year



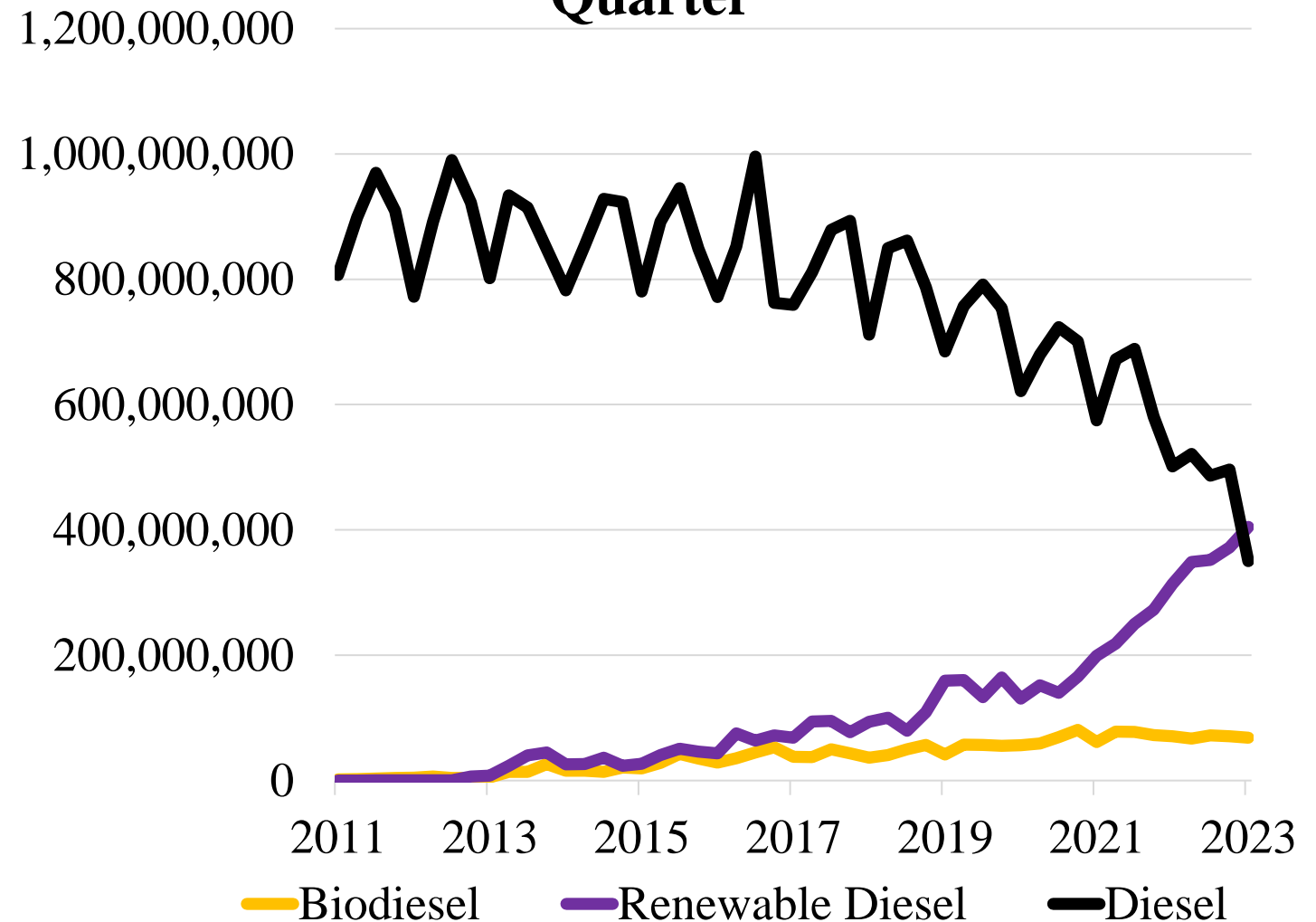
Data source: U.S. Energy Information Administration, *2023 Fuel Ethanol Plant Production Capacity Report*, *2023 Biodiesel Plant Production Capacity Report*, and *2023 Renewable Diesel Fuel and Other Biofuels Plant Production Capacity Report*

Soybean Outlook: Renewable Fuels

- ❑ In California, one of the largest fuel markets- Renewable diesel sales exceed petroleum-based diesel in first quarter of 2023.
- ❑ Not all renewable diesel will be made from soybean oil- in fact, other sources are actually (like used cooking oil) preferred.



California Diesel Sales, Gallons per Quarter



Soybean Outlook: Price Path

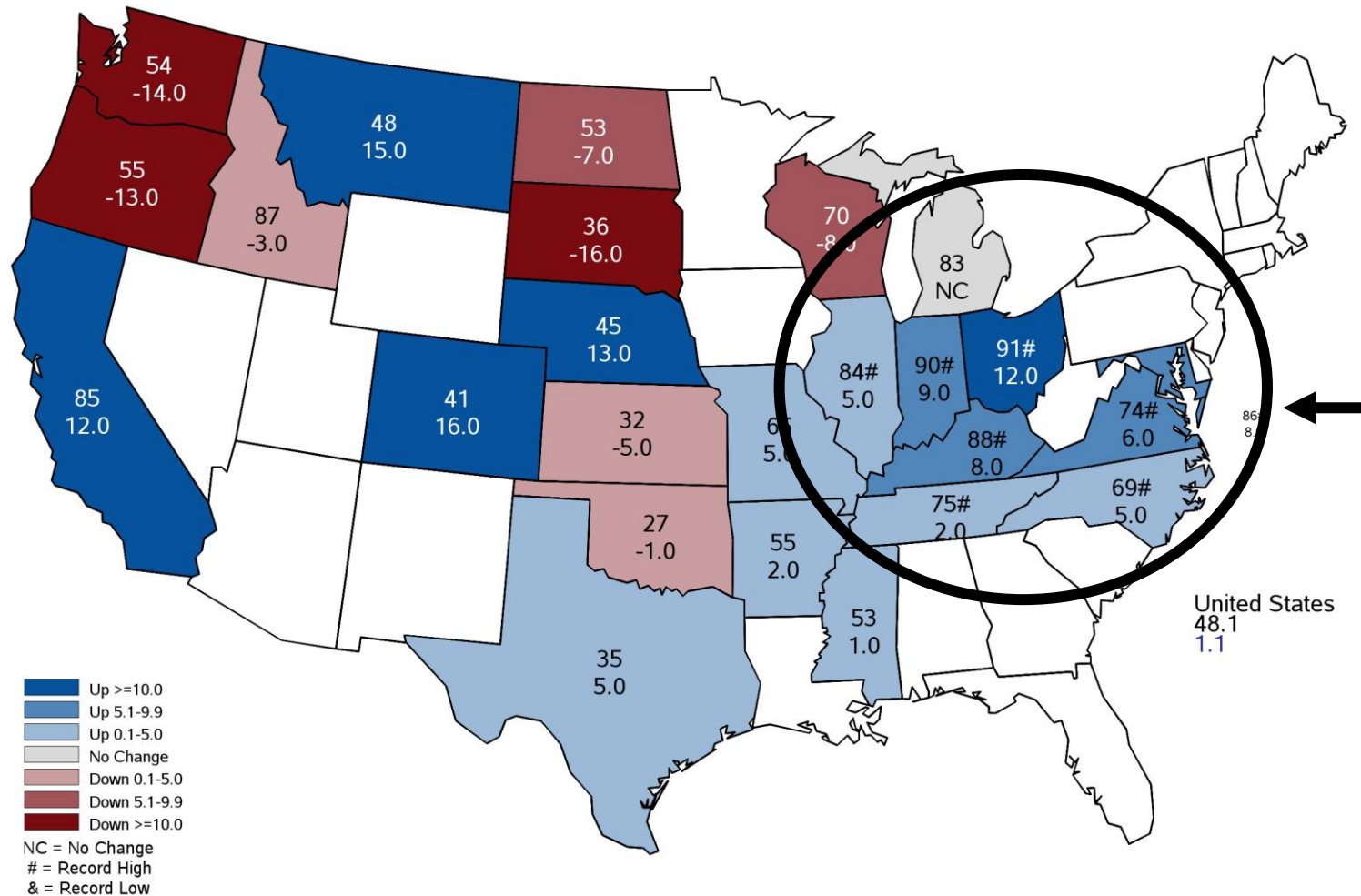
	2022/23 (USDA)	2023/24 (USDA)	2024/25 (FAPRI)	% Change 2023 to 2024
Area planted (mil. acres)	87.5	83.6	88.0	5%
Yield (bu./harvested acre)	49.6	49.6	51.9	5%
Production (mil. bu.)	4,270	4,129	4,806	16%
Crush	2,212	2,300	2,447	6%
Seed and residual use	97	127	110	-13%
Exports	1,992	1,755	1,860	6%
Ending stocks	268	245	392	60%
Marketing year avg. price (\$/bu.)	\$14.20	\$12.90	\$11.28	-13%



2024 SRW Wheat Outlook

US Wheat: The Many Stories of Wheat

August 2023 Winter Wheat Yield Bushels and Change from Previous Year



The majority of the Soft Red Winter Wheat production region had just outstanding yields.

Wheat: Price Path

	2022/23 (USDA)	2023/24 (USDA)	2024/25 (FAPRI)	% Change 2023 to 2024
Area planted (mil. acres)	45.7	49.6	48.5	-2%
Yield (bu./harvested acre)	46.5	48.6	50.9	5%
Production (mil. bu.)	1,650	1,812	1,976	9%
Feed and residual use	89	120	131	9%
Food and seed use	1,041	1,035	1,042	1%
Exports	759	725	817	13%
Ending stocks	582	659	793	20%
Marketing year avg. price (\$/bu.)	8.83	7.30	\$6.25	-14%

Source: FAPRI MU

Crop Summary

- ❑ It seems unfair that parts of Missouri were plagued with low yields due to drought AND lower prices because of reasonably strong production elsewhere and weak global demand.
- ❑ Renewable diesel continues to build out. The process has largely followed the ethanol boom of the mid 2000s with setbacks from time to time, but the market is growing. States like Massachusetts and New York will be important states to watch.
- ❑ For 2024/25- I look for soybean acreage to expand while corn acreage contracts.
- ❑ Outside adverse weather, prices are moderating back to equilibrium and putting pressure on operations to find cost savings on the input side.
- ❑ Coordination within the supply chain likely creates opportunities and challenges to come.



Extension
University of Missouri

Marketing Plans

Marketing: Fundamental vs Technical



Image Credit- The Greed-Hope-Fear School of Marketing

Marketing: **Common Challenges in Grain Marketing**

1. Reluctance toward Pre-Harvest Marketing Plans
2. Understanding Local Basis
3. Having an Exit Strategy
4. Understanding Market Carry



Marketing: Pre-Season Marketing

Pre-Harvest Plans- Strategic

- ❖ What do I plan to have, what am I willing to sell...
- ❖ Seasonal patterns point that April, May June being good time to look at early season prices
- ❖ Objective prices can be set based on production costs

Post Harvest Plans- Tactical

- ❖ Based on relative basis and carrying charges
- ❖ Decisions related to storage accessibility, handling, and cost
- ❖ Financial health and future needs come into plate
- ❖ Required exit strategy- no third option

Marketing: **Corn Seasonality**

- ✓ Since 2000, 14 out of 19 years have had a higher futures price on May 15 than Oct. 15. **That's 74%!!**
- ✓ The average decrease was \$0.73.
- ✓ 5 out of 19 years had a higher futures price on Oct. 15 than May 15 or 26% of the time.
- ✓ The average increase was \$0.83.
- ✓ If done every year you would have netted, **a positive \$0.32/bu.**

Year	May 15	Oct 15	Change
2007	\$3.77	\$3.54	\$0.23
2008	\$5.90	\$3.73	\$2.17
2009	\$4.16	\$3.68	\$0.48
2010	\$3.56	\$5.38	\$(1.82)
2011	\$6.88	\$6.44	\$0.44
2012	\$6.37	\$7.57	\$(1.20)
2013	\$5.27	\$4.51	\$0.76
2014	\$4.86	\$3.43	\$1.43
2015	\$3.69	\$3.85	\$(0.16)
2016	\$3.95	\$3.45	\$0.50
2017	\$3.66	\$3.31	\$0.35
2018	\$3.95	\$3.58	\$0.37
2019	\$4.16	\$3.85	\$0.31

Data: Barchart Nearby Futures

Marketing: Soybean Seasonality

- ✓ Since 2000, 13 out of 19 years have had a higher futures price on May 15 than Oct. 15. **That's 68%!!**
- ✓ The average decrease was \$1.91*.
- ✓ 6 out of 19 years had a higher futures price on Oct. 15 than May 15 or 32% of the time.
- ✓ The average increase was \$1.09*.
- ✓ If done every year you would have netted, **a positive \$0.96/bu.**

Year	May 15	Oct 15	Change
2007	\$7.36	\$9.36	-\$2.00
2008	\$13.08	\$8.05	\$5.03
2009	\$11.29	\$9.73	\$1.56
2010	\$9.25	\$11.52	-\$2.27
2011	\$13.90	\$12.42	\$1.48
2012	\$13.96	\$14.79	-\$0.83
2013	\$15.70	\$12.63	\$3.07
2014	\$14.82	\$9.31	\$5.51
2015	\$9.48	\$8.86	\$0.62
2016	\$10.32	\$9.30	\$1.02
2017	\$9.28	\$9.48	-\$0.20
2018	\$9.82	\$8.24	\$1.58

Data: Barchart Nearby Futures

Marketing: Corn Seasonality

✓ If we assume a \$0.20 corn basis in May- 2010 and 2015 were the only years that the May 15-Dec. Contract didn't cover cost of production.

✓ Does it make sense to sell new crop corn \$0.32 below cost of production?

Year	May 15	Oct 15	Change	2 yr. Cost of Prod.	May Futures - Cost
2007	\$3.77	\$3.54	\$0.23	\$2.80	\$0.97
2008	\$5.90	\$3.73	\$2.17	\$3.32	\$2.58
2009	\$4.16	\$3.68	\$0.48	\$3.28	\$0.88
2010	\$3.56	\$5.38	\$(1.82)	\$3.36	\$0.20
2011	\$6.88	\$6.44	\$0.44	\$4.05	\$2.83
2012	\$6.37	\$7.57	\$(1.20)	\$5.65	\$0.72
2013	\$5.27	\$4.51	\$0.76	\$4.24	\$1.03
2014	\$4.86	\$3.43	\$1.43	\$3.97	\$0.89
2015	\$3.69	\$3.85	\$(0.16)	\$4.01	-\$0.32
2016	\$3.95	\$3.45	\$0.50	\$3.56	\$0.39
2017	\$3.66	\$3.31	\$0.35	\$3.45	\$0.21
2018	\$3.95	\$3.58	\$0.37	\$3.50	\$0.45
2019	\$4.16	\$3.85	\$0.31	3.51	\$0.65

Marketing: Pre-Harvest Marketing- Action Steps

1. Pick a couple of early season dates and monitor their seasonality's.
 - ✓ I use- February 15, March 15, April 15, May 15 and June 15
2. Pick a Benchmark- where price is to “low” to sell for you
 - ✓ Be reasonable in your benchmark,
 - ✓ I use cost of production with some management cost. Usually 4% of total production.
3. When early season marketing is below costs- judgement call
 - ✓ Sometimes this isn't about ensuring profit, but minimizing loss
 - ✓ This is only half the equation- as there might be chances to store and wait for higher prices after harvest.



Marketing: Understanding Basis

Several Options to Use in Grain Marketing-

1. Forward Contract
2. Futures Contract (Those that have a solid margin account)
3. Hybrid – Hedge to Arrive (which lets you set the basis at a later time)

Which one to use? First question is how well do you know your local basis

Let's look at two examples:

1. What should you do Planting Time and New Crop Soybeans is \$9.60/bu. Local elevator is bidding \$8.80 and I think my local basis is usually -\$0.35 to -\$0.55.
2. Corn futures are \$4.30 with a positive basis of \$0.40 at the ethanol plant
 1. In this case a forward contract might be a great option to take advantage of the strong basis.

Marketing: Understanding Basis

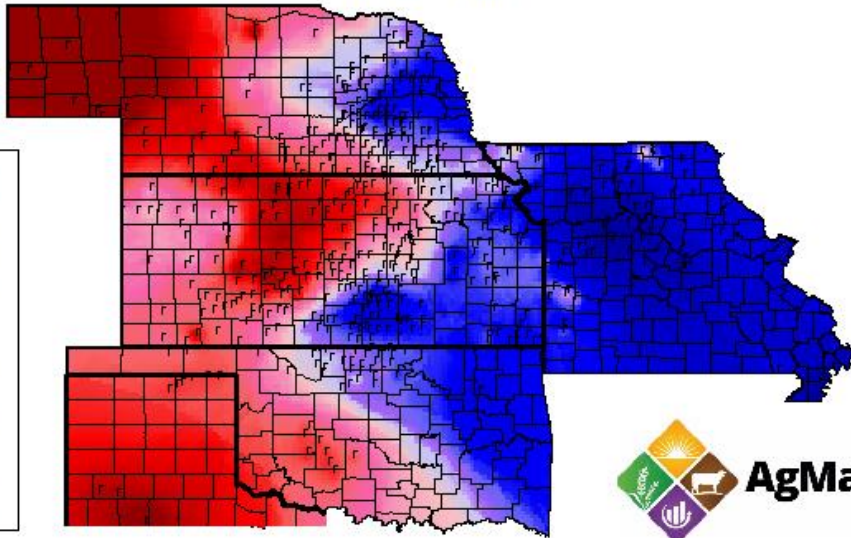
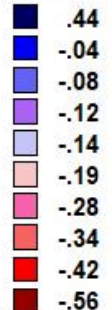
Kansas State Ag Manager's Basis Tool

Soybean Basis, 05-19-2021

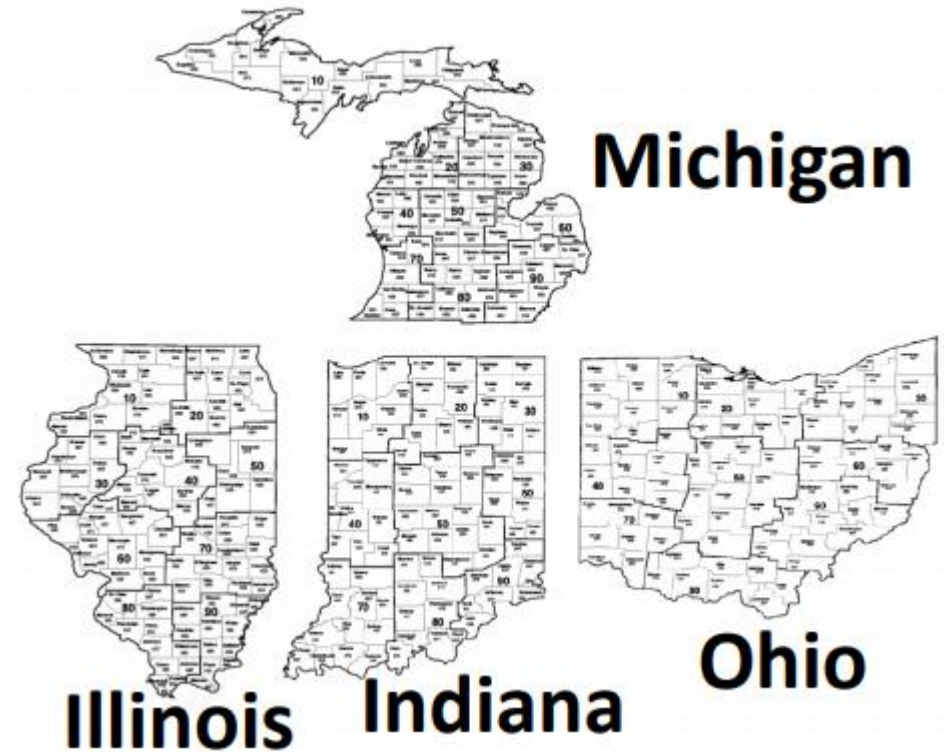
Basis = Cash Price - Nearby Futures Price

CBT Jul
Futures
Price: \$15.38

\$/Bushel



Purdue Center for Commercial Agriculture



<https://www.agmanager.info/grain-marketing/interactive-crop-basis-tool>

<https://ag.purdue.edu/cropbudget/multi.php>

Basis Data available back to 2004/05 crop year, Updated weekly, Average of entire crop reporting district

Marketing: Understanding Basis

Forecasting Basis Rules of Thumb

1. Corn: Most recent 3- year average seems to provide the most accurate estimates of future basis.
2. Soybeans: Most recent 2-year average seems to provide the most accurate estimates of future basis.
3. Forecast accuracy for both crops drops sharply after end of May as we transition into a period where markets become more volatile than cash prices and therefore basis changes frequently.

This makes it hard to forecast storage returns into the summer. (more on this later)

Marketing: **Having an Exit Strategy**

Not Having an Exit Strategy

Consider the following Strategies

1. Hold the grain in storage
2. Hold the grain in storage and buy put options to establish a price floor
3. Sell your grain and buy a call option

But what is your Exit Strategy????

Watching price go up 50 cents then fall 30 cents and say, “I’ll sell when the market goes back up” This is how we get 3-year-old stored grain.



Marketing: **Having an Exit Strategy**

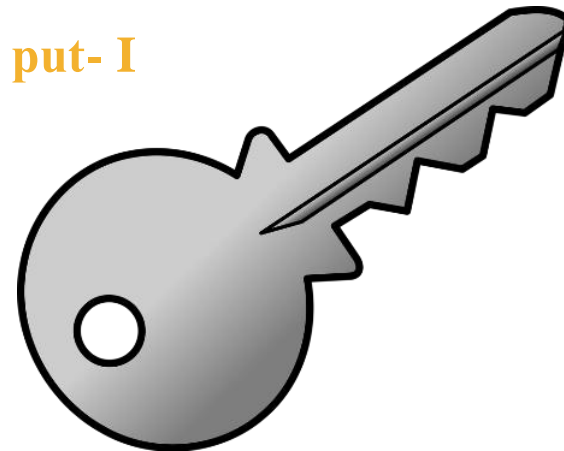
“Everyone needs an exit strategy because if you don’t know where you are going, then how do you know you got there?”

Exit Strategies

1.Price- Driven: have bounds for what you will sell your grain for, or when you will exit and cut your loss. *Be realistic!*

2.Time Driven: committing to sell at a certain point or over intervals. If I know that price is highest during spring. Shouldn’t I be looking during that price window?

- 1. I tend to use trailing stops- a strategy that says I will sell if price drops \$0.10 after a recent high.**
- 2. I’ve also bought put options along the way and when the price crosses the put- I sell.**



Marketing: Marketing Plans

2019 Pre-Harvest Marketing Plan for Brown Brothers Farms- Corn December 20, 2018

What do I anticipate having to protect?

Expected Production 2019 Production: APH of 154bu./acre times 600 planned corn acres 92,400

What is my Goal for this Plan?

Buy an 80% crop insurance revenue policy and have 75% (69,300) of my anticipated insured production sold before the end of June 2019 unless the following:

- Price 10,000 bushels at 3.40 cash price (\$3.90 December Futures with -\$0.50 basis) using a forward contract/futures contract for hedging, or hedge to arrive contract.
- Price 10,000 bushels at \$3.65 cash price (\$4.15 Dec. Futures) by March 26, 2019, pricing tool to be determined.
- Price 10,000 bushels at \$3.95 cash price (\$4.45 Dec. Futures) by April 16th, 2019 pricing tool to be determined.
- Price 10,000 bushels at \$4.30 cash price (\$4.80 Dec. Futures) by May 6, 2019, pricing tool to be determined.
- Price 10,000 bushels at \$4.70 cash price (\$5.20 Dec. Futures) by May 23, pricing tool to be determined.
- Price 10,000 bushels at \$5.15 cash price (\$5.65 Dec. Futures) by June 15, 2020, pricing tool to be determined.
- Price the last 10,000 bushels at \$5.65 cash price (\$6.15 December Futures) by June 30, 2020, pricing tool to be determined.

Timing

Plan starts on January 1, 2019. Any sales before this date will be made at a 25-cent premium to the targets noted above and will be limited to 6 contracts.

Ignore decision dates and make no sales if cash prices are lower than \$3.40 cash or \$3.90 December futures unless no sales have been made by June 1, 2019.

Exit all option positions (calls, puts, straddles...) by September 15, 2019.

My recommendation is always to
keep it SIMPLE and
Straightforward!

Mine is literally 275 words.

Marketing: **Marketing Plans**

There should be four primary goals:

1. Anticipated production. (**What do I have to manage**)
2. What is my goal? (**What are my operational needs**)
3. Action (**A written plan with someone to enforce it**)
4. Timing (**When, how, and at what price**)

My recommendation is always to keep it SIMPLE and Straightforward!



Marketing: **Marketing Plans**

1. Anticipated production. (**What do I have to manage**)
2. What is my goal? (**What are my operational needs**)

2024 Pre-Harvest Marketing Plan for Brown Brothers Farms- Corn **December 20, 2023**

What do I anticipate having to protect?

Expected Production 2024 Production: APH of 174bu./acre times 550 planned corn acres **95,700**

What is my Goal for this Plan?

Buy an 80% crop insurance revenue policy and have 75% (71,775) of my anticipated insured production sold before the end of June 2024 unless the following:

Marketing: Marketing Plans

3. Action (A written plan with someone to enforce it)

- Price 10,000 bushels at 4.40 cash price (\$4.65 December Futures with -\$0.25 basis) using a forward contract/futures contract for hedging, or hedge to arrive contract.
- Price 10,000 bushels at \$4.65 cash price (\$4.90 Dec. Futures) by March 26, 2024, pricing tool to be determined.
- Price 10,000 bushels at \$4.95 cash price (\$4.20 Dec. Futures) by April 16th, 2024 pricing tool to be determined.
- Price 10,000 bushels at \$5.25 cash price (\$5.50 Dec. Futures) by May 6, 2024, pricing tool to be determined.
- Price 10,000 bushels at \$5.60 cash price (\$5.85 Dec. Futures) by May 23, 2024 pricing tool to be determined.
- Price 10,000 bushels at \$6.05 cash price (\$6.30 Dec. Futures) by June 15, 2024, pricing tool to be determined.
- Price the last 10,000 bushels at \$6.40 cash price (\$6.65 December Futures) by June 30, 2024, pricing tool to be determined.

I divide my anticipated production by 5,000 (size of one contract) and then see how many “segments” I have. Then I set the number of sales I’m going to make based on that.

It is a great Farm Management Decision to spread these out. Sure, maybe not all are homeruns, but some might be.

Marketing: Marketing Plans

Maximum Price- my final sale.

Here are some thoughts:

- 1. Probably the least important part of my plan.**
- 2. Do not let your maximum price cause you to be inactive!**
- 3. Make it realistic. Yes- I want to sell \$10 corn, but that's just not realistic.**

	Jan. 1 Price (Dec).	Highest Price after to expiration	Difference	Percentage Change
2006	\$2.19	\$3.87	\$1.68	76%
2012	\$5.90	\$8.39	\$2.49	42%
2019	\$4.01	\$4.66	\$0.65	16%
Average				45%

Marketing: Marketing Plans

3. Action (A written plan with someone to enforce it)

- Price 10,000 bushels at **4.40 cash price** (\$4.65 December Futures with -\$0.25 basis) using a forward contract/futures contract for hedging, or hedge to arrive contract.
- Price 10,000 bushels at **\$4.65 cash price** (\$4.90 Dec. Futures) by March 26, 2024, pricing tool to be determined.
- Price 10,000 bushels at **\$4.95 cash price** (\$4.20 Dec. Futures) by April 16th, 2024 pricing tool to be determined.
- Price 10,000 bushels at **\$5.25 cash price** (\$5.50 Dec. Futures) by May 6, 2024, pricing tool to be determined.
- Price 10,000 bushels at **\$5.60 cash price** (\$5.85 Dec. Futures) by May 23, 2024 pricing tool to be determined.
- Price 10,000 bushels at **\$6.05 cash price** (\$6.30 Dec. Futures) by June 15, 2024, pricing tool to be determined.
- Price the last 10,000 bushels at **\$6.40 cash price** (\$6.65 December Futures) by June 30, 2024, pricing tool to be determined.

Once I have my high price, my low price and the number of sales- I can start to plan target prices.

I divide the difference by the total and create the middle- then I add plus five or minus five cents moving up and down.

Remember- We want to track both cash and futures so we can get basis.

Marketing: Pre Harvest Marketing Plans

Decision Dates: just as important as my price points.

- Price 10,000 bushels at 4.40 cash price (\$4.65 December Futures with -\$0.25 basis) using a forward contract/futures contract for hedging, or hedge to arrive contract.
- Price 10,000 bushels at \$4.65 cash price (\$4.90 Dec. Futures) by March 26, 2024, pricing tool to be determined.
- Price 10,000 bushels at \$4.95 cash price (\$4.20 Dec. Futures) by April 16th, 2024 pricing tool to be determined.
- Price 10,000 bushels at \$5.25 cash price (\$5.50 Dec. Futures) by May 6, 2024, pricing tool to be determined.
- Price 10,000 bushels at \$5.60 cash price (\$5.85 Dec. Futures) by May 23, 2024 pricing tool to be determined.
- Price 10,000 bushels at \$6.05 cash price (\$6.30 Dec. Futures) by June 15, 2024, pricing tool to be determined.
- Price the last 10,000 bushels at \$6.40 cash price (\$6.65 December Futures) by June 30, 2024, pricing tool to be determined.

My decision points are cluttered heavy in the spring and are literally just days I remember (my sisters birthday, my birthday, best friends birthday...)

Notice that I don't have a start decision date?

If the market isn't above my initial price- I don't sell and look after harvest.

Marketing: **Pre Harvest Marketing Plans**

Timing

Plan starts on January 1, 2024. Any sales before this date will be made at a 25-cent premium to the targets noted above and will be limited to 6 contracts.

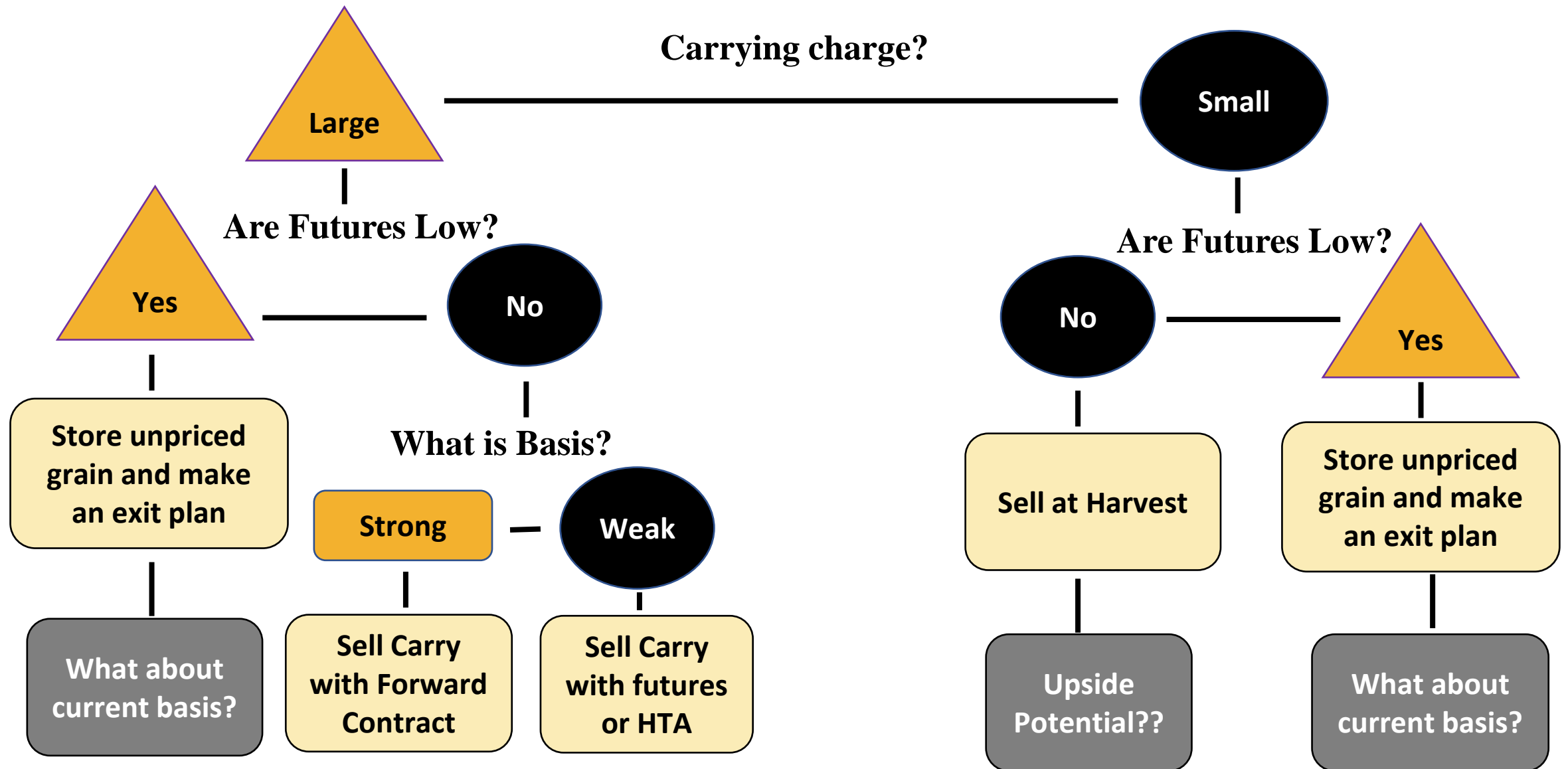
Ignore decision dates and make no sales if cash prices are lower than \$4.40 cash or \$4.65 December futures unless no sales have been made by June 1, 2024.

Exit all option positions (calls, puts, straddles...) by September 15, 2024.

Thoughts for mitigating risk:

- 1. I do not do a lot of selling multiple years in advance (I'm not completely sure what we are going to grow.)**
- 2. Puts and calls do work, but I do not use them to “beat” the market.**
- 3. Sometimes it's just about minimizing the loss (2015)**
- 4. My type of trade does change, but usually it's the same throughout the season. (Next slide)**

Marketing: **Decision Tree**



Marketing: **Post Harvest Marketing**

Pre Harvest Plans- **Strategic**

- ❖ Seasonal patterns point that April, May June being good time to look at early season prices
- ❖ Or after years of short crop: drought, flood, frost
- ❖ Objective prices can be set based on production costs

Post Harvest Plans- **Tactical**

- ❖ Based on relative basis and carrying charges
- ❖ Decisions related to storage accessibility, handling, and cost
- ❖ Financial health and future needs come into plate
- ❖ Required exit strategy- no third option (unless you choose to eat the interest costs)

Marketing: Summary

1. Have a plan for grain marketing. Pretty Please!
 1. I would encourage both price and decision date targets.
 2. Options make sense to me if you treat them with some common sense and are willing to lose the cost.
2. Know and track your local basis along with futures prices.
3. If storing grain, there is a place for unhedged grain and hedged grain. However, do not let your grain become 3-yr old grain.
 1. Historical data shows hedged corn does well to mitigate risk.
 2. Soybeans on the other hand have a tendency to have strong futures rallies in the spring supporting unhedged beans.

At the end of the day.... What is going to cause you to lose the most sleep and therefore add the most stress:

1. Selling and the market goes up?
2. Not selling and the market goes down?





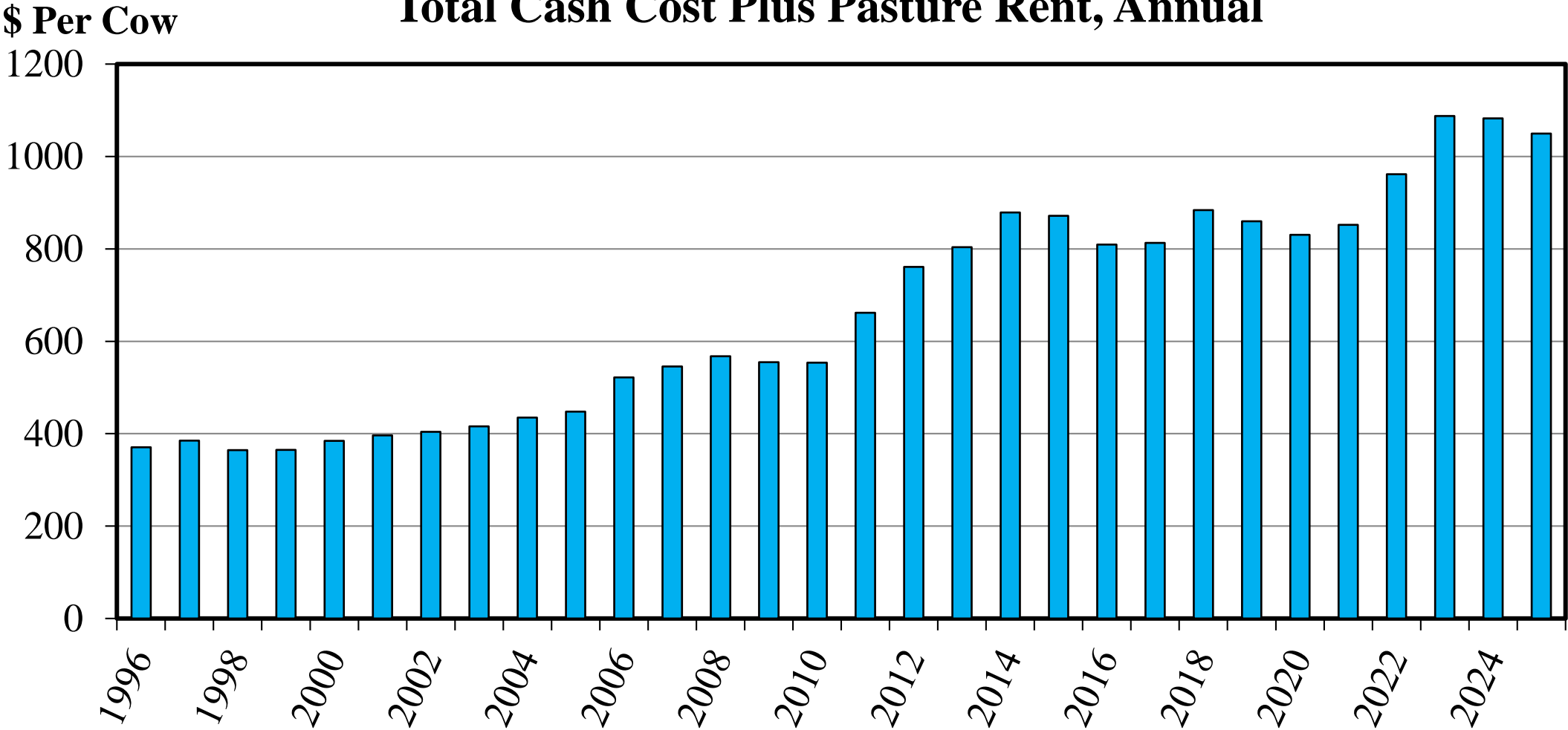
Livestock Markets

Cattle Outlook: Can we stay ahead of costs?

- Supply
 - ▣ 2023 beef production lower; first time since 2015
 - ▣ Drought has offset economic incentives for herd rebuilding
- Demand
 - ▣ U.S. consumers still demanding beef even at higher prices
 - ▣ Export volumes have struggled with recent higher price levels
- Risks remain
 - ▣ Forage availability in some areas, feed prices still a concern
 - ▣ Production cost increases hampering all livestock operations
 - ▣ If/when the expected recessions slow consumer spending

Livestock: Staying ahead of costs

ESTIMATED AVERAGE COW CALF COSTS
Total Cash Cost Plus Pasture Rent, Annual



Data Source: USDA & LMIC

Feedstuff Finder

The go-to platform for buying and selling feed in Missouri



Feedstuff Finder helps buyers and sellers connect

feedstufffinder.org



NORTH CENTRAL
EXTENSION
RISK
MANAGEMENT
EDUCATION



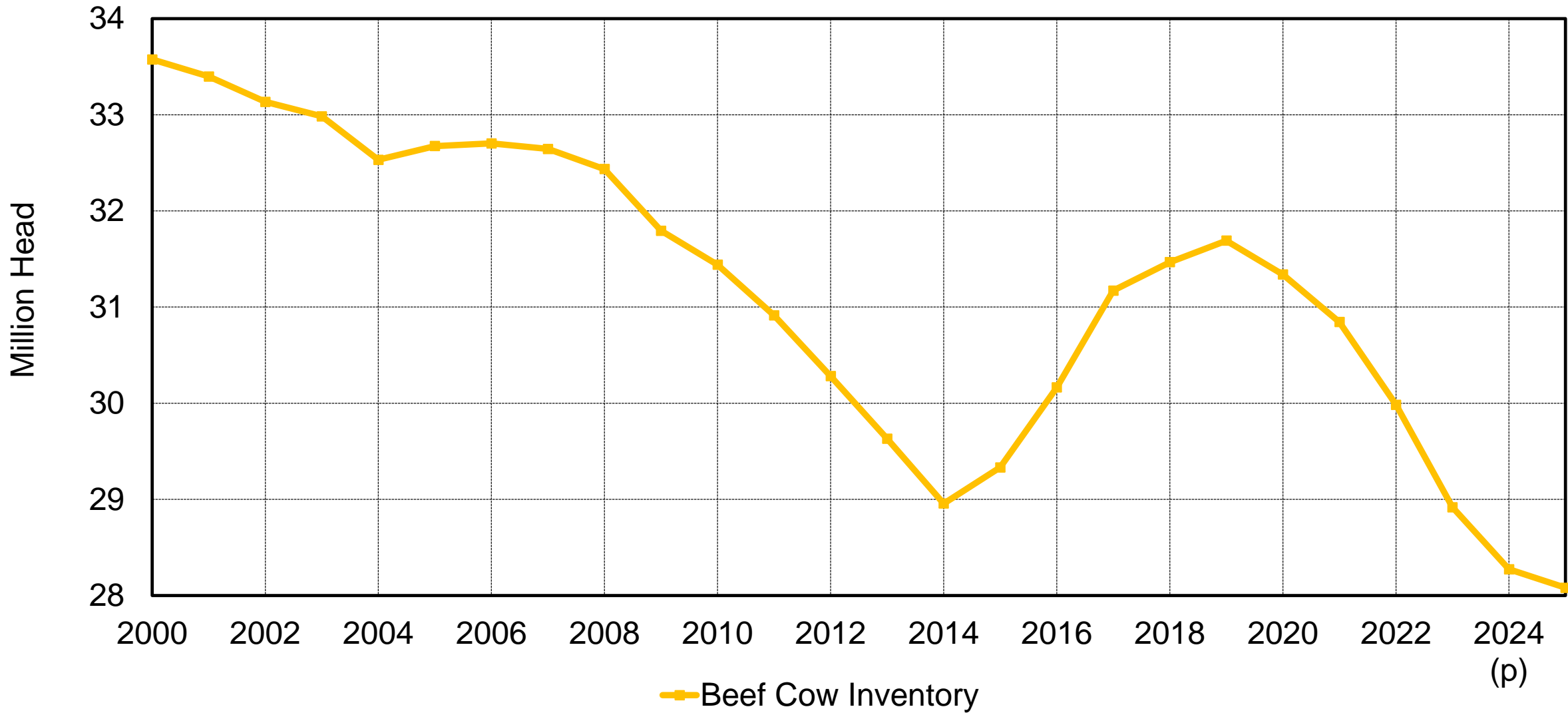
National Institute of Food and Agriculture
U.S. DEPARTMENT OF AGRICULTURE

This material is based upon work supported by USDA-NIFA under Award Number 2021-70027-34694

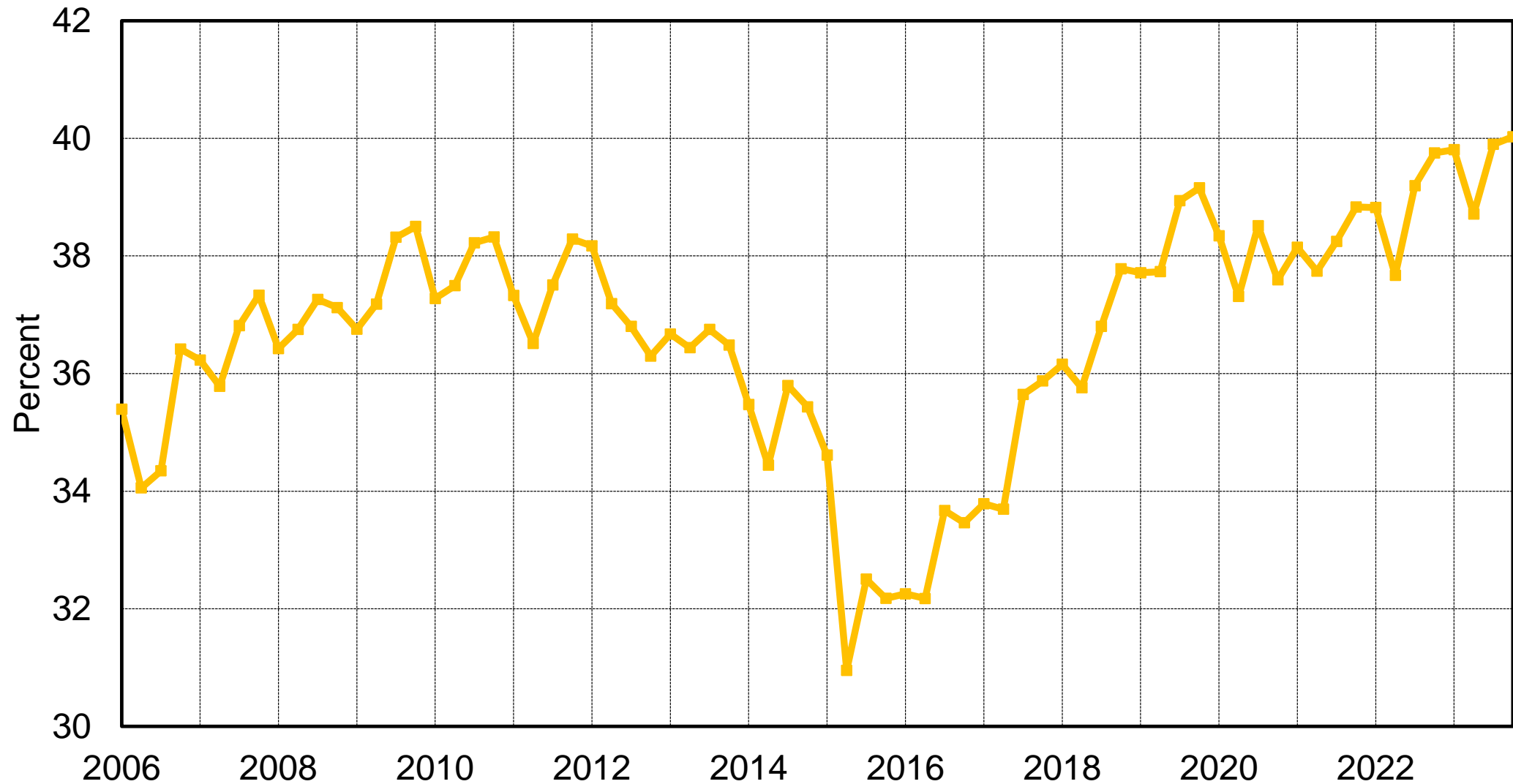


Extension
University of Missouri
an equal opportunity/ADA institution

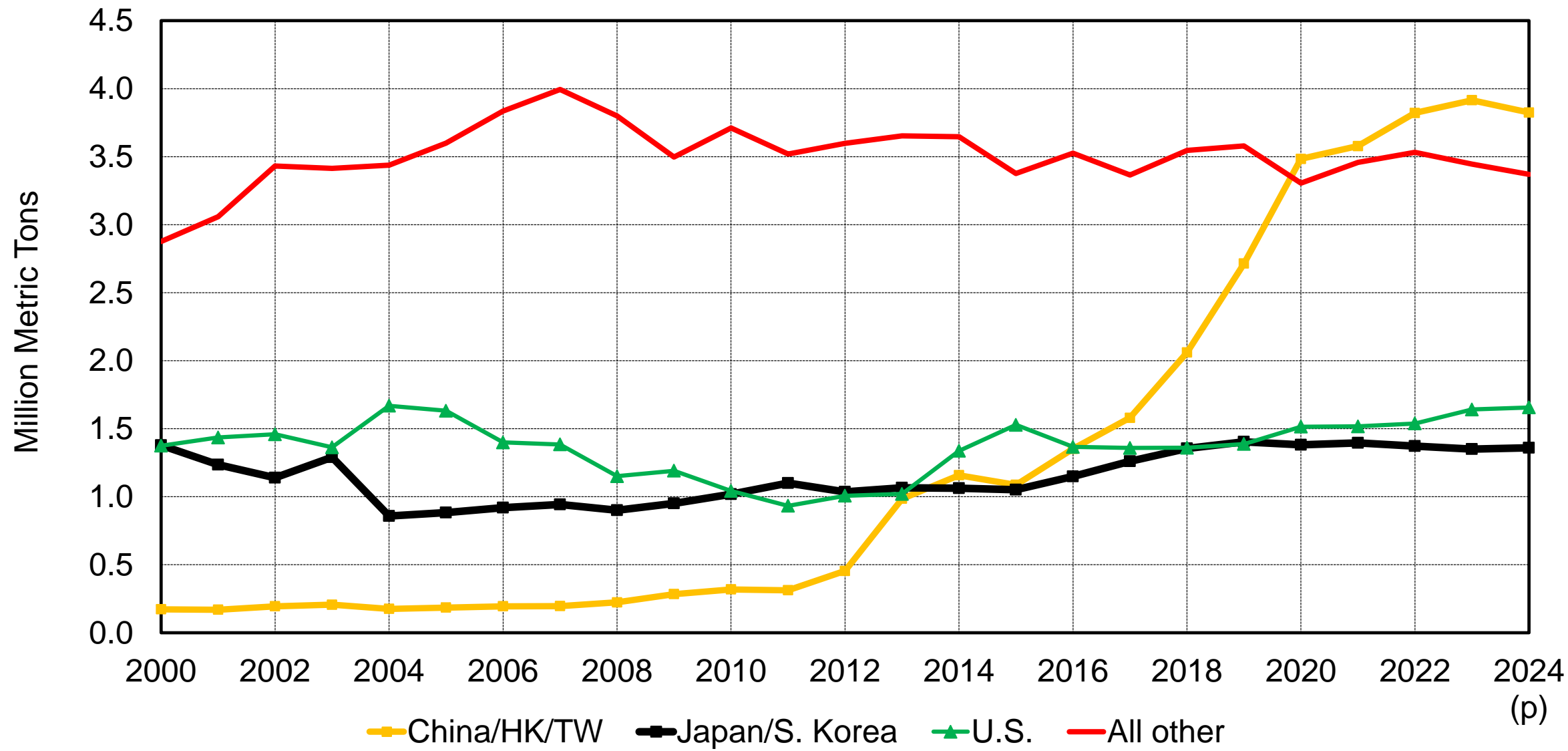
Cattle: Beef Cow Herd Continues to Decline



Cattle: Heifers/ Total Cattle on Feed

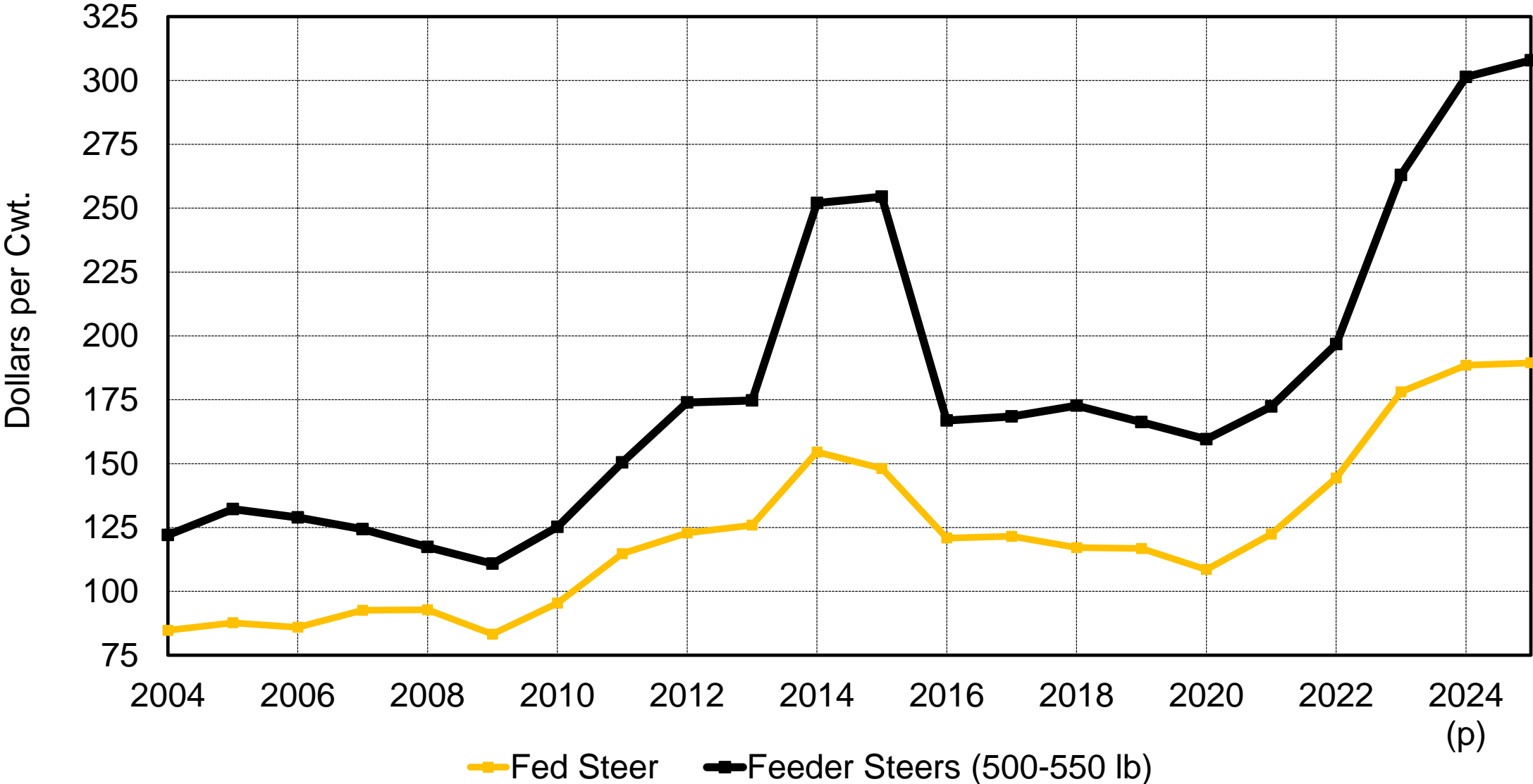


Beef Imports: Where are we Growing



Data Source: USDA NASS

Cattle: Quarterly Fed Steer Prices

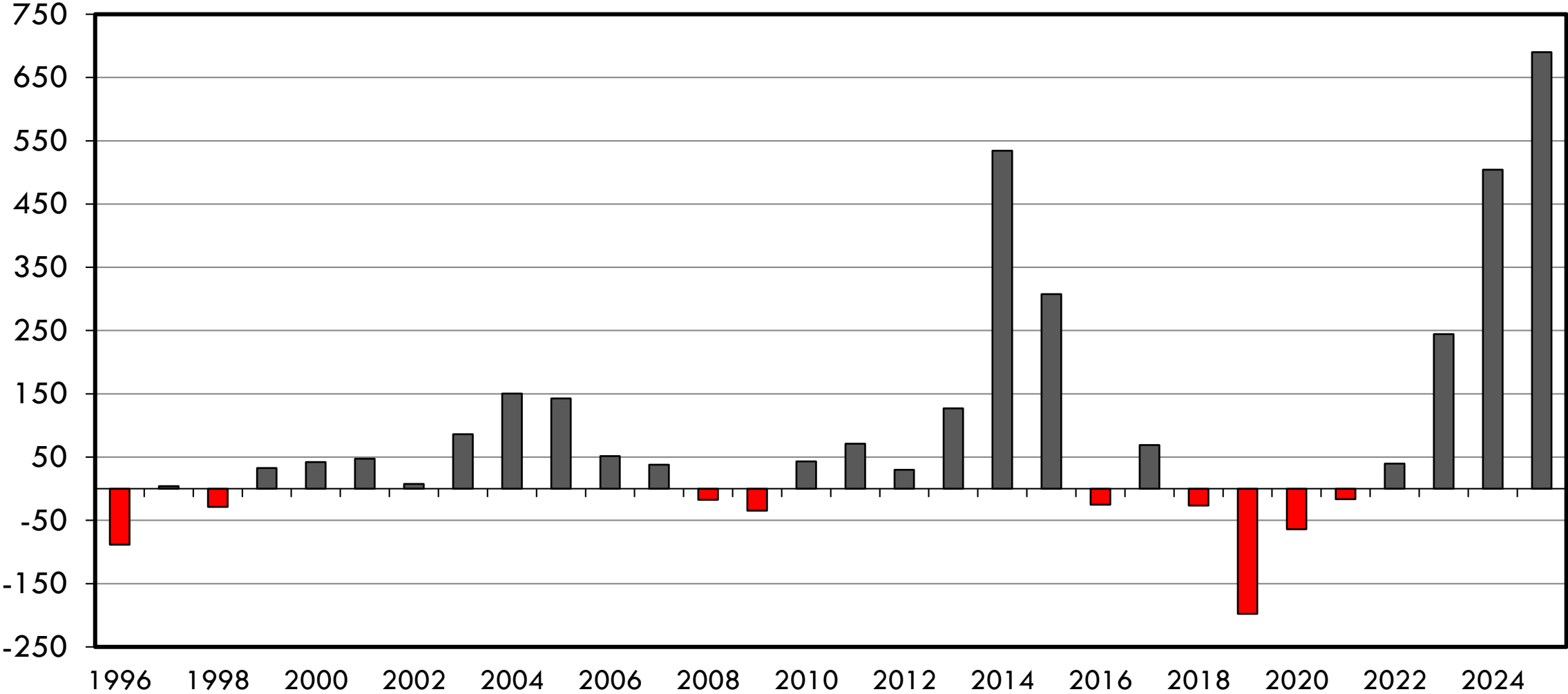


Cattle: Estimated Cow Calf Returns

ESTIMATED AVERAGE COW CALF RETURNS

Returns Over Cash Cost (Includes Pasture Rent), Annual

\$ Per Cow





Livestock Risk Management Tools- Livestock Risk Protection



College of Agriculture,
Food & Natural Resources
University of Missouri

Livestock Price Protection: Overview

Livestock Risk Protection (LRP) Insurance

Why

- There are a lot of cattle in Missouri- 4.3 million head of cattle (6th largest in country) 2 million cow/calf pairs (3rd largest)
- Substantial price risk in products where investment (breeding) happen well in advance of return (marketing)

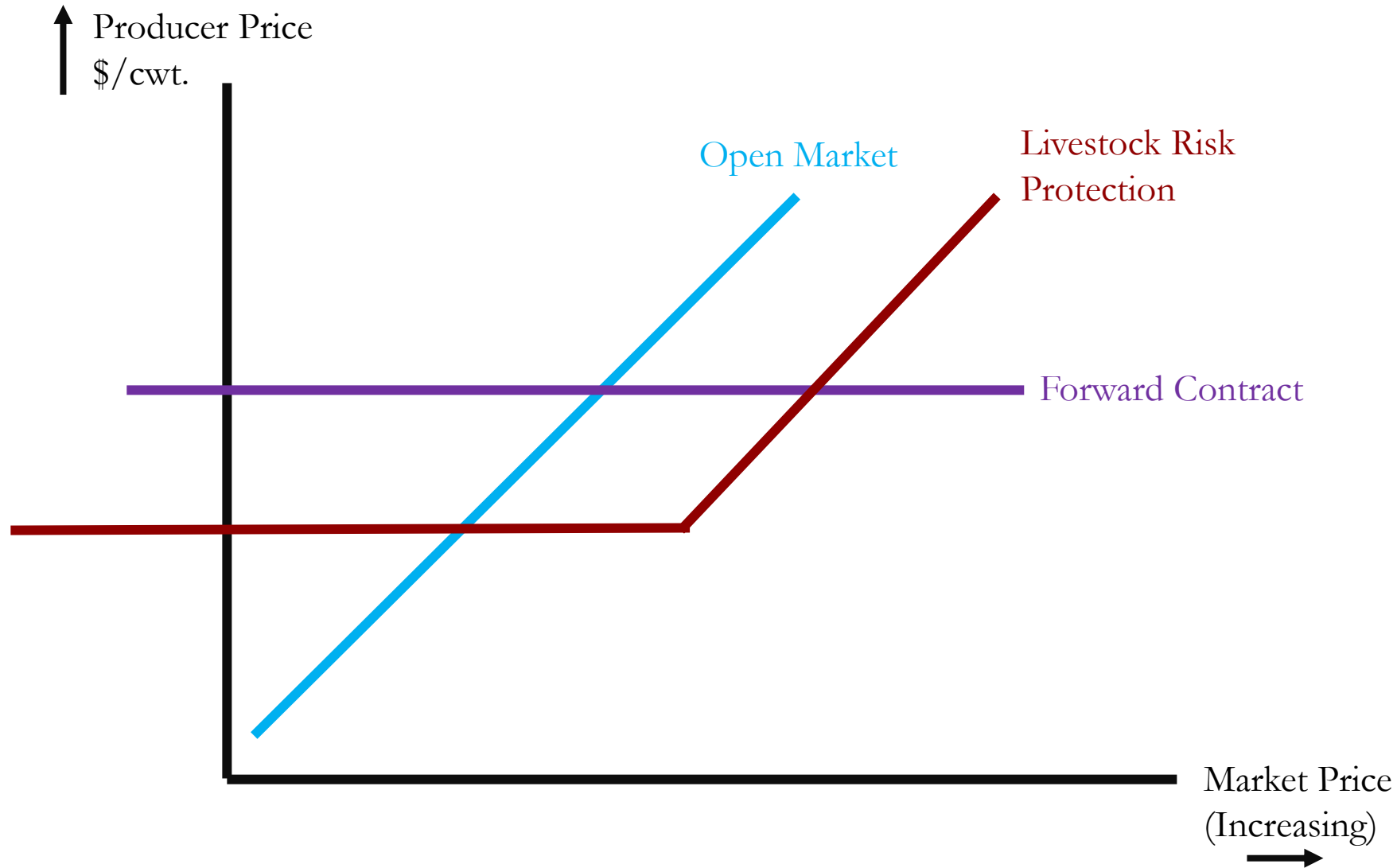
What

- Subsidized insurance product available through Risk Management Agency (RMA)
 - Designed to offer protection against downside price risk (2020) by essentially establishing a price floor based on national feeder cattle futures prices. Uses CME feeder cattle index (cash prices of cattle across the country) as a trigger
 - Leaves producers open to price increases (like crop insurance) There are continued incentives to earn as much as possible for your product (cattle).

When

- Any weekday between 9 am to 3:30 pm Central.
- The length of insurance coverage available for each specific coverage endorsement is 13, 17, 21, 26, 30, 34, 39, 43, 47, or 52 weeks.

Livestock Price Protection: Graphically



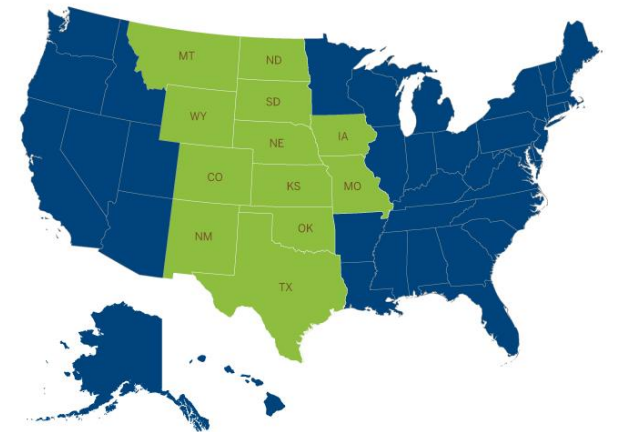
LRP: Feeder Cattle Specifics

Advantages

1. Small numbers (down to 1 can be insured)
2. Federal Premium Subsidies
3. No brokerage fees or margin calls
4. Available in all months (futures contracts only work on some months)
5. Coverage Prices updated daily

Disadvantages

1. Subject to basis risk (no different than futures and options)
 1. This product is based on a national indexed value- **not your cash location!**
 2. Lighter cattle have bigger basis risk.
2. Not as much flexibility as futures and options



CME feeder cattle index- 12 state region

LRP: Example

- Place 550-pound steers, 1.5 lbs. daily gain, 170 days (805 pounds)
- Sell 800-pound steers in November
- Stocking rate 1.5 steers per acre



LRP: Example



Beef Backgrounding Planning Budget

This budget presents information useful to beef farmers. Table 1 presents estimates for the 2021 year for backgrounded steer calves in Missouri. Assumptions were based on price forecasts as of October 2020. Detailed prices and practices are summarized in Tables 2, 3, 4 and 5. The production practices used to develop these cost estimates are common for beef farms in Missouri. Farmers are encouraged to customize this budget to fit their operation.

Table 1. Missouri beef steer backgrounding planning budget for 2021.

	Winter backgrounding per steer ¹	Pasture backgrounding per steer ¹	Your estimate
Income			
Market steer sales	1,107.18	1,117.40	
Less death loss (1 percent)	11.07	11.17	
Total income	1,096.11	1,106.22	
Operating costs			
Purchased steer	858.51	902.07	
Pasture (rental rate)	0.00	37.94	
Feed, mineral and stored forage	123.35	40.32	
Labor	38.75	23.25	
Veterinary, drugs and supplies	18.00	15.00	
Marketing and hauling	27.68	27.93	
Machinery and utilities	56.24	26.34	
Livestock facility repair	3.75	0.75	
Professional fees (legal, accounting, etc.)	1.00	1.00	
Miscellaneous	3.50	3.50	
Operating interest	12.72	12.65	
Total operating costs	1,143.48	1,090.76	
Ownership costs			
Depreciation on livestock facilities	3.87	0.62	
Interest on livestock facilities	2.98	0.47	
Insurance and taxes on capital items	3.61	2.71	
Total ownership costs	10.46	3.80	
Total costs	1,153.94	1,094.56	
Income over operating costs			
	-47.38	15.46	
Income over total costs			
	-57.84	11.66	

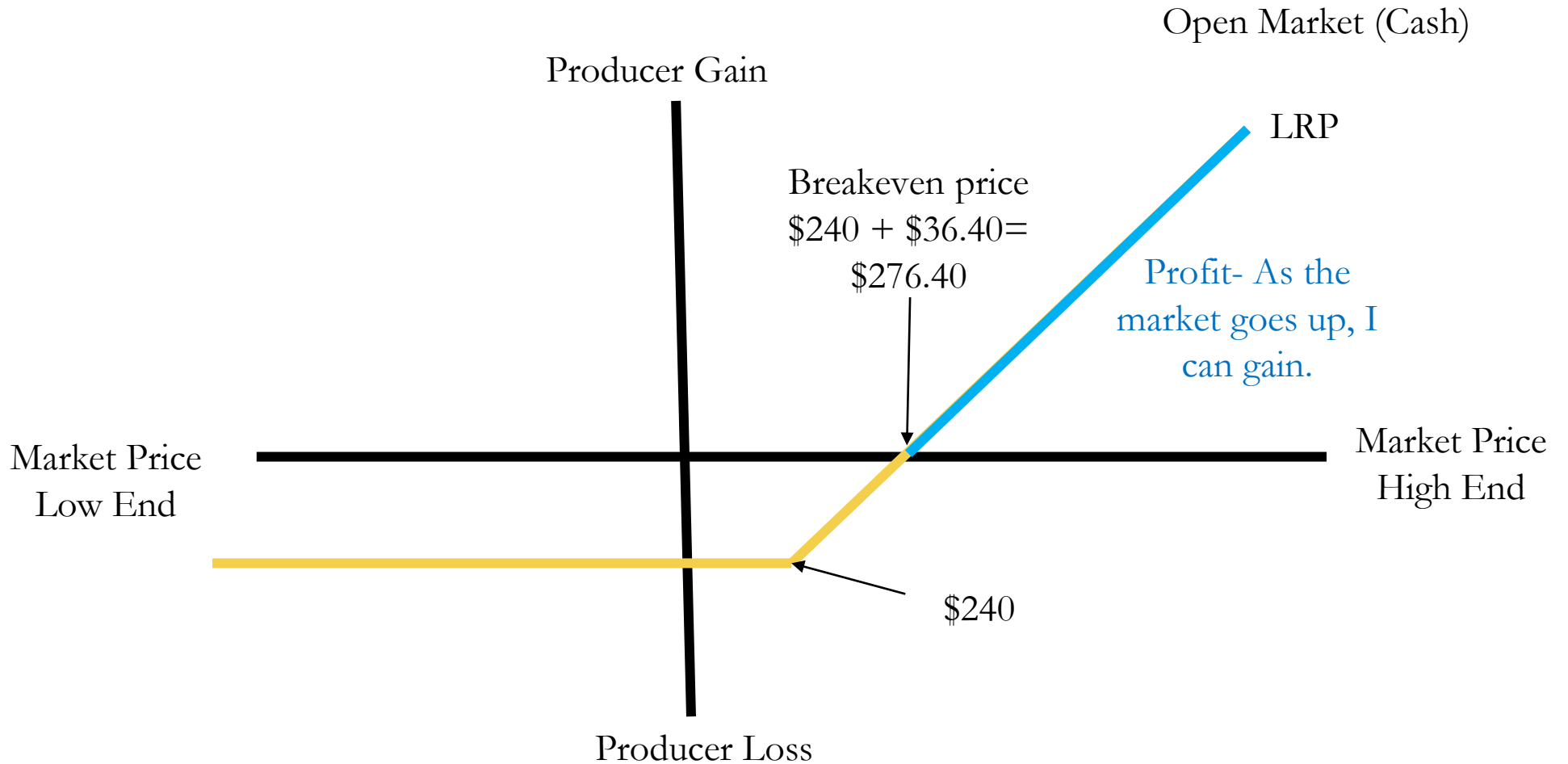
What can I do?

- Purchase LRP with ending date in November.
 - Expected value in November as of 5/05/23 was **250.963 per cwt.**
 - Buy the policy at \$240 per hundred weight at a cost of \$4.55/ cwt or \$36.40 per head.
- Estimate a local basis of about -\$10
- Estimated price floor of \$225.45per cwt. (\$240- \$10- \$4.55)

<https://extension.missouri.edu/programs/agricultural-business-and-policy-extension/missouri-crop-and-livestock-enterprise-budgets>

LRP: Basically a Put Option

Put Option= The right but not the obligation to sell at a set price



LRP: More Information

Locate an RMA Insurance Agent (they all have the same products- find one you like)

- <https://www.rma.usda.gov/informationtools/agentlocator>

USDA RMA Livestock Website

- <https://www.rma.usda.gov/topics/livestock>

Coverage, Rates, and Values

- <https://public.rma.usda.gov/livestockreports/main.aspx>





Agricultural Finance

Poll Question: Which of the following would you choose?

A. Get \$900 for sure

B. 90% chance to get \$1,000;
10% chance to get \$0

Poll Question: Which of the following would you choose?

A. Lose \$900 for sure

B. 90% chance to lose \$1,000;
10% chance to get \$0

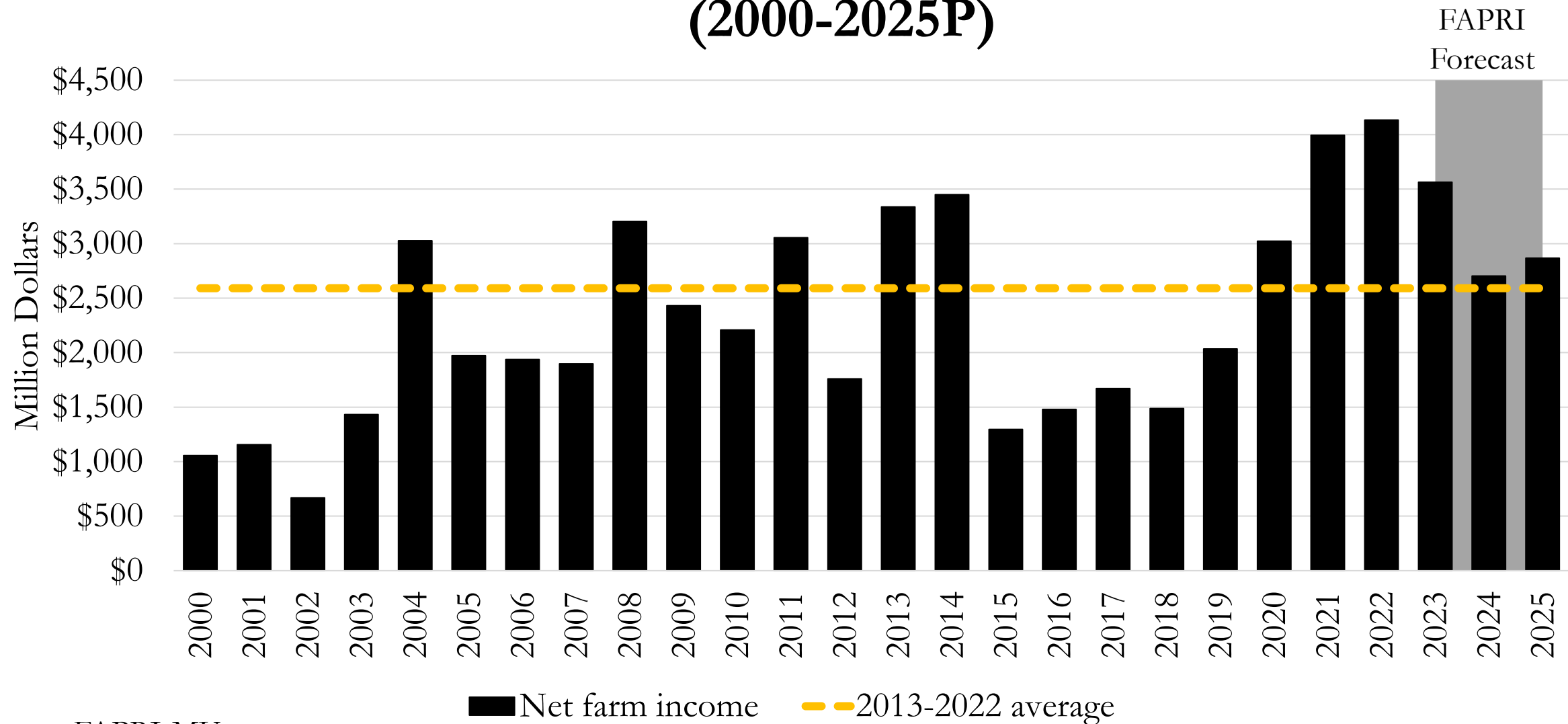
Poll Question: You are offered a gamble on the toss of a coin. Heads: you lose \$100 or Tails you win \$150. Do you:

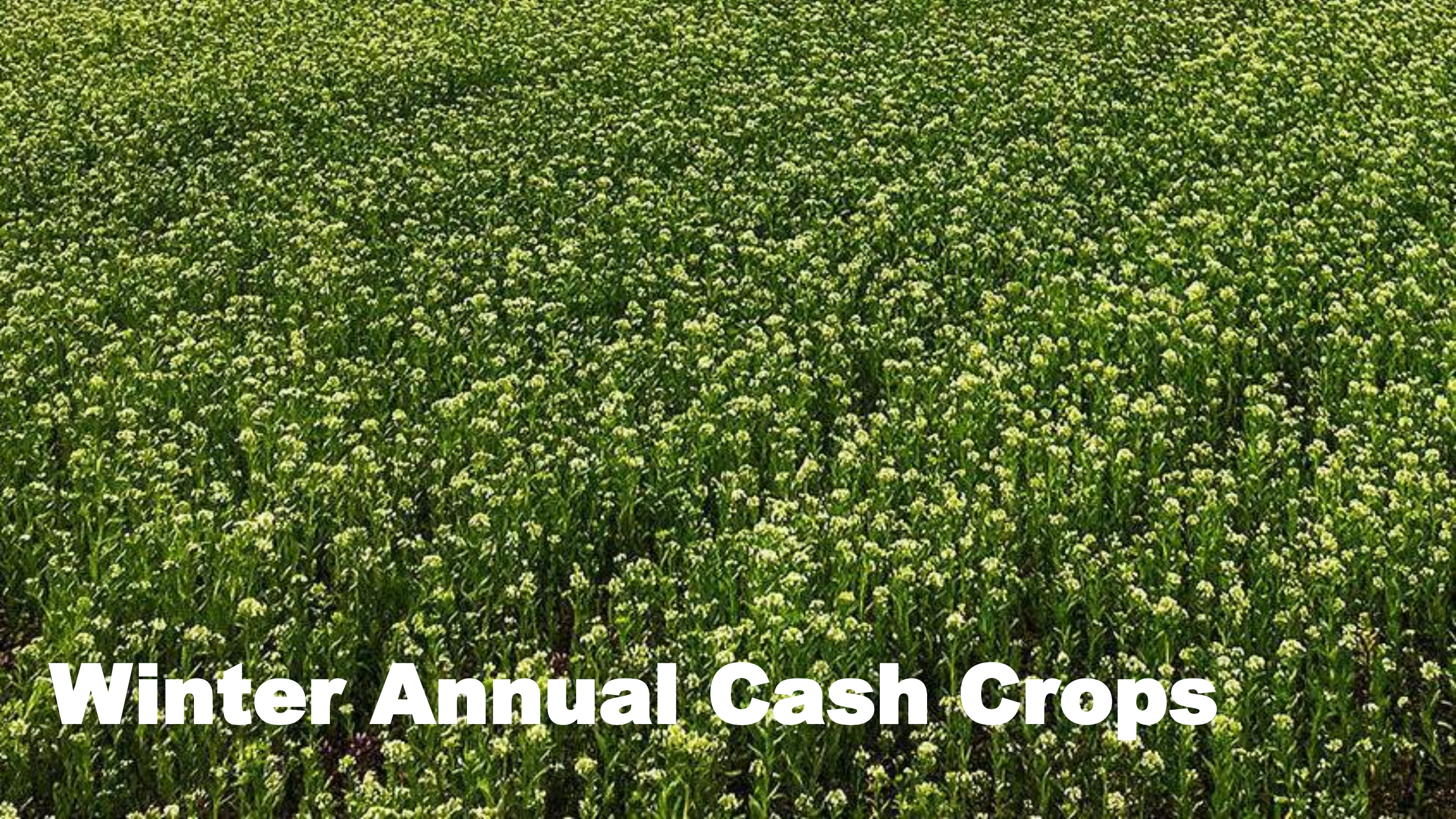
A. Accept the offer

B. Reject the offer

2023 Missouri Farm Income

Missouri AggregateNet Farm Income
(2000-2025P)





Winter Annual Cash Crops



MISSOURI AGRICULTURE, FOOD AND FORESTRY INNOVATION CENTER (MAFFIC)

New center established to help Missouri's
agricultural producers take their value-
added businesses to new levels and drive
Missouri's agricultural economy

MISSOURI AGRICULTURE,
FOOD AND FORESTRY
INNOVATION CENTER

MAFFIC

MU Extension
University of Missouri
an equal opportunity/ADA institution

Renewable energy implications for rural Missouri

- Renewable electricity is generated & transmitted on rural areas
- Missouri's renewable buildout has a long runway ahead
- Farmers have on-farm investment opportunities
- More landowners will have wind and solar lease opportunities



I don't want to change!

GROW

G- Gain Knowledge

R- Reach out to Others

O- Open your World

W- Walk Toward Wisdom



Thank you! Are there any questions??

Mizzou/Brownfield Market Information

- ❖ Weekly Crop Markets- Tuesday Afternoons
- ❖ Weekly Livestock Markets- Saturday Mornings



Ben Brown- University of Missouri
660-492-7574; bpbrown@missouri.edu

 @BenBrownMU