

# U.S. and Missouri Farm Income

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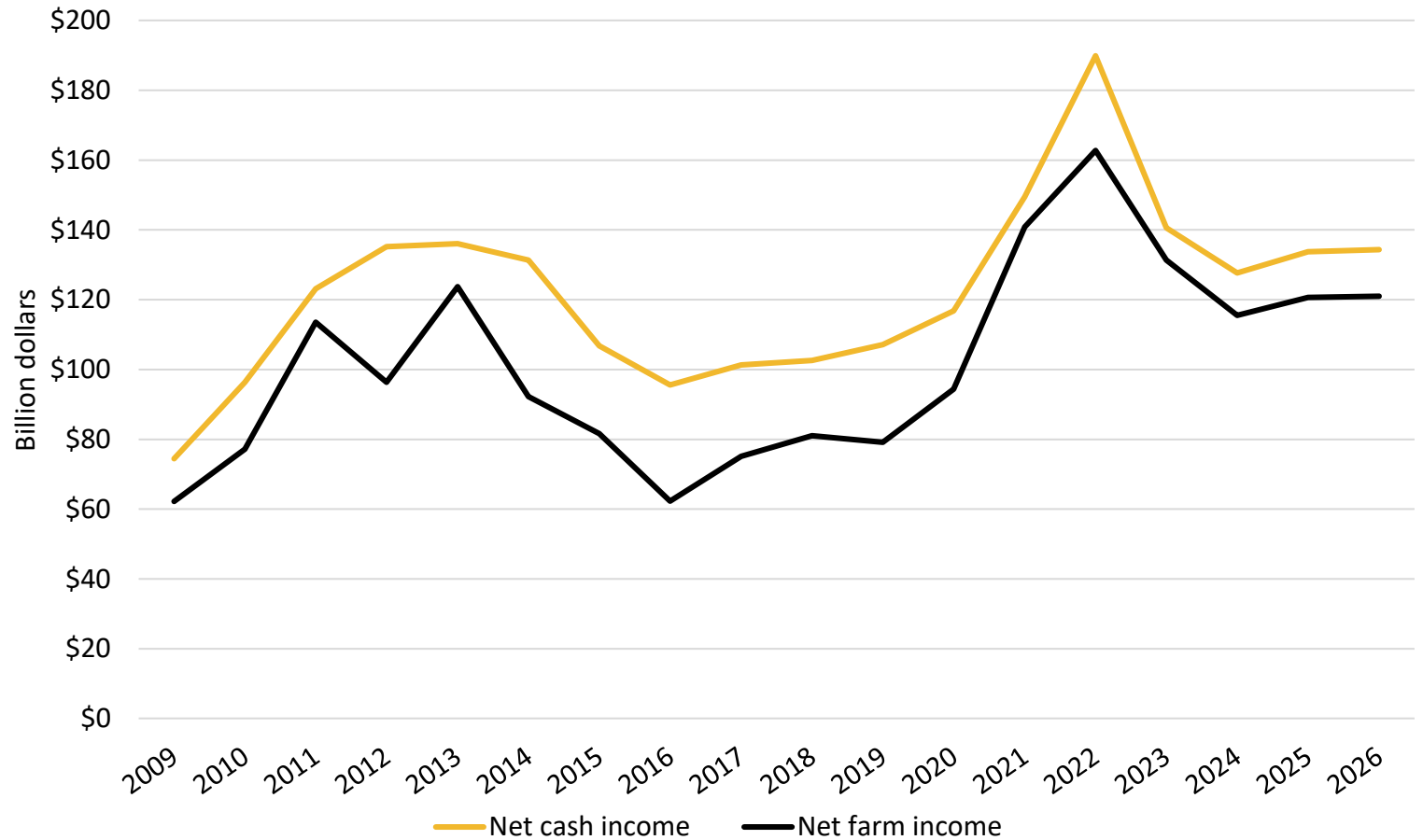
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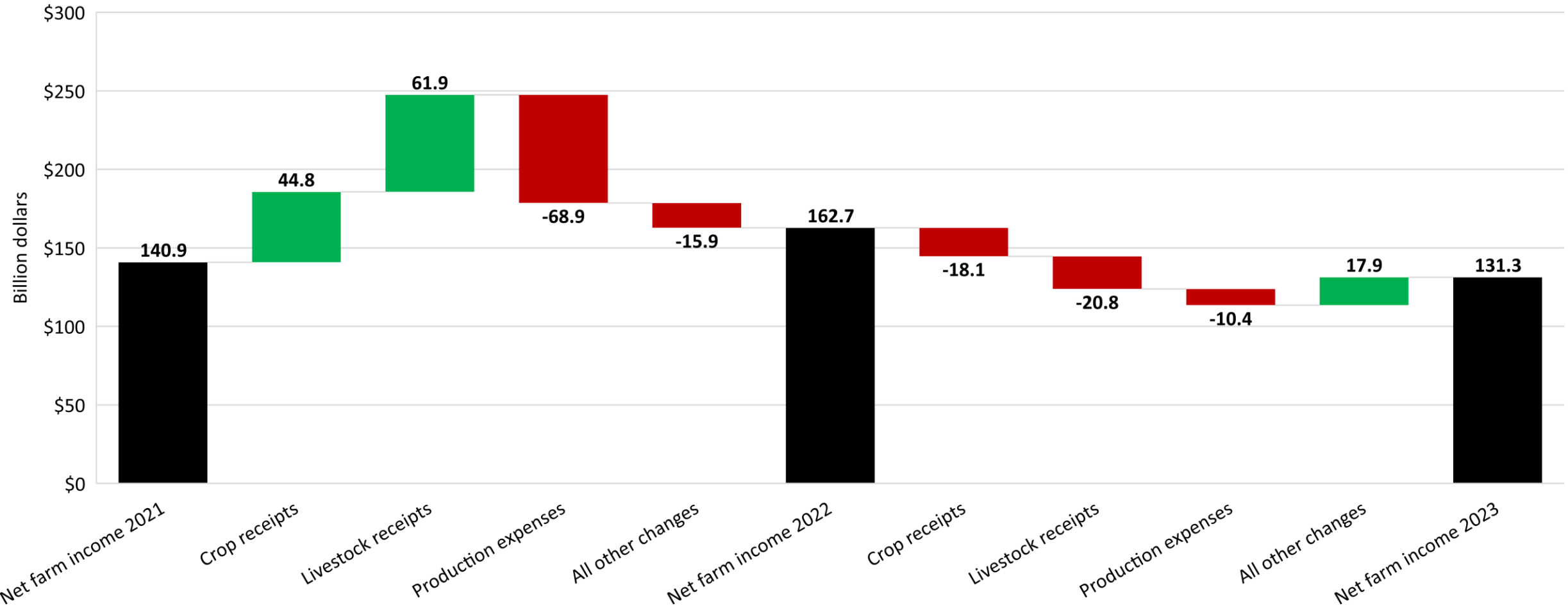
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# U.S. farm income declines in 2023

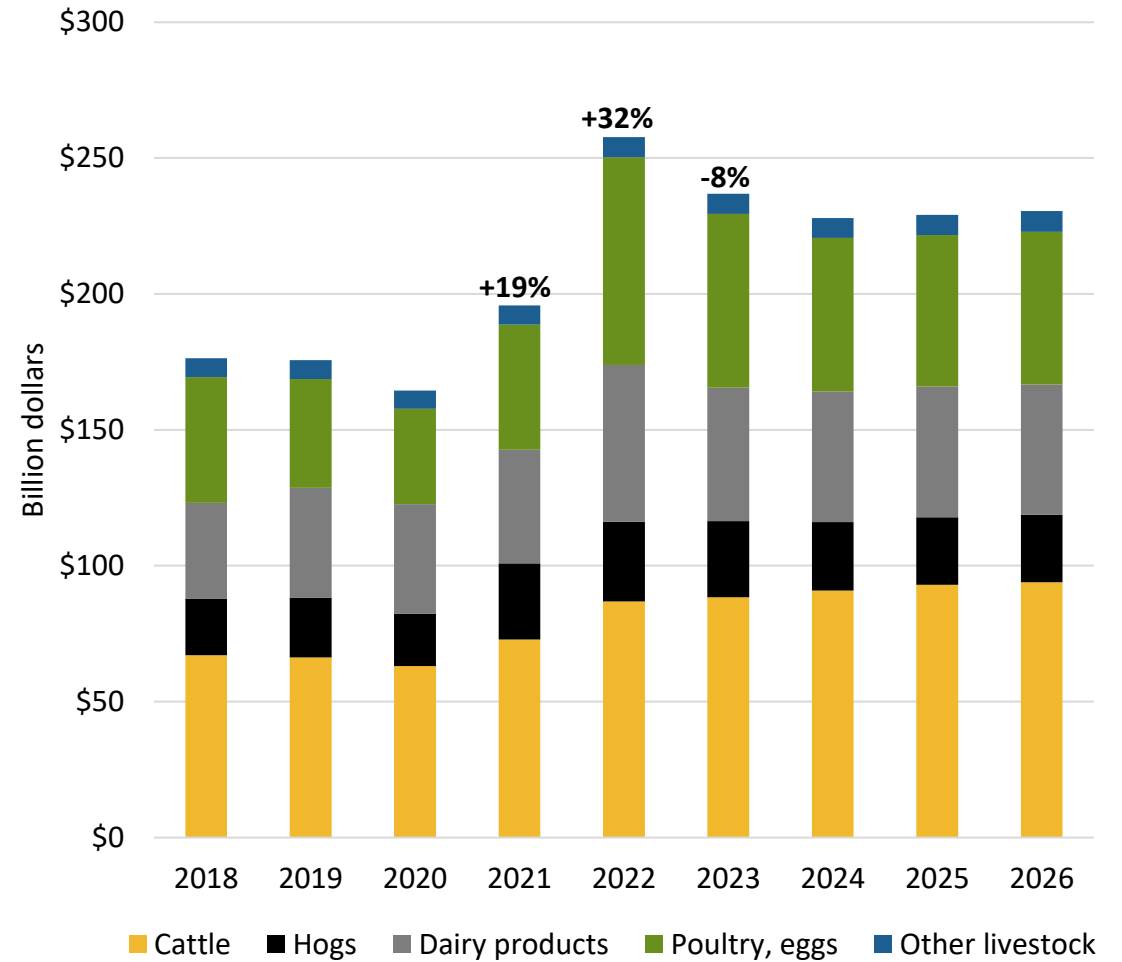
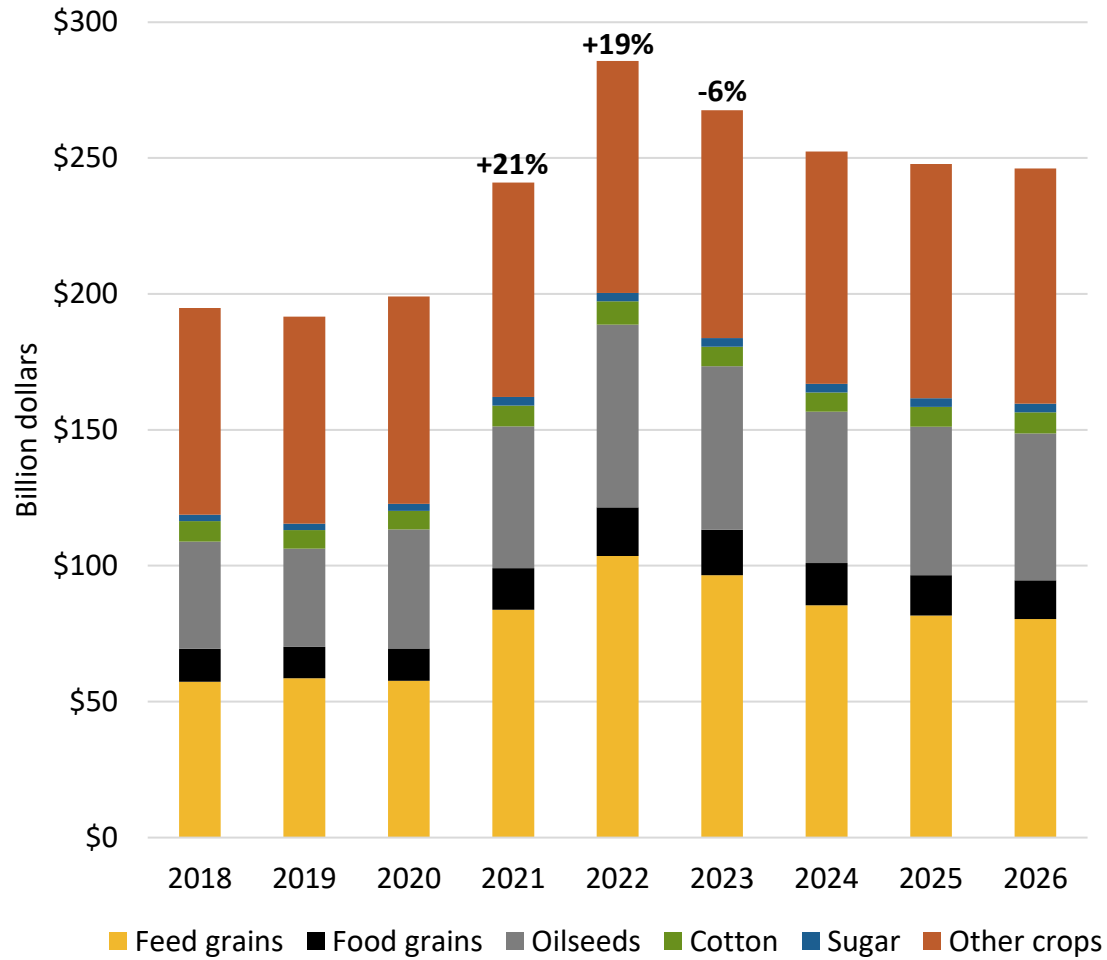
- Net cash income and net farm income fall from the 2022 record but remain historically high
- Decreasing receipts combine with a modest increase in expenses and a decline to government outlays to lower U.S. farm income in 2023



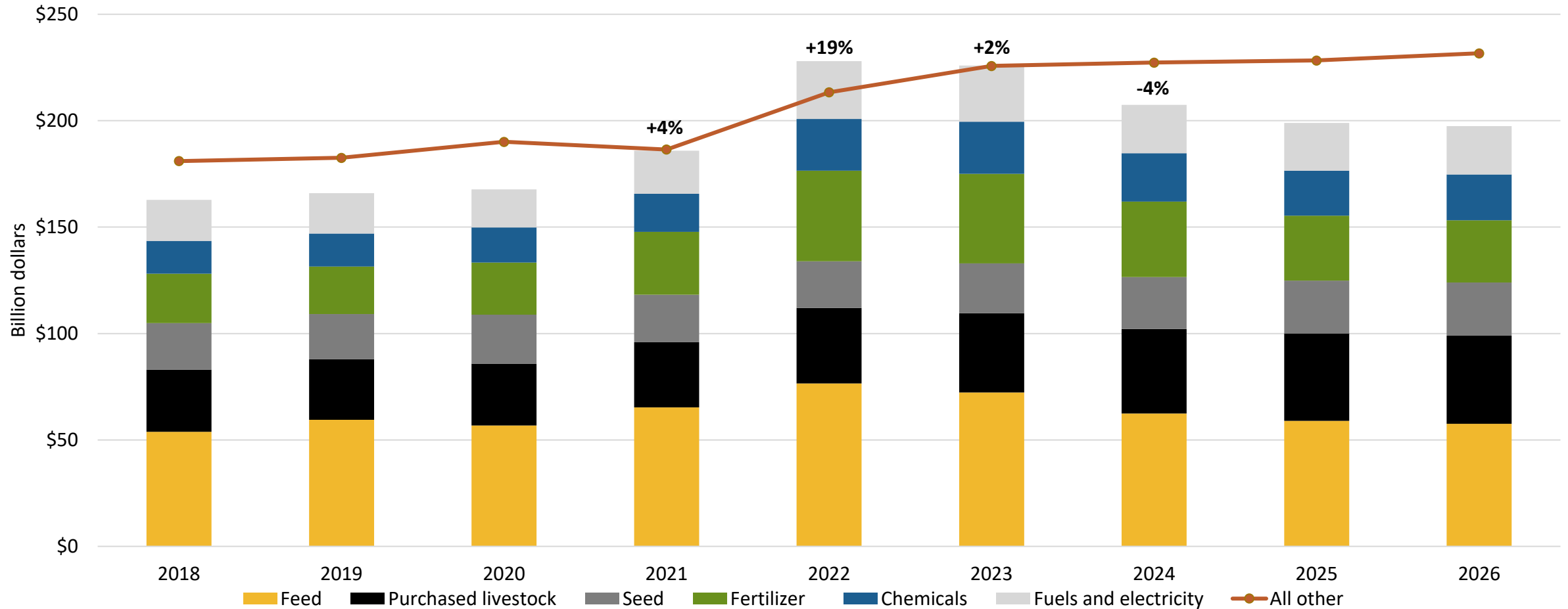
# U.S. net farm income changes, 2021-23



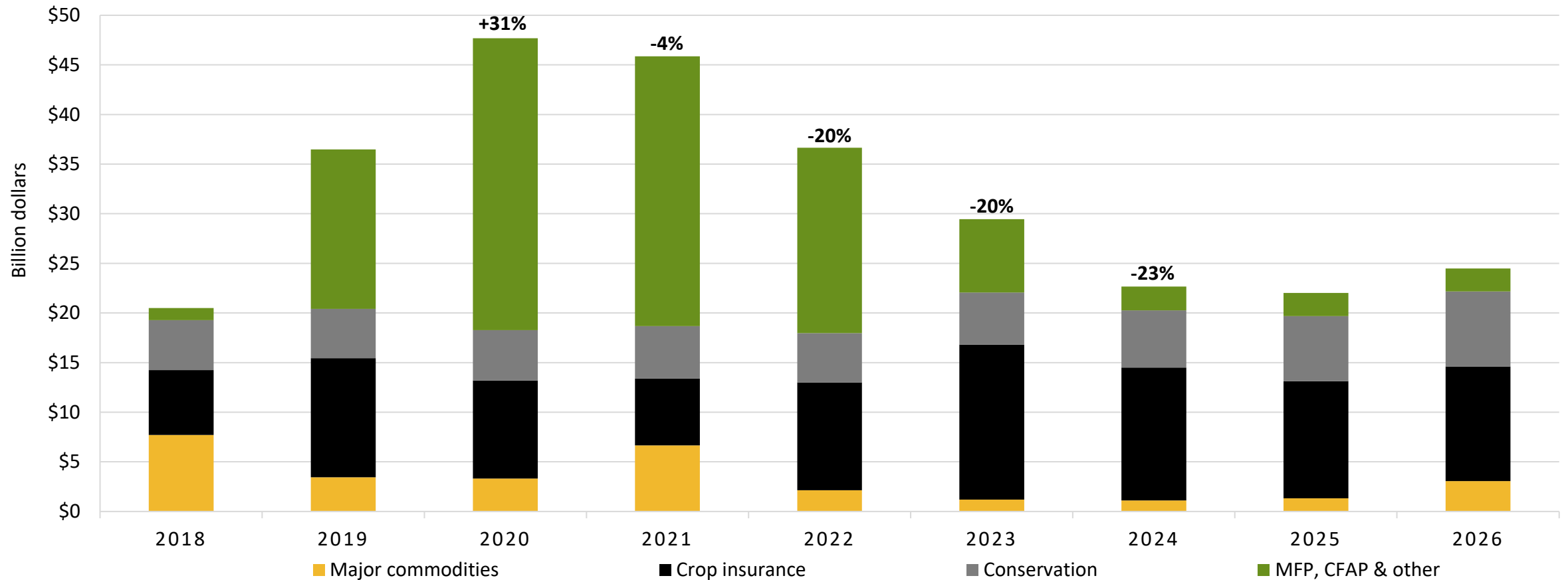
# Receipts decline following 2022 peak



# Decreases to feed, fertilizer and fuel expenses not enough to offset other rising expenses in 2023



# Outlays fall after special programs end



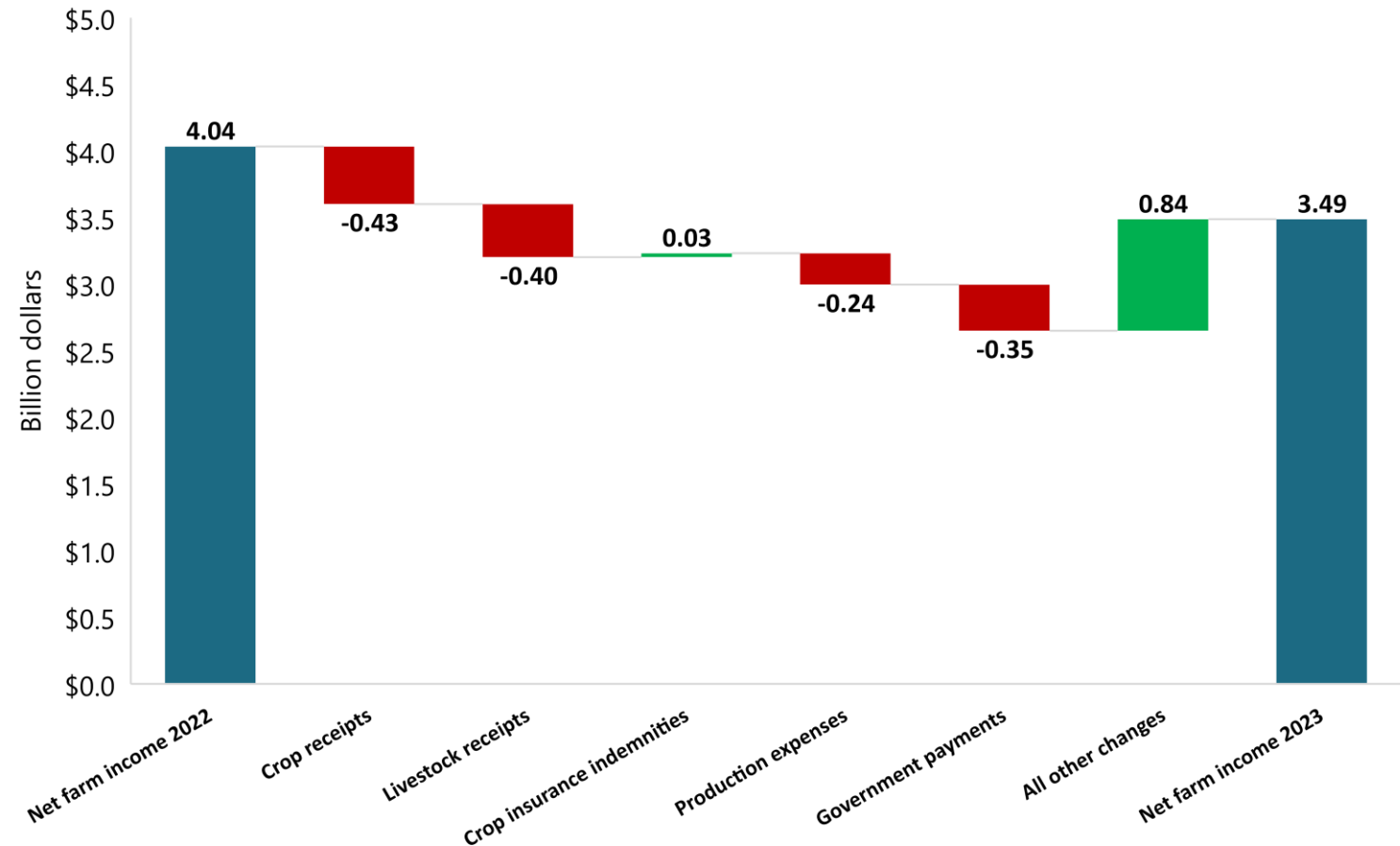
# Bottom line for U.S. farm income

- A return to trend yields helps U.S. field crop production recover, but price declines more than offset the bump to domestic production
- Livestock prices also decline, especially for poultry and eggs
  - Exception for cattle
- Receipts decline even as input prices remain sticky
  - Decline in feed, fertilizer and fuel not enough to compensate for other costs rising in 2023
- Government outlays decline from FY 2019-2020 highs
- U.S. net farm income projected to decline to \$131 billion in 2023
  - Falls \$31.4 billion from 2022 record, but still \$36.9 billion above 2020
  - Although farm income declines through the baseline, 10-year average remains above the 2011-14 average

# Missouri farm income retreats from 2022 record

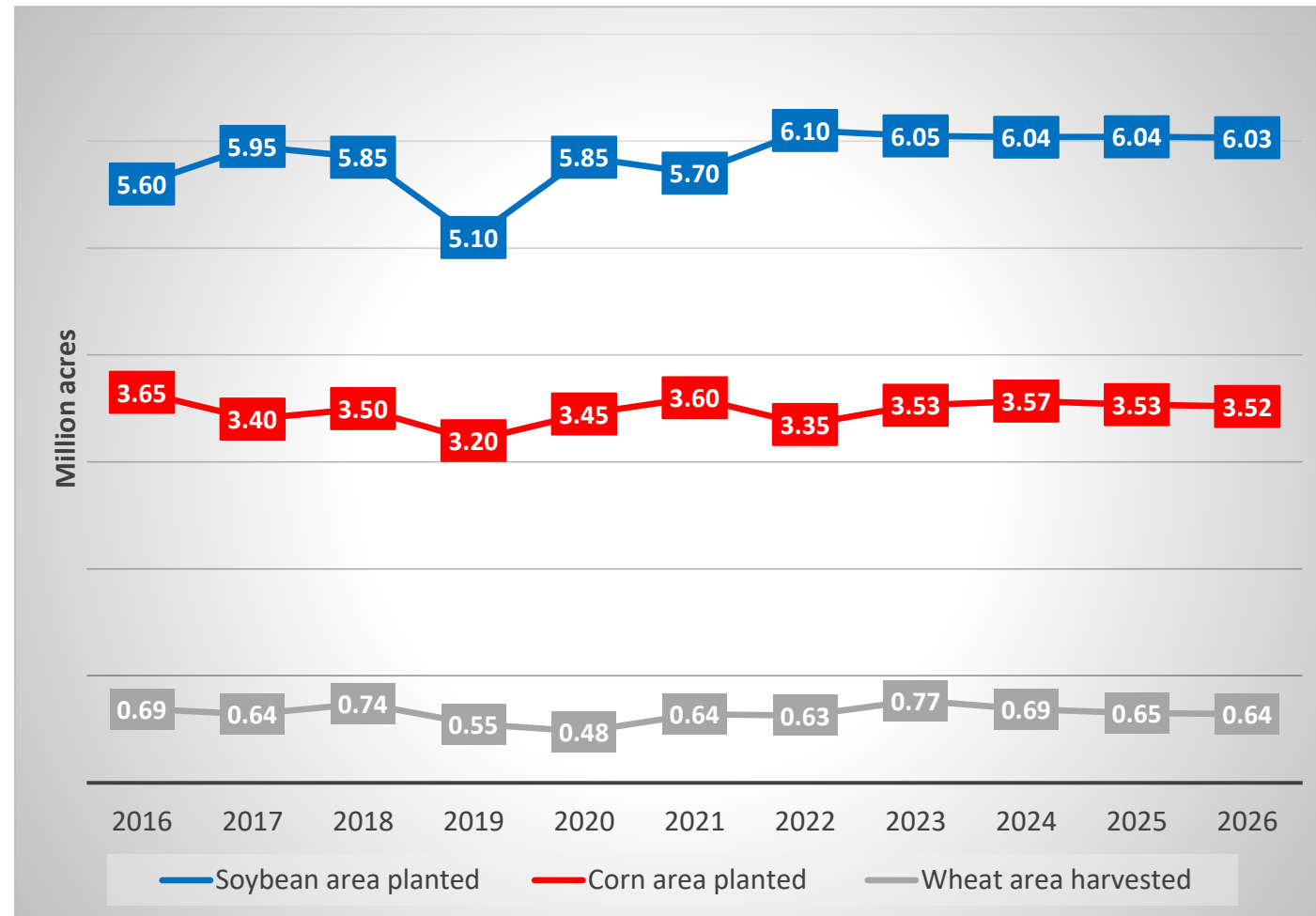
- After two rising years of farm income, declines in receipts and strong expenses squeeze the bottom line for Missouri's farm sector in 2023
- Projected to decrease 14% in 2023
  - Less significant than the 19% decline to U.S. net farm income
- Livestock receipts decline more in other states as the 2022 drought led to aggressive herd liquidation limiting 2023 marketings

Change in projected Missouri net farm income 2022-23



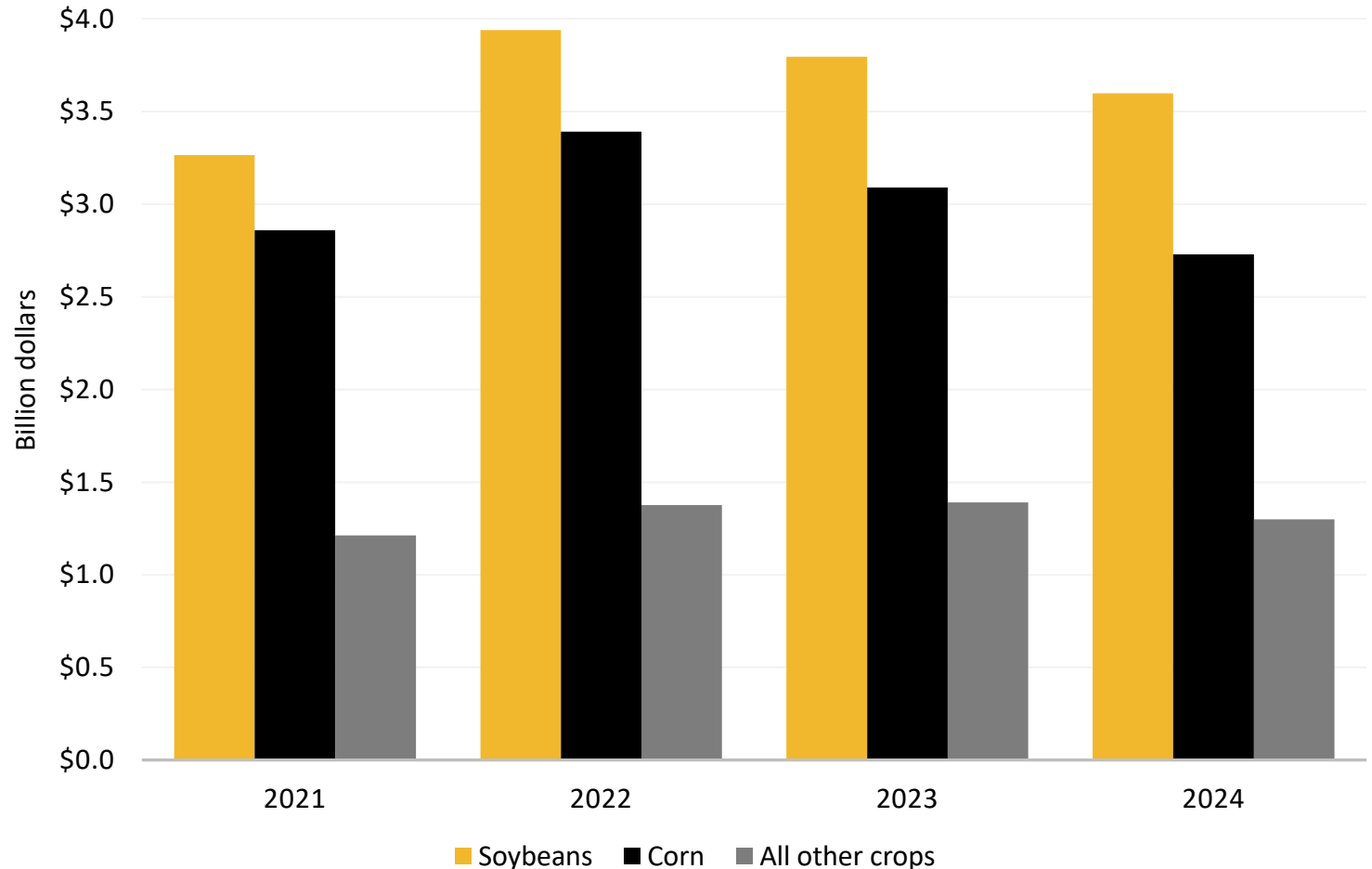
# Missouri crop area rises 2023

- 2023 acreage for to 6 crops plus hay in Missouri 251,000 acres higher than 2022 to exceed 14 million acres, a level not seen since 2014
- Soybean area remains the top field crop exceeding corn by 2.5 million acres in 2023 and exceeds 5.9 million acres for the second year in a row
- Corn planted area rises modestly and when combined with a return to trend yields, it drives production 47 million bushels higher in 2023/24
- Projected hay, wheat and rice area increases 216,000 acres in 2023



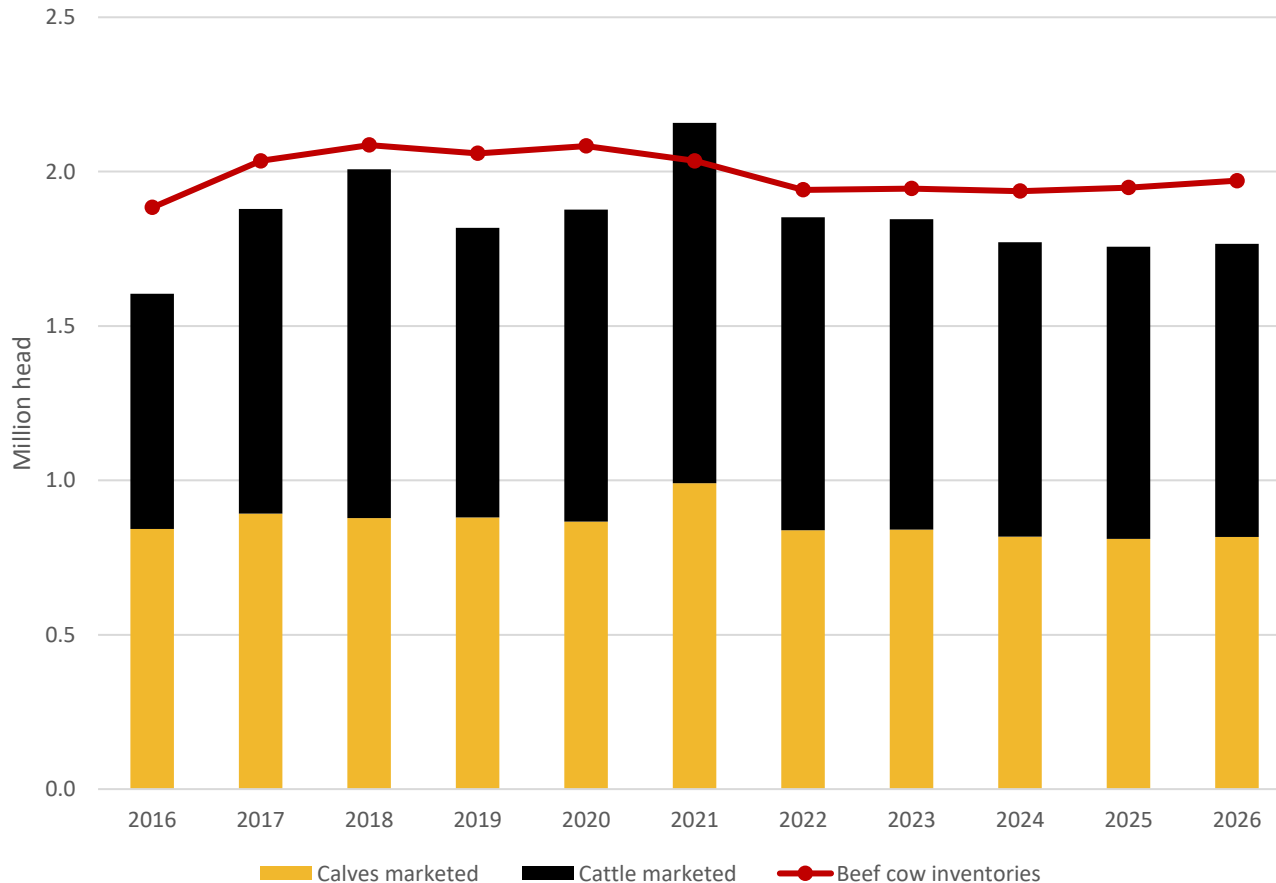
# Missouri crop receipts decline in 2023

- Despite increases in crop area and production in 2023, receipts fall as the decline in prices more than offsets production bumps
- Total crop receipts decrease \$433 million to \$8.5 billion
  - Still would be the 2<sup>nd</sup> best on record
- Even with the decline, soybeans receipts are projected to hit \$3.8 billion and exceed corn receipts by \$485 million in 2023



# Cattle and calves marketings decline in 2023

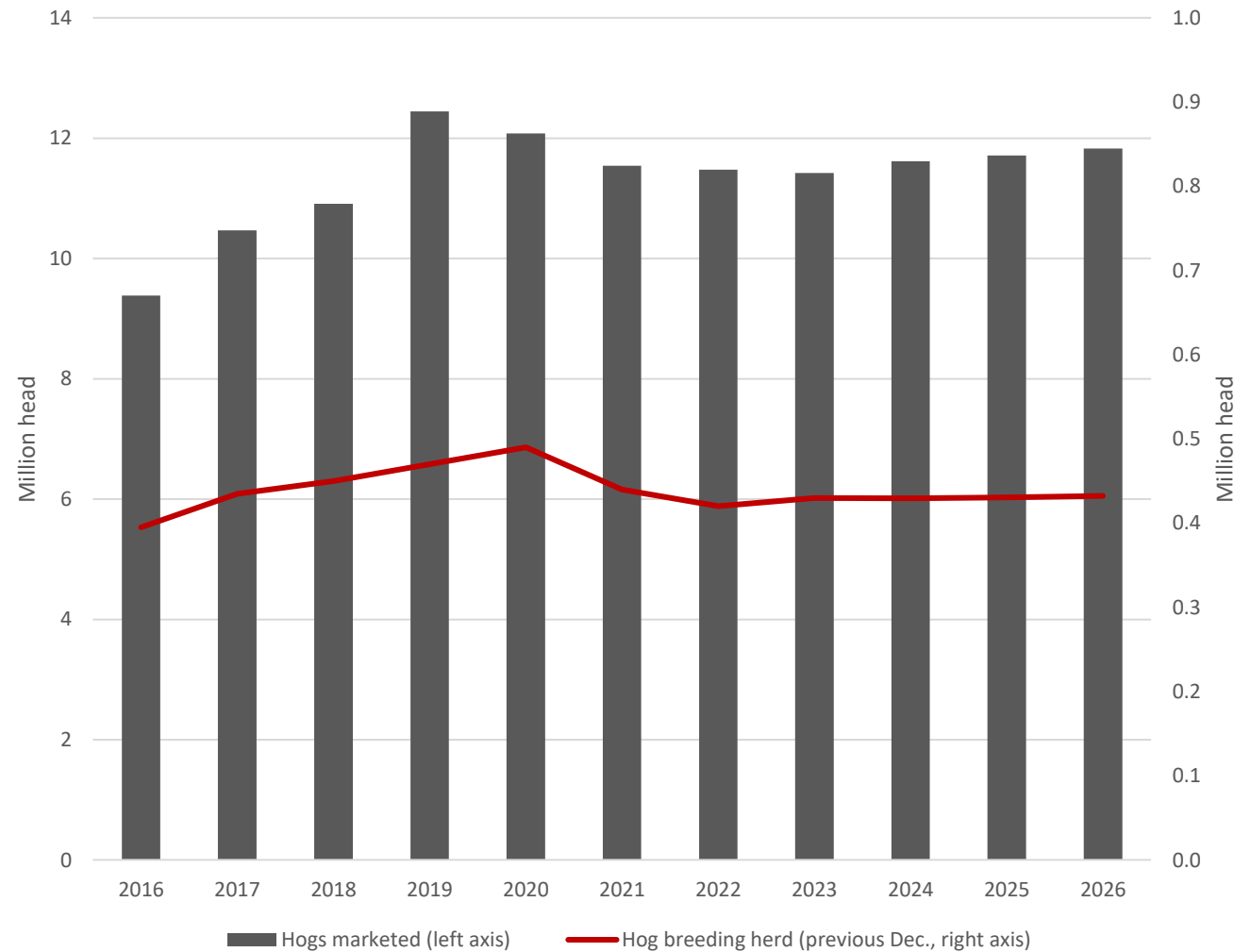
Beef cow numbers start 2023 higher



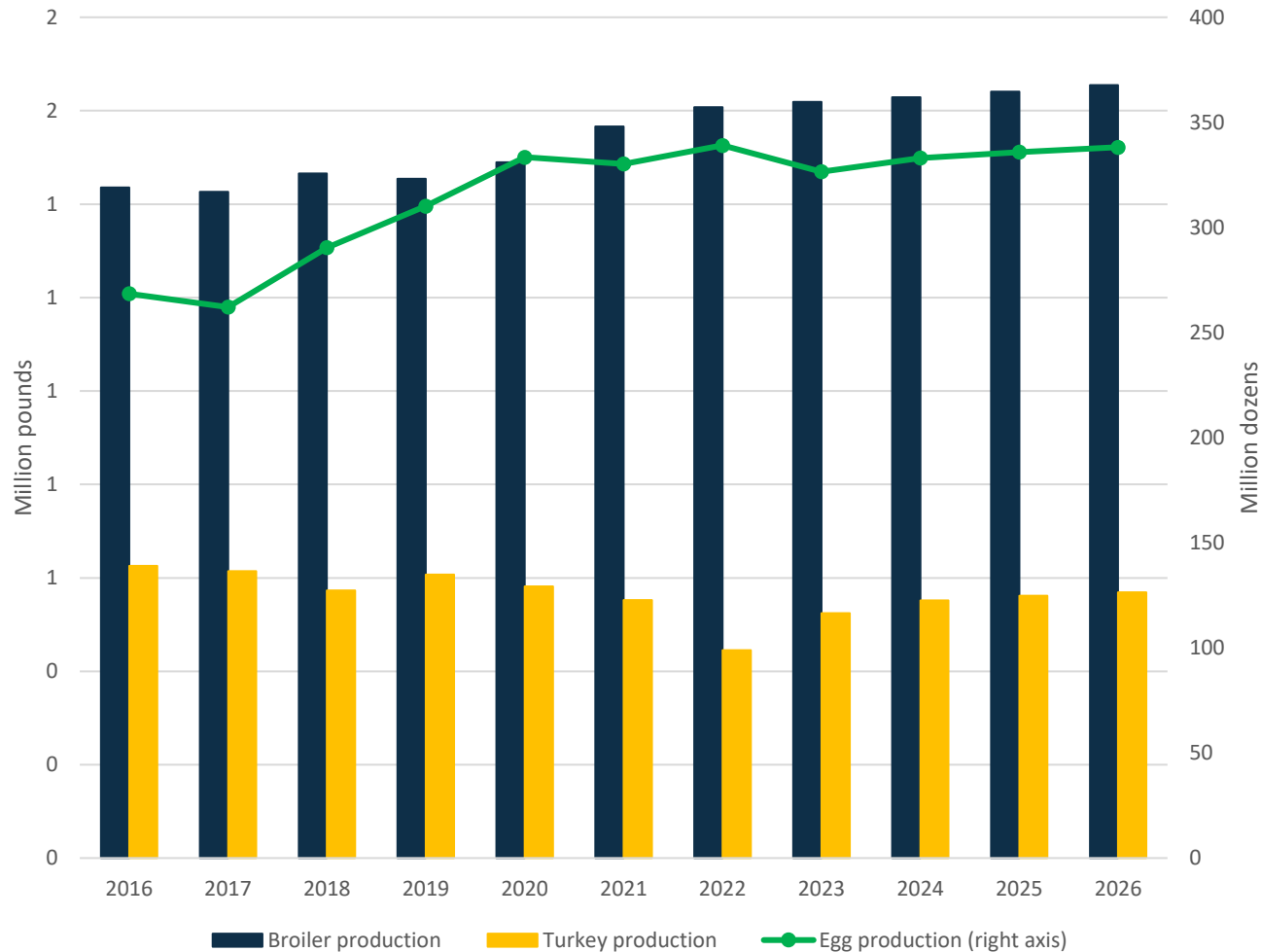
- The number of cattle and calves to start 2023 was 20,000 head higher than 2022, although this total remains 200,000 head lower than January 2021
- Lower inventories in Missouri have longer-run implications as marketings are projected to decline in 2023, 2024 and 2025
- Even with less marketings in 2023, cattle and calves receipts for Missouri see a modest rise as much tighter national inventories support higher prices

# Total market inventory turns higher in 2023

- Total market hog inventory turns higher in 2023 after sliding lower for 3 years, as a larger breeding herd to close 2022 allows the number of sows farrowed and the pig crop to increase
- Marketings in 2023 decline and when combined with retreating hog prices, Missouri hogs and pigs receipts decline \$128 million from 2022, which was the second best on record behind 2014



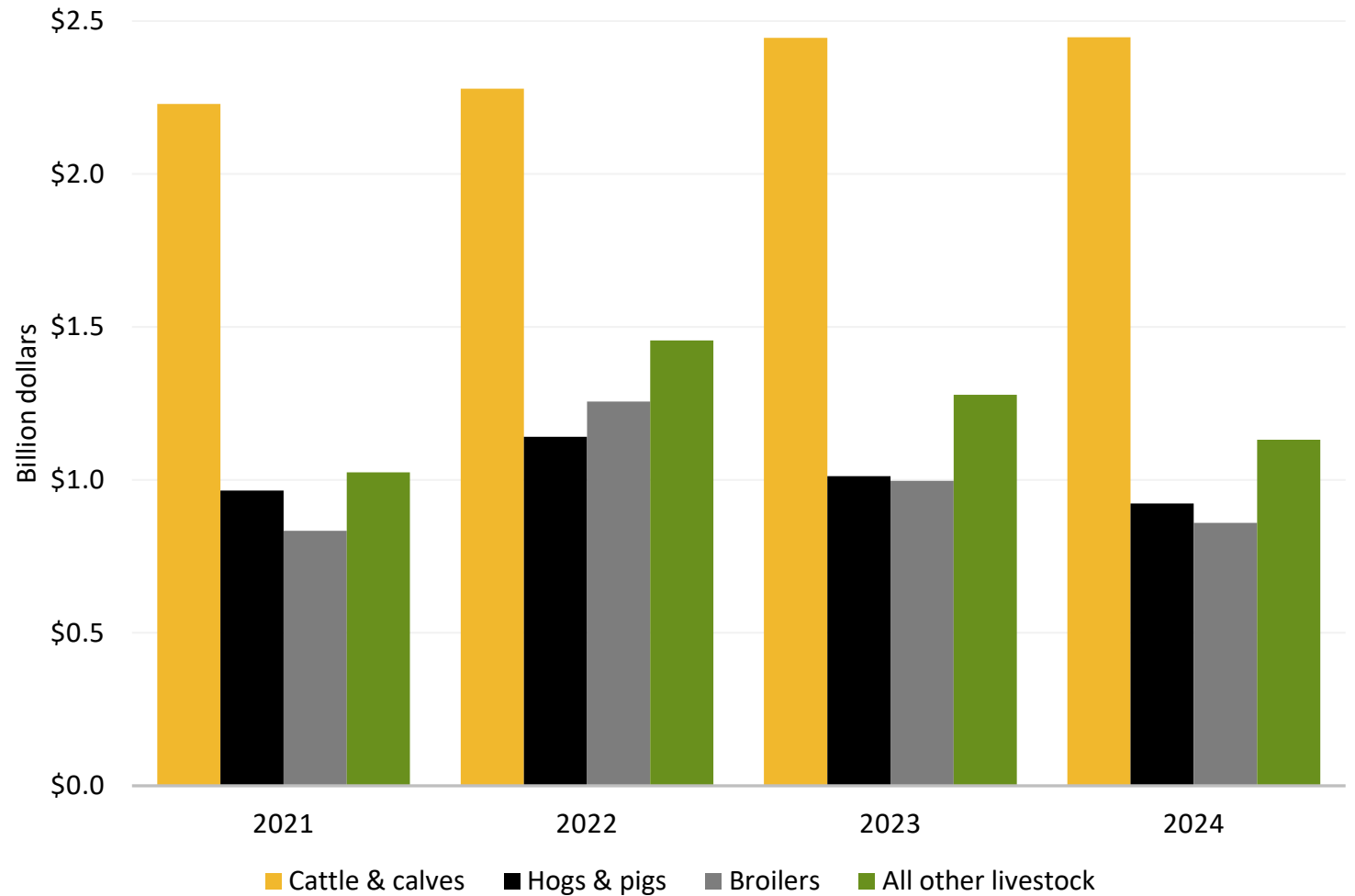
# Broiler and turkey production higher in 2023



- Highly pathogenic avian influenza had a negative influence on poultry inventories in various parts of the country with more Missouri cases occurring in the spring of 2022
- Despite weaker U.S. egg production as the avian influenza more strongly impacted laying flocks, Missouri egg production saw a modest increase by 2% in 2022
- After rising \$793 million in 2022, poultry and eggs receipts decline \$392 million in 2023 as weaker prices more than offset improving broiler and turkey production

# Missouri livestock receipts decline in 2023

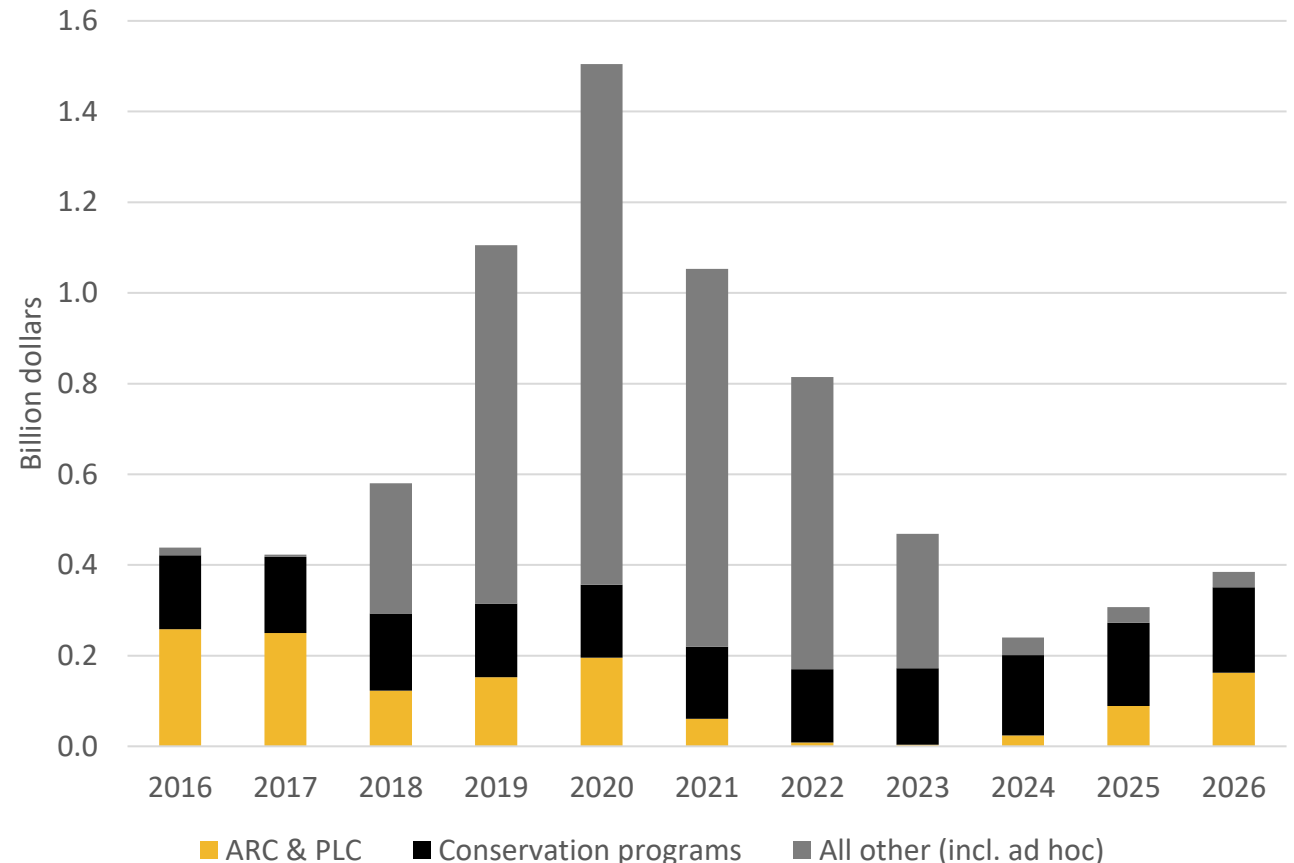
- Cattle and calves receipts are driven by higher cattle and calves prices in 2023, supported by tighter national inventories
- Retreating hog prices and lower marketing reduce hogs and pigs receipts
- Despite improving broiler and turkey production, weaker poultry and egg prices lessen receipts in 2023
- Combined livestock receipts decline nearly \$400 million to \$5.7 billion
  - Would end the 2<sup>nd</sup> best year on record for the state



# Government payments decline in 2023

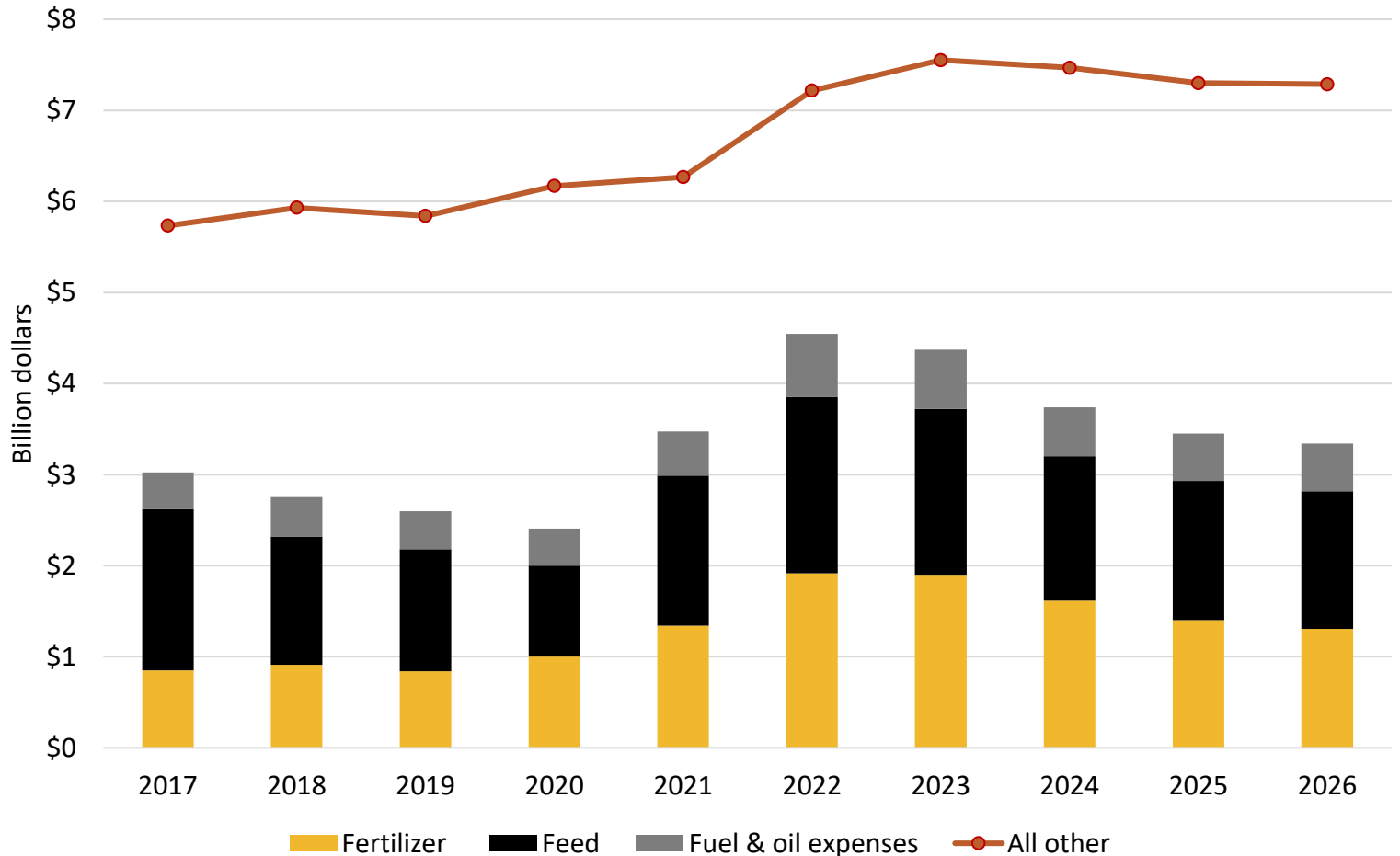
- Total government payments declined by \$451 million in 2021 and are projected to decline by \$239 million in 2022, and \$346 million in 2023
- The largest declines in payments is attributed to a decline in Supplemental and Ad hoc disaster assistance in 2022 and 2023
- ARC and PLC also decline from 2020 as prices remain historically high and yields are projected to return to trend in 2023; in later years moving averages would increase ARC benchmark revenues and PLC reference prices if current programs continue

Govt. payments fall to pre-MFP, -CFAP levels in 2023



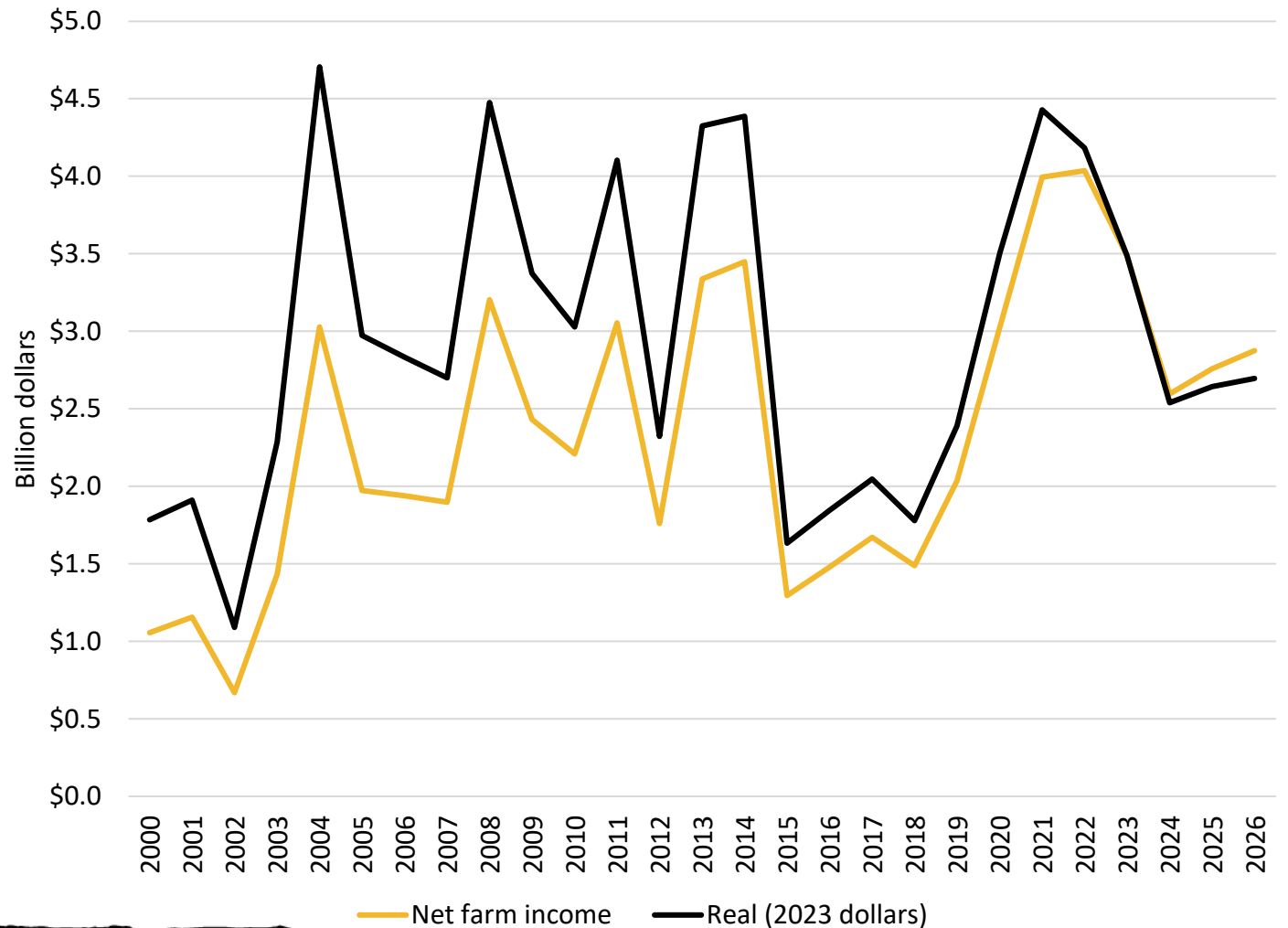
# Total expenses reach new record in 2023

- Fertilizer expense increased over \$1 billion in 3 years
  - 19% higher in 2020, 34% in 2021, 43% in 2022
- Feed expense rose \$285 million in 2022, decline \$111 million in 2023
- Fuel & oil expenses increased \$210 million in 2022, decline \$44 million in 2023
- Other expenses like interest, labor and purchased livestock continue to rise, driving total production expenses to increase 1.8% in 2023



# Bottom line for Missouri farm income

- Missouri net farm income set a record in 2022 and exceeded \$4 billion
- Looking forward, net farm income declines as commodity prices drop and input prices remain sticky
- Nominal net farm income lower for 2023-25, but on average remains about double from the 2015-18 average
- Weather and geopolitical factors will affect farm income estimates at both national and state levels



# Questions?

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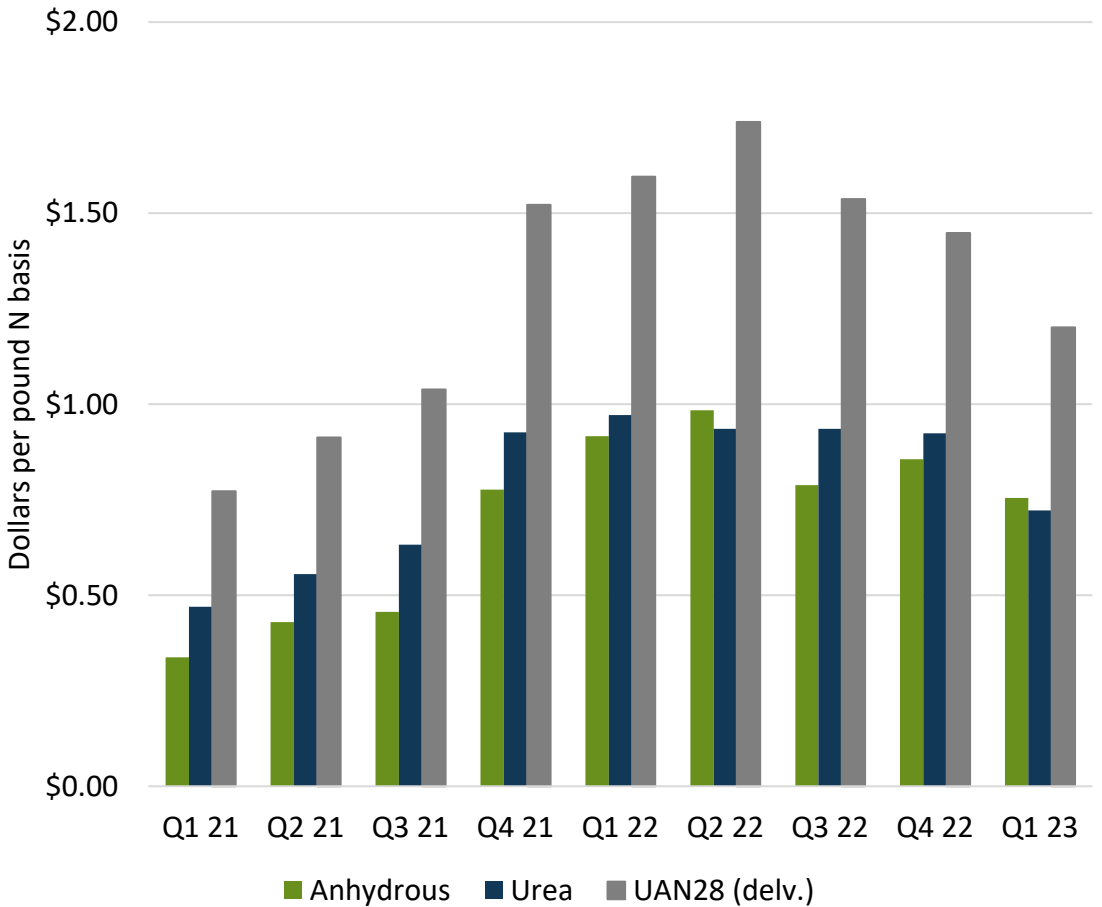
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# Uncertainties and risks

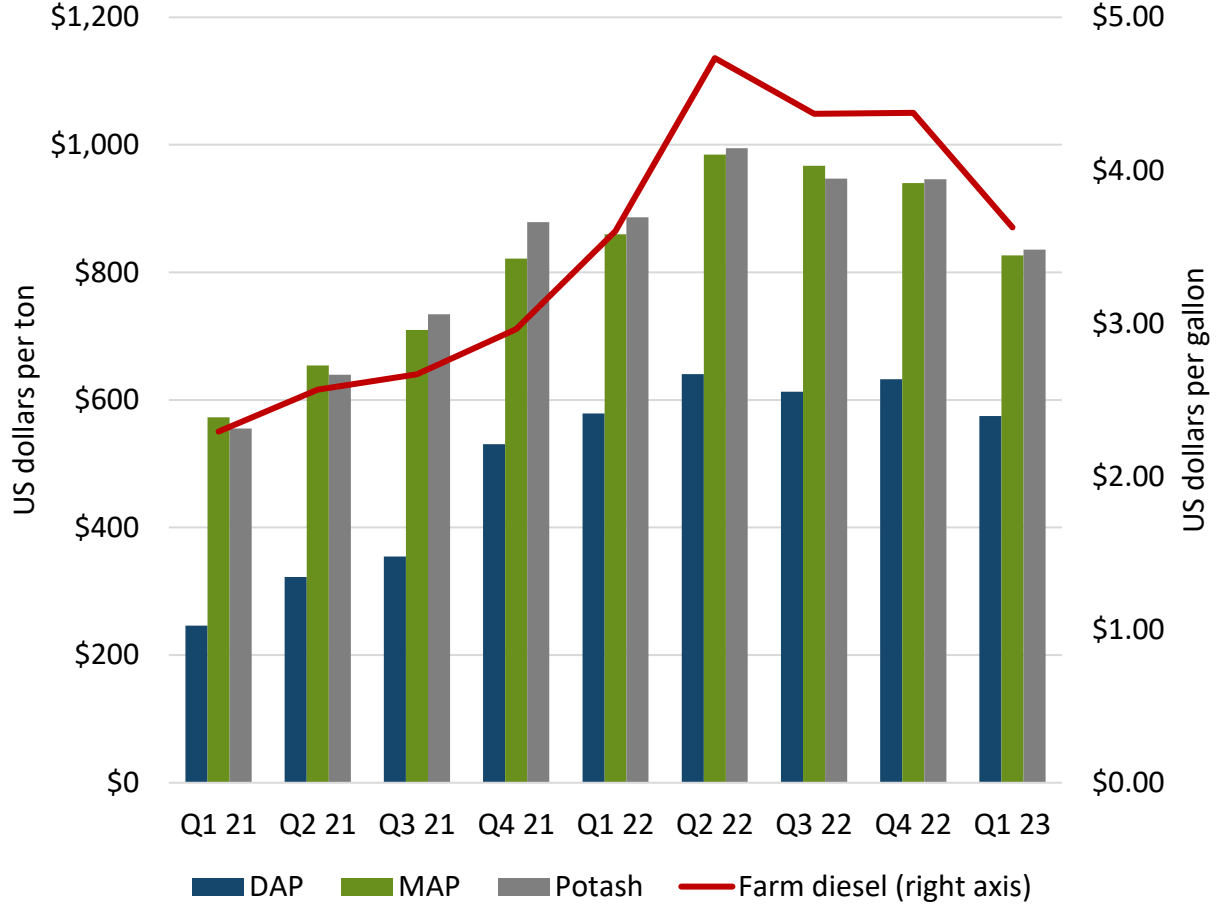
- Trend yields depend on favorable planting, growing and harvesting conditions; the El Nino Southern Oscillation Index (ENSO) may shift into El Nino territory this summer, which may mean drier conditions across portions of Missouri for the 2023 growing season
- If interest adjustments continue to climb this could still lead to higher interest expenses
- Recession risk “less likely than 6-months ago”; a recession could weaken output prices even as input prices lag as inputs tend to remain sticky and lag downward price pressure
- Uncertainty remains concerning the evolution of the Russian war in Ukraine, and more near-term the continuation of the UN grain corridor, which may influence global crops and fertilizer prices again in 2023

# Uncertainties and risks

**Nitrogen**



**Phosphorus, Potassium, Diesel**

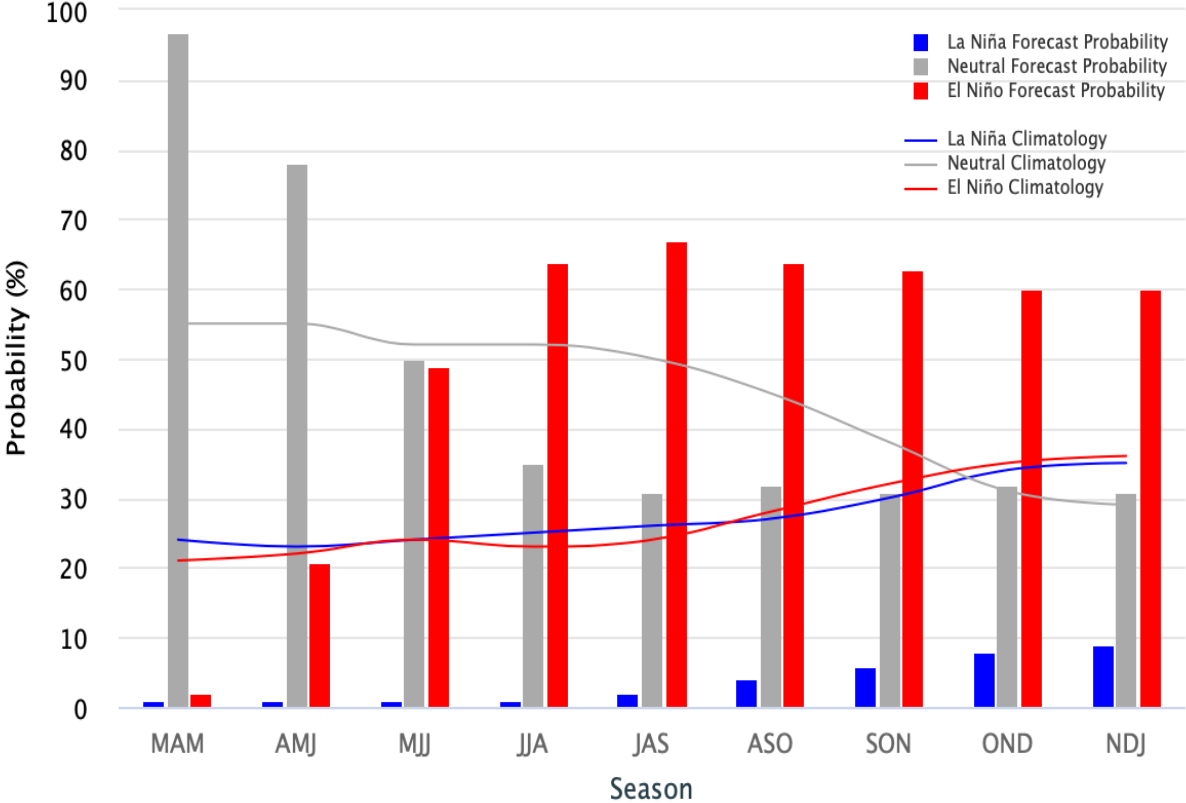


Source: USDA-AMS Illinois Production Cost Reports (Bi-Weekly), January 2021 to March 2023

# Uncertainties and risks

Mid-March 2023 IRI Model-Based Probabilistic ENSO Forecasts

ENSO state based on NINO3.4 SST Anomaly Neutral ENSO:  $-0.5\text{ }^{\circ}\text{C}$  to  $0.5\text{ }^{\circ}\text{C}$



Tercile dry ENSO nino Time May-Jul

