

# U.S. Agricultural Economic Outlook

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The views expressed here are those of the speaker and do not necessarily reflect the opinions of the Federal Reserve Bank of Kansas City or the Federal Reserve System.



# Outlook Themes

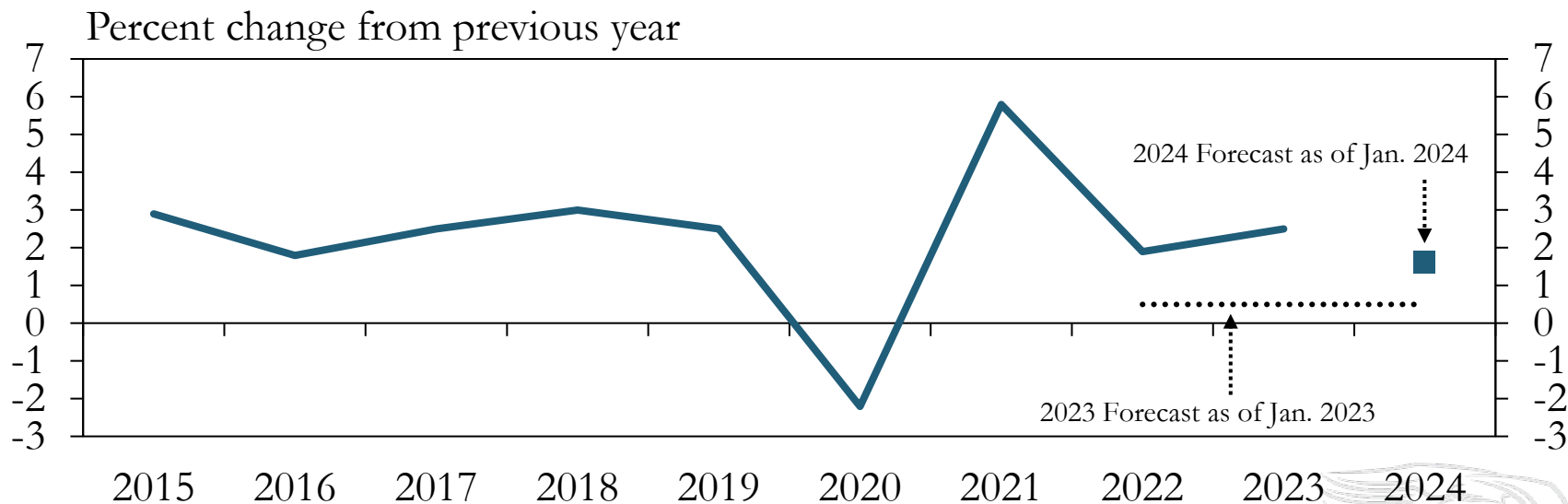
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- Economic conditions in U.S. agriculture have softened notably from a year ago alongside much higher financing costs.
- Profit margins are likely to be thinner this year, but the strength of recent years will provide support through 2024.



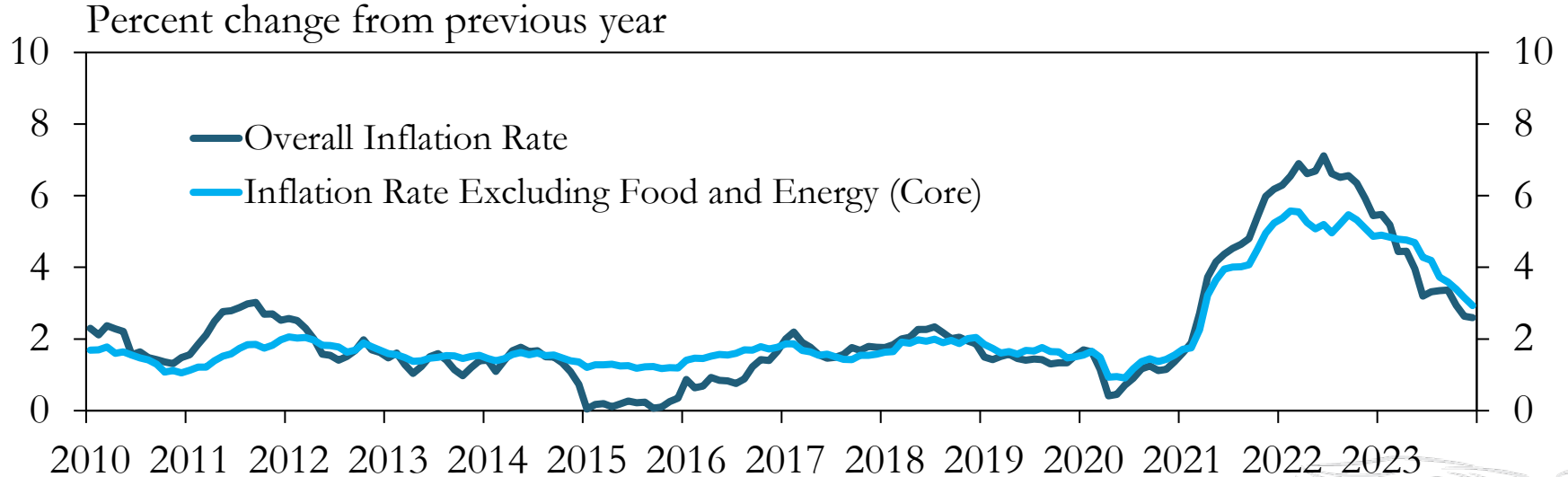
# The U.S. economy was surprisingly resilient in 2023.

## U.S. Real GDP



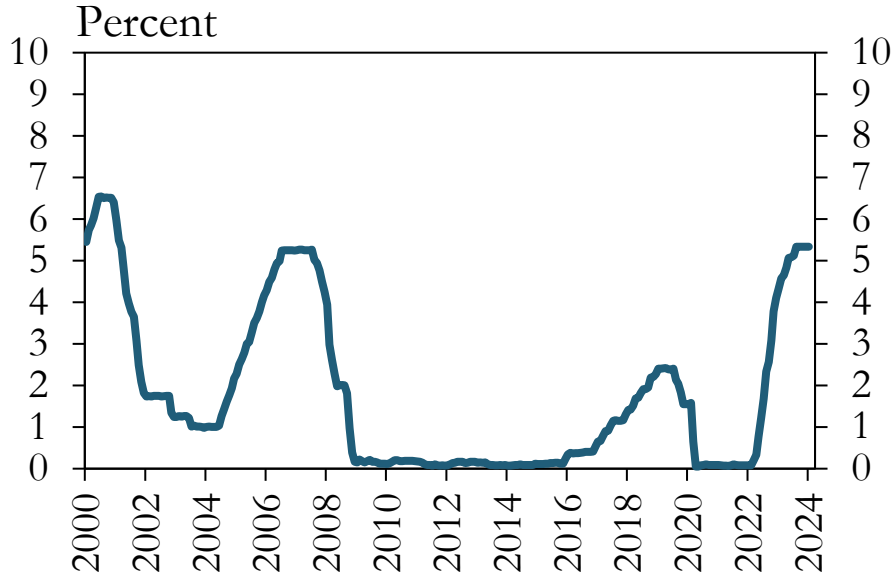
# Inflation remains elevated, but substantial progress has been made toward the Fed's 2% goal.

## U.S. Consumer Prices

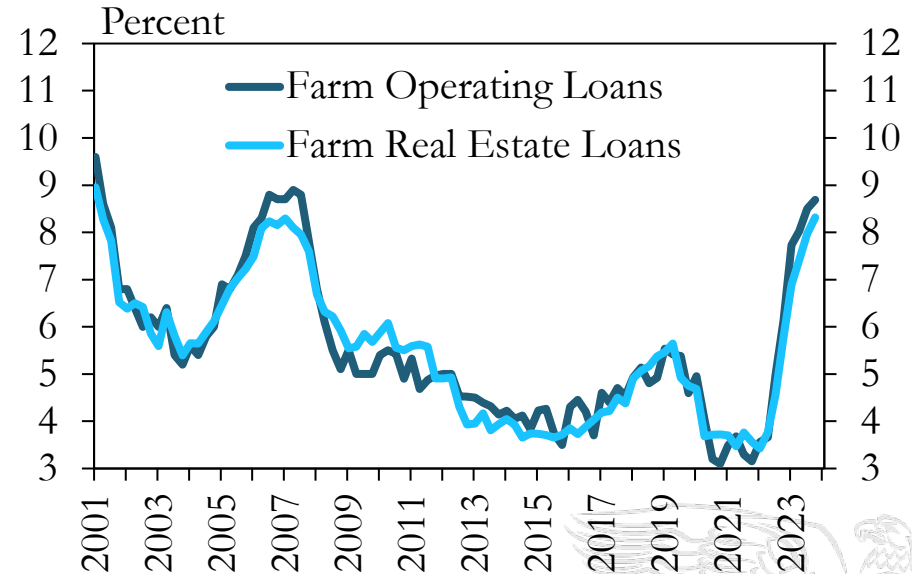


# Interest rates increased sharply through 2023 in response to inflationary pressures.

## Effective Federal Funds Rate

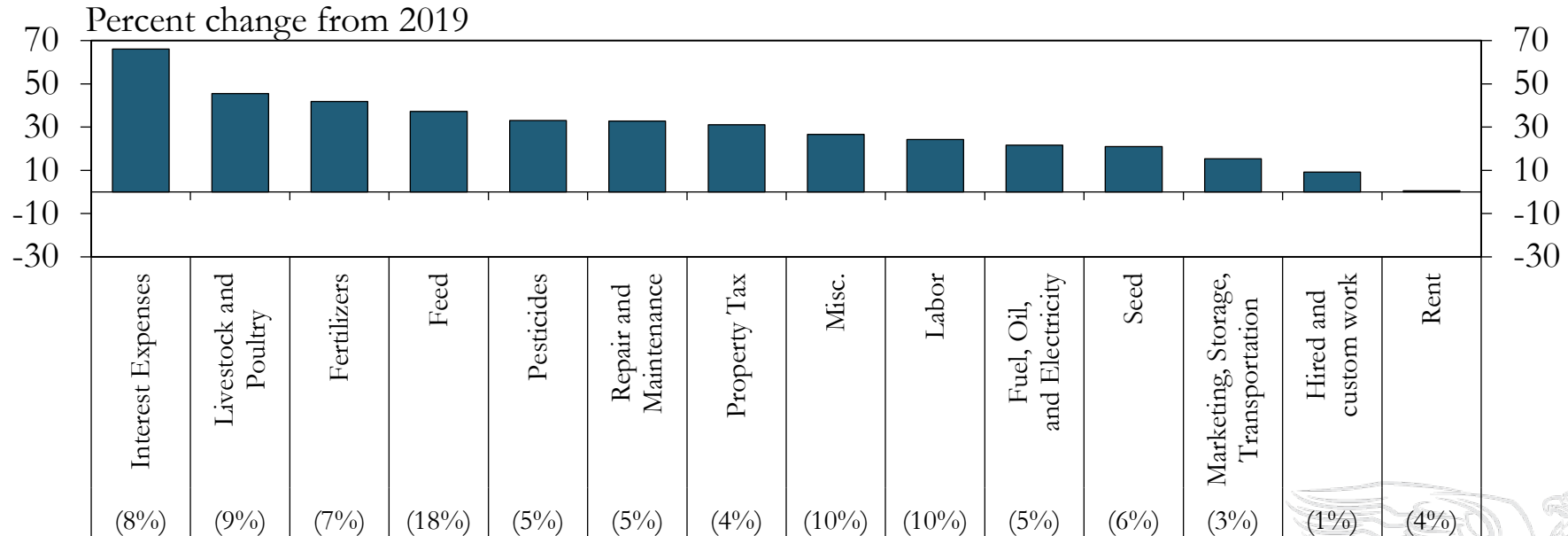


## Average Interest Rates on Ag Loans



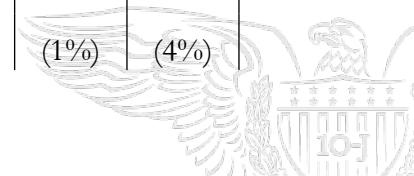
# Interest expenses account for a modest share of farm costs, but the increase has been significant.

## 2023 U.S. Farm Sector Expenses



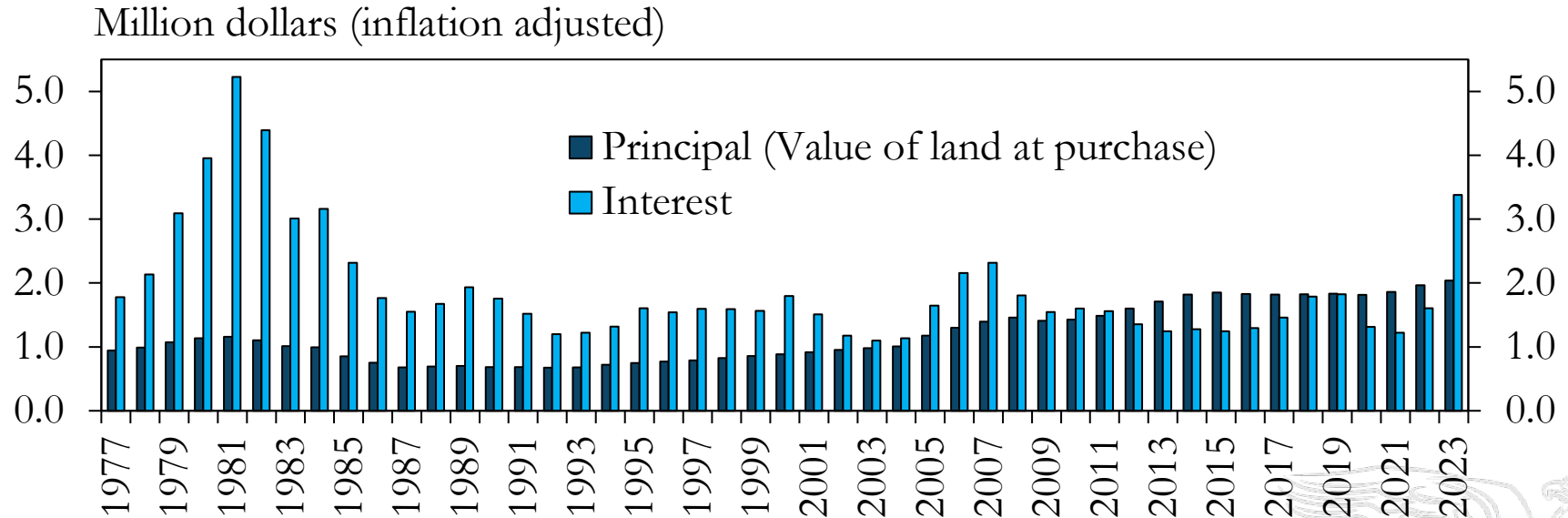
**Note:** U.S. Forecast as November 30, 2023. Numbers in parenthesis denote share of total expenses.

**Source:** USDA



# Operations with new financing on large purchases could face very high interest costs.

## Principal and Interest on 500 Acres of Farmland: 30-Year Fixed Loan



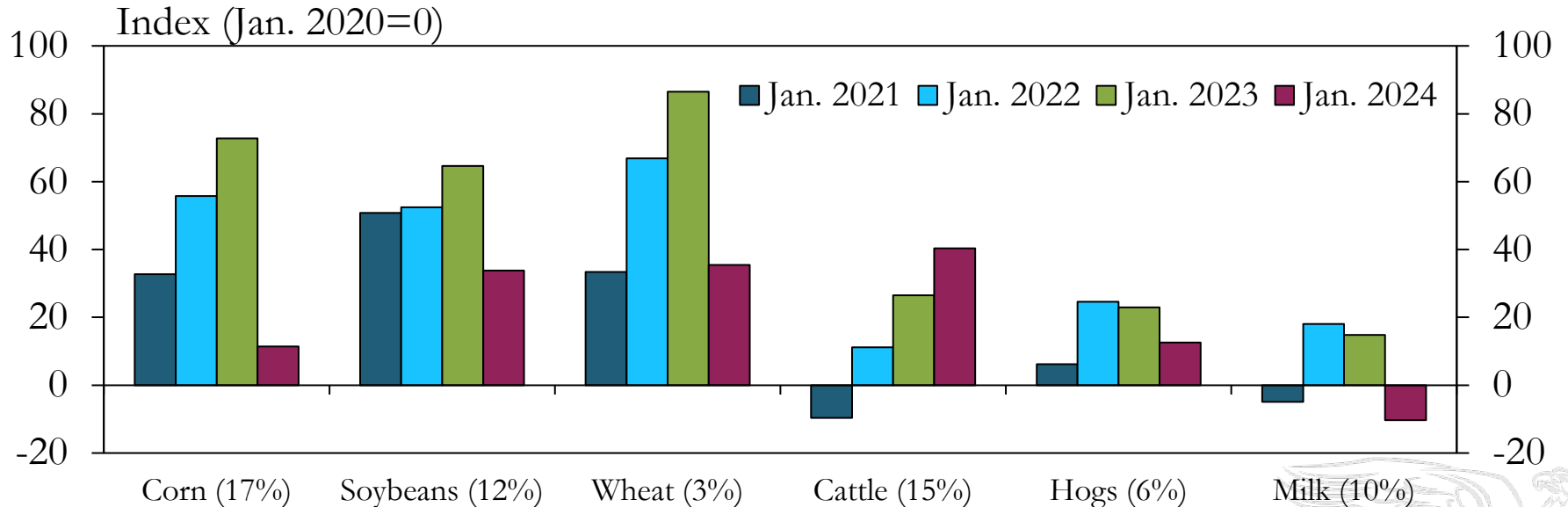
**Note:** Based on national average value of agricultural land (including buildings)

**Sources:** USDA, Survey of Terms of Lending to Farmers and staff calculations



# In addition, most ag commodity prices have declined substantially.

## Agricultural Commodity Prices



**Note:** Numbers in parentheses denote the share of total U.S. farm cash receipts

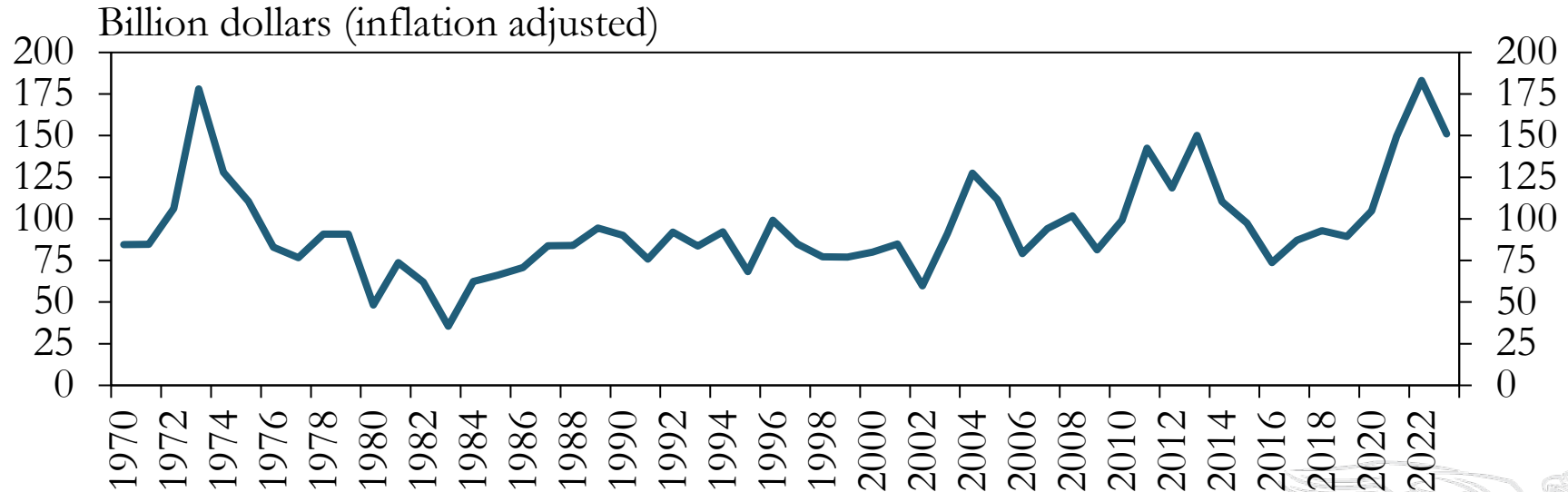
**Sources:** The *Wall Street Journal*, USDA and staff calculations





# Farm income likely declined in 2023, but from exceptional levels.

## U.S. Net Farm Income



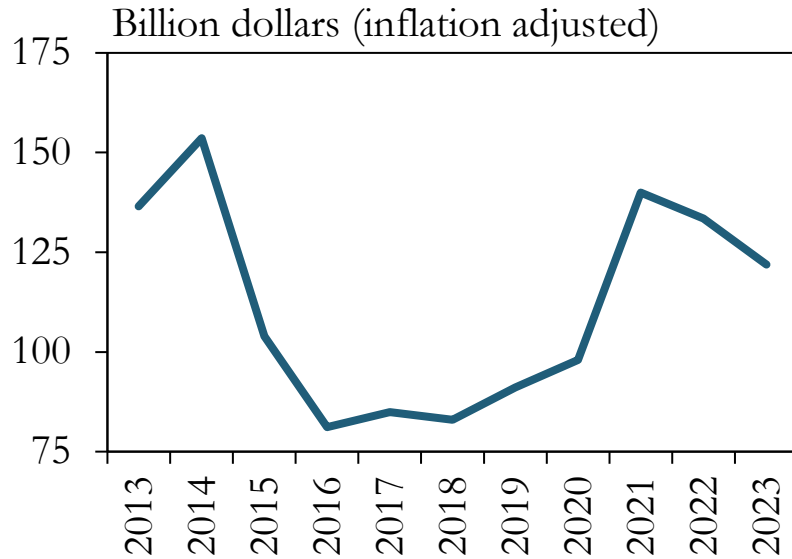
\*U.S. Forecast as November 30, 2023.

Source: USDA

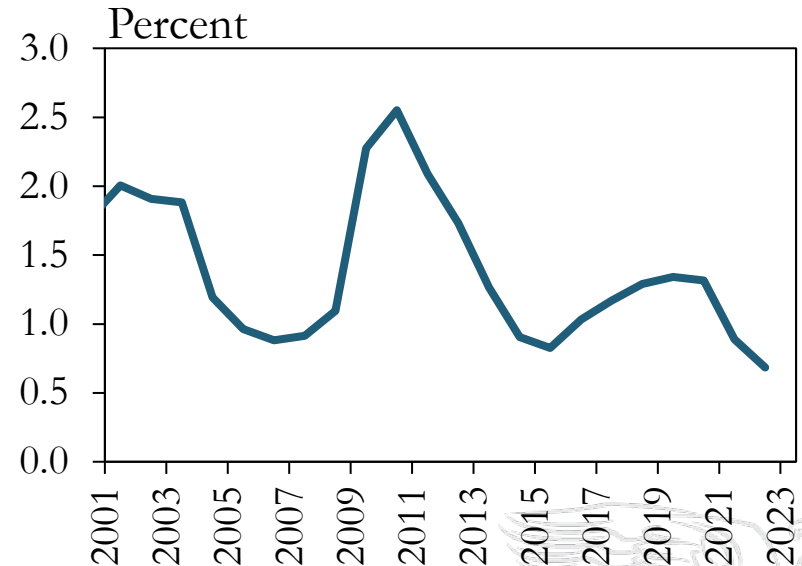


# The surge in farm incomes bolstered the financial position of farm borrowers.

## U.S. Farm Sector Working Capital

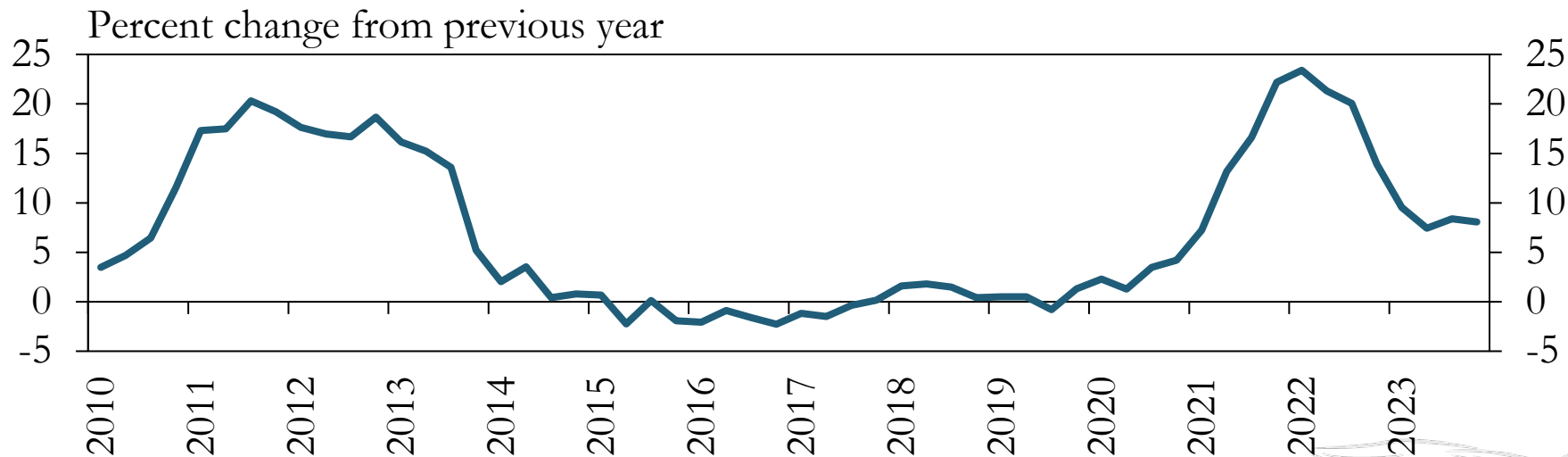


## Farm Loan Delinquency Rates, Q3



# Despite higher interest rates, the value of farmland has remained strong and continued to rise in 2023.

## Farm Real Estate Values



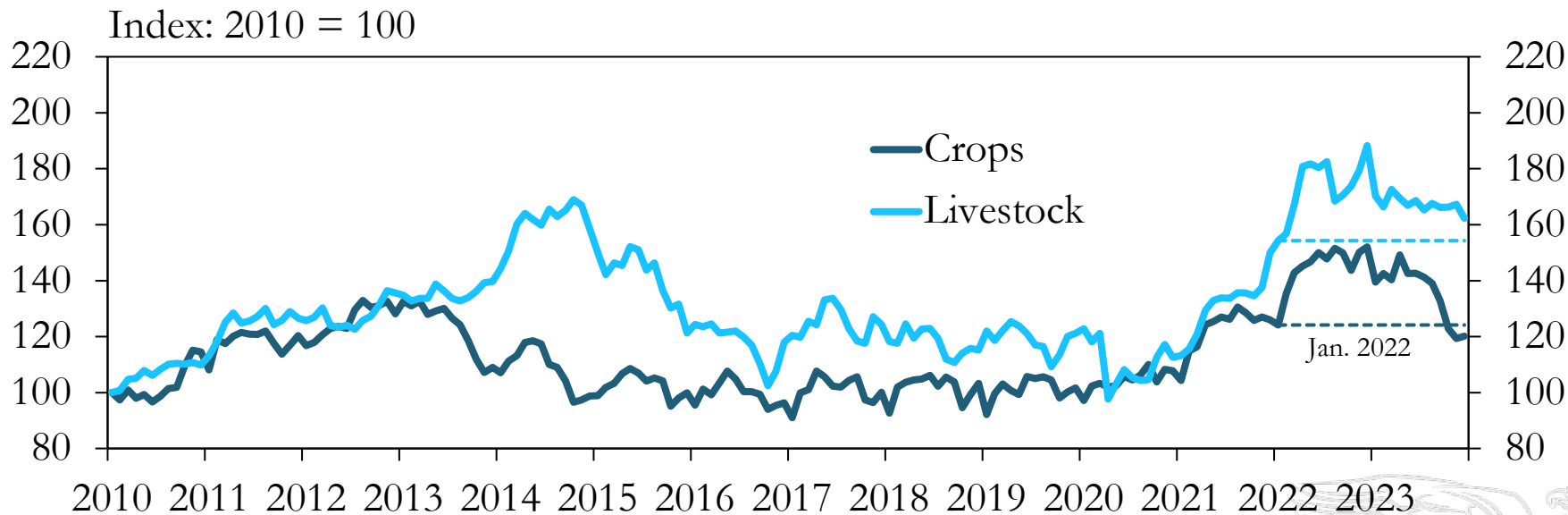
**Note:** Average of Chicago, Dallas, Kansas City and Minneapolis Federal Reserve Districts

**Sources:** Federal Reserve Surveys of Agricultural Credit Conditions



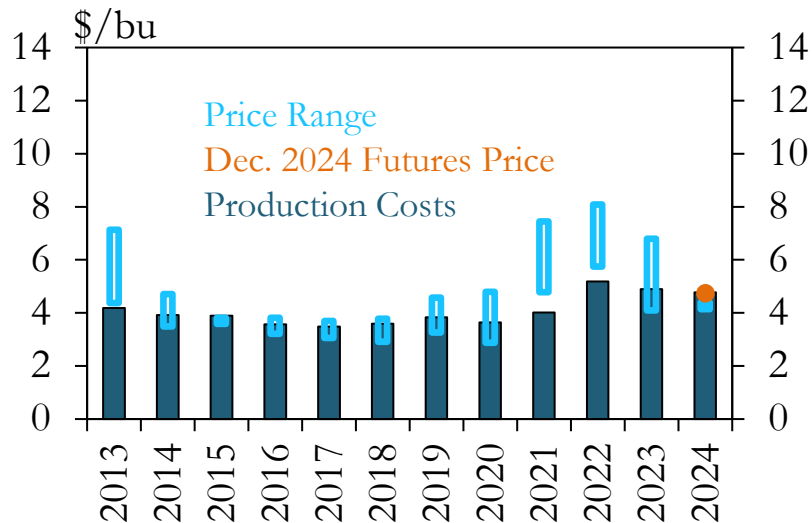
# Reduced commodity prices and persistently high cost pressures point to tighter profit margins ahead.

## Ag Price Indices

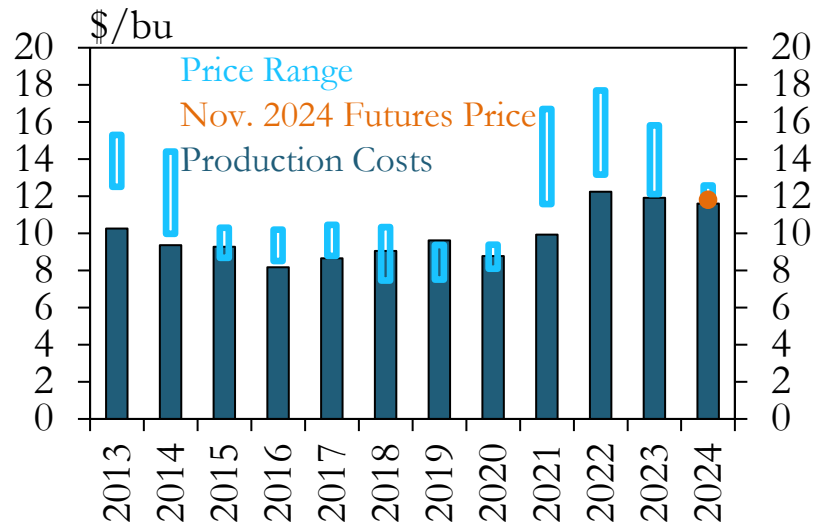


# For this year, profit margins in corn and soybeans appear similar to 2019.

## Corn Profit Margins

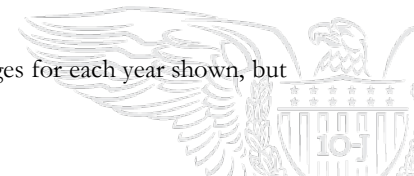


## Soybean Profit Margins



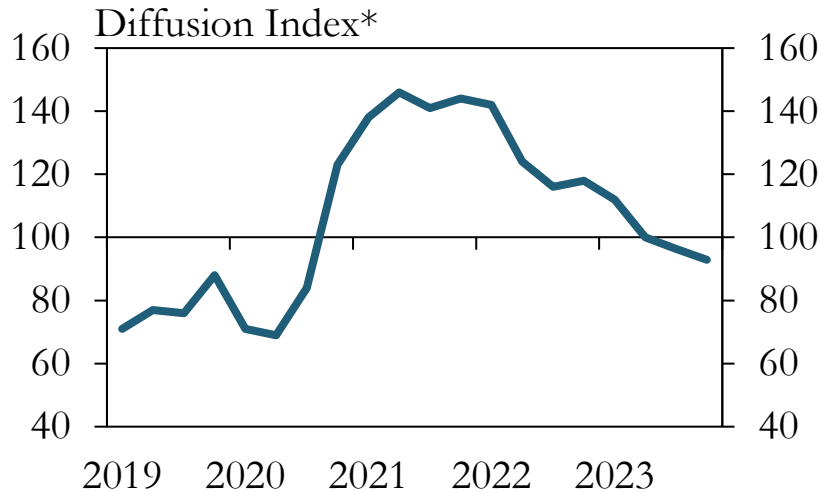
**Note:** Production costs are calculated from USDA's Economic Research Service (Commodity Costs and Returns) and national yield averages for each year shown, but exclude the opportunity cost of unpaid labor from the calculation.

**Source:** USDA, Haver Analytics and CME

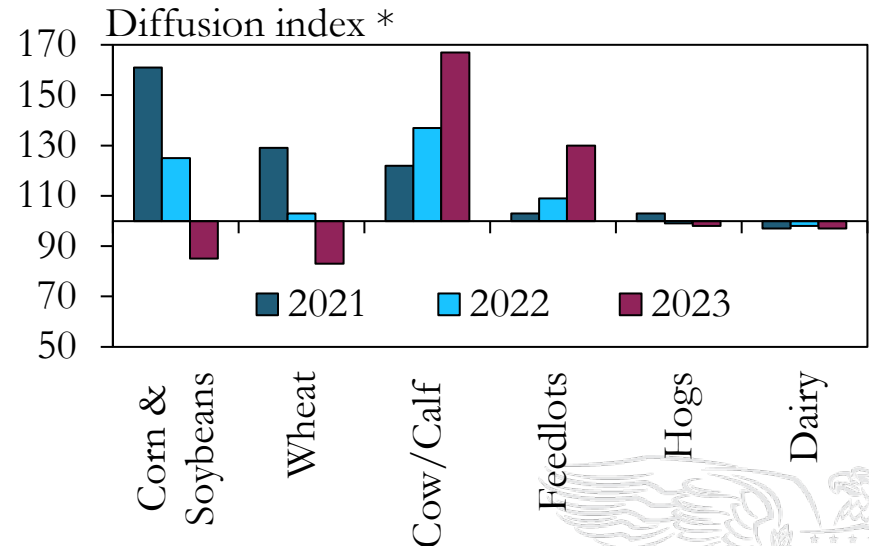


# Recent data show that financial conditions in ag have also begun to tighten somewhat.

KC Fed District  
Farm Loan Repayment Rates



Expected Change in Loan Repayment Rates by Operation Type, Q3



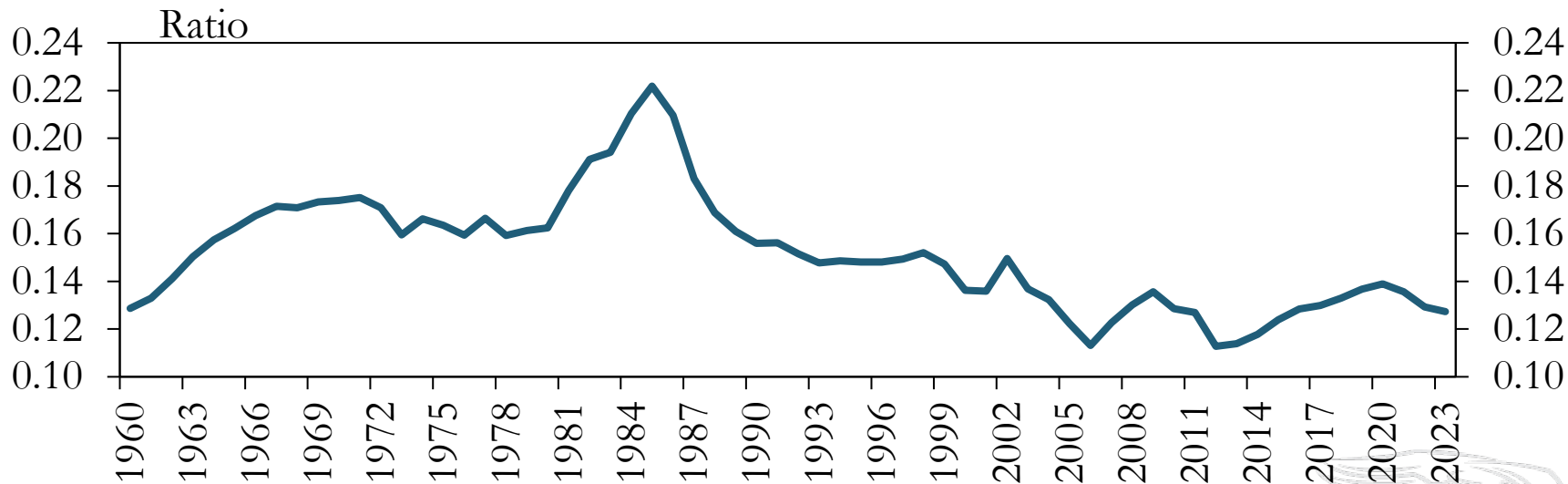
\*The index numbers are computed by subtracting the percentage of bankers who responded "lower" from the percentage who responded "higher" and adding 100.

Source: Federal Reserve Bank of Kansas City Survey of Agricultural Credit Conditions



# Despite recent tightening, the strength of the farm economy is likely to provide support through 2024.

## U.S. Farm Sector Leverage: Debt-to-Assets

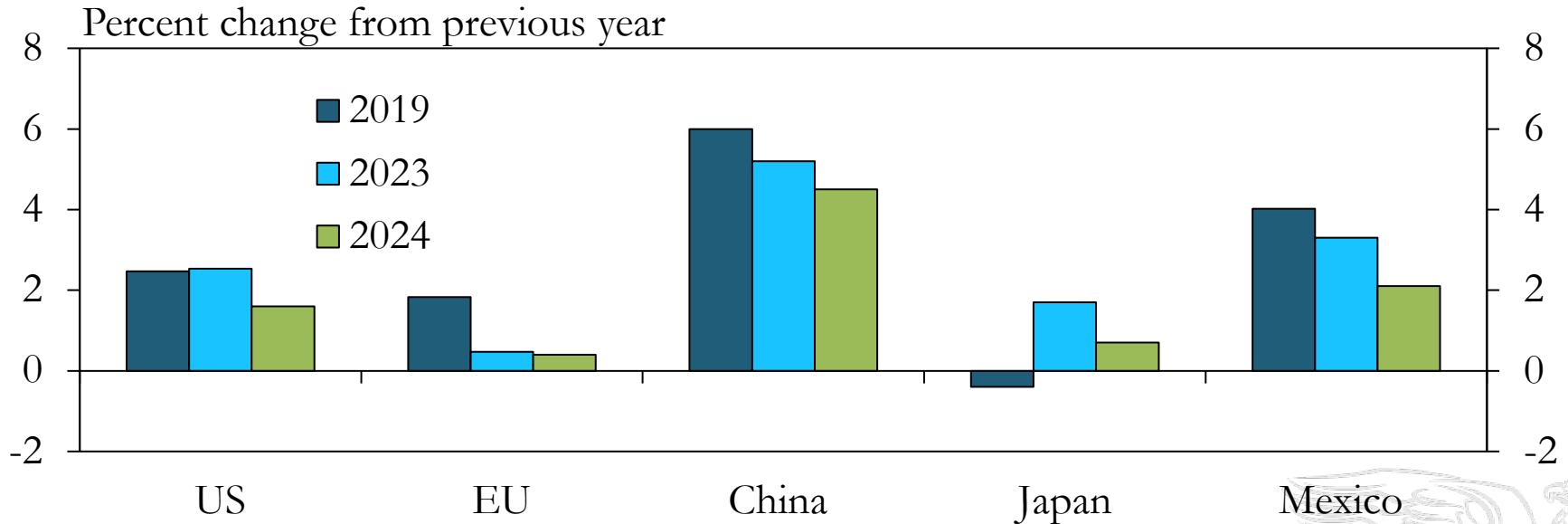


Sources: USDA and staff calculations



# Looking ahead, developments in the U.S. and global economy will be important to monitor.

## Real GDP Growth



Sources: Bureau of Labor Statistics, BEA, Wolters Kluwer, Statistical Office of the European Communities, Cabinet Office of Japan, Office of National Statistics, China National Bureau of Statistics, and Haver Analytics



# Concluding Thoughts

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- In the near-term, financial stress in ag is likely to remain limited due to the economic strength of the past few years.
  - But conditions have tightened notably since last year.
- The strength of global economic activity, and its implications for ag exports and commodity prices, will be a key risk to monitor in the year ahead.

