Macroeconomic Outlook and Interest Rates

Ag Lenders Conference

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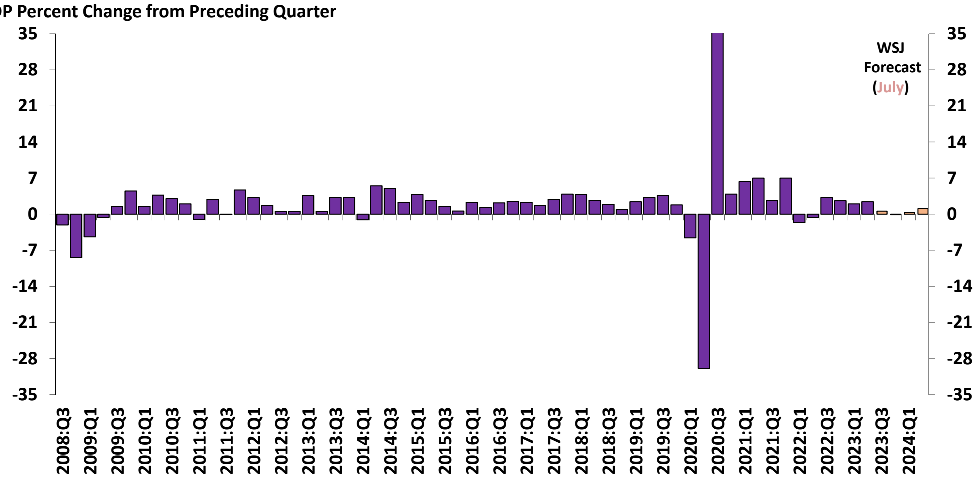
Professor and Director

September 26th – 27th, 2023

U.S. economic growth has remained resilient amid rising interest rates and higher inflation.

Real GDP Percent Change from Preceding Quarter



Source: Bureau of Economic Analysis and Wall Street Journal (WSJ) July 2024 Forecast Survey (Average)

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When will the U.S. officially enter a recession?

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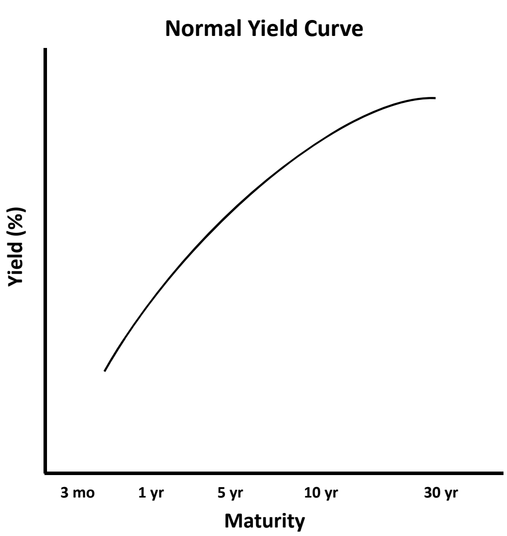
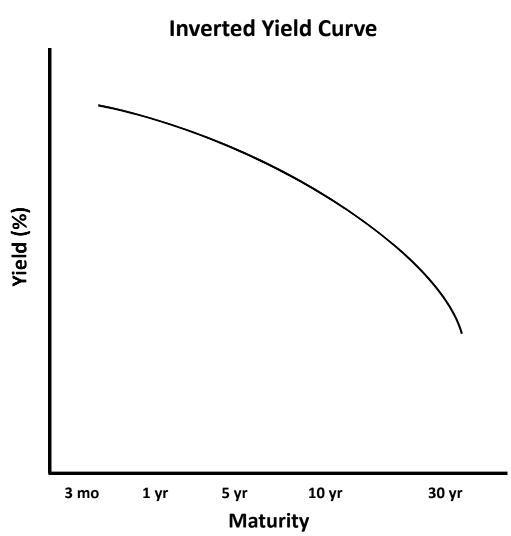
A leading indicator of the U.S. entering a recession tends to be an inverted yield curve.





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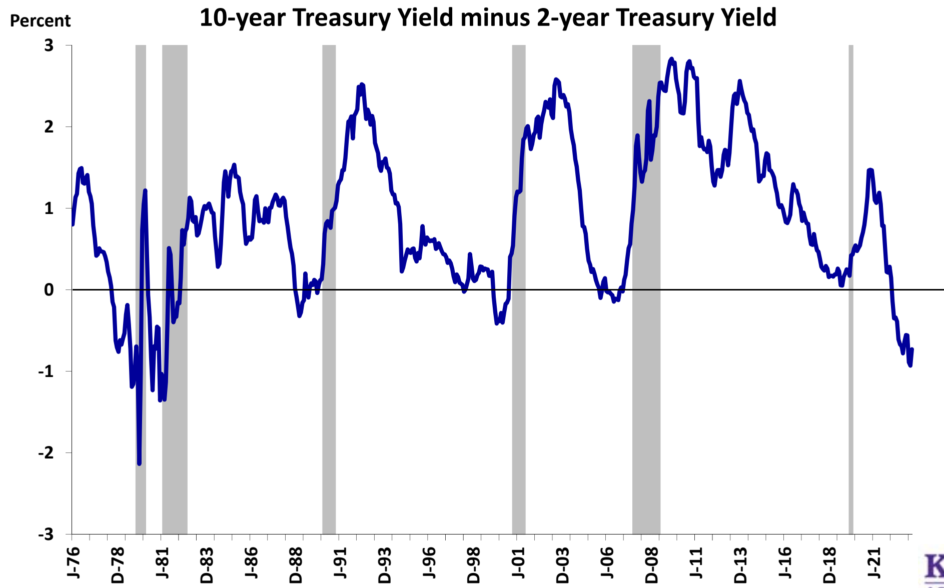
An inverted yield curve suggests a U.S. recession is on the horizon.



Source: U.S. Treasury Department

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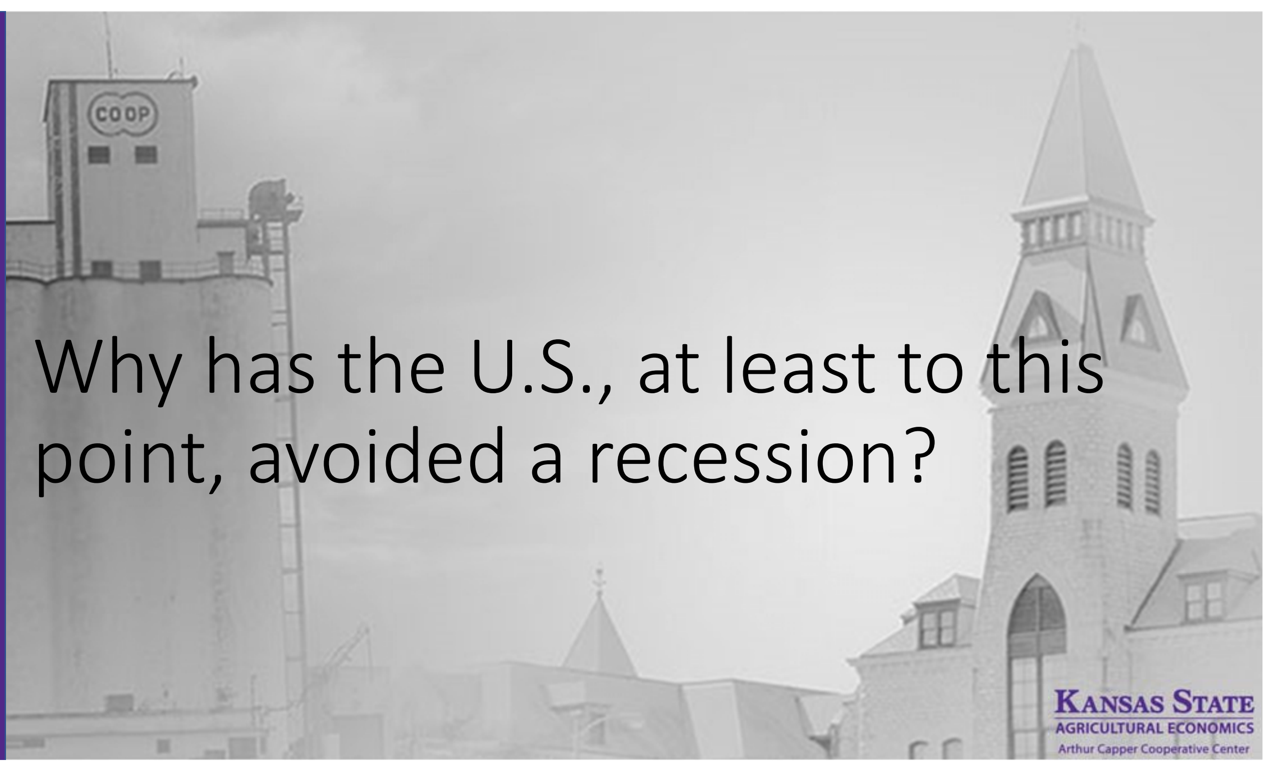

Why has the U.S., at least to this point, avoided a recession?

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Labor force participation has evolved over time, which has implications for future U.S. economic growth.

Source: U.S. Bureau of Labor Statistics

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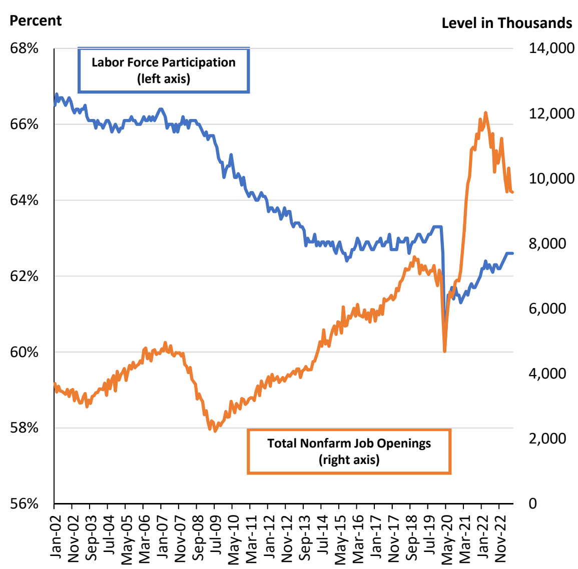
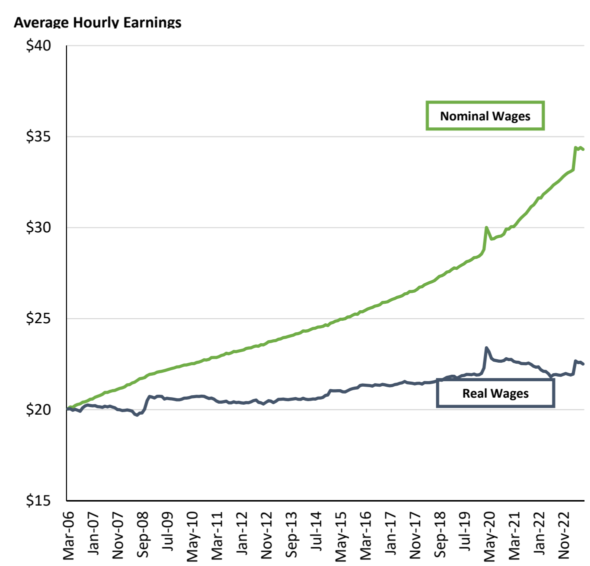
The labor market remains tight, and wages are not keeping up with inflation.



Source: U.S. Bureau of Labor Statistics



Source: U.S. Bureau of Labor Statistics and Consumer Price Index

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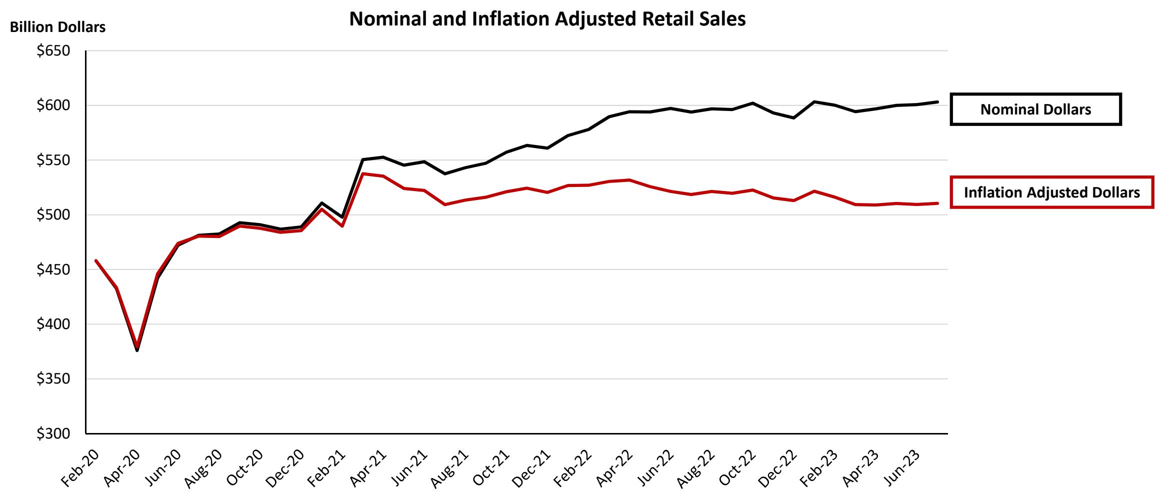
Retail sales are rising, but in nominal terms. Inflation adjusted retail sales indicates consumer demand is flat.



Source: U.S. Census Bureau and Consumer Price Index

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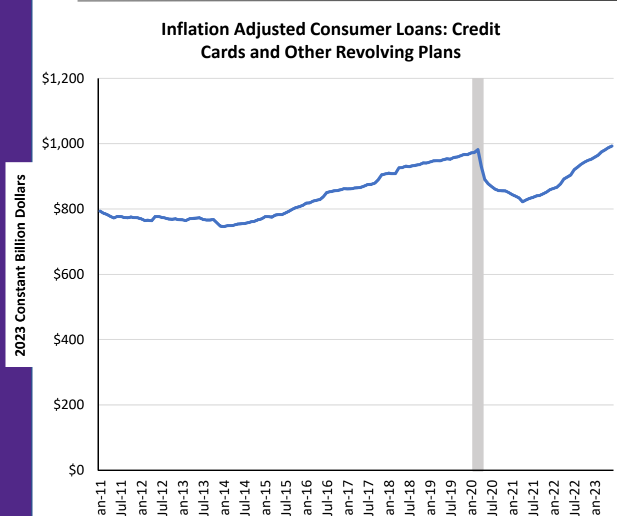
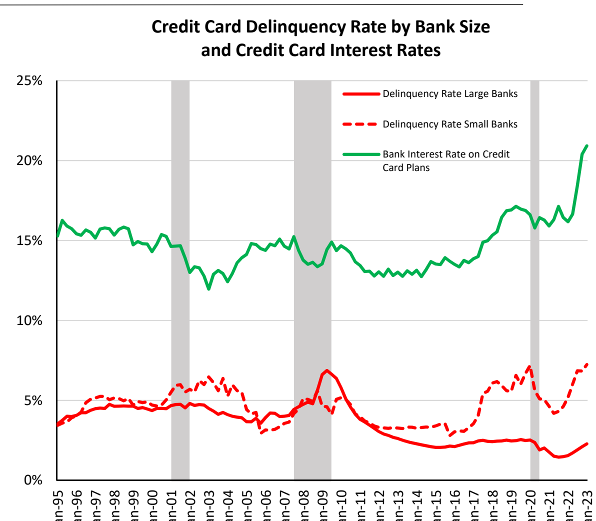
Credit card debt and delinquency rates are back to pre-Pandemic levels, and credit card interest rates are surging.



Source: Board of Governors and PCE Index



Source: Board of Governors and PCE Index

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Could another banking crisis occur?

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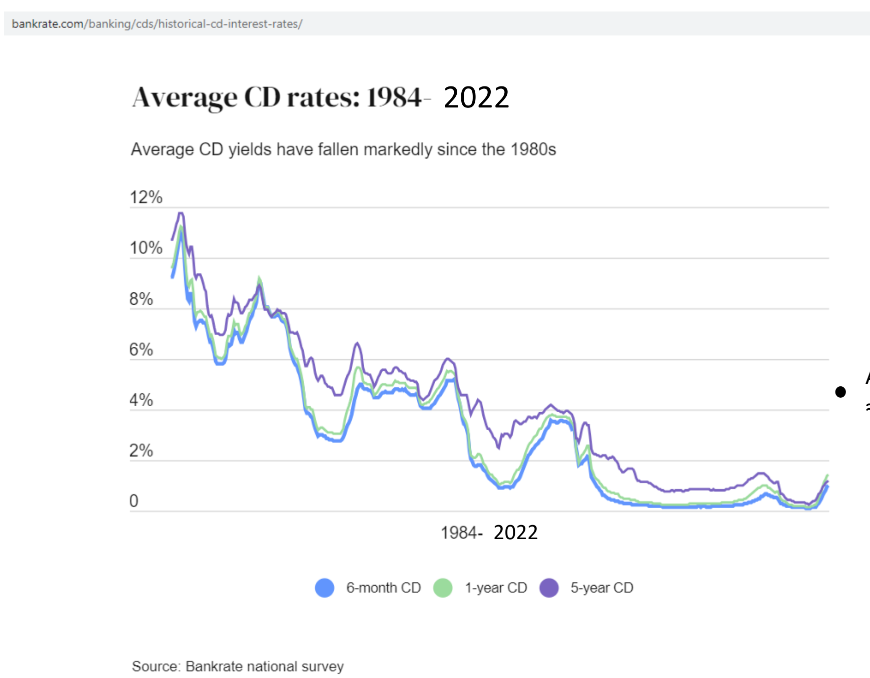

- Aug. 2023 CD rates ≈4.5%

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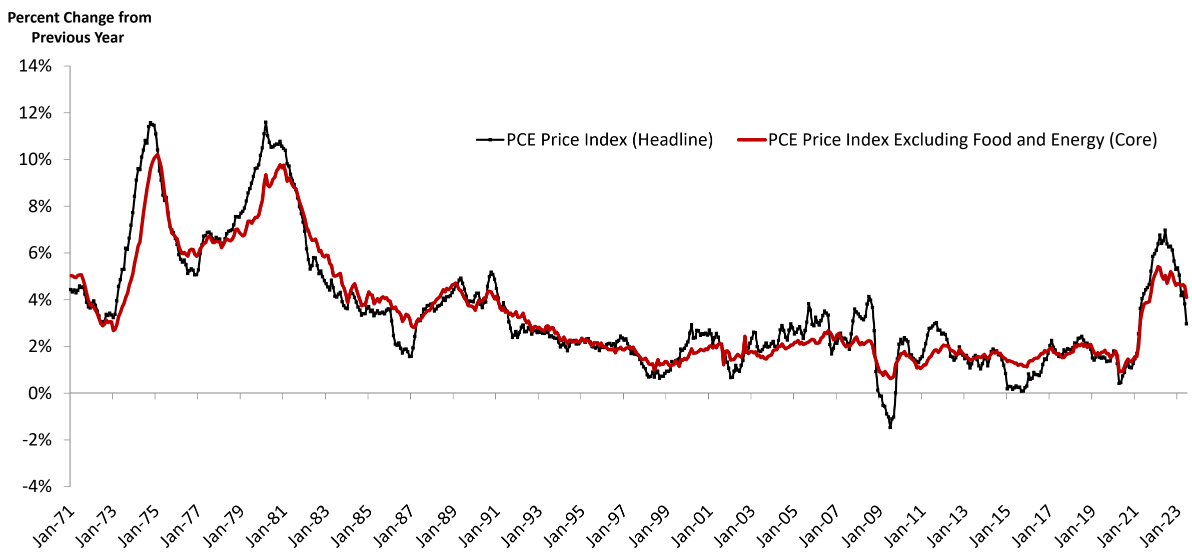
Personal consumption expenditures price indices are coming off of recent highs…will they continue to fall?



Source: U.S. Bureau of Economic Analysis

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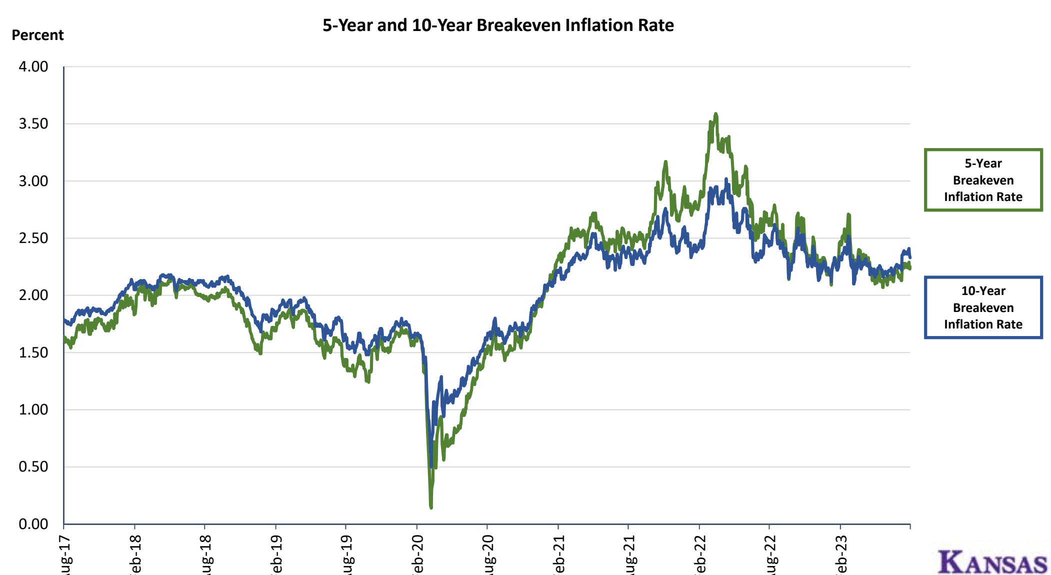
Longer term inflation expectations are higher than near term expectations, and both are down from recent highs.



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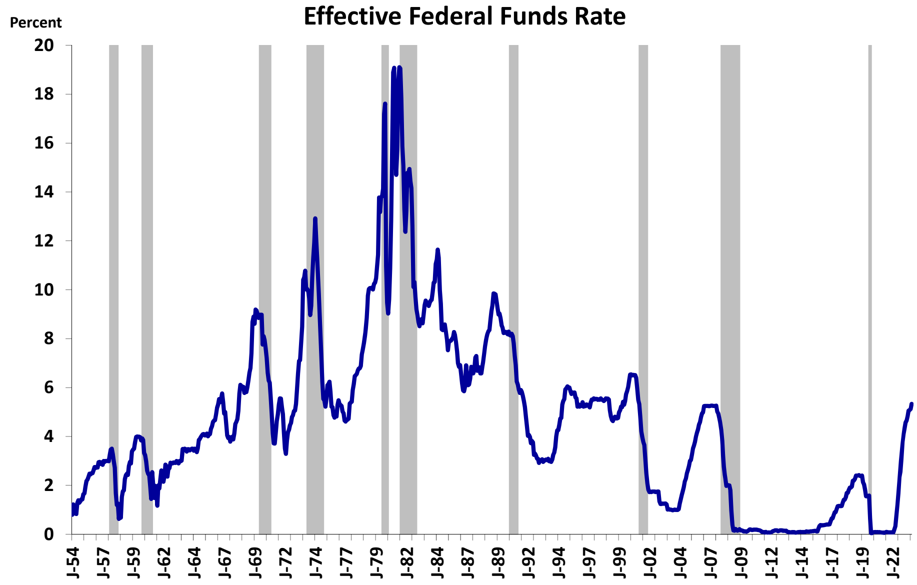
After a protracted period of exceptionally low interest rates, the Fed quickly raised interest rates.



Source: Federal Reserve Board of Governors

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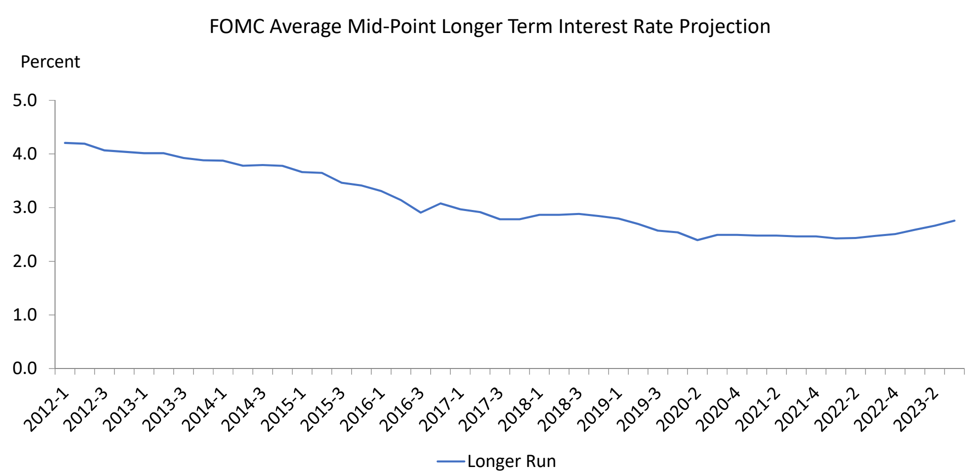
However, will the Federal Open Market Committee (FOMC) maintain higher interest rates into the future?



Source: Federal Open Market Committee (FOMC) Projections materials

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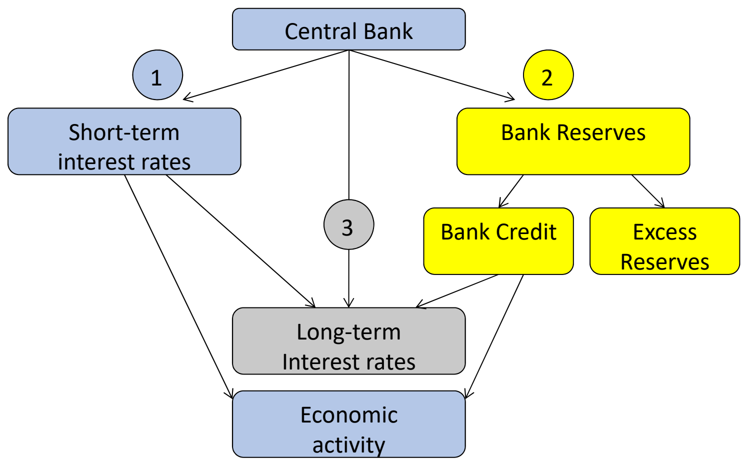
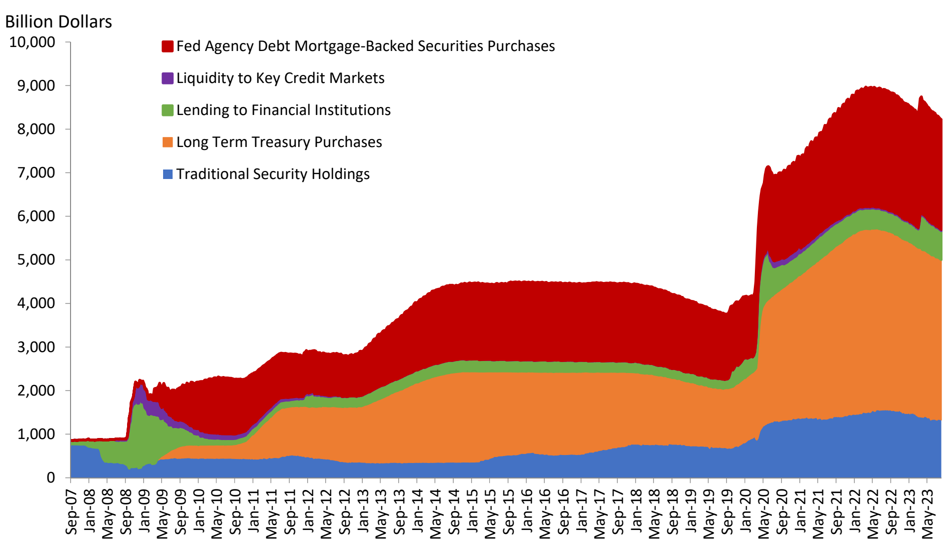
Monetary policy transmission mechanisms



Source: Gordon Sellon (2003) "Monetary Policy and the Zero Bound: Policy Options When Short-Term Rates Reach Zero" Economic Review http://www.kansascityfed.org/Publicat/ECONREV/PDF/4q03sell.pdf

The Federal Reserve's balance sheet is shrinking…what does that mean for the economy?



Source: Federal Reserve Bank of Cleveland

What are the implications of quantitative easing/tightening on the financial system?

How does the banking system create money?

- The key is fractional reserve banking
- Total reserves
  - Vault cash or reserves held at the Fed
- Required reserves (RR)
  - Reserves banks must hold; Ratio = RR / Total Deposits
- Excess reserves
  - Voluntarily held
- Total Reserves = Required Reserves + Excess Reserves

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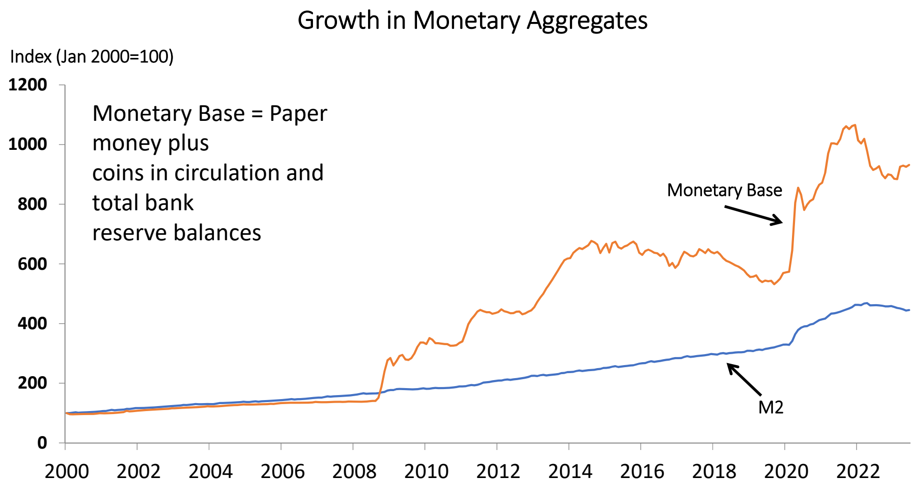
There is a disconnect between M2 money stock and the monetary base



Source: Federal Reserve Board of Governors

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What does this mean for U.S. agriculture?

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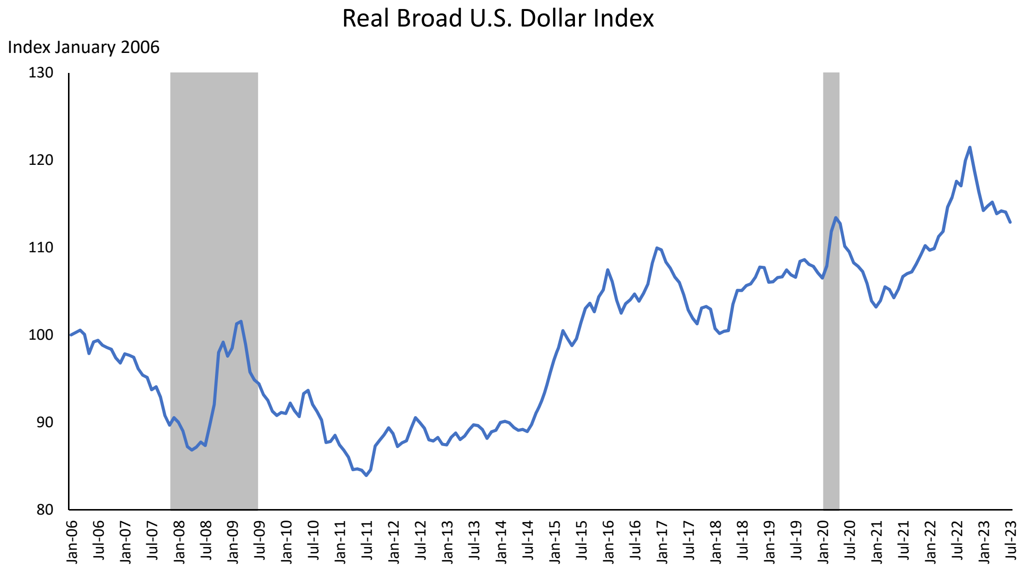
Will U.S. net farm incomes hold up with a stronger value of the U.S. dollar?



Source: Federal Reserve Board of Governors

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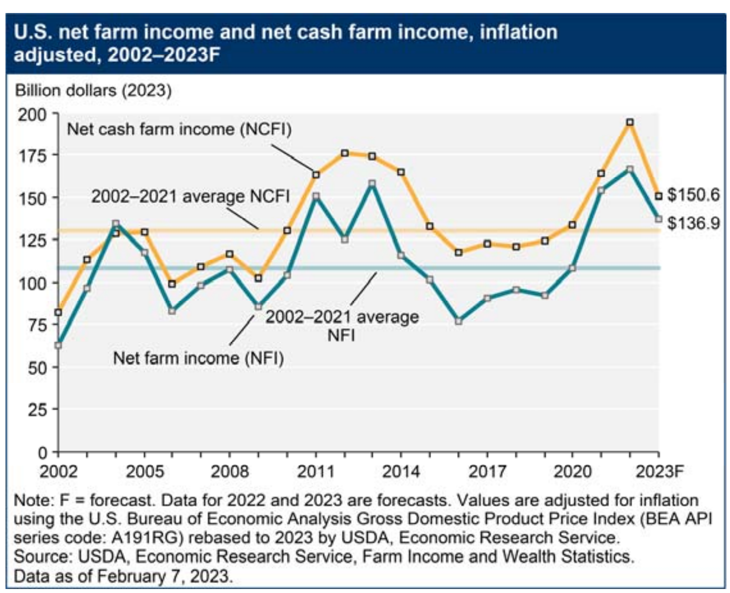
Even though 2023 U.S. net farm incomes are expected to decline, they remain above historical averages.



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Projected Kansas Farm Incomes

- According to a February 2023 fact sheet by Drs. Gregg Ibendahl and Dan O'Brien, farm incomes for Kansas Farm Management Association grain farms only is:

- 2020: Net Farm Income = $190,966
- 2021: Net Farm Income = $355,467
- 2022: Net Farm Income (projected) = $156,767
- 2023: Net Farm Income (forecast) = $40,566

- 20-year average = $106,000

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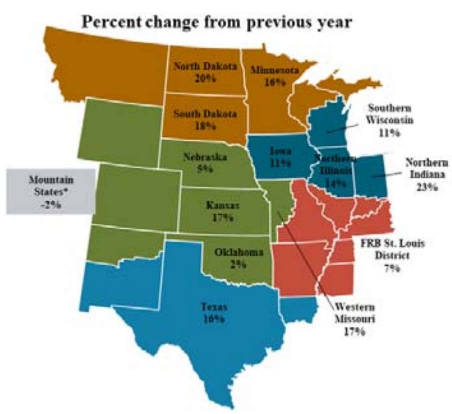
Farmland values continue to rise year-over-year, but will they level off?

Map: Nonirrigated Cropland Values, Fourth Quarter 2022



*Mountain States include Colorado, northern New Mexico and Wyoming, which are grouped because of limited survey responses from each state.
Sources: Federal Reserve District Surveys of Agricultural Credit Conditions

Article: https://www.kansascityfed.org/agriculture/agfinance-updates/farm-loan-interest-rates-rise-sharply/

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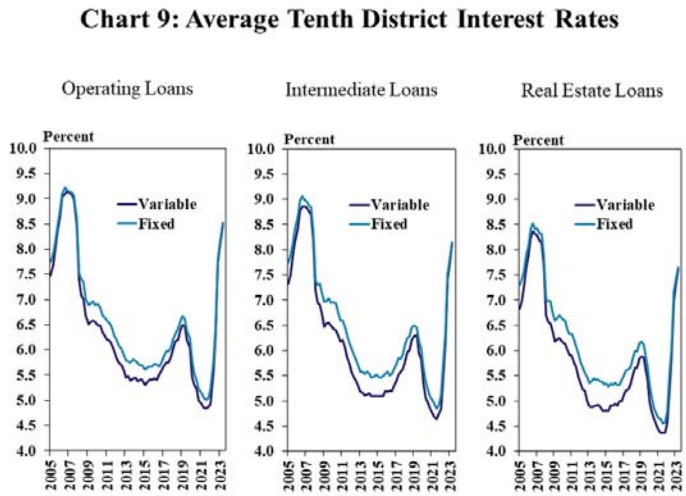
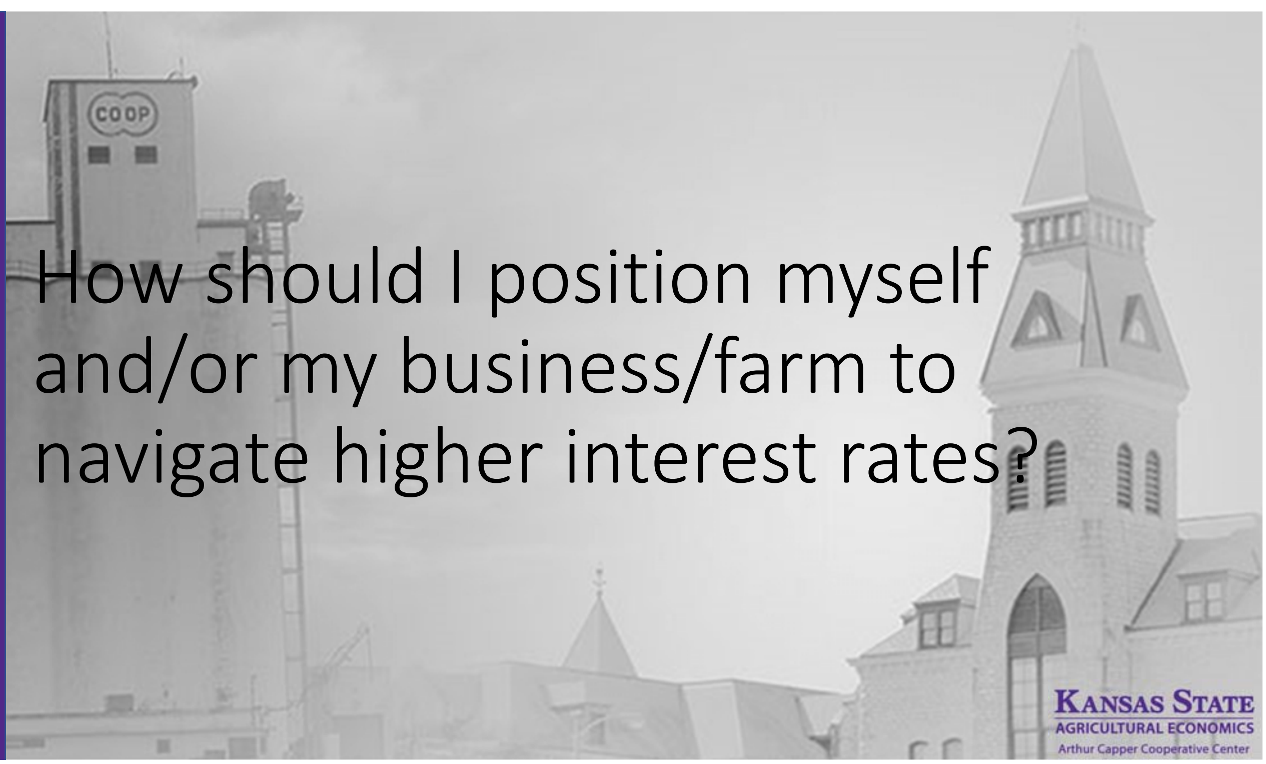
All debt costs are going up.



Source: Federal Reserve Bank of Kansas City's Ag Credit Survey
Article: https://www.kansascityfed.org/agriculture/ag-credit-survey/tenth-district-ag-credit-conditions-moderate/



How should I position myself and/or my business/farm to navigate higher interest rates?

How should farms and agribusinesses respond?

- Create a budget and stress test it
- Build your balance sheet
  - Increase liquidity
  - Use debt wisely
- Be extremely efficient
  - Pore over your operation to increase efficiency
  - Control costs
  - Know your breakevens
- Still look for opportunities to expand or improve your operation
  - Opportunities will emerge

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Thank You and Questions

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