Macroeconomy and Interest Rates

Ag Lenders Conference

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Professor and Director

October 1st and 2nd, 2024

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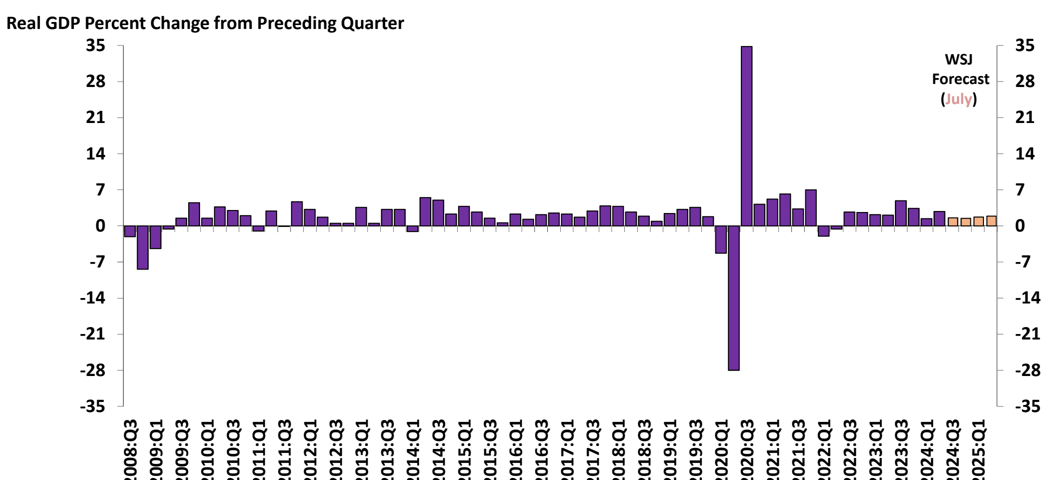
U.S. economic growth has remained resilient amid rising interest rates and higher inflation.



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

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What is the relationship of the agricultural industry to the broader U.S. economy?

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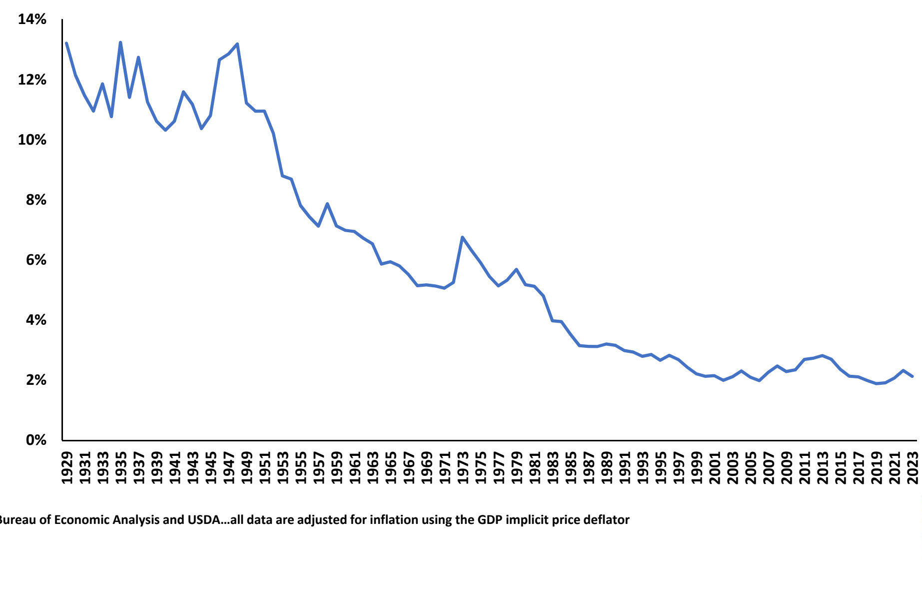
Over time, the ratio of the value of U.S. agricultural production to U.S. GDP has fallen.

Ratio of U.S. Value of Agricultural Production to U.S. Gross Domestic Product



Source: Bureau of Economic Analysis and USDA…all data are adjusted for inflation using the GDP implicit price deflator

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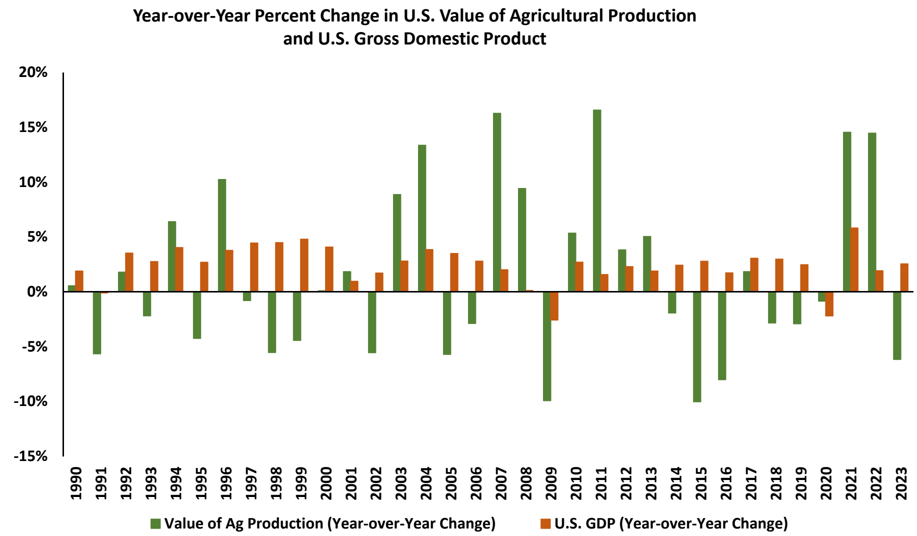
Since 1990, there is very little correlation between the value of U.S. agricultural production and U.S. GDP



Source: Bureau of Economic Analysis and USDA…all data are adjusted for inflation using the GDP implicit price deflator

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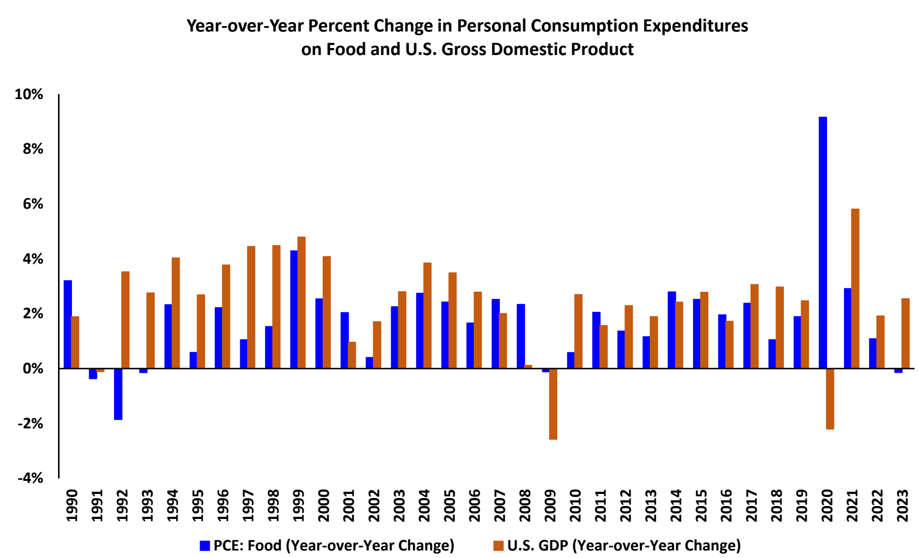
Excluding 2020, there is some positive correlation between U.S. food consumption and U.S. GDP.



Source: Bureau of Economic Analysis…all data are adjusted for inflation using the GDP implicit price deflator

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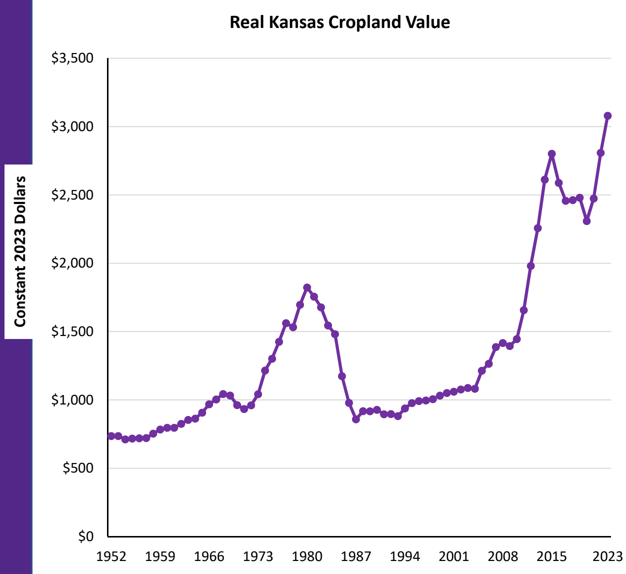
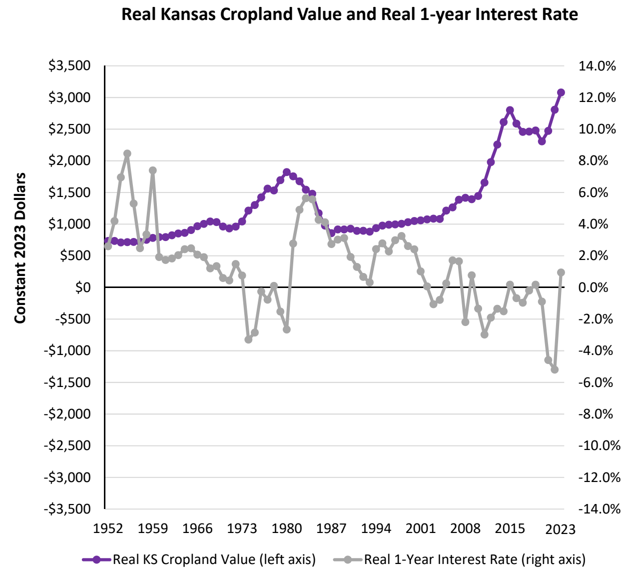
Real interest rates have a relationship to farmland values.



Source: USDA/NASS and Bureau of Economic Analysis



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What is the future path of interest rates?

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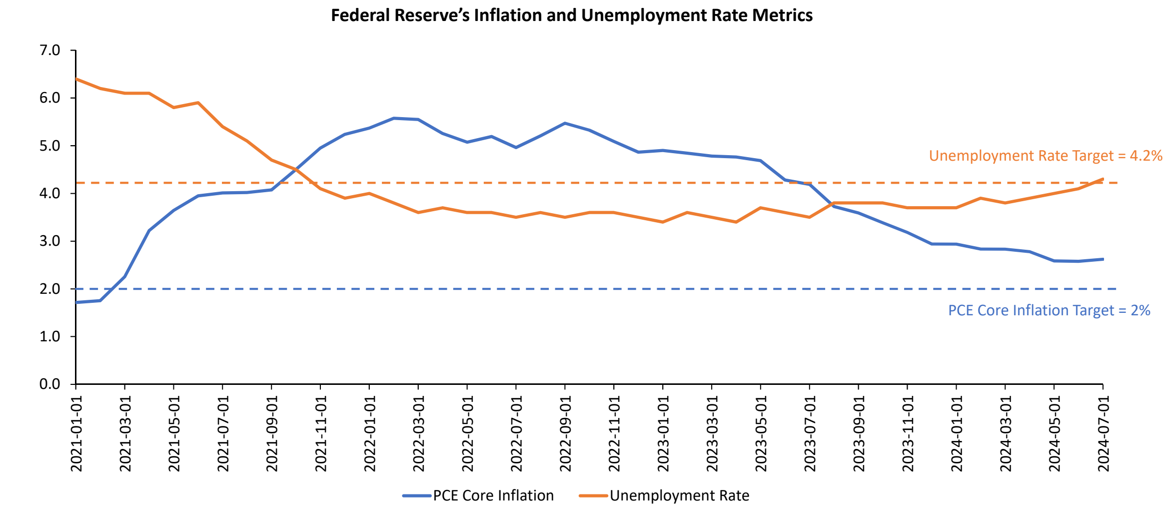
The Federal Reserve's dual mandate is approaching target levels for stable prices and full employment.



Source: Bureau of Economic Analysis and Bureau of Labor Statistics

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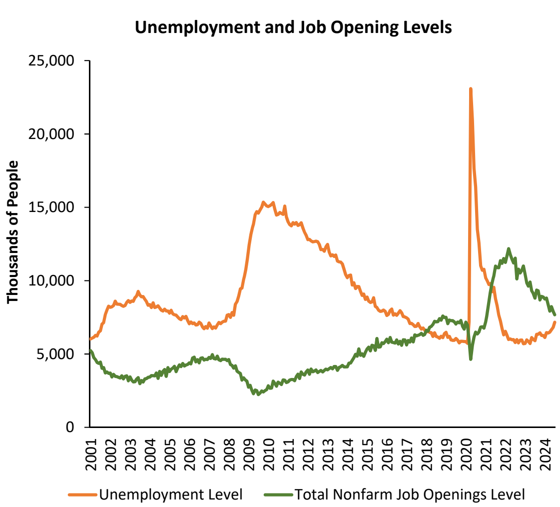
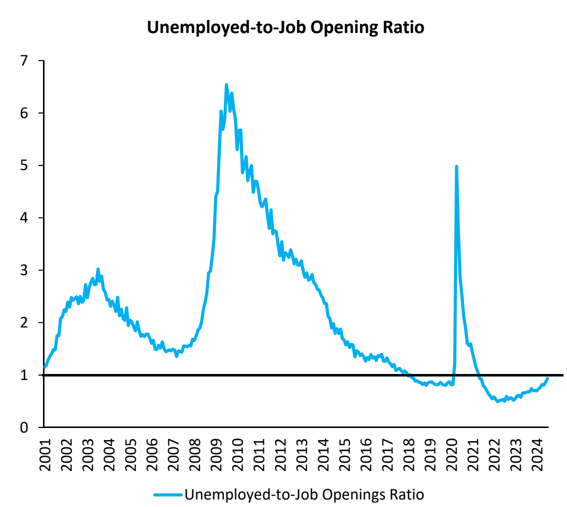
The labor market is becoming more balanced.





Source: Bureau of Labor Statistics

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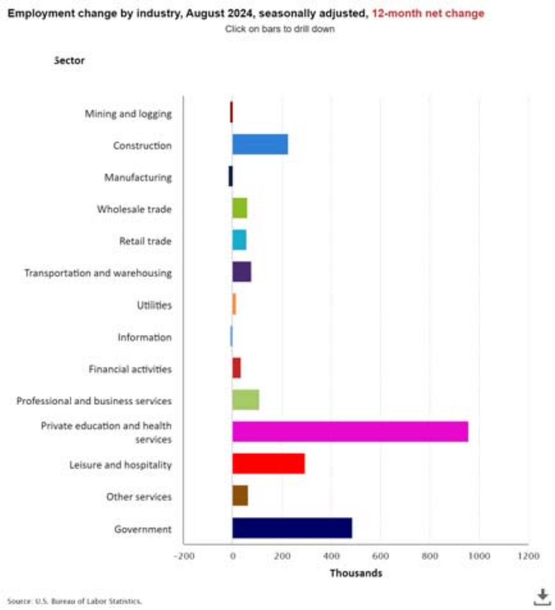
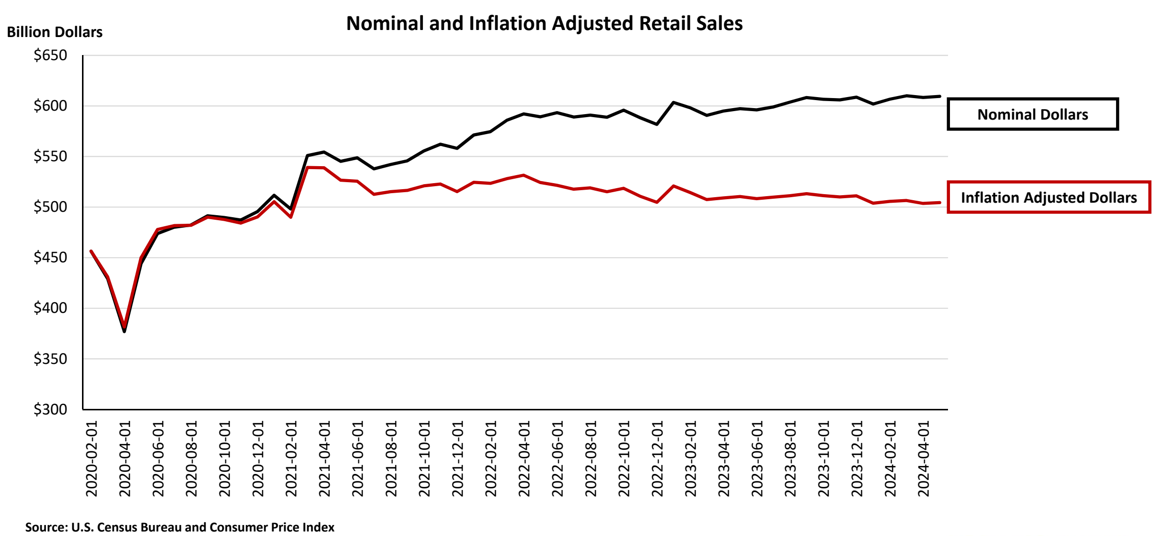
Biggest improvement in employment is coming from private education and health services as well as government.



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



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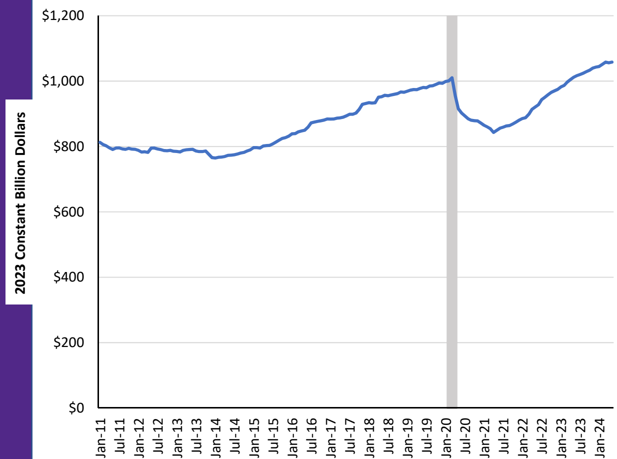
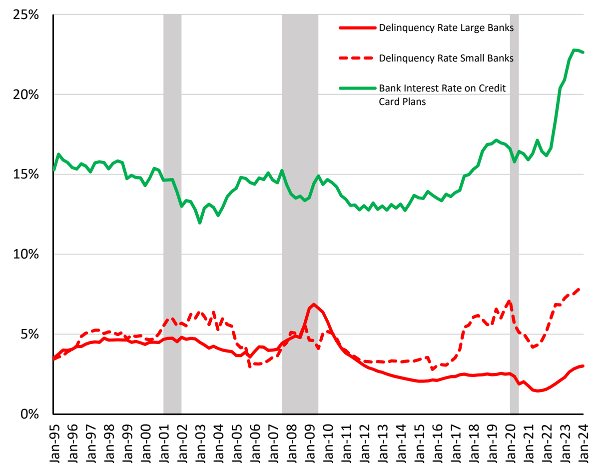
Credit card debt and delinquency rates are back to pre-Pandemic levels, and credit card interest rates are surging.



Source: Board of Governors and PCE Index



Source: Board of Governors and PCE Index

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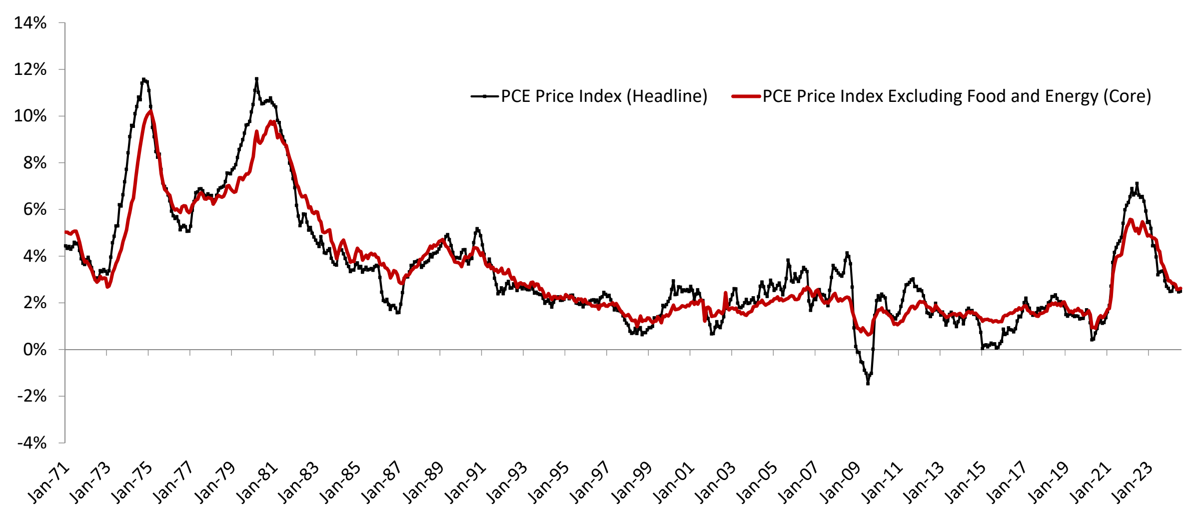
Personal consumption expenditures price indices are coming off of recent highs…will they continue to fall?



Source: U.S. Bureau of Economic Analysis

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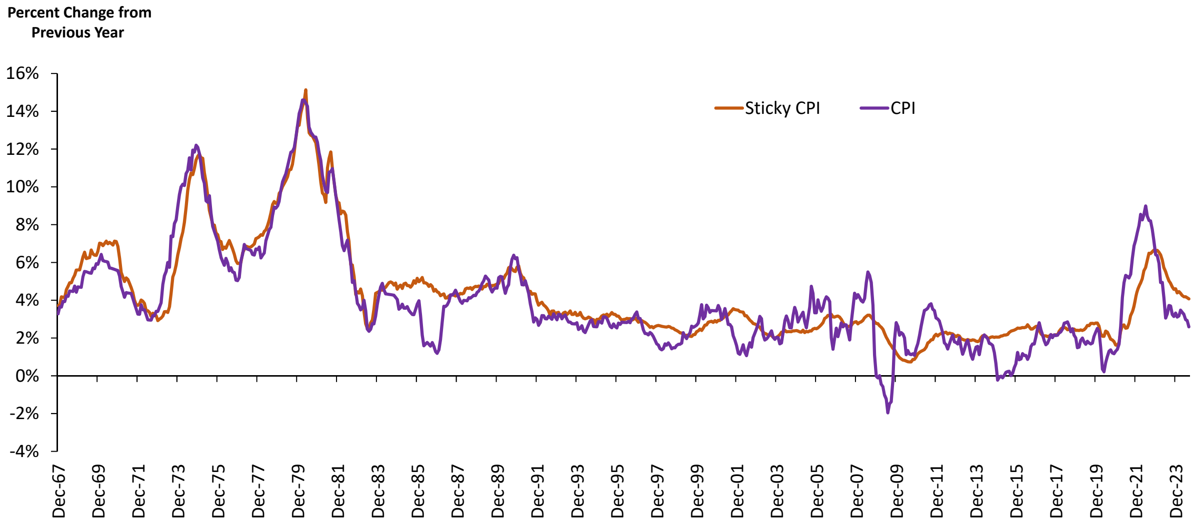
“Sticky” inflation continues to be stubbornly high.



Source: U.S. Bureau of Economic Analysis

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What about stagflation of the 1970s? Could it rear its ugly head?

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What led up to the stagflation of the 1970s? Why the drop in interest rates and then massive increase?

- Government budget deficits
  - Today: Yes
- Repeal of Bretton Woods ("gold standard")
  - Today: Zero bound interest rates and quantitative easing?
- Crude oil prices surged
  - Today: Not really
- US embargoed oil from Iran
  - Today: Trade wars?
- Confidence in the Fed waned and inflation expectations were no longer well anchored
  - Today: Not at the moment
- Wage-cost spiral
  - Today: No spiral but saw the beginning

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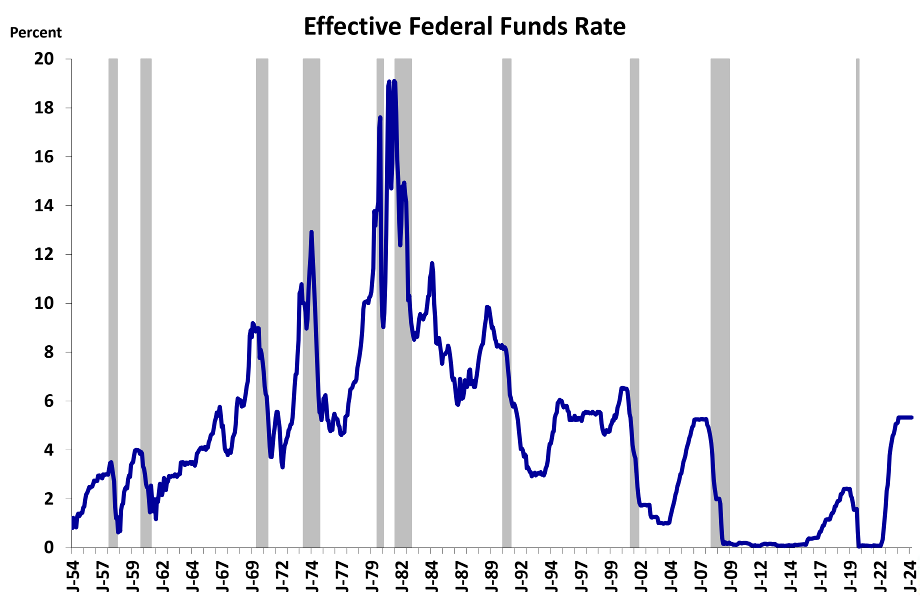
After a protracted period of exceptionally low interest rates, the Fed quickly raised interest rates and are now lowering rates.



Source: Federal Reserve Board of Governors

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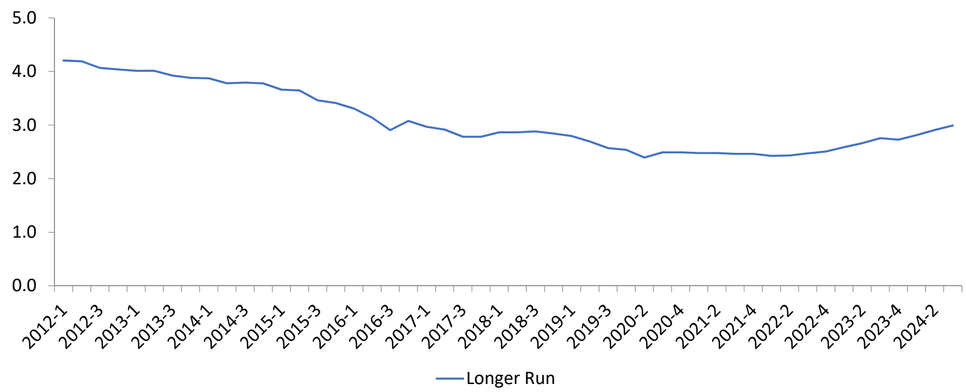
However, will the Federal Open Market Committee (FOMC) maintain higher interest rates into the future?



Source: Federal Open Market Committee (FOMC) Projections materials

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Implications of FOMC mid-point longer term interest rate projections for agricultural producers

- Traditional interest rate setting rules of thumb
- Projected mid-point: ≈2.5%
- Prime rate: ≈5.5%
- Loan/borrower adjustment: 1% to 4%
  - Borrower default risk
  - Industry risk
  - Loan size

- Longer term agricultural interest rates range from 6.5% to 9.5%

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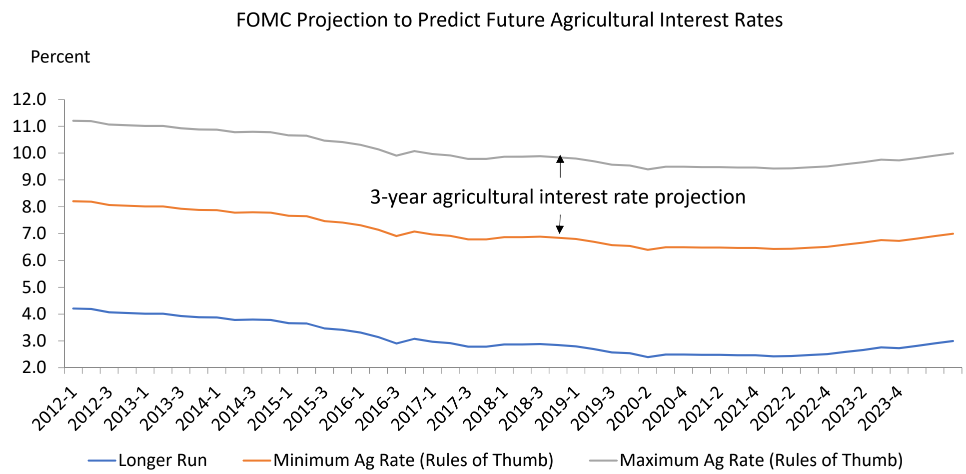
Using the FOMC projection for future agricultural interest rates



Source: Federal Open Market Committee (FOMC) Projections materials and author's calculations

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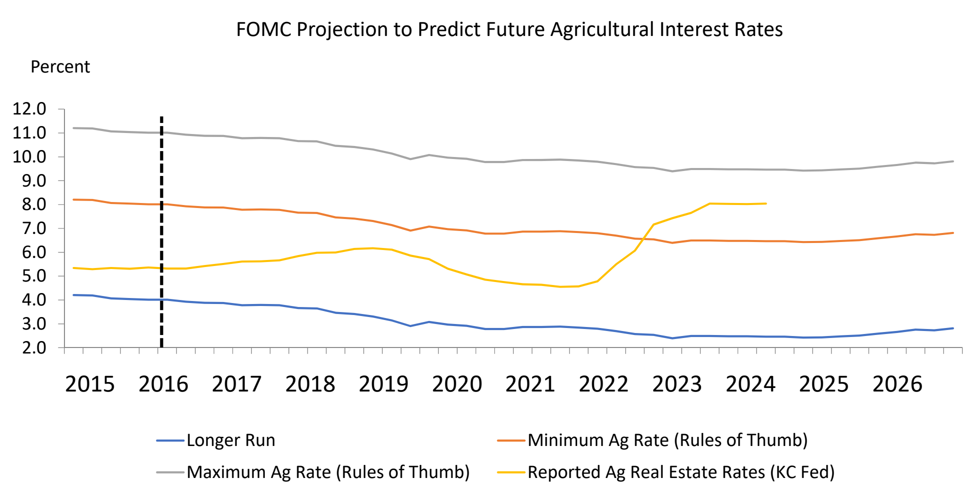
How well does the FOMC projection predict future agricultural interest rates?



Source: Federal Open Market Committee (FOMC) Projections materials, Federal Reserve Bank of Kansas City's Agricultural Credit Survey, and author's calculations

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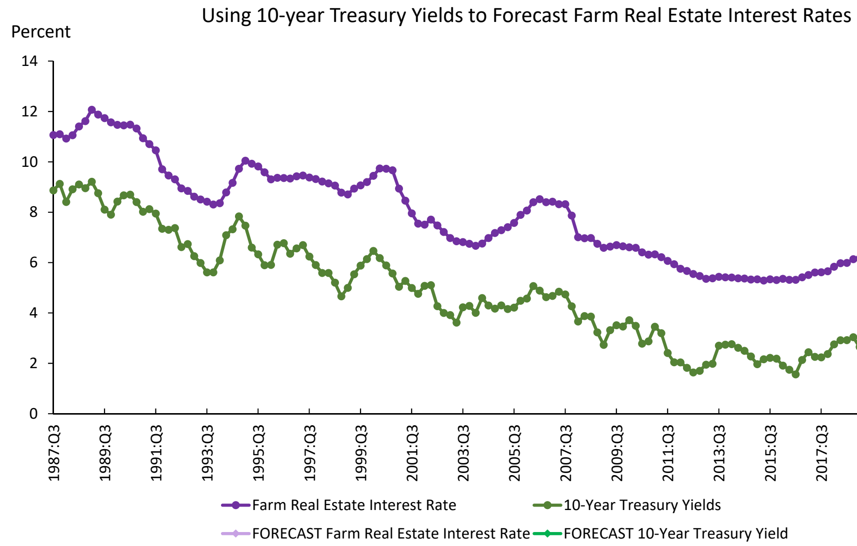
10-year treasury yields are correlated with farm real estate interest rates



Source: Federal Reserve Bank of Kansas City, Board of Governors, Econforecasting.com, and author's calculations

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When will the U.S. enter a recession?

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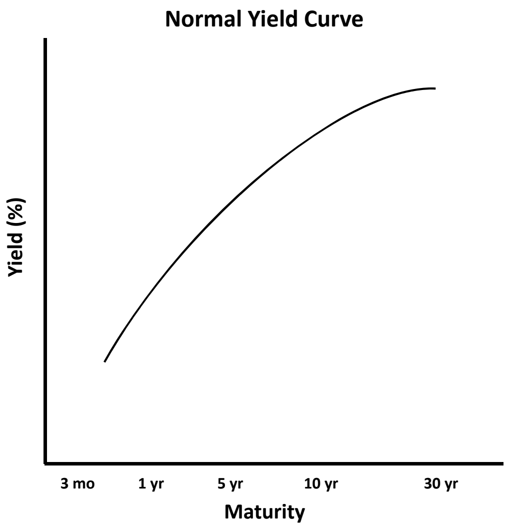
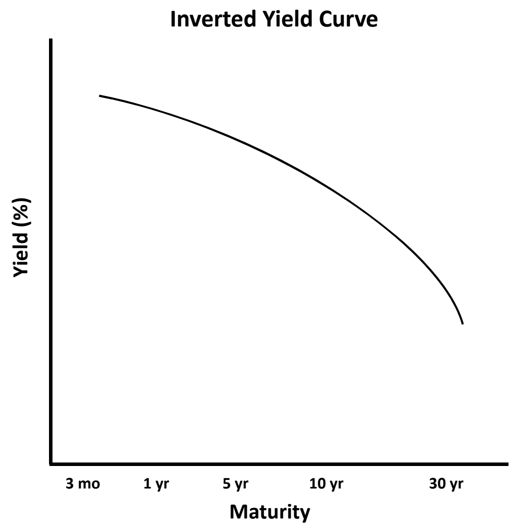
A leading indicator of the U.S. entering a recession tends to be an inverted yield curve.





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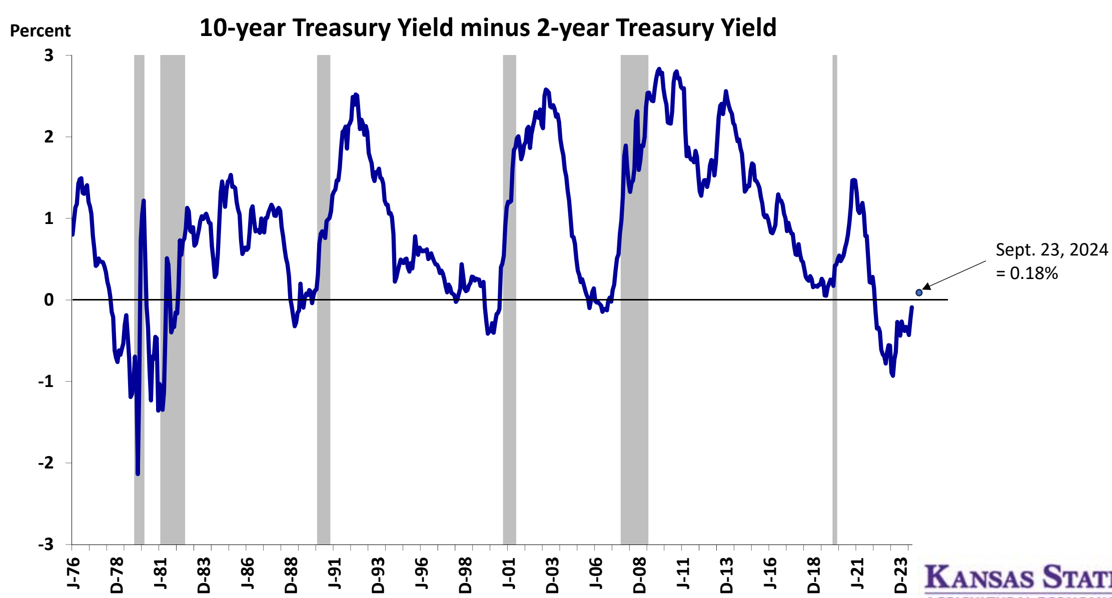
An inverted yield curve suggests a U.S. recession is on the horizon.



Source: U.S. Treasury Department

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Key takeaways

- While agriculture is a small component of GDP, interest rate movements have a relationship and connection to farmland values
  - Low to negative real interest rates tend to increase land values
  - High real interest rates tend to hold land values flat
- The Fed decreased interest rates to “normalize” them
  - The Fed was more aggressive than market expectations…implications?
- Farm real estate interest rates could approach 6.5% to 7% in 2025
  - Especially if 10-year treasury yields fall
- Interest rate movements are outside of your control. Maintaining a good working relationship with your customers is under your control.

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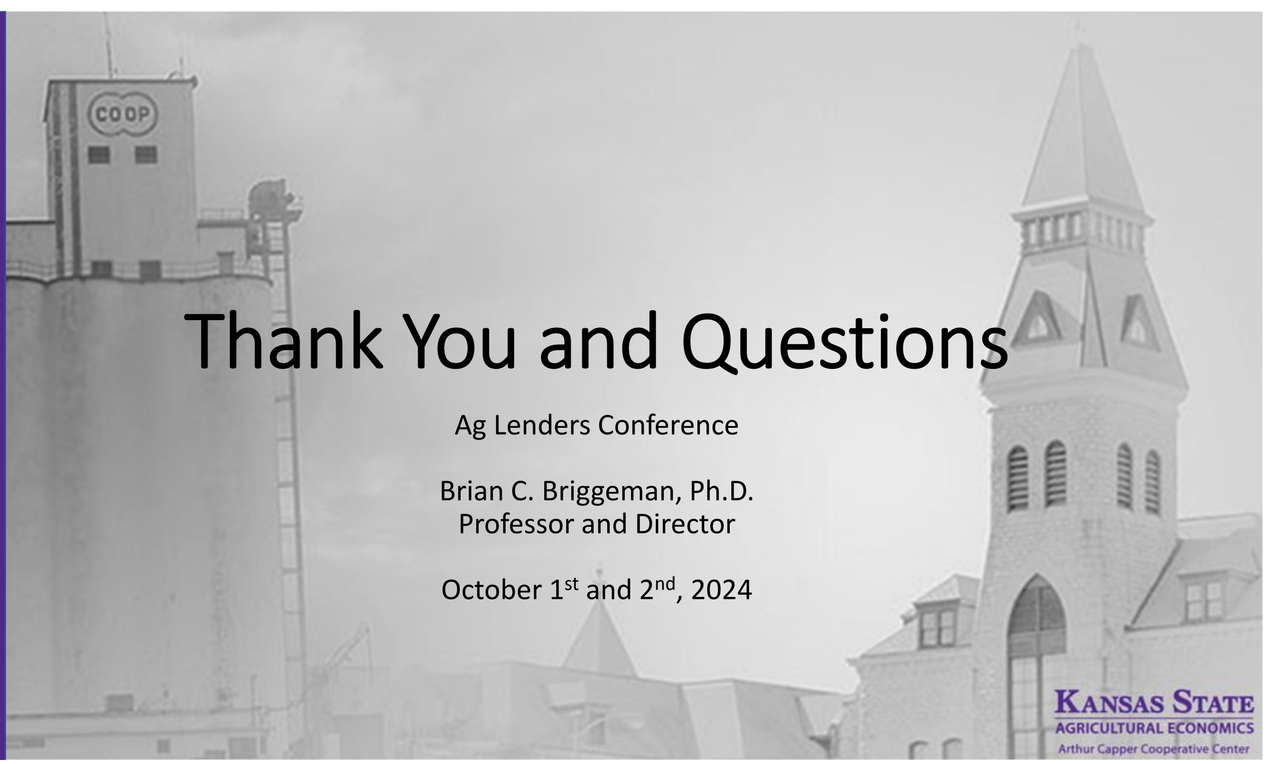

Thank You and Questions

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