Macroeconomy and Interest Rates

Ag Lenders Conference

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Professor and Director

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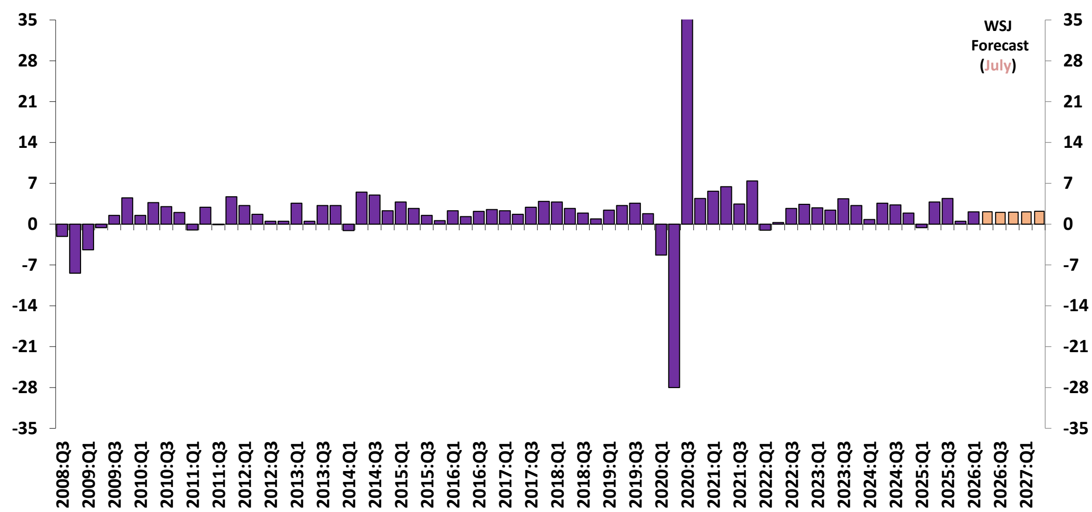
U.S. economic growth is projected to be a steady 2%

Real GDP Percent Change from Preceding Quarter



Source: Bureau of Economic Analysis and Wall Street Journal (WSJ) July 2026 Forecast Survey (Average)

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What is the future path of interest rates?

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Factors impacting the Fed’s decision on interest rates

- Labor market
  - Softening? Resilient?
- Inflation
  - Definitely rising but, is it elevated?
- Economic growth
  - Sustainable?
- Market expectations
  - CME 56% chance rate increase in October 2026

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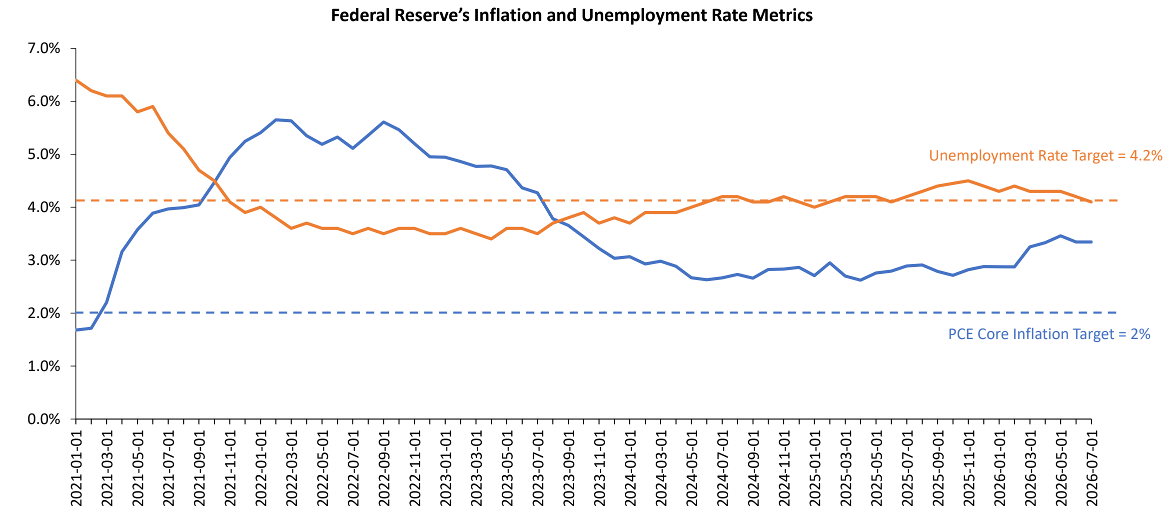
The Federal Reserve's dual mandate is at target level for full employment, but trending above the target for stable prices.



Source: Bureau of Economic Analysis and Bureau of Labor Statistics

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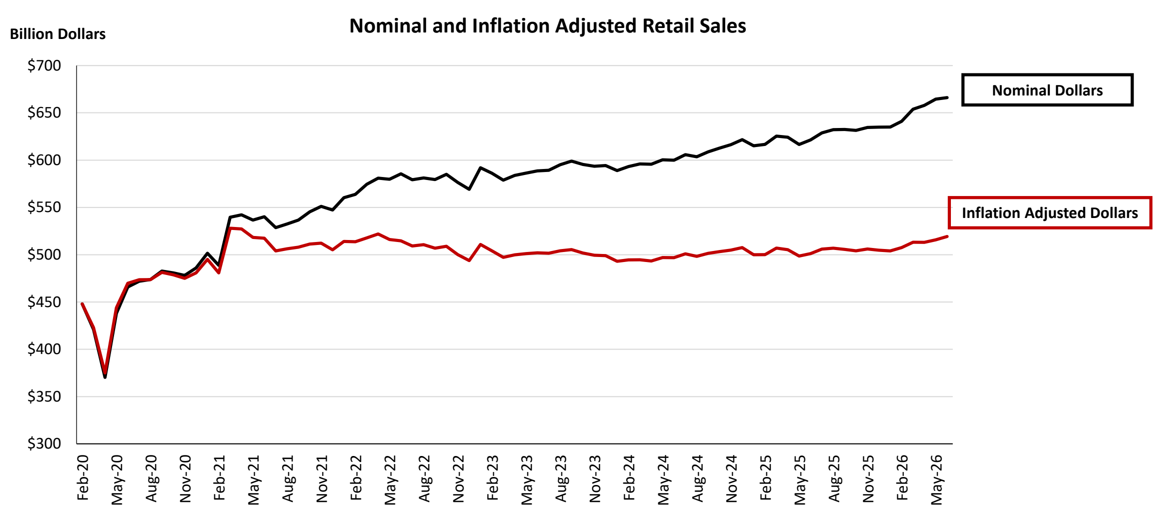
Nominal retail sales are rising, while inflation adjusted retail sales edging up, which suggests consumer demand is resilient.



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

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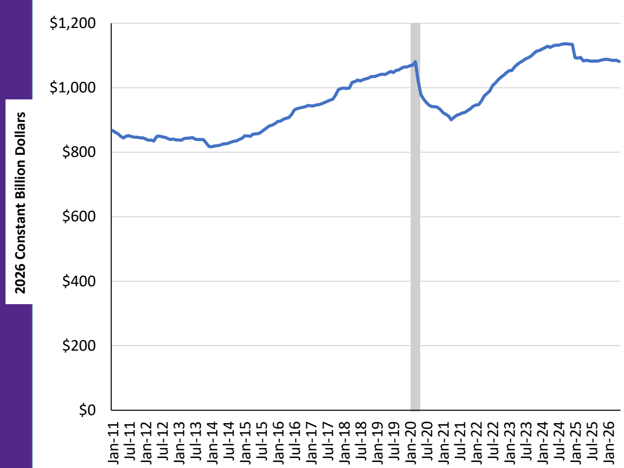
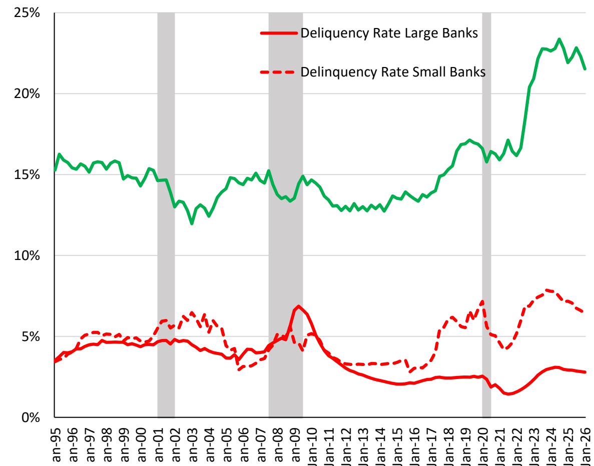
Credit card debt and delinquency rates are back to pre-Pandemic levels, and credit card interest rates are surging.

Inflation Adjusted Consumer Loans: Credit Cards and Other Revolving Plans



Source: Board of Governors and PCE Index

Credit Card Delinquency Rate by Bank Size and Credit Card Interest Rates



Source: Board of Governors and PCE Index

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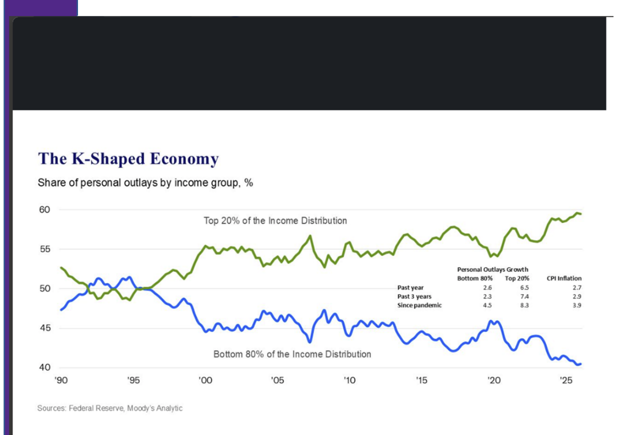
K-Shaped economy? E-Shaped economy?



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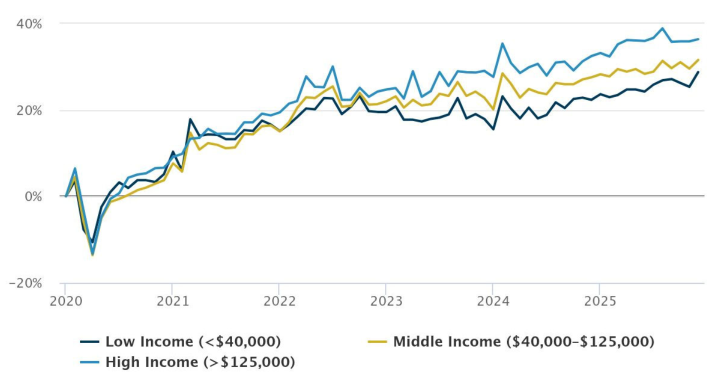
Retail spending by household income, cumulative growth since 2020 (New York Fed)



Source: Economic Heterogeneity Indicators, Federal Reserve Bank of New York.

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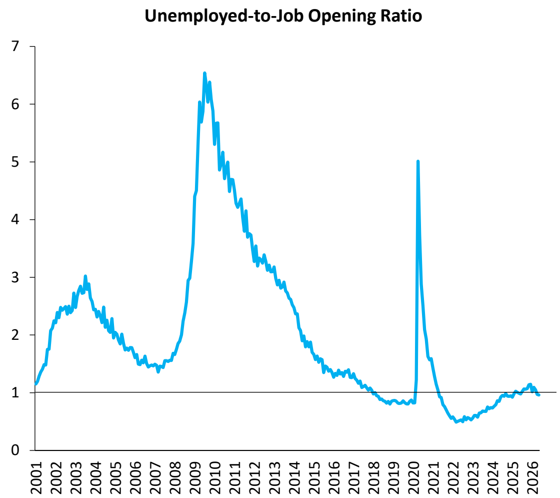
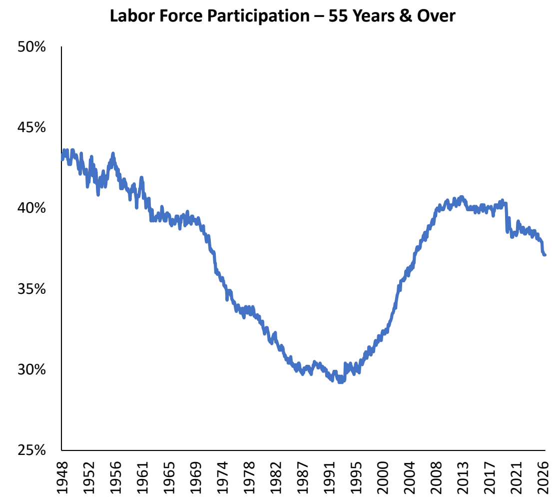
Today, the labor market is more balanced, but what about the future?





Source: Bureau of Labor Statistics

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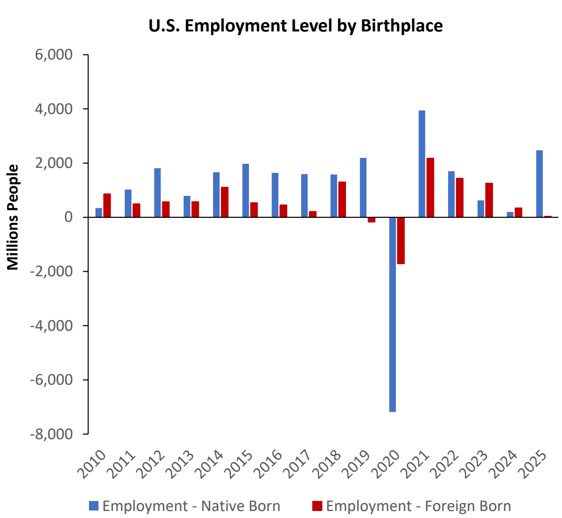
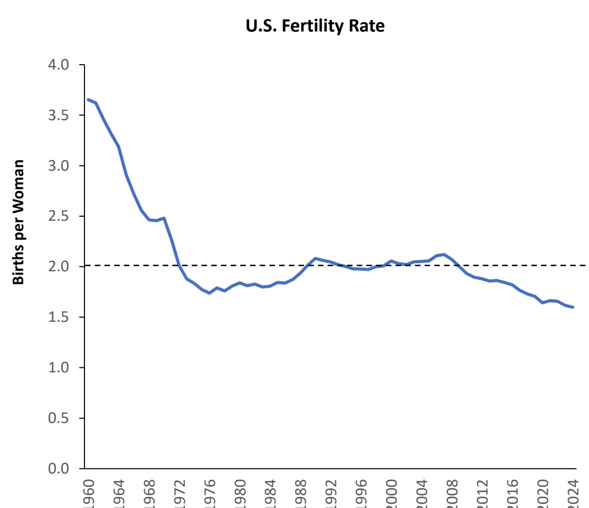
Could the future of US labor force could decline significantly?





Source: Bureau of Labor Statistics and World Bank

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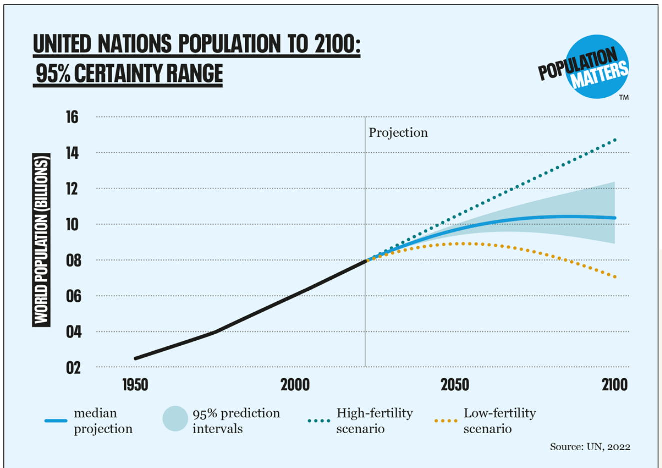

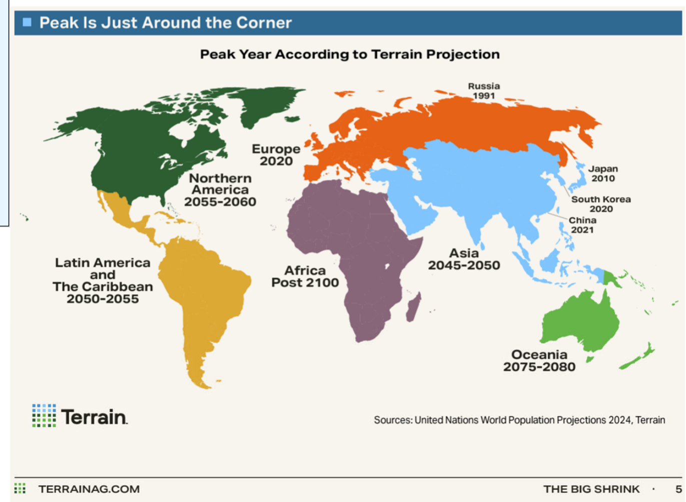

What about stagflation of the 1970s? Could it rear its ugly head?

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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

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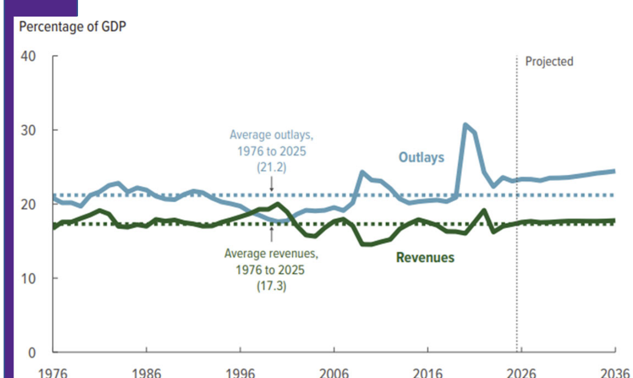
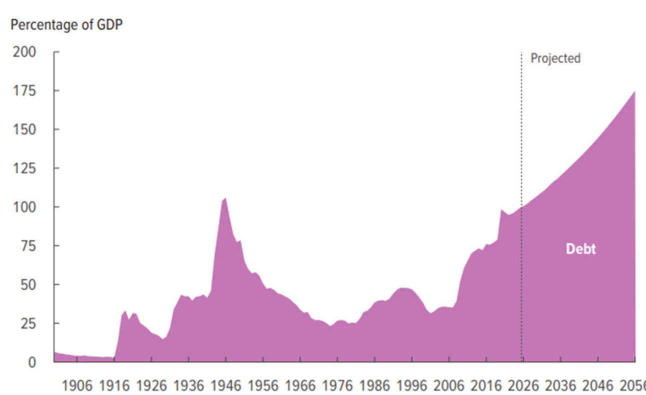
In 2025, U.S. federal deficit spending was projected to continue, and federal debt is expected to rise…





Source: Congressional Budget Office

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10-year U.S. treasury yields are elevated (farm interest rates?)…

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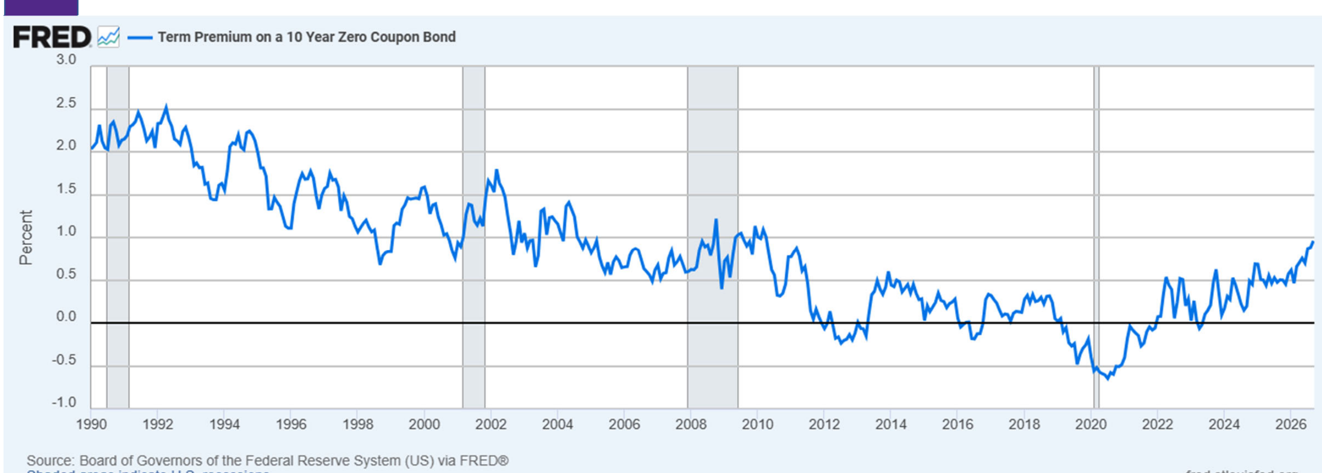
…term premiums on 10-year treasuries is rising (risk).



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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?

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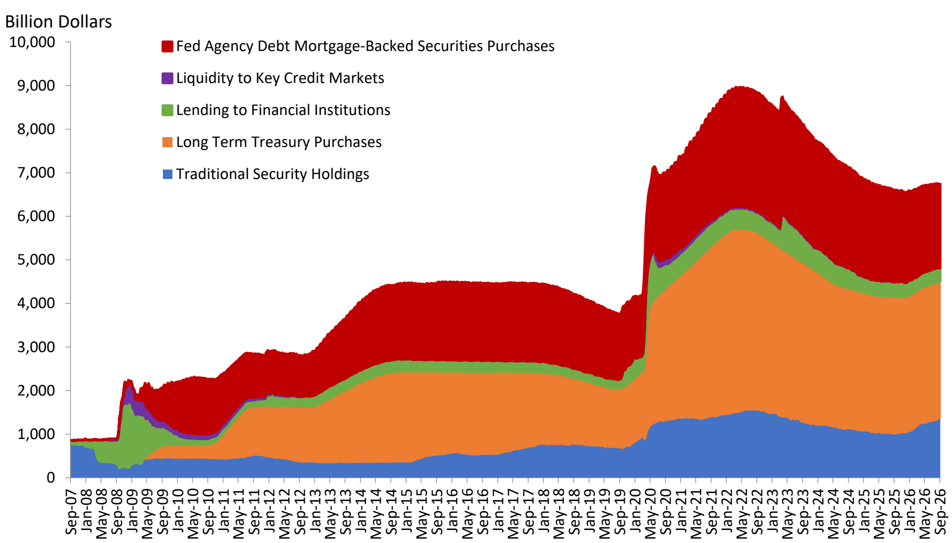
The Federal Reserve’s balance sheet is shrinking…what does that mean for the economy?



Source: Federal Reserve Bank of Cleveland

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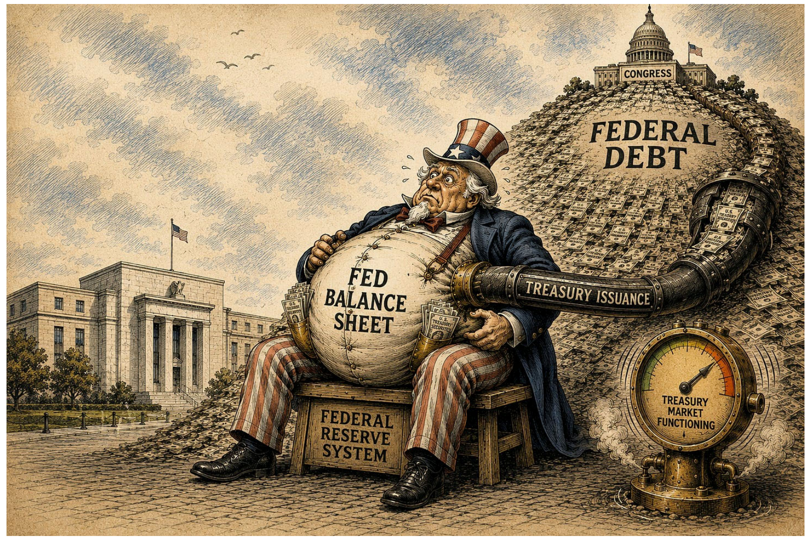
The Fed's Balance Sheet Girth: A Symptom, Not the Problem
By Thomas Hoenig at www.finregrag.com

"The problem is that the Federal Reserve System has allowed itself to become subservient to fiscal policy and has adopted an implicit mandate to keep the Treasury market "smoothly functioning" and highly liquid."



What led up to the stagflation of the 1970s? And where are we at today?

- Government budget deficits
  - Today: Yes
- Repeal of Bretton Woods ("gold standard")
  - Today: Zero bound interest rates and quantitative easing
- Crude oil prices surged
  - Today: Rising
- US embargoed oil from Iran
  - Today: War
- 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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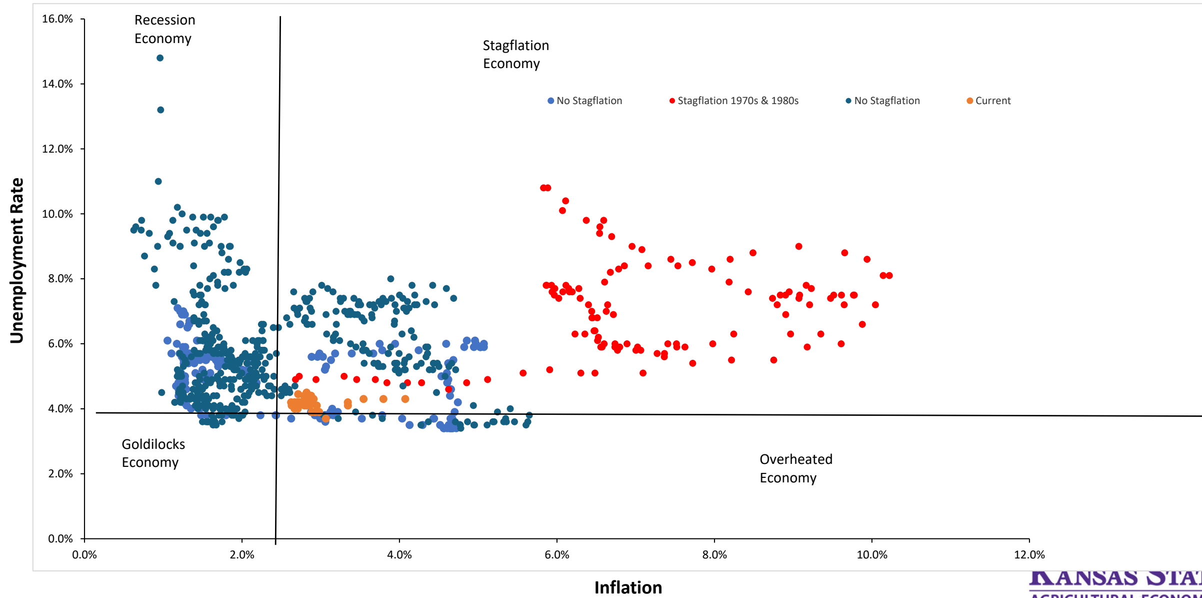
How has the Federal Reserve performed relative to its dual mandate over time?



Source: Bureau of Economic Analysis and Bureau of Labor Statistics

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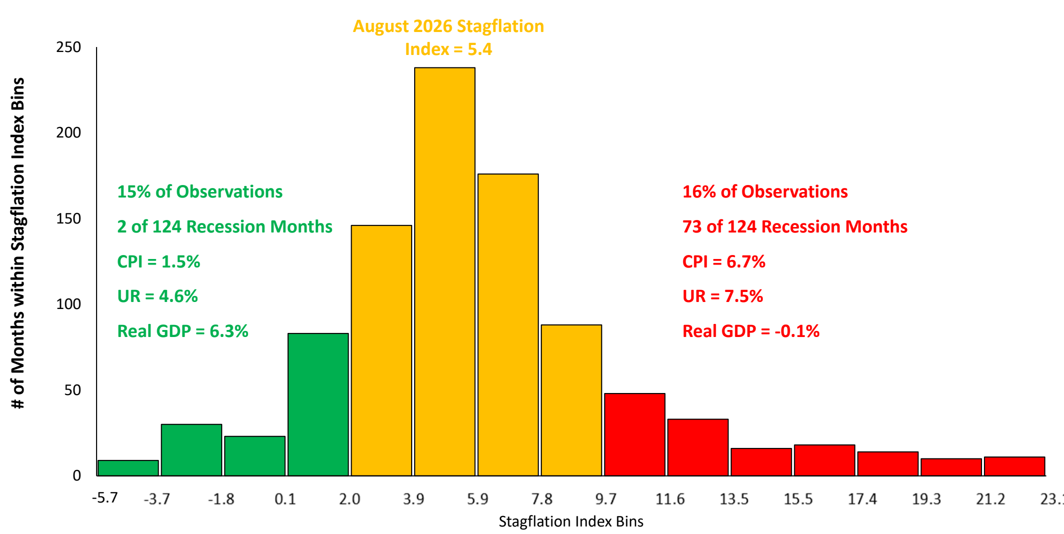
Today's stagflation index risk level is moderate



Stagflation Index = Inflation Rate (CPI) + Unemployment Rate – Real GDP Y-o-Y Δ

Source: Bureau of Economic Analysis and Bureau of Labor Statistics

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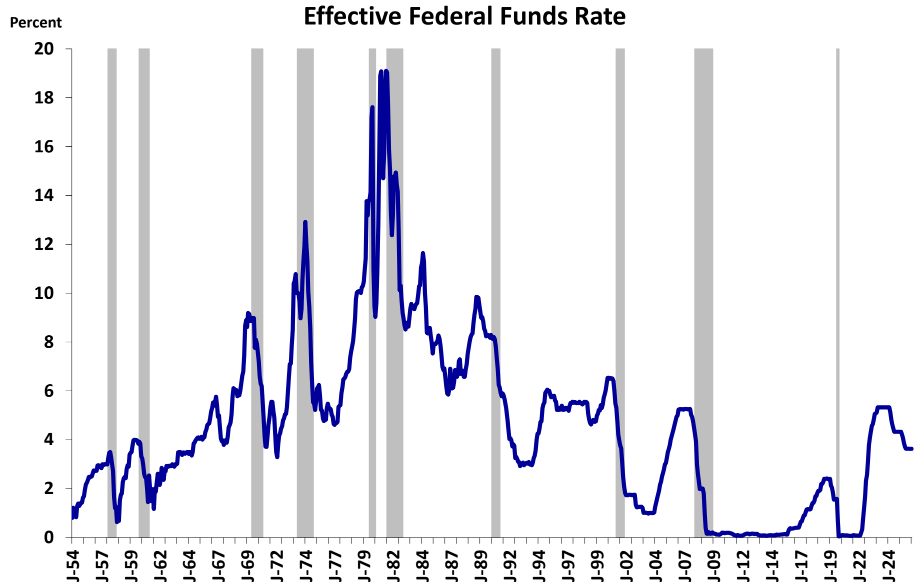
After a period of exceptionally low interest rates, the Fed quickly raised interest rates, lowered rates, and now is ‘wait and see’



Source: Federal Reserve Board of Governors

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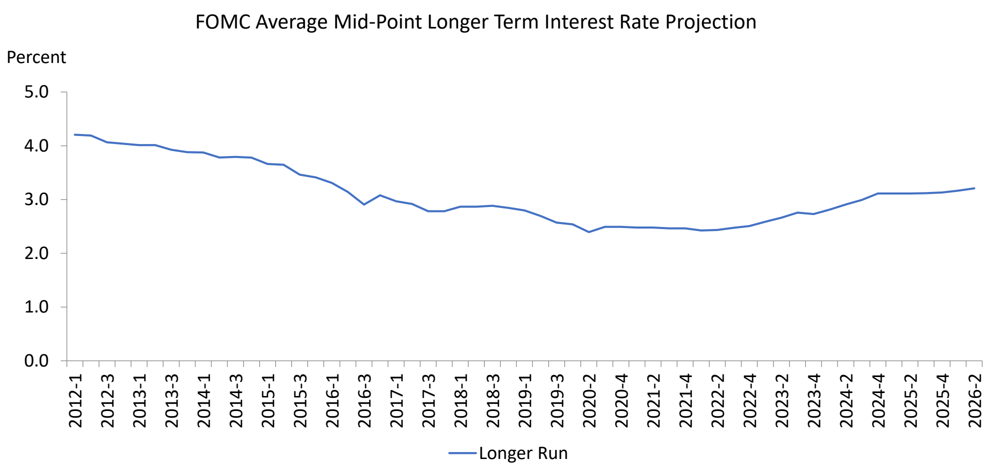
However, will the Federal Open Market Committee (FOMC) maintain higher interest rates into the future?



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: ≈3%
- Prime rate: ≈6%
- Loan/borrower adjustment: 1% to 4%
  - Borrower default risk
  - Industry risk
  - Loan size

- Longer term agricultural interest rates range from 7% to 10%

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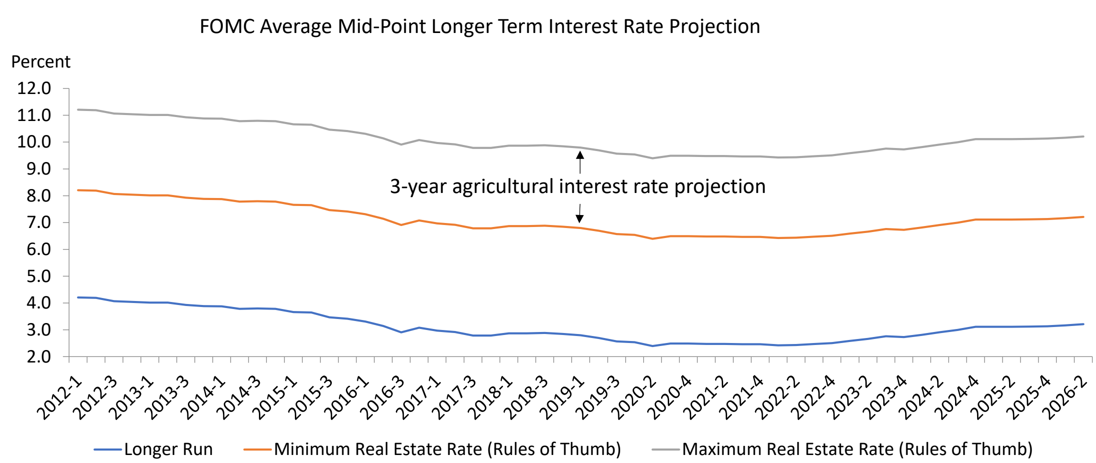
Using the FOMC projection for future agricultural interest rates



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

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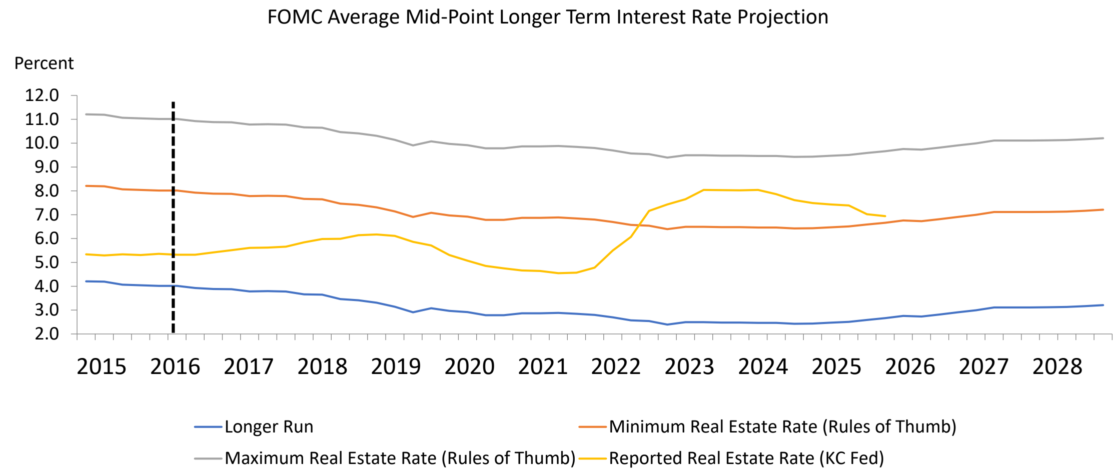
How well does the FOMC projection predict future agricultural interest rates?



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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Key takeaways

- Elevated real interest rates are a headwind on farmland value gains
- The Fed raised interest rates…will this continue?
  - Could the Fed raise their 2% interest rate target? Should they raise it?
- While there are signs pointing to a possible stagflation U.S. economy, the risk level is moderate
- Will farm real estate interest rates rise along with potential increases in 10-year U.S. Treasury Yields or hold steady?
  - Elevated default risk compensation (term premium 10-year zero coupon)
- Interest rate movements are outside of your control. So, what can you do?

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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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