

Macroeconomic Outlook

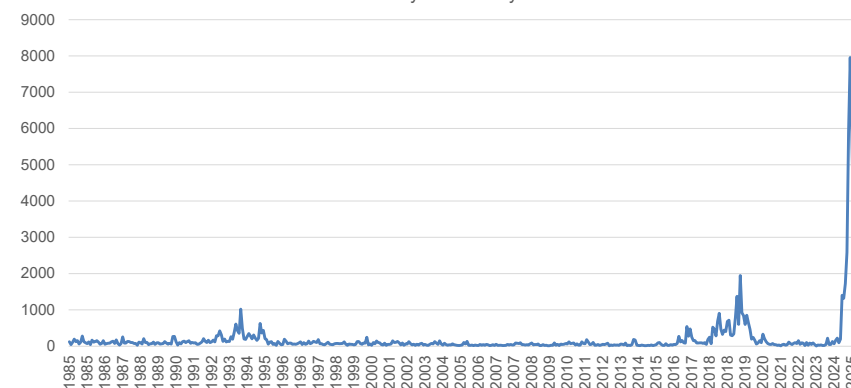
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Level of Uncertainty in the Economy High?

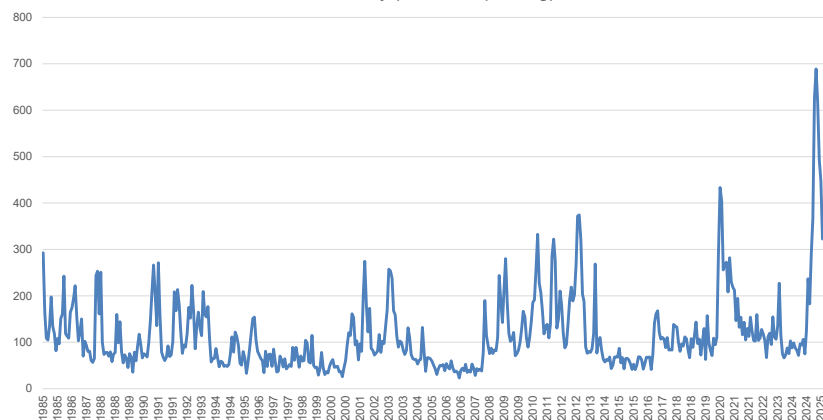
Trade Policy Uncertainty Index



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Level of Uncertainty in the Economy High?

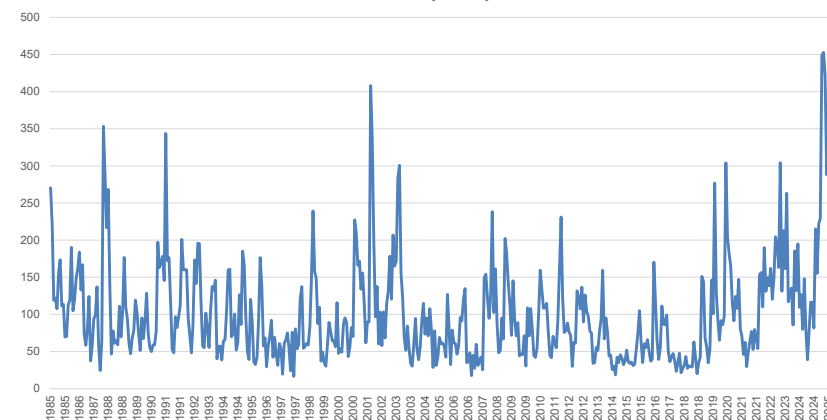
Fiscal Policy (Taxes or Spending)



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Level of Uncertainty in the Economy High?

Monetary Policy



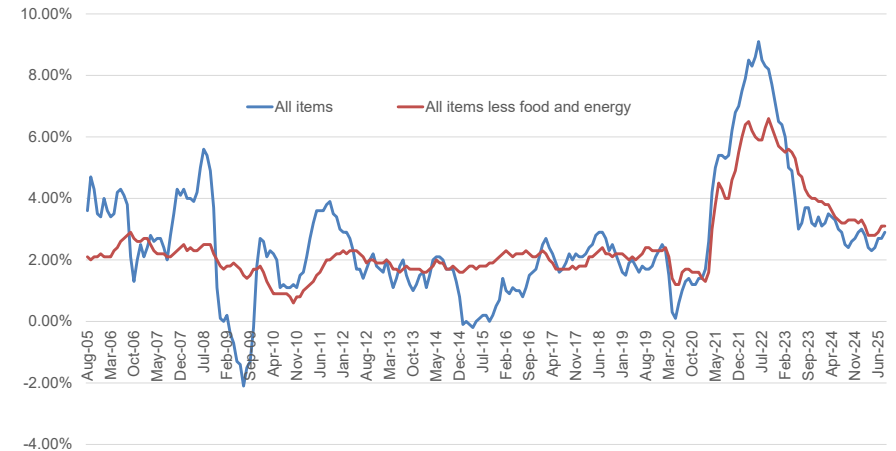
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The FED



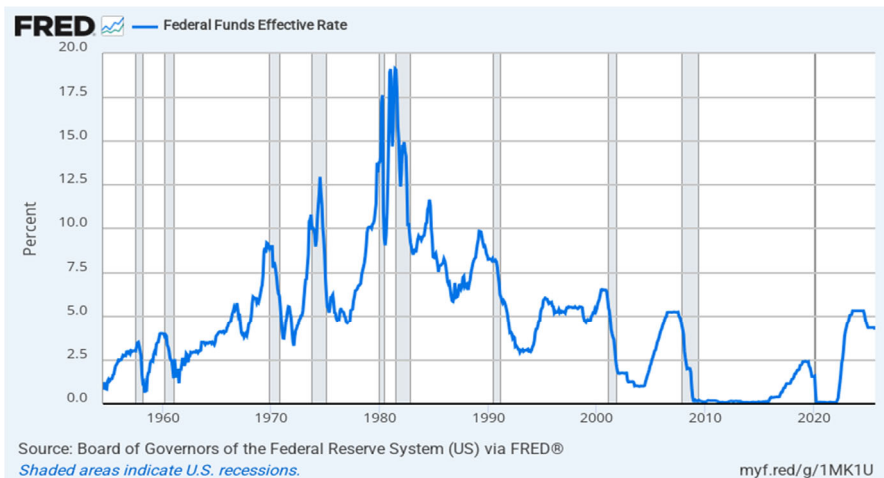
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CPI for Headline and Core Inflation



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To Fight Inflation The FED Increased the Federal Funds Rate



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The Federal Funds Rate Isn't the Only Thing Impacting Interest Rates

- While most of the discussion from news outlets revolves around the federal funds rate, the FED's balance sheet also has a large impact on rates.

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Understanding the Relationship Between the Federal Reserve's Balance Sheet and Interest Rates

- **Long-Term vs. Short-Term Rates:** The balance sheet is a powerful tool used to influence long-term interest rates, typically during severe economic conditions like recessions. Conversely, the federal funds rate is a more direct tool for affecting short-term interest rates in the economy.

The FED and the Balance Sheet

- The Federal Reserve's balance sheet size and composition directly influence interest rates by affecting the quantity of money in the economy and the price of long-term securities.
- An expanded balance sheet (Quantitative Easing) increases bank reserves and money supply, pushing longer-term interest rates down by reducing the supply and increasing the price of assets like Treasury and mortgage-backed securities.
- Conversely, a shrinking balance sheet (Quantitative Tightening) reduces bank reserves, decreases the money supply, and puts upward pressure on interest rates by increasing asset supply and lowering their price.

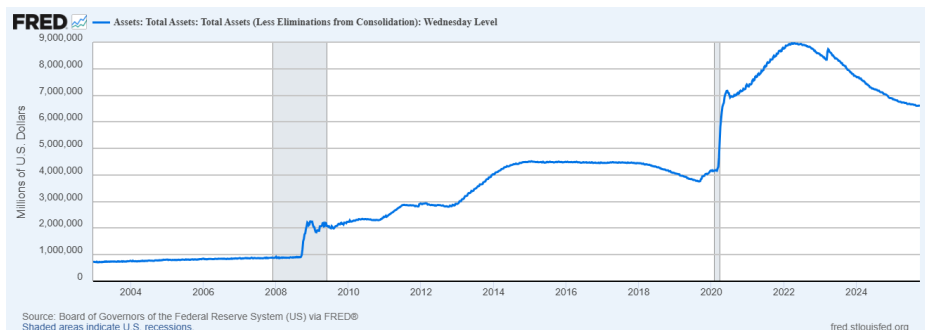
How the Fed Expands its Balance Sheet

1. **Purchasing Assets:** The Fed buys assets, such as U.S. Treasury securities or mortgage-backed securities (MBS), from banks and other financial institutions.
2. **Creating Reserves:** To pay for these assets, the Fed credits the reserve accounts of the banks involved, increasing the total amount of money in the financial system and expanding its own balance sheet.
3. **Impact on Rates:**
 1. **Decreases Long-Term Rates:** By purchasing a large number of long-term assets, the Fed increases their demand, which drives up their prices and lowers their yields (interest rates), according to the principle that bond prices and interest rates are inversely related.
 2. **Increases Money Supply:** The overall increase in bank reserves leads to a larger monetary base, which provides more liquidity in the economy, making credit more accessible.

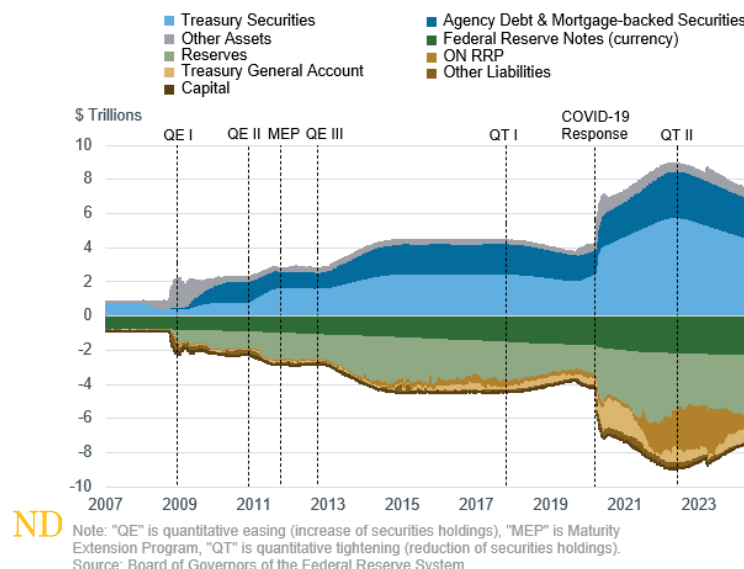
How the FED Shrinks its Balance Sheet

1. **Asset Roll-Off:** The Fed allows its assets to mature without reinvesting the principal (known as Quantitative Tightening).
2. **Reducing Reserves:** When the securities mature, the Fed is paid, and it doesn't create new reserves to replace them. This process effectively removes money from the economy and shrinks the Fed's balance sheet.
3. **Impact on Rates:**
 1. **Increases Long-Term Rates:** With less demand for these long-term assets and their supply increasing as they are less frequently repurchased by the Fed, their prices fall, and their yields rise.
 2. **Decreases Money Supply:** The reduction in bank reserves removes money from the financial system, tightening credit conditions and making it more expensive to borrow.

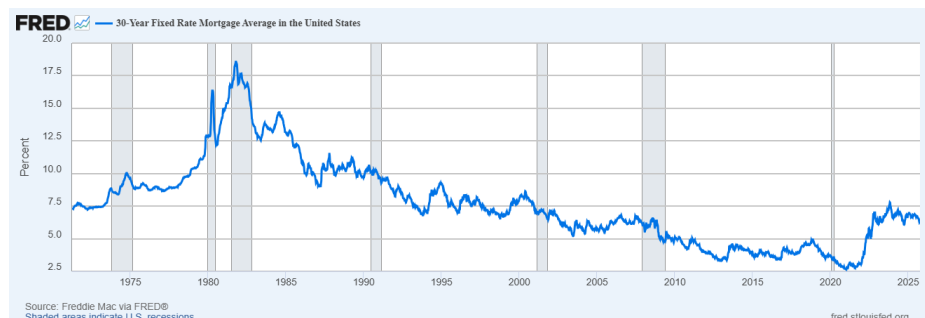
Federal Reserve Balance Sheet



Fed Balance Sheet Composition



30 Year Mortgage Rate

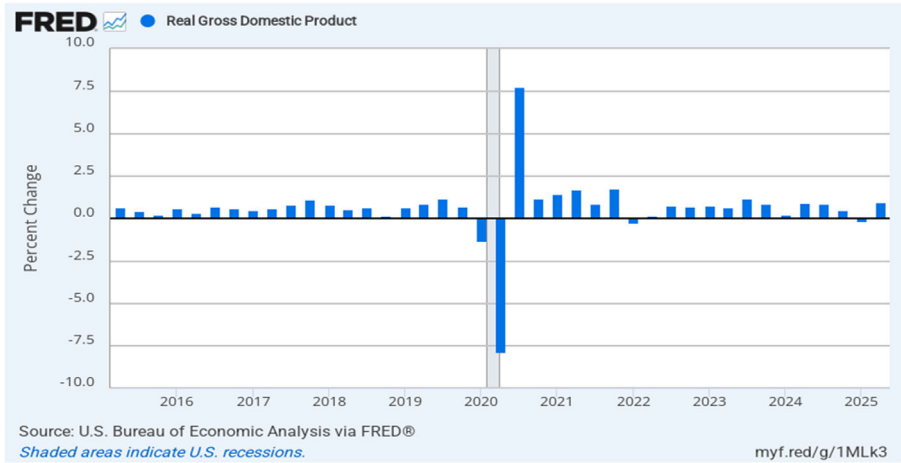


9th District Ag. Interest Rates

Agricultural interest rates from the Federal Reserve Bank of Minneapolis' quarterly Ag Credit Survey

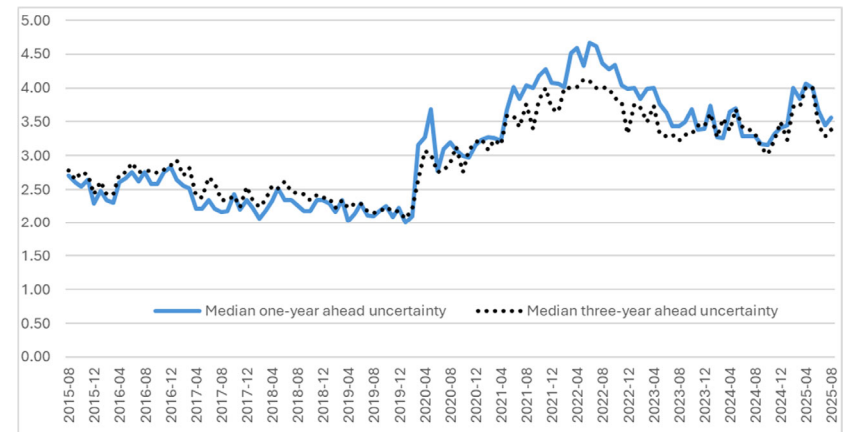
		Operating		Machinery		Real estate	
		Fixed	Var.	Fixed	Var.	Fixed	Var.
Q3-23	October	8.8	8.7	8.3	8.2	7.9	7.9
Q4-23	January	8.8	8.7	8.3	8.3	8.0	8.0
Q1-24	April	8.6	8.6	8.2	8.4	7.9	8.0
Q2-24	July	8.8	8.7	8.4	8.5	8.0	8.1
Q3-24	October	8.7	8.7	8.3	8.4	7.8	8.0
Q4-24	January	8.2	8.1	7.9	8.0	7.6	7.6
Q1-25	April	7.9	7.9	7.7	7.8	7.4	7.4
Q2-25	July	7.9	7.9	7.6	7.6	7.3	7.3

St. Louis FED Real GDP Growth



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NY FED Consumer Inflationary Expectations



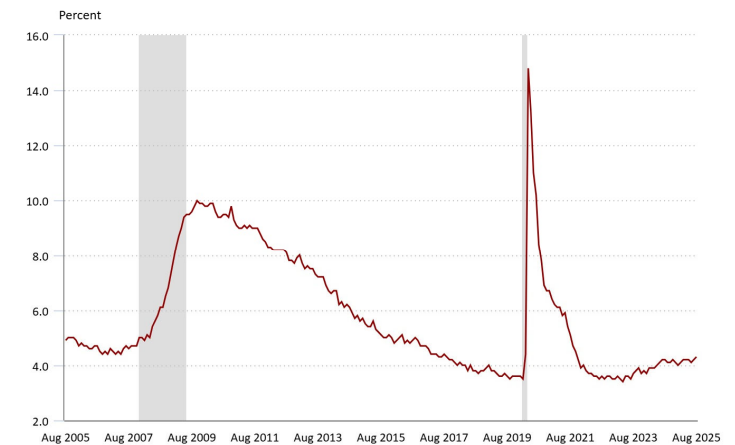
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The U.S. Labor Situation

- The labor force participation rate continues its decline
- Age demographic changes are going to be a challenge moving forward
- Labor productivity in the U.S. improving?

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BLS U.S. Unemployment Rate



Source: U.S. Bureau of Labor Statistics.

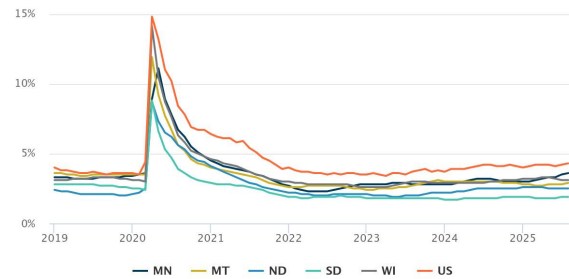
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Unemployment in the 9th District

Unemployment

The unemployment rate measures the percent of people in a state's labor force that are currently unemployed but are actively looking for work. Understanding unemployment trends helps the Federal Reserve assess progress on its dual mandate issued by Congress, which includes maximum employment.

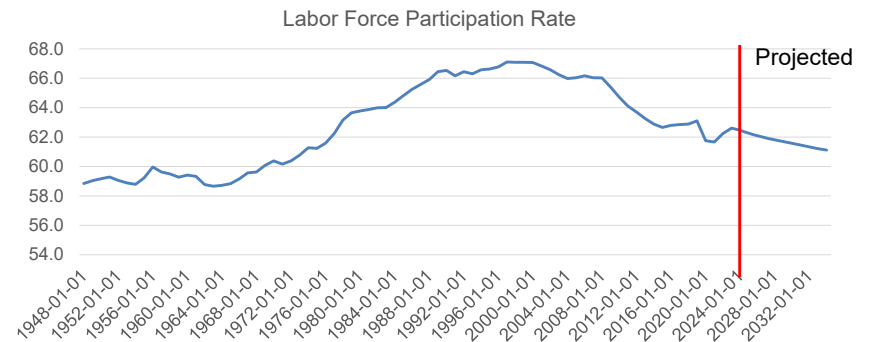
Seasonally adjusted



Source: Bureau of Labor Statistics

Highcharts.com

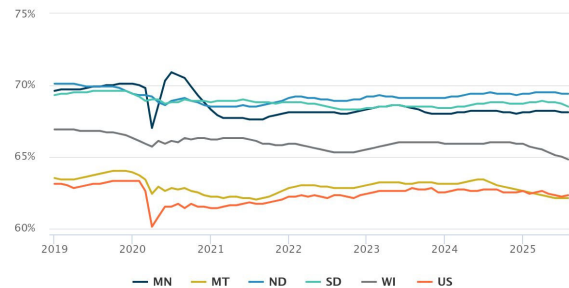
Projected Labor Force Participation Rate (1971 & 2034) The same 60.1%



Labor Force Participation in the 9th District

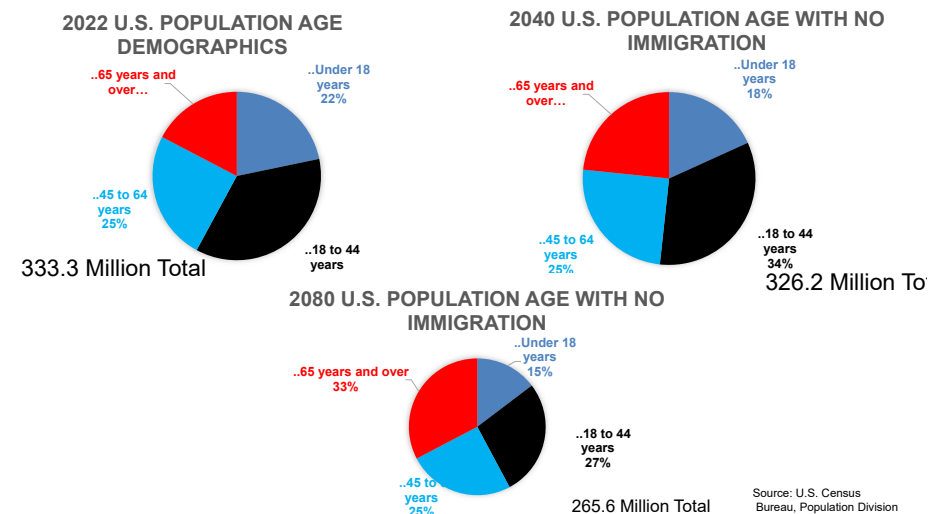
Labor force participation

Labor force participation measures the percent of people in a population that are either employed or unemployed but looking for work. Labor force participation falls when people leave the labor force completely for reasons such as retirement, becoming a stay-at-home parent, going to college, disability, or becoming discouraged about their ability to find a job.



Source: Bureau of Labor Statistics

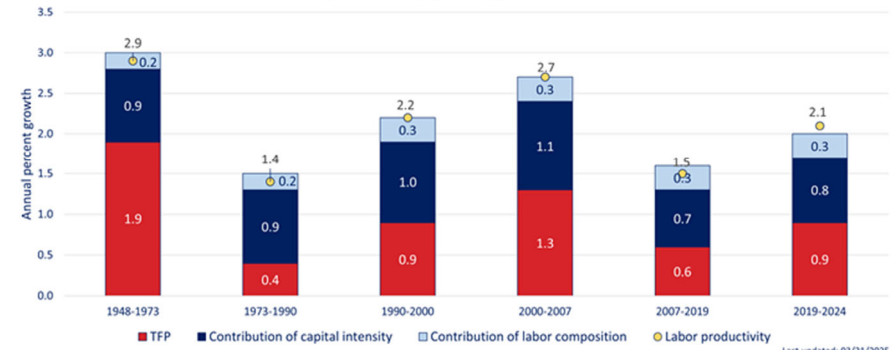
Highcharts.com



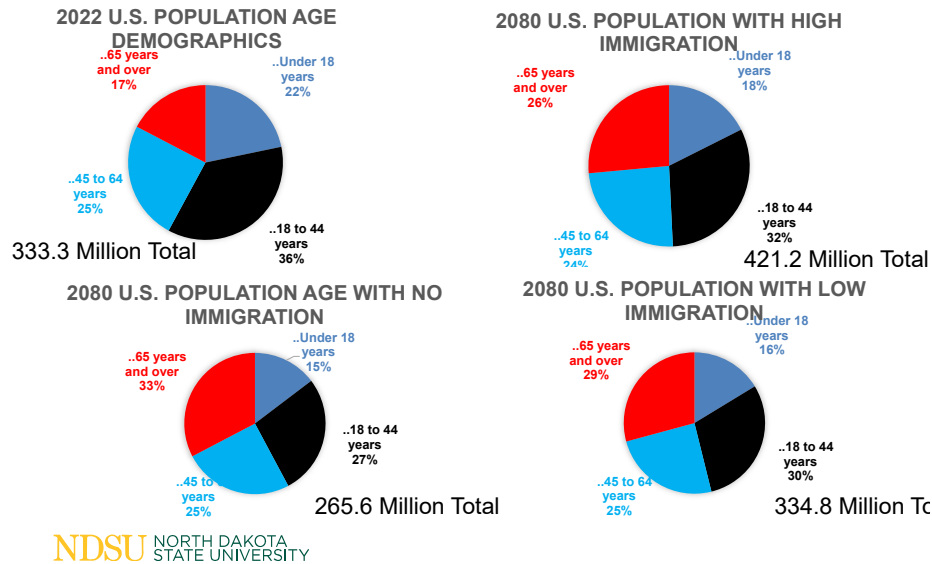
Source: U.S. Census Bureau, Population Division

The Resurgence of Labor Productivity

Contributions to labor productivity growth, private nonfarm business sector



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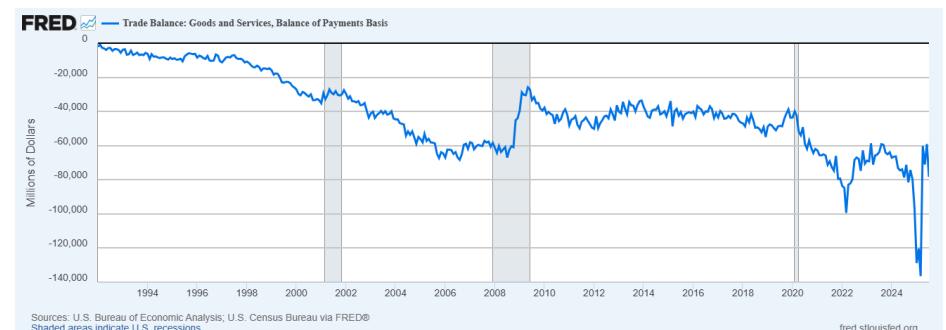
Trade

- Can Trade Policy Impact Interest Rates?



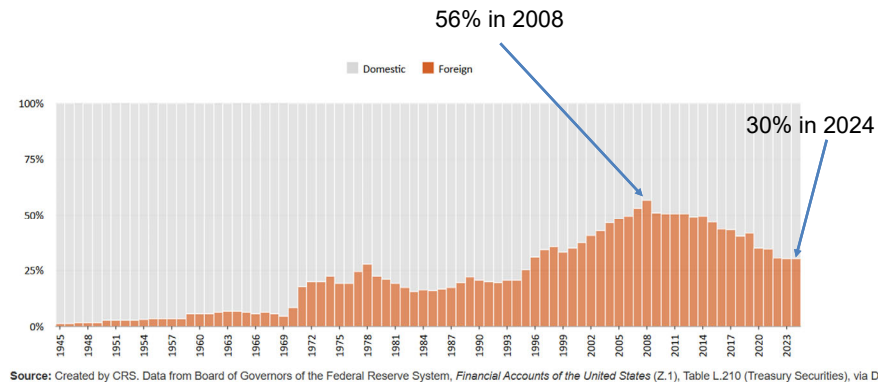
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U.S. Balance of Trade in Goods and Services



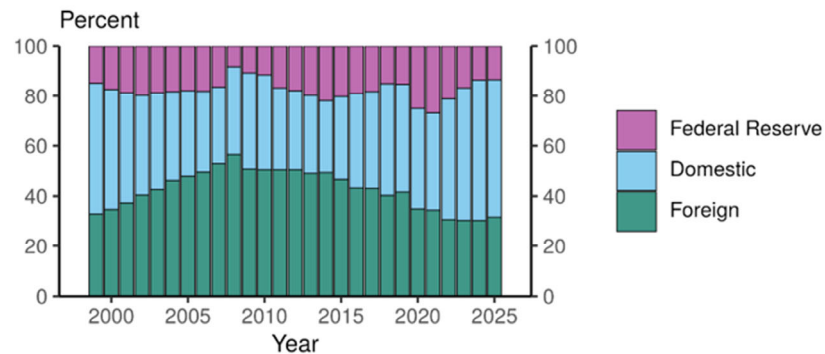
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Foreign Holding Of U.S. Treasuries



The Federal Reserve vs. Other Domestic Treasury Holdings

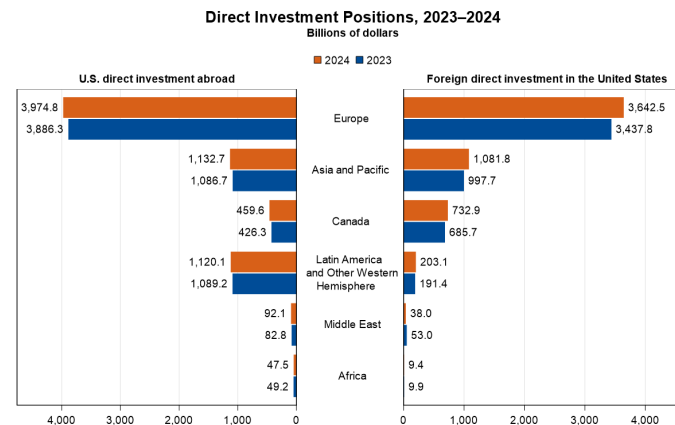
4a. Holdings of marketable U.S. Treasuries



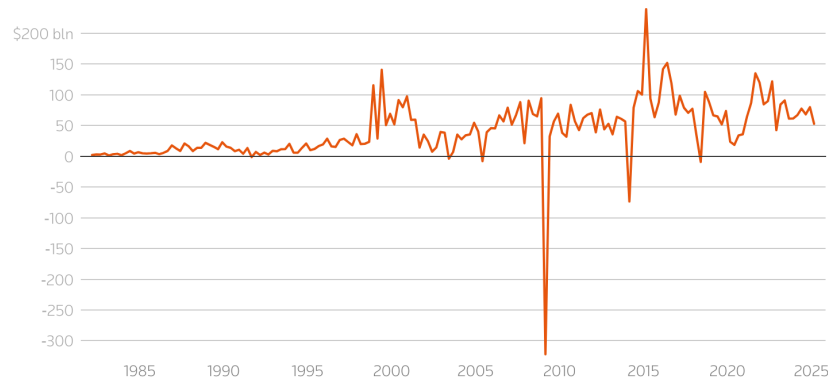
Which Countries Hold The Most Debt

Country	December 2024		Country	December 2020	
	Amount Held (\$ billions)	Percentage of All Foreign Holdings in Federal Debt		Amount Held (\$ billions)	Percentage of All Foreign Holdings in Federal Debt
Japan	\$1,061.5	12.40%	Japan	\$1,251.3	17.70%
Mainland China	\$759.0	8.87%	Mainland China	\$1,072.3	15.17%
United Kingdom	\$722.7	8.44%	United Kingdom	\$440.6	6.23%
Luxembourg	\$423.9	4.95%	Ireland	\$318.1	4.50%
Cayman Islands	\$418.9	4.89%	Luxembourg	\$287.7	4.07%
Canada	\$378.8	4.43%	Brazil	\$258.3	3.65%
Belgium	\$374.6	4.38%	Switzerland	\$255.5	3.61%
Ireland	\$339.4	3.97%	Belgium	\$253.5	3.59%
France	\$332.3	3.88%	Taiwan	\$235.4	3.33%
Switzerland	\$298.7	3.49%	Hong Kong	\$224.1	3.17%
Total top 10 countries of foreign investors in federal debt	\$5,109.8	59.71%	Total top 10 countries of foreign investors in federal debt	\$4,596.8	65.01%
Total all foreign investment in federal debt	\$8,558.4	100%	Total all foreign investment in federal debt	\$7,070.7	100%

Total Direct Investment



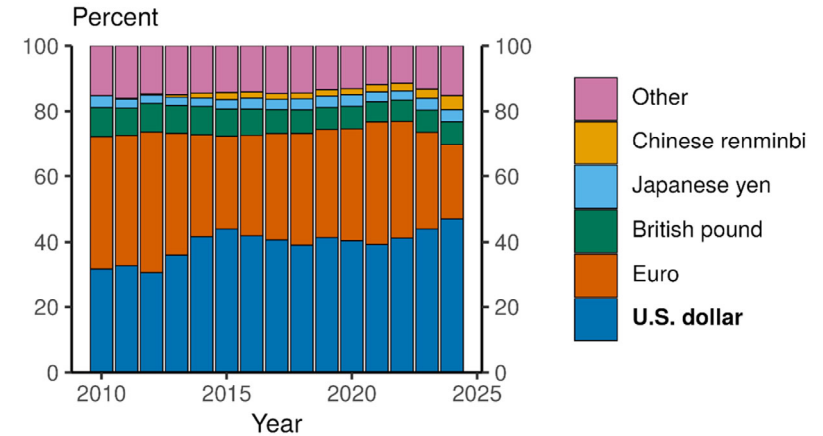
U.S. Inflows of Foreign Direct Investment in Equities



Note:

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Share of International and Foreign Currency Banking Claims



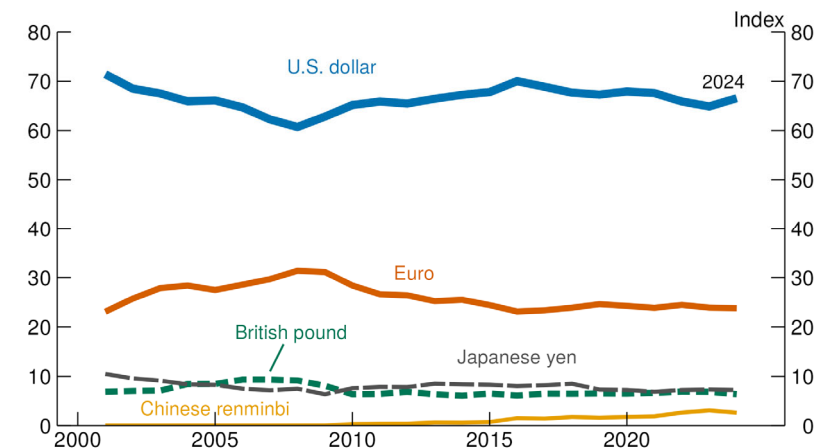
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Share of International and Foreign Currency Banking Claims and Liabilities



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Index of International Currency Usage



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Key Points

- The Federal Funds Rate isn't the only tool the FED has
 - The FED balance sheet has a large impact also
- The U.S. will soon have to grapple with changing age demographics, though productivity increases can help off-set this
- Trade policy can also impact borrowing costs by how it influences foreign ownership of U.S. debt and foreign direct investment



Questions?



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