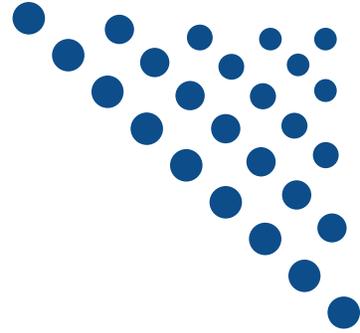


*Osher Lifelong Learning Institute, Fall 2023*  
**Contemporary Economic Policy**

University of Southern Maine  
January/February 2024

**Jon Haveman, Ph.D.**  
National Economic Education Delegation

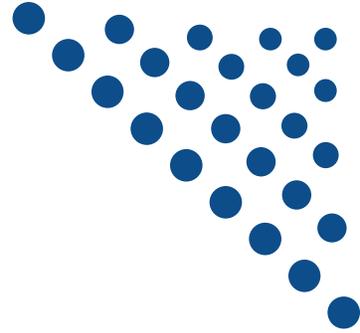
# Available NEED Topics Include:



- US Economy
- Healthcare Economics
- Climate Change
- Economic Inequality
- Economic Mobility
- Trade and Globalization
- Minimum Wages
- Immigration Economics
- Housing Policy
- Federal Budgets
- Federal Debt
- Black-White Wealth Gap
- Autonomous Vehicles
- US Social Policy

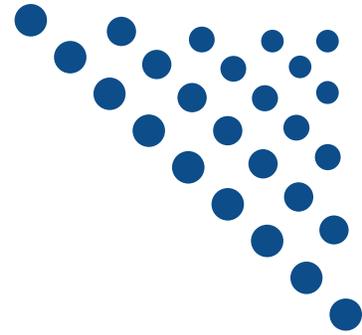


# Course Outline



- **Contemporary Economic Policy**

- Week 1 (1/09): Economic Update (Geoffrey Woglom Amherst College)
- Week 2 (1/16): Climate Change Economics (Sarah Jacobson, Williams College)
- Week 3 (1/23): Federal Debt and Deficits (Brian Peterson, LaGrange College)
- Week 4 (1/30): International Institutions (Alan Deardorff U of Michigan)
- **Week 5 (2/6): Monetary Policy and Inflation (Geoffrey Woglom)**
- Week 5 (2/13): Is College Worth It? (Geoffrey Woglom)

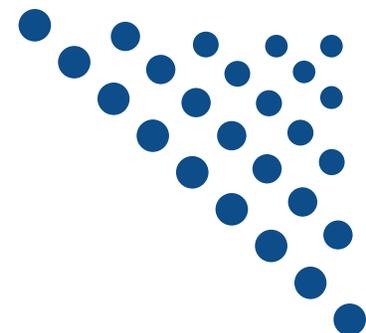


# Monetary Policy & The Fed

**Geoffrey Woglom,**  
Professor of Economics  
Amherst College, emeritus  
February 6, 2024

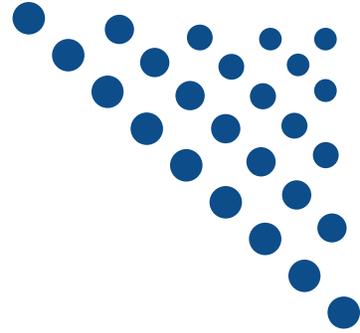


# Submitting Questions



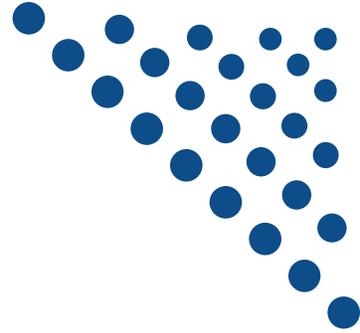
- **Please submit questions in the chat or raise your digital hand.**
  - I will try to handle them as they come up, but may take them in a bunch as time permits.
- **We will do a verbal Q&A once the material has been presented.**
  - And the questions in the chat have been addressed.
- **After talk, I hope there will be time for more extended questions.**
- **Slides will be posted at**  
**[https://needecon.org/delivered\\_presentations.php](https://needecon.org/delivered_presentations.php)**

# Credits and Disclaimer



- **This slide deck was authored by:**
  - Geoffrey Woglom
- **Disclaimer**
  - NEED presentations are designed to be nonpartisan.
  - It is, however, inevitable that the presenter will be asked for and will provide their own views.
  - Such views are those of the presenter and not necessarily those of the National Economic Education Delegation (NEED).

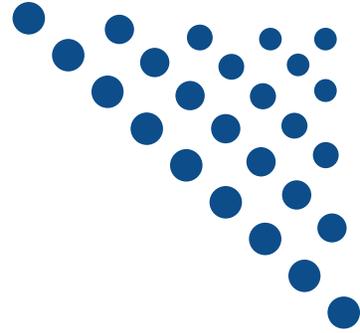
# Outline for the Talk



1. History of the origin and development of central banks
2. The economic determinants of inflation and unemployment.
3. The Fed's policy tools for influencing interest rates and thereby affecting aggregate demand and the economy.
4. A closer look at changes that Chair Powell made in Fed policy that contributed to the run up in inflation.
5. The January 30-31 Fed monetary policy meeting and what comes next.



# What Is a Central Bank?



## 1. Government's Bank.

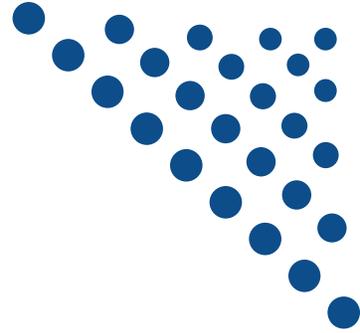
- a. Regulate currency and manage the payment system.
- b. Help with government finance.

## 2. “Lender of Last Resort” (LOL) in financial crises.

## 3. Responsible for stabilizing the macro economy: i.e., low, stable inflation and full employment

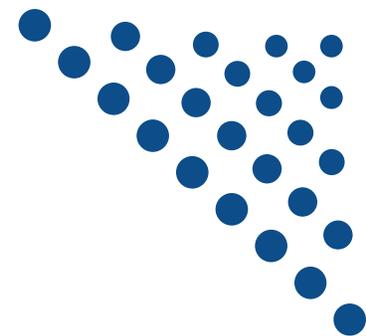


# Origins



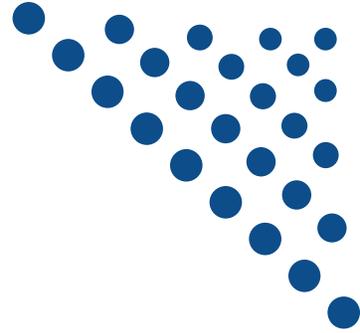
- **Sveriges Riksbank (Sweden), 1668, currency regulation.**
- **Bank of England, 1694, debt finance for the War of Grand Alliance.**
- **Banks of the US, First (1791-1811) and Second (1816-1836) did a little of both.**

# Financial Crises in the 19<sup>th</sup> Century



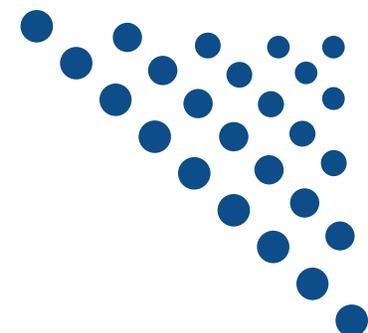
- Financial Panics (and recessions) in the 19<sup>th</sup> century: 1819, 1837, 1857, 1873, 1893.
- Financial Panics are caused by a shortage of *liquidity*.
- **illiquidity**: the value of liquid assets (cash, short-term Treasuries) are less than the value of liquid liabilities (short-term debt, bank deposits)
- **Insolvency**: the value of assets is less than liabilities, so unless things change, the liabilities will not be paid off.

# Illiquidity Can Lead to Insolvency



- Most banks are technically illiquid, which is not a problem in normal times because money is being deposited to offset the money that is being withdrawn.
- But during a panic solvency is no guarantee of survival (As George Bailey learned in *It's a Wonderful Life*)
- To meet pressing demands for cash, the bank may have to sell assets in a “fire sale,” leading to insolvency and a bank failure.

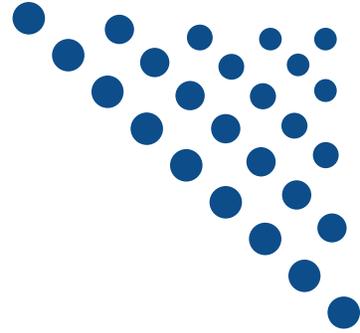
# Walter Bagehot's and his Famous Dictum



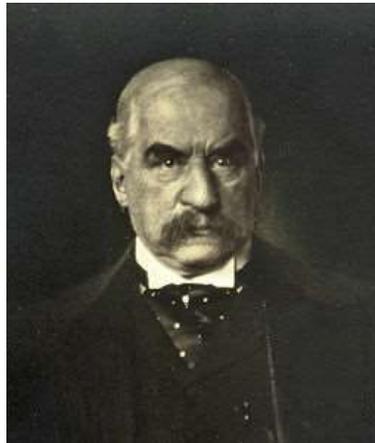
- **Walter Bagehot (1826-77): *Lombard Street*, 1873**
- **Save the solvent institutions while allowing the insolvent to fail.**
- **His “Dictum” during a panic the Central Bank should:**
  1. Lend freely,
  2. At a high interest rate,
  3. To solvent institutions,
  4. On good collateral.



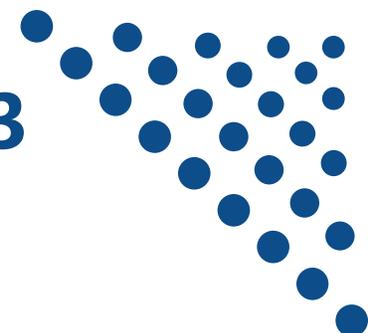
# JP Morgan, “Lender of Last Resort?” (LOL)



- October 1907, JP Morgan cuts short his vacation to deal with a financial panic
  - Market falls by 50%
  - Runs on banks threaten a complete collapse of financial markets.
- Morgan calls a number of bankers to his offices to pledge money to provide liquidity to markets.



# The Aftermath: Federal Reserve Act of 1913



- **Original Roles of the Fed**

1. Oversee Currency & Regulate Banks; 2. *Lender of Last Resort*.

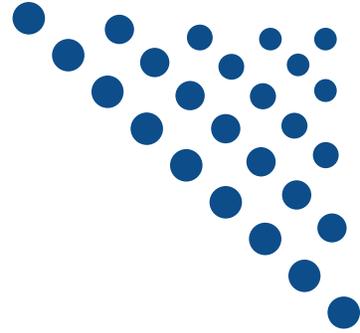
- **Great Depression and the Banking Panics of the 30s**

- Fed fails miserably.
- RFC lent more money to the banks than did the Fed

- **Footnote on later LOL Roles:**

1. 2008: Bernanke saves the world, but Congress is not happy.
2. 2020: Powell goes even bigger, but the verdict is still out.
3. 2022: Silicon Valley Bank aftermath

# The Evolution of the Fed's Role in the Macro Economy



- **Employment Act of 1946**
  1. “Full employment” is a Executive Government Responsibility.
  2. Council of Economic Advisors.
  3. Economic Report of the President.
- **Humphrey Hawkins Act 1978 & the Fed’s “Dual” mandate**
  - Full employment
  - Price stability
- **Division of Labor between Monetary and Fiscal Policies.**



# Stabilizer in Chief: the Fed



Jerome Powell  
February 2018

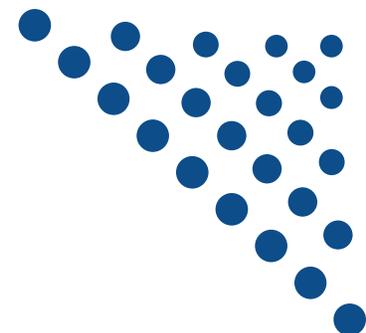
on Price Index

- **The Fed's Dual Mandate:**

1. "Stable prices" which means 2% rate of inflation in the long run (which corresponds to about 2.5% inflation in the medium run)
2. "Maximum employment" which means the highest level of employment (lowest unemployment rate) consistent with mandate 1.

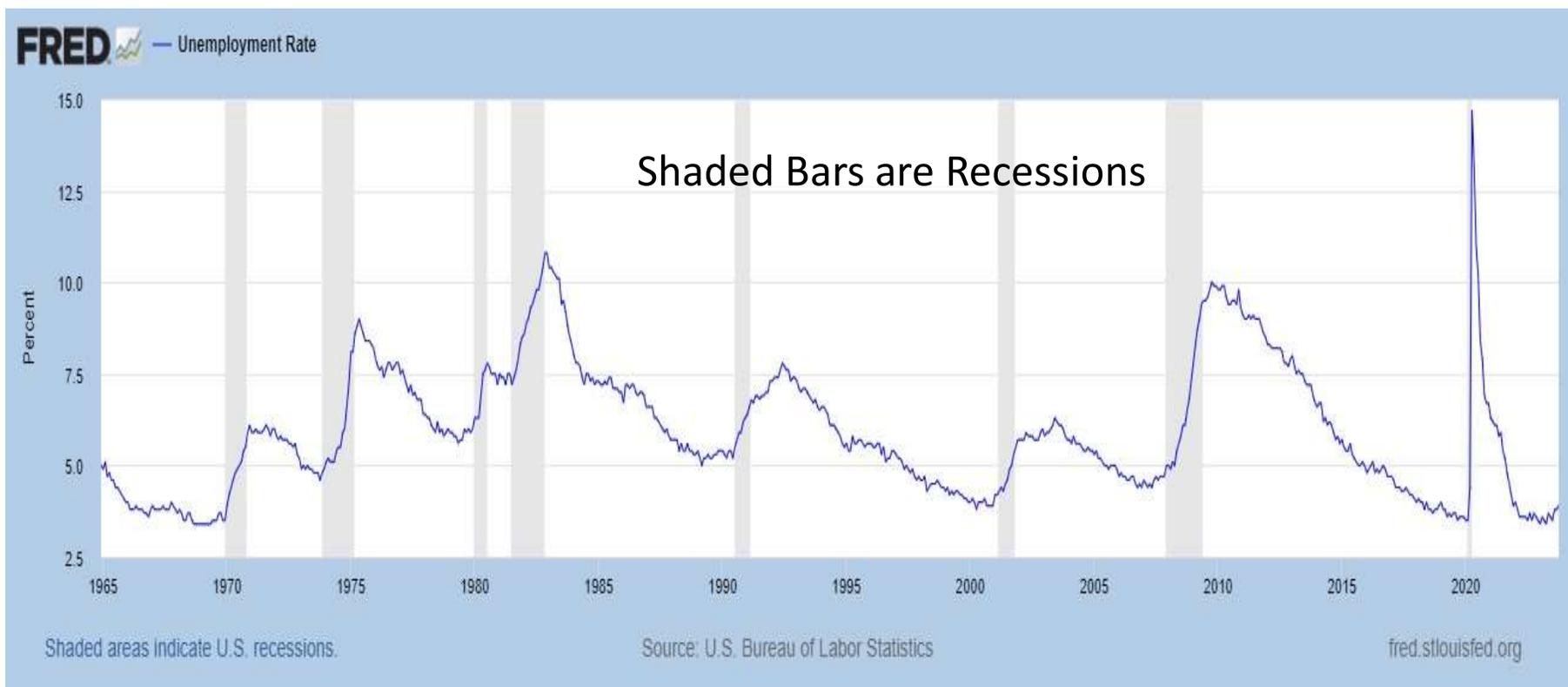
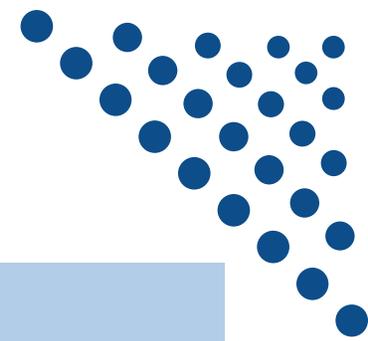
- **Monetary policy is made by the Federal Open Market Committee (FOMC), comprised of the 7 Fed Governors and 5 of the 12 Presidents of the Regional Federal Reserve Banks on a rotating basis.**
- **The FOMC has scheduled meetings 8 times a year, but can hold unscheduled meetings at a moments notice (e.g., March of 2020)**

# Why is “Price Stability” 2% Inflation?

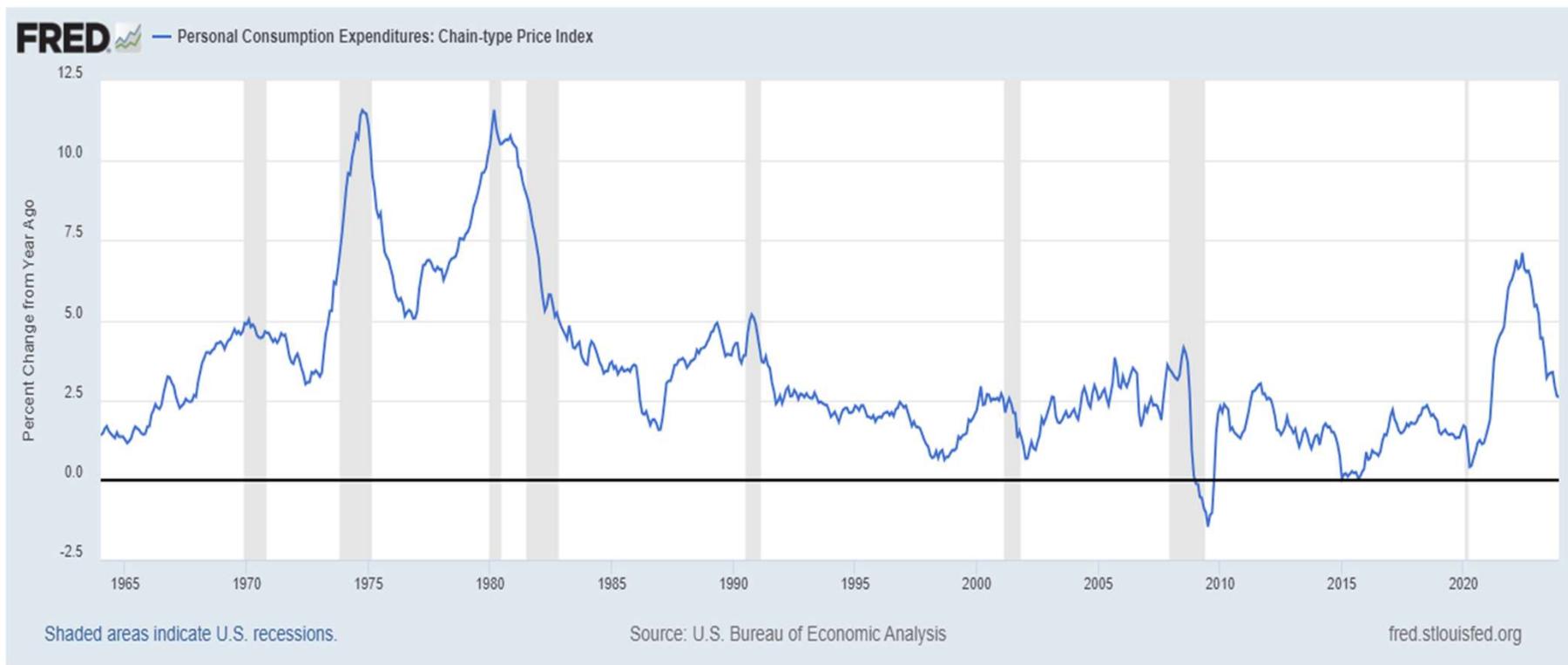


- It started in 1990 when New Zealand was the first country to adopt an inflation target: 0-2%
- **Why not 0?**
  - “Greasing the Wheels.”
  - Zero Lower Bound for Interest Rates
- **Why 2%- New Zealand raised it to 3%?**

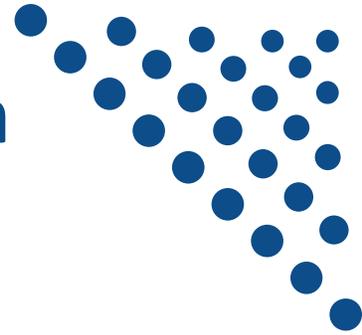
# Track Record on Unemployment



# Track Record on “Price Stability”



# Determinants of Unemployment & Inflation

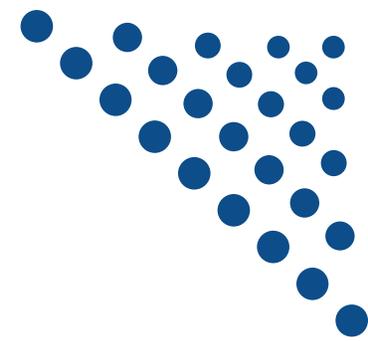


## Short run:

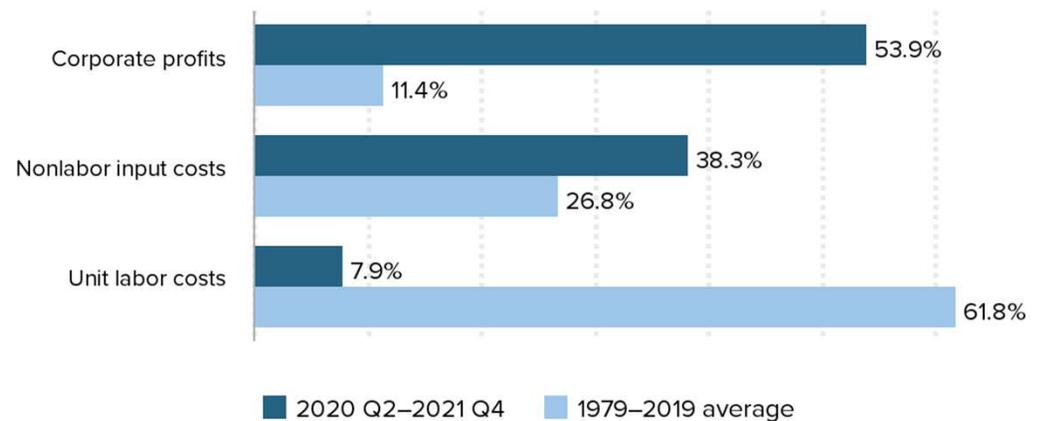
- **Unemployment:** The higher the level of total spending the lower the unemployment rate.
- **Inflation:**
  1. “Too much Spending:” Total spending *above* the economy’s normal capacity (“potential output”) tends to *increase* inflation.
  2. Increase in production costs (e.g., “supply chain bottlenecks.”)
  3. Expectations of high inflation can cause inflation to be high.
- **In the absence of 1.and 2., inflation will equal expected.**



# Corporate “Greed” and Inflation?



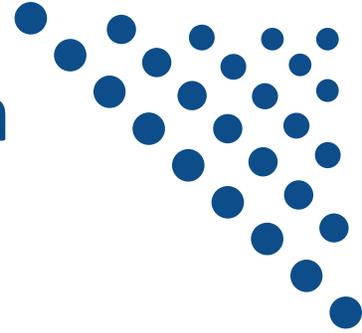
## Normal and recent contributions to growth in unit prices in the nonfinancial corporate sector



**Source:** Author’s analysis of data from Table 1.15 from the National Income and Product Accounts (NIPA) of the Bureau of Economic Analysis (BEA).

Economic Policy Institute

# Determinants of Unemployment & Inflation

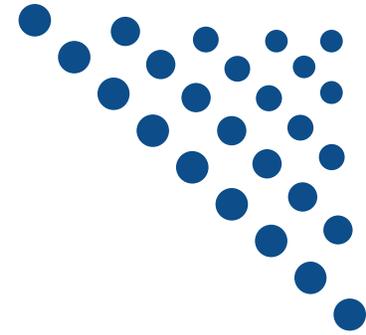


**Long run: what the economy would look like if real GDP were at potential (average behavior of the economy over a number of years):**

- **Unemployment: Is determined by labor supply and demand and is independent of monetary policy; unemployment will be at the natural rate.**
- **Inflation is totally determined by the Fed!**



# What about the Money Supply?



**Notice the absence of the money supply. The Fed does not believe there is a reliable, short-run link between the money supply and total spending or inflation.**

**The Minutes of the 12/12-13/2023 FOMC Meeting mentions:**

- Money Supply, M1, M2 – 0 times
- Federal funds rate – 13 times

# Do You See a Relationship?



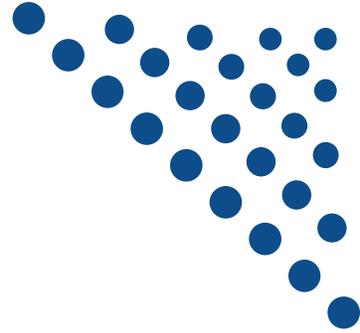
# The Fed's Affects the Economy via Interest Rates



- Higher Interest rates discourage firms from buying new plant and equipment, households from buying new homes, and tend to lower stock and housing prices (!).
- Lower spending tends to raise unemployment and eventually lowers inflation.



# Become a Central Banker in One Slide!

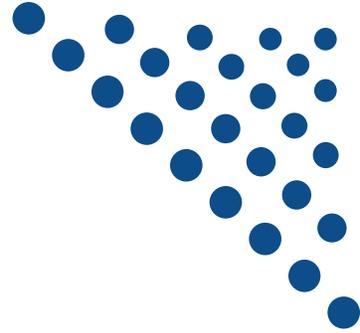


- If you are more concerned that inflation is too high, raise interest rates to lower total spending below potential output.
- If you are more concerned that unemployment is too high, lower interest rates to raise total spending.
- Inflation and unemployment just right: keep rates the same.

**Sounds Easy! But...**



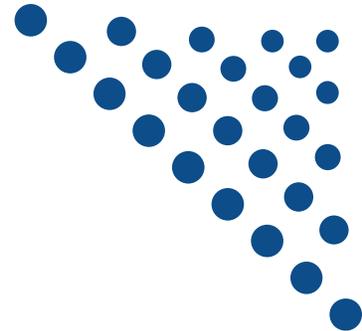
# One Big Complication: Lags



- **Milton Friedman: Monetary Policy affects GDP and Inflation with Long and Variable (Unpredictable) Lags.**
- **Raising interest rates today does nothing to spending today nor to inflation.**
- **But over time spending slows and eventually inflation falls.**
- **Friedman believed that lags led to the Fed to “oversteering” the economy consistently.**



# “Don’t Listen to This Nonsense”



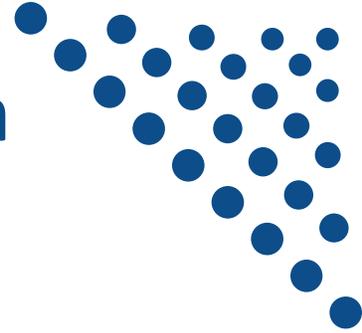
Robert Bartley, Editor of the Editorial page of the *Wall Street Journal* in the 1980s (paraphrased):

“Ronald Reagan proved that economists know nothing about inflation and unemployment. During his first term, he was able to do what economists said was impossible: simultaneously reduce inflation and unemployment.” (from January of 1983 to the end of his first term unemployment fell from 10.4 to 7.3% and inflation from 4.7 to 3.7%).

You will probably not be surprised that I disagree. What do you think I would say?



# Determinants of Unemployment & Inflation



## Short run:

- **Unemployment:** The higher the level of total spending the lower the unemployment rate.
- **Inflation:**
  1. “Too much Spending:” Total spending *above* the economy’s normal capacity (“potential output”) tends to *increase* inflation.
  2. Increase in production costs (e.g., “supply chain bottlenecks.”)
  3. Expectations of high inflation can cause inflation to be high.
- **In the absence of 1.and 2., inflation will equal expected.**

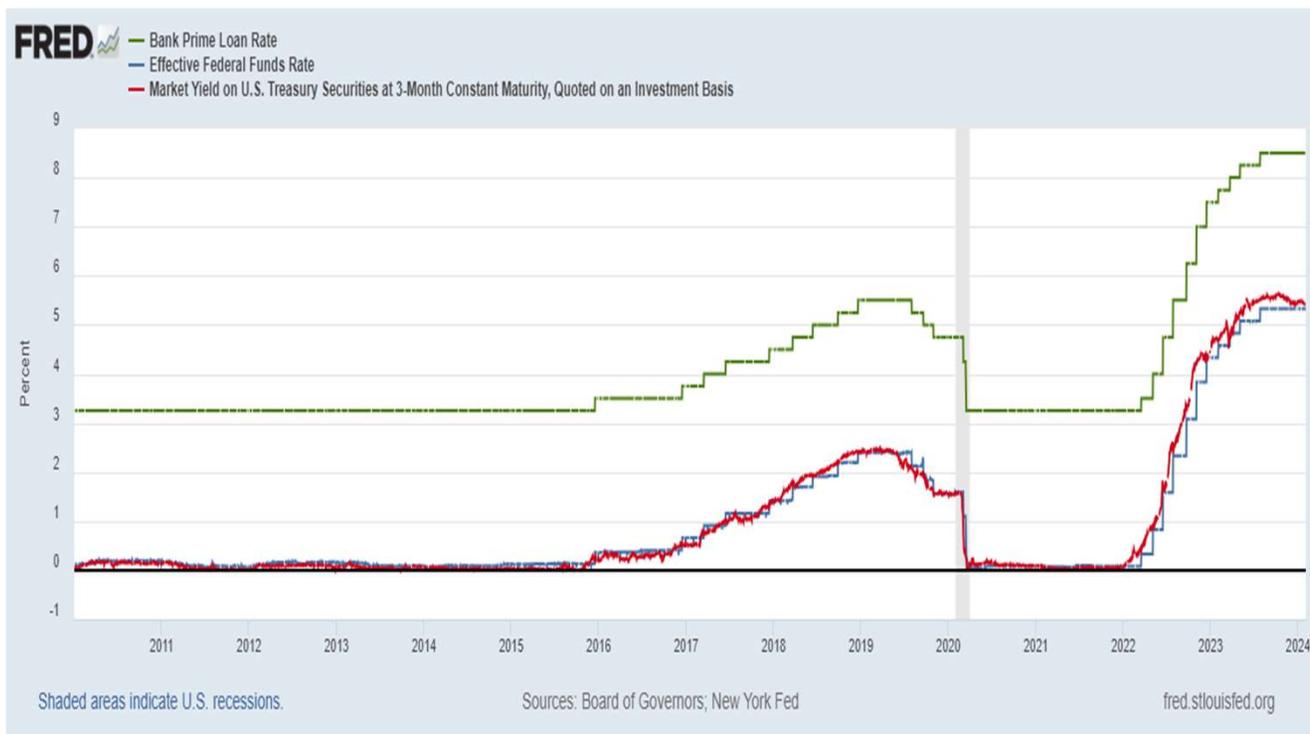


# A Closer Look at Interest Rate Control



- **Primary Tool:** the Fed targets the *federal funds rate* (or fed funds rate for short), the interest rate on overnight loans between banks.
- The Fed adjusts bank reserves so that the federal funds rate is within a target range 25 basis points wide; e.g., 5.5-5.25%
- From the bank's perspective these loans are very close substitutes to other short-term, safe assets such as Treasury Bills.
- Therefore, controlling the fed funds rate gives the Fed close control over all safe, *short-term* interest rates.

# The Fed and Short-term Interest Rates



Blue is the fed funds rate.

Red is the rate on 3 month Treasuries.

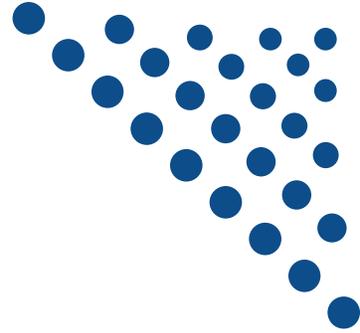
Green is the prime bank lending rate

# The Importance of Long-Term Interest Rates

- Nobody buys a house because of the level overnight interest rates.



# Long-Term Interest Rates



- **Unfortunately, the current fed funds rate has much less influence on long term interest rates.**
- **Instead, long-term interest rates depend on two factors**
  1. The average of expected, future short-term rates over the life of the long-term bond. Yesterday 10AM, US Treasuries: 1-Y 4.87; 2-Y 4.43. Why?
  2. “Risk” premia that reflect the possibility of unexpected changes in interest rates and the possibility of default.
- **The Secondary Tools are aimed at affecting these factors.**



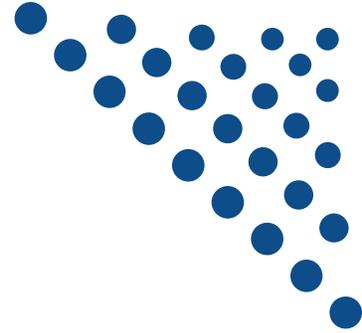
# Two Secondary Tools to Affect Interest Rates



1. **Forward Guidance: Communicating the Fed's intentions for the *future path of short-term interest rates.***
2. **Long-term Asset Purchases better known as quantitative easing or QE.**

**Both of these tools also affect interest rates, and thereby aggregate demand. But their effect is on the interest rates of longer-term and riskier assets.**

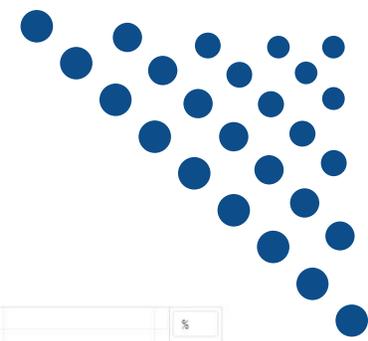
# Here Is What They Did 1/31



- [https://drive.google.com/file/d/1GylvOlwIDVR9RA3C\\_ljzD-g5KCCbafJW/view](https://drive.google.com/file/d/1GylvOlwIDVR9RA3C_ljzD-g5KCCbafJW/view)



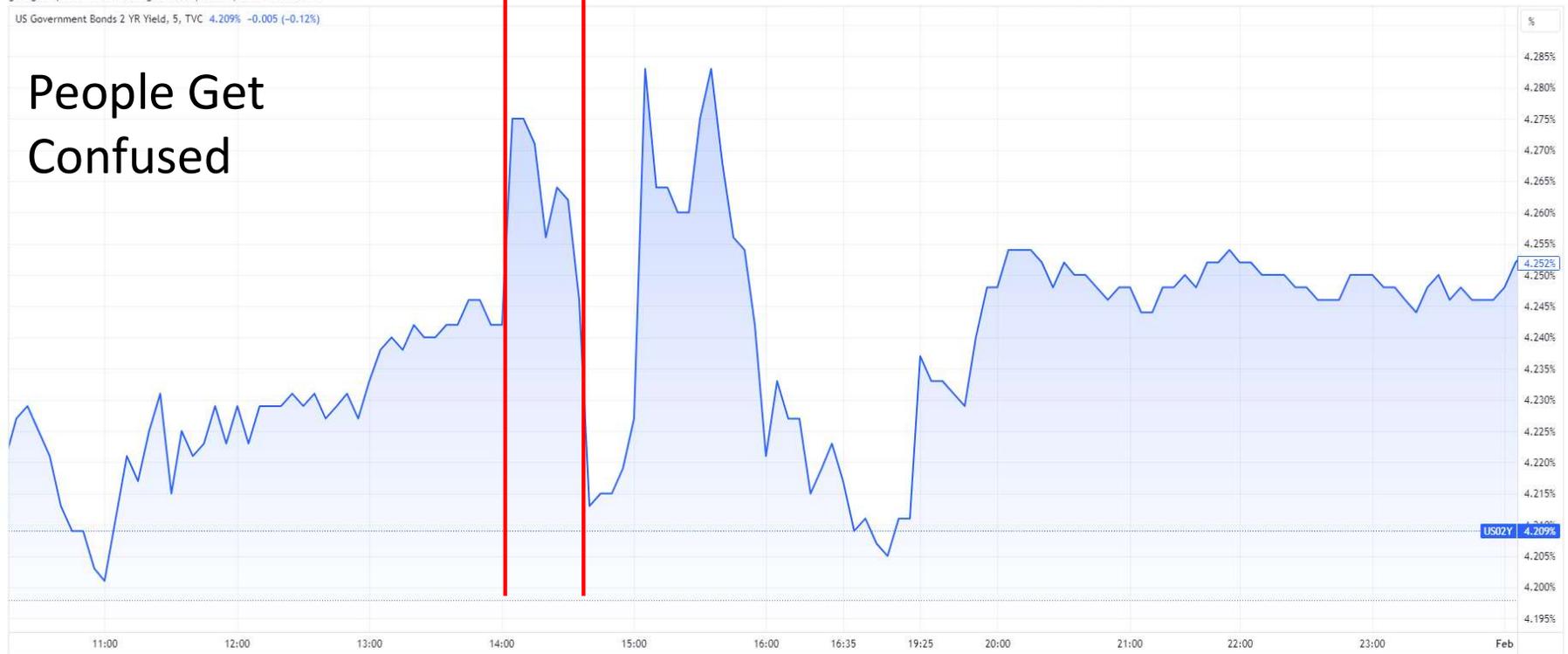
# When EF Hutton Talks...



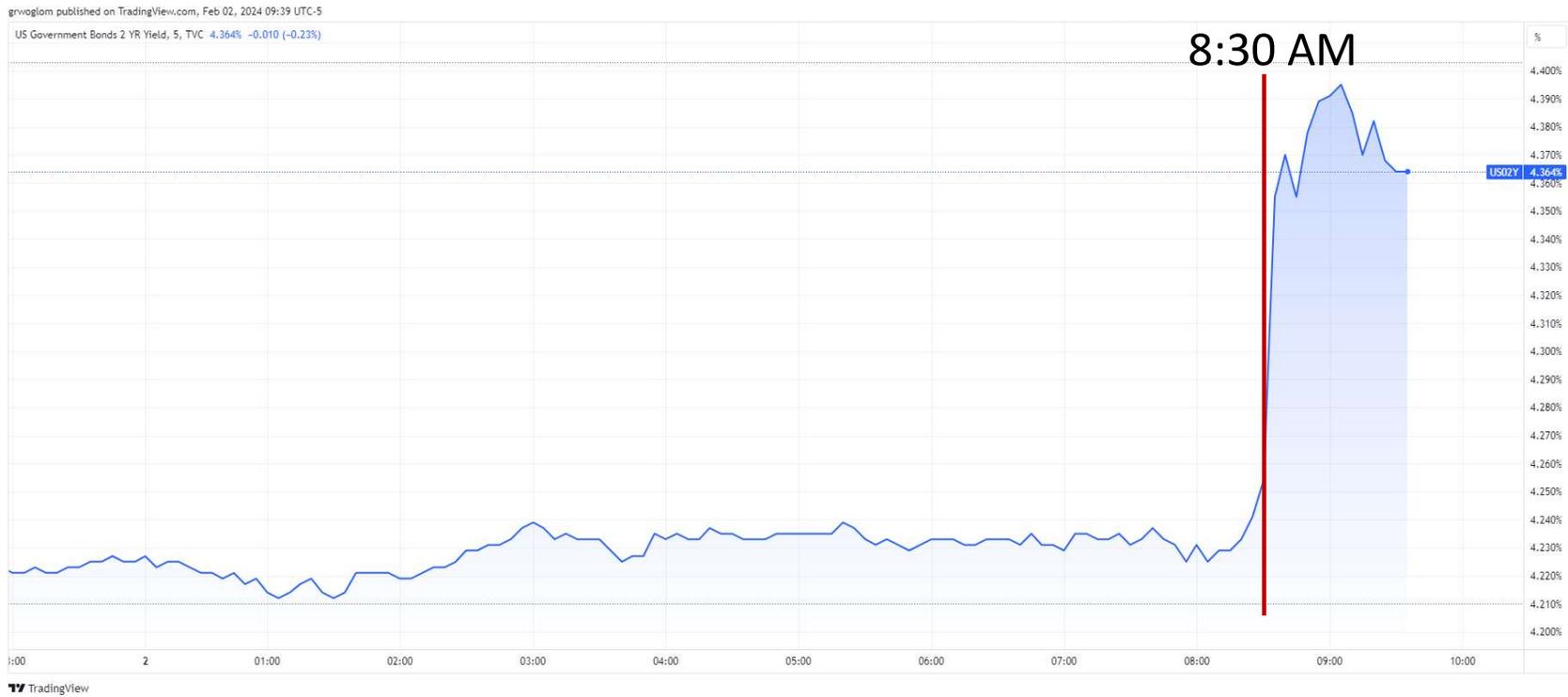
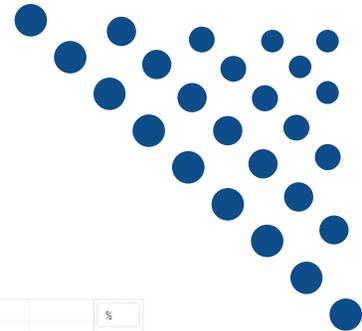
2:05 2:40

grvvgglom published on TradingView.com, Feb 01, 2024 13:09 UTC-5  
US Government Bonds 2 YR Yield, 5, TVC 4.209% -0.005 (-0.12%)

People Get  
Confused



# But, When the BLS Talks...



# Evolution of Market Opinion



## Probability for the Target Range after the March 20<sup>th</sup> FOMC Meeting

Target Range	As of 2/5	2/2	2/1	1/28
4.75-5.00%	0.0%	0.0%	0.0%	1.0%
5.00-5.25%	16.5%	20.0%	38.0%	46.2%
5.25-5.00%*	83.5%	80.0%	62.0%	52.9%

\* Current Range

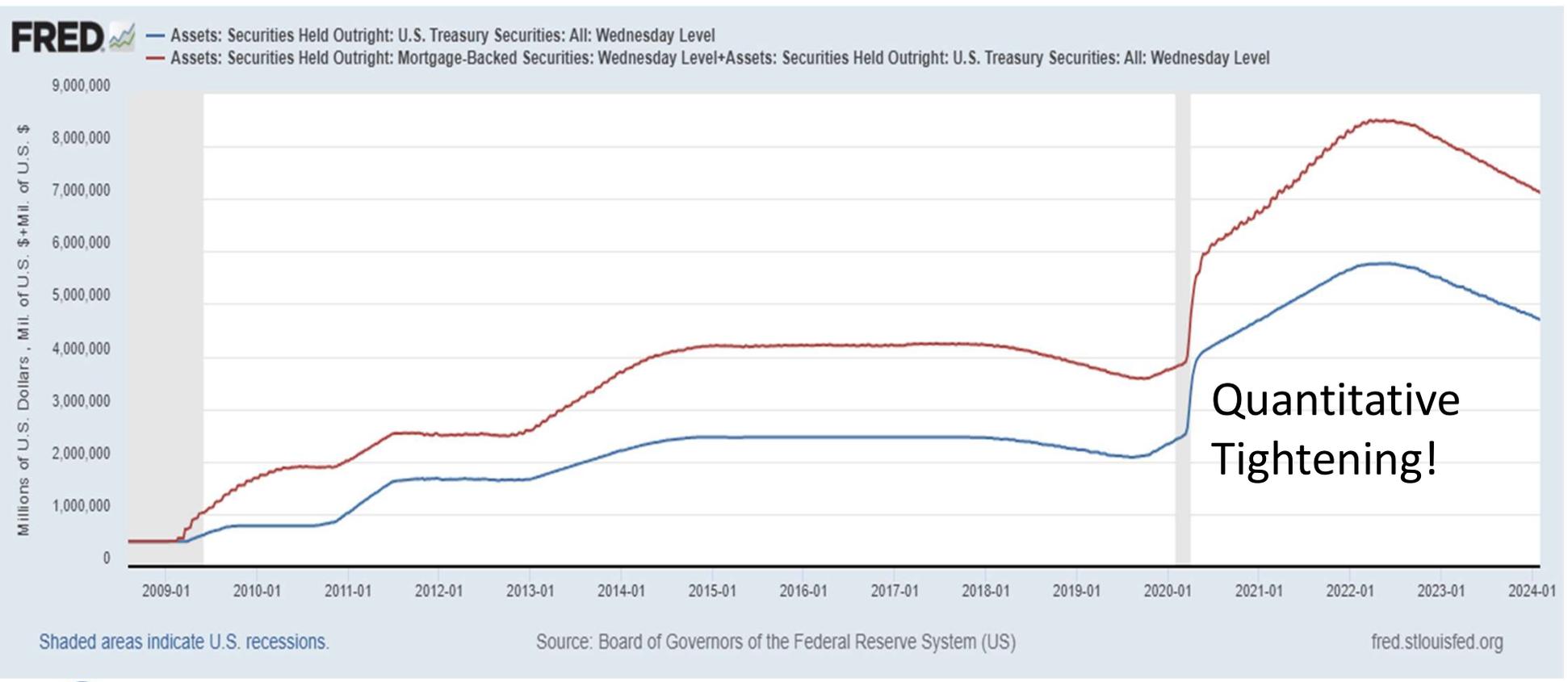
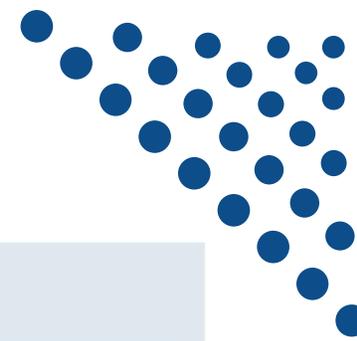
# QE And Long-term, Risky Rates



- Financial investors require a higher interest rate on risky bonds, than on safe short-term Treasuries.
- The lower the supply of risky bonds, the lower the required risk premia needed to get enough private investors to buy them.
- QE lowers the supply of long-term bonds held by private investors and thereby lowers to required risk premia and the interest rate on these bonds.
- QE is particularly important when the federal funds rate has hit the zero (ZLB)



# QE Had Been a Big Deal



# **A Policy Strategy: Stabilize Expectations of Inflation**

- **Monetary Policy is much easier if the people believe that the Fed will achieve its inflation target.**

**Ben Bernanke (2007):**

**”...if inflation expectations respond less than previously to variations in economic activity, then inflation itself will become relatively more insensitive to the level of activity...”**

- **In central bank jargon, stable expectations are “well anchored.”**



# Anchoring Requires Credibility



**Credibility, the public believes that the Fed will achieve its goals.**

- **Requirements for Credibility**

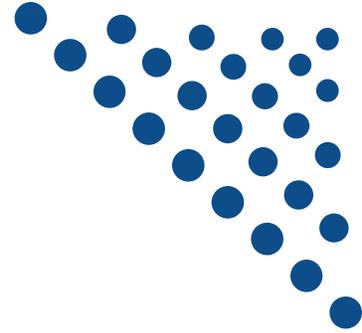
1. Transparency (Communication)
2. Accountability (Performance) BOE Letter?
3. Political Independence

**Things to think about: The Fed through monetary policy has the most influence on the short-run behavior of the economy. These governmental decisions are made “technocratically” and not democratically. Is that a problem? What would Sen Warren say?**

# Inflation and Expectations of Inflation



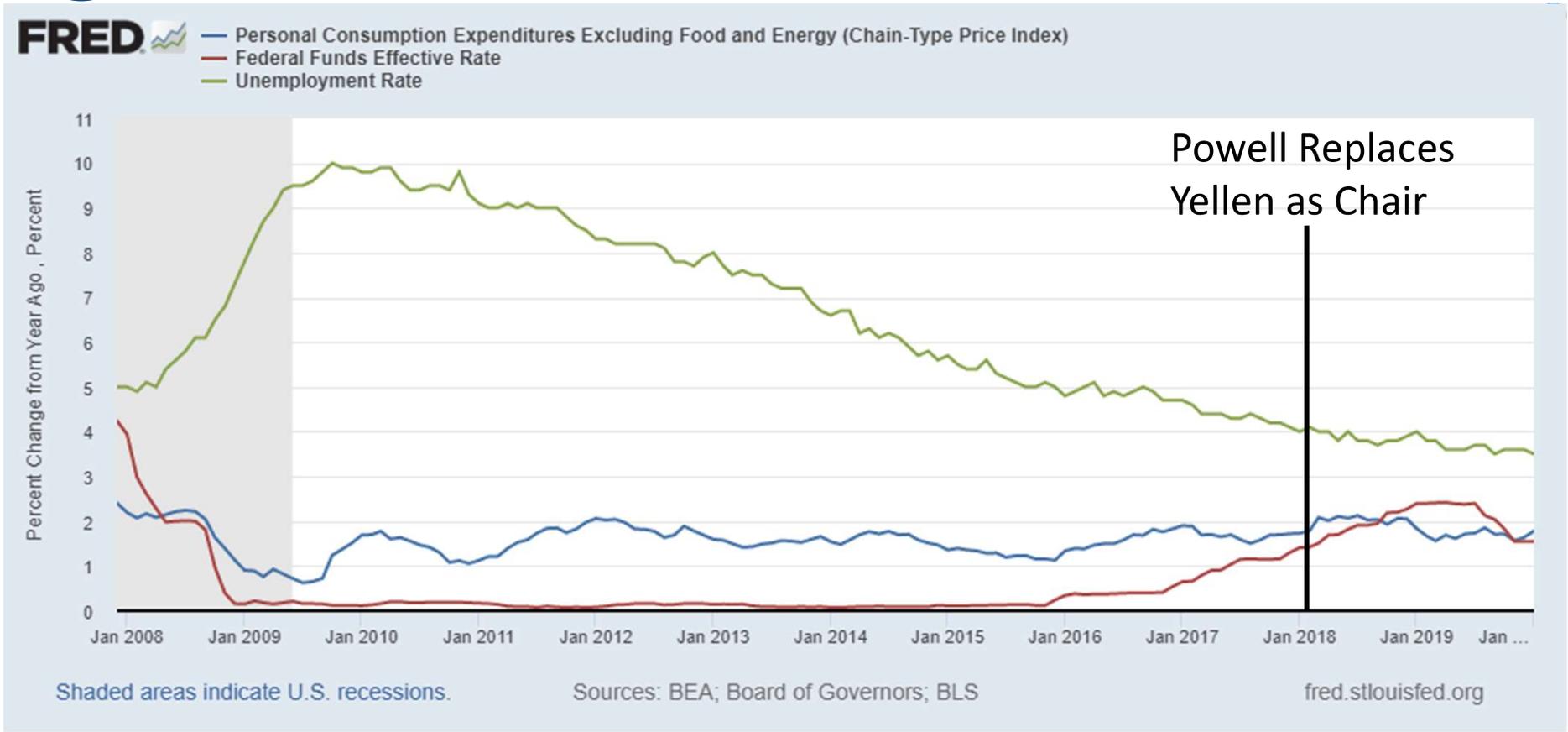
# The Great Moderation



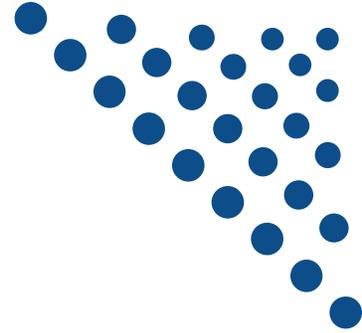
- Volcker paid a price in the early 1980s, but the price paid dividends from 1990 through 2008.
- During that period the performance of the US economy was extraordinary and even Milton Friedman gave kudos to the Alan Greenspan.
- Has Powell jeopardized Volcker's legacy?



# Why Did Powell Do It?

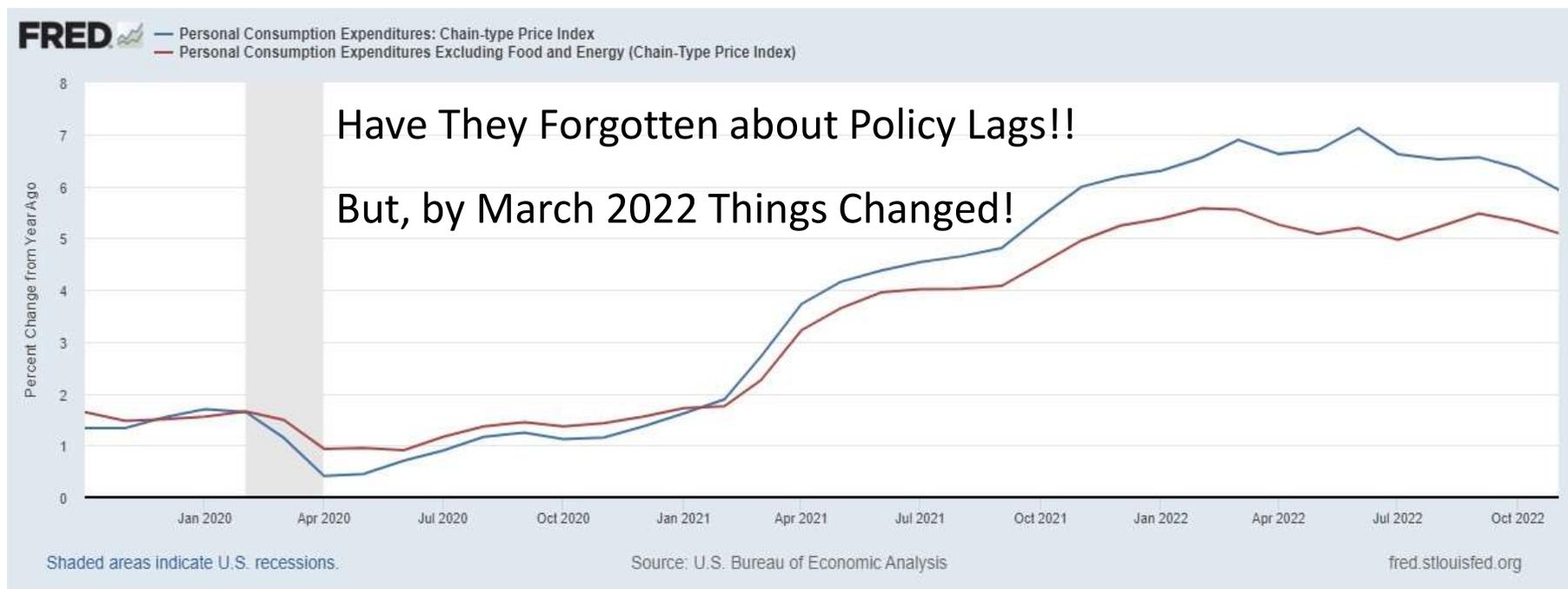
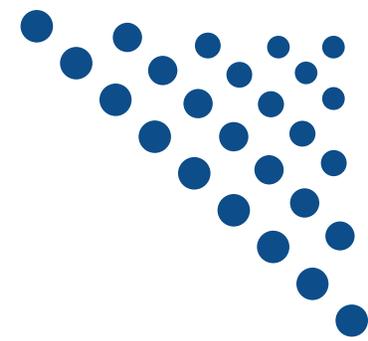


# Policy Changes under Powell



- In the Fed’s dual mandate FOMC put more emphasis on the employment goal relative to the inflation goal.
- Inflation goal switched from targeting forecasted *future* inflation to:  
“In order to anchor longer-term inflation expectations at this [2 percent], the Committee seeks to achieve inflation that averages 2 percent over time, and therefore judges that, following periods when inflation has been running persistently below 2 percent, appropriate monetary policy will likely aim to achieve inflation moderately above 2 percent for some time.”

# Why Didn't the Fed Act by April 2021?



# Is Powell Now Channeling Volcker?

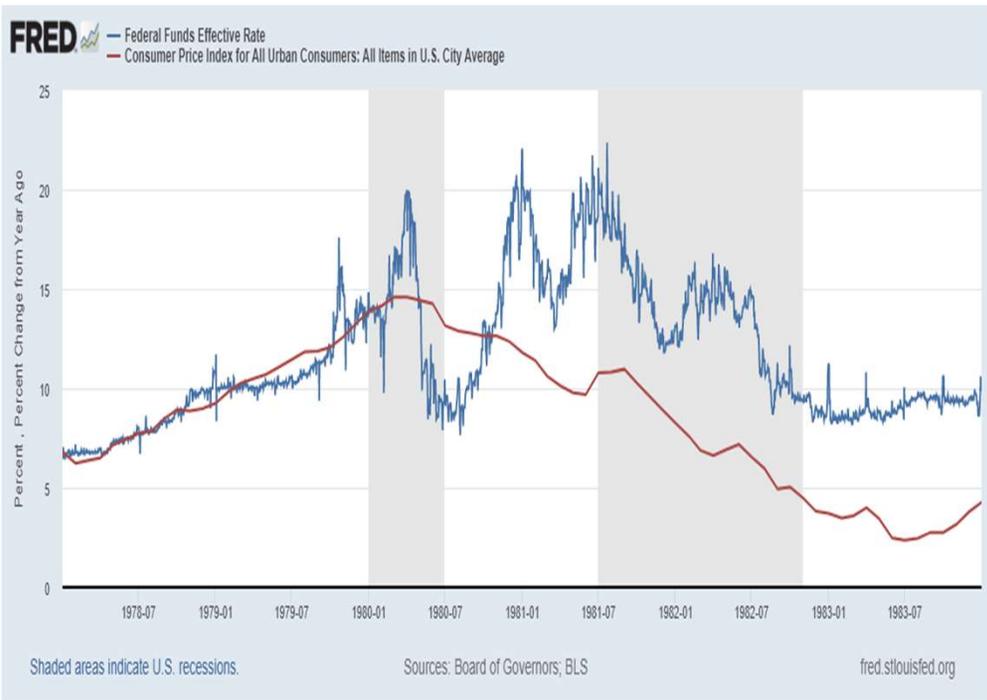
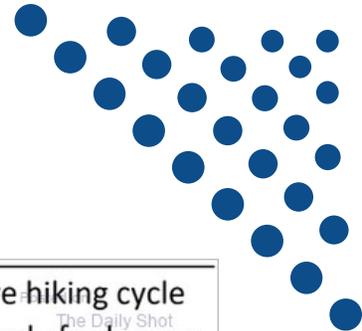
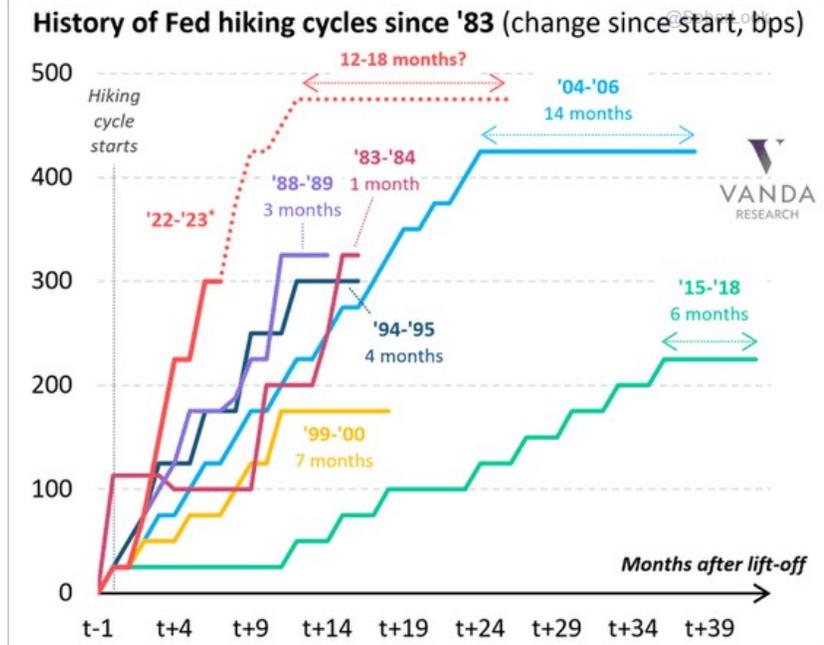
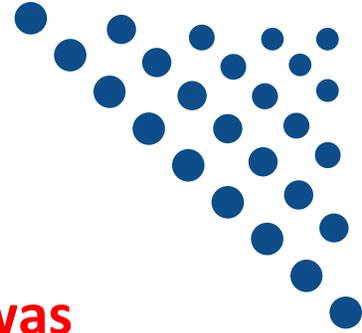


Chart 1: Not only is this the most aggressive hiking cycle since '83... the Fed may also keep rates steady for longer



\*Dotted line based on dots in Sep '22 FOMC projections; \*\*Hiking cycle path stops just before the Fed starts cutting rates and the months indicate time that the terminal rate is held constant  
Source: Bloomberg, Vanda

# OK But What Explains Powell's Reversal?



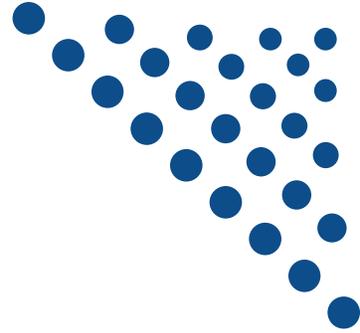
Congress asked Powell, if like Volcker, **he would do whatever was necessary to bring inflation down.**

'I knew Paul Volcker,' Powell responded. 'I think he was one of the great public servants of the era — the greatest economic public servant of the era.' Making it clear that his own legacy was on his mind, Powell continued, 'I hope that history will record that the answer to your question is yes.' Peter Coy, *NYTimes*, "*Economic Theory Alone May Not Explain Jerome Powell's Actions*," 9/23/2022

Could Powell be "Oversteering?"



# Has Powell Learned His Lesson



- Letting inflation exceed the target causes lots of problems.
- Because of lags you must act in advance of a potential problem.
- But, in January of this year the Fed reaffirmed that it was targeting average realized inflation!
- But where does the economy go from here?

# Fed Economic Projections

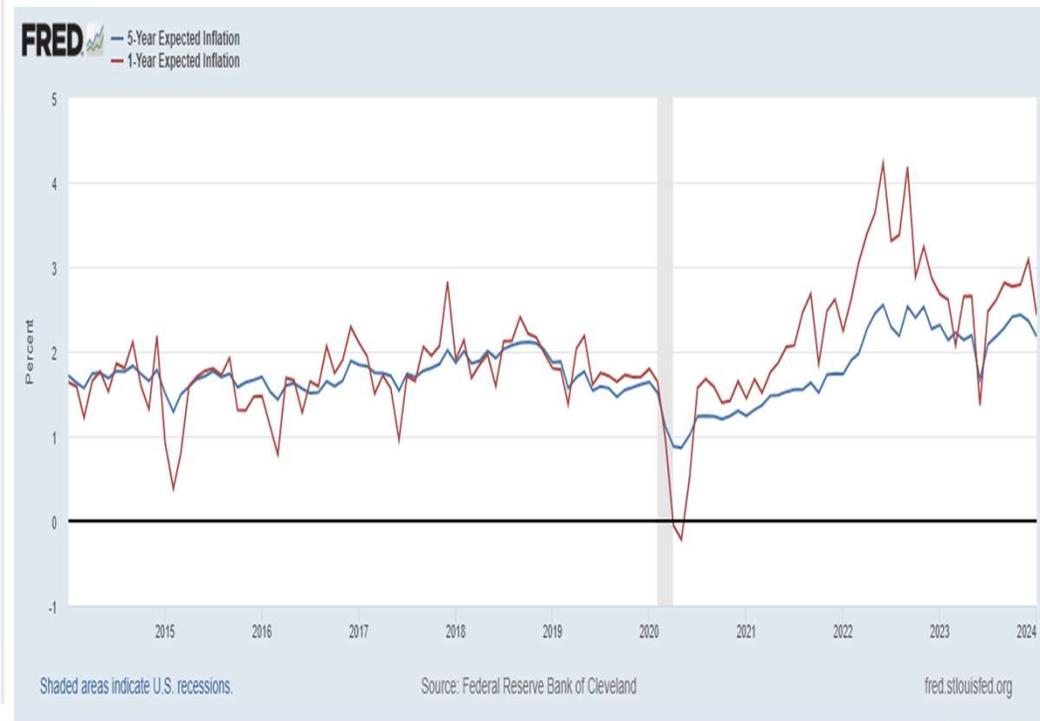
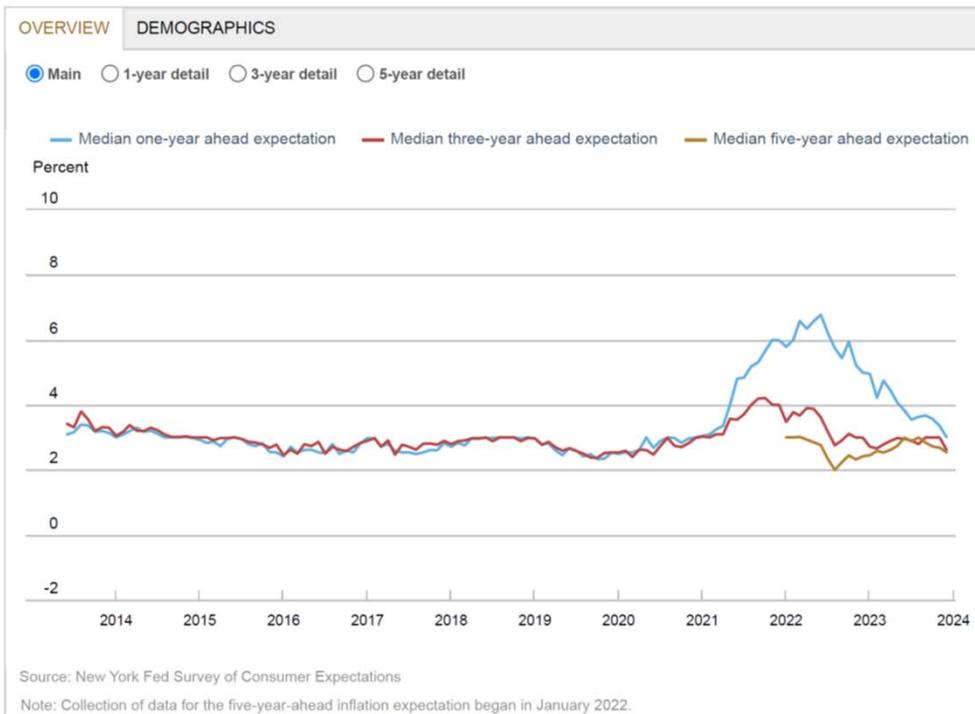
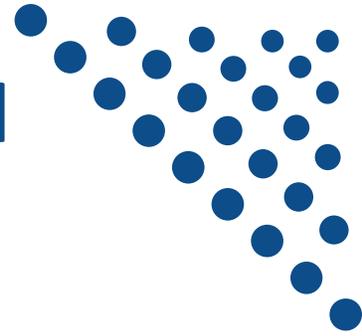
Percent 1/31/2024

Variable	Median <sup>1</sup>				
	2023	2024	2025	2026	Longer run
Change in real GDP	2.1	1.5	1.8	1.8	1.8
June projection	1.0	1.1	1.8		1.8
Unemployment rate	3.8	4.1	4.1	4.0	4.0
June projection	4.1	4.5	4.5		4.0
PCE inflation	3.3	2.5	2.2	2.0	2.0
June projection	3.2	2.5	2.1		2.0
Core PCE inflation <sup>4</sup>	3.7	2.6	2.3	2.0	
June projection	3.9	2.6	2.2		
Memo: Projected appropriate policy path					
Federal funds rate	5.6	5.1	3.9	2.9	2.5
June projection	5.6	4.6	3.4		2.5

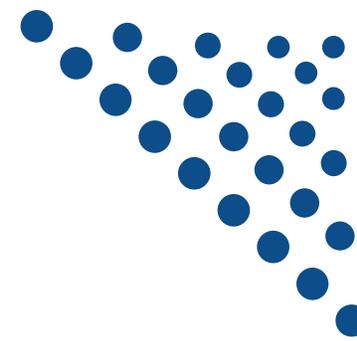
Austin Goolsbee, President of the Chicago Fed. The economy is on a “golden path” and will achieve the “mother of all soft landings.”

For me, the mystery is why inflationary expectations have remained so contained

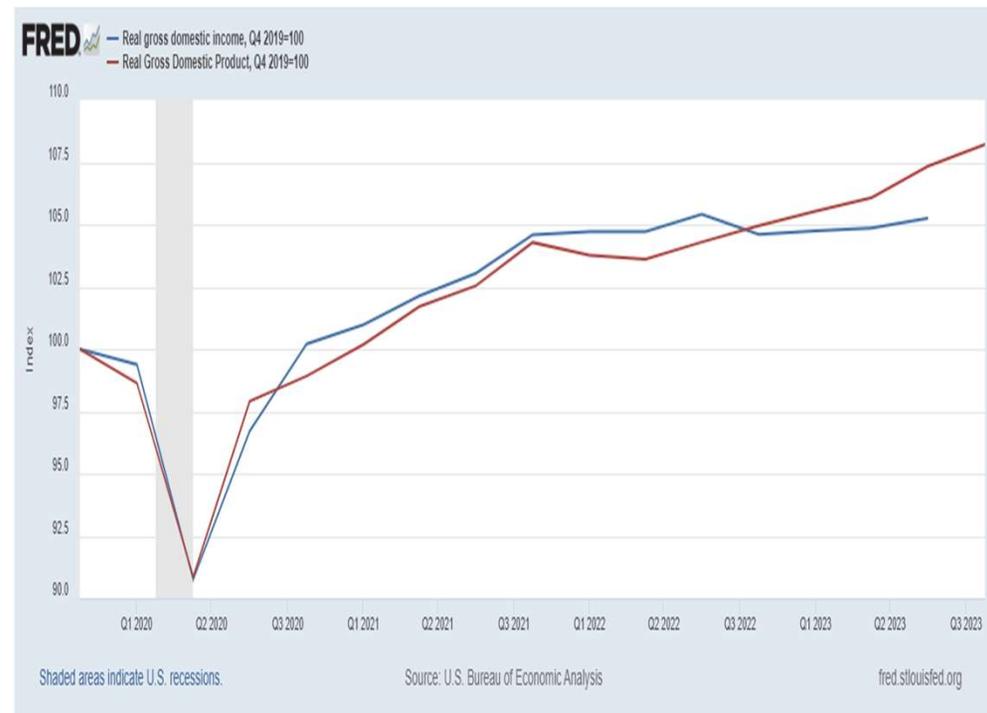
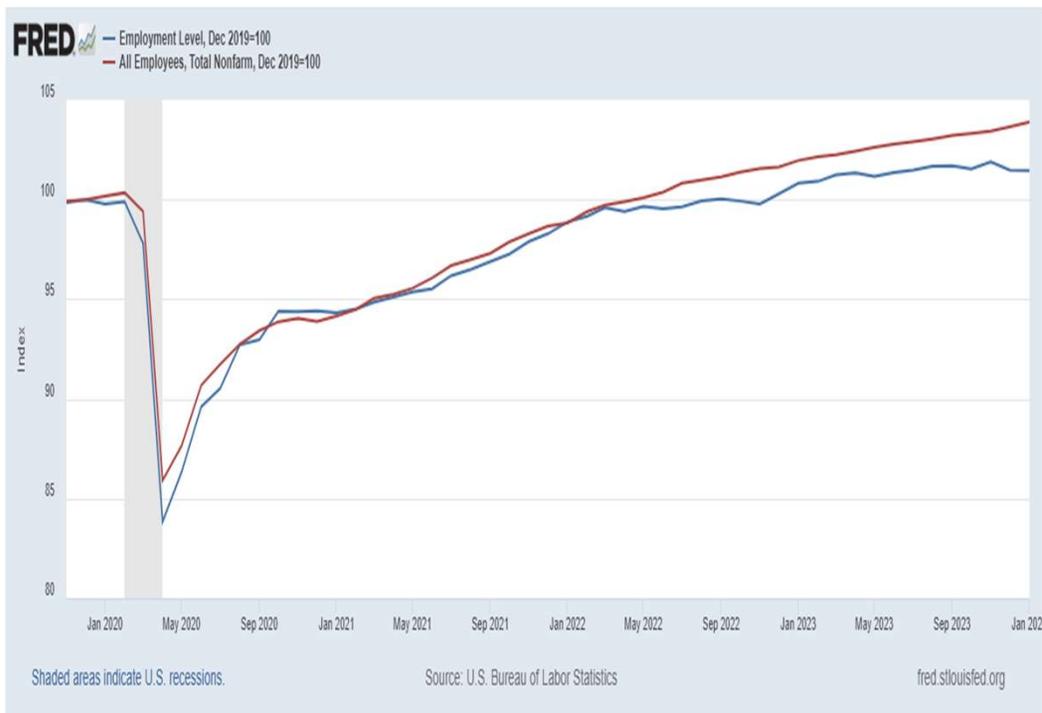
# Long-Term Inflation Expectations Remained “Well Anchored”



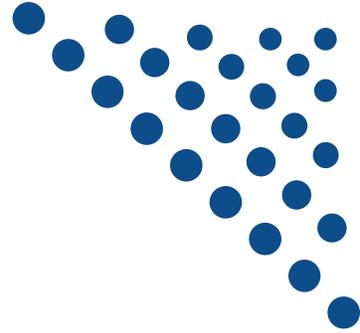
# The Future: Conflicting Signals



## Hot or Cooling?

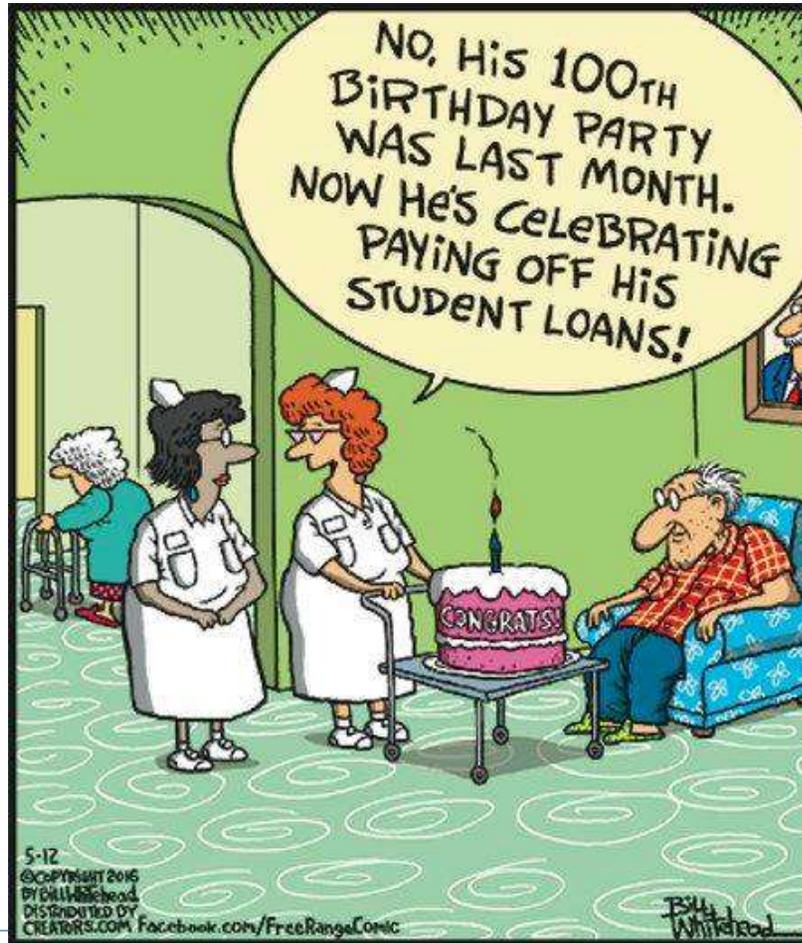
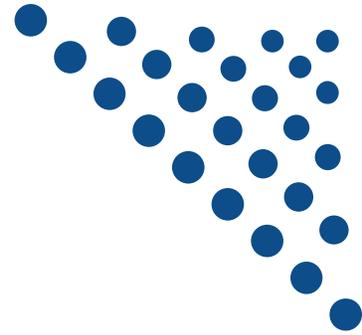


# Above My Pay Grade



- **To Cut or Not To Cut.**
- **Don't Forget about Lags.**
- **Political Reaction once Rates Start Coming Down?**
- **Stay Tuned: The 2024 election may hinge on what the Fed does and when.**

# 3. Student Debt



**Let's Hear from You!**

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**<https://sites.google.com/view/macro-current-issues/monetary-policy>**

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