Osher Lifelong Learning Institute, Winter 2022

Contemporary Economic Policy

Dartmouth College
April-May, 2023

Host: Jon Haveman, Ph.D.
National Economic Education Delegation

NATIONAL ECONOMIC EDUCATION DELEGATION

1

1

National Economic Education Delegation

- **Vision**
  - One day, the public discussion of policy issues will be grounded in an accurate perception of the underlying economic principles and data.
- **Mission**
  - NEED unites the skills and knowledge of a vast network of professional economists to promote understanding of the economics of policy issues in the United States.
- **NEED Presentations**
  - Are **nonpartisan** and intended to reflect the consensus of the economics profession.

NATIONAL ECONOMIC EDUCATION DELEGATION

2

2

Who Are We?

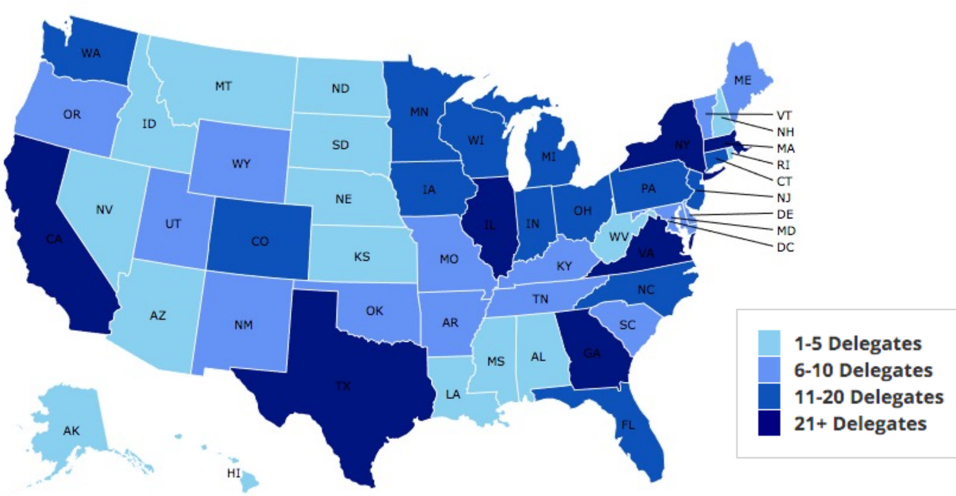
- **Honorary Board: 54 members**
  - 2 Fed Chairs: Janet Yellen, Ben Bernanke
  - 6 Chairs Council of Economic Advisers
    - Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
  - 3 Nobel Prize Winners
    - Akerlof, Smith, Maskin
- **Delegates: 653+ members**
  - At all levels of academia and some in government service
  - All have a Ph.D. in economics
  - Crowdsource slide decks
  - Give presentations
- **Global Partners: 48 Ph.D. Economists**
  - Aid in slide deck development

NATIONAL ECONOMIC EDUCATION DELEGATION

3

3

Where Are We?



NATIONAL ECONOMIC EDUCATION DELEGATION

4

4

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
- Healthcare Economics

Course Outline

- Contemporary Economic Policy
  - **Week 2 (4/10): Monetary Policy (Geoffrey Woglom)**
  - Week 3 (4/17): Healthcare Economics (Jon Haveman, NEED)
  - Week 4 (4/24): Trade and Globalization (Alan Deardorff, University of Michigan)
  - Week 5 (5/1): Trade Deficits and Exchange Rates (Alan Deardorff)
  - Week 6 (5/8): Cryptocurrencies (Jon Haveman)

Monetary Policy & The Fed

Geoffrey Woglom,
Professor of Economics
Amherst College, emeritus
April 10, 2023

NATIONAL ECONOMIC
EDUCATION DELEGATION

7

7

Credits and Disclaimer

- **This slide deck was authored by:**
  - Geoffrey Woglom, Amherst College (Emeritus)
- **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).

NATIONAL ECONOMIC
EDUCATION DELEGATION

8

8

Submitting Questions

- **Please submit questions in the chat, or by raising your digital hand.**
  - I will try to handle them as they come up.
- **We will do a verbal Q&A once the material has been presented.**
- **Slides will be available from the NEED website tomorrow (https://needelegation.org/delivered_presentations.php)**

NATIONAL ECONOMIC EDUCATION DELEGATION

9

9

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. **What's at stake if we don't get inflation under control.**

NATIONAL ECONOMIC EDUCATION DELEGATION

10

10

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**

NATIONAL ECONOMIC EDUCATION DELEGATION

11

11

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.**

NATIONAL ECONOMIC EDUCATION DELEGATION

12

12

Financial Crises in the 19th Century

- Financial Panics (and recessions) in the 19th 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 thins change, the liabilities will not be paid off.

NATIONAL ECONOMIC EDUCATION DELEGATION

13

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.**

NATIONAL ECONOMIC EDUCATION DELEGATION

14

14

Walter Bagehot's and his Famous Dictum

- **Walter Bagehot (1826-77): *Lombard Street*, 1873**
- **Save the solvent institutions while allowing the insolvent ones 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.

NATIONAL ECONOMIC EDUCATION DELEGATION

15

15

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.

NATIONAL ECONOMIC EDUCATION DELEGATION

16

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.

NATIONAL ECONOMIC EDUCATION DELEGATION

17

17

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.**

NATIONAL ECONOMIC EDUCATION DELEGATION

18

18

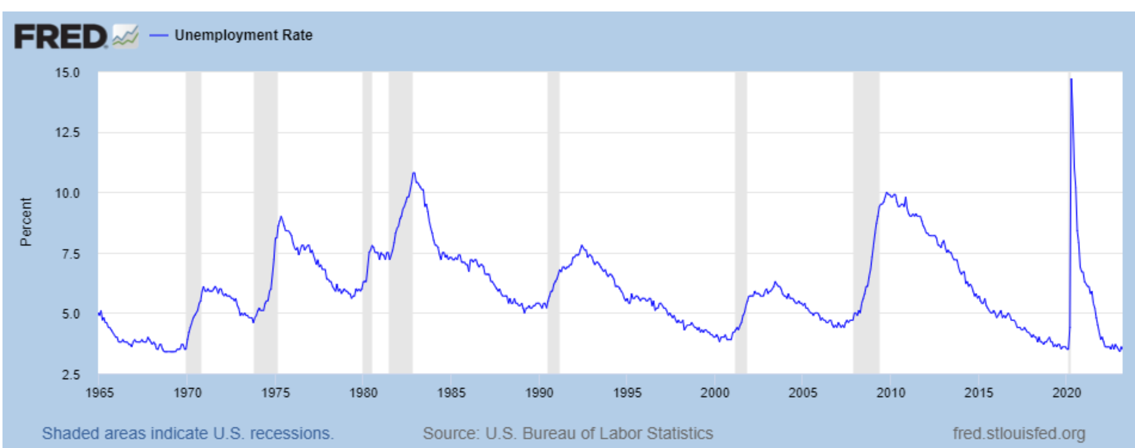
Stabilizer in Chief: the Fed

Jerome Powell
February 2018

- **The Fed's Dual Mandate:**
  1. "Stable prices" which means 2% rate of inflation in tl on Expenditure Price Index (which corresponds to about ıore well-known CPI).
  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)**

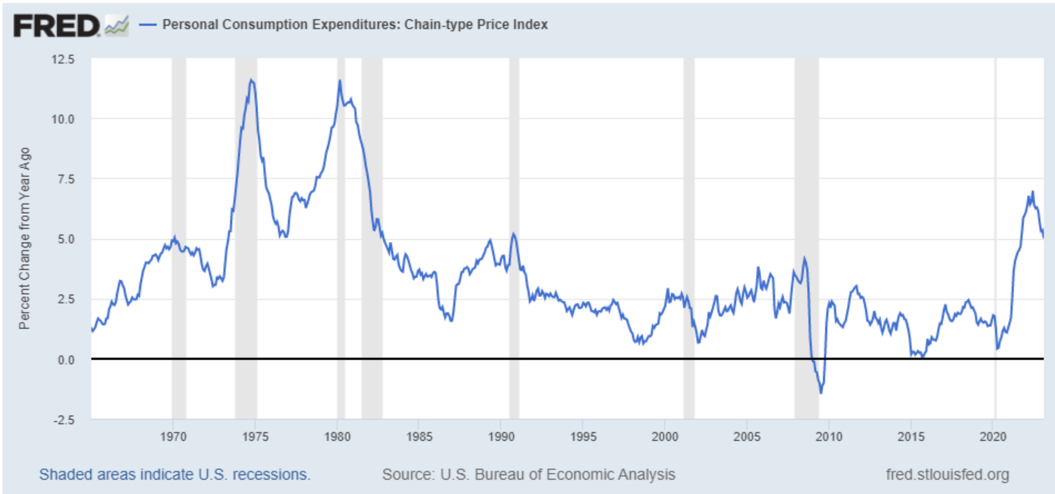
NATIONAL ECONOMIC EDUCATION DELEGATION

Track Record on Unemployment



NATIONAL ECONOMIC EDUCATION DELEGATION

Track Record on "Price Stability"



NATIONAL ECONOMIC EDUCATION DELEGATION

21

21

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.

NATIONAL ECONOMIC EDUCATION DELEGATION

22

22

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.
- If you are more concerned that unemployment is too high, lower interest rates.
- Inflation and unemployment just right: keep rates the same.

Note: in deciding on appropriate interest rates you must take account of what fiscal policy is doing that affects total spending

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):

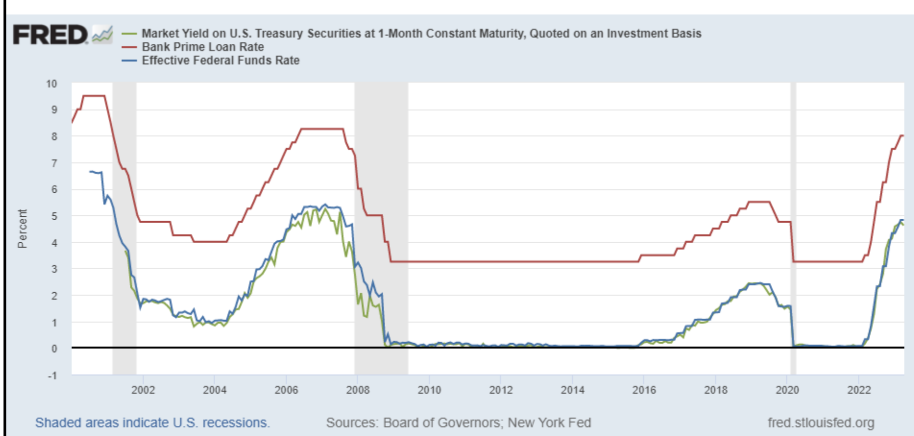
"Ronald Reagan proved that economists know nothing about inflation and unemployment. During his first term Reagan was able to do what economists said was impossible: simultaneously reducing inflation and unemployment."

What do you think would be my response?

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.
- 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 prime bank lending rate.
Green is the rate on 3 month Treasuries.

What about the Money Supply?

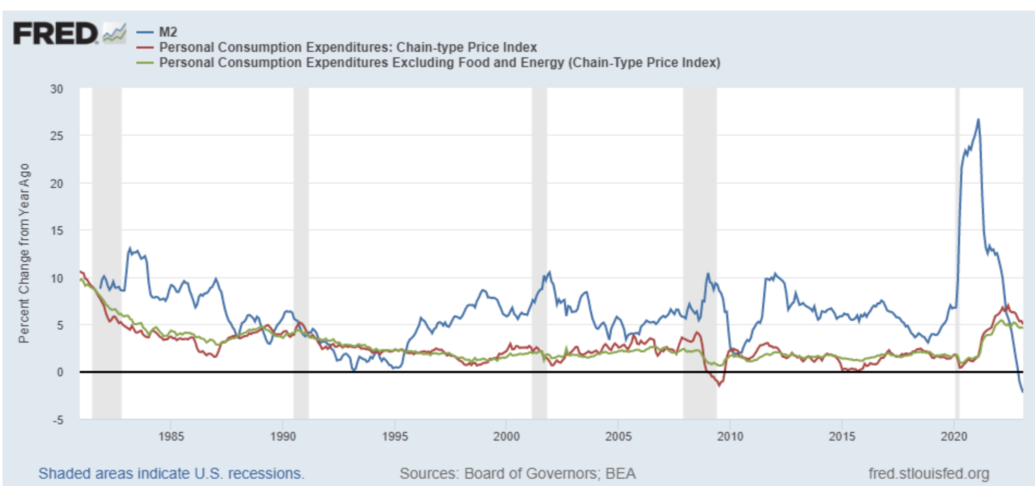
Notice the absence of the money supply. The Fed does not believe there is a reliable, short-run link between the money supply and total spending or inflation.

The Minutes of the 1/31-2/1/2023 FOMC Meeting mentions:

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

NATIONAL ECONOMIC EDUCATION DELEGATION

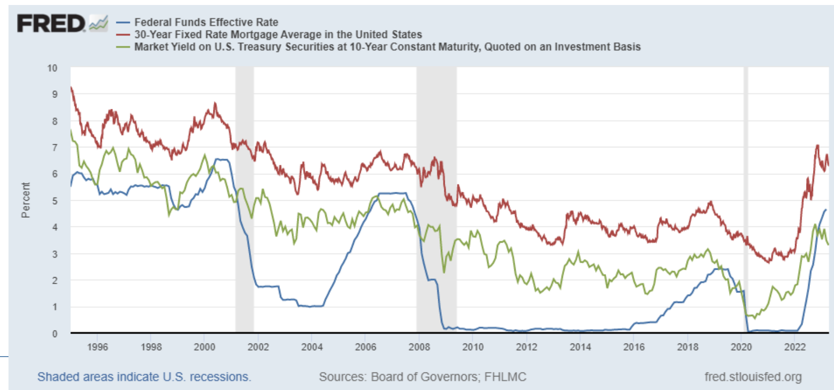
Do You See a Relationship?



NATIONAL ECONOMIC EDUCATION DELEGATION

The Importance of Long-Term Interest Rates

- **Nobody buys a house because of the level of 1-yr interest rates, and unfortunately, the current federal funds rate has much less influence on the rates that matter.**



NATIONAL ECONOMIC EDUCATION DELEGATION

Long-Term Interest Rates

- **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.
    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.**

NATIONAL ECONOMIC EDUCATION DELEGATION

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.

NATIONAL ECONOMIC EDUCATION DELEGATION

33

33

Forward Guidance

The Fed "guides" financial market participants about what they intend to do in the future. From the Policy Statement since September until February:

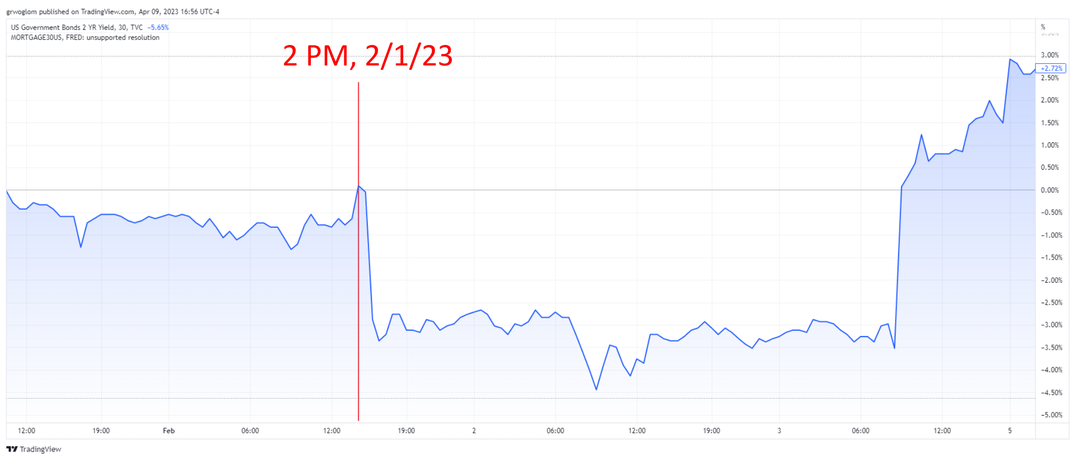
- Recent indicators point to modest growth in spending and production. Job gains have been robust in recent months, and the unemployment rate has remained low. Inflation rema has eased somewhat but remains elevated
- "The Committee anticipates that ongoing increases in the target range will be appropriate in order to attain a stance of monetary policy that is sufficiently restrictive to return inflation to 2 percent over time."
- "In determining the extent f future increases in the target range, the Committee will take into account the cumulative tightening of monetary policy, the lags with which monetary policy affects economic activity and inflation, and economic and financial developments."

NATIONAL ECONOMIC EDUCATION DELEGATION

34

34

When the Fed Talks, Wall St Listens!



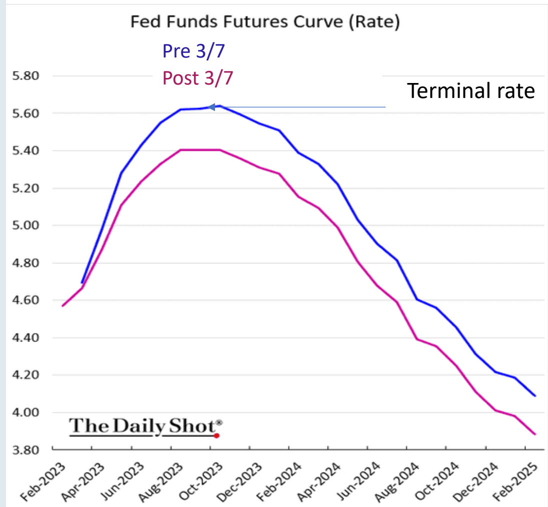
35

But Wall Street Got the Wrong Message

2Yr Treasury Rate,
March 7th

36

On March 7th Powell Gives More Guidance



NATIONAL ECONOMIC EDUCATION DELEGATION

37

37

QE And Long-term, Risky Rates

- Financial investors require a higher interest rate on risky bonds, than on safe short-term Treasuries.
- The greater the supply of risky bonds, the higher 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.

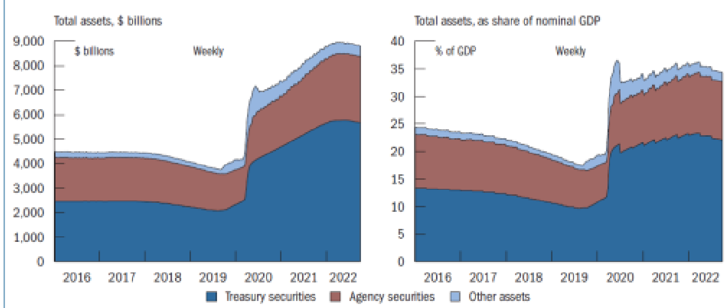
NATIONAL ECONOMIC EDUCATION DELEGATION

38

38

QE Has Been a Big Deal

Figure 1. Balance sheet assets, 2016–22



Note: Other assets includes swaps, repo, loans, and liquidity and credit facility LLCs; Asset values are weekly Wednesday. Key identifies curves from bottom to top.

Source: Federal Reserve Board.

Note: Asset values are weekly Wednesday; nominal GDP data are quarterly averages. Key identifies curves from bottom to top.

Source: Federal Reserve Board; Bureau of Economic Analysis.

NATIONAL ECONOMIC EDUCATION DELEGATION

39

Source: Federal Reserve Board

39

A Policy Strategy: Stabilize Expectations of Inflation

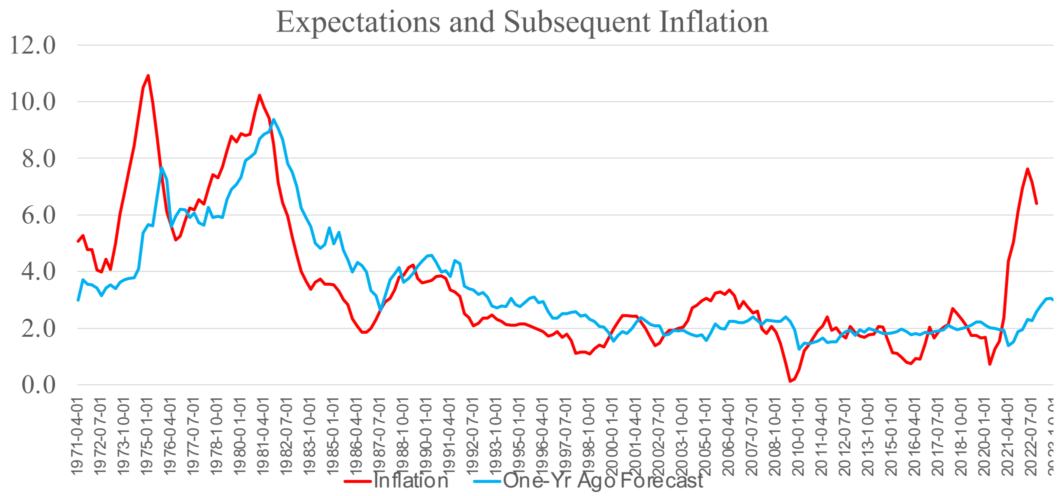
- **Monetary Policy is much easier if people believe that the Fed will achieve its inflation target.**
- **In central bank jargon, if expectations are stable and "well anchored."**

NATIONAL ECONOMIC EDUCATION DELEGATION

40

40

"Anchoring" Inflation Expectations



Forecasts: Philadelphia Fed, "Survey of Professional Forecasters"

NATIONAL ECONOMIC EDUCATION DELEGATION

41

41

Anchoring Requires Credibility

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

- **Requirements for Credibility**
  1. Transparency (Communication)
  2. Accountability (Performance)
  3. Political Independence

NATIONAL ECONOMIC EDUCATION DELEGATION

42

42

The Great Moderation

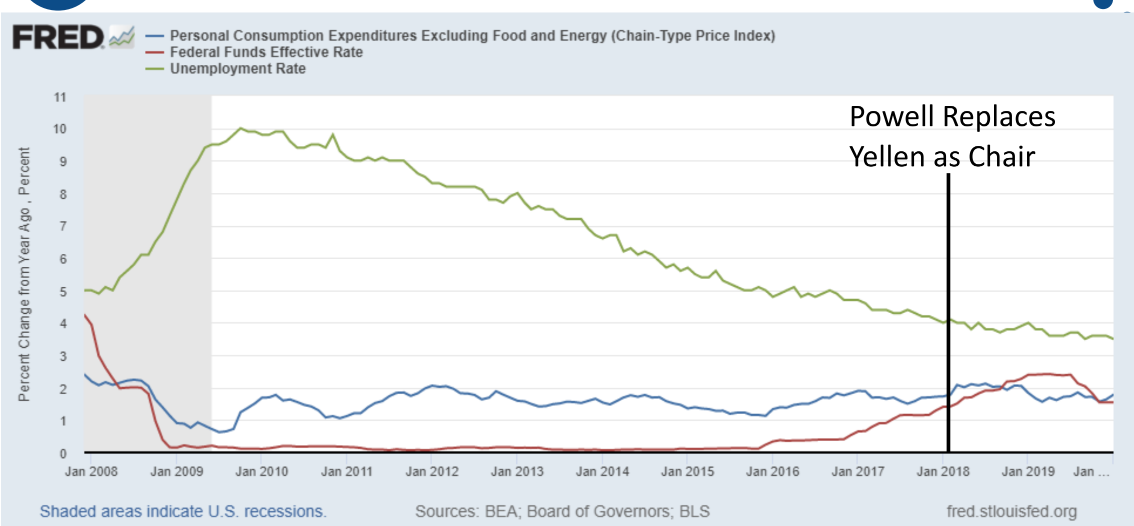
- Volcker paid a price in the early 1980s, but the price paid dividends from 1990 through 2008.
- During that period the performance of the US economy was extraordinary and even Milton Friedman gave kudos to the Alan Greenspan.
- Has Powell jeopardized Volcker's legacy?

NATIONAL ECONOMIC EDUCATION DELEGATION

43

43

Why Did Powell Do It?



NATIONAL ECONOMIC EDUCATION DELEGATION

44

44

Policy Changes under Powell

- In the Fed's dual mandate put more emphasis on the employment goal relative to the inflation goal.
- Inflation goal switched from targeting forecasted *future* inflation to trying to achieve average *realized* inflation of 2%

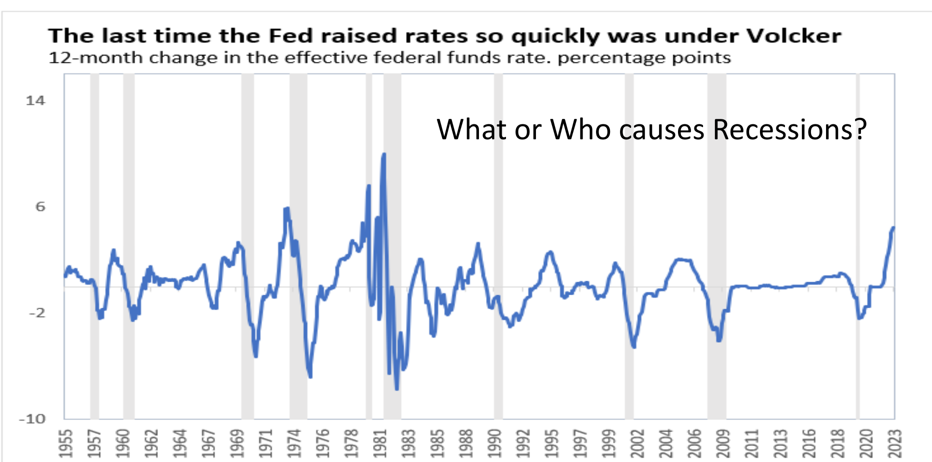
Have they forgotten about Lags!

NATIONAL ECONOMIC EDUCATION DELEGATION

45

45

Is Powell Now Channeling Volcker?



Source: Federal Reserve. Note: The shaded areas are recessions according to the NBER.

Amazingly, (to me anyway), the Fed reaffirmed targeting average realized inflation!

NATIONAL ECONOMIC EDUCATION DELEGATION

46

46

What's at Stake

- A rise in inflationary expectations would probably mean higher and more variable inflation.
- Oversteering leading to a steep recession ("hard" landing).
- Curbing inflation could lead to the demise of small banks.

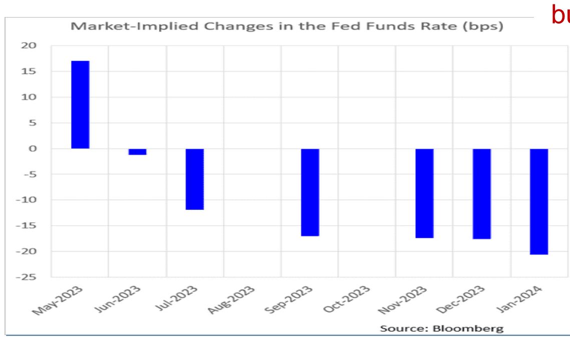
And, the Fed needs to navigate:

1. At the start of a presidential election cycle, with
2. Pervasive uncertainty. (e.g., credit crunch)

Forward Guidance: Reverse March!

Policy Statement March 22:

- Recent indicators point to modest growth in spending and production. Job gains have been robust in recent months. and the unemployment rate has remained low. Inflation has eased somewhat but remains elevated



Fed Plans, as of March 22

Variable (in percent)	Medians			
	2023	2024	2025	Longer Run
RGDP growth	0.4	1.2	1.9	1.8
Dec.	0.5	1.6	1.8	1.8
Unemployment	4.5	4.6	4.6	4.0
Dec.	4.6	4.6	4.5	4.0
Inflation	3.2	2.5	2.1	2.0
Dec.	3.1	2.5	2.1	2.0
Core Inflation	3.6	2.6	2.1	
Dec.	3.5	2.5	2.1	
Federal Funds	5.1	4.3	3.1	2.5
Dec.	5.1	4.1	3.1	2.5

Are these projections consistent with this lecture?

1. Interest rates above the "longer-run" rate.
2. Two years of growth below potential.
3. Rising unemployment, so that unemployment is above the "longer-run" rate.
4. Falling inflation

Is this a so-called "soft" landing? Why is the Fed forecasting a rise in the unemployment rate and can't they do something about it?

NATIONAL ECONOMIC EDUCATION DELEGATION

49

49

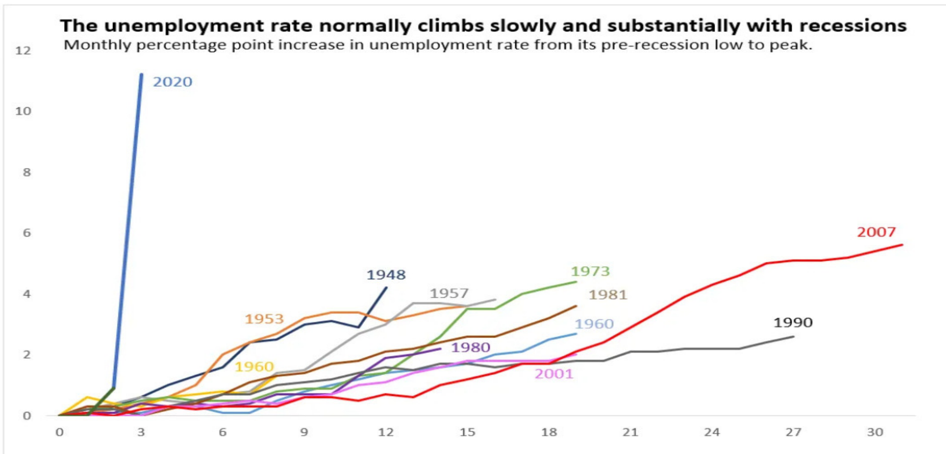
This Is Why Powell Gets the Big Bucks

NATIONAL EDUCATION

50

50

Sen Warren is Right



Source: Bureau of Labor Statistics. Calculations by Claudia Sahm.

NATIONAL ECONOMIC EDUCATION DELEGATION

51

51

Wednesday is a Big Day!

- **Wednesday**
  - 8:30 AM, BLS reports on CPI Inflation for March
  - 2 PM, Minutes of the March FOMC meeting released.

NATIONAL ECONOMIC EDUCATION DELEGATION

52

52

Economists' Frustration with MP & Inflation

Olivier Blanchard 12/30 Twitter Post:

Inflation is fundamentally the outcome of the distributional conflict, between firms, workers, and taxpayers… The source of the conflict may be too hot an economy. But in the end, forcing the players to accept the outcome, and thus stabilizing inflation, is typically left to the central bank… It is a highly inefficient way to deal with distributional conflicts…

Things to Ponder

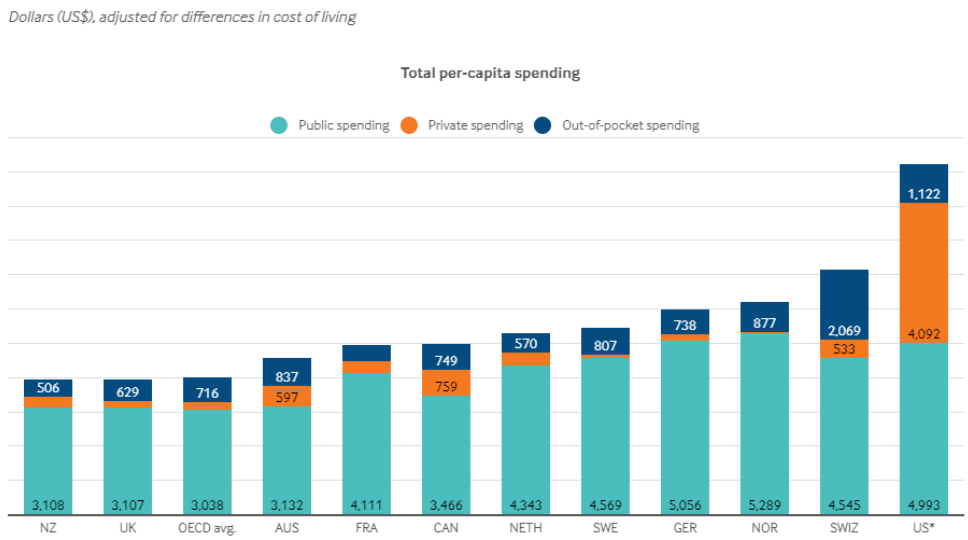
The Fed through monetary policy has the most influence on the short-run behavior of the (world?) economy. These governmental decisions are made "technocratically" and not democratically.

Congress has mandated the Fed to pursue:

1. **Both the inflation goal and the unemployment goal.**
2. **The mandate does not include anything about the effects of Fed policy on other countries.**

Is there a better way to conduct monetary policy?

International Comparison: Health Spending



NATIONAL ECONOMIC EDUCATION DELEGATION

55

Let's Hear from You!

Geoffrey Woglom
grwoglom@amherst.edu

Contact NEED: Info@NEEDelegation.org

Submit a testimonial:
www.NEEDelegation.org/testimonials.php

Support NEED:
www.NEEDelegation.org/donate.php

NATIONAL ECONOMIC EDUCATION DELEGATION

56

56