Osher Lifelong Learning Institute, Winter 2022

Contemporary Economic Policy

University of Southern Maine
January-February, 2023

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

1

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

2

Course Outline

- **Contemporary Economic Policy**
  - Week 1 (1/10): Trade and Globalization (Alan Deardorff, Univ. Michigan)
  - Week 2 (1/17): Trade Deficits and Exchange Rates (Alan Deardorff)
  - Week 3 (1/24): US Economic Update (Geoffrey Woglom, Amherst College)
  - **Week 4 (1/31): Monetary Economics (Geoffrey Woglom)**
  - Week 5 (2/7): The Black-White Wealth Gap (Jon Haveman, NEED)
  - Week 6 (2/14): Autonomous Vehicles (Jon Haveman)

NATIONAL ECONOMIC EDUCATION DELEGATION

3

3

Monetary Policy & The Fed

Geoffrey Woglom,
Professor of Economics
Amherst College, emeritus
January 31, 2023

NATIONAL ECONOMIC EDUCATION DELEGATION

4

4

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. Update on Inflation and what comes next.

NATIONAL ECONOMIC EDUCATION DELEGATION

5

5

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

6

6

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.**

7

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.

8

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

9

9

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.

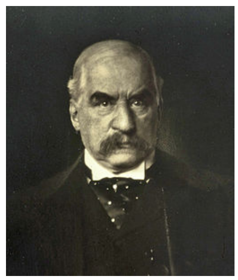
NATIONAL ECONOMIC EDUCATION DELEGATION

10

10

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

11

The Aftermath: Federal Reserve Act of 1913

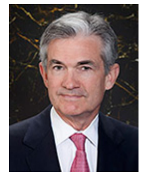
- **Original Roles of the Fed**
  1. Oversee Currency & Regulate Banks; 2. ***Lender of Last Resort***.
- **Great Depression and the Banking Panics of the 30s**
  - Fed fails miserably.
  - RFC lent more money to the banks than did the Fed
- **Footnote on later LOL Roles:**
  1. 2008: Bernanke saves the world, but Congress is not happy.
  2. 2020: Powell goes even bigger, but the verdict is still out.

NATIONAL ECONOMIC EDUCATION DELEGATION

12

12

Stabilizer in Chief: the Fed



Jerome Powell
February 2018

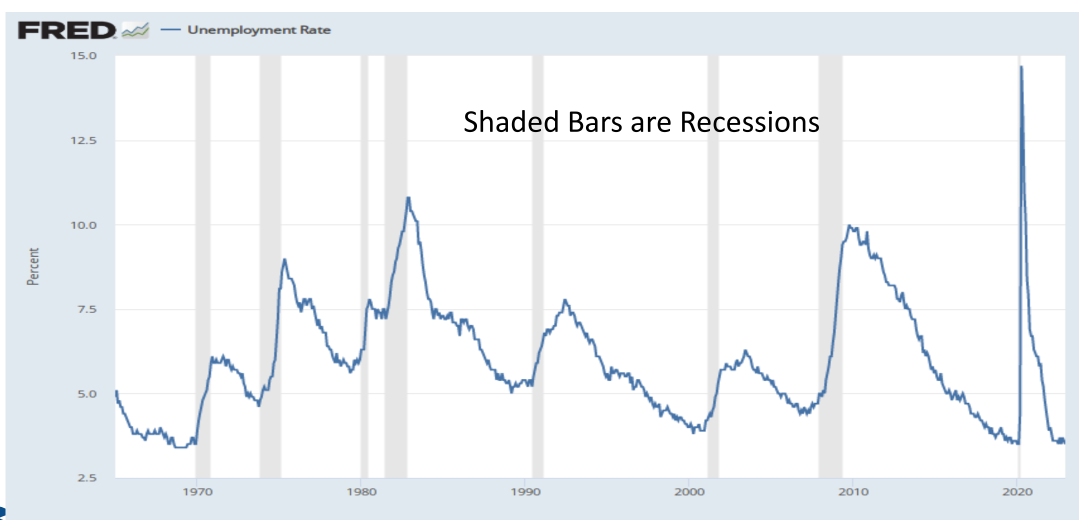
- **The Fed's Dual Mandate:**
  1. "Stable prices" which means 2% rate of inflation in tl on Expenditure Price Index (which corresponds to about ıore well-known CPI).
  2. "Maximum employment" which means the highest level of employment (lowest unemployment rate) consistent with mandate 1.
- **Monetary 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

13

13

Track Record on Unemployment

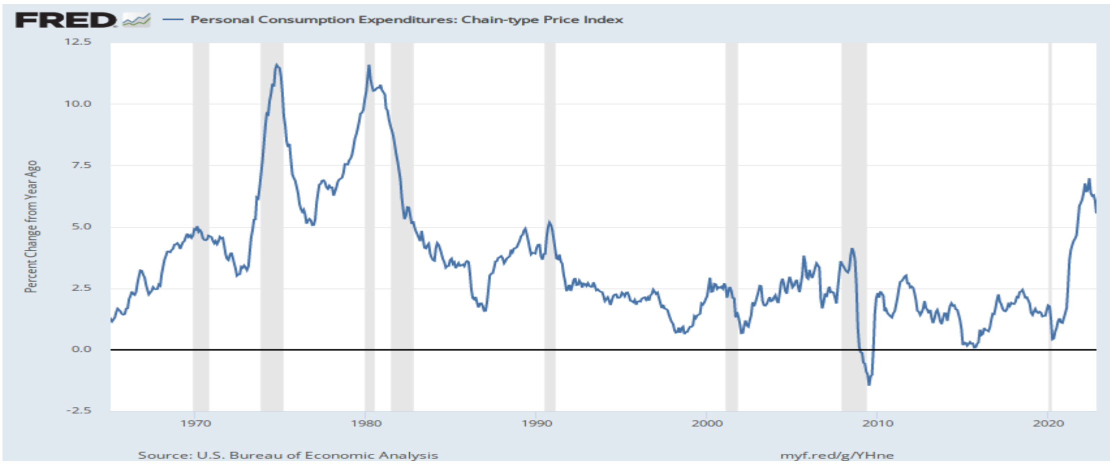


EDUCATION DELEGATION

14

14

Track Record on "Price Stability"



NATIONAL ECONOMIC EDUCATION DELEGATION

15

15

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

16

16

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!

NATIONAL ECONOMIC EDUCATION DELEGATION

17

17

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.

NATIONAL ECONOMIC EDUCATION DELEGATION

18

18

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.

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.

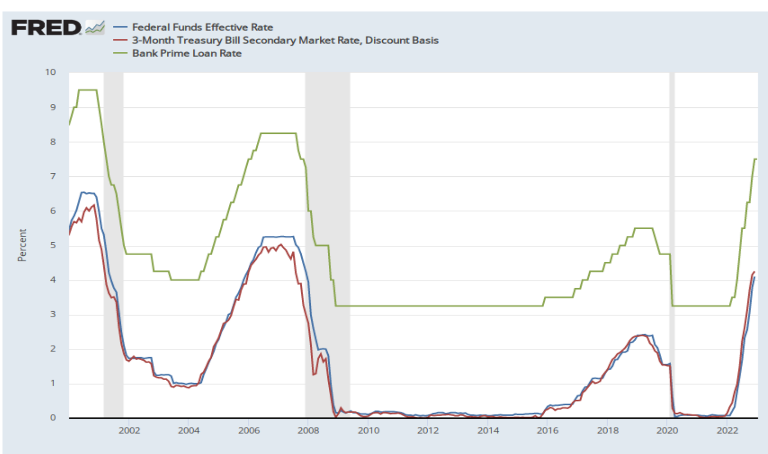
A Closer Look at Interest Rate Control

- *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.

NATIONAL ECONOMIC EDUCATION DELEGATION 21

21

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

NATIONAL ECONOMIC EDUCATION DELEGATION 22

22

What about the Money Supply?

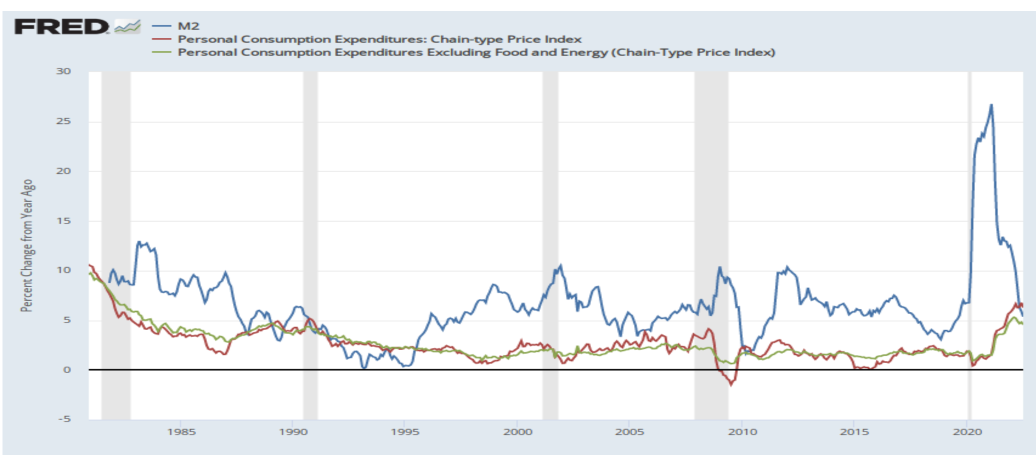
Notice the absence of the money supply. The Fed does not believe there is a reliable, short-run link between the money supply and total spending or inflation.

The Minutes of the 12/13-14/2022 FOMC Meeting mentions:

- Money Supply, M1, M2 – 0 times
- Federal funds rate – 16 times

NATIONAL ECONOMIC
EDUCATION DELEGATION

Do You See a Relationship?



NATIONAL ECONOMIC
EDUCATION DELEGATION

“Don’t Listen to This Nonsense”

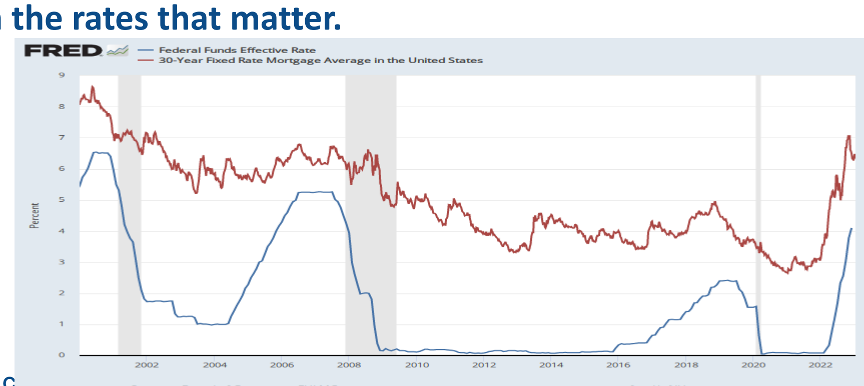
Robert Bartley, Editor of the Editorial page of the *Wall Street Journal* in the 1980s (paraphrased):

“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 reducing inflation and unemployment.”

What do you think would be my response?

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.**



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.**

27

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.

28

Forward Guidance

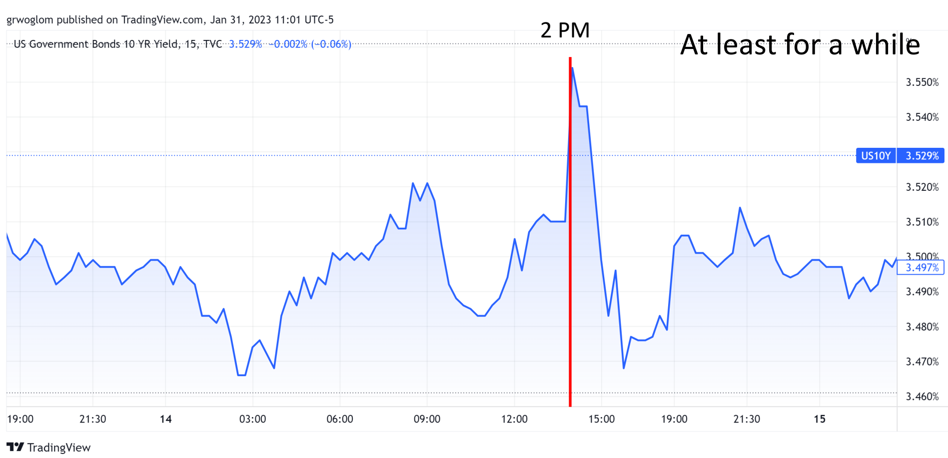
The Fed "guides" financial market participants about what they intend to do in the future. From the 9/13-14/22 Policy Statement:

- **"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."**

NATIONAL ECONOMIC EDUCATION DELEGATION 29

29

When the Fed Talks, Wall St Listens!



NATIONAL ECONOMIC EDUCATION DELEGATION 30

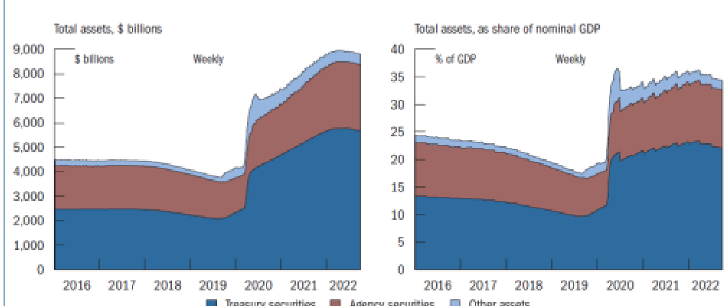
30

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.
- QE is particularly important when the federal funds rate has hit the zero (ZLB)

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.

Source: Federal Reserve Board

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…"

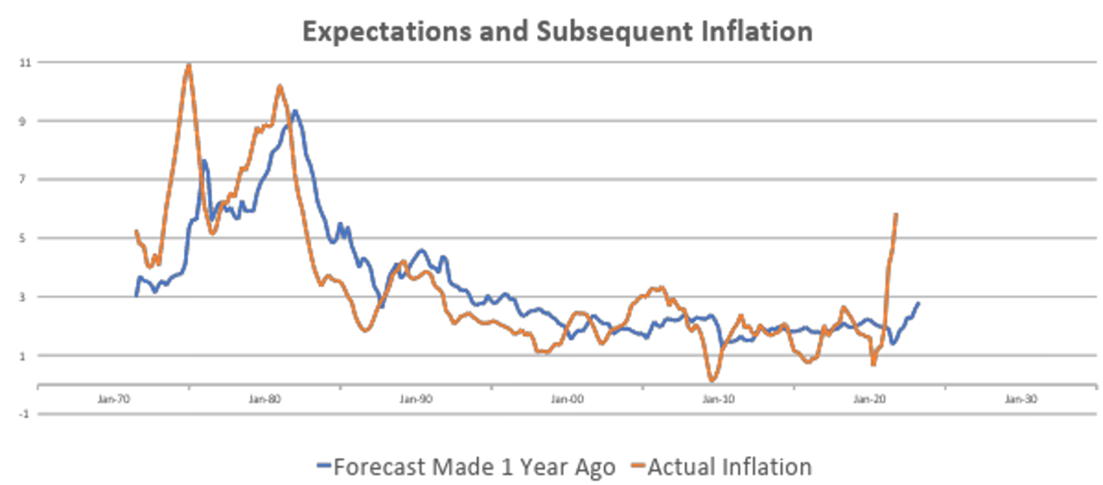
- In central bank jargon, stable expectations are "well anchored."

NATIONAL ECONOMIC EDUCATION DELEGATION

33

33

"Anchoring" Inflation Expectations



Forecasts: Philadelphia Fed, "Survey of Professional Forecasters"

NATIONAL ECONOMIC EDUCATION DELEGATION

34

34

Anchoring Requires Credibility

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

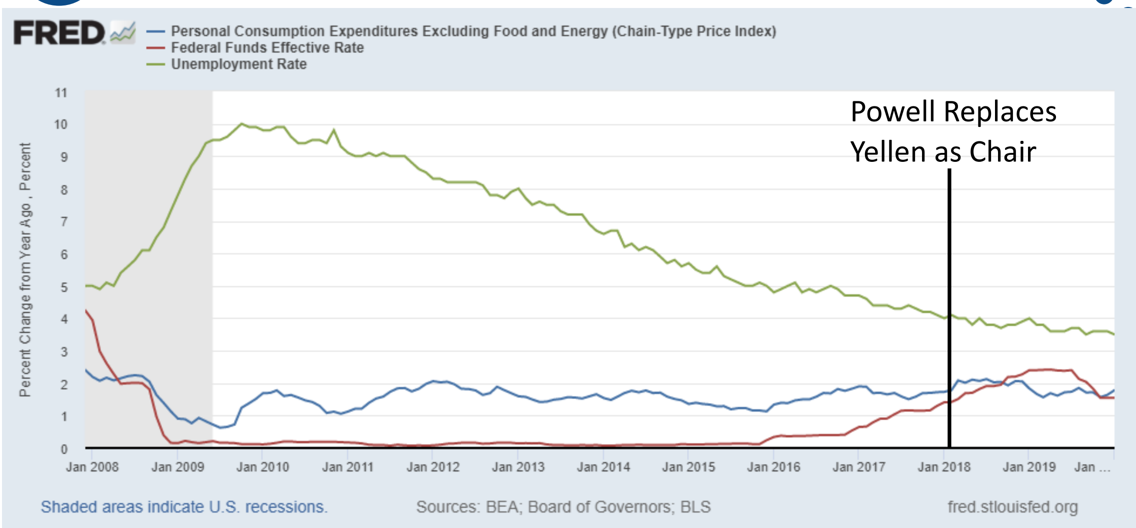
- **Requirements for Credibility**
  1. Transparency (Communication)
  2. Accountability (Performance)
  3. Political Independence

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?

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?



NATIONAL ECONOMIC
EDUCATION DELEGATION

37

37

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

38

38

OK But What Explains Powell's Reversal?

"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 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?"

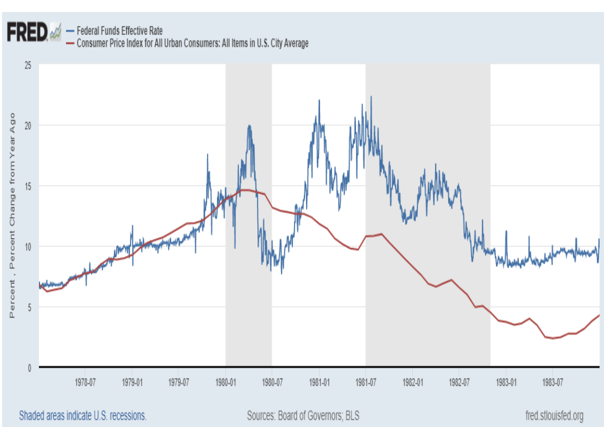
(Larry Summers doesn't think so)

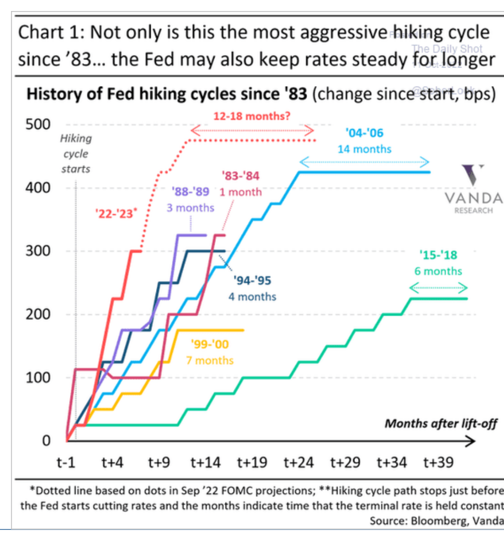
NATIONAL ECONOMIC EDUCATION DELEGATION

39

39

Is Powell Channeling Volcker?





NATIONAL ECONOMIC EDUCATION DELEGATION

40

40

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…

NATIONAL ECONOMIC
EDUCATION DELEGATION

41

41

FOMC Had Been of Two Minds (December 14, 2022)

Many participants highlighted that the Committee needed to continue to balance two risks.

1. One risk was that an insufficiently restrictive monetary policy could cause inflation to remain above the Committee's target for longer than anticipated, leading to unanchored inflation expectations
2. The other risk was that the lagged cumulative effect of policy tightening could end up being more restrictive than is necessary to bring down inflation to 2 percent and lead to an unnecessary reduction in economic activity, potentially placing the largest bur-dens on the most vulnerable groups of the population.

No participants anticipated that it would be appropriate to begin reducing the federal funds rate target in 2023.

NATIONAL ECONOMIC
EDUCATION DELEGATION

42

42

FOMC Economic Projections

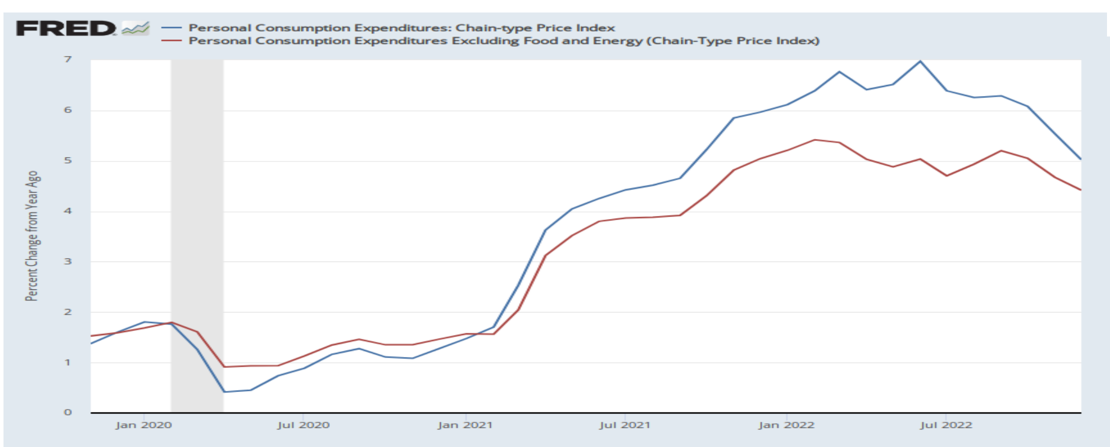
Variable (in percent)	Medians				
	2022	2023	2024	2025	Longer Run
RGDP growth	0.5	0.5	1.6	1.8	1.8
Sept.	0.2	1.2	1.7	1.8	1.8
Unemployment	3.7	4.6	4.6	4.5	4.0
Sept.	3.8	4.4	4.4	4.3	4.0
Inflation	5.6	3.1	2.5	2.1	2.0
Sept.	5.4	2.8	2.3	2.0	2.0
Core Inflation	4.8	3.5	2.5	2.1	2.0
Sept.	5.4	2.8	2.3	2.0	2.0
Federal Funds	4.4	5.1	4.1	3.1	2.5
Sept	4.4	4.6	3.9	2.9	2.5

NATIONAL ECONOMIC EDUCATION DELEGATION

43

43

Fed's Preferred Measure of Inflation (1/27)

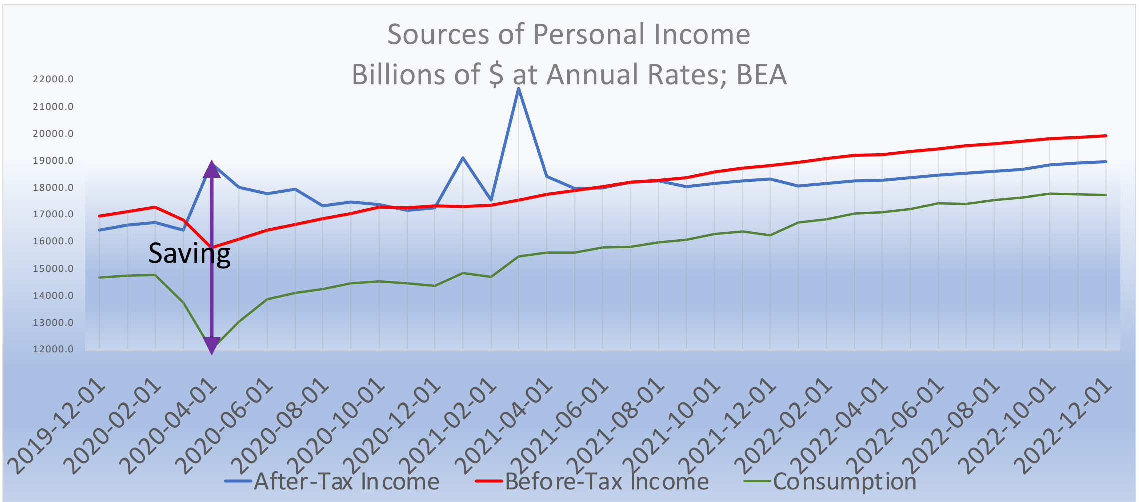


NATIONAL ECONOMIC EDUCATION DELEGATION

44

44

Fiscally Driven Recovery (1/27)



NATIONAL ECONOMIC EDUCATION DELEGATION

45

45

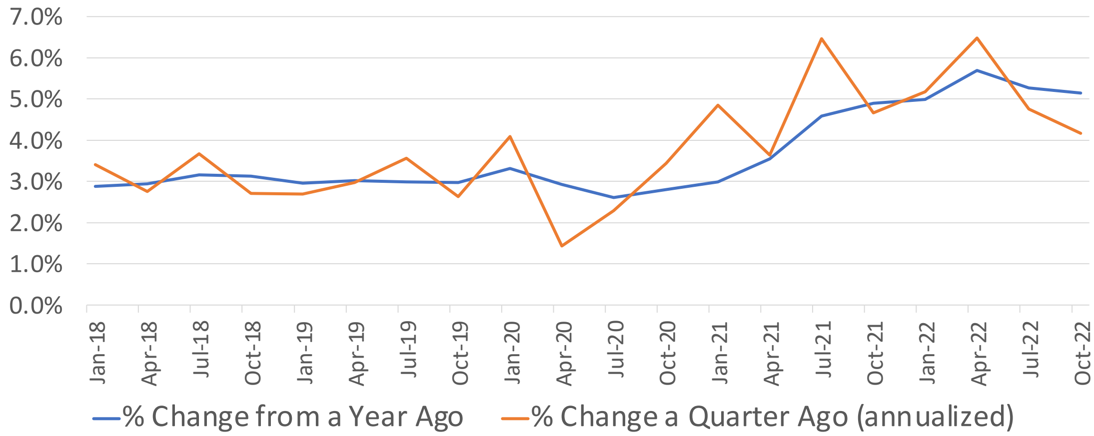
Initial Unemployment Claims (1/26)

NATIONAL ECONOMIC EDUCATION DELEGATION

46

46

Employment Cost Index (1/31, 8:30 AM)

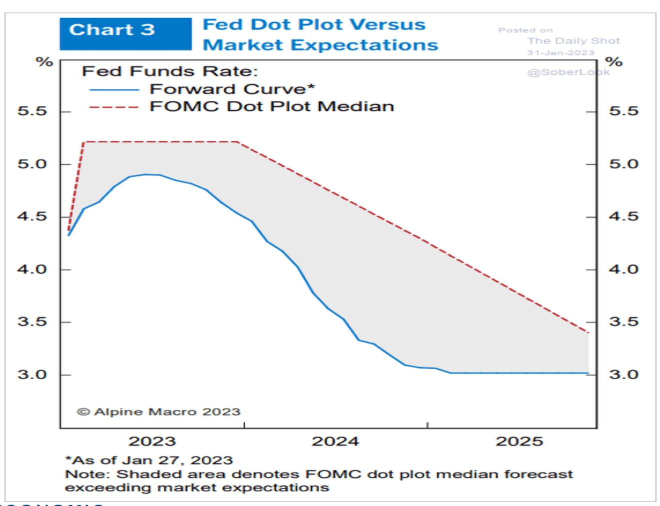


NATIONAL ECONOMIC EDUCATION DELEGATION

47

47

Wall Street Doesn't Believe the Fed



NATIONAL ECONOMIC EDUCATION DELEGATION

48

48

Reading Today's Tea Leaves

NATIONAL ECONOMIC
EDUCATION DELEGATION

49

49

Is the Fed Happy with this Chart?

NATIONAL ECONOMIC
EDUCATION DELEGATION

50

50

Now, it is Your Turn

www.NEEDelegation.org
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

51

51