

Osher Lifelong Learning Institute, Spring 2023 Current Issues in Macroeconomics & Finance

Brandeis University April-May 2023

Host: Geoffrey Woglom Professor of Economics (emeritus), Amherst College



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.



2

2

Who Are We?

Honorary Board: 54 members

- 2 Fed Chairs: Janet Yellen, Ben Bernanke
- 6 Chairs Council of Economic Advisers
 - o Furman (D), Rosen (R), Bernanke (R), Yellen (D), Tyson (D), Goolsbee (D)
- 3 Nobel Prize Winners
 - o 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

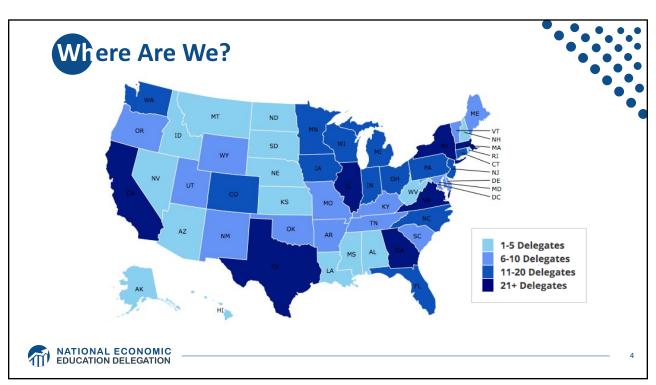
Global Partners: 48 Ph.D. Economists

- Aid in slide deck development



3

3



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









Monetary Policy & The Fed





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).



7

7

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)



8

Ou line 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.



9

9

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



10



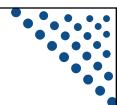


- Sveriges Riksbank (Sweden), 1668, currency regulation.
- Bank of England, 1694, debt finance for the War of Grand Alliance.
- Banks of the US, First (1791-1811) and Second (1816-1836) did a little of both.



11

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.



17

Stabilizer in Chief: the Fed







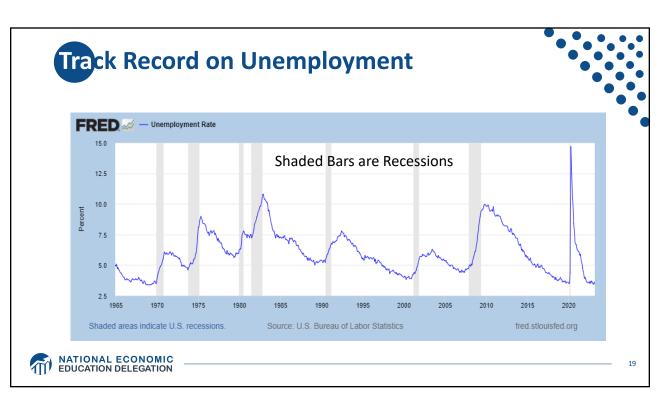
οn iore well-

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



18

18





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.



21



The Fed's Affects the Economy via Interest Rate

- 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.



22

Become a Central Banker in One Slide!



- If you are more concerned that inflation is too high, raise interest
- 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.



24

'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?



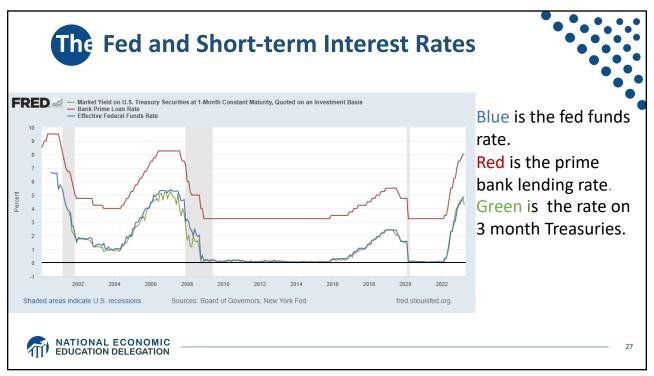
A Closer Look at Interest Rate Control

- *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.



26

26







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.

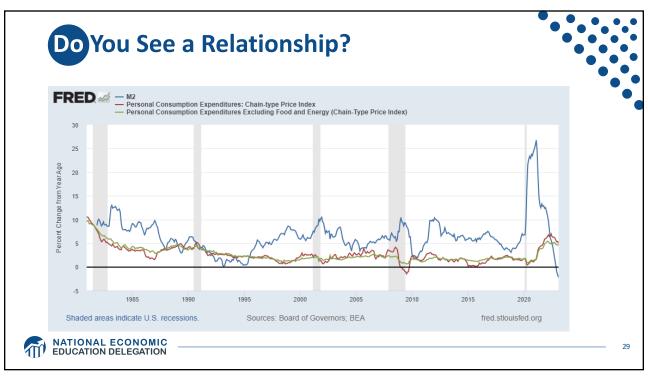
The Minutes of the 1/31-2/1/2023 FOMC Meeting mentions:

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



28

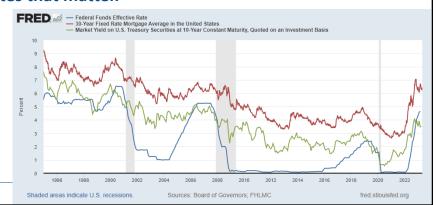
28





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.





30





- Long-term interest rates depend on two factors
 - 1. The average of expected, future short-term rates over the life of the longterm 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.





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.



32

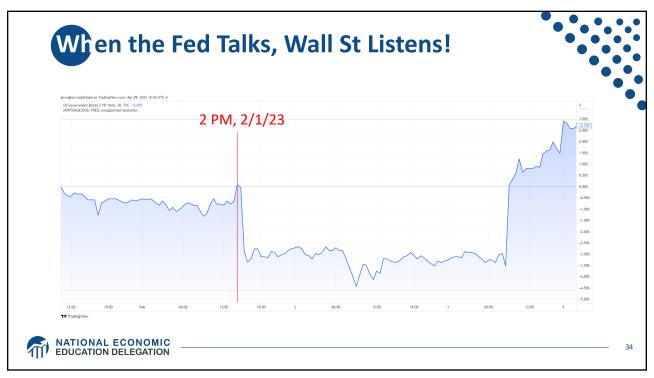
Forward Guidance



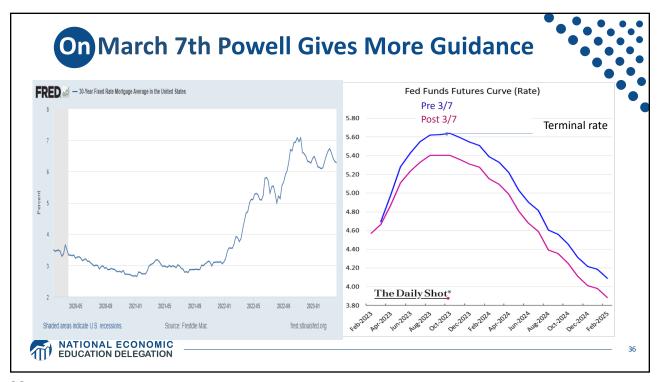
The Fed "guides" financial market participants about what they intend to do in the future. From the Policy Statement since September until February:

- 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 of 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."









QEAnd 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.



37

Figure 1. Balance sheet assets, 2016–22 Total assets, \$ billions 9,000 8,000 7,000 6,000 5,000

2,000
1,000
0
2016 2017 2018 2019 2020 2021 2022
1 Teasury securities Agency securities Other assets

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

Source: Federal Reserve Board.

10
5
0
2016 2017 2018 2019 2020 2021 2022
2016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022
3016 2017 2018 2019 2020 2021 2022

15

NATIONAL ECONOMIC EDUCATION DELEGATION

3,000

Source: Federal Reserve Board

38

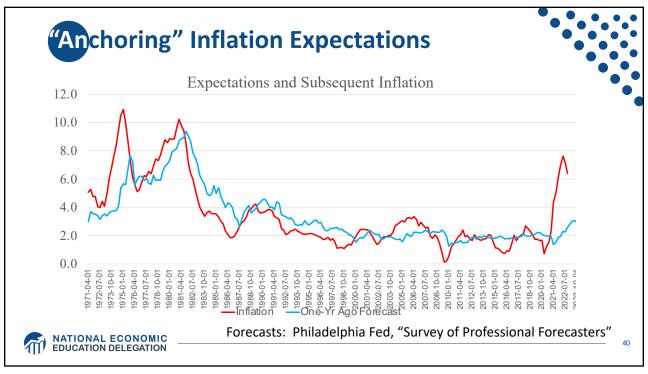
A Policy Strategy: Stabilize Expectations of Inflation

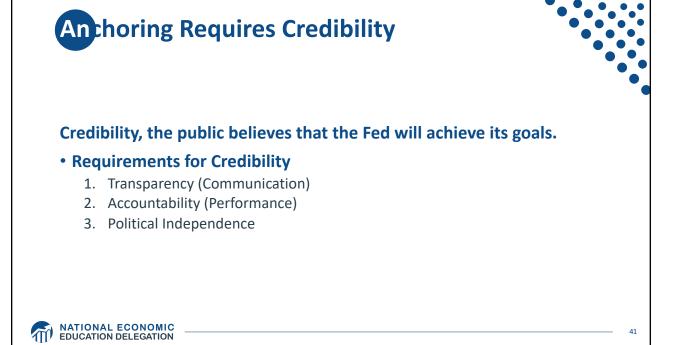


- Monetary Policy is much easier if people believe that the Fed will achieve its inflation target.
- In central bank jargon, if expectations are stable and "well anchored."



3





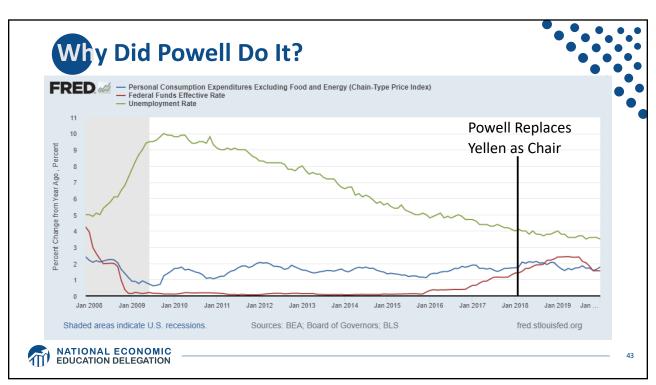




- Volcker paid a price in the early 1980s, but the price paid dividends from 1990 through 2008.
- During that period the performance of the US economy was extraordinary and even Milton Friedman gave kudos to the Alan Greenspan.
- Has Powell jeopardized Volcker's legacy?



42



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!



44

44

The last time the Fed raised rates so quickly was under Volcker 12-month change in the effective federal funds rate, percentage points What or Who causes Recessions? What or Who causes Recessions? Source: Federal Reserve. Note: The shaded areas are recessions according to the NBER. Amazingly, (to me anyway), the Fed reaffirmed targeting average realized inflation!





- 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 widespread bank failures (Pacific West?).

And, the Fed needs to navigate:

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



46

46

Fec Plans, as of March 22

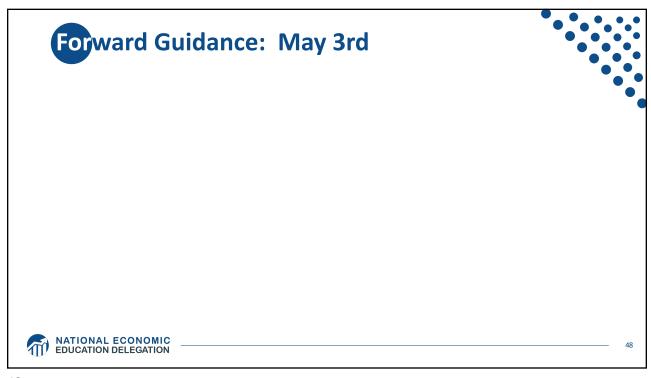
Variable	Medians			
(in percent)	2023	2024	2025	Longer Run
RGDP growth	0.4	1.2	1.9	1.8
Dec.	0.5	1.6	1.8	1.8
Unemployment	4.5	4.6	4.6	4.0
Dec.	4.6	4.6	4.5	4.0
Inflation	3.2	2.5	2.1	2.0
Dec.	3.1	2.5	2.1	2.0
Core Inflation	3.6	2.6	2.1	
Dec.	3.5	2.5	2.1	
Federal Funds	5.1	4.3	3.1	2.5
Dec.	5.1	4.1	3.1	2.5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

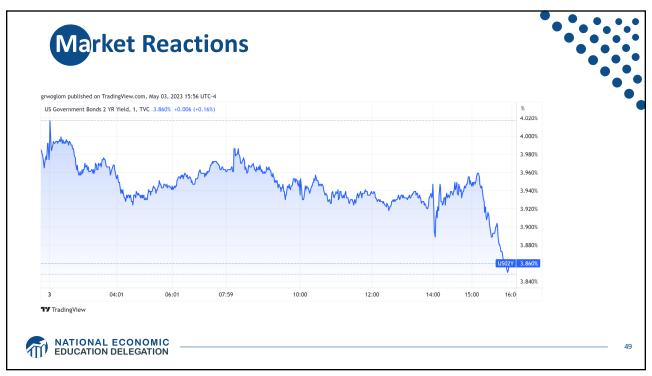
Are these projections consistent with this lecture?

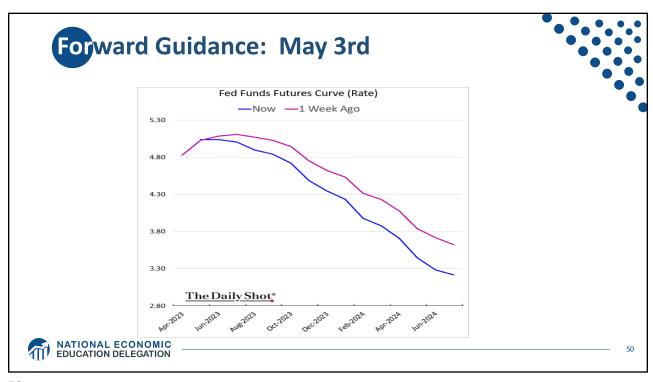
- 1. Interest rates above the "longer-run" rate.
- 2. Two years of growth below potential.
- 3. Rising unemployment, so that unemployment is above the "longer-run" rate.
- 4. Falling inflation

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?

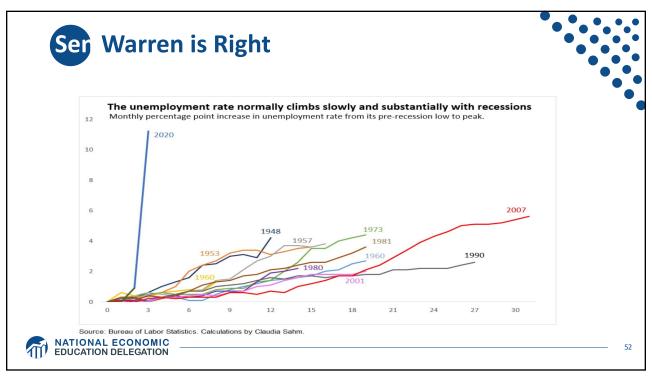
47















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...



53

Things to Ponder

The Fed through monetary policy has the most influence on the shortrun 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, while maintaining a credible commitment to low inflation?



54

54



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

55