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**21<sup>st</sup>**

**Century  
Monetary  
Policy**

**THE FEDERAL RESERVE  
FROM THE GREAT INFLATION  
TO COVID-19**

# THE CHANGING FEDERAL RESERVE

- Since its Depression-era reorganization in 1935, the Fed has seen **very few changes to its mandate or powers.**
  - Exceptions are expanded oversight of bank holding companies (1956), the formalization of the dual mandate (1977), and the power to pay interest on bank reserves (2008).
- **Nevertheless, especially since about 2000, the Fed's tools, policy framework, and policy implementation techniques have undergone radical change.**
- **The book provides a history and explanation of this evolution and speculates on how the Fed might confront future challenges.**

# FEDERAL RESERVE INNOVATIONS SINCE 2000: MONETARY POLICY

## POLICY TOOLS

- **Forward rate guidance** (increasingly explicit, long horizon)
  - Date-contingent, state-contingent, quantitative
  - Extended Summary of Economic Projections, including dot plot and estimates of long-run neutral rate, sustainable unemployment rate
  - Chair press conferences
- **Quantitative easing** (purchases of longer-term securities for macroeconomic objectives)
  - State-contingent (qualitative)
  - \$9T balance sheet in 2022 vs < \$1T in 2008

# FEDERAL RESERVE INNOVATIONS SINCE 2000: MONETARY POLICY

## POLICY FRAMEWORK

- Statement on longer-run goals and policy strategy, approved each year (2012)
- Formal 2% inflation target (2012); “flexible inflation targeting”
- Flexible average inflation targeting (2020)
- Elimination of pre-emptive inflation strikes (2020); “broad-based and inclusive”

## POLICY IMPLEMENTATION

- Ample reserves framework implies permanently large balance sheet
- Control of funds rate through administered rates (IOR, ONRRP)

# FEDERAL RESERVE INNOVATIONS SINCE 2000: FINANCIAL STABILITY

## TRADITIONAL

- Lender of last resort to banks (Bagehot dictum): “Lend freely at penalty rate...” (1987, 2001)

## LENDER OF LAST RESORT TO FINANCIAL INSTITUTIONS: BEYOND THE DISCOUNT WINDOW

- Expanding lending to nonbanks, global markets
  - Lending to nonbank financial institutions (dealers, MMMFs) using 13(3) powers
  - Lending dollars internationally via currency swaps (2008, 2020)

# **FEDERAL RESERVE INNOVATIONS SINCE 2000: FINANCIAL STABILITY**

## **BUYER OF LAST RESORT IN KEY SECURITIES MARKETS**

- Supporting distressed or dysfunctional markets (2008 MBS, 2020 Treasuries and MBS)
- Provision of large-scale liquidity to money markets (term repos, repo facilities)

# FEDERAL RESERVE INNOVATIONS SINCE 2000: FINANCIAL STABILITY

## LENDER OF LAST RESORT TO NONFINANCIAL BORROWERS

- Emergency (13-3) lending directly to nonfinancial borrowers when credit markets break down
- Commercial paper, ABS (2008, 2020)
- With Congressional support, programs to buy bonds and make loans to corporates, municipals, and nonprofits (2020)
- Main Street Lending Facility (through banks)

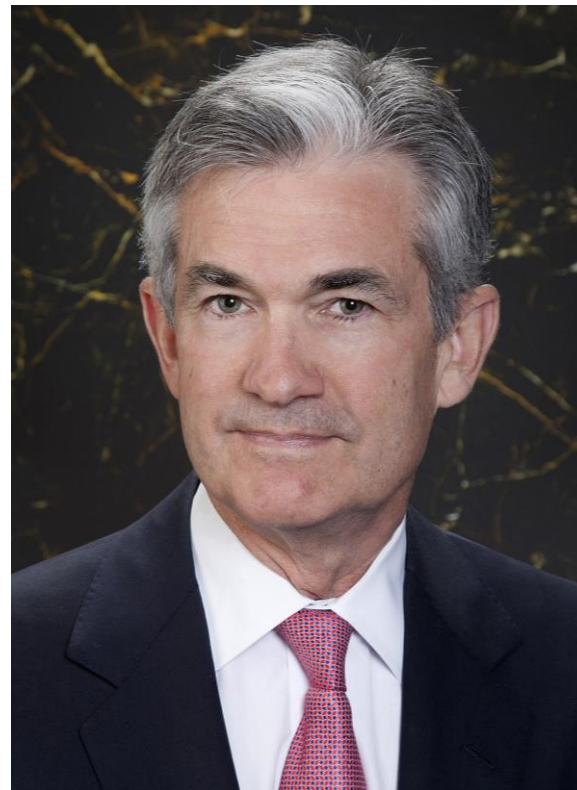
# FEDERAL RESERVE INNOVATIONS SINCE 2000: FINANCIAL STABILITY

## MACROPRUDENTIAL OVERSIGHT

- Leading role in Financial Stability Oversight Council
- Division of Financial Stability
- Financial Stability Reports
- Role in orderly liquidation, living wills



**Imagining a conversation between William McChesney Martin and Jay Powell...**



# THREE LONG-TERM DEVELOPMENTS HAVE DRIVEN THIS INNOVATION

## (1) Changing relationship of inflation and unemployment (Phillips curve)

- Lower, more stable inflation following Great Inflation
  - Fed succeeded in anchoring inflation expectations
  - Flatter Phillips curve
  - Lower (though uncertain) natural rate of unemployment,  $u^*$
  - Perceived benefits of “hot” labor market
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- Low and stable inflation and well-anchored expectations led the Fed to put **increasing emphasis on achieving maximum employment** while “looking through” supply shocks, at least until 2022.
  - How much will all this be changed by the 2021 inflation shock? Will FAIT survive?

# THREE LONG-TERM DEVELOPMENTS HAVE DRIVEN THIS INNOVATION

## (2) Declining nominal neutral rate of interest, $R^*$

- Lower trend inflation
  - Secular stagnation/global savings glut
  - Lower term premiums (safe assets, changed hedging properties of bonds)
  - Fiscal deficits work in other direction
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- Declines in  $R^*$  **reduced the scope for short-term rate cuts** and forced the Fed and other central banks to find **new monetary tools and frameworks** to stimulate the economy.

# THREE LONG-TERM DEVELOPMENTS HAVE DRIVEN THIS INNOVATION

## (3) Increased risk of systemic financial instability

- Post-New Deal “quiet period” until late 1970s shattered by inflation and deregulation
  - Explosive growth of shadow banking, securitization
  - Complexity and globalization
  - **Increasing mismatch of financial structure and financial regulation**
  - Over-reliance on market discipline to control risk-taking
  - **Lack of macroprudential perspective**
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- The Fed’s new approaches are responses to financial innovation, a shifting financial landscape, and holes in the regulatory safety net.

# THE BOOK ILLUSTRATES THESE DEVELOPMENTS THROUGH A NEW HISTORY OF FED POLICY

- Why didn't Martin "take away the punch bowl" in the late 1960s?
- Why didn't Burns do more about inflation even after Nixon left office?
- Did Volcker's credibility reduce the cost of disinflation?
- Greenspan and the stock market
- How unusual was the "Maestro" episode?
- Fed communication from Greenspan to Powell

# THE BOOK ILLUSTRATES THESE DEVELOPMENTS THROUGH A NEW HISTORY OF FED POLICY

- The roots of the global financial crisis and the Fed's response
- Why was there a taper tantrum in 2013?
- Rethinking policy and policy frameworks under Yellen and Powell
- Powell, Trump, and Fed independence
- The challenges of the pandemic for monetary policy, including the new FAIT framework

## THE BOOK ALSO LOOKS FORWARD TO THE FED'S FUTURE

- With the neutral rate likely to remain low, forward guidance and QE will remain in the policy toolbox. What are the benefits and risks?
- Assuming the ZLB becomes a problem again, what new tools could the Fed consider? Buying broader classes of assets? Funding for lending? Negative rates? Yield curve control? What role should fiscal policy play?
- How will the Fed's framework evolve, in light of recent experience? Variants of inflation or price-level targeting? Nominal GDP targeting? A higher inflation target?
- How will/should the Fed incorporate financial stability considerations into monetary policy? Are current U.S. macroprudential policies adequate?
- Will the Fed's responsibilities expand (CBDC, climate...)?
- Will the Fed remain policy-independent? Should it?

# THE POLICY RESPONSE TO THE PANDEMIC IN THE LIGHT OF HISTORY

Using tools from 2008 and adding its own, the Fed successfully controlled the March 2020 crisis.

- **Lender of last resort to all financial markets** (not just banks/domestic)
  - 2008 programs (e.g. primary dealers, MMMFs); currency swap lines
- **Market-maker/buyer of last resort**
  - Open-ended purchases of Treasuries and MBS
- **LOLR to nonfinancial firms** (all 13-3, supplemented by CARES Act)
  - Commercial paper, ABS, corporates, municipals, nonprofits, medium-sized firms. Strong announcement effects.
  - Would a “funding for lending” approach have been better than the bank-centric Main Street Facility?
- However, the episode revealed substantial remaining gaps in oversight of shadow banking.



# THE POLICY RESPONSE TO THE PANDEMIC IN THE LIGHT OF HISTORY

- Learning from 2007, monetary policy acted proactively and aggressively, deploying both rate cuts and nonstandard tools, including QE.
- Communication about future policy was well-executed and effective. Policy expectations were managed, with no taper tantrum, at least not yet.
- Fiscal policy more than made up for the constraints imposed by the ZLB. Together, monetary and fiscal policies fueled a strong recovery, faster than most forecasters projected despite new waves of the virus.

# THE POLICY RESPONSE TO THE PANDEMIC IN THE LIGHT OF HISTORY

- However, in some respects history was less than an ideal guide, reflecting the unusual nature of the shock.
- Fiscal policy was too expansionary from a macro point of view, with Congress overlearning the lesson of post-GFC austerity.
- Monetary ease increased GDP but in an unbalanced way, as the strongest sectors (housing, consumer durables) were also the most interest-sensitive sectors.

# THE POLICY RESPONSE TO THE PANDEMIC IN THE LIGHT OF HISTORY

- Traditional measures of slack, like the unemployment rate and employment/population, proved inadequate guides to demand-side inflation pressures, forcing the Fed to look for new indicators.
- With well-anchored inflation expectations, history tells us that monetary policymakers should “look through” supply shocks. However, the pandemic created a supply shock that was larger and more persistent than the FOMC expected and that threatens to un-anchor inflation expectations.
- The problem has been worsened by shocks to food and energy prices, in part due to the Ukraine war.

# THE POLICY RESPONSE TO THE PANDEMIC IN THE LIGHT OF HISTORY

- The misreading of the labor market and the duration of the pandemic supply shock, together with the desire to telegraph policy changes well in advance, slowed the Fed's response to the increase in inflation.
- The Fed is now working to catch up. Unlike the 1970s, the Fed has accepted its responsibility to lead the fight against inflation and is paying close attention to medium-term inflation expectations.
- The necessary policy tightening will depend on the extent to which realized inflation affects inflation expectations and wage trends, the degree to which supply-side constraints moderate, and the behavior of commodity prices.