Why the Choice of Monetary Policy Implementation Framework Matters

Presentation at the 50-year retrospective on the Shadow Open Market Committee and its role in monetary policy

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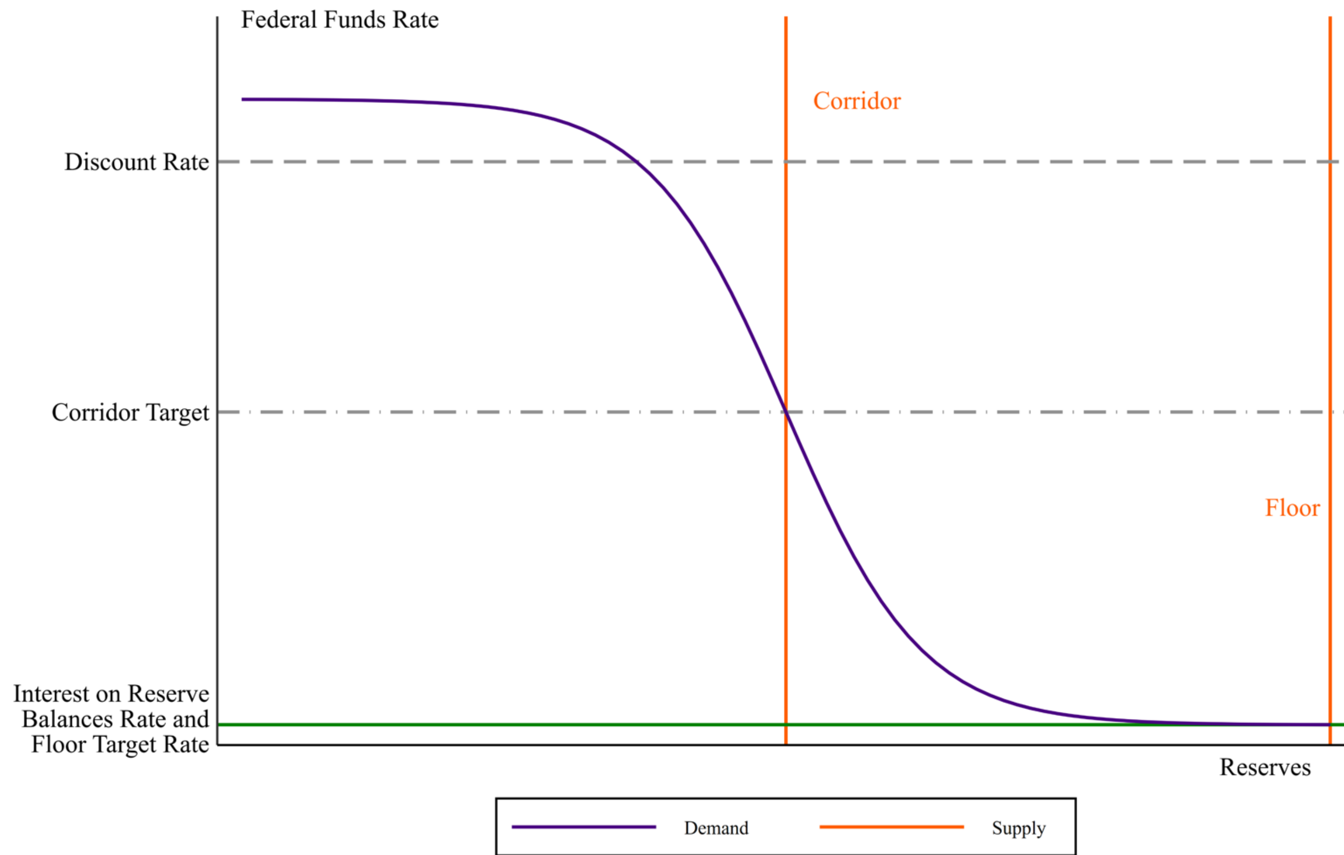
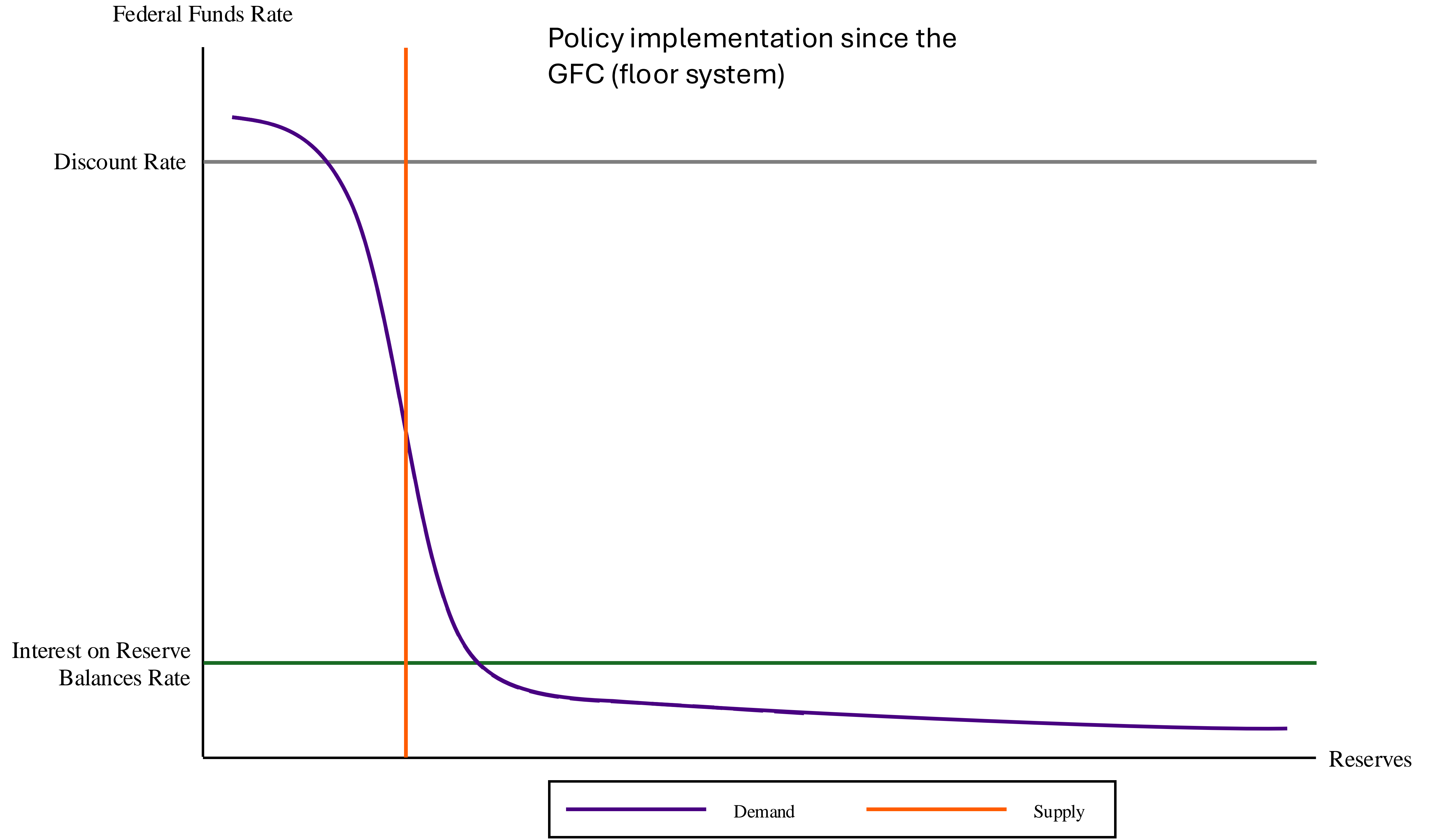
Outline

- The ratchet in the demand for reserves
- Fed replaces the interbank market
- Costs from Fed complacency about balance sheet
- Costs from others seeking to use the Fed’s balance sheet
- Risks to Fed independence
- Why “Friedman Rule” is not a benefit of the floor system
- Reasons to be hopeful

Poole (SOMC 1984-1998) model



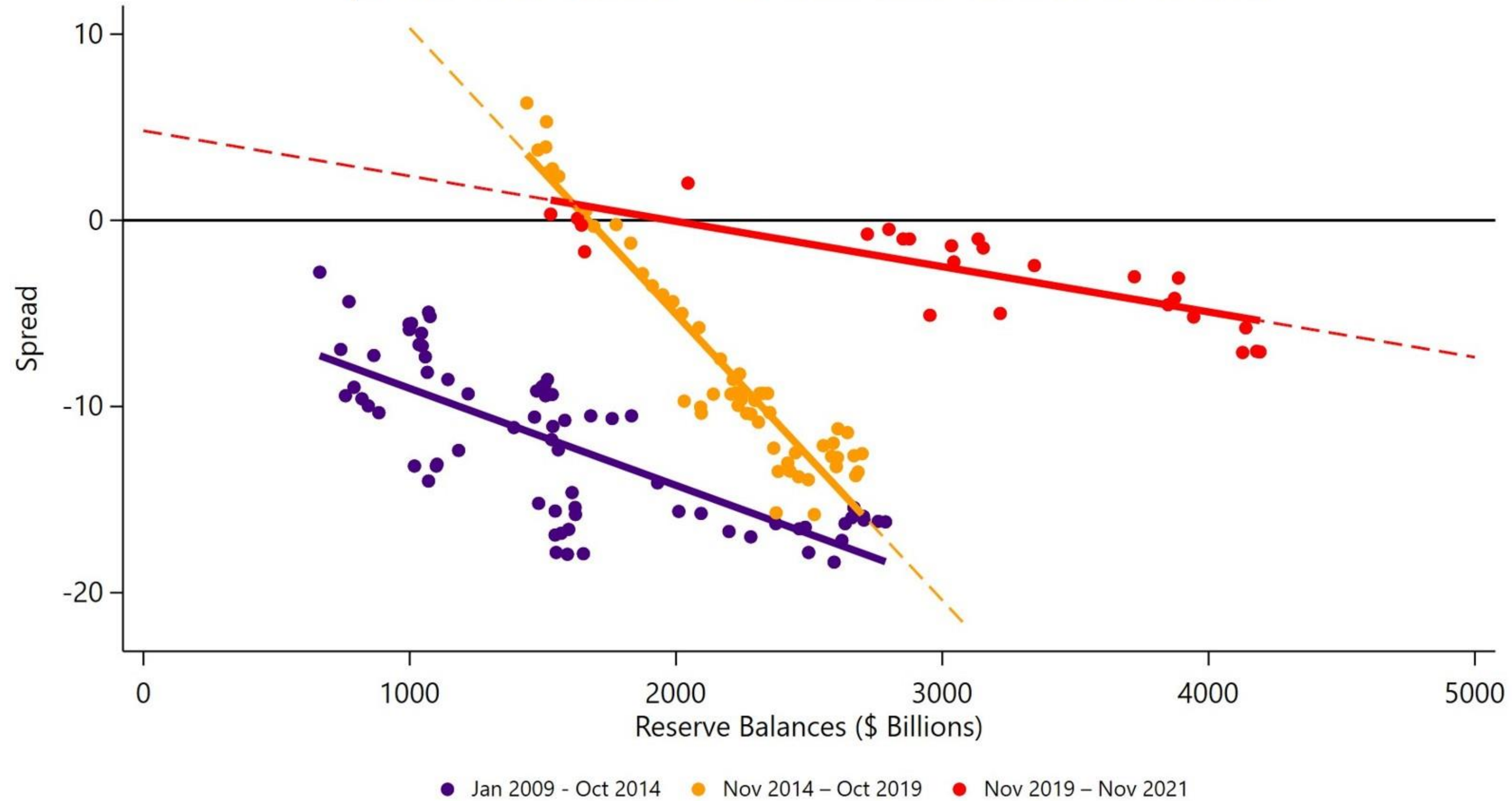
"The model presented here concentrates on these very short-run adjustments. However, it is obvious that the bank must make further adjustments if it experiences persistent reserve drains or accretions." Poole (1968)


Federal Funds Rate
Policy implementation since the GFC (floor system)
Discount Rate
Interest on Reserve Balances Rate
Reserves
Demand
Supply

Fed's Estimate of Banks' Structural Demand for Reserve Balances	
Date	**Level $billions**
April 2008	35
March 2016	100
March 2018	600
December 2018	1,000
October 2019	1,500
May 2022	2,300
April 2023	3,000

Source: April 2008, staff memo to the FOMC; March 2016 – December 2018, blue/ tealbooks, October 2019, FOMC directive; May 2022 and April 2023, FRBNY projections.

Figure 12:
Spread Between the Fed Funds Rate and the IORB Rate



Source: Board of Governors of the Federal Reserve H.3 Aggregate Reserves of Depository Institutions and, the Monetary Base H.6 Money Stock Measures, H.15 Selected Interest Rates, and Policy Rates

Federal Funds Rate

Policy implementation before the Global Financial Crisis (corridor system)

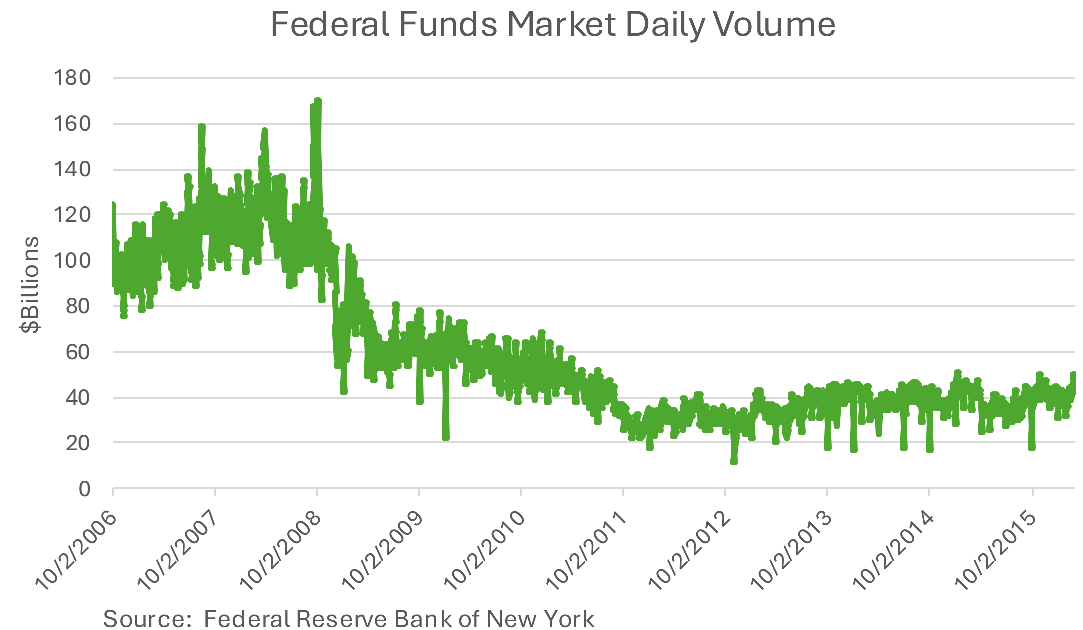
Discount Rate

Target Rate

Reserves

Interbank market withers

- Under the corridor system, at the end of the day banks with extra reserves would lend to those short of reserves in the fed funds market.
- Now banks are all overstuffed with reserves, so such trading has largely stopped.
- Fed funds market now just consists of FHLBs lending to U.S. branches of foreign banks.



Interbank market withers

Norges Bank, 2010, reason to switch from floor to corridor:

When Norges Bank keeps reserves relatively high for a period, it appears that banks gradually adjust to this level…With ever increasing reserves in the banking system, there is a risk that Norges Bank assumes functions that should be left to the market…If a bank has a deficit of reserves towards the end of the day, banks must be able to deal with this by trading in the interbank market.

Andrew Bailey, 2024, reason to get off the floor

Generally speaking, as reserves levels grow, the incentives for the banking sector to manage its own liquidity falls. And to the extent that reserve supply crowds out healthy market intermediation in normal market conditions, a large part of the financial system's ability to manage its liquidity will be affected. Mindful of these costs, we do not seek a larger balance sheet than is strictly necessary.

Discount window stigma worsens

- Under a corridor system, most discount window borrowing occurred for monetary policy purposes. Now, virtually all borrowing is to address stress at the borrowing bank.
  - Now it is much harder to say borrowing should not be viewed as a sign of trouble.
  - Banks demand such high levels of reserves in part to reduce the risk of having to borrow to near zero (adding to the ratchet).
  - Lack of preparedness to borrow from the discount window contributed to the bank troubles in spring 2023 and was probably a large part of what made the situation systemic.

Bank examiners expect higher stockpiles of reserve balances

- Before the GFC, examiners judged a bank to be liquid if it had well-diversified, reliable funding and access to the discount window.
  - Abundant and cheap reserves have led to a sea change.
- The LCR treats reserves and Treasury reverse repos equivalently but required internal liquidity stress tests and examiner preferences favor reserve balances.
- Former Vice Chair Randy Quarles stated that examiner preferences for reserves contributed to the abrupt and disorderly end to the previous round of QT in September 2019 (*Macro Musings*, 2022).
- In a recent speech, Vice Chair Barr stated that substitutability between reserves and reverse repos increases financial stability and monetary policy efficiency.

Fed becomes more complacent about balance sheet (1) Buyer's regret

- In December 2018, staff told the Committee that about $1 trillion in reserve balances should be necessary.
- Chair Powell said that if the necessary level of reserve balances turned out to be higher, he would experience "buyer's regret."
- The most recent publicly available staff estimates put the necessary amount at $3 trillion.
- There have been no expressions of regret.

Fed becomes more complacent about the balance sheet (2) Monetizing the debt

Ben Bernanke, 2011, House Budget Committee:

> No, sir. Monetization would involve a permanent increase in the money supply to basically pay the government's bills through money creation. What we are doing here is a temporary measure which will be reversed so that at the end of this process, the money supply will be normalized, the amount of the Fed's balance sheet will be normalized, and there will be no permanent increase, either in money outstanding, in the Fed's balance sheet, or in inflation.

Randal Quarles, 2020, at Hoover Institute:

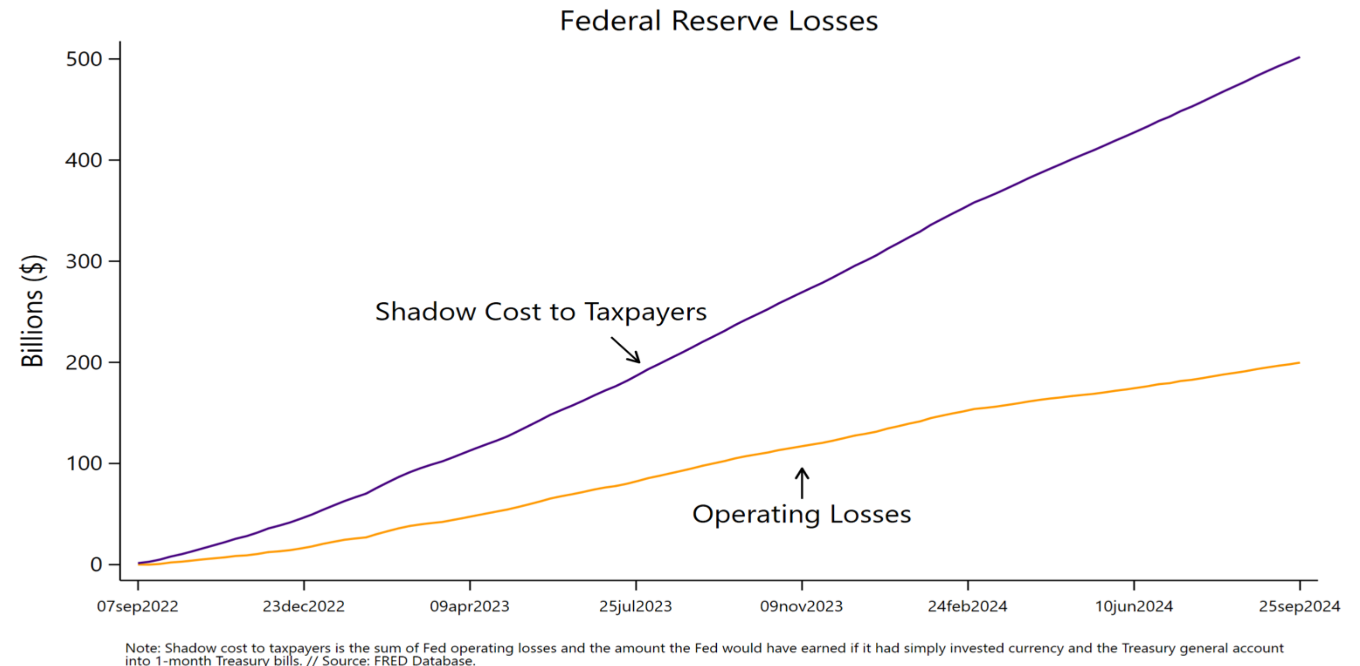
> Mr. Quarles said the Fed may have to remain engaged in asset buying for some time simply because financial markets are dealing with too many Treasurys to handle on their own. ("Fed Official Wonders Whether Treasury Market Can Handle Massive Issuance Alone," WSJ)

Fed becomes more complacent about balance sheet (3) – Interest rate risk

- The objective of QE is to for the Fed to take interest rate risk.
- The Fed’s 2002 balance sheet principles stated that interest rate risk is equivalent to credit risk, and the Fed would likely only incur substantial interest rate risk after consulting with Treasury and Congress.
  - See “Alternative Instruments for Open Market and Discount Window Operations.”
- Staff analysis provided to the FOMC in 2016 estimated that if reserve balances were $1 trillion or less, the Fed had only about a 10 percent chance of making operating losses, but if they were $2.5 trillion or more, it had a 60 percent chance of making losses from time to time.
  - See “Fiscal Implications of the Size and Composition of the Central Bank’s Balance Sheet”

Fed becomes more complacent about balance sheet (3) – Interest rate risk

- QE4 started in March 2020 to address a market meltdown, then justification changed to economic stimulus, then the Fed locked in the pace of QE with rigid forward guidance.
- Since September 2023, the Fed has lost $200 billion versus earning $300 billion if it had just invested currency and TGA in tbills.
- Andy Levin (SOMC 2019-present) estimates taxpayer cost of QE will total $1 trillion.



See also Fed staff decisions to have Treasury, money market funds, GSEs, and foreign official Institutions shift massive amounts of funds to the Fed's balance sheet

Fed’s balance sheet becomes irresistible to others as way to pay for things

Charlie Plosser (SOMC 1991-2006 and 2014 to present), June 2011 FOMC meeting :

> …without some constraint imposed on the size of our balance sheet via an implementation framework, we might find it very difficult to fight against ideas proffered from others in government as to how we might use that balance sheet to one sector or another’s advantage. We could be asked to engage in credit allocations rather than monetary policy. We could be asked to fund government debt to fund government spending.

Randy Quarles, November 2018 FOMC meeting:

> Having the FOMC control such a large stock of assets presents what…is called an “attractive nuisance.” [A]n attractive nuisance is an object that a property owner allows to remain on his land when it is obvious both that the object will be dangerous if misused and that misusing it will be irresistibly appealing to passers-by of impulsive and immature judgment, such as children and congressmen

Not an abstract concern

- Financing Green New Deal (2018): "As the checks go out, the government's bank—the Federal Reserve—clears the payments by crediting the seller's bank account with digital dollars. In other words, Congress can pass any budget it chooses, and our government already pays for everything by creating new money."

- The CARES of 2020, encouraged the Fed to create a lending program for middle-market firms.

- A 2021 nominee to head the OCC proposed that the Fed give everyone accounts and then put money into the accounts of the underprivileged and of worthy businesses, expenditures the Fed would finance by driving its equity negative.

- ECASH Act of 2023 directs Treasury to create a digital currency, with costs covered by running an overdraft in a specially created account at the New York Fed.

- BITCOIN Act of 2024 directs Treasury to acquire a stockpile of 1 million bitcoin funded with Fed capital and profits.

Relatedly, the unbounded balance sheet puts Fed independence at risk

- Nothing in the law guarantees Fed independence.
- The President could nominate and the Senate approve Fed boardmembers who would take direction from the administration.
- The prospect of using the Fed’s balance sheet like a sovereign wealth fund adds to the enticement.

Corridor system was already satisfying the "Friedman rule"

Some advocates of a floor system now state that its main advantage is that it satisfies something incorrectly called the Friedman rule:

> *The Fed can produce reserves for free, so it should produce them until money market rates equal the IORB rate and their opportunity cost is zero.*

This is wrong for two reasons.

1. The costs of having a massive, unbounded Fed are high, not low.
2. *The Fed already satisfied the so-called Friedman rule*. A line of credit and a deposit are economically nearly identical – both are promises by the bank to provide funds on demand. The Fed has been providing free no-questions-asked lines of credit at the discount window since 2003 and free collateralized intraday credit since 2008.

Is the Fed Becoming an Outlier?

- The BoC, BoE, ECB, and RBA are all reducing reserves until discount window borrowing picks up and market rates are a bit above the interest rate the central bank pays on deposits.
- Andrew Bailey indicated that there is an active ongoing debate at meetings of central bankers at the BIS about the benefits of a floor system.

There may be reason to be optimistic

The Fed recently stated that banks could look to the discount window and standing repo facility instead of reserve balances as the means to meet a deposit run.

The Fed now talks about reducing reserve balances until money market rates are a bit above the IORB rate.

That combination could gradually reduce banks' demand for reserves, allowing the Fed to get much smaller.

Claudio Borio, Head of Monetary and Economic Department at the BIS

> Would you like to have a system in which the central bank is a backstop, or would you like to have a system in which the central bank is the mass market maker of first resort, so last resort versus first resort?... I think that having a system in which the central bank is a backstop, and a system in which the first line of defense against demands on liquidity is an interbank market, that to me sounds [like], on balance, a better system.

Macro Musings, 2024

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