Figures for
"The Fed's Ample Reserves Monetary Policy Operating Framework: It Isn't as Simple as It Looks"

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Remarks for the Panel on
The Conduct of Monetary Policy: Evolution from Free Reserves to the Corridor and Floor Systems
Shadow Open Market Committee 50th Anniversary Conference
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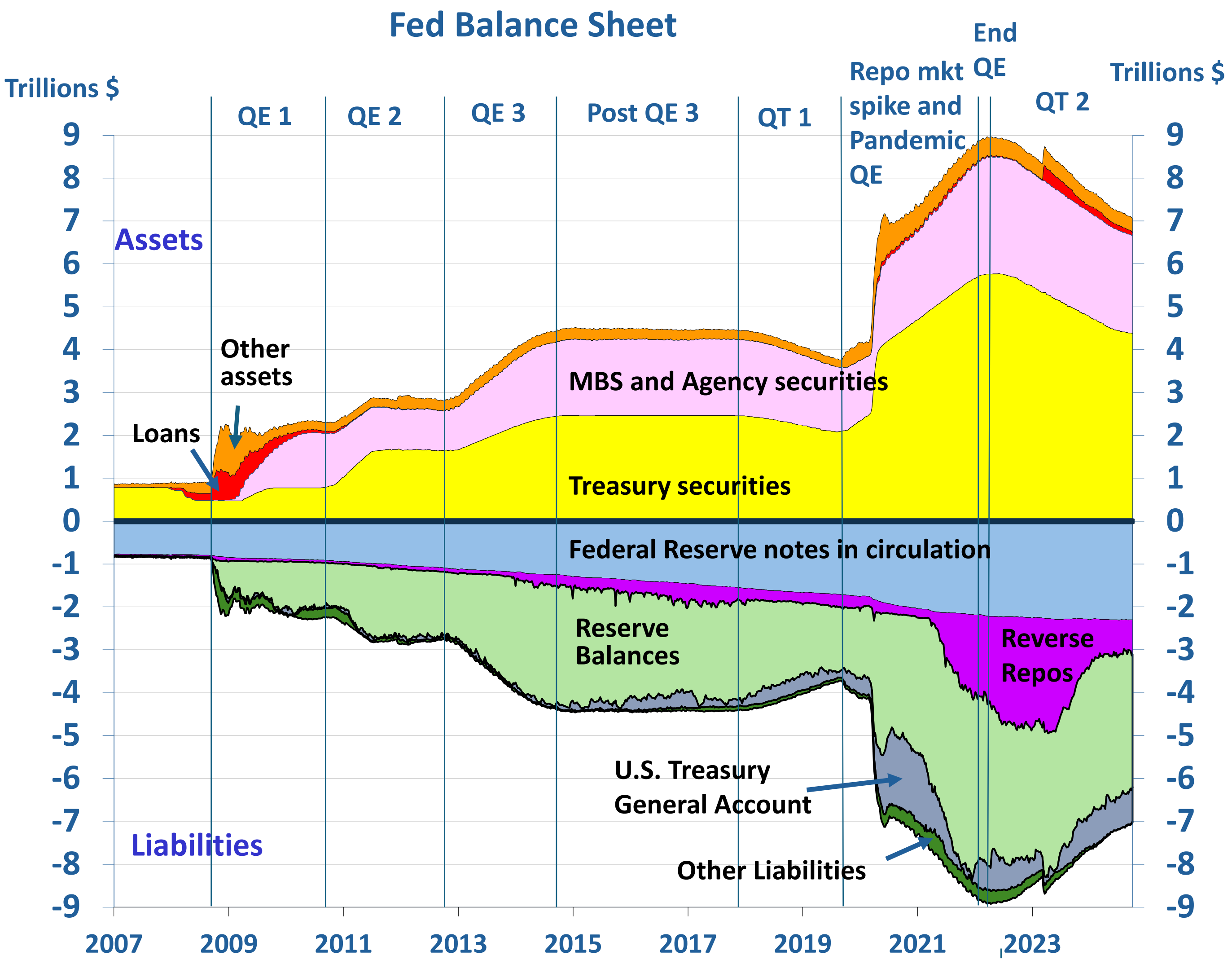
Monetary Policy Operating Framework

- Monetary policy operating framework: Method used by central bank to ensure its policy rate stays within the target range
  - It concerns how the central bank implements its policy and not what that policy is
- Principle attribute for operating framework:
  - Allows for effective control of a policy rate that is sufficiently tied to other market rates to allow for reliable transmission of monetary policy throughout the economy
- Other desirable attributes
  - Robust to different economic situations (e.g., when policy rate needs to move quickly or when the policy rate has been reduced to its effective lower bound)
  - Does not make financial stability problems worse and is adaptable to actions taken to address financial stability issues

Fed's Monetary Policy Operating Framework

- In January 2019, the FOMC announced that intended to continue to implement monetary policy in an ample-reserves regime (also known as a floor system)
  - Achieves its fed funds rate target mainly through setting its administered interest rates, the interest on reserves balances (IORB) rate, and the interest rate on overnight reverse repurchase agreements (ON RRP).
  - Communicates its policy stance with the fed funds rate
- Operating with a high level of reserves
- Before Global Financial Crisis used scarce-reserves regime (also known as corridor system
- Change was driven by economic circumstances and policy responses to those circumstances

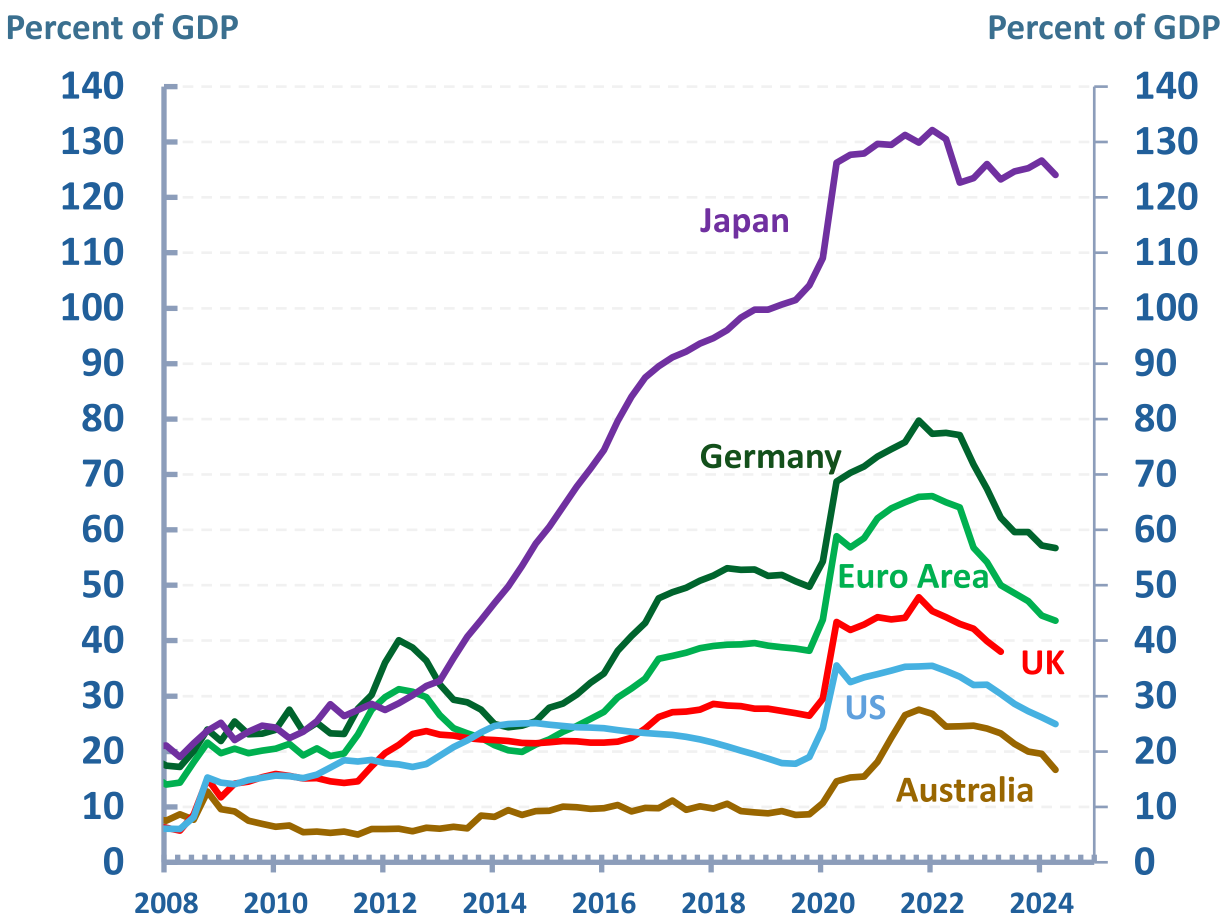
Figures 1a-b. The size and composition of the Fed's balance-sheet assets and liabilities have changed significantly since the Global Financial Crisis



Assets (Billions of Dollars)			Liabilities and Capital (Billions of Dollars)		
	Jan 4, 2007	Oct 3, 2024		Jan 4, 2007	Oct 3, 2024
Treasury securities	778.9	4,364.4	Currency	781.3	2,301.7
Agency and agency MBS	0.0	2,284.4	Reserves held by depository institutions	20.0	3,097.2
Loans to depository institutions	1.3	75.5	Reserve repos	29.7	799.3
Other assets	94.4	322.6	U.S. Treasury general account	6.2	823.4
			Other liabilities	6.8	–18.1
			Capital	30.6	43.4
Total	874.6	7,046.9	Total	874.6	7,046.9

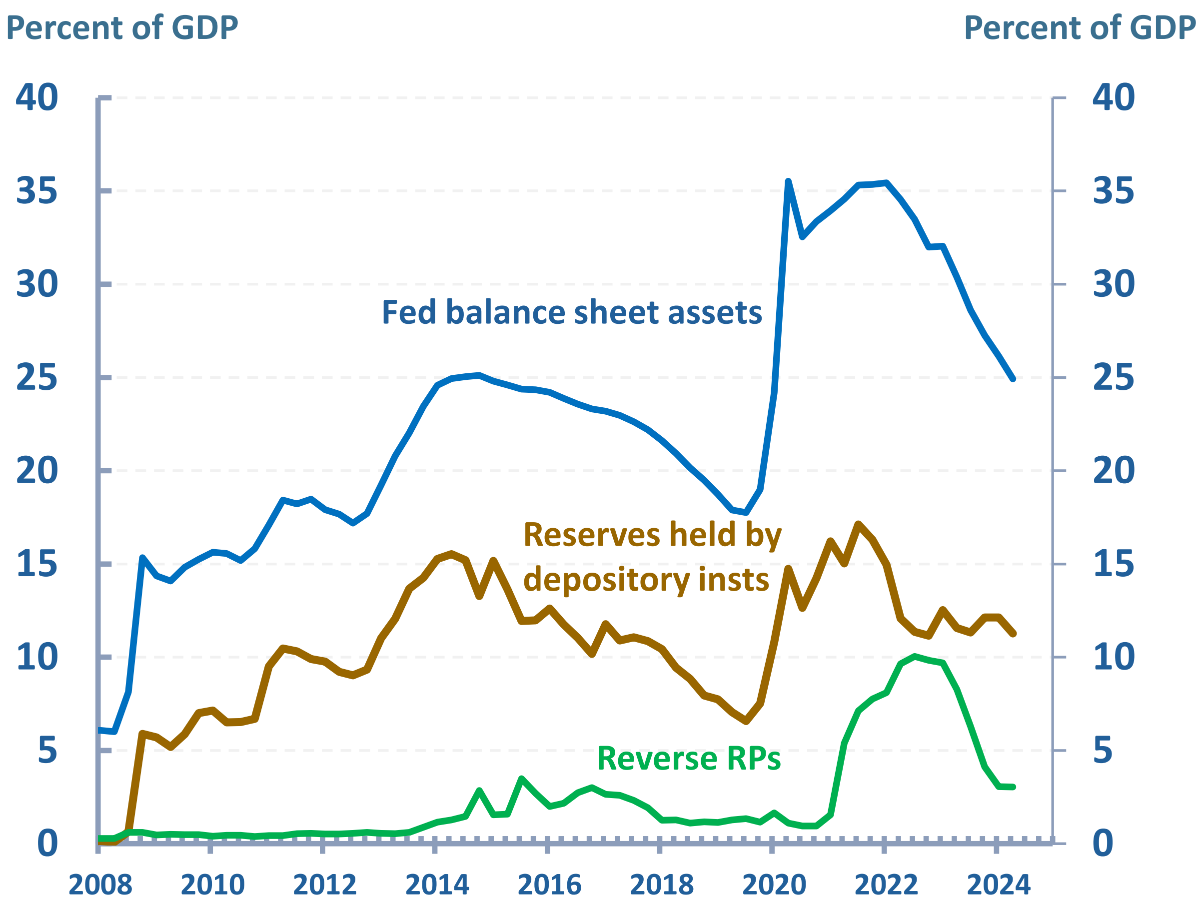
Source: Federal Reserve Board via Haver Analytics
Weekly data: Last point plotted is Oct 2, 2024

Figures 1c. Central bank assets as a percent of GDP rose in many advanced economies during the pandemic



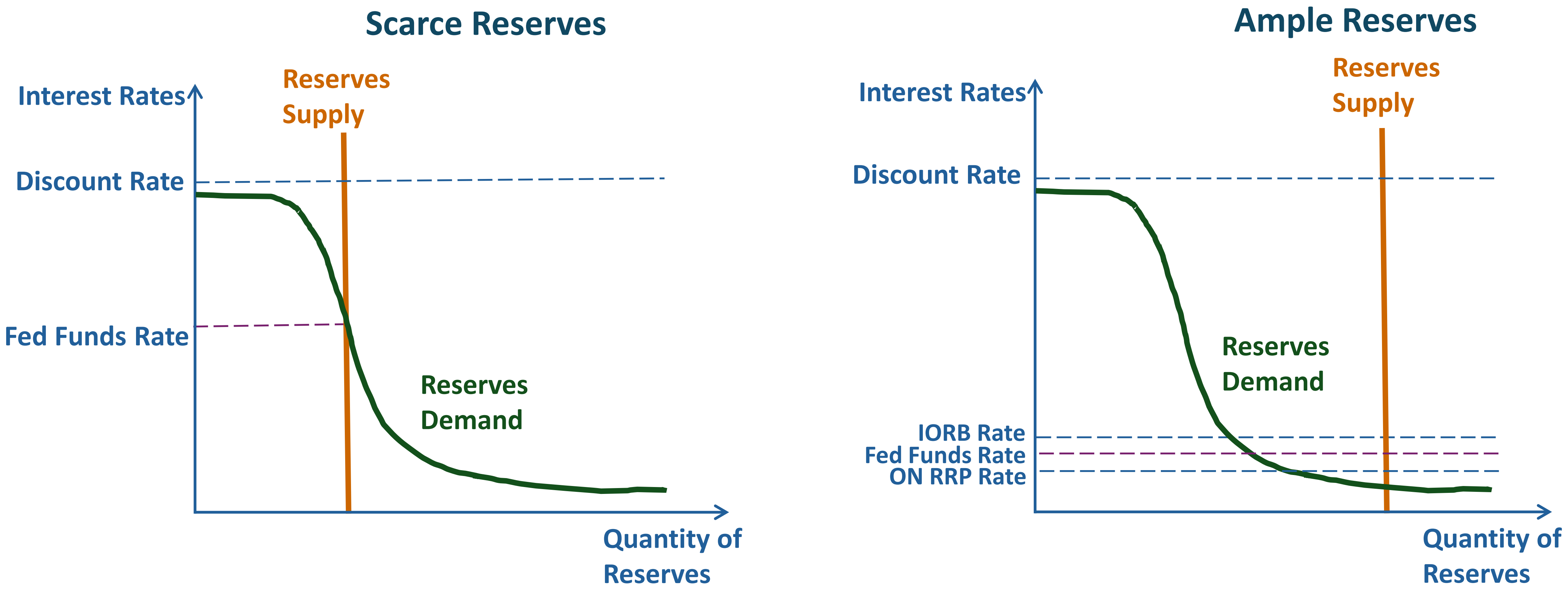
Source: Japan Cabinet Office, Bundesbank, ECB, Bank of England, Federal Reserve, Reserve Bank of Australia, via Haver Analytics
Quarterly data: Last obs. 2023 Q2 for UK, 2024 Q2 for the others

Figure 1d. Fed balance sheet assets, reserves, and ON RRPs as a percent of GDP rose during the pandemic



Source: Federal Reserve via Haver Analytics
Quarterly data: Last obs. 2024 Q2

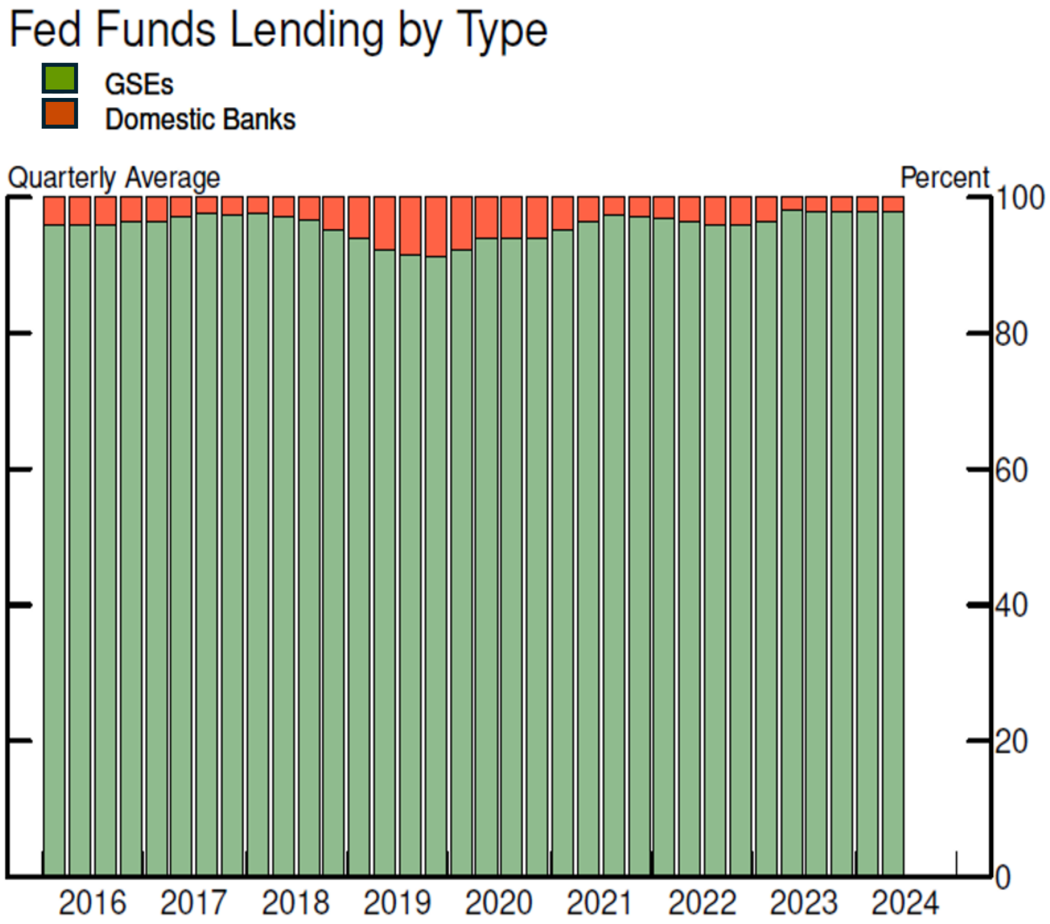
Figure 2. The ample reserves operating framework is conceptually simple

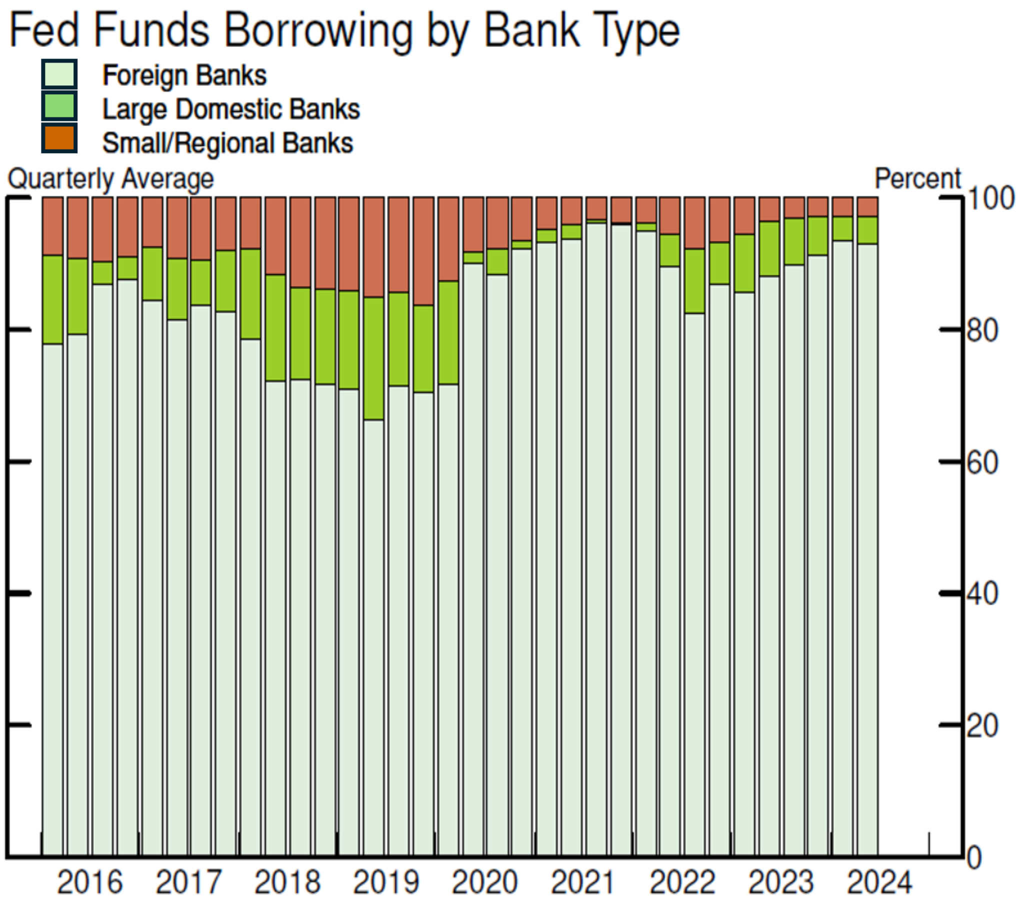


- **Purported benefits of ample-reserves regime:**
  - **Simple: No need to estimate banks' reserve demand daily; typical fluctuations in reserve demand don't change short-term interest rates**
  - **Works in a variety of economic and market conditions (ELB; market/financial stresses)**
  - **More liquidity in financial system => better financial stability**

Figure 3. GSEs, especially the FHLBs, do the majority of lending and foreign banks do the majority of borrowing in the fed funds market

Lending and borrowing shares in the fed funds market





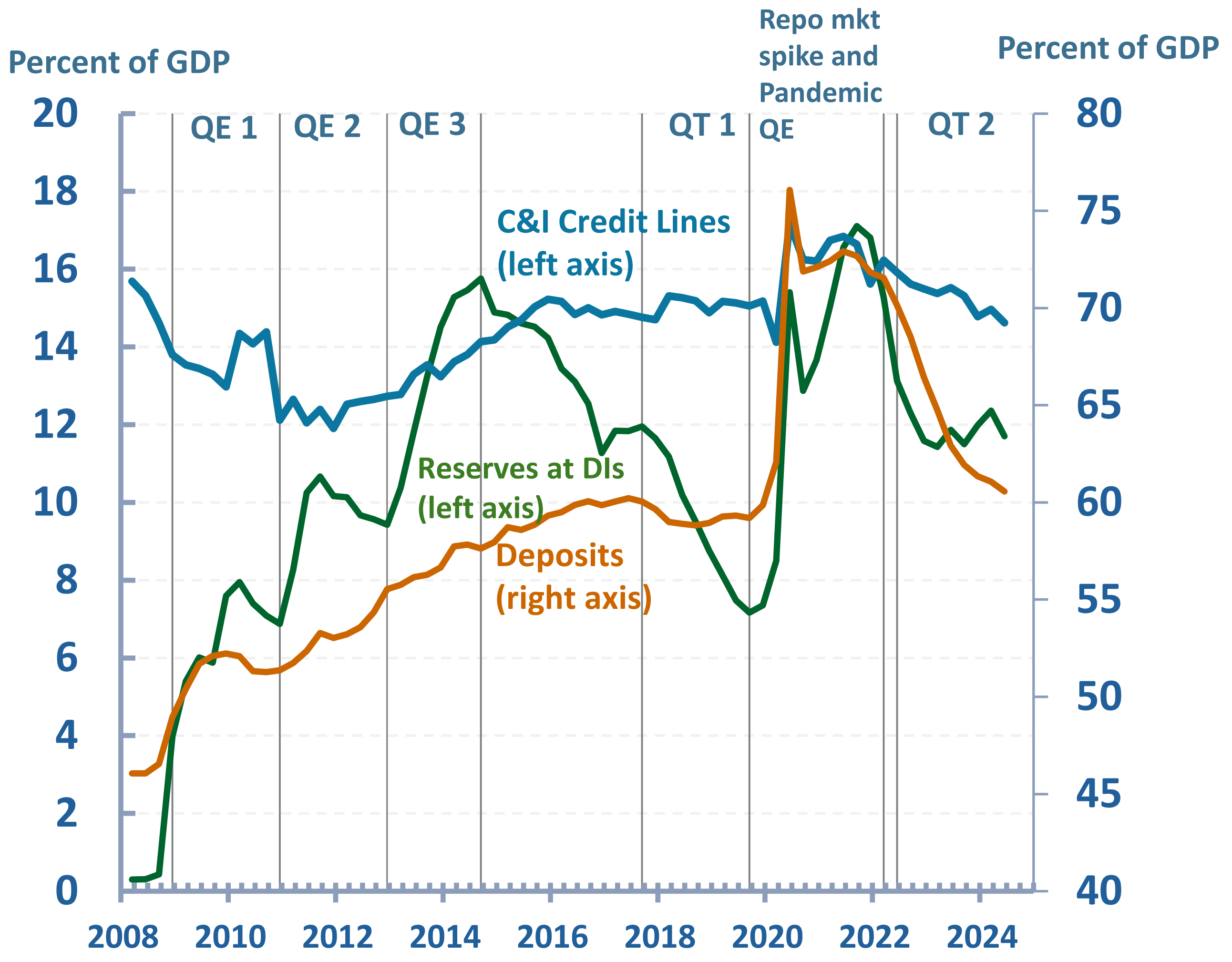
Source: Anderson and Na (2024)

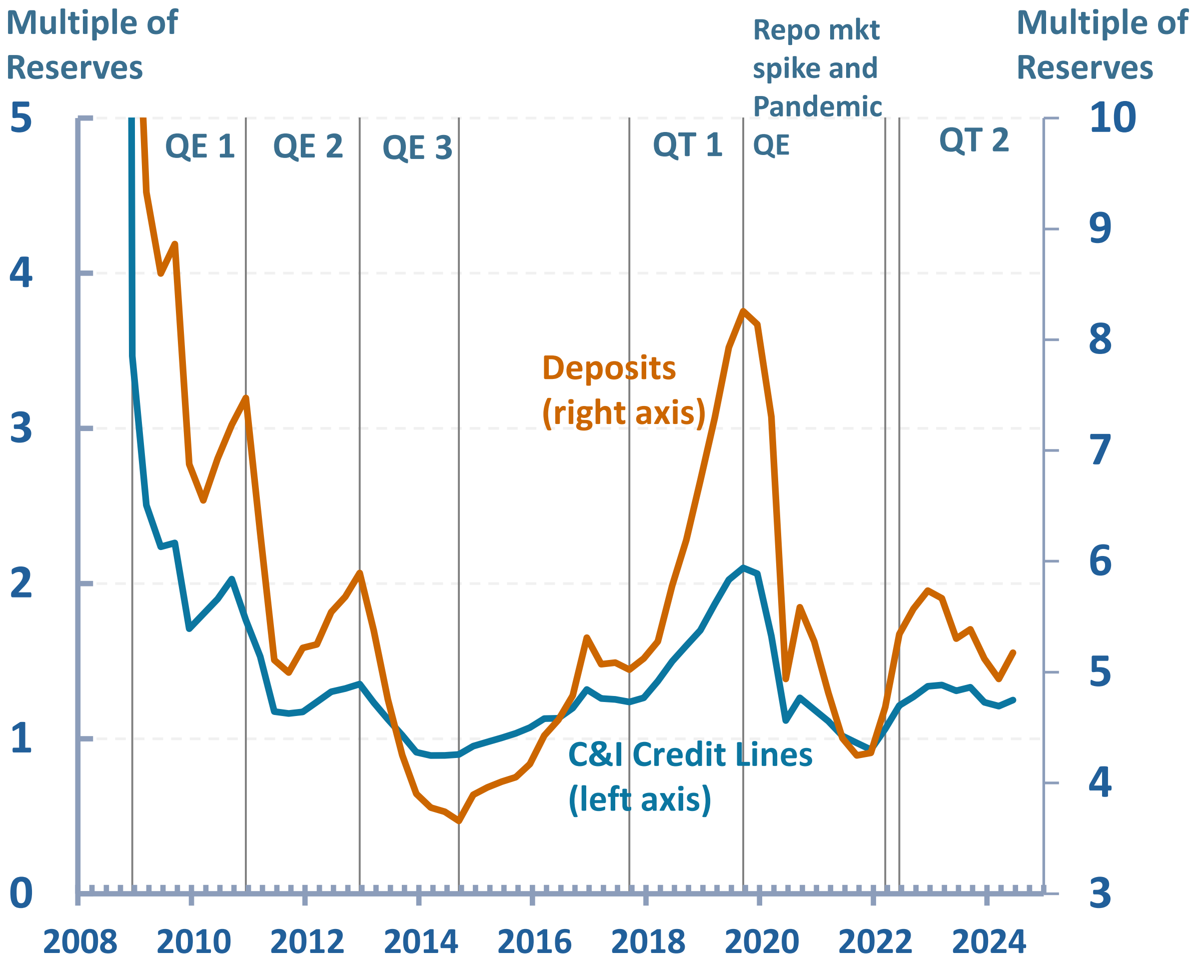
Ample-Reserve Regime is not that simple

- Two additional facilities: Overnight reverse repo (ON RRP) Facility and Standing Repo Facility (SRF)
  - Firmer floor and ceiling; SRF could allow for lower level of reserves in ample-reserves framework
- Still need to monitor when reserves are approaching point of scarcity:
  - stability of the fed funds rate relative to the IORB rate
  - sensitivity of the fed funds rate to changes in the supply of reserves
  - share of domestic bank borrowing in the fed funds market
  - share of payments made late in the day
  - average level of daylight overdraft
  - share of repo trades made at rates above the IORB rate
- Distribution of reserves across banks matters
  - Banks' preferred level of reserves can vary by bank size, business model, liquidity management considerations, regulatory burden
- Desired levels of reserves can change with market conditions
- Demand curve can shift around

Figures 4a-4b. Ample-reserves regime may not offer better financial stability:

Banks increase demandable debt and C&I credit lines with QE but don't reduce them as much with QT. So more reserves are needed to back liquidity claims.





Figures are Mester updates of Chart 1, Panel A and Panel B in Acharya, Chauhan, Rajan, and Steffen (2022)
Source: Federal Reserve System and FDIC, via Haver Analytics
Quarterly data: Last obs. 2024 Q2

Other issues

- Borio (2023): Limited trading in overnight bank funding markets => financial system more dependent on central bank liquidity
  - Norges Bank, SNB: tiering of interest on reserves
  - ECB: demand-driven floor system
- What interest rate to target? Should Fed continue to target fed funds rate or switch to overnight bank funding rate (OBFR)?
  - Limited trading in fed funds market => more volatility
- Plosser (2017 and many other speeches): Political economy issues
  - Ample reserves => no operational reason to limit size of central bank balance sheet => calls to use balance sheet for fiscal policy
  - Tankus op ed in Financial Times (10/9/2024): recommends Fed Disaster Relief Facility
- Appearance issues: could lead to criticism and potentially jeopardize central bank independence
  - Paying a lot of interest-on-reserves to nonbanks and foreign banks
  - Unable to fully unwind QE
  - Fed remittances to Treasury have been negative since Sept 2022

Chair Jay Powell expressed commitment to reducing the balance sheet, partly reflecting concerns with political economy/appearance issues

- December 2018 FOMC transcript
  - "I do see this as a **high-profile commitment** that we need to honor; and doing so, in my view, would do much to **support the legitimacy of future large-scale asset purchases** – by showing that QE is not just a one-way street to an ever-larger Federal Reserve balance sheet relative to GDP…."

  - "…I do think it's necessary to do what we can to be seen to have **worked hard to get to a smaller balance sheet**. It's not just that we get down to scarce reserves, it's that we be seen to work hard to do it – that **we take the commitment seriously**."

- Ample vs. abundant

Conclusions

- Ample-reserves system is meeting the prime directive – ensuring the Fed has very good interest rate control
- The simple ample-reserves operating regime is far from simple
  - Takes effort to know where scarcity occurs in different economic and market environments
  - Reflects a choice about the size of the Fed's footprint in financial markets
  - Could distort private-sector liquidity risk management practices
  - Not necessarily better for financial stability
- Evaluate certain features, such as tiering, in the U.S. context

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