EUROPEAN CENTRAL BANK

EUROSYSTEM

Banks' Balance-Sheet Costs, Monetary Policy, and the ON RRP

by Afonso, Cipriani, La Spada

Discussion

Workshop on Non-Bank Financial Institutions

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Simone Manganelli (ECB, DG-Research)

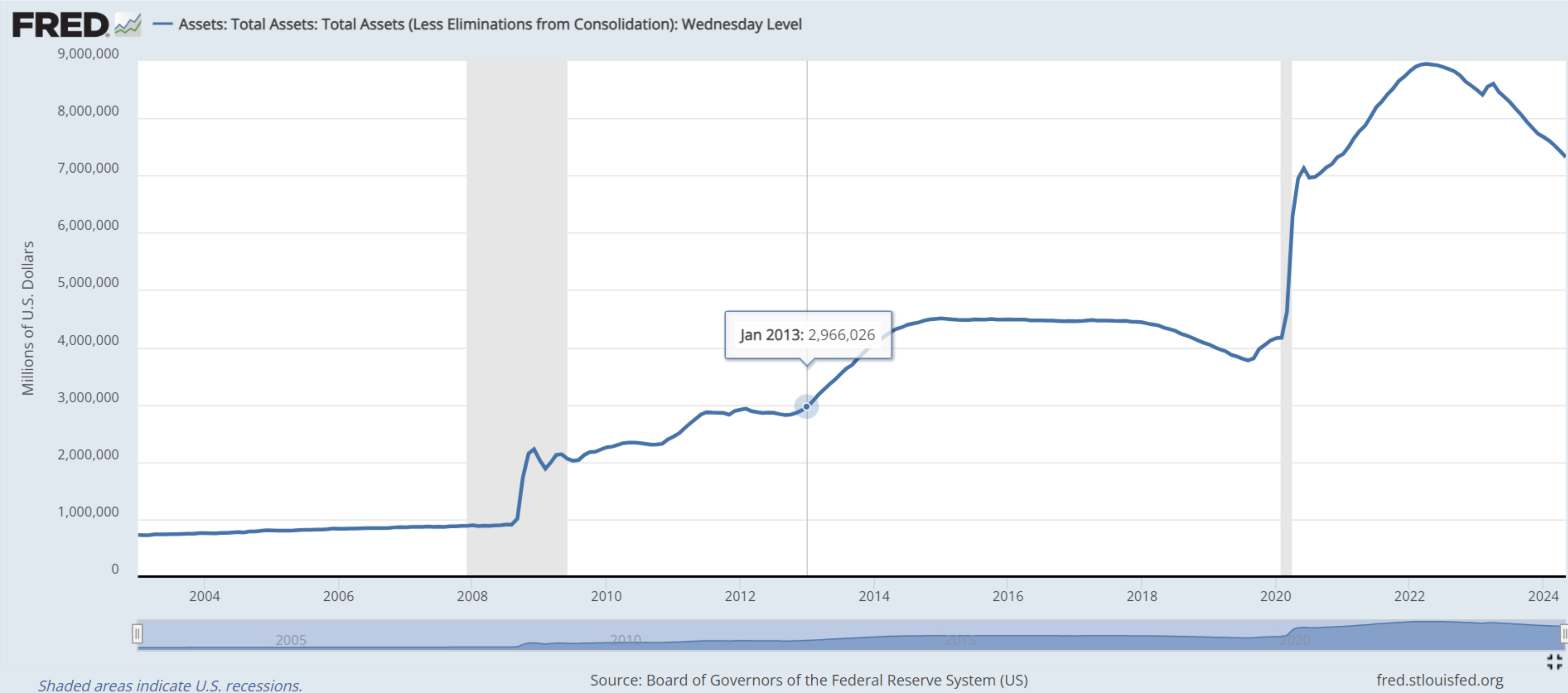
Recent history of the operational framework

- **Before 2008:** Reserves not remunerated, OMO, small balance sheet

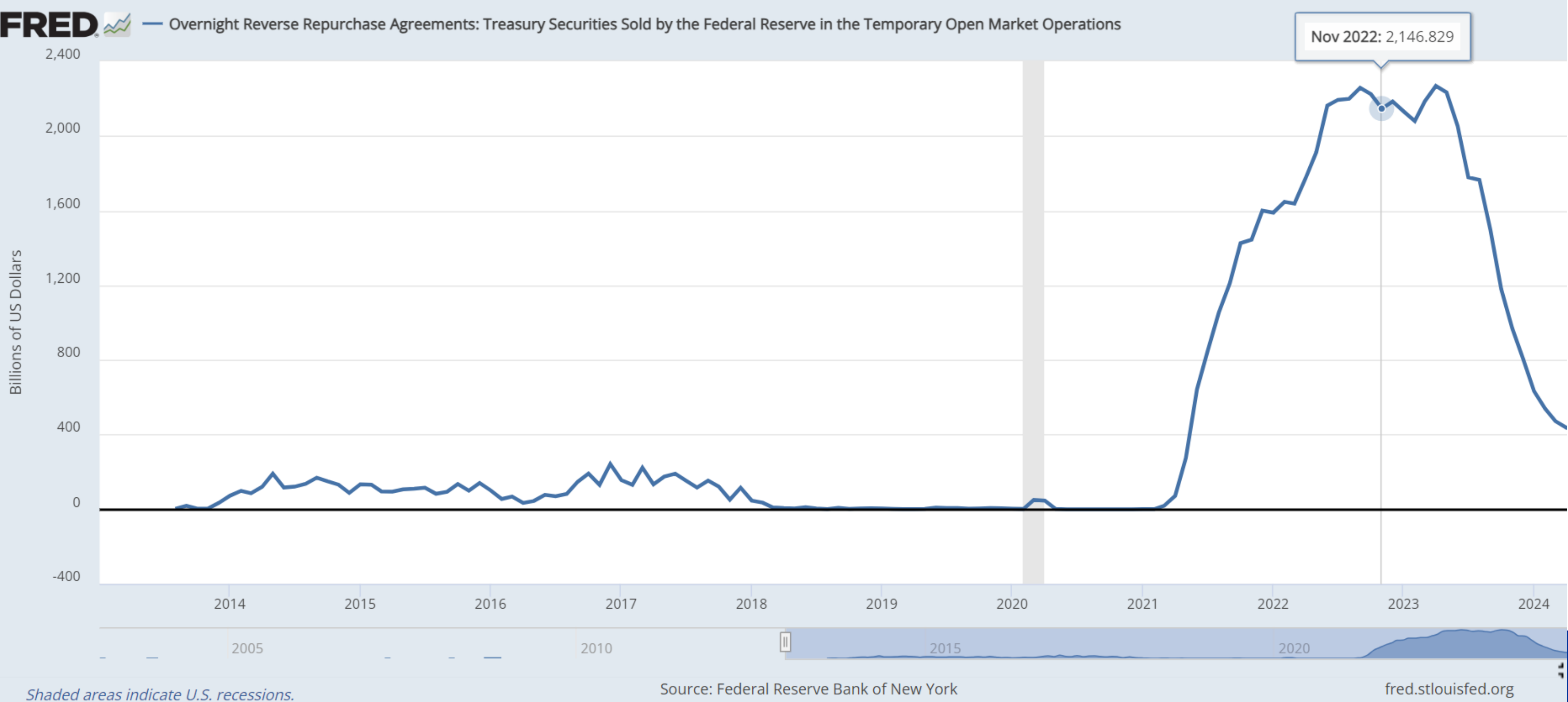
- **2008**: Interest on reserve balances (IORB), to fix side effects of QE for banks
  - Serves as a floor for the Effective Federal Funds Rate

- **2013**: Overnight Reverse Repo (ON RRP), to fix side effects of QE for non-banks
  - Act as the IORB for non-banks with no access to the Fed balance sheet

Fed balance sheet



Overall take-up of the ON RRP



Summary of the paper

Around 90% of the take-up in the ON RRP was by Money Market Funds (MMF).

Three main drivers:

a. Banks’ balance-sheet constraints
b. Scarce supply of Treasury bills
c. Tightening monetary policy

It would help to provide some self-contained institutional background on the operational framework.

1. The perfect out-of-sample exercise

- Results are based on sample ending in 2022.

- Since then, there has been a reversal in the take-up of ON RRP.

- What happens to the regression coefficients when estimated on 2023-2024 sample?
    - Impact of regulation is a temporary factor, but what about T-bill and monetary policy?

Banks’ balance-sheet constraint

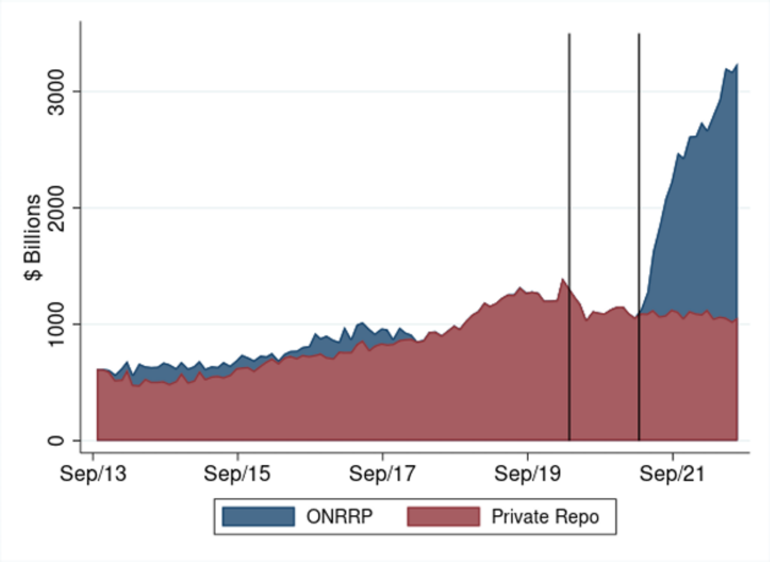


Figure 5: Tri-Party Repo Volume: Private Repos and ON RRP Take-up. The vertical lines represent the dates when the SLR relief becomes effective for BHCs, on April 14, 2020, and when the SLR relief period expires, on March 31, 2021.

2. What about prices?

- Take-up in ON RRP is a quantity that is jointly determined with prices.

- Which prices are relevant?
  - Spread between ON RRP and private repo rates (Hempel et al. 2023)
  - Spread between ON RRP and T-bill rates (Stein and Wallen 2023)

- Puzzle explanations:
  - Market segmentation: ON RRP is not available to all investors
  - Relationship lending: trade below ON RRP to preserve active relationship with dealers.
  - Technical restrictions: ON RRP is only open between 12:45 and 13:15.
  - Inelastic substitution: As more elastic investors leave the market, remaining inelastic investors require greater price changes (Breckenfelder and De Falco, 2023).

- It would be nice to see a dynamic model where prices and quantities are jointly determined, as in the VAR model of Garcia-de-Andoain et al. 2016.

3. Are these symptoms of a large balance sheet?

Larger central bank balance sheets and associated facilities reduce **short-run risks** of unexpected liquidity shocks.

But they do generate **long-run risks:**

- By interfering with market functioning and distorting prices.
- By changing the incentives of economic agents.
- These side effects are harder to contain for central banks and would require effective prudential supervision and fiscal rules.

Balance between short-run and long-run risk assessment:

- Long-run effects deserve closer scrutiny because they structurally change the interaction between the central bank and other economic agents.
- They can eventually become a major source of market distortion.