Comments on Shrinking the Federal Reserve Balance Sheet

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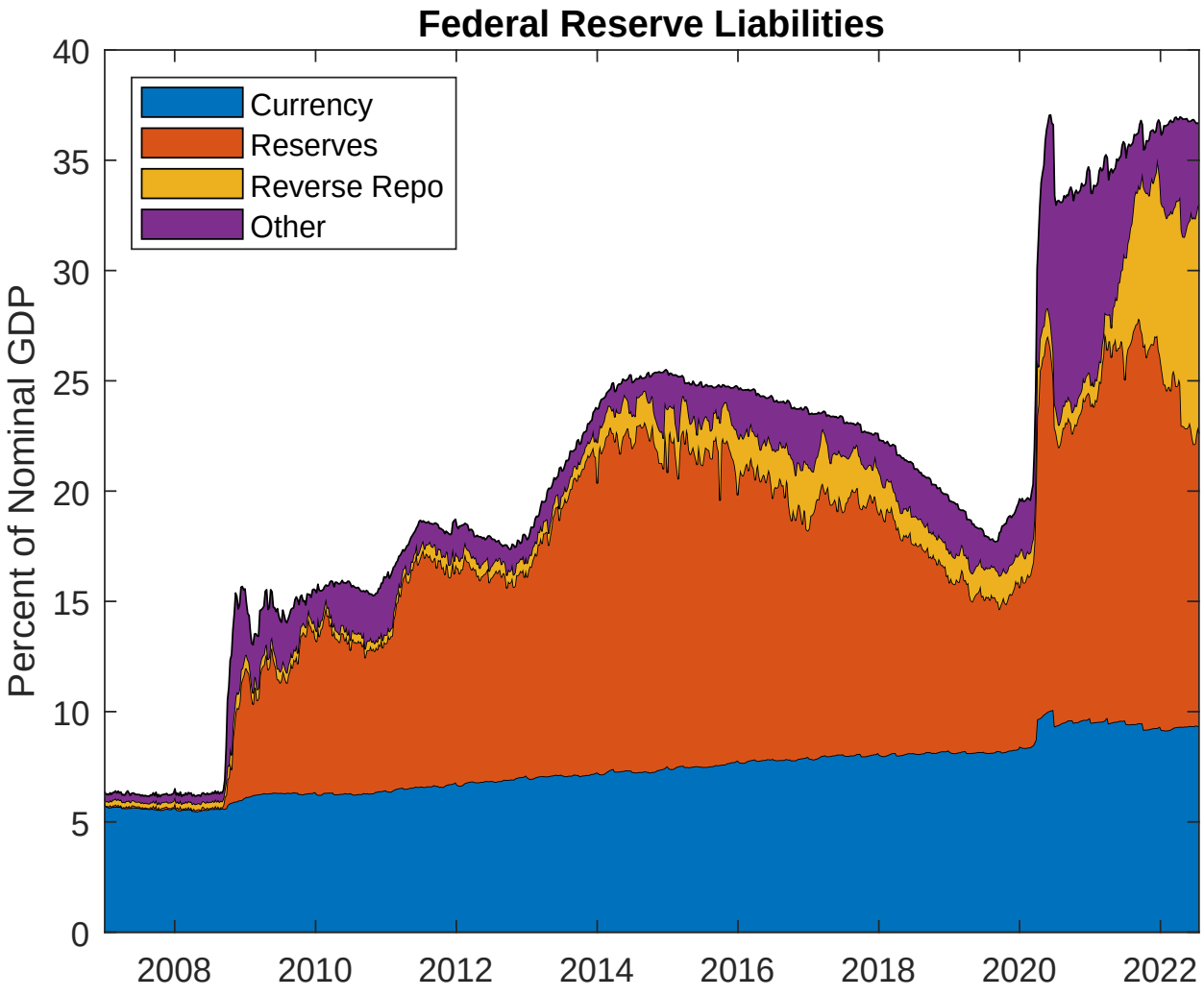
Fed Liabilities



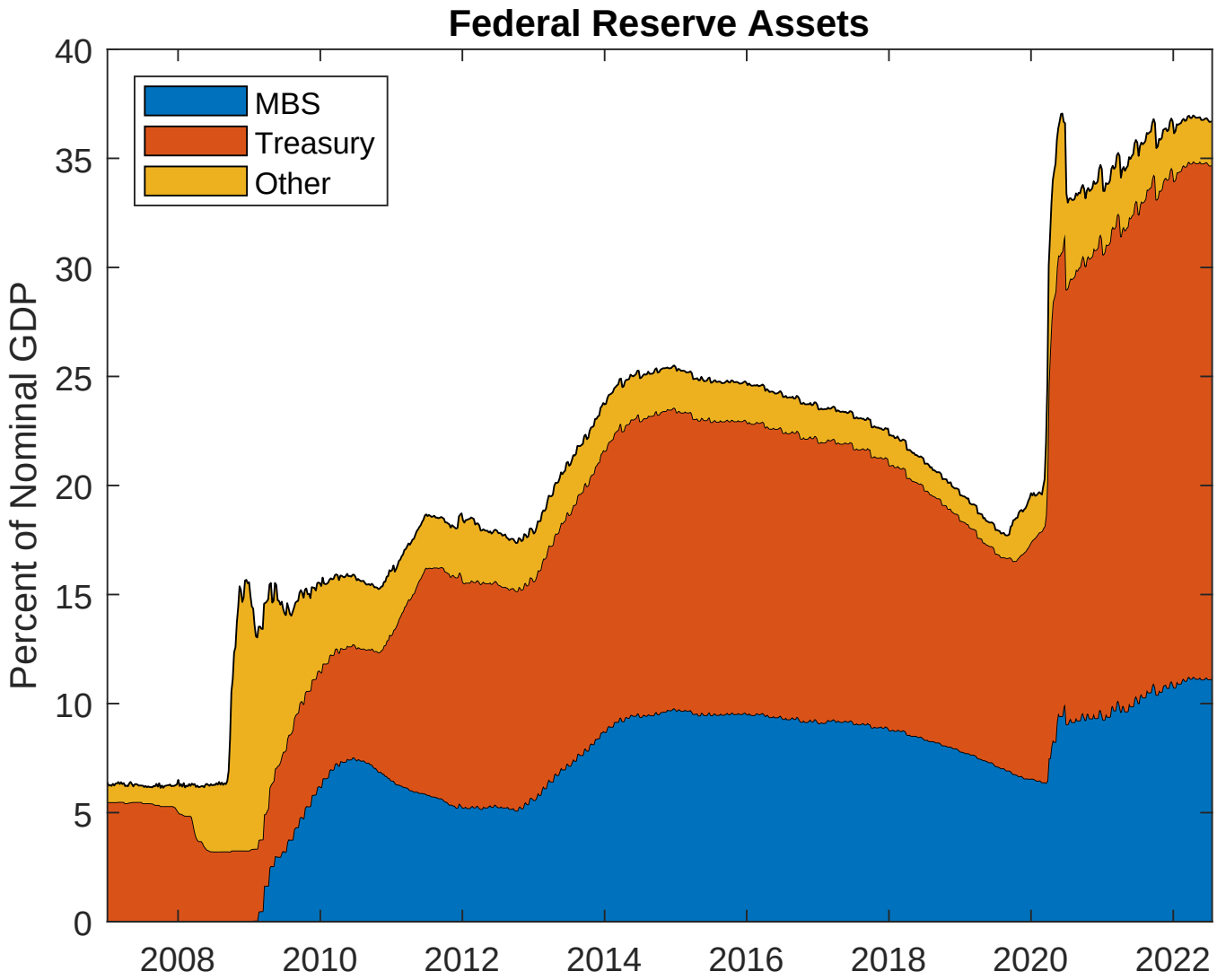
NY Fed Proj Steady State:
Reserves: 8%
Reverse Repo: 0%
....
Total: 22%

Chair Powell:
"2 to $2\frac{1}{2}$ years"

Ratchet Effect

- QE episodes don't get fully reversed
- Acharya (2022) has structural explanation

Fed Assets


Federal Reserve Assets
MBS
Treasury
Other
Percent of Nominal GDP
0
5
10
15
20
25
30
35
40
2008
2010
2012
2014
2016
2018
2020
2022

Maturity of SOMA Treasuries

- Fed's convention has been to match WAM of marketable Treasuries
- WAM of SOMA Treasuries: 8.3 years
- WAM of marketable Treasuries: 6.2 years
- QT involves a policy of first redeeming coupons before bills which should bring WAM down

Likely scale of QT

- Pace about twice as fast as in 2017-2019
- $1 trillion decline in SOMA Treasuries
- Some shortening of maturity of SOMA holdings
- Gradual move out of MBS that should continue even after balance sheet resumes growth
  - Direct MBS sales are distinctly possible

Channels of UMP

- Some emphasize broad channels in which MBS and Treasury purchases are fungible
- Others emphasize very local effects
- To me most of the evidence points in the direction of narrow channels:
  - Krishnamurthy and Vissing-Jorgensen (2011), Joyce et al. (2011), D'Amico et al. (2012), Di Maggio et al. (2020), Lucca and Wright (2021)
- May expect QT to have local effects

Effects of QT

- QT is not simply the opposite of QE
  - No signalling implications
  - No promise that more will be done if needed
  - No disrupted asset markets
  - Away from the ZLB (Gagnon and Jeanne (2022))

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  - No signalling implications
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  - No disrupted asset markets
  - Away from the ZLB (Gagnon and Jeanne (2022))
- Impacts are hard to identify
- Think of Treasury QT as equivalent to increase in amount and WAM of Treasury issuance pre ZLB

Effects on Treasury yields

- Regress 10Y term premium on maturity-weighted GDP with pre ZLB data (1961-2007)
  - Similar exercise to Greenwood and Vayanos (2014)
- A 1 unit increase in maturity weighted debt-to-GDP increases term premium by 33bps
- Robust to IV strategy

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  - Similar exercise to Greenwood and Vayanos (2014)
- A 1 unit increase in maturity weighted debt-to-GDP increases term premium by 33bps
- Robust to IV strategy
- QT is plausibly about a 0.7 increase in MWD/G $\rightarrow$ 25 bp increase in term premia
- Crawley et al. (2022) estimate a 50 bp increase
  - They assume a larger QT

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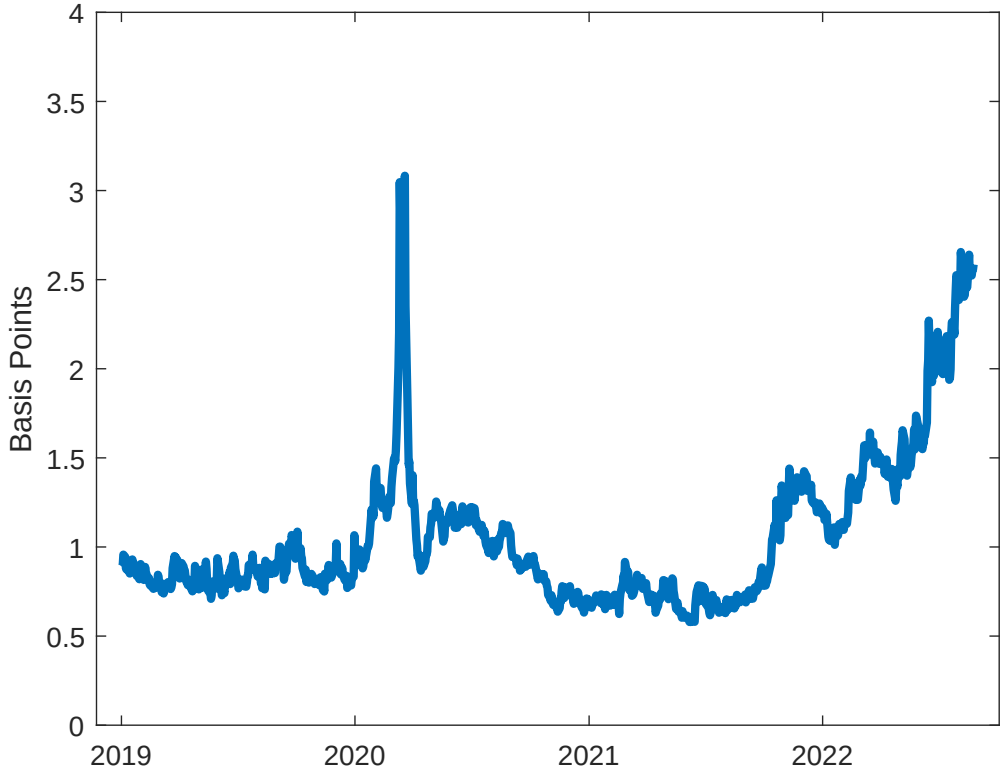
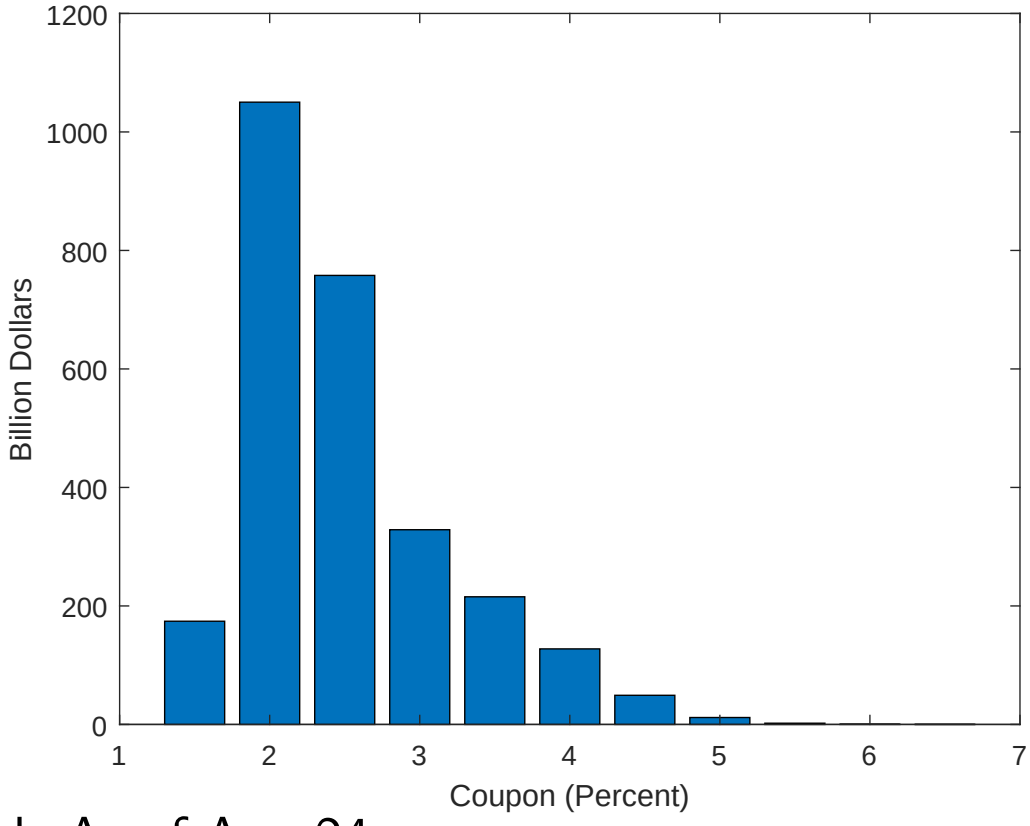
- Caveats:
  - TIPS might be more affected, distorting breakevens
  - Treasury market liquidity might be hurt
  - Effects of MBS sales

Measure of Treasury Liquidity: Mean Abs Pricing Error



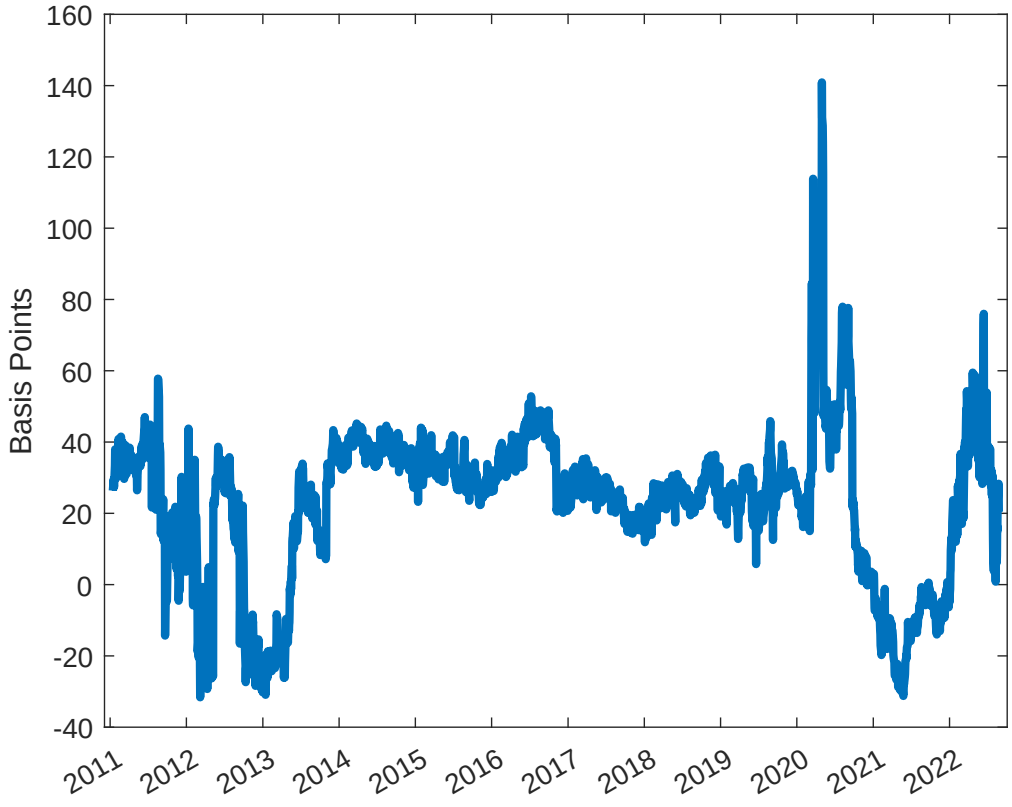
Source: Bloomberg

SOMA MBS holdings by coupon



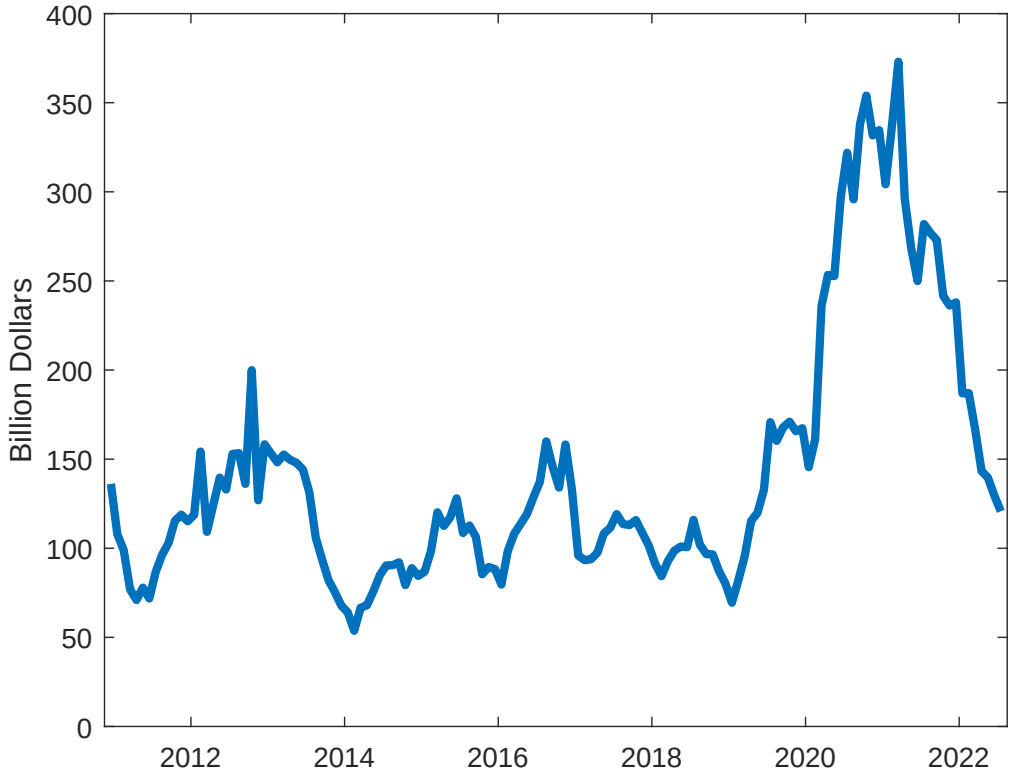
Source: NY Fed. As of Aug 24.

MBS Option Adjusted Spread (Current Coupon: Fannie Mae)



Source: Bloomberg

Agency Gross MBS Issuance



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How much *should* balance sheet shrink?

- Arguments for scarce/ample reserves
  - Nelson (2019); Fisher (2019)
  - Bush et al. (2019); Copeland, Duffie and Yang (2021); Greenwood, Hanson and Stein (2016); McAndrews and Kroeger (2016)