

Figure 1: SOMA Treasury and MBS Purchases

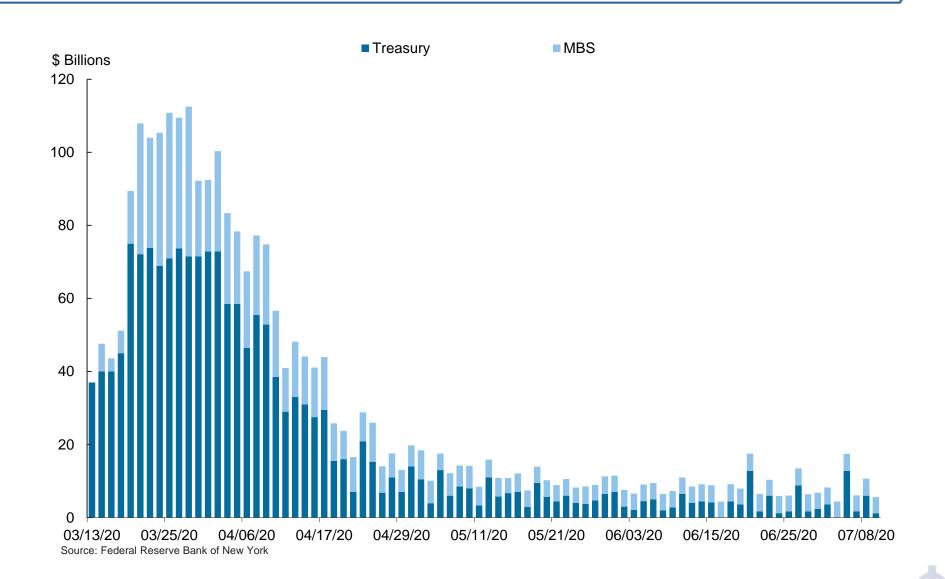


Figure 2: Federal Reserve Assets Since 2007

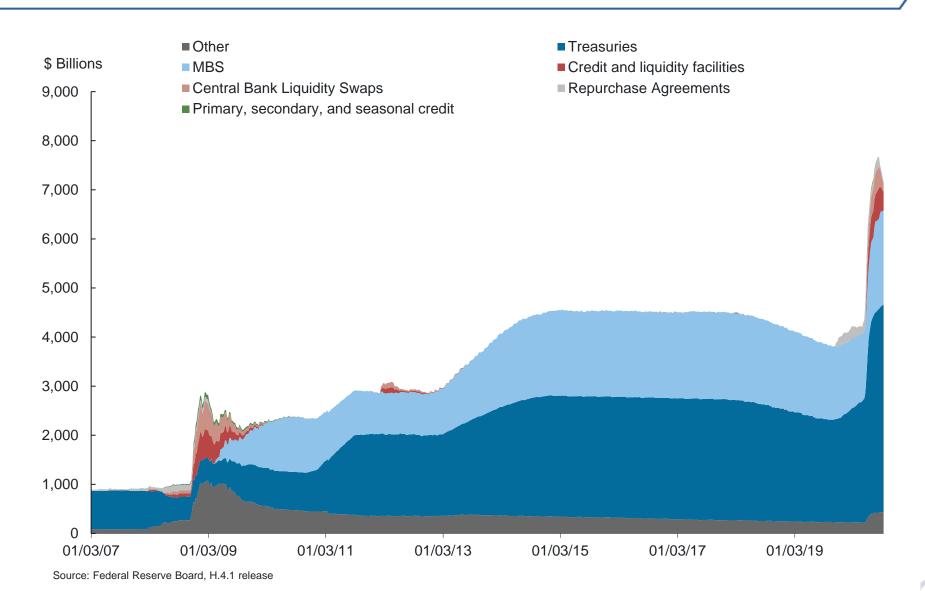


Figure 3: Federal Reserve Assets in 2020

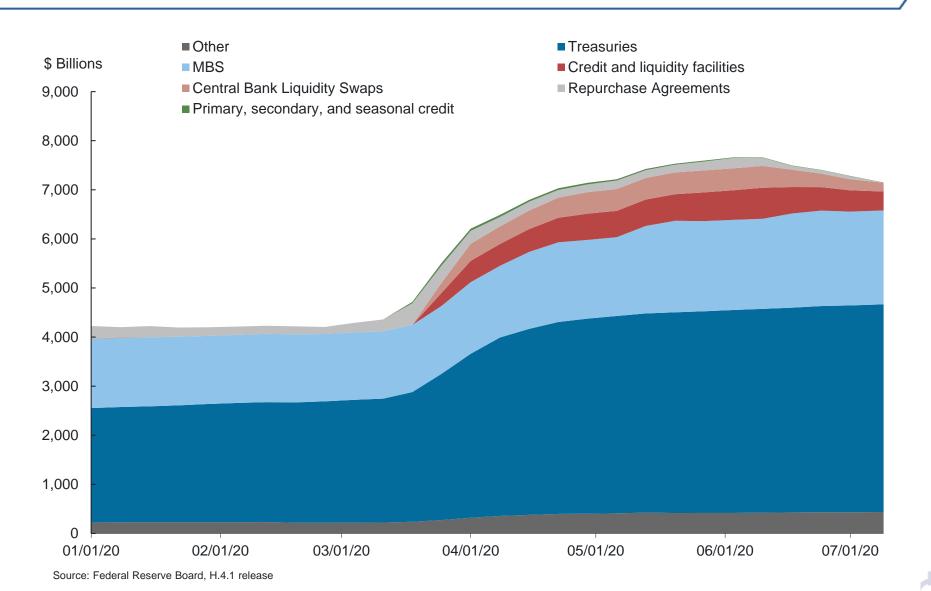


Figure 4: Selected Market Functioning Indicators

Direct metrics

- 1. Direct measures of liquidity ease with which assets can be bought and sold
 - Bid-ask spreads
 - Price impact coefficients
 - Market depth
- 2. Direct measures of relative value *spreads between related instruments*
 - Treasury cash-futures basis
 - On-the-run spreads
 - Spline errors
 - MBS-Treasury yield spreads

Indirect metrics

- 3. Measures of trading pressure balance of investor flows
 - Dealer inventories
 - Client-initiated transaction data
 - Foreign reserve manager holdings
- Results of open market operations strength of market participants' desire to sell
 - Offer-to-cover ratios
 - Favorable offer-to-cover ratios

Figure 5: Client Sales of Off-the-Run Nominal Treasuries

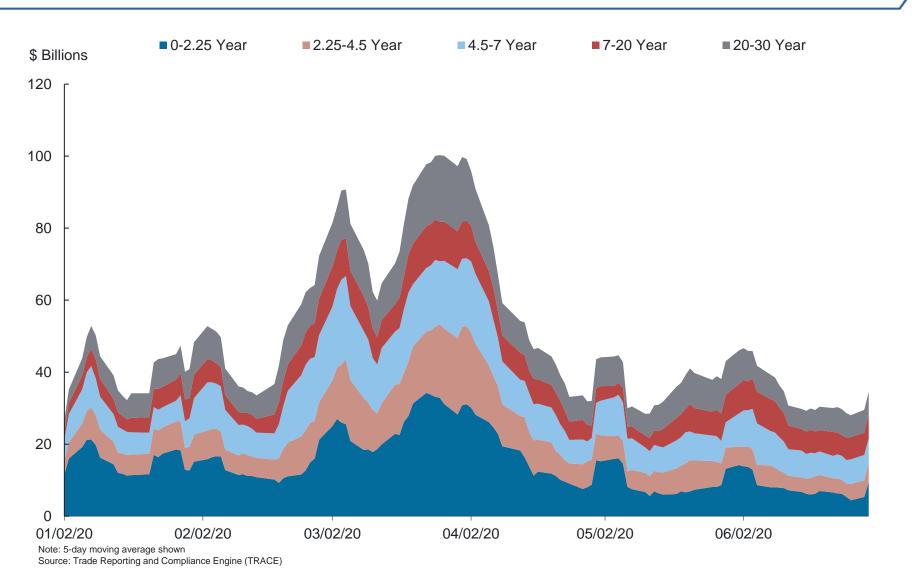
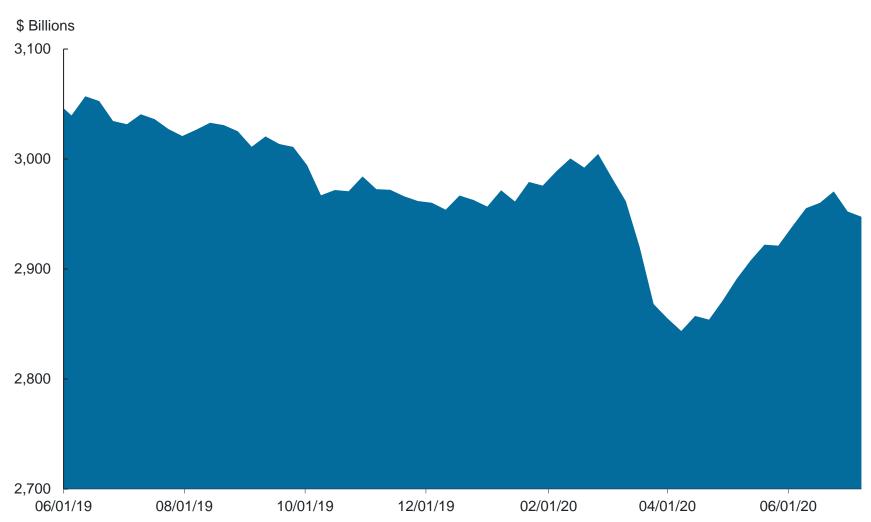
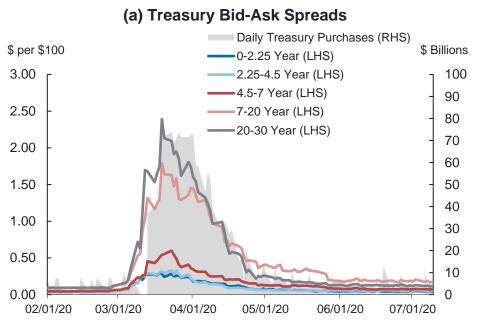


Figure 6: Treasuries in Custody for Foreign Official Accounts



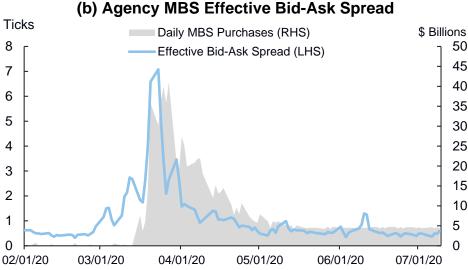
Note: Treasury securities held in custody by the Federal Reserve for foreign official and international accounts. Source: Federal Reserve Board, H.4.1 release

Figure 7: Treasury and MBS Bid-Ask Spreads



Note: Average bid-ask spreads for nominal Treasury coupon securities.

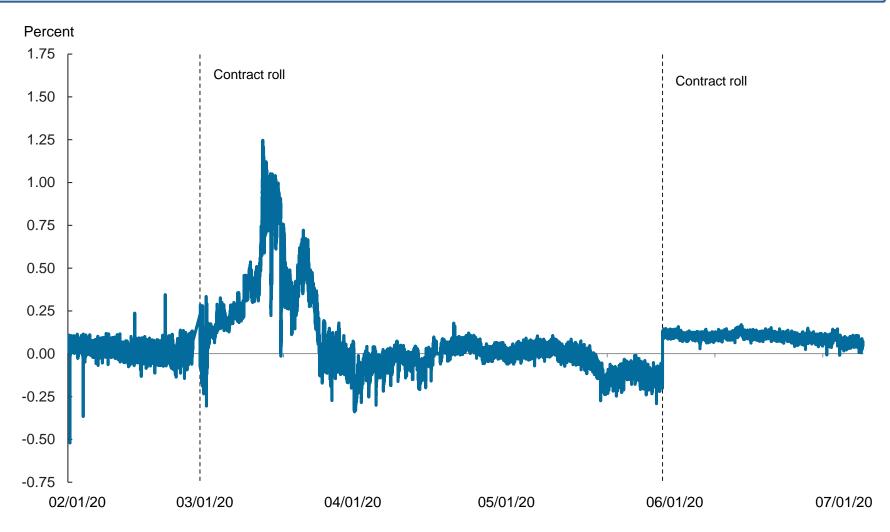
Source: Federal Reserve Bank of New York



Note: A tick is 1/32 of \$1. Effective bid-ask spread is calculated as 2-day moving average of volume-weighted realized bid-ask spread across 15- and 30-year 2.0%-7.0% to-be-announced MBS. Effective bid-ask spread equals daily average sell price minus buy price of dealer-to-customer transactions.

Source: Desk calculations, Financial Industry Regulatory Authority (FINRA), Federal Reserve Bank of New York, Trade Reporting and Compliance Engine (TRACE)

Figure 8: Treasury Cash-Futures Basis



Note: 5-year futures contract implied repo rate spread to 3-month OIS; reference contract changes at the end of February and Maydue to contract rolls. Source: Bloomberg, Desk Calculations