# THE RATE AND CREDIT VIEW

## *Understanding the Impacts of Quantitative Tightening*

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### EXECUTIVE SUMMARY


- The Federal Reserve (Fed) began to shrink its balance sheet this month by reducing the amount of reinvestments —starting with a $47.5 billion per month reduction for both Treasury and mortgage-backed securities (MBS), and eventually increasing up to $95 billion per month later this year.

- Given the maturity schedule of the Fed $8.9 trillion balance sheet, we don't expect the Fed to actively sell Treasuries as quantitative tightening begins this month. Mortgage-backed securities (MBS) could be a different story as most of the Fed's MBS holdings mature more than ten years from today.

- We expect the Fed's balance sheet to shrink by approximately $2.5 trillion by year-end 2024; however, the long-term impact of QT on financial market conditions is largely unknown.

- Based on the prior QT period (2018-2019), the Fed's exit as a buyer of Treasuries and MBS did not result in negative performance for these sectors although this time could be different.


### QUANTITATIVE TIGHTENING IS HERE. WHAT DOES IT MEAN AND HOW DOES IT WORK?

The Fed has stated that it would like to get its nearly $9 trillion balance sheet back down to roughly 20% of U.S. GDP (its currently closer to 40%), and as such, has announced a plan to reduce the amount it currently reinvests (aka quantitative tightening – QT) as bonds roll off its balance sheet starting this month (June 2022). It should be noted that the Fed is *not* initially planning on outright sales of securities to shrink its balance sheet, rather it will only reduce the amount of reinvestments by monthly caps—starting at $47.5 billion a month for both Treasury and mortgage-backed securities (MBS), and eventually increasing up to $95 billion a month that is allowed to runoff. That is, the Fed will only allow its balance sheet to shrink incrementally over time while also paying attention to the impact QT is having on the banking system.

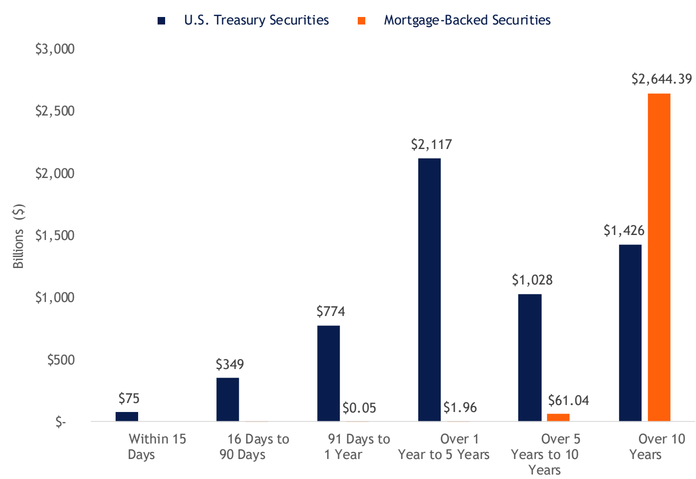
So what happens to the cash the Fed receives from principal repayments? Once Treasury bonds mature and Treasury pays the Fed for those bonds, those funds get taken out of the financial system completely. Similarly, for MBS, the Fed transacts in the secondary market so once MBS either mature naturally or through prepayments, the funds not reinvested are removed from the financial system. The point of QT is to remove liquidity from the financial system (mostly through the banking channels) to tighten financial conditions, so whatever isn't reinvested by the Fed is removed completely. The Fed takes the proceeds and simply extinguishes them. The reserves disappear from the banking system with a few keyboard strokes just as they appeared with a few keystrokes during quantitative easing.

## HOW CAN THE FED AVOID OUTRIGHT SALES OF SECURITIES TO REDUCE ITS BLOATED BALANCE SHEET?

As shown in **Figure 1**, over $1 trillion in Treasuries will mature in one year or less. This maturity schedule will allow the Fed to organically shrink its balance sheet based on the monthly reinvestment caps without actively selling Treasury bonds, which will support a more orderly Treasury market and avoid a sharp rise in yields to attract other buyers. However, as shown in Figure 1, the maturity schedule for MBS is pushed out further, with the majority of MBS holdings maturing more than 10-years from today. Home sales and refinancing will provide organic balance sheet roll-off of MBS, but it's unclear if that will be sufficient to avoid out-right MBS selling by the Fed. FOMC minutes from May 2022 noted that a number of participants thought sales of MBS would be an option once QT is "well under way." Given this rhetoric and a sharp rise in mortgage rates that may cool a hot housing market and refinancing activity, we would not be surprised in the Fed begins to sell MBS in 2023. Given this uncertainty with MBS, we have seen spreads, or yield investors require above like-duration Treasuries, widen in 2022 from below 25 bps to near 50 bps in April.

***Organic maturing of Treasury securities should allow the Fed to shrink its balance sheet without outright selling securities. MBS could be a different story down the road.***

**1 Treasury Securities Expected to Organically Mature Over Next 1 to 5 Years**




Source: LPL Research, Bloomberg, 5/27/22

All indexes are unmanaged and cannot be invested into directly.

Expectations may not develop as predicted.

***The Federal Open Market Committee (FOMC) is the branch of the Federal Reserve Board that determines the direction of monetary policy. The eleven-person FOMC is composed of the seven-member board of governors, and the five Federal Reserve Bank presidents. The president of the Federal Reserve Bank of New York serves continuously, while the presidents of the other regional Federal Reserve Banks rotate their service in one-year terms.***

And while the impact on financial market conditions is largely unknown (the Fed has only done this one other time from 2018-2019) we do think, as the process plays out over time, the cumulative impact could be meaningful (especially if the Fed overshoots the necessary monetary tightening), but we do not expect any near term disruptions due to the passive removal of liquidity. There is still an abundant amount of liquidity in the financial system that needs to be removed before credit creation conditions deteriorate, which could take several years, in our view. Also, and importantly, the Fed has stated that QT could replace several rate hikes as a way to tighten financial conditions. Markets have already repriced an aggressive rate hiking campaign, so as the QT process plays out over time, we could conceivably see a lower Fed funds terminal rate than what is already priced in to markets, which should help the Fed navigate a "softish" landing. Nonetheless volatility across markets is likely to stay elevated as the largest, price-insensitive buyer gradually steps away from supporting bond markets.

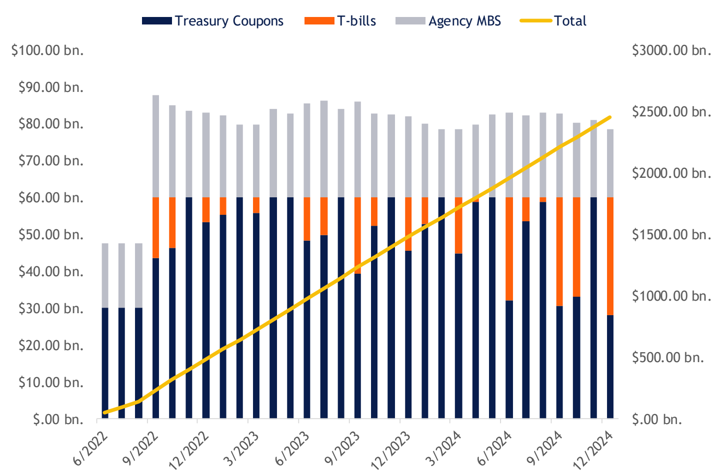
## WHAT WILL BE THE LONG-TERM IMPACT OF QT AND HOW FAR CAN THE FED GO?

Based on the reduced reinvestment caps noted above (starting at $47.5 billion and increasing to a max of $95B reduction), we expect the Fed's balance sheet to shrink by approximately $2.5 trillion by year-end 2024 (**Figure 2**). Based on the New York Fed's projections, the Fed is targeting a balance sheet that is roughly 22% of U.S. GDP by 2025, which would equate to roughly $5.9 trillion by mid-2025. Following this QT period, the make-up of the balance sheet is likely to remain similar to today; roughly two-third Treasury securities. However, Fed commentary has noted that the Fed prefers to hold Treasury securities over MBS, and the composition of the balance sheet will likely reflect that beyond 2025.

*We expect the Fed to eventually shrink its balance sheet by $80-90B per month, which will result in a $2.5T reduction by YE 2024.*

**2** **Fed Would Like to Reduce Its Balance Sheet by $90B per Month**

The Fed Could See Its Balance Sheet Shrink by $2.5 Trillion by 2024




**Source: LPL Research, Bloomberg Intelligence, 5/27/22**
**All indexes are unmanaged and cannot be invested into directly.**
**Projections may not develop as predicted**

The unanswered question, though, remains how far can the Fed actually go in reducing its balance sheet. Last time the Fed attempted to shrink its balance sheet, it was only able to remove roughly $750 billion of Treasury and mortgage securities before certain parts of the short-term funding markets, which are important corporate funding markets, experienced stress. Seemingly learning from that experience, the Fed established a domestic standing repurchase agreement (repo) facility (SRF). The SRF serves as a backstop in money markets and smooth market functioning, which, in theory, should help the Fed reduce its balance sheet without encountering the same market stresses as the previous episode. That said, existing liquidity in many government bond markets remains poor so the Fed will likely have to proceed cautiously to ensure the most important bond market—the Treasury markets—remains fully functional.

## WHAT SHOULD BOND INVESTORS EXPECT?

As noted above, we only have one recent data point we can leverage - the Fed reduced the size of its balance sheet from 2018 to 2019. The Fed announced intentions to reduce its balance sheet in June of 2017, with the reduction taking place from January 2018 through September of 2019. In March 2019, the Fed announced this runoff would conclude in September of that year. The table below examines how broad fixed income sectors performed immediately after Fed's intentions were announced, during the full balance sheet runoff period, and after the Fed informed market participants that this runoff would end. With less monetary accommodation, one would assume that fixed income returns would be negative. However, as the **Figure 3** indicates, these indices produced strong positive returns during all periods. The Fed's exit as a buyer of Treasuries and MBS did not result in negative performance for these sectors during the previous episode.

***Core bond sectors (Treasuries, IG corporates, and MBS) had overall positive returns throughout the prior QT period from Q3 2017 (when announced) to Q3 2019***

**3 Treasury, MBS, and Corporate Bond Total Returns During Last QT Period**

| Index | Quarter after runoff announced | Runoff period | Quarters following announcement runoff would end |
|---|---|---|---|
| | Q3 2017 | Jan 2018 - Sept 2019 | Q2 - Q3 2019 |
| ICE BofA US Treasury TR USD | 0.39 | 4.94 | 5.65 |
| ICE BofA US Corporate TR USD | 1.37 | 5.82 | 7.55 |
| ICE BofA US MBS TR USD | 0.92 | 3.87 | 3.47 |

Source: LPL Research, Morningstar Direct, 527/22
All indexes are unmanaged and cannot be invested into directly.
Past performance is no guarantee of future results.

While many market factors are at play, based on the 2018-2019 Fed balance sheet runoff period, fixed income returns may not be that negatively impacted by the looming balance sheet runoff. However, there is still considerable uncertainty on how balance sheet runoff will be structured and implemented. Best case scenario is that balance sheet runoff commences in the background with little impact on markets (with interest rate hikes still being the primary tool for reducing monetary support).

## IMPORTANT DISCLOSURES

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ICE Bofa US MBS Index – Tracks the performance of the U.S. dollar denominated fixed rate and hybrid residential mortgage pass-through securities publicly issued U.S. agencies in the domestic markets.

ICE Bofa U.S Treasury Index – Measures the performance of U.S. dollar denominated U.S. Treasury Bills publicly issued in U.S. domestic market with a remaining term to final maturity greater than or equal to 3 months and less than 6 months.

ICE Bofa U.S Corporate Index– Tracks the performance of the U.S. dollar denominated investment grade corporate debt publicly issued in the US domestic market.

A mortgage-backed security (MBS) is a type of asset-backed security that is secured by a mortgage, or more commonly a collection ("pool") of sometimes hundreds of mortgages. The mortgages are sold to a financial institution (a government agency or investment bank) that "securitizes", or packages, the loans together into a security that can be sold to investors. The structure of the MBS may be known as "pass-through", where the interest and principal payments from the borrower or homebuyer pass through it to the MBS holder, or it may be more complex, made up of a pool of other MBSs.

Mortgage backed securities are subject to credit, default, prepayment, extension, market and interest rate risk.

All index data from FactSet.

Please read the full Outlook 2021: Powering Forward publication for additional description and disclosure.

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