

# Market Bulletin

April 16, 2019

## Understanding the Fed balance sheet

### In brief

- The U.S. Federal Reserve (Fed) has called a halt to the balance sheet reduction program earlier, and at a higher terminal level, than investors first anticipated.
- Bond purchases grew the assets of the balance sheet; however, it is liabilities that are constraining the Fed's normalization plan.
- Going forward, the balance sheet will likely be used as a monetary policy tool. Furthermore, growth in liabilities should increase the Fed's balance sheet even if no further quantitative easing (QE) is adopted.

### Growing the balance sheet

Before looking at the future of the Fed's balance sheet, it may be helpful to understand how it became such a major monetary policy tool.

Prior to the 2008 financial crisis, the balance sheet was not used as a tool by the Fed, who preferred to target the fed funds rate. However, in the midst of the financial crisis, the Fed launched the first round of QE (QE1), in addition to cutting the fed funds rate, in order to unfreeze credit markets, which had become paralyzed after the collapse of Lehman Brothers. QE1 was followed by QE2 in November 2010 and QE3 in September 2012 as the Fed looked to stimulate economic growth by driving down bond yields.

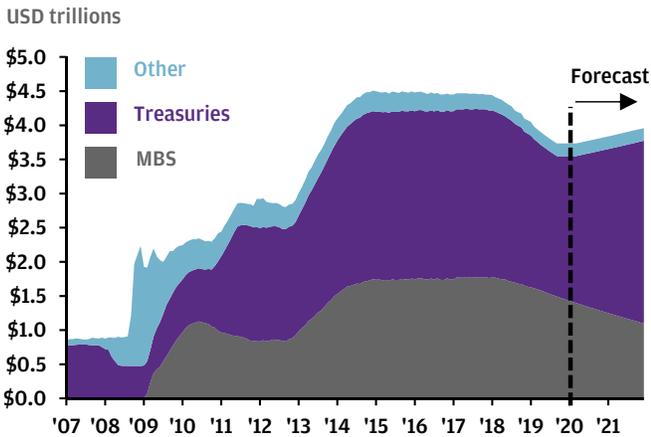
It should be noted that Fed asset purchases benefited the federal government. Through balance sheet expansion the Fed drove down bond yields, lowering borrowing costs for the Treasury. More importantly and less discussed is that the government bonds purchased by the Fed were in effect an interest-free loan to the Treasury, as all coupon payments received by the Fed are returned to the Treasury.



Alex Dryden, CFA  
Vice President  
Global Market Strategist

Overall, from September 2008 to June 2015, the balance sheet rose from USD900 billion to USD4.5 trillion. The Fed then kept the balance sheet at approximately USD4.5 trillion from June 2015 to October 2017 by reinvesting any maturing debt, as seen in **Exhibit 1**. The asset purchases turned the balance sheet into a key monetary policy tool.

**EXHIBIT 1: FED BALANCE SHEET ASSETS**



Source: Federal Reserve, J.P. Morgan Asset Management. mortgage-backed security (MBS) and Treasury holdings are reduced in line with the Fed's balance sheet reduction program until September 2019. After this date MBS assets will continue to mature and all proceeds will be invested in U.S. Treasuries. Data are as of March 29, 2019.

### Reducing the balance sheet

When the Fed began to reduce the size of its USD4.5 trillion balance sheet in October 2017, Fed officials quipped that it would be as “boring as watching paint dry.” This supposedly dull process was meant to take between four and six years and would gradually see the balance sheet reduced to USD2.5-USD3.0 trillion with little impact on financial markets<sup>1</sup>.

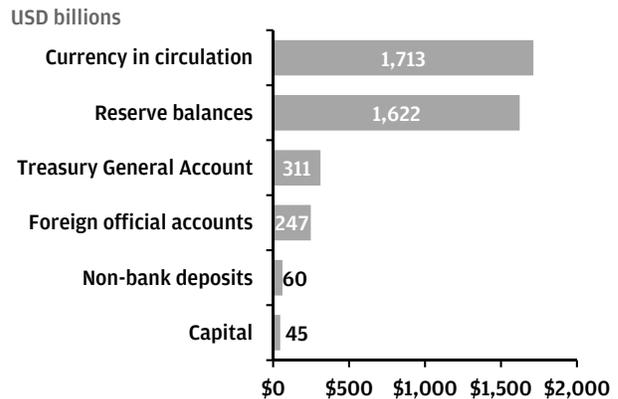
Fast forward 16 months and the Fed has reconsidered its position. The balance sheet reduction program has been more challenging than first anticipated, and the Fed will stop the process in September 2019 at a level of between USD3.6-USD3.7 trillion.

To better understand the Fed's change of heart, investors need to understand the underlying drivers of the Fed's balance sheet. The pace of normalization is

being increasingly hampered by the liability side of the balance sheet, highlighted in **Exhibit 2**. The three biggest liabilities are:

- **Currency in circulation:** The single biggest, and fastest growing, liability is printed dollars in circulation, rising at 7% per year since 1980. Much of the demand for dollars comes from overseas, with an estimated 70% of printed dollars held outside of the U.S., most likely as a store of value<sup>2</sup>.
- **Reserve balances:** The reserve balances are funds deposited at the Fed by financial institutions. The vast majority of these reserves are used to meet traditional capital requirements. The additional reserves are held on deposit in order to comply with other capital requirements.
- **Treasury General Account (TGA):** The Fed acts as a checking account for the U.S. Treasury. As political stand-offs over the debt ceiling have become more common, the Treasury has run larger TGA levels to help provide a buffer as negotiations take place.

**EXHIBIT 2: U.S. FEDERAL RESERVE BALANCE SHEET LIABILITIES**



Source: U.S. Federal Reserve, J.P. Morgan Asset Management. Data are as of March 29, 2019.

<sup>1</sup> U.S. Federal Reserve Bank of New York, Projections for the SOMA portfolio and Net Income, July 2017.

<sup>2</sup> Fed data shows that there have been more USD100 bills printed than USD1 bills, evidence that overseas investors are using the security of the dollar to store their wealth.

These liabilities have remained stubbornly high because the factors that drive them are not directly controlled by the Fed itself. The growth in currency in circulation is a bi-product of the dollar being the world’s reserve currency. International investors demand it as a store of value or as an alternative medium of exchange if they have lost faith in their domestic currency (e.g. Venezuela, Argentina and Zimbabwe). The size of TGA is controlled by the Treasury and is therefore out of the Fed’s control.

The size of the second biggest liability, reserve balances, is also tricky for the Fed to influence. U.S. banks currently have USD1.6 trillion of reserves stashed at the Fed. There are two benefits for banks keeping reserves at the Fed. First, banks earn the interest on excess reserves rate (IOER)<sup>3</sup>, currently at 2.4%, for any Fed deposits. This yield is similar to what is paid out on short-term U.S. Treasuries but has the added benefit of having no duration risk, making it an attractive instrument for bank reserves.

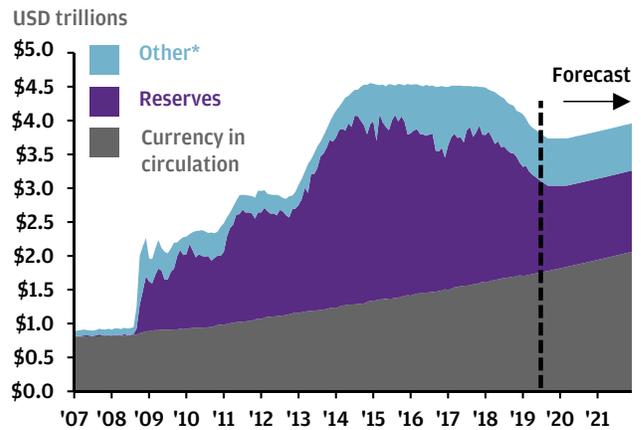
The second benefit is that reserves at the Fed are important for helping U.S. financial institutions meet their capital and liquidity requirements. As an indicator of the demand for reserves, the top five biggest listed banks in the U.S., as of December 2018, had USD1.6 trillion held in high-quality liquid assets (HQLA) in order to meet regulatory standards. While not all of these HQLAs are held at the Fed in the form of reserves, banks can also count Treasuries as HQLA, which is indicative of the need for large reserve levels on the Fed balance sheet. A recent Fed assessment estimated that there was demand for at least USD1.0-USD1.2 trillion in reserves from banks<sup>4</sup>.

These liabilities have been a roadblock on the Fed’s balance sheet journey. Investors should understand that the Fed is not halting this journey early because it is concerned that it sees signs of economic distress down the road, it is halting it for technical factors.

## The balance sheet in the future

The two balance sheet factors that investors need to watch going forward are its size and its composition. As highlighted in **Exhibit 3**, after the Fed’s March meeting the balance sheet should reach a low point of USD3.6-USD3.7 trillion by September 2019. The balance sheet is likely to stay at this low level for a few quarters before beginning to rise once more. Balance sheet growth will be driven by increases in the Fed’s liabilities. As the liability side of the Fed’s balance sheet grows it will be forced to purchase more Treasuries in order to keep assets level.

EXHIBIT 3: FED BALANCE SHEET LIABILITIES



Source: Federal Reserve, J.P. Morgan Asset Management. \*Other includes capital, Treasury General Account (TGA), deposits from foreign banks, reverse repurchase agreements. Currency in circulation is rising at 6.8% per year. Reserves include both excess and required reserves. Data are as of March 29, 2019.

However, it’s not just the size of the balance sheet that is changing: its composition is also transitioning. Currently, the asset side of the balance sheet is comprised of both U.S. Treasuries and MBS. Fed officials have communicated that they are not comfortable with holding MBS debt to credit risk and would like to transition to a 100% Treasury balance sheet.

<sup>3</sup> The IOER tool was provided to the Fed in 2008 after the financial crisis. Prior to the financial crisis, the Fed controlled day-to-day financial conditions by repurchase agreements; however, the increasing size of the Fed balance sheet made it difficult for the Fed to do that. Therefore the IOER tool was created for the Fed to better manage reserves and overall financial conditions.

<sup>4</sup> U.S. Federal Reserve minutes, January 2019.

Even beyond September 2019, the Fed is going to continue to allow MBS to mature and it will reinvest any proceeds into the U.S. Treasury market. This passive approach will take time. Assuming no new MBS purchases, it would take until 2045 for MBS to be fully removed from the Fed's balance sheet. Fed officials have also hinted that should financial conditions remain stable, they may actively sell MBS debt in order to speed up the reduction.

Overall, changes in the composition and the size of the balance sheet will mean that the Fed will own more U.S. Treasuries going forward. Assuming the Fed does not restart QE, it could end up owning nearly 18% of outstanding U.S. Treasuries by 2029, up from 14% today.

Investors should also be cognizant that the Fed's balance sheet will likely be used once more in the event of an economic downturn. In the past six downturns, the Fed has cut the Federal funds rate on average by 6.55% to stimulate growth. With the federal funds rate sitting at just 2.4% and the Fed on pause with its hiking cycle, the balance sheet will once again be used to stimulate growth in the next recession.

A larger Fed balance sheet in the future is likely to be an anchor on U.S. Treasury yields and potentially hamper long-run bond returns. It also provides a flexibility for U.S. fiscal policy because the U.S. treasury does not technically pay interest on debt held by the Fed.

## Investment implications

- The size of liabilities has hampered the Fed's plans to reduce its balance sheet. Currency in circulation, the TGA and reserve levels are outside of the Fed's control.
- These technical factors prevent the Fed from reducing the size of the balance sheet and it will stop in September 2019 at a level of around USD3.6-USD3.7 trillion, much higher than original estimates.
- Going forward, the Fed balance sheet will gradually begin to grow as liabilities expand. During the next downturn, the Fed is likely to lean on the balance sheet to stimulate growth. A larger balance sheet will weigh on bond yields in the long run but will be helpful for U.S. fiscal policy.

For the purposes of MiFID II, the JPM Market Insights and Portfolio Insights programs are marketing communications and are not in scope for any MiFID II / MiFIR requirements specifically related to investment research. Furthermore, the J.P. Morgan Asset Management Market Insights and Portfolio Insights programs, as non-independent research, have not been prepared in accordance with legal requirements designed to promote the independence of investment research, nor are they subject to any prohibition on dealing ahead of the dissemination of investment research.

This document is a general communication being provided for informational purposes only. It is educational in nature and not designed to be as advice or a recommendation for any specific investment product, strategy, plan feature or other purpose in any jurisdiction, nor is it a commitment from J.P. Morgan Asset Management or any of its subsidiaries to participate in any of the transactions mentioned herein. Any examples used are generic, hypothetical and for illustration purposes only. This material does not contain sufficient information to support an investment decision and it should not be relied upon by you in evaluating the merits of investing in any securities or products. In addition, users should make an independent assessment of the legal, regulatory, tax, credit and accounting implications and determine, together with their own professional advisers, if any investment mentioned herein is believed to be suitable to their personal goals. Investors should ensure that they obtain all available relevant information before making any investment. Any forecasts, figures, opinions or investment techniques and strategies set out are for information purposes only, based on certain assumptions and current market conditions and are subject to change without prior notice. All information presented herein is considered to be accurate at the time of production, but no warranty of accuracy is given and no liability in respect of any error or omission is accepted. It should be noted that investment involves risks, the value of investments and the income from them may fluctuate in accordance with market conditions and taxation agreements and investors may not get back the full amount invested. Both past performance and yields are not reliable indicators of current and future results.

J.P. Morgan Asset Management is the brand for the asset management business of JPMorgan Chase & Co. and its affiliates worldwide.

To the extent permitted by applicable law, we may record telephone calls and monitor electronic communications to comply with our legal and regulatory obligations and internal policies. Personal data will be collected, stored and processed by J.P. Morgan Asset Management in accordance with our [Company's Privacy Policy](#). For further information regarding our regional privacy policies please refer to the [EMEA Privacy Policy](#); for locational Asia Pacific privacy policies, please click on the respective links: [Hong Kong Privacy Policy](#), [Australia Privacy Policy](#), [Taiwan Privacy Policy](#), [Japan Privacy Policy](#) and [Singapore Privacy Policy](#).

This communication is issued by the following entities: in the United Kingdom by JPMorgan Asset Management (UK) Limited, which is authorized and regulated by the Financial Conduct Authority; in other European jurisdictions by JPMorgan Asset Management (Europe) S.à r.l.; in Hong Kong by JF Asset Management Limited, or JPMorgan Funds (Asia) Limited, or JPMorgan Asset Management Real Assets (Asia) Limited; in Singapore by JPMorgan Asset Management (Singapore) Limited (Co. Reg. No. 197601586K), or JPMorgan Asset Management Real Assets (Singapore) Pte Ltd (Co. Reg. No. 201120355E); in Taiwan by JPMorgan Asset Management (Taiwan) Limited; in Japan by JPMorgan Asset Management (Japan) Limited which is a member of the Investment Trusts Association, Japan, the Japan Investment Advisers Association, Type II Financial Instruments Firms Association and the Japan Securities Dealers Association and is regulated by the Financial Services Agency (registration number "Kanto Local Finance Bureau (Financial Instruments Firm) No. 330"); in Australia to wholesale clients only as defined in section 761A and 761G of the Corporations Act 2001 (Cth) by JPMorgan Asset Management (Australia) Limited (ABN 55143832080) (AFSL 376919); in Brazil by Banco J.P. Morgan S.A.; in Canada for institutional clients' use only by JPMorgan Asset Management (Canada) Inc., and in the United States by JPMorgan Distribution Services Inc. and J.P. Morgan Institutional Investments, Inc., both members of FINRA; and J.P. Morgan Investment Management Inc.

In APAC, distribution is for Hong Kong, Taiwan, Japan and Singapore. For all other countries in APAC, to intended recipients only.

Copyright 2019 JPMorgan Chase & Co. All rights reserved.

0903c02a8257647a