WisdomTree RESEARCH MARKET INSIGHTS (APRIL 2018)



WHAT GOES UP MUST COME DOWN?

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With a decade gone by since the start of the financial crisis, investors are seeing the balance sheets of global central banks at all-time highs. As economic growth shows signs of improving in countries/areas such as the U.S., the eurozone and Japan, central bankers are facing some important decisions regarding the unprecedented monetary policy moves of the last 10 years. Indeed, key questions, such as how and when to begin the normalization process, are no doubt taking up a lot of the discussion at various central bank meetings. Financial markets have already seen the Federal Reserve (Fed) go down this path, but the baton looks like it's getting ready to be passed over the next year or so.

Policy makers and investors alike realize that balance sheets can't grow forever, and what goes up must come down. We enter new territory because quantitative easing (QE)¹, or large-scale asset purchases, was an experiment of sorts. As central bankers look to unwind their balance sheets, how do financial markets respond?

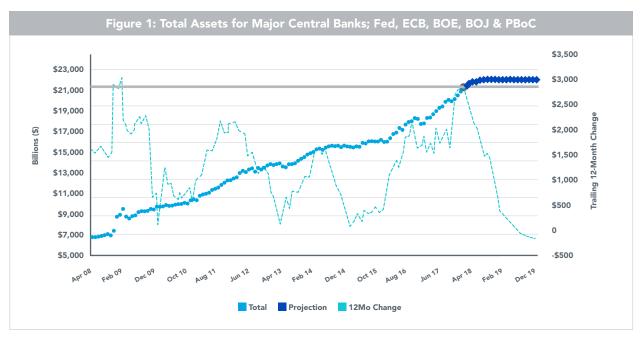
WHAT IS IT?

Over the past decade, central banks have conducted an unprecedented amount of market operations. This was a direct response to the global financial crisis, and central bankers used an unconventional policy to stabilize markets and stimulate a recovery. To support asset valuations and bank lending, central banks bought up all types of fixed income assets, including government bonds, mortgage-backed securities (MBS) and corporate bonds. By flooding the market with cash and buying up fixed income assets, central banks put downward pressure on interest rates and drove investors to riskier asset classes, such as equities and high-yield bonds. While financial historians will no doubt continue to debate the effectiveness of unconventional policy measures such as QE, it seems reasonable to conclude that without such approaches to monetary policy, investors would have more than likely witnessed some very different economic and market scenarios over the last decade or so.

Currently, the balance sheets of global central banks are more than \$21 trillion. To provide some perspective, in 2008, the figure was only \$7 trillion. The following chart depicts the size of the balance sheets, in aggregate, for the major central banks: the Fed, European Central Bank (ECB), Bank of England (BOE), Bank of Japan (BOJ) and the People's Bank of China (PBoC).

¹ Quantitative easing (QE): A central bank monetary policy occasionally used to increase the money supply by buying government securities or other securities from the market. Quantitative easing increases the money supply by flooding financial institutions with capital in an effort to promote increased lending and liquidity.

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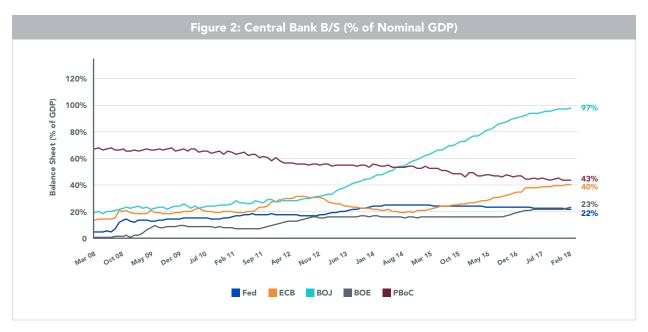
Sources: Citi Research, Bloomberg and WisdomTree, as of 3/31/2018. Total major central bank balance sheet projections are calculated by aggregating individual central bank balance sheet projections. PBoC balance sheet projections are calculated by growing the balance sheet at the average monthly balance sheet change over the previous 12 months using the current FX spot rate. Projections on BOJ/Fed/ECB/BOE balance sheets were provided by Citi Research as of 1/10/18.

As central banks, including the Fed and perhaps the ECB later this year or early next year, embark on the process of policy normalization, the chart above shows what we expect by the end of 2019. Specifically, central bank net investment will cease to grow and actually become negative (the dotted line shows the trailing 12-month change in the aggregated balance sheets). For now, we continue to see an increase in global central bank balance sheets, specifically for the BOJ, PBoC and ECB.

HOW DID THIS HAPPEN?

At the onset of the global financial crisis, the Fed and the BOE were the first policy makers to try QE. Keep in mind, many of these central banks had utilized various other unconventional policy measures before resorting to outright large-scale asset purchases. In November 2008, the Fed announced its first QE program, culminating in three rounds that ended in October 2014. The Fed's Operation Twist also occurred during this timeframe, but this measure did not add to the balance sheet outright; rather, it involved the policy makers shifting the maturities of their holdings, focusing on the longer end of the yield curve. By the end of QE, the Fed's balance sheet had increased to \$4.5 trillion.

Also in March 2009, the BOE began large-scale asset purchases, followed by the ECB, which started its own QE program in early 2015. Japan had been conducting quantitative easing in the early 2000s to combat deflation. This was mostly unsuccessful. After the global financial crisis, Japan started a new round of asset purchases in October 2010 to depreciate the yen against the dollar and stimulate the domestic economy. Then came "Abenomics" and its quantitative easing program in 2013. The BOJ has expressed a willingness to double the money supply.



Sources: Bloomberg, WisdomTree, as of 3/31/2018.

HOW DO THE BALANCE SHEETS STACK UP?

In order to get some perspective on the size and scope of these global ΩE programs, it is useful to examine where the central banks' asset holdings are in relation to their respective GDP^2 . The BOJ's actions certainly serve as the standout performer. Its balance sheet is 97% of GDP, followed at a distant second by the PBoC at 43%. Notably over this time horizon, GDP in China has outpaced the growth in the PBoC's balance sheet. This is roughly in line with the balance sheet of the ECB at 40% of eurozone GDP. Interestingly, we can see that the Fed's balance sheet has been stable since the end of ΩE at about 22% of GDP, well below the aforementioned percentages for the other countries/areas.

WHAT IS HAPPENING NOW?

Today, we appear to be seeing synchronized global economic growth and central banks trying to decide what comes next. As has already begun in the U.S., the next course of action for central banks is to begin tightening. This tightening can come in two forms: rate hikes and balance sheet normalization. Although not mentioned here from a QE perspective, the Bank of Canada joined the Fed last year on the rate-hike front. Last year, the Fed essentially tightened four times: three rate hikes and a balance sheet normalization announcement at the September FOMC meeting. One could argue that the latter is akin to a rate hike in this still-unusual monetary policy backdrop. The BOE has hiked one time so far and has indicated that it does not plan to unwind the balance sheet until inflation picks up materially.

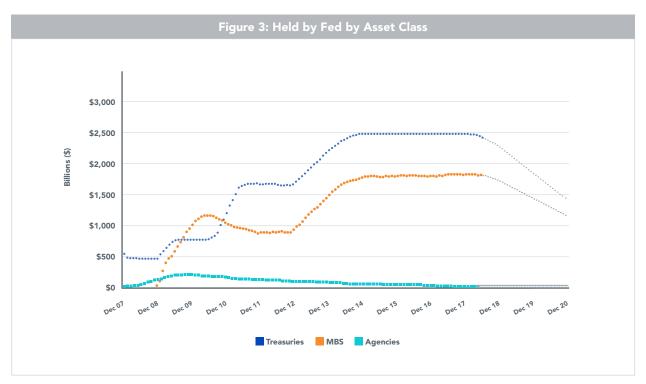


² Gross domestic product (GDP): The sum total of all goods and services produced across an economy.

Needless to say, the Fed has already begun reducing the size of its balance sheet, and investors will no doubt be turning their attention to the ECB, which, as of this writing, had a September 2018 end date for its QE program. It should be mentioned that the ECB has been paring back purchases over the past year. Any change of policy by the BOJ or PBoC could accelerate our projections of the reduction in central bank total assets.

A MORE IN-DEPTH LOOK AT THE FED

The Fed discontinued its purchase program in 2014 and since then had maintained the size of its balance sheet by reinvesting any maturing, or redeemed, proceeds from its holdings. Starting in October of last year, the Fed began a balance sheet normalization process that pares back its reinvestments and will allow Treasuries, MBS and agency securities to roll off its balance sheet. The FOMC has communicated monthly caps on the amount of assets that will roll off.



Sources: Bloomberg, WisdomTree, as of 3/31/2018. Projections are determined using monthly caps indicated by the FOMC.

The figure above depicts the projected runoff of the Fed's balance sheet. We see here that most of the balance sheet consists of MBS and Treasuries, with the total size of holdings at \$4.2 trillion as of this writing. Assuming the Fed sticks to its indicated caps, the balance sheet should be reduced by \$1 trillion over the next two years. Based on these projections, we see the total holdings for Treasuries and MBS at \$3.2 trillion as of December 2019 and \$2.6 trillion as of December 2020.



WHY DOES IT MATTER?

Let's turn our attention back to the ECB for a minute. At its October 2017 policy meeting, the ECB announced it was trimming its QE program to a reduced pace of 30 billion euros through September 2018. The key question is whether the ECB enacts a hard stop on market stimulus or a taper. The consensus seems to lean in the direction of tapering. However, entering 2019, we expect the end of the ECB's asset purchase program, to be followed next by the guidance and discussion of a rate hike.

From a strictly monetary policy perspective, as balance sheet normalization accelerates, there could be upward pressure on global interest rates as an integral force that helped push yields lower gets removed. For the record, there should be continued stimulus from the BOJ and PBoC, which needs to be factored in; however, such stimulus will not last forever.

CONCLUSION

Certainly, removing monetary policy stimulus can be considered an economic, and potentially financial asset, headwind in the years ahead and will need to be factored into the valuation equation. However, it is interesting to note that here in the U.S., the baton is being passed to the fiscal side of the ledger, where tax cuts and increased federal spending have entered the mix. The global growth backdrop is also arguably in a much healthier state to absorb the removal of these unconventional monetary policy measures, but uncharted waters lie ahead, as central bankers attempt to undo policies that were never attempted on such a large scale before.

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