

## INVESTMENT UPDATE

To paraphrase Neil Sedaka (are we dating ourselves?), "Breaking up QE is hard to do." That fact, no doubt, is weighing heavily on the mind of the new Federal Reserve Chair Jay Powell.

Let's backtrack for a moment: After the financial crisis, the Fed was faced with a dilemma it had never encountered before. In order to stimulate the economy and provide a cheap source of funding for the financial system, it had reduced its overnight lending rate, the Fed funds rate, to zero percent. But the economy was not responding, and with the housing market in tatters, the Fed took the dramatic step of implementing quantitative easing (QE), a multi-year process of buying bonds-first, US agency-issued mortgage-backed securities (MBS), and later, both MBS and Treasuries. These so-called "large-scale asset purchases" pulled bonds out of circulation and replaced them with cold, hard cash.

QE had multiple effects. The Fed's buying program sent bond prices up, and drove bond yields and other interest rates lower. That made borrowing cheaper and, while generating good total returns for bond holders, it simultaneously reduced the prospects for future gains for holding US govern-

ment bonds. That, plus nearly free short-term borrowing costs, encouraged investors to buy higher risk stocks-including non-US and emerging market equities—corporate bonds, ETFs, real estate, and other assets. Further rounds of QE focused on longer-maturity bond purchases in order to further reduce yields out the yield curve, which had its intended impact; by mid 2012, ten-year Treasury yields had dropped to 1.39%, their lowest level in more than 60 years.

While the US was not the first major economy to use QE (Japan implemented its QE program in 2001), the Fed's success in engineering a lower, flatter yield curve and putting the US economy on solid footing encouraged other central banks to follow suit. Currently, the Bank of Japan, the European Central Bank and the Bank of England, as well as the Fed, are still engaged in the purchase of government and (in the case of all but the Fed) non-government bonds in order to stimulate their economies after hitting the "zero lower bound" of their official overnight

lending rate.

"But wait," we hear you say, "the Fed has stopped buying bonds, hasn't it?" The answer to that question is "Nope!" While it's true that the Fed has been, since January, allowing some of the bonds in its portfolio to mature without being replaced, the Fed has placed a limit on the amount of funds that are "rolling off." The Fed is still making billions in purchases of bonds from maturing holdings each month. The Treasury portfolio alone, which now totals approximately \$2.4 trillion, has \$226 billion in maturities for the remainder of 2018, half of which are expected to be reinvested. The degree to which bonds will be allowed to roll off without replacement will increase each quarter in 2018, leveling off at \$50 billion per month in 2019—\$30 billion in Treasuries and \$20 billion in

> MBS. All told, the total balance sheet shrinkage over the two year period is expected to total \$860 billion.

As the chart on this page shows, the unwinding of the Fed's ginormous balance sheet is starting out slowly, and the paydowns so far have barely made a dent in their asset holdings. But if the FOMC

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that might not be so easy—by year-end 2019 its holdings of Treasuries and MBS, which peaked at \$4.2 trillion, will be down to \$3.3 trillion. To put that in context, the Fed's security holdings were less than \$1.0 trillion before the financial crisis.

What is the "right size" for the Fed's balance sheet going forward? Most Fed-watchers believe that the longer-term target is in the \$2.5-\$3.0 trillion range, which could be achieved in early 2021 if the Fed sticks to its 2019 roll-off schedule for an additional year or so. Again, this is all pro-forma, and projections longer than a couple of quarters become progressively subject to revision. Any number of variables could pop up and derail the Fed's plans; in order for the schedule to hold, the Fed will need, at a minimum, a relatively strong US economy and sufficient investor demand to absorb, without market disruption, the additional supply of more than a trillion dollars of Treasuries and MBS that the Fed will be shedding. We should expect adjustments to the Fed's balance sheet downsizing if



either of those conditions is not met.

Of course, the Fed is not the only central bank making changes to its quantitative easing program. The European Central Bank (ECB) announced this month that it will continue to taper its bond purchase program through year–end 2018. Currently, the ECB is purchasing €30 billion (\$35 billion) in net new bonds every month and will reduce future purchases to €15 billion in September, before ending new purchases at year–end. At its peak, the ECB was expanding its balance sheet by €80 billion per month. Clearly, the ECB's timetable is well behind that of the Fed (who stopped expanding its balance sheet more than three years ago), reflecting the fact that Euro–area economies have been slower to recover from the financial crisis than our own. The ECB has no timetable for shrinking its balance sheet, and will not consider rate hikes for at least another year.

As covered in past Investment Updates, the ECB's APP (asset purchase plan) is not just on a different time schedule than the Fed's, it's on a whole other level. By size, the program surpassed the Fed's in 2017, and today the ECB's balance sheet is more than \$1 trillion larger than that of the US central bank's program, despite the fact that the combined GDP of the 19 economies in the European Union represents less than 2/3rds of that of the US. The breadth of the ECB's asset portfolio is far wider than that of the Fed as well; the Fed only holds US Treasuries and government-backed agency MBS and debentures, while the ECB has purchased government bonds as well as corporate bonds, covered bonds, asset-backed securities, and other marketable and non-marketable securities from member institutions. These broad-based (and riskier) asset purchases were made necessary beacuse the size of the QE operations exceeded the aggregate size of the ECB members' government bond markets. Over the past couple of years, on average, ECB purchases have exceeded EU-member net government bond supply seven times over. Even when the US QE program was running full-tilt, bond purchases never came close to exceeding net new issuance of government bonds.

As you'd imagine, the size and breadth of the ECB's asset purchases (and we haven't even touched on the Bank of Japan's massive QE program—it's also bigger than the Fed's) make the unwinding of its balance sheet a very delicate matter. The massive buying of bonds by the ECB has driven short–term government bond yields below zero for most of the major European economies, and even some of the weaker players have negative short–term yields (Portuguese 2–year bonds at –0.14%, anyone?). And due to broad–based buying of corporate credits, the distortion extends into the nether regions of the quality spectrum: the average high-yield Euro corporate bond yields no more than the average US Treasury bond.

Clearly, these QE programs have had a significant impact on bond yields—and perhaps, more importantly, the prices of riskier assets—all across the globe. If it stands to reason that the

injection of central bank liquidity into the capital markets has inflated asset prices, then the removal of at least some of that liquidity will have an impact in the opposite direction. To be clear, we are not suggesting that the reaction has to be equal; since consumer and investor confidence is much higher across all economies now than when these programs were implemented, the removal of monetary stimulus is likely to have a more muted reaction. And, as pointed out above, the Fed (not to mention other central banks) is not contemplating shrinking its balance sheet back to pre-crisis levels, even after accounting for inflation.

What we have, then, is a pretty treacherous path for the Fed and other central banks. They know they have to "normalize" policy by raising rates and shrinking their bond holdings, yet the global capital markets must be able to absorb these shocks without doing too much damage to investor psychology and scaring off demand for good quality assets. While the US appears to be in better shape than its foreign counterparts—the Fed has raised the funds rate now seven times and has (slowly) begun to allow the balance sheet to shrink—our worsening fiscal situation means that net new Treasury bond supply will double in the next couple of years, no matter what the Fed does. In this regard, the Fed must walk the same tightrope as its counterparts, and try to keep things orderly while slowly removing these policy support systems.

Communication is key, and it's no coincidence that the Fed just announced that Chair Jay Powell will now have a press conference with a Q&A session after each FOMC meeting, up from just four times per year. The Fed, after stumbling badly in 2013 when it rattled the markets in the infamous "taper tantrum" episode, has gone out of its way to improve communications and transparency over the past few years. The SEP (the "dot plots") reveal to the general public the FOMC's forecast for GDP, inflation, unemployment and Fed funds rate over the next few years. All of this is extremely helpful in managing expectations and serves to calm investors' worries about what lies ahead.

It's also important to keep in mind that these central banks retain plenty of flexibility to make mid-stream corrections to their policies. The ECB, for example, can tailor its reinvest-ment/run-off program to deal with market disruptions by choosing any number of different assets to roll off or reinvest. If credit spreads widen unexpectedly, it can reinvest maturing corporate or collateral-backed bonds and allow government bond maturities to roll off instead. This may become necessary, as it's likely that the progressive removal of liquidity will hit lower quality assets harder than government-backed bonds.

So far, so good. Yet, from past experience we should expect policy mistakes. We can't control those, but we can take steps to ensure that our clients' portfolios perform well throughout this transitional period.