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Economics Group

WELLS FARGO SECURITIES

Special Commentary

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Who Will Buy All the New Treasury Securities?

Executive Summary

Strong demand for U.S. Treasury securities in recent years, coupled with reduced issuance, has kept yields on those securities low. However, the supply-demand dynamics in the Treasury market may be changing. Issuance likely will ramp up significantly in the next two years as the federal deficit widens again. The Federal Reserve is effectively becoming a net seller of Treasury debt as it shrinks its balance sheet, and foreign central banks probably will not purchase as many Treasury bills, notes and bonds as they did during the past decade. If demand for Treasury securities falls short of supply at current prices, then yields will need to rise to clear the market. Indeed, we look for yields on Treasury debt to rise in the next two years.

The supply-demand dynamics in the Treasury market may be changing.

Treasury Issuance Set to Increase

In a recent report, we discussed the outlook for new issuance of Treasury securities.[1] As we discussed in that report and shown in Figure 1, we expect that issuance will increase sharply in the next two calendar years (CY). Not only will the need to replenish the Treasury's cash balance boost issuance in CY 2018, but the projected increase in the federal budget deficit should also raise the Treasury's borrowing needs. We expect that the Treasury Department will need to issue nearly $1 trillion worth of new securities in CY 2018 as well as in CY 2019. These amounts are more than double the $500 billion or so that the Treasury Department is on pace to issue in CY 2017.

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Figure 1

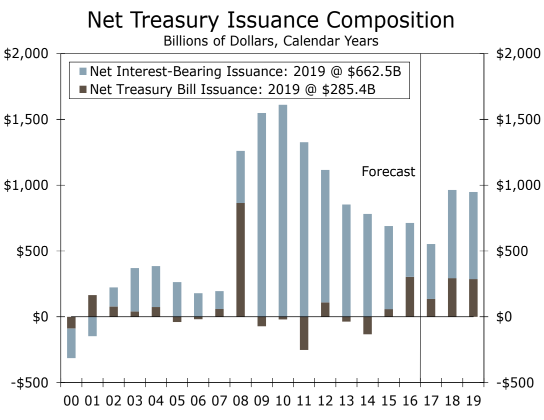
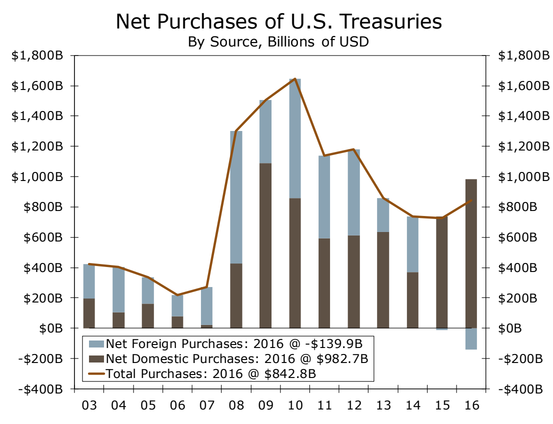


Figure 2



Source: US Department of the Treasury, Federal Reserve Board and Wells Fargo Securities

[1] **See "Q4 Net Treasury Issuance Outlook: An Update" (November 7, 2017), which is available upon request and our website.**

Together we'll go far

When the Treasury issues debt, the 23 primary dealers buy the newly issued securities in regularly scheduled Treasury auctions and then sell the securities to domestic and foreign clients. As shown in Figure 2, foreigners have historically been significant buyers of U.S. Treasury debt. However, foreign net purchases of U.S. government bonds have waned in recent years, and foreigners actually turned into net sellers in 2016. Monthly data show that net foreign purchases of Treasury securities turned positive again through the first nine months of 2017, but they remained well short of the foreign purchase rate that was registered a few years ago. Clearly, American institutions and households have ended up holding the vast majority of new Treasury issuance over the past few years.

Foreign buyers can be sub-divided into the foreign "official" sector and the foreign private sector.

So who will buy all the Treasury bills, notes and bonds that are expected to be issued in the next few years? As noted above, American residents as well as foreigners buy Treasury securities. Foreign buyers can be further sub-divided into the foreign "official" sector, which is largely comprised of foreign central banks and government entities that own foreign exchange (FX) reserves, the foreign private sector. Likewise, domestic buyers can be sub-divided into the Federal Reserve and the domestic private sector. We will analyze the buying potential of each of these four sub-sectors in the remainder of this report.

How Much More Can Foreigners Really Be Expected to Buy?

Foreigners own more than $6 trillion worth of Treasury securities, which represents about 45 percent of marketable Treasury debt outstanding. Let's start with the foreign official sector, which accounts for about 70 percent of foreign holdings of Treasury bills, notes and bonds. As shown in Figure 3, the foreign official sector was a net purchaser of Treasury securities for years but turned into a significant net seller in 2015 and 2016. The pace off selling has eased this year, but the foreign official sector will unload about $120 billion worth of Treasury bills, notes and bonds if the pace of net sales through the first nine months of the year is maintained through December.

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The large net purchases of U.S. government bonds by the foreign official sector coincided with a marked increase in FX reserve accumulation in Asia, especially in China (Figure 4). Foreign central banks have many instruments through which they can hold FX reserves, but they typically hold them via liquid, interest-earning assets such as U.S. Treasury securities. Many Asian central banks actively manage their currencies. When their currencies are appreciating, these central banks buy U.S. dollars (and sell their own currencies) in the FX market in order to offset some of the upward pressure on their currencies. They then buy U.S. Treasury debt with the dollars they have purchased. Conversely, these central banks must liquidate Treasury securities and sell the dollar proceeds in the FX market when their currencies come under downward pressure.

Figure 3

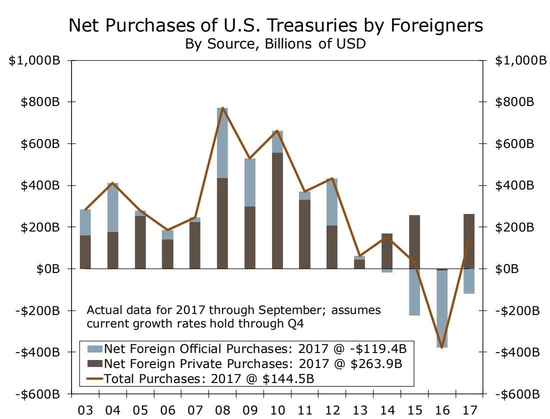
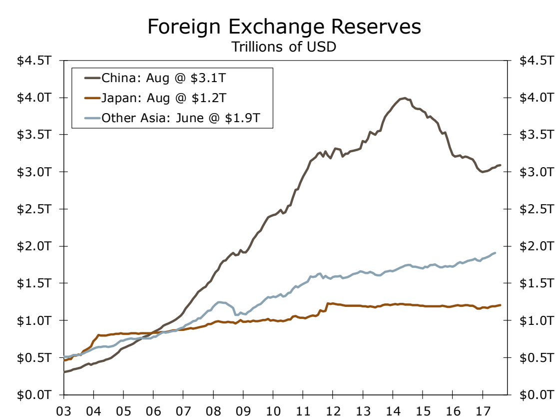


Figure 4



Source: US Department of the Treasury, Federal Reserve Board and Wells Fargo Securities

China's FX reserves mushroomed from about $600 billion to nearly $4 trillion when the Chinese renminbi was appreciating vis-à-vis the U.S. dollar from 2005 through 2013. During this period, Chinese holdings of U.S. Treasury debt ballooned from about $200 billion to more than $1.3 trillion. But the renminbi encountered significant selling pressure in 2015 and 2016, forcing the Chinese government to spend about $1 trillion of its FX reserves supporting the currency. Consequently, China turned into a net seller of Treasury securities during that period.

Looking forward, our currency strategy team looks for the Chinese currency to appreciate only modestly versus the U.S. dollar in the next year or so. Likewise, our strategists forecast that many other Asian currencies will appreciate modestly versus the greenback. Asian central banks may turn into net buyers of Treasury securities again, but they are not likely to provide the same level of support to the Treasury market as they did from 2005 through 2013.

Through September, the foreign private sector was on pace to buy about $260 billion worth of U.S. Treasury debt this year.

The foreign private sector was buying Treasury securities at a run rate of roughly $200 billion per annum from 2003 through 2007 (Figure 3). Net purchases jumped in 2008 as the global financial crisis induced foreign investors to seek the safe haven of U.S. government bonds. Net purchases by the foreign private sector remained elevated for the next few years before trending lower starting in 2011. Through the first nine months of 2017, the foreign private sector was on pace to buy about $260 billion worth of U.S. Treasury debt this year. Net purchases by the foreign private sector could clearly strengthen next year. But without a significant rise in U.S. interest rates, which would increase the attractiveness of Treasury securities, or alternatively another financial crisis, it is difficult to envision this sector providing material support to the tsunami of Treasury issuance that is expected in the next two years.

Will Domestic Buyers Be Able to Step Up to the Plate?

Similar to the international sector, it is useful to break out domestic Treasury holdings between the Federal Reserve and other domestic holders. At present, the Fed is holding a bit less than one-fifth of outstanding Treasury securities (Figure 5). Beginning in October, the Fed began the process of unwinding its balance sheet, with caps of $6 billion per month for Treasury securities and $4 billion for mortgage-backed securities (MBS) to roll off the balance sheet. Assuming that its economic forecast is more or less realized in the next year, the Fed will raise those caps by equal amounts four more times until the final caps stand at $30 billion for Treasuries and $20 billion for MBS. If the Fed follows its stated plan, approximately $230 billion in Treasury debt would mature and not be reinvested in 2018. Short of a recession occurring, it seems the Fed will remain a net seller for some time, adding to the supply that must be absorbed by the market (Figure 6).

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Figure 5

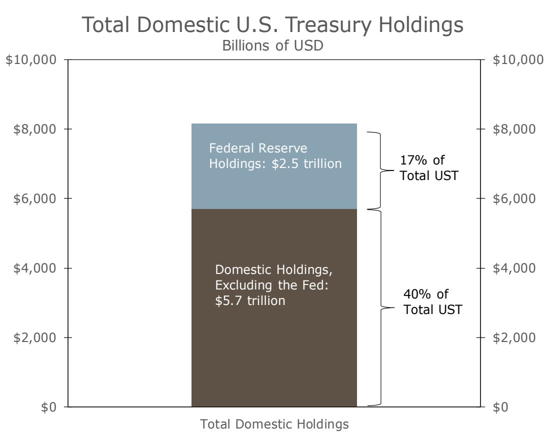
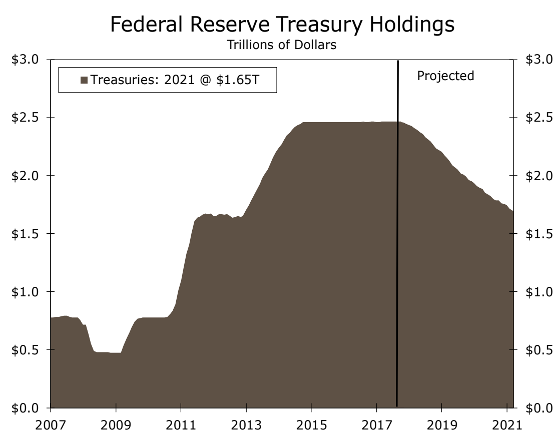


Figure 6



Source: Federal Reserve System and Wells Fargo Securities

Over the past five years, households and U.S. banks have seen robust growth in the size of their Treasury holdings.

Outside of the Fed, a wide range of domestic institutions and individuals hold Treasury securities, with American households, state & local governments and U.S. banks among the largest owners.[2] Over the past five years, households and U.S. banks in particular have seen robust growth in the size of their Treasury holdings, helping absorb some of the new supply that has come to market (Figure 7). Growth in state & local holdings have been more subdued, consistent with a sector that typically sees a more linear, trend-like growth rate based off of pension fund demands, cash needs and other less discretionary factors.

Figure 7

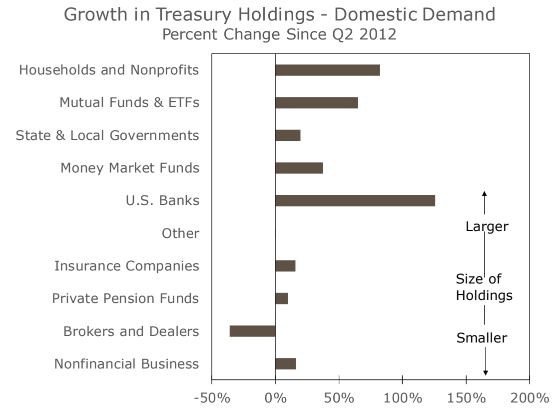
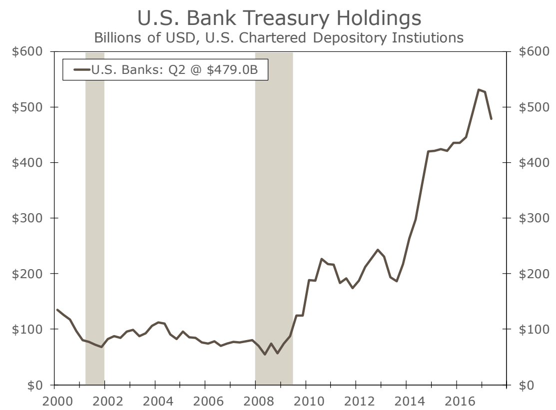


Figure 8



Source: Federal Reserve System and Wells Fargo Securities

Many new regulations and standards have required banks to increase their holdings of highly-liquid and safe assets such as Treasury securities.

Among domestic sectors, U.S. banks have seen the most sizable growth in Treasury holdings over the past five years. Bank holdings of U.S. Treasury debt rose from $212 billion in Q2-2012 to $479 billion in Q2-2017, a 126 percent increase. A slew of new bank regulations and standards have come into effect over that period, such as the Liquidity Coverage Ratio (LCR), and many of these regulations have required banks to dramatically increase their holdings of highly-liquid and safe assets such as Treasury securities. Most banks appear to have satisfied these requirements recently, and the Trump administration has signaled a desire to make financial regulation less onerous going forward. As illustrated in Figure 8, the significant growth in Treasury holdings might have started to level off earlier this year. If bank holdings of Treasury bills, notes and bonds return to a more normal growth rate over the next few years, the softening in demand would occur at a time when the new supply from the Treasury Department is beginning to ramp up.

U.S. households are the largest domestic holder of Treasury securities (excluding the Fed) through both outright holdings and holdings through mutual funds and exchange traded funds. An aging population and more cautious post-crisis U.S. consumer have likely boosted the demand for Treasury securities. From the end of the recession to November 2016, the personal saving rate in the United States averaged just shy of 6 percent, well-above pre-recession levels. Over the past year, however, the saving rate has fallen, reaching 3.1 percent in September. Given the trends in demand from other sectors both at home and abroad, U.S. households seem like the most obvious candidate to absorb a large chunk of the new supply we expect over the next couple years. However, with the saving rate falling and given the significant growth in new issuance we expect in a relatively short time period, their ability to absorb the new supply without higher rates providing an incentive to buy is likely to be somewhat limited.

Conclusion: Higher Treasury Yields Ahead

Issuance of new securities by the U.S. Treasury Department has trended lower over the past six years as the federal budget deficit has narrowed. However, issuance is set to jump in the next

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[2] The household sector in the Financial Accounts of the United States (formerly called the Flow of Funds) is a residual and thus captures some non-household Treasury holders, perhaps most notably hedge funds. https://www.federalreserve.gov/apps/fof/DisplayTable.aspx?t=l.210.

two years as the deficit starts to widen again, and finding willing buyers for all the new securities may prove to be a bit more problematic than it has been over the past few years.

For starters, the Federal Reserve is effectively turning into a net seller of Treasury securities as it takes steps to shrink the size of its balance sheet. Foreign central banks, especially those in Asia, were quick to snap up Treasury securities when their currencies were experiencing upward pressure vis-à-vis the U.S. dollar and their FX reserves were swelling. We forecast that most foreign currencies will appreciate modestly against the greenback in coming quarters, which probably will lead to increased demand for U.S. Treasury securities from the foreign official sector, but a return to the rapid rates of reserve accumulation among those central banks that characterized the last decade does not seem likely.

Our forecast looks for yields on U.S. Treasury securities to rise over the next two years.

That likely will leave the private sector, both domestic and foreign, as the principal buyer of U.S. Treasury debt. Demand for safe-haven assets spiked during the financial crisis, leading to a notable increase in demand for Treasury securities from foreign investors. Similarly, new regulations caused domestic banks to ramp up their purchases of Treasury debt, but those buying needs look to have been largely fulfilled. Short of another financial crisis, a surge in private sector demand for Treasury securities stemming from risk management considerations does not seem likely. So if demand for Treasury debt does not keep up with issuance, prices of Treasury securities will decline. Said another way, yields on Treasury debt must increase to clear the market. This conclusion is consistent with our forecast, which looks for yields on U.S. Treasury securities to rise over the next two years.

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