PICTET WEALTH MANAGEMENT

US Treasury market

US Treasuries volatility is rising amid deteriorating liquidity

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FLASH NOTE

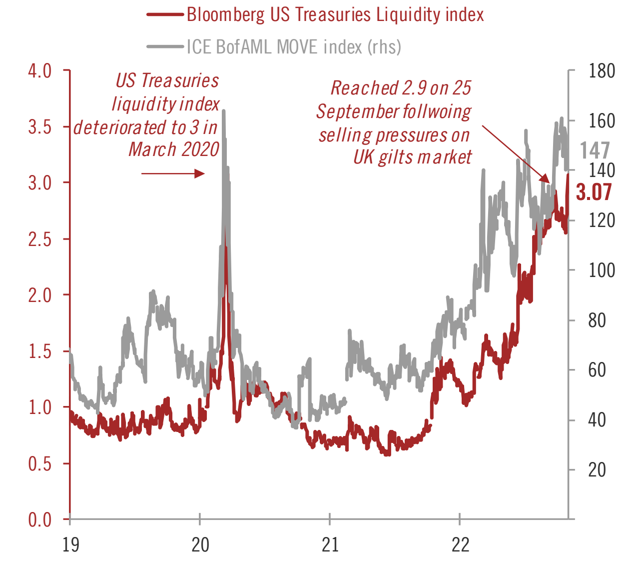
SUMMARY

- Rising volatility in the US Treasury market has been linked to uncertainties surrounding the US Federal Reserve's (Fed) hiking cycle. At the same time, the Fed's shift from quantitative easing (QE) to quantitative tightening (QT) has contributed to a deterioration in US Treasury market liquidity throughout the year. This new environment has led to a rebuilding of risk premiums on US Treasuries, but we expect the Fed to maintain large bond holdings, meaning that risk premiums could remain well below the pre-QE averages.
- Along with QT, the rising capital constraints on US banks have probably worsened market liquidity. These constraints, mostly regulatory, will take time to change, meaning that it is more likely we see the US Treasury Department buy back off-the-run US Treasuries as a near-term remedy.
- As the rout in UK government bonds in recent weeks shows, a well-functioning repo market is the lifeblood of financial markets, as it provides liquidity and limits the impact of panic selling. Knowing this, the Fed instituted a standing repo facility (SRF) in July 2021 for the Treasury market. However, it remains to be seen whether it will be sufficient to forestall a panic selling.
- The end of QE and US banks' balance sheet constraints justifies part of the increase in both US Treasuries' term and liquidity premia, but we suspect that a market that functions better coupled with a more predictable policy rate path could well reduce both risk premia and lead to lower long-term yields.

MARKET PARICIPANTS REQUIRE HIGHER RISK PREMIA

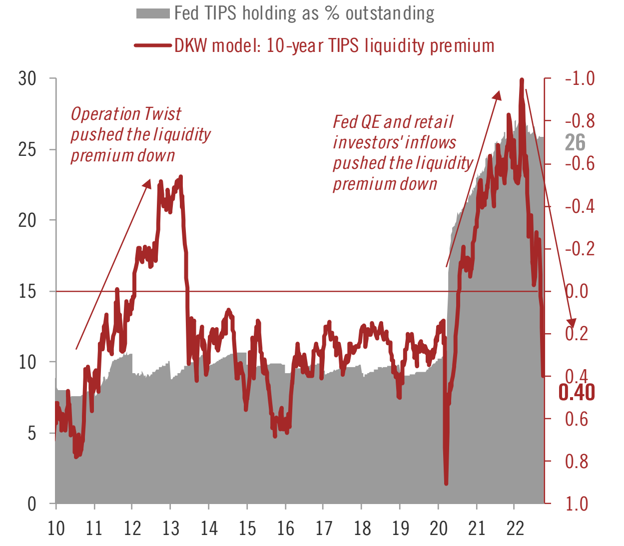
Rising volatility in the US Treasury market (according to the ICE Bank of America Merrill Lynch (BofA) Move index) **has been linked to uncertainties surrounding the Fed's hiking cycle**. At the same time, the shift from QE to QT has contributed to a deterioration in US Treasury market liquidity according to the Bloomberg US Treasury liquidity index (*see chart 1*). The last time such illiquidity was seen was in March 2020, suggesting that the recent rout in the UK gilts rippled right through the global government bond market.

Chart 1: US Treasuries liquidity and volatility



Source: Pictet Wealth Management, Bloomberg Finance, L.P, 31 October 2022

Chart 2: TIPS liquidity premium and Fed's holdings



Source: Pictet Wealth Management, SIFMA, Fed, https://www.federalreserve.gov/econres/notes/feds-notes/tips-from-tips-update-and-discussions-20190521.htm

Two risk premiums are particularly important: the term premium (the additional compensation investors demand for accepting the risk of a change in rates until maturity) **and the liquidity premium** (additional compensation for holding a less liquid bond). The 10-year Treasury term premium (as calculated using the Fed's Adrian, Crump and Moench (ACM) model) has turned less negative since the beginning of 2022, but the last time it was positive was before the onset of 'QE-for-longer' in 2014. In other words, **investors are relatively relaxed about holding long-term Treasuries despite interest rate uncertainty.**

The liquidity premium on 10-year Treasury Inflation-Protected Securities (TIPS) calculated using the Fed's D'Amico, Kim, and Wei (DKW) model rose from -70 bps at the beginning of 2022 to +40 bps on 30 September (*see chart 2*). The last time this liquidity premium rose so sharply was in March 2020 during the Treasury market rout at the same of time of the covid pandemic outbreak**. This suggests that bond investors are concerned by evaporating liquidity as rates go up and the Fed winds down its Treasury holdings.**

Both in the case of the term and liquidity premium, **QT seems to be having an impact**. The Fed's large US Treasuries holdings (it held over 24% of all TIPS and Treasury notes and bonds outstanding in October) would seem to justify the continuation of a negative term premium, while the fact that the Fed is reinvesting only part of the maturing TIPS bonds it holds to shrink its balance sheet could justify a positive liquidity premium. Nevertheless, **we expect the Fed to remain a very large holder of US Treasuries** (perhaps USD4.4 trn by mid-2024). This means that **both premia could remain well below the pre-QE era averages, thereby dampening 10-year US Treasury yields.**

US BANKS' BALANCE-SHEET CONTRAINTS ARE REDUCING LIQUIDITY

Along with the Fed's QT, the rising capital constraints on US banks have probably accentuated the deterioration in Treasury liquidity. Daily trading volume has collapsed from 19% of US Treasury notes outstanding in 2007 to only 3% in September, having declined throughout this year. Primary dealer transactions fell to 2.2% of the total value of US Treasuries outstanding in October from over 10% before the global financial crisis.

US banks' balance sheet constraints are mostly regulatory and may not change soon. However, in the last resort the Fed could still reinstate the supplementary leverage ratio (SLR) exemption for banks' reserves and US Treasuries as it did between April 2020 and April 2021. **The Fed also seems to be working on a more profound review of banks' capital regulations** that could take effect further out. Other possible measures **include the central clearing of US Treasuries exchanges**, as the US Securities and Exchange Commission (SEC) has proposed. But there again, implementation is likely to take months if not years.

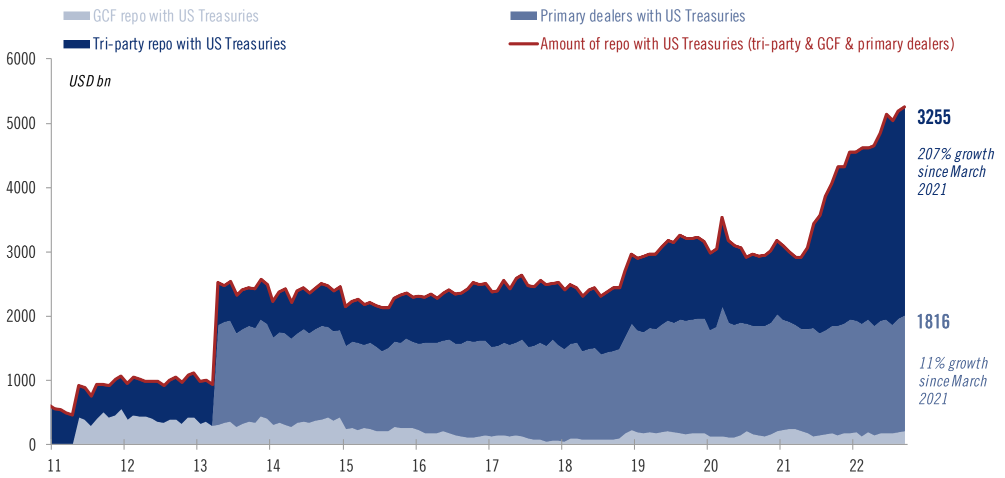
In the meantime, **buybacks of off-the-run US Treasuries by the US Treasury Department is the likeliest near-term measure to improve liquidity**. However, the Treasury Department itself reckons that the impact could be marginal. An important question is how these buybacks would be funded. **If paid for predominantly with T-bills or Treasury money deposited at the Fed** (on the Treasury General Account), **intervention could indeed relieve some pressures on the medium-to-long-end of the Treasury curve**. Large scale T-bills issuance would also reduce the weighted average maturity of US public debt.

REPURCHASE AGREEMENTS ARE A KEY TOOL

As panic selling of UK gilts in late September shows, **bond liquidity can deteriorate quickly, even in large government bond markets**. The repurchase agreements (repo) market enables investors to sell a security overnight in exchange for cash, with an agreement that they buy it back the day after at a slightly higher price. For this reason, **the repo market is the lifeblood of financial systems, providing liquidity and keeping a lid on panic selling**. With this in mind, the Fed instituted a standing repo facility (SRF) in July 2021 that could become an essential instrument in avoiding panic selling in the Treasury market.

Although the Fed's SRF lies unused, **US Treasury repo transactions have surged lately** (*see chart 3*). This suggests that **market participants increasingly in need of cash are using their US Treasuries as collateral**. There is little incentive to use the Fed's SRF facility for now because the minimum bid rate is higher than on the market. However, in periods of stress it remains to be seen whether the list of eligible counterparties will be sufficient for the SRF facility to limit stress in the repo market. Alongside primary dealers, banks and savings associations that meet set criteria can become counterparties if they request it. The current list is made up of 14 large banks. **The shadow banking sector, like money market funds, is not eligible to act as a counterparty**.

Chart 3: Amount of daily repurchase agreements using US Treasuries



Source: Pictet Wealth Management, Securities Industry and Financial Markets Association (SIFMA), 30 September, 2022

CONCLUSION

The deterioration in Treasury market liquidity is a source of concern for investors and policy makers alike and requires close monitoring. The end of QE and the constraints on US banks' balance sheets justify part of the increase in term and liquidity premia. Nevertheless. we suspect that a signal from the Fed that it was about to pause on rate hikes would reduce volatility linked to monetary-policy uncertainty and thereby lead to a fall in Treasury yields. **Better market functioning coupled with a more predictable policy-rate path could well reduce both term and liquidity premia. As we await tangible signs that the end of Fed rate hikes is near, we remain neutral on US Treasuries.**

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