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Cash in a Low-Forever World

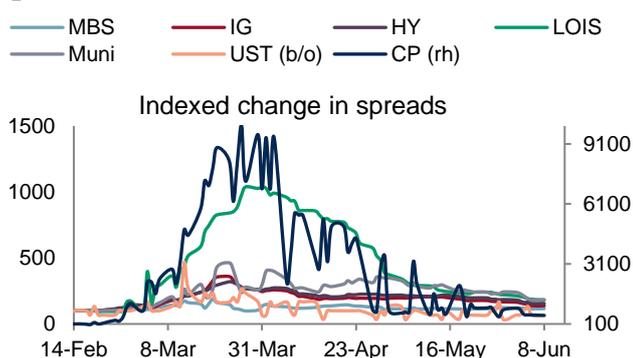
MARVIN LOH, VICE PRESIDENT AND SENIOR MACRO STRATEGIST AT STATE STREET GLOBAL MARKETS

In response to the unprecedented economic challenges created by COVID-19, the Federal Reserve along with most other major central banks slashed rates to their effective lower bound in March. The acute market dislocation further required aggressive central bank intervention, exceeding even the efforts put forth during the financial crisis. From the Fed's perspective that has meant expanding its balance sheet through the purchase of over US\$2 trillion in Treasury and agency mortgage-backed securities (MBS) securities, while committing to fund US\$3.3 trillion in various asset classes purchases. The goal of these efforts was to limit the virus' negative economic and financial market impact through lower rates and ample liquidity. During this process, the Fed has demonstrated its ability to obtain these goals through both creative programs and blunt force.

WHERE WE ARE NOW

While the Fed was quick to add liquidity once severe market stresses began to develop, an imperfect transmission mechanism resulted in uneven and at times elevated funding levels across various asset classes. For instance, the London Interbank Offer Rate (LIBOR) relative of overnight indexed swap (OIS) levels were three to four times above historic averages in the weeks after the Fed began its broad intervention in the markets. Cross-currency basis and commercial paper levels went through a comparable process, first surging as market stresses emerged, before slowly settling closer to historical spread levels. Aided by the litany of Fed programs listed in Figure 1, financial conditions have retraced 70 percent of their mid-March tightening as funding stresses have been largely ameliorated.

Figure 1 Fed bazooka unfreezes market



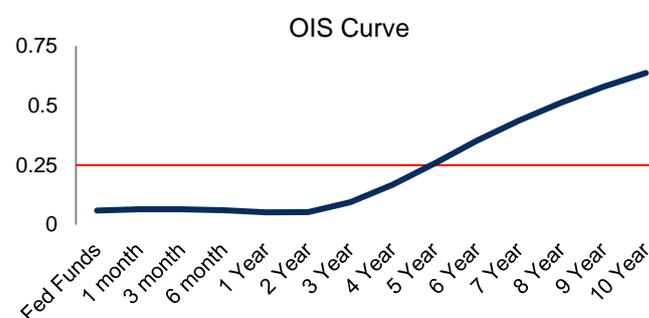
Source: State Street Global Markets, Bloomberg

WHERE DO WE GO FROM HERE?

Low for longer/forever: The Fed has been consistent in its messaging that rates will remain low until the economy fully rebounds. The minutes from the Federal Open Market Committee's (FOMC) meeting in May indicate that the Fed is

considering tying monetary policy changes to specific data or date-specific targets. For instance, it may state that it will keep rates low until either inflation returns to a 2 percent level or the unemployment rate falls back to 5 percent. Given the economic challenges created by the virus, futures markets are pricing unchanged rates for at least five years, while inflation swaps contracts do not envision CPI exceeding 2 percent for at least 10 years. The Fed's messaging and market pricing are therefore consistent in their view that rate will remain near the zero-lower bound for the foreseeable future.

Figure 2 Rates anchored at zero



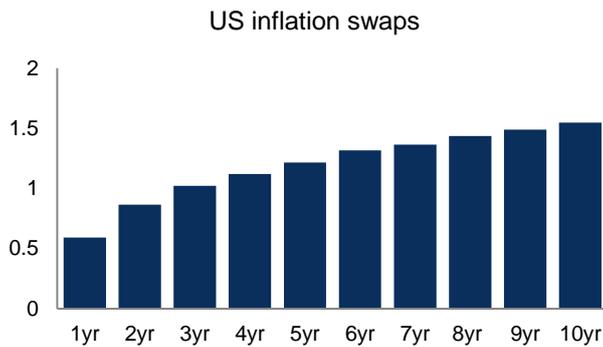
Source: State Street Global Markets, Bloomberg

Negative rates: The Fed has also been adamant that it will not go the way of lowering rates into negative territory. The size of the money market complex in the United States is significantly larger than in the other regions that have implemented negative policy rates, creating a potential systemic risk if the Fed were to use this tool. Additionally, there are numerous securities that cannot logistically price negative yields, including new issue treasury securities, creating further operational risks. Having said that, the Fed futures and OIS curves have both flirted with negative yields



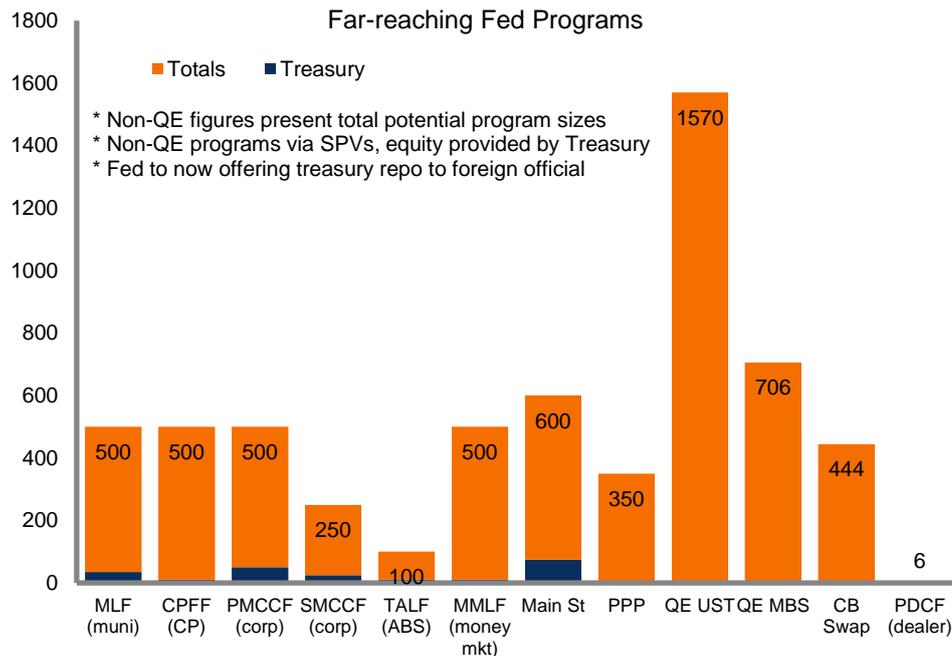
on and off over the past few weeks, as the extent of the economic damage created by the virus comes to light. Additionally, with deflation a likely short-term outcome on prices, and disinflation an intermediate term concern, the Fed needs to consider negative yields if it wants to retain credibility in reaching its inflation target. It should be noted that the Treasury curve can find itself with negative yields even if policy rates remain positive.

Figure 3 2% inflation not an expected outcome



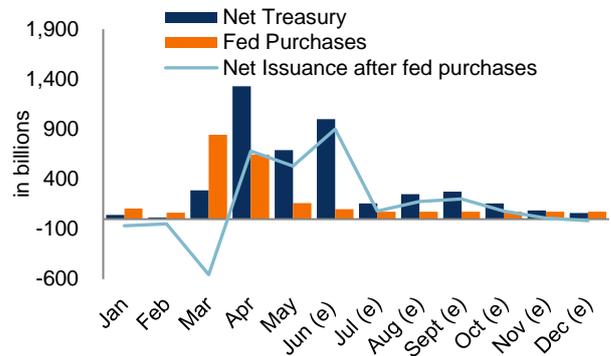
Source: State Street Global Markets, Bloomberg

Treasury issuance and the Fed's support: The one hiccup to the low-for-longer thesis is the massive issuance of Treasury securities to fund the nation's virus response. To date, US\$2.6 trillion in emergency funding has been provided to businesses and individuals and additional stimulus is already being discussed in Congress. We estimate that the Treasury has sold US\$2 trillion in net debt since March and we expect the need to raise an additional US\$2 trillion by year end. Most of this borrowing has been raised from Treasury bill investors, although the size of note auctions has also increased. We expect issuance to remain predominately



short-end focused, as that is where broad domestic and international demand currently exists.

Figure 4 Record issuance continues



Source: State Street Global Markets, US Treasury, Federal Reserve, Bloomberg

The Fed has also been a large buyer of Treasury notes as it has expanded its government bond holdings by US\$1.4 trillion since mid-March. More recently, it has aggressively tapered its daily Treasury purchases to just US\$4.5 billion per day, from a high of \$75 billion per day just two months ago. Given the Fed's desire to keep rates low and thereby economically supportive, we expect that they will again increase quantitative easing (QE) purchases if rates begin to rise to constrictive levels. Additionally, the FOMC appears to be discussing implementing yield curve control, which would set yields to desirable levels, with the promise to buy bills and notes if yields were to rise above these targets. Both are credible approaches which will again lock rates at the effective lower bound.

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