

New Trends in Repurchase Agreements

Frequently Asked Questions

Q&A | February 2020



The market for repurchase agreements (repos) made headlines in September 2019 after an unexpected spike in overnight rates sparked Federal Reserve (Fed) intervention. Repos are a critical part of the plumbing of the short-term investment markets, but may be less familiar to public funds investors. For many, the impact of the repo market is felt through investments in money market funds and local government investment pools (LGIPs).

In an effort to provide better insight into the repo market, and to answer some of the more frequently asked questions regarding this topic, we conducted the following Q&A session with Jeffrey Rowe, CFA, Managing Director and Senior Portfolio Manager with oversight of 16 PFM-managed LGIPs and Chris Blackwood, Managing Director and Administrator of Colorado Statewide Investment Pool (CSIP), a PFM-managed LGIP.

What is a repurchase agreement?

Blackwood: Although the mechanics differ, a repo is similar to a collateralized loan. A repo is a funding tool used by large financial institutions, such as commercial banks, insurance companies and investment banks. Many of these institutions have assets, such as Treasuries and agencies, they want to own long term, but they also have short-term funding needs. In a repo agreement, an institution will sell securities to an investor, such as a money market fund, and simultaneously agree to “repurchase” the securities at a specified price on a specified future date. The difference between the original sale price and the repurchase prices represents interest to the investor. The effective interest rate paid on the investment is known as the repo rate and is usually highly correlated with the overnight federal funds target rate set by the Federal Open Market Committee (FOMC). The bulk of the repo market is collateralized with U.S. Government or federal agency obligations and is structured as overnight investments, although they can also be structured with fixed terms typically from one week to three months. On a daily basis, the repo market totals an estimated \$3 trillion, so any hiccup in the repo market can have an outsized effect on the broader short-term marketplace.¹

How are repos used by investors?

Blackwood: Many repo users are entities with large amounts of cash to invest, such as money market funds, LGIPs and corporations. Repos are attractive because they are typically transacted with high credit quality counterparties and are typically collateralized at a minimum of 102% of the amount invested. Thus, they are widely viewed as a secure vehicle for rolling overnight investments, which also provide daily liquidity. For LGIPs that comply with GASB 79, repos are a useful investment to meet the prescribed liquidity, diversification and credit quality requirements.

Why was repo in the news recently?

Rowe: Repo rates typically trade in a predictable range, near the federal funds target rate, with only modest volatility. In September 2019, the repo market experienced an extreme amount of unexpected volatility. Interest rates for overnight repos spiked to over 5% (well above prevailing rates of around 2% at that time). In its simplest form, the spike in rates was driven by a significant supply and demand imbalance for bank reserves. Regulatory changes, as well as a shrinking Fed balance sheet were main drivers of this imbalance. The funding squeeze felt in September was likely exacerbated by a number of other technical factors that occurred at the same time, such as quarterly corporate tax payments that also drained funds from

¹ <https://www.bloomberg.com/news/articles/2019-09-19/the-repo-market-s-a-mess-what-s-the-repo-market-quicktake>.



the banking system. This unexpected surge in repo rates caught many market participants, as well as the Fed, off guard. In an effort to stabilize the market and push rates down to the target level, the Fed immediately intervened.

How did the Fed intervene in the repo market?

Blackwood: The Fed intervened in the repo market in two ways. First, the Fed immediately stepped in as a provider of cash to lend to repo counterparties through temporary open market operations. This increased the amount of liquidity in the system to alleviate the supply shortage. Then, in the following weeks, the Fed began purchasing Treasury Bills at a rate of \$60 billion per month. This is a more permanent open market operation that results in a larger Fed balance sheet and more permanent additional reserves within the banking system. The goal of both the temporary and permanent open market operations is to keep overnight repo rates within the target range set by the FOMC.

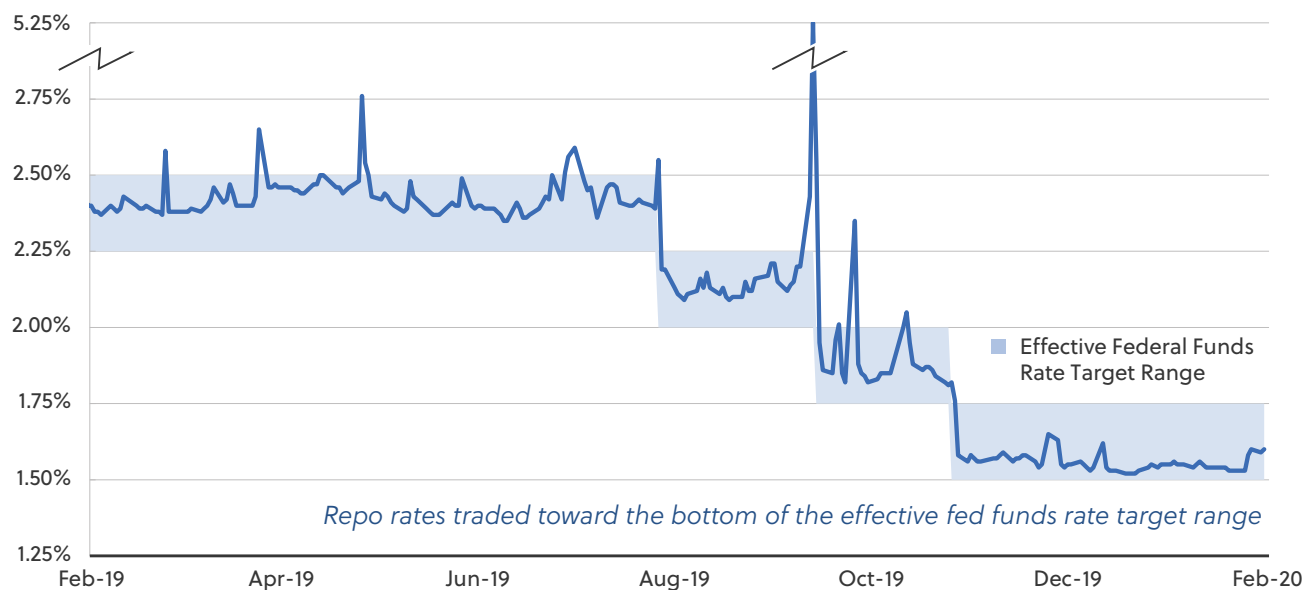
How has the market responded to Fed intervention?

Rowe: As of December 31, 2019, the Fed injected \$412 billion into the banking system through temporary and permanent open market operations.² The Fed's intervention in the repo market pushed rates to the low end of the federal funds target range and reduced volatility in repo rates.

The chart below shows how the Fed's activity has reduced the volatility of repos rates compared to the federal funds target range. The Secured Overnight Financing Rate (SOFR) is a broad measure of the cost of borrowing cash overnight collateralized by Treasury securities and includes all repo trades cleared through the Fixed Income Clearing Corporation. Thus, SOFR is a good representation of overnight repo rates.

2 <https://www.federalreserve.gov/releases/h41/20200102/>.

**Continued Fed Action Put Downward Pressure on Repo Rates in Q4 2019
Secured Overnight Financing Rate (SOFR) Index**



Source: Bloomberg, as of February 5, 2020.



How long do you think the Fed will continue to intervene in the repo market?

Rowe: Based upon the Fed's most recent communication in January, the Central Bank will be actively involved in the repo market until at least the second quarter of 2020. Following the FOMC meeting on January 29, 2020, FOMC Chairman Jerome Powell provided insight to the policy direction of the Fed. He stated "Over the first half of this year, we intend to adjust the size and pricing of repo operations as we transition away from their active use in supplying reserves. This process will take place gradually and, as indicated in today's FOMC directive to the [Fed's Trading] Desk, we expect to continue offering repos at least through April to ensure a consistently ample supply of reserves. Based on current projections, we expect that the underlying level of reserves will durably reach ample levels sometime in the second quarter of this year. As we get close to that point, we intend to slow the pace of purchases and transition to a program of smaller reserve-management purchases that maintains an ample level of reserves without the active use of repos."³

Is the Fed's balance sheet expansion another version of quantitative easing?

Blackwood: During the years following the 2008-2009 financial crisis, the Fed embarked on a program known as quantitative easing (QE), whereby it purchased billions of dollars of Treasuries, agencies and agency mortgage-backed securities in an effort to push down long-term interest rates and spur borrowing activity. From September 2008 to 2014 the Fed's balance sheet ballooned from less than \$1 trillion to \$4.5 trillion, where it remained through 2017. Beginning in 2018, the Fed allowed its balance sheet to gradually shrink to about \$3.8 trillion. As a consequence, the shrinkage of the Fed's balance sheet also materially reduced excess bank reserves by more than half. This reduced amount of excess bank reserves triggered the repo market volatility in September 2019. The Fed's recent activity in the repo market has caused its balance sheet to increase by \$382 billion from September 9, 2019 to January 27, 2020.⁴

³ <https://www.federalreserve.gov/mediacenter/files/FOMCpresconf20200129.pdf>.

⁴ Federal Reserve Bank of St. Louis.

While the Fed's balance sheet has expanded in recent months, the goal of the current expansion – to stabilize the short term funding markets – differs from the objective of QE programs of the past, which was to spur borrowing and economic growth by pushing down long-term interest rates.

How might this affect the investment strategy of a short-term investor?

Rowe: The Fed's involvement in the repo market has put downward pressure on repo rates, making this investment vehicle relatively less attractive to market participants. In response, investors have considered moving cash to other markets which are close substitutes for repo, including U.S. Treasury bills and federal agency discount notes. Demand for unsecured credit instruments, like commercial paper and negotiable certificates of deposit, which are also used to fund banks' and corporations' working capital needs, have seen increased demand causing their credit spreads to narrow recently. This is evidenced in the 3-month LIBOR rate, which has fallen by about 25 basis points (0.25%) since hitting a recent high near 2.00% in late December. The Fed tools used to calm repo markets are likely an indirect driver of this decline. The current resulting money market environment is one that is characterized by subdued volatility and narrow spreads among various investment sectors. In the coming months, it will be important for investors to monitor the Fed's evolving participation in the repo markets. As we've observed, these programs can have significant implications on short-term investment markets.

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