



Economics and Rate Strategy

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Economics and Rate Strategy ***Repo Running Wild***

- The spike in money market rates this morning resulted in the Fed undertaking the first overnight repurchase operation of meaningful size since 2008. The need for today's operation will spur additional discussion on the need for a standing repurchase facility at the Fed.
- The Sep. 15 corporate tax deadline is likely one of the key drivers of the move in money market rates this morning. The payment of corporate taxes contributed to the drain of reserves from the system of likely somewhere around \$100 billion.
- On the other hand, mid-month settlements of Treasury coupon auctions brought \$54 billion in net supply to the market yesterday. This is a particularly large day of settlements, but is indicative of a broader trend of a growing supply of Treasuries (used as collateral for repurchase agreements) in the market with a falling supply of cash in the form of bank reserves.
- We expect we could see similar pressures come month-end, perhaps not quite to the degree of the move witnessed this morning. Net T-bill issuance is expected to drop off from the rapid pace of weekly issuance over the past six weeks. However, settlements of coupon notes and bonds on Sep. 30 will be a similar \$50 billion.

Please see page 3 for the rating definitions, important disclosures and required analyst certifications.
All estimates/forecasts are as of 09/17/19 unless otherwise stated.

Together we'll go far



Spike in Money Market Rates Spurs Fed to Take Action

U.S. money markets have been on a wild ride this week. We have been deluged with questions, and overnight Treasury general collateral (GC) repo at one point traded near 9% this morning. The Secured Overnight Financing Rate (SOFR), which is based off of Treasury repo rates, has followed suit, climbing 23 bps on Monday (Figure 1). This jump in secured overnight borrowing rates has put upward pressure on unsecured markets: the effective fed funds rate set at 2.25% yesterday, an 11 bps move from Friday and at the upper bound of the Fed's 2.00%-2.25% target range.¹ What is going on here?

In our view, the lead driver relates to corporate tax payments. Corporations generally make tax payments quarterly, with September 15 being one of the key due dates. This is largely why the federal government usually runs a budget surplus in September (Figure 2). Mechanically, the company needs to have the cash readily available for payment by the due date, no different than an individual who owes the IRS would need to have the cash in her checking account before the April 15 tax deadline. Regardless of the exact form the cash takes, such as on deposit at a commercial bank or invested in a money market fund, think of this cash as available to be loaned out on an overnight basis. Put another way, this pool of cash represent reserves of the banking system.

When a company pays its taxes, its bank wires money to the Treasury, which holds its cash on deposit at the Fed. From the Federal Reserve's standpoint, this simple transaction is just a shifting of its liabilities; bank reserves (which are a liability of the Fed) decline, and the Treasury's General Account at the Federal Reserve (another liability of the Fed) rises proportionally. However, from a market perspective, the pool of funds available to be deployed has shrunk. The Treasury's cash held on deposit at the Federal Reserve Bank is not available to be loaned out overnight.

Figure 1

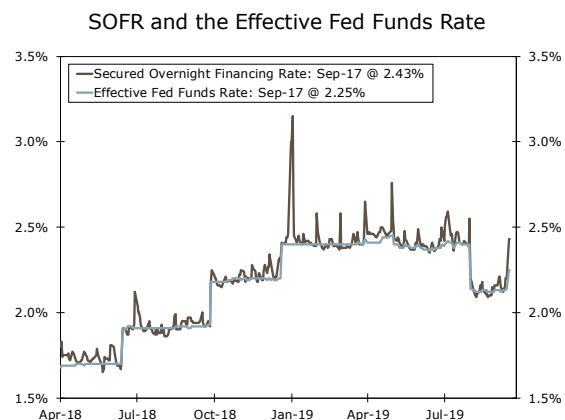
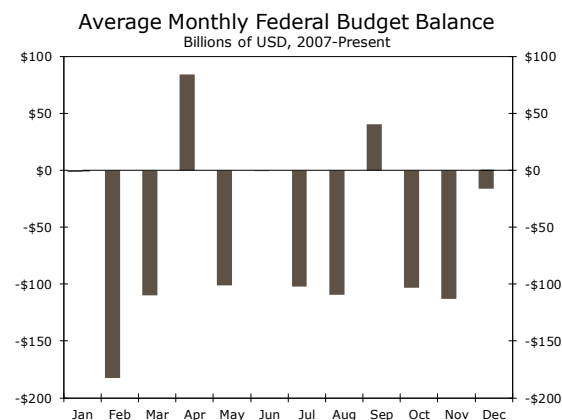


Figure 2



Source: Federal Reserve System, U.S. Department of the Treasury and Wells Fargo Securities

Corporate tax payment dates generally result in less loanable bank reserves/cash in the system. In 2018, for instance, the Treasury cash balance at the Federal Reserve rose about \$100 billion immediately after the September 15 tax payment date, with a proportional decline in bank reserves. We suspect this week's move in bank reserves/the Treasury's cash balance will be similar when it is all said and done. The Treasury's cash balance was \$195 billion on September 12, and a more normal level for the post-tax deadline would be \$300-\$350 billion.

The increase in collateral in the system over the past several weeks has likely exacerbated the funding squeeze. Treasury has ramped up net issuance since the debt ceiling was lifted in late July. Net T-bill supply excluding CMBs has been \$175 billion over the past six weeks alone (including \$12 billion of net supply by the end of this week), and primary dealers'

¹ For a more detailed review of how secured overnight borrowing rates can impact the fed funds rate, see our special report "[Getting Technical: Managing the Fed Funds Rate.](#)"

Treasury holdings remain elevated (Figure 3). On the private debt side, corporate debt issuance has exploded to historic levels over the past few weeks as companies have rushed to take advantage of the downward move in interest rates. In short, collateral in the financial system has been steadily on the rise, while loanable bank reserves took a big leg down yesterday. Reserves have been on a downward path for years. At their peak in 2015, aggregate bank reserves were about \$2.8 trillion. After the corporate tax payments are made, aggregate bank reserves will likely dip down about \$100 billion from their current level of \$1.46 trillion.

We expect funding pressures to ease somewhat in the next few days as the corporate tax payment event passes. Furthermore, earlier this morning the Federal Reserve Bank of New York (FRBNY) announced an ad hoc repo operation of \$75 billion, the first sizable (>\$1 billion) repo operation by the Fed since 2008. This should have the practical implication of injecting reserves into the system and removing collateral, thus easing some of the strain on the system and pushing down money market rates across the board.

Quarter-end is a mere 13 days away, and is poised to be rocky in funding markets. Between now and month end, net T-bill supply should be relatively flat, which should help stabilize money markets over the next week or so. However, the month-end settlement date for Treasury coupons should bring roughly \$50 billion of net supply. A similar magnitude experienced on Sep. 16. This seems likely to set up for another session of rough waters for funding markets on Sep. 30. Furthermore, over the medium term, collateral in the system is likely to continue rising for quite some time. We look for Treasury net supply to remain robust over the next six months or so. We expect roughly \$700 billion in total net Treasury supply between the start of October and the end of March, after accounting for anticipated outright purchases by the Fed (which differ from the temporary repo operations conducted today).

Figure 3

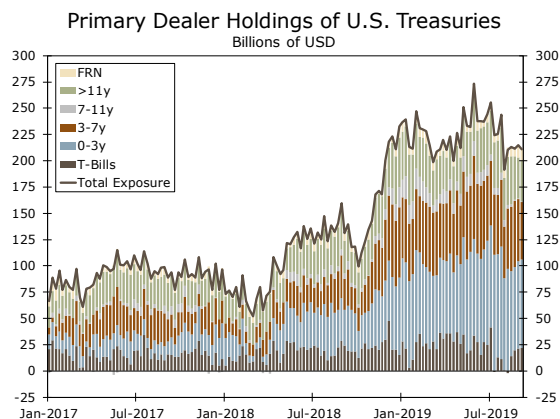
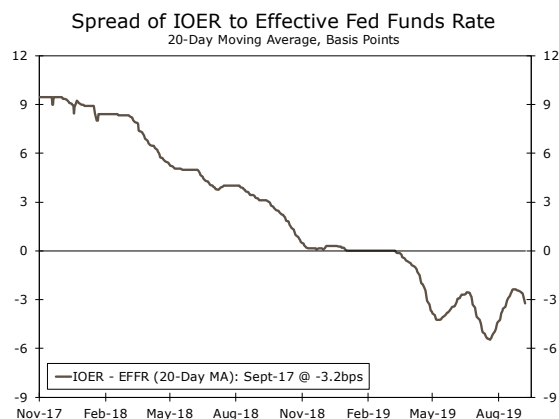


Figure 4



Source: Bloomberg LP and Wells Fargo Securities

Unsecured Rates, including Fed Funds, Are Being Pulled Along

This week's developments strike at the heart of the issue: over the past 18 months or so, secured overnight rates have periodically spiked, generally around month/quarter end. Days of funding stress have been far more unusual mid-month, which is what has made this week's move especially noteworthy. Just a couple years ago, the effective fed funds rate usually traded about 10bps below the interest rate paid on excess reserves (IOER). This spread has completely flipped and the effective fed funds rate is persistently trading above IOER (Figure 4). The Fed has responded by pushing IOER farther and farther away from the upper bound of the target range, helping to keep the effective fed funds rate in the middle of the band. Given this week's developments, another 5 bps IOER tweak could be in the offing, and ad hoc repo operations probably will continue in the near-term. This raises an important question: is a more permanent solution needed for the Fed to maintain control of its main policy rate and short-term interest rates more broadly? In particular, is the Fed about to launch the much discussed standing repo facility? In a forthcoming piece, we plan to take a deeper dive into this issue and explore the Fed's options.

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