

# THE FED'S REVERSE REPO PROGRAM: FROM LIMITED SUPPLY BACK TO FULL ALLOTMENT

Since introducing the reverse repo program (RRP) in 2013, the Federal Reserve has altered the program's parameters multiple times. The most significant change in recent months came in December 2015 when, in concert with its decision to raise interest rates for the first time in nine years, the Fed essentially removed the cap on the RRP.

More specifically, while the Fed maintained the \$30 billion-per-counterparty limit, it removed the \$300 billion aggregate cap on the overnight RRP. It replaced that aggregate cap by saying that the program will be "limited only by the value of Treasury securities held outright in the System Open Market Account (SOMA)<sup>1</sup>...."

At present, the value of the Treasury securities the Fed holds in the SOMA is roughly \$2.5 trillion.<sup>2</sup> To put this in context, since the aggregate cap was introduced in 2014 the maximum value of participation in the RRP between overnight and term operations was approximately \$450 billion as of September 2015. That means participation would have to quintuple to reach the new "cap." Given the current eligibility requirements for RRP counterparties, an increase in participation of this magnitude seems exceptionally unlikely, especially considering that the entire universe of U.S. dollar-denominated money market mutual funds (MMMFs) totals approximately \$2.7 trillion. Why did the Fed opt to essentially remove the aggregate cap on the RRP? **In our view, it reinforced the Fed's commitment to maintain a range for the fed funds rate of 0.25% to 0.50%. Secondly, it better positions the Fed to defend its policy target range throughout 2016, as money market reform compliance dates are expected to prompt large asset inflows into government MMMFs.**

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### LOW PARTICIPATION ... FOR NOW?

Just a few weeks after the aggregate cap on the RRP was removed at the December 2015 FOMC meeting, MMMFs and other RRP counterparties, such as the Federal Home Loan Banks, invested \$475 billion in the RRP at year-end. Notably, while a term RRP was offered over year-end 2015, the offering rate was set at 0.25% – the same as the overnight facility. Absent the term premium in the offering rate for the term RRP and an aggregate cap on the RRP, counterparties opted not to invest a meaningful sum in their term operations. Instead, they invested their cash on an overnight basis only. Given this dynamic, the Fed chose not to offer a term RRP operation for the end of the first quarter of 2016. Since the turn of the year, participation in the RRP has trended noticeably lower. **We attribute this decrease in RRP participation largely to seasonal increases in U.S. Treasury bill issuance, which offers a substitute for the RRP, rather than a decrease in the importance of the RRP in the U.S. dollar MMMFs.**

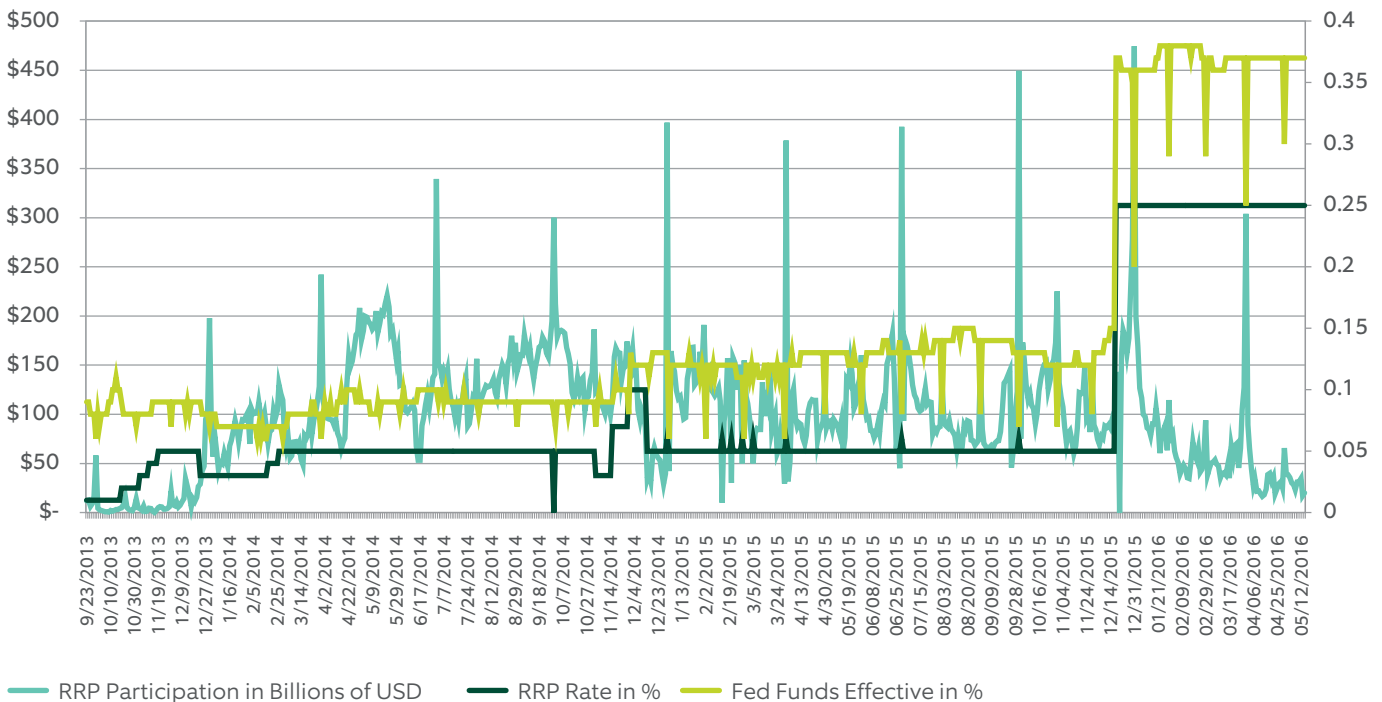
During the first quarter 2016, the Treasury increased T-bill issuance by approximately \$100 billion to pre-fund tax refunds.<sup>3</sup> As expected, this pattern began to reverse in March 2016. While we believe seasonal issuance factors biased RRP participation lower throughout the first half of 2016, an even

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### HISTORICAL DATA



SOURCE: Federal Reserve Bank of New York

more important structural shift in the money markets is likely to affect RRP participation in the second half of the year. The final compliance date for money market regulatory reforms announced in 2014 is October 14, 2016. We expect hundreds of billions of dollars in money market assets to shift out of prime and tax- exempt MMMFs and into government MMMFs. Given the smaller universe of eligible investments for government MMMFs, the Fed RRP likely will become an increasingly important investment option for government funds as they increase in size.

### EFFECTIVE ... FOR NOW?

From the RRP's introduction in 2013 until late 2015, the RRP successfully kept the fed funds rate above the RRP offered rate – essentially setting a "floor" under the Fed Funds market. This gave the Fed confidence that it could increase the fed funds rate by raising the RRP and the interest rate on excess reserves (IOER) in tandem. Since the Fed raised the RRP and IOER rates in December 2015, the fed funds rate has been similarly well-behaved, only trading below the RRP rate once, on December 31, 2015. We view this trend in the fed funds rate as highly successful for the Fed and at least partly reflecting the efficacy of an uncapped RRP. **Previously we posited that limiting the RRP too much or too soon in the tightening cycle would put at risk the Fed's ability to control money market rates. We stand by this assertion and believe maintaining an adequately large RRP will be essential to controlling the fed funds rate as assets shift into government MMMFs in response to money market reform.** Accordingly, we expect the Fed to leave the RRP uncapped until well after October 2016, regardless of its progress toward normalizing monetary policy. We also expect the fed funds rate to trade within the range set by the Fed, with very limited exceptions around key reporting dates like quarter-ends.

### EXPECTATIONS FOR OTHER KEY MONEY MARKET RATES

While the Fed provides a largely unlimited investment option for RRP counterparties, money market reform-related asset flows into government MMMFs will affect rates on other RRP substitutes. For example, we continue to expect T-bills with maturities out to three months to regularly trade at yields lower than the RRP rate. Somewhat more infrequently, we expect T-bills with maturities out to four or five months to trade at yields lower than the RRP rate. We continue to expect agency discount notes (ADNs) with maturities longer than one week to trade at yields higher than the RRP. We also expect inflows into government MMMFs to compress the spread between rates on ADNs and T-bills to 3 to 7 basis points from the current 5 to 10 basis points. Repurchase agreements with broker-dealers backed by government collateral have consistently traded 1 to 5 basis points over the Fed RRP rate, a dynamic we expect to continue. Since the Fed raised rates in December 2015, the fed funds rate and rates on overnight bank time deposits (BTDs) both traded in a narrow range of 11 to 13 basis points over the Fed RRP rate.

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(The exception is on last day of each month, when they have traded at smaller spreads to the Fed RRP.) Given the consistency in the fed funds rate over the past several months, we expect the fed funds rate and rates on overnight BTDs to trade in a similar range as we approach the October compliance date for money market reform. However, in the weeks approaching the October 14, 2016, deadline, we expect declining balances in prime money market funds to reduce the demand for overnight BTDs. This in turn may pressure rates on these instruments to exceed the 13 basis point spread over the RRP seen over the last several months.

## FED MAY KEEP RRP VIRTUALLY UNLIMITED

Since its introduction in 2013, the Fed's RRP program has proved highly influential on money market rates. We believe the Fed's decision to remove the aggregate cap on the RRP at its December 2015 meeting reinforces the RRP's effectiveness. We also think it reaffirms the Fed's commitment to keep the fed funds rate within its target range regardless of changes in the composition of MMMF balances. The timing and magnitude of asset flows out of prime MMMFs and into government MMMFs are uncertain, as is the timing of future interest-rate increases. Thus, we expect the Fed to keep the RRP essentially unlimited in regards to an aggregate cap in order to maintain its control over money market rates.

1 The Federal Reserve's Operating Portfolio

2 Source: The Federal Reserve

3 Source: The U.S. Treasury Department

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