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25 March 2019 Investment Solutions & Products Global



Credit Suisse Economics

Global Money Notes #21

It's Time to Use the Exorbitant Privilege

The Fed and the market converged to our views that the end of taper is nigh, and a revised operating framework and a repo facility will soon be necessary: although it seems like taper won't end by Easter, its pace will slow from May, and while we didn't get a repo facility by year-end, it would have been handy...

Tapering the pace of taper and working on a new o/n repo facility is progress, but it won't help now – and help is needed <u>now</u>. Taper will continue to destroy reserves and worsen the banking system's intraday liquidity profile, when in fact the December 31st turn in repo markets told us that on some days intraday liquidity is already a severe binding constraint, and an o/n repo facility will take time to design and communicate. The Fed is in a race against time! Time is money...

...and sometimes money buys time. Capping the foreign RRP facility would inject \$200 billion worth of reserves into the banking system and these reserves would improve the intraday liquidity profile of banks, ease quarter-end pressures, and buy precious time for the Fed to work on getting the new repo facility right.

In addition, capping the foreign RRP facility would help ease the safe asset glut that keeps the yield curve inverted – both outright and relative to funding costs: capping the foreign RRP facility would increase central banks' demand for bills and would also lead to more lending of U.S. dollars in the FX swap market, helping to bring about the adjustments that we discussed in our <u>previous issue</u>.

Keeping the foreign RRP facility uncapped is indefensible, in our view.

It is hard to understand why the Fed is reluctant to use this facility to ease the safe asset glut, given that it used it to ease a safe asset shortage back in 2015.

Public debate about re-capping foreign RRP facility is necessary, in our view.

In close to 150 client meetings year-to-date, the only argument we have heard former Fed hands say about why the Fed will never re-cap the facility is that:

"They don't want to upset foreign central banks."

Really? Valéry Giscard d'Estaing would have enjoyed that one...

It's now time to use the exorbitant privilege and re-cap the foreign RRP facility.

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"There is nothing more expensive than something free."

proverb

Nothing that provides intraday liquidity should be as expensive as the foreign RRP facility.

The New York Fed's foreign RRP facility has been around for a long time – so long in fact that it pre-dates the tri-party repo market. Because it pre-dates the tri-party market, RRPs between the New York Fed and foreign central banks and supranational institutions settle on a bilateral basis. In a post-Basel III financial order, bilateral repos are valuable because they return cash at 8:30 am, not 3:30 pm as is the case with tri-party repos.

The foreign RRP facility thus provides intraday liquidity services.

The foreign RRP facility always paid the market interest rate, because the New York Fed did not want to influence the market through the interest rate that it paid on this facility.

Historically, the Fed paid "yesterday's" repo rates on reverse repos that matured "today". That practice remains unchanged today, but the process that determines that rate paid became more formal: in the past, the rate paid was derived through an informal survey; today, the rate is derived from the formal exercise that generates the daily SOFR fixings.

The interest rate paid on the foreign RRP facility is not public information, but the Fed's unaudited quarterly financial <u>statements</u> provide some information on what that rate may be (more on this below). Based on these statements, it appears that the facility pays either the o/n bilateral GC rate or the SOFR rate, or some slightly adjusted version of these two.

The foreign RRP facility thus provides intraday liquidity at market prices.

The foreign RRP facility was capped historically, meaning that foreign central banks could only place limited amounts in it. Limited amounts went hand-in-hand with the market rate paid by the facility: quantity limits ensured that the facility does not influence the market, just as paying the market repo rate ensured that the facility doesn't influence the market.

The foreign RRP facility provided intraday liquidity at market prices and in <u>limited amounts</u> – historically. Because its usage was limited, the facility was an afterthought in markets.

The foreign RRP facility was uncapped sometime in early 2015 and with that change, it went from an afterthought to the most important policy tool you never heard of (see here).

The date the foreign RRP facility was uncapped is unknown because the public isn't privy to the terms of the facility. Similar to how the terms of an account between a bank and its corporate and institutional customers are private, the terms of the foreign RRP facility between the New York Fed and its foreign central bank customers are a private matter too.

The reason why we know the facility was uncapped is because the Fed's H.4.1 release revealed a \$150 billion increase in the usage of the facility during the course of 2015 (see Figure 1). The money that was put into the foreign RRP facility that year "nested" – the usage of the facility has been remarkably stable around \$250 billion ever since.

Why did the Fed uncap the foreign RRP facility in 2015?

We do not know for sure, but the following line of arguments could provide the answer.

Since the introduction of Basel III in 2015, globally systemically important banks (G-SIBs) had a problem to solve each year: in 2015, the problem was leverage (SLR) constraints; in 2016, the problem was liquidity (LCR) constraints and prime money market fund reform; in 2017, the problem was <u>unearthing collateral</u> to get dollars post-money fund reform; and in 2018, the problem was intraday liquidity needs and resolution planning constraints.



Part I – "Liftoff" and the Safe Asset Shortage

The "meme" of the 2015 constraint was large U.S. banks' efforts to push \$200 billion of non-operating deposits off their balance sheets and onto someone else's balance sheet.

Because G-SIBs' binding constraint back in 2015 was the <u>SLR</u>, the issue was not that G-SIBs did not have enough reserves against non-operating deposits, but that they didn't have the balance sheet to carry these deposits and the reserves needed to back them.

In 2015, G-SIBs needed to shed balance sheet.

Shedding balance sheet is "easy", especially if you are chock-full of reserves: all you need to do is to drop the rate on the non-operating deposits you aim to shed below the market, and the account holders will react – as they move away, you lose deposits and reserves in equal amounts on both sides of your balance sheet and *voilà* your SLR just improved.

Shedding \$200 billion of balance sheet is a lot, and 2015 was a particularly sensitive year: the FOMC was getting ready for the first hike of the current interest-rate cycle and the operational folks of the New York Fed were busy priming the o/n RRP facility to ensure that "liftoff" was a success (see here). Two forces were pushing in opposite direction:

- (1) the New York Fed was working on establishing a floor to o/n interest rates by opening up its balance sheet to non-bank counterparties like money funds, and
- (2) G-SIBs were working on closing off their balance sheet to certain depositors, an essential part of which was to cut deposit rates below o/n market rates.

This was the first time – but not the last time – when the operational and regulatory arms of the Fed pushed the financial system into opposite directions (see here, here).

Shedding \$200 billion of balance sheet in 2015 was ill-timed not only because of "liftoff" but also because of money fund reform, which was expected to lead to a surging demand for Treasury bills, in addition to the demand from the "exile" of non-operating deposits.

In 2015, the Debt Management Office of the U.S. Treasury did not yet have the sign-off to run its cash balances up to \$400 billion or structurally harvest negative bill-OIS spreads, and so the system didn't yet have a mechanism to address bouts of safe asset shortages.

Ensuring that "liftoff" was a success was paramount...

...and uncapping the foreign RRP facility was the path of least resistance.

Some of the \$200 billion of "exiled" deposits was hedge fund and asset manager money, but some belonged to foreign central banks. Uncapping the foreign RRP facility helped reduce the looming bill shortage by absorbing the central bank deposits that would have pressured the bill market – and with that, the risks that a bill shortage posed to o/n rates printing outside the Fed's target range on the day of "liftoff" were drastically reduced.

Uncapping the foreign RRP facility reduced a \$200 billion problem into a much smaller, \$50 billion problem. Uncapping the foreign RRP facility reduced the bill shortage by \$150 billion. Uncapping the foreign RRP facility helped ensure that "liftoff" was a success.

Uncapping the foreign RRP facility was a policy move we were told was <u>not</u> (see <u>here</u>) – but post-Basel III, a facility with unlimited intraday liquidity at market rates <u>is</u> a policy tool.

That was 2015.

Today is different.

¹ During the relevant period, the usage of the foreign RRP facility increased by \$150 billion.



Part II - Exacerbating the Safe Asset Glut

Today is different because the issue is not a looming safe asset shortage; the issue is a <u>safe asset glut</u>. Today is different because G-SIBs aren't leverage (SLR) constrained; they are constrained by intraday liquidity needs and a <u>scarcity of reserves on certain days</u>.

Today is not the time for an uncapped foreign RRP facility.

Defending an uncapped foreign RRP facility is hard in the current market environment for at least four reasons.

First, in a regime where Treasury is increasing issuance, and collateral, not reserves is what's excess, o/n GC rates and SOFR will always trade north of Treasury bill yields. Linking the pricing of the foreign RRP facility to market repo rates distorts incentives: it incentivizes foreign central banks to <u>not</u> buy bills that are shorter than three months. Euthanizing foreign central banks' bid for bills by paying them a spread over bills is a bad "deal" for the taxpayer. On a notional amount of \$250 billion, even basis points matter: in recent quarters, the foreign RRP facility paid around 10 bps more than one-month bills, which translates into \$250 million in extra interest expenses per annum (see Figure 2).

An uncapped foreign RRP facility keeps the U.S.'s funding costs higher than necessary.

Second, any facility that provides intraday liquidity services typically pays a rate that's below the market rate. Paying a rate above the market rate is plain bad business and violates the hierarchy of money markets. Hiding behind some historical pricing practices — "paying the market rate so as not to influence the market" — are hard to justify in a world where intraday liquidity has a distinct and growing price to it. Continuing with the facility's historical pricing practices while the facility remains uncapped is plain impossible to justify.

An uncapped foreign RRP facility distorts money markets, in our view.

Third, the foreign RRP facility became the most expensive liability of the Fed last year, putting it at the top of the Fed's account pricing "hierarchy" (see Figure 2 again). According to this hierarchy, Treasury and the GSEs get paid zero on their Fed balances; money funds get the RRP rate, which is currently 2.25%; banks get paid the IOR rate, which is currently 2.40%; and foreign central banks and supranationals get a market rate which currently trades over IOR and is set to go higher still as collateral supply increases. If Congress had an issue with the Fed paying foreign banks the IOR rate, it should have an even bigger issue with the Fed paying foreign central banks a spread over the IOR rate.

An uncapped foreign RRP facility can get political.

Fourth, we think it is bad policy to <u>force the largest of U.S. banks</u> through cuts to IOR to lend more in the o/n GC repo market and, implicitly, <u>to give up scarce intraday liquidity</u>, while <u>letting foreign central banks spend not one penny of their excess intraday liquidity</u>.

The Fed's aim with IOR cuts was to incentivize the largest U.S. banks to lend more in the o/n GC market to ensure that the constellation of o/n rates remains within the target band.

That approach didn't work, for it didn't attack the root cause of the pressure on o/n rates, which stemmed from bill supply and the foreign RRP facility exacerbating that supply. Higher bill yields pushed o/n rates up relative to the band and pouring liquidity on these pressures by forcing banks through IOR cuts to cap o/n GC rates was a band-aid solution.

But there was a twist: by forcing banks to spend their reserves to police the o/n GC rate on average days, they were less liquid and less able to help others net on reporting days – and on December 31st, 2018, we had the <u>worst-ever</u> year-end turn in repo markets.

Cuts to IOR thus traded intra-quarter stability for reporting-date instability in repo markets and did not address the root-cause of problems – bill supply and the foreign RRP facility.



Part III - Cleaning Up the Safe Asset Glut

Today, the case to re-cap the foreign RRP facility is stronger than ever:

- (1) the December 31st turn showed us that the repo market relies on two U.S. banks to clear and these banks only have \$200 billion of "excess" reserves (see here).
- (2) the growth of the IBDA market tells us that the hunt for intraday liquidity is on, with official accounts being banks' preferred source of intraday liquidity (see here).
- (3) the yield curve has inverted (outright and relative to funding costs) and we need a steeper curve to absorb the massive supply of Treasuries this year (see here).

Capping the foreign RRP facility would address each of the above points:

- if the foreign RRP facility is re-capped, reserves would go up in the system, and banks would have more intraday liquidity to work with on reporting dates.
- (2) if the foreign RRP facility is re-capped, banks with intraday liquidity constraints could lure foreign central bank cash through IBDAs, like they lure FHLBs' cash.
- (3) if the foreign RRP facility is re-capped, foreign central banks would go either in the bill market or the FX swap market, which would help re-steepen the curve.

The case to cap the foreign RRP facility is thus clear, with benefits in three policy domains: debt management (lower funding costs); bank supervision (more intraday liquidity); and financial stability (smoother quarter-ends). Three birds, not two, with one piece of stone.

But most importantly, capping he foreign RRP facility would buy the Fed precious <u>time</u> to communicate, design and implement a fixed-price, full allotment o/n RP facility (see <u>here</u>).

The Fed is currently working on this facility, and is under pressure to implement it sooner, rather than later. Communicating, designing and implementing the o/n RRP facility took years and there was no particular rush. In contrast, there is an urgency to launch the o/n RP facility, but its launch cannot be rushed because onboarding new counterparties and building new pipes "naturally" takes time to negotiate, document, and communicate.

Before the Fed is ready to inject reserves through an o/n PR facility, it could buy time by injecting reserves through "reverse-<u>sterilization</u>" – by capping the foreign RRP facility.

Let's assume the Fed re-caps the foreign RRP facility. How will we know they did it?

There won't be a speech, just like there was no speech about uncapping the facility. There won't be a note on the Fed's website either, for the new terms of the facility will be announced only to those official institutions who have access to the foreign repo facility.

STIRT traders will be in the dark.

The only data source we will have to track these flows – if they happen – is the Fed's <u>weekly H.4.1 release</u>. Here, watch for the size of the foreign RRP facility break its trend and brake below the \$225 billion mark and then rapidly fall to the \$100 billion mark.

The other, more real-time way of tracking these flows is to have a line into traders that make a market in deposits for central banks. If you are one of those market makers and see a reserve manager from a foreign central bank ask you to make him a market for \$1 billion in deposits one day, another \$1 billion the next day and then \$5 billion and then \$10 billion, you know the foreign RRP facility has been capped and that you should step away from the *tsunami* that's about to hit rather than absorb it. You'll <u>deflect</u> these flows by dropping the prices on your deposits – way below bill yields to send a clear message:

latch on to bills, not my balance sheet...



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...and so the flows will begin. Pushing \$200 billion back into the bill market would have a massive impact on bill yields, and through bill yields the FX swap market: lower bill yields would increase the spread between bills and FX swap implied yields which in turn would prompt more lending in the FX swap market, pushing cross-currency bases to go tighter.

But this \$200 billion leaving the foreign RRP facility could find its way to the FX swap market more directly. Foreign central banks – and the RBA in particular (see here) – are avid lenders of dollar reserves in the swap market. In a way, bills are "so yesterday".

\$200 billion hitting the FX swap market indirectly or directly is a lot, especially when cross-currency bases are barely negative (on a Libor-Libor basis). Barely negative bases mean that the €/\$ and \$/¥ markets are pretty much clearing through matched books, and so a marginal \$200 billion of new lending could tip the basis quite positive, quite fast – that's the scenario where Libor-OIS goes negative (re-read page 13 here, s-l-o-w-l-y).

Sometimes, when you come in to work, weird stuff just happens. The SNB ending the Swiss franc's peg to the € was one of those days. It sent spot FX flying (see Figure 3).

If the Fed re-caps the foreign RRP facility, we could have another one of those days: a day when the FX swap market realizes the amount of flow that's about to hit directly or indirectly and traders re-price forward dollars to discount an abundance of dollar supply.

Figure 4 shows what that day could look like on your screens...

...similar to the day when the franc's peg ended, but different in that the big move was in the spot FX rate back then, whereas the big move would be in forward FX rates today.

Conclusions

The case for re-capping the foreign RRP facility is clear, and debate about it is necessary.

It's hard to understand why the Fed is not using the foreign RRP facility as a tool with the same degree of enthusiasm it did at the eve of the hiking cycle. The problem back then was a shortage of safe assets and balance sheets so they created safe assets through the foreign RRP facility and sterilized reserves to ease banks' balance sheet constraints.

Now the problem is a glut of safe assets and a shortage of intraday liquidity so the Fed needs to undo some safe assets by re-capping the foreign RRP facility to ease the glut, which would also increase the amount of reserves and hence intraday liquidity in the system.

Same tool, different circumstances. If the Fed used it then, why don't they use it now?

Market making is simple in concept – the essence is to constantly adjust the prices on the two sides of your book to either absorb or deflect flows. Basel III makes this a bit more difficult in that the size, composition and funding of your book is subject to constraints, but the essence of the game is still the same: absorb or deflect within your constraints.

In 2015, banks deflected non-operating deposits by dropping deposit rates below the market rate. The Fed absorbed those deposits by uncapping the foreign RRP facility. Now it's time for the Fed to deflect the same deposits and push them back to banks and then for banks to deflect these deposits and push them into the bill and FX swap markets.

In closing, we'd note that in close to 150 client meetings year-to-date, the only argument we heard former Fed hands say about why the foreign RRP facility won't be capped was:

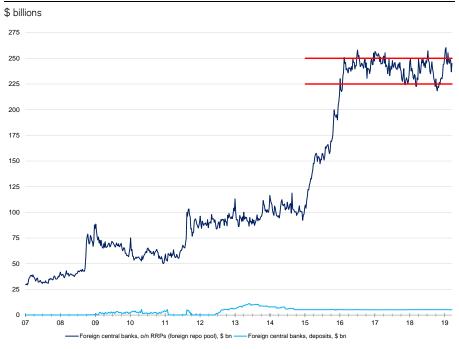
"They don't want to upset foreign central banks."

Really? Valéry Giscard d'Estaing would have enjoyed that one...

It's now time to use the exorbitant privilege and re-cap the foreign RRP facility.

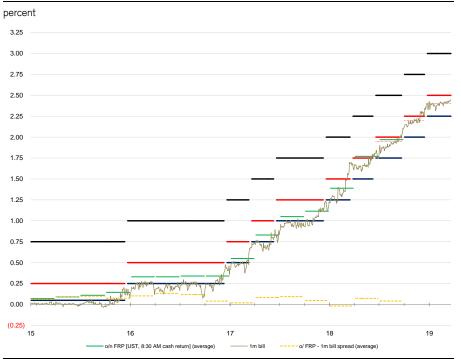


Figure 1: The Foreign RRP Facility's Usage



Source: the BLOOMBERG PROFESSIONAL™ service, Federal Reserve, Credit Suisse

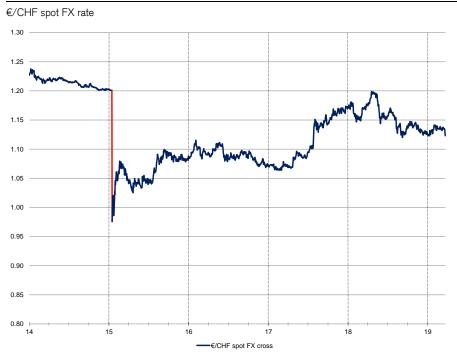
Figure 2: The Foreign RRP Facility's Pricing



Source: the BLOOMBERG PROFESSIONAL™ service, Federal Reserve, Credit Suisse

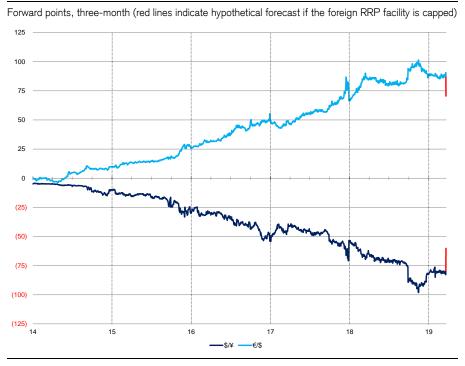


Figure 3: When the Unexpected Happens in Spot FX Markets



Source: the BLOOMBERG PROFESSIONAL™ service, Credit Suisse

Figure 4: When the Unexpected Happens in Forward FX Markets



Source: the BLOOMBERG PROFESSIONAL $^{\text{TM}}$ service, Credit Suisse



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