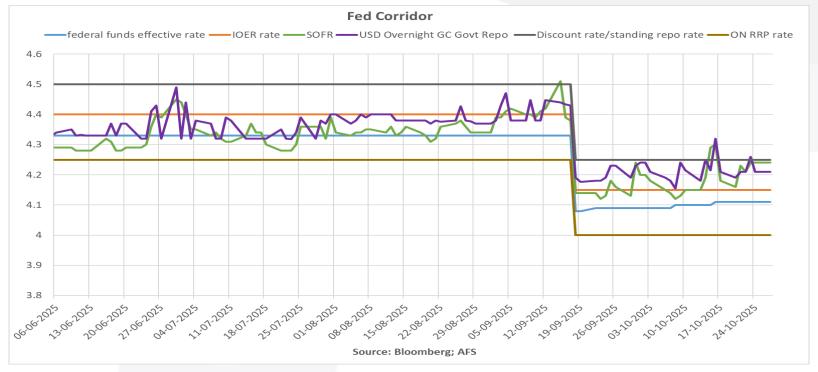


SHTF?

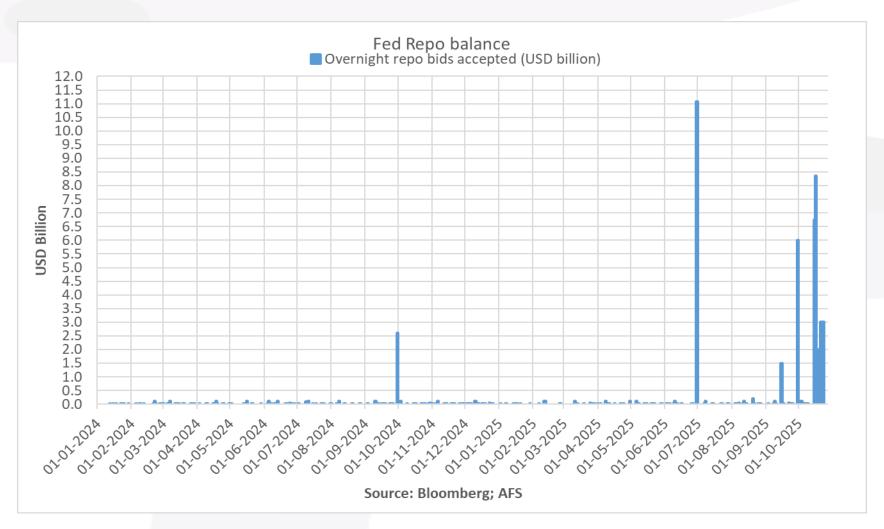
- Since last summer, a pattern of rising overnight rates has emerged. At first, only secured rates rose relative to the Fed's three administered rates: the repo rate (top of the corridor); the interest on reserves (around the middle) and the overnight reverse repo rate (bottom). In the past weeks, fed funds, which had been bog stable with a spread of 7bps to IOR for years, increased by 3bps;
- Notice that SOFR and GC repo have settled above the Fed's repo rate a number of times.
 Such borrowing above the Fed's repo rate takes place for two reasons: because the borrowing parties have no access to the Fed standing facilities; or simply because of stigma. The former is more likely than the latter.





Fed repo borrowing: a fact of life

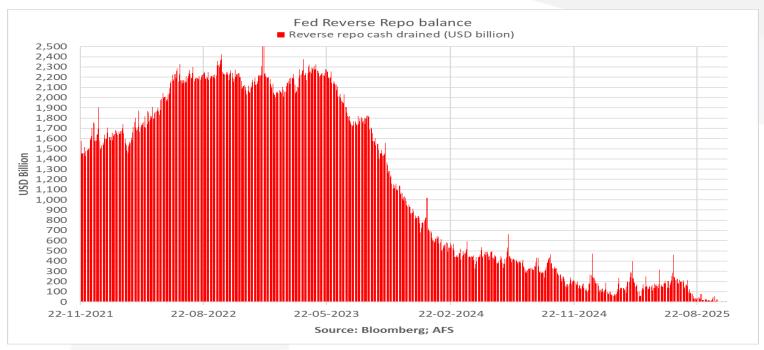
• Repo borrowing from the Fed has started to increase. More importantly, recourse is no longer confined to month and quarter turns. Still borrowings are small, though the amounts involved were miniscule before the autumn.





Reverse repo = a thing of the past

- Predictably, reverse repo recourse, where the Fed takes cash in exchange for collateral, has plunged. Recourse has withered to barely measurable levels. The Fed drained the reverse repo facility with Quantitative Tightening (QT).
- Ideally, QT destroys wholesale deposits. More likely than not, wholesale deposit destruction was modest. Instead, bonds that rolled off the Fed's balance sheet were bought by leveraged players. The bonds are pledged in the repo market to borrow cash to 'finance' the leveraged trade. That cash came from the reverse repo facility. Put differently, money market investors that parked cash at the Fed didn't turn into bond buyers overnight. They prefer to lend to leveraged players in the money market instead. Collateralized by Treasuries.





Appetite for destruction

- With reverse repo recourse basically at zero, ongoing QT must 'destroy' another liability: namely, bank reserves;
- When it comes to liquidity conditions (i.e. the level of bank of reserves), the only other liabilities on the Fed balance sheet that matter are reverse repos and the Treasury's Fed account. Very different compared to the Eurosystem, where miscellaneous assets and liabilities – dubbed 'factors' by the ECB – strongly influence liquidity conditions in the banking system;
- Yes, the Treasury pays the Fed when a bond from the QE portfolio matures. Obviously leaving bank reserves unaffected *at first*. But the Treasury will quickly move to restore its balance at the Fed to its target level of about USD800 billion by borrowing reserves. Those reserves must come from the banking system the Fed is no longer creating them.
- To repeat: QT now destroys bank reserves.

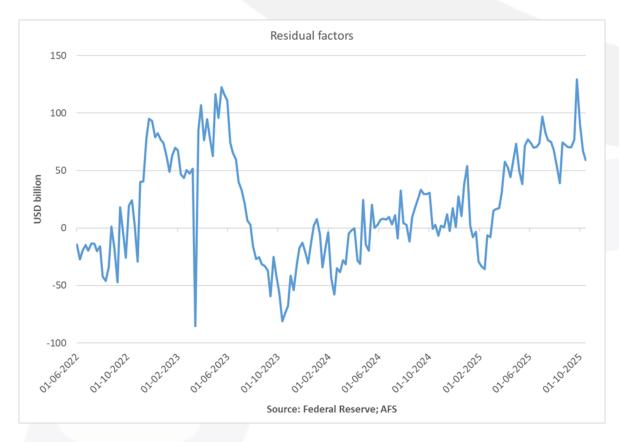
Federal Reserve

Assets	Liabilities
Bond holdings	Bank reserves
	Reverse repo borrowings
Other assets	Treasury General Account (TGA)
	Other liabilities



Treasury = BSD

OK, I have not been completely honest. Other factors on the Fed's balance sheet do affect liquidity conditions. And they matter more the lower the level of bank reserves. Furthermore, the Fed's ongoing operating losses – the negative interest margin on reserves – boosts liquidity. Still, the influence of these residual factors on bank reserves are marginal. The Big Swinging D*** – to quote Michael Lewis – is the Treasury account;





Violent delights

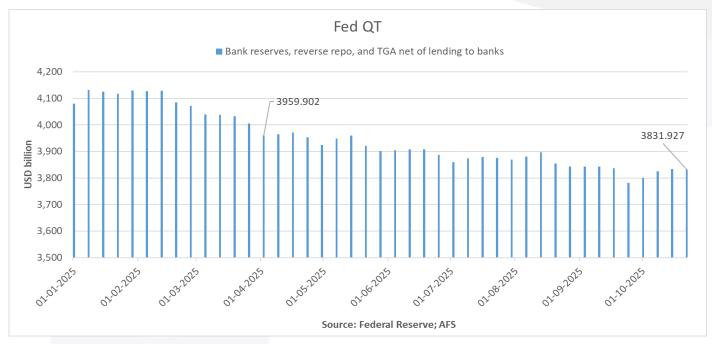
- The balance on the Treasury account at the Fed can swing violently. With the federal government shutdown, and basic stuff like paying civil servants' salaries not taking place, the balance has grown to more than USD900 billion;
- Conversely, when the government has hit the debt ceiling or is about to, net new borrowing is no longer possible. Because of the fiscal deficit, the Treasury will gradually deplete its balance at the Fed. The Treasury depleting its account boosts bank reserves, reverse repo, or both;
- In normal times (no shutdown or debt ceiling drama), the Treasury balance fluctuates from day-to-day, week-to-week, and month-to-month because of tax payments, large outlays, salary payments, debt issuance, etc.

	U	SD billion
Treasury balance	22-10-2025	906
	21-10-2025	906
Bank reserves	15-10-2025	3,019
	08-10-2025	2,998
Reverse repo	22-10-2025	5
	21-10-2025	5
Repo borrowing	21-10-2025	3.00
	22-10-2025	3.00



The shutdown is the problem

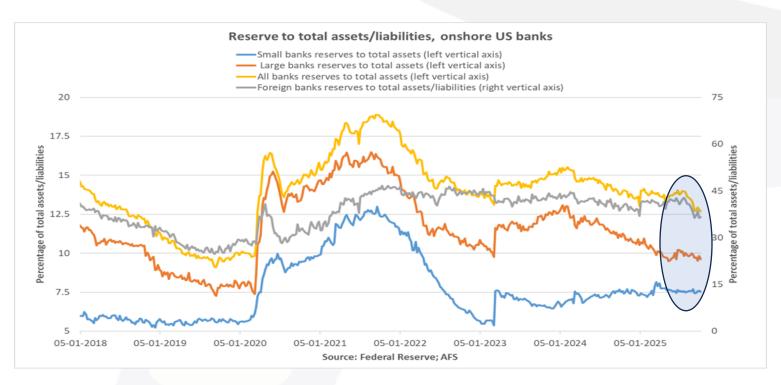
- When I published the US money market update last August, the Treasury balance stood at USD500 billion. The balance has ballooned to more than USD900. The level, close to the target level of USD800 billion, is not the issue per se. The problem is that the balance has been close to the one trillion mark since mid-September because of the record government shutdown;
- Last April, when the Fed slowed QT to roughly USD40 billion in QT from USD60 billion, the sum of bank reserves, reverse repo, and the Treasury account stood at USD3,959.9 billion. That has fallen to USD3,831.9 billion by mid-October, a USD128 billion decline over a five-month period:





Suffer, foreigner

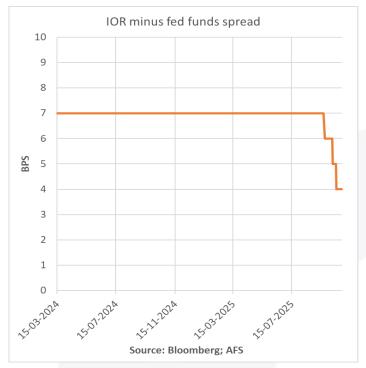
- To repeat, the sum of bank reserves, reverse repo, and the Treasury account has fallen by just USD128 billion over the past five months. During this period bank reserves fell by USD500 billion while reverse repo recourse fell by more than USD200 billion. Those reserves all ended up at the Treasury account, which targets a balance of around USD800 billion but not for an indefinite period of time;
- Which begs the question: who lost reserves? Pesky foreigners it turns out. Here are reserves to total assets/liabilities of banks in the US. Mind the second vertical axis for foreign banks:

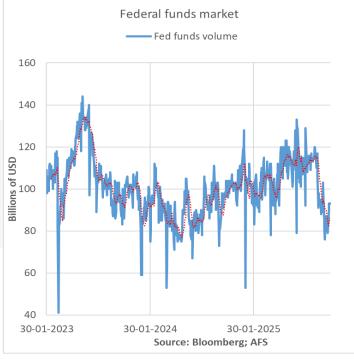




Fed funds spread tightened abruptly

- The drop in foreign bank reserves coincided with a narrowing of the fed funds IOR spread and a decline in volumes in the fed funds market;
- Volumes are probably down because the spread at 4bps makes less sense from an arbitrage perspective. Remember, borrowers in this market are by-and-large foreign-owned banks, who park the reserves at the Fed to earn IOR. Lenders are Government Sponsored Entities (GSEs) who can't earn IOR, though they have access to the Fed's reverse repo facility. Perhaps the GSEs parked their excess liquidity in the repo market instead in search of higher returns.

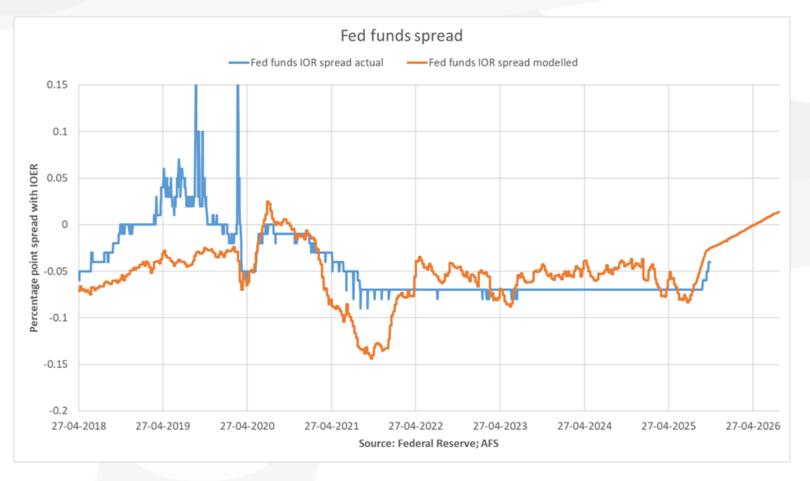






But Fed funds behavior was normal

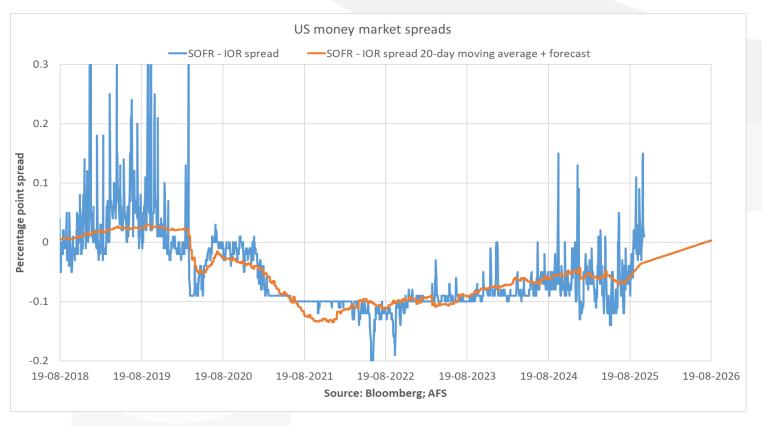
 Fed funds did what it was supposed to according to my rather mundane model for the fed funds – IOR spread (independent variables foreign bank reserves to total assets/liabilities, reverse repo recourse, and the Treasury account). Perhaps it was just luck, who knows.





SOFR behaving erratically

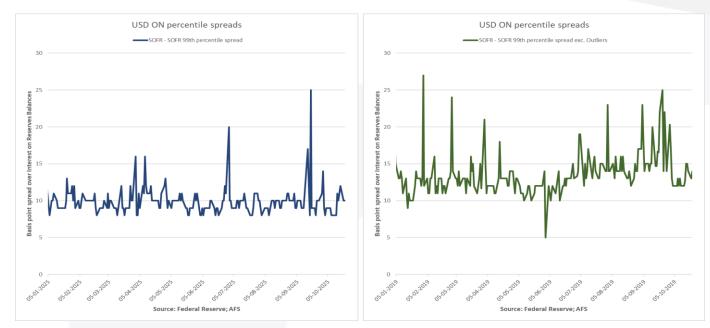
- The SOFR model, of which I was skeptical from the beginning, has already started to break down. Which begs the question. Are the recent elevated settlement a temporary blip because of the government shutdown shenanigans, or will settlements stay higher?
- I think the Fed isn't waiting around to find out. As per the August update, the Fed will simply cease QT at the first sign of trouble. And here we are. At the October FOMC, Powell & Co will announce QT's demise.





No outlier influence

- I tried to figure out what's been going on with SOFR. With not much to go on, I looked at percentile rates to check if there's a marginal borrowing bidding up the settlement. The takeaway: the rise in rates in the underlying transaction is broad-based, not confined to the higher percentiles. That's different compared to the run-up to the 2019 money market blowup. Back then, the 'marginal borrower' drove SOFR higher;
- Here's the spread between SOFR and the 99th percentile rate. I excluded the outliers, but some turn-based spikes remain apparent. Regardless, in 2019 the 99th percentile rate rose relative to the SOFR settlement. Currently, this spread is bog stable. My takeaway: the Fed's Standing Repo Facility acts as a relief valve, preventing undue influence from outlier transactions.





Kill volatility, resume asset buying

- So, where do I see money market spreads? It depends. I think the recent spike reflects the government shutdown. Which has resulted in the Treasury hoarding reserves. Once the government reopens, the Treasury balance will resume its 'normal erratic pattern'. The balance won't stay at peak levels for any sustained period of time. So, SOFR and fed funds should fall relative to the Fed's administered rates somewhat or perhaps only marginally;
- But beyond the short term, we've come at a fork in the road. The Fed can either try to 'passively' shrink its balance sheet or increase reserves in line with demand. Regarding the former, this entails the Fed <u>not</u> buying any assets (thus creating reserves) to satisfy reserves demand growth stemming from the increase in currency in circulation and the Treasury account. The repo facility and discount window will satisfy demand growth instead. Back-of-the-envelope, I put demand growth for reserves at about USD100 billion annually. That's assuming two and a half percent growth in currency in circulation and the Treasury balance growing in line with nominal GDP growth (five percent annually);
- If the Fed doesn't satisfy bank reserve demand growth with asset buying (Federal debt, and overweight T-bills), money market spreads will tighten further gradually, but with an increased risk of sudden spikes. In this regard, my confidence that the standing repo facility and discount window work as an effective ceiling for (secured) overnight rates is rather low;
- Within the current ample reserves regime, the Fed will likely resume asset buying at a pace of USD5 to USD10 billion a month to satisfy reserves demand growth. To the Zerohedgies of the world, that's not QE, but simple money market management. Given the outsized fiscal deficit, the risks are tilted towards larger monthly asset purchases. While I found no relationship between the bank reserves to collateral ratio (bank reserves divided by federal debt in private hands) and money market spreads, I am sure that with sizeable leveraged buying of Treasuries, the reserves/collateral ratio cannot go out of whack. Meaning that reserves growth must take the federal deficit of close to two trillion dollars (or six percent of GDP) into account;
- With Powell's term as Chair ending in May 2026, a new Chair could shake up things. From ending reserve renumeration to running a skinny balance sheet and accepting greater money market volatility as a fact of life. Alas, my great hope that central banks adopt a laissez faire attitude to overnight rates to flush out useless leverage (re, basis trades) will certainly not be fulfilled. I think the path of the least resistance is to continue with the current ample reserves regime. And resume asset buying sooner than later. Perhaps before Powell's term ends, or shortly thereafter. Above all, overnight rates must stay anchored. And the ends justify the means: the Fed balance sheet will accommodate to quell volatility.





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