

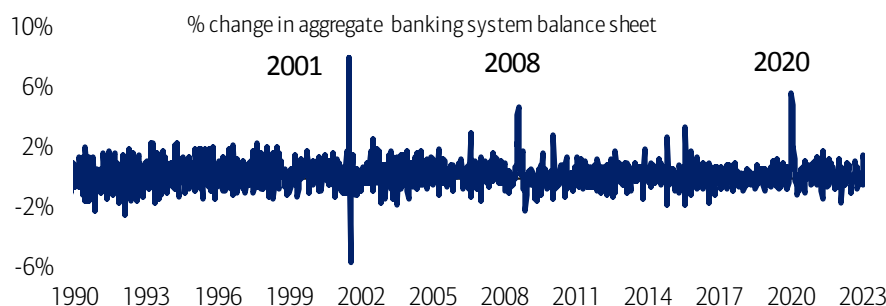
Liquid Insight

Fed + FHLB to the liquidity rescue

Key takeaways

- Banking episode required large liquidity injection, faster than several past episodes, and Fed+FHLB got it done.
- Focus on deposit and money funds flows, we believe, misses the bigger picture of stability of backstop bank funding resources
- Liquidity injections are the ultimate purpose of the Fed and FHLB, and we saw the required timely response.

By Ralph Axel

Chart of the day: Major bank balance sheet liquidity injections include '01, '08, '20Recent banking system expansion size was in 94th percentile since 1973

Source: Federal Reserve, BofA Global Research

BofA GLOBAL RESEARCH

A classic liquidity crunch set off by fear

Markets have been keenly focused on the level of bank deposits, but we believe focusing on deposits misses the bigger picture of total bank liabilities and, in particular, the rapid increase in the aggregate bank balance sheet that the system successfully generated to accommodate heavy volumes of cash transactions. Rapid liquidity needs can only be met via institutional funders, including the Fed and the Federal Home Loan Bank system (FHLB). While it was a relatively large expansion, equating to about 1.6% increase in total bank assets, it was not very large compared with the liquidity-adding episodes of 2020, 2008, and Sep 2001, which appear as spikes in the Chart of the Day. The liquidity adds of the Sep 2019 liquidity crunch were about 1% over a 2-week period.

In particular, bank borrowings from FHLB, which is a government-sponsored enterprise (GSE) wholly owned by banks and insurance companies, increased more rapidly among smaller banks (defined as below the top-25 in total assets) than at any time in history. FHLB continues to play a major role in providing rapid funding within the banking system to a wide variety of banks.

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BofA GLOBAL RESEARCH

FHLB and Fed provide quick changes to cash levels

Because banks own FHLB, issuance from FHLB is essentially indirect issuance of banks but with an implicit guarantee on the issuance provided by the GSE status. See the report [US Rates Watch: FHLB lender of 2nd-to-last resort](#) for more details on the mechanics of FHLB. Banks can issue several types of liabilities, including overnight Fed fund borrowings, short-term commercial paper, and longer term senior unsecured or subordinated debt securities. Deposits are “issued” when a loan is created. But when a shock hits the economy that generates an immediate surge in cash needs – in this case a bank failure, but in other cases a pandemic or an attack on US soil – it is unrealistic to expect the banking system to issue such liabilities quickly enough to meet the needs of money holders. It is also unrealistic – as we saw in 2020 – to expect banks to be able to sell even the most-liquid securities in large enough size unless the Fed acts as the buyer. Private entities do not have the capacity to generate the large-scale system-wide liquidity needs that large exogenous shocks demand.

This is precisely where the Fed and the FHLB step in, as they can both generate very rapid increases in their balance sheets which liquify banks to whatever level the shock requires without market disruption or concern over balance sheet constraints, etc. This is a feature, not a bug, of the banking system, and was employed in various ways in 2001, 2008, 2019, 2020, and over the past few weeks, in addition to other events.

Borrowing vs deposits – depends on the Fed ops

While the funds generated by the Fed’s lending windows and the FHLB system are essentially equivalent to bank deposits, they are accounted for as “borrowings” instead of deposits on the bank liability side. But the economic impact – rather than the accounting terminology – is what matters most: bank cash increases.

The funds created by the Fed is a process of reserve creation, generally referred to as “printing money”. This is the main job of the Fed, to ensure that the supply of cash in the banking system is adequate to meet the needs of money holders. It is arguably the single mandate of the Fed, according to a literal reading of the Federal Reserve Act’s Section 2a.

The Fed essentially has two ways it can create bank liquidity: it can do market operations such as Quantitative Easing (QE) or repo – both of which take Treasuries out of the market and replace them with reserves – or the Fed can use its lending facilities, including the discount window, the Bank Term Funding Program (BTFP), and others. It is an accounting issue that adding liquidity via QE or Treasury repo operations increases bank “deposits”, while adding liquidity via lending facilities increases bank “borrowings”. Either way, reserves increase and the cash impact on the bank asset side is the same. Focusing on deposits vs borrowings, we believe, misses the bigger picture that an immediate increase in the money supply to accommodate the movement of funds is successfully executed. Since FHLB funding is designated as “borrowings”, the deposit/borrowings mix of a liquidity add will depend on the portion generated by FHLB and the types of operations the Fed uses.

FHLB funding does not drain money from the banking system

Unlike the Fed, FHLB funding is not printing money and does not change reserves. Instead, funds sourced by FHLB are recycled from within the financial markets. Government money market funds are the typical buyers of FHLB debt and those funds are then lent to banks. If a depositor takes her money out of a bank and places it in a money fund that buys FHLB debt, she is still funding the banking system, even though the deposit line item goes down and the borrowings go up. This flow does not “remove money” from the banking system; it is still bank funding but of a different type (see the report [US Rates Viewpoint: Funding map: T-tables for Fed, banks, MMF 30 March 2023](#) for details on money flows). As a result, it is perhaps more accurate to think of deposit movements into money funds that buy FHLB debt as a shifting of bank liability types, rather than a flight from bank funding in aggregate.

To the extent that money market funds buy other assets such as Treasuries or repo (loans secured by Treasuries or Agencies), there is no impact on the level of bank deposits as this just causes deposits to shift among banks. However, if money funds invest in the Fed's reverse repo facility (RRP), funding does drain from the banking system. During the week ending 15 March, however, RRP levels actually fell, which added to bank reserves. This may provide some evidence that overall confidence in the banking system held up during the worst period, despite a severe drop in confidence around a few specific entities.

FHLB is an important alternative to Fed lending facilities

Technically, FHLB is not needed for liquidity injection. In theory, the Fed could inject the needed liquidity entirely on its own. But having the FHLB system is arguably better for the banking system because FHLB also operates in non-crisis times, helping the banking sector manage funding needs without the Fed changing the overall money supply, which could at times be inconsistent with its own monetary policy objectives. A bank's choice between FHLB and the Fed depends on several factors: pricing/terms, perceived stigma, borrower eligibility, and collateral eligibility.

All-in FHLB borrowing costs are often lower than the Fed programs. This is because FHLB issues debt in the capital markets very close to T-bills and runs relatively small net interest margins. In addition, borrowers are owners of FHLB and receive dividends on their ownership shares which reduce the all-in borrowing cost. Perceived stigma does not exist for FHLB because banks use FHLB on a regular basis, with incentives also built into bank regulations. FHLB membership eligibility is more restrictive than the Fed's, which can limit the total uptake in the system. In addition, members must buy capital of FHLB to borrow. While FHLB and Fed lending is always secured by collateral, collateral posted to FHLB must be mortgage-related. The Fed by contrast can take a large array of bank assets as collateral. So in a sense, the Fed and FHLB are complimentary agencies, and together they provide a battle-tested liquidity infrastructure.

The implication for interest rates

Our Economics team noted that lending standards were tightening before the banking events, and this shock clearly does not help (see the report [US Economic Weekly: Sentiment has stabilized, but excess tightening remains a concern 31 March 2023](#)). But from a plumbing perspective, we believe the mechanics of lending should not be impacted by the large flows between banks and into money funds, etc. Banks do not lend their existing cash, they create new deposits and new assets when they create a loan. In retrospect, what we saw was a system that worked as intended in the face of a powerful negative exogenous shock. How bank lending standards change – if at all – could be an important factor for the macro path forward. The level of interest rates should depend on the strength of incoming data on spending, jobs, inflation, and confidence, which in turn will determine whether the Fed hikes, pauses or cuts. We believe the cuts currently priced into the Fed rate path are too pessimistic and could partially reverse. See the report [Global Rates Weekly: Budding stability 31 March 2023](#) for our preferred positioning around how to fade the market pricing of rate cuts which currently begin at the June FOMC meeting.



Notable Rates and FX Research

- **Global Rates, FX & EM Year Ahead 2023 – [Year Ahead 2023: Pivot ≠ Peak](#)**, 20 Nov 2022
- [After the storm](#), **Global FX Weekly**, 31 Mar 2023
- [Budding stability](#) **Global Rates Weekly**, 31 Mar 2023
- [Three weeks of living dangerously](#), **Liquid Cross Border Flows**, 27 Mar 2023

Rates, FX & EM trades for 2023

For a complete list of our open trade recommendations, as well as our trade recommendations closed over the past 12 months, see the reports below:

[Global FX Weekly: After the storm 31 March 2023](#)

[Global Rates Weekly: Budding stability 31 March 2023](#)

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