

The Bank of England Just Released Its Plan for Getting Smaller. The Fed Could Learn From It.

Bill Nelson | Aug. 4, 2022

This morning, the Bank of England’s Monetary Policy Committee released minutes of the meeting it held yesterday. The minutes provide more information on its plan to reduce the size of its balance sheet. In sum, the BoE intends to shed assets until it is as small as possible in the short term, and it may then get smaller over time. The Federal Reserve, by contrast, plans to retain a huge balance sheet and may grow even bigger over time.

Although the BoE’s plan to sell securities rather than just allow them to roll off as they mature (the Fed plan) has received the most attention, the critical difference between the two approaches is the way each central bank plans on determining its minimum size. This note first describes the Fed’s plan and then the BoE’s plan; explains why the BoE plan is better for both monetary policy and broader economic reasons; and recommends ways that the Fed could adapt the BoE plan to U.S. circumstances. We end by describing a way that the Fed could get even smaller while also allowing banks to lend more to businesses and consumers and less to the federal government, with no degradation in safety and soundness.

Background

In response to the COVID-19 crisis, the Fed acquired \$3.4 trillion in Treasury securities and \$1.3 trillion in agency MBS. As a result, the Fed’s balance sheet rose from 20 percent of GDP to 36 percent. Before the global financial crisis, it was 6 percent. The Fed is now “normalizing” its balance sheet, which suggests shrinking back to some previous level. Normalizing also means returning the portfolio to mostly Treasury securities, but that is not the focus of this note.

To understand how the Fed will shrink its balance sheet, it is first necessary to understand the Fed’s balance sheet. Luckily, it is fairly simple. As shown in table 1, on July 27, 2022, \$8.8 trillion of the Fed’s \$8.9 trillion in assets consisted of securities. Two-thirds of the securities are Treasuries, and one-third is agency MBS. On the liability side, of the Fed’s \$8.9 trillion in liabilities, \$3.3 trillion are deposits of banks and other depository institutions (reserve balances); \$2.5 trillion are reverse repurchase agreements (secured overnight loans from money funds, GSEs, and foreign official institutions); \$2.2 trillion are Federal Reserve notes (currency); and \$0.6 trillion is the Treasury General Account (TGA) at the New York Fed. The Fed’s capital is essentially zero.

Table 1
Federal Reserve System Balance Sheet on July 27, 2022 (billions of dollars)

Assets		Liabilities	
Securities	8,778.9	Currency	2,225.0
<i>Of which:</i>		Reverse Repos	2,484.3
Treasury securities	5,734.2	Deposits of DIs (reserves)	3,275.6
Agency MBS	2,717.4	Treasury General Account	615.5
Other	428.4	Other	247.9
Total	8,890.0	Total	8,848.3
		Capital	41.7

Source: Federal Reserve Statistical Release H.4.1.

The Fed’s current balance sheet is not the balance sheet the FOMC wants. On Jan. 26, 2022, the Committee [indicated](#) that it intends to reduce its securities holdings down to amounts “...needed to implement monetary policy efficiently and effectively in its ample reserves regime.”

The Fed adopted its “ample reserves regime” for implementing monetary policy in [January 2019](#). In a nutshell, under the framework, the Fed maintains a balance sheet that is so large that reserve balances are supplied in an amount that is greater than what banks need or want. (The banking system has to hold whatever level of reserve balances the Fed creates.) Money market rates are pushed down by banks’ efforts to shed those reserve balances until they are about equal to the interest rate the Fed pays to banks on reserve balances (the IORB rate).¹ The Fed then moves the IORB rate up or down to deliver a federal funds rate that is in the Committee’s desired target range.

(It’s actually a bit more complicated than that. The Fed’s balance sheet is so huge that it has created more reserve balances than the banking system can absorb at low cost.² As a result, the Fed would have to set the IORB rate well above the targeted range for the federal funds rate to get the funds rate to trade in the range. To ease that pressure, the Fed operates the overnight reverse repurchase agreement (ON RRP) facility where it pays money market mutual funds and GSEs a fixed rate of interest (the ON RRP rate) for overnight credit set 10 basis points below the IORB rate. As noted, the facility is now also massive and the fed funds rate is near the ON RRP rate, below the IORB rate.)

¹ When the Fed expands its balance sheet and increases the quantity of reserves, banks have to hold the reserves and have to do so voluntarily. Each individual bank can choose whatever level of reserve balances they would like, but all those individual choices have to add up to the total amount supplied by the Fed.

Suppose grocery stores set the price of bananas so that all their bananas get sold but no lower, and a banana distributor doubled the amount they supplied to the D.C. area for some reason. Even though each household is free to buy or not buy bananas, the price will adjust so that households choose to buy all the bananas.

In the same way, the prices of bank assets and liabilities have to adjust so that banks willingly choose to hold all those reserves. If a bank has more reserves than it wants it can increase lending or decrease borrowing or buy securities. Among other things, the bank will seek to lend more in the interbank market. If the fed funds rate is above the IORB rate banks will all seek to make fed funds loans (because, in a floor system, they are overstuffed with reserves), pushing down the fed funds rate. But the funds rate will not fall much below the IORB rate because “why lend funds for less than you can get just keeping them on deposit at the Fed?”

² For further explanation, see the BPI note “A Very Different Federal Reserve Funding Model,” June 16, 2021. <https://bpi.com/a-very-different-federal-reserve-funding-model/>.

The Fed's Balance Sheet Normalization Plan

The Fed has begun reducing the size of its balance sheet following the [plan it announced](#) on May 4, 2022. Rather than reinvesting all principal payments it receives on its securities, the Fed will now allow fixed amounts to mature without reinvestment, only reinvesting principal payments above those monthly caps on redemptions. For Treasury securities, the cap is \$30 billion and will rise to \$60 billion in September. For MBS, the cap is \$17.5 billion and will rise to \$35 billion in September. The New York Fed projects that under this plan the Fed's balance sheet will decline \$2½ trillion from its peak by mid-2025, at which point it will equal 22 percent of GDP.

The New York Fed assumes that the level of reserve balances needed for the ample reserve implementation framework equals 8 percent of GDP, which was the percentage in December 2019.³ In September 2019, money markets experienced a significant episode of turmoil in part because reserve balances had fallen sharply. The Fed added reserves, and the December 2019 level was judged to be ample, including a substantial buffer over banks' structural demand. Once reserve balances get to 10 percent of GDP, the Fed will slow and then stop the decline in securities, allowing the share of reserve balances to edge down to 8 percent as currency and other liabilities grow. At that point, the New York Fed projects reserve balances will equal \$2.3 trillion.

The critical issue is how the Fed will determine that it is approaching the minimum level of reserve balances necessary to be ample. The Fed does not know the level, it is approaching it from above, and it wants to stop a bit before it gets there, leaving a buffer that can absorb volatility in reserve balances without requiring countervailing open market operations. The Fed will be walking toward a wall blindfolded and trying to stop as close as possible without bumping into it. The Fed has indicated that it will monitor money market conditions to determine when reserve balances are approaching the level needed to be ample and likely plans on halting the decline in reserve balances when money market rates rise up closer to the IORB rate.⁴

Problem With the Fed's Strategy

The Fed's strategy will leave the Fed with a massive balance sheet and create incentives for its continued growth. When the Fed creates reserve balances, market interest rates adjust to create the demand for those reserve balances. That is how monetary policy works. Viewed another way, in response to the new configuration of interest rates, banks adjust their liquidity and asset-liability plans to make use of the reserve balances. Contrary to the standard model of the market for reserves, banks do not just park the extra reserve balances in their account at the Fed without making alternative adjustments to their balance sheets. Furthermore, bank examiners also get used to the extraordinarily high level of reserve balances within the banking system and resist bank liquidity plans that include lower levels of reserve balances.

As a result, the level of reserves that the Fed supplies tends to get locked in. The Fed needs to create a financial incentive to encourage banks to economize on their holdings of reserve balances. In other words, the Fed needs to reduce supply to the point where the interest rates on alternative market sources of liquidity – T-bills, reverse repos, overnight interbank lending – are higher than the interest rate on reserve balances, the IORB rate. But that is precisely the outcome the Fed plans to avoid by ceasing normalization when any signs of tightness appear.

Moreover, because the Fed plans on maintaining a buffer of reserve balances above the level where tightness begins to appear, the structural demand for reserve balances will rise in response. Banks and bank examiners will

³ The New York Fed's projections are available here: <https://www.newyorkfed.org/medialibrary/media/markets/omo/omo2021-pdf.pdf>

⁴ Lorie Logan, Federal Reserve Asset Purchases: The Pandemic Response and Considerations Ahead, March 2, 2022. <https://www.newyorkfed.org/newsevents/speeches/2022/log220302>

get used to the level including the buffer. That process will be encouraged by the fact that the IORB rate will remain above market rates at that higher level of reserve balances. To maintain a buffer above that new level of structural demand, reserve balances will have to rise even higher, meaning the Fed will have to be even bigger. And so on.

The Bank of England Plan

The Bank of England has adopted a very different plan. According to the minutes released today and accompanying documents, the Bank plans to normalize its balance sheet by selling securities and establishing a new “Short-term Repo Facility.” The SRF extends one-week collateralized loans to banks at Bank rate, the same interest rate it pays on reserve balances. The minutes are available [here](#), additional information on the normalization plan is available [here](#), and additional information on the Short-term Repo Facility is available [here](#). The plan is consistent with the procedure described in a 2019 [speech](#) by Andrew Hauser, Executive Director, Markets. In particular, the BoE plans to shrink its portfolio down to a level where there is some scarcity in the market for reserve balances and where banks regularly borrow from the Short-term Repo Facility.

Hauser notes that this process will result in a smaller central bank.

The Bank’s balance sheet should naturally be somewhat smaller under this system than it would be under an ‘ample reserves’ floor. That’s partly because we would not need to build in a buffer to account for uncertainty over the true level of the [structural demand for reserves]. But it’s also because the balance sheet cost for banks obtaining reserves via OMOs is likely to require there to be a degree of reserve scarcity before banks will participate. p. 14

Under this approach market rates should be “...a little higher on average relative to Bank Rate...” (p.15). Although not mentioned as an advantage by Hauser, that configuration of rates should provide a steady encouragement for banks to economize on their holdings of reserve balances, allowing further reductions in the size of the BoE’s balance sheet. He also notes that market rates should be slightly more variable. Such variability would probably be worse in the United States without further adjustments, the subject of the next section.

Modifying the BoE Plan for Conditions in the United States

The Federal Reserve could adopt a normalization plan similar to the BoE plan – reducing reserve balances down to the point where scarcity begins – with two modifications. First, the Fed could maintain a small spread between the interest rate it charges on its loans and the interest rate it pays on reserve balances. Such a spread encourages the continued existence of an interbank market, a critical component of banks’ liquidity management.⁵ The Fed could, for example, place the discount rate and the standing repo rate 5 basis points below the top of its target range for the federal funds rate with the IORB rate 5 basis points above the bottom. Second, the Fed could take much more aggressive steps than it has taken to date to encourage banks to be willing to borrow from its standing lending facilities.⁶

⁵ The idea that banks should meet their liquidity using reserve balances is relatively new. Fed examiners in the mid-1990s were taught that the most important source of liquidity for a bank was access to the interbank market. Indeed, the Norges Bank decided to stop using an abundant reserves framework and shift toward a scarce reserve framework precisely because the abundant reserve framework had resulted in banks relying more on reserve balances and less on the interbank market for liquidity management. See Consultative document, “Changes in Regulation on the Access of Banks to Borrowing and Deposit Facilities in Norges Bank etc.” 1 October 2010, pp 5-6. https://static.norges-bank.no/contentassets/cfc83348f4574a719dd5a4ce70a48840/consultative_document_06102010.pdf?v=03/09/2017123145&ft=.pdf

⁶ Another aspect of the BoE plan that the Fed could adopt is selling securities rather than just letting them mature. The Committee’s normalization principals state that “[i]n the longer run, the Committee intends to hold primarily Treasury securities...” to minimize the extent to which the Fed was engaged in credit allocation. However, the New York Fed projects that the share of the portfolio consisting of MBS will rise

There is a significant stigma associated with borrowing from the Federal Reserve. The stigma has existed from the founding of the Fed but became more acute following the global financial crisis (see [here](#)). The Fed created a new lending facility – the standing repo facility – in hopes that there would be no or less stigma associated with borrowing from the new facility than from the discount window (or “primary credit facility”), the regular program through which the Fed lends to commercial banks. However, only nine banks have signed up for the SRF, reportedly because many banks do not see much added value from arranging access to the facility and because banks are concerned that their supervisors would view using the facility negatively.⁷

Because of the stigma, banks are willing to pay much higher rates to borrow in the market than the rate they would pay at the discount window or standing repo facility. As a consequence, if there is scarcity in the market for reserves, the federal funds rate could be highly variable, often rising up far above the SRF/Discount rate.

Recent discussions with treasurers of Bank Policy Institute member banks identified several steps the Fed could take to reduce the stigma associated with the discount window and the SRF (summarized [here](#)). First, borrowing must be made a business-as-usual event rather than an extraordinary event. A normalization strategy that results in reserve scarcity should help in this regard by making borrowing more common. Second, Fed leadership needs to explain to Congress and to the public that borrowing is not a bailout, it is just a normal business decision. Third, to reinforce the message that borrowing is just a business decision, banks should be able to incorporate borrowing into their liquidity stress testing and resolution requirements. Fourth, banking agencies must educate bank examiners that borrowing from the Fed is just a business decision, not an indication of a liquidity problem, and a decision to borrow should not be held against banks in their supervisory exams. Similarly, examiners need to be reeducated that there is nothing wrong with a collateralized daylight overdraft.

Consistent with these proposed steps, the Bank of England [emphasized today](#) that borrowing from its new lending facility should not be viewed negatively by Prudential Regulatory Authority examiners. The BoE also encouraged foreign bank examiners, including, of course, U.S. bank examiners, as well as bank leadership, to view borrowing as normal.

The Bank intends that the STR should be used freely from the point of introduction, as a way for counterparties to access reserves as necessary. The PRA would judge use of the STR as routine participation in sterling money markets and intends that it should be seen as such by bank boards and overseas regulators. To facilitate the continued decline in the Fed’s balance sheet, education of examiners should go further. Most importantly, examiners need to stop expressing a preference for reserve balances as a liquid asset. In a recent podcast, Randal Quarles, former Vice Chair for Supervision at the Board, noted with respect to the repo market turmoil in September 2019:

I do think that one of the drivers of that disruption in 2019 was our, not so much liquidity regulation, but liquidity supervisory policy, which put a pretty heavy thumb on the side of the scale of preferring reserves over Treasury securities in satisfying your liquidity obligations.⁸

through 2024 because Treasuries will roll off more quickly than MBS. The Fed could sell MBS gradually to hasten the return to a mostly Treasuries balance sheet. The first normalization plan that the FOMC adopted, in June 2011, included sales of agency debt and MBS of \$10 billion per month. (See “Exit Strategy”; memo to the FOMC by Bill English, Bill Nelson, and Brian Sack; April 19, 2011, available [here](#).)

⁷ See the BPI note “Informal Symposium on Monetary Policy, Bank Regulations, and Money Markets,” February 22, 2022.

<https://bpi.com/informal-symposium-on-monetary-policy-bank-regulations-and-money-markets/>

⁸ “Randal Quarles on Inflation, Balance Sheet Reduction, Financial Stability, and the Future of the Fed,” Interview by David Beckworth of the Mercatus Center, July 18, 2022. <https://www.mercatus.org/bridge/podcasts/07182022/randal-quarles-inflation-balance-sheet-reduction-financial-stability-and>

A Further Change That Will Allow Banks to Support Businesses and Consumers Rather Than Fund Government Spending

If the Fed successfully weans banks and bank examiners off of reserve balances, the only equivalent source of liquidity allowed by liquidity requirements is Treasury securities. In other words, banks are permitted to either invest in the federal government through the Federal Reserve or invest in the federal government directly. U.S. banking agencies could, instead, adopt the approach used in Australia and accept committed lines of credit from the central bank as a source of liquidity. Because the lines can be collateralized by business and household loans, they allow banks to make loans rather than buy government securities, while still remaining highly liquid. After all, a committed line of credit from the Fed is economically equivalent to a reserve balance – both are promises by the Fed to provide funds on demand.

Committed Liquidity Facilities (CLFs) are central bank facilities to provide commercial banks guaranteed, collateralized, lines of credit for a fee, with the interest rate on draws on the line set above market rates. Because the Fed would be more than compensated for the minimal risk associated with providing the lines and making loans under the lines, the CLFs would be neither subsidies nor bailouts. The collateral to back the CLFs is already available and positioned at the Fed. Depository institutions maintain large pools of collateral, about \$1.6 trillion in aggregate (lendable value), mostly business and household loans, pledged to the Fed to collateralize discount window loans and daylight overdrafts.⁹ There is no logical reason why a bank's access to a CLF should be ignored in assessing its liquidity position.

There is precedent for considering CLFs. The issue arose in Australia because banks could not meet their liquidity requirements by purchasing government debt for the simple reason that the government of Australia does not issue enough debt. While the United States is in no danger of producing insufficient levels of government debt, the other factors described above suggest that the approach adopted by the Australian Central Bank would work well in the United States, albeit for different reasons.

Thus, in Australia, the undrawn portion of the line counts as a level 1 high-quality liquid asset (HQLA) — defined by the rules as the most stable source of liquidity — meaning it is equivalent to a reserve balance or a Treasury security for the purposes of meeting a liquidity requirement. When the line is drawn, the bank receives a loan at an above-market rate, so the bank has a strong incentive to repay the loan as soon as its liquidity need passes.¹⁰

That is, under normal circumstances, the Fed would not be making a loan to the bank with a CLF; the bank would only borrow under the line when it needed the liquidity. Moreover, under normal and stressed circumstances, the bank would not be using its balance sheet to keep funds on deposit at the Fed; instead the bank could use the balance sheet capacity to make loans to businesses and households.

From conception, the international standard for the liquidity coverage ratio, the primary international liquidity requirement, allowed some jurisdictions to count CLFs as level 1 HQLA, but initially only jurisdictions where there was a shortage of government debt such as Australia. The final LCR standard allowed jurisdictions that were not short government debt to count CLFs but only for a relatively small part of each bank's HQLA and only if the CLF charged an onerous fee that made the facilities unworkable.¹¹

⁹ A footnote to table 5 of the Fed's Quarterly Report on Balance Sheet Developments in March 2020 states that the lendable value of collateral pledged by depository institutions to the Fed is \$1.621 billion. Subsequent reports have not reported the amount of collateral pledged. https://www.federalreserve.gov/monetarypolicy/files/quarterly_balance_sheet_developments_report_202003.pdf

¹⁰ Additional information on CLFs is available at <https://bpi.com/show-them-the-money-why-the-fed-should-adopt-clfs/>.

¹¹ See "Revisions to Basel III: The Liquidity Coverage Ratio and liquidity risk monitoring tools (January 2013)," Basel Committee on Banking Supervision, <https://www.bis.org/publ/bcbs274.pdf>

Of course, even though there was a shortage of government debt in Australia, the Reserve Bank of Australia could always have created reserve balances by acquiring assets or making loans. Nevertheless, it was seen as appropriate to allow Australia to count CLFs as HQLA rather than to make the RBA adjust its balance sheet. That logic extends to the United States as well, of course. The Fed should not need to hold a massive amount of assets to supply reserve balances so that banks can comply with liquidity requirements when CLFs would do just as well.

Conclusion

In June 2007, loans made up nearly two-thirds of bank assets; now they make up less than half. While some politicians lampoon this shift as banks “refusing to lend,” the simple economic fact is that lending is the most profitable business in which a bank can engage; a bank “refusing to lend” would be akin to the Apple store “refusing to sell iPhones.” The shift of bank balance sheets away from loans largely reflects the buildup in government securities and reserve balances that has taken place to comply with liquidity requirements – regulatory internal liquidity stress tests, the liquidity coverage ratio requirement, the net stable funding ratio requirement, and resolution liquidity requirements. The Bank for International Settlements estimates that complying with liquidity requirements reduces bank lending by between 3 and 26 percent.¹² If banks could comply with those requirements in part by arranging a CLF with the Fed, bank credit could be focused more on business and household loans, boosting economic growth. Moreover, the Fed would collect the fees on the lines, charging banks for the implicit liquidity support that they now get for free.

The Fed projects that balance sheet normalization will be completed in mid-2026 at which time it will begin acquiring securities to keep reserve balances growing with the economy. So there is time for the Fed to change its plan. Instead of maintaining a balance sheet that is larger than necessary and setting the stage for further growth, the Fed should shrink to the smallest balance sheet needed to provide just enough reserve balances to meet banks’ demand, or even a bit below that level so that banks need to borrow on a regular basis. Market rates will be above the IORB rate so banks will have an incentive to keep reducing their investments in reserve balances. Over time, the Fed could become even smaller as a share of GDP, although probably not to the pre-GFC level. If the Fed provides banks lines of credit under a CLF, the Fed could both get even smaller and encourage economic growth by allowing banks to refocus on lending to Main Street rather than lending directly or indirectly (through the Fed) to the federal government.

¹² Literature review on integration of regulatory capital and liquidity instruments, Working paper 30, Basel Committee on Banking Supervision, March 2016. <https://www.bis.org/bcbs/publ/wp30.pdf>