For release on delivery
4:00 p.m. EST
February 14, 2024

The Intersection of Monetary Policy, Market Functioning, and Liquidity Risk Management

Remarks by

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at the

40th Annual National Association for Business Economics (NABE)
Economic Policy Conference

Washington, D.C.

February 14, 2024

Thank you for having me here today. After having had to miss this conference last year, I greatly appreciate the opportunity to join you. As you might expect, I was a little busy in March 2023, and I will share some thoughts on lessons learned from the stress in the banking system at that time, in particular what we have learned in terms of liquidity risk management.[1]

But first, I will start by discussing recent economic developments and the implications for monetary policy. I will then turn to the banking sector and will focus on some topics that lie at the intersection of the composition of the Fed's balance sheet, market functioning, bank liquidity risk management, and the Fed's role in liquidity provision.

Starting with economic developments, I think it is helpful to reflect on how surprised most watchers of the economy were by developments in 2023, me included.

Perhaps like many of you, at the start of 2023 I had projected that tighter monetary policy would cause a slowdown in both inflation and economic activity. Then, with the March 2023 banking stress, I was concerned that a potential credit contraction could further weaken the economy.

At the same time, I also worried that inflation might remain elevated, even if we had weaker economic activity, as supply chain problems and job-matching challenges continued to be prominent elements of the pandemic's disruption to the operation of our economy.

I am glad to say that those worries did not come to pass, in part due to the official sector response to the banking stress, sound monetary policy, and a healing economy.

[1] The views expressed here are my own and not necessarily those of my colleagues on the Federal Open Market Committee.

Economic activity expanded at a solid pace, the labor market remained strong, and inflation came down significantly.

Disinflation and a growing economy

The current mix of outcomes we are experiencing would have seemed improbable one year ago, and we might ask, how did we end up with disinflation and an economy with brisk growth? The short answer is the healing of the economy. The pandemic brought our economy to a screeching halt. During the second quarter of 2020, the unemployment rate jumped to a high of 14.8 percent and gross domestic product plunged at a 28 percent annual pace. These dynamics hit some of the most vulnerable populations the most, though strong government responses helped to both ease the effects and make many households much more resilient. Once the economy restarted, demand rebounded quickly, while supply was hampered by supply chain difficulties. These supply snags were compounded enormously by a shift in demand away from in-person services and toward goods, which generally have a larger exposure to shipping and supply chain problems. Supply shocks to the global economy were subsequently compounded by Russia's war against Ukraine, which severely disrupted food and energy markets. And labor markets were disrupted by the pandemic as well. Employers could not find enough workers, and job-matching was impaired.

An important component of post-pandemic healing has been the recovery of supply chains after the pandemic-induced bottlenecks in both goods production and distribution. Recent shipping disruptions show supply chain conditions are still an issue, but compared to pandemic-era constraints, we are in a much better position. For example, the price to ship a 40-foot container from China to the West Coast has recently risen to around $4,000, about twice the pre-pandemic level, but it is far below the $20,000 rate in 2021.

Another key component of the improvement in supply has been in the labor market. We have seen substantial improvements in the labor force through both stronger immigration and higher labor force participation rates, notably by women. As supply has improved, labor demand has cooled, but this cooling has manifested largely in a reduction in job vacancies, rather than layoffs. At the same time, we have seen the labor market working more efficiently—for example, with improved job matching after the large disruptions during the pandemic. The improvements in labor supply and labor market functioning have allowed the unemployment rate to hold steady at a low level. The strong labor market has broadly improved the lives of Americans, and particularly so for groups that have long suffered significantly higher unemployment levels and whose jobless rates respond more forcefully to the business cycle.

Improvements in productivity

Another key part of the story in the post-pandemic healing of our economy has been the growth of productivity. While measures of productivity tend to be volatile, productivity growth has picked up in the past year. Increased productivity is, in part, likely coming from components that will continue to yield improvements, such as the integration of new technology, new ways of working, and the large increases in new business formation. Growth in new businesses has been found to lead to productivity gains, likely because new entrants innovate, and legacy firms must also innovate to compete with new entrants. These increases in productivity are also consistent with real wage gains, one measure of rising living standards.

The net result of all this healing of the economy is that growth has been robust even as upward pressure on inflation has diminished. This healing has been helping both sides of our dual mandate over the past year.

Monetary policy has been essential in this process. Higher interest rates have helped to restrain demand, giving supply the opportunity to catch up. Monetary policy has also anchored inflation expectations. Longer-term inflation expectations have stayed anchored, and shorter-term expectations have fallen. The Federal Open Market Committee's (FOMC) preferred inflation gauge has fallen from a peak of 7.1 percent in June 2022 to 2.6 percent in December 2023. We have made this progress while unemployment has remained near a 50-year low.

As central bankers, we always need to consider the full range of risks to achieving both our goals. We are always assessing risks on the horizon, including the risk of an economic slowdown that could reduce employment, or the risk that inflation does not stay on its path of sustainably returning to 2 percent. As Chair Powell indicated in his most recent press conference, my FOMC colleagues and I are confident we are on a path to 2 percent inflation, but we need to see continued good data before we can begin the process of reducing the federal funds rate. I fully support what he called a careful approach to considering policy normalization given current conditions. January's report on consumer product index inflation is a reminder that the path back to 2 percent inflation may be a bumpy one.

Given the limited historical experience with the growth and inflation dynamics we currently face, and no modern experience of emerging from a global pandemic, we have yet another reason to proceed carefully, as we have been doing.

Banking conditions

Next, I want to turn to current banking conditions, lessons learned from the March 2023 banking stress in terms of liquidity risk management, and how we can put those lessons to use for a resilient banking system**.**

Starting with current banking conditions, the banking system remains sound and resilient, and it is in much better shape than it was last spring. However, there are a few pockets of risk that we continue to watch, including the pandemic's persistent impact on office commercial real estate in certain central business districts.[2]

Just a couple of weeks ago, disappointing earnings and higher loss provisions at one bank precipitated significant declines in stock prices. A single bank missing its revenue expectations and increasing its provisioning does not change the fact that the overall banking system is strong, and we see no signs of liquidity problems across the system. Nevertheless, we continue to monitor conditions carefully across the sector, just as we always do.

A few lessons from March 2023

Crucial to banks being resilient is effective liquidity risk management. That was clear in March 2023 and remains so now. We learned that runs can materialize with unprecedented speed and severity, spreading contagion. Silicon Valley Bank (SVB) lost $40 billion in deposits in a single day, and the firm's management expected to lose $100 billion more the following day. In total, that represented about 85 percent of the firm's

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[2] These risks have been discussed in recent editions of the *Financial Stability Report,* which are available on the Board's website at https://www.federalreserve.gov/publications/financial-stability-report.htm.

deposits.[3] The runs on SVB and, shortly thereafter, on Signature Bank and First Republic, each of which lost around 20 percent of deposits within hours, were much faster than we had seen in previous episodes.[4]

The runs on all three were also especially severe, driven in part by imprudent funding reliance on uninsured deposits placed by concentrated and often highly networked customer bases. These deposits proved flightier than previously assumed. For example, SVB's depositors were heavily concentrated in venture capital and technology-sector firms, Signature Bank had uninsured depositors from crypto-related firms, and First Republic had high concentrations of high-net-worth uninsured depositors. Many of these uninsured depositors rapidly withdrew their balances, resulting in deposit flows that were much higher than assumed under the standardized liquidity requirements, such as the liquidity coverage ratio.

At the same time that these institutions faced these outflows, they also faced challenges meeting them with available assets. Firms, even those with large stocks of high-quality liquid assets (HQLA), were not sufficiently prepared to monetize these assets—that is, to turn them into cash. Challenges with monetization can be especially acute for securities designated as held-to-maturity (HTM). As interest rates increase and the value of HTM securities goes down, banks that account for them at amortized cost do not have to reflect the decline in market value on their balance sheets. But selling even a

[3] See Board of Governors of the Federal Reserve System (2023), *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank* (Washington: Board of Governors, April), https://www.federalreserve.gov/publications/files/svb-review-20230428.pdf.
[4] See Federal Deposit Insurance Corporation (2023), *FDIC's Supervision of Signature Bank* (Washington: Federal Deposit Insurance Corporation, April), https://www.fdic.gov/news/press-releases/2023/pr23033a.pdf; Federal Deposit Insurance Corporation (2023), *FDIC's Supervision of First Republic Bank* (Washington: Federal Deposit Insurance Corporation, September), https://www.fdic.gov/news/press-releases/2023/pr23073a.pdf.

portion of an HTM portfolio results in a firm needing to recognize losses on the entire portfolio, a hit to capital. The ability to turn HTM assets into cash, particularly when sales are not feasible, is limited by a firm's ability to ramp up access to secured funding sources, which proved problematic in large size last March.

Many banks have been analyzing these dynamics and have taken steps to address these risks. Over the past year, for example, we have seen banks reducing their reliance on HTM for liquidity purposes, adjusting the composition of their HQLA portfolios, and enhancing their ability to tap different sources of liquidity. They have also been updating their contingency funding plans. These improved practices are important for both individual firm resilience and aggregate financial stability.[5]

Additionally, I remain focused on how we can improve bank readiness to tap the Fed's discount window. The discount window provides ready access to liquidity, including when forms of market funding come under strain. But banks should do some preparation to be fully ready to tap the window. That includes pre-positioning collateral and testing discount window usage. While banks do their part to get operationally ready, we at the Federal Reserve also need to continue to improve discount window operations.

Bank liquidity needs also relate directly to the evolution of the Federal Reserve's balance sheet. The Fed's Senior Financial Officer Survey shows that banks now prefer to

[5] I have discussed the importance of prudent liquidity risk management in a number of previous speeches; see, for example, Michael S. Barr (2023), "The Importance of Effective Liquidity Risk Management," speech delivered at the ECB Forum on Banking Supervision, Frankfurt, Germany, December 1, https://www.federalreserve.gov/newsevents/speech/barr20231201a.htm.

manage to higher reserve levels than they did pre-COVID, with several citing the March liquidity stress as a significant driver.[6]

Right now, the Federal Reserve is implementing monetary policy with plentiful reserves in the system, even as we continue to run down the balance sheet with sizable securities redemptions every month. This process has been operating smoothly. So far, balance sheet asset reduction has largely been accompanied on the liability side of our balance sheet by large declines in overnight reverse repurchase agreement (ON RRP) usage, rather than reductions in reserves. Since the ON RRP remains sizable, we still have a buffer before reserves begin to decline in a meaningful way.

The FOMC reiterated in May 2022 that it plans to operate monetary policy with an ample-reserves regime over time.[7] As many market commentators have pointed out, it may be difficult to determine what level of reserves is consistent with "ample." The market dynamics from September 2019 illustrate this; when repo rates spiked and these pressures spilled over into the federal funds market, the Fed had to rapidly ramp up operations to add reserves to the banking system. This episode was a factor leading to the establishment of the standing repo facility, which, along with the discount window, will help dampen pressures that could emerge in short-term money markets.[8] I am

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[6] See Board of Governors of the Federal Reserve System (2023), *Senior Financial Officer Survey Results* (Washington: Board of Governors, September), https://www.federalreserve.gov/data/sfos/files/senior-financial-officer-survey-202309.pdf; Board of Governors of the Federal Reserve System (2023), *Senior Financial Officer Survey Results* (Washington: Board of Governors, May), https://www.federalreserve.gov/data/sfos/files/senior-financial-officer-survey-202305.pdf.

[7] See Board of Governors of the Federal Reserve System (2022), "FOMC Communications Related to Policy Normalization," webpage, https://www.federalreserve.gov/monetarypolicy/policy-normalization.htm. Note that the original statement was in January 2019; see Board of Governors of the Federal Reserve System (2019), "Statement Regarding Monetary Policy Implementation and Balance Sheet Normalization," press release, January 30, https://www.federalreserve.gov/newsevents/pressreleases/monetary20190130c.htm.

[8] Both the standing repo facility and the FIMA repo facility were established in July 2021; see Board of Governors of the Federal Reserve System (2021), "Statement Regarding Repurchase Agreement

pleased to see that there has been a steady growth in the number of firms signed up for the facility, and that current bank counterparties to the facility engage in regular testing as a part of maintaining access.

Despite these improvements in our tools, it is also important to closely monitor market conditions well *before* pressures emerge. There are a variety of market indicators that we can track closely to assess whether banks are beginning to have difficulty accessing reserves in a way that could affect the constellation of short-term rates. We are also watching for signs of frictions in the redistribution of reserves that may not be immediately evident in wholesale funding markets. These frictions could result from a variety of factors including the fact that smaller banks generally have a less diverse array of wholesale market funding options to tap when they need to bolster reserve positions. So we will be approaching these questions carefully. The Committee is planning to begin in-depth discussions of balance sheet issues soon.

In conclusion, I hope my remarks have given you a sense of how I view the current state of the economy as well as the path that has gotten us here. Economic healing is helping us to lower inflation while growth remains solid. That is to the great benefit of the American people. The banking sector is sound, and I am focused on ensuring its continued resiliency. One aspect of this work is carefully examining the links between bank liquidity, market functioning, the Federal Reserve's liquidity provision, and the evolution of our balance sheet.

Thank you.

Arrangements," press release, July 28, https://www.federalreserve.gov/newsevents/pressreleases/monetary20210728b.htm.