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Managing Financial Crises

Remarks by

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Thank you for the opportunity to speak to you today.¹ I note that the objectives of the Program on Financial Stability include “supporting the world’s financial authorities in refining proven crises management tools and strategies.”² Speaking as a representative of one of those authorities, I thought I would further the program’s goals by focusing these remarks on the principles and practice of crisis management. I am favored in that task with what one might call the luck of having been regularly confronted with crises in each of my three stints as a public servant, over a career divided between government and academia. In noting how often my arrival in government was accompanied by crisis, it might be reasonable to wonder if this is correlation or causation.

Kidding aside, crisis management is central to all management because it demands the very best from managers when it is most needed. Anyone who spends time in government can expect that some of the most memorable and challenging experiences will be managing through tough situations, when the answers to problems are unclear but the mission of the organization comes into acute focus. The financial system is in a perpetual state balancing risk and reward. Sometimes the system falls out of balance, and vulnerabilities turn into stress or even crisis. This moment is when it is crucial to mitigate spillovers from the financial system that can hurt businesses and households and wreak havoc on the economy at large.

Some of the most important features of modern economies were developed to prevent and mitigate financial crises. The first central banks, and eventually the Federal Reserve, were created to provide stable currencies and banking systems in support of the long-term stability of the provision of credit necessary to foster growth and rising living standards. Regulation of

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

² See Yale School of Management, Program on Financial Stability (2025), “About the Yale Program on Financial Stability,” webpage, paragraph 1, <https://som.yale.edu/centers/program-on-financial-stability/about>.

financial markets, regulation and supervision of banks, federal deposit insurance, and laws to protect investors, consumers, and businesses were developed over time to promote both financial stability and durable economic growth. I have spoken previously about how monetary policy and financial stability are inextricably linked and how the tools we use to conduct monetary policy and support financial stability work together.³

In the spring of 2023, the United States faced the prospect of a spiraling stress event, when poor management and excessive risk-taking by Silicon Valley Bank (SVB) led to a run that quickly spread to other banks and threatened the wider banking system. Shortcomings in supervision and gaps in the regulatory framework also contributed to SVB's failure, and I've spoken about the steps the Federal Reserve has taken to improve supervision and other steps to close regulatory gaps.⁴ Today, I'd like to talk about how effective management of the banking stress in the spring of 2023 helped prevent that event from spiraling into a financial crisis.

Given our student audience, I will begin with a little background on how I got into the crisis management business. After Yale Law School and two court clerkships, I worked at the State Department and then went to work for Treasury Secretary Bob Rubin in 1995. When I arrived, the Treasury Department had helped Mexico deal with a financial crisis that threatened to spread to the United States, and additional crises were to come in 1997 in Asia and in 1998 in

³ See, for example, Michael S. Barr (2023), "Monetary Policy and Financial Stability," speech delivered at the Forecasters Club of New York, New York, October 2, <https://www.federalreserve.gov/newsevents/speech/barr20231002a.htm>; and Michael S. Barr (2024), "The Intersection of Monetary Policy, Market Functioning, and Liquidity Risk Management," speech delivered at the 40th Annual National Association for Business Economics (NABE) Economic Policy Conference, Washington, February 14, <https://www.federalreserve.gov/newsevents/speech/barr20240214a.htm>.

⁴ See Michael S. Barr (2023), "Supervision and Regulation" testimony before the Financial Services Committee, U.S. House of Representatives, Washington, May 16, <https://www.federalreserve.gov/newsevents/testimony/barr20230516a.htm>. Also please see Michael S. Barr (2024), "Supervision with Speed, Force, and Agility," speech delivered at the Annual Columbia Law School Banking Conference, New York, February 16, <https://www.federalreserve.gov/newsevents/speech/barr20240216a.htm>. For more on bank supervision, see "Understanding Federal Reserve Supervision," available on the Federal Reserve Board's website at <https://www.federalreserve.gov/supervisionreg/understanding-federal-reserve-supervision.htm>.

Russia. Together, these events credibly threatened a worldwide financial crisis, which was averted by a response across the U.S. government and coordinated with governments and lending institutions around the world. I left government for academia in 2001 and then returned to Treasury in 2009 under Secretary Tim Geithner, in the midst of the Global Financial Crisis (GFC). I worked to develop what became known as the Dodd-Frank Act. This law was a pivotal component of our response to the GFC by addressing gaps in financial market oversight, including through strengthened regulation and supervision of banks that increased the safeguards against the excessive risk-taking that caused the crisis. I went back to academia again in 2011 and then returned to public service as the Federal Reserve Board's Vice Chair for Supervision in July 2022. In this position, I oversaw the response to the bank failures in March 2023 and have helped develop ways to reduce these and other risks going forward.

The March 2023 Banking Stress

Let me review some facts about what happened, so you can understand the context for how we put crisis management principles and practices to work.

SVB failed because of a textbook case of mismanagement of interest rate and liquidity risk.⁵ This mismanagement made uninsured depositors lose confidence in the bank's solvency, so they ran. While this was a textbook case, the speed and severity of the run were unprecedented. The largest previous bank failure before SVB was of Washington Mutual in

⁵ See Board of Governors of the Federal Reserve System, Office of Inspector General (2023), *Material Loss Review of Silicon Valley Bank* (Washington: September 25), <https://oig.federalreserve.gov/reports/board-material-loss-review-silicon-valley-bank-sep2023.pdf>. Immediately following SVB's failure, Chair Powell and I agreed that I should oversee a review of the circumstances leading up to SVB's failure. We published the results of this review on April 28, 2023; see Board of Governors of the Federal Reserve System, *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>.

2008.⁶ The accumulation of stresses that resulted in Washington Mutual's failure occurred over several weeks. By contrast, SVB's deposit outflows were much greater in both relative and absolute terms, and they occurred in less than 24 hours. On top of that, the bank had major gaps in its liquidity risk management, including its preparedness to tap contingency liquidity.⁷

Because this discussion is for future first responders, I will share with you some detail about what it's like to be on the front lines working to address a bank run. On the morning of Thursday, March 9, 2023, SVB had only a little over \$5 billion in collateral pledged to the discount window, as compared to over \$150 billion in uninsured deposits.⁸ Around midday, the firm contacted the Federal Reserve, indicating that it wanted to take out a discount window loan against this collateral, and the loan was granted. But in the next several hours, its account was drained as its deposit outflows spiraled. In the late afternoon, the firm indicated that it would need additional liquidity to meet expected outflows. The Federal Reserve worked with the firm to help it identify additional assets it could pledge to the discount window, but SVB was unsuccessful in identifying and moving sufficient collateral. Fed staff worked with the firm through the night to establish ad hoc collateral arrangements, so that the firm could tap the discount window further to meet its liquidity needs in the morning.

While this process was happening overnight, however, the volume of online deposit withdrawal requests was growing, such that SVB management expected outflows of over

⁶ See National Commission on the Causes of the Financial and Economic Crisis in the United States (2011), *The Financial Crisis Inquiry Report* (Washington: Financial Crisis Inquiry Commission, January), <https://www.govinfo.gov/content/pkg/GPO-FCIC/pdf/GPO-FCIC.pdf>; and Federal Deposit Insurance Corporation (2017), *Crisis and Response: An FDIC History, 2008–2013* (Washington: FDIC), <https://www.fdic.gov/publications/crisis-and-response-fdic-history-2008-2013>.

⁷ For instance, the bank failed its own internal liquidity stress tests and did not have workable plans to access liquidity in times of stress. The bank changed its own risk-management assumptions to reduce how these risks were measured rather than fully addressing the underlying risks. See *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank* (note 5).

⁸ See *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank* (note 5).

\$100 billion the next day, an unprecedented sum.⁹ Even if the bank were able to pledge all collateral available that morning to the discount window, the firm would not have been able to meet its obligations. It was not viable. The state of California closed the bank and turned it over to the Federal Deposit Insurance Corporation (FDIC) for resolution.

SVB's failure contributed to the strains at FDIC-supervised Signature Bank, and that bank failed in short order. As the situation intensified, the effects on businesses and households became increasingly apparent. Critically, these failures caused a reassessment of the viability of uninsured deposits as a funding source across the banking system. But strains at other banks materialized despite material differences between these firms. The rapidity of equity market price declines for several banks triggered repeated trading halts for their shares. Online deposits began to migrate out of smaller banks to larger banks, putting pressure on these smaller institutions.¹⁰ Commercial customers that had remaining deposits at SVB after it failed realized that they would not have access to their deposits and thus wouldn't be able to make payroll or even stay in business.¹¹

The severity and rapidity of the spread of stress warranted a decisive response. We developed a two-part strategy that weekend.

On March 12, the Treasury Secretary, the FDIC, and the Federal Reserve announced that the FDIC would protect uninsured deposits at SVB and Signature Bank under the systemic risk

⁹ See *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank*, p. 7 (note 5).

¹⁰ See Stephan Luck, Matthew Plosser, and Josh Younger (2023), "Bank Funding during the Current Monetary Policy Tightening Cycle," Federal Reserve Bank of New York, *Liberty Street Economics* (blog), May 11, <https://libertystreeteconomics.newyorkfed.org/2023/05/bank-funding-during-the-current-monetary-policy-tightening-cycle>.

¹¹ See Berber Jin, Katherine Bindley, and Rolfe Winkler (2023), "After Silicon Valley Bank Fails, Tech Startups Race to Meet Payroll," *Wall Street Journal*, March 11, https://www.wsj.com/articles/after-silicon-valley-bank-fails-tech-startups-race-to-meet-payroll-4ebd9c5c?mod=article_inline.

exception to least-cost resolution.¹² This action essentially implied that all depositors, insured and uninsured, would have access to their deposits Monday morning. And the step helped calm uninsured depositors around the country.

Also on March 12, the Federal Reserve established the Bank Term Funding Program (BTFP) under its emergency lending authority with the approval of and a backstop from the Treasury.¹³ The BTFP's terms and conditions addressed the fundamental source of banking-sector jitters: questions about the ability of a range of banks to hold onto their high-quality securities that had lost value because of interest rate increases. Unrealized losses on securities portfolios were a problem for many banks, particularly when the stability of their deposit bases came into question. The BTFP provided stable funding for these high-quality assets, addressing these concerns. Specifically, the BTFP provided one-year loans to banks in sound financial condition against Treasury securities and agency securities, valued at par.

By doing so, the BTFP addressed banks' immediate concerns about the stability of their funding and mitigated the risk that banks would be forced to liquidate assets in a fire sale, locking in losses. BTFP advances provided confidence that banks would have sufficient funding to retain the securities on balance sheet. The program supported confidence among depositors that their banks would have ready access to sufficient cash to meet their needs, thus helping reduce concern that a self-fulfilling panic could cause additional bank runs.

¹² See Department of the Treasury, Board of Governors of the Federal Reserve System, and Federal Deposit Insurance Corporation (2023), "Joint Statement by Treasury, Federal Reserve, and FDIC," joint press release, March 12, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20230312b.htm>.

¹³ See Board of Governors of the Federal Reserve System (2023), "Federal Reserve Board Announces It Will Make Available Additional Funding to Eligible Depository Institutions to Help Assure Banks Have the Ability to Meet the Needs of All Their Depositors," press release, March 12, <https://www.federalreserve.gov/newsevents/pressreleases/monetary20230312a.htm>; and Board of Governors of the Federal Reserve System (2025), "Bank Term Funding Program," webpage, <https://www.federalreserve.gov/financial-stability/bank-term-funding-program.htm>.

Usage of the BTFP was widespread across the banking sector, both in terms of actual usage and from a contingency standpoint. For example, at its peak, BTFP borrowing exceeded \$160 billion, and collateral posted to the BTFP reached nearly \$540 billion, suggesting that banks saw value in being prepared and having capacity to tap the facility if necessary. Over 1,800 institutions borrowed from the program, and the bulk of the borrowing was among institutions with less than \$10 billion in assets. These smaller institutions took out 50 percent of loans by value and nearly 95 percent of loans by volume. Fed staff analysis showed the usage was more likely among institutions that had experienced deposit outflows, but usage was also widespread at firms that did not experience outflows. The broad-based actual and contingency use was consistent with Federal Reserve communications that the program was part of prudent liquidity management and that we encouraged all depository institutions to use the program. Now, about two weeks before all remaining outstanding BTFP loans are set to mature, the program is down to less than \$200 million, and the program has experienced no losses.¹⁴

Our response to the stress worked. After the announcement of the systemic risk exception and the BTFP in early March, signs of broad-based contagion subsided, and the system stabilized. While in the first two weeks of March midsize and regional banks experienced significant outflows of deposits, the acute phase of outflows had eased by the end of the month. Stability among banks that had earlier come under pressure didn't mean that every bank found its footing, but the process of dealing with balance sheet gaps was much smoother and spillovers remained contained. By the fall of that year, deposit flows had fully stabilized and midsize and regional banks saw deposit inflows on net.

¹⁴ See Board of Governors of the Federal Reserve System (2025), Statistical Release H.4.1, "Factors Affecting Reserve Balances of Depository Institutions and Condition Statement of Federal Reserve Banks" (February 20), <https://www.federalreserve.gov/releases/h41/20250220>.

Managing Additional Stress beyond Silicon Valley and Signature Banks

While the announcement of the systemic risk exception and the BTFP on March 12, 2023, helped stabilize banks in the United States, we were also continuing to manage stress in the global financial system in cooperation with relevant authorities.

Credit Suisse, a Swiss global systemically important banking organization, had been experiencing stress over several years before March 2023, with doubts about its future viability after the Archegos Capital Management and Greensill Capital scandals had tarnished its reputation and raised doubts about its business model. Stress and outflows at Credit Suisse picked up in the fall of 2022, and we spent many months working with Swiss, European, and U.K. regulators on how to manage the growing issues, including war-gaming potential resolution scenarios. Concerns about the firm’s viability accelerated on March 9, 2023, when it was forced to announce that its internal controls over financial reporting were ineffective and had been for several years. Though Credit Suisse continued to operate, it became apparent that the firm was in trouble in the week following the failures of SVB and Signature Bank.

Just one week after SVB failed, Swiss authorities arranged for Credit Suisse to be acquired by UBS in a weekend deal that involved triggering Credit Suisse’s contingent convertible capital instruments, a severe dilution of shareholders, and the removal of senior bank management, as well as emergency liquidity support and extraordinary loss sharing from the Swiss government.¹⁵ In a sense, Credit Suisse had failed very slowly over many months—even years—and then all at once.

¹⁵ See 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>.

The combination of these events involved coordination across U.S. and foreign jurisdictions, with careful monitoring and cooperation to identify risks to financial stability and to monitor spillovers to the U.S. and European banking systems.

Back in the United States, we worked with our domestic counterparts as a handful of additional banks remained under pressure in the months that followed. Notably FDIC-supervised First Republic Bank was closed on May 1, 2023. First Republic had also experienced tremendous stress in March, as it suffered deposit outflows of nearly 20 percent in a single day.¹⁶ First Republic withstood these outflows in part because of significant discount window lending, as well as the extraordinary coordination among several other banks that placed significant deposits at the bank—worth \$30 billion. But over time, it became clear that First Republic’s rapid and large deposit outflows and unrealized losses on loans and securities would lead to its failure as well.¹⁷

While these were the events that got the headlines, the Federal Reserve continuously monitored other banks with potential balance sheet vulnerabilities, including those with gaps in interest rate and liquidity risk management, as well as significant exposures to office commercial real estate. We worked with these firms to ensure they addressed their vulnerabilities, while they bolstered their liquidity positions to manage potential stress. For example, overall, from March 2023 to March 2024, banks of all sizes and condition, including many not under direct stress, pledged more than \$1 trillion in additional collateral to the discount window. Banks and supervisors took a wide variety of steps to shore up resilience throughout the system.

¹⁶ See Michael S. Barr (2024), “On Building a Resilient Regulatory Framework,” speech delivered at Central Banking in the Post-Pandemic Financial System 28th Annual Financial Markets Conference, Federal Reserve Bank of Atlanta, Fernandina Beach, Florida, May 20, <https://www.federalreserve.gov/newsevents/speech/barr20240520a.htm>.

¹⁷ See Federal Deposit Insurance Corporation (2023), *FDIC’s Supervision of First Republic Bank*, (Washington: FDIC, September 8), <https://www.fdic.gov/news/press-releases/2023/pr23073a.pdf>.

Principles and Practices for Managing Financial-Sector Stress

When a crisis hits, the stakes are high. In the GFC, millions of Americans lost their homes, their jobs, and their dreams for their futures, when savings for education and retirement disappeared with the collapse of asset prices.¹⁸ The contraction in credit hurt small businesses and families all across the country. When banks can't carry out their role in supplying credit to those who need it, the effects are severe and widespread.

With those stakes in mind, here are five key principles that I learned in my experiences managing financial crises.

First, crisis response needs to be forceful. The factor that transforms a series of unfortunate events into a self-sustaining crisis is the belief that there is no end in sight and no prospect of a sufficient response. While we could debate whether every aspect of the GFC response was necessary, one clear lesson from this experience, and from other crises I have been involved in, is how important it is that the response be forceful enough to convince market participants and the broader public that there is a capability and the will to overcome the crisis.

A second principle is that the response should be proportionate. While a forceful response is important to bolster confidence in the prospects for gaining control over the crisis, the response also must avoid shaking confidence by suggesting that conditions are worse than they seem. In a crisis, information is spread unevenly. A response that is out of proportion—for example, by touching aspects of the financial system not considered endangered—can be misinterpreted as providing vital information about the extent of vulnerabilities.

Another key component of crisis management is the need to engage in decisionmaking amid significant uncertainty. I explained how the response needs to be both forceful and

¹⁸ See National Commission on the Causes of the Financial and Economic Crisis, *The Financial Crisis Inquiry Report* (note 6).

proportionate. Finding this balance requires making tough judgments amid rapidly evolving conditions. Crisis managers need to make consequential decisions quickly with the recognition that their understanding of the facts is incomplete. Even the best of efforts to understand what is happening and what is needed will be unsatisfactory in the moment. Decisionmaking under these conditions takes some courage. It also takes humility: the ability to listen to others around you, gather different perspectives, and weigh the imperfect information in real time.

A fourth principle is the need for clear communication—internally to the teams working on the response and externally to the public. And these communications need to be consistent with each other and with the values of the institution, even if tailored to the particular audience. Clear internal communication provides direction to the crisis response teams and facilitates coordination across relevant public-sector actors. Clear external communication, when grounded in a realistic assessment of the situation, can calm markets and reassure the public about the strategy. And clear communication is a two-way street: It involves listening to internal and external perspectives, as well as speaking in a way that can be heard.

And that brings me to the fifth principle I would cite, which is accountability. Financial crises come about because of a lack of confidence in counterparties and among other participants in the financial system. It is crucial for crisis responders to be credible and accountable not only for assessing the root causes of the crisis, but also for addressing these causes and the aftermath. That requires staying focused on the long-term goals for reform even as crisis management remains critically important and urgent.¹⁹

¹⁹ I have discussed some thoughts on leadership attributes in previous speeches, including here: Michael S. Barr (2024), “Commencement Remarks,” delivered at the American University School of Public Affairs Graduation Ceremony, Washington, May 10, <https://www.federalreserve.gov/newsevents/speech/barr20240510a.htm>.

Practices for Effective Management under Periods of Stress

These are important principles, and I will talk a little bit about some of the practices we used as we were guided by these principles. One crucial component of successful management of a stress event is to gather the most relevant information as quickly as possible. In a large and complex organization, it is necessary to overcome barriers to information flow across functions. In the case of the March 2023 banking stress, we drew from across the functions of the central bank to gather real-time information necessary to assess the severity of the conditions facing troubled institutions and also to identify potential levers of response.

Supervisors generally have real-time information from a bank as it undergoes stress, but this information needs to be put into context with foundational knowledge about the firm, such as the current structure of its balance sheet and typical payment flows. While we managed an influx of reports about deposit flows at banks, it was important to be able to immediately put the size of the outflows in context and corroborate anecdotal reports against multiple sources, including from our own systems. Our next step is to assess a firm's capacity to weather additional stress. First responders can assess if the firm has maximized the liquidity potential of its assets, including through its relationships with liquidity providers. And one needs to assess these firms' connections to the rest of the financial sector and identify interlinkages and spillovers. Leaning on experts who engage in broader monitoring of financial markets and engage in outreach with well-established contacts can be important. A team of staff who have the capacity to think broadly across the institution and draw on the partnerships they have built with a range of business lines is necessary to support the kind of information gathering and strategizing that are crucial for consequential decisions. This is why an institutional culture that

supports curiosity and openness to ideas and inquiry from the most junior to the most senior staff is foundational.

Earlier I mentioned the principle of needing to be accountable to the public about the sources of the crisis and to address the underlying vulnerabilities that led to it. On March 13, 2023, in consultation with Chair Powell, I requested a review of the failure of SVB. Self-evaluation is the first step in any sound risk-management framework. Experienced career staff from across the Federal Reserve System who were not involved in SVB's supervision reviewed the reasons for the bank's failure.²⁰ The review helped identify where the supervisory and regulatory functions of the Federal Reserve could be improved. Additional reviews by external independent parties, which we welcomed, reached similar conclusions.²¹ More broadly, carefully considering the underlying vulnerabilities that contributed to the stress helped the Fed develop proposals for how the supervisory and regulatory framework could be improved.²²

Conclusion

No leader looks forward to managing through a crisis, but those who hope to be good leaders need to be good crisis managers. These are skills that are most effectively developed through hard experience, but we can also learn from those who have gone through the experiences. In my case, the lessons of dealing with financial crises as a government official have revealed to me some basic principles that I believe can be useful to crisis managers. I have also learned that the best crisis management occurs beforehand, by strengthening rules and

²⁰ See Board of Governors of the Federal Reserve System (2023), Vice Chair Barr for Supervision's "Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank - April 2023: Key Takeaways," webpage, <https://www.federalreserve.gov/publications/2023-April-SVB-Key-Takeaways.htm>.

²¹ See Government Accountability Office (2023), "Bank Regulation: Preliminary Review of Agency Actions Related to March 2023 Bank Failures" (Washington: GAO, May 11), <https://www.gao.gov/products/gao-23-106834>; and Board of Governors, Office of Inspector General, *Material Loss Review* (note 5).

²² See Barr, "On Building a Resilient Regulatory Framework" (note 16).

norms and other structures meant to reduce the risk of a crisis in the first place and by fostering organizational values and culture that will help manage a crisis when it comes.

Thank you.ⁱ

ⁱ Note: On February 25, 2025, the announcement date of the Bank Term Funding Program's creation was updated to March 12, 2023.