Section 2: Introduction and Background

Introduction

The Federal Deposit Insurance Corporation was established in 1933 in response to widespread bank runs and bank failures that inflicted severe damage on the U.S. economy.¹ Although many banks have failed since, with the advent of FDIC insurance all insured deposits have been fully protected.

The events of March 2023 were a reminder that the risk of bank runs can still be consequential. Runs by uninsured depositors caused the failures of Silicon Valley Bank and Signature Bank, respectively the second and third largest bank failures in the FDIC's history at the time. On March 12, 2023, the Secretary of the Treasury, acting on the recommendations of the FDIC and the Federal Reserve and after consultation with the President, invoked the statutory systemic risk exception to protect all depositors in connection with each of the two failures.2 On the same day, the Federal Reserve announced the creation of the Bank Term Funding Program to lend to depository institutions at par against eligible collateral.³ The agencies took these actions to protect the U.S. economy by strengthening public confidence in the banking system.

These and subsequent events have stimulated a robust policy discussion about whether changes to the U.S. federal deposit insurance system are needed to ensure that it continues to achieve the important objectives that Congress established. These include promoting public confidence in the banking system and supporting financial stability, protecting small savers, and containing the cost of the deposit insurance system through regulation, supervision, deposit insurance pricing, and insurance fund management.

This report describes options for reform of the deposit insurance system and tools that can be used to complement the system. The proposed options require an act of Congress, though some aspects of the report lie within the scope of FDIC rulemaking authority.

The events of March 2023 have also stimulated discussion of whether changes are needed to the framework of bank supervision and regulation. These issues merit serious attention. Recommendations regarding specific changes to supervision and regulation are, however, beyond the scope of this report.

¹The current deposit insurance requirements are outlined in the Federal Deposit Insurance Act, 12 U.S.C. 1811, et seq.

²⁴Joint Statement by the Department of the Treasury, Federal Reserve, and FDIC," press release, March 12, 2023, https://www.fdic.gov/news/press-releases/2023/

³Board of Governors of the Federal Reserve System, "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, 2023, https://www.federalreserve.gov/ newsevents/pressreleases/monetary20230312a.htm.

Background

The conditions that led to the failure of Silicon Valley Bank and Signature Bank, the decision to make systemic risk determinations in connection with the two failures, and the establishment of the Federal Reserve's special liquidity program provide important context for the remaining discussion in this report.

The Bank Failures of March 20234

On March 8, 2023, Silvergate Bank, with about \$11.3 billion in assets at year-end 2022, announced that it would wind down its operations and self-liquidate. In retrospect, this announcement was a precursor to the events of the next few days. Silvergate had a business model focused on providing services to digital asset firms. From year-end 2018 through yearend 2021, Silvergate grew its assets eightfold, from about \$2 billion to about \$16 billion. The bank's asset growth was funded by uninsured deposits, which at year-end 2021 comprised about 98 percent of its deposits. Amid concerns about market developments regarding digital assets, in the fourth quarter of 2022 Silvergate experienced a significant outflow of deposits (including from the digital asset exchange FTX). To cover deposit withdrawals, Silvergate sold debt securities, resulting in a net earnings loss of \$1 billion. On March 1, Silvergate reported that recent events raised concerns about its ability to operate as a going concern, and on March 8 it announced that it would self-liquidate.

Silicon Valley Bank (SVB) had assets of \$209 billion and deposits of \$191 billion as of year-end 2022. Its deposits were associated with commercial and private banking clients, mostly linked to businesses financed through venture capital. From year-end 2018 through year-end 2021, SVB almost quadrupled its asset size, with the growth funded almost entirely by uninsured deposits. On its year-end 2022 Consolidated Report of Condition and Income (Call Report), SVB reported that 94 percent of its domestic deposits were uninsured.

SVB also had substantial unrealized losses on securities, amounting to 104 percent of tier 1 capital as of year-end 2022. These losses represented the decrease in the fair value of long-maturity securities caused by the substantial increase in interest rates that occurred in 2022, which continued into 2023. The combination of large volumes of uninsured deposits and large amounts of underwater securities elevated the risk that the bank would be forced to sell securities at a loss to cover deposit withdrawals.

On March 8, the same day that Silvergate announced that it would self-liquidate, SVB announced a proposed offering of common stock and mandatory convertible preferred stock.5 The announcement noted that SVB had completed the sale of a substantial portion of its available-for-sale securities portfolio that day and reported that more than \$21 billion of securities had been sold at an after-tax loss of \$1.8 billion. The announcement, and warnings about SVB in social media posts by private investors, escalated uninsured depositor concerns about the bank: by the end of the day on March 9, \$42 billion in deposits had left the bank.6 The California Department of Financial Protection and Innovation closed the bank on Friday morning, March 10, and appointed the FDIC as receiver.

The FDIC's announcement on Friday morning of its appointment as receiver for SVB indicated that uninsured depositors of SVB would receive an advance dividend and a receivership certificate for the rest of their funds. This approach was less costly to the DIF than it would have been to fully protect all uninsured depositors. Under the statutory Least Cost Test, the FDIC could not protect uninsured depositors unless a systemic risk determination had been made by the Secretary of the Treasury, acting on the recommendations of the FDIC and the Federal Reserve, and after consultation with the President.

The announcement that the uninsured depositors of SVB had not been fully protected reverberated through

⁴Much of the information in this section is from "Recent Bank Failures and the Federal Regulatory Response," United States Senate Committee on Banking, Housing, and Urban Affairs, March 28, 2023, https://www.banking.senate.gov/hearings/recent-bank-failures-and-the-federal-regulatory-response, and "The Federal Regulators' Response to Recent Bank Failures," United States House of Representatives Financial Services Committee, March 29, 2023, https:// financialservices.house.gov/calendar/eventsingle.aspx?EventID=408664, and the accompanying written testimony.

⁵SVB Financial Group, "SVB Financial Group Announces Proposed Offerings of Common Stock and Mandatory Preferred Stock," press release, March 8, 2003, https://ir.svb.com/news-and-research/news/news-details/2023/SVB-Financial-Group-Announces-Proposed-Offerings-of-Common-Stock-and-Mandatory-Convertible-Preferred-Stock/default.aspx.

⁶ In early research, Cookson, Fox, Gil-Bazo, Imbet, and Schiller (2023) analyze the effect of social media on bank stock market losses, including those at SVB. FDIC, "FDIC Creates a Deposit Insurance National Bank of Santa Clara to Protect Insured Depositors of Silicon Valley Bank, Santa Clara, California," press release, March 10, 2023, https://www.fdic.gov/news/press-releases/2023/pr23016.html.

the financial markets on Friday and into the weekend and precipitated the failure of Signature Bank. Signature had year-end 2022 assets of \$110 billion and deposits of \$89 billion. Its business included a significant focus on the digital asset industry. Signature grew its assets about 2.5-fold from yearend 2018 to year-end 2021. Like SVB and Silvergate, its rapid growth was funded with uninsured deposits. Almost 90 percent of Signature's deposits at year-end 2022 were uninsured. Signature also had exposure to unrealized losses on securities amounting to about 32 percent of its tier 1 capital.

Like Silvergate, Signature began losing deposits in 2022 amid unfavorable developments in the digital asset industry. With the announcement of the failure of SVB on Friday, Signature experienced an acceleration of deposit outflows that had begun the previous day. It lost 20 percent of its deposits in a matter of hours on March 10 and had a negative balance with the Federal Reserve at the close of business. The New York State Department of Financial Services closed Signature on Sunday, March 12, and appointed the FDIC as receiver.8

Following these developments, the bank regulatory agencies had significant concerns that uninsured depositors would withdraw funds rapidly from other banks. The agencies had already received reports on March 10 from several institutions with large amounts of uninsured deposits that their depositors had begun to withdraw funds. 9 Cascading bank runs could have caused widespread losses to business payroll accounts and more widespread financial contagion.

The Treasury, FDIC, and Federal Reserve agreed that systemic risk determinations for both SVB and Signature Bank were in the public interest. These were announced on Sunday, March 12, and on the same day the Federal Reserve announced the establishment of the Bank Term Funding Program.¹⁰

The self-liquidation of Silvergate and the failures of SVB and Signature stemmed from a confluence of factors, some of which were common to each. All three banks grew extremely rapidly before they failed. Experience has shown that rapid growth using short-term funding is a risky business model. In effect, significant amounts of deposits at these banks behaved as short-term funding, rather than stable relationship deposits. All three also had varying degrees of exposure to unrealized losses in their securities portfolios. For these banks, the risk that securities would need to be sold at a loss to cover deposit withdrawals became a reality.

Finally, and of particular importance given the focus of this report on the deposit insurance system, the vast majority of the deposits of all three banks were uninsured.¹¹ For practical purposes, in terms of their potential exposure to depositor runs and consequent liquidity risk, these banks were in effect operating as uninsured institutions.

Susceptibility to Uninsured Deposit Runs May Have Increased

Abstracting from the specifics of the events of March 2023, several developments suggest that the banking system has evolved in ways that could increase its exposure to deposit runs. These developments include the amplification of concerns through social media and the speed of some depositor responses, the interaction of failure-resolution events and depositor behavior, and the increased volume and proportion of uninsured deposits in the banking system.

The risk of depositor runs is inherent in banking, where long-term assets are funded by short-term deposit liabilities. The FDIC was established largely in response to the widespread bank runs of the 1930s. Depositors who are unprotected by deposit insurance may consider moving their funds if they are concerned about the liquidity or solvency of their bank. If uninsured depositors believe that other depositors share their concerns and that a run on the bank and potential failure are imminent, then they may act quickly to withdraw their funds. Synchronous

^{*}FDIC, "FDIC Establishes Signature Bridge Bank, N.A, as Successor to Signature Bank, New York, NY," press release, March 12, 2023, https://www.fdic.gov/news/ press-releases/2023/pr23018.html.

⁹The March 31, 2023, Federal Reserve Statistical Release H.8, Tables 7 and 9, available at https://www.federalreserve.gov/releases/h8/20230331/h8.pdf, reported that in the week ending March 15, the 25 largest domestically chartered commercial banks in the United States gained \$120.2 billion in deposits, while smaller domestically chartered commercial banks in the United States lost \$184.6 billion in deposits.

^{10&}quot; Joint Statement by the Department of the Treasury, Federal Reserve, and FDIC," press release, March 12, 2023, https://www.fdic.gov/news/pressreleases/2023/pr23017.html.

¹¹ As noted earlier, the uninsured deposits of Silvergate were 98 percent of its deposits at year-end 2022. Subsequently, deposits decreased at the institution so that its proportion of uninsured deposits was much lower by the time it announced its self-liquidation.

deposit withdrawals may then force the liquidation of assets and cause the failure of the bank. A bank failure caused by a run can be a self-fulfilling prophecy.

It is important to recognize that insured depositors do not have an incentive to run based on fears that their deposits are at risk. For banks with material reliance on uninsured deposits, however, a scenario in which uninsured depositors become sufficiently concerned about their risk of loss could create the conditions for a run.

The ubiquity of social media and mobile banking may mean that bank runs, when they happen, happen faster. The role of social media in the SVB depositor run illustrates the dynamics that can arise. Social media posts advised depositors to withdraw funds from SVB, and uninsured depositors did so all at once. The concentration of these large deposits in technology industry firms and individuals who appear to have been part of closely overlapping virtual communities may have contributed to the synchronized nature of the deposit outflows.

Another consideration is that the law governing the FDIC's treatment of uninsured deposits in bank failures may influence how attuned uninsured depositors are to the possibility that they would incur losses in a bank failure. Before 1992, the FDIC was not subject to the Least Cost Test and therefore generally protected uninsured deposits. The Least Cost Test came into being with the Federal Deposit Insurance Corporation Improvement Act (FDICIA), implemented in 1992.12 It required the FDIC to resolve banks in a way that is least costly to the DIF, considering only the specific resolution transaction at hand. If covering the uninsured deposits is not least costly, as may be the case when the proportion of uninsured deposits is large, the FDIC cannot protect uninsured deposits without a systemic risk determination from the Secretary of the Treasury, acting on the

recommendations of the FDIC and Federal Reserve and after consultation with the President.

FDICIA's systemic risk determination process remained untested until 2008, when it was invoked to address distress at several large banking organizations. 13 The systemic risk determination process was also used to create the FDIC's Transaction Account Guarantee Program (TAG program) that extended temporary full deposit insurance coverage to noninterest-bearing transactions accounts.14 This use of the systemic risk determination process likely helped to ensure that uninsured deposit runs did not play an important destabilizing role in the 2008-2013 banking crisis.

Under the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act), 15 and as amended in 2020 by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), 16 the FDIC must obtain congressional approval for any widely available guarantee of the obligations of depository institutions or depository institution holding companies. 17 The FDIC has issued regulations applicable to certain large banks to facilitate its ability to make timely deposit insurance determinations in the event of failure.18 With these developments, it is possible that relative to the framework for handling uninsured deposits that existed in the past, sophisticated market participants could now be more attuned to the possibility of uninsured depositors incurring losses.

Another important consideration that may influence the likelihood of uninsured depositors running on their bank is the loss experience of uninsured depositors in earlier bank failures.19 The announcement of a resolution in which uninsured deposits are not fully protected may create concern among uninsured depositors at other banks, a dynamic that may be amplified by the rapid spread of information on social media.

¹² Pub. L. 102-242.

¹³Chapter 3 of FDIC (2017) provides detail on the use of the systemic risk exception for individual institutions during the 2008–2013 crisis.

¹⁴Additional detail about the FDIC's Transaction Account Guarantee Program can be found in Section 3 of this report.

¹⁵Pub. L. 102-242.

¹⁶ Pub. L. 116-136.

¹⁷For details, see 12 U.S.C. 5612.

¹⁸ See section 360.9 of the FDIC's regulations, titled "Large-Bank Deposit Insurance Determination Modernization," available at https://www.fdic.gov/regulations/ resources/largebankdim/08final717.pdf, and part 370 of the FDIC's regulations, titled "Recordkeeping for Timely Deposit Insurance Determination," available at $\underline{https://www.fdic.gov/regulations/resources/recordkeeping/index.html}.$

¹⁹ For a discussion of loss experience since 1992, see Section 3 of this report.

Finally, by several measures, the reliance on uninsured deposits by the banking system has increased, particularly among larger banks.

Banking System Reliance on Uninsured Deposits Is Increasing

Following the 2008–2013 banking crisis, the reliance by the U.S. banking system on uninsured deposits grew dramatically, both in dollar volume and as a proportion of overall deposit funding.²⁰ From year-end 2009 through year-end 2022, uninsured domestic deposits at FDIC-institutions increased at an annualized rate of 9.8 percent, from \$2.3 trillion to \$7.7 trillion.²¹ The trends are comparable when using alternative methods in calculating uninsured deposits.²² In 2022 inflation-adjusted dollars, the value of uninsured deposits peaked in 2021 and remained greater in 2022 than at any point in the FDIC's history prior to 2021.²³ The 2022 total value of uninsured deposits was more than five times its real value in 1990. As shown in Figure 2.1, the portion of all deposits uninsured at its peak in 2021 was at its highest level since 1949.

While many banks have increased their reliance on uninsured deposits, the trend has been most pronounced among the largest banks. Growing concentrations of uninsured deposits at large banks make the banking system potentially more vulnerable to depositor runs such as those in March 2023.

Figure 2.2 plots the share of banks with uninsured deposits greater than 50 percent of domestic deposits based on asset size. Due to consolidation of the banking industry over the period, asset size is shown using percentiles of the asset size distribution in

each period rather than asset thresholds, namely the top 1 percent, the top 10 percent, and the bottom 90 percent.²⁴ For context, at year-end 2022, the size cutoffs were \$57 billion for the top 1 percent and \$2.4 billion for the top 10 percent. The percentage of banks in the larger size groups that are reliant on uninsured deposits is increasing. For example, as of year-end 2009, 13 percent of banks in the largest asset size group had more than half their domestic deposits uninsured; at year-end 2022, 40 percent of those banks had uninsured deposits of more than half their domestic deposits.

Figure 2.2 also shows that a non-negligible share of banks in the top 10 percent asset size bucket had more than half of their domestic deposits uninsured. And among all FDIC-insured institutions, a meaningful degree of reliance on uninsured deposits is not uncommon: about 28 percent of FDIC-insured institutions had more than 33 percent of their domestic deposits uninsured at year-end 2022.

Uninsured deposits are disproportionally concentrated in the largest banks. At year-end 2022, banks in the top 1 percent of the asset size distribution held about 72 percent of deposits in domestic offices but about 77 percent of uninsured deposits in domestic offices. These uninsured deposits come from a small subset of deposit accounts: accounts with balances exceeding \$250,000 comprised less than 1 percent of all deposit accounts by number at year-end 2022.25 Banks in the top 1 percent by assets, however, held about 66 percent of all such large accounts.

Finally, since the onset of the COVID-19 pandemic, demand deposits as a share of domestic deposits have

²⁰The discussion in this section is focused on deposits in domestic offices of U.S. banks and the proportions of those deposits that are insured and uninsured. Deposits in foreign offices of U.S. banks are not insured by the FDIC. Some jurisdictions may provide some deposit insurance coverage of these deposits; the amounts of coverage, if any, vary by jurisdiction.

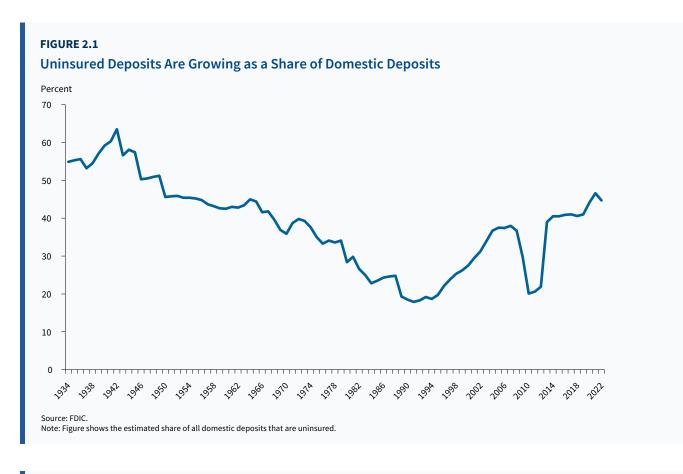
²¹The estimates used in this sentence are derived from FDIC Quarterly Banking Profile (QBP) 2010, Vol. 4, No. 1, Table I-B and QBP 2023, Vol. 17, No. 1, Table I-C. In this report, for purposes of analytical consistency over time, we calculate aggregate uninsured domestic deposits as domestic deposits minus estimated insured deposits. Because estimated insured deposits include selected deposit liabilities not included in reported domestic deposits, the calculation yields an estimate for uninsured deposits that is somewhat less than the total amount of uninsured deposits reported by banks. For example, at year-end 2022, banks reported \$8.2 trillion in uninsured domestic deposits. Generally, Call Report items do not match up with the 14 ownership rights and capacities used by the deposit insurance determination process.

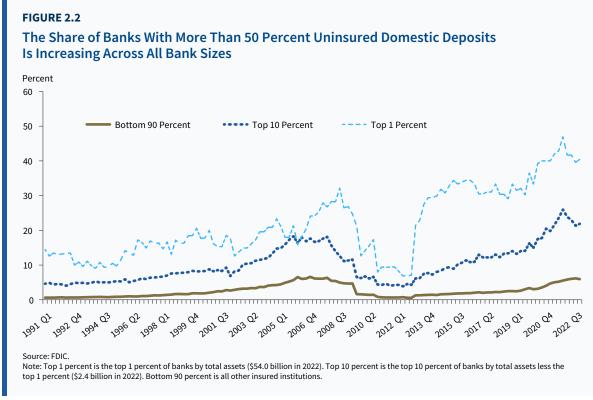
²²Estimated uninsured deposits that banks report may be inaccurate or inconsistent across quarters and institutions. There are at least three reasons the estimates may overstate the FDIC's exposure to uninsured deposits if a bank failure occurs. First, uninsured depositors typically flee institutions exhibiting deteriorating financial health. Second, some depositors reduce their balances or adjust their allocation of deposits across accounts to increase explicit deposit insurance coverage. Third, deposits that initially appear uninsured are actually insured once FDIC ownership rights and capacities are considered. It is also possible that uninsured deposits are understated if it is the case that deposits in accounts below the insurance limit are uninsured after aggregating to a depositor by ownership category at a bank.

²³ Estimates of uninsured deposits for this statement are from FDIC Annual Reports.

²⁴The trend line for the top 10 percent does not include the banks in the top 1 percent.

²⁵ Accounts with balances above the deposit insurance limit are not necessarily uninsured. For example, a brokerage sweep account at a bank could be very large while being fully insured to the individual sweep account customers.





increased sharply; demand deposits include both insured and uninsured deposits. Figure 2.3 shows that while the demand deposit share has increased for all bank asset sizes, the relative change has been greater for banks in the top 10 percent and top 1 percent of assets than it has for smaller banks. At year-end 2022, the top 1 percent of banks by assets had 32 percent of their deposits in demand accounts, up from 14 percent before 2020.

It is not clear whether the increase in the proportion of demand deposits will be an enduring structural

change or will prove to be a transitory effect of the deposit surge associated with the COVID-19 pandemic and the policies used to address it. Even if the trend of increasing demand deposits persists, its implications for the stability of deposits are unclear. As the March 2023 events demonstrated, experience with deposit outflows is not necessarily a reliable guide to the future. To the extent large demand deposits may be payroll or other business payment accounts, however, such deposits may be relatively more sensitive to adverse developments affecting banks.

