



What to do About Uninsured Deposits?

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Executive Summary

Recent disorderly failures of certain regional banks, notably SVB and Signature Bank, were caused largely by very rapid runoffs of uninsured deposits. Those two banks were unusually dependent on such deposits¹, and their deposits seem to have been unusually concentrated by size and industry.² This note uses call report data to examine the extent to which other U.S. banks were funded by uninsured deposits and the extent to which other banks suffered runoffs of uninsured deposits in the first quarter of 2023. It finds that many other U.S. banks, especially other large regional banks but also significant numbers of smaller banks, had uninsured deposits equal to a large share of their total deposits, but very few had shares anywhere near as large as those two failed banks. Furthermore, while some other U.S. banks, small and large, experienced significant runoffs of uninsured deposits in the first quarter, runoff rates varied widely and very seldom were more rapid than the runoff rates assumed in the liquidity coverage ratio (LCR) that is applicable to the very largest U.S. banks. Thus, broad application of new policies may not be needed to address risks to bank safety and soundness from uninsured deposits. Furthermore, given that uninsured deposits total about \$7 trillion (about 45 percent of all domestic deposits), broad application of such measures could require banks to make major balance sheet adjustments that almost surely would reduce credit availability to U.S. businesses and households.

An alternative approach would be for regulators to focus their attention on banks that are heavily dependent on uninsured deposits. They should require those banks to measure and monitor more effectively their reliance on the more unstable categories of uninsured deposits, such as wholesale nonoperational deposits, and to measure and monitor concentrations within those categories. Regulators could then use that information to develop enhanced supervisory and regulatory policies to promote reliable and well-diversified funding, including enhanced call report disclosures and possibly regulatory limits on the extent of reliance on, and concentration of, the more unstable categories. Such a targeted approach could improve safety and soundness while avoiding potential adverse effects on credit availability from implementing unnecessarily broad measures based on limited information. Whatever is done to discourage reliance on unstable categories of uninsured deposits, regulators should also take steps to ensure that banks are prepared to use the Federal Reserve's discount window when deposit outflows exceed reasonable expectations, to avoid the need for banks to tighten credit unnecessarily when outflows are experienced.

¹ SVB's call report for Dec. 31, 2022 shows that nearly 94 percent of its deposits were uninsured. The comparable figure for Signature Bank was nearly 90 percent. All the call report data used in this note were gathered from S&P Global Market Intelligence on Sept. 25, 2023.

² According to the FDIC's report on Signature Bank's failure, as of year-end 2021, "approximately 60 clients held deposit balances in excess of \$250 million, representing about 40 percent of total deposits. Digital asset-related deposits alone represented 27 percent of total deposits ..." The Fed's report on SVB did not quantify the degree of concentration but stated that "SVB's rapid failure can be linked directly to its concentration in uninsured deposit funding from the cyclical technology and VC sector ..." Information on concentration of deposits at other banks is not generally available, but it seems unlikely that concentration is so extreme at many other banks.

Reliance by U.S. Banks on Uninsured Deposits

Table 1 shows the shares of total domestic deposits at U.S. banks that were uninsured as of year-end 2022. Banks with \$1 billion or more in total assets are required to report an estimate of their uninsured deposits, and for those banks the reported estimates are used.³ Banks with total assets less than \$1 billion are not required to report an estimate of their uninsured deposits, but they are required to report the amount of deposit accounts with balances of \$250,000 or more and the number of such accounts. For those banks, the amount of uninsured deposits is estimated by deducting from the amount of such deposit accounts the number of such accounts times \$250,000. Across all reporting banks, these estimates indicate that about 45 percent of total domestic deposits were uninsured. As documented in a recent report by the FDIC, the share of uninsured deposits grew very rapidly in the 1990s, from less than 20 percent of domestic deposits at the beginning of the decade to around 40 percent at the end. The share rose further in recent years, to a peak share of nearly 47 percent in 2021.⁴ As shown in the first column, the methodology used in this note indicates that the total amount of uninsured deposits exceeded \$7 trillion at year-end 2022.

Table 1: Total Uninsured Deposits Ratio by Bank Size in 2022Q4

	Billions (\$)	Uninsured Deposits / Total Domestic Deposits (Percent)				
Size (# of Banks)	Uninsured Deposits	10 th Percentile	25 th Percentile	Median Values	75 th Percentile	90 th Percentile
<1B (3,042)	243.0	12.4	17.7	24.6	32.5	42.1
1-10B (652)	493.4	10.3	18.0	30.1	41.8	52.1
10-100B (100)	977.6	24.8	35.0	41.9	52.0	57.8
>100B (27)	5,523.2	18.1	32.5	48.6	67.2	92.8
Overall (3,821)	7,237.2	11.6	17.9	25.7	34.7	46.0

As shown in the rows of the table, larger banks (especially those with total assets of \$100 billion or more) tended to hold larger percentages of uninsured deposits than smaller banks. Those large banks included SVB and Signature Bank, each of which reported that around 90 percent of their total domestic deposits were uninsured. But significant shares of banks in all size groups held high percentages. For example, among banks with between \$1 and \$10 billion of total assets, uninsured deposits accounted for more than half of their total domestic deposits at more than 10 percent of those banks.

Runoffs of Uninsured Deposits in the First Quarter of 2023: Incidence and Analysis

Table 2 summarizes data from call reports on runoffs of uninsured deposits from Dec. 31, 2022 to March 31, 2023.⁵ The median runoff rate for all banks was 4.3% and the 90th percentile was 22.2%. Larger banks reported relatively

³ The fact that some banks reported major revisions to the estimates they first reported for the first quarter indicates that some banks and their regulators need to make greater efforts to ensure the reliability of these estimates.

⁴ FDIC, Options for Deposit Reform, May 1, 2023, 10. See figure 2.1.

⁵ Note that runoffs at SVB and Signature Bank are not included in these data because they failed prior to the March 31 call report date.

large runoffs somewhat more frequently than smaller banks. At the same time, some banks in all size categories received inflows of uninsured deposits in the first quarter. Inflows to large banks were widely reported at the time. But the 10th percentile figures show that inflows to large banks were rather modest, while 10 percent of banks in the smallest size categories were estimated to have received significant inflows. What comes through very clearly from the data in Table 2 is that across and within all size groups of banks, there was tremendous variation in runoff rates for uninsured deposits. While concerns about the stability of uninsured deposits are appropriate in light of the failures of SVB and Signature Bank, not all banks, even those for which uninsured deposits were a significant share of total deposits, proved equally vulnerable to runs on uninsured deposits. As the FDIC concluded in its report on the failure of First Republic Bank: “Uninsured deposits should not automatically be considered volatile; however, the historical and projected instability of uninsured deposits should be assessed.”⁶ A review of call report data seems the obvious place to begin such an assessment.

Table 2: Total Uninsured Deposits and Runoffs by Bank Size in 2023Q1

Size (# of Banks)	Billions (\$)	Runoff Rate (Percent)				
		10 th Percentile	25 th Percentile	Median Values	75 th Percentile	90 th Percentile
< 1B (3,032)	242.7	-17.4	-5.7	3.9	12.9	22.2
1-10B (574)	494.6	-16.5	-3.0	4.9	12.3	21.0
10-100B (100)	984.9	-4.4	1.6	7.6	13.8	27.3
>100B (25)	5,272.6	-2.0	2.5	5.2	15.8	37.6
Overall (3,731)	6,994.8	-17.0	-4.8	4.3	12.9	22.2

* SVB and Signature Bank are excluded because they failed prior to the March 31 call report date, as were other banks for which March 31 data were unavailable.

The LCR recognizes that a bank’s risk of rapid and sizeable deposit outflows depends on the type of depositor and on the reason why the deposits are being held. Deposits held by retail customers generally are more stable than deposits by businesses and other wholesale depositors. Among wholesale deposits, operational deposits are recognized as being more stable than nonoperational deposits.⁷ The LCR’s outflow assumptions for uninsured wholesale deposits are 25 percent for most operational deposits and 40 percent or even 100 percent for nonoperational deposits. These runoff assumptions seem quite conservative compared to the runoff rates shown above. To be sure, the runoffs at SVB, Signature Bank and First Republic⁸ exceeded those assumptions, but the vast

⁶ FDIC, FDIC’s Supervision of First Republic Bank, September 8, 2023, 30.

⁷ As defined in the U.S. rule implementing the LCR, “operational deposit means unsecured wholesale funding or a collateralized deposit that is necessary for the[bank] to provide operational services as an independent third-party intermediary, agent, or administrator to the wholesale customer or counterparty providing the unsecured wholesale funding or collateralized deposit.”

⁸ Its call reports indicate that First Republic’s uninsured deposits declined by more than 50 percent in the first quarter. The decline would have been significantly larger (on the order of 70-80 percent) if not for a deposit of \$30 billion by a consortium of major U.S. banks on March 16, 2023.

majority of banks likely had more retail or operational deposits or had nonoperational deposits were less concentrated by size or industry. Unfortunately, call reports do not collect data on the breakdown of wholesale deposits between operational and nonoperational deposits, even for the very largest banks or those most heavily dependent on uninsured deposits. A breakdown is available, however, from public disclosures regarding the LCR that a dozen or so large banks are required to make. Among those banks, the breakdown varies substantially because of fundamental differences in their business models. For example, at some of the custody banks, nearly all their deposits are wholesale deposits, and about two thirds of their wholesale deposits are operational deposits. The share of deposits that are operational deposits varies considerably and is smaller, often far smaller, across the other large banks that make public disclosures regarding their LCR ⁹ Nor do the call reports (or the LCR disclosures) provide any information of the concentration of uninsured deposits, other than the average balance in uninsured accounts, which is a very crude and limited measure of concentration.

Some Analysis of the Determinants of Variations Across Banks in Runoff Rates for Uninsured Deposits in the First Quarter of 2023

Certain data that are available in bank call reports can assist in explaining variations across banks in runoff rates of uninsured deposits under stress. Press reports and statements by regulators have suggested that the banks most susceptible to runs by uninsured depositors were those for which large shares of deposits were uninsured and whose capital had been depleted by losses on their holdings of fixed-rate securities. Accordingly, we regressed first quarter runoff rates on two variables: (1) the ratio of uninsured deposits to total domestic deposits and (2) tangible common equity ratios, adjusted for unrealized losses on holdings of securities. The results are shown in Table 3 below.

Table 3: Regression Results for Insured Runoff Rates

Constant	-2.486* (1.286)
Adjusted TCE Ratio	-0.525*** (0.110)
Share of Uninsured Deposits	0.333*** (0.029)
R-squared	0.065
Adjusted R-squared	0.064
No. observations	3,731
Robust Standard errors are reported in parentheses. *, **, *** indicates significance at the 90%, 95%, and 99% level, respectively. Note: Runoff rates, the TCE Ratio, and share of uninsured deposits are all in percent.	

⁹ See the comment letter that the custody banks (Bank of New York Mellon, Northern Trust and State Street) filed with the FDIC in response to the proposed rulemaking on Special Assessments Pursuant to Systemic Risk Determination, July 21, 2023, 6.

As expected, banks with lower adjusted tangible common equity ratios experienced higher first quarter outflows, as did those with greater reliance on uninsured deposits. However, while these relationships are statistically significant, they are quite weak. The estimated relationships imply that a bank with an adjusted TCE ratio 10 percentage points higher would be expected to experience a runoff rate only 5 percentage points lower and a bank with a share of uninsured deposits 10 percent higher would be expected to experience a runoff rate 3 percentage points higher. Consequently, as reflected in the R-squared of little more than 6 percent, these two variables explain little of the considerable variation across banks in runoff rates shown in Table 2 above. Surprised by these results, we also ran the same regressions for smaller groups of banks (those with total assets of \$1 billion or less, between \$1 billion and \$10 billion, and \$10 billion or above). The best fit was for the banks between \$1 and \$10 billion, for which the R-squared reached 15 percent. We also ran other regressions that added as explanatory variables other variables available on call reports, including the average size of uninsured deposits (a crude measure of concentration), the share of uninsured deposits that are brokered deposits, and the share of uninsured deposits held in retirement accounts. But none of these regressions explained significantly more of the variation in runoff rates. Furthermore, perhaps because the additional variables were correlated with the two variables included in the regression reported above, the two variables often were statistically insignificant and the signs of the coefficients sometimes were contrary to expectations. The bottom line is that we have been unable to explain very much of the considerable variation in first quarter runoff rates using data available from the call reports.

Policy Implications

Banking regulators clearly need to investigate more thoroughly the risks posed by excessive reliance on uninsured deposits, especially reliance on very large, concentrated deposits like those held by Signature Bank and SVB. Furthermore, while SVB and Signature Bank were relatively large banks with total assets greater than \$100 billion, the policy response needs to recognize that some small banks as well as large banks are heavily (and perhaps excessively) dependent on uninsured deposits. For example, uninsured deposits accounted for 50 percent or more of total deposits at 10 percent of banks with between \$1 billion and \$10 billion of total assets. If a small bank with such a degree of dependence were to fail, least cost resolution would almost surely require imposing losses on those uninsured depositors, which could spark runs on uninsured deposits at other banks. In principle, those other banks could meet the liquidity needs created by the runs by borrowing at the discount window. But we have learned that in practice many (perhaps most) banks are unprepared to use the discount window.¹⁰ Unprepared to borrow at the window, they would have no choice but to contract credit, creating the specter of a credit crunch. For these banks, in particular, regulators should apply significant pressure through regulatory policies and the examination process to ensure that the banks have sufficient collateral pre-positioned at the discount window.

Banking regulators also need to carefully consider the implications of policy changes designed to reduce reliance on uninsured deposits for banks' ability to meet demands for loans from businesses and households. While this is always true, it is especially important in this instance because of the magnitude of uninsured deposits, which totaled more than \$7 trillion at year-end. To be sure, banks invested much of the heavy pandemic-related inflows of uninsured deposits in US government securities (Treasuries and MBS), but the most of the increase in the share of uninsured deposits dates back to the 1990s. Call report data for March 31, 2023, calculating bank by bank and summing up, indicate that uninsured deposits exceed all U.S. government securities held available for sale by \$5 trillion and all U.S. government securities held AFS or held to maturity by \$3 trillion. Thus, to the extent that regulation incentivizes banks across the board to substantially reduce reliance on all types of uninsured deposits, banks might be under considerable pressure to reduce lending to U.S. businesses and households substantially. And, of course, if the policy adjustment were only to increase the assumed runoff rates for uninsured deposits in

¹⁰ Baer, Greg, Bill Nelson, Pat Parkinson, and Brett Waxman. "Improving the Government's Lender of Last Resort Function: Lessons from SVB and Signature Bank." Bank Policy Institute, April 24, 2023.

the LCR or other liquidity regulations, that would encourage banks to invest in larger, not smaller, shares of their balance sheets in U.S. government securities.

The principal conclusion we draw from the data and analysis above is that these call report data provide little insight into variations in runoff rates for uninsured deposits across banks. Given the importance of uninsured deposits as a funding source for the U.S. banking system, a graduated and differentiated approach to regulation of uninsured deposits is highly desirable and arguably essential if collateral damage to U.S. businesses and households is to be avoided. But that will require more information on the composition of uninsured deposits than is currently available and more analysis of that information.

Initially, better information probably is best gathered through the supervisory process. In his recent remarks, FDIC Chairman Gruenberg indicated that the FDIC has directed examiners to begin such efforts, albeit only at large regional banks:

More forward-leaning supervision of large regional banks is certainly a key lesson from the events earlier this year. In particular, the FDIC is reviewing whether its supervisory instructions on funding concentrations should be bolstered to better capture risks related to high levels of uninsured deposits generally or types of deposits more specifically, such as business operating account deposits. For example, FDIC examiner instructions could establish a specific threshold for concentrations of uninsured deposits, which would require examiners to devote supervisory attention to the concentration. Regulators and other stakeholders may also benefit from more granular, and more frequent, reporting of deposits. These are matters of priority attention for the FDIC.¹¹

We believe that any bank (large or small) whose uninsured deposits exceed some well-calibrated share of total domestic deposits (or total assets) should be required to maintain and make available to regulators disaggregated data on uninsured deposits that facilitate assessments of their stability. At a minimum, for each such bank, regulators need to know whether the uninsured deposits are retail or wholesale deposits, whether wholesale deposits are operational or nonoperational, and to what extent wholesale nonoperational deposits are concentrated. Those banks might be required to report those breakdowns to regulators on call reports, with a view toward eventual public dissemination of the information. For the deposit types that analysis suggests are most susceptible to runs (for example, wholesale nonoperational deposits), regulators could consider jointly proposing a rule limits a bank's total use of such unstable funding (as a percentage of total deposits or perhaps total assets), as well as a limit on a bank's reliance on unstable deposits by a small number of depositors.

Finally, as BPI has argued repeatedly, banks, banking regulators and the Federal Reserve must work together to ensure that banks are prepared to borrow from the discount window when liquidity pressures, whether from more rapid than expected runoffs of uninsured deposits or other sources, exceed expectations. The Federal Reserve and banking regulators also need to take steps to destigmatize discount window usage, so that banks are willing as well as able to borrow. The discount window is an essential pillar of stability supporting the banking system.

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¹¹ Gruenberg, Martin J., The Resolution of Large Regional Banks – Lessons Learned. Brookings Institution, Aug. 14, 2023. Note: Jose Tapia provided assistance with accessing and analyzing the data reported in this note.