Testimony of

Hal S. Scott

Emeritus Professor, Harvard Law School;

President of the Committee on Capital Markets Regulation

Before the

Subcommittee on Financial Institutions and Monetary Policy

of the

Financial Services Committee

United States House of Representatives

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Thank you, Chairman Barr, Ranking Member Foster, and members of this Subcommittee for inviting me to testify before you today on the topic of lender of last resort. My testimony today is my own and does not necessarily reflect the views of the Committee on Capital Markets Regulation or its members.

The lender of last resort ("LLR") function is of critical importance to the U.S. financial system. Before the creation of the Federal Reserve in 1913 and throughout the nineteenth century, U.S. banks underwent recurring liquidity crises – instances where banks, despite possessing assets greater than their liabilities, could not monetize their assets quickly enough to honor rapid withdrawals of their deposit liabilities. Without funding, the banking system could and did fail and the U.S. economy went into deep recession. After the panic of 1907, the Congress in 1913 created the Fed as the nation's first central bank and empowered it to extend emergency liquidity lending

to banks experiencing liquidity crises – i.e., to act as a lender of last resort to the banking sector. This was the original purpose of the Fed, before it undertook to conduct monetary policy. This role has often been controversial, since it involves public support of the private financial system. And this concern, which went back to the creation of the First Bank of the United States by Treasury Secretary Hamilton in 1791, was partly responsible for delaying the U.S. creation of a central bank long after central banks had been established in England and Europe.

Over the last century the lender of last resort function has remained a central part of the Fed's mission. Congress has periodically expanded the Fed's lender of last resort powers including by increasing the Fed's discretion to set the terms of LLR lending and granting it certain powers to lend to the non-bank sector. But concern with lending to non-banks during the great financial crisis of 2007-2008, particularly to AIG, led to certain restrictions being placed on the Fed in lending to that sector under the Dodd-Frank Act.

The 2023 banking crisis and the 2020 COVID crisis each revealed vulnerabilities in the current design and application of the lender of last resort function. In the case of the 2023 banking crisis, Silicon Valley Bank ("SVB"), the 16th largest bank in the United States, entered an FDIC receivership and was sold to a private acquirer after it experienced a bank run of a size and speed that were unprecedented in U.S. banking history, having received no lender of last resort funding from the Fed before its failure. The SVB failure set off runs on two other large U.S. banks, Signature and First Republic, which were also forced into receivership and sold to private acquirers. In 2020, the Fed's use of its lender of last resort powers to lend to *non-financial institutions* pushed the boundaries of the original purpose of lender of last resort, straying into fiscal policy.

My testimony focuses on identifying the issues and questions that these events raise about the lender of last resort function and identifies potential solutions.

The specter of the 2023 crisis has recently rearisen following New York Community Bancorp's release of its fourth quarter 2023 financial results on January 31. NYCB was the acquirer of Signature's assets and deposits in March 2023. That acquisition pushed NYCB's total assets above $100 billion in assets.

NYCB's Q4 2023 results showed a loss of $252 million. NYCB's stock fell 38% on the day the results were reported. The bulk of the losses are reportedly attributable to two specific real property loans, one of which defaulted and one of which the bank wrote down in expectation of a coming sale of the loan. It is far from clear that NYCB's losses indicate a systemic vulnerability among real property lenders or regional banks generally. However, the 2023 crisis, and previous runs on the financial system, show that bank runs can begin quickly and unexpectedly and can arise through irrational fears.

The 2023 banking crisis also raises important questions about the process of bank resolution, including how the Fed uses its lending powers to lend to banks that have already failed—so-called bridge banks—which my testimony does not focus on.

1. **The Fed should clarify its LLR collateral policies**.

The discount window statute (Section 10B of the Federal Reserve Act), the primary mechanism for LLR lending, provides that the Fed may make advances to member banks provided they are "secured to the satisfaction of [the Fed]."[1] The Fed thus has considerable discretion to determine

[1] FEDERAL RESERVE ACT § 10B(a).

how much collateral it requires, which assets it accepts as collateral, and how those assets are valued.

My analysis of publicly available information indicates that SVB possessed hold-to-maturity government securities that could have been pledged as collateral in a sufficient amount to cover the run on its deposits, even under the Fed' haircut policy of valuing these assets at market value rather than at their par value, the standard accounting treatment.

But the Fed could, if necessary, have changed its valuation approach if the market value of those assets had fallen short of needed collateral. The Fed has discretion under Section 10B to value government securities collateral at par rather than market value, or indeed to waive collateral requirements entirely. While these value adjustments could entail a risk of loss to the Fed, this risk must be weighed against the risk of permitting contagion to spread through the banking system by not keeping a bank afloat.

Indeed, after SVB failed, the Fed established the Bank Term Funding Program ("BTFP"), as an additional emergency lending facility, this time under Section 13(3) of the Federal Reserve Act, where its collateral policies are much more constrained than under the discount window. Under the BTFP, hold-to-maturity government securities were valued at par. Why didn't the Fed make these adjustments under the discount window before SVB failed? Was it lack of time or just confusion? Was there a collateral game plan? These questions must be addressed before the next crisis arises.

2. Operational improvements to lender of last resort are necessary.

The events of March 2023 show that bank runs can occur faster than they did in the past. To illustrate this point: SVB experienced a total outflow of 25% of deposits in one day, Thursday

March 9. A further outflow of 62% of SVB's deposits was anticipated to occur on the following day. By comparison, when Continental Illinois experienced a run in 1984, it took seven business days (10 days in total) for 30% of deposits to be withdrawn. SVB's high percentage of uninsured deposits played a role in accelerating the run. As of two months before its failure, only 6.2% of SVB's deposits were insured by the Federal Deposit Insurance Corporation. This was the highest percentage of total deposits that were uninsured of any U.S. bank with at least $50 billion in assets. However, the events of March 9, 2023 suggest that the Fed was operationally unprepared for the unprecedented speed of the run.

On March 9, during business hours on the West Coast, SVB asked its custodial bank to transfer $20 billion in collateral to the Fed to support discount window borrowing. Such transfers take place via the Fedwire system, which has a daily cutoff of 4pm PT/7pm ET. Although SVB's custodial bank attempted to complete the transfer before this deadline, the Fed required a "test trade" to take place before the actual collateral transfer. This test trade could not take place before the deadline, and the Fed declined to extend the deadline to facilitate the transfer. It is unclear why the deadline was not extended. As a result, at close of business on March 9, SVB did not have sufficient cash to cover all outstanding deposit withdrawal requests, and it ended the day with a negative cash balance of approximately $958 million.

The next day, the Fed kept Fedwire open until 11:30pmET/8:30pmPT to facilitate a collateral transfer by Signature, indicating that the Fed then realized that confining Fedwire to normal hours of operation was risking further contagion. In the future, at the first sign of a crisis, the operating hours of Fedwire and any other systems necessary to transfer collateral in support of liquidity lending should be extended as long as necessary.

The run on SVB also showed that there may be critical deficiencies in the communication protocols and unclear division of responsibility between the regional Fed banks and the Fed board and staff in the event of a liquidity crisis. Before the next liquidity crisis, the Fed must create a comprehensive operational plan with clear assignments of responsibilities and red flag procedures with reserve banks providing for immediate notification of top decisionmakers at the Board. This plan should include a "war room" in Washington, from which the Fed's response is coordinated, that is convened at the first sign of a potential bank run.

In addition, policymakers must consider how instant transfer capabilities, of collateral and funds, can speed necessary lender of last resort lending. Recently the Acting Comptroller of the Currency Michael Hsu and the Group of Thirty have suggested that these operational and collateral issues could be addressed by a requirement that banks pre-position collateral at the Fed in a sufficient amount to cover their runnable liabilities, to support their need of any future borrowing. This approach finds its origin in a similar recommendation in 2016 by former Bank of England Governor, Mervyn King. But this approach would require constant adjustments based on changes in collateral values and runnable liabilities and would also tie up bank collateral that could be used elsewhere, to borrow in the private market, to be used for clearing and settlement of securities, or for securities lending. The implementation of a pre-positioning requirement would also require revisiting and substantially revising bank liquidity requirements, since the pre-positioning of collateral would represent a standing source of substantial liquidity for banks. More generally, it is important to remember that run-like behavior and contagion can spread to non-bank financial institutions, which like banks transform short-term liabilities into long-term capital, but which do

not have access to the discount window, as occurred in 2008.[2] A pre-positioning requirement specific to banks would not address the risk of runs on non-bank financial institutions. What is needed is an operational system that allows the transfer of collateral and funds at the push of a button.

3. LLR should be the responsibility of the Fed alone.

Another exacerbating factor in the failure to make use of the LLR function for SVB was the diffusion of LLR responsibilities between the Fed and Federal Home Loan Banks ("FHLBs").

The original mission of the FHLB system upon its founding in 1932 was to support mortgage lending by thrifts and insurance companies. Membership was thus traditionally limited to these institutions. In 1989, following the savings and loan crisis, FHLB membership eligibility was expanded to any bank with more than 10% of its assets in residential mortgage-related assets.

The FHLBs provide loans upon request to their members with the intention that the proceeds will support mortgage lending by the member institution. Over time however, FHLB member banks have come to rely increasingly on FHLB advances as a source of general short-term liquidity. The FHLBs have thus become de facto general lenders to the banking system and are now also effectively acting as alternative lenders of last resort alongside the Fed.

The events of March 2023 show that having two lenders of last resort creates a coordination problem and that the FHLBs are not effective lenders of last resort. Because SVB had excess collateral at the San Francisco FHLB, it first sought to obtain liquidity loans through FHLB. Only when it could not do so did it approach the Fed. This caused a delay which impeded SVB's ability

[2] HAL S. SCOTT, CONNECTEDNESS AND CONTAGION: PROTECTING THE FINANCIAL SYSTEM FROM PANICS Ch. 7 (2016).

to respond to the run. More generally, FHLBs are less suited to the role of lender of last resort for the simple reason that they cannot create money as the Fed can. FHLBs must issue bonds to create funding capacity. Further, when a FHLB lends, it requires a general lien over the borrower's assets. The existence of this lien can delay the ability of the Fed to obtain the perfected security interest it needs to extend a discount window loan to the same bank, when timing is critical.

On November 7, 2023, the Federal Housing Finance Agency, the agency responsible for oversight of the FHLB system, released the results of their internal review of the FHLB's lending policies. Their report concluded that FHLBs should no longer be a part of any lender of last resort process. Indeed, FHLBs should likely not function as lenders more generally beyond providing support for mortgage lending. Lender of last resort responsibilities should henceforth be confined to the Fed.

4. LLR should occur through the discount window (Section 10B) and not under the emergency lending statute (Section 13(3)).

As noted above, after the failure of SVB, in an effort to stem the contagion, the Fed created an additional emergency lending facility, the BTPF, under Section 13(3) of the Federal Reserve Act. Whereas discount window lending under Section 10B is within the sole discretion of the Fed, Section 13(3) lending, post Dodd-Frank, requires Treasury approval, which the Fed obtained in order to establish the BTFP. To my knowledge this was the first time Section 13(3) has been used to create a lending facility just for banks. Why was this done under Section 13(3) rather than opening the new facility under its Section 10B discount window authority? Fed officials have suggested that establishing a new facility under Section 13(3) allowed them to value collateral at par.[3] But as indicated above, this could have been done under Section 10B.

[3] Richard Ostrander, FEDERAL RESERVE BANK OF NEW YORK, *Remarks on the Panel "Bank Crisis Framework: Learning from Experience - Paris Meeting of the Committee on International Monetary Law of the International Law Association* (June 17, 2023), https://www.newyorkfed.org/newsevents/speeches/2023/ost230617.

It has also been suggested that this new facility was necessary because banks are reluctant to incur the stigma that would result from discount window borrowing. But the stigma, to the extent it exists, comes from the borrowing itself. Moreover, the disclosure requirements for Section 13(3) loans are more rigorous than for Section 10B loans. Section 13(3) requires disclosures of borrowings to Congress within seven days (as compared with two years for the discount window), thus if anything increasing the prospect of stigma. Furthermore, one can seriously question whether stigma is really a consideration for banks in the existential situation faced by SVB, Signature, and First Republic.

There was, however, an important difference between using the discount window under Section 10B and the BTFP under Section 13(3). Whereas the Fed intentionally maintains the interest rate for discount window loans at a penalty rate, a rate above the prevailing rate Fed funds rate (i.e., the rate banks pay on overnight loans from other banks) the Fed did not apply the same higher interest rate on BTFP advances. Instead, the rate was equal to the one-year overnight index swap rate plus 10 basis points. As a result, the BTFP rate could be lower than the Fed funds rate and in recent months the BTFP rate has been significantly lower. At some volume this could pose an issue for maintaining the Fed funds rate, a key tool of monetary policy. While this lower rate may give banks cover from stigma by allowing them to claim that BTFP loans are attractive because they are cheap, it has also created an arbitrage opportunity where banks borrowed under the BTFP and deposited the proceeds in their higher paying Fed accounts, reaping the spread between those two interest rates. Only in January did the Fed shut down this arbitrage opportunity by imposing a floor on the BTFP rate. A better approach to rates might be for the Fed to use an auction mechanism through the discount window such as the Term Auction Facility (TAF) it used in December 2007,

so the rate of borrowing would be set by an auction, and banks could still claim they borrowed at an attractive rate rather than because they were in serious difficulty.

An unstated motivation for the Fed's establishment of the BTFP under Section 13(3), which requires Treasury approval, may be to shield it from attack on its role of lender of last resort. These attacks in the past have come from across the political spectrum. For example, in 2008 Republican legislators harshly criticized the Fed for extending $85 billion in credit to avert the bankruptcy of failing insurance company AIG. Democratic legislators also voiced criticism of the Fed and Treasury's support for the financial sectors in 2008.

As a result, the Fed may be seeking to pull back from acting as lender of last resort on its own under Section 10B and instead may be seeking political cover from the Treasury approval under Section 13(3). However, the Fed needs to resist such pressure and maintain its independence as a liquidity provider to banks, given its clear mandate under Section 10B to act independently.

5. The respective roles of LLR and deposit insurance in stemming contagion must be examined.

Deposit insurance at sufficient levels not only protects depositors but also has a stabilizing effect that can stem contagion.[4] As former Treasury Secretary Tim Geithner has noted, deposit insurance is part of the "well-developed safety net for banks" that provides "strong protections against banks runs."[5] Deposit insurance clearly had a key role in stemming contagion during the 2007-2008 crisis. The level of uninsured deposits in the U.S. banking system has grown substantially since the early 1990s. In 1990, roughly 20% of U.S. deposits were uninsured. This figure grew to roughly 40% by 2008 before dropping to 20% again by 2010. By December 31, 2022, uninsured deposits

[4] HAL S. SCOTT, CONNECTEDNESS AND CONTAGION: PROTECTING THE FINANCIAL SYSTEM FROM PANICS 146 (2016).
[5] Timothy F. Geithner, The Early Phases of the Financial Crisis: Reflections on Lender of Last Resort (2019), https://elischolar.library.yale.edu/cgi/viewcontent.cgi?article=1011&context=journal-of-financial-crises

had grown to about 43% of all deposits.[6] Withdrawals by large uninsured depositors were instrumental in spurring the runs on SVB and Signature.

During the 2008 financial crisis, the FDIC acted under the pre-Dodd Frank version of the systemic risk exception of the Federal Deposit Insurance Act to temporarily lift any limit on deposit insurance for banks' non-interest-bearing transaction accounts, to mitigate the run. But in 2010, Dodd-Frank prohibited the FDIC from taking the same action in the future without congressional approval in the form of a joint resolution. Under the CARES Act, adopted in 2020 in response to the COVID crisis, Congress again provided the power to the FDIC to guarantee all bank deposits in non-interest-bearing transaction accounts.[7] But this approval expired at the end of 2020. Obtaining the joint resolution of Congress necessary to renew this authority during the events of March 2023 crisis would have been impracticable and would be similarly impracticable in a future crisis.

In the 2023 crisis, the Treasury invoked the systemic risk exception to protect uninsured depositors of two banks (SVB and Signature) that were already in receivership proceedings. The power to do so for banks in insolvency was unaffected by the more general limitation in Dodd-Frank. While the *ad hoc* protection of uninsured depositors of already insolvent institutions may have helped stem the 2023 contagion, most uninsured depositors of other banks will not be greatly comforted by the prospect of only being protected if their bank becomes insolvent; they would rather avoid having to deal with an insolvency situation altogether. Congress should therefore consider

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[6] FDIC, *Options for Deposit Insurance Reform* 21 (2023), https://www.fdic.gov/analysis/options-deposit-insurance-reforms/report/options-deposit-insurance-reform-section-3.pdf

[7] CARES Act Section 4008. FDIC, *Options for Deposit Insurance Reform* 19 (2023), https://www.fdic.gov/analysis/options-deposit-insurance-reforms/report/options-deposit-insurance-reform-section-3.pdf.

restoring the ability to increase deposit insurance in a crisis or to increase the current deposit insurance limit of $250,000.

On the other hand, if deposit insurance is expanded, it can undermine the market discipline exerted on banks by uninsured depositors, to the extent such discipline can practically be exercised.[8] Some have argued for unlimited deposit insurance as a means to prevent future crises,[9] but this is accompanied by another recommendation to then control the exposure of the government by giving it a more wide-ranging role in determining which activities and risks banks are permitted to undertake, including a return to Glass-Steagall. Overall, this would be an undesirable interference in use of the market to allocate lending.

Unlimited deposit insurance would also entail banks paying much higher premiums for deposit insurance given the enhanced protection, which would likely be passed on to customers in the form of higher service fees.[10]

While a dramatic reform to the current deposit regime on the sole basis of the SVB crisis may be unwarranted, Congress should consider whether deposit insurance should take on more of the burden of preventing runs relative to lender of last resort and if so to what extent deposit insurance limits should be raised so that it can better perform this function without undermining market discipline.

One approach which the FDIC described in its 2023 report on deposit insurance reform, would be to increase limits for specific types of accounts that present greater run risks and that cannot be

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[8] Brian A. Johnson & Hal S. Scott, *Controlling the Long-Term Problem of Short-Term Funding* (2018), https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2910217.
[9] MORGAN RICKS, THE MONEY PROBLEM: RETHINKING FINANCIAL REGULATION (2017); Lev Menard & Morgan Ricks, *Scrap the Bank Deposit Insurance Limit* THE WASHINGTON POST (Mar. 15, 2023), https://www.washingtonpost.com/opinions/2023/03/15/silicon-valley-bank-deposit-bailout/.
[10] Johnson & Scott, *supra* note 8.

managed to the current $250,000 limit, particularly business payment accounts.[11] Appropriately calibrated deposit insurance coverage could be sufficient to effectively stem contagion if it works in conjunction with a strong lender of last resort function that reflects the needed reforms discussed herein.

6. Executive compensation should be clawed back, under appropriate circumstances, if a bank's reliance on LLR funds imposes costs on the Fed or the DIF.

If, due to mismanagement by a bank's executives, a bank must rely on loans from the Fed to avert insolvency or receives loans from the Fed in insolvency or the FDIC's Deposit Insurance Fund incurs costs in connection with the resolution of a failed bank, compensation received by the bank's executives should be subject, under appropriate circumstances, to clawback in proportion to those costs. A bipartisan bill has been proposed that would implement a clawback mechanism with respect to compensation received by bank executives within the five years immediately preceding a rescue.[12] The proposal however omits any clear mechanism for calculating the amount of a clawback, and does not precisely define the types of support that would trigger a clawback or link the imposition of a clawback to mismanagement by the failed bank's executives. More nuanced proposals along these lines should be considered.

7. The Fed's emergency lending facilities should be limited to liquidity provision and not entail fiscal policy.

During the COVID-19 pandemic, the Fed used its emergency lending powers under Section 13(3) to create temporary credit facilities under which it loaned to non-bank corporations and small businesses, including, among other programs, the Main Street Lending Program. The Treasury

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[11] FDIC, OPTIONS FOR DEPOSIT INSURANCE REFORM (2023), https://www.fdic.gov/analysis/options-deposit-insurance-reforms/report/options-deposit-insurance-reform-full.pdf.
[12] The Failed Bank Executive Clawback Act, *available at* https://www.documentcloud.org/documents/23731796-failed-executive-clawback-act-3-29-23.

provided credit protection to the Fed, necessitated in part by Section 13(3)'s requirement that loans thereunder be collateralized, given the fact that many small businesses could not provide collateral.

The Fed's assumption of this role as a lender to the non-financial sector, as well as the sharing of responsibility between the Fed and Treasury for these programs under Section 13(3), raises significant policy issues.[13] In particular, this lending to non-banks entailed potentially significant credit risk to the Fed. Notwithstanding Treasury backing, this credit risk could have put the Fed's reputation and credibility at risk, especially if the losses had been high (which fortunately they were not).

Further, the Fed's role in lending to the non-financial sector during the COVID crisis exposed the Fed to extensive public criticism for doing either too little or too much. But the Treasury's approval right over Fed lending under Section 13(3) means that the Treasury effectively has the power to design the terms of that lending. This puts the Fed at risk for the failure of programs it does not design or control.[14]

Fiscal policy, where the Fed faces substantial credit risk, as with the Main Street Lending Program, should be exclusively the role of the Treasury and not the Fed, since decisions about fiscal policy should be made by elected government officials that are accountable to voters, not independent agencies such as the Fed. More generally, jointly tasking two institutions with the execution of lending decisions, as is currently the case under Section 13(3), with no clear division of responsibility, means that it is difficult to decide where responsibility actually lies. The Fed's lending facilities should be limited to providing liquidity as lender of last resort to the financial

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[13] Hal S. Scott, *An Essay on the Fed and the U.S. Treasury: Lender of Last Resort and Fiscal Policy*, HARVARD JOURNAL OF LAW AND PUBLIC POLICY PER CURIAM 1-2 (2021).
[14] *Id*.

system where there is no substantial credit risk, not providing credit to corporate America, a matter best left to Congress and the Executive branch.