Resolving Systemically Important Banks:
Lessons from the 2023 Bank Failures

By

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1. INTRODUCTION

During the Global Financial Crisis, many large financial institutions were at risk of failing and threatening the financial system.[1] To prevent this and to avert further contagion and financial instability, authorities intervened and supported them, even though that potentially put taxpayers at risk. This reinforced the notion that some firms were "too big to fail" and, thus, were in a more advantageous position relative to smaller financial firms, homeowners, and taxpayers. The post-crisis reforms addressed this inequity in two ways. First, stronger capital and liquidity requirements were imposed to reduce the probability of failure. Second, a resolution regime was established so that, if and when banks of systemic importance failed, the situation could be managed in a way that preserved critical functions, limited contagion, and avoided public bailouts.[2]

The 2023 banking crisis revealed that those objectives have not been fully achieved. Although Silicon Valley Bank (SVB) and Credit Suisse (CS) operated in very different jurisdictions and regulatory frameworks, both failed despite meeting their respective regulatory capital and liquidity standards. And both failed in ways that put immediate pressure on public authorities in the United States and Switzerland to act quickly to stabilize the situation in ad hoc ways.[3] The practical challenge for authorities was not simply to decide who would bear the losses but also to preserve confidence, maintain funding, and ensure continuity of critical banking services.

1 The authors thank Viral Acharya, Andrew Bailey, Sarah Breeden, Agustín Carstens, Wilson Ervin, Katharine Hind, Art Murton, and Ryan Tetrick for their thoughtful comments in reviewing an earlier draft of this paper.

2 "Resolution" in this paper refers primarily to the post–Global Financial Crisis framework for systemically important banks developed by the Financial Stability Board (FSB). That framework includes strategies such as single-point-of-entry resolution and tools such as total loss-absorbing capacity, including bail-in debt, to impose losses on shareholders and creditors while preserving critical functions and limiting risks to taxpayers. For smaller or non-global systemically important banks in the United States, resolution may instead occur under the Federal Deposit Insurance Act receivership framework. FSB, *Key Attributes of Effective Resolution Regimes for Financial Institutions: Revised Version* (April 25, 2024), https://www.fsb.org/2024/04/key-attributes-of-effective-resolution-regimes-for-financial-institutions-revised-version-2024/.

3 For instance, the US Treasury Department, the Federal Reserve, and the FDIC invoked the systemic risk exception in order to insure all of SVB's and Signature Bank's (uninsured) deposits to reduce the risk of contagion to other US banks. Department of the Treasury, Board of Governors of the Federal Reserve System, and Federal Deposit Insurance Corporation, "Joint Statement by Treasury, Federal Reserve, and FDIC," March 12, 2023, https://www.federalreserve.gov/newsevents/pressreleases/monetary20230312b.htm.

The main lesson from this episode is that formal legal powers and regulatory metrics are unlikely, on their own, to be sufficient to produce desirable outcomes during periods of stress. Resolution cannot be treated as a narrow, end-of-life legal process that becomes relevant only after all other lines of defense have failed. It should be constructed and made readily operational as one key component of a broader resilience framework. A credible resolution regime helps to support resilience by affecting the incentives a bank faces before failure and by strengthening the options supervisors have when banks encounter financial difficulties. This reduces the risk of failure and the need for extraordinary intervention in a crisis.

This paper advances five propositions:

- Resolution is an ex-ante pillar of resilience, not simply an ex post cleanup tool. Its credibility matters before failure because expected loss allocation shapes funding costs, leverage, risk taking, and supervisory incentives.
- The 2023 banking crisis shows that a bank can fail even if it appears solvent in a regulatory capital sense. Viability is broader than solvency: It depends on confidence in management, the business model, access to funding, and the stability of the depositor base. Stress can amplify doubts about whether a bank remains a going concern, exposing weaknesses that are not captured by business-as-usual regulatory metrics.
- The perimeter for meaningful resolution planning should not be based on size alone. Favorable financial system conditions can obscure the risk that failure of some relatively small institutions may turn out to have systemic consequences.
- Resolution strategies such as single point of entry (SPE) are only as strong as their operational credibility under stress.
- Acquisition of a failing bank may not be a perfect private sector substitute for resolution, as it carries operational and financial risks that may require public support to be feasible.

These issues are more complex in a cross-border setting. In that case, the credibility of resolution depends on cooperation and trust between the home and host country authorities, including the ability to quickly mobilize liquidity assistance on a cross-border basis.[4]

The next section sets the stage with a brief review of the causes and implications of the SVB and CS failures. The remainder of the paper develops the five propositions, examines the importance of cross-border cooperation, and concludes with some recommendations for making resolution of systemically important banks more effective not just in theory but also in practice.

2. LESSONS FROM THE 2023 FAILURES

SVB and CS were very different failures, but they exposed a common weakness in the postcrisis framework (see Box 1 for a summary). The SVB case was a fast-moving failure of a concentrated, uninsured-depositor-funded regional bank with large losses on long-duration securities that were not recognized in its regulatory capital metrics. The CS case was the failure of a global systemically important financial institution (G-SIFI) whose franchise had been weakened over many years by governance failures, risk management problems, large legal liabilities, and a loss of confidence in bank management's leadership and strategy. In both cases, however, the decisive issue was whether authorities had credible options to respond both as vulnerabilities appeared and confidence began to unravel and once confidence had been completely lost and the situation deteriorated more quickly than expected.[5]

4 FSB, *2024 Resolution Report: From Lessons to Action: Enhancing Resolution Preparedness* (December 5, 2024), http://fsb.org/2024/12/2024-resolution-report-from-lessons-to-action-enhancing-resolution-preparedness/.

5 Basel Committee on Banking Supervision, *Report on the 2023 Banking Turmoil* (Bank for International Settlements, October 2023), https://www.bis.org/bcbs/publ/d555.htm.

Box 1. Highlights of the Silicon Valley Bank and Credit Suisse Failures

Aspect	Silicon Valley Bank	Credit Suisse
Size and business model	Midsized US bank; highly concentrated tech/venture capital depositor base; large holdings of long-duration securities	Global systemically important bank; universal bank with wealth management and investment banking
Main reasons for failure	Severe interest rate risk; large unrealized losses; concentrated uninsured deposits led to rapid bank run	Chronic governance and risk management failures; repeated losses and scandals; loss of market confidence
Immediate trigger	Disclosure of losses and failed capital raise sparked depositor run	Accelerating deposit outflows amid global banking stress
Resolution	Taken into FDIC receivership; deposits fully protected; US operations sold to First Citizens; UK arm sold to HSBC	Emergency state-brokered takeover by UBS; public liquidity support and a second-loss asset guarantee from the Swiss government; AT1 bonds written down to zero, even as shareholders receive CHF 3 billion

AT1 = Additional Tier 1.

SVB's vulnerabilities were concentrated in two areas.[6] On the asset side, the bank had built up large exposures in long-duration Treasuries but had not managed the related interest rate risk exposure. On the liability side, it relied heavily on a concentrated base of uninsured deposits from the technology and venture capital sectors. As interest rates rose, unrealized losses on its security holdings increased, but accounting rules and regulatory standards meant those losses were not reflected in the bank's regulatory capital. At the same time, the concentrated and uninsured nature of the deposit base made funding highly sensitive to changes in confidence. Depositors fled when losses were disclosed and an attempt to raise capital failed. Deposit outflows were unprecedented in speed and scale, with the bank losing 85 percent of its deposits in two days.[7]

The Federal Reserve's postmortem review conducted by Governor Michael Barr noted that supervisory concerns about interest rate risk management and liquidity had been identified, but escalation had been delayed and enforcement actions had been insufficiently forceful.[8] For example, SVB maintained a high supervisory rating for liquidity risk management until shortly before failure, despite clear vulnerabilities.

Credit Suisse followed a much different path to failure. Its difficulties were rooted in a prolonged deterioration of governance, risk management, and business strategy. The institution's storied track record of risk management failures included spying by senior management on the activities of some key personnel, large losses from counterparties such as Greensill and Archegos,

6 Board of Governors of the Federal Reserve System, *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank* (Federal Reserve, 2023), https://www.federalreserve.gov/publications/review-of-the-federal-reserves-supervision-and-regulation-of-silicon-valley-bank.htm.

7 This far exceeded the run-off rates assumed in liquidity regulations such as the liquidity coverage ratio and demonstrated how digital banking and concentrated depositor bases can compress the timeline for intervention.

8 Board of Governors, *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank*.

and fraudulent lending to Mozambique. These missteps not only eroded earnings and depleted capital but also led to a loss of confidence among its clients and investors. Despite meeting regulatory capital requirements and raising CHF 4 billion in new capital in late 2022, the bank experienced sustained outflows of deposits and of assets under management from its wealth management division. CS management's complex plan to restructure and improve the performance of the firm's investment banking operation was viewed as flawed, further eroding confidence.

How the authorities handled the two failures revealed both the strengths and the limits of the current framework. In the case of SVB, the response combined a standard resolution tool with extraordinary systemwide measures. The bank was placed into Federal Deposit Insurance Corporation (FDIC) receivership and ultimately sold, while SVB's UK arm was sold to HSBC.[9] The initial receivership exposed uninsured depositors to potential loss, contributing to broader contagion. Authorities then invoked the systemic risk exception to protect all deposits at SVB.[10] Although the systemic risk exception had been contemplated in legislation to address the risk of contagion, using it in this case was discretionary and marked a stark departure from the expected discipline imposed on uninsured depositors under ordinary receivership. While any shortfalls of the FDIC are paid by surviving banks rather than directly by taxpayers, these costs may ultimately be passed on to bank customers.

The response to contain systemic risk also included the Bank Term Funding Program, introduced by the Federal Reserve. The program provided liquidity to US federally insured depository institutions against high-quality securities at par. This was a departure from the typical rules for collateral, which value collateral at market prices and impose a haircut against that valuation. The objective of the program was to further stem contagion and the potential for deposit flight at other regional US banks, stabilize funding conditions across the banking system, and forestall forced asset sales to meet depositor outflows that could have amplified stress.

Given the ultimate response that judged SVB to be systemic, it is noteworthy that SVB had not been treated as systemic ex ante. It had not been subject to the resolution-planning expectations or loss-absorbing capital requirements that would have made resolution under Title II of the Dodd–Frank Act, using SPE, a realistic option.

The approach to Credit Suisse was different in form but similar in intent. Unlike SVB, CS had been subject to extensive resolution planning for G-SIFIs and had substantial loss-absorbing capacity. Yet Swiss authorities chose not to place CS into formal resolution. Instead, they engineered a state-assisted acquisition by UBS, supported by liquidity assistance from the Swiss National Bank and a second-loss asset guarantee from the Swiss government for a defined pool of problematic assets. The decision to write down Additional Tier 1 (AT1) instruments to zero while CS equity holders received shares from UBS surprised many investors, although the prospectuses for the AT1 instruments were explicit that they could be written down if the regulator found the bank to be no longer viable.[11] Even so, there remains substantial disagreement about whether instruments with these contractual features were appropriate as AT1 capital, since their write-down while equity retained value appeared to alter the expected creditor hierarchy. It is noteworthy that the AT1 instruments issued by UBS are now issued to be convertible into common equity when triggered, rather than written down to zero, presumably to avoid this issue. As in the US case, the

9 HM Treasury, "Government and Bank of England Facilitate Sale of Silicon Valley Bank UK," GOV.UK, March 13, 2023, https://www.gov.uk/government/news/government-and-bank-of-england-facilitate-sale-of-silicon-valley-bank-uk.

10 All deposits exceeding the insurance limit at Signature Bank, another failing bank at the time, were protected as well.

11 AT1 instruments (Additional Tier 1 capital) are loss-absorbing bank bonds that can be written down or converted into equity when a bank is in stress. They rank below other debt but above equity and were introduced after the Global Financial Crisis to strengthen bank resilience.

priority was to maintain confidence and preserve critical functions, even if that meant relying on measures that differed from the standard resolution playbook.

Swiss authorities explored the full G-SIFI resolution option alongside the possible acquisition by UBS but ultimately saw formal resolution as inadvisable under the circumstances. A formal resolution would have required stabilizing a large, complex, cross-border banking group over a weekend while maintaining market confidence and coordinating with multiple host jurisdictions. There were concerns that this could trigger further outflows, disrupt critical functions, and create spillovers across markets. A rapid sale to UBS, supported by public liquidity and asset guarantees, was judged to be more certain and faster to execute and more likely to bolster confidence. More broadly, the episode exposed a gap between the theoretical design of G-SIFI resolution regimes and their operational credibility under acute stress, especially when confidence is fragile and time is limited.[12]

3. FIVE PROPOSITIONS

Taken together, these two cases point in the same direction. When stress becomes acute, authorities prioritize speed, continuity, and confidence over strict adherence to an ex-ante resolution framework. This demonstrates that considerable preparation by the authorities and the banks is essential for such resolution designs to be operationally feasible. They also show that resolution tools do not operate in isolation. Liquidity provision, guarantees, and, in some cases, mergers are part of the effective toolkit. This is especially important in a cross-border context. CS operated across multiple jurisdictions, and coordination between Swiss authorities and key host supervisors elsewhere appears to have functioned reasonably well. But the episode also shows that coordination in planning does not necessarily translate into reliance on a common resolution strategy in execution. More broadly, the events reinforce the notion that resolution is not just a domestic legal process. Its effectiveness depends on whether authorities can act in a coordinated way under pressure, with a shared understanding of objectives and constraints.[13] That is a common thread that runs through the five propositions.

3.1. Resolution Is an Ex-Ante Pillar of Resilience

The value of a resolution regime lies as much in what it does before failure as in what it delivers afterward. Its role is to make it credible that a firm can fail without destabilizing the system and that losses will be imposed on the bank's shareholders and debtholders without a need for ad hoc public support.

Such credibility matters because it influences behavior. When resolution is believed to be workable under stress, creditors have greater incentives to price and manage risk, bank boards and managers face greater pressure to address weaknesses earlier and more thoroughly, and supervisors have more scope to escalate earlier. When such incentives are weak, the system tends to default instead to delay and forbearance, with the expectation that the authorities will be forced to step in only when the bank is on the brink of failure. The concern is not just moral hazard at an individual bank. If resolution is not credible, creditors may underprice risk across a

12 FSB, *2024 Resolution Report: From Lessons to Action;* International Monetary Fund (IMF), Monetary and Capital Markets Department, *Switzerland: Financial Sector Assessment Program—Technical Note on Financial Safety Net and Crisis Management Arrangements* (November 13, 2025), https://doi.org/10.5089/9798229031172.002; Swiss Financial Market Supervisory Authority (FINMA), *Lessons Learned from the CS Crisis* (December 19, 2023), https://www.finma.ch/en/~/media/finma/dokumente/dokumentencenter/myfinma/finma-publikationen/cs-bericht/20231219-finma-bericht-cs.pdf.

13 Adam Cull, "Being Ready for Cross-Border Resolution: Lessons from Credit Suisse and Silicon Valley Bank," Bank of England, March 31, 2026, https://www.bankofengland.co.uk/bank-insights/2026/being-ready-for-cross-border-resolution-lessons-from-credit-suisse-and-silicon-valley-bank; "Bank Failures—Speech by Sam Woods," Bank of England, October 16, 2023, https://www.bankofengland.co.uk/speech/2023/october/sam-woods-speech-at-the-city-banquet-mansion-house.

class of similar institutions, allowing them to rely too heavily on runnable liabilities and leaving the system more fragile when conditions deteriorate.

The 2023 experience discussed earlier clearly demonstrates this. In the United States, the resolution framework for systemically important banks had not been developed for an institution like SVB. SVB was resolved under the Federal Deposit Insurance Act receivership framework, but without the loss-absorbing capacity or resolution planning that would have made a Title II SPE strategy realistic. In contrast, Swiss authorities had prepared a resolution strategy for CS but ultimately chose not to use the core resolution tools that had been built for large, cross-border banking groups. As a result, authorities turned to the traditional combination of liquidity support, guarantees, and acquisition to stabilize conditions. Those actions were effective in limiting contagion and containing the immediate spillovers, but they also revealed the limits of resolution frameworks that are not executable under stress. It was not, for the most part, the absence of legal powers. It was whether those powers could be executed with sufficient speed, funding, and coordination once confidence had been lost.[14]

The risk of failure of these banks may have been lower in the first place if resolution had been fully credible. They may have faced stronger pressure to limit reliance on unstable funding, hold assets that could be mobilized in stress, and improve their risk management and risk culture. Supervisors would have had more room to intervene earlier and more forcefully, with less concern that escalation might trigger disorderly failure.

The discipline on creditors would also have been different. For holders of loss-absorbing instruments, including AT1 instruments, stronger expectations of loss would have increased monitoring and earlier repricing of risk. The CS experience shows how sensitive these incentives are to the perceived credibility and predictability of the framework. The AT1 write-down was grounded in the relevant instrument terms, but it nevertheless generated legal and market controversy because it revealed how loss allocation can operate differently across instruments and jurisdictions.[15]

For depositors, especially those that are not insured, the incentives are guided by protecting themselves against loss in the case of failure. Uninsured depositors at SVB worried that they might suffer losses; outflows reflected that uncertainty, and, as the outflows increased, losses for the remaining depositors became more likely. However, the subsequent decision to protect all deposits meant that ex-post outcomes were more favorable than many had anticipated. An interesting illustration is Circle, which held significant uninsured deposits at SVB and faced redemptions on its stablecoin USDC when those funds were at risk. The protection of deposits stabilized both the bank run and the run on USDC. However, the broader implication is that when expectations of support are uncertain ex ante, favorable outcomes ex post can create moral hazard and weaken the incentives for ex-ante monitoring and risk differentiation going forward.

The credibility of resolution depends on whether it can be executed under the conditions that matter in practice, such as speed, uncertainty, and cross-border complexity. Without that, the system will likely continue to rely on the same set of ad hoc tools when stress becomes acute.

14 FSB, *2024 Resolution Report: From Lessons to Action;* FINMA, *Lessons Learned from the CS Crisis;* Cull, "Being Ready for Cross-Border Resolution."

15 FINMA also relied on emergency powers adopted during the crisis. Article 5a of the amended emergency ordinance issued on March 19, 2023, authorized FINMA to order the write-down of Additional Tier 1 capital instruments in connection with the emergency support measures for Credit Suisse. The legal basis for that action has subsequently been contested. FINMA, "FINMA Provides Information about the Basis for Writing Down AT1 Capital Instruments," press release, March 23, 2023, https://www.finma.ch/en/news/2023/03/20230323-mm-at1-kapitalinstrumente/; Swiss Federal Administrative Court (Bundesverwaltungsgericht), "Unlawful Write-Off of AT1 Capital Instruments," media release, October 14, 2025, https://www.bvger.ch/en/newsroom/media-releases/unlawful-write-off-of-at1-capital-instruments-2385.

3.2. Capital Adequacy Is Not the Last Word

The events of 2023 underscore a point that is often acknowledged but not fully incorporated into policy frameworks. Although capital adequacy is necessary to ensure survivability, it may not always be sufficient. Because regulatory capital ratios are backward-looking, point-in-time measures, they say little about future business viability or how resilient an institution will turn out to be if confidence begins to shift. SVB and CS showed how banks can meet bank capital regulatory requirements and still fail.

Recent policy assessments support this conclusion. The International Monetary Fund emphasizes that recent stress episodes have been driven as much by changes in funding conditions and confidence as by solvency metrics.[16] The Bank for International Settlements similarly highlights the role of depositor behavior and the rapid speed of adjustment in 2023.[17]

One particular problem is that a bank is often worth much more when it is alive than afterward, once it has failed. A failed institution loses considerable value as its customers move elsewhere, its deferred-tax and capitalized software assets are written down in value, and operating costs are incurred to manage and liquidate its illiquid and impaired asset holdings. As failure becomes more likely, a vicious cycle can occur, with rising expected losses leading to further deposit flight and the loss of the bank's customers and revenue. If lower-cost deposits are replaced by borrowing from the central bank at higher, and sometimes penalty, rates, the bank's underlying profitability is impaired further. A takeover by a strong competitor and/or government intervention is necessary at that point to break the pernicious feedback loop.

At SVB, the fatal blow was that the speed of outflows overwhelmed the bank's ability to access liquidity to satisfy the deposit withdrawal requests. When that became evident, the run intensified. At CS, it was the loss of confidence in the franchise, which drove withdrawals despite capital ratios remaining above minimum requirements. In both cases, the viability of the business was impaired before the depletion of the firm's regulatory capital.

The UK treatment of SVB UK illustrates the other side of this point. The subsidiary could be sold rapidly because it was sufficiently capitalized for the risks it was running and could be separated from the failed US parent. This does not mean that capital is the whole answer, but it shows that adequate local capitalization and operational separability can materially expand the options available to resolution authorities.

These dynamics also expose the limits of recapitalization. Raising capital, including through instruments such as AT1, can buy time but does not necessarily restore confidence in management, business strategy, or risk controls. Where concerns relate to the viability of the business model or governance, additional capital may slow the process but not be sufficient to reverse it. The experience of CS illustrates that even when substantial capital is raised, it may fail to stabilize funding once confidence has been impaired.[18]

The implication is that supervisory frameworks need to place greater weight on the forward-looking viability of a bank's business model, not just its capital and liquidity levels. Point-in-time capital measures remain necessary, but they are not sufficient indicators of resilience. What matters is how capital interacts with funding structure, depositor behavior, and perceptions of franchise strength as conditions evolve. This places a premium on timely supervisory action. By 2023, although vulnerabilities had been identified, they had not been addressed with sufficient urgency. Strengthening capital alone will not prevent failures

16 IMF, *Global Financial Stability Report: Financial and Climate Policies for a High-Interest-Rate Era* (October 2023), https://www.imf.org/en/publications/gfsr/issues/2023/10/10/global-financial-stability-report-october-2023.

17 Basel Committee on Banking Supervision, *Report on the 2023 Banking Turmoil.*

18 FINMA, *Lessons Learned from the CS Crisis.*

driven by deteriorating confidence and tardy intervention. Supervisors should therefore be attentive to persistent market signals, such as sustained equity underperformance, widening credit spreads, low or falling market-to-book ratios, and deposit outflows, to inform the pace and intensity of supervisory escalation.

3.3. Resolution Perimeter Should Reflect Systemic Impact in Failure

A key lesson from 2023 is that the perimeter of meaningful resolution planning cannot be defined principally by size. Even though traditional approaches to identify systemically important banks consider other factors, such as interconnectedness, the events of 2023 show how the application of the framework is incomplete in practice.

SVB shows this clearly, because regulatory thresholds shaped the perimeter. Following changes to the Dodd–Frank Act in 2018, the threshold for the automatic application of enhanced prudential standards was raised from $50 billion to $250 billion in assets, with discretion for the Federal Reserve to apply such standards to firms in the $100 billion to $250 billion range. SVB, with assets of roughly $210 billion at the time of its failure, fell within that discretionary range but was not subject to the full set of requirements applied to larger institutions. In part, that is because SVB had grown rapidly, but the requirements were to be phased in more slowly. These included more stringent requirements with respect to liquidity, stress testing, and resolution planning.

The lesson here is that size alone is an inadequate proxy for risks in a bank. The systemic consequences of SVB's failure did not stem from its size, but from the risks in its liability structure and the speed of the depositor run. This created conditions in which stress spread rapidly to other institutions with similar profiles. Market reactions across US regional banks varied, sometimes reflecting similarities in asset–liability mix but, at other times, different risks such as the degree of exposure to commercial real estate.

This highlights the state-contingent nature of systemic risk. In normal times, differences across institutions appear meaningful. In stress, depositors and counterparties may respond to uncertainty by withdrawing from a broad set of institutions, particularly when the cost of doing so is low and information is limited. In that environment, contagion is driven less by direct linkages than by common exposures and perceived vulnerability.

The implication is that resolution planning and its related requirements should not be confined to a narrow set of the largest institutions. Size remains relevant, but it is not sufficient to identify risk. That is because some institutions that are not among the largest turn out to be systemic in failure even if they are not systemic in life because they have attributes shared by many other institutions. The relevant question is not only whether an institution is large, but whether its failure could trigger a broader loss of confidence, lead to runs on other institutions, or disrupt the provision of critical functions, such as the timely payment of payrolls to the employees of the bank's business customers.

This does not imply that requirements should be uniform across all institutions. A broader set of banks should be required to have credible resolution options and preparedness. These should be proportionate to their potential to generate negative systemic consequences under stress.

3.4. Resolution Strategy Must Be Operationally Credible

The experience of 2023 shows that legal authorities are insufficient because the binding constraint is whether the preferred strategy is actually feasible and can be executed in the conditions that apply at that time and for the circumstances of the particular bank. In the case of CS, the assumptions underpinning resolution planning were too optimistic, including the stability of funding and the time available to act.

SPE resolution has emerged as the preferred strategy for resolving large, complex banking groups. It is appealing because it preserves the continuity and value of the entire banking group and maintains critical functions by keeping the operating subsidiaries open, and it protects all the customers and liability holders of the operating companies. It also obviates the need for ring-fencing and the seizing of collateral locally, which reduces the amount of liquidity needed globally. Finally, it is more realistic about how large complex global banks fail. Because of opacity and the difficulty of valuing the assets and liabilities of a bank's subsidiaries, failure is typically an all-or-none type of event, with the exception of certain types of operations such as asset management, which are easier to value and sell quickly.[19]

In principle, SPE can achieve resolution without resorting to taxpayer support, provided that there is sufficient capacity to absorb losses and that the framework for converting that capacity into capital is credible. Such capacity did not exist for SVB. In the case of CS, authorities chose not to use an SPE resolution strategy. The Swiss Financial Market Supervisory Authority (FINMA) review emphasizes that assumptions about the time available to execute resolution were too optimistic and that confidence deteriorated more rapidly than anticipated.[20] In practice, this meant that authorities chose not to use the resolution plan that had been prepared and instead pursued a rapid sale to UBS.

Resolution strategies must therefore be feasible within the time that is actually available, not the time assumed in planning. Once confidence begins to erode, the window for action can compress to days or even hours. Frameworks that rely on extended preparation or complex sequencing risk becoming unusable when they are needed.

This also implies that resolution frameworks need to be built around a menu of options, not a single strategy. In both the United States and Switzerland, outcomes reflected a combination of tools, including resolution powers, liquidity support, guarantees, and mergers. The appropriate choice depended on the state of confidence, the availability of buyers, and the speed required. As illustrated in Box 2, the appropriate strategy depends on the particular conditions. This is consistent with the

Box 2: Typical resolution tools

Tool and typical use	Key strength	Main limitation
Sale / purchase & assumption—when a viable buyer exists and speed is critical	Preserves franchise value; rapid stabilization; continuity for depositors and clients	Requires willing buyer; often involves guarantees or loss-sharing; may increase concentration
Bridge bank—when no immediate buyer is available but continuity is essential	Maintains critical functions while allowing time to restructure or sell	Requires public operational support; valuation uncertainty; still needs eventual exit
Bail-in / recapitalization—when losses can be imposed on investors to restore solvency	Allocates losses to shareholders and creditors; can stabilize balance sheet without immediate sale	Does not restore confidence or franchise on its own; execution and legal risks
Liquidation—when institution is small, non-systemic, or lacks viable franchise	Clear exit; minimizes moral hazard; no need to preserve business	Destructive of franchise value; can disrupt services; not feasible for systemic firms

19 It is noteworthy that it took UBS three years to migrate all of the CS customers onto the UBS platform and that the decommissioning of the CS technology platform has not yet been completed.

20 FINMA, *Lessons Learned from the CS Crisis.*

emphasis on preparedness and flexibility in cross-border resolution highlighted by the Bank of England.[21]

To be credible, any resolution strategy also needs to ensure sufficient liquidity provision to ensure the continuity of banking services. Recapitalization alone does not ensure that an institution can meet its obligations as they come due. In Switzerland, for instance, existing liquidity tools proved insufficient in scope, and authorities had to expand support through emergency measures. The measures included large-scale liquidity assistance from the Swiss National Bank and the introduction of a public liquidity backstop supported by federal guarantees, enabled through emergency legislation during the crisis. In the end, a credible framework includes mechanisms to provide liquidity appropriately at scale and under stress.[22]

These experiences reinforce the importance of assessing resolution in terms of execution under stress. Plans must be workable under conditions of extreme time pressure, market uncertainty, and operational strain. Without that, preferred strategies risk being displaced by whatever options remain feasible when confidence deteriorates. Operational credibility also requires that senior executive and legislative authorities, not only resolution technocrats, understand the resolution strategy and have thought through the conditions under which it can and would be used. It also requires firm ownership of the resolution strategy and process. The UK Resolvability Assessment Framework is useful in this respect: Major firms must assess their own resolvability, supervisors review those assessments, and firms disclose a summary of their conclusions.[23]

3.5. Acquisition Is Not a Costless Substitute for Other Resolution Options

In practice, authorities often rely on acquisition as a means of resolving failing institutions. Sale to a private sector buyer can be attractive because it can preserve franchise value, maintain continuity of bank services, and reduce the operational burden on authorities. However, acquisition is not a frictionless or costless alternative to other resolution tools that require a high degree of preparedness.

A potential acquirer must evaluate the transaction in light of its own fiduciary duties, capital position, liquidity profile, and business strategy. The acquiring institution's management and board are responsible for judging that the transaction does not undermine the firm's stability or impose undue risks on its stakeholders. Those constraints limit the circumstances in which a private buyer will be willing to proceed without support, particularly under conditions of stress and uncertainty. They become more binding when several institutions are under stress at the same time. In this case, surviving banks may have insufficient liquidity to be able to fund the assets of the failed banks at reasonable cost, which creates a case for public liquidity to support acquisitions by stronger institutions.[24]

The US experience illustrates some of these constraints. The resolution of SVB and other failed regional banks involved the protection of uninsured depositors and the transfer of assets and liabilities to acquiring institutions. Although those transactions helped stabilize the system, they also imposed costs on the Deposit

21 Cull, "Being Ready for Cross-Border Resolution."

22 FINMA, *Lessons Learned from the CS Crisis;* IMF, Monetary and Capital Markets Department, *Switzerland.*

23 Bank of England, *Resolvability Assessment of Major UK Banks* (August 6, 2024), https://www.bankofengland.co.uk/financial-stability/resolution/resolvability-assessment-framework/resovability-assessment-of-major-uk-banks-2024.

24 Viral V. Acharya and Tanju Yorulmazer, "Cash-in-the-Market Pricing and Optimal Resolution of Bank Failures," *Review of Financial Studies* 21, no. 6 (2008): 2705–42, https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1315612.

Insurance Fund, which were recovered from the banking industry through special assessments. For example, the resolution of SVB resulted in an estimated cost of approximately $20 billion to the Deposit Insurance Fund.[25] While not unusual as the purpose of the fund is to absorb losses, the losses were high relative to the size of SVB's assets.

The relevant point is that the cost of fully protecting depositors was borne collectively rather than eliminated. In some cases, the authorities provided attractive terms to the acquirers, reflecting the urgency of the situation and the limited scope for competitive bidding in a compressed time frame. Moving more slowly was judged to be too risky given the threat of further contagion to other firms and the potential erosion of the failed banks' franchise values.

The Swiss case highlights the role of public support more directly. The acquisition of CS by UBS was facilitated by a package of measures, including large-scale liquidity support from the Swiss National Bank and government loss protection.[26] The write-down of AT1 instruments also played a role in making the transaction feasible by strengthening the capital position of the combined entity. Without these elements, it is unlikely that the acquisition would have been acceptable to UBS's shareholders or consistent with its prudential constraints and fiduciary obligations to its shareholders. That said, the decision to write down AT1 instruments led to legal and market uncertainties around loss allocation in resolution, including ongoing legal challenges, even as the broader market disruption proved relatively short-lived.[27]

These examples suggest that an acquisition often involves some form of public risk-bearing, whether explicit or implicit.[28] Guarantees, indemnities, liquidity support, and regulatory adjustments can all affect the economics of a transaction. As a result, the distinction between a "private sector solution" and a "public intervention" is not always clear-cut. This connects to the broader point made in the previous section that the feasibility of a particular strategy depends on the ability to execute it under stress.

Each solution also has structural implications. Acquisition of the failed bank by its competitor can increase concentration in the banking sector. UBS's takeover of CS created an institution that is larger and more complex than the one that failed and significantly increased banking market concentration within Switzerland. Although this may be necessary to preserve stability in the short term, it can increase future resolution challenges and reinforce the too-big-to-fail dynamics that postcrisis reforms sought to reduce.

The policy implication is that acquisition should be treated as one tool among several, rather than as the default or preferred outcome. As discussed in Box 3, the viability of acquisition depends on conditions that may not hold in acute stress. The experience of 2023 shows that a suitable buyer may not be available on acceptable terms without support, and that waiting for a private sector buyer can further reduce the set of viable options. Resolution frameworks should therefore be designed on the assumption that alternative strategies must also be credible and executable under stress.

25 Department of the Treasury, Board of Governors of the Federal Reserve System, and Federal Deposit Insurance Corporation, "Joint Statement."

26 Loss protection may be needed for several reasons. First, it protects the acquiror that has not had sufficient time to do a complete evaluation of the failed bank's assets and liabilities and, thus, makes it feasible for the bank to move forward with the acquisition while still fulfilling its fiduciary responsibility to its shareholders. Second, the asset guarantee and liquidity support buttresses financial stability by reducing the chance that the acquiring bank might be viewed as weakened by making the acquisition. It is important for both the acquiring bank and financial stability that market participants do not worry that the lifeguard bank will be pulled underwater by the drowning institution it is rescuing.

27 FINMA, *Lessons Learned from the CS Crisis;* Basel Committee on Banking Supervision, *Report on the 2023 Banking Turmoil.*

28 A purely private sector solution would involve a recapitalization or acquisition of a troubled bank by private actors without public support for loss absorption or recapitalization. By contrast, an acquisition executed under resolution may involve loss sharing, guarantees, liquidity support, or costs to a deposit insurance fund.

Box 3. The Cost of Resolution for the 2023 Bank Failures

Case and Intervention	Type of Intervention	Form of Public Support or Cost	Key Trade-Off Illustrated
Silicon Valley Bank (US)—FDIC receivership (March 10) and sale (March 23)	Deposit protection and sale to First Citizens	~$20 billion estimated cost to Deposit Insurance Fund; full protection of uninsured deposits	Speed and financial stability vs. cost and precedent for depositor protection
Signature Bank (US)—FDIC receivership (March 12) and sale (March 20)	Deposit protection and sale to Flagstar Bank	~$17 billion estimated cost to Deposit Insurance Fund; full protection of uninsured deposits	Speed and financial stability vs. cost and precedent for depositor protection
First Republic Bank* (US)—FDIC receivership and sale (May 1)	Deposit protection and sale to JPMorgan Chase	~$13 billion estimated cost to Deposit Insurance Fund; full protection of uninsured deposits	Financial stability vs. cost and precedent for depositor protection
Credit Suisse (Switzerland)—sale to UBS (March 19)	State-brokered acquisition	No loss to Swiss government; liquidity support, loss guarantees, AT1 write-down (~CHF 16 billion)	Franchise preservation vs. legal uncertainty and concentration risk in Swiss financial system

* No systemic risk exception was required for FRB.

4. CROSS-BORDER CREDIBILITY AND COOPERATION

For large banking groups that operate across jurisdictions, the credibility of resolution depends critically on cooperation between home and host authorities. Resolution strategies such as SPE assume that losses can be absorbed at the group level while operating entities continue to function across borders. This requires a high degree of trust and coordination, particularly with respect to liquidity provision, loss allocation, and the continuity of critical functions.[29] When those are lacking, institutions that are global in life prove to be national when they fail.

Postcrisis arrangements such as crisis management groups and institution-specific cooperation agreements were designed to support this coordination. Resolution work led by the Financial Stability Board and regular cross-border exercises have materially improved preparedness since 2008. In the case of CS, these arrangements appear to have functioned reasonably well in terms of information sharing and coordination among key authorities, with regular engagement across jurisdictions.[30] However, the episode also illustrates that coordination in planning does not necessarily translate into reliance on a common strategy in execution.[31] SVB was primarily a US failure and was not subject to a G-SIFI crisis management group. Even so, the sale of SVB UK was a Bank of England resolution action

29 FSB, *Key Attributes of Effective Resolution Regimes;* FSB, *2023 Bank Failures: Preliminary Lessons Learnt for Resolution* (October 10, 2023), https://www.fsb.org/2023/10/2023-bank-failures-preliminary-lessons-learnt-for-resolution/.

30 FINMA, *Lessons Learned from the CS Crisis.*

31 FSB, *2024 Resolution Report: From Lessons to Action.*

that was supported by host country preparedness and cooperation with US counterparts. When confidence deteriorates rapidly, authorities default to tools that can be executed immediately, rather than those that require coordination or sequencing.

In practice, that trust cannot be taken for granted. In times of stress, national authorities face strong incentives to protect domestic stakeholders. This can lead to ring-fencing of capital and liquidity, fragmentation of operations, and a reluctance to rely on group-level solutions. Although such responses may be rational from a national perspective, they can undermine the effectiveness of resolution strategies and raise resolution costs.

The events of 2023 highlight that cross-border credibility depends on more than formal arrangements. It requires a shared understanding of how authorities will act under stress, particularly with respect to liquidity. In the case of CS, the need for large-scale liquidity support from the Swiss National Bank, backed by federal guarantees, underscores the importance of clarity around who provides funding and on what terms. Where such clarity is lacking, authorities may be less willing to rely on group-level solutions, increasing the risk of fragmentation.

More broadly, the environment for cross-border cooperation may be becoming more challenging. Cross-border resolution ultimately rests on trust that is only tested in crisis. That trust may be harder to sustain in a more fragmented geopolitical environment, where national resilience, strategic autonomy, and financial stability concerns increasingly intersect. Those forces can strengthen incentives for constraints on the movement of capital and liquidity, and more conservative supervisory approaches that focus mainly on the host country's operations and exposures.

The implication is that resolution planning must place greater emphasis on cross-border credibility in execution, not just coordination in design. This includes more frequent and realistic joint exercises, clearer communication of expectations, and more detailed planning for the provision of liquidity and the maintenance of critical functions across jurisdictions. As emphasized by the Bank of England, coordinated preparedness and the ability to execute across borders under stress conditions are central to making resolution strategies credible in practice.[32]

5. POLICY AGENDA

These experiences point to several areas for policy development. This agenda is especially important at a time when the policy debate is shifting toward reducing regulatory burden. The objective should be more effective and better-targeted resilience measures, not a weakening of the safeguards that make resolution credible.

First, authorities need better ways to identify potential vulnerabilities before they become acute. This would include stress testing to identify the institutions that are most at risk of failure, assessing what interventions could reduce that risk, examining how stress could propagate to other institutions, and improving communication and coordination among regulators about the risks that they have identified.

Second, supervisory frameworks should place greater emphasis on timely and meaningful intervention. The failures of 2023 demonstrate that just identifying vulnerabilities is not sufficient. Supervisors must be able and willing to require corrective action before problems escalate. The experience of Silicon Valley Bank points to weaknesses in escalation and enforcement.[33] In the case of Credit Suisse, limitations in supervisory powers and enforcement tools constrained the ability to impose timely corrective measures.[34]

Third, central banks' lender-of-last-resort functions need to be strengthened to reduce the risk of deposit runs before failure. For example, in the United States,

32 Cull, "Being Ready for Cross-Border Resolution."

33 Board of Governors, *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank.*

34 FINMA, *Lessons Learned from the CS Crisis.*

the Federal Reserve should evaluate whether banks should be required to pre-position collateral at the discount window sufficient to cover all the bank's runnable liabilities.[35] SVB illustrates the point because, once uninsured depositors began to run, the bank's inability to mobilize sufficient liquidity quickly enough turned a balance sheet vulnerability into a disorderly failure. Pre-positioned collateral would not have solved the underlying interest-rate-risk problem, but it would have constrained the ability of SVB to rely so heavily on uninsured deposits for its funding, and it could have bought time for supervisors and management to act before confidence collapsed.

Fourth, resolution planning should be intensified and broadened. Institutions with characteristics that make them systemic in failure, such as high levels of runnable liabilities, should be subject to more robust expectations regarding resolution preparedness, even if they are not among the largest banks. The SVB experience shows why this requires moving beyond primarily size-based thresholds toward a more risk-based approach that captures funding structure, depositor concentration, and the speed of potential outflows. Global banks that could be systemic should be subject to coordinated resolution planning by their home and host country supervisors. With respect to cross-border cooperation, further work is needed to enhance information sharing, conduct joint exercises, and clarify the roles and responsibilities of authorities in different jurisdictions.[36]

Fifth, liquidity in resolution should be treated as a central component of the framework. Lender-of-last-resort facilities can reduce the likelihood of a run before failure; liquidity in resolution is needed to preserve continuity once resolution is underway. Authorities should ensure that mechanisms for providing liquidity are accessible and capable of supporting institutions. This may require reconsideration of collateral frameworks, standing facilities, and the role of public liquidity backstops. The experience of CS prompted Switzerland to strengthen its liquidity backstop framework, including the introduction of a public liquidity backstop supported by federal guarantees.[37] As part of this process, home and host countries should develop plans about how liquidity would be provided on a cross-border basis and how collateral could be mobilized to secure such borrowing.

Sixth, resolution strategies such as single point of entry should be strengthened through a focus on credible operational execution and reliable cross-border cooperation. This includes ensuring adequate loss-absorbing capacity, clear governance arrangements, continuity of critical functions, and credible communication with markets. It also requires realistic assumptions about execution, particularly regarding the speed required and the stability of funding, as highlighted by the CS experience.

Seventh, policymakers should adopt a realistic view of acquisition as a resolution tool. While sale to a private buyer can be effective in some cases, it should not be assumed that this option will be available or able to be implemented at a reasonable cost. The same is true for a bridge solution (see Box 3). As the events of 2023 demonstrate, transactions may require public support to be feasible and may involve the mutualization of losses. Resolution frameworks must be viable even in the absence of a suitable buyer and under conditions of stress.

6. CONCLUSION

In 2023, the authorities were successful in stabilizing the global financial system. Compared with the Great Financial Crisis, the 2023 episode was only a tremor. Losses were imposed further down the capital structure, broad taxpayer equity injections were avoided, and the core of the banking system proved more resilient.

35 Group of Thirty's Working Group on the 2023 Banking Crisis, *Bank Failures and Contagion: Lender of Last Resort, Liquidity, and Risk Management* (Group of Thirty, January 2024), https://group30.org/images/uploads/publications/G30_Lessons-23-Crisis_RPT_Final.pdf.

36 FSB, *2023 Bank Failures;* Cull, "Being Ready for Cross-Border Resolution."

37 IMF, Monetary and Capital Markets Department, *Switzerland;* FINMA, *Lessons Learned from the CS Crisis.*

But the episode also showed that resolution preparedness remains incomplete. In different circumstances, the outcome could have been much worse. There is still considerable work to do: strengthening the effectiveness of supervision, improving central banks' lender-of-last-resort capabilities, and making resolution more credible both before and when banks fail, especially those of systemic importance. Some of that work is already underway, but more progress is needed if resolution of systemically important banks is to become a stronger component of a resilient financial system.

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