Purchase and Assumption and Bridge Bank
Silicon Valley Bank (2023)

Background and context

Founded in 1983 by a bank executive and university professor, Silicon Valley Bank (SVB) had focused on lending to start-ups from its establishment. As the technology industry boomed, SVB grew over the years to become the 16th largest bank in the US. As at 31 December 2022, it held total assets of about $209 billion and total deposits worth $175.4 billion, with about 8,500 employees. Headquartered in Santa Clara and with 17 branches in California and Massachusetts, SVB was a state-chartered regional bank providing financing in the San Francisco Bay Area to Venture Capital (VC) and private equity firms, technology and health care companies (including early-stage and start-up companies), as well as mortgages to high-net-worth individuals (HNWI). SVB was regulated and supervised by the Federal Reserve Bank of San Francisco / US Federal Reserve System (Fed) as well as the state bank regulator - the California Department of Financial Protection and Innovation (CDFPI).

SVB is the main subsidiary of SVB Financial Group (SVBFG), a financial holding company listed on the S&P 500 index. SVBFG is also involved in VC and investment management, securities, and private banking, and had subsidiaries including in the UK, Germany and Canada.

SVB registered high returns on equity of up to 20% in 2019. While making gradual progress over the years, its growth trajectory spiked from 2018 to 2021. Total assets of SVBFG rapidly rose by 271% (industry average of 29% over the same period) as low interest rates fuelled rapid growth in the VC and technology sector, in turn leading to record-high deposit inflows. In terms of profiles, there was high concentration of large deposits among VC-backed technology and life-sciences companies (Figure 1). Concomitantly, about 94% of total deposits were uninsured (amounts exceeding the US statutory deposit insurance limit of $250,000). SVB did not

have a substantial retail deposits business. In many ways, the business model of SVB was an outlier compared to its peers in terms of loans, deposits and securities holdings (Table 3).

A large proportion of the record inflow of deposits were invested in long term Held to Maturity (HTM) securities (weighted average duration of 6.2 years). These HTM securities were accounted for at amortised historical costs instead of mark-to-market values. However, as interest rates rose, SVB accumulated increasing unrealised losses on its securities portfolios (Figure 2).[23] Moreover, SVB did not manage its interest rate risk exposures well. Hedges to protect its growing securities portfolio against rising rates were removed in prior years.

As a result of the sharp rise in US interest rates in 2022 (from the target range of 0 – 0.25% to 4.25 – 4.50%) and concerns about the US economy, investors turned cautious and technology investments dried up. This led to higher deposit outflows from SVB, as VC-backed clients withdrew funds for business operations.

To meet increasing deposit withdrawals, SVB restructured its balance sheet. On 8 March 2023, it announced that $21 billion of Available For Sale (AFS) securities were sold at a loss of $1.8 billion, and additional equity capital of $2.2 billion would be raised. Furthermore, there were future expectations of a slowdown in the technology sector and potential rating downgrades on SVBFG. The voluntary liquidation of Silvergate Bank also occurred on the same day, affecting the confidence of depositors.

My ask is to stay calm because that's what is important. We [SVB] have been long-term supporters of you – the last thing we need you to do is panic

Greg Becker, former Chief Executive Officer of Silicon Valley Bank

On 8-9 March, the Chief Executive Officer (CEO) of SVB announced the restructuring of SVB's balance sheet and urged its VC depositors to remain calm and avoid panic, amid growing concerns surrounding SVB. Fuelled by social media and the concentrated network of VC investors and technology firms, these negative news flows culminated in an unprecedented large, fast-paced, digitally driven bank run by SVB's uninsured depositors. On 9 March, $42 billion was withdrawn with an expectation of another $100 billion outflow the next day. Taken together, SVB would have potentially shed 87% of its total deposits in 2 days. Consequently, SVB was closed on the morning of 10 March by the CDFPI, which also appointed FDIC as the receiver.

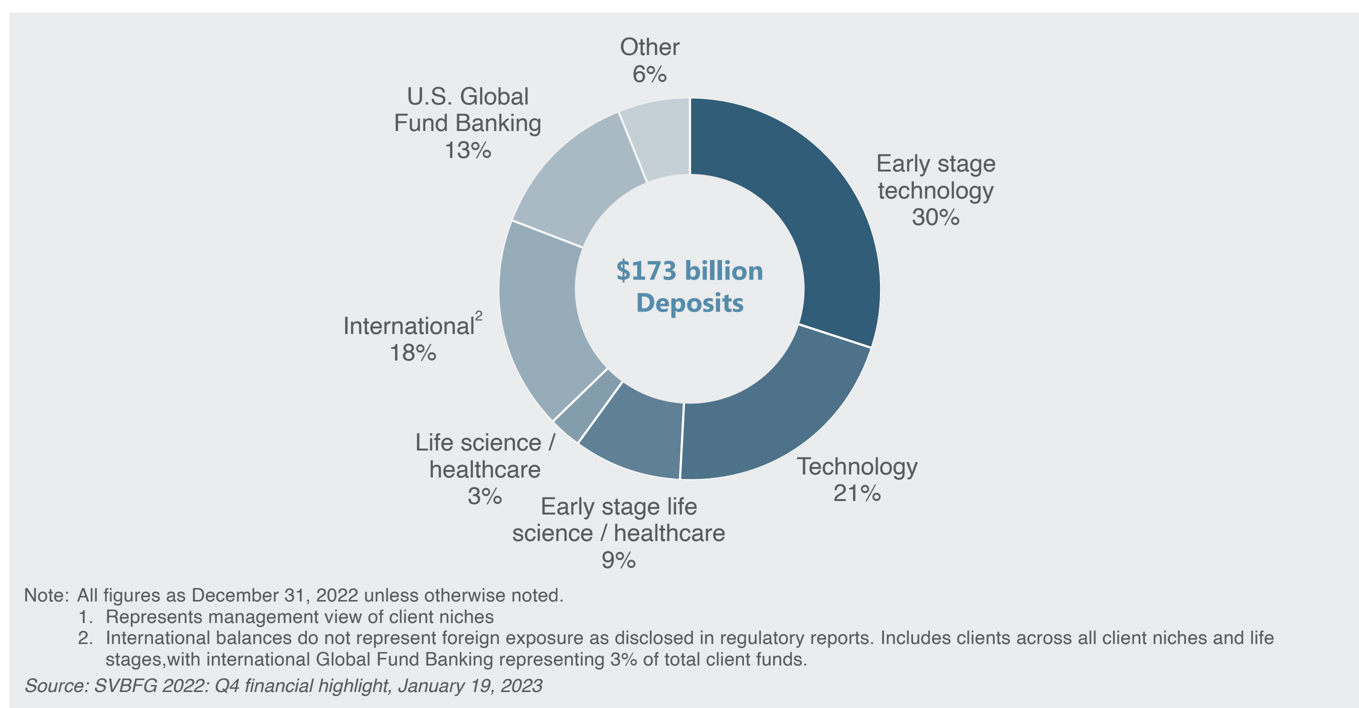
Silicon Valley Bank UK Limited (SVB UK)

SVB UK, a subsidiary of SVB, also specialised in financing early and high-growth start-ups in the UK. According to reports, it served a large base of companies forming the innovation economy (3,300 customers) including British start-ups backed by VC, which held an estimated £2.5 billion ($3.0 billion) of total deposits in SVB UK. At a broader level, SVB UK was not a large bank – its total asset size was £8.8 billion ($10.6 billion), with deposits and loans of about £6.7 billion ($8.1 billion) and £5.5 billion ($6.6 billion) respectively.

On 10 March, as SVB was being resolved in the US, SVB UK experienced a deposit run, losing £2.9 billion ($3.5 billion) or 30% of its overall deposits. It then applied to access £1.8 billion ($2.2 billion) from the Bank of England (BoE) discount window / short term funding facility to banks. Subsequently, on the evening of 10 March, the BoE announced that 'absent any meaningful further information', it intended to place SVB UK into insolvency.

[23] "Unrealised gains or losses" refers to the difference between the value of the security at the time of purchase and the price of the security today, if it were sold on the market. Since HTM securities are meant to be held until maturity, any decline in the value from the purchase date is considered an unrealised loss. While unrealised losses must be disclosed in financial statements, they do not change the assets' value on the balance sheet itself

Figure 1:
SVBFG client funds by client type / niche[1]



Note: All figures as December 31, 2022 unless otherwise noted.
1. Represents management view of client niches
2. International balances do not represent foreign exposure as disclosed in regulatory reports. Includes clients across all client niches and life stages,with international Global Fund Banking representing 3% of total client funds.

Source: SVBFG 2022: Q4 financial highlight, January 19, 2023

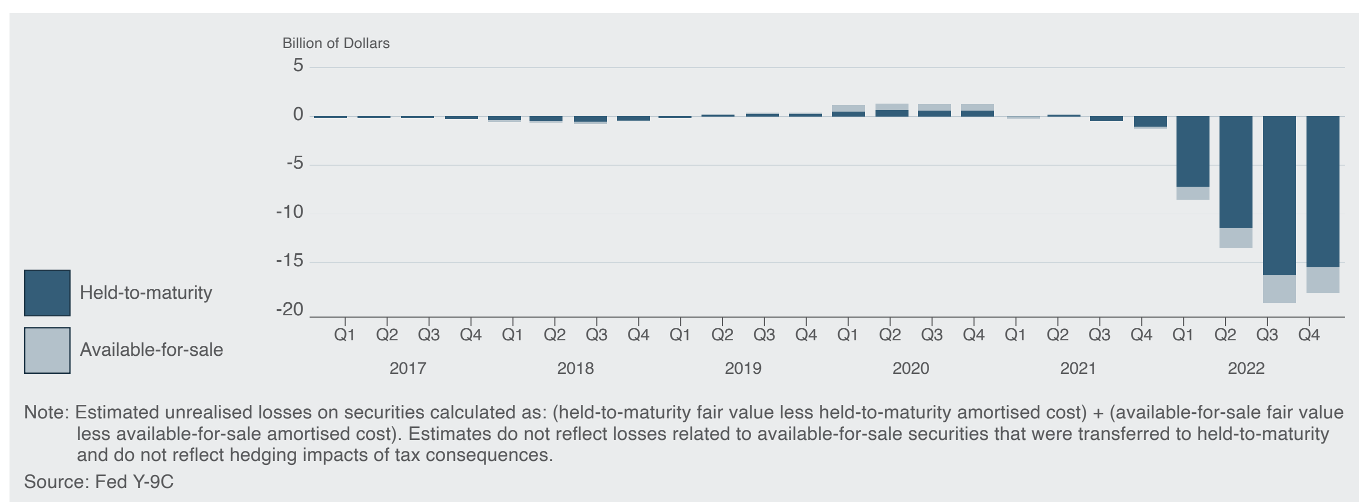
Table 3:
Peer comparison, 2022: Q4 (%)

Metric	SVBFG	LBOs
Loans as a percentage of total assets	35	58
Securities as a percentage of total assets	55	25
Held-to-maturity securities as a percentage of total securities	78	42
Total deposits as a percentage of total liabilities	89	82
Uninsured deposits as a percentage of total deposits	94	41
Common equity tier 1 capital as a percentage of total risk-weighted assets	12	10

Note: Values for large banking organisations (LBOs) represent weighted averages of all US bank holding companies and savings & loan holding companies with total assets greater than $100 billion, with the exception of banking organisations in the Large Institution Supervision Coordinating Committee (LISCC) supervisory portfolio.

Source: Fed-Y9C and Call Report.

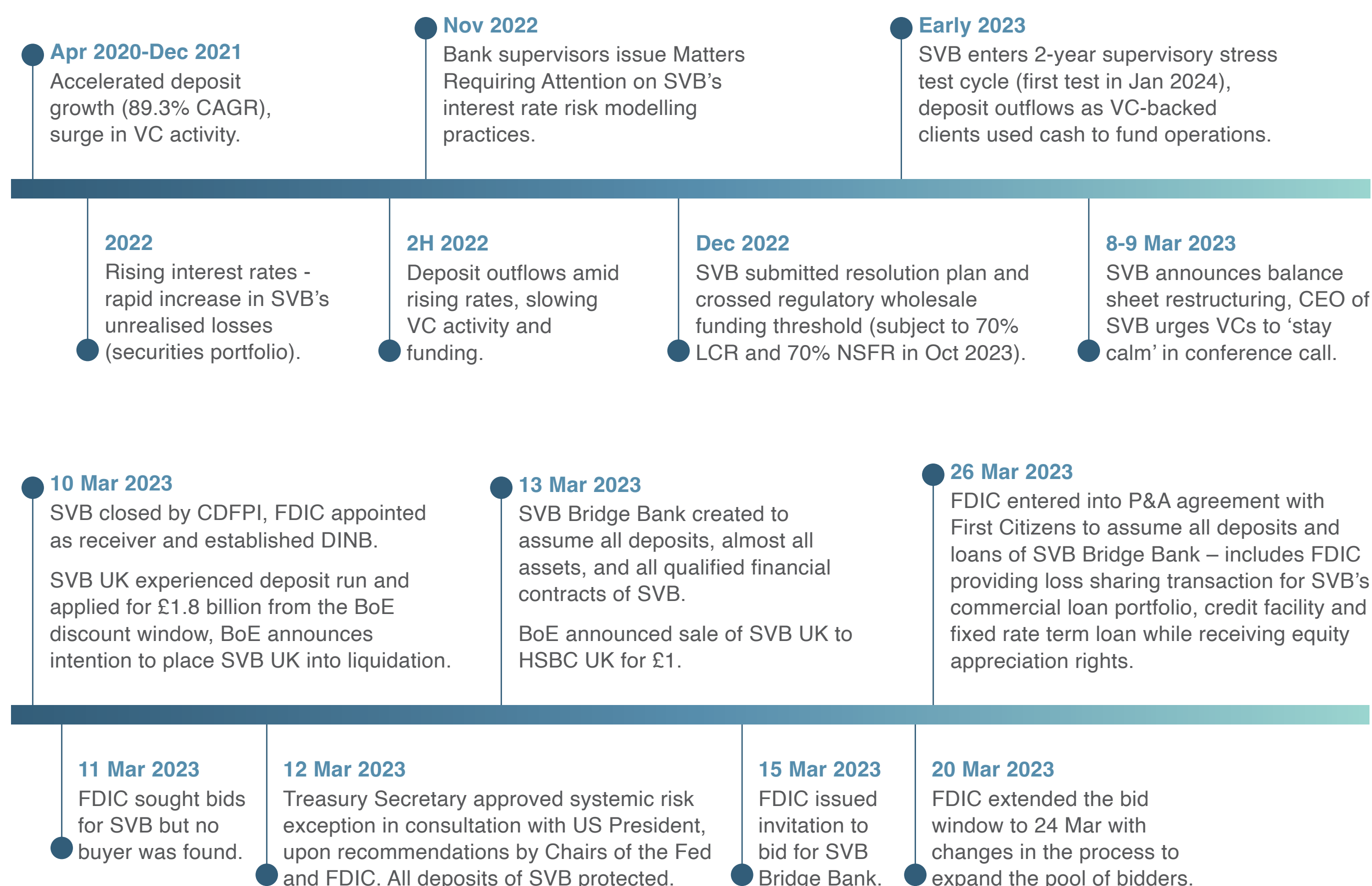
Figure 2:
Estimated unrealised gains (losses) on SVBFG's investment portfolio securities



Note: Estimated unrealised losses on securities calculated as: (held-to-maturity fair value less held-to-maturity amortised cost) + (available-for-sale fair value less available-for-sale amortised cost). Estimates do not reflect losses related to available-for-sale securities that were transferred to held-to-maturity and do not reflect hedging impacts of tax consequences.

Source: Fed Y-9C

Resolution actions



Systemic risk exception applied to protect all deposits at SVB

On 10 March, upon the closure of SVB, the FDIC established the Deposit Insurance National Bank[24] of Santa Clara (DINB) and all insured deposits were immediately transferred to DINB. Meanwhile, uninsured depositors would be paid an amount in the following week, with future payments contingent upon the sale of SVB's assets. While the FDIC sought bids from an auction of SVB on 11 March, no buyer was found. Only two bids were received, and the one valid offer would have resulted in recoveries below that of a liquidation scenario.

Hence, on 12 March, the Treasury Secretary, Chair of the Federal Reserve (Fed Chair), and Chairman of the FDIC jointly announced, among others, that a systemic risk exception would be applied to SVB to strengthen public confidence in the US banking system. This action was approved by the Treasury Secretary in consultation with the US President, upon recommendations by the Fed Chair and FDIC Chairman.

This meant that all deposits in SVB, including the uninsured portions, would be fully protected. However, shareholders and certain unsecured debtholders took losses. It was also communicated that senior management of SVB has been removed and as required by law, losses sustained by the Deposit Insurance Fund (DIF) would be recovered by way of special assessment on banks. Taxpayers would not bear any losses relating to SVB's resolution.

In addition, to provide assurance that banks could meet depositor needs, the Fed provided additional funding through a new Bank Term Funding Program (BTFP) for depository institutions.[25]

[24] The Banking Act of 1933 authorised the FDIC to establish a "new" bank called a Deposit Insurance National Bank (DINB) (a national bank chartered with limited life and powers) to assume the insured deposits of a failed bank, and pay depositors. Depositors of a DINB were given up to two years to move their insured accounts to other institutions, allowing a failed bank to be liquidated in an orderly fashion

[25] The BTFP offers loans of up to one year to banks pledging collateral (valued at par) as an additional source of liquidity. This eliminates an institution's need to quickly sell highly liquid securities in times of stress

Bridge bank established as a stabilisation measure

On 13 March, Silicon Valley Bridge Bank, N.A. (SVB BB) was created as a bridge bank operated on a temporary basis by the FDIC, which appointed a new CEO for the SVB BB. All deposits, almost all of SVB's assets, and all qualified financial contracts, were transferred to SVB BB to protect depositors, preserve asset values and operations of SVB, and potentially improve recoveries for creditors and the DIF.

With the bridge bank structure in place, the FDIC was able to source for better offers. Prospective acquirers also had more time to assess SVB's condition. Invitation for bids were issued on 15 March, with reports suggesting the FDIC's preference for a sale of the entire bank. Subsequently, the FDIC announced several changes to the bid process for SVB BB, including extension of the bid window to 24 March. Notably, the FDIC would accept separate bids for SVB BB and Silicon Valley Private Bank (for HNWI). Moreover, the pool of bidders was widened – qualified insured banks in alliance with nonbank partners could submit whole-bank bids, while non-bank financial firms could bid on asset portfolios. The FDIC ended up receiving 27 bids from 18 parties (one or more bidders submitted more than one bid), across all three categories: whole-bank, private bank and asset portfolios.

Purchase and Assumption of SVB Bridge Bank by First Citizens Bank & Trust Company (First Citizens)

On 26 March, 16 days after the SVB auction process was initiated, the FDIC entered into a P&A agreement with First Citizens which assumed all deposits and loans of SVB BB, and also acquired the private bank. As at 10 March, SVB BB held an estimated $167 billion in assets and about $119 billion in deposits.

> ***Let me say that this acquisition is compelling financially, strategically and operationally***
>
> Frank Holding, Chief Executive Officer of First Citizens Bank

The deal involved purchase of approximately $72 billion of SVB BB's assets at a discount of $16.5 billion. Meanwhile, $90 billion of securities and other assets remained in receivership with the FDIC. The structure also involved a loss sharing transaction, where the FDIC will cover an estimated $60 billion of loans and reimburse First Citizens for 50% losses of SVB's commercial loans in excess of a $5 billion threshold. The FDIC also provided a $70 billion credit facility for a two-year period for liquidity support to First Citizens, as well as a five-year loan of $35 billion at a fixed rate of 3.5% (this was structured as a purchase money note issued by First Citizens to the FDIC). Lastly, the FDIC received equity appreciation rights for the common stock of First Citizens with a potential value of up to $500 million.

Sale of SVB UK to HSBC UK Bank Plc (HSBC UK)

The BoE, in its earlier statement on 10 March stating the intention to place SVB UK into insolvency (with reimbursements to depositors up to the deposit insurance limit of £85,000 per depositor), explained that the bank had limited presence in the UK and did not perform any critical functions supporting the financial system. The insolvency approach was also the BoE's preferred resolution strategy for SVB UK.

> ***This decision (to sell SVB UK to HSBC UK) has been taken to stabilise SVB UK, ensuring the continuity of banking services, minimising disruption to the UK technology sector and supporting confidence in the financial system***
>
> Bank of England

However, on 13 March, the BoE announced that – in consultation with the Prudential Regulatory Authority, Her Majesty's Treasury and the Financial Conduct Authority – the decision was made to sell SVB UK to HSBC UK for £1.[26] In explaining its position at the Treasury Select Committee hearing on SVB UK held on 28 March, Andrew Bailey, Governor of the BoE, argued that the resolution strategy of a sale was always the preference for a better outcome. In the case of SVB UK, effecting a sale also preserved continuity of banking for important businesses in the technology and life sciences sector.

Despite interest from prospective suitors which accessed SVB UK's data room from 11 to 12 March, only HSBC UK put in a bid. It was reported that HSBC UK had concluded only 70% of its due diligence on SVB UK's loan books. However, it still went ahead with the decision to acquire SVB UK, which was solvent and seen as a good strategic fit to expand HSBC UK's commercial banking business in high-growth industries. Following the acquisition, HSBC UK disclosed plans to inject £2 billion ($2.4 billion) into SVB UK to fund its holdings of long-dated assets and sustain operations, pending business integration.

[26] The BoE undertook a provisional valuation of SBV UK and its AT1 and Tier 2 regulatory capital instruments were mandatorily written down with the whole equity transferred to HSBC UK. The interests of SVB US, as the sole holder of SVB UK's regulatory capital instruments, were extinguished following resolution execution

Key takeaways

The failure of SVB in March 2023 drew significant interest owing to its unique characteristics, as well as concerns of potential contagion across the US as well as global financial system. It has been argued that SVB's failure – as well as the failures of Silvergate Bank on 8 March and Signature Bank (Signature) on 12 March – led to broader loss of confidence in banks, which then affected Credit Suisse Group AG (acquired by UBS AG on 19 March) and First Republic Bank (acquired by JP Morgan Chase on 1 May). From a policy and resolution lens, six key insights and areas can be distilled from the collapse of SVB.

Agile resolution execution

First, the importance of agility in resolution execution in terms of timing, assessing systemic risk, and recalibrations in resolution strategies and tactics. In SVB's case, the runway or 'time-to-resolution intervention' was significantly truncated by massive deposit withdrawals, leading to its urgent closure by the CDFPI on Friday morning. FDIC moved in immediately to create the DINB without having the benefit of a 'resolution weekend'.[27]

Dynamic situations also require greater adaptability, supported by comprehensive powers and tools to facilitate changes in the resolution approach. Having decided to only cover insured deposits via the DINB, the FDIC altered the course of its resolution strategy for SVB over the weekend. With the imminent failure of Signature in sight, the FDIC and Fed speedily assessed and sought approvals from the Treasury Secretary on systemic risk determinations for both SVB and Signature. With 2 bank failures within a 48-hour window, there were serious concerns of contagion to other institutions, risk to the overall financial system, and broader economic spillover effects. Losses of uninsured deposits could also adversely impact the ability of SVB and Signature's small and medium-sized business customers to make payroll, pay suppliers and sustain operations. This led to the swift resolution action of protecting all deposits by applying the systemic risk exception, and creating temporary bridge banks while the FDIC worked expeditiously to find suitable acquirers for SVB and Signature.

The FDIC also demonstrated flexibility on the tactical front. For instance, it extended and simplified the bidding processes for SVB. Meanwhile, in the UK, the BoE also changed its resolution strategy from an initial position to place SVB UK into insolvency, to the sale of its business to HSBC UK as a better solution that emerged over the weekend.

Robust regulation

Second, the importance of robust regulatory action and policies. According to the Fed, a key reason for SVB's collapse was the failure by SVB's Board and senior management to oversee inherent risks in SVB's business model and balance sheet strategies. Beyond the issues at SVB, while supervisors identified vulnerabilities, due to changes in rules applied to US banking institutions in 2018, SVB ended up being subject to less intensified regulatory and supervisory frameworks.[28]

Even after crossing the regulatory threshold in June 2021 of $100 billion (average total consolidated assets) for enhanced prudential standards, at the time of its failure, SVB had yet to adopt important capital and liquidity requirements due to transition periods in the rules, e.g. SVB would have been subjected to its first stress test only in January 2024. In addition, SVB's tailored resolution plans were only submitted to authorities in December 2022 – had those and other rules been applied earlier, SVB may have been more resilient, for instance having better contingency funding plans. SVB's ability to set up data rooms for faster bidding by potential acquirers (as part of regulatory initiatives to enhance the resolvability of banks) could have also led to more effective resolution.

[27] This departed from FDIC's conventional approach to announce closure of failed banks on a Friday evening to facilitate potential sale over the weekend, and re-opening on Monday morning to ensure minimal disruption to customers of the failed bank

[28] In 2018, the Economic Growth, Regulatory Relief, and Consumer Protection Act (EGRRCPA) amended the Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank Act) by raising the $50 billion minimum asset threshold for general application of Enhanced Prudential Standards (EPS) to bank holding companies with $250 billion in total assets. Consistent with the EGRRCPA, in 2019, the Fed raised the threshold for EPS from $50 billion in assets to $100 billion in assets, and SVBFG was subject to a less stringent set of EPS when it reached the $100 billion threshold than would have applied before 2019

Dynamic policies for bank runs and reform of deposit insurance coverage

Third, the importance of addressing the risks of fast-paced and amplified deposit runs. The withdrawal of $42 billion from SVB in a single day (25% of total deposits), with another $100 billion (62%) in waiting on the next day, was unprecedented and led to the swift closure of SVB by the CDFPI. It was fuelled by the mix of a large uninsured depositor base, social media, digital access and herd behaviours among a common network of technology and VC depositors. To put in context, the largest failure in US banking history (Washington Mutual Bank in 2008) recorded a 10% deposit outflow over a period of 16 days.

While SVB's case was unusual (high level of uninsured deposits with concentration among similar tech start-up depositors), it highlights the broader need for more effective policies to tackle liquidity risks as well as strategies to mitigate the spread of panic and potential dis-information through social media channels. In addition, policy discussions are taking place internationally on the possibility of increasing the level of deposit coverage to include certain uninsured deposits. For instance, under the FDIC's reform proposals, the favoured option is to target coverage of large accounts used for business payments. While such policies may increase public confidence in the deposit insurance system, it is equally essential to consider the trade-off of moral hazard in ensuring market discipline is not compromised, as well as costs associated with higher coverage levels. Another point is to consider the complimentary roles of deposit insurance, the prudential framework and the resolution regime.

Table 4: Selected Deposit Runs from 1984 to 2023

Bank	Date run started	Deposit insurance coverage (%)	Total outflow (%)	Duration of outflow
Continental Illinois	May 7, 1984	15	30	10 days (7 bus. days)
Washington Mutual	Sep 8, 2008	74	10.1	16 days (12 bus. days)
Wachovia	Sep 15, 2008	61	4.4	19 days (15 bus. days)
Silvergate	2022 Q4	11	52	Possibly 7 days or less
Silicon Valley Bank	Mar 9, 2023	6	25 + 62*	1 day + expected next day
Signature Bank	Mar 10, 2023	10	20 + 9*	1 day + expected next day
First Republic	Mar 10, 2023	32	57	About 7-14 days (5-10 bus.days)

** Expected amounts of outflows that were scheduled to go out the next business days, but did not actually occur because the banks were closed*
Source: Federal Reserve Bank of St. Louis

Effective crisis communications and interagency coordination

Fourth, the importance of effective crisis communications and interagency coordination.

Spokespersons need to exercise greater conscientiousness amid heightened sensitivities in the heat of a crisis. SVB's communications in the days leading up to its failure may have exacerbated the loss of confidence in the bank. On 8 March, SVB's press release communicated the intention to shore up its capital base, but lacked details explaining the reasons for its action. On the following day, it was reported that Greg Becker, SVB's CEO, claimed in a conference call that SVB had "ample liquidity to support our clients with one exception: If everyone is telling each other SVB is in trouble, that would be a challenge". He also attempted to leverage the goodwill of relationships with SVB customers to stabilise the situation, by urging them to stay calm and not panic. As it turned out, instead of building confidence, those statements proliferated across social media and yielded the opposite effect of intensifying concerns and deposit withdrawals from SVB.

Nevertheless, communications by financial safety net authorities on actions taken to resolve SVB during the height of the crisis were clear and well executed. The US Treasury, Fed, and FDIC released joint statements, and Treasury Secretary Yellen fronted public communications to address concerns.

Besides within the US, regulatory coordination also extended across borders to the UK. The Governor of the BoE recognised close cooperation with the Fed and FDIC during critical times, towards the successful resolution of SVB UK.[29]

[29] The BoE had developed strong working relationships over the years with US authorities in areas covering the development of resolution plans for cross-border banks, high level crisis management scenario-based exercises, and other collaborations

Tackling contagion and its implication

Fifth, the importance of recognising the impact of crisis contagion instead of underestimating it. Contagion can lead to potential loss of confidence in other healthy banking institutions (of similar profile with the failed banks) as well as the broader financial system. Some market commentators were of the view that SVB's failure aggravated troubles faced by Credit Suisse leading to its 'emergency rescue' by UBS. Meanwhile, even as other observers questioned if SVB was indeed 'too-big-to-fail', contagion risk in the US proved to be a decisive factor supporting the Fed and FDIC's recommendation to trigger the systemic risk exception for SVB and Signature.

While such actions provided stability, the fallout of SVB continued to undermine confidence in other regional banks. At the height of the crisis, the flight-to-safety from regional banks saw large US banks and institutions inundated with significant deposit inflows. The loss of deposits proved too much to bear for First Republic Bank (First Republic) as its overall deposit base shrunk by 40.8% in the first quarter of 2023. First Republic was closed by the CDFPI on 1 May. On the same day, it was resolved by the FDIC by way of a P&A agreement with JP Morgan Chase, which assumed all the deposits and substantially all the assets of First Republic (as of 13 April, First Republic held about $229 billion of assets and $103.9 billion of deposits and was the 14th largest bank in the US).

Bank failures are costly

Last but not least, the importance of advanced planning for resolution and crisis preparedness to potentially reduce the cost of failures. One way of assessing the overall cost of recent bank failures in the US is to capture it across three dimensions. First is the cost of $31.5 billion to the DIF administered by the FDIC. Second is the cost of $155 billion – which could be generally termed as individual government backstops – for SVB and First Republic (liquidity line and terms loans provided by the FDIC). Third is market-wide support by the Fed of about $305 billion as at 11 May (including the Fed discount window,[30] BTFP and other credit extensions). In aggregate, this represented about 1.9% of US GDP (as at 2022).

A key aspect to reiterate is that taxpayers did not bear any losses from the recent failures. Instead, losses to the DIF sustained from protecting uninsured depositors would be recouped from the industry. On 11 May, the FDIC proposed rules to apply the special assessments which mainly covered large banks (with higher amount of uninsured deposits) that benefitted the most from the systemic risk determination.[31]

As bank failures can be a costly affair, it is imperative that authorities as well as the industry invest in early planning and preparedness for crisis situations. This can be done through regulatory policies such as robust recovery and resolution planning towards enhancing the resilience and sustainability of the financial systems.

[30] Use of the Fed discount window facility peaked at $153 billion in the week to 15 March 2023

[31] The FDIC estimated that a total of 113 banking organisations would be subject to the special assessment. Those with total assets over $50 billion would pay more than 95 percent of the special assessment to be collected at an annual rate of approximately 12.5 basis points over eight quarterly assessment periods