Event Note

SVB Crisis: Snowballing Down the Valley

aranca

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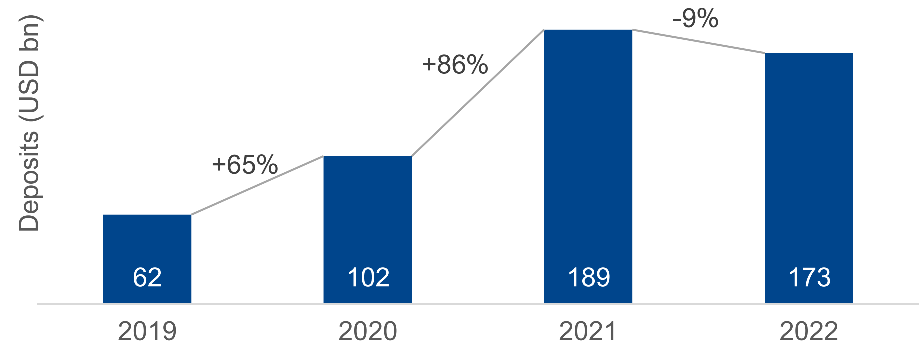
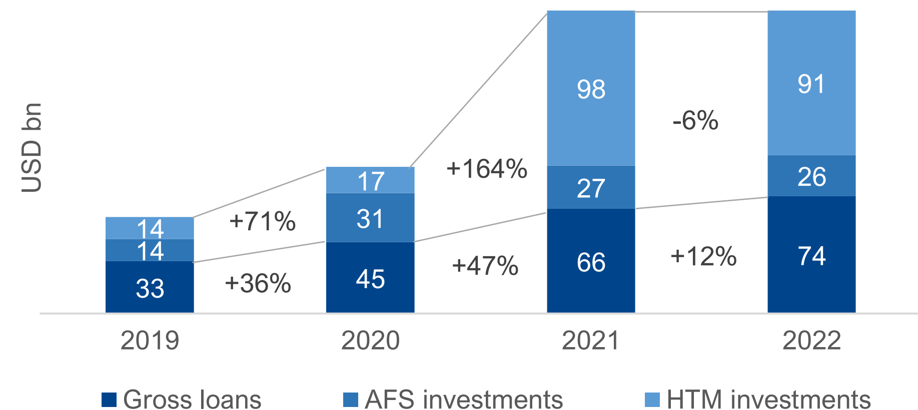
What Led to SVB Crisis?

- Silicon Valley Bank (SVB) was founded in 1983 to specifically cater to the needs of startup companies.
- SVB was the only publicly traded bank focused on Silicon Valley and tech startups. According to its website, SVB does business with nearly half of all US venture capital-backed startups.
- The bank saw drastic growth in deposits over the last two years, supported by strong private fundraising and easy funding available to startups due to low interest rates in 2021. About 89% of deposits were uninsured by the Federal Deposit Insurance Corporation (FDIC) as of December 2022.
- However, SVB was unable to grow its loan book fast enough to match its deposit growth. Hence, to generate better yields, the bank invested a major portion of the deposits into long-term securities (mostly 10+ years), largely government bonds and residential mortgage-backed securities.
- Investment securities [Available for Sale (AFS) and Held to Maturity (HTM)] accounted for approximately 60% of assets, while loans represented only 35% of assets on the balance sheet.

SVB saw influx of deposits in 2021 due to strong fundraising activities by startups



As demand for loans remained low, SVB invested most of the incremental deposits in long-term securities



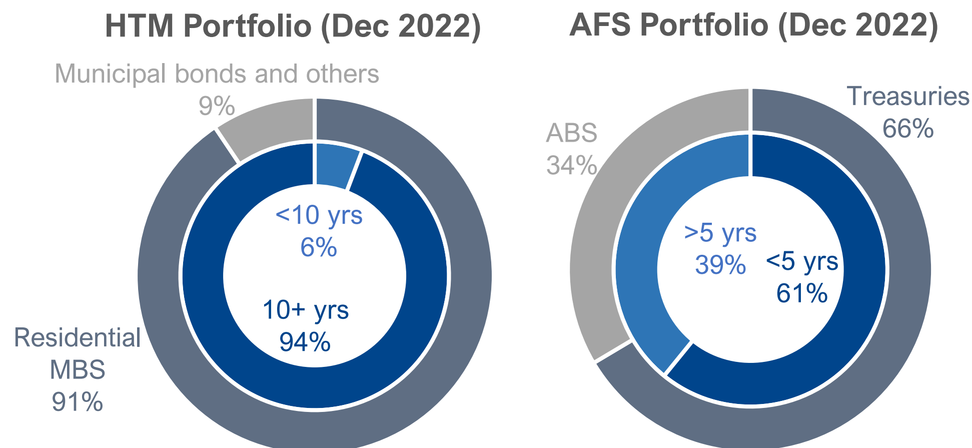
Source: Company filings

What Led to SVB Crisis?

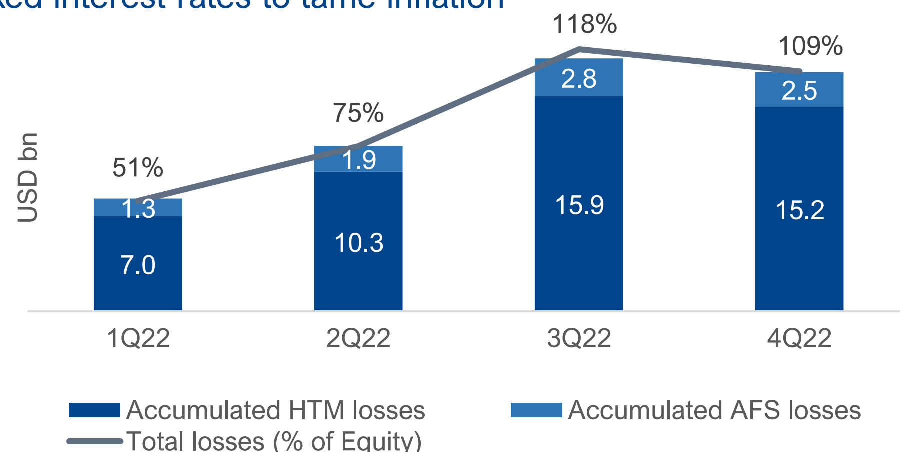
- A major portion of the investment portfolio was recognized as HTM, which was concentrated in residential mortgage-backed securities with maturity of more than 10 years.
- In the AFS portfolio, the investments were mainly in treasuries with less than 5 years maturity.
- Starting 2022, the Fed aggressively hiked interest rates to taper inflation. As a result, the accumulated mark-to-market losses on investment portfolio (both HTM and AFS) went up significantly.
- As of December 2022, the accumulated losses on AFS and HTM securities totaled USD 17.7bn, representing 109% of equity as of December 2022.
- Prior to making investments, the management conducted a scenario analysis that factored in the impact of a 100-200 bps increase in interest rate on the balance sheet. However, it failed to consider what would be the impact if the Fed swiftly raised interest rates beyond 200 bps, which was the actual scenario (the Fed raised interest rated by 425bps in 2022).
- Things started to get worse for SVB in 4Q22 and 1Q23 when startups, its key clients, started withdrawing deposits amid funding winter and cash burn, which resulted in liquidity pressure at the bank.
- On the contrary, SVB's CET1 ratio (including losses on AFS securities) was strong at 13.88% (vs 7% minimum requirement).

Source: Company filings

HTM portfolio mainly comprised residential mortgage-backed securities with 10+ years maturity, while AFS portfolio was skewed toward treasuries



Unrealized losses surged drastically as the Fed aggressively hiked interest rates to tame inflation



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SVB Crisis at a Glance

Date	Event
March 08, 2023	▪ In its 1Q23 mid-quarter update, SVB mentioned that it **fully sold the AFS investment portfolio of USD 21bn and realized a loss of USD 1.8bn** on the transaction. Due to the hit on CET1 ratio from the loss, SVB announced it would **raise USD 2.25bn** in common equity and mandatory convertible preferred shares. With the help of these transactions, SVB **aimed to strengthen its capitalization and enhance liquidity** in anticipation of a further hit to the investment portfolio from rising interest rates, stress in public and private markets, and elevated cash burn at its startup clients. ▪ **Moody's downgraded SVB senior unsecured rating to Baa1 from A3** with a negative outlook due to deterioration in the bank's funding, liquidity, and profitability.
March 09, 2023	▪ Inadequate liquidity and fear of further losses in its investment portfolio in the event of higher deposit withdrawals triggered a **panic among depositors that led to a run on the bank.** Depositors withdrew USD 42bn within two days (about a quarter of deposits as of December 2022), which foiled the bank's plans to raise capital.
March 10, 2023	▪ **FDIC took control of the bank** by creating a new entity called the Deposit Insurance National Bank of Santa Clara, and all SVB deposits were transferred to the new bank. Insured depositors would get their money, while FDIC would issue receivership certificates for uninsured deposits. ▪ **Moody's downgraded SVB Financial Group to C from Baa1 and withdrew ratings.**
March 12, 2023	▪ The **Federal Reserve announced that all customers would get their deposits back and launched the Bank Term Funding Program (BTFP)**, a new liquidity program for banks. BTFP would allow banks to take advances from Fed for up to one year by pledging treasury, mortgage-backed bonds, and other debt as collateral. The main benefit of the program is that banks can **borrow funds equal to the par value** of collateral and not the market value.
March 13, 2023	▪ **HSBC UK acquired SVB's U.K. subsidiary for GBP 1**. Concerns that the bank's failure would impact Britain's startup industry prompted calls from the sector for government to intervene.
March 26, 2023	▪ North Carolina based **First Citizens Bank and Trust (FCB) entered into an agreement with FDIC to buy SVB.** FCB and FDIC also inked a loss-sharing agreement for purchase of the commercial loan portfolio. ▪ The deal includes the purchase of about USD 72bn in loans, at a discount of USD 16.5bn, and transfer of deposits worth USD 56bn. Roughly USD 90bn in SVB securities and other assets are not included in the sale and will remain in FDIC's control. As part of the deal, FDIC will receive equity appreciation rights linked to FCB shares worth USD 500mn. ▪ The deal benefits from further downside protections including a loss-sharing agreement and liquidity facilities. In its loss sharing agreement, FDIC agreed to reimburse First Citizens for half of any losses above USD 5bn on the portfolio of commercial loans transferred in the deal. FCB issued a five-year USD 35bn note at a fixed rate of 3.5%, resulting in an immediate cash infusion. The deal also includes a USD 70bn credit line for five years at a cost of SOFR + 25bps to protect against additional deposit flight. ▪ FDIC estimates the **cost of SVB's failure to the Deposit Insurance Fund to be around USD 20bn**.

Conclusion

Lessons Learned

- SVB had an undiversified business model with a focus on tech startups and venture capital funds, resulting in high concentration risk.
- The event emphasizes the fact that government bonds should not be considered as fully risk free and shall not carry 0% weight in risk-weighted assets calculation.
- FDIC gives small banks a one-time permanent option to elect out of the requirement to deduct unrealized losses from CET1 capital, which inflates the CET1 ratio. The regulator should discontinue such benefits so that risks and losses are truly reported.
- Small banks should be required to adhere to stringent regulatory requirements that are applicable to large banks. For instance, SVB was not subject to liquidity coverage ratio (LCR) requirement.

How Safe are Large US Banks?

- Unlike SVB, large US banks (including G-SIBs) have high business diversification and cater to multiple industries, which reduces concentration risks. Moreover, they have a stable deposit base with a large proportion of sticky retail deposits, indicating less volatility.
- The large US banks are highly regulated and mandated to follow regulatory requirements related to liquidity and capital. They follow advanced approach for calculating CET1 ratio, whereby unrealized losses on AFS investments are deducted while calculating CET1 capital; this gives a true picture of the capital position. Unrealized losses are also deducted in LCR.
- The large US banks hold a diversified portfolio of securities across asset classes and have a strong risk management framework that ensures careful match of assets vs liabilities (with hedges when necessary).
- Based on the Federal Reserve weekly data (non-seasonally adjusted data), large domestic chartered banks gained USD 120bn in deposits, while small domestic chartered banks lost USD 108bn for the week ended March 15, 2023. This highlights the market confidence in large domestic chartered banks.

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