

Tip of the Iceberg...

SILICON VALLEY BANK Case Study

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Founded in 1983 and headquartered in Santa Clara, California, SVB was a commercial bank that provided range of banking services such as deposit services, loans, investment products, cash management, commercial finance etc. to ***venture capital-backed technology*** and life-science companies and received deposits majorly from ***start ups*** as they tend to have more cash on hand than debt. Nearly half of U.S. venture capital-backed healthcare and technology companies were financed by SVB.

It was wholly owned subsidiary of SVB Financial Group. The bank operated from offices in 13 countries and regions. SVB was regulated by the California Department of Financial Protection and Innovation (DFPI) and was a member of the Federal Reserve System. It was the largest bank by deposits in Silicon Valley. It is the ***largest bank to fail since the 2008 financial crisis*** and at the ***time of its failure*** on March 10, 2023, it was the ***16th-largest bank in the United States***.

Prior to March 9 2023, SVB was in "sound financial condition," according to the DFPI. Employees had received their annual bonuses on March 10 2023, hours before the government took control of the company.

- Beginning 2020 (during covid) lots of money was pumped into the economy and interest rate was decreased to NIL making funds easily available. During that period, SVB got flushed with cash (majorly from startups) and its ***total deposit balances more than tripled from 2019 to 2022*** to USD 189bn (of which USD 126bn comprised of non-interest-bearing demand deposits).
- After providing loans, the bank split its remaining deposits in two strategic investment parts : invested some portion in short-term available-for-sale (AFS) securities to protect its liquidity, while also invested in long-term held-to-maturity (HTM) securities to earn higher returns.
- AFS book with shorter durations increased from USD 14bn in 2019 to a peak of USD 27bn in 2021. Meanwhile, during the same period, HTM book with longer durations saw a much bigger rise growing from USD 13.8bn to USD 98bn .
- But as interest rates began to increase, SVB's assets got negatively affected. By the end of 2022, the unrealized losses in the bank's HTM portfolio increased from nothing in 2021 to USD 15bn by 2022, representing 16% decline in value. The bank's AFS portfolio was also impacted, but to a lesser extent, with mark-to-market losses of 9% by 2022.
- The drop in value of SVB's investments was so significant that as of 2022, the bank was technically insolvent. The USD 15bn in losses from the HTM portfolio more or less equalized to the USD 16bn of equity that supported the bank's balance sheet. But since HTM assets are not marked to market, these losses didn't have to be recorded on the bank's books and the HTM portion of balance sheet remained glued at amortized cost.

- The Fed hiking spree sent the borrowing cost higher meaning tech startups had to channel more cash towards repaying debt. At the same time, they were struggling to raise new venture capital funding. That forced companies to draw down on deposits held by SVB to fund their operations and growth.
- To meet the huge withdrawal demand, **SVB sold USD 21bn worth of low yielding bonds at a loss of USD 1.8bn** with a plan to **cover the loss by selling shares worth USD 2.25bn**. Private equity firm General Atlantic agreed to purchase USD 500m of shares contingent on the other common stock offering closing.
- Though the bank's management was confident that the share sale would be completed before the market open on 9th March 2023 but stock sale was unachievable because of the tight schedule.
- On 9th March 2023, SVB's stock plunged on news of the share sale and loss from investments. Further situation worsen when venture capital firms instructed startups they had funded to withdraw their funds from the bank due to financial concerns leading to bank run as **customers withdrew funds totaling USD 42bn leaving a negative cash balance of USD 958mn** on a single day. SVB shares **closed the day down 60% at USD 106.04** and trading halt was implemented on March 10.
- As a consequence of bank run, General Atlantic and other investors stepped back and the bank collapsed.
- On 10th March 2023, Moody's lowered the SVB's long-term local currency bank deposit to "Caa2" from "A1" and its issuer rating to "C" from "Baa1" as a result of SVB closure by DFPI.

DFPI closed the bank on 10th March 2023 citing inadequate liquidity and insolvency post examination of company's finances by Federal Reserve and Federal Deposit Insurance Corporation (FDIC) and appointed the FDIC as receiver. Approx 89% of the bank's USD 172bn in deposit liabilities exceeded the maximum insured by the FDIC, as per the regulatory report.

On the same day, the FDIC established the Deposit Insurance National Bank of Santa Clara (DINB) to re-open the bank's branches and enable access to insured deposits from March 13.

The bank's CEO Greg Becker who was previously on the board of directors at the Federal Reserve Bank of San Francisco exited the position.

On 12th March 2023, a joint statement was issued by Secretary of the Treasury, Federal Reserve Chairman and FDIC Chairman stating that all depositors at SVB would be fully protected and have access to all of their money starting March 13.

Additionally, the Fed said it would make additional funding available to banks to ensure they have “the ability to meet the needs of all depositors” through a new “Bank Term Funding Program”.

On March 13, 2023, the FDIC transferred SVB assets to a new bridge bank, Silicon Valley Bridge Bank, N.A. On the same day, it was announced that HSBC UK had agreed to acquire Silicon Valley Bank UK for GBP 1 in a rescue deal, and SVB UK customers can continue to bank as usual with immediate effect.

On March 8, 2023 Silvergate announced that it will shut down operations, liquidate the bank and repay all the deposits. A week ago, the bank released a notice about its delay in filing annual report in the need to reevaluate the losses incurred and its ability to continue as a going concern . As a result, the bank's share crashed more than 50% in an hour trading. Its biggest clients including Coinbase, Galaxy Digital, Paxos suspended all operations with the bank.

Silvergate was founded in 1988 in California. It was federally regulated financial institution to provide banking services to crypto companies. Its clients were major crypto exchanges including FTX. FTX was 4th most liquid crypto exchange after Binance, Coinbase and Kraken. FTX collapsed in November 2022 after CoinDesk revealed that Alameda Research, a crypto trading firm held a significant amount in FTT, the native token of FTX leading to bulk withdrawals by investors.

Panicked investors from FTX collapse rush to withdraw funds from FTX and crypto banks. Silvergate faced bank run and to meet sudden demand, it had to sale USD 6bn of securities and reported a loss of USD 1bn in Q4 2022. Its digital asset customers decline to USD 3.8bn from USD 11.9bn through its Q4 2022. The bank faced continuous probe from US department of Justice for ties with FTX.

The bank suspended its flagship product, Silvergate Exchange Network (SEN) on March 3 2023, which allowed its clients to transact fiat and crypto currencies 24/7. ***Silvergate collapse was mainly the result of poor risk management, heavy reliance on volatile short term deposits and lending or investing at a longer duration.***

Frightened by the sudden collapse of SVB, customers of Signature Bank withdrew more than USD 10bn in deposits on 10 March 2023. The run on deposits led to the third largest bank failure in US history.

On 12 March 2023, state regulators announced to takeover Signature Bank to protect its depositors and maintain the stability of the U.S. financial system. FDIC took control of the bank that had USD 110.36bn in assets and USD 88.59bn in deposits (of which USD 16.5bn from digital-asset-related customers) at the end of 2022. The regulator then established a "bridge" successor bank which enabled customers to access their funds from 13 March 2023.

Signature Bank was founded in 2001 and had businesses mainly in commercial real estate and digital asset banking.

Silvergate, Silicon Valley Bank and Signature Bank faced specific business cycle. All three catered to sectors – crypto or venture-funded tech firms that saw huge runups in the early stages of the COVID-19 pandemic. All these banks got flooded with deposits between 2020-2021. In the absence of huge demand for loans and to safeguard the funds, these banks made investments in government securities providing low yield during that period. The strategy backfired as government rose interest rate to curb inflation and bank's investments met an unrealized loss which later had to be realized as banks faced deposit run .

Hit by the shockwave from collapse of SVB and Signature Bank, all major indices sank sharply. Within 3 trading days, from 8th to 13th March, the S&P 500 fell 3.41%, the Euro Stoxx 600 dragged down by 3.95%, the Dow Jones Industrial Average lost 2.99%, the Nasdaq Composite shed 3.34%, the FTSE 100 closed 4.81% lower, Sensex dropped by 3.50% and Nifty 50 plunged 3.38%.

The collapse has sparked fears of a financial crisis leading to a drop in crude oil price also. While WTI sank by 2.43% ,Brent dipped by 2.29%.

Though government worldwide is quoting that SVB and Signature collapse is not a systemic risk and pose no threat to financial stability but investors are spooked and the markets remains tensed despite the best efforts of governments and regulators to contain the situation.

Of the banking crisis situation, one of the positive impact that market is speculating is Federal Reserve will now pause its plans to keep raising interest rates, designed to tame inflation and may cut down the benchmark interest. Indeed, both the US 2-year and 10-year treasury bond yields have cooled down from levels before the SVB episode. The US 2-year yields have tumbled more than a percentage points whereas US 10-year yields have declined by approx. 50 bps.

- ❑ **Asset-liability mismatch:** Accepting the deposit of short-term nature (eg. Non-interest bearing deposit by start-ups) and lending/investing the same into the long-term duration products (eg. Mortgage backed securities) could at any time create liquidity issues where bank may not be able to timely realize cash from its investments to honor the cash encashment by the depositors.
- ❑ **Misunderstanding capital positions:** Capital is different from cash. A company's capital and capital management may be sound, but that doesn't necessarily mean that its cash and ALCO management is robust. Capital provides reporting information, but cash provides liquidity. To avoid liquidity traps, top executives must have a deep understanding of types of their firm's assets and liabilities.
- ❑ **Concentration risk:** It is essential to diversify sources and uses of fund. Having a niche and concentrated customer base is a boon when business is booming but at the same time, it can magnify a feedback loop when conditions reverse. Similarly, investing entire pool of funds in a single product may lead to liquidity crunch.
- ❑ **High-Interest Rate Environment:** Central bank may adopt the policies to increase the interest rates to curb the inflation but this can have the systemic impact to other areas too. Business may shrivel in high interest rate environment, resulting under-performance, job cuts, etc. which in turn brings more havoc situation.
- ❑ **Inadequate cash reserves:** The cause of many potential losses on business balance sheets is liquidity risk, which is the inability to buy or sell assets as needed due to a lack of demand in a crisis. Thus conducting stress test and maintaining cash reserve higher than historic event is paramount.
- ❑ **Risk Management – A Necessity:** Lack of attention to the risk management and/or no risk officer can be the warning bell to the companies operation. In case of this SVB too, there was absent of Chief Risk Officer (CRO) for nearly 8 months prior to the bankrupt.