The Failure of Silicon Valley Bank (SVB):

A PRMIA Case Study

Summary

Silicon Valley Bank (SVB) was a prominent financial institution that specialized in providing banking and financial services to start-up, technology, life sciences, healthcare, and venture capital firms. Headquartered in Santa Clara, California, SVB played a major role in entrepreneurial activity in Silicon Valley and similar markets around the world.

With $213 billion in assets and more than 8,200 employees globally at the end of 2022, SVB seemed a stable and successful firm. However, in March 2023, after market concerns about its financial position, it collapsed and was seized by its regulator, the California Department of Financial Protection and Innovation (DFPI). At the time, it was the biggest bank failure in the United States since 2008 with additional bank failures or rescues taking place because of market unease.

This case study will consider the failure of the bank with a focus on its risk capacity and appetite, its Asset Liability Management (ALM) risk, and concentration risk. It will also consider the impact of inflation and the resulting increases in interest rates and the related and inevitable fall in bond prices.

The Company

Silicon Valley Bank was founded in Santa Clara, California in 1983. According to the bank's own history from 2003, it was conceived by Bill Biggerstaff and Robert Medearis over a game of poker. Biggerstaff was a Wells Fargo executive and Medearis was a Stanford University professor; both were former Bank of America managers. It had an immediate emphasis on meeting the needs of startup companies. To aid this, they hired Roger Smith to be the bank's first CEO and president. Smith had previously headed a high-tech lending division at Wells Fargo.

In 1987, the company began trading stock on Nasdaq under the symbol SIVB. The following year, it completed its IPO and raised $6 million in equity. The bank expanded around the Silicon Valley area, with a further expansion to the East Coast of the United States in 1990 with an office in Massachusetts.

Small losses in the 1980s turned into modest profits by the mid-1990s, with the firm then achieving 21 consecutive quarters of profitability. This expansion continued throughout the dot-com boom of the late 1990s. An expansion into real estate in the 1990s resulted in nearly 50% of loans being in that sector; however, losses in this sector in the mid-1990s resulted in this being reduced again to less than 10% of loans.

During the late 1990s, there was a rapid rise in the business and valuation of internet-related companies. Many of these companies, referred to as dot-coms, had high valuations despite having little to no profits or sustainable business models. There was a correction with the collapse of that market around 2001. Stock prices of internet-based companies plummeted, leading to massive losses for investors. Many dot-com companies went bankrupt or experienced substantial layoffs and downsizing. At this time, SVB's stock fell more than 50% in 2001, but the bank was able to recover from that.

International offices continued to open in the 2000s, including offices in the UK and Israel. Of interest is that it was able to drive some of its expansion from the ties between the tech community's apparent love for California wine; in 2015, wine business accounted for 6% of the bank's then $14.6 billion gross loan portfolio. It benefited from the Troubled Asset Relief Program (TARP) during the 2007–2008 financial crisis and continued to expand.

Risk Management

Given the nature of the industries it provided services to, SVB faced some unique risks associated with financing startups and high-growth companies. Following traditional lending practices, other banks would request information on cash flow and the collateral. However, new firms may be just a concept and growing firms might be cash flow negative for an extensive period. SVB recognized the nature of funding and cashflow for such firms and adjusted their practices to match this.

Many of their customers would be dependent on venture capital and other such sources of funding. Venture capital refers to a type of private equity financing that is provided to such early-stage, high-growth companies. Venture capital firms look for companies with significant growth potential and invest in them in exchange for an ownership stake. This is typically in the form of equity or convertible debt for which the startups and high-growth companies receive financial support and resources. The venture capital firm expects substantial returns on these investments; such investments are inherently risky due to unproven business models and uncertain market conditions. The failure of any one investment might wipe out the entire related investment.

However, SVB actively cultivated relationships with these venture capital firms and in turn the clients of the venture capital firms. They recognized the vital role these venture capital firms played in funding and supporting startups. However, they also recognized their ability to connect them with such firms. Following this strategy, SVB became a familiar bank for those in this area, offering financial services and expertise tailored to the needs of the venture capital community and their portfolio companies. As the startups and high-growth industry evolved, SVB adapted its services to align with related emerging trends and needs. It supported emerging additional sectors such as biotechnology.

For SVB, this often meant they were the bank that startup and high-growth companies deposited their funds with. Returning to the related funding model, these firms might receive a large amount of funding from a venture capital firm or other investor. These funds were what the startups and high-growth companies would use to pay staff to run their operations, develop products, and develop customers. Many firms at this stage in their development will be "burning" cash each month; that is, spending the money invested in them as they work to develop cash flows from new products and customers. This understanding of their customers often featured in any reporting or discussions on risk management at SVB.

In addition, SVB could be seen to have many of the elements to be expected in a bank's risk management framework. SVB's Risk Committee Charter from April 2022 listed many of the items expected for a firm of this type, including:

- **Risk appetite:** *The Board will review and approve the Company's Risk Appetite Statement on at least an annual basis, subject to the Committee's recommendation*.
- **Chief Risk Officer:** *The Committee shall be responsible for the appointment, performance, evaluation, compensation determination, and termination of the Chief Risk Officer...*
- **Liquidity management strategies and policies:** *The Committee shall review, approve and recommend for Board approval at least annually, the Company's liquidity risk management strategies (including liquidity tolerance), policies and procedures, as developed by management.*

Thus, SVB seemed to be what people thought it to be – a successful bank, that had used its knowledge of startups and high-growth to pursue a profitable strategy using modern and proven risk management tools and approaches. At the end of 2022, it had over 8,500 staff, assets of $212bn, liabilities of $196bn, and equity of $16bn.

The Failure

SVB had become very concentrated in the start-up, technology, life sciences, healthcare, and venture capital industries; it frequently stated that it did business with over half of the start-ups in the United States. However, until 2023, this concentration was presented as an advantage and not a threat.

However, it was the deposits from these customers that started to cause an issue. As already stated, many startup and high-growth companies deposited their funds with SVB. This in turn allowed SVB to either lend or invest this money – by the end of 2022, SVB had $74 billion in loans. In what seemed a prudent investment, they invested much of their non-lent funds into US Treasury Bonds, with a preference for longer term bonds. Seen to be a very safe investment, these bonds are expected to pay regular interest and a large lump sum at the end of the investment. In addition, by being longer term investments, a better return would be expected.

However, this had two major implications for SVB. Firstly, their funds were now invested for a long period of time – if their depositor customers suddenly withdrew a lot of their funds, then SVB would need to ensure they had more immediate funds on hand to address such an event. Secondly, there was an exposure to interest rate risk. One of the tenets of bond investment, is that when interest rates go up, bond prices go down. As a result of various events including the Invasion of Ukraine and a global rebound in the global economy after COVID-19, countries were suddenly facing some of the largest inflation in years. The usual response by Central Banks to inflation is to increase interest rates and this was what happened from 2021 onwards. By 2023, interest rates had increased significantly and in tandem with this bond prices went down. It is important to note that the bonds were still paying the same interest and the final lump sum would be received at the end – the issue was that the price of the bonds had declined. By the end of 2022, SVB had related mark-to-market accounting unrealized losses of more than $15 Billion.

To attempt to address this, SVB announced a $1.75 billion capital raising exercise on March 8th. However, people became alarmed the bank was short on capital and some started to wonder about their deposits with the bank. Like many other countries, SVB depositors were protected by a deposit guarantee scheme. In this case the Federal Deposit Insurance Corporation (FDIC) operated a $250,000 coverage limit. But many of the startups and high-growth companies had deposits well more than this limit; regulatory filings from December 2022 estimated that more than 85% of deposits were uninsured. This led to an understandable fear that their deposits may be in danger. In addition, this was in the time of social media, so rumors spread quickly, and many took, for them, the least risky approach and started to withdraw their deposits. SVB was starting to experience what looked like an old-time bank run.

Early in the morning of March 10th, examiners from the Federal Reserve and the FDIC arrived at the offices of SVB to assess the company's finances. Quickly the California Department of Financial Protection and Innovation (DFPI) issued an order taking possession of SVB, citing inadequate liquidity and insolvency, and appointed the FDIC as receiver. To aid in reassuring customers and the wider market, the FDIC then established a deposit insurance national bank, the Deposit Insurance National Bank of Santa Clara, to re-open the bank's branches the following Monday and enable access to insured deposits.

Over the next few weeks, various parties took on the business of SVB, including HSBC UK agreeing to acquire Silicon Valley Bank UK for £1 in a rescue deal, at no cost to the taxpayer and with depositors fully protected. People were then left to consider how this great bank had collapsed so quickly.

Lessons Learned

SVB gives a set of lessons that can be linked back to several areas of risk management.

1. Having a risk management framework is very useful. A review of disclosures and other documents on the SVB website and elsewhere shows that many of the standard items expected in a risk framework were listed and indeed implemented. However, SVB went without a Chief Risk Officer (CRO) for most of 2022. Laura Izurieta stepped down from her role as CRO of SVB Financial Group in April 2022 and formally departed the company in October. The bank then appointed her successor, Kim Olson, in January of 2023. This important role was not properly filled in the time when interest rates were starting to impact SVB's finances and there may not have been a sufficient voice at the management level in SVB to highlight the related risks.

2. While SVB made a success of its concentration in startups and high-growth companies, it may have been a dangerous strategy to follow. They were able to leverage their knowledge and contacts in these industries to give an excellent service and in turn to profit from the related business. However, once concerns emerged about SVB's financial position, many of these customers and their venture capital firms discussed the exposure they all had. It was easy for a "herd mentality" to emerge and for a run on the bank to begin. In addition, most of these customers had well in excess of the $250,000 deposit coverage and thus were more likely to want to withdraw their funds.

3. Risk Capacity and appetite are topics that PRMIA and others have included in their thought leadership and educational materials. For PRMIA, risk capacity is made up of four resources:
    i. Profitability / Net Earnings: the principal and cheapest source of additional capital and the first cushion or shock absorber for losses;
    ii. Capital: providing the capacity to absorb losses beyond the profitability of the business, to support the risk taking to stay in business and to grow;
    iii. Liquidity: providing resilience to market wide or idiosyncratic threats, the level of this resource can itself either reinforce confidence or destroy it; and,
    iv. Reputation: creates the confidence of stakeholders to support management's plans or if damaged can precipitate short term crisis or long-term demise.

    Each of these were impacted – the mark to market losses for their investments impacted on profitability. They then had to go to the market for additional capital, which led to reputational damage. Finally, with depositors worried about their funds, there was a draw on the funds and thus the liquidity of the bank.

4. Interest Rate Risk is an old and well-known risk. As already stated, a basic fact of bond prices is that when interest rates go up, bond prices go down. SVB created a large and longer-term exposure to this risk and did not have a sufficient pool of short-term investments to draw on if there was an increase in interest rates, a decrease in bond prices, and a related loss.

5. Lastly, SVB did not perform its asset liability management in a robust manner. Asset and liability management is the practice of managing the risks that arise due to mismatches between the assets and liabilities of a firm. This should have recognised and managed the risk in the point above.

Timeline of events

1983: Founded in Santa Clara, California

1987: Began trading stock on Nasdaq under the symbol SIVB

1988: Completed IPO, raising $6 million in equity

1991: Launched international services

2000: Raised $91 million in a common stock public offering

2000 / 2001: SVB experiences growth and success amid the dot-com boom, as the bank's specialization in the technology sector aligns with the industry's rapid expansion. It then successfully survives the related downturn.

2004: SVB launches its Private Bank division.

2012: SVB Financial Group, the parent company of Silicon Valley Bank, acquires Boston-based SVB Analytics

2019: SVB completes the acquisition of Leerink Partners, further expanding its expertise and services in these sectors.

2022: As of the end of 2022, SVB had over 8,000 staff, assets of $212bn, liabilities of $196bn and equity of $16bn.

December 2022, SVB has incurred investment related mark-to-market accounting unrealized losses of more than $15 Billion.

March 8th, 2023, SVB announces a $1.75 billion capital raising exercise.

March 10th, 2023, The California Department of Financial Protection and Innovation (DFPI) issued an order taking possession of SVB, citing inadequate liquidity and insolvency, and appointed the FDIC as receiver.

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