Silicon Valley Bank: A Failure in Risk Management

By Clifford Rossi

As someone who had a front-row seat at the largest bank failure in U.S. history, Washington Mutual, the demise of Silicon Valley Bank (SVB) brings back memories of how seemingly well-run banks can in an instant run into trouble due to unexpected events that catch these firms off guard. As in the case of Washington Mutual, poor governance and management of key risks sealed SVB’s fate.

Although the business models for SVB and WaMu were very different (SVB catered to the venture capital crowd and tech companies, while WaMu focused primarily on the home loan business), they both were far too concentrated in one sector. SVB probably never imagined it could experience a run of $42 billion in a single day, accounting for about one-quarter of all deposits at the bank.

So, what happened to cause SVB to be abruptly taken over by the FDIC?

Anatomy of SVB’s Failure

We now have a better glimpse inside as to what brought SVB down. Technically, the bank failed due to a liquidity crisis – i.e., a lack of sufficient cash inflows to sustain it during a period of significant cash outflows.

Think about getting in your car to go to work and you hear a clunk, and the car just stops running. The mechanic tells you that you’ll have to replace the transmission for $5,000. Your heart sinks as you realize your checking account has $100 in it, your credit cards are maxed out and your family and friends won’t extend you any credit. That’s a personal liquidity crisis. Magnify that by billions and you get the idea of what SVB was dealing with when a good part of its depositor base evaporated.

One of the risks it seems SVB didn’t account for was the degree and speed by which its depositors would withdraw money from the bank upon hearing that SVB was experiencing a “cash burn” that required them to raise capital in an attempt to shore up losses from sales in investment securities that are held in the available-for-sale (AFS) part of the balance sheet. That announcement spooked investors and sent the stock spiraling down, precipitating the largest bank run of all time.

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How did SVB get into this position? After all, it touted that it had solid risk management practices and effective controls in its financial disclosures. It turns out, however, that things aren’t always what they seem on the surface.

The company made several risk management blunders. The first was in placing large bets on Treasury bonds back when interest rates were low. Bank balance sheets split assets into two groups, AFS – or those assets that firms expect to transact over some time – and held-to-maturity (HTM) assets that are expected to be held for long-term investment purposes. HTM assets are held at book values while AFS assets are marked-to-market according to fair value accounting principles.

At the end of 2022, SVB reported $120 billion of investment securities, representing 55% of its assets – or more than double the average of all U.S. banks. Furthermore, HTM securities (largely in U.S. Treasuries and mortgage-backed securities) comprised three-quarters of its investment portfolio.

While Treasuries and MBS are very safe investments from a credit risk perspective, they pose substantial interest rate risk. The weighted average duration of these investments was about six years, implying that if interest rates rose by 100 basis points (1%), the value of those securities would decline by 6%. In a low-yield environment prior to the Fed’s rate hiking plan, the quest to ride the yield curve for income was very much in focus by banks, including SVB.

The strategy was to invest a significant amount of deposits in the HTM portfolio where the investments would not have to be marked-to-market. However, the AFS side of the portfolio is subject to reporting unrealized gains or losses as a result of changes in the valuations of those assets that remain on the balance sheet.

As interest rates rose quickly in 2022, the value of those assets declined, as bond portfolios, yields and prices moved inversely. SVB had to do something to stop the bleeding as those unrealized gains hit against the balance sheet – specifically, in equities, via accumulated other comprehensive income or loss (AOCI).

It turns out that unrealized losses, when reported under AOCI, do not affect a bank’s regulatory capital but will impact its nonregulatory total common equity (TCE) ratio. SVB’s TCE ratio was severely dented by the steady unrealized losses it was sustaining, and the bank was therefore forced to sell its AFS assets at a loss, igniting the stampede to withdraw deposits once the word got out.

SVB maintained in its regulatory filings that it conducted regular and sophisticated market risk analysis and interest rate risk hedging activity. However, the amount of interest rate hedging was quite small in comparison with its AFS investments. (As of the end of 2022, SVB had reported only $550 million in notional value of interest rate derivatives as interest rate hedges.)

Clearly, the bank’s risk modeling didn’t anticipate the combination of interest rate and liquidity risk shocks it would face. Indeed, it seems apparent now that SVB’s liquidity risk management practices were deficient.
Best-practice banks typically employ a number of methods – including contingency liquidity planning scenario exercises – to understand the sensitivity of their liquidity risk profile to various shocks. The largest banks (north of $250 billion in assets) go further and are required by the Fed to calculate the amount of high-quality liquid assets (HQLA) as a percent of stress net cash outflows over a 30-day horizon, referred to as the liquidity coverage ratio (LCR). These banks also have to calculate a similar ratio over a one-year horizon on the stability of their funding.

However, in the end, even if SVB had technically been compliant with LCR (we’ll never know, since they weren’t large enough to require LCR compliance), the size of the bank run would likely have resulted in the same outcome.

**Poor Risk Oversight**

Compounding SVB’s problems was an apparent lack of risk management oversight by the board and the risk team. SVB had a risk committee charter documenting all the components of risk management that should be in place to manage risk effectively. So, clearly, there was a disconnect between what they said on paper and their actions.

SVB was without their senior most risk officer for about eight months in 2022 and only in January brought a new chief risk officer on board. That leadership gap could have left the board and the risk management team in the dark on emerging risk in the portfolio, and may have ultimately resulted in the poor strategy and practices that were put in place to manage SVB’s market and liquidity risks.

Another major issue that is pervasive across banking is the lack of risk expertise represented on bank boards. The vast majority of bank boards today are not equipped to challenge management on risks affecting the enterprise.

Only one of the seven board members assigned to SVB’s risk committee, for example, had any background remotely related to risk management. Moreover, according to the information provided on SVB’s 2023 proxy statement, none of the committee members ever held a senior risk management role, such as CRO.

Without proper experience, how can boards ask the right questions of management regarding threats and mitigation strategies, given the technical complexities of bank risks?

**Aftermath**

SVB’s stunning collapse is a reminder that despite our best efforts to regulate the banking sector following the 2008 financial crisis, banks can and will fail from time to time. In the case of SVB, the bank’s ultimate demise was fueled by unusual confluence of events: over-concentration in a volatile sector, and poor investment strategy, risk management practices and board risk oversight.

As we’ve seen with the closure of Signature Bank, concerns voiced by regulators over buildups of unrealized losses at many banks (because of rapidly rising interest rates on fixed-income investments) are legitimate.
U.S. regulators took a step in the right direction toward curtailing contagion when they committed to backing depositors at both SVB and Signature Bank. But they also need take a closer look, longer-term, at the effectiveness of oversight at bank boards and at the overall ability of banks to manage complex and integrated risks competently.