



The collapse of SVB and Signature bank act as warning signs of potential distress in the US Banking sector

by [Wang Chenye](#)

- **The NUS-CRI PDs of SVB Financial Group and Signature bank surged prior to the banks' collapse amidst bank runs**
- **The NUS-CRI CriSIB ranking of SVB Financial Group and Signature bank may signal a heightened contagion risk in the US Banking sector**

Echoes of an upcoming financial crisis are ringing true due to the collapse of Silicon Valley Bank (SVB). On March 10th, 2023, SVB was [closed](#) by the California Department of Financial Protection and Innovation, with the FDIC appointed as the receiver, to ensure that SVB's depositors remain protected amidst a bank run. Although the publicly-listed parent company, SVB Financial Group, was not included in the receivership; due to SVB Financial Group's acting as a holding company for Silicon Valley bank, the substantial subsidiary's default in effect will lead to a significant economic impact on the parent entity, and thus will be classified as a default of the parent entity according to the NUS-CRI default definition. Therefore, the collapse of SVB, and the resultant default of SVB Financial Group, saw the latter's NUS-CRI 1-year Probability of Default surge in March 2023 to a historic high of over 700bps prior to its default (See Figure 1).

SVB became the [largest](#) bank to fail since Washington Mutual's bankruptcy during the 2008 global financial crisis. SVB's collapse has come amongst a wider slowdown in the country's technology sector, to which SVB was heavily exposed, as clients withdrew funds to meet rising payment obligations due to the high-interest rate environment. As seen in Figure 1, SVB's PD has been steadily increasing since Jan-2022 in line with Fed's interest rate hikes, crossing the BB- upper bound at the end of last year when referenced to PDiR2.0 bounds¹. Given SVB's size, fears of contagion risks have been trickling through to the rest of the banking sector, with the KBW Bank Index, which measures the value of 24 major banks in the US, falling by over 25% since SVB's closure. Similar defaults are also being seen in other banks like Signature bank. Therefore, SVB's failure is ringing alarm bells regarding a potential build-up of systemic risk in the US Financial network, with broader implications for the wider economy.

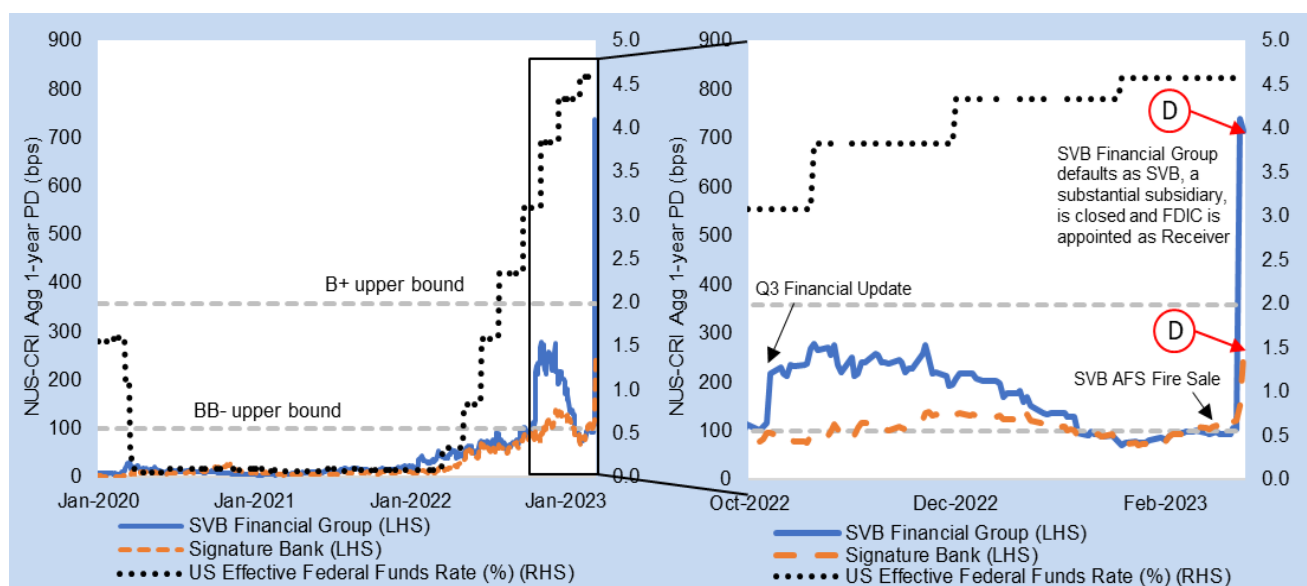


Figure 1: NUS-CRI 1-year Probability of Default for SVB Financial Group with reference to PDiR2.0 bounds (LHS axis) and the US effective federal funds rate (RHS axis). *Source: NUS-CRI, Bloomberg*

¹ The Probability of Default implied Rating version 2.0 (PDiR2.0) provides a more familiar interpretation through mapping the NUS-CRI 1-year PDs to the S&P letter grades. The method targets S&P's historical credit rating migration experience exhibited by its global corporate rating pool instead of relying solely on the reported default rates.

SVB expanded its balance sheet rapidly with increasing deposit exposure, driven by a surge of venture capital funds into technology startups during the early stages of the pandemic. From the end of 2019 to Q1 2022, the bank had a more than [threefold](#) increase in deposit balances, reaching [USD 198bn](#).² However, as the interest rate hiking cycle continued, depositors began withdrawing money from the bank in order to meet rising repayment obligations and to fund operations as other financing channels dried up³. To add to SVB's woes, any material gains in SVB's interest income due to rate hikes was partly offset by the loss in value of security investments, as loans only accounted for less than 40% of the bank's total assets. In order to meet the rising liquidity demanded to fund depositor withdrawals, SVB effectively sold all of its 'available for sale' (AFS) securities at a loss of [USD 1.8bn](#) to raise USD 21bn. However, with over 70% of investments classified as illiquid 'held to maturity' (HTM) securities having [little](#) default risk, an asset-liability mismatch led to concerns arising over SVB's solvency that ultimately led to a bank run by SVB's depositors. The run on SVB's deposits ultimately saw SVB Financial Group's PD skyrocket to above 700bps prior to the FDIC taking over as receiver.

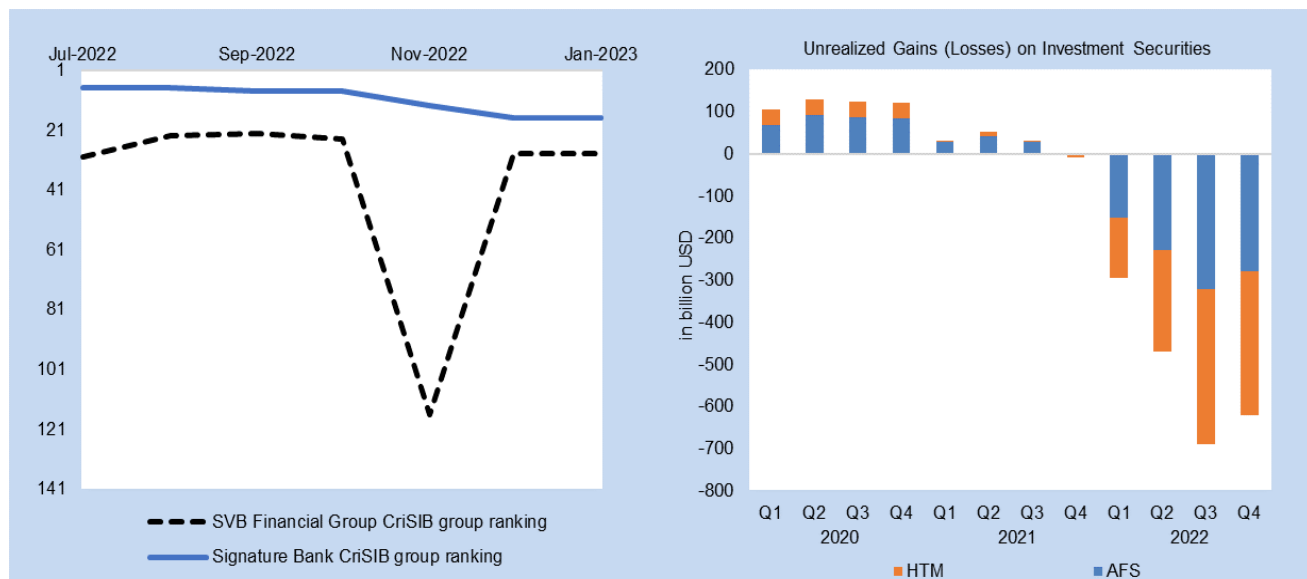


Figure 2a (LHS): CriSIB⁴ ranking of SVB Financial Group and Signature bank amongst other US banks. Figure 2b (RHS): US banks' unrealized gains or losses on HTM and AFS investment securities. *Source: NUS-CRI, FDIC Data*

The threat of mass deposit withdrawal leading to an asset-liability mismatch has affected other high-profile banks as well. Most notably, [Signature bank](#), for which the depositor base is primarily made up of clients in the crypto industry, was also placed under receivership by the Department of Financial services of New York on March 12th, 2023. Signature bank saw its PD increase to above 250bps prior to its default. The defaults of both SVB and Signature bank mark two of the largest bank failures in the US, raising concern about the potential spillovers. As seen in Figure 2a, using the NUS-CRI Systemically Important Bank (CriSIB) rankings, both SVB and Signature bank have ranked in the top 30 most systemically important banks over the last six months.⁵ Given the size and interconnectedness of both these banks, their default is likely going to have a significant spill-over effect on [depositor confidence](#) and borrowing costs⁶ in other major banks. Even though the nature of SVB and Signature Bank that led to their failure⁷ is dissimilar to the nature of wider financial network, which has a more diverse depositor base and relatively more robust capital structures, hints of similar business practices across the industry, albeit to a lesser extreme, are evident.

Like SVB, investment assets held by US-domiciled banks are starting to see a worsening in their unrealized losses. As per FDIC, unrealized losses at the end of Q4 2022, increased dramatically to USD 620bn⁸ (See

² The banking industry as a whole benefitted from the low-interest-rate environment, however, SVB's depositor growth was far greater than the industry average of 37%. Close to two-thirds of SVB's deposits are demand deposits.

³ In 2022 Q3, SVB's average non-interest-bearing deposits decreased by 12.2% to USD 106bn, while its average total deposits experienced a 3.5% decrease.

⁴ CriSIB is the ranking of systemic importance for exchange-listed banks around the world. It is dynamic by nature, and it determines a firm's systemic risk by its size and interconnectedness with others. A higher ranking of a firm means it is likely to pose a larger threat to the global (group) financial system. NUS-CRI Systemically Important Banks monthly (January 2023) rankings can be found on the [NUS-CRI website](#).

⁵ SVB's CriSIB ranking drops in Nov-2022 due to an improvement in its stock price.

⁶ Following SVB's collapse, banks may face a higher credit premium demanded by investors, which can be observed through an [increase](#) in other banks' bond spread.

⁷ Both SVB and Signature bank had a large proportion of their deposit base from a relatively homogeneous clientele.

⁸ The increase in unrealized losses seen during 2022 has been [catalyzed](#) by US banks investing in longer-maturity assets when interest rates were low. As a whole, US banks increased their holdings of government securities by [53%](#) during the initial stages of the pandemic.

Figure 2b) raising concern regarding the build-up of interest rate risk across the country's banking sector. The impact of further interest rate hikes is likely to worsen the losses of US banks, driven by the diminishing market-to-market value of the investment securities available for sale. For US banks, interest rate risk becomes of material concern should banks want to liquidate their holdings to meet rising repayment obligations. As the threat of mass depositor withdrawal picks up steam, US banks' effort to ensure that they have sufficient liquidity to remain solvent may lead to the realization of such losses, possibly affecting their profitability moving forward.

To ensure depositor protection in SVB, and to calm market worries that may lead to runs on other major banks, the FDIC has transferred all SVB deposits, insured and uninsured, as well as all assets to a full-service FDIC-operated 'bridge bank'. The Fed has also introduced a new [Bank Term Funding Program \(BTFP\)](#) that will provide 1-year loans up to USD 25bn to shore up bank liquidity. Regulators around the world are also keen to ensure that the spill-overs of SVB's failure have a limited impact on their domestic banking industries. For example, the UK government has facilitated the purchase of SVB's UK unit by [HSBC](#). However, regional US banks that have a non-diverse depositor base may continue seeing contagion fears⁹ affect their balance sheets as signaled by the 22% decline in the [SPDR S&P Regional Banking ETF](#) since the SVB crisis began. The full impact of SVB and Signature banks' failure on the wider financial network is yet to be seen, however, given their systemic importance as per CriSIB, it is likely that the banking industry may witness heightened credit risk going forward.

⁹ For example, due to contagion fears surrounding SVB, the share price of First Republic Bank [dropped](#) by close to 75% over the past week.

Credit News**Investors pull near record sums from corporate bond ETFs**

Mar 09. Investors withdrawn near-record sums from corporate bond ETFs in February as strong US economic and inflation data strengthened market expectations for further rate hikes. Investors instead moved to government bond ETFs, which saw net inflows of USD 10.9bn. At the same time, US ETFs saw two months of consecutive outflows of USD 1.7bn in Jan-2023 and USD 5.5bn in Feb-2023. Subsequently, these funds seemed to have gravitated towards European ETFs, making up majority of the USD13.6 inflows seen in 2023. ([FT](#))

Investors pile into property debt as banks bail on landlords

Mar 13. As European banks limit exposure to the troubled property sector, investors have grabbed the opportunity to extend financing to struggling property firms. Over the last year, more than USD 8bn has been invested into the sector by pension funds, insurers, and private equity firms. Despite market volatility, investors believe that the property sector holds the potential to generate good returns. However, the funding gap created, as European banks avoid the property sector, may be as huge as EUR 125bn and may trigger a downward trend in prices as firms rush to raise cash. ([Bloomberg](#))

China property sector left in limbo by stalled debt-restructuring talks

Mar 09. As Chinese property developers struggle to negotiate with investors, the recovery of the USD 30bn sector remains stalled, weighing on economic growth of the country. In Feb-2023, new home sales of large developers saw an increase for the first time since mid-2021, signalling a possible turnaround for the embattled sector. However, the increase in sales may pose an additional drag on negotiations as there may be disagreement amongst parties regarding the time taken by the sector to return to normal operations. ([WSJ](#))

A USD 13bn plunge in bond sales hints at pain for EM credit

Mar 12. As global central banks remain firm on their commitment to tighten policy rates, investors wary of a possible increase in financial distress are staying away from corporate debt. Resultantly, emerging market businesses' access to debt financing has narrowed. As of Mar-2023, firms in developing economies were able to sell USD 60bn debt, a fall of USD 13bn or 18% YoY, as per data from Bloomberg. Companies in need of funds may have to seek financing via other channels such as private placements. Till central banks follow a tighter monetary policy, emerging market debt may remain unattractive to global investors as they get good risk-adjusted returns in developed markets. ([Bloomberg](#))

Credit investors see potential risk in bank bonds after SVB collapse

Mar 10. After SVB's collapse, investor concern for debt issued by banks mounted as spreads on bank bonds above treasuries rose. JPMorgan's 4.9% notes due 2033 increased by 8bps to 164bps, while Goldman's 3.1% notes due 2033 rose by 10bps to 182bps. Spreads on credit protections also rose for banks, with Goldman's 5-year CDS rising by 2bps to 94bps. This risk-on sentiment materialized as SVB collapsed due to mass deposit withdrawals. Another market-wide credit risk measure, Markit CDX North American Investment grade index, reached its widest spread since the end of last year. Though concerns have been raised regarding the widespread financial risk SVB's failure has caused, market participants also believe that this may be an idiosyncratic event based on SVB's business model and funding profile, thought to be not reflective of the broader banking system. ([Bloomberg](#))

Vietnam's premier tells central bank to review property loans ([Bloomberg](#))

Turkey is pushing lenders to cut rates on consumer loans ([Bloomberg](#))

Waskita to cut borrowings by two thirds, lengthen debt maturity ([Bloomberg](#))

Regulatory Updates

Fed's new backstop shields banks from USD 300bn of losses

Mar 13. The federal reserve introduced backstop measures to calm the economy to reduce further bank runs after SVB's failure. The Fed, in conjunction with the US Treasury and the FDIC, announced that it will help protect all depositors in US-domiciled banks. The new 'Bank Term Funding Program' (BTFP) will offer one-year loans to banks under easier terms than it typically provides, with each institution able to tap into USD 25bn. The FDIC has also said that all depositors in SVB and Signature bank will be made whole. The response helped soothe market participants after two major banks entered into receivership last weekend. The impact of this funding channel is also believed to alleviate the threat of an imminent financial crisis. However, investors are wary of the potential moral hazard this funding channel faces. ([Bloomberg](#))

Italian central banker criticises hawkish ECB colleagues as rift over rates widens

Mar 08. Italian central bank chief, Ignazio Visco, criticized comments made by his peers at the ECB regarding the trajectory of interest rate movements. The ECB has signalled that the deposit rate is likely to increase by 0.5 percentage points to 3%. However, some members of the ECB have looked at higher-than-forecasted inflation, as well as a resilient economy, to say that rates may rise much higher in the coming months. Some believe that the geopolitical tensions of the Russia-Ukraine war are likely to provide sticky economic conditions that will see inflation rise further, pointing to a potential hike of up to 4.5%. Although inflation has receded from the all-time high of 10.6% in Oct-2022, core price growth rose to an all-time high of 5.6% in Feb-2022. With the economic data proving to be better than expected, it is more likely that the hawks' effort to tighten policy will proceed going forward, compared to the doves' effort to boost the economy. ([FT](#))

Jay Powell warns Fed is prepared to return to bigger interest rate rises ([FT](#))

PBOC to continue with liquidity help as Yi stays on as governor ([BT](#))