

SVB Failure: Key Lessons for Institutional Investors

1. Introduction

The failure of Silicon Valley Bank (SVB) is a stark reminder that banks are fragile. With 1-2 units of equity backing 20 units of capital, a variation in the value of total assets by 5-10% can wipe out the entire equity of the bank. It also reminds us of the speed with which contagion can spread and affect other banks.

Institutional investors discovered that they might have significant indirect exposure to SVB through their (venture) fund portfolios, where both the funds, as well as underlying investee companies were banking with SVB. While in the instance of SVB and Signature Bank, the Federal Reserve has ultimately provided a backstop and guaranteed all deposits and thereby contained the fallout, it is important that managers and institutional investors strengthen their understanding of bank deposit risk and wider counterparty risk.

- This memo reminds institutional investors and investment managers how the risk practices set out in the *Alternative Investment Standards* help address deposit/counterparty risk.
- With the benefit of hindsight, we provide examples of analyses that could have helped detect vulnerabilities, as well as specific questions investors and managers can ask when assessing deposit/counterparty risk.
- We further provide investors with key questions they may ask managers when assessing their deposit risk management practices.

2. What do good counterparty/deposit risk management practices look like?

The *Alternative Investment Standards* [9 – 20] cover risk management, including counterparty risk, which arises in the trading relationships of many liquid alternative investment funds (see Appendix A). Although SVB was a deposit taking bank, rather than a trading counterparty, the basic principles for selection and monitoring of (deposit) bank relationships mirror the selection and monitoring of counterparties in many ways. The Standards require a process for setting up such relationships, including an assessment of the credit worthiness, the setting of risk limits, periodic monitoring, and adjustments of risk limits as required.

The SBAI Toolbox of practical industry guidance also provides a standardised Administrator Transparency Report (ATR) Template, which help investors identify and track exposure to counterparty risk (including cash deposits) within comingled investment funds through periodic reports. Investors can then aggregate risk exposure across funds to obtain an overall risk perspective (see Appendix B). This facilitates ongoing monitoring and informs risk management decisions. It is worthwhile noting that ATRs are common among hedge funds but are not used in venture capital or private equity, where most exposure to SVB resided.

The SVB failure provides a useful opportunity for institutional investors and investment managers to review the *Alternative Investment Standards*, to ensure their processes are robust (and to make use of reporting tools such as ATRs to facilitate better risk oversight).

3. How to Assess Deposit Risk?

The table below provides examples of risks investors can assess in relation to their banking relationships, as well as the banking relationships of the funds they invest in.

Examples of key risks, and how they materialised in SVB

Risk	How the risk materialised
Run risk: Deposits exceeding the US FDIC insurance policy threshold of US\$250,000 are not guaranteed, and therefore likely to be moved in times of distress.	The proportion of deposits in excess of the threshold stood at over 93%, compared to 46% ¹ for a range of large US Banks as of Q4 2022, resulting in a business model with higher run risk.
Duration mismatch: Funding longer duration assets with shorter duration liabilities/deposits.	<ul style="list-style-type: none"> ▪ Interest rate hikes throughout 2022 triggered losses in SVB's long-term fixed-rate bonds (largely U.S. Treasuries and mortgage-backed securities), which are particularly subject to duration risk. ▪ Losses were not recognised in the balance sheet and P&L due to amortised cost accounting (rather than fair value).² ▪ Interest rate risks were inadequately hedged.³ ▪ Deposit withdrawals led to loss crystallisation when assets had to be sold to raise liquidity, giving rise to solvency concerns, triggering the bank run.
Liquidity risk: Banks engage in maturity transformation – funding illiquid longer-term loans with short term liabilities/deposits. Banks with larger asset liability mismatches have higher liquidity risk.	On the surface, SVB's liquidity levels as measured by a modified liquidity coverage ratio (LCR) was not a significant outlier compared to other regional banks. ⁴ SVB could quickly liquidate assets to meet redemption requests, but substantial losses upon liquidation ultimately created a capital hole. When SVB announced intentions to raise \$2.25bn through new share issuance, in attempt to shore up their balance sheet, this represented the starting gun for rapid deposit withdrawals. Due to SVB's higher run risk, this loss crystallisation spiral led to collapse.
Quality of assets: Losses due to increases in credit risk.	Deterioration of quality of assets (e.g., in SVB's early-stage loan book) did <u>not</u> play a major role in the downfall of SVB.
Diversification: Concentrated exposure to particular risk factors/industry sectors.	Niche positioning in Tech/Venture made SVB vulnerable to an unfavourable VC funding environment, that could result in deposit bleed, which could have been a contributing factor to its downfall.

¹ <https://www.spglobal.com/marketintelligence/en/news-insights/latest-news-headlines/svb-signature-racked-up-some-high-rates-of-uninsured-deposits-74747639>

² Available for Sale securities are carried at fair value and unrealized gains and losses are reported as net increases or decreases to accumulated other comprehensive income ("AOCI"). Trading securities are carried at fair value with gains and losses recognized in current period earnings.

³ <https://www.garp.org/risk-intelligence/market/silicon-valley-bank-031423>

⁴ <https://bpi.com/silicon-valley-bank-would-have-passed-the-liquidity-coverage-ratio-requirement/>

Analysing these risks requires in depth review of financial statements to assess financial position: looking specifically for disclosures around approach to hedging, adverse changes in accounting ratios, level of debt, etc. However, there may be limitations around the availability of timely information.

Another potential source of insight about evolving risk may be found in external **credit ratings**. However, it is worthwhile noting that there was no deterioration of SVB's credit rating in the run up to failure. As such, credit ratings may not be useful as a short-term warning signal, but they can help investors understand the relative risk position of a bank vis-à-vis its peer group and to help identify those players that may be more likely affected in a contagion scenario. An obvious warning signal of inadequate risk management at SVB, however, was the **absence of a Chief Risk Officer** for large parts of 2022. Financial services companies should have appropriately experienced individuals in positions of responsibility.

As a specialist banking player focussed on the venture capital arena, it appears that it was the customary among venture capital funds as well as underlying companies to bank with SVB. This raises questions about whether sufficient due diligence had been undertaken of SVB as a banking provider and highlights how concentration of idiosyncratic risks can build up over multiple layers of investment. In this instance, it may have been worthwhile to take a closer look at potential conflicts of interest that arise from special commercial terms provided by a service provider (or bank, in the case of SVB) to its clients and related businesses (see Appendix A, standard 20.3). This may be difficult in the case of competitive investment allocations but is essential from a risk management perspective, and hence enshrined in the *Alternative Investment Standards*.

Role of Regulation

Investors might wish to revisit the comfort they take from the prudential oversight of the banking sector, which is not designed to be a zero-failure regime (despite the interventions of authorities in this instance). It is worthwhile highlighting the weaker regulatory oversight of smaller US banks. The 2018 Dodd-Frank law tailoring regulation exempted banks under US\$250bn (including SVB) from some Federal supervisory measures, including stress tests and ratio analysis, i.e., liquidity coverage ratio (LCR) and net stable funding ratio (NSFR) requirements. The LCR is a measure of emergency funding capacity, designed to require banks to have high-quality liquid assets (HQLA) sufficient to meet net cash outflows under stress. The LCR for the largest institutions is designed to cover a 30-day survival horizon (expected to be above 100%). For smaller and less complex institutions, the LCR's stress assumptions are relaxed by multiplying projected net cash outflows by 70 percent.⁵ However, given the substantial (uninsured) deposit amounts held by individual depositors with SVB – this relaxation of projected net cash outflows substantially underestimates the outflow risk that was present and materialised.

Dual regulatory oversight at Federal and State level failed to identify that the proportion of deposits in excess of the FDIC insurance policy threshold of US\$250,000 stood at over 90%. While this should have likely raised regulatory interest, it may have been lost in the co-ordination of this dual banking system whereby state-chartered banks like SVB are subject to both Federal and State oversight.

Even so, the failure of SVB appears to primarily reflect flaws in fundamental risk management as opposed to regulation. However, it should serve as a reminder that regional banks are not tier-1 banks and may require additional attention in evaluating such relationships. For banks and counterparties more broadly, it is essential to understand the regulatory framework under which an entity operates including whether it is sufficiently robust and appropriately resourced (from both a staffing and monetary perspective).

⁵ <https://bpi.com/silicon-valley-bank-would-have-passed-the-liquidity-coverage-ratio-requirement/>

Detailed Questions to Assess Bank Deposit Risk

Financial Performance	<ul style="list-style-type: none"> What is the bank's historical financial performance in terms of profitability, return on equity, and return on assets? How does the bank's performance compare to its peers and industry benchmarks? How diversified is the bank's revenue stream?
Capital Adequacy	<ul style="list-style-type: none"> What is the bank's capital adequacy ratio and how does it compare to regulatory requirements and peers? Does the bank have a contingency plan for raising additional capital if necessary?
Asset Quality	<ul style="list-style-type: none"> What is the bank's non-performing loan (NPL) ratio, and how does it compare to peers and industry benchmarks? What are the bank's loan loss provisions and how adequate are they in covering potential losses?
Risk Management	<ul style="list-style-type: none"> What is the bank's exposure to interest rate and foreign exchange risk, and how is it managed?
Regulatory Oversight	<ul style="list-style-type: none"> Who are the banks primary regulators and supervisors? How much comfort can investors take from the prudential oversight? What are the frequency and outcomes of regulatory examinations or inspections? What stress tests, liquidity coverage ratios, etc., will the entity be subject to?
Other	<ul style="list-style-type: none"> What is the banks' credit rating?

How to Assess Investment Managers' Deposit and Cash Management Practices?

Risk Process	<ul style="list-style-type: none"> What is the manager's process to set up banking relationships? How are banking relationships monitored?
Sweeping of Cash	<ul style="list-style-type: none"> What is the procedure for sweeping excess cash (into money market funds) and who are the teams or individuals involved? What are the triggers or thresholds for initiating a sweep?
Money Market Fund Level Due Diligence	<ul style="list-style-type: none"> What are the Money Market Fund's liquidity terms, including any redemption restrictions, minimum investment amounts, or penalties for early withdrawal? What is the credit quality of the securities held by the money market fund? What is the weighted average maturity of the assets of the fund? Who manages the money market fund and is the entity a related party to the banking entity or fully segregated?

4. Summary: Lessons for Institutional Investors

For institutional investors, the SVB failure provides food for thought as to how their investment managers and fund vehicles engage with banks and counterparties (such as prime brokers, OTC relationships, etc.) more broadly, as well as the extent to which concentration risk and overreliance can become entrenched.

In summary, the fallout of this event will continue for some time. Stress in the US and European banking system is still present. The SVB failure reminds institutional investors that:

- i. The financial health and stability of any institution cannot be taken for granted, and
- ii. Events in the financial services industry can develop at a rapid pace.

Institutional investors and money managers alike can reduce the chances of being exposed to such failures by:

- Performing appropriate due diligence,
- Managing and monitoring their exposures to counterparties or banking entities,
- Implementing diversification across their relationships,
- Spreading cash deposits amongst a range of stronger banks and utilising money-market funds and investments in short-dated Treasuries.

As an organisation, the SBAI will continue to review such incidents to understand what the alternatives industry can learn from such failures. We encourage our stakeholders to access our suite of materials on industry best practices and guidance.

Appendix A: *Alternative Investment Standards*⁶

Counterparty Credit Risk Management – Standards & Guidance (p.18)

14.1 A fund manager should have a process for setting up trading relationships on behalf of the fund, including the assessment of creditworthiness and the setting of risk limits.

In setting up such trading relationships, a fund manager may, where relevant and appropriate, wish to consider putting netting agreements and appropriate collateral arrangements in place. For example, it may be possible for certain funds to agree two-way collateral posting with a trading counterparty.

14.2 Credit worthiness of the fund’s trading counterparties should be monitored periodically, and risk limits adjusted, if required.

Outsourcing Risk – Disclosure Standards & Guidance (p.27)

20.1 A fund manager should disclose the names of its principal third party service providers in its due diligence documents or upon request.

20.2 A fund manager should, to the extent it is able or permitted to do so, provide information on the fund’s committed funding or financing arrangements with prime brokers/lenders to investors in its due diligence documents or upon request.

20.3 A fund manager should disclose the nature of any special commercial terms with its third-party service providers which result in potential conflicts of interest (e.g., in-house brokerage or rebates).

20.4 A fund manager to the extent applicable should disclose the monitoring procedures in relation to its third-party service providers in its due diligence documents or upon request.

⁶ <https://www.sbai.org/standards.html>

Appendix B: Administrator Transparency Reporting (ATR)

Counterparty Reporting

The counterparty reporting sections offers several approaches:

- Tier 1 Approach includes the list of counterparty exposures (without attribution of exposures to individual counterparties) with a separate list of counterparty names
- Tier 2 Approach includes the attribution of the counterparty names with the respective exposure amount (this is considered to be the most common approach)

Counterparty Reporting (to be named directly below, or left blank and separate Counterparty List below to be completed)	Net (USD)	% NAV	% NAV Range
Counterparty 1	55,000,000	46%	40%-50%
Counterparty 2	38,000,000	32%	30%-40%
Counterparty 3	11,000,000	9%	5%-10%
Counterparty 4	6,000,000	5%	5%-10%
Counterparty 5	2,078,740	2%	0%-5%
Counterparty 6	3,565,900	3%	0%-5%
Counterparty 7	0	0%	0%-5%
Counterparty 8	0	0%	0%-5%
Counterparty 9	0	0%	0%-5%
Counterparty 10	0	0%	0%-5%
... add lines for additional counterparties / or aggregation of other counterparties outside of Top 10	0	0%	0%-5%
Non-Custodied Assets 1 (Name if applicable)	0	0%	0%-5%
Non-Custodied Assets 2 (Name if applicable)	0	0%	0%-5%
Non-Custodied Assets ... (add lines if needed)	4,313,800	4%	0%-5%
Non-Trading Balances (Accruals and Prepayments) including pending capital flows	41,560	0%	0%-5%
Total	120,000,000	100%	N/A

Separate list of counterparty names (Tier 1 approach):

Counterparty List (if not disclosed under Named Counterparty):

Bank Name (alphabetic listing)

Bank Name (alphabetic listing)

Bank Name (alphabetic listing)

Bank Name (alphabetic listing)

Bank Name (alphabetic listing)