Date: Sunday, March 12, 2023

To: BCA Clients

Subject: SVB Situation and Potential Impact on Client Portfolios

Dear BCA Clients,

Considering rapidly unfolding developments at Silicon Valley Bank (SVB) and in the banking system more broadly, we want to update clients with regards to latest information (Treasury and Fed resolution) and implications with regards to their portfolios (especially for their private fund investments).

SVB Failure and Closure

On Friday March 10, 2013, SVB (the 10th largest US bank with $210bln in assets as of December 31, 2022) was shut down by regulators due to insolvency. SVB was the largest US bank failure since the Global Financial Crisis and the second largest in US history. The bank failed due to a stunningly swift run on the bank (depositors rapidly withdrawing money) driven by a confluence of underlying risk management issues described in the appendix to this memo. But, in brief, the bank had a classic mismatch in its assets and liabilities.

As of December 31, 2022, the bank had $210bln in assets and $177bln in deposits. However, the assets were heavily weighted to safe, but longer-duration securities (government bonds) subject to price declines with rising interest rates. At the same time, most of these deposits were from commercial banking customers including a significant amount of Silicon Valley start-ups and high-growth technology and healthcare companies. 93% of SVB's deposits were uninsured (over $250,000 and not eligible for FDIC insurance).

As venture capital firms began instructing portfolio companies to withdraw funds, this led to a panic spiral where over $42bln was withdrawn on Thursday alone. SVB simply did not have cash to meet further withdrawal needs without liquidating and realizing the losses on its securities portfolio, and regulators swiftly stepped in and closed the bank. Bank stocks were hit hard on Thursday and Friday, especially those perceived as having business models similar to SVB.

Heading into the weekend, the situation was highly unclear with the FDIC stating on Friday that insured depositors would receive access to their money in full by Monday March 13 but that uninsured depositors would receive "an unspecified advance dividend on Monday" followed by potential future dividends based upon proceeds received upon sales of SVB's

assets. Substantial uncertainty remained with regards to final amounts of these dividends (would depositors get all their money back?) and to the timing of these dividends (many start-ups and founder-backed companies had payroll obligations to meet by March 16 and may have had to furlough employees if their access to cash was constrained much longer). Finally, the potential for contagion to affect the broader financial system was high as depositors could panic further and withdraw deposits from smaller banks in mass (especially those having a larger percentage of commercial clients).

The fallout from the SVB collapse also extended beyond just depositors. Many venture capital and private equity firms either had direct banking and operational relationships with SVB (with fund cash held or lines of credit at SVB) or had indirect exposure (portfolio companies holding cash at SVB).

Recognizing the broader threat to an important subsystem of the economy, the Treasury, Federal Reserve, and FDIC acted swiftly to address the situation. On Sunday March 12, they announced the following: a) that all SVB depositors will have access to their money by Monday March 13, b) the closure of Signature Bank (another lender with similarities to SVB) and similar protection for its deposit holders, and c) the creation of a new "Bank Term Funding Program," backed by up to $25bln made available by the Treasury from the Exchange Stabilization Fund, that will offer loans to banks with terms that are easier than are typically provided by the Fed. This facility will be big enough to protect uninsured deposits in the wider US banking system and was invoked under the Fed's emergency authority, allowing for establishing a broad-based program under "unusual and exigent circumstances". Under this program (which provides loans up to one year), collateral will be valued at par (even if the securities are worth less in the case of longer-term Treasury and Mortgage-backed securities). The Fed and Treasury are positioning this as other than a bailout because the stockholders and bondholders of SVB and Signature Bank do not benefit and could be completely wiped out (the aim is to protect depositors).

- This swift coordinated action, first and foremost, removes the uncertainty regarding the uninsured deposits at SVB (and now Signature). Depositors will get their money in full by Monday March 13, which should alleviate a potential collapse in the Silicon Valley start-up and growth-oriented company ecosystem.
- The Bank Term Funding Program facility should prevent contagion from spilling over to regional banks (especially those with similarities to SVB), though we will see if the Fed needs to increase the size of the Program.
- The Government's actions should hopefully ensure that a specific situation that may have affected a relatively narrow (but important) sector of the economy does not lead to a more widespread financial crisis with broader economic implications.

Implications for BCA Client Portfolios

BCA has assessed the potential implications for client investments with regards to the SVB situation. Investments potentially impacted are limited to private investment funds. First and foremost, BCA has no banking relationship with SVB. We reached out to our private

fund managers on Friday to assess whether the BCA-recommended investment funds and fund managers had exposure to SVB – either direct (whether either the firm and / or underlying funds had banking relationships with SVB) or indirect (whether underlying portfolio companies of those funds had banking relationships with SVB). Generally, BCA-managed portfolios have limited exposure to venture capital and growth equity fund strategies. As such, we do not expect to have significant direct or indirect exposures across most of our recommended private investment fund strategies.

Direct Exposures

The vast majority of our private investment fund managers had zero or very limited direct exposure to SVB. Most had no direct banking exposure while only a few had relatively small amounts of underlying Fund cash held at SVB. Some did have capital call lines of credit with SVB, however.

Indirect Exposures

Here, the picture is more mixed. Most of our clients' private equity and private credit funds did not have any indirect exposure (in terms of underlying portfolio companies having cash at SVB). However, the secondary funds are still assessing their portfolio companies' exposure. These funds are one-step removed from the portfolio companies as they are passive holders of LP-interests in the underlying private equity funds (as such, they receive information from the private equity funds that control these companies). Generally, these secondary funds had 10%-20% of their investments in venture or growth-equity sectors so it is likely that there is some indirect underlying portfolio company exposure. Additionally, certain growth equity-focused funds did have portfolio companies with cash balances at SVB. Based on the US government's coordinated resolution, these companies should be able to access cash balances at SVB by March 13th and continue to fund business operations as normal.

Based on the government's resolution, we believe that there will be no immediate impact on BCA private investment funds and no losses of any cash balances. However, there may be some short-term fluidity in business operations as new banking relationships are developed, new capital lines of credit facilities are set up, etc.

Consequences Going Forward

This is a swiftly evolving situation in which near-and-mid-term ramifications remain to be seen. The Government's swift actions have prevented an immediate crisis (much like it did in 1998 with the Long Term Capital Management bailout). There are likely to be changes in terms of venture capital backed firms' cash management practices (i.e. – spreading their cash holdings across more banks and potentially holding more at Tier I banks). Additionally, regulators are likely to pay closer attention to banks' depositor profiles and their asset-liability funding (looking for any glaring mismatches between short-term liabilities vs. longer-duration assets). Banks may also pull back further from lending to venture-backed companies creating opportunities for private venture-debt funds.

In terms of the public equity markets, we expect continued volatility over the short-term. On the one hand, investors are likely jarred by the swift collapse of a relatively large bank which may evoke memories of the GFC. Additionally, banks may become more cautious in terms of lending which could slow economic growth faster than anticipated (and hit corporate earnings as well). On the other hand, the Fed is highly likely to either raise interest rates by only 25bps at its next meeting (vs. the potential 50bps hike that was on the table prior to the most recent jobs report and the SVB collapse), or even pause for a period. Treasury yields are likely to decline, at least for some time, and investors may perceive that lower terminal rates will be able to control inflation (also potentially positive for the markets in the short term). The inflation picture and the efficacy of policy to address it (and in what timeframe) remains uncertain.

Appendix – Drivers Behind SVB's Collapse

SVB, based in California, has a 40-year operating history and is one of the largest lenders to the Silicon Valley venture capital and biotech industries (estimated to have relationships with roughly half of Silicon Valley start-ups and high-growth companies). The company developed a successful niche in lending to start-ups and growth-oriented companies (that were not yet profitable and had limited tangible assets as collateral). In conjunction with providing its lending services, SVB also housed these companies' cash deposits,

As the Silicon Valley landscape boomed over the past five years, SVB benefitted tremendously. Its clients (backed by venture capital firms) raised substantial amounts of cash to be custodied. As a result, SVB's deposits rose substantially from $44bln in 2017 to $189bln by year-end 2021 while loans only increased from $23bln to $66bln. Unlike larger national banks or even regional banks, SVB's deposit base was highly commercial as opposed to retail oriented. Commercial deposits are far less sticky than retail deposits (which proved to be one of the main factors contributing to SVB's undoing).

SVB invested heavily in Treasury and mortgage-backed securities to earn a spread on these deposits, especially during 2021. By YE 2021, SVB had $128bln in largely these types of securities. With interest rates near historical lows during 2020 and 2021, SVB attempted to earn higher yields by investing in longer-term securities. While these securities had no credit risk if held to maturity, they did have interest rate risk and would lose value on a mark-to-market basis if interest rates rose.

During 2022 and 2023, the economic landscape changed significantly as inflation soared and the Fed rapidly increased interest rates. The value of SVB's Treasury and Mortgage-Backed Securities declined on a mark-to-market basis (for instance, at the end of 2022, SVB had $91bln of held-to-maturity (HTM) securities on its balance sheet whereas their fair market value was actually $76bln. Accounting rules allow banks to hold HTM securities at par value rather than at fair market value for balance sheet purposes. In addition, SVB had $23bln in available-for-sale (AFS) securities as well. Since both the HTM and AFS investments bore no credit risk, the decline in mark-to-market values should not have caused any problems

unless they needed to be sold in the open market versus holding to maturity to realize par value.

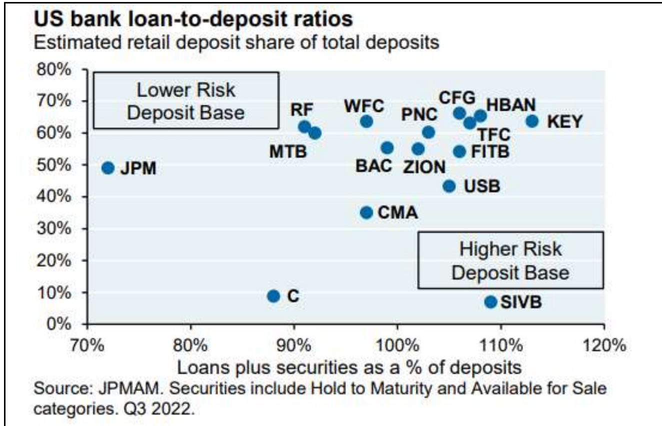
During 2022, however, as valuations dropped for growth-oriented companies, venture-capital portfolio companies' access to investor funding dropped significantly. In response, these companies began withdrawing their deposits at SVB to fund operations. Additionally, as corporate CFOs and treasurers searched for higher-yielding investments, companies also withdrew deposits at a faster pace than retail customers. Deposits declined from $189bln at YE 2021 to $173bln in 2022 and further declined during the first two months of 2023. As liquidity and cash balances were deteriorating at SVB, rating agencies informed SVB of likely downgrades to its outstanding bonds.

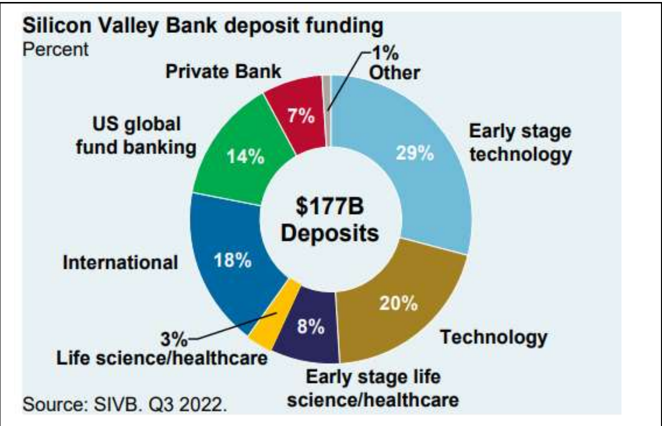
- In response, SVB sold off its entire $23bln+ AFS bond portfolio at a $1.8bln loss to raise cash. They disclosed this unexpectedly and clumsily on a conference call on Thursday March 9th which shocked investors.
- In addition, SVB concurrently attempted to raise $2.25bln in equity to shore up its balance sheet and enable it to continue lending at attractive terms to venture companies.

These steps only raised concern. Venture capital firms began instructing portfolio companies to promptly withdraw deposits from SVB. This led to a swift spiral of panic, and a classic run on the bank ensued.

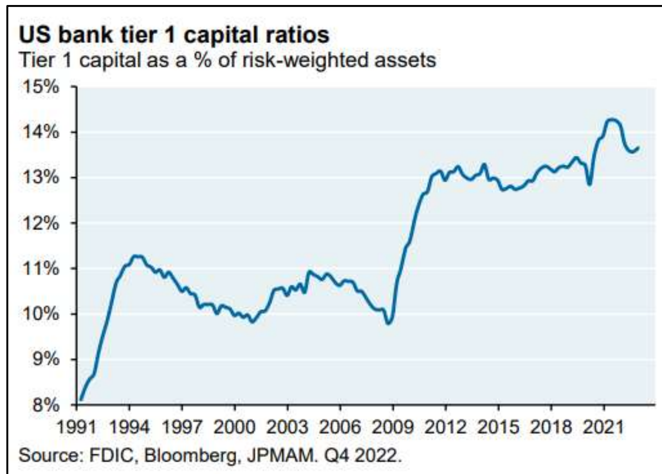
- SVB's share price dropped by 60% to $106 on March 9th from $268 on March 8th.
- Panic withdrawals continued on March 10th (a staggering $42bln was withdrawn in one day), and SVB had a negative cash balance of almost $1bln before being declared insolvent mid-day.
- SVB's share price declined by another 60% on Friday, March 10th before being halted as regulators seized control of the bank. Equity holders will likely be completely wiped out post the government's intervention.

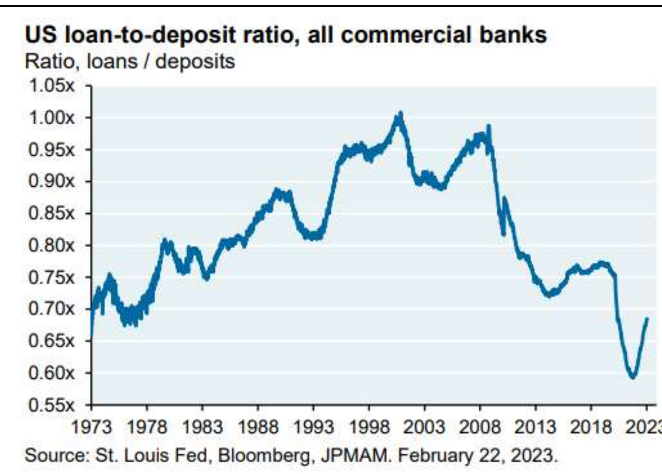
While SVB's demise was sudden and shocking, its problems resulted from a fundamental failure in risk management. The business model had a classic mismatch between assets (large portion of investments in longer-dated securities) and liabilities (short-term deposits and less sticky given the highly commercial as opposed to retail deposit base). This was compounded by concentrated risks related to exposure to venture-capital and high-growth tech and healthcare companies. The chart below from JPMorgan illustrates SVB's outlier status among banking peers in terms of commercial vs. retail deposits and high exposure to securities as a percentage of both assets and total deposits.





We do believe that SVB's situation was largely isolated to a handful of banks. As seen in the charts below, the financial health of US banks is broadly very sound.





US banks are, however, sitting on $620blm of unrealized mark-to-market security losses. These securities bear no credit risk and will be realized at par if held to maturity. Thus, if banks are not forced to sell these securities, they are not required to recognize losses. Additionally, these securities would increase in value if rates were to decline. We would expect there to be pressure on deposits, as depositors withdraw funds to earn higher yields in other short-term, low-risk alternatives (e.g. Treasury Bills, money market funds). But, because most of the larger national banks as well as most regional banks have a lower-risk deposit base (majority are stickier retail deposits rather than commercial deposits), the risk of forced sales is low at these banks. The prospects for certain smaller regional banks with business models perceived as more like SVB, including Pacwest, First Republic, and Western Alliance, are more uncertain. It remains to be seen whether the government's new facility program that guarantees deposits may assuage fears about these banks' financial stability and whether it proves beneficial in maintaining calm in the broader financial ecosystem.