Strategy
March 13, 2023

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An Expensive Lesson on Uninsured Deposit Risk in Cash Management

What the Run on SVB's Deposits Teaches Us About Undiversified Bank Risk—and Why to Avoid It

Introduction

The single biggest credit risk for institutional cash investors lies in the large uninsured deposits they leave at their operating banks. Particularly at risk are uninsured balances at banks with less diversified business profiles and aggressive risk cultures that expose depositors to the risk of a bank run, which is difficult to predict and even harder to stop. At one such bank, these risks unfortunately came to a head last week. Silicon Valley Bank (SVB), the $209 billion storied lender to the innovation industry, closed its doors less than 48 hours after disclosing trading losses and equity offerings after a run on deposits left thousands of businesses and individuals frozen out of their cash accounts with unknown future losses.

As an independent investment advisor to managers of institutional cash portfolios for more than three decades, **Capital Advisors Group (CAG)** consistently cautions on the risk of uninsured deposits as undiversified and unsecured credit exposure to financial institutions. Out of the ashes of the 2007-2008 Global Financial Crisis, more stringent regulatory oversight, including tougher capital and liquidity rules and stress tests, greatly bolstered the credit strength of large financial institutions worldwide. Problems are now easier to detect, and tools are in place to resolve them.

Smaller and less diversified lenders, however, may fly under the regulatory radar and sneak up on depositors, investors and the public, especially in a rising rate environment when credit conditions are tight and all lenders tend to experience losses. For that reason, our list of CAG-approved banks for institutional cash management portfolios includes only large, systemically important financial institutions.

In the following, we will explain why the factors that led to SVB's downfall are either unique to its business and client profiles or are impacting it more severely due to its status as a small but aggressively growing lender in a difficult macro environment. **Our takeaway is that when it comes to credit worthiness, SVB is truly an outlier in contrast to the strong large global and regional banking credits approved for our institutional cash portfolios.** In addition, let this be an expensive lesson that **uninsured deposits at any bank, large or small, strong or weak, are concentrated bank risk** that should be evaluated by the institution's standalone strength and be part of a diversified portfolio of high-grade liquid instruments.

What Happened to Silicon Valley Bank?

For decades, Silicon Valley Bank has been the bank for venture-backed growth companies. Nearly half of U.S. venture-backed tech and life science companies banked with SVB. Following the pandemic, it saw an explosion in deposit growth, as low rates led venture-backed companies to raise large sums of money. From Q1 2020 to Q1 2022, SVB's deposits grew 220%[1], compared to only 26%[2] deposit growth in all FDIC insured institutions during that time frame.

SVB heavily invested the inflows in its hold-to-maturity (HTM) portfolio, which grew from $14 billion at the end of 2019 to $91 billion at the end of 2022 while the bank's available-for-sale (AFS) portfolio grew from $9.6 billion to $26 billion during that same time frame. As rates increased in 2022 and venture funding markets slowed, SVB's client base began to draw down deposits. The bank offered high deposit rates, peaking at 1.17% in Q4 2022 vs. a median of 0.65% for SVB's peer group. High deposit rates are intended to attract or retain cash in accounts[3]. Nevertheless, the bank faced a rapid reduction in deposit levels, decreasing 13% from Q1 2022 to the end of the year, vs. a 3.5%[4] decrease at all FDIC insured banks.

SVB did not anticipate that the elevated rate of deposit outflows would continue, and its balance sheet was positioned poorly to maintain liquidity in the face of ongoing deposit drawdowns. Reduced deposit balances led SVB to turn to wholesale funding markets, increasing their short-term borrowing from $71 million dollars at the end of 2021, to $13.5 billion at the end of 2022, placing pressure on the bank's profitability. These forces eroded the bank's liquidity profile, prompting it to sell $21 billion of its $26 billion AFS securities portfolio. Rising interest rates had pushed the value of securities down, causing SVB to realize a $1.8 billion after-tax loss in the process.

The goal was to reinvest the sales proceeds into short-term fixed rate Treasuries. However, news of the restructuring led the bank's commercial customers to become nervous that the bank would not be able to meet redemptions. Additionally, at the end of 2022, SVB held $152 billion of uninsured deposits, accounting for 87.5% of all deposits at the bank, making the bank's deposits extremely confidence-sensitive. This accelerated the run on the bank's deposits, eventually leading to its collapse.

Are Any CAG-approved Banks at Risk of a Similar Run?

The same cocktail of ingredients that led to a run on SVB is not applicable to any of our approved banks, and therefore, we do not believe they are at risk of a similar run.

Why? Mainly because our approved banks are much less reliant on corporate deposits for funding than was SVB. The banks we approve, both domestic and international, have much more diverse funding profiles and are anchored by retail deposits.

[1] Company specific data in this section was sourced from company filings unless otherwise noted.
[2] FDIC Quarterly Banking Profiles, as of Q1 2022.
[3] "Moody's downgrades SVB Financial (senior unsecured to Baa1 from A3); outlook negative", Moody's Investor Service, March 8th, 2023. https://www.moodys.com/research/Moodys-downgrades-SVB-Financial-senior-unsecured-to-Baa1-from-A3--PR_474590
[4] FDIC Quarterly Banking Profiles, as of Q4 2022.

Exhibit 1. Funding Sources

	International Banks		
	Canada	Nordics	Australia
Retail Deposits	29%	39%	35%
Non-Retail Deposits	38%	8%	32%
Market Funding	15%	39%	34%
Other	18%	13%	

	Domestic Banks		
	Bank A	Bank B	SVB
Insured Deposits	22%	21%	2%
Uninsured Deposits	47%	48%	87%
Wholesale Funding	20%	21%	10%
Other	10%	9%	1%

Source: Bloomberg, S&P, Company Reports. International bank universes defined as 2 largest banks in each region. For U.S. banks the split of insured vs. uninsured can be viewed as a proxy of the banks' reliance on retail vs. business deposits.

Retail deposits are much stickier than corporate deposits, due to the prevalence of deposit guarantee programs. Retail depositors tend not to take credit risk into account when choosing where to bank, and once they find a bank, they tend to stick with it. The FDIC, created after the Great Depression to prevent bank runs, was widely copied throughout the Western world and has effectively solved the problem of retail bank deposit runs.

The larger banks augment this retail focus with proven access to wholesale funding markets, which SVB didn't try to employ until it was too late. Wholesale funding is an important vehicle to offset deposit outflows. It also acts to mitigate outflows in the first place, since depositors will be less likely to exhibit a herd mentality if they know the bank has a way to plug funding holes.

Do CAG-approved Banks Face Similar Liquidity Risks?

The large banks on our approved list are more liquid than smaller banks like SVB and therefore, we do not believe they face similar liquidity risks:

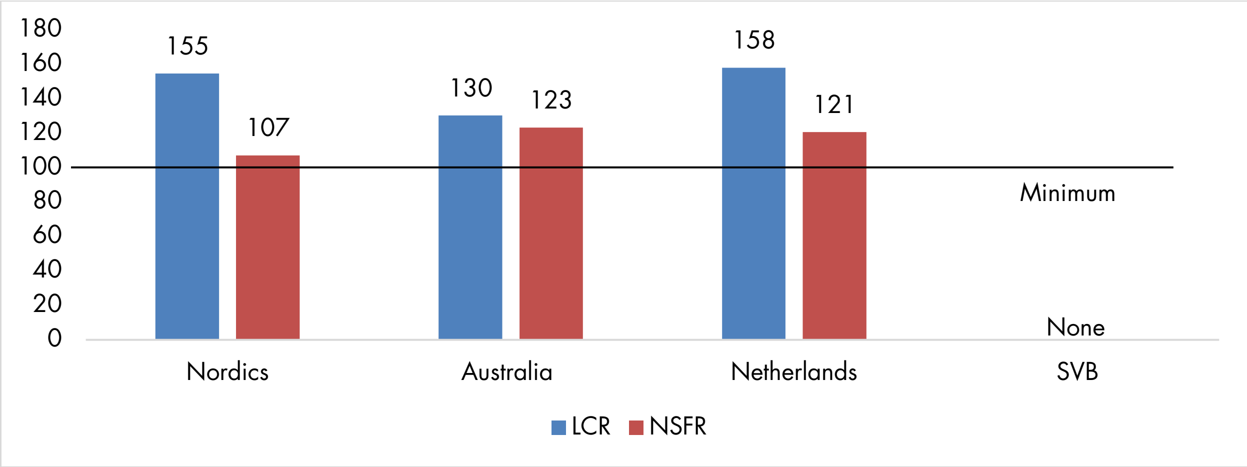
- They operate with more cash on the balance sheet. The average reserve/assets ratio for large US banks is 10%, compared to 6% for small banks[5]. It's a similar story for the international banks; the Nordic banks run an average of 11% cash/assets[6].

- They are subject to a predefined liquidity coverage ratio (LCR), which assesses how well a bank can meet outflows in a stressed event. At 100%, short-term assets are sufficient to cover short-term obligations. Most large banks generally operate well above this 100% minimum requirement. SVB was not subject to the LCR.

- They are subject to a predefined net stable funding ratio (NSFR), an assessment of how well the duration of a banks' assets matches its liabilities. Like the LCR, 100% is the minimum, and most large banks operate above it. SVB was not subject to the NSFR.

[5] "Large Bank Sell-Off Overdone – Higher Liquidity, More Diversified; Mgmt Meetings Yesterday Calm" J.P. Morgan Research. As of 3/10/2023.
[6] Company filings, Quarterly Fact Book and Bloomberg, as of 12/31/2022.

Exhibit 2: LCR & NSFR (%) - By Region



Source: Bloomberg, Company Reports. Average of three largest banks in all systems. Large U.S. banks are now subject to the NSFR but are not required to disclose their results until this year. **SVB is not subject to LCR and NSFR requirements.**

Do Any CAG-approved Banks Have Similar Concentrated Business Profiles?

It is CAG credit policy to approve only domestic and global systemically important banks. We believe that these institutions have such scale and diversity of business lines that a disruption within a particular industry—such as early-stage healthcare, life-science, or tech companies—would not affect the bank as a whole. But SVB had an extremely concentrated business profile: 44%[7] of publicly traded venture-backed tech and healthcare companies banked with SVB, and roughly 60% of total bank deposits were from technology or life science/healthcare companies alone.

Within the US regional bank universe, CAG-approved banks are at least twice the size of SVB, with more diversified business activities. Using loan books as a proxy for client base, below is a breakdown of the loan books at the three CAG-approved regional banks (Bank C, Bank D and Bank E), compared to that of SVB.

Exhibit 3: Bank Loan Portfolios

Bank C		Bank D		Bank E		Silicon Valley Bank	
Commercial	35.0%	Commercial & Industrial	55.9%	Commercial & Industrial	50.2%	Commercial & Industrial	83.0%
Residential Mortgages	29.8%	Residential Mortgages	14.1%	Residential Mortgages	17.3%	Private Banking	14.0%
Commercial Real Estate	14.3%	Commercial Real Estate	11.1%	Auto	8.5%	Commercial Real Estate	3.0%
Other Retail	14.1%	Home Equity	8.0%	Home Equity	7.8%		
Credit Card	6.8%	Auto	4.5%	Commercial Real Estate	6.9%		
		Credit Card	2.1%	Other	4.0%		
		Equipment Lease	2.0%	Commercial Construction	1.8%		
		Other Consumer	1.5%	Student	1.6%		
		Education		Credit Card	1.5%		

Source: Company Filings, as of 12/31/2022.

[7] Company specific data in this section was sourced from company filings unless otherwise noted. As of 3/8/2023.

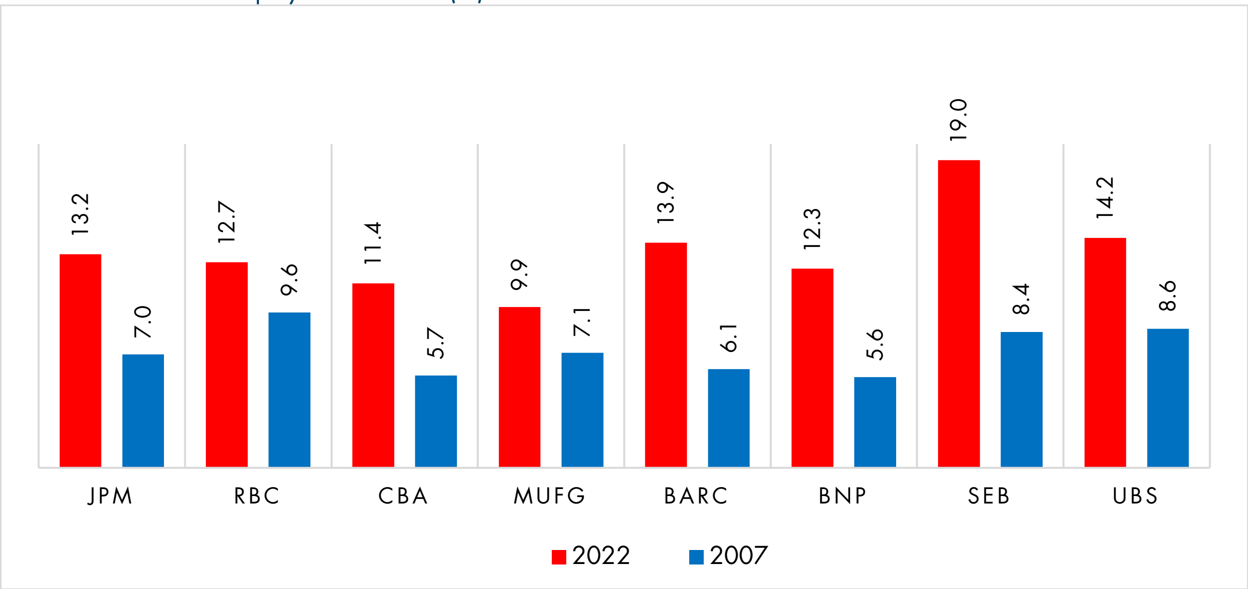
This breakdown is subject to how individual banks report the composition of their loan books. Across Banks C, D and E, commercial and industrial loans are spread between multiple mature industries, while 97% of SVB's commercial & industrial loans are focused on PE investors and VC investors, or companies SVB labeled as sensitive to market correction. The size restriction of CAG's approval process prevents approved banks from being over-reliant on a single industry for revenues, as SVB was in the venture-backed space. Rather, they tend to be large and well-diversified across regions, industries, and business lines, leading to business profiles which look nothing like SVB's.

Do CAG-approved Banks Have Sufficient Capital?

Capitalization is a strength of the large international banks on our approved list for the following reasons:

1. Large banks have built up capital over time. A sample of the largest banks in the world shows that Common Equity Tier-1 (CET1) ratios have increased across jurisdictions in the post-2008 period.

Exhibit 4: Common Equity Tier-1 Ratio (%)

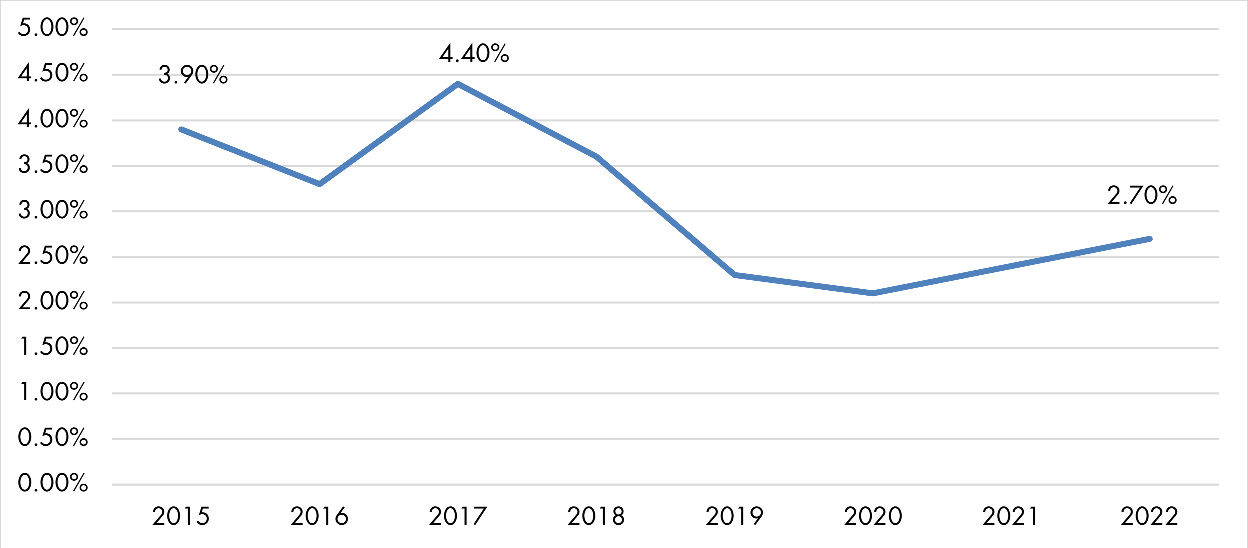


Source: Bloomberg, Company Reports

2. Larger banks are subject to higher requirements which force them to maintain elevated capital levels. Moreover, their internal targets are generally set well above their minimum requirement (often 100-300 basis points higher).

3. Larger banks' capital adequacy is assessed by routine stress tests. These tests provide the best indication of the quality of capital in the context of an economic downturn. The Fed's most recent stress test in 2022 assumed a 3.5% decline in GDP and a rise in unemployment to 10%, which would be consistent with a 2008-type recession. The result of the test saw no outright failures, and an average decline in CET1 ratio of 2.7% in the severely adverse scenario. This is slightly higher than 2021, but still broadly consistent with the trend of stress test results improving over time. It suggests that large banks have reduced on-balance sheet risk.

Exhibit 5: Average Decline in CET1 Ratio Under "Severely Adverse" Scenario



Source: Federal Reserve 2015-2022 stress test.

What Are Other Protections That Help Safeguard CAG-approved Banks from Run Risk?

There are also a few external protections afforded to CAG-approved banks but not to SVB.

1. The large banks are subject to additional regulatory scrutiny, including but not limited to:

    a. Higher capital requirements
    b. Liquidity and funding requirements
    c. Loss-absorbing debt issuance requirements (TLAC/ MREL)
    d. Resolvability –banks have to submit plans and are regularly assessed on their resolution frameworks (i.e., how would a bank unwind itself if it were to experience an insolvency event)

In contrast, as a lower category (Category IV) U.S. bank, SVB was subject to much less regulation. It faced a lower CET1 capital ratio requirement and was not required to go through as frequent stress testing. It was also not subject to LCR or NSFR requirements. Given the way SVB failed (in what was effectively an LCR test on steroids), this is rather prescient.

2. Systemic Importance

Given their size, integration into the financial system, and importance to their respective operating environments, these banks benefit from an implicit assumption of government support. Europe, the U.S., and others have attempted to move away from expectations of government support with the implementation of bail-in debt regimes. However, bank bailouts are not uncommon; for instance, the Italian government bailed out Monte dei Paschi Siena in 2017, injecting it with €6B in capital. When push comes to shove, allowing a large bank to fail is often deemed too great a risk to financial markets and the broader economy[8].

[8] "Jon Nicolaisen: Should banks be bailed out?". Bank of International Settlements. 4/14/2015.

Exhibit 6. Moody's Assumed Probability of Government Support for Senior Debtholders

Moody's	Probability
JPM	"Moderate"
RBC	"Moderate"
TD	"Moderate"
BNP	"Moderate"
CBA	"High"
Nordea	"Moderate"
Rabo	"Moderate"
SVB	No assumption of government support

Source: Moody's Credit Profile

Does SVB's Failure Pose a Contagion Risk?

We don't believe SVB's failure poses a contagion risk to any of CAG's approved banks. This is because these banks have very different operating profiles which are not subject to the same concentrated client base. Much of the spillover concerns associated with the failure of SVB are focused on banks with similar deposit profiles and clients.

- SVB had an extremely high level of uninsured deposits ~ 87%[9]. CAG approved banks have a much lower share of uninsured deposits, largely due to the retail presence seen in most of the CAG approved banks. SVB almost exclusively focused on corporate deposits which are more confidence-sensitive.
- CAG-approved custody banks have a higher share of uninsured and corporate deposits. However, their accounts are largely transaction accounts, while SVB had a high level of non-transaction accounts which are more sensitive to shifts in confidence[10]. The global presence of these banks and the vital corporate services they provide further solidifies their deposits.

On the day of SVB's collapse, CAG-approved U.S. bank stocks performed better than non-approved banks in SVB's peer group, falling an average of 2.10%, compared to the latter group's average fall of 3.97% and the S&P 500 index's 1.45% fall. Stronger stock performance is investors' votes of confidence about where they think contagion risk may lie. It is an indication that the markets understood the differentiated operating models of CAG-approved banks vs. that of SVB. Notably absent from the second group are First Republic Bank and Signature Bank that share similar risk profiles with SVB.

Exhibit 7. CAG Approved & Non-Approved Banks

CAG Approved Banks		Non-CAG Approved Banks	
Bank A	2.54%	FITB	(4.17%)
Bank B	(0.88%)	ALLY	(5.70%)
Bank F	(1.44%)	ZION	(2.44%)
Bank G	(3.59%)	KEY	(4.17%)
Bank H	(2.29%)	RF	(4.17%)
Bank C	(3.97%)	MTB	(1.44%)
Bank D	(0.51%)	NYCB	(5.99%)
Bank E	(6.68%)	CFG	(3.66%)
Average	(2.10%)	Average	(3.97%)

Source: Google Finance, as of 3/10/2023.

[9] Company Specific Data in This Section was Sourced from Company Filings Unless Otherwise Noted. As of 3/8/2023.
[10] "U.S. Banks: SVB Situation More 'SV' Than 'B'", CreditSights, March 10th, 2023.
https://www.creditsights.com/articles/502886?resultIndex=0&ssid=1678576434211

Why Should Investors Have Confidence in CAG-approved Banks?

We believe that CAG-approved banks are far removed from the causes of SVB's liquidity woes. The banks which populate our clients' portfolios are significantly larger, subject to capital, liquidity and risk management regulations, far more diversified in both their funding and revenue sources and do not rely on the performance of any one industry or market. Post-collapse market reaction suggested they might be flight-to-quality candidates.

We will remain vigilant in monitoring market conditions and the banks' financial positioning.

How Can Institutional Investors Avoid or Minimize Run Risk in Cash Investments?

The run on SVB's deposits reminds us again that not all cash management solutions are the same. We lived through runs on prime money market funds and now on bank deposits, but the key principle to safeguard cash investments remains the same – a portfolio of high-quality diversified investments supported by a conservative risk culture that investors can customize according to their needs and risk tolerance. A well-managed separately management account (SMA) may minimize liquidity risk from runs on deposits, commingled funds and other instruments.

Direct purchases of government and corporate cash instruments through an SMA represent a back-to-basics approach that reduces credit risk in uninsured deposits. It also offers multiple sources of liquidity when one area of the market experiences volatility. With SVB's concentrated risk in business activities, loan types, deposit sources and imprudent management of interest rate risk explained above, a similar specialty lender would not have met the minimum credit standard in most institutionally managed cash portfolios. When implemented with government money market funds and a laddered maturity structure, SMA strategies can potentially take advantage of market inefficiencies to produce higher yield opportunities than both deposits and pooled vehicles.

About Us

Capital Advisors Group, Inc. is an independent SEC-registered investment advisor specializing in institutional cash investments, risk management, and debt finance consulting. Our clients range from venture capital-funded startups and emerging growth companies to Fortune 100 companies.

Drawing upon more than a quarter of a century of experience through varied interest rate cycles, the firm has built its reputation upon deep, research-driven investment strategies and solutions for its clientele.

Capital Advisors Group manages customized separately managed accounts (SMAs) that seek to protect principal and maximize risk-adjusted returns within the context of each client's investment guidelines and specific liquidity needs. Capital Advisors Group also provides FundIQ® money market fund research; CounterpartyIQ® aggregation and credit analysis of counterparty exposures; risk assessment on short-term fixed income securities and portfolios; and independent debt finance consulting services.

Headquartered in metropolitan Boston, Capital Advisors Group maintains multiple U.S. regional offices.

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