Silicon Valley Bank

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March 16, 2023

Ironically

The Nobel Prize in economics in 2022 was awarded to Ben Bernanke, Douglas Diamond and Philip Dybvig for research on bank collapses.

- "for research on banks and financial crises"
- From the Nobel Prize website: This year's laureates in the Economic Sciences, Ben Bernanke, Douglas Diamond and Philip Dybvig, have significantly improved our understanding of the role of banks in the economy, particularly during financial crises. An important finding in their research is why avoiding bank collapses is vital.

Some references

- https://delano.lu/article/unhedged-interest-risk-high-un
- https://www.youtube.com/watch?v=QACGoKb48_0&ab_channel=WallStreetJournal
- https://johnhcochrane.blogspot.com/2023/03/how-many-banks-are-in-danger.html?spref=tw

What happened?

SVB Financial Group (SIVB -60.41% in 10/03/2023) bought some of the safest assets in the world of finance. How could it possibly have failed in two days?

How did we get here?

- SVB Financial is the parent company of Silicon Valley Bank
- Silicon Valley Bank has many startups and venture-capital firms as clients
- During the pandemic, those clients generated a ton of cash that led to a surge in deposits
- SVB ended the first quarter of 2020 with just over $60 billion in total deposits
- That skyrocketed to just shy of $200 billion by the end of the first quarter of 2022
- It was the 16th biggest bank in the US, and the second largest in history to fail.

What did the bank do?

- SVB Financial bought tens of billions of dollars of seemingly safe assets
  - Primarily longer-term U.S. Treasurys and government-backed mortgage securities
- SVB's securities portfolio rose from about $27 billion in the first quarter of 2020 to around $128 billion by the end of 2021

Why is that a problem?

- These securities are at virtually no risk of defaulting
  - But they pay fixed interest rates for many years
- That isn't necessarily a problem, unless the bank suddenly needs to sell the securities
- Because market interest rates have moved so much higher, those securities are suddenly worth less on the open market than they are valued at on the bank's books
  - As a result, they could only be sold at a loss
- SVB's unrealized losses on its securities portfolio at the end of 2022 jumped to more than $17 billion

What else went wrong?

- SVB's deposit inflows turned to outflows as its clients burned cash and stopped getting new funds from public offerings or fundraisings
    - Attracting new deposits also became far more expensive, with the rates demanded by savers increasing along with the Fed's hikes
- Deposits fell from nearly $200 billion at the end of March 2022 to $173 billion at year-end 2022
- As of Jan. 19 - 2023, SVB was forecasting its deposits would decline by a midsingle-digit percentage in 2023
    - But their expectation as of March 8 was for a low-double-digit percentage decline

How did this come to a head?

- On Wednesday (8/3/2023), SVB sold a large chunk of its securities worth $21 billion at the time of sale
  - At a loss of about $1.8 billion after tax
- The bank's aim was to help it reset its interest earnings at today's higher yields
  - And provide it with the balance-sheet flexibility to meet potential outflows and still fund new lending
- SVB also set out to raise about $2.25 billion in capital

Why didn't it work?

- Following Wednesday's announcement, things seemed to get even worse for the bank
  - The share-sale announcement led the stock to crater in price, making it harder to raise capital
  - Venture-capital firms reportedly advised their portfolio companies to withdraw deposits from SVB
- On Thursday, customers tried to withdraw $42 billion of deposits–about a quarter of the bank's total
  - According to a filing by California regulators
  - The bank ran out of cash

SVB Financial: From Boom to Bust

What will happen to customer deposits? 12/03/2023

- Many of the bank's deposits don't carry FDIC protection. SVB estimates that at the end of 2022, deposits in its U.S. offices that exceed the FDIC insurance limit were \$151.5 billion.
- The FDIC stated on Friday that customers will have full access to their insured deposits no later than Monday morning.
- The FDIC has not yet determined the current amount of uninsured deposits, but uninsured depositors will get an advance dividend within the next week.
- For the remaining amounts of uninsured funds, depositors will get something called a "receivership certificate," and as the FDIC sells off the assets of SVB, they may get future dividend payments.
- **13/03/2023** All of SVB depositors will get their money back. (Signal to depositors in other banks)

Unhedged interest risk

- SVB had assets that were very sensitive to interest risk.
- The first thing you teach students who are going to work in a bank is how to hedge interest rate risks.
- SVB's chief risk office, Laura Izuriet, stopped serving as risk officer in April 2022. Kim Olson was appointed CRO in January 2023.
- **Why they didnt hedge?** : Incompetence?
- Turns out they couldn't. FASB rule ASC 815-20-25-43(c)(2) interest rate risk may not be hedged in a fair value hedge of held-to-maturity debt

Financial Accounting Standards Board (FASB)

FASB rule ASC 815-20-25-43(c)(2)

		Eligible hedged risks			
Instrument type	**Recognition model**	**Interest rate**	**Foreign exchange**	**Credit**	**Market price**
Loans	Held for investment	Yes	Yes	Yes	Yes
	Held for sale	Yes	Yes	Yes	Yes
	Fair value option[1]	No	No	No	No
Debt securities	Available for sale	Yes	Yes	Yes	Yes
	Held to maturity	No	Yes	Yes	No
	Trading[1]	No	No	No	No
Equity securities accounted for under ASC 321	Fair value through earnings[1]	No	No	No	No
	Measurement alternative	No	No	No	No
Liabilities and other assets	Amortized cost	Yes	Yes	Yes	Yes
	Fair value option[1]	No	No	No	No

Large amount of uninsured deposits, concentrated in one industry and one region

- Banks mostly fund themselves with deposits, but "typically we have a lot of small retail deposits in the bank.
- Most of these retail deposits, because they are small amounts, they're insured by the government–by the FDIC [Federal Deposit Insurance Corporation] up to 250K
- In the case of Silicon Valley Bank, however, "the business model was to attract very large deposits from the tech industry," and, in particular, tech startups with a lot of cash from venture capital funding.
- Time Bomb: A large uninsured deposit base, all concentrated in one region, Silicon Valley.

Reduced Regulation

- Diversification of depositaries is not something that is covered by regulation.
- There are limits introduced by the Basel Committee for single counterparty exposure, but if you have all your counterparties that look the same, it's like being exposed to one counterparty.
- At the end of 2022, Silicon Valley Bank had around $200bn in assets. "It's regulated by the Fed, but it's not regulated like the largest banks in the US".
- After the 2008 financial crisis, new regulations were implemented. But under the Trump administration, there was "a deregulation wave that was also pushed very much by lobbying banks, including Silicon Valley, to reduce the regulation burden for smaller banks."
- To be subject to the Federal Reserve's regulatory stress tests, which tests how a bank would react to an increase in interest rates, for instance, the threshold was set at $250bn in assets

What Happened next

- Silvergate, a crypto related bank failed (third largest failure).

Thoughts?

- Insurance over 250K ?
- Size
- Bailout