Welcome to Money for the Rest of Us. This is a personal finance show on money, how it works, how to invest it and how to live without worrying about it. I'm your host, David Stein. Today's episode, 424. It's titled "Are more bank runs coming? The collapse of Silicon Valley Bank."

How the Silicon Valley Bank Crisis Unfolded

Last Wednesday, March 8th, I saw a Financial Times piece that SVB Financial, the holding company for Silicon Valley Bank, planned to raise $2.2 billion through new stock issuance. The purpose was to replenish capital that it had lost after selling $2 billion of US Treasuries and mortgage-backed securities. These were bonds the bank was forced to sell to meet deposit withdrawals from its customers, but also because Moody's Investors Service was threatening to downgrade SVBs debt rating due to the large amount of unrealized losses on its bond portfolio.

Silicon Valley Bank offers a variety of banking financial products. Greg Becker, who is the CEO or was the CEO of SVB Financial, just a week earlier, at a conference in Los Angeles said, "We pride ourselves on being the best financial partner in the most challenging times."

Silicon Valley Bank has always had a very close relationship with venture capitalists and startups. For example, I'm invested in some private capital fund-of-funds through my old firm. I've invested in six funds over the last decade or so, and those funds in turn have invested in 150 other funds that were sponsored by venture capitalists, leveraged buyout managers, and real estate. One third of those underlying funds use Silicon Valley Bank for wire transfers, to handle the capital calls and distributions. And their underlying portfolio companies use Silicon Valley Bank.

SVB Financial’s Balance Sheet

If you pull up the year-end financial statements, the annual report or 10k for SVB Financial, what you'll see is it had $211 billion in assets, and 120 billion of those assets were investment securities. Some were listed as available for sale, and some were held to maturity securities.

Since 1993 financial companies and other companies, if a security such as a bond is going to be held until it matures, it doesn't have to be marked to market. You don't have to put the actual value based on the fluctuations of interest rates. SVB has $91 billion of these held to maturity securities, but their fair value based on interest rate was $76.1 billion. So there was approaching $20 billion of unrealized losses on those bonds. The available for sale securities was $26 billion, and their cost basis was $28.6 billion dollars. So there was a $2 billion loss embedded in that.

What is interesting is there are two different rule sets for banks. There are the banks that are considered too big to fail, the JP Morgans, the Wells Fargo, that have more stringent criteria. And one of those stringent criteria is those banks in terms of calculating their capital ratios, how much capital do they have relative to their assets, they have to reflect these unrealized losses in their capital ratio calculation.

Whereas a smaller bank, if we can call a $200 billion bank small, they don't have to do that. They don't have to reflect unrealized losses in their capital ratios. And so the banks look more secure than they actually are.

Continuing looking at SVB balance sheet, it had about $73 billion in loans, and then it had $173 billion in deposits. The deposits are considered liabilities of the bank. And then there was $16 billion in equity. Some of it was common stock, some of it preferred stock, but that was the capital buffer, $16 billion supporting $200 billion in assets.

Back in episode 305, "Are banks safe?" we quoted John Walters of the Federal Reserve Bank of Richmond. He pointed out that a bank's capital is the difference between the value of the bank's assets and its liabilities, just as we described. $212 billion of assets for SVB Financial, there are $195 billion in liabilities, and $16 billion of capital.

John Walters wrote, "If the organization encounters financial troubles that reduce the value of the assets, the bank can still repay its liabilities, because it has this capital cushion, as long as the decline in asset values is smaller than the amount of capital."

We already pointed out that SVB Financial head unrealized losses of $20 billion on the bonds that it held. And if it had to sell all those bonds, it would completely wipe out its capital.

The Burden of Higher Interest Rates on Banks

The reason why Silicon Valley Bank had so many unrealized losses was, as FDIC Chairman Martin Gruenberg pointed out at the Institute of International Bankers on March 6th, 2023, just a few days before SVB tried to raise additional capital - he pointed out that the short-term interest rate, the Federal Reserve's policy rate had gone from 0.08% in February 2022 to 4.6% as of February 2023.

If we look at longer-term interest rates, five, seven and ten years, their yields have doubled in the past year. As interest rates go up, the value of bonds go down, and Chairman Gruenberg pointed out that across the banking system in the US, there was $620 billion of unrealized losses on those bonds, including $20 billion that SVB Financial had.

In the footnote of Gruenberg's speech, it says "For most banks, regulatory capital does not reflect the effect of unrealized losses on available for sale securities. Realizing the loss by selling the depreciated securities therefore causes a decrease in regulatory capital."

In his speech, Gruenberg said the banking system was strong due to reforms that had been made since the Great Financial Crisis, but he pointed out some of the risks, and one of the risks was the unrealized losses and the potential of having to recognize those losses if depositors wanted to pull out their deposits. And in order to keep depositors from pulling out deposits, banks would need to raise their interest rates on their checking and savings accounts, which they had been slow to do.

The leverage ratio is essentially the amount of capital divided by the assets - and this is from a piece by Robert Armstrong in the Financial Times.

The leverage ratio, or the sort of simplified capital ratio for Silicon Valley Bank was 8%. After factoring in the unrealized losses though, the leverage ratio would have been negative, as we pointed out. But he listed out some other banks that have struggled.

First Republic, 8% leverage ratio, but if they recognize all the unrealized losses, the leverage ratio would be 5.9%. So not insolvent. And yet First Republic stock has fallen over 50% in the last week. So have some of the other banks. Zions Bank has seen their stock plummet in the last week, because investors are worried about the potential for having to recognize these losses on bonds, because they have to be sold to meet depositor demand.

In the case of Silicon Valley Bank, 96% of the deposits were uninsured. The FDIC insurance limit in the US is $250,000. Many of Silicon Valley Bank's depositors were startups. They would get funding from a venture capitalist and then they would just store the money in Silicon Valley Bank. Some of them used SVB for payroll services. Some of them had lines of credit, in which SVB required the borrower to keep a minimum cash balance at the bank. But the reality is - and this is highly unusual - that 96% of the deposits are uninsured.

If we look at some of the other banks - First Republic, 80% of the deposits are uninsured. At Zions Bank about 65% of the deposits are uninsured. Those numbers surprise me, but it just goes to show that most deposits at banks are from corporations. And those corporations face a risk that the bank could go insolvent, and those uninsured deposits could be at risk.

A Bank Run

The venture capital community is very well connected. Rumors swirl, and some venture capitalists, after seeing that announcement by SVB, their need to raise equity capital on March 8th, and in the afterhours their stock fell 15%, they started telling their clients to pull deposits from the bank. Many did, and some venture capitalists such as Peter Thiel's Founders Funds were telling portfolio companies, "Get your money out." And they did.

On Thursday, March 9th, Silicon Valley Bank depositors tried to withdraw $42 billion. That's 24% of the deposits in one day. In order to meet that, the bonds, the liquid bonds, super-liquid, had to be sold at a loss, and by then it was over.

The Federal Deposit Insurance Corporation seized Silicon Valley Bank before it opened Friday morning. It was the second biggest bank failure in US history, second only to Washington Mutual's collapse in 2008. And it took just a matter of hours.

The ability -- banking now you, don't even have to go to the branch. You can just move money on your phone, in many cases. The stock price for SVB was $743 on November 2021, up from $139 on April 3rd, 2020. On March 8th, the stock was still selling for $267 per share, but now it's worthless. FDIC announced that they created the Deposit Insurance National Bank of Santa Clara that would take over the insured deposits, and insured depositors would have full access to their deposits come Monday morning, March 13th, 2023.

The uninsured depositor would get an advanced dividend within a week, and then they would receive receivership certificates for the remaining amount. And as FDIC sold assets of Silicon Valley Bank, then those depositors would get future dividends.

Public versus Private Money

Back in episode 392, my son Camden and I, we discussed money, a two-part episode, and Camden was summarizing the difference between public money and private money.

He said, "Public money is what we're familiar with as currency, cash. This can be the US dollar, this could be the Japanese yen. And then there is private money, things we use as money for transactions that hold value but are often within a more private system. It could be casino chips, it could be a gift card to a local restaurant, or to the Apple store. It could be tickets at the fair, but most commonly banks. And that is one of the things that really kind of shakes my world; not in a bad way, but I just find it really fascinating the idea that banks, deposits at banks is private money, even though it's denominated in the same unit of account, the US dollar."

I pointed out that a commercial bank has an IOU. When we have a deposit, it is a private money IOU. They owe it to us. It's a liability of the bank, just like we pointed out in SVBs financial statement. And if people fear they're not going to get their money back, it can cause a run.

That's why we have public money backing this private money with FDIC insurance. But most of the money in the banking system is an insured.

Why Uninsured Depositors Were Bailed Out

The holders of this uninsured money really started to worry that weekend. They were trying to sell their deposit credits at SVB, in some cases for 55 to 65 cents on the dollar. Some opportunistic firms such as Fulcrum Capital, an Austin-based special situation fund, was contacting startups offering to pay for those deposits, or the rights to those deposits, and provide capital for that. The startups were worried about meeting payroll, although they would get this dividend in the next week.

There was some talk - Bill Ackman, hedge fund manager, and others - that the federal government should step in and protect both insured, and uninsured depositors, because SVB was so tied to the venture capital community.

And that's exactly what happened. On Sunday, March 12th, 6pm Eastern Time, the Federal Reserve and the FDIC announced that after consulting with President Biden, Secretary Yellen, that the government would fully protect all depositors. And all, both the insured and uninsured depositors, would have access to all their money starting Monday, March 13th. They also announced - and this is called a systemic risk exception - for Signature Bank, which was closed that weekend by the New York State. Also got into trouble as there was a bank run.

In the announcement, the Federal Reserve and the FDIC made a point that shareholders of the banks and certain unsecured debt holders would not be protected.

They insisted this was not a bailout of investors, but it was an exception; it was protecting the uninsured depositors. The senior management of the banks had been removed, and then they pointed out that any losses to the Deposit Insurance Fund to support these uninsured depositors would be recovered by a special assessment to the banks. In other words, it would be done through the FDIC, which is an agency of the government, but it's funded by assessments to banks.

Bank Term Funding Program

The Federal Reserve also announced a new program. They created the Bank Term Funding Program, BTFP, another new program, offering loans to banks, savings associations, credit unions and other eligible depository institutions loans. If those banks would pledge US Treasuries, agency debt and mortgage-backed securities as collateral, they could get a loan to meet depositors that were exiting, so that the financial institutions wouldn't be forced to sell their bonds and realize the losses, and potentially wipe out their capital.

The idea is that this would provide a liquidity cushion, a liquidity provision, which given the $620 billion dollars in unrealized losses, was probably a good thing, although not without controversy. One of the controversies is they're valuing these bonds at par, not at the actual value of the bonds. And some have called that magical accounting. The bond is worth what it's worth. Now, if it's held to maturity, they would get back the principal. But today, it's unusual to take collateral and value it at a fictitious amount, its cost, essentially, what it was bought for, rather than its current value.

The Federal Reserve said the US banking system remains resilient and on a solid foundation, in large part due to reforms that were made after the financial crisis that ensured better safeguards for the banking industry.

Except that those safeguards were reduced back in 2018. President Trump signed a law that raised the limit for systematically important banks, banks too big to fail. It was at 50 billion. Now it's at 250 billion. And as a result, those banks that have assets less than 250 billion didn't have to have the more stringent capital ratios, nor did they have to go through Federal Reserve stress tests. That includes Silicon Valley Bank. Back in 2017, it had $48 billion in assets. It was below the threshold. But once the threshold was lifted, the amount of assets that SVB had soared to $200 billion, because they didn't have to meet the more stringent regulatory requirements, including having to recognize losses on bonds as part of the capital ratio calculation. The requirements were watered down, and that in itself has been controversial.

The other controversy is the fact that the uninsured depositors are being bailed out.

Sheila Bair writing in the Financial Times - she's a former chair of the US Federal Deposit Insurance Corporation, and a senior fellow at the Center for Financial Stability, wrote, "Preventing systemic risk was repeatedly used as a rationale for bailing out Wall Street during the 2008 financial crisis. The 2010 Dodd-Frank Act was supposed to have fixed all of that by strengthening regulation and banning government bailouts. Yet banking regulators have now decided that the failure of two mid-sized banks, Silicon Valley Bank and Signature, pose systemic risk, requiring the FDIC to pay off their uninsured depositors. Those two banks combined have $300 billion in assets, compared to the $23 trillion in the banking system. Is that system really so fragile that it can't absorb some small haircut on these banks' uninsured deposits? If the banking system is as safe and resilient as we've been constantly assured by the government, then the regulators' moves set dangerous expectations for future bailouts."

Moral Hazard

There is moral hazard there. Moral hazard is not having an incentive to guard against risk, because you feel like you'll be protected; you'll be protected from the consequences of taking that risk. Bair says these uninsured depositors of SVB are not a needy group. They are a who's who of leading venture capitalists and their portfolio companies; that they're financially sophisticated, and apparently missed the disclosure about the FDIC insurance being capped at $250,000.

Larger businesses routinely have more than $250,000, and I struggle with this... Is it the responsibility of a corporation to be bank examiners, to protect against the potential that the bank had go under? The point of money is that we should be able to use it without asking questions; no questions asked. We shouldn't have to do due diligence on money. And so I struggle. I don't necessarily have a problem with protecting the uninsured depositors, because it's challenging to figure out whether a bank will go under or not, because it's based on trust. 44 hours it took that bank to collapse, because it had some losses on bonds. It wasn't even taking big, esoteric risk. It held bonds, and interest rates went up, and their value fell. Now, there was a mismatch between the assets and liabilities. SVB probably shouldn't have had such longer-term bonds, but that was a big rate move. Is it the responsibility of money users to have to conduct due diligence on whether a bank potentially could fail because other depositors get scared, and there's a bank run?

Bair continues, "My instinct tells me that most regional and community banks are basically sound. The main thing we have to fear is fear itself cascading into bank runs, that will force otherwise healthy banks to collapse."

That's what we're facing; that trust can switch so quickly, and there'll be a bank run. And that's why we have deposit insurance. But now there's two tiers - we have the systematically important banks, that have even more stress tests that they have to obey, more of a capital buffer... Do depositors flee the smaller banks and go to the bigger banks because of that, causing even more bank runs?

Come Monday, the sell-off in banks continued. As I mentioned, First Republic stock fell 75%. Western Alliance Bank fell 80% on Monday, even though President Joe Biden said that the government would do whatever is needed to protect bank deposits. "We will not stop at this", he said. "We'll do whatever is needed on top of all this", this being the action that Federal Reserve and FDIC took in the case of Silicon Valley Bank and Signature Bank.

Bank Stock Performance

If we look at the SPDR S&P Regional Bank ETF, it's fallen 23% since March 8th. Yesterday I thought about "Hah, maybe I'll buy that ETF." But it's sort of a wager that depositors won't freak out. Because if there are bank runs, a bank can go under in a matter of hours.

Even my bank. I bank at Schwab, Schwab Bank. Its stock fell close to 12% on Monday. At one point it was down 23%.

The bank said, "Focusing attention on unrealized losses within held to maturity portfolio", the portfolio bonds they are planning on holding, "has two illogical flaws. First, those securities will mature at par, and given our significant access to other sources of liquidity, there is very little chance that we'd need to sell them prior to maturity." They're saying they're not going to have to sell their bonds like Silicon Valley Bank has, because they have other sources of liquidity, including this new lending facility by the Federal Reserve.

The second point Schwab made is the fact that Schwab has more held to maturity securities than other banks, compared to for example loans that other banks have, and it actually makes Schwab higher-quality and more liquid and more transparent, because everybody knows, "Here's what they own. Here's what it's worth if it had to be sold." But unlike most banks that the biggest asset is loans, we don't have the transparency of how many of those loans are potentially exposed, particularly if the economy slows.

And finally, Schwab pointed out that more than 80% of its bank deposits fall within the insurance limits of FDIC. They're mostly a retail bank. Now, we've seen a big interest rate move down, because the thought is "Well, if banks have to protect their capital, they're not going to be able to loan as much. They're going to be more restrictive, and that would lead to a slower economy, and that the Federal Reserve, given this crisis, is not as likely to keep raising its policy rates."

We saw the 2-year yield fall a percent over just a couple of days. 5-year interest rates are down about 60 basis points, and the 10-year, the yield's down about 40 basis points, just since March 8th.

What Happens Next

So where do we go from here? This is based on some work that Capital Economics does - they outline three scenarios, and I agree with them. One is a good scenario, that this is contained to SVB, and the Federal Reserve continues to raise its policy rate, and it just kind of all goes away. The panic subsides. The second scenario is it actually expands a little bit, but just within the US, that banks have to reduce the amount of credit they offer, that we get the tighter financial conditions, and that leads to an economic recession in the US, but it's overall contained. That it doesn't spread to the rest of the world.

And the third scenario, the tail risk scenario, is that there are a lot of financial institutions in trouble. That there are unknown vulnerabilities lurking beneath the surface, and the central banks around the world have to step up and provide emergency liquidity... But this doesn't prevent a loss of confidence in the system. They don't say a collapse, but if we lose trust in the financial system, we're in dire straits. If we lose trust in central banks. Central bank insolvency and a lack of trust would lead to major, major repercussions, including hyperinflation.

Not much has changed in the last week or so. It's just the story change, the narrative change. There was herd behavior, contagion.

You can go to Silicon Valley Bank's balance sheet; we knew the amount of unrealized losses. It's just that the announcement of a stock sale triggered fear, and then the venture capitalists and their startups pulled the money, and the bank collapsed.

Hopefully, that won't spread to other banks. We as individuals need to make sure that we keep our deposits less than the insurance amount, under $250,000 if you're a US individual. And every country has different limits. If you have a business and you can't stay under that limit, make sure you have multiple banking relationships, so if one bank closes, and it takes time to get most of the funds back, you can still operate, because you have other banking relationships.

Another takeaway is make sure your assets match your liabilities. If you're saving for a house, we want shorter-term assets that can be sold without incurring a loss in order to make the down payment on the house. That's basic finance - match the term of your assets to your liabilities, and when there's a mismatch, like we see in banking, that can lead to losses and failure.

Finally, recognize the foundation of the financial system is trust. And trust can evaporate very quickly. It's why I have 5% of my net worth in gold. It's why I own crypto, because there are other alternative currencies that are also based on trust. But if trust in the fiat monetary system, the financial system collapses, then hopefully, they will still be trusting gold and other alternative currencies. No guarantee to that, but that's why having some currency diversification makes sense.

Stay tuned, we'll see what happens from here. That's episode 424. Thanks for listening. Everything I've shared with you in this episode has been for general education. I've not considered your specific risk situation, not provided investment advice. This is simply general education on money and investing in the economy. Have a great week.