



Myrmikan Research

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Boom!

From July through December 2021, the average fixed rate for a 30-year mortgage hovered around 3%. Most home owners locked in this gift from the Federal Reserve. The low rates triggered manic building and bubble pricing, as they always do—but, unlike the bubble of the 2000s, 92% of new mortgages were fixed rate: rising interest rates became more threatening to lenders than to borrowers.

The Fed began hiking rates twelve months ago, and the question became: on which balance sheets did the massive interest rate liability lie? Not those of the issuers: ever more mortgages were issued by non-bank lenders who accessed capital through 15-day loan facilities from money-center banks. Terms were so short because the issuers flipped mortgages immediately to Fannie Mae and the other quasi-government agencies. The agencies did not bear the risk because they securitized the mortgages and issued MBSs to banks and other investors. Large, money-center banks bought MBSs but tend to have a significant amount of variable interest income from credit cards, business loans, and loans to other institutions. They also aggressively hedge rate risk and tend to buy the highest securitization tranches with the shortest maturities. Who was left with the interest rate exposure, either directly or as counter-parties to hedging transactions? Insurance companies, pension funds, shadow banks, and small banks.

Many have been surprised that nothing in the financial system had broken as rates shot dramatically higher. Myrmikan did recently observe that FTX, an obvious fraud, had managed to stagger on for six months after the Luna collapse ignited the crypto-contagion—a proper bank ought to be able to survive a lot longer than that, especially since rates did not even break 3% until October.

A lot longer turned out to be four months. If the first casualty of higher rates was an outright fraud, the next would be in the venture industry, which is the marginal user of capital. The Fed's money printing blitz during the COVID hysteria sent the cost of capital back into sharply negative territory. At zero discount rates, payments in the future are worth the same as cash in the present. This absurd phenomenon favored especially projects with large capital needs and prospective cash flows in the distant future, the kind of company in which Silicon Valley specializes.

SVB Financial Group was banker to the Silicon Valley start-up industry and captured a large portion of venture-bound funds. Deposits soared from \$62 billion at the end of 2019 to \$173 billion by the end of 2022. The bank attracted these cash balances in part because it offered founders special perks. Its website still advertises:

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“We offer financing to accommodate: Private aircraft financing; Ownership stake in a private or public company; Ownership in Venture Capital or Private Equity fund.”¹ SVB’s balance sheet includes \$9 billion of loans against private residences, \$9 billion backed by income from “innovation sector” business loans, and \$1.6 billion against “premium wine.”

Founders who took advantage of these perks were required to maintain their corporate cash balances at SVB. Whereas individuals rarely hold more than the \$250,000 balance covered by FDIC insurance, corporations hold millions to fund working capital and, in the case of venture companies, to store their development capital. As a result, of the \$173 billion in deposits, \$165 billion were uninsured.²

In the typical bubble narrative, it would have been SVB’s willingness to lend against overvalued, illiquid collateral that would have pushed it into bankruptcy: its borrowers would have defaulted one by one as the economic cycle turned, slowly building pressure on its balance sheet, until first one and then another creditor withdrew funding, finally panic. That was the story of 2008. But in this story, the culprit was the bond portfolio.

The sudden influx of deposits from the Fed’s QE had given SVB little time to look for loans, so they used the funds to buy bonds instead. As of the end of 2022, SVB held \$117 billion in securities, mostly securitized mortgages purchased from quasi-government agencies (like Fannie Mae). These are AAA rated bonds with virtually no default risk, the kind of investments that regulators want banks to own.

SVB held its securities in two buckets: available for sale (AFS) and held to maturity (HTM). These characterizations were invented by the Financial Accounting Standards Board in 2009 under direct pressure from Congress. During the 2008 panic, money market funds and banks became forced sellers of bonds, pushing prices lower, triggering more margin calls and more selling. Congress had passed a law requiring the Federal Reserve to study the effects of mark-to-market accounting “due to concerns that such write-downs were the result of inactive, illiquid, or irrational markets.”

Under the new rules, as long “it is more likely than not [the bank] will not have to sell the security before recovery of its costs basis,” banks are permitted to value bonds at cost for regulatory purposes, ignoring fair market value. Whatever the wisdom of this policy during a financial panic, it makes no sense in the current situation, in which bonds have fallen in price not because of a liquidity panic but because the Fed has raised interest rates rapidly and has been boasting that they will keep rates higher for longer to contain inflation.

The Fed’s rapid tightening of financial conditions sharply curtailed the market’s appetite to fund venture companies: shrinking money supply reduces the quantity of available dollars, and higher interest rates entices capital in other directions. SVB began to see deposits fall as its customers spent their development dollars, requiring it to raise liquidity. On Wednesday, March 8, the bank announced a \$21 billion sale of AFS securities in which it realized a loss of \$1.8 billion “after-tax” (the assumption being that the loss would reduce income taxes—but, of course, there will be no income taxes this year). The bank also announced plans to plug the capital hole by raising \$1.75 billion in equity.

Presumably it was the equity offering that prompted investors to read the bank’s recently filed 2022 10-K, which revealed that the bank held \$91 billion in its HTM bucket, \$86 billion of which had maturities stretching out at least ten years with a

¹ <https://www.svb.com/private-bank/lending/private-lending/custom-lending>

² SVB FINANCIAL GROUP, Form 10-K the fiscal year ended December 31, 2022, p. 80.

weighted average yield of just 1.63%. The unrealized loss of \$15 billion was only slightly less than the reported \$16 billion in net equity. Interest rates have continued climbing since, and bond prices falling, which rendered the bank insolvent. It probably did not help matters that the CEO, who sat on the board of the San Francisco Fed, had dumped \$3.58 million in stock two weeks earlier. He had sold another \$26 million of stock over the previous two years.¹

The evening that SVB announced its capital raise, some prominent venture capital investors warned their portfolio companies that SVB was in trouble and reminded them that corporate funds were mostly uninsured.² The next day, SVB was hit with \$42 billion in withdrawal requests, which it could not meet.³ The FDIC closed the bank the following day, the second-largest U.S. bank failure in history.

The implications of SVB's failure began to percolate through the intelligentsia over the weekend. Depositors would likely recover around 80% of their money, but much of the cash would be frozen for years in a bankruptcy process.⁴ Corporate clients, which were led and backed by connected, high-profile executives, would fail. Their example would prompt every corporation in America to shift deposits from regional banks to money-center banks, spreading bank failures and large losses to the working capital of corporations large and small. The FDIC would be overwhelmed even as banking power became further concentrated.

Market analysts quickly pointed out the many other banks had similar problems. Bank of America's unrealized loss in its HTM bucket represents 43% of its total equity; at State Street it is 27%, and 25% for Wells Fargo. For small banks, the problems are compounded by loss of deposits as the Fed shrinks the money supply and souring business and real estate loans, which have already put small banks' reserves at critically low levels.⁵ Some analysts predicted a full run on the banking system at the open of business Monday.

Sunday morning, Treasury Secretary Janet Yellen told CBS News: "During the financial crisis, there were investors and owners of systemic large banks that were bailed out ... and the reforms that have been put in place means we are not going to do that again."⁶ But then they did do it again. A few hours later, right after Asian markets opened, the Treasury announced that all SVB depositors would be made whole and have immediate access to their funds.⁷ European officials were shocked at the "total and utter incompetence" of U.S. regulators, especially after fifteen years of "long and boring meetings" advocating an end to bailouts.⁸

Fed chairman Powell himself, as a Fed governor, had declared "too big to fail must end, even if more intrusive measures prove necessary." He designed a "simulation of the failure of a large financial institution under OLA," the Orderly Liquidation Authority granted by Congress, and "came around to the view that it is possible to resolve a large, global financial institution." His simulation involved wiping out shareholders

¹ <https://www.cnn.com/2023/03/14/svb-execs-sold-84-million-of-the-banks-stock-over-the-past-2-years.html>

² <https://www.bloomberg.com/news/articles/2023-03-09/svb-ceo-becker-asks-silicon-valley-bank-clients-to-stay-calm?sref=lsNUbNMA>

³ <https://dfpi.ca.gov/wp-content/uploads/sites/337/2023/03/DFPI-Orders-Silicon-Valley-Bank-03102023.pdf?emrc=bedc09>

⁴ The \$60 billion Reserve Fund, for example, which failed after losing 1.2% of its assets in the 2008 Lehman collapse, did not begin distributions until 2012 and was not fully resolved until 2019.

⁵ <https://www.zerohedge.com/markets/hedge-funds-pile-new-big-short-next-credit-event-emerges>

⁶ <https://www.cbsnews.com/news/janet-yellen-silicon-valley-bank-bailout-face-the-nation-interview-today-2023-03-12/> at 2:30.

⁷ <https://home.treasury.gov/news/press-releases/jy1337>

⁸ <https://www.ft.com/content/5e4a8dde-c053-4510-8cd9-8aecb9082a6e>.

and unsecured bond holders and “exchang[ing] the remaining claims of unsecured creditors of the parent for equity and/or debt claims.”

Powell’s actual experience in the real world told a different story. A year after he joined the Treasury Department, the government was faced with the collapse the Bank of New England Corp., then the third-largest bank failure in U.S. history. Powell recalled: “We came to understand that either the FDIC would protect all of the bank’s depositors, without regard to deposit insurance limits, or there would likely be a run on all the money center banks the next morning—the first such run since 1933. We chose the first option, without dissent.” Indeed, Powell admitted that despite threatening the banks with his simulation, “the market still appears to provide a subsidy, of changing and uncertain amount, to very large banks to account for the possibility of a government bailout in the event of failure.”¹

The SVB bailout was accomplished by the Federal’s Reserve new facility, the BTFP (Bank Term Funding Program). Under the program, Banks can borrow 100% of the face value of U.S. Treasuries, agency debt, and mortgage-backed securities for up to a year.² In other words, although the market now properly prices long-dated Treasuries at 70 cents on the dollar, the Fed will lend a full dollar for up to year. The idea is that if depositors are assured that banks can meet their withdrawal requests despite large mark-to-market losses on the banks’ balance sheets, they will leave their deposits in place.

The Fed’s actions may solve a liquidity problem temporarily, but it does nothing to address solvency risk. Loans under the facility are made with recourse beyond the collateral. In other words, if after a year the bank has not repaid the loan, the Fed will keep the collateral and have a claim for the difference. The bank will be just as bad off—worse, in fact, since the Fed is charging interest on the loans.

Nor is it likely that banks will be able to earn their way out of trouble. According to FDIC data, the national interest rate on checking accounts is 0.06%. For savings accounts it is 0.35%. This means that even banks like SVB that bought 10-year bonds yielding 1.63% are still making positive margin. However, the 1-month Treasury bill is currently yielding 4.6%. It is a trivial matter for a company to move its cash from a bank into the bill market, and the BTFP does nothing to address the penalty for holding a deposit in a Bank.

It turns out, the SVB bailout does nothing to address the short-term risk of bank contagion either. Senator Lankford of Oklahoma asked Treasury Secretary Yellen during a senate hearing: “Will the deposits in every community bank in Oklahoma, regardless of their size, be fully insured now? Will they get the same treatment that SVB just got?” Yellen responded that bailouts only occur if “failure to protect uninsured depositors would create systemic risk and significant economic and financial consequences.” In other words, as Lankford translated: “you’re fully insured no matter what the amount is if you’re in a big bank, you’re not fully insured if you’re in a community bank.”³

The Financial Times reports that “large US banks are being inundated with requests from customers trying to transfer funds from smaller lenders.”⁴ And, of course, the large banks are more than happy to grab additional market share: “JPMorgan Chase,

1 Powell Jerome H. “Ending ‘Too Big to Fail’” 4 Mar 2013. Institute of International Bankers 2013 Washington Conference, Washington, D.C.

2 <https://www.federalreserve.gov/newsevents/pressreleases/monetary20230312a.htm>

3 “Treasury Secretary Yellen testifies before the Senate on Biden’s 2024 budget.” CNBC Television. 16 Mar 2023 at 1:30:47.

4 <https://www.ft.com/content/2b580939-a4b6-48d2-8eb6-629b4cb1e06c>

Citigroup and other large financial institutions are trying to accommodate customers wanting to move deposits quickly, taking extra steps to speed up the normal sign-up or 'onboarding' process, according to several people familiar with the matter.”

Let's think about what happens next: to meet the withdrawals, smaller banks will have to pledge their underwater bonds to the Fed for cash. The large banks will get deposit inflows, enabling them to keep their interest rates low while using the funds to purchase high-yielding, short-term Treasuries, boosting their market share and profitability. Small banks could raise deposit rates to compete, if they were healthy. Given the term structure of their loans, however, they cannot do without locking in negative cash flow. The looming recession will make cash flow deteriorate even at low rates.

The economic consequences are profound. According to Goldman Sachs, small and medium size banks account for roughly 50% of US commercial and industrial lending, 60% of residential real estate lending, 80% of commercial real estate lending, and 45% of consumer lending.¹ The mega-banks can easily open new deposit accounts, but they do not have the operational capacity to replace so much lending; they prefer larger loans to fewer borrowers, which will further concentrate economic power.

It gets worse. As deposits—the core reserve of the banking system—flee to the Treasury market, it means that the government will stay well funded to make transfer payments to the indigent, fund Raytheon and Zelensky in Ukraine, and pay rising interest costs on its debt. But businesses—real businesses, not just innovation ventures—will find it that much harder to access capital. The real burden of government, as Milton Friedman taught, is measured by how much it spends.

The market is betting that the sudden lack credit available to business will result in severe economic consequences that will force the Fed to lower rates. Longer term bonds reflect the expected average of shorter term rates. In a single day, the yield on the 6-month Treasury plunged from 5.2% to 4.8%. Even more impressive, the 2-year plunged from 4.6% to 4.0%. The market is saying the Fed is done tightening. Indeed, on March 15, the Fed reported that over the previous week its balance sheet had expanded by \$300 billion, erasing half of the Quantitative Tightening that began last April.

These events are setting gold up for another epic run. The banking crises of 2008 and 2020 forced the Fed to hyper-print dollars and sent gold vertical. The market perceived that the recent inflation would prompt the Fed to tighten monetary conditions; gold softened, though not nearly as much as it might have. Now inflation is still running at 6%, yet the Fed has already rolled out extraordinary programs to support bank balance sheets and soon more QE to support the economy. And at some point insurance companies and pension funds will start to fail without rates returning to near zero soon.

From a geopolitical perspective, only U.S. banks are eligible to use the BTFP. Non-U.S. banks active in the eurodollar market who may be in a similar situation as SVB are on their own. Notably, Credit Suisse has been teetering on failure for the past few months, if the market for its credit default swaps are at all accurate. Its shares traded down 29% this morning as the market bets it will not survive, which would all but force the Fed to reopen massive swap lines with the ECB. The U.S. rates market, which last

¹ <https://www.zerohedge.com/markets/goldman-small-medium-banks-account-50-ci-lending-45-consumer-lending-and-80-all-commercial>

week was projecting the fed funds rate would be 0.6% higher by September, is now pricing in 0.6% of cuts by then.

Nor should it be lost on the market that the Fed itself is essentially a giant SVB: it purchased trillions of dollars of fixed-rate securities at ridiculously low interest rates and is now carrying enormous unrealized losses. Since its own deposit rate—what it pays on reserves and on its reverse repo facility—reflects the Treasury rate, it also has large operational losses, previewing what is in store for the private banking system.

Powell has lost. Like Arthur Burns in the 1970s, he has discovered that abruptly higher rates threaten stability long before retail prices stop rising. At this point, it is hard to know which is better for gold: more rate hikes that accelerate a major banking crisis or a pivot to more money printing now.



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