



Banking Failures, Economic Slowdown, and What the Future Holds

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Outline of talk

- What happened to Silicon Valley Bank
- The government's response for Silicon Valley Bank, Signature Bank, and the banking industry as a whole
- What is the state of the banking community going forward?
- What lingering economic questions are there?

Is the current banking environment the same as the 2008-2009 Great Financial Crisis?

Simply, no.

During the Great Financial Crisis, the biggest banks were crushed by bad loans

- There were **credit risk issues**

March 2023- present, banks are struggling with **interest rate risk** and perhaps dissemination of information issues

What is interest rate risk?

Simple terms– you are stuck in low interest rate assets when interest rates rise.

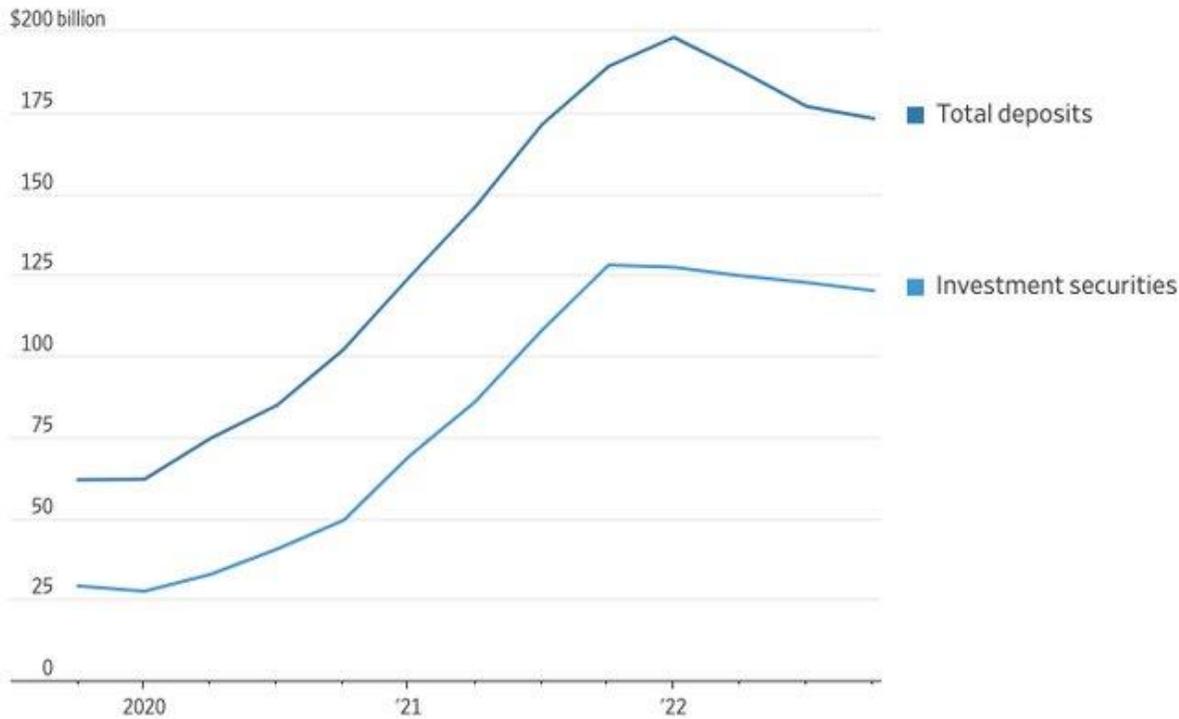
You could have been making more money **not** buying assets and waiting for rates to rise

- The problem is you do not know when they will actually rise

It is always preferred to have high interest rate assets (example: 5%) and hope rates fall... you lock in a premium!

What happened to Silicon Valley Bank (SVB)?

SVB Financial Group selected assets and liabilities



Deposits rose rapidly post-covid

Bank was geared toward giving loans to businesses (tech usually)

SVB required these tech firms to deposit their funds with them

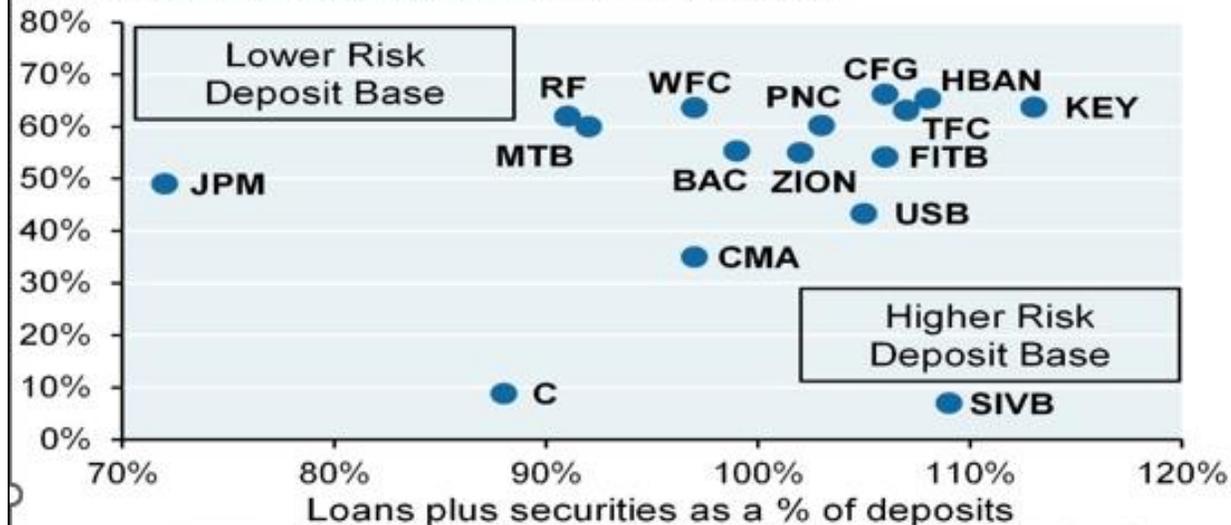
Undiversified Depositors

March 11, 2023

One of these things is not like the other, and that thing is Silicon Valley Bank.

US bank loan-to-deposit ratios

Estimated retail deposit share of total deposits



Source: JPMAM. Securities include Hold to Maturity and Available for Sale categories. Q3 2022.

There were not many “typical” depositors

Most businesses, hold deposits in excess of \$250,000 so most of their deposits were not insured



Company Name	Ticker	4Q22 (%)	2021 (%)	2020 (%)	2019 (%)	2018 (%)
76 Bank of America Corporation	BAC	30.8	29.0	30.8	31.8	31.2
77 Dime Community Bancshares, Inc.	DCOM	30.6	29.1	23.2	28.4	29.0
78 Farmers & Merchants Bank of Long Beach	FMBL	30.6	29.1	33.0	37.6	38.4
79 Cullen/Frost Bankers, Inc.	CFR	30.3	29.0	31.9	36.3	
80 Eagle Bancorp, Inc.	EGBN	30.2	37.3	41.3	42.7	
81 Hope Bancorp, Inc.	HOPE	30.0	30.4	35.2	45.1	
82 BankUnited, Inc.	BKU	29.2	28.5	32.0	36.7	
83 Comerica Incorporated	CMA	28.7	24.1	31.5	32.2	
84 Hilltop Holdings Inc.	HTH	28.6	20.0	29.4	34.0	
85 W.T.B. Financial Corporation	WTBF.B	28.0	26.0	27.2	32.7	
86 BOK Financial Corporation	BOKF	26.1	25.5	31.2	34.8	
87 Western Alliance Bancorporation	WAL	23.2	19.0	20.8	26.2	
88 Texas Capital Bancshares, Inc.	TCBI	20.8	14.3	18.2	20.4	22.8
89 East West Bancorp, Inc.	EWBC	20.5	20.1	22.6	32.2	26.5
90 CVB Financial Corp.	CVBF	20.4	18.9	20.5	26.6	28.8
91 First Republic Bank	FRC	19.8	14.4	18.7	23.6	22.7
92 First Foundation Inc.	FFWM	18.9	20.0	22.4	22.1	22.1
93 UMB Financial Corporation	UMBF	17.7	16.0	20.5	28.6	30.4
94 ServisFirst Bancshares, Inc.	SFBS	16.2	15.1	17.4	19.9	20.4
95 Citigroup Inc.	C	15.0	15.9	16.6	16.8	15.0
96 Signature Bank	SBNY	6.2	4.8	7.4	11.5	11.6
97 State Street Corporation	STT	4.3	4.5	4.7	2.7	0.4
98 Northern Trust Corporation	NTRS	4.0	4.5	5.6	7.5	6.8
99 SVB Financial Group	SIVB	2.7	2.3	2.3	3.5	4.0
100 The Bank of New York Mellon Corporation	BK	2.3	2.9	4.2	3.3	5.0

% of deposits less than the FDIC limit of \$250,000

Source: S&P Global Market Intelligence

Silicon Valley Bank vs. “Other” Banks

Many banks are diversified in the ways they make money:

- credit cards
- mortgages
- asset-backed securities
- Treasuries
- investment management, etc.

SVB made their money on loans (long-shot loans to start-ups) and holding Treasuries

- SVB lobbied for looser guidelines on regulations (to not be treated like a big bank) because of this.

Why did SVB invest in Treasuries?

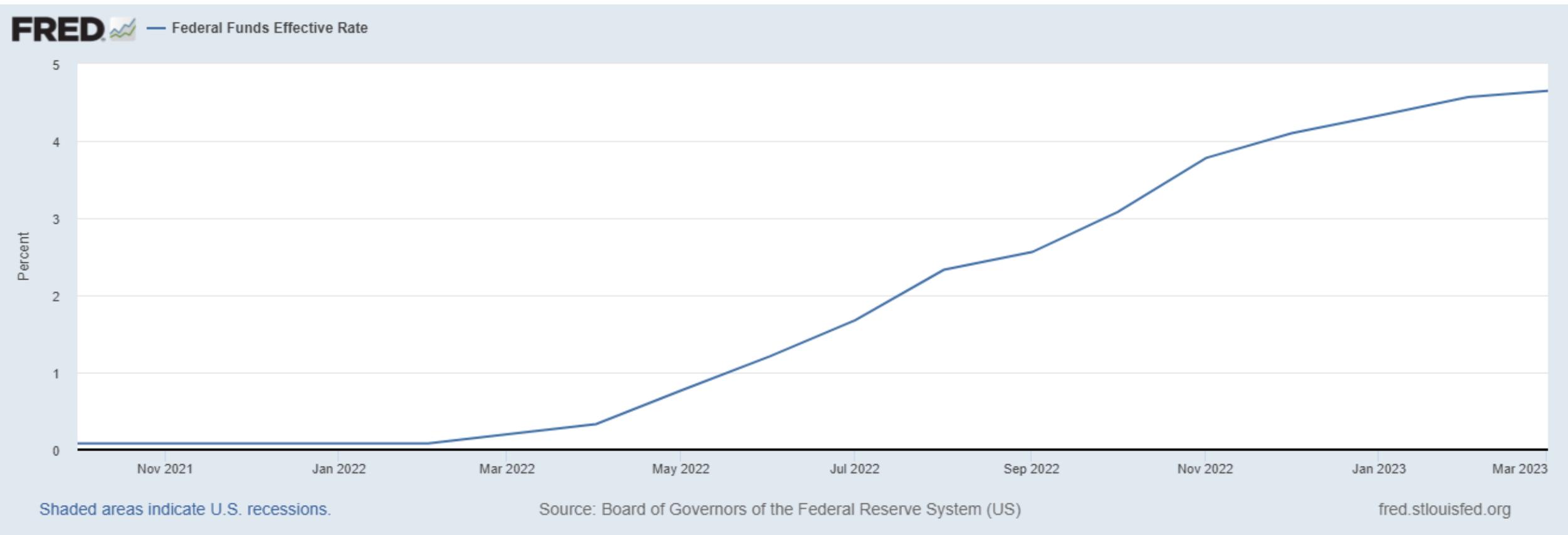
Treasuries are the safest asset and less capital needs to be held back against them.

Banks need to make money somehow

- if they pay depositors 0.5% APY for deposits and lock in Treasuries at 1.5%, the bank earns a 1% premium
- GREAT if interest rates stay low!

But interest rates did not stay low

SVB owned many 30-year Treasuries at 1.5%. Rates climbed to +4% in under a year.



What went wrong in the weeks leading up to the SVB collapse

Tech companies found it harder to raise more money.

Why?

- Interest rates were rising so it made it expensive for tech firms to borrow \$

Tech firms pulled out deposits to pay for their current operations

- Many depositors were in a similar position; SVB deposits fell by 6.5% in a short time span

SVB did not have as much cash on hand

- So, they had to sell assets quickly (fire sales)

SVB Fire sales

SVB had to sell their 30-year Treasuries quickly, but at a HUGE discount

Why?

- What investor wants to buy a bond paying 1.5% when new issued bonds are 4%?
- Very few.

Venture capitalists got worried by the large amount of bonds SVB was selling and told their companies to pull deposits

- Word got around on Slack → leading to a bank run!

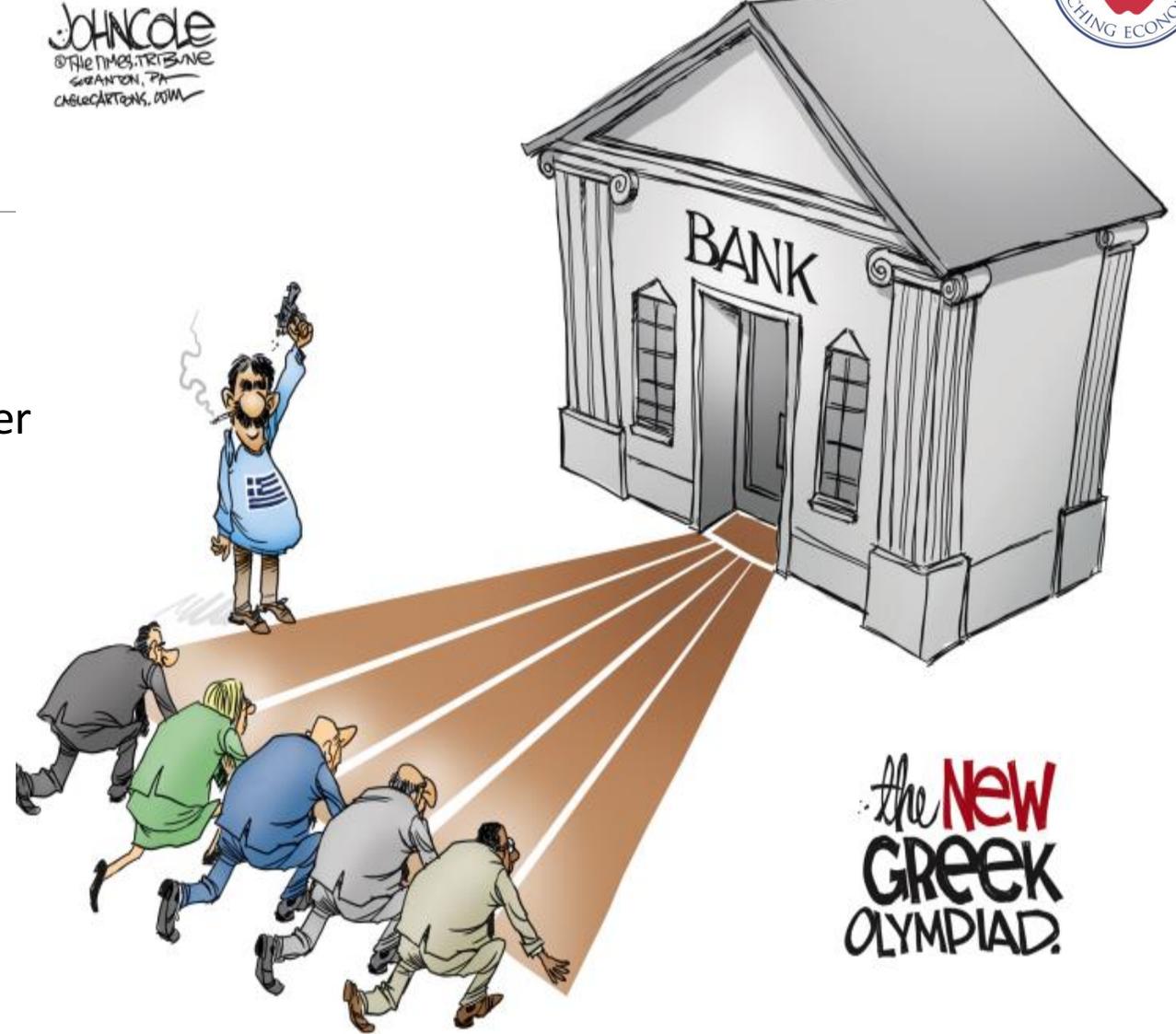


SVB's Bank run

SVB's customers withdrew **\$42 billion** from their accounts on Thursday, March 9.

- That's \$4.2B an hour, or more than \$1M per second for 10 hours straight.

The previous largest bank run in modern U.S. history was \$16.7B over 10 days in 2008 for Washington Mutual.



The government's response

The FDIC halted deposits from leaving SVB on Friday, March 10

- They shut down the bank that afternoon

The FDIC normally takes over a bank and closes it over a weekend

Why?

- Markets are not open
- Gives them time to find a solution– potential buyer, but there were problems with this for SVB

Sunday night answer

(a bit earlier than the expected Monday announcement the FDIC usually makes)

The FDIC, Federal Reserve, and the Treasury invoked the systematic risk exception

- Insure all bank deposits with no limit to prevent bank runs at other regional banks that may have
 - 1) less diversified depositors; and
 - 2) many uninsured deposits

Created new Silicon Valley Bank (bridge bank) so existing depositors can get their money out.

- Bondholders and equity holders lose all money.
- Depositors do not lose any money.
- Senior management out of jobs.

Closed Signature Bank as a precaution

Signature Bank closure

~25% of deposits came from cryptocurrency

- Like SVB, 90%+ deposits were over the \$250,000 FDIC threshold
- Depositors were mostly businesses like healthcare companies, law firms, accounting, real estate, etc.

Deposits fell 23% on Friday, March 10 alone before all trading was stopped

FDIC created a “bridge bank”, to allow depositors to be made whole

- Deposits and loans were bought by Flagstar Bank

What happened Monday morning, March 13 to regional banks?

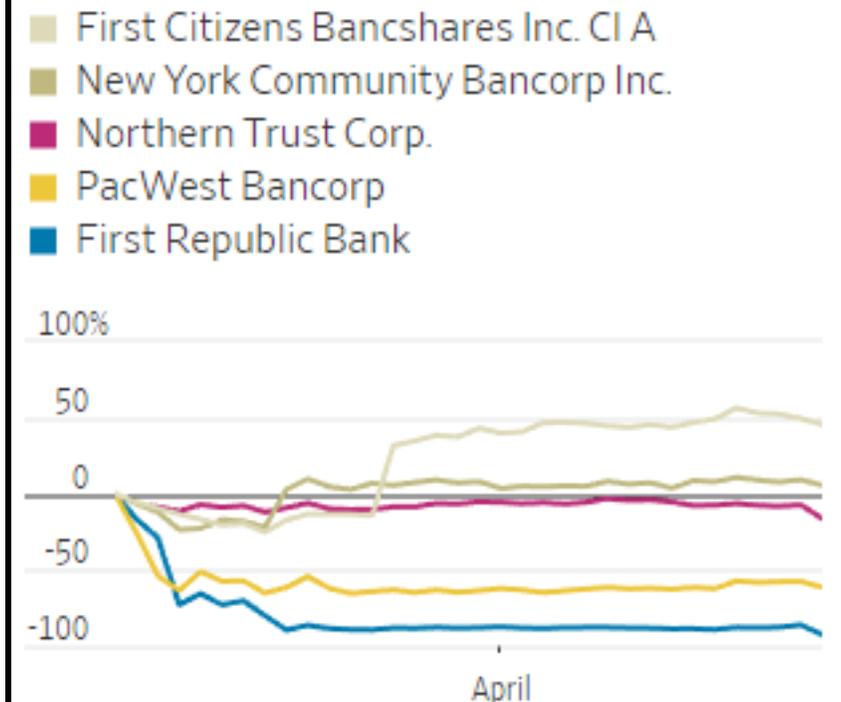
Massive trade halts. Why?

- Investors were pricing in future new regulations on banks
- Investors were worried about liquidity shocks across the entire sector

Regional banks got crushed

- First Republic Bank sank 62% for a record drop
- PacWest Bancorp dropped 21% to the lowest close since 2009

Regional bank stock price performance since March 8.



Note: New York Community Bancorp is buying parts of Signature Bank. First Citizens is buying parts of Silicon Valley Bank

Source: FactSet

What is the current state of the banking sector?

Investors were beginning to think regional banks would be okay

- First Republic Bank put pause to that this week

First Republic Bank in their Q1 2023 earnings report:

- **Deposits fell 35.5%** to \$104B * ~80% of SVB's deposits are over the \$250,000 threshold
- Loans were up 22% to \$173B
- Borrowings were higher at \$106B

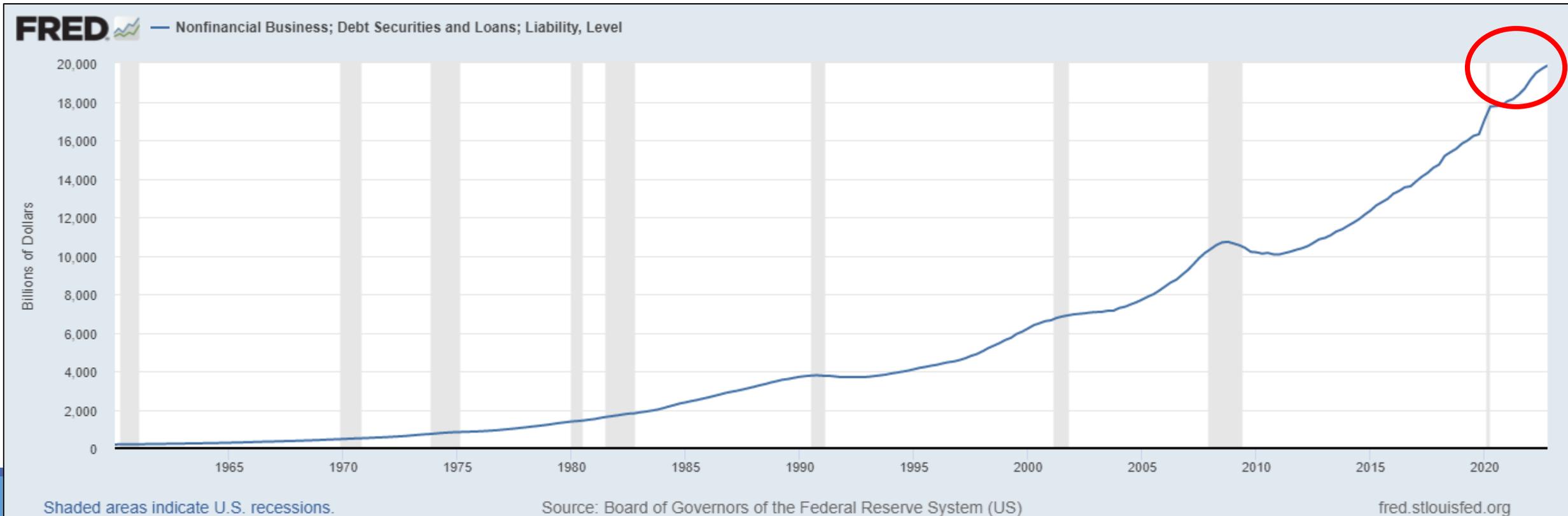
Loans yielded on average 3.73%, while they borrowed from the Fed and FHLB between 3 - 4.9%.

As a result of their Q1 earnings, First Republic Bank must cut back loans → less available mortgages, biz loans etc. in economy

Banking sector may lead to borrowing issues

Businesses have been massively borrowing with post-pandemic low interest rates

- If the economy slows down and businesses temporarily need more funds..., will they be available?



Did the Fed create 2 different systems for the banking industry going forward?

On March 16, Treasury Secretary, Janet Yellen, stated that

*depositors would only be covered if the bank creates “**create systemic risk and significant economic and financial consequences.**”*

1. Big banks → systematically important banks that cannot fail
 - Universally-insured deposits forever?

2. All other banks- you are only insured up to \$250,000.
 - Depositors should be worried to hold more

US Banks by Asset Size (\$bln)



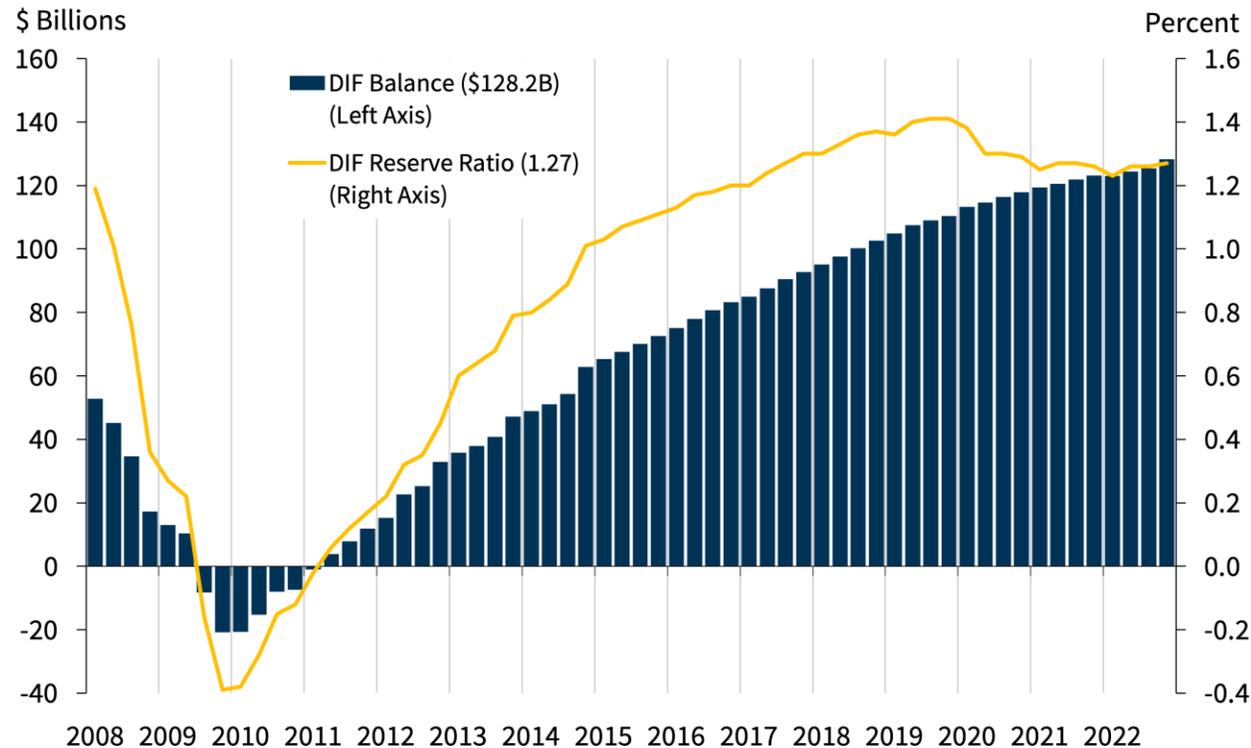
Source: Federal Reserve

Other lingering Questions...

- Should you be worried about your money?
- Was SVB and the banking industry bailed out?
- Should we reconsider whether deposit insurance is helpful if the government steps in to insure all deposits?
- Gov't says taxpayers aren't paying for this, should we believe them?
- Was there a better solution to instill confidence in the banking sector?

Should you be worried about your money?

Deposit Insurance Fund Balance & Reserve Ratio (2008 Q1 – Q4 2022 Q4)



Source: FDIC.

Note: The reserve ratio is calculated as the ratio of the DIF to insured deposits and is calculated as of quarter end.

No.

The FDIC had 1.27x the amount of **insured deposits** as of December 2022

- If you have less than \$250,000 in deposits in any one bank you are insured
- If you have more than \$250,000 you can split this money between banks

But insured deposits only represent 50% of all deposits in the U.S.

Was SVB and the banking industry “bailed out”?

Can this be considered a bailout if the CEO, shareholders, management got fired?

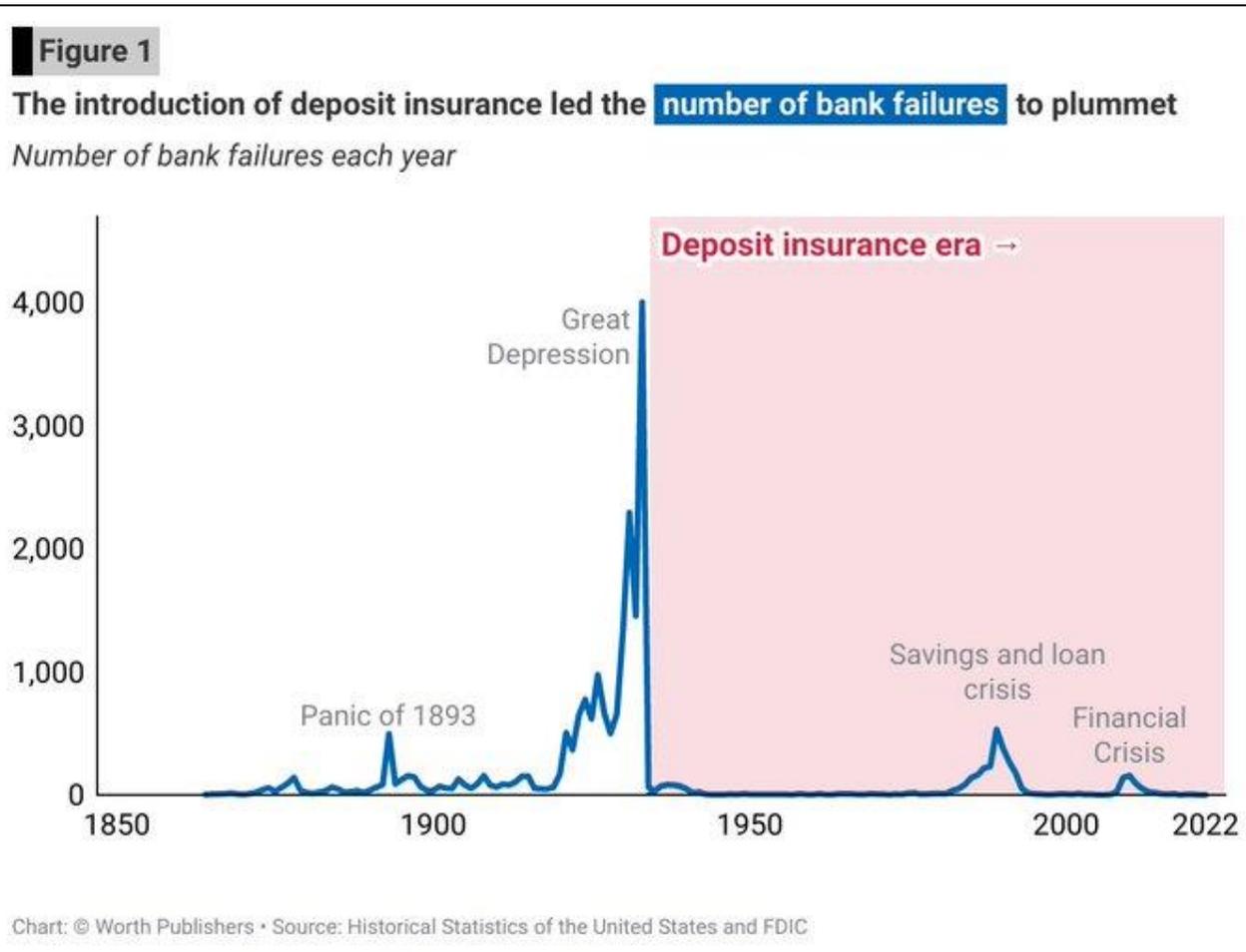
- Unlike 2008, the SVB and Sovereign Bank management were fired.
- Shareholders got 0.
- Depositors were made whole.

Depositors are not the bank. They are users (customers) of the bank.

So, was the bank bailed out or users? **Is it the same?**

- Does the Fed have a role to keep depositors safe against bad or greedy actors?

Should we reconsider whether deposit insurance is helpful if the gov't steps in to insure all deposits?



Deposit insurance is intended for human specialization

- People do not need to monitor bank risks as they have insurance.
- It has led to less bank runs over time

If we do not have deposit insurance will depositors keep bank management accountable?

Gov't says taxpayers aren't paying for this, should we believe them?

The Federal Reserve increased primary credit (lending to banks)

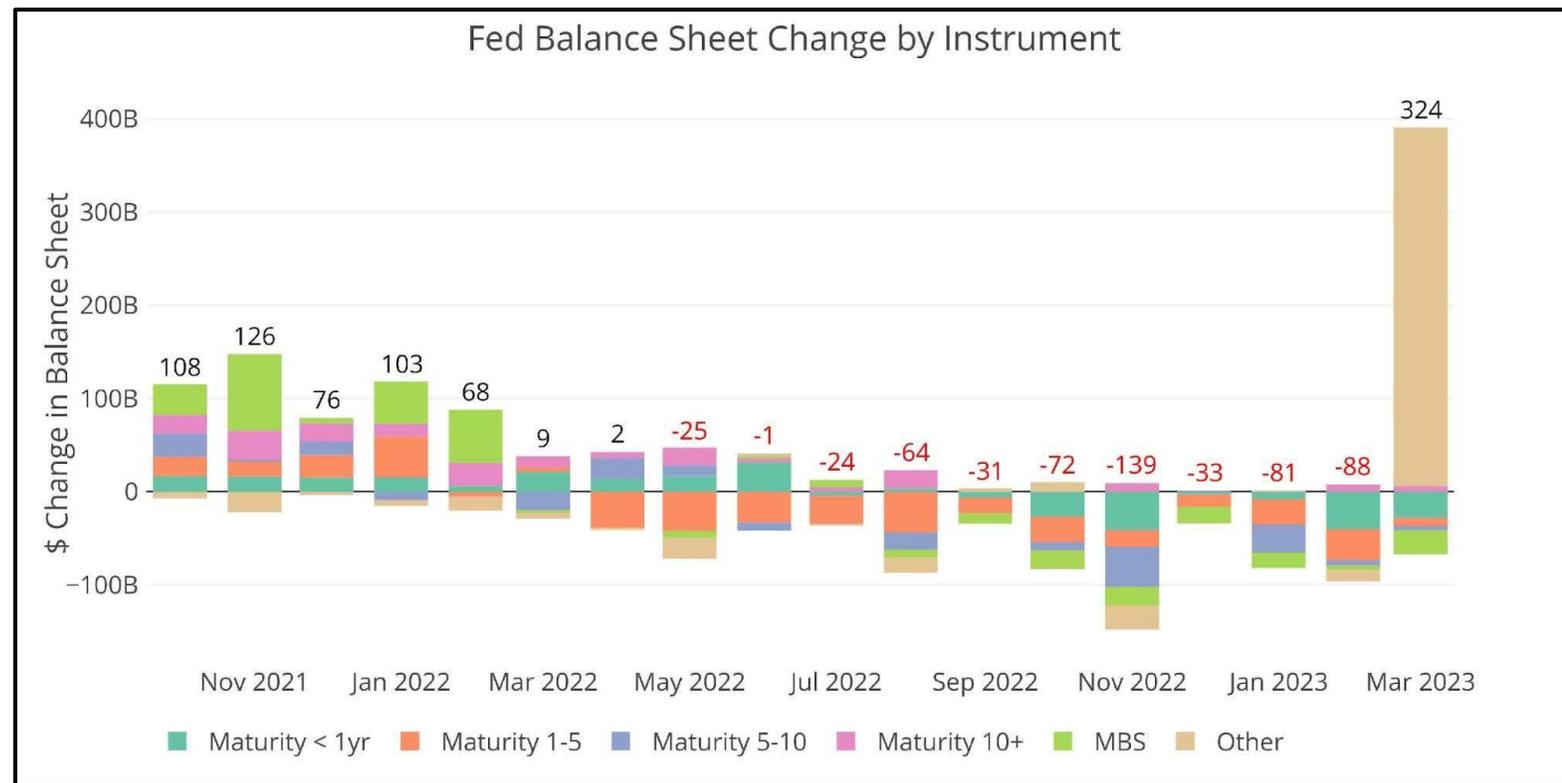
→ Less remittances from Fed to Treasury hurts taxpayers

More \$ in society= more inflation

→ hurts all taxpayers

There will be future higher deposit insurance premiums and less interest rate paid on deposits

→ hurts all depositors/taxpayers



Was there a better solution to instill confidence in the banking sector?

Weighing MB and MC of the FDIC insuring “all deposits”

Costs

- The cost of insuring deposits for Silicon Valley Bank is ~\$20B and Signature Bank is ~ \$2.5B
 - Potentially more if other banks fail while the gov't guarantees “universally insured deposits” (~\$19T)

Benefits

- Is the role of the Fed to maintain public trust in U.S. banks and the U.S. financial system?
 - And if so, *what is this worth?*
 - Does the FDIC have to universally insure deposits forever?

Final Thoughts: Winners and Losers

Winners

- Large banks
 - JPMC had record Q1 profit of \$12.6B, 52% yoy
 - Citigroup scored \$4.6B in profit, 7% higher yoy
 - Wells Fargo earned \$5B or 32% yoy
 - Do not need to pay high rates to attract deposits
- Any large firm with > \$250,000 in deposits
 - Tech firms, start-ups, large biz

Losers

- Potential homeowners and mortgage companies
 - Higher interest rates will continue to lead to less home buying (-3.3% yoy)
- Regional banks
 - The S&P Regional Banks Select Industry Index is down 34% since March 8
 - Deposits fell ~21% yoy for all banks, but mostly in regional and small banks
 - Will need to pay higher rates to attract deposits
 - Will now see tougher regulations post SVB's failure