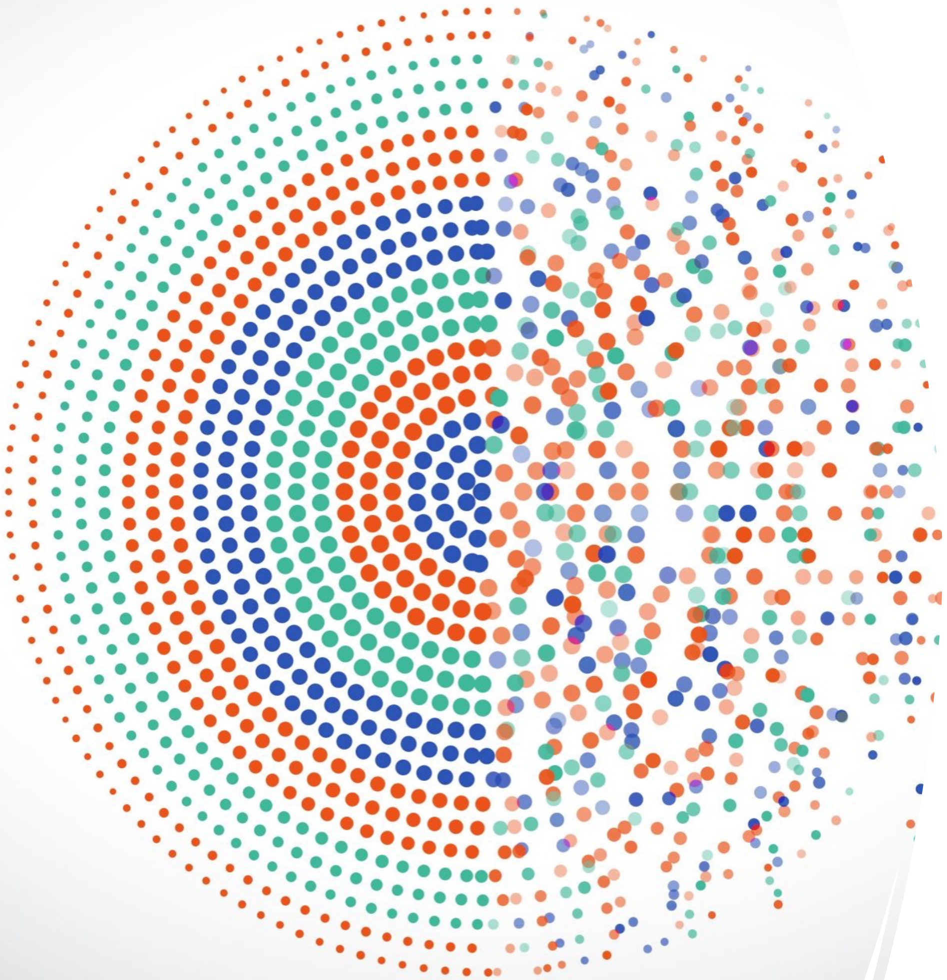
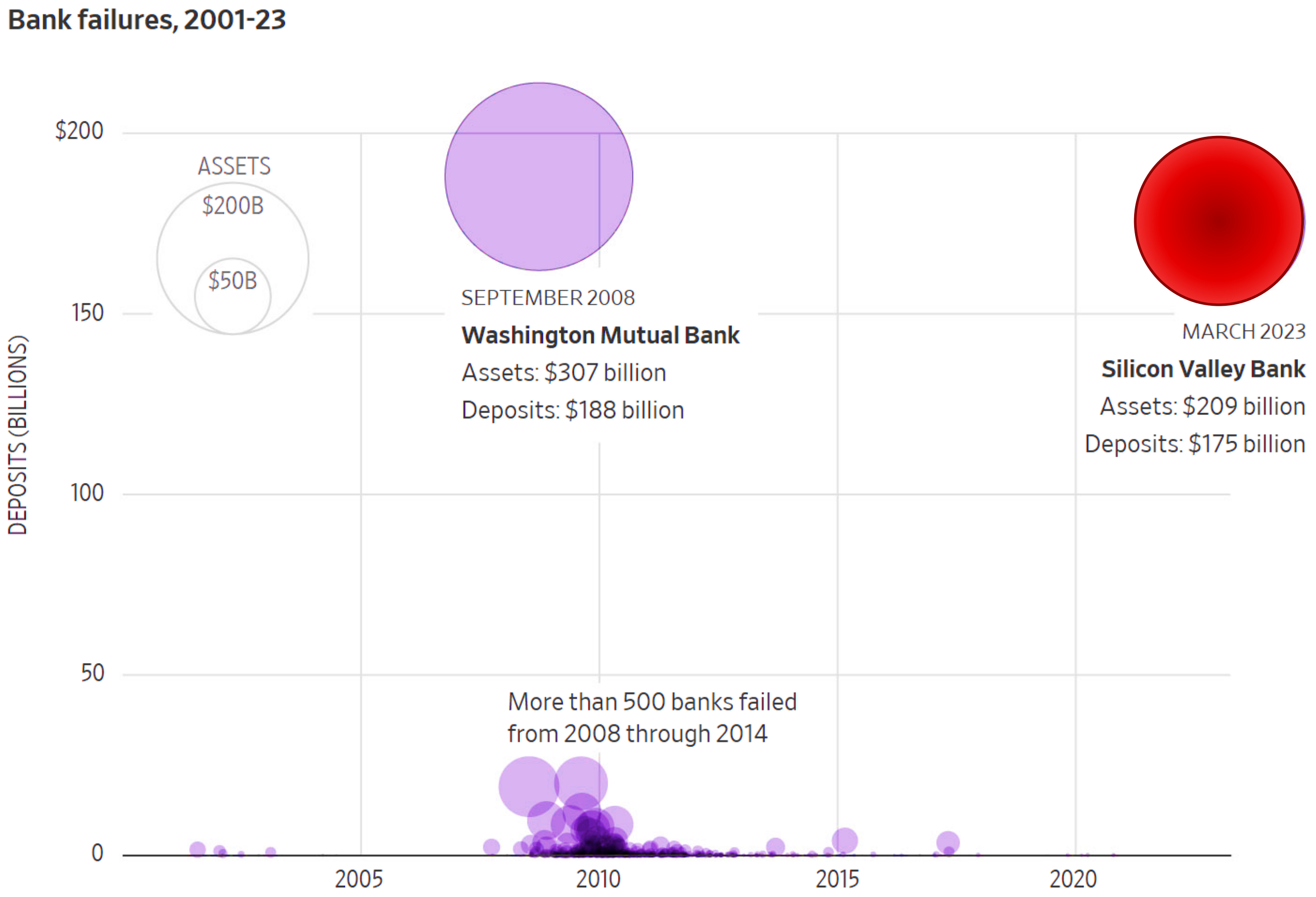
Financial Regulation: SVB and Beyond

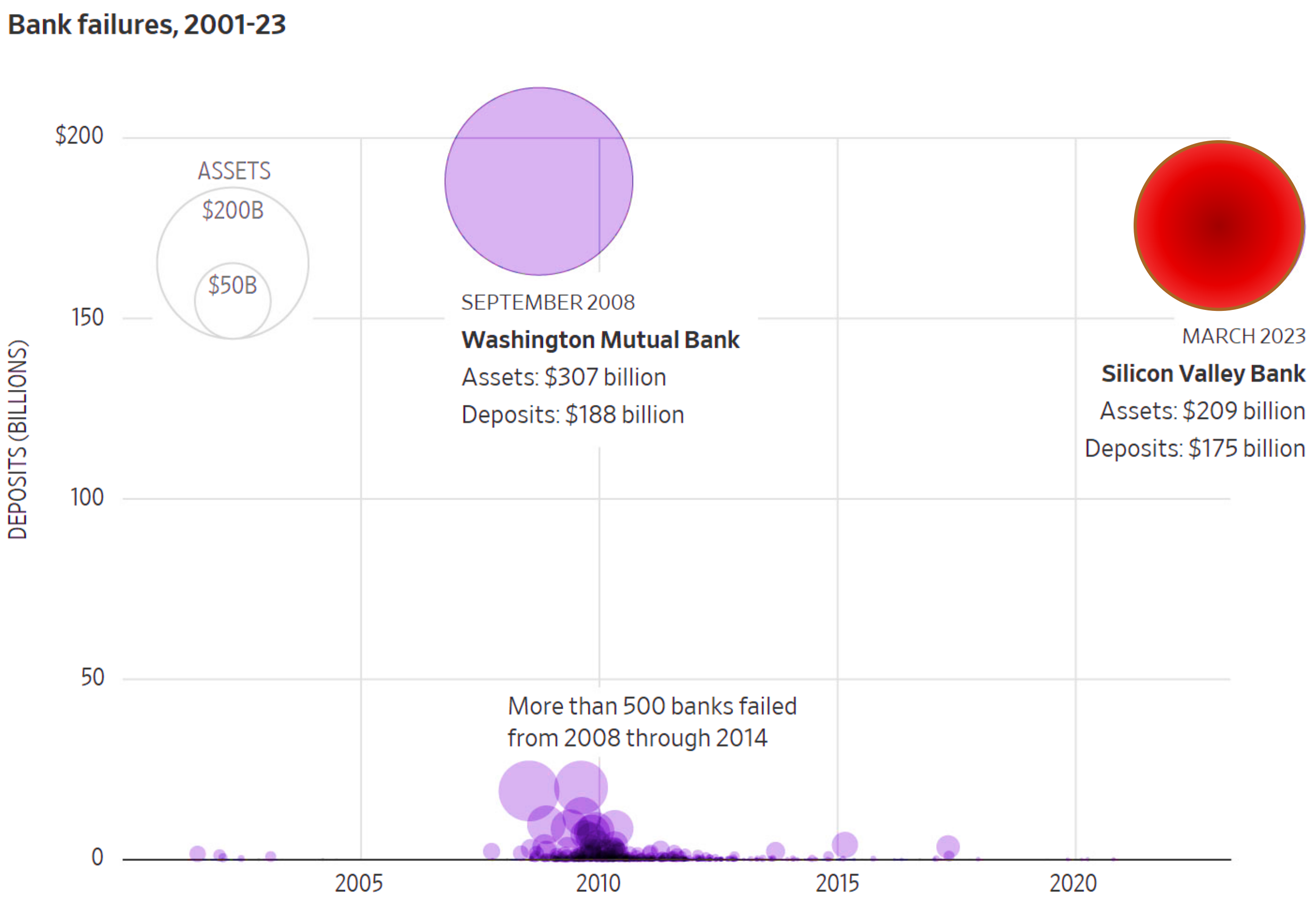




Hoover Monetary Policy Conference: How to Get Back on Track?

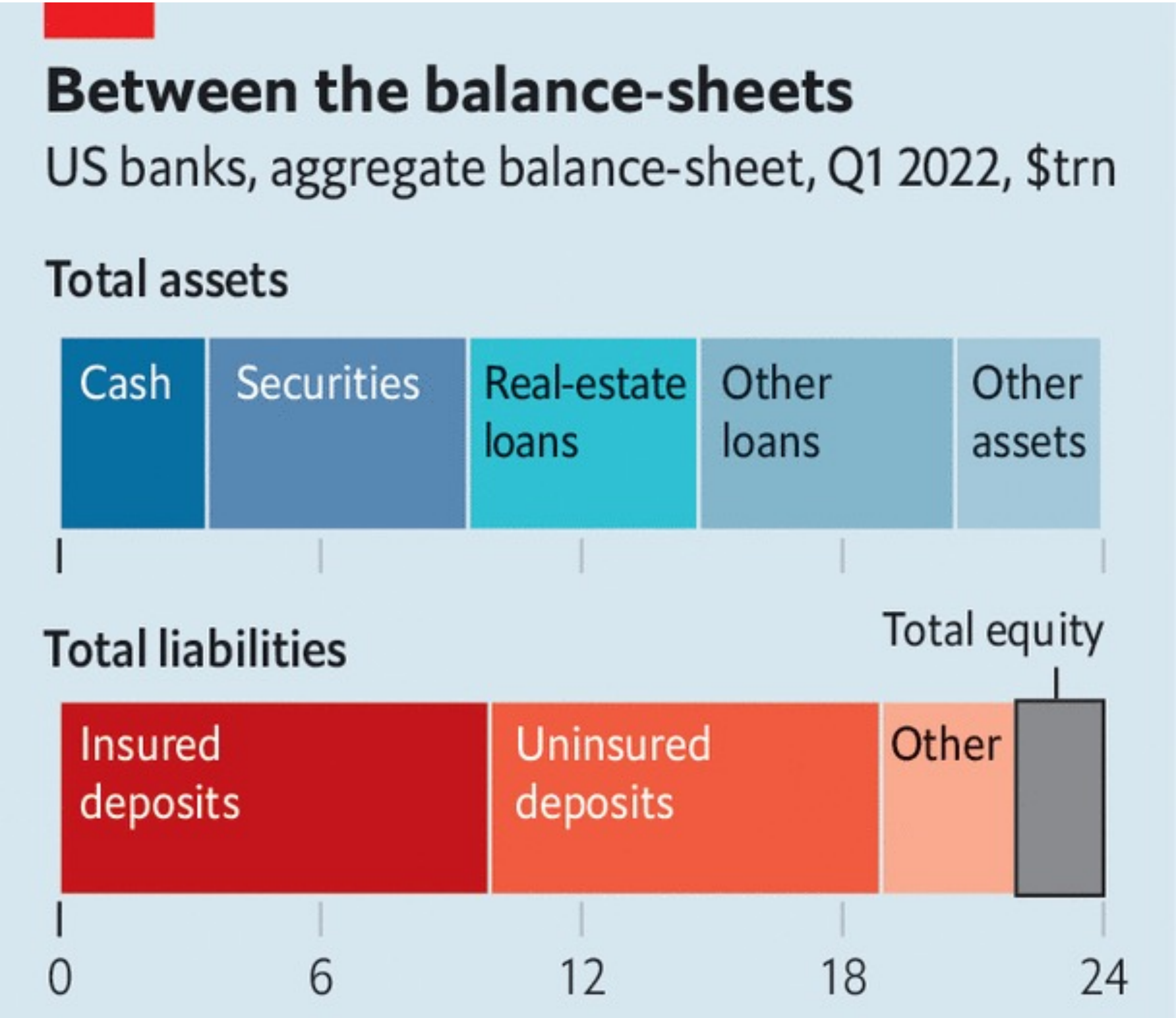
May 12, 2023

SVB: An Outlier?

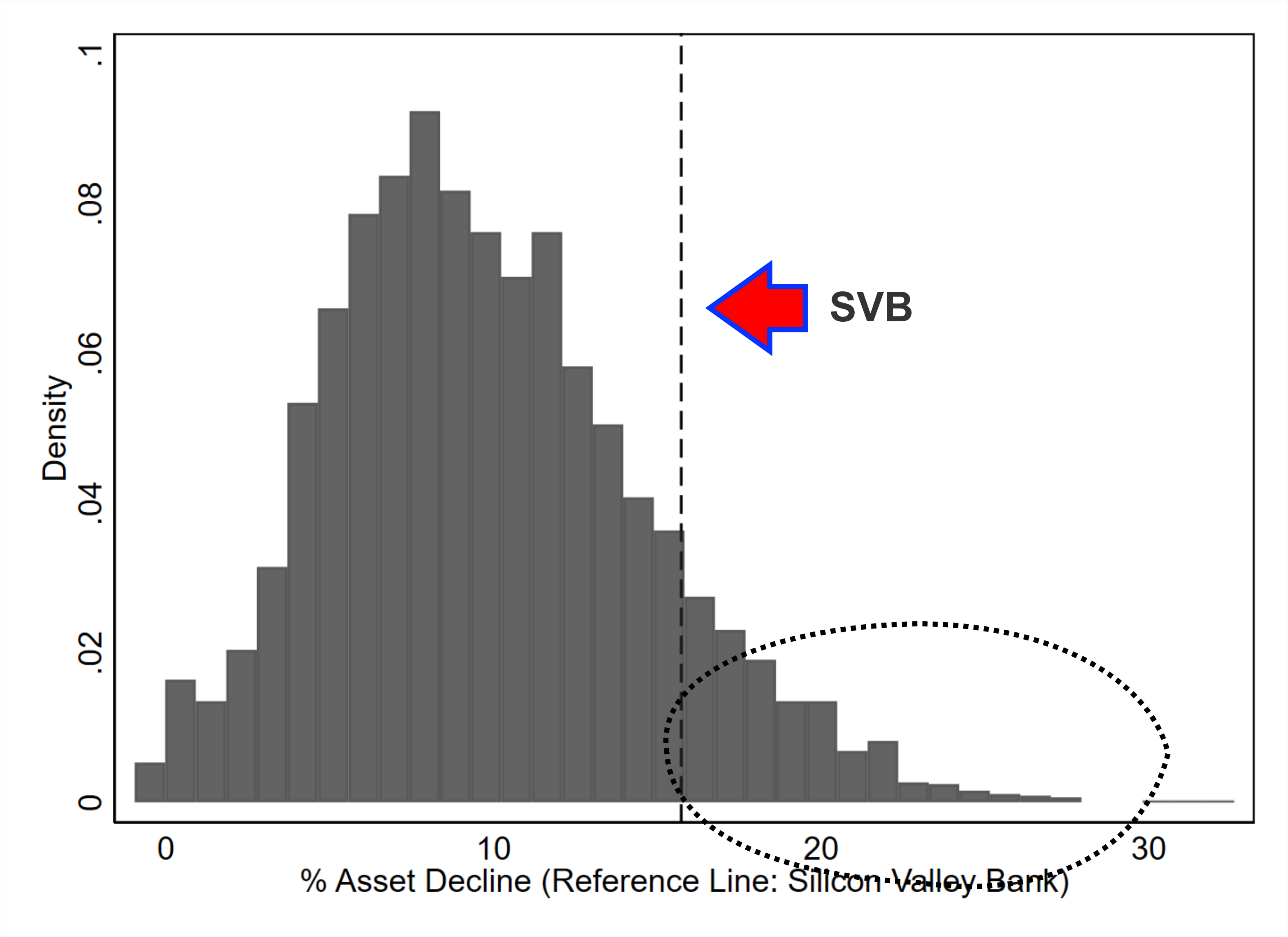


Jiang, Matvos, Piskorski, Seru 3/13/23

Monetary Tightening and U.S. Bank Fragility in 2023: Mark-to-Market Losses and Uninsured Depositor Runs?

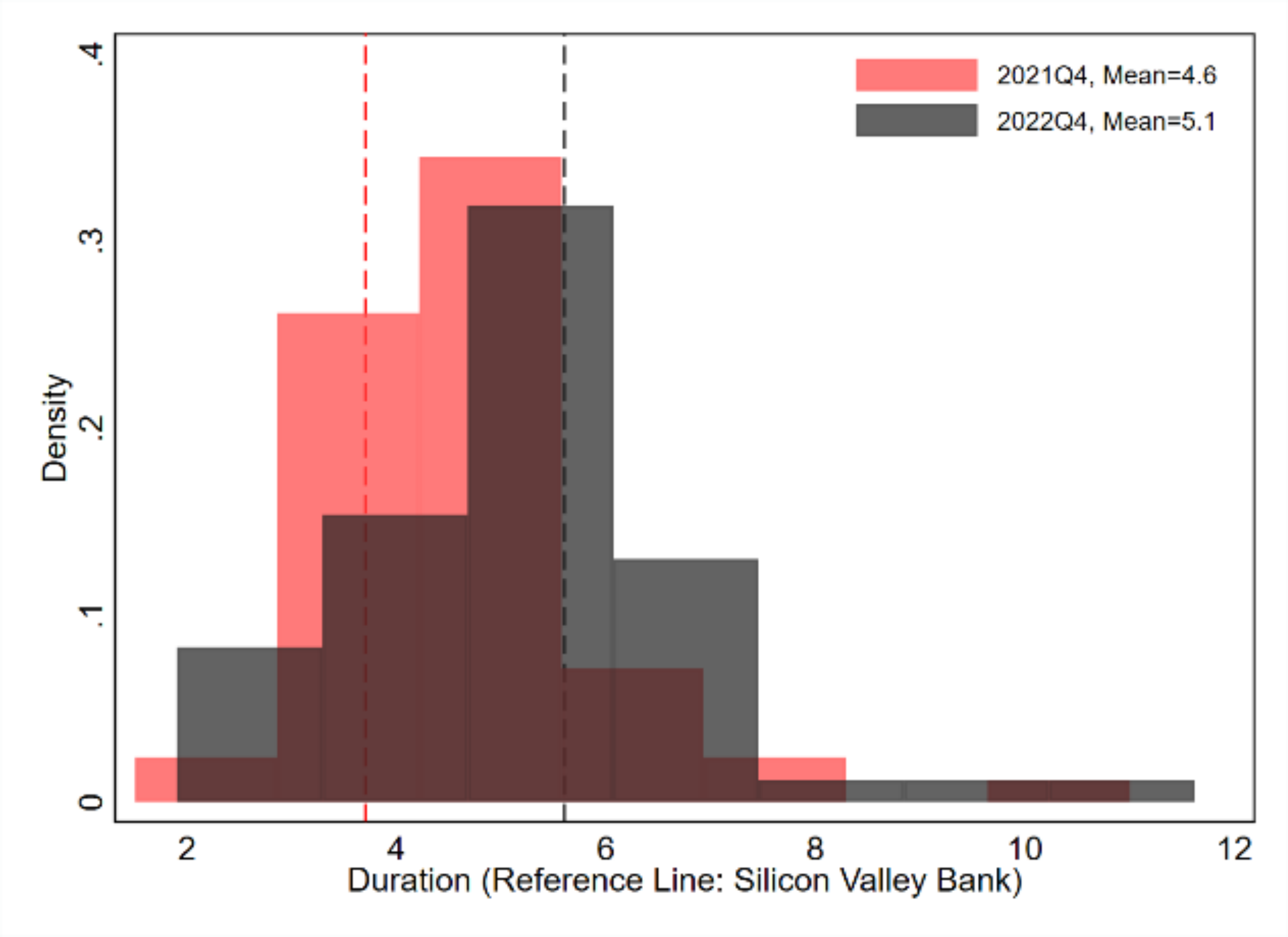


Unrealized Losses



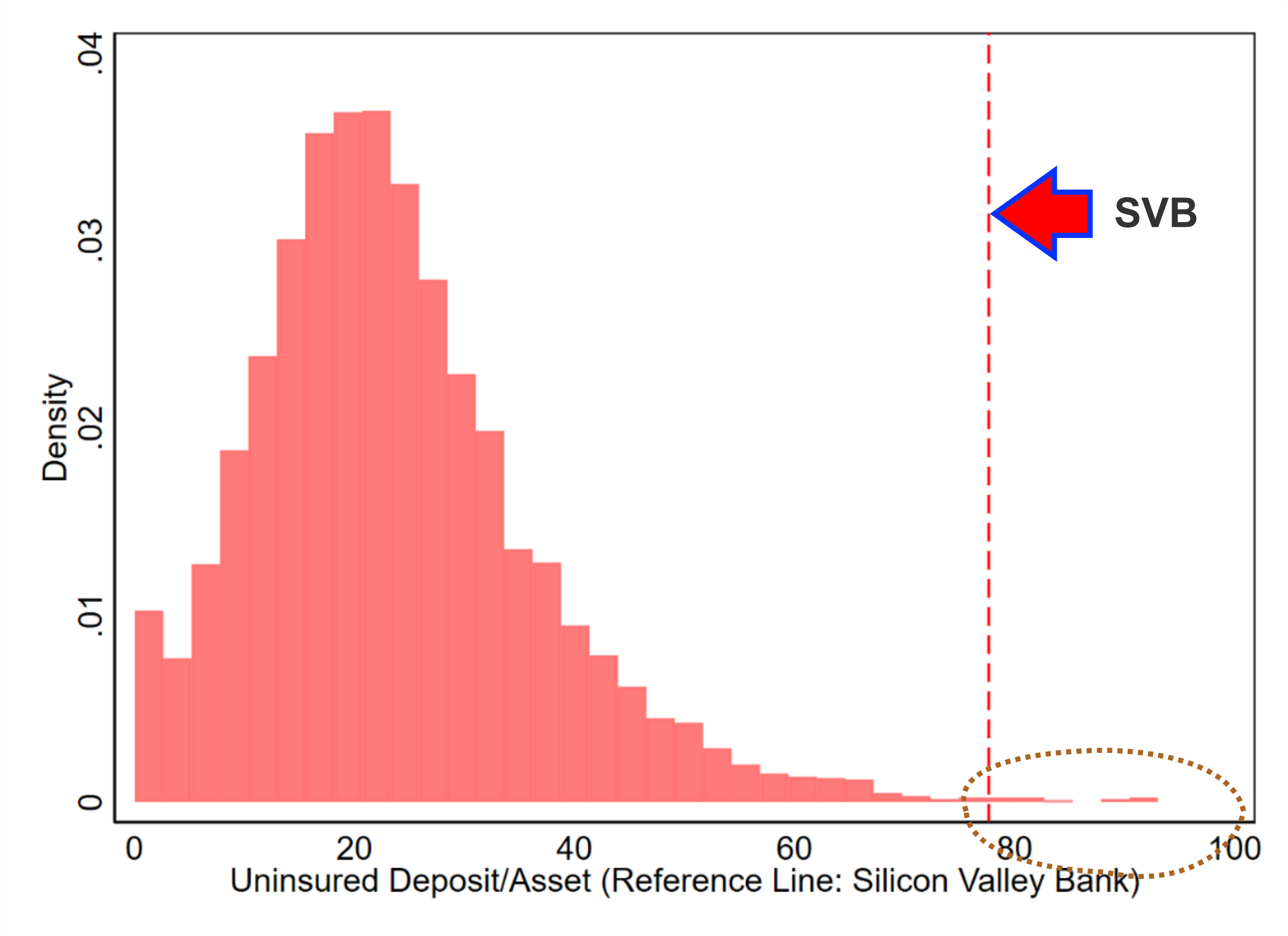
	Total	RMBS	Non-RMBS Security	Residential Mortgage	Other Loans
MTM Loss	2.2	1.0	0.3	0.6	0.3

Hedging?



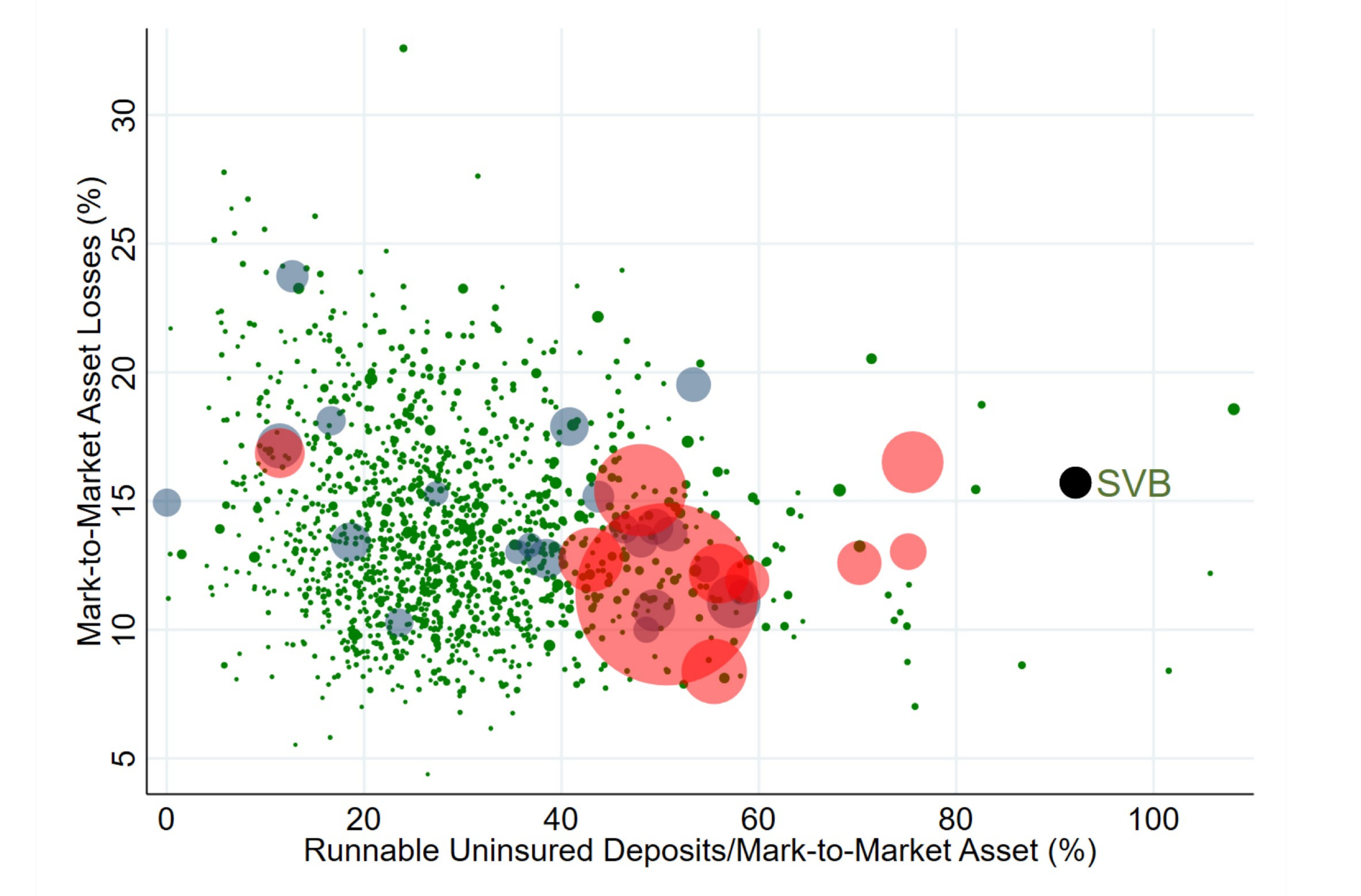
2021Q4, Mean=4.6
2022Q4, Mean=5.1
Density
0
.1
.2
.3
.4
2
4
6
8
10
12
Duration (Reference Line: Silicon Valley Bank)

Uninsured Leverage

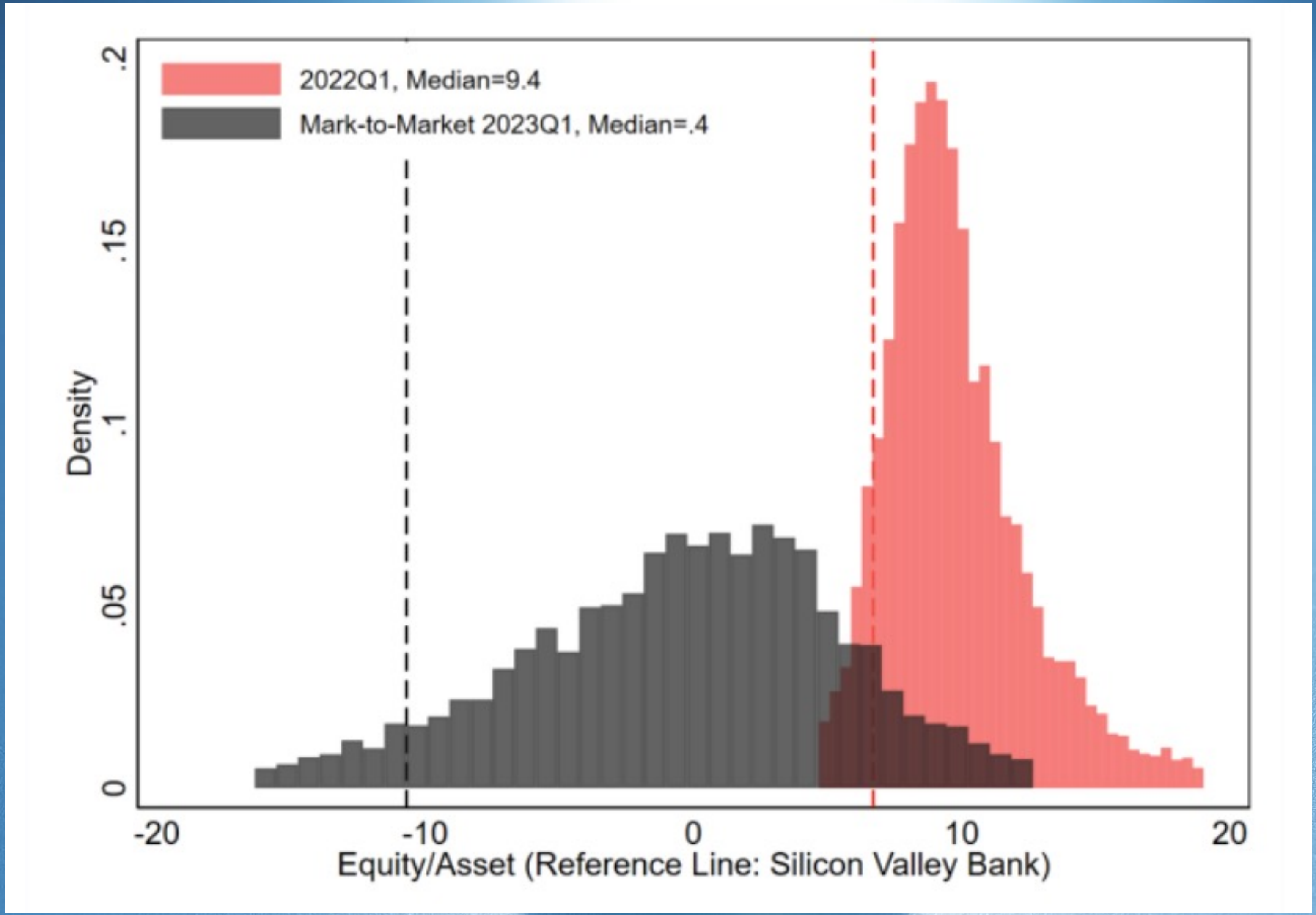


Uninsured Leverage & Unrealized Losses

Flight risk v turbulence



Equity/Assets

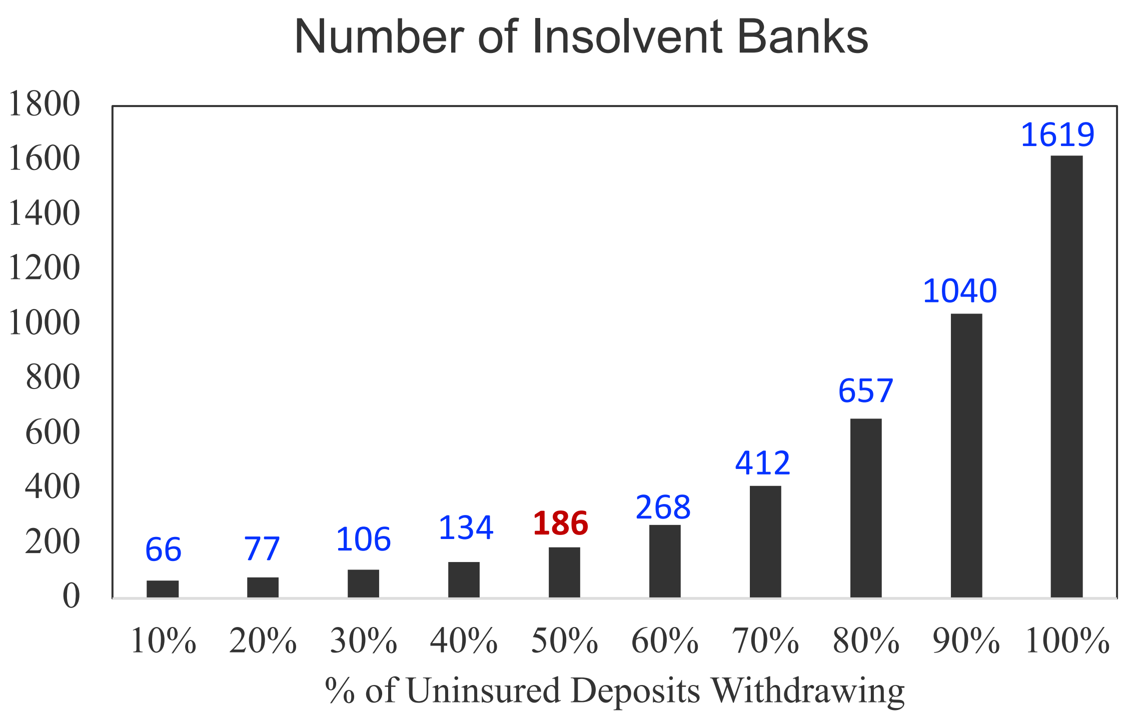


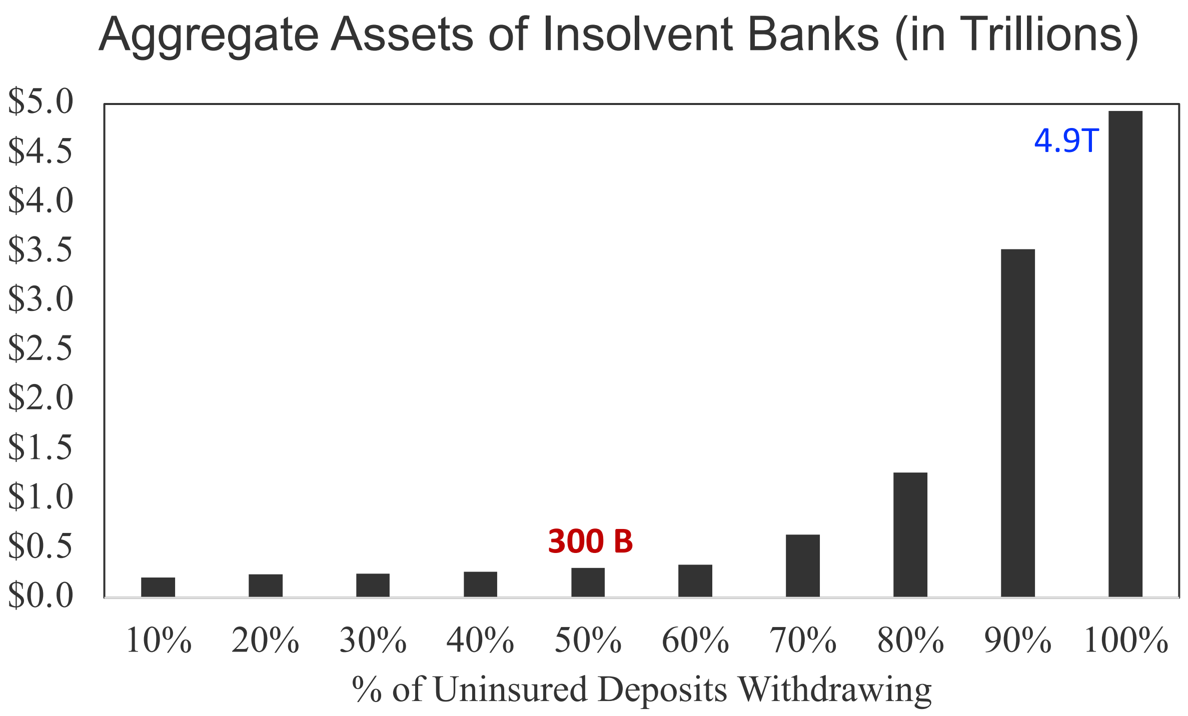
A Solvency Run…

- When interest rate increases sufficiently, a “solvency run” is possible

- Banks at a higher risk of solvency run:
  - Lower initial capitalization (**Equity**)
  - **Higher uninsured leverage**
  - **More awake uninsured depositors**

Where are self-fulfilling solvency runs possible?





What about Regulators?

Liquidity

Fed report on SVB "liquidity" appears 320 times, "solvency" once!

But liquidity issues addressed, and yet banks keep failing!

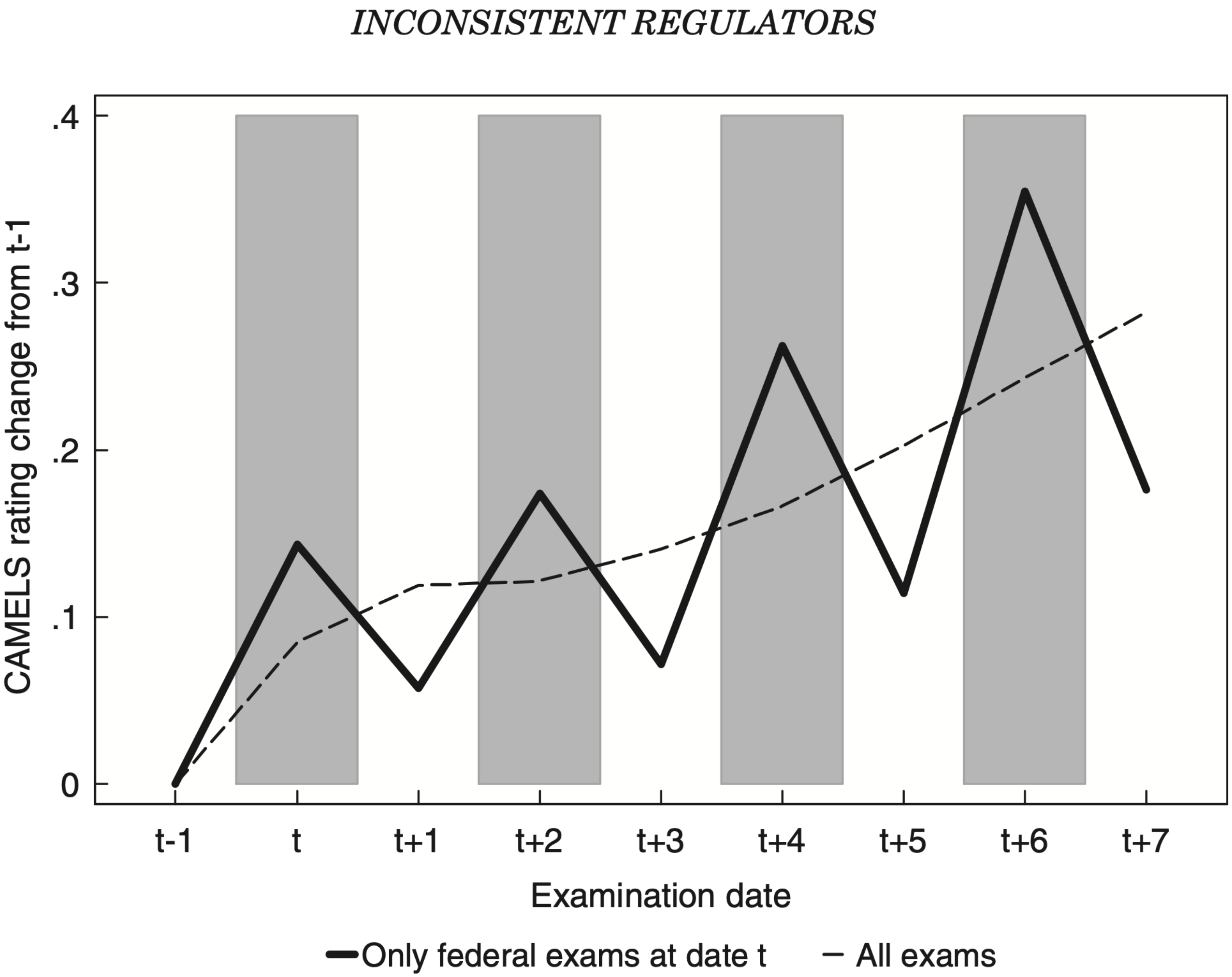
LOTS of liquid assets

Other liquidity interventions

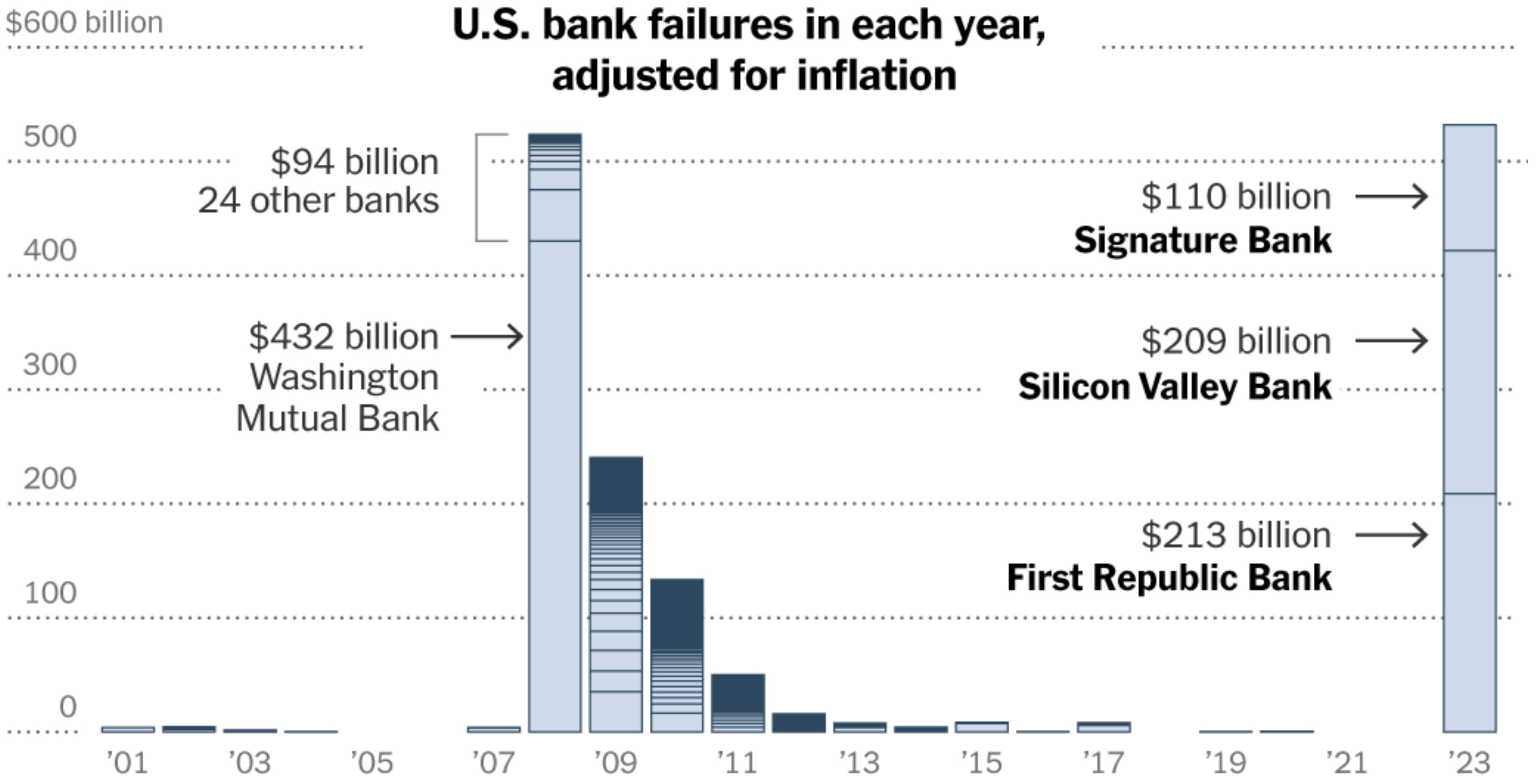
Bad management!

Board of directors and management failed to manage their risks

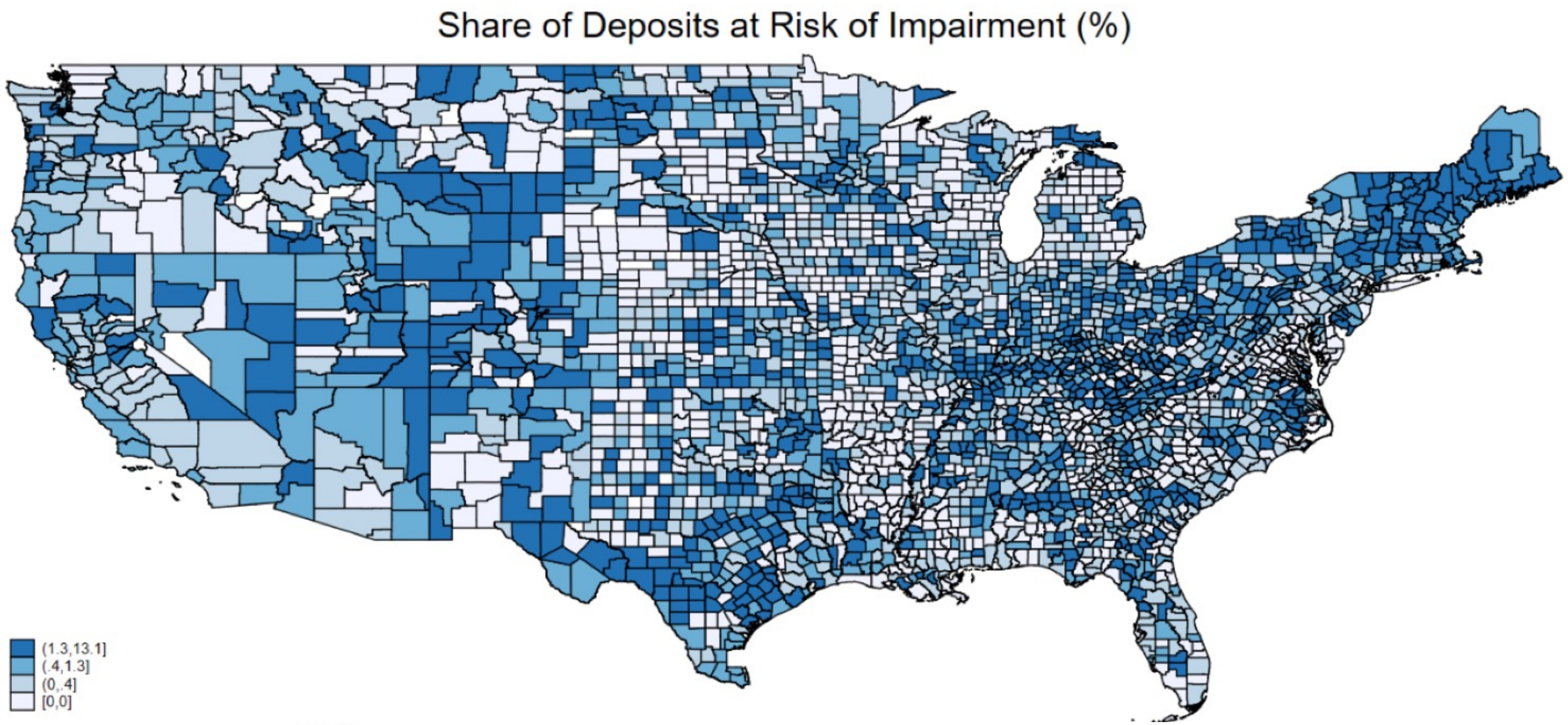
What about Regulators?

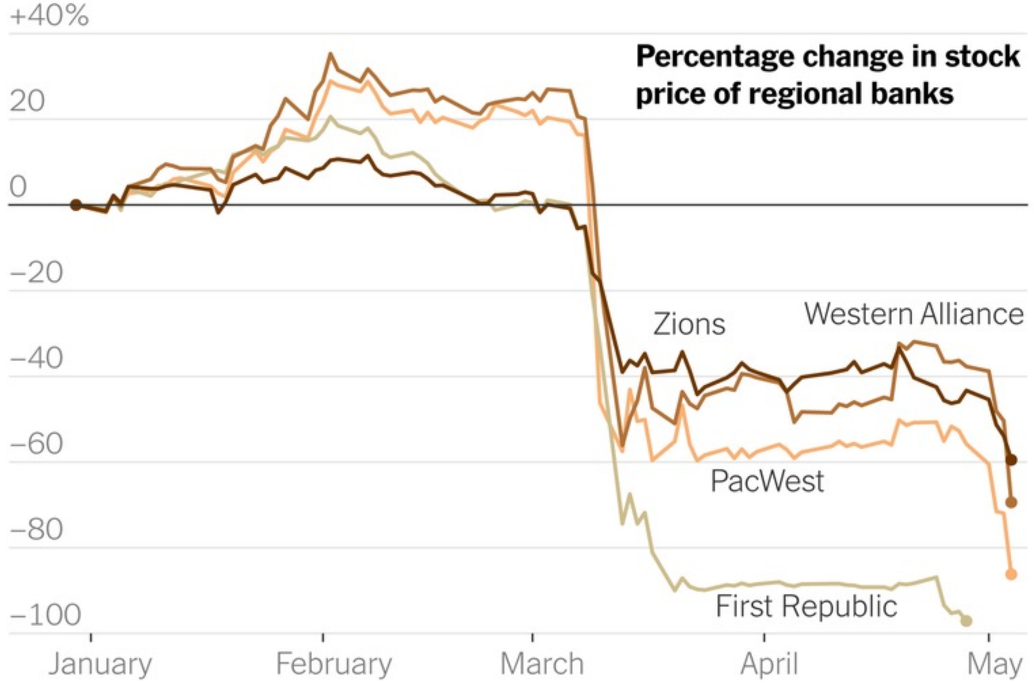


Beyond SVB?


U.S. bank failures in each year, adjusted for inflation
$600 billion
500
400
300
200
100
0
$94 billion
24 other banks
$432 billion
Washington
Mutual Bank
$110 billion
Signature Bank
$209 billion
Silicon Valley Bank
$213 billion
First Republic Bank
'01
'03
'05
'07
'09
'11
'13
'15
'17
'19
'21
'23

Beyond SVB?


Share of Deposits at Risk of Impairment (%)
(1.3,13.1]
(.4,1.3]
(0,.4]
[0,0]


Percentage change in stock price of regional banks
+40%
20
0
−20
−40
−60
−80
−100
Zions
Western Alliance
PacWest
First Republic
January
February
March
April
May

Now What?

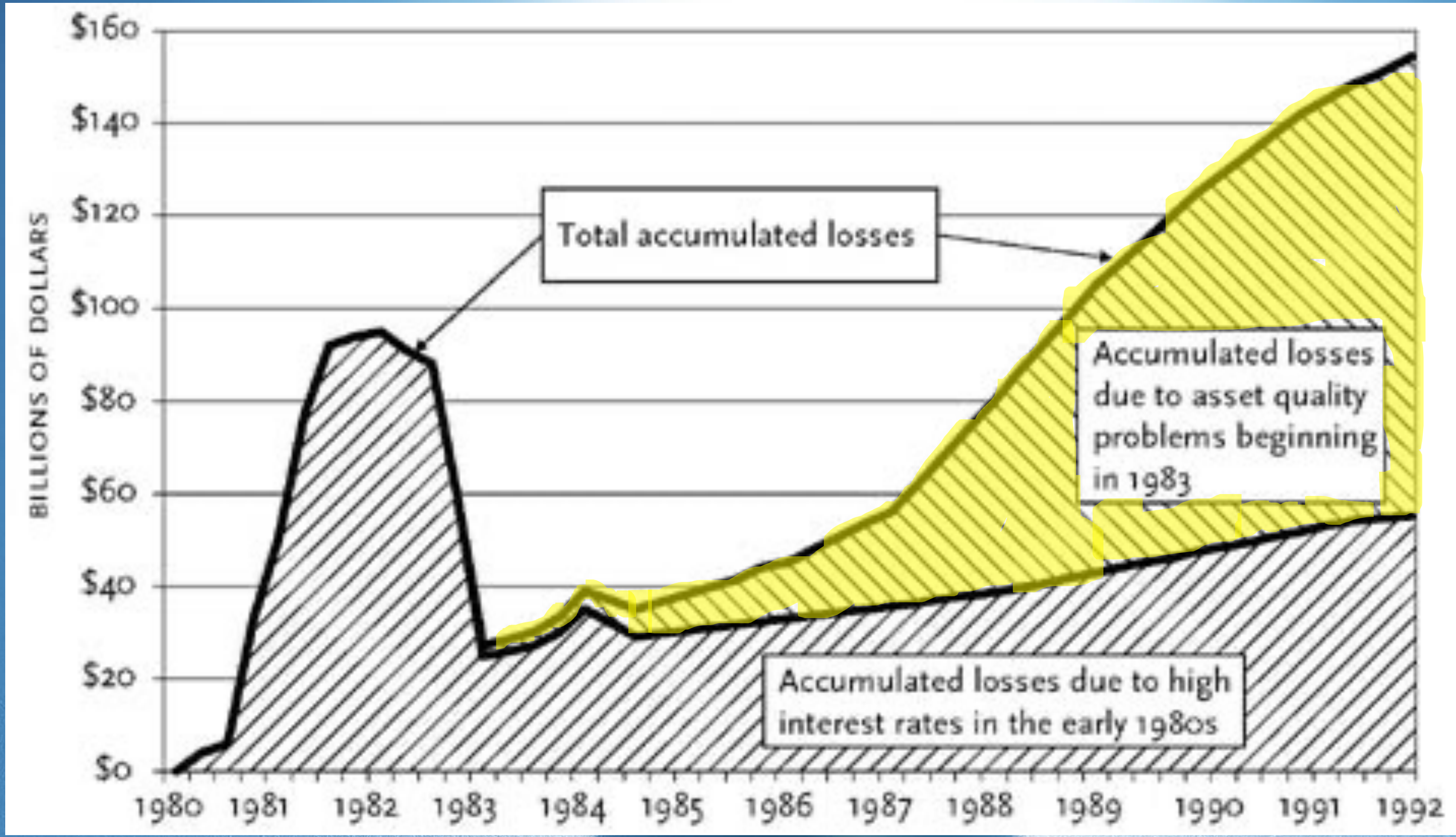
Extended coverage to uninsured depositors

Bank Term Funding Program

Mitigates short term risk…

…but losses remain.

S&L Crisis (1980s)
"Gambling for Resurrection"



What next in the short run?

Resolving the Banking Crisis

This Version: April 12, 2023 (**with FAQs**)
First Version: March 28, 2023
[Link to Current Draft]

Peter DeMarzo (Stanford), Erica Jiang (USC), Arvind Krishnamurthy (Stanford), Gregor Matvos (Northwestern), Tomasz Piskorski (Columbia), Amit Seru (Stanford and Hoover)

Summary

1. New economic conditions have led to insolvency concerns across the banking system.
2. There are too many banks in this situation to resolve with one-off solutions.
3. Government backstops and regulatory forbearance risk a repeat of the S&L crisis.
4. Requiring banks to promptly raise equity capital will both reduce fragility and provide a needed market test to identify truly insolvent banks.
5. The amount of private capital needed is in the range of $190 to $400 billion.

What about the long run?

"Careful Regulations to address unprecedented and unanticipated risks?"

Interest Rate Risk