Failure of SVB Oversight: Reacting to Incurred Losses Versus Risks Taken

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Failure of Silicon Valley Bank (SVB)

- March, 2023 SVB Failed
  - At he time SVB had 208 billion dollars in assets
  - At the time SVB was the 16th largest US Bank
- Consequences for regional banks
  - First Republic and Signature Bank experienced runs and failed (Both among the 30 largest US banks at the time
  - Shares in regional banks declined and many experienced deposit outflows
- Policy actions
  - Federal Reserve and Treasury jointly announced systemic exemptions providing depositors in failed banks full deposit protection
  - Federal Reserve announced a new emergency lending facility allowing banks to pledge Treasury securities at par

Recent Papers on SVB

- Government investigations in aftermath of SVB failure
  - Barr report – Conducted by Federal Reserve
    - Focused on supervisors not taking forceful action leading up to failure
    - Highlighted earlier reduction in prudential oversight
  - General Accountability office – Two reports
    - Needed more timely escalation leading up to failure
    - Inaction in six months leading up to failure
- Academic studies
  - Parker (2023) focused on SVB risk taking
  - Metrick (2024) focused on risks leading up to failure
  - Jiang (2024) Interaction of monetary tightening and self-fulfilling runs
  - Lucas and Golding (2024) emphasized the need for better disclosure of duration risk

Our Contribution To The Literature

- Much longer perspective
  - Focus on strategy of bank from the time they crossed 10 billion dollars and became a regional bank
  - Risk-taking was not new – Had taken large risks since becoming a regional bank
    - Reliant on uninsured deposits that posed significant run risk if depositors lost confidence
    - Invested in long duration government securities
    - Business demand deposits financing long duration securities was profitable but highly risky in a rising interest rate environment
- Focus on long-run supervisory and regulatory failures
  - Risk of SVB strategy not reflected in supervisory ratings and no enforcement actions implemented despite obvious risk
  - Regulatory changes compounded lax supervision and accounting practices
  - Merger approval failed to recognize risks less than 2 years before failure despite approval requirements to consider systemic implications of merger. No conditions on merger to force better risk management

Table 1 – SVB Selected Balance Sheet Items (2008-2010)

	2008	2009	2012
	($ Billions)	($ Billions)	($ Billions)
Cash and cash equivalents (FF,RP)	2.4	3.5	1
Investment securities	1.8	4.5	12.5
Total loans	5.5	4.5	8.9
Total assets	10	12.8	22.8
Noninterest-bearing deposits	4.4	6.3	13.9
Interest-bearing deposits	3.1	4	5.3
Total equity	1	1.1	1.8
Loan Concentrations			
Technology	2.7	2	4.4
Private equity	1.1	0.9	1.7
Life sciences	0.6	0.5	1.1
Premium wine	0.4	0.4	0.1
Total commercial loans	4.5	3.6	7.6

Concentrated Risks Even With Assets Of Only $10 Billion

- Concentrated in low interest uninsured deposits investing in risky high tech loans and long duration securities
  - Large uninsured business deposits from start-up companies
  - Loans concentrated in start-up industry
  - Large long-duration securities portfolio
- Potential risk mitigation
  - Broaden deposit base with de novo branches or acquisition
  - Broaden lending portfolio with more traditional CRE, consumer loans, C&I loans

Figure 1: Demand Deposits, SVB vs All FDIC Insured Banks

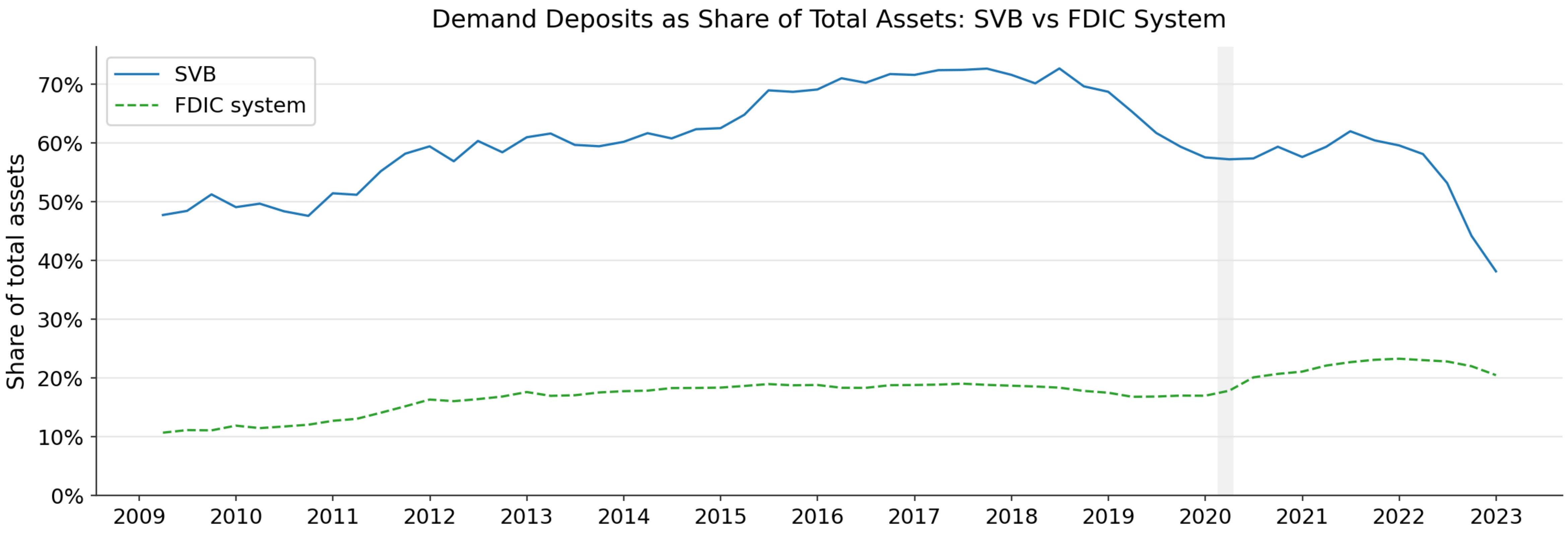


Figure 2: Uninsured Domestic Deposits

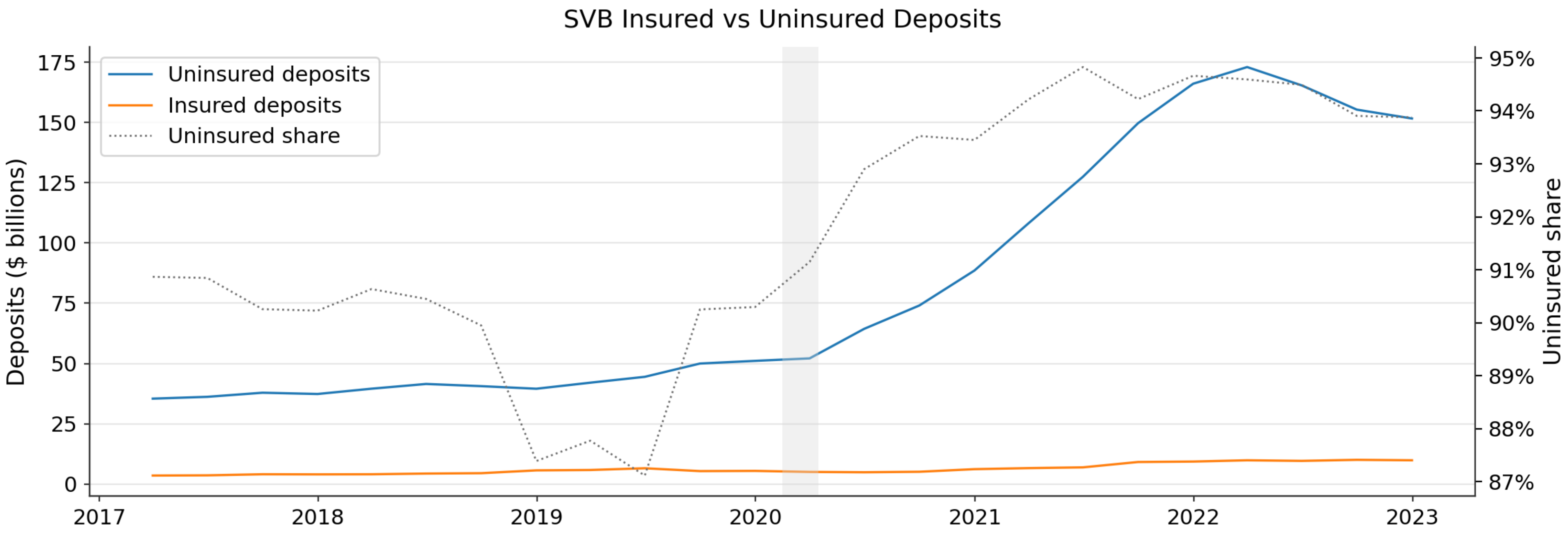


Figure 3: Investment Securities/ Total Assets

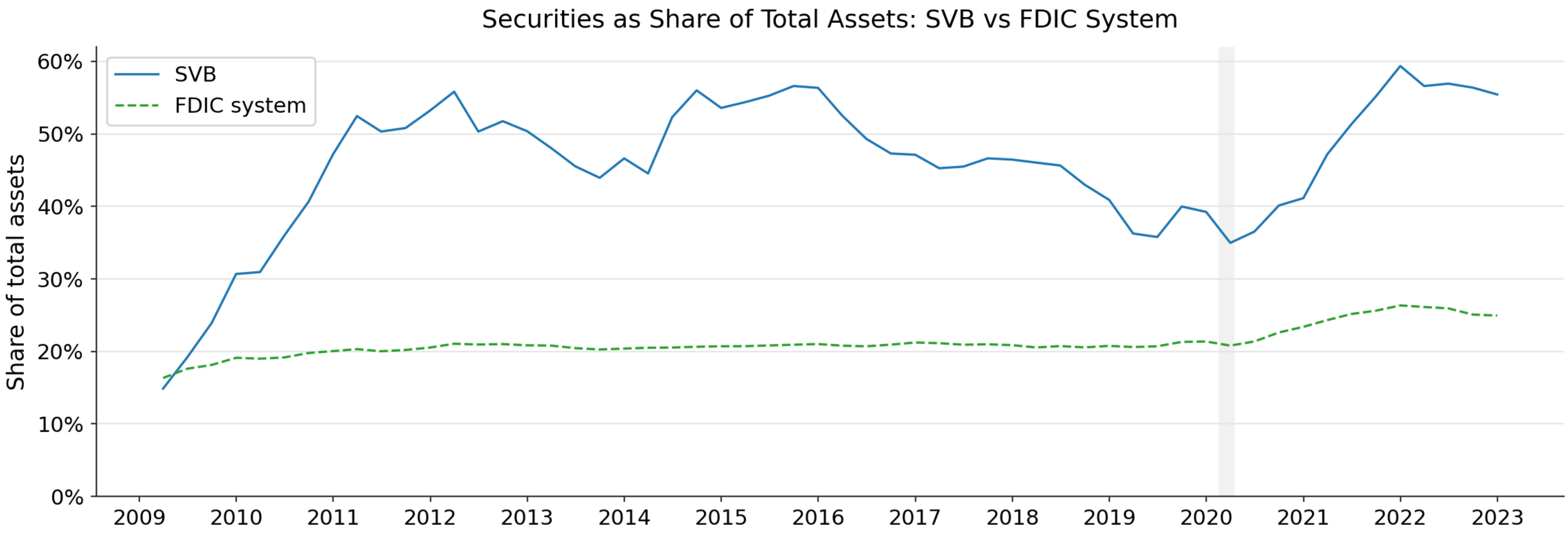


Figure 4: Composition of Investment Securities

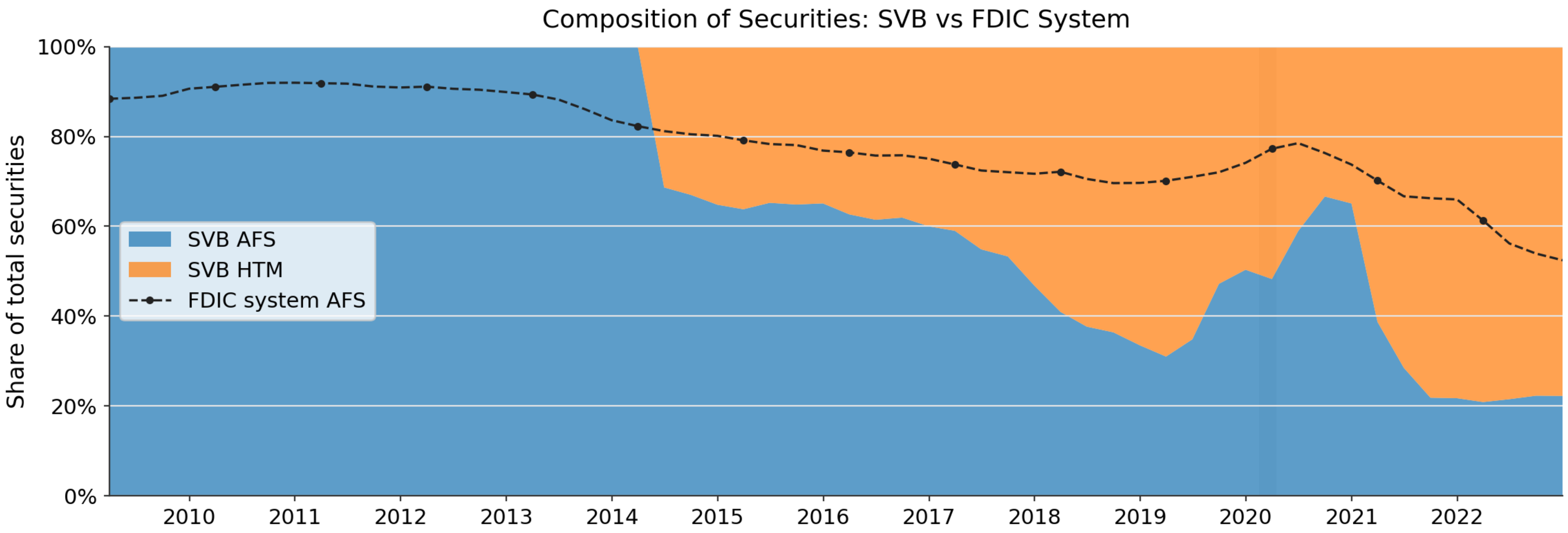


Figure 5: Fair Value-To-Book Ratio

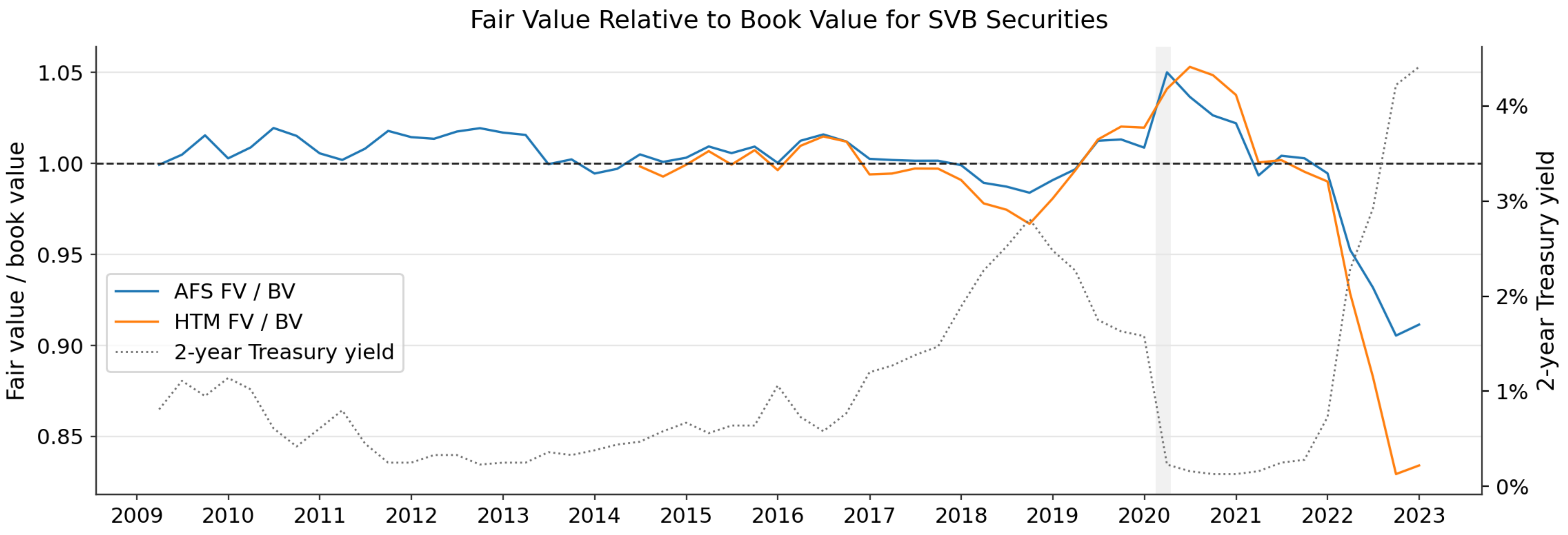


Table 2: Bank Correlations With QQQ

Top 15 Bank Correlations with QQQ - 01/2010-07/2020	
Name	Correlation
Northern Trust Corp	0.673
Silicon Valley Bank	0.641
Cathay General Bancorp	0.621
Commerce Bancshares Inc	0.618
Fifth Third Bancorp	0.613
Glacier Bancorp Inc New	0.603
N B T Bancorp Inc	0.599
International Bancshares Corp	0.597
Westamerica Bancorporation	0.596
East West Bancorp Inc	0.594
Trustmark Corp	0.590
Umpqua Holdings Corp	0.589
Huntington Bancshares Inc	0.584
United Bankshares Inc	0.583
Fulton Financial Corp Pa	0.583

Figure 6: Cumulative Asset Growth

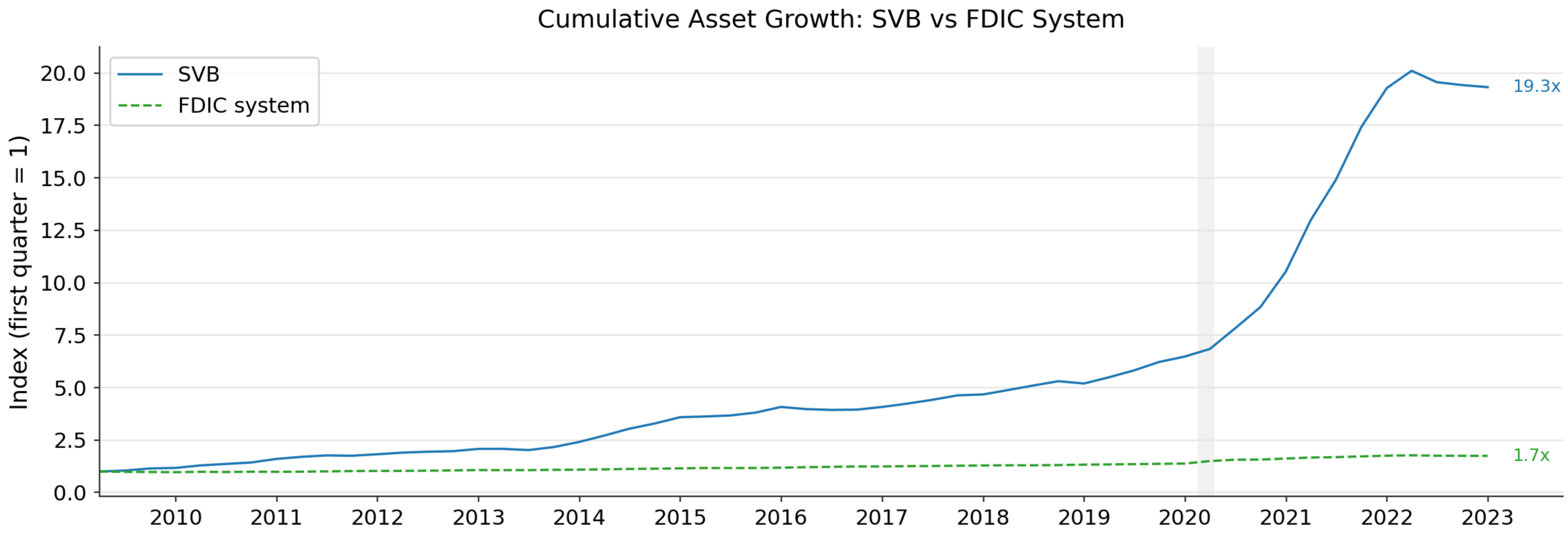
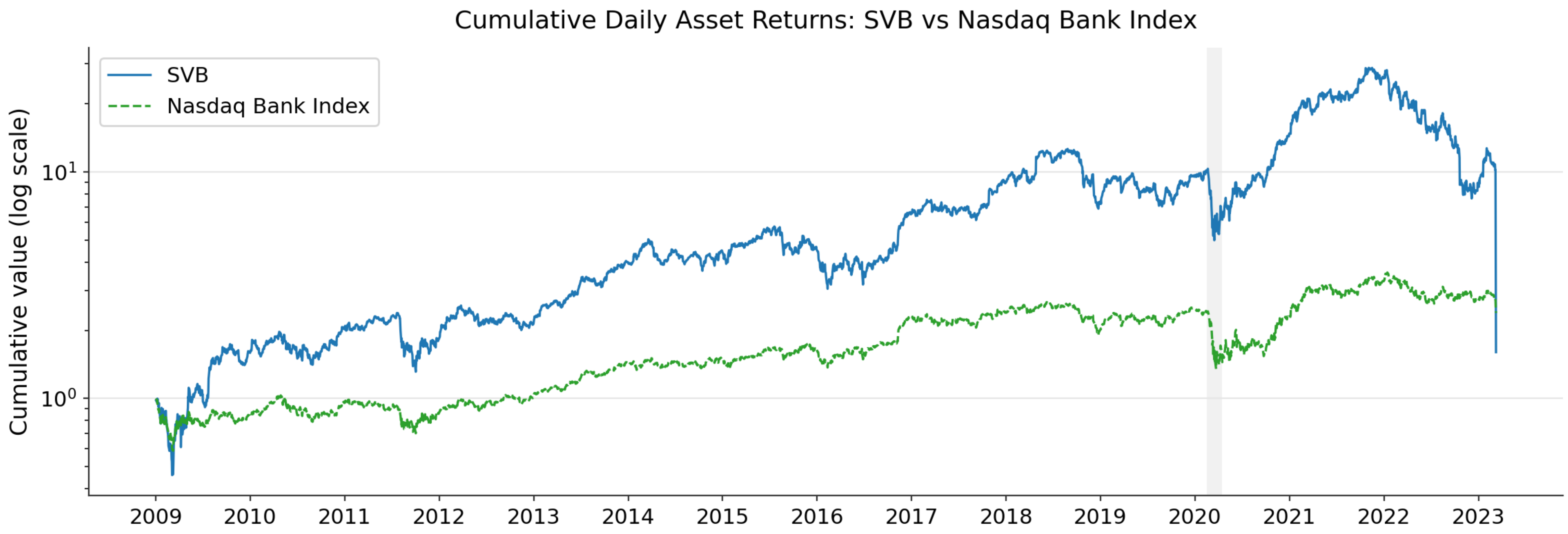


Figure 7: Cumulative Daily Asset Returns



Rapid Growth Increasing Risk Profile

- SVB grew very rapidly and was very profitable
  - Much more dependent on high tech than most other banks
  - Much more dependent on uninsured deposits than most other banks
  - Much more dependent on long duration securities than other banks
- Risk profile increasing
  - Much larger size
  - Duration and liquidity mismatch increasing

Table 4: Bank Supervisory Ratings

Report Date	Capital	Asset	Management	Earnings	Liquidity	Market sensitivity	Composite
17-Mar	2	2	2	2	1	2	2
18-Feb	2	2	2	2	1	2	2
19-Mar	2	2	2	2	1	2	2
20-Apr	2	2	2	2	1	2	2
21-May	2	2	2	2	1	2	2
22-Aug	2	2	3	2	2	2	3

Supervision – Not Reflecting Risk Profile

- Risk profile was increasing but not apparent in CAMELS ratings
- Risk profile was increasing no enforcement actions taken
- Particularly troubling was liquidity had highest rating until close to failure
- Sensitivity to market risk second highest rating despite duration mismatch with severe interest rate sensitivity

Regulatory Failures

- SVB actively lobbied Congress for lax regulations
- “We urge Congress to act quickly to increase the $50 billion threshold”
- Board of Governors ”tailored rule” exempted SVB from higher prudential regulation despite the rising risk profile
- Board of Governors allowed merger with Boston Private in 2021 with no conditions despite being required to consider systemic implications – This was less than 2 years before failure and declaring systemic exemption

Figure 9: Regional Banks Uninsured Deposits/Total Deposits

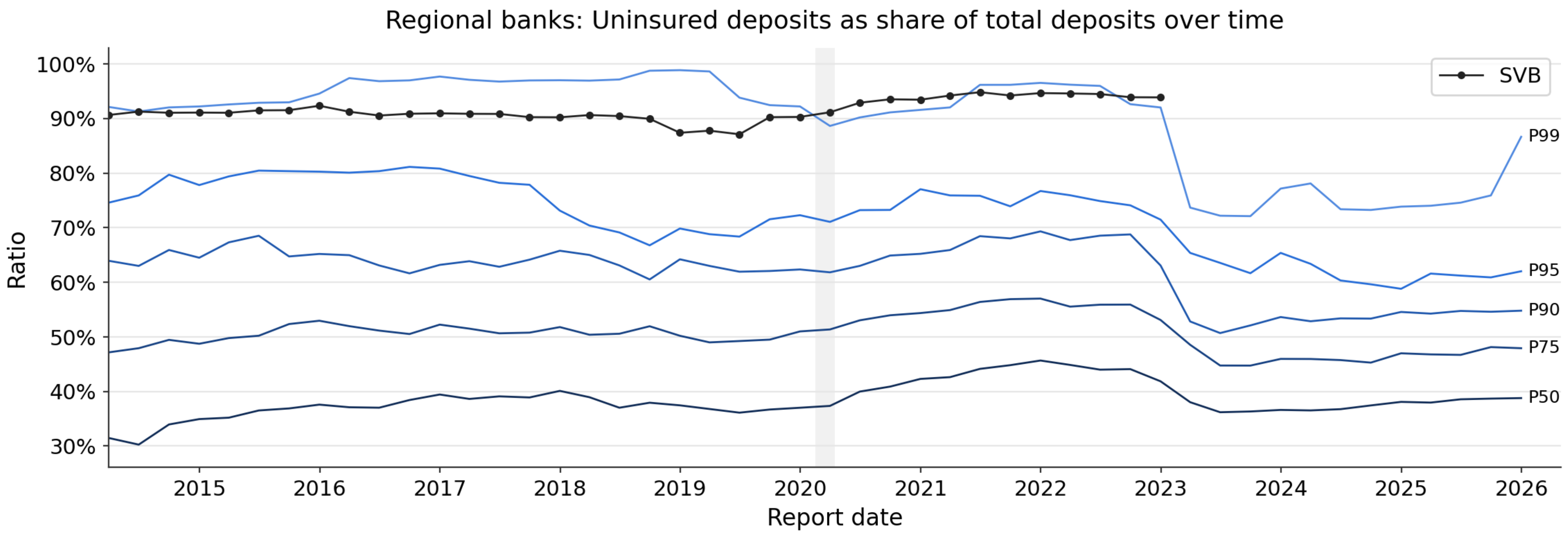


Figure 10: Regional Banks HTM Securities/Total Securities

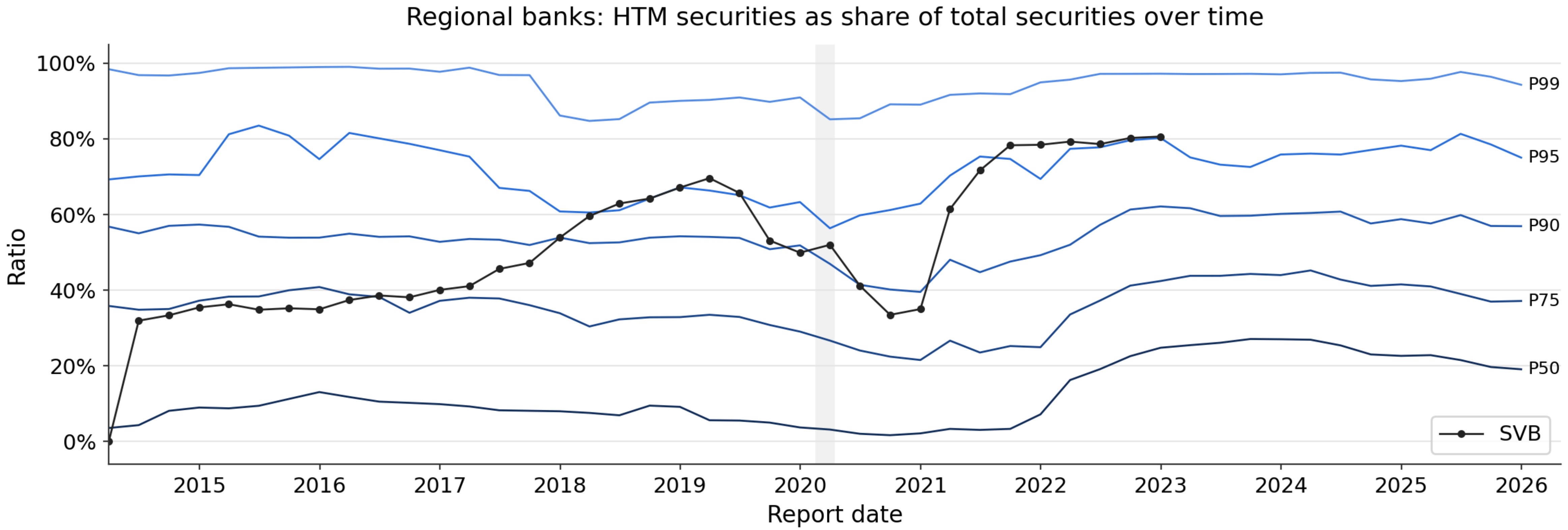
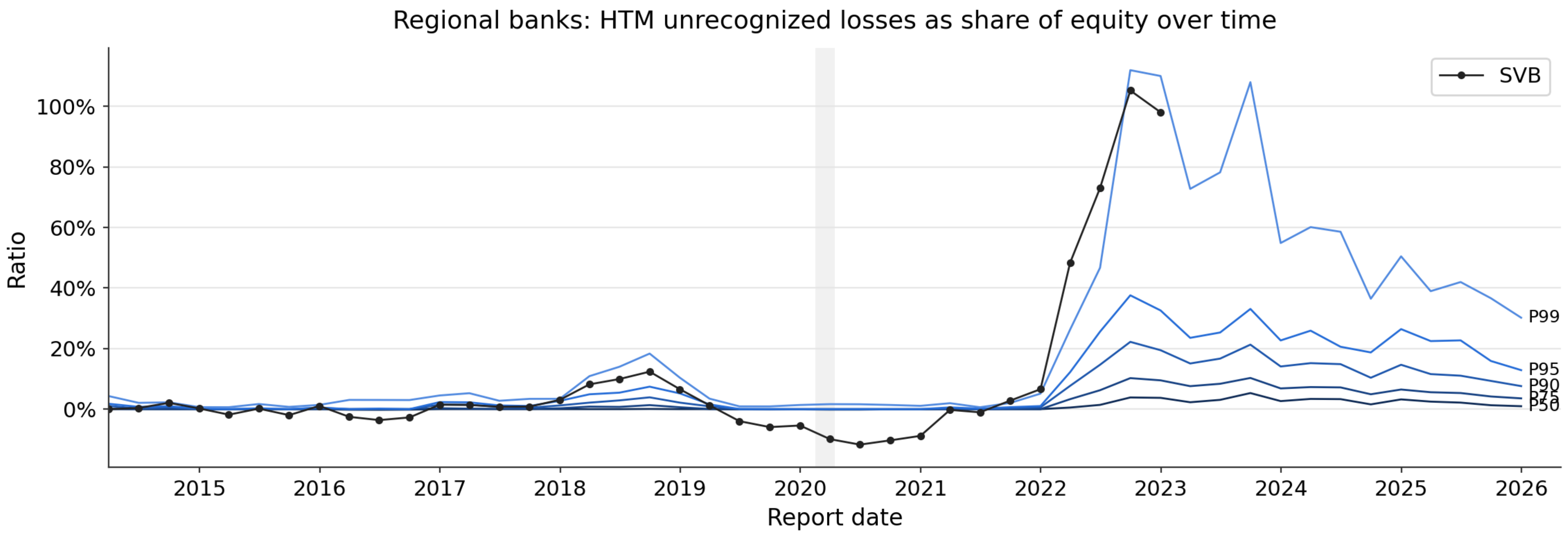


Figure 11: Regional Banks HTM Losses/Equity



Conclusion

- SVB problems long-standing
  - Dependence on uninsured demand deposits funding long duration securities
  - Slow down in tech industry and higher interest rates forced realization of long-standing risks
- Supervision and regulation did not react to increasing risk profile
  - Only reacted once losses were apparent
  - Plenty of opportunities to use supervisory and regulatory tools to change risk profile much earlier
- Focus on process rather than risk allowed a risky business model to persist resulting in a costly failure