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BRIEFING DOCUMENT

The Collapse of Silicon Valley Bank: What Happened and What it Means for Banking Regulation

Monday, April 10, 2023 2:30 PM, Room 444
Prepared by Luke Reidenbach

Purpose of the hearing:

Today's hearing will provide a preliminary review of the March 2023 collapse of Silicon Valley Bank (SVB), the second largest bank failure in US history. SVB's failure, caused by a bank run amid concerns about the bank's solvency, raises important questions about the adequacy of banking regulations and the effectiveness of banking supervision.

SVB played a pivotal role in California's tech industry. That a bank so central to California's economy failed so dramatically is a sobering reminder that industry, policymakers, and regulators must remain vigilant in identifying risks. And, they must be empowered to address those risks.

Importantly, SVB is not the only California bank that has struggled in the current economic environment. March 2023 also saw the voluntary winding down of Silvergate Bank and the industry-led interventions to shore up First Republic Bank. Identifying the problems specific to SVB, Silvergate, and First Republic will be an important area of study moving forward.

This hearing will function as a prologue to a more robust review of the state's supervision of state-chartered financial institutions like SVB. Both the Department of Financial Protection and Innovation (DFPI) and the Federal Reserve, who shared supervision of SVB, have announced they will release reports in May 2023 about that supervision. This committee will reconvene following the release of those reports.

Today, committee members will hear from two experts who will review how SVB collapsed, how the government responded, and what may come next:

- **Todd H. Baker**, Senior Fellow, Richman Center at Columbia University.
- **Michele Alt**, Partner at the Klaros Group and former Office of the Comptroller of the Currency (OCC) counsel.

SVB COLLAPSE: SUMMARY OF EVENTS

Overview

Banks typically make money from fees they charge to customers, the interest they earn on securities they hold, and the difference between the interest rate they pay for deposits and the interest rate they receive on the loans they make. Because of the complex nature of banking and finance, a myriad of risks or complications can emerge that jeopardize the stability of the bank or the broader system. In addition to regulations that make the banking system safe, a bank's management plays an essential role in monitoring and managing risks to their business model and to their customers. SVB's failure is due, in part, to its failure to manage such risks.

For California, SVB was not just any bank. SVB was widely perceived as a vital component of California's tech economy, offering tailored products and services to venture capitalists (VCs), technology firms, entrepreneurs and start-ups. SVB marketed itself as "the financial partner of the innovation economy," and one venture capitalist described it as "the most important capital provider to tech startups and the biggest supporter of the community."¹

SVB's reliance on start-ups and VC customers meant that the bank's fortunes tracked closely with those of tech industry. Up until just a month ago, this close relationship worked well: Between 2019 and 2022, amid a booming tech economy, SVB's assets tripled, growing from around \$60 billion to \$209 billion, becoming the 16th largest bank in the nation. SVB used that surge in deposits to invest in medium-and long-term securities like government bonds, which are typically considered safe.

However, SVB's weaknesses began to emerge after the Federal Reserve raised interest rates to combat persistent inflation. Specifically, the Federal Reserve warned SVB leadership about the bank's "interest rate risk," which is a type of risk stemming from a changing interest rate environment.² In SVB's case, the market value of its long-term securities investments was declining, which means the bank would sell these investments at a loss if they were compelled to sell before their maturity date. This interest rate risk, in combination with SVB's substantial amount of uninsured deposits (representing 88% of the bank's deposits at the end of 2022) and a struggling tech sector, appear to have helped create the conditions for SVB's quick collapse in March 2023.

¹ Aimee Picchi, "Silicon Valley Bank shut down by regulators. Here's what to know." CBS News (March 10, 2023), available at: <https://www.cbsnews.com/news/silicon-valley-bank-sivb-stock-fdic-cbs-explains/>

² "Interest rate risk," also called "duration risk," works like this: If someone buys a bond when interest rates are low, then the market value of that bond will decline if rates for newly issued bonds go up, because the newly issued bonds generate higher revenue due to their higher interest rates. If the low interest rate bond is held until maturation, then the bond holder will see the full return. However, if the bond holder must sell a low interest rate bond on secondary market before the bond's maturity date, then the bond holder will take a loss because the low interest rate bond is valued lower than more lucrative newly issued bonds with higher interest rates.

Timeline of major events in the SVB collapse

- On Wednesday March 8, SVB announced a sale of \$21 billion in securities at a loss of \$1.8 billion to raise liquidity, a result of SVB's interest rate risk. The company also announced it was conducting a capital raise. These announcements raised concerns among investors and customers that the bank could be in financial trouble. In a letter to investors, the SVB president wrote that "While VC (venture capital) deployment has tracked our expectations, client cash burn has remained elevated and increased further in February, resulting in lower deposits than forecasted."³
- On Thursday, March 9, SVB experienced a bank run as a growing number of the bank's customers, including start-ups and VCs, began to pull their money out of the bank. SVB customers used social media and their personal networks to spread the word about pulling funds out of the bank. In total, approximately \$42 billion was withdrawn from the bank in a single day, leaving SVB with a negative cash balance of around \$958 million.⁴ As DFPI described in its order taking possession of the bank, "the precipitous deposit withdrawal has caused [SVB] to be incapable of paying its obligations as they come due."
- On Friday, March 10, DFPI took control of SVB due to its inadequate liquidity and appointed the Federal Deposit Insurance Corporation (FDIC) as a receiver of SVB. The FDIC announced that the insured portion of deposits (amounts less than \$250,000) would be available to customers by Monday, March 13, and that the uninsured portion of deposits would be paid as an advanced dividend at some later date. The FDIC also began looking for a buyer of SVB or its parts, which would then determine any additional funds that could be allocated back to uninsured depositors.
- On Sunday, March 12, purchaser bids for SVB were due to the FDIC. According to testimony from the FDIC's Martin Gruenberg, the FDIC received only one valid offer on the insured deposits and some of SVB's assets. Gruenberg states that the costs associated with this offer would have "resulted in recoveries significantly below the estimated recoveries in liquidation."⁵

As concerns arose that risk of collapse could spread to other banks and reports that customers had begun to withdraw funds from other banks with large amounts of uninsured deposits, the FDIC board recommended that the Secretary of the Treasury make a "systemic risk determination" with regard to SVB. This determination allowed the FDIC to extend

³ Krystal Hu et al, "Silicon Valley Bank Scrambles to Reassure Clients After 60% Stock Wipe-Out." Reuters, March 10, 2023, available at: <https://www.reuters.com/business/finance/silicon-valley-bank-sell-stock-cope-with-cash-burn-2023-03-09/>

⁴ DFPI's order is available at: <https://dfpi.ca.gov/wp-content/uploads/sites/337/2023/03/DFPI-Orders-Silicon-Valley-Bank-03102023.pdf?emrc=bedc09>

⁵ Remarks by Chairman Martin J. Gruenberg on Recent Bank Failures and the Federal Regulatory Response before the Committee on Banking, Housing, and Urban Affairs, United States Senate, March 27, 2023, available at: <https://www.fdic.gov/news/speeches/2023/spmar2723.html>

insurance to all of SVB's deposits, even those with deposits greater than the \$250,000 insured threshold. Gruenberg notes this guarantee helped small and mid-size businesses as well as customers with very large account balances. The ten largest deposit accounts held \$13.3 billion in total.

- On Sunday, March 26, the FDIC announced that it had sold most of SVB's assets to First Citizens Bank. According to the FDIC, the net costs of the SVB failure to the Deposit Insurance Fund to insure all deposits would be roughly \$20 billion.

Possible questions from committee members

To better understand the drivers of the SVB failure and how policymakers should respond, the Committee may consider asking the following questions during the hearing:

- 1) If part of SVB's unique risk was its concentrated business model and narrow customer base, what can banks do differently? Are there relevant regulations or public policies that would help address this?
- 2) If part of the problem is that SVB leadership embraced risky practices, what can be done to make bank leadership more responsible? Should policymakers re-evaluate bank leadership compensation practices?
- 3) Federal regulators warned SVB about its interest rate risk or internal management practices. How must a bank respond to such warnings? What other actions could state or federal regulators have taken to prompt action by banks in this situation?
- 4) Could any institution withstand the scale of deposit withdrawals experienced by SVB? Can the financial system handle bank runs in a digital world? How can policymakers "social media proof" the financial system?
- 5) SVB had uniquely large amounts of uninsured deposits. Why was this the case?

HOW WAS SVB REGULATED AND SUPERVISED?

Overview of the dual-banking system

How a bank is regulated and supervised depends on its charter, which acts as a type of license authorizing the bank to operate. The United States has a dual-banking system (also called a dual-charter system) by which both federal and state regulators share the supervision of banks and credit unions. Under the dual-banking system, a bank can choose to receive a federal charter through the Office of the Comptroller of the Currency (OCC) or a state charter through the state chartering authority.

DFPI is California's state chartering authority and supervises nearly 100 state-chartered banks.⁶ A state-chartered bank is also regulated by either the Federal Reserve or the FDIC, depending on whether or not the bank joins the Federal Reserve System or not. Importantly, banks, whether they are state-or federally-chartered, may also be subject to a range of macroprudential rules and policies aimed at ensuring the stability of the whole financial system.

The dual-banking system may seem like a complicated structure that adds yet another cook to a kitchen already filled with assorted federal agencies. However, the availability of a state charter is believed to produce real and tangible benefits for both the industry and consumers by making the federal and state governments "compete" for banks. According to the Conference on State Banking Supervisors (CSBS), state regulators offer unique value to banking supervision because "the state regulatory system provides banks and nonbanks the opportunity to serve the specific needs of local communities under the supervision and guidance of a supervisor directly connected to those communities."⁷ CSBS notes that many products that are now commonplace, such as home equity loans and the checking account, originated in state-chartered banks and later became more widely available in the broader dual-banking system.

DFPI also cites a number of advantages to banks that obtain a California charter. Among the benefits are lower fees and assessments, minimal intrusion of examiners into institutions that are well-managed and well-capitalized, and more direct and timelier contact with the regulator.⁸ DFPI states that "the combination of access, low fees, favorable state laws, and expertise and experience of the Department's staff, make the state charter the charter of choice for California financial institutions."

⁶ For a full list of state-chartered banks in California, see: <https://dfpi.ca.gov/commercial-banks/directory-of-state-charted-com-banks/>

⁷ See CSBS primer on financial services regulation for further discussion of state charters: <https://www.csbs.org/state-financial-regulation-101>

⁸ "Advantages of a State Charter," DFPI (Updated September 2019), available at: <https://dfpi.ca.gov/advantages-of-state-charter/>

What is involved in bank supervision?

As a state-chartered bank that was a member of the Federal Reserve System, SVB was jointly supervised by DFPI and the Federal Reserve. For these types of banks, DFPI and the Federal Reserve coordinate their examinations of the bank and may even alternate examinations. The two supervising teams may focus on different aspects of the bank's operations.

According to the Federal Reserve, the primary objectives of an examination are to provide an objective evaluation of a bank's soundness, determine the risk involved in the bank's activities, evaluate the bank's compliance with laws and regulations, and identify areas where "corrective action" is required to strengthen the bank and improve the quality of its performance.⁹

Banking supervisors have a number of options to correct a bank's behavior or practices. For example, if the Federal Reserve determines that a bank is unsafe or it is not following the law, it can take a range of informal or formal actions to ensure that the bank changes course. Informal supervisory actions typically are used to address less serious issues, while formal supervisory actions are actions to correct behavior, and can be enforced in court. Those formal actions can include orders directing the bank to cease and desist from engaging in certain conduct or directing the bank to take actions to return to safer business practices.

Did regulators have concerns about SVB?

As of the writing of this document, it is unknown the extent to which DFPI was aware of SVB's weaknesses and what actions were taken in its capacity as SVB's chartering authority. It is also unknown how the Federal Reserve and DFPI shared supervision in practice.

However, the Federal Reserve has provided some information about its supervision of SVB and the issues identified by its examiners. On March 28, Michael S. Barr, the Vice Chair for Supervision at the Federal Reserve, provided in Congressional testimony a brief summary of concerns flagged by SVB supervisors. Barr's testimony stated:

Near the end of 2021, supervisors found deficiencies in the bank's liquidity risk management, resulting in six supervisory findings related to the bank's liquidity stress testing, contingency funding, and liquidity risk management. In May 2022, supervisors issued three findings related to ineffective board oversight, risk management weaknesses, and the bank's internal audit function. In the summer of 2022, supervisors lowered the bank's management rating to "fair" and rated the bank's enterprise-wide governance and controls as "deficient-1." These ratings mean that the bank was not "well managed" and was subject to growth restrictions under section 4(m) of the Bank Holding Company Act. In October 2022, supervisors met with the bank's senior management to

⁹ See Chapter 5 of the Federal Reserve's "About the Fed" manual for an in-depth discussion of the Federal Reserve's many supervisory duties for both national and state member and nonmember banks: https://www.federalreserve.gov/aboutthefed/files/pf_5.pdf

express concern with the bank's interest rate risk profile and in November 2022, supervisors delivered a supervisory finding on interest rate risk management to the bank.¹⁰

While Federal Reserve examiners correctly identified the types of issues that would ultimately lead to SVB's failure, it is unclear whether the Federal Reserve was planning to take more formal action. Barr, in his testimony, acknowledged that policymakers must determine whether banking supervisors have the tools to mitigate threats to the safety and soundness, and whether supervisors are supported in using these tools.

News reports suggest that the answer to the second question may be "no." For example, a March 24 *Wall Street Journal* report dissected the many tensions facing banking supervisors and the challenges of elevating concerns into more concrete and aggressive interventions:

One FDIC official said problems rarely escalate into cease-and-desist orders unless there's a long-term pattern of noncompliance. He said that absent some emergency—which wasn't apparent with SVB until it was too late—it can be challenging for supervisors to push back against management if the bank is in compliance with all of its capital and liquidity requirements, as SVB was.¹¹

Possible questions from committee members

To better understand how banking supervision fell short, the Committee may consider asking the following questions during the hearing:

- 1) How should policymakers think about changes to the state charter? Are there risks of pushing banks to the federal charter system?
- 2) Given the size of SVB and the federal government's determination that its potential failure posed a systemic risk, was it appropriate for it to be chartered at the state level?
- 3) What is the current timeline of banking examinations? Given how quickly SVB grew in the last three years and the speed of the bank run, should examinations happen more frequently?
- 4) If DFPI wanted to more assertively demand changes in SVB's risk management practices, what authority did they have as a chartering authority to do so?

¹⁰ Michael S Barr, "Bank Oversight," Testimony Submitted to the US Senate Committee on Banking, Housing, and Urban Affairs (March 29, 2023), available at

<https://www.federalreserve.gov/newsevents/testimony/barr20230328a.htm>

¹¹ Andrew Ackerman et al, "How Bank Oversight Failed: The Economy Changed, Regulators Didn't." *Wall Street Journal* (March 2023, 2023), available at: <https://www.wsj.com/articles/how-bank-oversight-failed-the-economy-changed-regulators-didnt-7dbb842d>

FEDERAL REGULATORY CHANGES AND BIDEN ADMINISTRATION RESPONSE

In addition to exploring the role of supervisors in missing the immediate danger posed by SVB, federal policymakers and policy experts are also revisiting specific federal regulations. They have identified a change to a 2019 federal rule – called the “tailoring rule” - that may have allowed SVB to take unnecessary risks or otherwise contributed to the bank’s unpreparedness for the impact of high interest rates on the its finances.

The tailoring rule states that banks with between \$50 billion and \$250 billion in assets (like SVB) will not be subject to some of the regulatory standards and liquidity requirements that apply to larger, more “systemically important” banks.¹² For example, the liquidity coverage ratio is the minimum amount of high-quality liquid assets a bank typically must hold to fund cash outflows for 30 days. Because of the 2019 rule change, SVB was not subject to the liquidity coverage ratio rule. In evaluating whether SVB would have benefited from following this rule, one analysis by Yale School of Management’s Greg Feldberg concludes that SVB’s liquidity coverage ratio “would have been...substantially below the threshold. This result suggests that the 2019 tailoring rule was complicit in the run and failure at SVB.”¹³

In response to the SVB failure, the Biden administration has highlighted the need to modify or reverse the tailoring rule as an immediate next step. On March 30, 2023, the administration released a set of proposals to strengthen safeguards and supervision for large regional banks. Those recommendations are heavily focused on reversing the 2019 changes described above.¹⁴ The administration’s policy proposals include:

- Reinstating rules for banks with assets between \$100 billion and \$250 billion, including liquidity requirements, enhanced liquidity stress testing, annual supervisory capital stress tests, and comprehensive resolution plans.
- Strengthening supervision by reducing the transition periods for applying safeguards to banks projected to exceed the \$100 billion threshold, strengthening supervisory tools to make sure banks can withstand high interest rates.

However, experts who contend the 2019 rule change helped facilitate the SVB collapse also acknowledge that it is just one of many possible factors that worked together to allow the collapse of SVB. For instance, the Feldberg analysis cited above also concludes that regulators

¹² For a detailed table of how the tailoring rule affected banks of different size, see:

<https://www.federalreserve.gov/aboutthefed/boardmeetings/files/tailoring-rule-visual-20191010.pdf>

¹³ Greg Felberg, “Lessons from Applying the Liquidity Coverage Ratio to Silicon Valley Bank,” Yale School of Management (March 23, 2023), available at: <https://som.yale.edu/story/2023/lessons-applying-liquidity-coverage-ratio-silicon-valley-bank>

¹⁴ “FACT SHEET: President Biden Urges Regulators to Reverse Trump Administration Weakening of Common-Sense Safeguards and Supervision for Large Regional Banks,” White House (March 30, 2023), available at: <https://www.whitehouse.gov/briefing-room/statements-releases/2023/03/30/fact-sheet-president-biden-urges-regulators-to-reverse-trump-administration-weakening-of-common-sense-safeguards-and-supervision-for-large-regional-banks/>

should have identified the liquidity risks due to “its high concentration to, and run-inducing dependence on, a specific type of corporate depositor,” and that SVB might have faced a similar bank run because of its mismanagement of duration risk.

In his testimony to Congress, Barr references the tailoring rule and the Federal Reserve’s review of the impact of these regulations on the SVB collapse. Barr states that the Federal Reserve is assessing whether “SVB would have had higher levels of capital and liquidity under those standards, and whether such higher levels of capital and liquidity would have forestalled the bank's failure or provided further resilience to the bank.”¹⁵

Possible questions from committee members

To better understand how the state can complement the work of the Biden Administration, the Committee may consider asking the following questions during the hearing:

- 1) How should policymakers think of the state role in protecting the safety and soundness of state-chartered banks?
- 2) How can the state complement the reforms implemented by the Biden Administration?

NEXT STEPS

As noted above, DFPI and the Federal Reserve will release reports in May 2023 that examine the SVB collapse and the role of banking supervisors. These reports may provide insights into next steps and whether additional legislation could strengthen California’s banking system.

¹⁵ Michael S Barr, “Bank Oversight,” Testimony Submitted to the US Senate Committee on Banking, Housing, and Urban Affairs (March 29, 2023), available at <https://www.federalreserve.gov/newsevents/testimony/barr20230328a.htm>