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Review of DFPI's Oversight and Regulation of Silicon Valley Bank

DFPI DEPARTMENT OF FINANCIAL PROTECTION & INNOVATION

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A. Page 2: URL for supervisory materials updated.

B. Pages 4, 18, and 41: Non-substantive typographical changes.

C. Page 44: Indicated $1.9 billion unrealized losses figure is an estimated figure.

D. Page 63: Glossary updated.

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Executive Summary

A. The collapse of Silicon Valley Bank

On March 10, 2023, the Department of Financial Protection and Innovation (DFPI or Department) took possession of Silicon Valley Bank (SVB), a California state-chartered regional bank based in Santa Clara, and appointed the Federal Deposit Insurance Corporation (FDIC) as receiver.

SVB became insolvent after an unprecedented run on SVB's deposits. Within the span of eight hours on March 9, 2023, SVB received deposit withdrawal requests of approximately $42 billion, representing nearly 25 percent of SVB's approximately $166 billion in total deposits. While many internal factors made SVB susceptible to a bank run, both social media and digital banking technology accelerated the volume and speed of the deposit outflows.

The bank run began after SVB's holding company announced SVB had liquidated a bond portfolio at a loss of $1.8 billion and was seeking to raise $2.25 billion in capital. SVB had established itself as a primary provider of banking products and services to the technology industry, including venture-backed tech startups, and had accumulated a high percentage of uninsured deposits concentrated in the tech industry. SVB had grown at a rapid pace since 2020 without sufficient risk management. Recent rising interest rates led to SVB's startup deposits decreasing and SVB's investments losing value, both of which contributed to SVB's liquidity challenges.

The DFPI and SVB's primary federal regulator, the Federal Reserve Bank of San Francisco (FRBSF), had divided their respective oversight and supervisory activities over SVB in such a way that the FRBSF had assumed a lead role for many supervisory activities. However, most supervisory letters to the bank were issued jointly. In the years leading up to SVB's failure, the DFPI and the FRBSF identified deficiencies in SVB's bank management practices. Specifically, the FRBSF and the DFPI had initiated supervisory actions related to SVB's risk management, liquidity, and interest rate risk simulations. SVB had undertaken corresponding remediation efforts, but the regulators did not take adequate measures to ensure SVB did so with enough speed.

B. Report overview

The DFPI conducted a comprehensive review of the circumstances leading up to the liquidation of SVB. This report provides background on the regulatory framework that governs banks in California and the United States, summarizes the DFPI's supervision of SVB, reviews the circumstances that led to the failure of SVB, and details key findings and next steps for the DFPI.

This report, in conjunction with the release of the Federal Reserve's April 28, 2023 report on SVB,[1] seeks to provide information for policymakers and stakeholders that may help to prevent future bank failures. In the interest of transparency, this report includes confidential supervisory information (CSI) about SVB, including summaries of examination reports, supervisory letters, and ratings downgrades, so that policymakers and the public are fully informed about the circumstances leading to the demise of SVB.[2] This information is available at https://dfpi.ca.gov/review-of-dfpi-oversight-and-regulation-of-silicon-valley-bank/.

C. Key findings and next steps for DFPI

The DFPI will leverage the events surrounding SVB's failure to better understand how the DFPI can protect the public from future economic destabilization. Below is a summary of the DFPI's key findings regarding the events surrounding SVB's collapse and of next steps for the DFPI going forward.

Finding 1: Speed of remediation

SVB was slow to remediate regulator-identified deficiencies, and regulators did not take adequate steps to ensure SVB resolved problems as fast as possible.

Next steps:

- DFPI will coordinate with federal regulators to develop stronger and more effective systems to remediate deficiencies promptly.

[1] *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank*, Board of Governors of the Federal Reserve System (Apr. 28, 2023).

[2] CSI is information that is typically kept confidential in the bank regulatory process to protect financial markets. In this case, the Federal Reserve Board released CSI information related to the examination of SVB in conjunction with its April 28, 2023 report on SVB.

DFPI will add additional levels of supervisory review to elevate issues identified in an examination and expedite action as appropriate.

Finding 2: Rapid growth and DFPI's role in supervision

SVB's unusually rapid growth was not sufficiently accounted for in risk assessments.

Next steps:

- DFPI will review its internal staffing processes to ensure that additional staff members are assigned in a timely manner, commensurate with accelerated growth or increased risk profile for an institution, for banks with assets of more than $50 billion.

- DFPI will continue to develop large bank supervisory plans in coordination with federal regulators for all banks with assets of more than $10 billion, with increased focus on timelines for corrective actions and allocating banking staff examination hours based on the risks identified in these supervisory plans.

Finding 3: Uninsured deposits

SVB's high level of uninsured deposits contributed to the run on SVB.

Next steps:

- DFPI will increase its focus on banks' uninsured deposit levels, in addition to continuing to monitor key indicators such as banks' concentration of uninsured deposits by industry.

- Banks with over $50 billion in total assets will be subject to heightened examination requirements regarding uninsured deposits.

Finding 4: Digital technology and social media

Digital banking technology and social media accelerated the volume and speed of the run on SVB and contributed to its ultimate collapse.

Next steps:

- Through the supervisory process, the DFPI will require banks to consider how to quantify and best manage existing and emerging risks posed by technology-enabled activities such as social media and real-time deposit withdrawals.

Background and Regulatory Framework

A. The U.S. dual banking system

The United States has a "dual banking system" referring to "parallel state and federal banking systems that co-exist" and operate in tandem.[3] The federal system involves a federal bank charter provided under federal law, with oversight by a federal supervisor. The state system involves a state charter based on state law, with oversight by a state supervisor in coordination with a federal primary regulator. Upon formation, a bank chooses whether to seek a federal charter or a state charter. A bank can convert from one charter to another, which requires application to and approval from the other chartering authority.[4]

The dual banking system is unique to the United States. Advocates of the dual banking system have noted that the system permits enhanced competition and efficiency in the financial system, which has led to the United States' long-standing leadership in financial services. For example, a bank that intends to operate only in a specific geographic footprint may be better served by a state charter, as the state regulator may better understand the local economic environment and business model of the bank. On the other hand, a bank that intends to operate on a national basis may choose to obtain a federal charter, which can best ensure that it is prepared for nationwide scale, but both federal and state-chartered banks can operate nationwide.

B. Federal charter

National banks are chartered by the Office of the Comptroller of the Currency (OCC), an independent bureau of the United States Department of Treasury. The OCC is the oldest federal banking regulator and was established in 1863. Federal law requires that national banks be member banks of the Federal Reserve System and be insured under the Federal Deposit Insurance Act.[5] The OCC is the primary regulator of national banks, with the Federal Reserve and the FDIC having secondary authority.

[3] *National Banks and the Dual Banking System*, Office of the Comptroller of the Currency (OCC) (Sep. 2003).
[4] *Id.*
[5] 12 U.S.C. § 222.

C. State charter

State banks are chartered by the appropriate state banking regulator. In California, the DFPI charters state banks.[6] California-chartered banks are insured by the FDIC.[7] The bank chooses whether to become a member of the Federal Reserve System, as membership is not a requirement under California law. A state bank that chooses to be a member of the Federal Reserve System is called a "state member bank." A state bank that chooses not to be a member of the Federal Reserve System is called a "state non-member bank."

California state banks are supervised by the DFPI and a primary federal regulator. For state non-member banks, the FDIC is the primary federal regulator. For state member banks, the Federal Reserve is the primary federal regulator, and the FDIC is secondary. The DFPI works with the appropriate primary federal regulator to supervise and examine California-chartered banks. SVB was a state member bank. Therefore, the Federal Reserve was SVB's primary federal regulator, and the FDIC was the secondary federal regulator.

D. DFPI and the history of banking supervision in California

Commissioner Clothilde V. Hewlett heads the DFPI, which operates under the California Business, Consumer Services & Housing Agency (BCSH).

The DFPI protects consumers, regulates financial services, and fosters responsible innovation in the State of California. The Department oversees the operations of state-licensed financial institutions, including banks, credit unions, money transmitters, and premium finance companies. The Department licenses and regulates a variety of financial businesses, including securities brokers and dealers, investment advisers, student loan servicers, deferred deposit originators (commonly known as payday lenders), and certain fiduciaries and lenders.

The DFPI also regulates the offer and sale of securities, franchises, and off-exchange

[6] Cal. Fin. Code §§ 1020, 1044.

[7] Cal. Code Regs. tit. 10, § 10.3520.

commodities. Under authority granted by the California Consumer Financial Protection Law (CCFPL) in 2020, the Department oversees previously unregulated providers of financial products and services, such as early wage access companies, debt collectors,[8] debt relief companies, among others.

The DFPI has a long history as a state banking regulator, dating back to the formation of California's first banking department over a century ago. The Department was renamed the DFPI in 2020 with the passage of the CCFPL. The DFPI continues to serve as the state's banking supervisor and to administer the state's banking laws.

Table 1: Timeline of California Banking Regulation

Early History
Starting in 1857, banking enterprises in California were granted charters under the General Corporation Laws. Savings banks were authorized under the provisions of an act passed in 1862.
The Board of Bank Commissioners (1878–1909)
In 1878, an act was passed creating a three-person Board of Bank Commissioners and placed under its jurisdiction "every savings bank and banking company incorporated under the laws of this state, or any other state or country doing business in this state." This marks the advent of banking supervision in California.
The State Banking Department (1909–1997)
In 1909, the Bank Act was passed, creating the State Banking Department with a Superintendent of Banks appointed by the Governor to a term of four years. In 1911 this changed to the Superintendent holding office "at the pleasure of the Governor." The Bank Act was revised in 1949 and was codified in 1951 as Division I of the California Financial Code. The Bank Act was again extensively revised in 1979 to bring it in line with General Corporate Law and Generally Accepted Accounting Principles.

[8]Debt collectors are included under the CCFPL, and the California Debt Collection Licensing Act, also passed in 2020, grants the DFPI licensing authority over debt collectors. (Cal. Fin. Code §§ 1000 – 2176).

The Department of Financial Institutions (1997–2013)
The State Banking Department, which regulated commercial banks, savings and loan associations, and trust companies, merged in July 1997 with part of the Department of Corporations, which regulated credit unions and industrial loan companies. The new entity was called the Department of Financial Institutions (DFI). For the first time, the responsibility for the safety and soundness of California's depository institutions was combined under one department.
The Department of Business Oversight (2013–2020)
In July 2013, the DFI merged with the remainder of the Department of Corporations (DOC), which regulated other financial companies, such as mortgage lenders, finance lenders, securities, broker-dealers, and investment advisors. They formed the Department of Business Oversight (DBO), which reported to a newly formed Business, Consumer Services & Housing Agency. With this merger, all of California's financial services and products were regulated by one department. The functions of the two former departments operated as divisions within the DBO.
The Department of Financial Protection and Innovation (2020–present)
The California Consumer Financial Protection Law (CCFPL) changed the Department's name from the Department of Business Oversight to the Department of Financial Protection and Innovation (DFPI). The CCFPL also provided expanded supervisory and enforcement powers to protect California consumers from financial harm. The legacy functions from the Financial Institutions and Corporations divisions (including banking) were combined into one division, while newer supervisory functions added in 2020 were aligned to a new consumer financial protection division. An innovation office was also created. The revamped Department continues to report to the Business, Consumer Services & Housing Agency.

E. Bank supervision

1. Overview

The broad objectives of bank supervision and regulation are to foster and maintain safe and sound banking conditions, as well as to protect the public interest. This includes fostering and maintaining sound and solvent individual banks run by competent management, who protect the depositors and adequately serve the needs of the community.

Although bank examination is the foundation of bank supervision, supervision covers a broader range of activities than examination alone. Supervision also includes the licensing process, which allows regulators to control entrance into the banking business by granting charters only where there is a demonstrated need for the bank and a reasonable promise of success; and it includes reviewing applications for new facilities, which allows regulators to control the expansion of banks through branching, mergers, and consolidations. In addition to the continuing supervision of existing licensees through regular, periodic bank examinations, the DFPI monitors various regularly reported financial data and ratios from its bank licensees.

Bank supervision does not involve oversight of day-to-day bank management. The responsibility for bank management and operation decisions rests with the bank's board of directors. When bank managers demonstrate an inability to effectively direct the activities of the bank or if the continued viability of the bank is threatened, supervision techniques are used by regulators to strengthen or replace management.[9]

2. The business of banking

Banks are privately-owned financial institutions that, generally, are chartered to accept deposits and make loans.

Banks earn money in three primary ways: (1) interest income based on loans,[10] (2) yield on investments,[11] and (3) service charges and fees, such as minimum balance fees, overdraft fees, and safe deposit box fees.

Banks cannot lend the entirety of the deposits they accept. Otherwise, they would not have funds to meet deposit withdrawals. Therefore, they maintain primary and secondary reserves. Primary reserves are the reserves required by the Federal Reserve System that a bank must maintain against its transaction accounts.[12] Secondary reserves are typically

[9]For example, the Department can issue an order under California Financial Code section 580 requiring the bank to retain and maintain competent management within a specified timeframe, subject to approval by the regulators.

[10]Banks often will pay interest on deposits. A bank will then lend out money using those deposits and charge a higher interest rate to borrowers. The difference between what the bank pays for deposits and what they charge on loans is what the bank earns as interest income.

[11]Banks will typically invest in securities as part of maintaining reserves and earn interest on those investments.

[12]U.S.C § 461; 12 C.F.R. § 204.

assets invested in marketable securities, such as government bonds, which may be pledged with the Federal Home Loan Bank or Federal Reserve Bank to draw a line of credit to meet short-term cash needs.

Federal law establishes requirements for the percentage of deposits a bank must maintain as primary reserves either at the local Federal Reserve Bank, a correspondent bank, or as vault cash.[13] Excess reserves are funds that a bank has after it meets its reserve requirement and can be lent out.[14]

The fractional-reserve banking system, which is in operation in most countries worldwide,[15] does not require banks to hold cash to cover all deposit liabilities in full. Under a fractional-reserve banking system, banks that take deposits only are required to hold a fraction of their deposit liabilities in cash or liquid assets.[16] Banks can lend on the remainder. If banks were required to maintain reserves equal to 100 percent of deposits, they would be severely limited in their ability to lend and would likely not be profitable. This system assumes that a large percentage of depositors will not attempt to withdraw all their deposits at the same time.

3. UFIRS and CAMELS

Banks chartered by the DFPI operate under a federally created evaluation system known as the Uniform Financial Institutions Rating System (UFIRS). In March 1979, the Federal Financial Institutions Examination Council (FFIEC) was created through the Financial Institutions and Interest Rate Control Act of 1978.[17] Its purpose is to prescribe uniform principles and standards for the federal examination of financial institutions by the OCC,

[13]The Federal Reserve Act authorizes the Federal Reserve Board to establish reserve requirements within specified ranges for purposes of implementing monetary policy on certain types of deposits and other liabilities of depository institutions. 12 U.S.C. § 461. On March 15, 2020, the Federal Reserve Board reduced reserve requirement ratios to zero percent, effective March 26, 2020. That zero percent requirement remains in effect.

[14]*I Noticed That Banks Have Dramatically Increased Their Excess Reserve Holdings. Is This Buildup of Reserves Related to Monetary Policy?*, FRBSF (Mar. 2010).

[15]Frederic S. Mishkin, Economics of Money, Banking and Financial Markets (10th ed. 2012).

[16]Fractional Reserve Banking: What It Is and How It Works, Investopedia (Mar. 28, 2023).

[17]Financial Institutions and Interest Control Act of 1978, Pub. L. No. 95-630, 92 Stat. 3641 (1978).

FDIC, Federal Reserve Board, Federal Home Loan Bank Board, and National Credit Union Administration and to make recommendations to promote uniformity in the supervision of these institutions. In 1979, the FFIEC recommended the adoption of UFIRS. In 2006, a state regulator seat was added to the FFIEC as a voting member representing the states.

The UFIRS rating system represents a comprehensive and uniform evaluation of an institution's financial condition, compliance with banking regulations and statutes, and overall operating soundness, and has been adopted by nearly every federal and state regulatory agency, including the DFPI.

The rating system provides a framework for evaluating all significant financial, operational, and compliance factors to assign a confidential summary supervisory rating. The specific areas of a bank that are evaluated include:

- Capital Adequacy
- Asset Quality
- Management
- Earnings
- Liquidity and Funds Management
- Sensitivity to Market Risk

These elements account for the use of the acronym CAMELS for a bank's rating. Each component is rated on a scale of 1 through 5 in ascending order of performance deficiency. Component ratings correspond with the following conditions:

1. Strong
2. Satisfactory
3. Less than Satisfactory or Fair
4. Deficient
5. Critically Deficient

Multiple factors are analyzed under each component and ratings decisions require comprehensive quantitative and qualitative analysis. When assigning ratings, examiners consider an institution's size and sophistication, the nature and complexity of its activities, and its general risk profile. Once a rating has been determined for each component, an overall rating is assigned. The overall rating is referred to as the composite rating. The composite rating is also based on a scale of 1 through 5 in ascending order of supervisory concern. In arriving at a composite rating, each component must be weighed and due consideration must be given to the interrelationships among the various aspects of a bank's operations.[18]

4. Banking supervision components

The following is a description of the CAMELS components and other areas evaluated by all state and federal banking regulators.

- Capital Adequacy
    - A bank primarily derives its capital by issuing stock and retaining earnings.
    - Capital serves several important functions: (1) It absorbs fluctuations in income, so a bank can continue to operate in periods of loss or negligible earnings; (2) it provides a measure of assurance to the public that the institution will continue to provide financial services, thereby maintaining confidence in individual banks and in the banking system; and (3) it supports growth yet restrains unjustified or imprudent expansion of assets.

- Asset Quality
    - A bank’s assets typically include cash, securities investments, loans, and fixed assets.
    - Loans comprise a major portion of the asset base of most banks. Loans are the asset category which ordinarily present the greatest credit risk, and therefore, the greatest potential for loss to the bank.
    - The securities portfolio of a bank can also represent a significant portion of total assets. Some of the objectives of the securities portfolio are to: (1) provide the maximum yield on investments while maintaining quality in the portfolio; (2) provide a source of liquidity as protection against possible runoff of deposits or a sudden increase in loan demand; (3) fulfill pledging requirements for public deposits, trusts, and borrowings; (4) help manage interest rate risk; and (5) diversify asset risks and income sources.

[18]A bank’s composite rating generally bears a close relationship to its component ratings. However, the composite rating is not derived by averaging the component ratings. Each component rating is based on a qualitative analysis of the factors composing that component and its interrelationship with other components. When assigning a composite rating, some components may be given more weight than others depending on the situation at an institution.

- Management
    - Management includes the board of directors and executive or senior officers. The board of directors is elected by the shareholders and has ultimate responsibility for the bank. Executive officers are appointed by the board of directors and involved in the policy-making functions of the bank and its day-to-day operations.
    - The capability of the board of directors and management to conduct the affairs of the bank with candor, personal honesty, and integrity, coupled with their establishment of a strong risk management framework is the most important component to the success of the institution.

- Earnings
    - Earnings represent a bank's first line of defense against capital depletion. The continued viability of a bank depends on its ability to earn a reasonable return on its assets and capital.
    - Earnings serve to absorb losses, augment capital, and provide the shareholders with a reasonable return on their investment.

- Liquidity and Funds Management
    - Liquidity is the measure of cash, liquid assets, and access to borrowing lines that a bank has available to quickly meet short-term business and financial obligations. Primary liquidity reserves include cash and balances due from depository institutions (cash held at other banks). Secondary liquidity reserves include short-term, readily marketable, unpledged securities and other negotiable instruments that can be converted into cash at little risk of loss.
    - Funds management is one core component of sound liquidity planning and management. This involves managing assets and liabilities and off-balance sheet instruments to maximize and maintain the spread between interest earned and interest paid while ensuring the ability to pay liabilities and fund asset growth.

- Sensitivity to Market Risk
    - Sensitivity to market risk addresses the degree to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can adversely affect a financial institution's earnings or capital.
    - A bank must have the ability to identify, monitor, manage, and control its market risk, which typically relates to exposure to changes in interest rates.
    - Interest rate risk is the risk of reduction in, or loss of, capital and earnings caused by adverse changes in market interest rates. The impact of interest rate risk on earnings

is significant because reduced earnings or losses affect the adequacy of a bank's liquidity and capital.

- Bank Secrecy Act
    - The Financial Recordkeeping and Reporting of Currency and Foreign Transactions Act of 1970[19] is commonly known as the Bank Secrecy Act (BSA).
    - The BSA was designed to help identify the source, volume, and movement of currency and other monetary instruments transported or transmitted into or out of the United States or deposited in financial institutions. The statute achieves this objective by requiring individuals, banks, and other financial institutions to file currency reports with the U.S. Department of the Treasury, properly identify persons conducting transactions, and maintain a paper trail by keeping appropriate records of financial transactions. These records enable law enforcement and regulatory agencies to pursue investigations of criminal, tax, and regulatory violations, if warranted, and provide evidence useful in prosecuting money laundering and other financial crimes.
    - BSA examinations focus on a bank's compliance with the BSA and may be performed at the same time as safety and soundness examinations.

- Information Technology (IT)
    - IT examinations evaluate management and oversight of IT activities, compliance with the Gramm-Leach-Bliley Act (GLBA) including on financial privacy,[20] adequacy of the Vendor Management Program, adequacy of the scope and quality of a bank's internal audit of IT activities, review of cybersecurity policies, and enterprise-wide contingency planning.

5. Bank examinations

Banks regulated by the DFPI are examined for their safety and soundness at regular intervals. California Financial Code section 500 establishes the Department's authority to examine licensees. Each bank must be examined on-site at least once every 12 or 18

[19] 31 U.S.C. §§ 5311 - 5336.

[20] The GLBA, also known as the Financial Services Modernization Act of 1999, is a federal act that, among other things, includes a financial privacy rule that governs the collection and disclosure of a customer's personal financial information. (Financial Services Modernization Act of 1999, Pub. L. No. 106-102, 113 Stat. 1338 (1999)).

months depending on size, which mirrors the federal mandate for examination frequency.[21] In addition, the DFPI performs quarterly off-site monitoring, composed of reviewing call reports and the Uniform Bank Performance Report (UBPR), which include key financial data and ratios.

The purpose of periodic examinations is to determine the condition of a bank and to require that the bank's management take steps to correct weaknesses or unsafe and unsound conditions. With the findings from the field examination, the Department can determine whether the bank is operating in a safe and sound manner, prescribe necessary corrective actions, and formulate specific supervisory actions for the bank, if needed. The findings and recommendations of state and federal regulators are communicated to the bank's board of directors and senior management and then summarized in a confidential[22] Report of Examination (ROE) issued to the bank.[23]

6. Collaboration between federal and state regulators

The Department performs bank examinations independently and with federal regulatory agencies: primarily the FDIC and Federal Reserve. The examinations conducted with the FDIC and Federal Reserve involve each agency sharing in the completion of examination functions, including scoping, prepping, exam management and execution, vetting, and report writing.

State chartered banks with total assets of less than $10 billion and a composite CAMELS

[21]Certain small banks that meet specified criteria are only examined at least once every 18 months. (Cal. Fin. Code § 500(a)(4); 12 U.S.C. § 1820(d)(4)). As part of the issuance of a new charter, banks are generally examined in each of the first three years of operation.

[22]Cal. Fin. Code § 159.

[23]The Federal Reserve communicates recommendations using the terms Matters Requiring Attention (MRA) and Matters Requiring Immediate Attention (MRIA). MRAs are "a call for action to address weaknesses that could lead to deterioration in a banking organization's soundness." MRIAs are "a call for more immediate action to address acute or protracted weaknesses that could lead to further deterioration in a banking organization's soundness, may result in harm to consumers, or have caused, or could lead to, noncompliance with laws and regulations." Both MRAs and MRIAs are confidential and not publicly issued. (Federal Reserve Supervision and Regulation Report - November 2019, Board of Governors of the Federal Reserve System (June 21, 2022)).

rating of 1 (Strong) or 2 (Satisfactory) are examined independently on an alternating basis by their state or primary federal regulator.[24] This is referred to as an Alternating Examination Program (AEP). In other words, if the DFPI examines a bank in this category independently one year, the primary federal regulator will examine the bank independently the next year. The DFPI and federal regulator share their examination findings and reports with each other. Under the Alternating Examination Program, when it is the DFPI's turn to examine a bank independently, the DFPI will issue an independent report and share it with the federal regulator. The federal regulator will accept the report and not issue its own report for that examination cycle.

Banks with a composite CAMELS rating of 3 (Less than Satisfactory), 4 (Deficient), or 5 (Critically Deficient) are generally examined jointly by federal and state regulators each year and are subject to a visitation at six-month intervals in addition to the annual examination. Such banks are also likely under orders requiring them to submit quarterly progress reports on their remediation efforts.

7. Large bank supervision

In California, banks with total assets of $10 billion or more are supervised under the Department's Large Bank Supervision Program in coordination with federal regulatory agencies. Out of the 99 banks the DFPI supervises,[25] 9 are over the $10 billion threshold.

The Federal Reserve Large and Foreign Banking Organization (LFBO) program oversees banks with total assets of $100 billion or more.[26] As a bank grows above the $100 billion threshold, it generally receives increasing federal regulatory scrutiny and high-level oversight by the Federal Reserve Board of Governors in Washington, DC.

Under the DFPI's Large Bank Supervision Program, an examination team led by a Dedicated Examiner-in-Charge, Asset Manager, and Operations Manager is typically assigned to each large bank and a unique supervisory plan is prepared to address the risk profile of the individual bank. Currently, the supervisory plan is prepared by the primary federal regulator

[24]The Department has agreements with the FDIC and Federal Reserve to participate in an Alternating Examination Program (AEP). The purpose of the AEP is to promote effective and efficient supervision that is collaborative, inclusive, and appropriately limits regulatory burden.

[25]Of the 99 banks the DFPI supervises, 96 are commercial banks and 3 are industrial banks.

[26]*Large Financial Institutions*, Board of Governors of the Federal Reserve System (Dec. 18, 2020).

with input from the Department, and the Department then coordinates with the primary federal regulator to execute the supervisory plan. Going forward, the Department will continue to develop large bank supervisory plans in coordination with federal regulators for all banks with assets of more than $10 billion, and it will increase focus on timelines for corrective actions and allocating banking staff examination hours based on the risks identified in these supervisory plans. (See section V.B.2.)

A common supervisory plan for a large bank will call for various risk-specific target examinations throughout the year, followed by a comprehensive cycle-ending "roll-up" examination in which examination findings are consolidated and composite CAMELS component ratings are assigned. However, the supervisory plan may be adjusted or modified at any time depending on early warning indicators or changes in a bank's financial condition.

The Department's Large Bank Supervision Program also incorporates off-site monitoring, including reviewing up-to-date financial data and ratios from bank licensees and monthly board packages, which bank management submits directly to the dedicated examination team. Board package submissions include board meeting minutes and various internal reports from management. The dedicated examination team also reviews quarterly call reports and the UBPR, which include key financial data and ratios. This allows the Department to monitor its largest and most complex banks closely and continuously.

8. Enforcement actions

The condition of a bank will determine whether and what type of enforcement action is necessary to ensure the correction of any deficiencies identified in an examination or visitation.[27]

Enforcement actions may be taken independently or jointly with the primary federal regulator on a case-by-case basis, regardless of whether the examination was joint or independent.

Enforcement actions fall into two categories—informal and formal. Informal actions include board resolutions and memoranda of understanding. Formal actions include cease and desist orders and written agreements.

[27]Cal. Fin. Code § 580.

Generally, a bank with a CAMELS composite rating of 3, 4, or 5 is operating under some type of informal or formal enforcement action.

a. Informal enforcement actions

Informal actions are appropriate when regulators have identified deficiencies, but they have also determined that the licensee's executive management and board are committed to and capable of effecting correction with some direction but without the initiation of a formal corrective action. Informal actions are not publicly disclosed.

A board resolution is an informal commitment adopted by a licensee's board (often at the request of the Department) directing the licensee's personnel to take corrective action regarding specific noted deficiencies. A memorandum of understanding (MOU) is an informal agreement between a licensee and the Department, which is signed by both parties. The appropriate federal regulator may also be a party to the agreement.

b. Formal enforcement actions

Formal actions include cease and desist orders and written agreements. Both are legally enforceable[28] and are publicly disclosed.

An order is issued by the Department pursuant to statutory authority, typically under California Financial Code section 580, by which a licensee is directed to take affirmative actions to correct identified deficiencies. Issuance of an order under section 580 requires notice and a right to a hearing. However, the order is usually negotiated between the Department and the licensee, and the licensee will typically waive notice and the right to a hearing and consent to the order.

An agreement is a voluntary arrangement between the Department and a licensee that is intended to accomplish the same ends as an order without the requirement of a hearing right.[29] An agreement may be used in situations where an order would generally be required,

[28]*See generally* Cal. Fin. Code §§ 329, 580 (referencing ability to enforce written agreements between the Commissioner and licensees).

[29]Unlike an MOU, a voluntary agreement is a formal action, and failure to comply with such an agreement can subject a licensee to immediate further enforcement action, such as penalties under California Financial Code section 329, subdivision (b) or additional extreme regulatory action, such as closure. In contrast, failure to comply with an MOU will generally result in a formal action being issued.

but for various reasons, an agreement is acceptable. The benefit of an agreement for a licensee is that the licensee takes voluntary action in a situation where an order could be issued. An agreement does not preclude the Department from subsequently issuing an order directing remediation of the same deficiencies covered by the agreement if the Department determines that the agreement is not proving to be effective corrective action.

In general, a formal action will be issued if the Department determines an MOU is insufficient given the severity of the deficiencies, or the Department has determined that the licensee's management and board are not committed to or capable of effective corrective action without clear direction from the Department.

A bank's composite CAMELS rating is not the only factor the Department considers when determining whether to issue a formal action. If the Department finds any of the factors listed in California Financial Code section 580, such as unsafe or unsound condition, violation of applicable laws or regulations, or noncompliance with prior agreements, the Department can issue a formal action or order.

The Department monitors the bank's compliance with the actions, and the bank is required to submit progress reports detailing its compliance efforts. The Department has broad enforcement authority to tailor actions to a bank's specific condition. For example, the Department can amend actions, issue new actions to supersede prior ones, issue multiple actions concurrently, or issue a formal action to replace an informal one if the circumstances warrant it.

Summary of DFPI's Supervision of Silicon Valley Bank

A. Background

Silicon Valley Bank was founded in 1983 in Santa Clara, California, and operated as a regional bank with branches primarily in California. SVB established itself as the provider of banking products and services to the technology industry, including venture-backed tech startups. SVB self-reported it provided banking services to roughly 44 percent of venture-backed tech and health care Initial Public Offerings (IPOs) in 2022 and 55 percent in 2021.[30] The institution grew rapidly in recent years, from $50 billion in total assets in 2017 to over $100 billion in 2020 to over $200 billion in 2021.

> Note: Silicon Valley Bank Financial Group (SVBFG) was the holding company of SVB until March 10, 2023. As the holding company, SVBFG owned a controlling share in SVB and exercised control over management and company policies but did not offer banking services or run the bank's day-to-day operations.

B. Overview

As the chartering regulator of SVB, the DFPI worked with the FRBSF to examine the bank as a part of the state's Large Bank Supervision Program.

1. Growth of SVB's assets and deposits

Beginning in 2020, SVB and SVBFG experienced significant growth, primarily driven by increased deposit inflows from a rise in venture capital funding of companies in the technology industry, SVB's core customers. On June 30, 2021, SVBFG crossed the Regulation YY covered financial institution threshold, based on a four-quarter average of deposits, and therefore met the criteria for a Category IV firm.[31]

[30] *The Rise and Stunning Fall of Silicon Valley Bank*, Axios (Mar. 11, 2023).

[31] Regulation YY requires that entities with over $100 billion in deposits be subjected to higher prudential standards.

SVB's deposit growth continued in 2022. As of March 31, 2022, SVB's total deposits exceeded $200 billion, and SVB had reached $217 billion in total consolidated assets.[32]

Figure 1 below shows SVB's deposits and assets increases over time.[33]

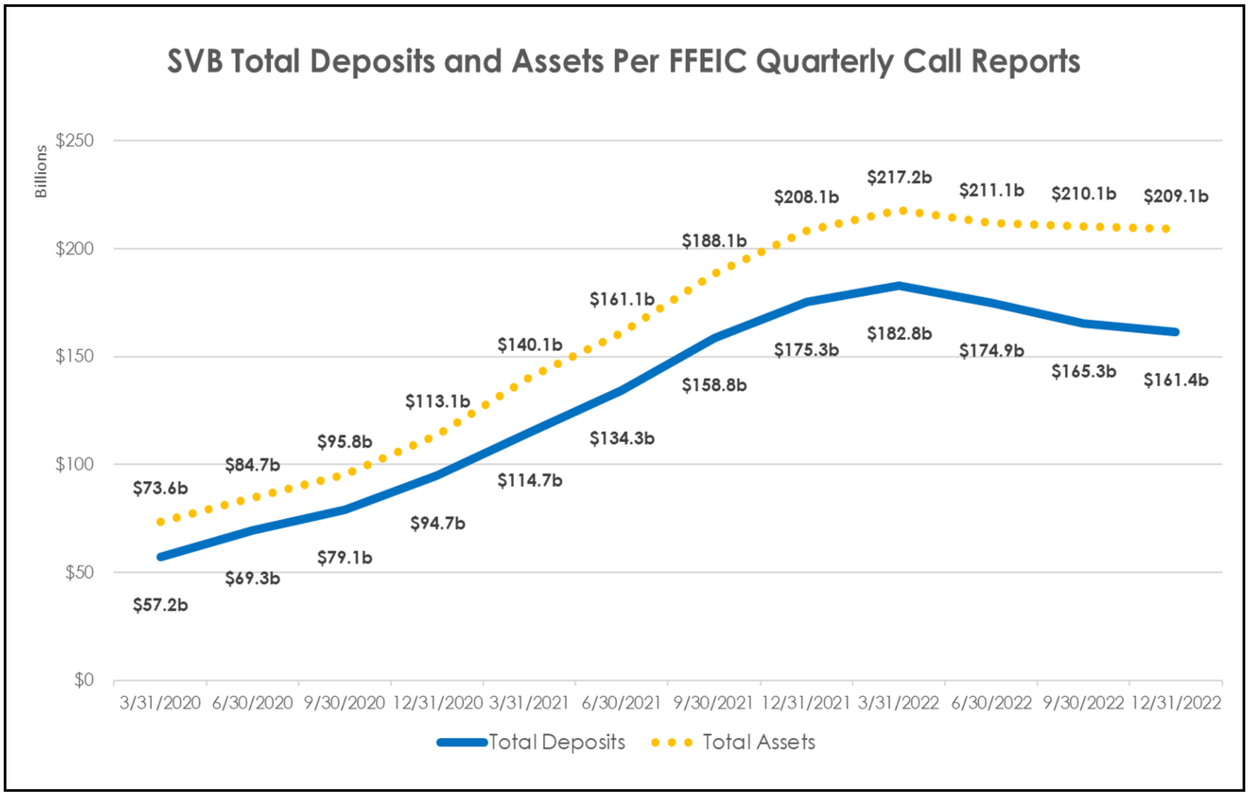

Figure 1: SVB's deposit and assets from March 31, 2020, to December 31, 2022

2. SVB's merger with Boston Private Bank & Trust in 2021

In addition to SVB's growth in deposits, the bank also grew with the merger of Boston Private Bank & Trust Company (Boston Private), a Massachusetts state-chartered bank. SVB

[32]Per the Federal Financial Institutions Examination Council (FFIEC) call report, as of March 31, 2022, balance sheet assets totaled $217,804,000,000 ($217 billion).

[33]Data were obtained from publicly available FFIEC quarterly call reports, under Schedule RC—Balance Sheet. Data for total deposits: see line 13a—Deposits in domestic offices. Data for total Assets: see line 12—Total assets.

was a wholly-owned subsidiary of SVBFG. Boston Private was a wholly owned subsidiary of Boston Private Financial Holdings, Inc. Both banks were members of the Federal Reserve. Thus, SVB needed approval from both the Federal Reserve and the DFPI to complete the merger.

On February 23, 2021, SVB applied for approval from the Federal Reserve and the DFPI. The DFPI reviewed the merger to determine if it met the standards for approval specified in California Financial Code section 4885. To approve, the DFPI must find that the merger will not result in a monopoly or substantially lessen competition within the state, that the shareholders' equity of the surviving bank will be adequate, that the financial condition and directors and executive officers of the surviving bank will be satisfactory, that the surviving bank affords a reasonable promise of successful operation and will be operated in a safe and sound manner, and that the merger will be fair, just, and equitable and in compliance with applicable laws.

Balance sheets submitted with the merger application indicate that Boston Private's total asset size prior to the merger was approximately $10 billion and that SVB's asset size was $113.8 billion. Thus, the merger with Boston resulted in an approximately nine percent increase in SVB's total assets.

While SVB had outstanding Matters Requiring Immediate Attention (MRIAs) and Matters Requiring Attention (MRAs) at the time of the merger application, these issues were primarily related to IT, lending controls, internal credit review, and enterprise risk management controls monitoring. These concerns did not mandate a finding that the bank would be unable to operate in a safe or sound manner, especially since the bank was actively working to address them. Thus, the Department applied the administrative standard and approved the merger.

3. SVB's high uninsured deposit ratio

In addition to SVB's deposit base being highly concentrated in the technology industry, SVB had a significant level of uninsured deposits. As of year-end 2022, SVB had $151.6 billion in uninsured deposits representing 93.8 percent of the bank's total deposits.[34] This was the highest ratio of uninsured deposits to total deposits of any U.S. bank with $50 billion or more in total assets as of December 31, 2022.[35]

Figure 2 shows SVB uninsured deposits levels compared to the five largest U.S. banks by assets size as of December 31, 2022. Figure 3 shows the uninsured deposits of the five largest California banks by assets size, including SVB, as of December 31, 2022.[36]

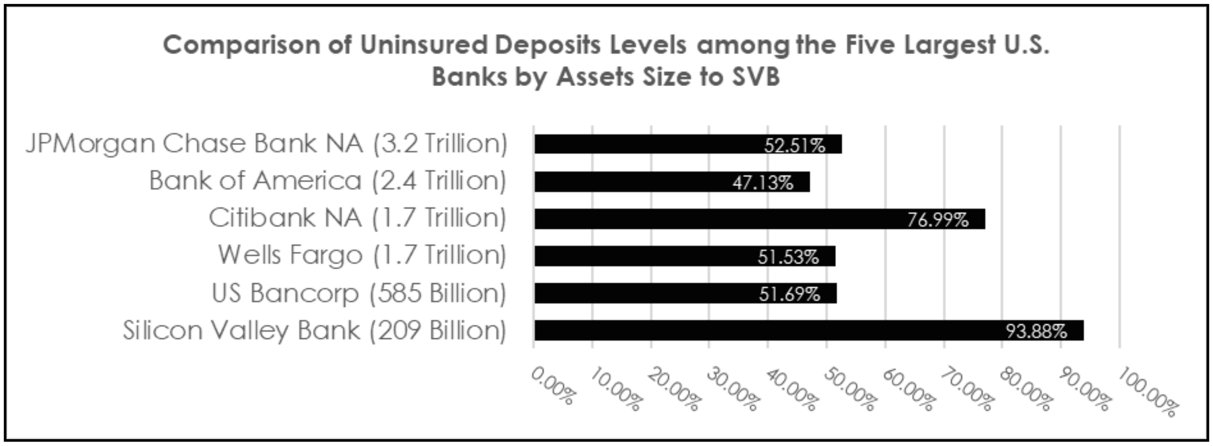

Figure 2: SVB uninsured deposits levels compared to the five largest U.S. banks by assets size as of December 31, 2022

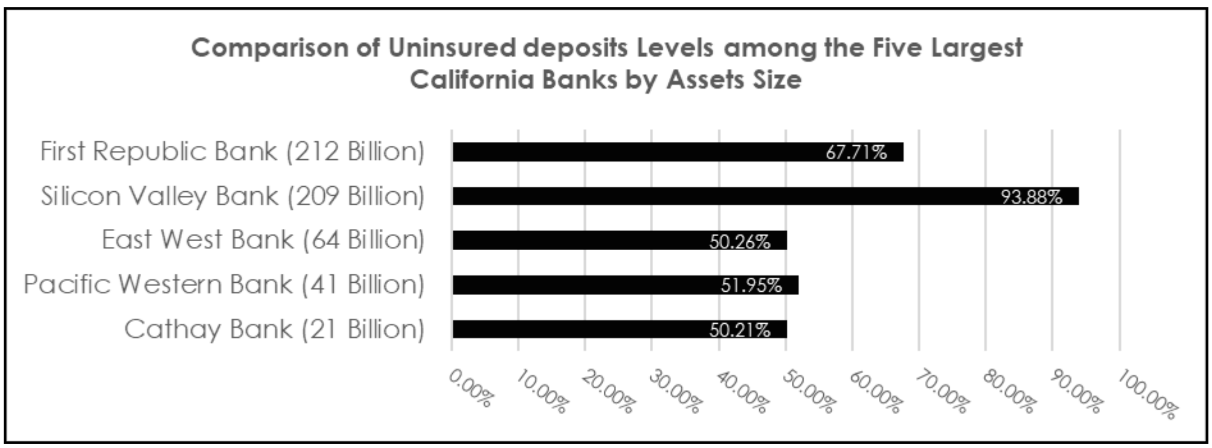

Figure 3: Uninsured deposits of the five largest California banks by assets size, including SVB, as of December 31, 2022.

[34]*SVB, Signature Racked up Some High Rates of Uninsured Deposits,* S&P Global Market Intelligence (Mar. 14, 2023).
[35]*Id.*
[36]Data were obtained from publicly available FFIEC quarterly call reports. Data for total deposits: see Schedule RC—Balance Sheet line 13a (Deposits in domestic offices). Data for total uninsured deposits: see Schedule RC-O—Other Data for Deposit Insurance and FICO Assessments line M.2. These are estimated amounts of uninsured deposits in domestic offices of the bank and in insured branches in Puerto Rico and U.S. territories and possessions, including related interest accrued and unpaid.

Historically, bank examiners have not viewed a high ratio of uninsured deposits to total deposits as a significant risk factor. In fact, historically, fully insured brokered deposits[37] have exhibited higher volatility[38] because these depositors tend to chase high yields and therefore have less loyalty to any bank. For this reason, federal regulators have published significant guidance about how banks should best manage the risks associated with brokered deposits.

One common source of uninsured deposits are large corporations and businesses that maintain balances over $250,000 in their operating accounts to cover payroll, collect money from vendors, and pay for day-to-day expenses. Moving operating accounts from one bank to another poses logistical challenges, which incentivizes businesses to stay with one bank for a long time. Given this is standard for business accounts, examiners would not ordinarily consider these deposits to be volatile even though they are uninsured. However, given that SVB's uninsured deposits were concentrated in one industry, they posed a heightened liquidity risk to the bank.

C. Examinations

The DFPI is responsible for conducting bank examinations to ensure that banks are operating in a safe and sound manner and are complying with applicable laws and regulations. These examinations are designed to assess a bank's financial condition, risk management practices, and compliance with regulatory requirements. From 2009 until its collapse in March 2023, SVB was examined jointly by the DFPI and the FRBSF.

Due to its asset size and complexity, SVB was examined on a continuous basis and monitored by the DFPI and the FRBSF examiners throughout the year.[39] The DFPI and the FRBSF had divided their responsibilities in such a way that oversight activities were led primarily by the FRBSF, with DFPI staff monitoring supervisory activities and collaborating with the FRBSF on discrete exams.

This section will provide an overview of SVB supervisory activities during the 2021 and 2022 supervisory cycles.

[37]Brokered deposits can be in any amount, i.e. under $250,000 and fully insured or over $250,000 with the portion above $250,000 being uninsured.

[38]Unsafe and Unsound Banking Practices: Brokered Deposits and Interest Rate Restrictions, 84 Fed. Reg. 2,366.

[39]The DFPI and the FRBSF monitored SVB under a continuous examination process after SVB transitioned to the FRBSF's Large and Foreign Banking Organizations (LFBOs) portfolio from the Regional Banking Organizations (RBOs) portfolio in February 2021.

1. The supervisory cycle and collaboration between FRBSF and DFPI

After SVB entered the Large and Foreign Banking Organization (LFBO) portfolio in February 2021, the FRBSF took the lead in examinations.

The FRBSF prepared supervisory plans with input from the Department, and the two regulators coordinated to execute the supervisory plans.

The regulators allocated staff based on the requirements of the supervisory plans and on their available resources. For the DFPI's part, a total of 12 DFPI examiners participated in supervising SVB, but only two were specifically dedicated to SVB. In contrast, the FRBSF had a team specifically dedicated to SVB that grew to approximately 20 examiners, with subject matter expertise examining large banks in excess of $100 billion in total assets.

During the 2022 examination cycle, the DFPI collaborated with the FRBSF on six of the 10 targeted examinations:[40] (1) Governance and Risk Management, (2) Bank Secrecy Act and Anti-Money Laundering Compliance, (3) CAMELS Roll-Up Examination, (4) Trust and Fiduciary Services, (5) Information Technology, and (6) Internal Audit.

The DFPI did not participate in the remaining four exams: (1) Model Risk Management ECM Review, (2) Third-Party Risk Management Horizontal Review, (3) LFBO Horizontal Cybersecurity Review (HCSR), and (4) LFBO Horizontal Capital Review (HCR).[41]

Table 2 below lists the examinations conducted in 2021 and 2022, including those in which the DFPI collaborated with the FRBSF.

[40]The 2022 supervisory cycle Asset Quality exam was incorporated in the CAMELS roll-up exam. Although it was not conducted separately as a target exam, the Asset Quality exam conducted covered the equivalent scope as a target exam.

[41]A horizontal review is an assessment that compares and evaluates the practices of multiple banks across the country, rather than focusing on a single institution. The purpose of a horizontal review is to identify common trends and risks by comparing information from a wide pool of institutions. Horizontal reviews require the comparison of confidential banking information from institutions across the country. The subjects and information used for horizontal reviews fall outside of the DFPI's jurisdiction, so the Department did not participate in the horizontal reviews of SVB. Although the DFPI did not participate in the exam work programs for three horizontal reviews, DFPI's DEIC and examiners attended meetings with SVB and the FRBSF and were kept apprised of the developments and findings.

Table 2: SVB's Examination History

Date	On-Site or Remote Supervisory Effort	DFPI's Role
4/26/2021	It Target Exam	The DFPI collaborated with federal regulators.
5/24/2021	Asset Quality Target Review	The DFPI collaborated with federal regulators.
7/26/2021	BSA/AML Target Exam	The DFPI collaborated with federal regulators.
8/16/2021	FRB Independent Liquidity Review	The DFPI did not participate this examination.
9/7/2021	FRB Independent Capital Review	The DFPI did not participate this examination.
10/2/2021	IT Target Exam	The DFPI collaborated with federal regulators.
3/14/2022	Governance and Risk Management Exam	The DFPI collaborated with federal regulators.
4/11/2022	BSA/AML and OFAC Exam	The DFPI collaborated with federal regulators.
4/25/2022	FRB Independent Horizontal Capital Review	The DFPI did not participate this examination.
6/13/2022	FRB Independent Horizontal Cyber Security	The DFPI did not participate this examination.
7/18/2022	FRB Independent Model Risk Management ECM Review	The DFPI did not participate this examination.
8/22/2022	FRB Independent Horizontal Third-Party Risk Management Review	The DFPI did not participate this examination.
8/22/2022	2022 CAMELS Rollup Exam and AQ review	The DFPI collaborated with federal regulators.
9/12/2022	Trust Target Exam	The DFPI collaborated with federal regulators.
9/12/2022	IT Target Exam	The DFPI collaborated with federal regulators.
10/3/2022	Asset Quality Target Internal Audit Target Exam	The DFPI collaborated with federal regulators.

2. The 2022 target exams in which DFPI participated

- Governance and Risk Management:

  The governance and risk management target exam focused on SVBFG's management effectiveness, board oversight, and risk management practices. The DFPI assisted with examining SVBFG's risk monitoring and reporting framework and provided support in drafting the conclusion memo.

- Bank Secrecy Act and Anti-Money Laundering (BSA/AML) Compliance:

  The DFPI assessed SVB's compliance with the Bank Secrecy Act and AML requirements, including its Bank Secrecy Act training program, governance and oversight, customer due diligence and risk rating, and Office of Foreign Assets Control (OFAC) risk. In addition, the DFPI provided support in drafting the conclusion memo.

- CAMELS Roll-Up Examination:

  The FRBSF was responsible for gathering the bulk of the information for the CAMELS Roll-Up Examination. In addition to handling the bulk of the specific CAMELS components, the FRBSF's routine continuous monitoring provided data key to the CAMELS roll-up examination and ratings. The DFPI only conducted an examination relating to SVB's asset quality, with a focus on its loan portfolio (credit risk management). Specifically, the DFPI examined the effectiveness of the Internal Credit Review (ICR) function, framework and governance, and the adequacy of Current Expected Credit Loss (CECL).[42] The DFPI did not assist with drafting the conclusion memo.

- Trust and Fiduciary Services:

  Trust and fiduciary services examinations typically involved reviewing compliance with relevant laws and regulations, earnings performance, management, operational controls, and faithful execution of a bank's trust and fiduciary functions.

  The DFPI examined SVB's internal controls, internal policy, and governing instruments. In addition, the DFPI provided support in drafting the conclusion memo.

[42]The 2022 supervisory cycle Asset Quality exam was incorporated in the CAMELS roll-up exam. Although it was not conducted separately as a target exam, the Asset Quality exam conducted covered the equivalent scope as a target exam.

- Information Technology:

  The DFPI evaluated SVB's IT systems, including SVB's information security management, risks associated with development and maintenance activities, and cybersecurity. The DPFI assisted with drafting the conclusion memo.

- Internal Audit:

  The DFPI assessed the effectiveness of SVB's Internal Audit execution but did not assist with drafting the conclusion memo.

3. DFPI Staffing

Beginning in March 2020, on-site examination functions were performed virtually due to the COVID-19 pandemic. This was a shift from prior to 2020, when DFPI staff examined the bank on-site during parts of the year. However, review of digital information was standard even before the pandemic. The DFPI and the FRBSF had been reviewing digital versions of SVB's documents for several years leading up to the pandemic. While this review was previously conducted on-site, all examination tasks could be performed virtually, and many tasks could be performed more efficiently and with equal thoroughness using filing sharing and virtual meeting platforms.

For the 2022 supervisory cycle, the DFPI allocated 3,066 hours to examining SVB and participated in six targeted examinations with the FRBSF, compared to 2,434 hours for the 2021 cycle and 1,750 hours for the pandemic-impacted 2020 cycle.[43] The DFPI examination team for SVB included one Dedicated Examiner-in-Charge (DEIC) assigned exclusively to SVB and one Asset Manager (AM). Twelve additional DFPI examiners were assigned to examine SVB at various times during the 2022 supervisory cycle, focusing on risk areas as needed and rotating through other non-SVB assignments as well.

The Dedicated Examiner-in-Charge oversaw the DFPI's supervision of SVB. While the Dedicated Examiner-in-Charge's responsibilities typically include developing the examination plan, assigning work to examiners, and communicating with bank

[43]A target exam is a full-scope exam on specific areas identified by the examiners. Typically, a target exam includes an entry letter, scope memorandum, and a conclusion memorandum with output supervision. It is a point-in-time assessment with a predefined exam scope and not an on-going process.

management and federal counterparts, the Dedicated Examiner-in-Charge assigned to SVB did not develop the examination plan. Instead, the Dedicated Examiner-in-Charge reviewed the examination plan developed by the FRBSF and provided feedback given the FRBSF's expertise and resource available.

Asset Managers are responsible for loan review, loan scoping, review of concentrations in credit (e.g., large loan concentration in a particular industry)[44] and review of the allowance for loan and lease losses. Typically, Asset Managers are focused on examinations related to asset quality.

Although an Operations Manager is typically assigned to examine large banks, an Operations Manager was not assigned to SVB because the DFPI did not initially anticipate needing one due to additional federal staff that had been assigned. From late 2021 through 2022, the Dedicated Examiner-in-Charge highlighted the need for additional resources to review SVB materials adequately, but examiners with the necessary experience and skill sets were already assigned to key roles in other bank examinations, which delayed the allocation of additional staff.[45]

[44]According to internal documents provided by SVB, as of December 31, 2022, SVB's total loan balances were approximately $74.4 billion, with approximately $28.1 billion, or 37.7% of the total loan balances, allocated towards technology-related loans. Out of the $28.1 billion amount, $10.7 billion was attributed to VC loans, which primarily served technologies companies. The remaining $17.4 billion was targeted towards SVB's preferred market for direct loans, which represents the demographic SVB was most interested in serving within the tech industry. Out of the $17.4 billion, $10.2 billion was allocated towards software applications development, $3.8 billion towards life sciences, and $1 billion towards hardware development, while the rest primarily supported energy efficiency businesses.

[45]Toward the end of 2021, the DEIC and the DFPI Financial Institution Manager assigned to SVB elevated the need to divert resources to SVB due to its complexity and large asset size. These discussions did not result in assigning additional staff or an Operations Manager being allocated to the DFPI exam team, as the DFPI determined that the FRBSF had already brought in more examiners and covered the reviews typically assigned to an Operations Manager. However, by early 2022, the Dedicated Examiner-in-Charge reported that, based upon the volume of SVB examination materials being generated, an Operations Manager continued to be needed. Management in DFPI's Banking Program agreed to begin the process of assigning an Operations Manager but competing staff demands, turnover, and employee development delayed the assignment. During a third quarter staff meeting in August 2022, the Dedicated Examiner-in-Charge again reported the inability to review the materials from SVB examinations and the need for additional resources. As noted in the text above, the DFPI allocated additional staff hours and planned to assign an additional full-time examiner prior to the collapse of SVB.

The need for additional oversight resulted in the DFPI Banking Division revisiting the allocation of hours for large institutions.

In August 2022, the banking team planned to increase the allotted examination hours for SVB to 6,000 for the 2023 examination cycle. The plan included assigning an additional full-time examiner to SVB's supervision. Staff would likely not have been available until mid-2023, and therefore, no additional staff were added to the team before SVB's collapse.

D. Supervisory response related to key risks

The DFPI and the FRBSF communicated deficiencies and weaknesses identified by bank examiners to SVB's executive management or its board through various channels. In general, SVB's board of directors and senior management were informed of examination findings and recommendations through joint exit meetings and supervisory letters that included Matters Requiring Attention (MRAs) and Matters Requiring Immediate Attention (MRIAs).[46]

Supervisory letters that identify MRIAs or MRAs require a written management response within a specified timeframe, usually 30 days. These responses from management typically include Management Action Plans (MAPs) outlining timeframes for remediation, steps to be taken, and responsible people charged with the plan's execution. Progress on MAPs is followed up on through interim reporting or at the next target review or examination.

During the 2021 and 2022 supervisory cycles, SVB received 16 supervisory letters, with five independently issued by the FRBSF. All others were jointly issued with the DFPI.

Additionally, the DFPI and the FRBSF worked with SVB executives, including SVB's Chief Financial Officer, to address issues during periodic conference calls. These periodic check-ins enabled bank examiners and SVB staff to synchronize and address any questions or concerns.

[46]Typically, the findings and recommendations are communicated to the bank's board of directors and senior management and then summarized in a Report of Examination (ROE) that is issued to the bank. For the 2021 supervisory cycle, the DFPI and the FRBSF issued a supervisory letter dated August 17, 2022, in lieu of a ROE, because it was combined with the holding company Report of Inspection (ROI) containing LFI ratings. For the 2022 supervisory cycle, a combined ROE and ROI was scheduled to be released in Q1 2023 in the form of a supervisory letter to reduce redundancy. The supervisory letter for the 2022 supervisory cycle was not issued before SVB's collapse.

Table 3 presents the findings related to corporate governance and enterprise risk management, liquidity risk management and positions, and interest rate risk. The discussions of these findings are elaborated on sections 4 through 7.

Table 3: Supervisory Actions

Section 4: Corporate governance and enterprise risk management supervisory letter (May 31, 2022)	
Matters Requiring Immediate Attention (MRIAs)	
MRIA #1	SVB's board effectiveness did not meet supervisory expectations because it failed to hold senior management accountable for executing a sound risk management program.
MRIA #2	SVB's risk management framework did not provide appropriate mechanisms to operate a fully integrated risk management program which impeded management's ability to identify emerging risks.
MRIA #3	SVB's internal audit department failed to establish sufficient methodology and programs to challenge management, provide the audit committee with adequate or timely reporting, or ensure timely analysis of critical risk management functions.
Section 5: Liquidity risk management supervisory letter (November 2, 2021)	
Matters Requiring Immediate Attention	
MRIA #1	FRBSF examiners identified weakness from SVBFG's liquidity risk management project plan.
MRIA #2	SVBFG lacked effective independent review oversight of its liquidity risk management framework.
Matters Requiring Attention (MRAs)	
MRA #1	SVB's internal liquidity stress test did not adequately address market and idiosyncratic risks.
MRA #2	SVB's deposit segmentation input failed to provide sufficient granularity to differentiate client outflows and depositor behavior during stress.
MRA #3	SVB's point-in-time metrics did not adequately account for specific liquidity risks.
MRA #4	FRBSF examiners identified three deficiencies with SVB's contingency funding plan, including: • A lack of quantitative evaluations of funding needs and capacity during a stress-event. • Failure to identify available funding amounts. • SVB's early warning indicators did not include metrics towards private equity and venture capital clients.
Section 6: SVB's liquidity position	
FRBSF examiners found that SVB's liquidity positions were considered adequate in Q1 2023, but modeling forecast showed potential issues at the three-months mark. SVB had sufficient liquidity to handle a $16 billion single day outflow.	
Section 7: Interest rate risk supervisory letter (November 15, 2022)	
Matters Requiring Attention	
MRA #1	SVB's interest rate risk (IRR) simulations were not reliable and required improvements.

1. Supervisory response related to corporate governance and enterprise risk management

The Federal Reserve uses the Large Financial Institutions (LFI) Rating System for examinations of bank holding companies with total consolidated assets of $100 billion or more.[47] While there are similarities in what is being assessed in the CAMELS Management component of a bank examination and the LFI Governance and Controls component of a bank holding company examination—essentially the ability of the board and management to identify, monitor, and control risk (i.e., risk management) and compliance with laws and regulations—the assignment of ratings is different. For the rating of CAMELS components, the delineating factor is the level and degree of problems and risk. If the bank's safety or soundness is in immediate threat, the Management component would typically be rated 4–Deficient.

In the LFI rating system, the ratings reflect how extensive the remediation needs to be. A "Conditionally Meets Expectations" rating for the Governance and Controls component means the remediation is not extensive, is not disruptive to operations, does not entail a major change in risk management and controls, and will not take a prolonged period to fix. A 1-Deficient rating means the fix is extensive and will take a prolonged period.

Due to the holding company's corporate structure, the FRBSF assigned LFI ratings to the holding company SVBFG, while CAMELS ratings were jointly assigned to its subsidiary SVB. During the 2022 supervisory cycle, the DFPI and the FRBSF conducted a joint Governance and Risk Management target examination of SVBFG that began March 14, 2022.[48]

As the exams conducted by the Federal Reserve to determine LFI ratings for a bank holding company can be used to feed into other ratings, such as CAMELS for subsidiary banks, the examination team leveraged the reviews of the bank holding company to revise its assessment of SVB's Management and Risk Management. This resulted in the findings being subsequently incorporated into the ratings of other areas, including the Management component of CAMELS for SVB, and the Governance and Controls component of the LFI rating system for SVBFG.

[47] *SR 19-3 / CA 19-2: Large Financial Institution (LFI) Rating System,* Board of Governors of the Federal Reserve System (Feb. 28, 2019).

[48] Regulators delayed the issuance of ratings for the 2021 supervisory cycle to evaluate the organization against more rigorous supervisory expectations imposed upon large banks designated as an LBFO.

The results of this examination contributed to the downgrade of the Management component of SVB's 2021 CAMELS rating from 2–Satisfactory to 3–Fair and the first LFI rating of Governance & Controls at the Holding Company level of 1-Deficient. At the time that SVB's Management rating was downgraded to 3–Fair, the DFPI and FRBSF did not perceive any imminent threats to the bank.

The Governance and Risk Management examination centered on SVBFG's board effectiveness and SVB's risk management program. To evaluate board effectiveness, the examiners reviewed SVB's board oversight and governance, which encompassed a review of the board's oversight and effectiveness in holding senior management accountable and maintenance of a capable board composition and governance structure. Additionally, the examiners reviewed risk oversight and governance across SVB's risk management program, which encompassed an evaluation of its risk monitoring and reporting and internal audit program to ensure that both the board and the risk management program were effective. The risk management framework that SVB was expected to follow was the industry standard of a "three lines of defense" framework.[49]

This examination concluded on April 8, 2022, and the DFPI and the FRBSF jointly communicated the supervisory findings to SVB through a supervisory letter on May 31, 2022. The assessment showed that SVB's governance and risk management practices were below supervisory expectations. The following MRIAs were issued and required to be completed by August 31, 2022:

- MRIA # 1 Board Effectiveness

  SVB's board did not meet supervisory expectations because it did not hold senior management accountable for executing a sound risk management program. The board lacked members with risk management experience commensurate with SVB's size. The board's lack of oversight was especially problematic with respect to second line internal audits and third line independent risk management as discussed in the following two MRIAs.

[49]Banking's three line of defense model is a risk management framework. The three lines include: First line: Management has the primary responsibility to own and manage risks associated with day-to-day operational activities. The first line also includes design, operation, and implementation of controls. Second line: The second-line function enables the identification of emerging risks in daily operation of the business through risk and compliance management. Third line: The third-line function provides objective and independent assurance, typically through internal audit. While the third line's key responsibility is to assess whether the first- and second-line functions are operating effectively, it is charged with reporting to the board and audit committee. (*Modernizing the Three Lines of Defense Model*, *Deloitte* (2020)).

- MRIA # 2 Risk Management Program

  SVB's risk management framework did not address foundational matters, was not comprehensive, and was not commensurate with SVB's size and complexity. Issues with the risk management framework caused an inconsistent approach to core risk management activities and inadequate risk reporting to management and the board. The risk management structure relied on non-board SVB executive business line committees. These executive committees were primarily focused on business and revenue issues. Ideally risk management decisions would be made by independent risk management committees, primarily focused on ensuring that risk management systems are operating effectively as opposed to a primary focus on business issues. These independent risk management committees provide a second line of defense with a primary focus on ensuring that risk is properly managed.

- MRIA # 3 Internal Audit

  SVB's internal audit was not effective at holding senior management accountable or providing sufficient information for the SVB's Audit Committee to fulfill its oversight responsibilities. In addition, SVB failed to subject known areas of weakness to the audit.

On August 17, 2022, the DFPI and the FRBSF issued a letter detailing supervisory ratings for the 2021 supervisory cycle. The letter was not issued until August due to the FRBSF transition of SVB from the Regional Banking Group to the LBFO group. Once entering this program, a new FRB team was installed and wanted to review more areas before issuing ratings.

The letter, among other topics, explained that SVB's failure to fully remediate its Governance and Control issues outlined in the May 31, 2022, supervisory letter was a major factor in SVB's first LFI Governance and Control rating being "deficient." The letter further explained that a Memorandum of Understanding (MOU) would be implemented to address the outstanding MRIAs regarding Board Effectiveness, SVB's Risk Management Program and SVB's Internal Audit Effectiveness. An MOU is a non-public action that bank regulators can take to obtain a commitment from the bank's board and senior management to correct for inadequacies by the bank.

On August 31, 2022, SVB provided a plan detailing the steps that it had taken to remediate the MRIAs that were first identified in the May 31, 2022, letter and that were reiterated in the August 17, 2022, letter.

On November 18, 2022, the FRBSF and the DFPI responded, noting that examiners recognized the changes SVB made, but they would be leaving the Board Effectiveness, Risk Management Program, and Internal Audit MRIAs open. Examiners left the MRIAs open because more time needed to pass for updated data to accrue, and such was necessary to evaluate the efficacy of SVB's remediation efforts.

A joint Internal Audit examination was conducted from October 3, 2022, to October 28, 2022. On December 27, 2022, the FRBSF and the DFPI sent a letter formalizing the results of the Internal Audit examination which rated SVB's internal audit processes as "not fully effective." Examiners found that the analysis driving the risk assessment was limited, lacking in transparency, and often informal. As part of SVB's internal audit processes, market risk, credit risk, and model risk were incorrectly designated as "not applicable" for SVB Capital[50] without further rationale or challenge. No new MRIA was issued, but the Internal Audit MRIA from the May 31, 2022, letter remained open to be addressed through continuous supervision.

2. Supervisory response related to liquidity risk management

The FRBSF took the lead role in the examination of issues regarding SVB's liquidity with a particular focus on Liquidity Risk Management.[51] On August 16, 2021, FRBSF examiners completed a liquidity target examination of SVBFG independent of the DFPI. The results were shared with the DFPI and, on November 2, 2021, the FRBSF issued a supervisory letter summarizing the findings of the August examination. As a result of the examination, SVB's liquidity risk management practices were deemed to be below supervisory expectations and the following MRIAs and MRAs were issued:

[50]SVB Capital is the venture capital and credit investing arm of SVB. (See *SVB Capital is Operating in the Ordinary Course*, SVB Capital (Apr. 27, 2023)).

[51]The 2021 and the 2022 Target liquidity exams focused on SVB's liquidity management. SVB's liquidity positions were examined independently by the FRBSF due to their expertise and resources available. A Horizontal Liquidity Review comparing SVB to other similar institutions was scheduled by the FRBSF to be conducted Q1 2023, but was not completed due to SVB's closure in March 2023.

- MRIA #1 Enhanced Liquidity Risk Management Project Plan

  Examiners noted that SVB "needs to enhance [its] Liquidity Risk Management project plan." Examiners directed SVB to "re-prioritize control frameworks such as Model Risk Management" after past de-prioritization, and "ensure it has appropriate data sources, while remediating weaknesses related to the [Contingency Fund Planning]."

  - Examiners also noted that the SVB's "governance and controls workstreams need to be clearly linked to liquidity risk management."

  - Examiners directed SVB to enhance its project plan and gap assessment for liquidity risk management by December 31, 2021, by updating the plan to address supervisory concerns in the letter and to ensure sufficient staffing and resources were allocated to execute the plan on established timelines.

- MRIA #2 Oversight and Challenge

  Examiners noted that SVBFG, the holding company for SVB, "lacks effective independent review oversight and challenge of its liquidity risk management framework." Importantly, examiners noted that "[with] the significant recent deposit inflows, concentrated in uninsured deposits, SVBFG's liquidity risk profile continues to evolve. The level of oversight by the independent review functions, however, have not kept pace."

  - Examiners identified multiple instances in which SVBFG's second-line financial and model risk management teams failed to challenge problematic approaches by SVB.

  - Examiners said that the consequence of these deficiencies were "undetected shortcomings in SVBFG's Internal Liquidity Stress Testing (ILST), limits framework and contingency funding planning." Examiners directed SVBFG to "immediately establish an effective process for reviewing and challenging liquidity risk management practices" by March 31, 2021.

- MRA #1 Internal Liquidity Stress Testing Design

  Examiners found that "scenario design elements in ILST do not adequately address both market and idiosyncratic risks." Specifically, examiners raised concerns that SVB's risk model incorporated assumptions based upon "incomparable peer benchmarks," noting specifically that "SVBFG's historical analysis was based off other banks largely with a retail deposit base subject to FDIC insurance coverage, while SVBFG's deposit base is largely commercial deposits without FDIC insurance coverage."

Examiners also stated that "scenario design contains assumptions tailored to capital stress testing rather than the more immediate impact of a liquidity stress." Examiners stated that the risk with SVB's flawed assumptions was that it might cause SVB to have an insufficient liquidity buffer. SVB was given until June 30, 2022, to enhance its ILST scenario design and directed that the design should be subject to review and challenge "by an independent function."

- MRA #2 Deposit Segmentation

  Examiners found that the deposit segmentation input assumptions used for SVB's models did "not have sufficient granularity to differentiate client outflows during stress." In other words, the data about deposit makeup that SVB used in its liquidity testing was insufficiently granular, leading SVB to assume all depositors will behave similarly under stress.

  Examiners noted that assuming all deposits will behave "similarly is unrealistic and potentially understates outflows under stress," and that these flawed assumptions could lead SVB to have an insufficient liquidity buffer. SVB was given until June 30, 2022, to enhance the deposit segmentation inputs for its stress testing model.

- MRA #3 Liquidity Limits Framework

  SVB's point-in-time metrics did not account for the firm's specific liquidity risks or how they would absorb losses under stressful conditions. The business side of the firm was able to draw from funds to a degree that is not linked to SVB's overall liquidity risk appetite.

  By June 30, 2022, SVB was required to develop a comprehensive liquidity and monitoring framework to better anticipate demands on available liquidity sources in stress.

- MRA #4 Contingency Funding Plan (CFP)
  - Examiners noted three deficiencies with SVB's CFP:
    - The plans did not include a quantitative evaluation of expected funding needs and funding capacity during a stress event and lacked realistic assessments of how funds providers would behave under stress.

    - SVB identified contingent funding sources but did not identify available amounts based upon active contracts or internal firm limits. This led to unrealistic assumptions about funding capacity. For example, funding sources such as brokered CDs and discount window access were not tested, and SVB assumed more funding capacity than available for some of the tested sources.

    - SVB's "Early Warning Indicators" (EWIs) were not tailored to its liquidity risk profile. Examiners noted that SVB's EWIs "do not have any specific metrics oriented towards private equity and venture capital despite the firm's business model centered on these types of clients."

- Examiners noted that "ineffective CFP negatively affects management's ability to assess whether the firm is under liquidity stress, what funding is available in varying levels of stress, and its ability to respond quickly to a real stress event." Examiners directed SVB to make improvements to its CFP by June 30, 2022. As remedial measures, examiners directed SVB to:

    - Include a quantitative projection and evaluation of expected funding needs and capacity under stress.

    - Accurately identify and test alternative sources of liquidity to ensure access to contingent funding sources.

    - Enhance the Contingency Funding Plan by tailoring their Early Warning Indicators to include metrics oriented toward private equity and venture capital.

On December 1, 2021, SVB responded to the November 2, 2021, supervisory letter and provided a Management Action Plan. SVB took numerous steps to address MRIA #1. Actions taken included hiring consulting firm Ernst and Young to provide an independent risk management assessment and hiring a new head of liquidity risk management.

On December 29, 2021, SVB submitted a follow-up letter to demonstrate that it believed its actions satisfied the requirements to update its project plan and gap assessment and ensure sufficient staffing and resources were allocated to execute the plan by the December 31, 2021, due date. While a new plan and staffing were in place, MRIA #1 would remain open until regulators could determine whether the plan and the staffing were effective. The risk management plans and the staffing to implement them required testing over a longer period of time to identify their response to changes in the market.

On March 31, 2022, SVB requested and was granted an extension to October 31, 2022, to fully remediate MRIA #2. According to a May 4, 2022, letter from the FRBSF to SVB, the FRBSF did not object to the extension, partly due to SVB's management taking prompt action and submitting materials that showed progress towards remediation.

On August 17, 2022, the DFPI and the FRBSF issued a letter detailing supervisory ratings for the 2021 examination period. The letter, among other topics, addressed SVB's failure to fully remediate the liquidity issues, stating that SVB's liquidity was assessed as "conditionally meets expectations" due in part to the outstanding November 2, 2021, MRIAs and MRAs. Furthermore, SVB was notified that an MOU would be initiated reflecting the outstanding Liquidity Target Examination MRIAs.

Through the continuous monitoring process, SVB kept the FRBSF and the DFPI apprised of its continued efforts to remediate the MRIAs and MRAs from November 1, 2021, and discussed in the August 12, 2022, letter. In internal discussions leading up to the 2022 CAMELS ratings, SVB's progress toward remediating the MRAs and MRIAs was described as "positive" by the FRBSF.

3. SVB's liquidity position

The 2021 Target liquidity exam focused on SVB's liquidity management. SVB's liquidity positions were examined independently by the FRBSF due to its expertise and available resources. Based on the information the FRBSF shared from its examinations, the DFPI assessed that SVB's liquidity positions were considered adequate and posed no short-term risk. A Horizontal Liquidity Review comparing SVB to other similar institutions was scheduled to be conducted Q1 2023 by the FRBSF but was not completed due to SVB's closure in March 2023.

In Q1 2023, SVB had sufficient liquidity to cover its short-term needs. However, SVB's modeling and forecasting showed potential issues at the three-month mark. This issue was identified by regulators through stress-testing requirements they had placed on SVB.

Although the data reviewed by the DFPI showed that the cash burn rate of SVB's depositors was more concerning in Q1 2023, SVB had ample liquidity to address its regular deposit outflows. Prior to its collapse, SVB had sufficient liquidity to handle a $16 billion single day outflow. Put in context, the largest short period outflow ever seen in a U.S. bank failure was Washington Mutual's collapse in 2008, which involved approximately $16.7 billion over 10 days.

Under typical liquidity stress testing scenarios, SVB's liquidity position would have enabled it to survive. However, on March 9, 2023, SVB experienced a $42 billion single day outflow and was unable to survive. One reason the failure of SVB was different from that of Washington Mutual is the differences in technological processes between then and now. In 2008, the utilization of mobile devices to withdraw funds from banking applications, social media, and work-based communication platforms had yet to materialize. The advance of that technology contributed to a digital bank run on SVB that could not have occurred in any prior era of banking.

4. Supervisory response related to interest rate risk

In November 2022, the FRBSF, which was in the lead due to its expertise in this area, alongside the DFPI found that SVB's Interest Rate Risk (IRR) simulations were not reliable and required improvements.[52] Specifically, earnings, changes in Net Interest Income (the difference between the income from interest-bearing assets and expenses from its interest-bearing liabilities), and Net Interest Margin (the difference between the Net Interest Income and outgoing interest payments to depositors) were inconsistent with SVB's projections and IRR simulations, calling into question the reliability of SVB's IRR modeling and the effectiveness of its risk management practice. SVB's model predicted that its assets would generate more earnings in a rising interest rate environment, which turned out to be the opposite of what occurred. The bank examiners observed that these unreliable results were caused by flawed assumptions in SVB's model.

In a supervisory letter dated November 15, 2022, the FRBSF and the DFPI issued an MRA to SVB regarding these deficiencies and required SVB to submit a written response within 45 calendar days. In addition, SVB was required to perform other specified actions related to IRR by June 30, 2023. These findings resulted in the DFPI and the FRBSF determining to issue a downgrade to the Sensitivity to Market Risk component of CAMELS to 3 -Less than Satisfactory from 2 - Satisfactory. The DFPI and the FRBSF planned to release the 2022 CAMELS ratings in Q1 2023 with the LFI ratings.[53]

[52]A bank must have the ability to identify, monitor, manage and control its market risk, which typically relates to exposures to changes in interest rates. Interest rate risk is the risk of reduction in, or loss of, capital and earnings caused by adverse changes in market interest rates. The impact of interest rate risk on earnings is significant because reduced earnings, or losses, have an impact on the adequacy of a bank's liquidity and capital. These safeguards are typically monitored in the safety and soundness exams in which bank examiners review a bank's risk assumptions, financial condition, operational controls, and compliance with banking regulations.

[53]CAMELS ratings for the 2022 supervisory cycle were never formally issued. The DFPI and the FRBSF planned to release the CAMELS ratings along with the LFI ratings in Q1 2023 to avoid redundancy, which did not occur, due to the demise of SVB.

On December 22, 2022, SVB submitted its response, which included a detailed Management Action Plan to remediate the identified IRR MRA. SVB recognized and accepted the regulators' assessment that its Interest Rate Risk simulations were not reliable and required improvements, as evidenced by inconsistencies noted between internal projections and actual results during periods of material interest rate changes.

Although SVB had begun to correct the IRR-related deficiencies by devising a series of key actions, deliverables, and milestones under its MAP, SVB did not complete them before its failure in March 2023.

5. Supervisory response related to other issues

In addition to the supervisory responses discussed above, the DFPI and the FRBSF jointly participated in supervisory activities relating to the Bank Secrecy Act and Anti-Money Laundering Compliance, Trust and Fiduciary Services, Credit Risk Management, and Information Technology. The examinations and supervisory letters related to these examinations likely did not play a direct or material role in SVB's failure.

6. SVB's removal of its Chief Risk Officer

SVB employed a Chief Risk Officer (CRO) for almost six years from 2017 to April 2022. The DFPI was notified in February 2022 that SVB intended to terminate the CRO's employment in April, but the Department was not informed that they remained at SVB in a transition role until October.

The DFPI does not know the circumstances that led to their termination or continued employment in a transition role. As discussed above, issues with risk management and the board's failure to hold senior management accountable for executing sound risk management plans were the basis for MRIAs, MRAs, and ratings downgrades. The DFPI and the FRBSF were kept apprised of SVB's progress on filling the position and, in the interim, SVB established an office of the CRO to perform the CRO function by committee. SVB's new CRO was hired in December 2022 and remained in that position until SVB's failure.

E. Actions preceding the run on SVB

On March 8, 2023, SVB issued a press release announcing that it sold $21 billion worth of securities at a $1.8 billion loss and the holding company planned to raise $2.25 billion by selling a mix of common and preferred stock.[54] Banks routinely monitor their investment portfolios and make adjustments, including sales of their investments, as needed. These adjustments are business decisions and determined by criteria established in a bank's internal policies.

As part of the examination function, the DFPI reviews the adequacy of the policies and the bank's adherence to its own policies. However, banks, including SVB, do not need prior approval to sell investments, absent a directive otherwise, such as an order, which was not the case for SVB. Similarly, SVB's holding company did not need DFPI approval for its proposed stock offering. Not only was that a business decision, but the California Banking Law regulates only the sale of securities offered by a bank itself, not the sale of securities by a holding company. State or federal securities laws govern sales by holding companies. In this instance, federal securities laws governed and SVB Financial Group (SVB's holding company) filed a Form 8-K with the Securities and Exchange Commission (SEC) on March 8, 2023, announcing the proposed public offering of common and preferred stock.[55]

The DFPI first became aware of the sale and the stock offering from SVB's public press release. The next day, March 9, 2023, SVB received withdrawal requests for approximately 25 percent of its total deposits. On March 10, 2023, the DFPI closed SVB.

1. Purchase of bonds and mortgage-backed securities

Senior officers and the board are responsible for the overall management of a bank's investment portfolio, and the purchase or sale of individual securities are considered business decisions.[56] During examinations, bank regulators evaluate the existing and potential risk associated with a bank's investment portfolio, including risks that may affect the value or marketability of investments, and the ability of management to identify and manage those risks. The DFPI and the FRBSF were not provided with, and were not required

[54]*SVB Press Release, SVB Financial Group Announces Proposed Offerings of Common Stock and Mandatory Convertible Preferred Stock*, SVB (Mar. 8, 2023).

[55]*SVB Financial Group Announces Proposed Offerings of Common Stock and Mandatory Convertible Preferred Stock*, U.S. SEC (last visited May 3, 2023).

[56]California Financial Code section 1510 limits the amount a bank can invest in the securities issued by a person to 15 percent of the sum of shareholders' equity, allowance for loan and lease losses, capital notes and debentures of a bank. However, this restriction does not apply to investments in U.S. government and U.S. agency bonds and obligations such as those purchased by SVB.

to be provided with, specific data showing the securities purchased by SVB and when the securities were purchased. The graph below was compiled using data obtained by the DFPI staff in their efforts to evaluate the events that led to SVB's failure.

Figure 4 below illustrates the total amount of bonds purchased by SVB against the federal funds rates. The data suggests that most of the U.S. Treasury bonds and Agency mortgage-backed securities were purchased during a period of low federal funds rates.[57]

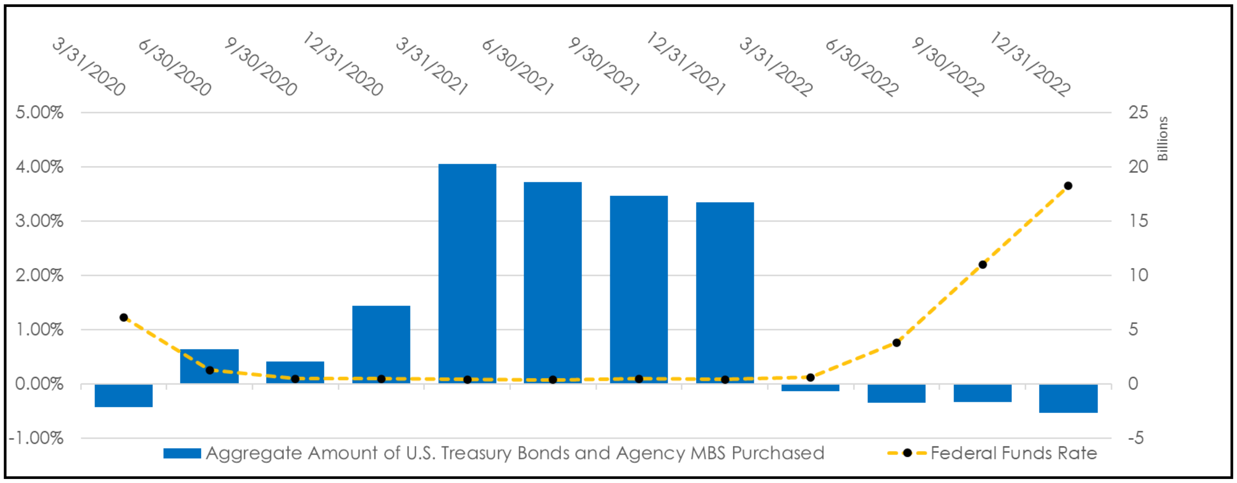

Figure 4: SVB's U.S. Treasury and Agency Mortgage Back Securities Growth from 2019 to 2022

2. Sale of hedges

DFPI bank examiners did not review the sale of the interest rate hedges for the Available for Sale Securities (AFS) securities. In preparing this review, the DFPI was unable to pinpoint the date that SVB's AFS hedges were purchased and sold.

For the 2022 supervisory cycle, the FRBSF was responsible for the evaluation of SVB's hedging activities due to its expertise in reviewing market risk and conditions. SVB's hedging activities were evaluated under the "Sensitivity to Market Risk" component of CAMELS.

[57]The DFPI conducted an analysis of SVB's securities growth with a focus of its AFS portfolio as a retrospective effort. Figure 4 displays a graph showing the net securities purchase from March 2020 to December 2022. The bar in the graph represents an aggregate of three types of securities, including U.S. Treasury bonds, pass-through Residential Mortgage-Backed Securities (RMBS), and other Commercial Mortgage-Backed Securities (CMBS) issued or guaranteed by Government-Sponsored Enterprise (GSE) securities. The data were obtained from publicly available FFIEC quarterly call reports. The federal fund rates data used in the figure were obtained from the FDIC extranet application, "IRRSA."

In its April 28, 2023 report on SVB, the Federal Reserve noted: "In April 2022, SVBFG made counterintuitive modeling assumptions about the duration of deposits to address the limit breach rather than managing the actual risk."[58] Further, "over the same period, SVBFG also removed interest rate hedges that would have protected against rising interest rates."[59]

As discussed in the Federal Reserve's report:

- "In early 2022, at a time when rates were rising rapidly, SVBFG became increasingly concerned with decreasing [Net Interest Income (NNI)] if rates were to decrease, rather than with the impact of rates continuing to increase. This was based on observed yield curve inversion that could be an indication of an impending recession and a subsequent decrease in rates. The bank began positioning its balance sheet to protect NII against falling interest rates but not rising ones. SVBFG was very focused on NII and profits and the NII sensitivity metrics were showing that NII was exposed to falling rates. Rising rates were seen as an opportunity to take profits on hedges, and the bank began a strategy to remove hedges in March 2022, which were designed to protect NII in rising rate scenarios but also would have served to constrain NII if rates were to decrease. Protecting profitability was the focus."[60]

- "This strategy of removing hedges extended the duration of the securities portfolio and caused the [Economic Value of Equity (EVE)] metric to worsen throughout 2022. . . . SVBFG was expecting the deposit duration lengthening[61] would be an offset to the increasing investment portfolio duration,[62] but this only provided temporary

[58] *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank*, Board of Governors of the Federal Reserve System 3 (Apr. 28, 2023).

[59] *Id*.

[60] *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank*, Board of Governors of the Federal Reserve System 63 (Apr. 28, 2023).

[61] "In April 2022, SVBFG made a poorly supported change in assumption to increase the duration of its deposits based on a deposit study conducted by a consultant and in-house analysis." (*Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank,* Board of Governors of the Federal Reserve System 63 (Apr. 28, 2023)).

[62] Duration is a measure of the sensitivity of the price of a bond or other debt instrument to a change in interest rates. In general, the higher the duration, the more a bond's price will drop as interest rates rise (and the greater the interest rate risk). (*Duration Definition and Its Use in Fixed Income Investing,* Investopedia (Apr. 6, 2023)).

relief from the EVE metric breaching limits. Instead, rates rose, investment portfolio duration lengthened, deposits shifted from non-interest bearing to interest bearing, and liability duration fell. This mismatch of durations on the asset and liability sides of the balance sheet caused the EVE metric to worsen and breach SVBFG's EVE limits once again. Importantly, there was no evidence that management made the full board aware that the EVE metric was breaching limits for years."[63]

3. Sale of bonds

SVB's securities portfolio was experiencing an increase in unrealized losses as the Federal Reserve increased the federal funds effective rate seven times in 2022. As SVB anticipated additional interest rate increases by the Federal Reserve, it aimed to cap its losses by selling bonds.[64] As noted above, SVB was not required to notify or seek the DFPI's approval for the bond sales.

In the third quarter of 2022, SVB's estimated unrealized losses within the AFS portfolio totaled $1.9 billion.[65] The DFPI and the FRBSF were aware of the amount of estimated unrealized loss in SVB's AFS portfolio and Held-to-Maturity (HTM) portfolios prior to SVB's collapse.[66]

SVB previewed to the FRBSF and the DFPI that it foresaw the need for some kind of balance sheet restructuring, but SVB did not say specifically when this would occur or how it would be implemented (e.g., through government bond sales, securities sales, or a capital raise).

[63] *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank*, Board of Governors of the Federal Reserve System 63-64 (Apr. 28, 2023).

[64] For context, when the federal funds rates increase, the value of existing bonds with lower rates decreases. This is because the rate on the existing bond is lower than the interest rate on newly issued bonds, and thus investors at current market are willing to pay less for the lower-interest bonds.

[65] *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank*, Board of Governors of the Federal Reserve System 89 (Apr. 28, 2023).

[66] A bank's securities portfolio should consist of assets that are classified into three categories, namely, held-to-maturity (HTM), available-for-sale (AFS), and held-for-trading. These categories determine the appropriate accounting treatment for each asset. A security is categorized as HTM when it is purchased with intent and ability to hold the security until maturity. A security is categorized as AFS if bank management intends to sell the security at some point during an indefinite future period.

The DFPI did not become aware of the bank's sale of bonds until SVB's press release on March 8, 2023. SVB was not required to inform or seek approval from regulators about the holding company's plan to raise capital.

As this sale was standard practice, examiners would likely have not objected if informed, but any capital raise would have been discussed extensively with the bank and reviewed by examiners in the next target examination. In other words, although the sale of securities and the holding company's plan to raise capital did not require regulatory approval from the DFPI, examiners would have thoroughly evaluated the securities sales and capital raise in the context of the bank's overall capital planning, asset-liability management, and risk management framework were it not for the bank's failure two days later.

4. Stock offering

SVBFG's plan to raise capital by selling stock was a permissible and ordinary activity that other banks' holding companies have often undertaken. Therefore, SVBFG was not required to notify or seek the DFPI's approval of its plan to raise $2.25 billion by selling a mix of common and preferred stock. The California Banking Law requires a bank organized under California law to apply for and obtain a stock permit prior to offering or selling its securities.[67] That law does not apply to a bank's holding company because other securities laws cover those transactions appropriately, and the Federal Reserve has supervisory authority over the activities of holding companies.

F. Run on SVB and role of digital technology

The run on deposits experienced by SVB on March 9, 2023, was an extraordinary event in which fears about SVB's solvency resulted in a large number of uninsured bank depositors unexpectedly withdrawing their funds over the course of approximately eight hours.[68] State and federal bank supervision is predicated on the assumption that depositors will not withdraw their deposits at the same time. However, within the span of eight hours on March 9, SVB received deposit withdrawal requests of approximately $42 billion,[69] which at the time, represented nearly 25 percent of SVB's approximately $166 billion in total deposits.

[67] Cal. Fin. Code § 1201.

[68] See *SVB, Signature Racked up Some High rates of Uninsured Deposits*, S&P Global Market Intelligence (Mar. 14, 2023) (93.8 percent of SVB's total deposits were uninsured as of the end of 2022).

[69] Approximately $36 billion was withdrawn with approximately $6 billion left in queue for processing when the bank was closed.

To put this into perspective, the largest U.S. bank run prior to SVB occurred during the 2008 financial crisis at Washington Mutual.[70] At the time, bank regulators considered a loss of around two percent of deposits in a day to represent a stress scenario.[71] At the peak of the bank run at Washington Mutual, it lost $2.8 billion in deposits in a single day, which is approximately 15 times smaller than the $42 billion withdrawn from SVB.[72]

While underlying factors inside the bank, including the high level of uninsured deposits largely concentrated in one industry, made SVB susceptible to a bank run, both social media and digital banking technology played a role in increasing the unprecedented volume and accelerating speed of the deposit outflows experienced by SVB.[73]

Following the bank's announcement on March 8, 2023, regarding its $1.8 billion loss on the sale of securities and the holding company's plan to raise capital, there was a surge in messages on social media as well as private message boards and apps about a bank run, with many of SVB's venture capital customers suggesting companies withdraw their deposits from SVB.[74]

Furthermore, digital banking advancements such as real-time self-service money management tools allowed the movement of funds at a faster speed than ever before.[75]

[70]See Johnathan D. Rose, *Old-Fashioned Deposit Runs*, Board of Governors of the Federal Reserve, 30 (Nov. 18, 2015) ($18.7 billion, representing 10.1 percent of deposits, flowed out of Washington Mutual over a 16 day period).

[71]*Id*.

[72]*Remarks by Vice Chairman Travis Hill at the Bipartisan Policy Center on the Recent Bank Failures and the Path Ahead*, FDIC (Apr. 12, 2023).

[73]See Anthony J. Cookson, Corbin Fox, Javier Gil-Bazo, Juan Felipe Imbet & Christopher Schiller, *Social Media as a Bank Run Catalyst*, SSRN (Apr. 18, 2023) (employing comprehensive Twitter data in the context of the SVB collapse to conclude that preexisting exposure to social media predicts bank stock market losses in the run period even after controlling for bank characteristics related to run risk (i.e., mark-to-market losses and uninsured deposits), and that social media amplifies these bank run risk factors). See also *Statement by Michael S. Barr, Vice Chair of Supervision, Board of Governors of the Federal Reserve System, Before the Committee on Banking, Housing, and Urban Affairs*, U.S. Senate 4 (Mar. 28, 2023); *Statement of Martin J. Gruenberg, Chairman of the Federal Deposit Insurance Corporation Before the Committee on Banking, Housing, and Urban Affairs*, U.S. Senate 6 (Mar. 28, 2023).

[74]*Regulators Blame Social Media for SVB's Rapid Collapse: "Complete Game Changer*," Yahoo Finance (Mar. 28, 2023); See also *Bank Runs Used to be Slow. The Digital Era Sped Them Up*, Associated Press (Mar. 15, 2023).

[75]*Regulators Blame Social Media for SVB's Rapid Collapse: "Complete Game Changer,"* Yahoo Finance (Mar. 28, 2023).

The first fully functional banking app was launched in 2011, years after the last financial crisis. Given that the largest liquidity failures of the last financial crisis took weeks[76] and SVB's liquidity failure occurred in one day, the DFPI believes that social media and digital banking technology pose new systemic risks to financial institutions.[77] As FDIC Chairman Martin Gruenberg testified to the Senate Committee on Banking, Housing, and Urban Affairs, "One clear takeaway from recent events is that heavy reliance on uninsured deposits creates liquidity risks that are extremely difficult to manage, particularly in today's environment where money can flow out of institutions with incredible speed in response to news amplified through social media channels."[78]

G. Closure of SVB

As deposit withdrawals accelerated from the morning into the afternoon of March 9, the DFPI Banking Program was notified by the bank of the run on deposits, likely funding shortfalls, and the potential inability to meet the demands of depositors. SVB's attempts to pledge collateral with either the Federal Home Loan Bank (FHLB) or the Federal Reserve in time to access additional lines of credit that day were unsuccessful. By the close of business, the bank had a negative cash balance of $958 million and was insolvent.

The DFPI coordinated with federal regulators throughout Thursday evening and into the night and early morning of the following day. At 8:39 a.m. Pacific Time on Friday, March 10, 2023, in coordination with the FDIC and the Federal Reserve, the DFPI took possession of SVB by issuing an Order Taking Possession of Property and Business pursuant to California Financial Code section 592. The DFPI simultaneously issued an Order of Liquidation pursuant to California Financial Code section 603 and appointed the FDIC as receiver by issuing a Tender of Appointment pursuant to California Financial Code section 620. Copies of the orders were provided to the bank's Chief Executive Officer. At this point, the Department relinquished jurisdiction over the institution.

[76] Johnathan D. Rose, *Old-Fashioned Deposit Runs*, Board of Governors of the Federal Reserve 30 (Nov. 18, 2015).

[77] *Regulators Blame Social Media for SVB's Rapid Collapse: "Complete Game Changer*," Yahoo Finance (Mar. 28, 2023); See also Anthony J. Cookson, Corbin Fox, Javier Gil-Bazo, Juan Felipe Imbet & Christopher Schiller, *Social Media as a Bank Run Catalyst*, SSRN (Apr. 18, 2023).

[78] *Regulators Blame Social Media for SVB's Rapid Collapse: "Complete Game Changer,"* Yahoo Finance (Mar. 28, 2023).

H. Events following SVB's closure

By mid-morning Friday, March 10, 2023, the DFPI no longer played a decision-making role with respect to SVB, and the FDIC unilaterally determined the necessary steps to protect SVB's depositors. The DFPI's understanding of events that took place after the Order of Liquidation and removal of the Certificate of Authority is based on public statements made by the FDIC. The FDIC transferred all SVB's insured deposits to Deposit Insurance National Bank of Santa Clara, created by the FDIC to temporarily provide insured depositors with continued access to their funds. On Sunday, March 12, 2023, after a systemic risk determination with the United States Treasury Department and the Federal Reserve System as required by law, the FDIC chartered the Silicon Valley Bridge Bank, N.A. and transferred all deposits and substantially all assets of SVB to the Bridge Bank. The DFPI played no role in the determination of the use of the systemic risk determination.

The Silicon Valley Bridge Bank was created to provide the FDIC time to stabilize SVB and provide prospective purchasers of the bank time to determine and submit appropriate offers. The SVB board and the most senior executives were removed. The Silicon Valley Bridge Bank opened for normal business activities on Monday, March 13, 2023.

Bridge banks are temporary, and the FDIC's stated goal was to return SVB to private control as quickly as possible. Potential bidders were notified on March 11, 2023, and three bids were received on March 12, 2023. The FDIC was responsible for reviewing bids and the DFPI does not play any role in reviewing such bids. The FDIC kept the bidding open until March 24, 2023, and reviewed all bids on March 25, 2023.

On March 26, 2023, First-Citizens Bank & Trust Company, a North Carolina state-chartered, non-member bank (First Citizens), was approved as the successful bidder to acquire Silicon Valley Bridge Bank.

On March 27, 2023, the former Silicon Valley Bridge Bank reopened as First Citizens.

I. Timeline of significant events

Table 4 below is a timeline of significant events related to the supervision of SVB from November 2020 to March 2023.

Table 4: Timeline of SVB Events

Date	Event	
Nov. 30, 2020	SVB Joint IT Part 2 Target Review. IT components Management, Support & Delivery, and the Composite rating were all downgraded to 3, less than satisfactory. • Findings communicated to management Jan. 29, 2021. • Supervisory letter issued Feb. 11, 2021. • Formal response from SVB management Mar. 12, 2021.	A
Nov. 30, 2020	Joint Roll-Up Examination. Focused on the Development and Acquisition and IT Audit Components, which were ultimately rated satisfactory. Follow-up on remediation of outstanding MRIAs and MRAs. • Findings communicated to management Feb. 4, 2021. • Full report transmitted May 3, 2021. • Formal response, along with detailed action plans, from SVB received June 2, 2021.	B
Feb. 2021	SVB transitioned into the Fed's Large Banking Organization (LBO) portfolio and was subjected to the "Large Financial Institution" Rating System.	C
Feb. 11, 2021	Joint supervisory letter issued regarding Nov. 30, 2020, SVB Joint IT Part 2 Target Review. (See A)	D
Mar. 12, 2021	Formal response from SVB bank management regarding Nov. 30, 2020, SVB Joint IT Part 2 Target Review. (See A)	E
Apr. 26, 2021	• SVB Joint IT Part 1 Target Review. Review focused on the Development and Acquisition and IT Audit Components, which were ultimately rated satisfactory. No new MRIAs or MRA issued as a result of this review. 3 MRAs identified at the November 2020 IT Target were closed while 4 MRIAs and MRAs remained open.Findings communicated to management June 11, 2021. • Supervisory letter issued Aug. 6, 2021. • No formal response required.	F
May 3, 2021	Nov. 30, 2020, Joint Roll-Up Examination report transmitted to SVB. (See B)	G

May 24, 2021	SVB Joint Asset Quality Target Review. Review focused on asset quality and credit risk management practices and evaluated management action plans developed in response to two MRAs issued in the 2020 full-scope examination report that remain open. Two new MRAs issued regarding loan risk rating granularity and governance for lending procedures. • Findings communicated to management Aug. 10, 2021. • Supervisory letter issued Aug. 17, 2021. • Formal response, along with detailed action plans, from SVB received Sept 16, 2021.	H
June 2, 2021	Formal response, along with detailed action plans, from SVB regarding Nov. 30, 2020, Joint Roll-Up Examination report. (See B)	I
Aug. 6, 2021	Supervisory letter regarding Apr. 26, 2021, SVB Joint IT Part 1 Target Review. (See F)	J
Aug.16-17, 2021	SVBFG Liquidity Target Review conducted independently by the FRBSF. This review resulted in two MRIAs and four MRAs regarding liquidity risk management practices which would ultimately impact the Liquidity rating for SVB.	K
Aug. 17. 2021	Supervisory letter issued regarding May 24, 2021, SVB Joint Asset Quality Target Review. (See H)	L
Sept. 7, 2021	CAMELS Exam and LFI Ratings Examination conducted, but ratings not formally issued.	M
Sept. 16, 2021	Formal response, along with detailed action plans, from SVB regarding May 24, 2021, SVB Joint Asset Quality Target Review. (See H)	N
Oct. 12, 2021	SVB Joint IT Part 2 Target Review. Review evaluated and issued ratings for the IT components of Management and Support and Delivery, which were downgraded to 3-Less than Satisfactory along with the IT composite rating. The review also evaluated progress on outstanding four MRIAs and five MRAs. • Findings communicated to management Jan. 27, 2022. • Supervisory letter issued Feb. 18, 2022. • Formal response, along with detailed action plans, from SVB received Mar. 18, 2022.	O
Nov. 2, 2021	Supervisory Letter - MRIAs and MRAs issued based on findings in the August 2021 Liquidity Target Examination. (See K)	P

Nov. 16, 2021	Internal supervisory discussions between DFPI and FRBSF determine that CAMELS ratings from the September examination should not be formally issued until first half of 2022 exam cycle to provide more time to perform analysis of underlying issues.	Q
Nov. 2021	The FRBSF informally raised concerns with SVB that it was not ready to operate under the LFBO program and asked what SVB was doing to slow its growth.	R
Feb. 18, 2022	Supervisory letter regarding Oct. 12, 2021, SVB IT Part 2 Target Review. (See O)	S
Mar. 18, 2022	Formal response, along with detailed action plans, from SVB regarding Oct. 12, 2021, SVB IT Part 2 Target Review. (See O)	T
Aug. 2022	Total DFPI exam hours on SVB increased from 3,000 to 6,000 for 2023.	U
May 31, 2022	Supervisory Letter - FRBSF and DFPI examiners found that SVB's governance and risk management practices were below supervisory expectations.	V
Aug. 17, 2022	Supervisory Letter - CAMELS and LFI ratings were issued for the 2021 exam cycle. Supervisory letter notes that MRIAs and MRAs from the November 2021 letter remain open and SVB is notified that an MOU is being initiated.	W
Oct. 2022	DFPI and FRBSF examiners noted concerns regarding the amount of unrealized losses for SVB's available for sale securities (AFS). As of September 30, 2022, the unrealized loss in AFS was $2.8 billion.	X
Oct. 2022	As SVB continued to address issues in their predictive models, SVB informed FRBSF that it intended to reposition themselves to address possible liquidity needs appearing in their new predictive models.	Y
Nov. 15, 2022	Supervisory Letter - SVB's Interest Rate Risk assumptions for its forecast model was unreliable.	Z
Dec. 22, 2022	SVB filed an action plan in response to the November 15, 2022, supervisory letter.	AA
Late 2022	SVB's assets eclipsed the $200 billion threshold.	BB
Mar. 8, 2023	SVB announces in an SEC 8-K filing that it sold a bond portfolio at a $1.8 billion loss and was seeking to raise $2.25 billion in capital.	CC
Mar. 9, 2023	Commissioner Hewlett and DFPI staff notified that SVB failed to make its cash letter payment and was insolvent.	DD

Mar. 10, 2023	Despite attempts overnight to find liquidity, SVB remained insolvent. DFPI took possession of SVB and appointed FDIC as receiver in the early morning. FDIC creates Silicon Valley Bridge Bank.	EE
Mar. 12, 2023	Federal Reserve, Treasury Department, and FDIC announced that depositors will have access to all deposits starting Monday, March 13.	FF
Mar. 26, 2023	FDIC entered into a purchase and assumption agreement for all deposits and loans of Silicon Valley Bridge Bank, National Association, by First-Citizens Bank & Trust Company, Raleigh, North Carolina.	GG

Key Findings

The DFPI has reviewed and will continue to review the events surrounding SVB's failure in order to better understand how the DFPI can protect the public from future economic destabilization.

Even with the benefit of hindsight, it is difficult to identify any one action or set of actions that regulators could have taken that would have been guaranteed to prevent SVB's collapse. As the Federal Reserve noted in its SVB report in evaluating the bank's failure, [it is a challenge to determine] "how much weight to put on the decisions of SVBFG's board and management, the design of the Federal Reserve's supervision and regulation, the execution of that supervision and regulation, and the specific combination of environmental factors that materialized in 2022 and early 2023. This type of causal decomposition is quite difficult from a single event."[79]

Despite this difficulty, the DFPI has made the following key findings, which it will leverage to improve its internal processes and to better assess and confront banking challenges in the digital age.

[79] *Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank*, Board of Governors of the Federal Reserve System 15 (Apr. 28, 2023).

Finding 1: Speed of remediation

Prior to SVB's collapse, the DFPI and the FRBSF identified deficiencies in SVB's risk management, liquidity, and interest rate risk simulations and had initiated supervisory actions in these areas. Although SVB had initiated remediation efforts, the regulators did not take adequate measures to ensure SVB did so with enough speed.

The DFPI has committed to undertaking supervisory enhancements that will reduce the chances of future bank failures. (See section V. below.)

In particular, the DFPI will coordinate with federal regulators to develop stronger and more effective systems to remediate deficiencies promptly. (See section V.B.1.) The DFPI will add additional levels of supervisory review to elevate issues identified in examinations and expedite action as appropriate. (See section V.B.4.)

Finding 2: Rapid growth and DFPI's role in supervision

SVB's unusually rapid growth was not sufficiently accounted for in risk assessments. In particular, SVB did not promptly remediate deficiencies identified in joint supervisory letters. The DFPI will improve its processes to escalate concerns, including potential allocation of additional staff to support joint supervision of larger banks.

The DFPI has committed to revising its supervisory approach to escalate issues with its depositories and address supervisor staffing deficiencies more quickly. (See section V.) The DFPI will review its internal staffing processes to ensure that additional staff is assigned in a timely manner for banks with assets of more than $50 billion, commensurate with accelerated growth or increased risk profile for an institution. The DFPI will continue to develop large bank supervisory plans in coordination with federal regulators for all banks with assets of more than $10 billion, increasing focus on timelines for corrective action (both ensuring timelines are appropriate and that banks adhere to them), and will allocate banking staff examination hours based on the risks identified in these supervisory plans. (See section V.B.2.)

Finding 3: Uninsured deposits

SVB's high level of uninsured deposits contributed to the run on SVB. The DFPI will increase its focus on banks' uninsured deposit levels, in addition to continuing to monitor key indicators such as banks' concentration of uninsured deposits by industry. (See section V.B.3.)

Finding 4: Digital technology and social media

The run on SVB accelerated at a rapid pace, due, in part, to digital technology and social media.

The DFPI will continue to evaluate these risks through its exam processes. Going forward, the DFPI will require banks to consider their susceptibility to real-time deposit withdrawals and reputational risk posed by viral social media posts in general, or from short sellers in publicly traded scenarios. (See section V.B.6.)

Next steps: DFPI improvements underway

The events involving SVB have underscored the need for the DFPI to evaluate and refine its monitoring and examination processes for banks and other financial institutions. These efforts are ongoing.

A. Immediate enhanced monitoring to prevent further failures

Immediately following SVB's closure, DFPI staff conducted a review of DFPI-chartered banks and credit unions to identify any other institutions that could face liquidity failures or other severe risks. The DFPI identified certain metrics that could be indicators of risk, including a high composite CAMELS rating, a high CAMELS liquidity rating, a high percentage of uninsured deposits or high volume of uninsured deposits, and high levels of unrealized securities losses.

Based on these and other factors, the DFPI identified institutions requiring increased monitoring and has already implemented more frequent monitoring for them.[80]

The monitoring efforts range from gathering reports on an hourly, daily, weekly, or monthly basis, to monitoring through the Department's regular offsite framework and examination process. DFPI banking and legal staff provide regular briefings on these developments to

[80]This report will not discuss actions taken as to individual active financial institutions since such particulars are confidential supervisory information not subject to disclosure.

the Commissioner and the DFPI's Senior Management.

The Department has been coordinating more closely with its federal partners and with these financial institutions to ensure that the institutions take corrective actions as appropriate.

B. Supervisory enhancements in progress

In addition to the immediate enhanced monitoring the DFPI has undertaken, the DFPI is in the process of implementing further enhancements to its examination processes, particularly for its largest banks.

Globally, the DFPI shares the goals set forth by the Federal Reserve in its April 28, 2023 report.[81] The DFPI recognizes the need to engage with its federal regulatory partners—as well as with other state and federal policymakers and stakeholders—regarding how to best effectuate these objectives and balance competing priorities to reduce the risk of future bank failures.

In addition to continued engagement with federal and state partners, DFPI has identified concrete steps that it can undertake immediately using its existing resources and authority.

1. Coordinate with federal regulators to develop stronger and more effective systems to promptly remediate deficiencies

The DFPI will engage with its federal regulatory partners to discuss the speed and effectiveness of the current regulatory framework and to identify where regulators can make improvements to achieve timely remediation of deficiencies by supervised institutions.

In its April 28, 2023, report on SVB, the Federal Reserve suggested, "A simpler and stronger oversight program and tailoring framework could be both more efficient and more effective."[82] Specifically, the Federal Reserve proposed that supervisors pursue "greater clarity on portfolio expectations, well-defined internal governance over ratings, an explicit

[81]The Federal Reserve identified four broad areas to consider in improving supervisory oversight: (1) enhance risk identification, (2) promote resilience, (3) change supervisor behavior, and (4) strengthen processes. Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank, Board of Governors of the Federal Reserve System 96 (Apr. 28, 2023).

[82]*Review of the Federal Reserve's Supervision and Regulation of Silicon Valley Bank,* Board of Governors of the Federal Reserve System 98 (Apr. 28, 2023).

supervisory plan for firms transitioning between portfolios, and reduced complexity of the regulatory structure" and that supervisors "systematically elevate focus on long-dated, material issues to promote more rapid remediation."[83]

The DFPI believes these suggestions warrant careful consideration and will continue to work with its federal partners on how to implement changes that will best ensure strong supervisory processes and swift remediation of issues.

2. Review supervisory plans and staffing processes for large banks with assets above $10 billion, with focus on banks with assets above $50 billion

The DFPI will mandate completion of large bank supervisory plans for all banks with over $10 billion in total assets in coordination with federal regulators as part of its examination process.[84]

These supervisory plans will be used to identify risks and prioritize which areas to reallocate existing banking staff examination hours and personnel. Allocations will be based on bank size, risk, and complexity as determined in the supervisory plan.

This step will enhance the robust discussions during DFPI's collaborations with the primary federal regulator during the exam cycle planning stage.

Such plans will allow the Department to allocate resources in a way that both equips it to be a strong partner to its federal counterparts and allows it to take independent action where appropriate, thus maximizing the benefits of the dual regulation system.

To best effectuate this plan, the DFPI will review its internal staffing processes to ensure that additional staff is assigned in a timely manner for banks with assets above $50 billion commensurate with accelerated institution growth or increased risk profile.

The DFPI will make this change by reallocating existing resources and will continue to evaluate future resource needs through the state budget process.

[83] *Id*.

[84] In certain situations, a state banking regulator such as the DFPI may be more nimble or responsive than a federal regulator. State banking regulators can also offer a unique "local" perspective because they may be more familiar with the regional environment, economy, and other financial issues that impact the state.

3. Heightened management of uninsured deposits for large banks

The DFPI will increase its focus on banks' uninsured deposit levels, in addition to continuing to monitor key indicators such as banks' concentration of uninsured deposits by industry. DFPI will review requirements for California-chartered banks and take steps to require these banks to provide the DFPI with a plan for more proactive management of uninsured deposits, and will make them subject to enhanced testing, in closer collaboration with the DFPI's federal partners.

In particular, for banks with assets over $50 billion, the DFPI will review the circumstances in which these banks must provide a written assessment evaluating their management of uninsured deposits, including their historic and projected levels, whether these deposits are concentrated in a specific depositor or industry group, and the bank's plan to mitigate any liquidity risk associated with such concentration.

The DFPI will also update its training procedures and exam manuals to emphasize risks from uninsured deposits.

4. Add an additional level of supervisory review for exam reports prior to issuance to elevate issues identified in the exam and expedite action as needed

The DFPI will add another level of supervisory review to exam reports before they are issued. Supervisors will assess the exam reports to ensure that the examiner has identified risks appropriately and that concerns are escalated if necessary. This will allow the DFPI to ensure it is identifying as many risks as possible and will help to ensure timely remediation of concerns. Additionally, this step will help state examiners in holding bank management to swifter action.

5. Implement changes to Early Warning System Module

The DFPI uses an internal program to perform offsite monitoring of banking licensees which are in between examinations. This program includes an Early Warning System module that uses quarterly financial data to trigger red flags or Early Warning Indicators for analysis and follow up by the DFPI's Portfolio Managers.

The DFPI will assess the appropriateness of current early warning triggers and recommend changes to existing thresholds or addition of new metrics to include in the module. The DFPI will also evaluate the availability of other tools to augment its existing Early Warning System module.

6. Address existing and emerging risks from technological changes, including social media and real-time deposit withdrawals

The DFPI will continue to require banks to assess risks from social media and digital banking technology as part of its examination processes and it will make enhancements to spotlight these concerns.

Going forward, the DFPI will require banks to consider their susceptibility to real-time deposit withdrawals and reputational risk posed by viral social media posts or from short sellers in publicly traded scenarios. Examiners will discuss with bank management what kind of social media monitoring a bank is conducting and how the bank intends to confront reputational and public relations concerns in the digital age.

Banks must consider how they evaluate and quantify their reputational risks and whether it is appropriate to hold more liquidity or capital to mitigate potential risk. This analysis will be included in the bank's risk assessment and will be considered in the evaluation of the management component.

Expectations around this assessment should be commensurate with the size and complexity of the bank.

The DFPI will also conduct additional training to ensure its examiners remain aware of and informed about these risks.

Appendix 1: Objective and Scope and Methodology

A. Objective

California Financial Code section 500 authorizes the DFPI to examine the operations of banks subject to the DFPI's supervision. In March 2023, the DFPI initiated an investigation into the DFPI's supervision of SVB after the failure of SVB. The primary objective of this report is to provide the public insight into the DFPI's oversight and regulation of SVB. As part of its commitment to transparency, this report contains assessments of confidential supervisory information (CSI) prepared by, on behalf of, or for the use of the DFPI. By sharing CSI, the DFPI aims to communicate to the public an accurate and transparent overview of what occurred.

This report also includes next steps the DFPI will take to enhance financial regulation and help prevent future bank failures. By implementing these measures, the DFPI intends to strengthen the financial regulatory system, promote the stability of the banking sector, and enhance risk management practices of banks. These steps will increase the resilience of banks to weather future market volatility and contribute to the overall sustainability of the banking sector.

B. Scope and methodology

The scope of this report includes an analysis of supervisory activities relating to SVB from 2018 until its failure on March 10, 2023.

Within days of SVB's failure, the DFPI began reviewing examination-related materials produced by FRBSF and DFPI examiners to assess the DFPI's past oversight of SVB. These materials included:

- Policies and manuals
- Correspondence
- Supervisory letters
- Reports of examination
- Internal communications

- Documentation and responses by SVB
- Information produced by DFPI staff after SVB's failure

Additionally, the DFPI reviewed and relied on publicly available information to gain a comprehensive understanding of the causes and consequences of SVB's failure, including:

- SVB SEC reports
- Independent research
- News articles
- Internet sources

The DFPI conducted interviews with DFPI examiners and managers to better understand decisions made regarding their supervisory approach to SVB and to clarify information contained in reports and correspondence. During the interview process, the DFPI asked detailed questions to cross check information and followed up with interviewees to clarify any inconsistencies or gaps in information.

The DFPI produced this report on a tight timeframe. Necessity required that the DFPI staff conducting the report rely heavily on the information and explanations provided by DFPI financial institution examiners and managers. The DFPI believes it is important to recognize these limitations but believes that the report produced achieves the goal of informing the public and policymakers about the factual circumstances leading to SVB's failure as expeditiously as possible.

Finally, it is important to note that some of the findings presented in this report were derived from materials produced exclusively by federal regulators.

Appendix 2: Table of Abbreviations

AEP	Alternating Examination Program
AFS	Available for Sale Securities
AM	Asset Manager
AML	Anti-Money Laundering
BCSH	California Business, Consumer Services and Housing Agency
Boston Private	Boston Private Bank & Trust Company
BSA	Bank Secrecy Act
CAMELS	Capital adequacy, Asset quality, Management, Earnings, Liquidity, Sensitivity to market risk
CCFPL	California Consumer Financial Protection Law
CECL	Current Expected Credit Loss
CFP	Contingency Funding Plan
CMBS	Commercial Mortgage-Backed Securities
Commissioner	Commissioner of California Department of Financial Protection and Innovation
CRO	Chief Risk Officer
CSI	Confidential Supervisory Information
DEIC	Dedicated Examiner-in-Charge
Department	California Department of Financial Protection and Innovation
DFI	California Department of Financial Institutions
DFPI	California Department of Financial Protection and Innovation
DOC	California Department of Corporations
ECM	Enhanced Continuous Monitoring
EIC	Examiner-in-Charge
EVE	Economic Value of Equity
EWIs	Early Warning Indicators
FDIC	Federal Deposit Insurance Corporation
FFIEC	Federal Financial Institutions Examination Council
FHLB	Federal Home Loan Bank
First Citizens	First-Citizens Bank & Trust Company
FRBSF	Federal Reserve Bank of San Francisco
GLBA	Gramm-Leach-Bliley Act
HCR	LFBO Horizontal Capital Review
HCSR	LFBO Horizontal Cybersecurity Review
HLR	LFBO Horizontal Liquidity Review

HTM	Held-To-Maturity
ICR	Internal Credit Review
ILST	Internal Liquidity Stress Testing
IOLTAs	Interest on Lawyers Trust Accounts
IPO	Initial Public Offering
IRR	Interest Rate Risk
IT	Information Technology
LBO	Large Banking Organization (Federal Reserve)
LBSP	Large Bank Supervision Program
LFBO Program	Large and Foreign Banking Organization Program
LFI Rating System	Large Financial Institution Rating System
MAP	Management Action Plan
MOU	Memorandum of Understanding
MRAs	Matters Requiring Attention
MRIAs	Matters Requiring Immediate Attention
NII	Net Interest Income
NOW	Negotiable Order of Withdrawal
OCC	Office of the Comptroller of the Currency
OFAC	Office of Foreign Assets Control
OM	Operations Manager
RBO	Regional Banking Organization
RMBS	Residential Mortgage-Backed Securities
ROE	Report of Examination
ROI	Report of Inspection
SEC	Securities and Exchange Commission
SV Bridge Bank	Silicon Valley Bridge Bank, N.A
SVB	Silicon Valley Bank
SVBFG	Silicon Valley Bank Financial Group
UBPR	Uniform Bank Performance Report
UFIRS	Uniform Financial Institutions Rating System
URSIT	Uniform Rating System for Information Technology

Appendix 3: Glossary of Terms

A

Alternating Examination Program (AEP)

The process by which state-chartered banks with total assets of less than $10 billion and a composite CAMELS rating of 1 (Strong) or 2 (Satisfactory) are examined independently on an alternating basis by their state or primary federal regulator. In other words, if the DFPI examines a bank independently one year, the primary federal regulator will examine the bank independently the next year. The DFPI and federal regulator share their examination findings and reports with each other. When it is the DFPI's turn to examine a bank independently, the DFPI will issue an independent report and share it with the federal regulator. The federal regulator will accept the report and not issue its own report for that exam cycle.

Asset Manager (AM)

A banking team member in charge of loan review, loan scoping, review of concentrations in credit (e.g., large loan concentration in a particular industry), and review of allowance for loan and lease losses.

Available-for-Sale Securities (AFS)

Securities which can be sold prior to maturity in order to meet liquidity needs or for any other reason.

B

Bank Secrecy Act (BSA)

The Financial Recordkeeping and Reporting of Currency and Foreign Transactions Act of 1970 is commonly known as the Bank Secrecy Act (BSA). The BSA was designed to help identify the source, volume, and movement of currency and other monetary instruments transported or transmitted into or out of the United States or deposited in financial institutions. The statute achieves this objective by requiring individuals, banks, and other financial institutions to file currency reports with the U.S. Department of the Treasury, properly identify persons conducting transactions, and maintain a paper trail by keeping appropriate records of financial transactions. These records enable law enforcement and regulatory agencies to pursue investigations of criminal, tax, and regulatory violations, if warranted, and provide evidence useful in prosecuting money laundering and other financial crimes. BSA examinations focus on a bank's compliance with the BSA and may be performed at the same time as safety and soundness examinations.

Brokered Deposits:

Deposits made to a bank through a third-party deposit broker.

C

CAMELS:

Capital adequacy, Asset quality, Management, Earnings, Liquidity, and Sensitivity to market risk.

Capital Adequacy

- A bank primarily derives its capital by issuing stock and retaining earnings.

- Capital serves several important functions: It absorbs fluctuations in income, so a bank can continue to operate in periods of loss or negligible earnings, (2) it provides a measure of assurance to the public that the institution will continue to provide financial services, thereby maintaining confidence in individual banks and in the banking system, and (3) it supports growth yet restrains unjustified or imprudent expansion of assets.

Asset Quality

- A bank's assets typically include cash, securities investments, loans, and fixed assets.
- Loans comprise a major portion of the asset base of most banks. Loans are the asset category which ordinarily present the greatest credit risk, and therefore, the greatest potential for loss to the bank.
- The securities portfolio of a bank can also represent a significant portion of total assets. Some of the objectives of the securities portfolio are to provide the maximum yield on investments while maintaining quality in the portfolio; provide a source of liquidity as protection against possible runoff of deposits or a sudden increase in loan demand; fulfill pledging requirements for public deposits, trusts, and borrowings; help manage interest rate risk; and diversify asset risks and income sources.

Management

- Management includes the board of directors and executive or senior officers. The board of directors is elected by the shareholders and has ultimate responsibility for the bank. Executive officers are appointed by the board of directors and involved in the policy-making functions of the bank and its day-to-day operations.
- The capability of the board of directors and management to conduct the affairs of the bank with candor, personal honesty, and integrity, coupled with their establishment of a strong risk management framework is the most important component to the success of the institution.

Earnings

- Earnings represent a bank's first line of defense against capital depletion. The continued viability of a bank depends on its ability to earn a reasonable return on its assets and capital.
- Earnings serve to absorb losses, augment capital, and provide the shareholders with a reasonable return on their investment.

Liquidity (and Funds Management)

- Liquidity is the measure of cash, liquid assets, and access to borrowing lines that a bank has available to quickly meet short-term business and financial obligations. Primary liquidity reserves include cash and balances due from depository institutions (cash held at other banks). Secondary liquidity reserves include short-term, readily marketable, unpledged securities and other negotiable instruments that can be converted into cash at little risk of loss.
- Funds management is one core component of sound liquidity planning and management. This involves managing assets and liabilities and off-balance sheet instruments to maximize and maintain the spread between interest earned and interest paid while ensuring the ability to pay liabilities and fund asset growth.

Sensitivity to Market Risk

- Sensitivity to market risk addresses the degree to which changes in interest rates, foreign exchange rates, commodity prices, or equity prices can adversely affect a financial institution's earnings or capital.
- A bank must have the ability to identify, monitor, manage, and control its market risk, which typically

relates to exposure to changes in interest rates.

- Interest rate risk is the risk of reduction in, or loss of, capital and earnings caused by adverse changes in market interest rates. The impact of interest rate risk on earnings is significant because reduced earnings or losses affect the adequacy of a bank's liquidity and capital.

Composite Rating

The overall rating assigned to a financial institution, once a rating has been determined for each of the CAMELS components. The composite rating is based upon a scale of 1 through 5 in ascending order of supervisory concern. While a financial institution's composite rating generally bears a close relationship to its component ratings, the composite rating is not derived by averaging the component ratings. When assigning a composite rating, some components may be given more weight than others depending on a financial institution's situation.

Concentration

A significantly large volume of economically related assets or liabilities that an institution has advanced or committed to a certain industry, market sector, person, entity, or affiliated group. These assets or liabilities may, in the aggregate, present a substantial risk to the safety and soundness of the institution.

Confidential Supervisory Information (CSI)

Information that is prepared by, on behalf of, or for the use of financial regulatory agencies, including state or federal banking supervisors. CSI is typically confidential unless public release is specifically authorized. Examples of CSI include reports of examination, inspection, visitation, and related workpapers; confidential operating and condition reports; supervisory assessments; investigative requests for documents or other information; and supervisory correspondence or other supervisory communications.

Contingency Funding Plan (CFP)

A contingency funding plan is designed to ensure a bank has adequate sources of liquidity in place to fund normal operations under various contingent liquidity event scenarios.

D

Dedicated Examiner-in-Charge (DEIC)

A DEIC performs the same function as an EIC, but is dedicated to one institution—usually a large institution with total assets in excess of $10 billion. DEICs serve a minimum term of three years with a maximum term of five years.

E

Early Warning Indicators (EWIs)

A financial indicator that exceeds or falls below a predetermined threshold. These thresholds are based on various indicators derived from failed or troubled banks, are measured quarterly, and are calculated from the bank's quarterly call reports. EWIs are an internal tool used by the DFPI in its offsite monitoring of licensees.

Economic Value of Equity (EVE)

The cash flow calculation taking the current value of all asset cash flows and reducing it by the current value of all outstanding liability cash flows.

Examiner-in-Charge (EIC)

Banking examiner responsible for the overall examination and for completing the Report of Examination (ROE) and the work of all examiners assigned to an examination. EIC responsibilities include setting timelines for the completion of assignments, reviewing comments and conclusions from the examination team, serving as primary point of contact with bank management during the examination, and creating an organized environment in which the examination goals and objectives can be achieved.

F

Federal Funds Rate

The interest rate at which banks and other depository institutions lend money to each other, typically on an overnight basis. This rate is set by the Federal Reserve's Federal Open Market Committee (FOMC).

G

Governance Examination

The examination of the functionality of Board oversight over the affairs and operations of the bank.

H

Held-to-Maturity (HTM) Securities

Securities that companies purchase and intend to hold until they mature.

I

Insolvent

Insolvent means a financial institution has ceased to pay its debts in the ordinary course of business, or cannot pay its debts as they become due, or is insolvent within the meaning of the federal bankruptcy law.

Interest Rate Risk (IRR)

The potential that changes in market rates of interest will reduce earnings and/or capital. The risk that changes in prevailing interest rates will adversely affect assets, liabilities, capital, income, and/or expense at different times or in different amounts.

Internal Liquidity Stress Testing (ILST)

A financial institution's internally generated liquidity stress test, based on risks determined by the financial institution.

J

Joint Asset Quality Target Review

A review conducted jointly by the state and federal regulators of a segment of the bank's assets. If a bank has several different loan products, an asset quality target review would review one or more of those loan products and the surrounding policies and procedures.

Joint IT Target Reviews

A review, conducted jointly by the state and federal regulators, focused on a bank's information technology system and controls.

Joint Roll-Up Examination

A comprehensive cycle-ending examination in which examination findings are consolidated and composite and component CAMELS ratings are assigned. A joint roll-up examination is conducted jointly by the state and federal regulators, where both agencies agree on the findings, recommendations, and ratings, with one joint report of examination issued.

L

Large and Foreign Banking Organization (LFBO) Program

The Federal Reserve's LFBO program supervises large financial institutions with more than $100 billion in assets. Excluded from the LFBO program are eight of the biggest U.S. firms, which are supervised by a separate Federal Reserve program, the Large Institution Supervision Coordinating Committee (LISCC).

Large Banking Organization (LBO)

The Federal Reserve considers LBOs to be domestic financial institutions with total consolidated assets of at least $100 billion that are not included in the Federal Reserve's LISCC supervision program.

Large Bank Supervision Program

The DFPI's Large Bank Supervision Program (LBSP) supervises California banks with total assets of $10 billion or more, in coordination with federal regulatory agencies. Out of the 99 banks the DFPI supervises, 9 are over the $10 billion threshold.

Large Financial Institution (LFI) Rating System

The rating system used by the Federal Reserve Board to evaluate and communicate the supervisory condition of the following: (1) bank holding companies with total consolidated assets of $100 billion or more; (2) all non-insurance, non-commercial savings and loan holding companies with total consolidated assets of $100 billion or more; and (3) U.S. intermediate holding companies of foreign banking organizations with combined U.S. assets of $50 billion or more established pursuant to the Federal Reserve's Regulation YY.

LFBO Horizontal Capital Review (HCR

An annual review of capital position and risk-management practices of certain large financial institutions conducted by the Federal Reserve.

LFBO Horizontal Cybersecurity Review (HCSR)

An annual review of cybersecurity practices of certain large financial institutions conducted by the Federal Reserve.

LFBO Horizontal Liquidity Review (HLR): An annual review of liquidity position and risk-management practices of certain large financial institutions conducted by the Federal Reserve.

Liquidity: See the CAMELS definition above.

Loan Scoping: A process examiners perform to determine which loans will be reviewed during an examination.

M

Memorandum of Understanding (MOU)

An informal agreement between a licensee and the Department, signed by both parties. The appropriate federal regulator may also be a party to the agreement. MOUs are designed to address and correct identified weaknesses in a licensee's condition.

Matter Requiring Attention (MRAs)

A recommendation from the Federal Reserve to address a weakness that could lead to deterioration in a banking organization's soundness. The Federal Reserve considers MRAs to be important and the banking organization is expected to address the MRA over a reasonable period of time, but the timing need not be immediate.

Matter Requiring Immediate Attention (MRIAs)

A call for more immediate action that the Federal Reserve considers to be of significant importance and urgency and that banking organizations must address immediately. These include: (1) matters that have the potential to pose significant risk to the safety and soundness of the banking organization; (2) matters that represent significant noncompliance with applicable laws or regulations; (3) repeat criticisms that have escalated in importance due to insufficient attention or inaction by the banking organization; and (4) in the case of consumer compliance examinations, matters that have the potential to cause significant consumer harm.

Model Risk Management

An assessment of how bank management identifies, monitors, mitigates, and controls risk associated with using various models in their banking operation. For instance, if a bank uses an automated model to make credit decisions, the review of this model would fall under Model Risk Management.

N

Net Interest Income

A financial performance measure that reflects the difference between the revenue generated from a bank's interest-bearing assets and the expenses associated with paying on its interest-bearing liabilities.

Net Interest Margin

A measurement of the difference between the interest income generated and the amount of interest paid out to lenders.

O

Operations Manager (OM)

A banking team member focused on directing examiner review of earnings performance, capital contingency planning, liquidity, securities, earnings, etc.

P

Primary Federal Regulator

The federal regulatory agency tasked with being the primary federal supervising entity of a financial institution.

R

Regional Bank

The Federal Reserve considers regional banks to be those that have between $10 billion and $100 billion in assets.

Regional Banking Organization (RBO)

The Federal Reserve classifies RBOs as organizations with total assets between $10 billion and $100 billion.

Risk Management Program

A risk management program addresses, prevents, and manages potential risks that can impact a bank's finances and overall operations.

S

Stress Testing

Forward-looking quantitative evaluation of bank capital that demonstrates how a hypothetical economic or financial crisis (e.g., recession) would affect capital ratios.

Supervisory Letter

The means to communicate findings, deficiencies and recommendations identified at target reviews conducted in between roll-up examinations.

T

Target Examination

A full-scope examination on specific areas identified by bank examiners. Typically, a target examination includes an entry letter, scope memorandum, and a conclusion memorandum with output supervision. It is a point-in-time assessment with a predefined examination scope and not an ongoing process.

U

Uniform Bank Performance Report (UBPR)

An analytical tool for bank supervisory, examination, and management purposes. UBPR shows the impact of management decisions and economic conditions on a bank's performance and balance sheet composition.

Uniform Financial Institutions Rating System (UFIRS)

Commonly known as the CAMELS rating system, the UFIRS is a supervisory rating system that represents a comprehensive and uniform evaluation of an institution's financial condition, compliance with banking regulations and statutes, and overall operating soundness.

Unrealized Losses

An unrealized loss occurs when the value of an asset has decreased, but the asset has not yet been sold.

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