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TRANSMIT BY SECURE EMAIL

Board of Directors
Silicon Valley Bank
3003 Tasman
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Dear Members of the Board:

The Federal Reserve Bank of San Francisco (FRBSF) and the California Department of Financial Protection and Innovation (CDFPI) recently completed a target exam of asset quality and credit risk management practices at Silicon Valley Bank (SVB). The review started on May 24, 2021 and concluded on June 9, 2021. The review focused on testing a sample of loans for risk rating accuracy and appropriate due diligence, credit risk management practices, and management action plans developed in response to the Matters Requiring Attention (MRAs) issued during the 2020 full scope exam. Examiners-in-Charge **Redacted** (CDFPI) and **Redacted** (FRBSF) discussed the examination results with Chief Executive Officer Greg Becker, President Michael Descheneaux, Chief Risk Officer Laura Izurieta, Chief Credit Officer Marc Cadieux, and Chief Auditor John Peters on August 10, 2021.

Executive Summary

SVB credit risk management practices are generally consistent with supervisory expectations, however, certain areas require attention and are described in the Supervisory Findings section as MRAs. Management has established consistent risk rating and underwriting processes with no rating differences identified during the target exam. Management action plans established to address previously issued MRAs in the areas of independent loan review and separation of an independent credit risk management function appear reasonable, although significant time and work remain before remediation is complete.

Loan File Review

Examiners reviewed 84 relationships consisting of \$3.4 billion in credit commitments equating to 4.6 percent of total commercial commitments as of February 28, 2021. The review focused on the Investor Dependent (ID) and Leveraged Lending (LL) portfolios. These portfolios have historically presented a higher level of credit risk. Based on the growth in these specific portfolios, examiners also reviewed the procedures for the Global Funds Banking (GFB) and Recurring Revenue Lending (RRL) portfolio along with a sample of files to test the application of these procedures.

The loan file review confirmed that SVB continues to have acceptable risk rating practices in alignment with internal matrices and guidelines as well as in conformance with regulatory expectations. However, the internal grading system is no longer sufficient for the portfolio's size and complexity as most loans fall within two pass grades. Please see the MRA section for required actions.

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MRA Action Plans

Action plans to address the two new MRAs issued at the November 30, 2020 roll-up exam were reviewed during this target. Both plans reasonably address the requirements of the MRAs, however, both include many steps and entail significant execution risk. Management has already made some progress addressing the lines-of-defense (LOD) MRA and shared numerous artifacts documenting the ongoing work that demonstrate a competent project management process. Despite the early progress, the timeframe to fully address the MRA is protracted. Second LOD involvement in first LOD controls will continue well into 2022. As such, the second LOD cannot be considered fully independent until there is appropriate segregation of duties.

The response to the internal loan review MRA has been slower to develop, due in part to a leadership change in the loan review function in early 2021. The engagement of a new outside loan review consultant also delayed SVB's ability to address concerns shared verbally during the November 2020 full scope exam. As a result of these changes and delays, SVB's internal planning and scoping process for the 2021 cycle remains essentially the same as 2020, and this process is not sufficient for the loan portfolio's size and risk complexity. A significant part of the action plan will be completed towards the end of 2021 and will be reviewed by examiners during 2022.

Investor Dependent Lending Portfolio

Risk management practices for ID portfolio remains satisfactory. This portfolio continues to present high risk and generates most of SVB's historical loan losses. For 2020, the net charge off rate for the ID portfolio was 1.28 percent compared to the overall loan charge off rate of 0.20 percent. Management, however, has shown an ability to limit this portfolio's loss exposure through their work to develop, evaluate, and maintain key investor relationships over a sustained period. As a result, SVB has maintained manageable levels of classified assets and loan losses while achieving solid risk adjusted returns over various economic cycles. Management has also gradually decreased concentration risk in ID loans as the portfolio growth rate has been minimal compared to capital growth over the past several years.

Leveraged Lending Portfolio

Risk management, including underwriting and risk rating, of the LL portfolio is adequate. Policies and grading matrixes are sufficient in relation to portfolio risk. No deficiencies were noted in the underwriting processes for the Sponsor Led Buyout (SLBO) loans or the broader LL portfolio. Management information systems (MIS), risk limits, and risk monitoring efforts specific to the LL portfolio are adequate at both the Board and management level. Leverage ratios, compliance with covenants and the ability to reduce leverage over a five-to-seven-year period are appropriately monitored. All credit facilities within the review sample demonstrated debt reduction at least 50 percent over the projection periods. With a 45 percent coverage in 2020, SVB's Internal Loan Review did not identify any loan rating differences in their review of this portfolio. The results of this examination confirmed the conclusions from SVB's Internal Loan Review.

Recurring Revenue Lending

The risk management practices for the RRL portfolio are generally adequate. Although RRL loans are relatively new as a formal product, SVB has extended credit to borrowers that have a recurring revenue

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business model as part of the ID portfolio for many years. Sponsor Finance Recurring Revenue (SFRR) loans became a formal product in early 2021, with the remainder of the RRL product set continuing development as part of the Low Experience Credit Exposure (LECE) bucket. In addition to the SFRR loans, SVB also plans to offer a new product for Monthly Recurring Revenue (MRR) loans sometime in 2021. With the acknowledgement that the LECE bucket is a testing process, SVB's underwriting processes for RRL loans are more fluid and not as fully developed as other formal loan products. RRL loans in the LECE bucket are governed by relatively conservative risk limits, and Board and senior management reporting is appropriate for the portfolio's current size and risk.

Global Funds Banking Lending

The GFB portfolio is by far the largest portfolio at SVB, and management expects continued growth in larger, high-quality deals with greater client diversification. In all material respects, management has underwritten, risk rated, and monitored GFB loans in accordance with underlying policies and procedures, with no noted exceptions during this exam.

Due diligence and underwriting process controls are in process of being reviewed and strengthened in response to an \$80MM charge-off in 1Q 2021. This charge-off was a result of a sophisticated fraud scheme involving falsified documents, companies, audit, and LP commitments. Management is pursuing legal action and has conducted an evaluation of the entire GFB portfolio to verify that no other similar fraud has occurred and gone undetected. Additionally, all three lines of defense are conducting a review process to identify areas that could be improved to reduce the risk of a similar fraud occurring.

Concentration risk and limits are effectively managed, and MIS is adequate. In 3Q 2021, management expects to merge its **Redacted** dashboards to better determine exposure levels for limits and concentrations. Additional GFB processes will soon include **Redacted** dashboards, email alerts, automated renewals, **Redacted** **Redacted** use of the **Redacted** credit approval system, and a new 2021 GFB training program.

Credit Risk Management

Board and senior management oversight of credit risk is adequate. Minimal underwriting weaknesses were noted during the loan review. Policy exceptions are well documented and supported by appropriate mitigating factors and analysis. Meaningful covenants are in place and were noted in several loans included within our sample. There were no risk rating differences between examiners and management during the past year. Examiners concluded that management has taken a conservative approach to risk rating credits within the reviewed portfolios, especially those materially impacted by COVID-19. Management was early to conduct enhanced monitoring of these relationships and proactively worked to address credit weaknesses as they emerged. This process was supported by a strong problem loan management team that has been in place for many years. Examiners noted that downgrades were prudently recognized and processed in all relationships reviewed during this event.

Policies and risk limits are satisfactory, but governance over credit procedures requires improvement as noted below in MRA 2. While written at a high level, policies are appropriate to guide SVB's lending activities and credit risk management. The Policy Office maintains a centralized repository of all credit policies and is responsible for maintaining an adequate governance process. The second LOD credit risk management

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continues to provide effective challenge to policy development. However, SVB's management of credit related procedures is only considered fair. Unlike the Policy Office's oversight of policies, procedures are not centrally managed and have no documented overarching governance process. Limits are tracked for compliance in various reports provided to Board and senior management committees, and any noted exceptions reflect sufficient escalation practices. The ongoing improvement in risk identification and controls processes will inevitably lead to policy and procedure updates.

MIS is satisfactory, and the Board and senior management receive sufficient and relevant information to monitor credit risk across the organization. The risk appetite statement has clear credit metrics. Management has established processes to independently track the accuracy and compliance with the risk appetite credit metrics. Monitoring by the Board occurs quarterly and is considered appropriate given the loan portfolio's risk profile. The second LOD credit administration function is now independent from the first LOD loan approval process, and management is revising the full suite of MIS to reflect the change. Although MIS is satisfactory, changes are necessary to keep pace with the bank's growth and complexity. Changes are expected to allow for greater use of data, early identification of emerging risks, and a proactive approach to enhancing reporting capabilities over time.

Internal controls need improvement as there is insufficient separation of duties between first and second LOD personnel. Remediation efforts are underway to address the open MRA (Line of Defense Ownership of Lending Controls) noted in the 2020 roll-up exam Report. Once complete, the remediation efforts will create clearer accountability and better differentiate responsibilities between the first and second LOD functions. The internal audit (IA) function remains an effective third LOD and has identified several other internal control weaknesses in credit risk management practices. While none of the weaknesses materially impacts safety and soundness now, the weaknesses are indicators that the overall program of controls needs attention. Internal Loan Review's risk assessment and planning process are not sufficient for the size and complexity of SVB's loan portfolio and are the subject of an MRA (Formalization and Maturity of Internal Credit Review). Nonetheless, other key internal controls, such as those related to the loan approval process, loan risk rating, and problem loan management, are effective.

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Supervisory Findings¹

MRA 1– *Loan Risk Rating Granularity*

Issue: Risk ratings are timely, accurate, and generally supported. However, for a bank of this size and complexity, the credit risk rating system is not sufficiently granular. A 10-point grading system is used which is common in community banks and has been in place at SVB since the bank was much smaller and less complex. With 73.7 percent of SVB’s loan portfolio residing in either Pass Categories 3 or 4 as of 1Q 2021, the credit risk rating system does not provide sufficient granularity for the bank’s size and complexity. Ratings granularity need to be sufficient to appropriately differentiate risk within a large complex loan portfolio as well as to provide sufficient data for robust stress testing and allowance for credit loss calculation purposes. Management is in the early stages of planning to transition into a dual risk rating system based on probability of default (PD) and loss given default (LGD), which is a common risk rating system employed by other large and complex banks.

SR 98-25 describes risk rating expectations for large and complex institutions. The guidance specifically states: *“The rating scale chosen should meaningfully distinguish gradations of risk within the institution’s portfolio so that there is clear linkage to loan quality (and/or loss characteristics), rather than just to levels of administrative attention. To do so, the rating system should be designed to address the range of risks typically encountered in the underlying businesses of the institutions. One reflection of this degree of meaning is that there should be a fairly wide distribution of portfolio outstanding or exposure across grades”*.

Risk: The current loan grading system may not provide adequate granularity and dispersion of loans in the rating scale particularly within the Pass category.

Required Action: Senior management is required to develop and implement a risk rating system commensurate with the size and complexity of the institution and credit risk activities. The 2021 credit strategic plan indicates that a dual risk rating system is in the initial planning stage and acknowledges a dual risk rating system is an industry best practice, aligns with large institution expectations, and will provide more granularity/precision in certain segments. Management should implement its plan to use a dual risk rating system, including meeting the interim milestones that are part of their multi-year plan.

MRA 2– *Governance Process for Lending Procedures*

Issue: SVB does not currently have a systemic governance process for lending guidance documents, which are the detailed procedures supporting the bank’s credit policy documents. These documents include job aides, handbooks, and other process-oriented reference documents. The current governance process lacks:

¹ **Matters Requiring Immediate Attention** (MRIs) arising from an examination, inspection, or any other supervisory activity are matters of significant importance and urgency that the FR requires organizations to address immediately and include: (1) matters that have the potential to pose significant risk to the organization’s safety and soundness; (2) matters that represent significant noncompliance with applicable laws and regulations; (3) repeat criticisms that have escalated in importance due to insufficient attention or inaction by the organization; and (4) in the case of consumer compliance examinations, matters that have the potential to cause significant consumer harm.

Matters Requiring Attention (MRAs) constitute matters that are important, and that the FR is expecting an organization to address over a reasonable period of time, but when the timing need not be “immediate” as the threat to safety and soundness is less immediate than with issues giving rise to MRIs. An MRA typically will remain an open issue until resolution and confirmation by examiners that the banking organization has taken corrective action. If a banking organization does not adequately address an MRA in a timely manner, examiners may elevate an MRA to an MRI. Similarly, a change in circumstances, environment, or strategy can also lead to an MRA becoming an MRI.

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an inventory of the current procedure documents, clear roles and responsibilities for maintaining those documents including ownership and approval, and a process to promote consistency of both form and content.

Policies at SVB are relatively high level and are subject to an appropriate approval and governance process. However, there is a critical gap in the governance of underlying procedural documents relied upon for management's implementation of the Board's high-level policy objectives. For example, GFB uses at least 46 such documents that guide underwriting, due diligence, and risk management processes, and there is no governance system to ensure that these documents are consistent in their guidance.

Risk: The lack of an adequate governance process surrounding key procedure documents could inadvertently lead to employees following outdated guidance, attempting to follow conflicting instructions, or being unaware of a procedural documents' existence. A single central repository for all procedures provides discipline to procedure administration and minimizes the probability of personnel failure to consider all applicable procedures. The lack of clear ownership of these procedures could lead to the incorrect person updating the guidance. Several procedures for GFB listed the incorrect document owner.

Required Action: Senior management is required to develop a robust governance process around key procedure documents that provide the details on how to implement credit policy. That governance process should include at a minimum: a comprehensive inventory of all written guidance provided to employees to implement policy, clear standards for ownership and responsibility for updating and approving those documents, and a process to promote consistency of both form and content of these documents.

After reviewing this supervisory letter², and within 30 calendar days of its receipt, management is required to submit in writing remedial actions the firm has taken or will take to address the supervisory findings described above, including validation of corrective actions by Internal Audit, by the specified remediation timelines. Please send all supervisory correspondence from your institution in electronic format only copying our centralized mailbox as a recipient at **Redacted** @sf.frb.org.

Please note that this letter contains confidential material and should be treated accordingly by your organization.³ As such, the contents of this letter are subject to the rules of the Board of Governors of the Federal Reserve System and DFPI regarding disclosure of confidential supervisory information. Should you

² Any institution about which the Federal Reserve makes a written material supervisory determination is eligible to utilize the appeals process as described in Internal Appeals Process for Material Supervisory Determinations and Policy Statement Regarding the Ombudsman for the Federal Reserve System, 85 Fed. Reg. 15175 (March 17, 2020). An appeal under this process may be made of any written material supervisory determination, as defined in the policy statement. The Board's Ombudsman (Ombudsman) can provide assistance regarding questions related to the System's material supervisory determination appeals process and claims of retaliation. The Ombudsman can also provide assistance to facilitate the informal resolution of concerns prior to the filing of a formal appeal. An institution may contact the Ombudsman at any time by calling 1-800-337-0429, by sending a facsimile to 202-530-6208, by writing to the Office of the Ombudsman, Board of Governors of the Federal Reserve System, Washington, D.C. 20551, or by sending an e-mail to ombudsman@frb.gov.

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have any comments or questions regarding this letter, please feel free to contact **Redacted** at **Redacted** or **Redacted@sf.frb.org**, or **Redacted** at **Redacted** or **Redacted@dfpi.ca.gov**. Please send all supervisory correspondence from your institution in electronic format only, copying our centralized mailbox as a recipient at **Redacted@sf.frb.org**.

Sincerely,

Redacted

Redacted
Redacted
Department of Financial Protection and Innovation

Redacted
Redacted Central Point of Contact
Federal Reserve Bank of San Francisco

By **Redacted**

Redacted
Redacted

cc: Greg Becker, Chief Executive Officer
Michael Descheneaux, President
Laura Izurieta, Chief Risk Officer
Marc Cadieux, Chief Credit Officer
John Peters, Chief Auditor
Ben Jones, Head of Regulatory Affairs