Federal Reserve Bank of San Francisco
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SUPERVISION + CREDIT

November 2, 2021

**TRANSMIT BY SECURE EMAIL**

Mr. Greg Becker
Chief Executive Officer
c/o Regulatory Affairs
SVB Financial Group
3003 Tasman Drive
Santa Clara, California 95054

Dear Mr. Becker:

The Federal Reserve Bank of San Francisco (FR) completed a Liquidity Target Examination of SVB Financial Group (SVBFG). The review started on August 16 and concluded on August 27. The review focused on liquidity risk management practices[1] separate from SVBFG's on-balance sheet liquidity positions. Examiners also engaged management regarding the build-out of the liquidity management program and the related project plans in process. This letter serves to formalize the supervisory findings and recommendations discussed with SVBFG management on October 22, 2021.

**Executive Summary**

The firm's liquidity risk management practices are below supervisory expectations set forth in applicable guidance. The FR identified foundational shortcomings in three key areas: (1) internal liquidity stress testing (ILST), (2) the liquidity limits framework, and (3) the contingency funding plan (CFP).

ILST:
The scenario design elements in ILST do not adequately address both market and idiosyncratic risks. Additionally, the firm's deposit segmentation does not have sufficient

[1] The examination used the following supervisory letter guidance in our assessment: SR 10-6, The Interagency Policy Statement on Funding and Liquidity Risk Management, SR 11-7, Guidance of Model Risk Management and SR 12-7, Guidance on Stress Testing for Banking Organizations with Total Consolidated Assets of More than $10 Billion.

Mr. Greg Becker
c/o Regulatory Affairs
SVB Financial Group
November 1, 2021

granularity to differentiate client outflows during stress. MRA #1 and MRA #2 provide a more detailed description of the issue, risk and required actions associated with ILST shortcomings.

Limits:
The limits framework is inadequate because it does not address post stress limits and does not reflect the interconnectedness of liquidity risk. Additionally, liquidity limits are infrequently and inadequately reviewed. Without sufficient review, the firm adopted a Global Funds Banking limit as part of its Risk Appetite Statement. This limit is not well calibrated as reflected by the mix of reliable and unreliable liquidity sources, and funded loans with unfunded contingent liabilities. MRA #3 provides a more detailed description of the issue, risk and required actions associated with the limits-related shortcomings.

CFP:
The CFP is outdated and is not linked to the liquidity risk framework. It is missing key elements, such as quantitative projections and an evaluation of funding needs. Without these elements and the linkage to the liquidity risk framework, management does not have an effective CFP to activate in stress. MRA #4 provides further details on the issue, risk, and required actions associated with the CFP shortcomings.

The shortcomings identified in the three foundational areas referenced will require management to re-assess the Liquidity Risk Management Project Plan established to meet the Enhanced Prudential Standards (EPS). These shortcomings reflect a deficiency in the Project Plan. MRIA #1 provides additional detail on the issue, risk and required actions associated with the Project Plan's deficiency.

The three foundational shortcomings also point to independent review functions that did not provide effective oversight, review, and challenge. MRIA #2 provides more detail on the issue, risk and required actions related to the independent review deficiencies identified through this liquidity target exam.

**Supervisory Findings**[2]

**MRIA #1 – Enhanced Liquidity Risk Management Project Plan**
**Issue:** Management needs to enhance the Liquidity Risk Management project plan. The current project plan does not account for weaknesses identified from this Liquidity Target Exam. Several workstreams, such as CFP and Model Risk Management were de-prioritized

[2] **Matters Requiring Immediate Attention** (MRIAs) 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 MRIAs. 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 MRIA. Similarly, a change in circumstances, environment, or strategy can also lead to an MRA becoming an MRIA.

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but had weaknesses identified through this exam. As SVBFG enhances its internal liquidity stress testing process, the firm will need to re-prioritize control frameworks such as Model Risk Management. The firm will also need to ensure it has appropriate data sources, while remediating weaknesses related to the CFP. Finally, the governance and controls workstreams need to be clearly linked to liquidity risk management. This will likely require an accelerated effort, given the identified weaknesses in current liquidity risk management practices.

**Risk:** The current project plan does not account for deficiencies identified during the FR's Liquidity Target Exam. As a result, delays to key milestones could jeopardize overall project timelines and thereby the firm's plans to implement sound liquidity risk management that meets supervisory expectations.

**Required Action:** By December 31, 2021, SVB is required to enhance their project plan for liquidity risk management as follows:

1. Update the project plan and the associated gap assessment to address applicable supervisory expectations and requirements, including those related to the findings cited in this supervisory letter.
2. Ensure sufficient staffing and resources are allocated to execute the plan to meet established timelines.

**MRIA #2 – Oversight and Challenge**

**Issue:** SVBFG lacks effective independent review oversight and challenge of its liquidity risk management framework. 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,[3] however, have not kept pace. FRM did not challenge the recently adopted Global Funds Banking limit, despite the calibration issues identified in this examination. FRM also did not challenge the first line's progress related to differentiating operational versus non-operational deposits despite the firm quickly approaching the point where it will be subject to the supervisory liquidity coverage ratio. MRM did not challenge the use of capital stress testing model scenarios for the ILST model despite the different time horizons and model purposes. IA has not subjected the CFP to review since 2019 despite the changes in SVBFG's liquidity risk profile. The independent risk functions are intended to serve as a check on the first line's liquidity risk management. The examples noted above do not reflect favorably on the oversight provided by the independent review functions.

**Risk:** Weak oversight and ineffective review and challenge resulted in undetected shortcomings in SVBFG's ILST, the limits framework and CFP. A credible ILST, limits framework and CFP are key elements contributing to the firm's longer term financial resiliency.

**Required Action:** By March 31, 2022, SVBFG is required to immediately establish an effective process for reviewing and challenging liquidity risk management practices. The firm should

[3] Second line independent review represented buy Financial Risk Management (FRM) and Model Risk Management (MRM); and third line independent review represented by Internal Audit (IA)

be able to provide descriptions of challenges, management's responses, or the basis for concurrence with the business risk owner. Key issues arising from review and challenge should be documented, at a minimum, with description of issue, issue owner, corrective actions and stated timeline for remediation and escalated to the appropriate committee(s) for oversight. The required actions should be mapped to the firm's enhanced project plan.

**MRA #1 – Internal Liquidity Stress Testing Design**
**Issue:** The combined scenario in the current version of the firm's ILST is based on historical simulation; but does not reflect a forward-looking assessment of the firm's risks. It combines data from capital stress testing and internal historical data that has been supplemented with high-level external data. Examiners have noted several weaknesses in the firm's approach, including:

- Key assumptions rely on incomparable peer benchmarks. 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.
- The scenario design contains assumptions tailored to capital stress testing rather than the more immediate impact of a liquidity stress.

**Risk:** The current stress scenario does not sufficiently stress SVBFG's liquidity exposures. Without sufficiently designed assumptions and scenarios, the firm's liquidity buffer under stress may be insufficient.

**Required Action:** By June 30, 2022, SVBFG is required to enhance its ILST scenario design. The scenario should address both market- and idiosyncratic-based risks. The velocity and severity of stress factors in the scenario should be appropriate for analyzing stress over the shorter time horizons of a defined liquidity event. The scenario itself should be subject to review and challenge by an independent function. The required actions should be mapped to the firm's enhanced project plan.

**MRA #2 – Deposit Segmentation**
**Issue:** The firm's ILST deposit segmentation is primarily focused on business lines, and does not delineate between product type, operational/non-operational deposit classification, or customer type. The insufficient segmentation results in all deposits being assumed to behave similarly in stress. During the exam, management acknowledged the outflows of its commercial deposits would vary in stress. While management has plans to enhance deposit segmentation, the specific methodology, project plan and supporting examples were not available during the exam.

**Risk:** Without sufficient deposit segmentation, the firm is unable to appropriately differentiate deposit behaviors through outflow assumptions. Assuming all deposits to behave similarly is unrealistic and potentially understates outflows under stress. The shortcomings in the firm's deposit segmentation negatively impact the reliability of liquidity buffer SVBFG has established.

**Required Action:** By June 30, 2022, SVBFG is required to enhance deposit segmentation to reflect the risks associated with their deposits. This includes stability characteristics such as operational versus non-operational deposits, product type, counterparty type, and other relevant elements identified through the firm's liquidity risk framework. The required actions should be mapped to the firm's enhanced project plan.

**MRA #3 – Liquidity Limits Framework**

**Issue:** The firm lacks several components of an adequate liquidity limits framework. The firm has not demonstrated effective liquidity risk identification, measurement and monitoring systems and processes commensurate with the complexity and business activities of the institution. In its current state, SVBFG's liquidity limit framework is a mix of static metrics that neither reflect the interconnectedness of the firm's liquidity risks, nor account for liquidity stress testing outcomes. SVBFG also lacks meaningful limits for primary sources of liquidity risk, including funding concentrations and off-balance sheet exposures, such as those that come from committed and uncommitted loan facilities. Finally, limits within lines of business and legal entities are not clearly linked to the firm's liquidity risk appetite.

**Risk:** The firm's current limit framework is inadequate for the purpose of measuring, monitoring, and controlling risks. These inadequacies may underestimate the demands on available liquidity sources in stress.

**Required Action:** By June 30, 2022, SVB is required to develop a comprehensive liquidity limit and monitoring framework commensurate with the liquidity risk profile of the institution. The limit structure should reflect the company's risk profile, size, complexity, and activities. The limit structure should also consider liquidity stress testing outcomes, funding concentrations, and off-balance sheet exposures. The required actions should be mapped to the firm's enhanced project plan.

**MRA #4 – Contingency Funding Plan**

**Issue:** The firm's CFP has several deficiencies. First, it does not include a quantitative evaluation of expected funding needs and funding capacity during a stress event. It lacks a realistic assessment of how funds providers would behave under stress. For example, Fed Funds borrowing lines are listed as still available under "Severe" stress events. Second, the firm identifies the types of contingent funding by source but does not identify available amount based on active contracts or internal firm limits. For example, when compared with the firm's ILST, the CFP assumes far more repo funding capacity than is currently available through master repurchase agreements. Additionally, several listed funding sources such as brokered CDs and discount window access have not been tested. Finally, the firm's Early Warning Indicators (EWIs) are not tailored to its liquidity risk profile. SVBFG's EWIs do not address off-balance sheet items despite the firm's $36 billion of unfunded loan commitments. SVBFG'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. Within a contingency planning context, SVBFG uses credit related metrics only in its Capital Contingency Plan but not in its Contingent Funding Plan.

**Risk:** An 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.

**Required Action:** By June 30, 2022, SVBFG is required to:

- Include quantitative projection and evaluation of expected funding needs and funding capacity under stress. This analysis must address the potential erosion in funding at alternative stages or severity levels of the stress event and identify the potential cash flow mismatches that may occur during the various stress levels.
- Accurately identify and test alternative sources of liquidity to ensure access to contingent funding sources, including availability according to firm limits or restrictions.
- Enhance the CFP by tailoring EWIs to its specific risk profile. Additionally, management is required to establish a discrete linkage between its EWIs and activating the CFP.
- The required actions should be mapped to the firm's enhanced project plan.

**Closing**

After reviewing this supervisory letter[4], and within 30 days of its receipt, management is required to submit in writing remedial actions the firm will take to address the supervisory findings described above.

The actions should include Internal Audit validation within 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.[5] As such, the contents of this letter are subject to the rules of the Board

[4] 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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of Governors of the Federal Reserve System regarding disclosure of confidential supervisory information. Should you have any comments or questions regarding this letter, please feel free to contact me at **Redacted** or **Redacted** @sf.frb.org. 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** LFBO Dedicated Supervisory Team Lead

cc: Daniel Beck, Chief Financial Officer
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