



CALIFORNIA DEPARTMENT OF BUSINESS OVERSIGHT  
DIVISION OF FINANCIAL INSTITUTIONS  
1515 K STREET, SUITE 200  
SACRAMENTO, CA 95814



FEDERAL RESERVE BANK  
OF SAN FRANCISCO  
FEDERAL RESERVE BANK OF SAN FRANCISCO  
101 MARKET STREET  
SAN FRANCISCO, CA 94105

February 14, 2018

Board of Directors  
Silicon Valley Bank  
3003 Tasman Drive  
Santa Clara, California 95054

Dear Members of the Board:

Enclosed is the report of examination covering our recent review of Silicon Valley Bank. Examiners from the Federal Reserve Bank of San Francisco (FRBSF) and the California Department of Business Oversight (CDBO) commenced a roll-up examination on October 2, 2017, using financial information as of September 30, 2017, and loan data as of July 31, 2017. The event leveraged the results of all ongoing supervision work performed during this supervisory cycle, including four target examinations. The results of this examination were discussed with senior management on December 12, 2017.

The overall condition of the bank is satisfactory. The bank's financial condition remains sound, as evidenced by satisfactory asset quality, capital, and earnings, sensitivity to market risk, and strong liquidity. Asset quality remains satisfactory and reflects a manageable level of problem loans, as well as adequate credit administration and risk management. Management successfully resolved the Matters Requiring Attention (MRA) improving the monitoring of the bank's high risk profile credits and documentation of credit review procedures. However, inconsistencies and gaps in capital call lending risk management processes were noted during the examination that could result in elevated credit risk. Management is required to complete an independent risk assessment of capital call lending activities to ensure that risk management processes and policies remain commensurate with the size, complexity, and growth of the portfolio. Vendor management processes should also capture all service providers, including the law firms that represent the bank in its capital call lending processes. Refer to the Matters Requiring Board Attention section of the report for details on corrective action.

Capital levels remain satisfactory for the overall risk profile of the bank, and management has improved the documentation of the capital planning methodology in response to a prior examination MRA. Nevertheless, the capital assessment does not sufficiently detail how material risks are accounted for in the capital stack. Management is required to strengthen the capital adequacy assessment and planning methodology to support capital actions and decisions. Refer to the Matters Requiring Board Attention section of the report for details on corrective action.

Federal Reserve Bank of San Francisco

Board of Directors  
Silicon Valley Bank  
February 14, 2018  
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Overall, management and board supervision, as well as risk management are satisfactory. These ratings are based primarily on the bank's sound financial condition, the manageable volume of areas for attention, and management's commitment and ability to address the deficiencies. Management has sufficiently addressed information technology (IT) weaknesses and overall IT performance is now satisfactory. In addition, significant progress to address BSA/AML and Office of Foreign Assets Control (OFAC) program deficiencies is recognized, including improving the internal controls framework and remediating two MRAs related to the risk assessment and system implementation. Nevertheless, several key projects or action plans have not been fully implemented. Additional time will also be needed to demonstrate the effectiveness of new processes and controls, organizational changes, and management skills. As a result, previous Matters Requiring Immediate Attention related to oversight and internal controls, as well as the prior OFAC MRA remain open. The Memorandum of Understanding should remain in place until all weaknesses have been remediated and corrective actions are validated during the next examination cycle. These findings were communicated to the board of directors in a supervisory letter dated January 17, 2018.

The new MRAs cited at this examination, along with the ongoing BSA/AML and OFAC program deficiencies, highlight areas of new and lingering weaknesses in the risk oversight and control function. Although risk management practices over the credit, liquidity, market and legal functions remain adequate, the bank's rapid growth and turnover of key management positions have placed a strain on the compliance and Enterprise Risk Management functions with respect to oversight and challenge. As a result, weaknesses were noted in management's ability to effectively identify and monitor key risks as well as ensure compliance with bank policies, regulatory rules and supervisory guidance. While the severity of these issues is mitigated by an experienced management team and an effective audit function, the board is required to direct management to ensure that the risk management structure is commensurate with the institution's growing size, complexity, and risks. Refer to the Matters Requiring Board Attention section of the report for details on corrective action.

After your review of the enclosed report and within 45 days of its receipt, please submit a written response to the FRBSF and the CDBO that includes management's actions and/or plans to address the Matters Requiring Board Attention. Upon completion of your review, each director should sign the enclosed *Signature of Directors* page to acknowledge their review. This letter and the signed Directors page should be retained with the permanent records of the bank.

Federal Reserve Bank of San Francisco

Board of Directors  
Silicon Valley Bank  
February 14, 2018  
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As a reminder, this letter is the property of the Board of Governors, and is furnished to directors and management for their confidential use under applicable law.<sup>1</sup> We welcome the opportunity to discuss any aspect of this letter or our supervisory process with members of the board or management. If you have any comments or questions, please do not hesitate to contact Central Point of Contact **Redacted** at **Redacted** or **Redacted** at **Redacted**

Sincerely,  
**Redacted**

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

**Redacted**  
**Redacted**  
California Department of Business Oversight

By **Redacted**  
**Redacted**  
Assistant Deputy Commissioner

Enclosure(s)

cc: Federal Deposit Insurance Corporation  
Consumer Financial Protection Bureau

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**RESTRICTED F.R.**

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**REPORT OF  
COMMERCIAL BANK EXAMINATION**

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California Department of Business Oversight  
Federal Reserve Bank of San Francisco

Bank Name: SILICON VALLEY BANK

Start Date: OCTOBER 2, 2017

Location: SANTA CLARA, CALIFORNIA

Financial Statements as of: SEPTEMBER 30, 2017

RSSD Number: 802866

Examination Date as of: SEPTEMBER 30, 2017

Concluded on: DECEMBER 12, 2017

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**FEDERAL RESERVE BANK OF SAN FRANCISCO**

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# REPORT OF COMMERCIAL BANK EXAMINATION

<b>Silicon Valley Bank</b>			
Bank Name			
<b>Physical Location</b>		<b>Mailing Address</b>	
Street:	3003 Tasman Drive	Street/Box:	3003 Tasman Drive
City:	Santa Clara	City:	Santa Clara
County:	Santa Clara	State:	California
State:	California	ZIP Code:	95054-1191
<input checked="" type="checkbox"/>	Joint	<input type="checkbox"/>	Concurrent
		<input type="checkbox"/>	Independent
<b>Redacted</b> _____		<b>Redacted</b> _____	
Federal Reserve Bank Examiner-in-Charge		California Department of Business Oversight EIC	

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Note: Except as indicated, amounts in tables are shown to the nearest thousand dollars.

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Date of previous examination: October 03, 2016

## SCOPE

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This report of examination presents the findings and conclusions of the roll-up safety and soundness examination of Silicon Valley Bank (SVB/bank) jointly conducted by examiners from the Federal Reserve Bank of San Francisco (FRBSF/Reserve Bank) and the California Department of Business Oversight (CDBO). Financial information presented in this report is as of September 30, 2017, and loan data as of July 31, 2017. The on-site portion of the examination commenced on October 2, 2017, and concluded on October 26, 2017.

The examination included a risk-focused assessment of capital adequacy, asset quality, earnings, liquidity, and sensitivity to market risk. In addition, examiners evaluated management and risk management processes, including key control functions such as internal credit review and internal audit. Corrective actions taken by bank management to address prior examination findings were also reviewed for their status and adequacy. Lastly, the examination scope considered ongoing supervision work performed during the year, including the results of four target examinations conducted during the 2017 supervisory cycle as summarized below.

Supervisory Event	2017 Rating	Event Date
Information Technology	Satisfactory	February 27, 2017
Asset Quality Target	Satisfactory, with new and continued findings	May 8, 2017
Dodd-Frank Act Stress Test (DFAST)	In Compliance, with new and continued findings	October 2, 2017
Bank Secrecy Act	Less than Satisfactory, with continued findings	October 16, 2017

Of note, a concurrent review of the Bank Secrecy Act/Anti-Money Laundering (BSA/AML) and Office of Foreign Assets Control (OFAC) compliance programs was conducted to assess management's progress in addressing supervisory concerns, and compliance with the Memorandum of Understanding (MOU).

No Consumer Compliance or Community Reinvestment Act examinations were conducted during 2017.

### Asset Quality

The assessment of asset quality included a review of 74 relationships totaling \$2.2 billion, or 5.7 percent of commercial loans and commitments. When combined with the sample conducted during the May 2017 target review, loan portfolio coverage excluding Shared National Credit activity totaled 17.4 percent for the 2017 supervisory cycle. Asset quality was evaluated over the course of two supervisory events, with an emphasis on portfolios with inherent high-risk credits, large concentrations, or rapid growth. The May 2017 Asset Quality Target focused on evaluating the administration of leveraged loans based on prudent risk management standards, management's progress in enhancing loan file information for pre-profit credits, and collateral documentation standards for capital call loans. This examination also incorporated a representative sample of leveraged and pre-profit credits, to further assess the adequacy of management's remediation of the outstanding MRA requiring enhanced loan documentation.

The evaluation of credit risk management practices included a review of underwriting standards, risk monitoring, and the accuracy of the internal loan grading system. During this review, examiners evaluated management's progress in resolving two MRAs requiring the development of an enhanced

## SCOPE

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framework to identify emerging credit risk and improvement of internal loan review procedures for line sheet preparation and credit assessments. Risk management over capital call lending, residential mortgages with a focus on underwriting practices, and compliance with Regulation O were also reviewed. In addition, an update on the loan loss reserve methodology was prepared.

### Peer Comparison

Throughout the report, the performance of the bank is compared to national peer group averages of other commercial banks of similar size and structure. As of September 30, 2017, the peer group was comprised of 253 insured commercial banks having assets greater than \$3.0 billion.

### Exit Meeting

An exit meeting with senior management of the bank was held on December 12, 2017, to communicate final examination conclusions and findings.

Present from senior management were the following:

- Greg Becker, Executive Vice President (EVP) and Chief Executive Officer
- Michael Descheneaux, EVP and President
- Dan Beck, EVP and Chief Financial Officer
- Marc Cadieux, EVP and Chief Credit Officer
- Mike Dreyer, EVP and Chief Operations Officer
- Laura Izurieta, EVP and Chief Risk Officer
- John Peters, EVP and Head of Internal Audit
- **Redacted**
- **Redacted**
- **Redacted**
- Bob Neitz, BSA Officer and Chief Compliance Officer
- **Redacted**
- Michael Kruse, Treasurer
- **Redacted**
- Kamran Husain, Chief Accounting Officer
- **Redacted**
- **Redacted**
- **Redacted**
- Suanne Mingrone, Head of Regulatory Relations
- **Redacted**

Representing the FRBSF were the following:

- **Redacted** Central Point of Contact and Examiner-in-Charge (EIC) Lead
- **Redacted**, EIC
- **Redacted**, Asset Manager

Representing the CDBO were the following:

- **Redacted**
- **Redacted**, EIC



## MATTERS REQUIRING BOARD ATTENTION AND EXAMINATION COMMENTS AND CONCLUSIONS

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### Matters Requiring Attention<sup>1</sup>

#### Topic: Risk Management – Compliance and Independent Oversight

**Issue:** While overall risk management and board and senior management oversight remain adequate, the bank's rapid asset growth, coupled with turnover of key management positions in recent years, has placed stress on the compliance and enterprise risk management (ERM) functions. Examiners continued to identify instances across the business lines where risk management processes have not kept pace with growth, and where policies and practices require better alignment with supervisory guidance or more effective MIS and controls to appropriately mitigate risks. Viewed collectively, the root cause of these exceptions or weaknesses is the need for further strengthening of oversight from Corporate Compliance and ERM through ongoing effective challenge to policies, procedures, limits, strategies/plans, and model assumptions. As outlined in SR 16-11,<sup>2</sup> an institution's risk management processes are expected to evolve in sophistication, commensurate with the institution's asset growth, complexity, and risk.

**Required Action:** Management is required to align risk management practices with SR 16-11 to ensure compliance with internal policies and relevant supervisory guidance and rules, as well as sufficient independent oversight to address the full range of risks for the institution. These actions include:

- Establishing clear accountabilities, roles, and responsibilities over the system of internal controls (at both the business line and the risk management oversight level) to ensure compliance with internal policies, supervisory guidance, and regulations.
- Establishing clear roles, responsibilities, and engagement strategy of the positions assigned to provide ongoing oversight and challenge to risk infrastructure and controls, plans, and model assumptions. Personnel performing this oversight should be independent from business lines and have a level of knowledge and expertise consistent with the size and complexity of the bank.
- Providing evidence of the effective implementation of the above-mentioned system of internal controls and risk oversight structure in the form of a risk coverage map for the enterprise, internal reporting, and clear action plans to address the root cause of self-identified gaps in the compliance and effective challenge functions. Each action plan should include ownership and specific tasks.

**Management Response:** CRO Laura Izurieta was receptive to the finding and agreed to implement these recommendations by September 30, 2018.

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<sup>1</sup> Matters Requiring Attention are matters that are important and that the Federal Reserve is expecting a banking organization to address over time.

<sup>2</sup> SR 16-11, *Supervisory Guidance for Assessing Risk Management at Supervised Institutions with Total Consolidated Assets Less than \$50 Billion* < <https://www.federalreserve.gov/supervisionreg/srletters/sr1611.htm> >

## MATTERS REQUIRING BOARD ATTENTION AND EXAMINATION COMMENTS AND CONCLUSIONS

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### Topic: Credit Risk Management – Capital Call Lending

**Issue:** Risk management of capital call lending activities is inconsistent and requires attention in light of the rapid growth, size, and complexity of the portfolio. Capital call lending practices should be re-evaluated to ensure that processes continue to effectively identify, monitor, and control credit risk.

**Required Action:** Management is required to reassess capital call lending activities to ensure that risks are appropriately identified and controlled. The assessment should include at a minimum, the following areas:

- Concentration limits, sub-limits, and monitoring reports should include additional detail to ensure the sufficient oversight of capital call activities, given the portfolio's complexity, risk profile, and the bank's substantial exposure to these activities. Reports should include analysis and consider sub-limits based on industry, product type, country, wealth management agents, high net worth borrowers, and any other segmentation that presents concentration risk.
- Due diligence forms for capital call lending should be assessed for use in countries that present unique risk conditions.
- Internal control processes should be evaluated to ensure that wealth management agents and high net worth borrowers are independently reviewed, appropriately risk rated, and assigned limits based on risk levels.
- Final loan boarding processes should be reviewed to ensure documentation requirements are consistently applied and incorporate certification controls for due diligence forms and attorney-provided consistency letters where appropriate.

**Management Response:** CEO Greg Becker and CCO Marc Cadieux agreed that it would be appropriate to conduct an independent risk assessment of the capital call lending portfolio based on its current volume and growth, and committed to engage a third party and address these recommendations by September 30, 2018.

### Topic: Vendor Risk Management

**Issue:** Management has not ensured that the vendor management program captures all outside service providers. Currently, several law firms that represent the bank in its capital call lending processes have not been included in the vendor management program. SR 13-19<sup>3</sup> states that "service providers" are broadly defined to include all entities that enter into a contractual relationship with a financial institution to provide business activities and services.

**Required Action:** Management is required to conduct a review of centralized vendor management controls and processes to ensure all outside vendors are appropriately covered. These reviews should be commensurate with the level of risk in those relationships. Furthermore, reviews completed for unaccounted vendors, such as these legal firms, should be conducted by the necessary management and/or board committee.

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<sup>3</sup> SR 13-19, *Guidance on Managing Outsourcing Risk*, < <https://www.federalreserve.gov/supervisionreg/srletters/sr1319.htm> >

## MATTERS REQUIRING BOARD ATTENTION AND EXAMINATION COMMENTS AND CONCLUSIONS

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**Management Response:** **Redacted**, and Michael Zuckert, EVP/General Counsel, were receptive to this finding and agreed to remediate the issue by May 31, 2018.

**Topic: Internal Capital Adequacy Assessment**

**Issue:** The capital planning methodology does not include sufficient analysis to ensure that material risks at the firm are appropriately considered in capital actions and decisions. The methodology relies heavily on the limited scenarios used for DFAST, which do not necessarily capture the company's full range of risks. The internal capital assessment lacks specificity in capital attribution and does not detail how material risks, including certain risks outlined in the Risk Appetite Statement, are accounted for in the capital stack. Finally, it is unclear how the capital limits derived for the holding company consider substantial non-bank holding company activities.

**Required Action:** Management is required to strengthen the analysis and documentation behind the capital adequacy assessment and planning methodology to ensure effective identification, measurement, monitoring, and control of risks, consistent with expectations outlined in SR 16-11. Management should build sufficient granularity into the capital limits implemented to identify capital attribution for each risk segment, including applicable risks resulting from ERM Risk Identification efforts which are currently underway. Additionally, management should ensure that sufficient documentation is in place to understand quantitative methodologies and qualitative risk attribution processes. Documentation should also sufficiently describe and analyze the additional capital needs derived for holding company activity exposures.

**Management Response:** **Redacted** was receptive to the finding and agreed to remediate the issue by September 30, 2018.

Summary of New Findings	
Matters Requiring Attention	
Issue	Expected Completion Date
Risk Management – Compliance and Independent Oversight	September 30, 2018
Credit Risk Management – Capital Call Lending	September 30, 2018
Vendor Risk Management	May 31, 2018
Internal Capital Adequacy Assessment	September 30, 2018

**MATTERS REQUIRING BOARD ATTENTION AND  
EXAMINATION COMMENTS AND CONCLUSIONS**

SUMMARY OF OUTSTANDING FINDINGS		
Matters Requiring Immediate Attention (MRIA)		
Issue	Status	Comments
Internal Controls: CDD, EDD, and Suspicious Activity Monitoring	Carry Forward	Significant efforts have been made to address MRIA requirements, with the progress of remediation efforts acceptable. The completion of the EDD backlog and demonstrated effectiveness of improved CDD/EDD processes, among other internal control areas, remain in progress.
BSA Officer and Administration	Carry Forward	Significant efforts have been made to address MRIA requirements as evidenced by the hiring of qualified individuals to implement and manage the BSA/AML program. Nonetheless, remediation will depend on fully addressing all outstanding MRIAs/MRAs, as well as the demonstration of program effectiveness. BSA Officer oversight and ownership of the training program also needs strengthening.

SUMMARY OF OUTSTANDING FINDINGS		
Matters Requiring Attention		
Issue	Status	Comments
Program Oversight- Risk Assessment	Close	Management has satisfactorily remediated this deficiency.
Risk Management of System Implementation	Close	Management has satisfactorily remediated this deficiency.
BSA/OFAC Program	Carry Forward	Further improvement in the OFAC program is required to ensure ongoing compliance with OFAC requirements.
Credit File Documentation and Support	Close	Management has satisfactorily remediated this deficiency.
Internal Credit Review Procedures	Close	Management has satisfactorily remediated this deficiency.
Credit Risk Management Framework	Carry Forward	Management has developed an acceptable Management Action Plan and made progress identifying key risk indicators for its highest risk portfolios. Management is on track to develop a written framework by March 31, 2018.
Compliance Program	Close	Closed and replaced with a new MRA to communicate and clarify repeat and new concerns.

**MATTERS REQUIRING BOARD ATTENTION AND  
EXAMINATION COMMENTS AND CONCLUSIONS**

Safety and Soundness Examination Ratings			
Examination Start Date	Current Exam	Prior Exam	Prior Exam
	10/02/17	10/03/16	10/13/15
Uniform Composite Rating	2	2	2
Component Ratings:			
Capital	2	2	2
Asset Quality	2	2	2
Management	2	2	2
Earnings	2	2	2
Liquidity	1	1	1
Sensitivity to Market Risk	2	2	2
Risk Management Rating	2	2	2

The bank has been assigned a uniform composite rating of 2 (Satisfactory) based on information contained in this examination report and supporting workpapers. In accordance with the Uniform Financial Institutions Rating System, each bank is assigned a composite rating based on an evaluation of its managerial, operational, financial, and compliance performance. This rating is defined as follows:

**Composite 2**

Financial institutions with a composite 2 rating are fundamentally sound. For a financial institution to receive this rating, generally none of its component ratings should be more severe than 3. Only moderate weaknesses are present, and the board of directors and management are capable of and willing to correct them. These financial institutions are stable, can withstand business fluctuations, and are in substantial compliance with laws and regulations. Overall risk-management practices are satisfactory relative to the institution's size, complexity, and risk profile. There are no material supervisory concerns and, as a result, the supervisory response is informal and limited.

**OVERALL CONDITION**

The overall condition of the bank is satisfactory. Asset quality remains satisfactory, reflecting a manageable level of problem loans as well as adequate credit administration and risk management. Management successfully resolved two MRAs improving the monitoring of the bank's high risk profile credits and documentation of internal credit review processes, and is on track to remediate an MRA requiring the development of a risk management framework to identify emerging credit risk by March 31, 2018. However, examiners noted inconsistencies and gaps in capital call lending risk management processes that could result in elevated credit risk. A new MRA was cited requiring the completion of an independent risk assessment of capital call lending activities to ensure that risk management processes and policies remain commensurate with the size, complexity, and growth of the

**MATTERS REQUIRING BOARD ATTENTION AND  
EXAMINATION COMMENTS AND CONCLUSIONS**

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portfolio. Management committed to address this MRA by September 30, 2018. In addition, it was noted that several law firms that represent the bank in its capital call lending activities were not included in the vendor management program. A new MRA was cited to ensure that the vendor management program captures all service providers. Management committed to remediate this MRA by May 31, 2018.

Earnings remain satisfactory, as net income has increased due to substantial asset growth and improving yields. Liquidity remains strong with substantial on-balance sheet liquidity to meet present and anticipated funding needs. Sensitivity to market risk continues to be appropriately managed. Capital levels remain satisfactory for the overall risk profile of the bank. Management has improved the documentation of the capital planning methodology in response to prior examination recommendations. However, the capital assessment does not sufficiently detail how material risks are accounted for in the capital stack. A new MRA was cited requiring the strengthening of the capital adequacy assessment and planning methodology to support capital actions and decisions. Management committed to address this MRA by September 30, 2018.

Overall management remains satisfactory. The assessment is supported by the bank's overall sound financial condition and progress made to implement corrective actions and address prior examination findings. Management has sufficiently addressed IT weaknesses and overall IT performance is now satisfactory. In addition, management made significant progress to address BSA/AML and OFAC program deficiencies, including improving the internal controls framework and remediating two MRAs related to risk assessment and system implementation. However, additional time is required to fully implement effective BSA program oversight and internal controls. The MOU will remain outstanding until all weaknesses have been remediated and corrective actions are validated during the next examination cycle. Additionally, while risk management processes are generally adequate, certain credit, compliance, and enterprise-wide oversight practices require improvement to ensure the effectiveness of risk identification, monitoring, and control. An MRA is cited requiring the strengthening of the risk management structure to ensure compliance with regulations, supervisory guidance, and internal guidance, as well as ensure sufficient independent oversight to address the full range of risks for the institution. Management committed to address this MRA by September 30, 2018.

**Redacted**

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FRBSF Examiner-in-Charge**Redacted**

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CDBO Examiner-in-Charge

**COMPLIANCE WITH ENFORCEMENT ACTIONS**

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Action	Date
Memorandum of Understanding	01/30/17

The bank entered into a MOU with the FRBSF and the CDBO to address deficiencies in the BSA/AML and OFAC program, effective January 30, 2017. Although SVB continues to make adequate progress towards addressing the provisions of the MOU, key improvements are still in progress. The bank remains in noncompliance with five of the seven provisions pertaining to the remediation of board oversight, compliance program, customer due diligence, suspicious activity monitoring and reporting, and OFAC compliance. A separate BSA target supervisory letter was transmitted to the bank on January 17, 2018 with additional detail on the status of compliance with the enforcement action.

## MANAGEMENT / RISK MANAGEMENT

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Management is evaluated against all factors necessary to operate the institution in a safe and sound manner and in accordance with acceptable practices. Consideration is given to technical competence, leadership, and administrative ability; compliance with regulations and statutes; ability to plan and respond to changing circumstances; effectiveness of management information systems; adequacy of and compliance with internal policies; responsiveness to recommendations from auditors and supervisory authorities; tendencies toward self-dealing; demonstrated willingness to serve the legitimate banking needs of the community; and management depth and succession. In addition, consideration is given to the extent that management is affected by or susceptible to dominant influence or concentration of authority and the overall performance of the institution and its risk profile. Consideration is given to the risk management rating, risk factors, and the adequacy of risk management associated with risk levels and risk trends. Consideration is also given to the impact of any information technology concerns on operational and other relevant risks, as well as the impact on legal or other risks of any findings with respect to fiduciary activities or compliance concerns.

### COMPONENT RATINGS

2 / 2

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#### Management

Management and board performance remain satisfactory. This assessment primarily reflects the overall satisfactory condition of the bank as well as management's commitment and ability to address deficiencies by providing sufficient resources and appropriate oversight to remediate issues.

Management is responsive to regulatory and audit recommendations, evidenced by the return of the IT function to a stable and satisfactory condition and the closure of four MRAs during the prior year.

However, while progress has been made in addressing BSA deficiencies, additional time is required to comply with the MOU and fully remediate weaknesses in BSA oversight, internal controls and the OFAC program.

The management team is qualified to supervise bank operations as well as prepare the bank for compliance with heightened regulatory standards required for institutions over the \$50.0 billion asset threshold. While senior management has experienced significant turnover in the past two years, the current leadership team is now staffed with individuals that hold either considerable experience in their current capacity or relevant experience at similar-sized or large banks. Management is currently working on enhancing the risk management structure to support the bank's growth and ensure that risks are sufficiently identified, monitored and controlled.

#### Risk Management

Risk management remains generally satisfactory, reflecting adequate board and management oversight as well as sufficient policies and procedures over the bank's credit, liquidity, market, and legal functions. However, the bank's rapid growth and turnover of key management positions have placed a strain on the compliance and ERM functions, resulting in weakened risk monitoring and MIS that could impair management's ability to effectively identify and monitor key risks and vulnerabilities. In addition, while management has provided resources to address prior findings, examiners continue to identify instances across the business lines where risk management practices have not kept pace with growth. A contributing factor to continued findings is the lack of clarity in roles, responsibilities, and accountabilities within these functions with respect to independent risk oversight and challenge.

Weaknesses were also noted in the system of controls and risk monitoring to ensure compliance with institutional policies, supervisory guidance, and regulations. An MRA is cited to align risk management practices with SR 16-11 and ensure compliance with regulations, supervisory guidance, and internal



## MANAGEMENT / RISK MANAGEMENT

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guidance, as well as ensure sufficient independent oversight to address the full range of risks for the institution. Refer to the *Matters Requiring Board Attention* section of the report for additional detail.

The audit program remains effective and compliant with SR 13-1<sup>5</sup>. The internal audit function continues to provide an independent and objective assessment of internal control, governance, and risk management processes. The 2017 audit plan is on track for timely completion, as staff resources and expertise, inclusive of co-sourced auditors, are sufficient. While the process for developing the audit universe is effective, management is currently enhancing processes to establish the audit universe through more formal documentation and mapping to operational processes, applications, models, vendors, and regulations. Auditable entities are generally audited at a frequency commensurate with their risk, with any deviations reported to the Audit Committee. Audits are comprehensive and workpapers adequately support their findings and conclusions. Finally, effective issues tracking processes are in place to monitor the status of open audit findings and validate corrective actions taken.

Overall internal controls are acceptable. The BSA/AML internal control framework has improved but additional time is required to ensure that updated processes are operating effectively. Refer to the separate supervisory letter communicating the results of the October 2017 BSA target examination for additional detail. While IT operations have stabilized and is now satisfactory, Internal Audit and the IT General Controls SOX review noted weaknesses in E-Banking and access controls. The area of E-Banking was rated as “Needs Improvement” in the December 2016 audit report, primarily due to vulnerabilities in authentication controls introduced during a software update. Management has remediated the application code, retested applications for similar vulnerabilities and implemented enhanced testing processes. The SOX review also cited a significant deficiency related to SVB’s decentralized and manual application access management processes. The risk of ineffective access controls is mitigated by existing compensating processes, and management has initiated projects to address control issues. Remediation efforts for internal control weaknesses will be reviewed during the 2018 IT examination.

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<sup>5</sup> SR 13-01, *Supplemental Policy Statement on the Internal Audit Function and Its Outsourcing*, < <https://www.federalreserve.gov/supervisionreg/srletters/sr1301.htm> >

## ANALYSIS OF FINANCIAL FACTORS

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### Asset Quality

#### **Component Rating: 2**

Asset quality remains satisfactory. The internal loan grading system is reliable and continues to be supported by timely problem loan identification and effective internal loan review processes. Also considered in this rating are credit administration and risk management practices.

#### *Volume and Trend of Criticized Assets*

The volume of problem assets decreased over the past year due to positive investor sentiment in late 2016 that led to continued financial support for many sponsor-dependent borrowers. As of July 31, 2017, adversely classified assets totaled \$916.6 million or 23.7 percent of capital and reserves, compared to 28.5 percent a year ago. Credits listed as special mention also declined by \$91.3 million to \$273.2 million during this period. Improving credit quality is further reflected in other key credit performance metrics such as net credit losses, which totaled \$45.3 million through the third quarter of 2017 for a 0.3 percent loss rate, compared to 0.5 percent through September 30, 2016. The levels of past due and nonaccrual loans remain stable.

Notwithstanding these favorable aspects, the outlook for loan quality remains dependent on conditions and trends in the innovation sector. Although favorable venture capital investment conditions in late 2016 have resulted in improved trends in credit quality, management noted that September 2017 industry data indicated that venture fundraising declined significantly when compared to 2016 totals. Exit activity and initial purchase offerings have also declined since the prior year. Management continues to monitor investor sentiment and market conditions to determine whether prolonged trends could adversely impact investor-dependent loans.

#### *Credit Risk Management*

Credit risk management processes remain satisfactory, based on effective board and committee oversight, acceptable risk monitoring, and a credible internal loan review function. Since the prior examination, management successfully resolved two MRAs improving the monitoring of the bank's high risk profile credits and documentation of credit review procedures. Policies and procedures now require increased transparency into the resolution plans of classified pre-profit credits and enhanced support for key assumptions pertinent to the underwriting of leveraged loans. In addition, internal loan review procedures have been augmented with detailed instructions for evaluating specialty lending areas, including capital call, leveraged, and pre-profit credits.

Management has developed acceptable policies and processes, as well as job aides and other forms of guidance to supervise nearly every credit-related activity. However, concerns were raised regarding the risk management of capital call loans, which represent the largest and fastest-growing loan segment with a concentration of over 400.0 percent of capital. While this portfolio has had a history of strong credit quality through prudent underwriting, inconsistencies and gaps noted in risk management processes could result in elevated credit risk. A new MRA is issued requiring the completion of an independent risk assessment of capital call lending activities to ensure that risk management processes and policies remain commensurate with the size, complexity, and growth of the portfolio. In addition, it was noted that several law firms that represent the bank in its capital call lending processes were not included in the vendor management program. A new MRA is cited to ensure that the vendor

## ANALYSIS OF FINANCIAL FACTORS

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management program captures all service providers. Refer to the Matters Requiring Board Attention section of the report for details on the two MRAs and required corrective action.

Credit MIS remains acceptable and includes a number of reports designed to monitor and measure credit-related conditions. Management has made progress in remediating the MRA requiring the development of a risk management framework to identify emerging credit risk. Initially, the framework will include analysis of metrics and thresholds that point to meaningful risk correlation within the bank's high risk loan segments, including leveraged and pre-profit loans; with analysis subsequently applied in a similar manner to lower risk profile groups. This analysis will be used to support the formulation of Key Risk Indicators (KRIs) designed to monitor and measure portfolio conditions through standardized reports.

### *Internal Credit Review*

The internal credit review function remains satisfactory and provides an effective challenge over credit administration. The team maintains appropriate independence from the loan production function and provides objective assessments for each loan division. Personnel in the group are qualified and sufficiently trained, with ongoing training tailored to the bank's specialty lending areas where appropriate. Policies, job aides, procedures, and other forms of guidance are acceptable. Management successfully remediated a prior MRA to augment line sheet procedures with prescriptive instructions for analyzing capital call, pre-profit, and leveraged lending. Lastly, management is implementing a succession plan to cross train a new manager to succeed the head of internal credit review, who plans to retire in early 2018.

### *Allowance for Loan and Lease Losses*

The loan loss reserve methodology is acceptable and the level of the reserve remains appropriate, totaling \$249.0 million, or 1.1 percent of total loans as of September 30, 2017. The reserve adequately covers net losses at 4.1 times, nonaccrual loans at 2.0 times, and classified assets at 0.27 times. Although these metrics have fluctuated since the prior examination, they remain directionally consistent with the credit risk in the portfolio. The ALLL policy is comprehensive and provides clear standards for generating appropriate and supported reserve allocations. The policy defines standards for ASC 450 formula computations for homogenous loan pools, qualitative factors, and ASC 310 specific allocations for loans designated as impaired. Additionally, management has created a loan pool matrix to more effectively analyze performing impaired loans that are neither past due nor on nonaccrual status.

### *Regulation O*

The bank is in compliance with Regulation O requirements. Management has corrected the violations cited at the prior full-scope examination and strengthened policies, procedures, and monitoring processes to ensure that inadvertent insider overdrafts do not recur. Policies and procedures have been updated to prohibit the funding of insider overdrafts. In addition, senior management and the board adequately monitor loans for non-preferential terms and conditions, credit quality, and ongoing compliance with Regulation O lending limits.

### *Investment Portfolio*

The quality and risk management of the investment portfolio remains satisfactory. The investment securities portfolio totaled \$23.4 billion or 46.5 percent of average assets, with over 99.0 percent of

## **ANALYSIS OF FINANCIAL FACTORS**

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portfolio consisting of low risk U.S. Treasury and government agency securities. Risk monitoring is acceptable, as evidenced by adequate documentation of pre-purchase assessments and ongoing monitoring as well as sufficient oversight provided by the Asset/Liability Committee (ALCO). Investment strategy objectives continue to focus on capital preservation, liquidity, and interest rate risk management. Management's plan to increase municipal bond holdings over time to a range of 10.0 percent of investments is prudent and well-controlled.

### **Earnings**

#### **Component Rating: 2**

Earnings remain satisfactory. Through September 30, 2017, the bank reported net income of \$358.8 million for a return on average assets (ROAA) of 1.02 percent, a significant increase from the ROAA of 0.85 percent reported for 2016. The improvement in earnings is primarily attributed to substantial asset growth and an increase in the federal funds rate resulting in higher loan and investment yields. Provision expenses to the ALLL have decreased since the prior year, which has helped offset increasing compensation and related expenses used to fund the bank's growth initiatives and improvement of the risk management infrastructure.

The net interest margin (NIM) also improved due to increasing interest rates but continues to be constrained by the level of loans relative to total assets. Substantial deposit inflows from the bank's clientele, which includes venture capital and private equity firms with significant levels of cash, have resulted in excess funds deployed into a sizable and lower-yielding investment portfolio. The downward pressure on the NIM is slightly offset by the low cost of funds provided by the bank's large and stable core deposit base.

Budgeting practices are adequate and based on reasonable assumptions. Management monitors earnings performance through the use of budget variance reports that are distributed to all business line owners on a monthly basis. The bank is on track to meet 2017 budget projections.

## ANALYSIS OF FINANCIAL FACTORS

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### Capital

#### **Component Rating: 2**

Capital levels remain satisfactory relative to the overall risk profile of the institution. Capital ratios declined slightly year-over-year as a result of strong asset growth outpacing capital accretion. While the tier 1 leverage ratio continues to trail peer levels, risk is mitigated by the sizable investment portfolio relative to total assets. Risk-weighted capital ratios remain comparable to peer. Capital continues to be supported by the bank's retained earnings and satisfactory asset quality.

Board and senior management oversight is appropriate. Current and projected capital levels and trends are reviewed monthly by the ALCO and quarterly by the Finance Committee. Management has improved the documentation of the capital planning methodology by including key assumptions to support the composition and derivation of capital buffers. However, aspects of the capital planning methodology, specifically with regards to capital attribution, require additional attention. Analysis for capital limits requires increased granularity to ensure that material risks at the firm are appropriately incorporated to support capital actions and decisions. In addition, many limits do not have justification as to why they are appropriate for the firm (e.g. "floor" of 350 bps, or starting base at the adequately capitalized minimum). Following a gap analysis performed by **Redacted**, project plans related to capital management and planning were developed which are expected to address capital attribution to credit risk; however, it would be prudent to also distinguish other enterprise risks. Refer to the *Matters Requiring Board Attention* section of the report for additional detail regarding deficiencies and required corrective action.

The bank paid \$60.0 million in dividends to the parent company through the third quarter of 2017. The 2017 capital plan allows for up to 30.0 percent of quarterly net income to be upstreamed in anticipation of future uses of cash at the holding company, which may include share repurchases, dividends, or by way of recent example, the retirement of trust-preferred securities as management seeks to simplify the capital structure. Each quarter, management performs a dividend analysis to ensure that regulatory requirements are met and the bank continues to hold capital that meets internal policy thresholds.

#### *DFAST Review*

The October 2017 DFAST review concluded that the bank remains in compliance with the minimum DFAST guidance requirements outlined in SR 14-03<sup>6</sup>. However, DFAST reporting requires better support and analysis of the model methodologies and outcomes, including the overlay process. In addition, while management made efforts to improve Model Risk Management (MRM) policies and procedures, examiners identified areas in oversight and documentation requiring further improvement. Management will also be required to validate the process used to extend the paths of the company's additional variables used in each scenario. The two MRAs requiring improvement in MRM oversight and the rationale and support of the DFAST framework are detailed in a separate supervisory letter transmitted to the bank on February 5, 2018.

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<sup>6</sup> SR 14-03, *Supervisory Guidance on Implementing Dodd-Frank Act Company-Run Stress Tests for Banking Organizations with Total Consolidated Assets of more than \$10 Billion but less than \$50 Billion*  
< <https://www.federalreserve.gov/supervisionreg/srletters/sr1403.htm> >

## ANALYSIS OF FINANCIAL FACTORS

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### Liquidity

#### **Component Rating: 1**

Liquidity remains strong. The bank maintains substantial and reliable access to funds on favorable terms to meet present and anticipated liquidity needs. As of September 30, 2017, on-balance sheet liquidity represented 46.7 percent of total assets, consisting of unencumbered high quality securities of \$20.6 billion and deposits held at the Federal Reserve of \$2.7 billion. Funding remains centered in the stable and well-diversified core deposit base which at 84.0 percent of total assets, is well above the peer group average of 69.8 percent. The bank continues to attract low-cost funding from highly liquid clients, which includes many fast-growing technology startups and their venture capital investors. Secondary funding sources include unused, secured lines of credit with the Federal Home Loan Bank and FRB Discount Window of \$3.4 billion and \$719.0 million, respectively, as well as repo lines of \$2.3 billion.

Funds management practices are adequate. Management has adequately planned and communicated the strategy for managing excess deposits through off-balance sheet investment alternatives for the client base, while making tactical decisions in targeted product pricing and client segments as necessary for on-balance sheet deposit retention. Policies ensure sufficient funding for both anticipated and unanticipated events, including establishing a liquidity buffer for unexpected liquidity stress events. Contingency funding plan and liquidity stress testing practices are adequate and in line with interagency guidance.

## ANALYSIS OF FINANCIAL FACTORS

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### Sensitivity to Market Risk

#### Component Rating: 2

Sensitivity to market risk is satisfactory. The balance sheet remains asset-sensitive, primarily due to an asset base largely comprised of variable-rate instruments and a relatively short-term investment securities portfolio with an average duration of only 2.7 years. Nonetheless, market risk is considered to be moderate due to the bank's exposure to potential decreasing rates and growing exposure to foreign exchange risk. The notional value of derivative exposures increased substantially by \$1.7 billion or 65.4 percent from the prior year, mainly due to an increase in FX derivatives to accommodate customers. The risk of these foreign transactions is mitigated by immediate settlement on the spot market.

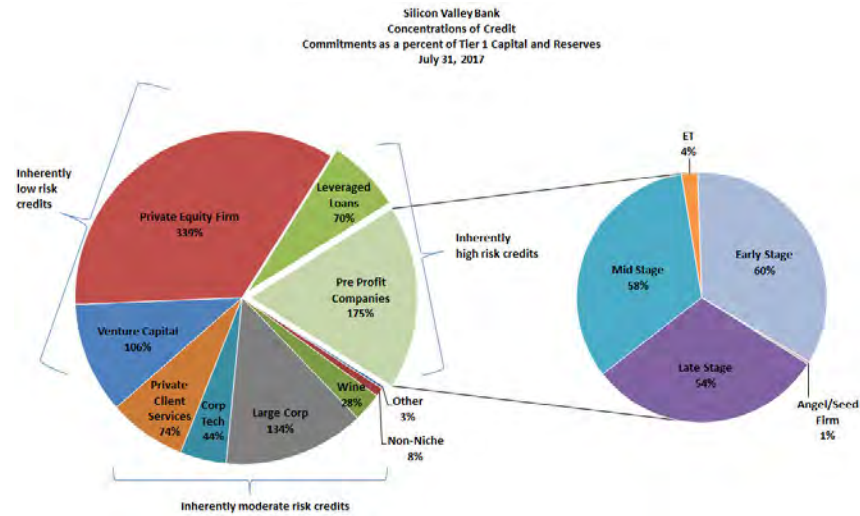
The bank's asset liability management (ALM) model indicates that net interest income (NII) and the economic value of equity (EVE) benefit from a rising rate environment. As of September 30, 2017, the model projects that NII would increase between 14.6 percent and 43.9 percent for upward parallel rate shocks between 100 basis points and 300 basis points on a static balance sheet. Equity at risk is also projected to increase in all positive rate shock environments. More specifically, a rate shock of up 200 basis points would increase NII by \$427.0 million and EVE by \$1.0 billion from the base scenario.

Overall, board and management oversight of market risk is adequate. Policies, including ALM model scenarios and limits, are reviewed and approved by the ALCO and the Finance Committee with appropriate frequency. Internal controls, model risk management, and internal audit's oversight over the market risk function are also adequate. The Treasury function has completed its implementation of the new ALM model, **Redacted**, and now has access to a more comprehensive set of scenario measurement and reporting capabilities. Model inputs and assumptions are in line with internal policies as well as regulatory guidance, with **Redacted**'s recent independent validation noting no significant issues. Nonetheless, while the Chief Risk Officer sits in on ALCO meetings, meeting minutes do not evidence detailed oversight or challenge to business decisions. The Treasury function has grown in complexity over the past several years, and examination and audit findings point to a need for ongoing and independent monitoring and challenge for market risk. Refer to the *Matters Requiring Board Attention* section for additional detail regarding improvement in risk management.

## CONCENTRATIONS

### Concentration Risk

While the bank experienced loan growth of \$4.3 billion during the past year, overall concentration risk remains considerable but stable due to diversification in the loan portfolio. As noted in the chart, the bank's loans can be divided into three segments based on their risk characteristics. Loan growth was primarily driven by inherently low risk segments, which account for nearly half of all credit exposures. High risk loan segments declined slightly as a percentage of capital and reserves, while some growth occurred in the inherently moderate risk loan segments.



Inherently low risk segments are represented by capital call loans extended through the private equity and venture capital groups. These loans totaled \$17.2 billion or 445.1 percent of capital and reserves, an increase from 430.4 percent year-over-year. Although growth in these segments was high at \$2.2 billion, these loans are considered lower risk as the bank has reported negligible credit losses in this portfolio over the past 20 years. Credit risk is mitigated by prudently-applied underwriting terms which generally limit line advances to no more than 25 percent of the remaining callable capital.

Inherently moderate risk loans increased by \$1.3 billion over the past year; however, growth relative to capital and reserves was low, increasing from 283.4 percent to 290.6 percent. These loans are considered to have moderate risk as they primarily consist of asset-based extensions of credit to corporate clients in the technology and life science industries, real estate secured loans extended to winery clients, and residential real estate secured financing extended to the investors, founders, entrepreneurs, and executives associated with existing commercial clients. Underwriting terms, debt service thresholds, and collateral margins for these loans are in line with industry practices.

Inherently high risk segments, consisting of pre-profit and sponsor-led buyout credit commitments, represent 245.0 percent of capital and reserves. While the combined portfolios increased by \$873 million during the past year, their size relative to capital and reserves declined slightly due to increasing capital levels. These loan groups are considered high risk as pre-profit credits are dependent on investor sentiment for repayment, and sponsor-led buyout borrowers are highly leveraged with repayment dependent on meeting projections. In both cases, secondary sources of repayment are nonexistent outside of intangible assets such as intellectual property or business enterprise value. Inherent high risk is mitigated by the underwriting and risk selection process. Pre-profit credits are approved only after a determination that the borrower has obtained sufficient support from a familiar and reputable sponsor. Leveraged loan approvals are granted after a thorough screening by both the bank and sponsor to confirm that business plans are realistic and align with the bank's covenant structure.



**SUMMARY OF ITEMS SUBJECT TO ADVERSE CLASSIFICATION /  
SUMMARY OF ITEMS LISTED AS SPECIAL MENTION**

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**SUMMARY OF ITEMS SUBJECT TO ADVERSE CLASSIFICATION**

CATEGORY	Substandard	Doubtful	Loss	Total
Loans and Leases	809,910	106,694	0	916,604
Securities	0	0	0	0
OREO	0	0	0	0
Other Assets	0	0	0	0
Other Transfer Risk	0	0	0	0
Subtotal	809,910	106,694	0	916,604
Contingent Liabilities	0	0	0	0
Totals at Current Exam [07/31/17]	809,910	106,694	0	916,604
Totals at Prior Exam [09/30/16]	911,893	109,003	0	1,020,896

**SUMMARY OF LISTED FOR SPECIAL MENTION**

	Current Exam 07/31/17	Prior Exam 09/30/16
Loans / Leases	273,248	364,508

**ITEMS SUBJECT TO ADVERSE CLASSIFICATION**

Includes assets and off-balance sheet items which are detailed in the following categories:

**Substandard Assets.** A substandard asset is inadequately protected by the current sound worth and paying capacity of the obligor or of the collateral pledged, if any. Assets so classified must have a well-defined weakness or weaknesses that jeopardize the liquidation of debt. They are characterized by the distinct possibility that the institution will sustain some loss if the deficiencies are not corrected.

**Doubtful.** An asset classified doubtful has all the weaknesses inherent in one classified substandard with the added characteristic that the weaknesses make collection or liquidation in full, on the basis of currently existing facts, conditions, and values, highly questionable and improbable.

**Loss Assets.** An asset classified loss is considered uncollectible and of such little value that continuance as a bankable asset is not warranted. This classification does not mean that the asset has absolutely no recovery or salvage value, but rather it is not practical or desirable to defer writing off this basically worthless asset even though partial recovery may be affected in the future.

Description	Asset Category		
	Substandard	Doubtful	Loss
<b>LOANS</b>			
<b>Redacted</b>	12,056		
	4,210		
	4,368		
		5,686	
		2,500	
	7,283		
	17,213		
	4,625		
	13,201		
		20,651	
		6,283	
	6,267		
	250		
	4,406		
	2,431		
	10		
	7,084		
		4,728	
	11,500		
	4,972		
	29,600		
	4,611		
	11,400		
	4,864		
	2,000		
9,600			
<b>Total Loans Reviewed</b>	<b>161,951</b>	<b>39,848</b>	<b>0</b>
<b>Loans Not Reviewed</b>	<b>647,959</b>	<b>66,846</b>	<b>0</b>
<b>Total Classified Assets</b>	<b>809,910</b>	<b>106,694</b>	<b>0</b>

**ITEMS LISTED FOR SPECIAL MENTION**

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<b>SPECIAL MENTION LOANS</b>	<b>AMOUNT</b>
<b>Redacted</b>	10,375
<b>Redacted</b>	800
<b>Redacted</b>	17,800
<b>Total Loans Reviewed</b>	<b>28,975</b>
<b>Loans Not Reviewed</b>	<b>244,273</b>
<b>Total Special Mention Credits</b>	<b>273,248</b>
<b>Total at Prior Examination [09/30/16]</b>	<b>364,508</b>

**OTHER MATTERS**

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**Bank Secrecy Act (BSA) / Anti-Money Laundering (AML)**

The BSA/AML supervisory report transmitted to the bank on January 17, 2018 noted that the BSA/AML compliance program is improving but remains less than satisfactory. Management made significant progress in addressing deficiencies noted during the prior examination, including improving the internal controls framework and remediating two MRAs related to risk assessment and system implementation. However, additional time is required to fully implement effective program oversight and internal controls. While management significantly reduced the backlog of Enhanced Due Diligence reviews, thirty percent of the backlog remained at the time of the October target review. Further, continued changes within the Financial Crimes Risk Management (FCRM) organization raise some concerns about the bank's ability to effectively and fully remediate deficiencies with the BSA program. As a result, the oversight and internal controls MRAs remain open. The OFAC MRA also remains open. Despite efforts to improve the OFAC program, unidentified control gaps and technology related issues continue to delay progress in developing a comprehensive OFAC program. The MOU will remain in place until these BSA deficiencies are remediated.

**Information Technology (IT)**

The February 2017 IT target examination confirmed that management and the board has sufficiently addressed weaknesses and returned the IT function to a satisfactory condition. IT executive management remains stable with key positions filled by qualified leaders and skilled personnel. The board has allocated the necessary resources to support initiatives to upgrade systems, processes, and technology. Since issues were first cited in 2015, management has completed a root cause analysis of control breakdowns, identified current tools to ensure proper implementation and configuration, remediated weaknesses in application implementation and maintenance processes, and developed an IT Strategic Plan that aligns with business objectives and provides appropriate strategic direction for IT initiatives. Management has effectively integrated cybersecurity into its risk management and information security programs, and the bank remains GLBA compliant. Notwithstanding the overall satisfactory condition of the IT function, internal audits and the IT General Controls SOX review continue to identify control issues. Risk is mitigated through existing compensating controls, and management has initiated projects to improve control processes.

**SIGNATURE OF DIRECTORS**

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We, the undersigned directors of Silicon Valley Bank, have personally reviewed the contents of the report of examination as of September 30, 2017.

Signature of Directors	Date
_____ Roger F. Dunbar, Chairman	_____
_____ Greg W. Becker	_____
_____ Eric A. Benhamou	_____
_____ David M. Clapper	_____
_____ John Clendening	_____
_____ Joel P. Friedman	_____
_____ Lata Krishnan	_____
_____ Jeff N. Maggioncalda	_____
_____ Mary John Miller	_____
_____ Kate D. Mitchell	_____
_____ John F. Robinson	_____
_____ Garen K. Staglin	_____

NOTE: This form should remain attached to the report of examination and be retained in the bank’s file for review during subsequent examinations. The signature of committee members will suffice only if the committee includes outside directors and a resolution has been passed by the full board delegating the review to such committee.

**CONFIDENTIAL**

**CONFIDENTIAL SECTION  
DIRECTORS**

<i>Name</i>	<i>*</i>	<i>Year of Birth</i>	<i>Year Elected to Board</i>	<i>Occupation or Principal Business Affiliation</i>
Dunbar, Roger F. <sup>1,4,5,6</sup>	0	Redacted	2004	Chairman of SVB & SVB Financial Group, Retired E&Y executive for strategic growth markets and venture capital services
Becker, Greg W.	0	Redacted	2011	President & CEO of SVBFG, CEO of SVB
Benhamou, Eric A. <sup>4,5,6</sup>	0	Redacted	2005	Founding CEO of an early stage VC firm
Clapper, David M. <sup>1,3,6</sup>	1	Redacted	2005	CEO of a medical device company, former executive at other life science companies
Clendening, John <sup>3</sup>	NA	Redacted	2017	President & CEO of provider of Internet-related services, former executive at Charles Schwab’s investor services division and CEO of its subsidiary bank
Friedman, Joel P. <sup>4,5,6</sup>	1	Redacted	2004	Retired, former executive at Accenture
Krishnan, Lata <sup>1,4</sup>	1	Redacted	2008	CFO of a PE firm focused on technology businesses
Maggioncalda, Jeffrey N. <sup>2,3</sup>	0	Redacted	2012	Former founding CEO of technology-enabled financial advisor, Financial Engines
Miller, Mary J. <sup>1,4</sup>	0	Redacted	2015	Former Under Secretary for Domestic Finance, U.S. Department of the Treasury
Mitchell, Kate D. <sup>2,3,6</sup>	1	Redacted	2010	Co-founding Managing Partner of a VC firm focused on the technology and healthcare sectors
Robinson, John F. <sup>1,2,3,6</sup>	1	Redacted	2010	Former Deputy Comptroller of the Currency, EVP of Washington Mutual Bank
Staglin, Garen K. <sup>2,5</sup>	2	Redacted	2011	Proprietor of Staglin Family Vineyards, director and PE/VC investor in growth technology companies and developing businesses

\*Number of meetings missed of a total of 10 held since the prior full-scope examination.  
Director John Clendening was appointed to the board effective August 3, 2017.

Regular schedule of directors’ meetings:      At least quarterly

**CONFIDENTIAL SECTION  
DIRECTORS**

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Fee paid each director: Non-employee directors receive fees and stock options, and are reimbursed for reasonable expenses incurred in connection with attendance at meetings. The fee structure is as follows:

Annual Retainer: \$60,000  
Chairman of the Board: \$150,000  
Audit Committee Chair: \$20,000  
Compensation and Risk Committee Chairs: \$15,000  
Credit, Finance, and Governance Committee Chairs: \$12,000  
Audit Committee Members: \$2,500 (in person), \$1,250 (by telephone)  
All Other Committees: \$1,500 (in person), \$750 (by telephone)  
Strategic Planning or Other Extended Meetings: \$3,000/day

**Committees:**

1. Audit Committee
2. Compensation Committee
3. Credit Committee
4. Finance Committee
5. Governance Committee
6. Risk Committee



**CONFIDENTIAL SECTION**  
**EXECUTIVE OFFICERS**

<i>Name and Title</i>	<i>Area of Responsibility</i>	<i>Year of Birth</i>	<i>Years with Bank</i>	<i>Years in Present Position</i>	<i>Compensation (Bonus)</i>
Becker, Greg W.	CEO	Redacted	24	9	\$950,000 (\$1,148,750)

Mr. Becker has served as CEO of SVB since April 2011. He joined the company and bank in 1993 as part of the Northern California Technology Division. He was appointed COO in 2003 and, later, President in 2008. He was also a co-founder and managing director of SVB Capital, which manages global venture fund-of-funds and co-investment funds. Mr. Becker currently serves on the Board of the Bay Area Council and as Chairman of the Board of the Silicon Valley Leadership Group.

Beck, Daniel	CFO	Redacted	<1	<1	\$525,000
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Mr. Beck joined the bank as CFO in June 2017. Prior to joining the bank, he served at Bank of the West as CFO and Treasurer for two years, and Controller for seven years. In his former positions, he was responsible for leadership of the finance function, along with large scale transformation programs, and played a lead role in the company's successful submission of its first Comprehensive Capital Analysis and Review stress test. Prior to Bancwest, he held financial positions at Wells Fargo and Freddie Mac and worked at Deloitte & Touche and E\*Trade Financial Corporation earlier in his career.

Cadieux, Marc C.	CCO	Redacted	25	4	\$475,000 (\$375,000)
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Mr. Cadieux has served as CCO of USB since 2013. Since joining the bank in 1992, he has held positions of increasing responsibility in the areas of credit administration, business development, and relationship management. He was appointed Assistant CCO in 2009. He has also served as the Risk Manager for SVB's Eastern Division where he oversaw commercial lending activities on the East Coast, in Canada, the United Kingdom, and Israel.

China, John D.	Head of Technology Banking	Redacted	21	3	\$525,000 (\$525,000)
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Mr. China has served as the Head of Relationship Banking since 2014, overseeing all aspects of the company's relationships with the venture capital and private equity, private bank and commercial bank communities. He joined the company in 1996 as a Senior Relationship Manager and has since held various leadership roles at the company and its subsidiary, SVB Capital, including Head of the Venture Capital Group and Head of the Private Equity Group.

Cox, Phillip C.	Head of EMEA; President of UK Branch	Redacted	7	7	\$364,594 (\$275,000)
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Mr. Cox has served as Head of Europe, Middle East and Asia (EMEA) and India since joining the bank in 2009 and is responsible for developing the company's business across these regions. He has led the establishment of the UK Branch banking business in 2012 and its expansion into UK Technology lending.

## CONFIDENTIAL SECTION

### EXECUTIVE OFFICERS

Previously, he served as Head of Commercial Banking at Bank of Scotland in London, a division of the Lloyds Banking Group, and was responsible for the relationship management, origination, and operational aspects of the business. He was also with The Royal Bank of Scotland (RBS) prior to that for 23 years and held a variety of positions, including Managing Director of Transport and Infrastructure Finance and Regional Managing Director of the North England region.

Descheneaux, Michael R.	President	Redacted	10	<1	\$700,000 (\$625,000)
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Mr. Descheneaux was recently promoted from CFO to President of SVB in June of 2017. He joined the company in 2006 as Managing Director of Accounting and Financial Reporting and was appointed as CFO in 2007. Previously, he was Managing Director with Navigant Consulting from 2004 to 2006 and the head of Financial Services Practice as well as other leadership positions for the Central and Eastern Europe region of Arthur Anderson from 1995 to 2002, the latter tenure during which he also served as the Lead Audit Partner for Telecommunications and High-Tech Practice and advised large, public and multinational clients. He is a Certified Public Accountant, as well as, a member of the American Institute of CPAs and the Association of Certified Fraud Examiners.

Draper, Michelle A.	Chief Marketing Officer	Redacted	3	3	\$425,000 (\$340,000)
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Ms. Draper joined the Bank as Chief Marketing Officer in 2013. Previously, she was with Charles Schwab & Co. for nearly twenty years and most recently served as SVP of Institutional Services marketing. During her tenure with Charles Schwab, she also served as Director of Investor Services Segment Marketing and VP of Advisor Services Marketing Programs, developing marketing strategies for both the retail and institutional side.

Dreyer, Michael L.	Chief Operations Officer	Redacted	2	2	\$500,000 (\$475,000)
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Mr. Dreyer joined the company as COO in November 2015 to lead the global technology and infrastructure teams. Prior to joining the bank, he served as COO for the Americas businesses of Monitise Plc in 2014 and CIO for Visa, Inc. from 2005 through 2014. Prior to these roles, he was an SVP for Visa for seven years and VP for American Express for two years.

Edmonds-Waters, Christopher D.	Head of Human Resources	Redacted	13	9	\$400,000 (\$325,000)
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Mr. Edmonds-Waters joined the company in 2003 as Director of Organization Effectiveness and was appointed Head of Human Resources in 2007. Prior to joining the company, he held numerous senior human resources positions from 1996 through 2003 at Charles Schwab & Co. where he specialized in management learning and development and launched the company's online training system.

Izurieta, Laura	Chief Risk Officer	Redacted	1	1	\$500,000 (\$205,000)
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Ms. Izurieta joined the bank as CRO in August 2016. She has over 20 years of experience in operations,

**CONFIDENTIAL SECTION**  
**EXECUTIVE OFFICERS**

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risk management, large program delivery and culture change at other banking organizations. Previously, she was EVP and CRO, Retail and Direct Bank at Capital One, where she had also served as SVP of Enterprise Risk Management, VP of Corporate Reputation and Governance, VP of Home Loans and VP of IT since 2000. Prior to Capital One, she held positions at Freddie Mac and Bank of America.

Peters, John	Head of Internal Audit	Redacted	11	3	\$375,000 (\$312,000)
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Mr. Peters has served as the bank’s Chief Audit Executive for over ten years. He holds more than 35 years of audit, operational and consulting experience, including more than nine years with KPMG in its external audit group. Immediately prior to joining SVB, he worked at HP-Mercury Interactive as its Director of Internal Audit where he was responsible for the development and execution of their internal audit plan. Mr. Peters is a CPA and a member of the American Institute of CPAs.

Zuckert, Michael S.	General Counsel	Redacted	3	3	\$500,000 (\$380,000)
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Mr. Zuckert is the General Counsel of SVB Financial Group, joining the Company in 2014 from Citigroup, where he most recently served as Deputy General Counsel. During his twelve years with Citi, he gained experience in a wide range of legal matters, most recently focusing on Citi Holdings and mergers and acquisitions. From 1987 through 2002, he worked at Morgan Stanley as a Principal in the legal department, covering investment banking and principal investing, and later served as COO for a private equity fund at Morgan Stanley.

**CONFIDENTIAL SECTION  
MANAGEMENT AND CONTROL**

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**1. Discuss any other relevant matters regarding the bank’s management not previously addressed.**

During the October 2017 committee meetings, the board approved management’s proposal to merge the Corporate Compliance function with the Financial Crimes Risk Management unit. Under this organizational change, the current BSA Officer also assumes the position of Chief Compliance Officer, with two direct reports: a Deputy Compliance Officer, and a Deputy BSA Officer. While this change is expected to provide additional talent and resource support to the compliance function with respect to monitoring and testing, its sustainability and impact to the BSA compliance program are uncertain and will need to be validated over time.

All other relevant and material matters supporting the evaluation of management and the board of directors have been addressed within the open section of this report.

**2. If the bank is in a weakened or extended condition, what aid may be expected from shareholders or others?**

Not applicable; the bank is not in a weakened or extended condition.

**3. (a) List each major shareholder (5% or more) of the bank and the respective percentage of ownership. When the major shareholder is a bank holding company, list its major shareholders and the percent controlled.**

<u>Shareholder</u>	<u>Number of Shares</u>	<u>Percentage Owned</u>
BlackRock, Inc.	5,361,630	10.2%
The Vanguard Group	3,930,352	7.5%
Harding Loevner LP	2,659,081	5.1%
T. Rowe Price Associates, Inc.	2,647,195	5.1%

**(b) Comment on the extent to which a particular director(s), shareholder(s), or executive officer(s) controls or dominates the bank’s policies and operations.**

There is no evidence to suggest dominant influence by any one director, shareholder, or executive officer. Control over policy making and operations remains centered in the bank’s executive officers and senior management, whose influences are commensurate with their responsibilities. Meeting minutes indicate that the board of directors is engaged in the institution’s overall activities and responsible for reviewing and approving all policies, procedures, and limits.

**(c) Comment on any adverse effects of insiders on operating policies, procedures, or the overall financial condition of the bank.**

No such adverse effects were noted.

**CONFIDENTIAL SECTION  
MANAGEMENT AND CONTROL**

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- (d) Provide the aggregate amount of borrowings by directors, executive officers, principal shareholders, and their related interests (as defined in Regulation O). Describe any material loans or other transactions between the bank and its executive officers, directors, or its direct or indirect principal shareholder(s) and their interest(s), and assess the impact of the transactions on the bank. (An interest would include any holding company affiliate or outside business interest of a bank or holding company insider in which 25 percent or more is controlled.)

As of July 31, 2017, the aggregate commitment to directors, executive officers, principal shareholders, and their related interests totaled \$35.3 million to nine individuals and six entities. The outstanding balance on these loans totaled \$23.0 million. Credits to **Redacted** **Redacted** and a related entity, consisting primarily of two land development loans, represent the largest amount at \$18.0 million, for which \$15.9 million is currently funded. Credits (two term loans and one commercial line) to **Redacted** related entity, **Redacted** **Redacted**, represent the next largest commitment at \$10.0 million, for which \$5.0 million is currently funded. The bank also granted two lines totaling \$5.5 million to **Redacted** **Redacted** related entities, **Redacted**

Based on the sample of loans reviewed at this examination and board meeting minutes documenting discussion and approval of insider loans, insider loans are not granted on preferential terms and do not present any other adverse features.

4. Has any director, officer, or employee allegedly embezzled, abstracted, or otherwise criminally misused the funds of the bank since the previous examination? No.

## CONFIDENTIAL SECTION

### RATINGS AND GENERAL INFORMATION

1. State the bank's rating at this examination and the date and rating at the last examination. Briefly discuss the rationale for the rating and reasons for any departures from Federal Reserve guidelines with respect to the CAMELS component ratings and the composite rating.

	<u>CAMELS</u>	<u>Risk Management</u>	<u>Agency</u>	<u>Date</u>
Current	222212/2	2	FRB	10/02/17
Prior	020000/0	NA	FRB	05/08/17

#### Composite and Risk Management

The composite and component ratings reflect the overall satisfactory condition of the bank and are consistent with Federal Reserve guidelines. Risk management practices remain generally satisfactory as reflected by acceptable board and management oversight and internal controls across most areas; and overall adequate policies and procedures. Management Information Systems remains fair due to weaknesses in risk identification and monitoring processes within the BSA/AML compliance and ERM functions. There were no departures from Federal Reserve guidelines with respect to the Risk Management rating. Please refer to the open section of the report for more detailed discussion of financial ratings and risk management practices.

#### Risk Matrix

The table below summarizes the risk profile of the institution. "Inherent risk" assesses the nature, complexity, and volume of the activities giving rise to the risk in question; it is rated as low, limited, moderate, considerable, or high. Risk controls assess the strength of risk management processes and controls for each risk stripe, expressed as strong, satisfactory, fair, marginal, or weak.

Risk Management and Controls							
Risk Category	Inherent Risk	Board and Senior Mgmt Oversight	Policies, Procedures and Risk Limits	Management Information Systems	Internal Controls	Residual Risk	Trend of Risk
Credit	Considerable	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Considerable	Increasing
Liquidity	Low	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Low	Stable
Market	Moderate	Satisfactory	Satisfactory	Satisfactory	Satisfactory	Moderate	Increasing
Operational	Considerable	Satisfactory	Satisfactory	Satisfactory	Fair	Moderate	Stable
Legal / Compliance	Considerable	Fair	Satisfactory	Fair	Fair	Considerable	Increasing
Overall	Considerable	Satisfactory	Satisfactory	Fair	Satisfactory	Considerable	Increasing

2. Discuss the prospects of the bank.

Prospects are favorable. The bank remains financially sound and continues to exhibit stable to positive performance trends. The current board and management have demonstrated the willingness and expertise to manage the bank effectively. In addition, the bank has demonstrated the ability to grow while maintaining stable capital ratios, despite a tier 1 leverage ratio that will

**CONFIDENTIAL SECTION**  
**RATINGS AND GENERAL INFORMATION**

continue to trail peer as a result of substantial deposit growth. The bank continues its plans to establish offices in Germany and Canada. However, BSA/AML and OFAC compliance (though improving), as well as the framework for the ERM and compliance function, remain a concern with processes and controls requiring additional time to implement. Management expects the bank to have breached the \$50 billion threshold for four continuous quarters by the end of 2018, but action plans to fully address supervisory issues and move towards large bank standards may extend further than 2018.

3. Was a meeting held with the full board of directors to discuss matters subject to criticism? No. If not, give the names of directors and officers with whom the bank's condition was discussed.

A meeting with the board of directors was not required but will be scheduled in mid-2018. The meeting will include discussion of the findings of this examination, and provide a summary of key risks, the results of supervisory events that took place during the 2017 cycle, and the supervisory plan for 2018.

4. Provide the composite ratings and dates of the most recent bank specialty examinations (EDP, trust, consumer, CRA) and bank holding company inspection, if applicable. If any specialty examination or inspection resulted in a problem rating, discuss any adverse impact of those particular weaknesses on the overall safety and soundness of the bank.

Examination Type (if applicable)	Examination Start Date	Composite Rating
Bank Holding Company (top tier)	12/27/16	222/22
Trust	NA	NA
IT	02/27/17	2222/2
Consumer Compliance	06/20/16	2
CRA	06/20/16	Satisfactory

5. Loan Sampling  
 Summary of Loan Coverage (\$,000)

Number of Relationships Worked	Number of Lines Worked	Dollar Volume Worked (incl. OBS)	Total Loans (incl. OBS)	Total Loans Coverage Percent	Dollar Volume Com'l Worked (incl. OBS)	Total Com'l (incl. OBS)	Com'l Loans Coverage Percent
74	215	2,167,098	38,003,064	5.70	2,035,558	35,473,918	5.74

**CONFIDENTIAL SECTION**  
**RATINGS AND GENERAL INFORMATION**

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**6. Suggestions for next examination**

Refer to examination workprograms and conclusion memos, and the Issues Tracking Log for suggested areas to review at the next examination. Also refer to the 2018 Institutional Overview, Risk Assessment, and Supervisory Plan for scope and resource projections.

- An examiner assigned to review the Risk Management MRA is recommended due to the nature and breadth of issues.
- Management indicated intentions to grow the portfolio of larger growth capital loans during the recent examination. If the bank experiences substantial growth in such loans, which currently total only \$68.7 million or less than 2.0 percent of capital, the upcoming asset quality target review may consider incorporating a few newly originated growth capital loans to get an understanding of the level of risk and quality of risk management practices for this segment.
- Similarly, given that early stage growth capital facilities represent the highest risk of loss within the technology and life science niches, examiners may consider selecting a sample of early stage growth capital loans for review.
- Verify that management has improved the analysis behind the capital limit structure to at the minimum clearly show and support the attribution of capital to the top tier risks to the firm.



**CONFIDENTIAL SECTION**  
**CDBO EXAMINATION INFORMATION**

Examination entry date:	<u>10/2/17</u>	Quarter end call date:	<u>9/30/17</u>
Field completion date:	<u>10/26/17</u>	Trial balance date:	<u>7/31/17</u>
Exit meeting date:	<u>12/12/17</u>	Entry date of last Federal exam:	<u>10/3/16</u>
Date submitted to AD:	_____	Entry date of previous DBO exam:	<u>10/3/16</u>

Type of examination:        Independent                Concurrent              X   Joint  
 Processor:                        DBO                      X   Federal                        Other State

IT Complexity Category:        Type C        Type B      X   Type A        No IT rating assigned

Billable Examination (FC 501) due to institution's problem status:            Yes           No      X  

EXAMINER NAME	ASSIGNMENT	TRAINING	TOTAL (Net of Training)
<b>Safety and Soundness Examination</b>			
<b>Redacted</b>	EIC		456
<b>Redacted</b>	AM		256
<b>Redacted</b>	Loss Analysis		30
<b>Redacted</b>	Loan Review		142
<b>Redacted</b>	Loan Review		30
<b>Redacted</b>	State Specific, Loan Review		72
<b>Redacted</b>	DFAST assist		116
<b>Redacted</b>	Loan Review		65
<b>Redacted</b>	Internal Loan Review		144
<b>Redacted</b>	Loan Review		110
<b>Redacted</b>	Loan Review		80
Total DBO S&S Exam Hours			<b>1,501</b>
Budgeted Hours			<b>1,800</b>
Variance			<b>(299)</b>
Federal Hours (On-Site)			<b>1,517</b>

**CONFIDENTIAL SECTION**  
**COMPARATIVE STATEMENT OF FINANCIAL CONDITION**

**Balance Sheet Structure**

	09/30/17	12/31/16
<b><u>Assets</u></b>		
Total Loans and Leases	22,189,328	19,886,488
Less: ALLL	249,010	225,248
Loans and Leases (net)	21,940,318	19,661,240
Interest-Bearing Balances	2,713,975	1,853,416
Federal Funds Sold and Securities Purchased Under Agreements to Resell	0	0
Trading Account Assets	250,909	128,138
Securities: HTM (at amortized cost)	11,055,006	8,426,998
AFS (at fair value)	12,365,892	12,599,823
<b>Total Earning Assets</b>	<b>48,388,764</b>	<b>42,727,289</b>
Cash and Noninterest-Bearing Balances	694,941	605,304
Premises and Fixed Assets	55,675	49,857
OREO	0	0
Intangible Assets	0	0
Other Assets	725,740	610,369
<b>TOTAL ASSETS</b>	<b>49,940,631</b>	<b>44,068,115</b>
<b><u>Liabilities</u></b>		
Deposits	41,986,251	36,716,644
Federal Funds Purchased & Securities Sold Under Agreement to Repurchase	0	0
Other Borrowed Money	4,840	513,166
Other Liabilities	590,310	431,427
Subordinated Notes and Debentures	0	46,646
<b>Total Liabilities</b>	<b>46,211,741</b>	<b>40,644,688</b>
<b><u>Equity Capital</u></b>		
Perpetual Preferred Stock	0	0
Common Equity Capital (includes net unrealized holding gains or losses on AFS securities)	3,728,890	3,423,427
Other Equity Capital	0	0
<b>Total Equity Capital</b>	<b>3,728,890</b>	<b>3,423,427</b>
<b>TOTAL LIABILITIES AND EQUITY CAPITAL</b>	<b>49,940,631</b>	<b>44,068,115</b>
<b><u>Off-Balance Sheet Items</u></b>		
Unused Loan Commitments	14,593,683	15,135,798
Letters of Credit	1,831,322	1,630,767
Interest Rate Contracts	664,422	623,035

Amounts are shown to the nearest thousand dollars.

**CONFIDENTIAL SECTION**  
**COMPARATIVE STATEMENT OF INCOME**

**Income Statement and Change in Equity Capital**

	Interim Period 09/30/17	Year Ended 12/31/16	Year Ended 12/31/15
<b>Interest Income</b>			
Interest and Fee Income on Loans and Leases	745,904	833,795	692,635
Interest on Securities	296,260	348,882	347,252
Other Interest Income	18,019	13,221	10,664
<b>Total Interest Income</b>	<b>1,060,183</b>	<b>1,195,898</b>	<b>1,050,551</b>
<b>Interest Expense</b>			
Interest on Deposits	6,195	5,612	5,449
Interest on Federal Funds Purchased and Other Borrowings	293	1,087	42
Interest on Subordinated Notes and Debentures	467	906	633
<b>Total Interest Expense</b>	<b>6,978</b>	<b>7,605</b>	<b>6,124</b>
<b>Net Interest Income</b>	<b>1,053,205</b>	<b>1,188,293</b>	<b>1,044,427</b>
<b>Noninterest Income</b>			
Service Charges on Deposit Accounts	40,758	49,971	44,841
Other Fee Income	108,169	134,813	108,312
Other Noninterest Income	135,968	151,840	126,753
<b>Total Noninterest Income</b>	<b>284,895</b>	<b>336,624</b>	<b>279,906</b>
<b>Noninterest Expense</b>			
Salaries and Employee Benefits	423,145	477,682	438,666
Premises and Fixed Assets Expense (net)	44,177	50,470	42,118
Other Noninterest Expense	225,546	278,874	230,999
<b>Total Noninterest Expense</b>	<b>692,868</b>	<b>807,026</b>	<b>711,783</b>
Provision for Loan and Lease Losses	67,390	95,650	97,677
Securities Gains or Losses	0	13,827	0
<b>Net Operating Income (before tax)</b>	<b>577,842</b>	<b>636,068</b>	<b>514,873</b>
Applicable Income Taxes	219,046	256,439	208,009
<b>Net Operating Income (after tax)</b>	<b>358,796</b>	<b>379,629</b>	<b>306,864</b>
Extraordinary Credits and Charges (net of income tax)	0	0	0
<b>Net Income</b>	<b>358,796</b>	<b>379,629</b>	<b>306,864</b>
Dividends Declared	0	0	0
Sale or Purchase of Capital	19,909	18,209	28,323
Other Increases/Decreases (includes changes in net Unrealized gains or losses on AFS securities)	(13,242)	6,544	(25,328)
<b>Net Change in Equity Accounts</b>	<b>305,463</b>	<b>364,382</b>	<b>659,859</b>

Amounts are shown to the nearest thousand dollars.

**CONFIDENTIAL SECTION**  
**CAPITAL CALCULATIONS**

	<b>09/30/17</b>	<b>12/31/16</b>
<b><u>Common Equity Tier 1 Capital</u></b>		
Common stock + related surplus	1,378,649	1,358,739
Retained earnings	2,340,226	2,041,430
Accum Other Comprehensive Inc (AOCI)	10,015	23,258
Common equity tier 1 minority interest	0	0
<b>Common equity tier 1 capital elements</b>	<b>3,728,890</b>	<b>3,423,427</b>
Less:		
Goodwill	0	0
Intangible assets	0	0
Deferred tax assets	0	0
Other adjustments	9,222	26,195
<b>Common Equity Tier 1 Capital</b>	<b>3,719,668</b>	<b>3,397,232</b>
<b><u>Additional Tier 1 Capital</u></b>		
Additional tier 1 instruments + related surplus	0	0
Non-qualifying instruments subject to phase-out	0	0
Minority interests not incl. in common equity	0	0
Less: Additional tier 1 capital deductions	0	0
Additional tier 1 capital	0	0
<b>Tier 1 Capital</b>	<b>3,719,668</b>	<b>3,397,232</b>
<b><u>Tier 2 Capital</u></b>		
Tier 2 capital instruments + related surplus	0	0
Non-qualifying instruments subject to phase-out	0	0
Total minority interest not included in tier 1	0	0
Allowance for loan losses includable in tier 2	297,182	270,477
Unrealized gains on AFS includable in tier 2	0	0
Less: Tier 2 capital deductions	0	0
<b>Tier 2 Capital</b>	<b>297,182</b>	<b>270,477</b>
<b>Total Capital</b>	<b>4,016,850</b>	<b>3,667,709</b>
<b><u>Risk-Weighted Asset Calculation</u></b>		
Risk-weighted balance sheet assets	24,254,238	20,980,068
Risk-weighted off-balance sheet items	5,716,675	5,876,782
Market risk equivalent assets	0	0
<b>Gross Risk-Weighted Assets</b>	<b>29,970,913</b>	<b>26,856,850</b>
Less: Excess ALLL and ATRR	0	0
<b>Total Risk-Weighted Assets</b>	<b>29,970,913</b>	<b>26,856,850</b>
<b>Adjusted Average Total Assets</b>	<b>49,005,883</b>	<b>44,289,329</b>