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# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**Washington, D.C. 20549**

# FORM 10-Q

**☒ QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
**For the quarterly period ended June 30, 2019**
**OR**
**☐ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
**For the transition period from _____ to _____**

**Commission File Number: 000-15637**

# SVB FINANCIAL GROUP

**(Exact name of registrant as specified in its charter)**

| **Delaware** | **91-1962278** |
|---|---|
| (State or other jurisdiction of incorporation or organization) | (I.R.S. Employer Identification No.) |

**3003 Tasman Drive, Santa Clara, California 95054-1191**
(Address of principal executive offices) (Zip Code)

**(408) 654-7400**
(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company," in Rule 12b-2 of the Exchange Act.

Large accelerated filer ☒ Accelerated filer ☐

Non-accelerated filer ☐ Smaller reporting company ☐

Emerging growth company ☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

Securities registered pursuant to Section 12(b) of the Act:

| Title of Each Class | Trading Symbol | Name of Exchange on Which Registered |
|---|---|---|
| Common Stock, par value $0.001 per share | SIVB | NASDAQ Global Select Market |

At July 31, 2019, 51,538,553 shares of the registrant's common stock ($0.001 par value) were outstanding.

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**Glossary of Acronyms that may be used in this Report**

AFS— Available-for-Sale

APIC— Additional Paid-in Capital

ASC— Accounting Standards Codification

ASU— Accounting Standards Update

CET— Common Equity Tier

EHOP— Employee Home Ownership Program of the Company

EPS— Earnings Per Share

ERI— Energy and Resource Innovation

ESOP— Employee Stock Ownership Plan of the Company

ESPP— 1999 Employee Stock Purchase Plan of the Company

FASB— Financial Accounting Standards Board

FDIC— Federal Deposit Insurance Corporation

FHLB— Federal Home Loan Bank

FRB— Federal Reserve Bank

FTE— Full-Time Employee

FTP— Funds Transfer Pricing

GAAP— Accounting principles generally accepted in the United States of America

HTM— Held-to-Maturity

IASB— International Accounting Standards Board

IPO— Initial Public Offering

IRS— Internal Revenue Service

IT— Information Technology

LIBOR— London Interbank Offered Rate

M&A— Merger and Acquisition

OTTI— Other Than Temporary Impairment

SEC— Securities and Exchange Commission

SPD-SVB— SPD Silicon Valley Bank Co., Ltd. (the Bank's joint venture bank in China)

TDR— Troubled Debt Restructuring

UK— United Kingdom

VIE— Variable Interest Entity

**PART I - FINANCIAL INFORMATION**

**ITEM 1. INTERIM CONSOLIDATED FINANCIAL STATEMENTS**

**SVB FINANCIAL GROUP AND SUBSIDIARIES**
**INTERIM CONSOLIDATED BALANCE SHEETS (UNAUDITED)**

| (Dollars in thousands, except par value and share data) | June 30, 2019 | December 31, 2018 |
|---|---|---|
| **Assets:** | | |
| Cash and cash equivalents | $ 9,020,925 | $ 3,571,539 |
| Available-for-sale securities, at fair value (cost of $7,842,667 and $7,862,311, respectively) | 7,940,322 | 7,790,043 |
| Held-to-maturity securities, at cost (fair value of $15,064,962 and $15,188,236, respectively) | 14,868,761 | 15,487,442 |
| Non-marketable and other equity securities | 1,079,749 | 941,104 |
| Total investment securities | 23,888,832 | 24,218,589 |
| Loans, net of unearned income | 29,209,573 | 28,338,280 |
| Allowance for loan losses | (301,888) | (280,903) |
| Net loans | 28,907,685 | 28,057,377 |
| Premises and equipment, net of accumulated depreciation and amortization | 141,888 | 129,213 |
| Goodwill | 137,823 | — |
| Other intangible assets, net | 55,158 | — |
| Lease right-of-use assets | 156,347 | — |
| Accrued interest receivable and other assets | 1,465,081 | 951,261 |
| **Total assets** | $ 63,773,739 | $ 56,927,979 |
| **Liabilities and total equity:** | | |
| Liabilities: | | |
| Noninterest-bearing demand deposits | $ 39,331,489 | $ 39,103,422 |
| Interest-bearing deposits | 16,279,051 | 10,225,478 |
| Total deposits | 55,610,540 | 49,328,900 |
| Short-term borrowings | 24,252 | 631,412 |
| Lease liabilities | 195,326 | — |
| Other liabilities | 1,540,476 | 1,006,359 |
| Long-term debt | 696,970 | 696,465 |
| **Total liabilities** | 58,067,564 | 51,663,136 |
| Commitments and contingencies (Note 16 and Note 19) | | |
| SVBFG stockholders' equity: | | |
| Preferred stock, $0.001 par value, 20,000,000 shares authorized; no shares issued and outstanding | — | — |
| Common stock, $0.001 par value, 150,000,000 shares authorized; 51,561,719 shares and 52,586,498 shares issued and outstanding, respectively | 52 | 53 |
| Additional paid-in capital | 1,421,565 | 1,378,438 |
| Retained earnings | 4,051,194 | 3,791,838 |
| Accumulated other comprehensive income (loss) | 81,232 | (54,120) |
| **Total SVBFG stockholders' equity** | 5,554,043 | 5,116,209 |
| Noncontrolling interests | 152,132 | 148,634 |
| Total equity | 5,706,175 | 5,264,843 |
| **Total liabilities and total equity** | $ 63,773,739 | $ 56,927,979 |

See accompanying notes to interim consolidated financial statements (unaudited).

**SVB FINANCIAL GROUP AND SUBSIDIARIES**
**INTERIM CONSOLIDATED STATEMENTS OF INCOME (UNAUDITED)**

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| **(Dollars in thousands, except per share amounts)** | **2019** | **2018** | **2019** | **2018** |
| Interest income: | | | | |
| Loans | $ 414,077 | $ 330,298 | $ 808,221 | $ 627,371 |
| Investment securities: | | | | |
| Taxable | 134,395 | 137,150 | 261,112 | 261,627 |
| Non-taxable | 10,931 | 7,666 | 21,868 | 12,758 |
| Federal funds sold, securities purchased under agreements to resell and other short-term investment securities | 26,364 | 6,187 | 45,580 | 11,943 |
| Total interest income | 585,767 | 481,301 | 1,136,781 | 913,699 |
| Interest expense: | | | | |
| Deposits | 47,150 | 6,270 | 75,057 | 10,367 |
| Borrowings | 9,214 | 8,588 | 19,435 | 17,026 |
| Total interest expense | 56,364 | 14,858 | 94,492 | 27,393 |
| Net interest income | 529,403 | 466,443 | 1,042,289 | 886,306 |
| Provision for credit losses | 23,946 | 29,080 | 52,497 | 57,052 |
| Net interest income after provision for credit losses | 505,457 | 437,363 | 989,792 | 829,254 |
| Noninterest income: | | | | |
| Gains on investment securities, net | 47,698 | 36,114 | 76,726 | 45,172 |
| Gains on equity warrant assets, net | 48,347 | 19,061 | 69,652 | 38,252 |
| Client investment fees | 45,744 | 29,452 | 90,226 | 52,327 |
| Foreign exchange fees | 38,506 | 34,077 | 76,554 | 67,904 |
| Credit card fees | 28,790 | 22,926 | 56,273 | 44,618 |
| Deposit service charges | 22,075 | 18,794 | 43,014 | 36,493 |
| Lending related fees | 11,213 | 9,528 | 25,150 | 20,263 |
| Letters of credit and standby letters of credit fees | 11,009 | 8,347 | 20,363 | 16,529 |
| Investment banking revenue | 48,694 | — | 98,489 | — |
| Commissions | 14,429 | — | 28,537 | — |
| Other | 17,245 | 14,390 | 29,142 | 26,649 |
| Total noninterest income | 333,750 | 192,689 | 614,126 | 348,207 |
| Noninterest expense: | | | | |
| Compensation and benefits | 243,172 | 181,955 | 481,233 | 347,761 |
| Professional services | 40,830 | 46,813 | 77,816 | 75,538 |
| Premises and equipment | 23,911 | 19,173 | 45,611 | 37,718 |
| Net occupancy | 16,687 | 13,288 | 32,735 | 26,904 |
| Business development and travel | 17,022 | 12,095 | 32,376 | 23,286 |
| FDIC and state assessments | 4,483 | 10,326 | 8,462 | 19,756 |
| Other | 37,417 | 22,089 | 70,953 | 40,193 |
| Total noninterest expense | 383,522 | 305,739 | 749,186 | 571,156 |
| Income before income tax expense | 455,685 | 324,313 | 854,732 | 606,305 |
| Income tax expense | 119,114 | 77,287 | 226,549 | 151,253 |
| Net income before noncontrolling interests | 336,571 | 247,026 | 628,183 | 455,052 |
| Net income attributable to noncontrolling interests | (18,584) | (9,228) | (21,464) | (22,293) |
| **Net income available to common stockholders** | $ 317,987 | $ 237,798 | $ 606,719 | $ 432,759 |
| Earnings per common share—basic | $ 6.12 | $ 4.48 | $ 11.61 | $ 8.17 |
| Earnings per common share—diluted | 6.08 | 4.42 | 11.51 | 8.05 |

See accompanying notes to interim consolidated financial statements (unaudited).

**SVB FINANCIAL GROUP AND SUBSIDIARIES**
**INTERIM CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (UNAUDITED)**

| (Dollars in thousands) | Three months ended June 30, 2019 | Three months ended June 30, 2018 | Six months ended June 30, 2019 | Six months ended June 30, 2018 |
|---|---|---|---|---|
| **Net income before noncontrolling interests** | $ 336,571 | $ 247,026 | $ 628,183 | $ 455,052 |
| Other comprehensive income (loss), net of tax: | | | | |
| Change in foreign currency cumulative translation gains and losses: | | | | |
| Foreign currency translation losses | (2,900) | (5,184) | (94) | (2,078) |
| Related tax benefit | 808 | 1,433 | 26 | 577 |
| Change in unrealized gains and losses on available-for-sale securities: | | | | |
| Unrealized holding gains (losses) | 119,182 | (15,103) | 166,018 | (73,130) |
| Related tax (expense) benefit | (33,194) | 4,349 | (46,239) | 20,275 |
| Reclassification adjustment for losses included in net income | 275 | — | 3,905 | — |
| Related tax benefit | (77) | — | (1,087) | — |
| Reclassification of unrealized gains on equity securities to retained earnings for ASU 2016-01 | — | — | — | (40,316) |
| Related tax expense | — | — | — | 11,145 |
| Amortization of unrealized holding gains on securities transferred from available-for-sale to held-to-maturity | (719) | (932) | (1,393) | (2,138) |
| Related tax benefit | 200 | 258 | 388 | 591 |
| Reclassification of stranded tax effect to retained earnings for ASU 2018-02 | — | — | — | (319) |
| Change in unrealized gains and losses on cash flow hedges: | | | | |
| Unrealized gains | 17,554 | — | 18,656 | — |
| Related tax expense | (4,890) | — | (5,197) | — |
| Reclassification adjustment for losses included in net income | 508 | — | 511 | — |
| Related tax benefit | (141) | — | (142) | — |
| Other comprehensive income (loss), net of tax | 96,606 | (15,179) | 135,352 | (85,393) |
| **Comprehensive income** | 433,177 | 231,847 | 763,535 | 369,659 |
| Comprehensive income attributable to noncontrolling interests | (18,584) | (9,228) | (21,464) | (22,293) |
| **Comprehensive income attributable to SVBFG** | $ 414,593 | $ 222,619 | $ 742,071 | $ 347,366 |

See accompanying notes to interim consolidated financial statements (unaudited).

**SVB FINANCIAL GROUP AND SUBSIDIARIES**
**INTERIM CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY (UNAUDITED)**

| (Dollars in thousands) | Common Stock Shares | Common Stock Amount | Additional Paid-in Capital | Retained Earnings | Accumulated Other Comprehensive Income (Loss) | Total SVBFG Stockholders' Equity | Noncontrolling Interests | Total Equity |
|---|---|---|---|---|---|---|---|---|
| **Balance at December 31, 2017** | **52,835,188** | **$ 53** | **$ 1,314,377** | **$ 2,866,837** | **$ (1,472)** | **$ 4,179,795** | **$ 139,620** | **$ 4,319,415** |
| Cumulative adjustment for adoption of the revenue standard (ASU 2014-09), net of tax | — | — | — | (5,802) | — | (5,802) | — | (5,802) |
| Cumulative adjustment for adoption of financial instruments (ASU 2016-01), net of tax | — | — | — | 103,766 | (29,171) | 74,595 | — | 74,595 |
| Reclassification of stranded tax effect for ASU 2018-02 | — | — | — | 319 | (319) | — | — | — |
| Common stock issued under employee benefit plans, net of restricted stock cancellations | 365,767 | — | 7,165 | — | — | 7,165 | — | 7,165 |
| Common stock issued under ESOP | 9,672 | — | 2,577 | — | — | 2,577 | — | 2,577 |
| Net income | — | — | — | 432,759 | — | 432,759 | 22,293 | 455,052 |
| Capital calls and distributions, net | — | — | — | — | — | — | (14,725) | (14,725) |
| Net change in unrealized gains and losses on AFS securities, net of tax | — | — | — | — | (52,855) | (52,855) | — | (52,855) |
| Amortization of unrealized holding gains on securities transferred from AFS to HTM, net of tax | — | — | — | — | (1,547) | (1,547) | — | (1,547) |
| Foreign currency translation adjustments, net of tax | — | — | — | — | (1,501) | (1,501) | — | (1,501) |
| Share-based compensation, net | — | — | 22,467 | — | — | 22,467 | — | 22,467 |
| **Balance at June 30, 2018** | **53,210,627** | **$ 53** | **$ 1,346,586** | **$ 3,397,879** | **$ (86,865)** | **$ 4,657,653** | **$ 147,188** | **$ 4,804,841** |
| **Balance at December 31, 2018** | **52,586,498** | **$ 53** | **$ 1,378,438** | **$ 3,791,838** | **$ (54,120)** | **$ 5,116,209** | **$ 148,634** | **$ 5,264,843** |
| Cumulative adjustment for the adoption of premium amortization on purchased callable debt securities (ASU 2017-08) (1) | — | — | — | (583) | — | (583) | — | (583) |
| Acquisition of SVB Leerink | — | — | — | — | — | — | 5,256 | 5,256 |
| Common stock issued under employee benefit plans, net of restricted stock cancellations | 467,427 | — | 7,853 | — | — | 7,853 | — | 7,853 |
| Common stock issued under ESOP | 14,442 | — | 3,506 | — | — | 3,506 | — | 3,506 |
| Net income | — | — | — | 606,719 | — | 606,719 | 21,464 | 628,183 |
| Capital calls and distributions, net | — | — | — | — | — | — | (23,222) | (23,222) |
| Net change in unrealized gains and losses on AFS securities, net of tax | — | — | — | — | 122,597 | 122,597 | — | 122,597 |
| Amortization of unrealized holding gains on securities transferred from AFS to HTM, net of tax | — | — | — | — | (1,005) | (1,005) | — | (1,005) |
| Foreign currency translation adjustments, net of tax | — | — | — | — | (68) | (68) | — | (68) |
| Net change in unrealized gains and losses on cash flow hedges, net of tax | — | — | — | — | 13,828 | 13,828 | — | 13,828 |
| Share-based compensation, net | — | — | 31,768 | — | — | 31,768 | — | 31,768 |
| Common stock repurchases | (1,506,648) | (1) | — | (346,780) | — | (346,781) | — | (346,781) |
| **Balance at June 30, 2019** | **51,561,719** | **$ 52** | **$ 1,421,565** | **$ 4,051,194** | **$ 81,232** | **$ 5,554,043** | **$ 152,132** | **$ 5,706,175** |

(1) See "Adoption of New Accounting Standards" in Note 1—"Basis of Presentation" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report for additional details.

See accompanying notes to interim consolidated financial statements (unaudited).

**SVB FINANCIAL GROUP AND SUBSIDIARIES**
**INTERIM CONSOLIDATED STATEMENTS OF CASH FLOWS (UNAUDITED)**

| (Dollars in thousands) | Six months ended June 30, 2019 | 2018 |
|---|---|---|
| **Cash flows from operating activities:** | | |
| Net income before noncontrolling interests | $ 628,183 | $ 455,052 |
| Adjustments to reconcile net income to net cash provided by operating activities: | | |
| Provision for credit losses | 52,497 | 57,052 |
| Changes in fair values of equity warrant assets, net of proceeds from exercises | (825) | (24,940) |
| Changes in fair values of derivatives, net | (9,958) | (8,768) |
| Gains on investment securities, net | (76,726) | (45,172) |
| Distributions of earnings from non-marketable and other equity securities | 40,584 | 27,409 |
| Depreciation and amortization | 40,824 | 28,902 |
| Amortization of premiums and discounts on investment securities, net | 4,993 | (478) |
| Amortization of share-based compensation | 31,768 | 22,467 |
| Amortization of deferred loan fees | (76,712) | (65,606) |
| Deferred income tax benefit | (3,854) | (18,594) |
| Excess tax benefit from exercise of stock options and vesting of restricted shares | (7,369) | (14,488) |
| Losses from the write-off of premises and equipment | 185 | 7,006 |
| Changes in other assets and liabilities: | | |
| Accrued interest receivable and payable, net | (3,850) | (28,213) |
| Accounts receivable and payable, net | 22,308 | (10,169) |
| Income tax receivable and payable, net | (87,097) | (21,076) |
| Accrued compensation | (175,469) | (55,814) |
| Foreign exchange spot contracts, net | 108,307 | 68,870 |
| Other, net | (37,218) | (26,060) |
| **Net cash provided by operating activities** | 450,571 | 347,380 |
| **Cash flows from investing activities:** | | |
| Purchases of available-for-sale securities | (2,553,326) | (390,758) |
| Proceeds from sales of available-for-sale securities | 2,189,087 | — |
| Proceeds from maturities and paydowns of available-for-sale securities | 382,054 | 1,775,568 |
| Purchases of held-to-maturity securities | (277,889) | (4,067,389) |
| Proceeds from maturities and paydowns of held-to-maturity securities | 888,943 | 935,820 |
| Purchases of non-marketable and other equity securities | (39,287) | (28,099) |
| Proceeds from sales and distributions of capital of non-marketable and other equity securities | 59,187 | 75,139 |
| Net increase in loans | (844,830) | (2,855,537) |
| Purchases of premises and equipment | (18,632) | (14,851) |
| Acquisition of SVB Leerink, net of cash acquired | (102,328) | — |
| **Net cash used for investing activities** | (317,021) | (4,570,107) |
| **Cash flows from financing activities:** | | |
| Net increase in deposits | 6,281,640 | 4,633,220 |
| Net decrease in short-term borrowings | (607,160) | (616,484) |
| (Distributions to noncontrolling interests), net of contributions from noncontrolling interests | (23,222) | (14,725) |
| Common stock repurchases | (346,781) | — |
| Proceeds from issuance of common stock, ESPP and ESOP | 11,359 | 9,742 |
| **Net cash provided by financing activities** | 5,315,836 | 4,011,753 |
| Net increase (decrease) in cash and cash equivalents | 5,449,386 | (210,974) |
| Cash and cash equivalents at beginning of period | 3,571,539 | 2,923,075 |
| **Cash and cash equivalents at end of period** | **$ 9,020,925** | **$ 2,712,101** |
| **Supplemental disclosures:** | | |
| Cash paid during the period for: | | |
| Interest | $ 94,851 | $ 27,730 |
| Income taxes | 310,604 | 193,682 |
| Noncash items during the period: | | |
| Changes in unrealized gains and losses on available-for-sale securities, net of tax | $ 122,597 | $ (52,855) |
| Distributions of stock from investments | 6,747 | 3,136 |

See accompanying notes to interim consolidated financial statements (unaudited).

## SVB FINANCIAL GROUP AND SUBSIDIARIES
## NOTES TO INTERIM CONSOLIDATED FINANCIAL STATEMENTS (UNAUDITED)

### 1. Basis of Presentation

SVB Financial Group is a diversified financial services company, as well as a bank holding company and a financial holding company. SVB Financial was incorporated in the state of Delaware in March 1999. Through our various subsidiaries and divisions, we offer a diverse set of banking and financial products and services to support our clients of all sizes and stages throughout their life cycles. In these notes to our unaudited interim consolidated financial statements, when we refer to "SVB Financial Group," "SVBFG," the "Company," "we," "our," "us" or use similar words, we mean SVB Financial Group and all of its subsidiaries collectively, including Silicon Valley Bank (the "Bank"), unless the context requires otherwise. When we refer to "SVB Financial" or the "Parent" we are referring only to the parent company, SVB Financial Group (not including subsidiaries).

The accompanying unaudited interim consolidated financial statements reflect all adjustments of a normal and recurring nature that are, in the opinion of management, necessary to fairly present our financial position, results of operations and cash flows in accordance with GAAP. Such unaudited interim consolidated financial statements have been prepared in accordance with the instructions to Form 10-Q pursuant to the rules and regulations of the SEC. Certain information and footnote disclosures normally included in financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. The results of operations for the three and six months ended June 30, 2019 are not necessarily indicative of results to be expected for any future periods. These unaudited interim consolidated financial statements should be read in conjunction with our Annual Report on Form 10-K for the year ended December 31, 2018 ("2018 Form 10-K").

The accompanying unaudited interim consolidated financial statements have been prepared on a consistent basis with the accounting policies described in Consolidated Financial Statements and Supplementary Data—Note 2—"Summary of Significant Accounting Policies" under Part II, Item 8 of our 2018 Form 10-K.

The preparation of unaudited interim consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. Estimates may change as new information is obtained. Significant items that are subject to such estimates include measurements of fair value, the valuation of non-marketable and other equity securities, the valuation of equity warrant assets, the adequacy of the allowance for loan losses and allowance for unfunded credit commitments, and the recognition and measurement of income tax assets and liabilities.

***Principles of Consolidation and Presentation***

Our unaudited interim consolidated financial statements include the accounts of SVB Financial Group and consolidated entities. We consolidate voting entities in which we have control through voting interests or entities through which we have a controlling financial interest in a variable interest entity ("VIE"). We determine whether we have a controlling financial interest in a VIE by determining if we have: (a) the power to direct the activities of the VIE that most significantly impact the entity's economic performance, (b) the obligation to absorb the expected losses, or (c) the right to receive the expected returns of the entity. Generally, we have significant variable interests if our commitments to a limited partnership investment represent a significant amount of the total commitments to the entity. We also evaluate the impact of related parties on our determination of variable interests in our consolidation conclusions. We consolidate VIEs in which we are the primary beneficiary based on a controlling financial interest. If we are not the primary beneficiary of a VIE, we record our pro-rata interests based on our ownership percentage.

VIEs are entities where investors lack sufficient equity at risk for the entity to finance its activities without additional subordinated financial support or equity investors, as a group, lack one of the following characteristics: (a) the power to direct the activities that most significantly impact the entity's economic performance, (b) the obligation to absorb the expected losses of the entity, or (c) the right to receive the expected returns of the entity. We assess VIEs to determine if we are the primary beneficiary of a VIE. A primary beneficiary is defined as a variable interest holder that has a controlling financial interest. A controlling financial interest requires both: (a) the power to direct the activities that most significantly impact the VIE's economic performance, and (b) obligation to absorb losses or receive benefits of a VIE that could potentially be significant to a VIE. Under this analysis, we also evaluate kick-out rights and other participating rights, which could provide us a controlling financial interest. The primary beneficiary of a VIE is required to consolidate the VIE.

We also evaluate fees paid to managers of our limited partnership investments. We exclude those fee arrangements that are not deemed to be variable interests from the analysis of our interests in our investments in VIEs and the determination of a primary beneficiary, if any. Fee arrangements based on terms that are customary and commensurate with the services provided are deemed not to be variable interests and are, therefore, excluded.

All significant intercompany accounts and transactions with consolidated entities have been eliminated. We have not provided financial or other support during the periods presented to any VIE that we were not previously contractually required to provide.

***Adoption of New Accounting Standards***

In February 2016, the FASB issued a new accounting standard update (ASU 2016-02, Leases (Topic 842)), which requires for all operating leases the recognition of a right-of-use ("ROU") asset and a corresponding lease liability, in the statement of financial position. For short term leases (term of 12 months or less), a lessee is permitted to make an accounting election not to recognize lease assets and lease liabilities. The lease cost will be allocated over the lease term on a straight-line basis. There were further amendments, including practical expedients, with the issuance of ASU 2018-01, "Leases (Topic 842): Land Easement Practical Expedient for Transition to Topic 842" in January 2018. In July 2018 the FASB issued ASU No. 2018-11, "Leases (Topic 842): Targeted Improvements", which provides us with the option to apply the new leasing standard to all open leases as of the adoption date, on a prospective basis.

On January 1, 2019, we adopted the new accounting standard ASU 2016-02, Leases (Topic 842) and all the related amendments ("new lease standard", "ASC 842" or "ASU 2016-02") utilizing the practical expedient to apply the new lease standard as of January 1, 2019 on a prospective basis. We also elected the "package of expedients" and elected as an accounting policy to exclude recording ROU assets and lease liabilities for leases that meet the definition of short-term leases. In addition to excluding short-term leases, we have implemented an accounting policy in which non-lease components are not separated from lease components in the measurement of ROU assets and lease liabilities for all lease contracts. The "package of expedients" allowed us to continue to account for existing leases for which the commencement date is before January 1, 2019, in accordance with the previous guidance, Leases (Topic 840), throughout the lease term, including periods after adoption of the new guidance. We recognized $146 million in ROU assets and $178 million in lease liabilities as a result of applying the new lease standard as an adjustment to our opening consolidated balance sheet on January 1, 2019. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods. See Note 9—"Leases" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report for additional disclosures related to our leases.

In March 2017, the FASB issued ASU No. 2017-08, Receivables—Nonrefundable Fees and Other Costs (Subtopic 310-20): Premium Amortization on Purchased Callable Debt Securities, which amends the amortization period for certain purchased callable debt securities held at a premium. The ASU requires entities to amortize premiums on debt securities by the first call date when the securities have fixed and determinable call dates and prices. The scope of the ASU includes all accounting premiums, such as purchase premiums and cumulative fair value hedge adjustments. The ASU does not change the accounting for discounts, which continue to be recognized over the contractual life of a security. Adoption of the ASU is on a modified retrospective basis through a cumulative effect adjustment to retained earnings as of the beginning of the year of adoption. Adoption of the ASU primarily affected our HTM portfolio of callable state and municipal debt securities. On January 1, 2019, we adopted the ASU and recognized a net reduction to retained earnings of $583 thousand.

***Recent Accounting Pronouncements***

In June 2016, the FASB issued a new accounting standard update (ASU 2016-13, Financial Instruments- Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments) ("ASU 2016-13" or "CECL"), which amends the incurred loss impairment methodology in current GAAP with a methodology that reflects a current expected credit loss measurement to estimate the allowance for credit losses ("ACL") over the contractual life of the loan and requires consideration of a broader range of reasonable and supportable information to inform credit loss estimates. This guidance will be effective January 1, 2020, on a modified retrospective approach, with early adoption permitted, but not before January 1, 2019. We expect to adopt the guidance in the first quarter of 2020.

Our implementation process includes loss forecasting model development, evaluation of technical accounting topics, updates to our allowance documentation, reporting processes and related internal controls, and overall operational readiness for our adoption of CECL, which will continue throughout 2019, including parallel runs for CECL alongside our current allowance process. The ultimate effect of CECL on our ACL will depend on the size and composition of our portfolio, the portfolio's credit quality and economic conditions at the time of adoption, as well as any refinements to our models, methodology and other key assumptions. At adoption, we will have a cumulative-effect adjustment to retained earnings for our change in the ACL.

In August 2018, the FASB issued a new accounting standard update (ASU No. 2018-13, Fair Value Measurement (Topic 820): Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement). The ASU primarily modifies certain disclosures with respect to Level 3 fair value measurements. This guidance will be effective January 1, 2020, with early adoption permitted. This guidance will not have an impact on our consolidated financial position or results of operations, and we do not expect the adoption of this standard to have a material impact on the disclosures in our Notes to the Consolidated Financial Statements.

***Reclassifications***

Certain prior period amounts, primarily related to presentation changes to our financial statement line items and immaterial changes to our reportable segments, have been reclassified to conform to current period presentations.

**2. Business Combination**

On January 4, 2019, we completed the acquisition of Leerink Holdings LLC, the Boston-based parent company of healthcare and life science investment bank Leerink Partners LLC, now SVB Leerink Holdings LLC ("SVB Leerink"). The acquisition was previously announced on November 13, 2018. SVB Leerink is an investment bank specializing in Equity & Convertible Capital Markets, Mergers & Acquisitions, Equity Research and Sales & Trading for growth and innovation-minded healthcare and life science companies and operates as a wholly-owned subsidiary of SVB Financial.

The acquisition was accounted for as a business combination and accordingly, the results of SVB Leerink's operations have been included in the Company's unaudited interim consolidated financial statements at and for the three and six months ended June 30, 2019 from the date of acquisition. We acquired SVB Leerink for approximately $273.2 million comprised of cash and share-based replacement award liabilities. In addition, we provided a retention pool for employees of $60.0 million to be paid over five years comprised of a mix of cash and equity issued under the Company's current Equity Incentive Plan. Refer to Note 4—"Share-Based Compensation" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report for more information. The following table summarizes the allocation of the purchase price to the net assets of SVB Leerink as of January 4, 2019:

| (Dollars in thousands) | January 4, 2019 |
|---|---|
| Cash paid (1) | $ 265,601 |
| Replacement award liabilities (2) | 7,629 |
| Total purchase consideration | $ 273,230 |
| Fair value of net assets acquired (1) | 135,407 |
| Goodwill | $ 137,823 |

(1) During the three months ended June 30, 2019, the Company recorded purchase price allocation adjustments based on new information about facts and circumstances that existed at the time of the acquisition.
(2) The replacement award liabilities recognized as part of the total purchase consideration and the post-combination expenses of $9.1 million related to share-based replacement awards will be paid out in cash in accordance with SVB Leerink's original grant date vesting schedules.

The following table summarizes the estimated fair value of assets acquired and liabilities assumed upon the finalization of the purchase:

| (Dollars in thousands) | January 4, 2019 |
|---|---|
| Assets acquired: | |
| Cash and cash equivalents | $ 163,273 |
| Investment securities (1) | 33,644 |
| Accounts receivable (1) | 36,538 |
| Intangible assets | 60,900 |
| Other assets | 35,128 |
| Total assets acquired | 329,483 |
| Liabilities assumed: | |
| Accrued compensation | 137,206 |
| Due to broker-dealers | 18,483 |
| Other liabilities | 33,131 |
| Noncontrolling interests | 5,256 |
| Total liabilities assumed | 194,076 |
| Fair value of net assets acquired | $ 135,407 |

(1) During the three months ended June 30, 2019, the Company recorded purchase price allocation adjustments described below.

The Company recognized identifiable intangible assets of $60.9 million and goodwill of $137.8 million as a result of the acquisition. Intangible assets of $60.9 million are subject to amortization over their estimated useful lives. The goodwill recorded includes revenue generating synergies expected from collaboration between SVB Leerink and the Company. All reported goodwill amounts have been allocated to the SVB Leerink reporting segment and are expected to be deductible for tax purposes. During the three months ended June 30, 2019, the Company made measurement period adjustments to reflect facts and circumstances in existence as of the acquisition date. These adjustments resulted in an increase in goodwill from March 31, 2019 of $2.6 million due to the net impact of an increase in cash paid of $2.3 million, an increase in investment securities of $0.7 million and a reduction in accounts receivable of $1.0 million. The fair value of the noncontrolling interests in Leerink Holdings LLC represents the noncontrolling ownership percentage for SVB Leerink's consolidated VIE investment securities which are measured at net asset value.

The following table summarizes the fair value and estimated useful lives of the other intangible assets at the date of acquisition:

| (Dollars in thousands) | Estimated Fair Value | Weighted Average Estimated Useful Life - in Years |
|---|---|---|
| Other intangible assets: | | |
| Customer relationships | $ 42,000 | 11.0 |
| Other | 18,900 | 9.9 |
| Total other intangible assets | $ 60,900 | |

SVB Leerink's net income from January 4, 2019 through June 30, 2019 was approximately $9.7 million. Supplementary pro forma financial information related to the acquisition is not included because the impact to the Company's unaudited interim consolidated statements of income is not material. The following table represents the amount of revenue and earnings attributable to SVB Leerink that is included in our financial results for the three and six months ended June 30, 2019:

| (Dollars in thousands) | Three months ended June 30, 2019 | Six months ended June 30, 2019 |
|---|---|---|
| Net interest income | $ 242 | $ 684 |
| Noninterest income | 67,035 | 135,152 |
| Noninterest expense | 61,935 | 122,475 |
| Income before income tax expense | 5,342 | 13,361 |
| Income tax expense | 1,449 | 3,623 |
| Net income attributable to noncontrolling interests | 35 | 35 |
| Net income available to common stockholders | $ 3,858 | $ 9,703 |

The following table shows the components of acquisition-related activities expense for the three and six months ended June 30, 2019:

| (Dollars in thousands) | Three months ended June 30, 2019 | Six months ended June 30, 2019 |
|---|---|---|
| Professional fees | $ 283 | $ 651 |
| Other | 69 | 273 |
| Total acquisition-related expenses | $ 352 | $ 924 |

### 3. Stockholders' Equity and EPS

*Accumulated Other Comprehensive Income*

The following table summarizes the items reclassified out of accumulated other comprehensive income into the Consolidated Statements of Income (unaudited) for the three and six months ended June 30, 2019 and 2018:

| | | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|---|
| (Dollars in thousands) | Income Statement Location | 2019 | 2018 | 2019 | 2018 |
| Reclassification adjustment for losses on available-for-sale securities included in net income | Gains on investment securities, net | $ 275 | $ — | $ 3,905 | $ — |
| Related tax benefit | Income tax expense | (77) | — | (1,087) | — |
| Reclassification adjustment for losses on cash flow hedges included in net income | Net interest income | 508 | — | 511 | — |
| Related tax benefit | Income tax expense | (141) | — | (142) | — |
| Total reclassification adjustment for losses included in net income, net of tax | | $ 565 | $ — | $ 3,187 | $ — |

The table below summarizes the activity relating to net gains on our cash flow hedges included in accumulated other comprehensive income for the three and six months ended June 30, 2019 and 2018. Over the next 12 months, we expect that approximately $1.5 million in accumulated other comprehensive income ("AOCI") at June 30, 2019, related to our cash flow hedges will be reclassified out of AOCI and recognized in net income.

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Beginning balance | $ 797 | $ — | $ — | $ — |
| Net increase in fair value, net of tax | 12,664 | — | 13,459 | — |
| Net realized loss reclassified to net income, net of tax | 367 | — | 369 | — |
| Ending balance | $ 13,828 | $ — | $ 13,828 | $ — |

*EPS*

Basic EPS is the amount of earnings available to each share of common stock outstanding during the reporting period. Diluted EPS is the amount of earnings available to each share of common stock outstanding during the reporting period adjusted to include the effect of potentially dilutive common shares. Potentially dilutive common shares include incremental shares issuable for stock options and restricted stock unit awards outstanding under our 2006 Equity Incentive Plan and our ESPP. Potentially dilutive common shares are excluded from the computation of dilutive EPS in periods in which the effect would be antidilutive. The following is a reconciliation of basic EPS to diluted EPS for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars and shares in thousands, except per share amounts) | 2019 | 2018 | 2019 | 2018 |
| Numerator: | | | | |
| Net income available to common stockholders | $ 317,987 | $ 237,798 | $ 606,719 | $ 432,759 |
| Denominator: | | | | |
| Weighted average common shares outstanding—basic | 51,955 | 53,064 | 52,269 | 52,974 |
| Weighted average effect of dilutive securities: | | | | |
| Stock options and ESPP | 235 | 400 | 254 | 408 |
| Restricted stock units and awards | 146 | 312 | 192 | 350 |
| Weighted average common shares outstanding—diluted | 52,336 | 53,776 | 52,715 | 53,732 |
| Earnings per common share: | | | | |
| Basic | $ 6.12 | $ 4.48 | $ 11.61 | $ 8.17 |
| Diluted | 6.08 | 4.42 | 11.51 | 8.05 |

The following table summarizes the weighted-average common shares excluded from the diluted EPS calculation due to the antidilutive effect for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Shares in thousands) | 2019 | 2018 | 2019 | 2018 |
| Stock options | 166 | 58 | 128 | 33 |
| Restricted stock units | 333 | 113 | 228 | 59 |
| Total | 499 | 171 | 356 | 92 |

*Stock Repurchase Program*

On November 13, 2018, the Company announced a new program to repurchase up to $500 million of our outstanding common stock (the "Stock Repurchase Program"). For the three months ended June 30, 2019, we repurchased 1.0 million shares of our outstanding common stock for $230.8 million under the Stock Repurchase Program. As of June 30, 2019, we had repurchased 2.2 million shares of our outstanding common stock for $493.9 million under the Stock Repurchase Program.

*Consolidated Statement of Changes in Equity*

The following table summarizes the changes in our consolidated equity for the three months ended June 30, 2019 and 2018:

| (Dollars in thousands) | Common Stock Shares | Common Stock Amount | Additional Paid-in Capital | Retained Earnings | Accumulated Other Comprehensive Income (Loss) | Total SVBFG Stockholders' Equity | Noncontrolling Interests | Total Equity |
|---|---|---|---|---|---|---|---|---|
| **Balance at March 31, 2018** | **52,922,219** | **$ 53** | **$ 1,326,998** | **$ 3,160,081** | **$ (71,686)** | **$ 4,415,446** | **$ 144,278** | **$ 4,559,724** |
| Common stock issued under employee benefit plans, net of restricted stock cancellations | 288,408 | — | 7,644 | — | — | 7,644 | — | 7,644 |
| Net income | — | — | — | 237,798 | — | 237,798 | 9,228 | 247,026 |
| Capital calls and distributions, net | — | — | — | — | — | — | (6,318) | (6,318) |
| Net change in unrealized gains and losses on AFS securities, net of tax | — | — | — | — | (10,754) | (10,754) | — | (10,754) |
| Amortization of unrealized holding gains on securities transferred from AFS to HTM, net of tax | — | — | — | — | (674) | (674) | — | (674) |
| Foreign currency translation adjustments, net of tax | — | — | — | — | (3,751) | (3,751) | — | (3,751) |
| Share-based compensation, net | — | — | 11,944 | — | — | 11,944 | — | 11,944 |
| **Balance at June 30, 2018** | **53,210,627** | **$ 53** | **$ 1,346,586** | **$ 3,397,879** | **$ (86,865)** | **$ 4,657,653** | **$ 147,188** | **$ 4,804,841** |
| **Balance at March 31, 2019** | **52,322,105** | **$ 52** | **$ 1,394,130** | **$ 3,963,965** | **$ (15,374)** | **$ 5,342,773** | **$ 141,050** | **$ 5,483,823** |
| Common stock issued under employee benefit plans, net of restricted stock cancellations | 257,684 | — | 10,789 | — | — | 10,789 | — | 10,789 |
| Net income | — | — | — | 317,987 | — | 317,987 | 18,584 | 336,571 |
| Capital calls and distributions, net | — | — | — | — | — | — | (7,502) | (7,502) |
| Net change in unrealized gains and losses on AFS securities, net of tax | — | — | — | — | 86,186 | 86,186 | — | 86,186 |
| Amortization of unrealized holding gains on securities transferred from AFS to HTM, net of tax | — | — | — | — | (519) | (519) | — | (519) |
| Foreign currency translation adjustments, net of tax | — | — | — | — | (2,092) | (2,092) | — | (2,092) |
| Net change in unrealized gains and losses on cash flow hedges, net of tax | — | — | — | — | 13,031 | 13,031 | — | 13,031 |
| Share-based compensation, net | — | — | 16,646 | — | — | 16,646 | — | 16,646 |
| Common stock repurchases | (1,018,070) | — | — | (230,758) | — | (230,758) | — | (230,758) |
| **Balance at June 30, 2019** | **51,561,719** | **$ 52** | **$ 1,421,565** | **$ 4,051,194** | **$ 81,232** | **$ 5,554,043** | **$ 152,132** | **$ 5,706,175** |

**4. Share-Based Compensation**

For the three and six months ended June 30, 2019 and 2018, we recorded share-based compensation and related tax benefits as follows:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Share-based compensation expense | $ 16,646 | $ 11,944 | $ 31,768 | $ 22,467 |
| Income tax benefit related to share-based compensation expense | (3,817) | (2,743) | (7,144) | (5,060) |

*Unrecognized Compensation Expense*

As of June 30, 2019, unrecognized share-based compensation expense was as follows:

| (Dollars in thousands) | Unrecognized Expense | Weighted Average Expected Recognition Period - in Years |
|---|---|---|
| Stock options | $ 17,537 | 2.89 |
| Restricted stock units and awards | 128,493 | 3.10 |
| Total unrecognized share-based compensation expense | $ 146,030 | |

*Share-Based Payment Award Activity*

The table below provides stock option information related to the 2006 Equity Incentive Plan for the six months ended June 30, 2019:

| | Options | Weighted Average Exercise Price | Weighted Average Remaining Contractual Life - in Years | Aggregate Intrinsic Value of In-The-Money Options |
|---|---|---|---|---|
| Outstanding at December 31, 2018 | 679,659 | $ 137.19 | | |
| Granted | 119,835 | 250.31 | | |
| Exercised | (88,600) | 80.99 | | |
| Forfeited | (16,265) | 208.27 | | |
| Expired | (720) | 64.37 | | |
| Outstanding at June 30, 2019 | 693,909 | 162.31 | 3.91 | $ 52,916,546 |
| Vested and expected to vest at June 30, 2019 | 673,285 | 159.83 | 3.84 | 52,600,866 |
| Exercisable at June 30, 2019 | 427,405 | 120.15 | 2.71 | 46,281,877 |

The aggregate intrinsic value of outstanding options shown in the table above represents the pre-tax intrinsic value based on our closing stock price of $224.59 as of June 30, 2019. The total intrinsic value of options exercised during the three and six months ended June 30, 2019 was $6.9 million and $14.4 million, respectively, compared to $21.6 million and $31.0 million for the comparable 2018 periods.

The table below provides information for restricted stock units and awards under the 2006 Equity Incentive Plan for the six months ended June 30, 2019:

| | Shares | Weighted Average Grant Date Fair Value |
|---|---|---|
| Nonvested at December 31, 2018 | 597,296 | $ 194.48 |
| Granted (1) | 526,639 | 244.61 |
| Vested | (212,179) | 150.20 |
| Forfeited | (43,377) | 179.28 |
| Nonvested at June 30, 2019 | 868,379 | 236.46 |

(1) On February 1, 2019, we granted 125,160 restricted stock awards to SVB Leerink employees at a market price of $238.28 under the retention plan previously announced on November 13, 2018. The restricted stock awards will vest over a five-year period.

**5. Variable Interest Entities**

Our involvement with VIEs includes our investments in venture capital and private equity funds, debt funds, private and public portfolio companies and qualified affordable housing projects.

The following table presents the carrying amounts and classification of significant variable interests in consolidated and unconsolidated VIEs as of June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | Consolidated VIEs | Unconsolidated VIEs | Maximum Exposure to Loss in Unconsolidated VIEs |
|---|---|---|---|
| **June 30, 2019:** | | | |
| Assets: | | | |
| Cash and cash equivalents | $ 7,387 | $ — | $ — |
| Non-marketable and other equity securities (1) | 250,028 | 642,882 | 642,882 |
| Accrued interest receivable and other assets | 469 | — | — |
| Total assets | $ 257,884 | $ 642,882 | $ 642,882 |
| Liabilities: | | | |
| Other liabilities (1) | 2,421 | 266,761 | — |
| Total liabilities | $ 2,421 | $ 266,761 | $ — |
| **December 31, 2018:** | | | |
| Assets: | | | |
| Cash and cash equivalents | $ 9,058 | $ — | $ — |
| Non-marketable and other equity securities (1) | 221,646 | 568,272 | 568,272 |
| Accrued interest receivable and other assets | 228 | — | — |
| Total assets | $ 230,932 | $ 568,272 | $ 568,272 |
| Liabilities: | | | |
| Other liabilities (1) | 919 | 205,685 | — |
| Total liabilities | $ 919 | $ 205,685 | $ — |

(1) Included in our unconsolidated non-marketable and other equity securities portfolio at June 30, 2019 and December 31, 2018 are investments in qualified affordable housing projects of $394.0 million and $318.6 million, respectively, and related other liabilities consisting of unfunded credit commitments of $266.8 million and $205.7 million, respectively.

*Non-marketable and other equity securities*

Our non-marketable and other equity securities portfolio primarily represents investments in venture capital and private equity funds, SPD Silicon Valley Bank Co., Ltd. (the Bank's joint venture bank in China ("SPD-SVB")), debt funds, private and public portfolio companies and qualified affordable housing projects. A majority of these investments are through third- party funds

held by SVB Financial in which we do not have controlling or significant variable interests. These investments represent our unconsolidated VIEs in the table above. Our non-marketable and other equity securities portfolio also includes investments from SVB Capital. SVB Capital is the funds management business of SVB Financial Group, which focuses primarily on venture capital investments. The SVB Capital family of funds is comprised of direct venture funds that invest in companies and funds of funds that invest in other venture capital funds. We have a controlling and significant variable interest in four of these SVB Capital funds and consolidate these funds for financial reporting purposes.

All investments are generally nonredeemable and distributions are expected to be received through the liquidation of the underlying investments throughout the life of the investment fund. Investments may only be sold or transferred subject to the notice and approval provisions of the underlying investment agreement. Subject to applicable regulatory requirements, including the Volcker Rule, we also make commitments to invest in venture capital and private equity funds. For additional details, see Note 16—"Off-Balance Sheet Arrangements, Guarantees and Other Commitments" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

The Bank also has variable interests in low income housing tax credit funds, in connection with fulfilling its responsibilities under the Community Reinvestment Act ("CRA"), that are designed to generate a return primarily through the realization of federal tax credits. These investments are typically limited partnerships in which the general partner, other than the Bank, holds the power over significant activities of the VIE; therefore, these investments are not consolidated. For additional information on our investments in qualified affordable housing projects, see Note 7—"Investment Securities" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

As of June 30, 2019, our exposure to loss with respect to the consolidated VIEs is limited to our net assets of $255.5 million and our exposure to loss for our unconsolidated VIEs is equal to our investment in these assets of $642.9 million.

## 6. Cash and Cash Equivalents

The following table details our cash and cash equivalents at June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Cash and due from banks (1) | $ 8,727,265 | $ 3,444,971 |
| Securities purchased under agreements to resell (2) | 291,678 | 123,611 |
| Other short-term investment securities | 1,982 | 2,957 |
| Total cash and cash equivalents | $ 9,020,925 | $ 3,571,539 |

(1) At June 30, 2019 and December 31, 2018, $6.4 billion and $1.7 billion, respectively, of our cash and due from banks was deposited at the Federal Reserve Bank and was earning interest at the Federal Funds target rate, and interest-earning deposits in other financial institutions were $1.8 billion and $1.2 billion, respectively.

(2) At June 30, 2019 and December 31, 2018, securities purchased under agreements to resell were collateralized by U.S. Treasury securities and U.S. agency securities with aggregate fair values of $297.7 million and $126.2 million, respectively. None of these securities were sold or repledged as of June 30, 2019 and December 31, 2018.

**7. Investment Securities**

Our investment securities portfolio consists of: (i) an available-for-sale securities portfolio and a held-to-maturity securities portfolio, both of which represent interest-earning investment securities, and (ii) a non-marketable and other equity securities portfolio, which primarily represents investments managed as part of our funds management business as well as public equity securities held as a result of equity warrant assets exercised.

Available-for-Sale Securities

The major components of our available-for-sale investment securities portfolio at June 30, 2019 and December 31, 2018 are as follows:

| | June 30, 2019 | | | |
|---|---|---|---|---|
| (Dollars in thousands) | Amortized Cost | Unrealized Gains | Unrealized Losses | Carrying Value |
| Available-for-sale securities, at fair value: | | | | |
| U.S. Treasury securities | $ 4,757,164 | $ 69,279 | $ (5,369) | $ 4,821,074 |
| Foreign government debt securities | 9,203 | 8 | — | 9,211 |
| Residential mortgage-backed securities: | | | | |
| Agency-issued mortgage-backed securities | 1,303,634 | 18,245 | (22) | 1,321,857 |
| Agency-issued collateralized mortgage obligations—fixed rate | 1,772,666 | 15,569 | (55) | 1,788,180 |
| Total available-for-sale securities | $ 7,842,667 | $ 103,101 | $ (5,446) | $ 7,940,322 |

| | December 31, 2018 | | | |
|---|---|---|---|---|
| (Dollars in thousands) | Amortized Cost | Unrealized Gains | Unrealized Losses | Carrying Value |
| Available-for-sale securities, at fair value: | | | | |
| U.S. Treasury securities | $ 4,762,182 | $ 11,638 | $ (35,562) | $ 4,738,258 |
| U.S. agency debentures | 1,090,426 | 61 | (6,370) | 1,084,117 |
| Foreign government debt securities | 5,815 | — | (3) | 5,812 |
| Residential mortgage-backed securities: | | | | |
| Agency-issued collateralized mortgage obligations—fixed rate | 1,922,618 | — | (42,400) | 1,880,218 |
| Agency-issued collateralized mortgage obligations—variable rate | 81,270 | 383 | (15) | 81,638 |
| Total available-for-sale securities | $ 7,862,311 | $ 12,082 | $ (84,350) | $ 7,790,043 |

The following table summarizes sale activity of available-for-sale securities during the three and six months ended June 30, 2019 and 2018 as recorded in the line item “Gains on investment securities, net," a component of noninterest income:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Sales proceeds | $ 1,017,523 | $ — | $ 2,189,087 | $ — |
| Net realized gains and losses: | | | | |
| Gross realized gains | 1,250 | — | 1,250 | — |
| Gross realized losses | (1,525) | — | (5,155) | — |
| Net realized losses | $ (275) | $ — | $ (3,905) | $ — |

The following tables summarize our unrealized losses on our available-for-sale securities portfolio into categories of less than 12 months, or 12 months or longer as of June 30, 2019 and December 31, 2018:

| | June 30, 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Less than 12 months | | 12 months or longer (1) | | Total | |
| (Dollars in thousands) | Fair Value of Investments | Unrealized Losses | Fair Value of Investments | Unrealized Losses | Fair Value of Investments | Unrealized Losses |
| Available-for-sale securities: | | | | | | |
| U.S. Treasury securities | $ — | $ — | $ 2,318,760 | $ (5,369) | $ 2,318,760 | $ (5,369) |
| Residential mortgage-backed securities: | | | | | | |
| Agency-issued mortgage-backed securities | 8,220 | (22) | — | — | 8,220 | (22) |
| Agency-issued collateralized mortgage obligations—fixed rate | — | — | 25,331 | (55) | 25,331 | (55) |
| Total temporarily impaired securities (1) | $ 8,220 | $ (22) | $ 2,344,091 | $ (5,424) | $ 2,352,311 | $ (5,446) |

(1) As of June 30, 2019, we identified a total of 57 investments that were in unrealized loss positions, of which 54 investments totaling $2.3 billion with unrealized losses of $5.4 million have been in an impaired position for a period of time greater than 12 months. As of June 30, 2019, we do not intend to sell any of our impaired securities prior to recovery of our adjusted cost basis, and it is more likely than not that we will not be required to sell any of our securities prior to recovery of our adjusted cost basis. Based on our analysis as of June 30, 2019, we deem all impairments to be temporary, and therefore changes in value for our temporarily impaired securities as of the same date are included in other comprehensive income. Market valuations and impairment analyses on assets in the available-for-sale securities portfolio are reviewed and monitored on a quarterly basis.

| | December 31, 2018 | | | | | |
|---|---|---|---|---|---|---|
| | Less than 12 months | | 12 months or longer (1) | | Total | |
| (Dollars in thousands) | Fair Value of Investments | Unrealized Losses | Fair Value of Investments | Unrealized Losses | Fair Value of Investments | Unrealized Losses |
| Available-for-sale securities: | | | | | | |
| U.S. Treasury securities | $ 494,287 | $ (3,785) | $ 3,568,119 | $ (31,777) | $ 4,062,406 | $ (35,562) |
| U.S. agency debentures | 443,790 | (1,602) | 591,216 | (4,768) | 1,035,006 | (6,370) |
| Foreign government debt securities | 5,812 | (3) | — | — | 5,812 | (3) |
| Residential mortgage-backed securities: | | | | | | |
| Agency-issued collateralized mortgage obligations—fixed rate | 13,430 | (22) | 1,866,788 | (42,378) | 1,880,218 | (42,400) |
| Agency-issued collateralized mortgage obligations—variable rate | — | — | 13,516 | (15) | 13,516 | (15) |
| Total temporarily impaired securities (1) | $ 957,319 | $ (5,412) | $ 6,039,639 | $ (78,938) | $ 6,996,958 | $ (84,350) |

(1) As of December 31, 2018, we identified a total of 200 investments that were in unrealized loss positions, of which 162 investments totaling $6.0 billion with unrealized losses of $78.9 million have been in an impaired position for a period of time greater than 12 months.

The following table summarizes the fixed income securities, carried at fair value, classified as available-for-sale as of June 30, 2019 by the remaining contractual principal maturities. For U.S. Treasury securities and foreign government debt securities, the expected maturity is the actual contractual maturity of the notes. Expected maturities for mortgage-backed securities may differ significantly from their contractual maturities because mortgage borrowers have the right to prepay outstanding loan obligations with or without penalties. Mortgage-backed securities classified as available-for-sale typically have original contractual maturities from 10 to 30 years whereas expected average lives of these securities tend to be significantly shorter and vary based upon structure and prepayments in lower interest rate environments.

| | June 30, 2019 | | | | |
|---|---|---|---|---|---|
| (Dollars in thousands) | Total | One Year or Less | After One Year to Five Years | After Five Years to Ten Years | After Ten Years |
| U.S. Treasury securities | $ 4,821,074 | $ 1,677,718 | $ 1,974,793 | $ 1,168,563 | $ — |
| Foreign government debt securities | 9,211 | — | 9,211 | — | — |
| Residential mortgage-backed securities: | | | | | |
| Agency-issued mortgage-backed securities | 1,321,857 | — | — | — | 1,321,857 |
| Agency-issued collateralized mortgage obligations—fixed rate | 1,788,180 | — | — | 5,244 | 1,782,936 |
| Total | $ 7,940,322 | $ 1,677,718 | $ 1,984,004 | $ 1,173,807 | $ 3,104,793 |

Held-to-Maturity Securities

The components of our held-to-maturity investment securities portfolio at June 30, 2019 and December 31, 2018 are as follows:

| | June 30, 2019 | | | |
|---|---|---|---|---|
| (Dollars in thousands) | Amortized Cost | Unrealized Gains | Unrealized Losses | Fair Value |
| Held-to-maturity securities, at cost: | | | | |
| U.S. agency debentures (1) | $ 585,817 | $ 14,111 | $ — | $ 599,928 |
| Residential mortgage-backed securities: | | | | |
| Agency-issued mortgage-backed securities | 7,706,133 | 105,024 | (7,790) | 7,803,367 |
| Agency-issued collateralized mortgage obligations—fixed rate | 1,912,839 | 1,780 | (14,322) | 1,900,297 |
| Agency-issued collateralized mortgage obligations—variable rate | 197,962 | 109 | (357) | 197,714 |
| Agency-issued commercial mortgage-backed securities | 2,886,958 | 49,057 | (12,455) | 2,923,560 |
| Municipal bonds and notes | 1,579,052 | 61,137 | (93) | 1,640,096 |
| Total held-to-maturity securities | $ 14,868,761 | $ 231,218 | $ (35,017) | $ 15,064,962 |

(1) Consists of pools of Small Business Investment Company debentures issued and guaranteed by the U.S. Small Business Administration, an independent agency of the United States.

| | December 31, 2018 | | | |
|---|---|---|---|---|
| (Dollars in thousands) | Amortized Cost | Unrealized Gains | Unrealized Losses | Fair Value |
| Held-to-maturity securities, at cost: | | | | |
| U.S. agency debentures (1) | $ 640,990 | $ 2,148 | $ (4,850) | $ 638,288 |
| Residential mortgage-backed securities: | | | | |
| Agency-issued mortgage-backed securities | 8,103,638 | 5,011 | (157,767) | 7,950,882 |
| Agency-issued collateralized mortgage obligations—fixed rate | 2,183,204 | — | (62,272) | 2,120,932 |
| Agency-issued collateralized mortgage obligations—variable rate | 214,483 | 608 | (14) | 215,077 |
| Agency-issued commercial mortgage-backed securities | 2,769,706 | 6,969 | (64,374) | 2,712,301 |
| Municipal bonds and notes | 1,575,421 | 2,304 | (26,969) | 1,550,756 |
| Total held-to-maturity securities | $ 15,487,442 | $ 17,040 | $ (316,246) | $ 15,188,236 |

(1) Consists of pools of Small Business Investment Company debentures issued and guaranteed by the U.S. Small Business Administration, an independent agency of the United States.

The following tables summarize our unrealized losses on our held-to-maturity securities portfolio into categories of less than 12 months and 12 months or longer as of June 30, 2019 and December 31, 2018:

| | June 30, 2019 | | | | | |
|---|---|---|---|---|---|---|
| | Less than 12 months | | 12 months or longer (1) | | Total | |
| (Dollars in thousands) | Fair Value of Investments | Unrealized Losses | Fair Value of Investments | Unrealized Losses | Fair Value of Investments | Unrealized Losses |
| Held-to-maturity securities: | | | | | | |
| Residential mortgage-backed securities: | | | | | | |
| Agency-issued mortgage-backed securities | $ 23,334 | $ (99) | $ 1,649,553 | $ (7,691) | $ 1,672,887 | $ (7,790) |
| Agency-issued collateralized mortgage obligations—fixed rate | — | — | 1,566,989 | (14,322) | 1,566,989 | (14,322) |
| Agency-issued collateralized mortgage obligations—variable rate | 156,837 | (351) | 7,515 | (6) | 164,352 | (357) |
| Agency-issued commercial mortgage-backed securities | — | — | 1,040,014 | (12,455) | 1,040,014 | (12,455) |
| Municipal bonds and notes | — | — | 20,962 | (93) | 20,962 | (93) |
| Total temporarily impaired securities (1) | $ 180,171 | $ (450) | $ 4,285,033 | $ (34,567) | $ 4,465,204 | $ (35,017) |

(1) As of June 30, 2019, we identified a total of 337 investments that were in unrealized loss positions, of which 324 investments totaling $4.3 billion with unrealized losses of $34.6 million have been in an impaired position for a period of time greater than 12 months. As of June 30, 2019, we do not intend to sell any of our impaired securities prior to recovery of our adjusted cost basis, and it is more likely than not that we will not be required to sell any of our securities prior to recovery of our adjusted cost basis, which is consistent with our classification of these securities. Based on our analysis as of June 30, 2019, we deem all impairments to be temporary. Market valuations and impairment analyses on assets in the held-to-maturity securities portfolio are reviewed and monitored on a quarterly basis.

| | December 31, 2018 | | | | | |
|---|---|---|---|---|---|---|
| | Less than 12 months | | 12 months or longer (1) | | Total | |
| (Dollars in thousands) | Fair Value of Investments | Unrealized Losses | Fair Value of Investments | Unrealized Losses | Fair Value of Investments | Unrealized Losses |
| Held-to-maturity securities: | | | | | | |
| U.S. agency debentures | $ 291,432 | $ (2,915) | $ 66,624 | $ (1,935) | $ 358,056 | $ (4,850) |
| Residential mortgage-backed securities: | | | | | | |
| Agency-issued mortgage-backed securities | 2,493,156 | (34,956) | 3,972,690 | (122,811) | 6,465,846 | (157,767) |
| Agency-issued collateralized mortgage obligations—fixed rate | 16,952 | (109) | 2,103,980 | (62,163) | 2,120,932 | (62,272) |
| Agency-issued collateralized mortgage obligations—variable rate | 3,364 | (1) | 8,101 | (13) | 11,465 | (14) |
| Agency-issued commercial mortgage-backed securities | 177,697 | (1,580) | 1,600,277 | (62,794) | 1,777,974 | (64,374) |
| Municipal bonds and notes | 868,751 | (17,075) | 340,413 | (9,894) | 1,209,164 | (26,969) |
| Total temporarily impaired securities (1) | $ 3,851,352 | $ (56,636) | $ 8,092,085 | $ (259,610) | $ 11,943,437 | $ (316,246) |

(1) As of December 31, 2018, we identified a total of 1,244 investments that were in unrealized loss positions, of which 695 investments totaling $8.1 billion with unrealized losses of $259.6 million have been in an impaired position for a period of time greater than 12 months.

The following table summarizes the remaining contractual principal maturities on fixed income investment securities classified as held-to-maturity as of June 30, 2019. For U.S. agency debentures, the expected maturity is the actual contractual maturity of the notes. Expected remaining maturities for certain U.S. agency debentures may occur earlier than their contractual maturities because the note issuers have the right to call outstanding amounts ahead of their contractual maturity. Expected maturities for mortgage-backed securities may differ significantly from their contractual maturities because mortgage borrowers have the right to prepay outstanding loan obligations with or without penalties. Mortgage-backed securities classified as held-to-maturity typically have original contractual maturities from 10 to 30 years whereas expected average lives of these securities tend to be significantly shorter and vary based upon structure and prepayments in lower interest rate environments.

| | June 30, 2019 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | One Year or Less | | After One Year to Five Years | | After Five Years to Ten Years | | After Ten Years | |
| (Dollars in thousands) | Amortized Cost | Fair Value | Amortized Cost | Fair Value | Amortized Cost | Fair Value | Amortized Cost | Fair Value | Amortized Cost | Fair Value |
| U.S. agency debentures | $ 585,817 | $ 599,928 | $ — | $ — | $ 101,464 | $ 103,530 | $ 484,353 | $ 496,398 | $ — | $ — |
| Residential mortgage-backed securities: | | | | | | | | | | |
| Agency-issued mortgage-backed securities | 7,706,133 | 7,803,367 | — | — | 110,633 | 110,834 | 821,076 | 817,428 | 6,774,424 | 6,875,105 |
| Agency-issued collateralized mortgage obligations—fixed rate | 1,912,839 | 1,900,297 | — | — | — | — | 506,773 | 501,451 | 1,406,066 | 1,398,846 |
| Agency-issued collateralized mortgage obligations—variable rate | 197,962 | 197,714 | — | — | — | — | — | — | 197,962 | 197,714 |
| Agency-issued commercial mortgage-backed securities | 2,886,958 | 2,923,560 | — | — | — | — | — | — | 2,886,958 | 2,923,560 |
| Municipal bonds and notes | 1,579,052 | 1,640,096 | 14,977 | 14,984 | 83,468 | 84,297 | 340,526 | 351,481 | 1,140,081 | 1,189,334 |
| Total | $14,868,761 | $15,064,962 | $ 14,977 | $ 14,984 | $ 295,565 | $ 298,661 | $2,152,728 | $2,166,758 | $12,405,491 | $12,584,559 |

Non-marketable and Other Equity Securities

The major components of our non-marketable and other equity securities portfolio at June 30, 2019 and December 31, 2018 are as follows:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Non-marketable and other equity securities: | | |
| Non-marketable securities (fair value accounting): | | |
| Consolidated venture capital and private equity fund investments (1) | $ 110,086 | $ 118,333 |
| Unconsolidated venture capital and private equity fund investments (2) | 193,206 | 201,098 |
| Other investments without a readily determinable fair value (3) | 42,419 | 25,668 |
| Other equity securities in public companies (fair value accounting) (4) | 39,808 | 20,398 |
| Non-marketable securities (equity method accounting) (5): | | |
| Venture capital and private equity fund investments | 169,219 | 129,485 |
| Debt funds | 7,168 | 5,826 |
| Other investments | 123,797 | 121,721 |
| Investments in qualified affordable housing projects, net (6) | 394,046 | 318,575 |
| Total non-marketable and other equity securities | $ 1,079,749 | $ 941,104 |

(1) The following table shows the amounts of venture capital and private equity fund investments held by the following consolidated funds and our ownership percentage of each fund at June 30, 2019 and December 31, 2018 (fair value accounting):

| | June 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| (Dollars in thousands) | Amount | Ownership % | Amount | Ownership % |
| Strategic Investors Fund, LP | $ 8,860 | 12.6% | $ 12,452 | 12.6% |
| Capital Preferred Return Fund, LP | 51,801 | 20.0 | 53,957 | 20.0 |
| Growth Partners, LP | 48,984 | 33.0 | 50,845 | 33.0 |
| CP I, LP | 441 | 10.7 | 1,079 | 10.7 |
| Total consolidated venture capital and private equity fund investments | $ 110,086 | | $ 118,333 | |

(2) The carrying value represents investments in 212 and 213 funds (primarily venture capital funds) at June 30, 2019 and December 31, 2018, respectively, where our ownership interest is typically less than 5% of the voting interests of each such fund and in which we do not have the ability to exercise significant influence over the partnerships operating activities and financial policies. We carry our unconsolidated venture capital and private equity fund investments at fair value based on the fund investments' net asset values per share as obtained from the general partners of the investments. For each fund investment, we adjust the net asset value per share for differences between our measurement date and the date of the fund investment's net asset value by using the most recently available financial information from the investee general partner, for example March 31st for our June 30th consolidated financial statements, adjusted for any contributions paid, distributions received from the investment, and significant fund transactions or market events during the reporting period.

(3) These investments include direct equity investments in private companies. The carrying value is based on the price at which the investment was acquired plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments. We consider a range of factors when adjusting the fair value of these investments, including, but not limited to, the term and nature of the investment, local market conditions, values for comparable securities, current and projected operating performance, exit strategies, financing transactions subsequent to the acquisition of the investment and a discount for certain investments that have lock-up restrictions or other features that indicate a discount to fair value is warranted.

The following table shows the changes to the carrying amount of other investments without a readily determinable fair value for the six months ended June 30, 2019:

| (Dollars in thousands) | Six months ended June 30, 2019 | Cumulative Adjustments |
|---|---|---|
| Measurement alternative: | | |
| Carrying value at June 30, 2019 | $ 42,419 | |
| Carrying value adjustments: | | |
| Impairment | $ — | $ — |
| Upward changes for observable prices | 2,611 | 3,512 |
| Downward changes for observable prices | (2,376) | (3,996) |

(4) Investments classified as other equity securities (fair value accounting) represent shares held in public companies as a result of exercising public equity warrant assets and direct equity investments in public companies held by our consolidated funds. Changes in equity securities measured at fair value are recognized through net income.

(5) The following table shows the carrying value and our ownership percentage of each investment at June 30, 2019 and December 31, 2018 (equity method accounting):

| | June 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| (Dollars in thousands) | Amount | Ownership % | Amount | Ownership % |
| Venture capital and private equity fund investments: | | | | |
| Strategic Investors Fund II, LP | $ 4,200 | 8.6% | $ 4,670 | 8.6% |
| Strategic Investors Fund III, LP | 16,364 | 5.9 | 17,396 | 5.9 |
| Strategic Investors Fund IV, LP | 28,404 | 5.0 | 28,974 | 5.0 |
| Strategic Investors Fund V funds | 33,300 | Various | 28,189 | Various |
| CP II, LP (i) | 7,450 | 5.1 | 7,122 | 5.1 |
| Other venture capital and private equity fund investments | 79,501 | Various | 43,134 | Various |
| Total venture capital and private equity fund investments | $ 169,219 | | $ 129,485 | |
| Debt funds: | | | | |
| Gold Hill Capital 2008, LP (ii) | $ 5,323 | 15.5% | $ 3,901 | 15.5% |
| Other debt funds | 1,845 | Various | 1,925 | Various |
| Total debt funds | $ 7,168 | | $ 5,826 | |
| Other investments: | | | | |
| SPD Silicon Valley Bank Co., Ltd. | $ 76,544 | 50.0% | $ 76,412 | 50.0% |
| Other investments | 47,253 | Various | 45,309 | Various |
| Total other investments | $ 123,797 | | $ 121,721 | |

(i) Our ownership includes direct ownership interest of 1.3 percent and indirect ownership interest of 3.8 percent through our investments in Strategic Investors Fund II, LP.
(ii) Our ownership includes direct ownership interest of 11.5 percent in the fund and an indirect interest in the fund through our investment in Gold Hill Capital 2008, LLC of 4.0 percent.

(6) The following table presents the balances of our investments in qualified affordable housing projects and related unfunded commitments included as a component of "Other liabilities" on our consolidated balance sheets at June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Investments in qualified affordable housing projects, net | $ 394,046 | 318,575 |
| Other liabilities | 266,761 | 205,685 |

The following table presents other information relating to our investments in qualified affordable housing projects for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Tax credits and other tax benefits recognized | $ 10,988 | $ 5,207 | $ 20,245 | $ 10,629 |
| Amortization expense included in provision for income taxes (i) | 6,758 | 4,705 | 14,394 | 9,497 |

(i) All investments are amortized using the proportional amortization method and amortization expense is included in the provision for income taxes.

The following table presents the net gains and losses on non-marketable and other equity securities for the three and six months ended June 30, 2019 and 2018 as recorded in the line item “Gains on investment securities, net," a component of noninterest income:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Net gains (losses) on non-marketable and other equity securities: | | | | |
| Non-marketable securities (fair value accounting): | | | | |
| Consolidated venture capital and private equity fund investments | $ 14,830 | $ 4,397 | $ 18,119 | $ 16,044 |
| Unconsolidated venture capital and private equity fund investments | 10,152 | 19,136 | 18,158 | 30,855 |
| Other investments without a readily determinable fair value | 167 | 60 | 5,172 | 1,801 |
| Other equity securities in public companies (fair value accounting) | 282 | 88 | 12,085 | (22,194) |
| Non-marketable securities (equity method accounting): | | | | |
| Venture capital and private equity fund investments | 22,351 | 9,212 | 25,140 | 18,781 |
| Debt funds | 1,342 | 726 | 1,342 | (1,573) |
| Other investments | (1,151) | 2,495 | 615 | 1,458 |
| Total net gains on non-marketable and other equity securities | $ 47,973 | $ 36,114 | $ 80,631 | $ 45,172 |
| Less: realized net gains (losses) on sales of securities (1) | 2,524 | 1,915 | 12,359 | (21,163) |
| Net gains on non-marketable and other equity securities still held | $ 45,449 | $ 34,199 | $ 68,272 | $ 66,335 |

(1) Realized gains and losses include sales of non-marketable and other equity securities. No OTTI was recorded during the three and six months ended June 30, 2019 and 2018.

**8. Loans, Allowance for Loan Losses and Allowance for Unfunded Credit Commitments**

We serve a variety of commercial clients in the technology, life science/healthcare, private equity/venture capital and premium wine industries. Our technology clients generally tend to be in the industries of hardware (semiconductors, communications, data, storage, and electronics), software/internet (such as infrastructure software, applications, software services, digital content and advertising technology), and energy and resource innovation (“ERI”). Because of the diverse nature of ERI products and services, for our loan-related reporting purposes, ERI-related loans are reported under our hardware, software/internet, life science/healthcare and other commercial loan categories, as applicable. Our life science/healthcare clients primarily tend to be in the industries of biotechnology, medical devices, healthcare information technology and healthcare services. Loans made to private equity/venture capital firm clients typically enable them to fund investments prior to their receipt of funds from capital calls. Loans to the premium wine industry focus on vineyards and wineries that produce grapes and wines of high quality.

In addition to commercial loans, we make consumer loans through SVB Private Bank and provide real estate secured loans to eligible employees through our EHOP. Our private banking clients are primarily private equity/venture capital professionals and executive leaders in the innovation companies they support. These products and services include real estate secured home equity lines of credit, which may be used to finance real estate investments and loans used to purchase, renovate or refinance personal residences. These products and services also include restricted stock purchase loans and capital call lines of credit.

We also provide community development loans made as part of our responsibilities under the Community Reinvestment Act. These loans are included within “Construction loans” below and are primarily secured by real estate.

The composition of loans, net of unearned income of $161 million and $173 million at June 30, 2019 and December 31, 2018, respectively, is presented in the following table:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Commercial loans: | | |
| Software/internet | $ 6,000,284 | $ 6,154,755 |
| Hardware | 1,328,589 | 1,234,557 |
| Private equity/venture capital | 14,684,900 | 14,110,560 |
| Life science/healthcare | 2,382,847 | 2,385,612 |
| Premium wine | 236,116 | 249,266 |
| Other | 384,247 | 321,978 |
| Total commercial loans | 25,016,983 | 24,456,728 |
| Real estate secured loans: | | |
| Premium wine (1) | 753,468 | 710,397 |
| Consumer loans (2) | 2,808,707 | 2,612,971 |
| Other | 39,666 | 40,435 |
| Total real estate secured loans | 3,601,841 | 3,363,803 |
| Construction loans | 126,895 | 97,077 |
| Consumer loans | 463,854 | 420,672 |
| Total loans, net of unearned income (3) | $ 29,209,573 | $ 28,338,280 |

(1) Included in our premium wine portfolio are gross construction loans of $94 million and $99 million at June 30, 2019 and December 31, 2018, respectively.
(2) Consumer loans secured by real estate at June 30, 2019 and December 31, 2018 were comprised of the following:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Loans for personal residence | $ 2,418,103 | $ 2,251,292 |
| Loans to eligible employees | 330,374 | 290,194 |
| Home equity lines of credit | 60,230 | 71,485 |
| Consumer loans secured by real estate | $ 2,808,707 | $ 2,612,971 |

(3) Included within our total loan portfolio are credit card loans of $377 million and $335 million at June 30, 2019 and December 31, 2018, respectively.

***Credit Quality***

The composition of loans, net of unearned income of $161 million and $173 million at June 30, 2019 and December 31, 2018, respectively, broken out by portfolio segment and class of financing receivable, is as follows:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Commercial loans: | | |
| Software/internet | $ 6,000,284 | $ 6,154,755 |
| Hardware | 1,328,589 | 1,234,557 |
| Private equity/venture capital | 14,684,900 | 14,110,560 |
| Life science/healthcare | 2,382,847 | 2,385,612 |
| Premium wine | 989,584 | 959,663 |
| Other | 550,808 | 459,490 |
| Total commercial loans | 25,937,012 | 25,304,637 |
| Consumer loans: | | |
| Real estate secured loans | 2,808,707 | 2,612,971 |
| Other consumer loans | 463,854 | 420,672 |
| Total consumer loans | 3,272,561 | 3,033,643 |
| Total loans, net of unearned income | $ 29,209,573 | $ 28,338,280 |

The following table summarizes the aging of our gross loans, broken out by portfolio segment and class of financing receivable as of June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | 30 - 59 Days Past Due | 60 - 89 Days Past Due | Equal to or Greater Than 90 Days Past Due | Total Past Due | Current | Loans Past Due 90 Days or More Still Accruing Interest |
|---|---|---|---|---|---|---|
| **June 30, 2019:** | | | | | | |
| Commercial loans: | | | | | | |
| Software/internet | $ 4,693 | $ 20,568 | $ 97 | $ 25,358 | $ 5,909,916 | $ 97 |
| Hardware | 347 | 2,507 | 3 | 2,857 | 1,318,806 | 3 |
| Private equity/venture capital | 5,526 | 14 | — | 5,540 | 14,682,798 | — |
| Life science/healthcare | 1,895 | 378 | 11 | 2,284 | 2,394,468 | 11 |
| Premium wine | 821 | — | — | 821 | 988,290 | — |
| Other | 367 | — | — | 367 | 589,456 | — |
| Total commercial loans | 13,649 | 23,467 | 111 | 37,227 | 25,883,734 | 111 |
| Consumer loans: | | | | | | |
| Real estate secured loans | — | 3,294 | — | 3,294 | 2,796,397 | — |
| Other consumer loans | 60 | — | — | 60 | 464,168 | — |
| Total consumer loans | 60 | 3,294 | — | 3,354 | 3,260,565 | — |
| Total gross loans excluding impaired loans | 13,709 | 26,761 | 111 | 40,581 | 29,144,299 | 111 |
| Impaired loans | 2,051 | 4,281 | 14,954 | 21,286 | 164,237 | — |
| Total gross loans | $ 15,760 | $ 31,042 | $ 15,065 | $ 61,867 | $ 29,308,536 | $ 111 |
| **December 31, 2018:** | | | | | | |
| Commercial loans: | | | | | | |
| Software/internet | $ 28,134 | $ 6,944 | $ 378 | $ 35,456 | $ 6,059,672 | $ 378 |
| Hardware | 300 | 34 | 4 | 338 | 1,233,956 | 4 |
| Private equity/venture capital | 59,481 | 11 | — | 59,492 | 14,054,940 | — |
| Life science/healthcare | 16,082 | 817 | 19 | 16,918 | 2,410,091 | 19 |
| Premium wine | 2,953 | 14 | — | 2,967 | 956,285 | — |
| Other | 7,391 | 163 | 1 | 7,555 | 477,442 | 1 |
| Total commercial loans | 114,341 | 7,983 | 402 | 122,726 | 25,192,386 | 402 |
| Consumer loans: | | | | | | |
| Real estate secured loans | 3,598 | 1,750 | 1,562 | 6,910 | 2,598,496 | 1,562 |
| Other consumer loans | 361 | — | — | 361 | 420,359 | — |
| Total consumer loans | 3,959 | 1,750 | 1,562 | 7,271 | 3,018,855 | 1,562 |
| Total gross loans excluding impaired loans | 118,300 | 9,733 | 1,964 | 129,997 | 28,211,241 | 1,964 |
| Impaired loans | 2,843 | 1,181 | 25,092 | 29,116 | 140,958 | — |
| Total gross loans | $ 121,143 | $ 10,914 | $ 27,056 | $ 159,113 | $ 28,352,199 | $ 1,964 |

The following table summarizes our impaired loans as they relate to our allowance for loan losses, broken out by portfolio segment and class of financing receivable as of June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | Impaired loans for which there is a related allowance for loan losses | Impaired loans for which there is no related allowance for loan losses | Total carrying value of impaired loans | Total unpaid principal of impaired loans |
|---|---|---|---|---|
| **June 30, 2019:** | | | | |
| Commercial loans: | | | | |
| Software/internet | $ 37,016 | $ 72,060 | $ 109,076 | $ 114,285 |
| Hardware | 8,868 | 6,667 | 15,535 | 15,641 |
| Private equity/venture capital | — | — | — | — |
| Life science/healthcare | 41,639 | 9,372 | 51,011 | 78,471 |
| Premium wine | 244 | 784 | 1,028 | 1,108 |
| Other | 3,230 | — | 3,230 | 3,230 |
| Total commercial loans | 90,997 | 88,883 | 179,880 | 212,735 |
| Consumer loans: | | | | |
| Real estate secured loans | 1,818 | 3,812 | 5,630 | 9,348 |
| Other consumer loans | 13 | — | 13 | 13 |
| Total consumer loans | 1,831 | 3,812 | 5,643 | 9,361 |
| Total | $ 92,828 | $ 92,695 | $ 185,523 | $ 222,096 |
| **December 31, 2018:** | | | | |
| Commercial loans: | | | | |
| Software/internet | $ 49,625 | $ 65,225 | $ 114,850 | $ 131,858 |
| Hardware | 1,256 | 10,250 | 11,506 | 12,159 |
| Private equity/venture capital | — | 3,700 | 3,700 | 3,700 |
| Life science/healthcare | 17,791 | 16,276 | 34,067 | 44,446 |
| Premium wine | — | 1,301 | 1,301 | 1,365 |
| Other | 411 | — | 411 | 411 |
| Total commercial loans | 69,083 | 96,752 | 165,835 | 193,939 |
| Consumer loans: | | | | |
| Real estate secured loans | 3,919 | 320 | 4,239 | 5,969 |
| Other consumer loans | — | — | — | — |
| Total consumer loans | 3,919 | 320 | 4,239 | 5,969 |
| Total | $ 73,002 | $ 97,072 | $ 170,074 | $ 199,908 |

The following tables summarize our average impaired loans and interest income recognized on impaired loans, broken out by portfolio segment and class of financing receivable for the three and six months ended June 30, 2019 and 2018:

| Three months ended June 30, | Average impaired loans | | Interest income recognized on impaired loans | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Commercial loans: | | | | |
| Software/internet | $ 101,813 | $ 110,101 | $ 1,232 | $ 315 |
| Hardware | 15,131 | 37,058 | 95 | 237 |
| Private equity/venture capital | 3,860 | 72 | — | — |
| Life science/healthcare | 55,219 | 21,790 | 246 | 5 |
| Premium wine | 1,051 | 2,604 | 14 | 36 |
| Other | 1,078 | 379 | — | — |
| Total commercial loans | 178,152 | 172,004 | 1,587 | 593 |
| Consumer loans: | | | | |
| Real estate secured loans | 5,412 | 4,466 | — | 3 |
| Other consumer loans | 13 | 693 | — | — |
| Total consumer loans | 5,425 | 5,159 | — | 3 |
| Total average impaired loans | $ 183,577 | $ 177,163 | $ 1,587 | $ 596 |

| Six months ended June 30, | Average impaired loans | | Interest income recognized on impaired loans | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Commercial loans: | | | | |
| Software/internet | $ 103,062 | $ 109,444 | $ 1,835 | $ 562 |
| Hardware | 15,973 | 37,742 | 347 | 289 |
| Private equity/venture capital | 4,529 | 187 | — | — |
| Life science/healthcare | 49,691 | 22,234 | 593 | 11 |
| Premium wine | 1,154 | 2,686 | 33 | 72 |
| Other | 609 | 195 | — | — |
| Total commercial loans | 175,018 | 172,488 | 2,808 | 934 |
| Consumer loans: | | | | |
| Real estate secured loans | 7,513 | 3,765 | 54 | 8 |
| Other consumer loans | 9 | 716 | — | — |
| Total consumer loans | 7,522 | 4,481 | 54 | 8 |
| Total average impaired loans | $ 182,540 | $ 176,969 | $ 2,862 | $ 942 |

The following tables summarize the activity relating to our allowance for loan losses for the three and six months ended June 30, 2019 and 2018, broken out by portfolio segment:

| Three months ended June 30, 2019<br>(Dollars in thousands) | Beginning Balance March 31, 2019 | Charge-offs | Recoveries | Provision for Loan Losses | Foreign Currency Translation Adjustments | Ending Balance June 30, 2019 |
|---|---|---|---|---|---|---|
| Commercial loans: | | | | | | |
| Software/internet | $ 95,683 | $ (2,937) | $ 6,716 | $ 2,646 | $ (110) | $ 101,998 |
| Hardware | 25,121 | (2,992) | 3,013 | 1,868 | (78) | 26,932 |
| Private equity/venture capital | 97,460 | (2,047) | — | 10,550 | (439) | 105,524 |
| Life science/healthcare | 55,814 | (17,495) | 76 | 1,889 | (78) | 40,206 |
| Premium wine | 3,799 | — | — | 208 | (9) | 3,998 |
| Other | 3,208 | (4) | — | 1,134 | (47) | 4,291 |
| Total commercial loans | 281,085 | (25,475) | 9,805 | 18,295 | (761) | 282,949 |
| Total consumer loans | 19,066 | (960) | 15 | 853 | (35) | 18,939 |
| Total allowance for loan losses | $ 300,151 | $ (26,435) | $ 9,820 | $ 19,148 | $ (796) | $ 301,888 |

| Three months ended June 30, 2018<br>(Dollars in thousands) | Beginning Balance March 31, 2018 | Charge-offs | Recoveries | Provision for (Reduction of) Loan Losses | Foreign Currency Translation Adjustments | Ending Balance June 30, 2018 |
|---|---|---|---|---|---|---|
| Commercial loans: | | | | | | |
| Software/internet | $ 103,295 | $ (13,402) | $ 404 | $ 13,179 | $ (828) | $ 102,648 |
| Hardware | 28,472 | (461) | 643 | 6,447 | (406) | 34,695 |
| Private equity/venture capital | 91,618 | (112) | — | (2,237) | 140 | 89,409 |
| Life science/healthcare | 25,806 | — | 3 | 9,876 | (621) | 35,064 |
| Premium wine | 3,365 | — | — | 78 | (5) | 3,438 |
| Other | 3,482 | (1,164) | 566 | 13 | (1) | 2,896 |
| Total commercial loans | 256,038 | (15,139) | 1,616 | 27,356 | (1,721) | 268,150 |
| Total consumer loans | 18,256 | (289) | 310 | 300 | (18) | 18,559 |
| Total allowance for loan losses | $ 274,294 | $ (15,428) | $ 1,926 | $ 27,656 | $ (1,739) | $ 286,709 |

| Six months ended June 30, 2019<br>(Dollars in thousands) | Beginning Balance December 31, 2018 | Charge-offs | Recoveries | Provision for (Reduction of) Loan Losses | Foreign Currency Translation Adjustments | Ending Balance June 30, 2019 |
|---|---|---|---|---|---|---|
| Commercial loans: | | | | | | |
| Software/internet | $ 103,567 | $ (11,191) | $ 7,770 | $ 1,988 | $ (136) | $ 101,998 |
| Hardware | 19,725 | (3,245) | 3,069 | 7,252 | 131 | 26,932 |
| Private equity/venture capital | 98,581 | (2,047) | — | 9,471 | (481) | 105,524 |
| Life science/healthcare | 32,180 | (17,518) | 181 | 24,561 | 802 | 40,206 |
| Premium wine | 3,355 | — | — | 635 | 8 | 3,998 |
| Other | 3,558 | (415) | — | 1,193 | (45) | 4,291 |
| Total commercial loans | 260,966 | (34,416) | 11,020 | 45,100 | 279 | 282,949 |
| Total consumer loans | 19,937 | (1,019) | 225 | (131) | (73) | 18,939 |
| Total allowance for loan losses | $ 280,903 | $ (35,435) | $ 11,245 | $ 44,969 | $ 206 | $ 301,888 |

| Six months ended June 30, 2018<br>(Dollars in thousands) | Beginning Balance December 31, 2017 | Charge-offs | Recoveries | Provision for (Reduction of) Loan Losses | Foreign Currency Translation Adjustments | Ending Balance June 30, 2018 |
|---|---|---|---|---|---|---|
| Commercial loans: | | | | | | |
| Software/internet | $ 96,104 | $ (20,073) | $ 977 | $ 25,980 | $ (340) | $ 102,648 |
| Hardware | 27,614 | (3,414) | 1,231 | 9,551 | (287) | 34,695 |
| Private equity/venture capital | 82,468 | (112) | 10 | 6,568 | 475 | 89,409 |
| Life science/healthcare | 24,924 | (864) | 56 | 11,507 | (559) | 35,064 |
| Premium wine | 3,532 | — | — | (83) | (11) | 3,438 |
| Other | 3,941 | (1,263) | 1,103 | (893) | 8 | 2,896 |
| Total commercial loans | 238,583 | (25,726) | 3,377 | 52,630 | (714) | 268,150 |
| Total consumer loans | 16,441 | (289) | 337 | 2,022 | 48 | 18,559 |
| Total allowance for loan losses | $ 255,024 | $ (26,015) | $ 3,714 | $ 54,652 | $ (666) | $ 286,709 |

The following table summarizes the activity relating to our allowance for unfunded credit commitments for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Allowance for unfunded credit commitments, beginning balance | $ 57,970 | $ 52,823 | $ 55,183 | $ 51,770 |
| Provision for unfunded credit commitments | 4,798 | 1,424 | 7,528 | 2,400 |
| Foreign currency translation adjustments | (104) | (143) | (47) | (66) |
| Allowance for unfunded credit commitments, ending balance (1) | $ 62,664 | $ 54,104 | $ 62,664 | $ 54,104 |

(1) See Note 16—"Off-Balance Sheet Arrangements, Guarantees and Other Commitments" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report for additional disclosures related to our commitments to extend credit.

The following table summarizes the allowance for loan losses individually and collectively evaluated for impairment as of June 30, 2019 and December 31, 2018, broken out by portfolio segment:

| | June 30, 2019 | | | | December 31, 2018 | | | |
|---|---|---|---|---|---|---|---|---|
| | Individually Evaluated for Impairment | | Collectively Evaluated for Impairment | | Individually Evaluated for Impairment | | Collectively Evaluated for Impairment | |
| (Dollars in thousands) | Allowance for loan losses | Recorded investment in loans | Allowance for loan losses | Recorded investment in loans | Allowance for loan losses | Recorded investment in loans | Allowance for loan losses | Recorded investment in loans |
| Commercial loans: | | | | | | | | |
| Software/internet | $ 25,284 | $ 109,076 | $ 76,714 | $ 5,891,208 | $ 28,527 | $ 114,850 | $ 75,040 | $ 6,039,905 |
| Hardware | 8,389 | 15,535 | 18,543 | 1,313,054 | 1,253 | 11,506 | 18,472 | 1,223,051 |
| Private equity/venture capital | — | — | 105,524 | 14,684,900 | — | 3,700 | 98,581 | 14,106,860 |
| Life science/healthcare | 17,722 | 51,011 | 22,484 | 2,331,836 | 7,484 | 34,067 | 24,696 | 2,351,545 |
| Premium wine | 244 | 1,028 | 3,754 | 988,556 | — | 1,301 | 3,355 | 958,362 |
| Other | 1,284 | 3,230 | 3,007 | 547,578 | 411 | 411 | 3,147 | 459,079 |
| Total commercial loans | 52,923 | 179,880 | 230,026 | 25,757,132 | 37,675 | 165,835 | 223,291 | 25,138,802 |
| Total consumer loans | 144 | 5,643 | 18,795 | 3,266,918 | 266 | 4,239 | 19,671 | 3,029,404 |
| Total | $ 53,067 | $ 185,523 | $ 248,821 | $ 29,024,050 | $ 37,941 | $ 170,074 | $ 242,962 | $ 28,168,206 |

*Credit Quality Indicators*

For each individual client, we establish an internal credit risk rating for that loan, which is used for assessing and monitoring credit risk as well as performance of the loan and the overall portfolio. Our internal credit risk ratings are also used to summarize the risk of loss due to failure by an individual borrower to repay the loan. For our internal credit risk ratings, each individual loan is given a risk rating of 1 through 10. Loans risk-rated 1 through 4 are performing loans and translate to an internal rating of "Pass," with loans risk-rated 1 being cash secured. Loans risk-rated 5 through 7 are performing loans; however, we consider them as demonstrating higher risk, which requires more frequent review of the individual exposures; these translate to an internal rating of "Performing (Criticized)." When full repayment of a criticized loan has been deemed improbable under the original contractual terms but full repayment remains probable overall, the loan is considered to be a "Performing Impaired (Criticized)" loan. All of our nonaccrual loans are risk-rated 8 or 9 and are classified under the nonperforming impaired category. (For further description of nonaccrual loans, refer to Note 2—"Summary of Significant Accounting Policies" under Part II, Item 8 of our 2018 Form 10-K). Loans rated 10 are charged-off and are not included as part of our loan portfolio balance. We review our credit quality indicators for performance and appropriateness of risk ratings as part of our evaluation process for our allowance for loan losses.

The following table summarizes the credit quality indicators, broken out by portfolio segment and class of financing receivables as of June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | Pass | Performing (Criticized) | Performing Impaired (Criticized) | Nonperforming Impaired (Nonaccrual) | Total |
|---|---|---|---|---|---|
| **June 30, 2019:** | | | | | |
| Commercial loans: | | | | | |
| Software/internet | $ 5,457,188 | $ 478,086 | $ 72,060 | $ 37,016 | $ 6,044,350 |
| Hardware | 1,185,161 | 136,502 | 6,667 | 8,868 | 1,337,198 |
| Private equity/venture capital | 14,688,329 | 9 | — | — | 14,688,338 |
| Life science/healthcare | 2,310,262 | 86,490 | 9,371 | 41,640 | 2,447,763 |
| Premium wine | 925,649 | 63,462 | 784 | 244 | 990,139 |
| Other | 574,978 | 14,845 | — | 3,230 | 593,053 |
| Total commercial loans | 25,141,567 | 779,394 | 88,882 | 90,998 | 26,100,841 |
| Consumer loans: | | | | | |
| Real estate secured loans | 2,787,853 | 11,838 | — | 5,630 | 2,805,321 |
| Other consumer loans | 463,850 | 378 | — | 13 | 464,241 |
| Total consumer loans | 3,251,703 | 12,216 | — | 5,643 | 3,269,562 |
| Total gross loans | $ 28,393,270 | $ 791,610 | $ 88,882 | $ 96,641 | $ 29,370,403 |
| **December 31, 2018:** | | | | | |
| Commercial loans: | | | | | |
| Software/internet | $ 5,574,332 | $ 520,796 | $ 48,069 | $ 66,781 | $ 6,209,978 |
| Hardware | 1,146,985 | 87,309 | 10,250 | 1,256 | 1,245,800 |
| Private equity/venture capital | 14,098,281 | 16,151 | — | 3,700 | 14,118,132 |
| Life science/healthcare | 2,291,356 | 135,653 | 16,276 | 17,791 | 2,461,076 |
| Premium wine | 909,965 | 49,287 | 1,017 | 284 | 960,553 |
| Other | 467,653 | 17,344 | — | 411 | 485,408 |
| Total commercial loans | 24,488,572 | 826,540 | 75,612 | 90,223 | 25,480,947 |
| Consumer loans: | | | | | |
| Real estate secured loans | 2,584,261 | 21,145 | 320 | 3,919 | 2,609,645 |
| Other consumer loans | 419,771 | 949 | — | — | 420,720 |
| Total consumer loans | 3,004,032 | 22,094 | 320 | 3,919 | 3,030,365 |
| Total gross loans | $ 27,492,604 | $ 848,634 | $ 75,932 | $ 94,142 | $ 28,511,312 |

***Troubled Debt Restructurings***

As of June 30, 2019, we had 20 TDRs with a total carrying value of $112.0 million where concessions have been granted to borrowers experiencing financial difficulties, in an attempt to maximize collection. There were $4.3 million of unfunded commitments available for funding to the clients associated with these TDRs as of June 30, 2019.

The following table summarizes our loans modified in TDRs, broken out by portfolio segment and class of financing receivables at June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 |
|---|---|---|
| **Loans modified in TDRs:** | | |
| Commercial loans: | | |
| Software/internet | $ 79,512 | $ 58,089 |
| Hardware | 8,159 | 9,665 |
| Life science/healthcare | 19,592 | 12,738 |
| Premium wine | 2,587 | 2,883 |
| Total commercial loans | 109,850 | 83,375 |
| Consumer loans: | | |
| Other consumer loans | 2,181 | 320 |
| Total loans modified in TDRs | $ 112,031 | $ 83,695 |

The following table summarizes the recorded investment in loans modified in TDRs, broken out by portfolio segment and class of financing receivable, for modifications made during the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| **Loans modified in TDRs during the period:** | | | | |
| Commercial loans: | | | | |
| Software/internet | $ 55,065 | $ 14,783 | $ 55,681 | $ 14,783 |
| Hardware | — | 1,954 | — | 3,448 |
| Life science/healthcare | 11,227 | 6,231 | 11,227 | 7,461 |
| Total commercial loans | 66,292 | 22,968 | 66,908 | 25,692 |
| Consumer loans: | | | | |
| Other consumer loans | 1,865 | — | 1,865 | 325 |
| Total loans modified in TDRs during the period (1) | $ 68,157 | $ 22,968 | $ 68,773 | $ 26,017 |

(1) There were $3.4 million and $5.6 million of partial charge-offs for the three and six months ended June 30, 2019, respectively, and $8.5 million of partial charge-offs for both the three and six months ended June 30, 2018.

During the three and six months ended June 30, 2019, $66.3 million and $66.9 million, respectively, were modified through payment deferrals granted to our clients. During the three and six months ended June 30, 2019, $1.9 million were modified through partial forgiveness of principal for both periods presented. During the three and six months ended June 30, 2018, all new TDRs of $23.0 million and $26.0 million, respectively, were modified through payment deferrals granted to our clients.

The related allowance for loan losses for the majority of our TDRs is determined on an individual basis by comparing the carrying value of the loan to the present value of the estimated future cash flows, discounted at the pre-modification contractual interest rate. For certain TDRs, the related allowance for loan losses is determined based on the fair value of the collateral if the loan is collateral dependent.

The following table summarizes the recorded investment in loans modified in TDRs within the previous 12 months that subsequently defaulted during the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| **TDRs modified within the previous 12 months that defaulted during the period:** | | | | |
| Commercial loans: | | | | |
| Software/internet | $ — | $ 19,625 | $ — | $ 22,657 |
| Hardware | — | 3,449 | — | 3,449 |
| Life science/healthcare | — | 1,230 | — | 1,230 |
| Total TDRs modified within the previous 12 months that defaulted in the period | $ — | $ 24,304 | $ — | $ 27,336 |

Charge-offs and defaults on previously restructured loans are evaluated to determine the impact to the allowance for loan losses, if any. The evaluation of these defaults may impact the assumptions used in calculating the reserve on other TDRs and impaired loans as well as management's overall outlook of macroeconomic factors that affect the reserve on the loan portfolio as a whole. After evaluating the charge-offs and defaults experienced on our TDRs we determined that no change to our reserving methodology for TDRs was necessary to determine the allowance for loan losses as of June 30, 2019.

## 9. Leases

We have operating leases for our corporate offices, data centers and certain equipment utilized at those properties. We are obligated under a number of noncancelable operating leases for premises and equipment that expire at various dates, through 2030, and in most instances, include options to renew or extend at market rates and terms. Such leases may provide for periodic adjustments of rentals during the term of the lease based on changes in various economic indicators.

At the inception of the lease, the lease is evaluated to determine whether the lease will be accounted for as an operating or a finance lease. There were no significant assumptions or judgments required upon applying the new lease standard. Operating lease ROU assets and operating lease liabilities are included in our consolidated balance sheets. We have no leases that meet the definition of a finance lease under ASC 842 and our lessor accounting treatment for subleases is not material. The comparative information has not been restated and continues to be reported under the accounting standards in effect for those periods.

Total recorded balances for the lease assets and liabilities are as follows:

| (Dollars in thousands) | June 30, 2019 |
|---|---|
| Assets: | |
| Right-of-use assets - operating leases (1) | $ 156,347 |
| Liabilities: | |
| Lease liabilities - operating leases (1) | 195,326 |

(1) Included in these amounts are $23.3 million and $32.3 million of ROU assets and lease liabilities, respectively, attributable to the inclusion of SVB Leerink in our financial results at June 30, 2019.

The components of our lease cost and supplemental cash flow information related to leases for the three and six months ended June 30, 2019 were as follows:

| (Dollars in thousands) | Three months ended June 30, 2019 | Six months ended June 30, 2019 |
|---|---|---|
| Operating lease cost | $ 9,462 | $ 18,980 |
| Short-term lease cost | 582 | 845 |
| Variable lease cost | 933 | 1,779 |
| Less: sublease income | (1,115) | (2,223) |
| Total lease cost, net | $ 9,862 | $ 19,381 |
| **Supplemental cash flows information:** | | |
| Cash paid for operating leases | $ 10,884 | $ 21,238 |

The table below presents additional information related to the Company's leases as of June 30, 2019:

| | June 30, 2019 |
|---|---|
| Weighted-average remaining term (in years) - operating leases | 6.22 |
| Weighted-average discount rate - operating leases (1) | 3.19% |

(1) The incremental borrowing rate used to calculate the lease liability was determined based on the facts and circumstances of the economic environment and the Company's credit standing as of the effective date of ASC 842. Additionally, the total lease term and total lease payments were also considered in determining the rate. Based on these considerations the Company identified credit terms available under its existing credit lines which represent a collateralized borrowing rate that has varying credit terms that could be matched to total lease terms and total lease payments in ultimately determining the implied borrowing rate in each lease contract.

The following table presents our undiscounted future cash payments for our operating lease liabilities as of June 30, 2019:

| Years ended December 31, (Dollars in thousands) | Operating Leases |
|---|---|
| 2019 (excluding the six months ended June 30, 2019) | $ 21,753 |
| 2020 | 40,222 |
| 2021 | 37,410 |
| 2022 | 31,853 |
| 2023 | 30,384 |
| 2024 and thereafter | 38,204 |
| Total future lease payments (1) | $ 199,826 |
| Less: imputed interest | (4,500) |
| Total lease liabilities | $ 195,326 |

(1) As of June 30, 2019, we have additional operating leases that have not yet commenced. We estimate that we will record additional operating lease liabilities of $30.1 million upon commencement. These operating leases will commence in 2019 with lease terms of one to ten years.

The following table presents minimum future payments under noncancelable operating leases under ASC 840, as of December 31, 2018:

| (Dollars in thousands) | Amount |
|---|---|
| 2019 | $ 38,609 |
| 2020 | 37,575 |
| 2021 | 35,854 |
| 2022 | 31,659 |
| 2023 | 30,904 |
| 2024 and thereafter | 49,071 |
| Total minimum future payments | $ 223,672 |

**10. Goodwill and Other Intangible Assets**

***Goodwill***

On January 4, 2019, we completed the acquisition of Leerink Holdings LLC, the Boston-based parent company of healthcare and life science investment bank Leerink Partners LLC, now SVB Leerink. We recognized identifiable intangible assets of $60.9 million and goodwill of $137.8 million as a result of the acquisition. For additional information, refer to Note 2—"Business Combination" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report. The goodwill of $137.8 million includes revenue generating synergies expected from collaboration between SVB Leerink and the Company.

The changes in goodwill were as follows for the six months ended June 30, 2019:

| (Dollars in thousands) | Goodwill |
|---|---|
| Beginning balance at December 31, 2018 | $ — |
| Acquisitions (1) | 137,823 |
| Ending balance at June 30, 2019 | $ 137,823 |

(1) All reported goodwill amounts have been allocated to the SVB Leerink reporting segment and are expected to be deductible for tax purposes. Refer to Note 15—"Segment Reporting" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report for additional information.

***Other Intangible Assets***

The components of net other intangible assets related to the acquisition of SVB Leerink were as follows:

| | June 30, 2019 | | |
|---|---|---|---|
| (Dollars in thousands) | Gross Amount | Accumulated Amortization | Net Carrying Amount |
| Other intangible assets: | | | |
| Customer relationships | $ 42,000 | $ 1,910 | $ 40,090 |
| Other | 18,900 | 3,832 | 15,068 |
| Total other intangible assets | $ 60,900 | $ 5,742 | $ 55,158 |

For the six months ended June 30, 2019, we recorded amortization expense of $5.7 million. Assuming no future impairments of other intangible assets or additional acquisitions or dispositions, the following table presents the Company's future expected amortization expense for other intangible assets that will continue to be amortized:

| Years ended December 31, (Dollars in thousands) | Other Intangible Assets |
|---|---|
| 2019 (excluding the six months ended June 30, 2019) | $ 5,742 |
| 2020 | 5,382 |
| 2021 | 4,732 |
| 2022 | 4,732 |
| 2023 | 4,732 |
| 2024 and thereafter | 29,838 |
| Total future amortization expense | $ 55,158 |

## 11. Short-Term Borrowings and Long-Term Debt

The following table represents outstanding short-term borrowings and long-term debt at June 30, 2019 and December 31, 2018:

| | | | Carrying Value | |
|---|---|---|---|---|
| (Dollars in thousands) | Maturity | Principal value at June 30, 2019 | June 30, 2019 | December 31, 2018 |
| Short-term borrowings: | | | | |
| Short-term FHLB advances | | | $ — | $ 300,000 |
| Securities sold under agreement to repurchase | (1) | | — | 319,414 |
| Other short-term borrowings | (2) | $ 24,252 | 24,252 | 11,998 |
| Total short-term borrowings | | | $ 24,252 | $ 631,412 |
| Long-term debt: | | | | |
| 3.50% Senior Notes | January 29, 2025 | $ 350,000 | $ 347,812 | $ 347,639 |
| 5.375% Senior Notes | September 15, 2020 | 350,000 | 349,158 | 348,826 |
| Total long-term debt | | | $ 696,970 | $ 696,465 |

(1) Securities sold under repurchase agreements are effectively short-term borrowings collateralized by U.S. Treasury securities.
(2) Represents cash collateral received from certain counterparties in relation to market value exposures of derivative contracts in our favor.

Interest expense related to short-term borrowings and long-term debt was $9.2 million and $19.4 million for the three and six months ended June 30, 2019, respectively, and $8.6 million and $17.0 million for the three and six months ended June 30, 2018. The weighted average interest rate associated with our overnight short-term borrowings was 2.62 percent as of December 31, 2018. There were no overnight short-term borrowings as of June 30, 2019.

***Short-term Borrowings***

We have certain facilities in place to enable us to access short-term borrowings on a secured and unsecured basis. Our secured facilities include collateral pledged to the FHLB of San Francisco and the discount window at the FRB (using both fixed income securities and loans as collateral). Our unsecured facility consists of our uncommitted federal funds lines. As of June 30, 2019, collateral pledged to the FHLB of San Francisco was comprised primarily of fixed income investment securities and loans and had a carrying value of $4.6 billion, of which $4.1 billion was available to support additional borrowings. As of June 30, 2019, collateral pledged to the discount window at the FRB was comprised of fixed income investment securities and had a carrying value of $0.6 billion, all of which was unused and available to support additional borrowings. Our total unused and available borrowing capacity for our uncommitted federal funds lines totaled $1.9 billion at June 30, 2019. Our total unused and available borrowing capacity under our master repurchase agreements with various financial institutions totaled $3.3 billion at June 30, 2019.

**12. Derivative Financial Instruments**

We primarily use derivative financial instruments to manage interest rate risk, currency exchange rate risk and to assist customers with their risk management objectives, which may include currency exchange rate risks and interest rate risks. Also, in connection with negotiating credit facilities and certain other services, we often obtain equity warrant assets giving us the right to acquire stock in private, venture-backed companies in the technology and life science/healthcare industries.

***Interest Rate Risk***

Interest rate risk is our primary market risk and can result from timing and volume differences in the repricing of our interest rate sensitive assets and liabilities and changes in market interest rates. To manage interest rate risk on our variable-interest rate loan portfolio, we enter into interest rate swap contracts to hedge against future changes in interest rates by using hedging instruments to lock in future cash inflows that would otherwise be impacted by movements in the market interest rates. We designate these interest rate swap contracts as cash flow hedges that qualify for hedge accounting under ASC 815, *Derivatives and Hedging* ("ASC 815"), and record them in other assets and other liabilities. For qualifying cash flow hedges, changes in the fair value of the derivative are recorded in accumulated other comprehensive income and recognized in earnings as the hedged item affects earnings. Derivative amounts affecting earnings are recognized consistent with the classification of the hedged item in the line item "Loans" as part of interest income, a component of consolidated net income.

We assess hedge effectiveness under ASC 815 on a quarterly basis to ensure all hedges remain highly effective to ensure hedge accounting under ASC 815 can be applied. If the hedging relationship no longer exists or no longer qualifies as a hedge per ASC 815, any amounts remaining as gain or loss in accumulated other comprehensive income are reclassified into earnings in the line item "Loans" as part of interest income, a component of consolidated net income. As of June 30, 2019, no derivatives classified as hedges were terminated or were disqualified for hedge accounting. The maximum length of time over which the forecasted transactions are hedged is approximately six years.

***Currency Exchange Risk***

We enter into foreign exchange forward contracts to economically reduce our foreign exchange exposure risk associated with the net difference between foreign currency denominated assets and liabilities. We do not designate any foreign exchange forward contracts as derivative instruments that qualify for hedge accounting. Gains or losses from changes in currency rates on foreign currency denominated instruments are recorded in the line item “Other” as part of noninterest income, a component of consolidated net income. We may experience ineffectiveness in the economic hedging relationship, because the instruments are revalued based upon changes in the currency’s spot rate on the principal value, while the forwards are revalued on a discounted cash flow basis. We record forward agreements in gain positions in other assets and loss positions in other liabilities, while net changes in fair value are recorded in the line item “Other” as part of noninterest income, a component of consolidated net income.

***Other Derivative Instruments***

Also included in our derivative instruments are equity warrant assets and client forward and option contracts, and client interest rate contracts. For further description of these other derivative instruments, refer to Note 2-“Summary of Significant Accounting Policies" under Part II, Item 8 of our 2018 Form 10-K.

***Counterparty Credit Risk***

We are exposed to credit risk if counterparties to our derivative contracts do not perform as expected. We mitigate counterparty credit risk through credit approvals, limits, monitoring procedures and obtaining collateral, as appropriate. With respect to measuring counterparty credit risk for derivative instruments, we measure the fair value of a group of financial assets and financial liabilities on a net risk basis by counterparty portfolio.

The total notional or contractual amounts and fair value of our derivative financial instruments at June 30, 2019 and December 31, 2018 were as follows:

| | June 30, 2019 | | | December 31, 2018 | | |
|---|---|---|---|---|---|---|
| | Notional or Contractual Amount | Fair Value | | Notional or Contractual Amount | Fair Value | |
| (Dollars in thousands) | | Derivative Assets (1) | Derivative Liabilities (1) | | Derivative Assets (1) | Derivative Liabilities (1) |
| **Derivatives designated as hedging instruments:** | | | | | | |
| *Interest rate risks:* | | | | | | |
| Interest rate swaps | $ 1,015,000 | $ 19,558 | $ — | $ — | $ — | $ — |
| Interest rate swaps | 250,000 | — | 391 | — | — | — |
| **Derivatives not designated as hedging instruments:** | | | | | | |
| *Currency exchange risks:* | | | | | | |
| Foreign exchange forwards | 37,120 | 1,081 | — | 263,733 | 4,767 | — |
| Foreign exchange forwards | 275,704 | — | 4,210 | 178,310 | — | 1,094 |
| *Other derivative instruments:* | | | | | | |
| Equity warrant assets | 221,013 | 158,048 | — | 223,532 | 149,238 | — |
| Client foreign exchange forwards | 3,447,213 | 92,623 | — | 2,759,878 | 93,876 | — |
| Client foreign exchange forwards | 3,137,742 | — | 81,489 | 2,568,085 | — | 85,706 |
| Client foreign currency options | 87,439 | 758 | — | 93,556 | 1,759 | — |
| Client foreign currency options | 87,538 | — | 758 | 93,579 | — | 1,759 |
| Client interest rate derivatives (2) | 1,159,613 | 19,440 | — | 1,020,416 | 8,499 | — |
| Client interest rate derivatives (2) | 1,237,704 | — | 25,803 | 1,337,328 | — | 9,491 |
| **Total derivatives not designated as hedging instruments** | | 271,950 | 112,260 | | 258,139 | 98,050 |
| **Total derivatives** | | $ 291,508 | $ 112,651 | | $ 258,139 | $ 98,050 |

(1) Derivative assets and liabilities are included in "Accrued interest receivable and other assets" and "Other liabilities", respectively, on our consolidated balance sheets.

(2) The amount reported for June 30, 2019 reflects rule changes implemented by two central clearing houses that require entities to treat derivative assets, liabilities and the related variation margin as settlement of the related derivative fair values for legal and accounting purposes, as opposed to presenting gross derivative assets and liabilities. As a result, client interest rate derivatives reflect reductions of approximately $4.2 million and $0.4 million of derivative assets at June 30, 2019 and December 31, 2018, respectively.

A summary of our derivative activity and the related impact on our consolidated statements of income for the three and six months ended June 30, 2019 and 2018 is as follows:

| | | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|---|
| **(Dollars in thousands)** | **Statement of income location** | **2019** | **2018** | **2019** | **2018** |
| **Derivatives designated as hedging instruments:** | | | | | |
| *Interest rate risks:* | | | | | |
| Amounts reclassified from accumulated other comprehensive income into income | Interest income—loans | $ (508) | $ — | $ (511) | $ — |
| **Derivatives not designated as hedging instruments:** | | | | | |
| *Currency exchange risks:* | | | | | |
| Gains (losses) on revaluations of internal foreign currency instruments, net | Other noninterest income | $ 2,491 | $ (319) | $ 3,541 | $ 2,607 |
| (Losses) gains on internal foreign exchange forward contracts, net | Other noninterest income | (3,274) | 459 | (3,743) | (3,053) |
| Net (losses) gains associated with internal currency risk | | $ (783) | $ 140 | $ (202) | $ (446) |
| *Other derivative instruments:* | | | | | |
| Gains (losses) on revaluations of client foreign currency instruments, net | Other noninterest income | $ 959 | $ (2,748) | $ (12,612) | $ 4,905 |
| Gains (losses) on client foreign exchange forward contracts, net | Other noninterest income | 411 | 2,844 | 13,065 | (4,270) |
| Net gains associated with client currency risk | | $ 1,370 | $ 96 | $ 453 | $ 635 |
| Net gains on equity warrant assets | Gains on equity warrant assets, net | $ 48,347 | $ 19,061 | $ 69,652 | $ 38,252 |
| Net (losses) gains on other derivatives | Other noninterest income | $ (1,131) | $ (10) | $ (1,496) | $ 421 |

***Balance Sheet Offsetting***

Certain of our derivative and other financial instruments are subject to enforceable master netting arrangements with our counterparties. These agreements provide for the net settlement of multiple contracts with a single counterparty through a single payment, in a single currency, in the event of default on or termination of any one contract.

The following table summarizes our assets subject to enforceable master netting arrangements as of June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | Gross Amounts of Recognized Assets | Gross Amounts offset in the Statement of Financial Position | Net Amounts of Assets Presented in the Statement of Financial Position | Gross Amounts Not Offset in the Statement of Financial Position but Subject to Master Netting Arrangements | | Net Amount |
|---|---|---|---|---|---|---|
| | | | | Financial Instruments | Cash Collateral Received (1) | |
| **June 30, 2019** | | | | | | |
| Derivative assets: | | | | | | |
| Interest rate swaps | $ 19,558 | $ — | $ 19,558 | $ (19,558) | $ — | $ — |
| Foreign exchange forwards | 93,704 | — | 93,704 | (30,435) | (24,171) | 39,098 |
| Foreign currency options | 758 | — | 758 | (246) | (59) | 453 |
| Client interest rate derivatives | 19,440 | — | 19,440 | (19,418) | (22) | — |
| Total derivative assets | 133,460 | — | 133,460 | (69,657) | (24,252) | 39,551 |
| Reverse repurchase, securities borrowing, and similar arrangements | 291,678 | — | 291,678 | (291,678) | — | — |
| Total | $ 425,138 | $ — | $ 425,138 | $ (361,335) | $ (24,252) | $ 39,551 |
| **December 31, 2018** | | | | | | |
| Derivative assets: | | | | | | |
| Foreign exchange forwards | $ 98,643 | $ — | $ 98,643 | $ (38,213) | $ (11,825) | $ 48,605 |
| Foreign currency options | 1,759 | — | 1,759 | (613) | (90) | 1,056 |
| Client interest rate derivatives | 8,499 | — | 8,499 | (8,416) | (83) | — |
| Total derivative assets | 108,901 | — | 108,901 | (47,242) | (11,998) | 49,661 |
| Reverse repurchase, securities borrowing, and similar arrangements | 123,611 | — | 123,611 | (123,611) | — | — |
| Total | $ 232,512 | $ — | $ 232,512 | $ (170,853) | $ (11,998) | $ 49,661 |

(1) Cash collateral received from our counterparties in relation to market value exposures of derivative contracts in our favor is recorded as a component of "Short-term borrowings" on our consolidated balance sheets.

The following table summarizes our liabilities subject to enforceable master netting arrangements as of June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | Gross Amounts of Recognized Liabilities | Gross Amounts offset in the Statement of Financial Position | Net Amounts of Liabilities Presented in the Statement of Financial Position | Gross Amounts Not Offset in the Statement of Financial Position but Subject to Master Netting Arrangements | | Net Amount |
|---|---|---|---|---|---|---|
| | | | | Financial Instruments | Cash Collateral Pledged (1) | |
| **June 30, 2019** | | | | | | |
| Derivative liabilities: | | | | | | |
| Interest rate swaps | $ 391 | $ — | $ 391 | $ (391) | $ — | $ — |
| Foreign exchange forwards | 85,699 | — | 85,699 | (17,096) | (29,296) | 39,307 |
| Foreign currency options | 758 | — | 758 | (475) | — | 283 |
| Client interest rate derivatives | 25,803 | — | 25,803 | — | (25,579) | 224 |
| Total derivative liabilities | 112,651 | — | 112,651 | (17,962) | (54,875) | 39,814 |
| Repurchase, securities lending, and similar arrangements | — | — | — | — | — | — |
| Total | $ 112,651 | $ — | $ 112,651 | $ (17,962) | $ (54,875) | $ 39,814 |
| **December 31, 2018** | | | | | | |
| Derivative liabilities: | | | | | | |
| Foreign exchange forwards | $ 86,800 | $ — | $ 86,800 | $ (24,778) | $ (20,732) | $ 41,290 |
| Foreign currency options | 1,759 | — | 1,759 | (1,054) | — | 705 |
| Client interest rate derivatives | 9,491 | — | 9,491 | — | (9,207) | 284 |
| Total derivative liabilities | 98,050 | — | 98,050 | (25,832) | (29,939) | 42,279 |
| Repurchase, securities lending, and similar arrangements | 319,414 | — | 319,414 | — | — | 319,414 |
| Total | $ 417,464 | $ — | $ 417,464 | $ (25,832) | $ (29,939) | $ 361,693 |

(1) Cash collateral pledged to our counterparties in relation to market value exposures of derivative contracts in a liability position and repurchase agreements are recorded as a component of "Cash and cash equivalents" on our consolidated balance sheets.

## 13. Noninterest Income

On January 1, 2018, we adopted accounting standard ASU 2014-09, Revenue from Contracts with Customers and all the related amendments ("ASC 606" or "ASU 2014-09"). Included below is a summary of noninterest income, as well as the impact of such adoption, for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Noninterest income: | | | | |
| Gains on investment securities, net | $ 47,698 | $ 36,114 | $ 76,726 | $ 45,172 |
| Gains on equity warrant assets, net | 48,347 | 19,061 | 69,652 | 38,252 |
| Client investment fees | 45,744 | 29,452 | 90,226 | 52,327 |
| Foreign exchange fees | 38,506 | 34,077 | 76,554 | 67,904 |
| Credit card fees | 28,790 | 22,926 | 56,273 | 44,618 |
| Deposit service charges | 22,075 | 18,794 | 43,014 | 36,493 |
| Lending related fees | 11,213 | 9,528 | 25,150 | 20,263 |
| Letters of credit and standby letters of credit fees | 11,009 | 8,347 | 20,363 | 16,529 |
| Investment banking revenue | 48,694 | — | 98,489 | — |
| Commissions | 14,429 | — | 28,537 | — |
| Other | 17,245 | 14,390 | 29,142 | 26,649 |
| Total noninterest income | $ 333,750 | $ 192,689 | $ 614,126 | $ 348,207 |

***Gains on investment securities, net***

Net gains on investment securities include both gains and losses from our non-marketable and other equity securities, which include public equity securities held as a result of exercised equity warrant assets, gains and losses from sales of our AFS debt securities portfolio, when applicable, and carried interest.

Our non-marketable and other equity securities portfolio primarily represents investments in venture capital and private equity funds, our China Joint Venture, debt funds, private and public portfolio companies, which include public equity securities held as a result of exercised equity warrant assets and qualified affordable housing projects. We experience variability in the performance of our non-marketable and other equity securities from period to period, which results in net gains or losses on investment securities (both realized and unrealized). This variability is due to a number of factors, including unrealized changes in the values of our investments, changes in the amount of realized gains from distributions, changes in liquidity events and general economic and market conditions. Unrealized gains from non-marketable and other equity securities for any single period are typically driven by valuation changes.

The extent to which any unrealized gains or losses will become realized is subject to a variety of factors, including, among other things, the expiration of certain sales restrictions to which these equity securities may be subject to (i.e., lock-up agreements), changes in prevailing market prices, market conditions, the actual sales or distributions of securities, and the timing of such actual sales or distributions, which, to the extent such securities are managed by our managed funds, are subject to our funds' separate discretionary sales/distributions and governance processes.

Carried interest is comprised of preferential allocations of profits recognizable when the return on assets of our individual managed fund of funds and direct venture funds exceeds certain performance targets and is payable to us, as the general partners of the managed funds. The carried interest we earn is often shared with employees, who are also members of the general partner entities. We record carried interest on a quarterly basis by measuring fund performance to date versus the performance target. For our unconsolidated managed funds, carried interest is recorded as gains on investment securities, net. For our consolidated managed funds, it is recorded as a component of net income attributable to noncontrolling interests. Carried interest allocated to others is recorded as a component of net income attributable to noncontrolling interests. Any carried interest paid to us (or our employees) may be subject to reversal to the extent fund performance declines to a level where inception to date carried interest is lower than actual payments made by the funds. The limited partnership agreements for our funds provide that carried interest is generally not paid to the general partners until the funds have provided a full return of contributed capital to the limited partners. Accrued, but unpaid carried interest may be subject to reversal to the extent that the fund performance declines

to a level where inception-to-date carried interest is less than prior amounts recognized. Carried interest income is accounted for under an ownership model based on *ASC 323 — Equity Method of Accounting* and *ASC 810 — Consolidation*.

Our available-for-sale securities portfolio is a fixed income investment portfolio that is managed with the objective of earning an appropriate portfolio yield over the long-term while maintaining sufficient liquidity and credit diversification as well as addressing our asset/liability management objectives. Though infrequent, sales of debt securities in our AFS securities portfolio may result in net gains or losses and are conducted pursuant to the guidelines of our investment policy related to the management of our liquidity position and interest rate risk.

Gains on investment securities are recognized outside of the scope of ASC 606 as it explicitly excludes noninterest income earned from our investment-related activities. A summary of gains and losses on investment securities for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Gains on non-marketable and other equity securities, net | $ 47,973 | $ 36,114 | $ 80,631 | $ 45,172 |
| Losses on sales of available-for-sale securities, net | (275) | — | (3,905) | — |
| Total gains on investment securities, net | $ 47,698 | $ 36,114 | $ 76,726 | $ 45,172 |

***Gains on equity warrant assets, net***

In connection with negotiating credit facilities and certain other services, we often obtain rights to acquire stock in the form of equity warrant assets in primarily private, venture-backed companies in the technology and life science/healthcare industries. Any changes in fair value from the grant date fair value of equity warrant assets will be recognized as increases or decreases to other assets on our balance sheet and as net gains or losses on equity warrant assets, in noninterest income, a component of consolidated net income. Gains on equity warrant assets are recognized outside of the scope of ASC 606 as it explicitly excludes noninterest income earned from our derivative-related activities. A summary of net gains on equity warrant assets for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Equity warrant assets: | | | | |
| Gains on exercises, net | $ 40,226 | $ 8,875 | $ 49,180 | $ 20,509 |
| Terminations | (1,045) | (826) | (1,884) | (1,726) |
| Changes in fair value, net | 9,166 | 11,012 | 22,356 | 19,469 |
| Total net gains on equity warrant assets | $ 48,347 | $ 19,061 | $ 69,652 | $ 38,252 |

***Client investment fees***

Client investment fees include fees earned from discretionary investment management services for substantially all clients, managing clients' portfolios based on their investment policies, strategies and objectives and investment advisory fees. Revenue is recognized on a monthly basis upon completion of our performance obligation and consideration is typically received in the subsequent month. Included in our sweep money market fees are Rule 12(b)-1 fees, revenue sharing and customer transactional-based fees. Rule 12(b)-1 fees and revenue sharing are recognized as earned based on client funds that are invested in the period, typically monthly. Transactional based fees are earned and recognized on fixed income securities when the transaction is executed on the clients' behalf. Amounts paid to third-party service providers are predominantly expensed, such that client investment fees are recorded gross of payments made to third parties. A summary of client investment fees by instrument type for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Client investment fees by type: | | | | |
| Sweep money market fees | $ 26,952 | $ 17,178 | $ 53,496 | $ 29,500 |
| Asset management fees (1) | 6,956 | 5,730 | 13,628 | 11,088 |
| Repurchase agreement fees | 11,836 | 6,544 | 23,102 | 11,739 |
| Total client investment fees (2) | $ 45,744 | $ 29,452 | $ 90,226 | $ 52,327 |

(1) Represents fees earned from investments in third-party money market mutual funds and fixed-income securities managed by SVB Asset Management.
(2) Represents fees earned on client investment funds which are maintained at third-party financial institutions and are not recorded on our balance sheet.

***Foreign exchange fees***

Foreign exchange fees represent the income differential between purchases and sales of foreign currency on behalf of our clients, primarily from spot contracts. Foreign exchange spot contract fees are recognized upon the completion of the single performance obligation, the execution of a spot trade in exchange for a fee. In line with customary business practice, the legal right transfers to the client upon execution of a foreign exchange contract on the trade date, and as such, we currently recognize our fees based on the trade date and are typically settled within two business days.

Forward contract and option premium fees are recognized outside of the scope of ASC 606 as it explicitly excludes noninterest income earned from our derivative-related activities. A summary of foreign exchange fee income by instrument type for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Foreign exchange fees by instrument type: | | | | |
| Spot contract commissions | $ 34,696 | $ 31,548 | $ 69,725 | $ 62,750 |
| Forward contract commissions | 3,778 | 2,455 | 6,773 | 4,940 |
| Option premium fees | 32 | 74 | 56 | 214 |
| Total foreign exchange fees | $ 38,506 | $ 34,077 | $ 76,554 | $ 67,904 |

***Credit card fees***

Credit card fees include interchange income from credit and debit cards and fees earned from processing transactions for merchants. Interchange income is earned after satisfying our performance obligation of providing nightly settlement services to a payment network. Costs related to rewards programs are recorded when the rewards are earned by the customer and presented as a reduction to interchange fee income. Rewards programs continue to be accounted for under ASC 310 - *Receivables*. Our performance obligations for merchant service fees are to transmit data and funds between the merchant and the payment network. Credit card interchange and merchant service fees are earned daily upon completion of transaction settlement services.

Annual card service fees are recognized on a straight-line basis over a 12-month period and continue to be accounted for under ASC 310 - *Receivables*.

A summary of credit card fees by instrument type for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Credit card fees by instrument type: | | | | |
| Card interchange fees, net | $ 22,855 | $ 18,137 | $ 44,248 | $ 35,697 |
| Merchant service fees | 4,286 | 3,425 | 8,821 | 6,331 |
| Card service fees | 1,649 | 1,364 | 3,204 | 2,590 |
| Total credit card fees | $ 28,790 | $ 22,926 | $ 56,273 | $ 44,618 |

***Deposit service charges***

Deposit service charges include fees earned from performing cash management activities and other deposit account services. Deposit services include, but are not limited to, the following: receivables services, which include merchant services, remote capture, lockbox, electronic deposit capture, and fraud control services. Payment and cash management products and services include wire transfer and automated clearing house payment services to enable clients to transfer funds more quickly, as well as business bill pay, business credit and debit cards, account analysis, and disbursement services. Deposit service charges are recognized over the period in which the related performance obligation is provided, generally on a monthly basis, and are presented in the "*Disaggregation of revenue from contracts with customers*" table below.

***Lending related fees***

Unused commitment fees, minimum finance fees and unused line fees are recognized as earned on a monthly basis. Fees that qualify for syndication treatment are recognized at the completion of the syndicated loan deal for which the fees were received. Lending related fees are recognized outside of the scope of ASC 606 as it explicitly excludes noninterest income earned from our lending-related activities. A summary of lending related fees by instrument type for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Lending related fees by instrument type: | | | | |
| Unused commitment fees | $ 7,051 | $ 7,827 | $ 16,721 | $ 16,584 |
| Other | 4,162 | 1,701 | 8,429 | 3,679 |
| Total lending related fees | $ 11,213 | $ 9,528 | $ 25,150 | $ 20,263 |

***Letters of credit and standby letters of credit fees***

Commercial and standby letters of credit represent conditional commitments issued by us on behalf of a client to guarantee the performance of the client to a third party when certain specified future events have occurred. Fees generated from letters of credit and standby letters of credit are deferred as a component of other liabilities and recognized in noninterest income over the commitment period using the straight-line method, based on the likelihood that the commitment being drawn down will be remote. Letters of credit and standby letters of credit fees are recognized outside of the scope of ASC 606 as it explicitly excludes noninterest income earned from our lending related activities.

***Investment banking revenue***

The Company earns investment banking revenue from clients for providing services related to securities underwriting, private placements and advisory services on strategic matters such as mergers and acquisitions. Underwriting fees are attributable to public and private offerings of equity and debt securities and are recognized at the point in time when the offering has been deemed to be completed by the lead manager of the underwriting group. Once the offering is completed, the performance obligation has been satisfied and the Company recognizes the applicable management fee as well the underwriting fee, net of consideration payable to customers. The Company recognizes private placement fees at the point in time when the private placement is completed, which is generally when the client accepts capital from the fund raise. Advisory fees from mergers and acquisitions engagements are generally recognized at the point in time when the related transaction is completed. Expenses are deferred only to the extent they are explicitly reimbursable by the client and the related revenue is recognized at a point in time. All other deal-related expenses are expensed as incurred. The Company has determined that it acts as principal in the majority of these transactions and therefore presents expenses gross within other operating expenses.

A summary of investment banking revenue by instrument type for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Investment banking revenue: | | | | |
| Underwriting fees | $ 42,584 | $ — | $ 78,356 | $ — |
| Advisory fees | 5,315 | — | 17,588 | — |
| Private placements and other | 795 | — | 2,545 | — |
| Total investment banking revenue | $ 48,694 | $ — | $ 98,489 | $ — |

***Commissions***

Commissions include commissions received from customers for the execution of agency-based brokerage transactions in listed and over-the-counter equities. The execution of each trade order represents a distinct performance obligation and the transaction price is fixed at the point in time or trade order execution. Trade execution is satisfied at the point in time that the customer has control of the asset and as such, fees are recorded on a trade date basis. Commission are presented in the *"Disaggregation of revenue from contracts with customers"* table below.

***Other***

Other noninterest income primarily includes income from fund management fees and service revenue. Fund management fees are comprised of fees charged directly to our managed funds of funds and direct venture funds. Fund management fees are based upon the contractual terms of the limited partnership agreements and are generally recognized as earned over the specified contract period, which is generally equal to the life of the individual fund. Fund management fees are calculated as a percentage of committed capital and collected in advance and are received quarterly. Fund management fees for certain of our limited partnership agreements are calculated as a percentage of distributions made by the funds and revenue is recorded only at the time of a distribution event. As distribution events are not predetermined for these certain funds, management fees are considered variable and constrained under ASC 606.

Other service revenue primarily consists of dividend income on FHLB/FRB stock, correspondent bank rebate income, incentive fees related to carried interest and other fee income. We recognize revenue when our performance obligations are met and record revenues on a daily/monthly basis, quarterly, semi-annually or annual basis. For event driven revenue sources, we recognize revenue when: (i) persuasive evidence of an arrangement exists, (ii) we have performed the service, provided we have no other remaining obligations to the customer, (iii) the fee is fixed or determinable and (iv) collectability is probable.

A summary of other noninterest income by instrument type for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| **(Dollars in thousands)** | **2019** | **2018** | **2019** | **2018** |
| Other noninterest income by instrument type: | | | | |
| Fund management fees | $ 7,758 | $ 5,929 | $ 15,799 | $ 11,665 |
| Net gains on revaluation of foreign currency instruments, net of foreign exchange forward contracts (1) | 587 | 236 | 251 | 189 |
| Other service revenue | 8,900 | 8,225 | 13,092 | 14,795 |
| Total other noninterest income | $ 17,245 | $ 14,390 | $ 29,142 | $ 26,649 |

(1) Represents the net revaluation of client and internal foreign currency denominated financial instruments. We enter into foreign exchange forward contracts to economically reduce our foreign exchange exposure related to client and internal foreign currency denominated financial instruments.

***Disaggregation of revenue from contracts with customers***

The following tables present our revenues from contracts with customers disaggregated by revenue source and segment for the three and six months ended June 30, 2019 and 2018:

| Three months ended June 30, 2019 (Dollars in thousands) | Global Commercial Bank (2) | SVB Private Bank | SVB Capital (2) | SVB Leerink (2) | Other Items | Total |
|---|---|---|---|---|---|---|
| Revenue from contracts with customers: | | | | | | |
| Client investment fees | $ 18,325 | $ 466 | $ — | $ — | $ 26,953 | $ 45,744 |
| Spot contract commissions | 34,428 | 165 | — | — | 103 | 34,696 |
| Card interchange fees, gross | 41,887 | — | — | — | 190 | 42,077 |
| Merchant service fees | 4,286 | — | — | — | — | 4,286 |
| Deposit service charges | 21,750 | 33 | — | — | 292 | 22,075 |
| Investment banking revenue | — | — | — | 48,694 | — | 48,694 |
| Commissions | — | — | — | 14,429 | — | 14,429 |
| Fund management fees | — | — | 6,328 | 1,430 | — | 7,758 |
| Correspondent bank rebates | 1,612 | — | — | — | — | 1,612 |
| Total revenue from contracts with customers | $ 122,288 | $ 664 | $ 6,328 | $ 64,553 | $ 27,538 | $ 221,371 |
| Revenues outside the scope of ASC 606 (1) | 8,364 | 22 | 33,731 | 2,447 | 67,815 | 112,379 |
| Total noninterest income | $ 130,652 | $ 686 | $ 40,059 | $ 67,000 | $ 95,353 | $ 333,750 |

(1) Amounts are accounted for under separate guidance than ASC 606.
(2) Global Commercial Bank's, SVB Capital's and SVB Leerink's components of noninterest income are shown net of noncontrolling interests. Noncontrolling interest is included within "Other Items."

| Three months ended June 30,2018 (Dollars in thousands) | Global Commercial Bank (2) | SVB Private Bank | SVB Capital (2) | Other Items | Total |
|---|---|---|---|---|---|
| Revenue from contracts with customers: | | | | | |
| Client investment fees | $ 11,895 | $ 379 | $ — | $ 17,178 | $ 29,452 |
| Spot contract commissions | 31,350 | 144 | — | 54 | 31,548 |
| Card interchange fees, gross | 31,734 | — | — | 104 | 31,838 |
| Merchant service fees | 3,425 | — | — | — | 3,425 |
| Deposit service charges | 18,386 | 31 | — | 377 | 18,794 |
| Fund management fees | — | — | 5,929 | — | 5,929 |
| Correspondent bank rebates | 1,473 | — | — | — | 1,473 |
| Total revenue from contracts with customers | $ 98,263 | $ 554 | $ 5,929 | $ 17,713 | $ 122,459 |
| Revenues outside the scope of ASC 606 (1) | 13,411 | 11 | 23,460 | 33,348 | 70,230 |
| Total noninterest income | $ 111,674 | $ 565 | $ 29,389 | $ 51,061 | $ 192,689 |

(1) Amounts are accounted for under separate guidance than ASC 606.
(2) Global Commercial Bank's and SVB Capital's components of noninterest income are shown net of noncontrolling interests. Noncontrolling interest is included within "Other Items."

| Six months ended June 30, 2019 (Dollars in thousands) | Global Commercial Bank (2) | SVB Private Bank | SVB Capital (2) | SVB Leerink (2) | Other Items | Total |
|---|---|---|---|---|---|---|
| Revenue from contracts with customers: | | | | | | |
| Client investment fees | $ 35,884 | $ 846 | $ — | $ — | $ 53,496 | $ 90,226 |
| Spot contract commissions | 69,233 | 288 | — | — | 204 | 69,725 |
| Card interchange fees, gross | 80,601 | — | — | — | 337 | 80,938 |
| Merchant service fees | 8,821 | — | — | — | — | 8,821 |
| Deposit service charges | 42,543 | 68 | — | — | 403 | 43,014 |
| Investment banking revenue | — | — | — | 98,489 | — | 98,489 |
| Commissions | — | — | — | 28,537 | — | 28,537 |
| Fund management fees | — | — | 12,987 | 2,812 | — | 15,799 |
| Correspondent bank rebates | 3,079 | — | — | — | — | 3,079 |
| Total revenue from contracts with customers | $ 240,161 | $ 1,202 | $ 12,987 | $ 129,838 | $ 54,440 | $ 438,628 |
| Revenues outside the scope of ASC 606 (1) | 16,808 | (6) | 51,917 | 5,279 | 101,500 | 175,498 |
| Total noninterest income | $ 256,969 | $ 1,196 | $ 64,904 | $ 135,117 | $ 155,940 | $ 614,126 |

(1) Amounts are accounted for under separate guidance than ASC 606.
(2) Global Commercial Bank's, SVB Capital's and SVB Leerink's components of noninterest income are shown net of noncontrolling interests. Noncontrolling interest is included within "Other Items."

| Six months ended June 30,2018 (Dollars in thousands) | Global Commercial Bank (2) | SVB Private Bank | SVB Capital (2) | Other Items | Total |
|---|---|---|---|---|---|
| Revenue from contracts with customers: | | | | | |
| Client investment fees | $ 22,145 | $ 681 | $ — | $ 29,501 | $ 52,327 |
| Spot contract commissions | 62,322 | 323 | — | 105 | 62,750 |
| Card interchange fees, gross | 61,183 | — | — | 203 | 61,386 |
| Merchant service fees | 6,331 | — | — | — | 6,331 |
| Deposit service charges | 35,426 | 59 | — | 1,008 | 36,493 |
| Fund management fees | — | — | 11,665 | — | 11,665 |
| Correspondent bank rebates | 2,869 | — | — | — | 2,869 |
| Total revenue from contracts with customers | $ 190,276 | $ 1,063 | $ 11,665 | $ 30,817 | $ 233,821 |
| Revenues outside the scope of ASC 606 (1) | 19,284 | 9 | 47,698 | 47,395 | 114,386 |
| Total noninterest income | $ 209,560 | $ 1,072 | $ 59,363 | $ 78,212 | $ 348,207 |

(1) Amounts are accounted for under separate guidance than ASC 606.
(2) Global Commercial Bank's and SVB Capital's components of noninterest income are shown net of noncontrolling interests. Noncontrolling interest is included within "Other Items."

The timing of revenue recognition may differ from the timing of cash settlements or invoicing to customers. We record a receivable when revenue is recognized prior to invoicing, and unearned revenue when revenue is recognized subsequent to receipt of consideration. These assets and liabilities are reported on the consolidated balance sheets on a contract-by-contract basis at the end of each reporting period. During the three and six months ended June 30, 2019 and 2018, changes in our contract assets, contract liabilities and receivables were not material. Additionally, revenues recognized during the three and six months ended June 30, 2019 and 2018 that were included in the corresponding contract liability balance at the beginning of the periods were not material.

## 14. Other Noninterest Expense

A summary of other noninterest expense for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Lending and other client related processing costs | $ 8,763 | $ 7,403 | $ 13,940 | $ 10,603 |
| Correspondent bank fees | 3,569 | 3,277 | 7,313 | 6,687 |
| Investment banking activities | 3,869 | — | 8,054 | — |
| Trade order execution costs | 2,828 | — | 5,344 | — |
| Data processing services | 2,659 | 2,703 | 5,558 | 5,195 |
| Telephone | 2,422 | 2,378 | 5,163 | 4,756 |
| Dues and publications | 860 | 845 | 2,384 | 1,694 |
| Postage and supplies | 678 | 813 | 1,448 | 1,480 |

| | | | | |
|---|---|---|---|---|
| Other | 11,769 | 4,670 | 21,749 | 9,778 |
| Total other noninterest expense | $ 37,417 | $ 22,089 | $ 70,953 | $ 40,193 |

**15. Segment Reporting**

We have four reportable segments for management reporting purposes: Global Commercial Bank, SVB Private Bank, SVB Capital and SVB Leerink. SVB Leerink is a new reportable segment and was created as a result of the acquisition of Leerink Holdings LLC effective January 4, 2019. The results of our operating segments are based on our internal management reporting process.

Our Global Commercial Bank and SVB Private Bank segments' primary source of revenue is from net interest income, which is primarily the difference between interest earned on loans, net of funds transfer pricing ("FTP"), and interest paid on deposits,

net of FTP. Accordingly, these segments are reported using net interest income, net of FTP. FTP is an internal measurement framework designed to assess the financial impact of a financial institution's sources and uses of funds. It is the mechanism by which a funding credit is given for deposits raised, and a funding charge is made for funded loans. FTP is calculated at an instrument level based on account characteristics.

We also evaluate performance based on provision for credit losses, noninterest income and noninterest expense, which are presented as components of segment operating profit or loss. In calculating each operating segment's noninterest expense, we consider the direct costs incurred by the operating segment as well as certain allocated direct costs. As part of this review, we allocate certain corporate overhead costs to a corporate account. We do not allocate income tax expense or the provision for unfunded credit commitments (included in provision for credit losses) to our segments. Additionally, our management reporting model is predicated on average asset balances; therefore, period-end asset balances are not presented for segment reporting purposes. Changes in an individual client's primary relationship designation have resulted, and in the future may result, in the inclusion of certain clients in different segments in different periods.

Unlike financial reporting, which benefits from the comprehensive structure provided by GAAP, our internal management reporting process is highly subjective, as there is no comprehensive, authoritative guidance for management reporting. Our management reporting process measures the performance of our operating segments based on our internal operating structure, which is subject to change from time to time, and is not necessarily comparable with similar information for other financial services companies.

For reporting purposes, SVB Financial Group has four operating segments for which we report our financial information:

- **Global Commercial Bank** is comprised of results from the following:
  - Our **Commercial Bank** products and services are provided by the Bank and its subsidiaries to commercial clients in the technology, life science/healthcare and private equity/venture capital industries. The Bank provides solutions to the financial needs of commercial clients through credit, global treasury management, foreign exchange, trade finance, and other services. We broadly serve clients within the U.S., as well as non-U.S. clients in key international innovation markets. In addition, the Bank and its subsidiaries offer a variety of investment services and solutions to its clients that enable them to effectively manage their assets.
  - Our **Private Equity Division** provides banking products and services primarily to our private equity and venture capital clients.
  - **SVB Wine** provides banking products and services to our premium wine industry clients, including vineyard development loans.
  - **SVB Analytics** previously provided equity valuation services and currently provides research for investors and companies in the global innovation economy. In September 2017, SVB Analytics sold its equity valuation services business.
  - **Debt Fund Investments** is comprised of our investments in certain debt funds in which we are a strategic investor.
- **SVB Private Bank** is the private banking division of the Bank, which provides a range of personal financial solutions for consumers. Our clients are primarily private equity/venture capital professionals and executive leaders of the innovation companies they support. We offer a customized suite of private banking services, including mortgages, home equity lines of credit, restricted stock purchase loans, capital call lines of credit and other secured and unsecured lending products, as well as cash and wealth management services.
- **SVB Capital** is the funds management business of SVBFG, which focuses primarily on venture capital investments. SVB Capital manages funds (primarily venture capital funds) on behalf of third-party limited partners and, on a more limited basis, SVB Financial Group. The SVB Capital family of funds is comprised of direct venture funds that invest in companies and funds of funds that invest in other venture capital funds. SVB Capital generates income for the Company primarily from investment returns (including carried interest allocations) and management fees.
- **SVB Leerink** is an investment bank specializing in the equity and convertible capital markets, mergers and acquisitions, equity research and sales and trading for growth and innovation-minded healthcare and life science companies and operates as a wholly-owned subsidiary of SVB Financial. SVB Leerink provides investment banking services across all subsectors of healthcare including: biotechnology, pharmaceuticals, medical devices, diagnostic and life science tools, healthcare services and digital health. SVB Leerink focuses on two primary lines of business: (i) investment banking focused on providing companies with capital-raising services, financial advice on mergers and acquisitions, sales and trading services and equity research, and (ii) sponsorship of private investment funds.

The summary financial results of our operating segments are presented along with a reconciliation to our consolidated interim results.

Our segment information for the three and six months ended June 30, 2019 and 2018 is as follows:

| (Dollars in thousands) | Global Commercial Bank (1) | SVB Private Bank | SVB Capital (1) | SVB Leerink (1) | Other Items (2) | Total |
|---|---|---|---|---|---|---|
| **Three months ended June 30, 2019** | | | | | | |
| Net interest income | $ 461,752 | $ 12,277 | $ 6 | $ 242 | $ 55,126 | $ 529,403 |
| Provision for credit losses | (18,295) | (853) | — | — | (4,798) | (23,946) |
| Noninterest income | 130,652 | 686 | 40,059 | 67,000 | 95,353 | 333,750 |
| Noninterest expense (3) | (206,902) | (9,526) | (7,883) | (61,935) | (97,276) | (383,522) |
| Income before income tax expense (4) | $ 367,207 | $ 2,584 | $ 32,182 | $ 5,307 | $ 48,405 | $ 455,685 |
| Total average loans, net of unearned income | $ 25,724,704 | $ 3,217,597 | $ — | $ — | $ 464,319 | $ 29,406,620 |
| Total average assets (5) (6) | 60,502,170 | 2,432,358 | 373,167 | 410,279 | (3,017,488) | 60,700,486 |
| Total average deposits | 51,126,806 | 1,394,905 | — | — | 440,497 | 52,962,208 |
| **Three months ended June 30, 2018** | | | | | | |
| Net interest income | $ 409,057 | $ 15,600 | $ 9 | $ — | $ 41,777 | $ 466,443 |
| Provision for credit losses | (27,356) | (300) | — | — | (1,424) | (29,080) |
| Noninterest income | 111,674 | 565 | 29,389 | — | 51,061 | 192,689 |
| Noninterest expense (3) | (196,992) | (7,974) | (5,666) | — | (95,107) | (305,739) |
| Income (loss) before income tax expense (4) | $ 296,383 | $ 7,891 | $ 23,732 | $ — | $ (3,693) | $ 324,313 |
| Total average loans, net of unearned income | $ 21,714,870 | $ 2,777,617 | $ — | $ — | $ 366,016 | $ 24,858,503 |
| Total average assets (5) | 52,561,973 | 2,515,984 | 369,841 | — | (1,027,152) | 54,420,646 |
| Total average deposits | 45,991,701 | 1,480,162 | — | — | 500,088 | 47,971,951 |
| **Six months ended June 30, 2019** | | | | | | |
| Net interest income | $ 907,628 | $ 24,258 | $ 12 | $ 684 | $ 109,707 | $ 1,042,289 |
| (Provision for) reduction of credit losses | (45,100) | 131 | — | — | (7,528) | (52,497) |
| Noninterest income | 256,969 | 1,196 | 64,904 | 135,117 | 155,940 | 614,126 |
| Noninterest expense (3) | (404,147) | (18,378) | (13,665) | (122,475) | (190,521) | (749,186) |
| Income before income tax expense (4) | $ 715,350 | $ 7,207 | $ 51,251 | $ 13,326 | $ 67,598 | $ 854,732 |
| Total average loans, net of unearned income | $ 25,264,010 | $ 3,152,104 | $ — | $ — | $ 484,046 | $ 28,900,160 |
| Total average assets (5) (6) | 58,214,465 | 2,469,804 | 375,934 | 355,609 | (2,292,578) | 59,123,234 |
| Total average deposits | 49,371,589 | 1,442,803 | — | — | 532,788 | 51,347,180 |
| **Six months ended June 30, 2018** | | | | | | |
| Net interest income | $ 778,924 | $ 31,847 | $ 16 | $ — | $ 75,519 | $ 886,306 |
| Provision for credit losses | (52,630) | (2,022) | — | — | (2,400) | (57,052) |
| Noninterest income | 209,560 | 1,072 | 59,363 | — | 78,212 | 348,207 |
| Noninterest expense (3) | (382,251) | (16,199) | (10,712) | — | (161,994) | (571,156) |
| Income (loss) before income tax expense (4) | $ 553,603 | $ 14,698 | $ 48,667 | $ — | $ (10,663) | $ 606,305 |
| Total average loans, net of unearned income | $ 21,199,897 | $ 2,722,444 | $ — | $ — | $ 413,421 | $ 24,335,762 |
| Total average assets (5) | 51,274,033 | 2,553,024 | 371,572 | — | (799,013) | 53,399,616 |
| Total average deposits | 45,022,054 | 1,526,038 | — | — | 496,078 | 47,044,170 |

(1) Global Commercial Bank's, SVB Capital's and SVB Leerink's components of net interest income, noninterest income, noninterest expense and total average assets are shown net of noncontrolling interests for all periods presented. Noncontrolling interest is included within "Other Items."

(2) The "Other Items" column reflects the adjustments necessary to reconcile the results of the operating segments to the consolidated financial statements prepared in conformity with GAAP. Net interest income consists primarily of interest earned from our fixed income investment portfolio, net of FTP. Noninterest income consists primarily of gains on equity warrant assets, gains or losses on the sale of fixed income investments and gains on equity securities from exercised warrant assets. Noninterest expense consists primarily of expenses associated with corporate support functions such as finance, human resources, marketing, legal and other expenses.

(3) The Global Commercial Bank segment includes direct depreciation and amortization of $4.8 million and $5.5 million for the three months ended June 30, 2019 and 2018, respectively, and $9.6 million and $11.0 million for the six months ended June 30, 2019 and 2018.
(4) The internal reporting model used by management to assess segment performance does not calculate income tax expense by segment. Our effective tax rate is a reasonable approximation of the segment rates.
(5) Total average assets equal the greater of total average assets or the sum of total average liabilities and total average stockholders' equity for each segment to reconcile the results to the consolidated financial statements prepared in conformity with GAAP.
(6) Included in the total average assets for SVB Leerink is goodwill of $137.8 million for both the three and six months ended June 30, 2019 related to the acquisition effective January 4, 2019.

## 16. Off-Balance Sheet Arrangements, Guarantees and Other Commitments

In the normal course of business, we use financial instruments with off-balance sheet risk to meet the financing needs of our customers. These financial instruments include commitments to extend credit, commercial and standby letters of credit and commitments to invest in venture capital and private equity fund investments. These instruments involve, to varying degrees, elements of credit risk. Credit risk is defined as the possibility of sustaining a loss because other parties to the financial instrument fail to perform in accordance with the terms of the contract.

***Commitments to Extend Credit***

The following table summarizes information related to our commitments to extend credit at June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Loan commitments available for funding: (1) | | |
| Fixed interest rate commitments | $ 1,917,907 | $ 1,839,190 |
| Variable interest rate commitments | 16,484,542 | 14,821,815 |
| Total loan commitments available for funding | 18,402,449 | 16,661,005 |
| Commercial and standby letters of credit (2) | 2,549,620 | 2,252,016 |
| Total unfunded credit commitments | $ 20,952,069 | $ 18,913,021 |
| Commitments unavailable for funding (3) | $ 2,922,238 | $ 2,723,835 |
| Allowance for unfunded credit commitments (4) | 62,664 | 55,183 |

(1) Represents commitments which are available for funding, due to clients meeting all collateral, compliance and financial covenants required under loan commitment agreements.
(2) See below for additional information on our commercial and standby letters of credit.
(3) Represents commitments which are currently unavailable for funding due to clients failing to meet all collateral, compliance and financial covenants under loan commitment agreements.
(4) Our allowance for unfunded credit commitments includes an allowance for both our unfunded loan commitments and our letters of credit.

***Commercial and Standby Letters of Credit***

The table below summarizes our commercial and standby letters of credit at June 30, 2019. The maximum potential amount of future payments represents the amount that could be remitted under letters of credit if there were a total default by the guaranteed parties, without consideration of possible recoveries under recourse provisions or from the collateral held or pledged.

| (Dollars in thousands) | Expires In One Year or Less | Expires After One Year | Total Amount Outstanding | Maximum Amount of Future Payments |
|---|---|---|---|---|
| Financial standby letters of credit | $ 2,290,762 | $ 95,663 | $ 2,386,425 | $ 2,386,425 |
| Performance standby letters of credit | 125,310 | 22,804 | 148,114 | 148,114 |
| Commercial letters of credit | 14,781 | 300 | 15,081 | 15,081 |
| Total | $ 2,430,853 | $ 118,767 | $ 2,549,620 | $ 2,549,620 |

Deferred fees related to financial and performance standby letters of credit were $16.2 million at June 30, 2019 and $14.1 million at December 31, 2018. At June 30, 2019, collateral in the form of cash of $1.4 billion was available to us to reimburse losses, if any, under financial and performance standby letters of credit.

***Commitments to Invest in Venture Capital and Private Equity Funds***

Subject to applicable regulatory requirements, including the Volcker Rule, we make commitments to invest in venture capital and private equity funds, which generally make investments in privately-held companies. Commitments to invest in these funds are generally made for a 10-year period from the inception of the fund. Although the limited partnership agreements governing these investments typically do not restrict the general partners from calling 100% of committed capital in one year, it is customary for these funds to call most of the capital commitments over 5 to 7 years, and in certain cases, the funds may not call 100% of committed capital. The actual timing of future cash requirements to fund these commitments is generally dependent upon the investment cycle, overall market conditions, and the nature and type of industry in which the privately held companies operate. The following table details our total capital commitments, unfunded capital commitments, and our ownership percentage in each fund at June 30, 2019:

| (Dollars in thousands) | SVBFG Capital Commitments | SVBFG Unfunded Commitments | SVBFG Ownership of each Fund (3) |
|---|---|---|---|
| CP I, LP | $ 6,000 | $ 270 | 10.7% |
| CP II, LP (1) | 1,200 | 162 | 5.1 |
| Capital Preferred Return Fund, LP | 12,688 | — | 20.0 |
| Growth Partners, LP | 24,670 | 1,340 | 33.0 |
| Strategic Investors Fund, LP | 15,300 | 688 | 12.6 |
| Strategic Investors Fund II, LP | 15,000 | 1,050 | 8.6 |
| Strategic Investors Fund III, LP | 15,000 | 1,275 | 5.9 |
| Strategic Investors Fund IV, LP | 12,239 | 2,325 | 5.0 |
| Strategic Investors Fund V funds | 515 | 131 | Various |
| Other venture capital and private equity fund investments (equity method accounting) | 21,813 | 5,914 | Various |
| Debt funds (equity method accounting) | 58,493 | — | Various |
| Other fund investments (2) | 295,648 | 7,709 | Various |
| Total | $ 478,566 | $ 20,864 | |

(1) Our ownership includes direct ownership of 1.3 percent and indirect ownership interest of 3.8 percent through our investment in Strategic Investors Fund II, LP.
(2) Represents commitments to 215 funds (primarily venture capital funds) where our ownership interest is generally less than five percent of the voting interests of each such fund.
(3) We are subject to the Volcker Rule, which restricts or limits us from sponsoring or having ownership interests in “covered” funds including venture capital and private equity funds. See “Business - Supervision and Regulation” under Part 1, Item 1 of our 2018 Form 10-K.

The following table details the amounts of remaining unfunded commitments to venture capital and private equity funds by our consolidated managed funds of funds (including our interest and the noncontrolling interests) at June 30, 2019:

| (Dollars in thousands) | Unfunded Commitments |
|---|---|
| Strategic Investors Fund, LP | $ 1,338 |
| Capital Preferred Return Fund, LP | 1,572 |
| Growth Partners, LP | 2,527 |
| Total | $ 5,437 |

**17. Income Taxes**

We are subject to income tax in the U.S. federal jurisdiction and various state and foreign jurisdictions and have identified our federal tax and California tax returns as major tax filings. Our U.S. federal tax returns for 2015 and subsequent tax years remain open to full examination. Our California tax returns for 2015 and subsequent tax years remain open to full examination.

At June 30, 2019, our unrecognized tax benefit was $13.3 million, the recognition of which would reduce our income tax expense by $10.4 million. We do not expect that our unrecognized tax benefit will materially change in the next 12 months.

We recognize interest and penalties related to income tax matters as part of income before income taxes. Interest and penalties were not material for the three months ended June 30, 2019.

**18. Fair Value of Financial Instruments**

***Fair Value Measurements***

Our available-for-sale securities, derivative instruments and certain non-marketable and other equity securities are financial instruments recorded at fair value on a recurring basis. We make estimates regarding valuation of assets and liabilities measured at fair value in preparing our interim consolidated financial statements.

Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (the "exit price") in an orderly transaction between market participants at the measurement date. There is a three-level hierarchy for disclosure of assets and liabilities recorded at fair value. The classification of assets and liabilities within the hierarchy is based on whether the inputs to the valuation methodology used for measurement are observable or unobservable and on the significance of those inputs in the fair value measurement. Observable inputs reflect market-derived or market-based information obtained from independent sources, while unobservable inputs reflect our estimates about market data and views of market participants. The three levels for measuring fair value are based on the reliability of inputs and are as follows:

**Level 1**

Fair value measurements based on quoted prices in active markets for identical assets or liabilities that we have the ability to access. Since valuations are based on quoted prices that are readily and regularly available in an active market, valuation of these instruments does not entail a significant degree of judgment. Assets utilizing Level 1 inputs include U.S. Treasury securities, foreign government debt securities, exchange-traded equity securities and certain marketable securities accounted for under fair value accounting.

**Level 2**

Fair value measurements based on quoted prices in markets that are not active or for which all significant inputs are observable, directly or indirectly. Valuations for the available-for-sale securities are provided by independent pricing service providers who have experience in valuing these securities and by comparison to and/or average of quoted market prices obtained from independent brokers. We perform a monthly analysis on the values received from third parties to ensure that the prices represent a reasonable estimate of the fair value. The procedures include, but are not limited to, initial and ongoing review of third-party pricing methodologies, review of pricing trends and monitoring of trading volumes. Additional corroboration, such as obtaining a non-binding price from a broker, may be obtained depending on the frequency of trades of the security and the level of liquidity or depth of the market. We ensure prices received from independent brokers represent a reasonable estimate of the fair value through the use of observable market inputs including comparable trades, yield curve, spreads and, when available, market indices. As a result of this analysis, if the Company determines that there is a more appropriate fair value based upon the available market data, the price received from the third party is adjusted accordingly. Below is a summary of the significant inputs used for each class of Level 2 assets and liabilities:

**U.S. agency debentures:** Fair value measurements of U.S. agency debentures are based on the characteristics specific to bonds held, such as issuer name, coupon rate, maturity date and any applicable issuer call option features. Valuations are based on market spreads relative to similar term benchmark market interest rates, generally U.S. Treasury securities.

**Agency-issued mortgage-backed securities:** Agency-issued mortgage-backed securities are pools of individual conventional mortgage loans underwritten to U.S. agency standards with similar coupon rates, tenor, and other attributes such as geographic location, loan size and origination vintage. Fair value measurements of these securities are based on observable price adjustments relative to benchmark market interest rates taking into consideration estimated loan prepayment speeds.

**Agency-issued collateralized mortgage obligations:** Agency-issued collateralized mortgage obligations are structured into classes or tranches with defined cash flow characteristics and are collateralized by U.S. agency-issued mortgage pass-through securities. Fair value measurements of these securities incorporate similar characteristics of mortgage pass-through securities such as coupon rate, tenor, geographic location, loan size and origination vintage, in addition to incorporating the effect of estimated prepayment speeds on the cash flow structure of the class or tranche. These measurements incorporate observable market spreads over an estimated average life after considering the inputs listed above.

**Agency-issued commercial mortgage-backed securities:** Fair value measurements of these securities are based on spreads to benchmark market interest rates (usually U.S. Treasury rates or rates observable in the swaps market), prepayment speeds, loan default rate assumptions and loan loss severity assumptions on underlying loans.

**Municipal bonds and notes:** Bonds issued by municipal governments generally have stated coupon rates, final maturity dates and are subject to being called ahead of the final maturity date at the option of the issuer. Fair value measurements of these securities are priced based on spreads to other municipal benchmark bonds with similar characteristics; or, relative to market rates on U.S. Treasury bonds of similar maturity.

**Other equity securities:** Fair value measurements of equity securities of public companies are priced based on quoted market prices less a discount if the securities are subject to certain sales restrictions. Certain sales restriction discounts generally range from 10 percent to 20 percent depending on the duration of the sale restrictions which typically range from three to six months.

**Equity warrant assets (public portfolio):** Fair value measurements of equity warrant assets of publicly-traded portfolio companies are valued based on the Black-Scholes option pricing model. The model uses the price of publicly-traded companies (underlying stock price), stated strike prices, warrant expiration dates, the risk-free interest rate and market-observable option volatility assumptions.

**Foreign exchange forward and option contract assets and liabilities:** Fair value measurements of these assets and liabilities are priced based on spot and forward foreign currency rates and option volatility assumptions.

**Interest rate derivative and interest rate swap assets and liabilities:** Fair value measurements of interest rate derivatives are priced considering the coupon rate of the fixed leg of the contract and the variable coupon on the floating leg of the contract. Valuation is based on both spot and forward rates on the swap yield curve and the credit worthiness of the contract counterparty.

**Level 3**

The fair value measurement is derived from valuation techniques that use significant assumptions not observable in the market. These unobservable assumptions reflect our own estimates of assumptions we believe market participants would use in pricing the asset. Below is a summary of the valuation techniques used for each class of Level 3 assets:

**Venture capital and private equity fund investments not measured at net asset value:** Fair value measurements are based on consideration of a range of factors including, but not limited to, the price at which the investment was acquired, the term and nature of the investment, local market conditions, values for comparable securities, and as it relates to the private company, the current and projected operating performance, exit strategies and financing transactions subsequent to the acquisition of the investment. The significant unobservable inputs used in the fair value measurement include the information about each portfolio company, including actual and forecasted results, cash position, recent or planned transactions and market comparable companies. Significant changes to any one of these inputs in isolation could result in a significant change in the fair value measurement; however, we generally consider all factors available through ongoing communication with the portfolio companies and venture capital fund managers to determine whether there are changes to the portfolio company or the environment that indicate a change in the fair value measurement.

**Equity warrant assets (public portfolio):** Fair value measurements of equity warrant assets of publicly-traded portfolio companies are valued based on the Black-Scholes option pricing model. The model uses the price of publicly-traded companies (underlying stock price), stated strike prices, warrant expiration dates, the risk-free interest rate and market-observable option volatility assumptions. Modeled asset values are further adjusted by applying a discount of up to 20 percent for certain warrants that have lock-up restrictions or other features that indicate a discount to fair value is warranted. As a lock-up term nears, and other sale restrictions are lifted, discounts are adjusted downward to zero percent once all restrictions expire or are removed.

**Equity warrant assets (private portfolio):** Fair value measurements of equity warrant assets of private portfolio companies are priced based on a Black-Scholes option pricing model to estimate the asset value by using stated strike prices, option expiration dates, risk-free interest rates and option volatility assumptions. Option volatility assumptions used in the model are based on public market indices whose members operate in similar industries as companies in our private company portfolio. Option expiration dates are modified to account for estimates to actual life relative to stated expiration. Overall model asset values are further adjusted for a general lack of liquidity due to the private nature of the associated underlying company. There is a direct correlation between changes in the volatility and remaining life assumptions in isolation and the fair value measurement while there is an inverse correlation between changes in the liquidity discount assumption and the fair value measurement.

It is our policy to maximize the use of observable inputs and minimize the use of unobservable inputs when developing fair value measurements. When available, we use quoted market prices to measure fair value. If market prices are not available, fair value measurement is based upon valuation techniques that use primarily market-based or independently-sourced market parameters, including interest rate yield curves, prepayment speeds, option volatilities and currency rates. Substantially all of our financial instruments use the foregoing methodologies and are categorized as a Level 1 or Level 2 measurement in the fair value hierarchy. However, in certain cases, when market observable inputs for our valuation techniques may not be readily available, we are required to make judgments about assumptions we believe market participants would use in estimating the fair value of the financial instrument, and based on the significance of those judgments, the measurement may be determined to be a Level 3 fair value measurement.

The degree of management judgment involved in determining the fair value of a financial instrument is dependent upon the availability of quoted market prices or observable market parameters. For financial instruments that trade actively and have quoted market prices or observable market parameters, there is minimal subjectivity involved in measuring fair value. When observable market prices and parameters are not fully available, management judgment is necessary to estimate fair value. For inactive markets, there is little information, if any, to evaluate if individual transactions are orderly. Accordingly, we are required to estimate, based upon all available facts and circumstances, the degree to which orderly transactions are occurring and provide more weighting to price quotes that are based upon orderly transactions. In addition, changes in the market conditions may reduce the availability of quoted prices or observable data. For example, reduced liquidity in the capital markets or changes in secondary market activities could result in observable market inputs becoming unavailable. Therefore, when market data is not available, we use valuation techniques requiring more management judgment to estimate the appropriate fair value measurement. Accordingly, the degree of judgment exercised by management in determining fair value is greater for financial assets and liabilities categorized as Level 3.

The following fair value hierarchy table presents information about our assets and liabilities that are measured at fair value on a recurring basis as of June 30, 2019:

| (Dollars in thousands) | Level 1 | Level 2 | Level 3 | Balance at June 30, 2019 |
|---|---|---|---|---|
| **Assets:** | | | | |
| Available-for-sale securities: | | | | |
| U.S. Treasury securities | $ 4,821,074 | $ — | $ — | $ 4,821,074 |
| Foreign government debt securities | 9,211 | — | — | 9,211 |
| Residential mortgage-backed securities: | | | | |
| Agency-issued mortgage-backed securities | — | 1,321,857 | — | 1,321,857 |
| Agency-issued collateralized mortgage obligations—fixed rate | — | 1,788,180 | — | 1,788,180 |
| Total available-for-sale securities | 4,830,285 | 3,110,037 | — | 7,940,322 |
| Non-marketable and other equity securities (fair value accounting): | | | | |
| Non-marketable securities: | | | | |
| Venture capital and private equity fund investments measured at net asset value | — | — | — | 302,852 |
| Venture capital and private equity fund investments not measured at net asset value (1) | — | — | 441 | 441 |
| Other equity securities in public companies | 5,068 | 34,740 | — | 39,808 |
| Total non-marketable and other equity securities (fair value accounting) | 5,068 | 34,740 | 441 | 343,101 |
| Other assets: | | | | |
| Foreign exchange forward and option contracts | — | 94,462 | — | 94,462 |
| Equity warrant assets | — | 10,278 | 147,770 | 158,048 |
| Interest rate swaps | — | 19,558 | — | 19,558 |
| Client interest rate derivatives | — | 19,440 | — | 19,440 |
| Total assets | $ 4,835,353 | $ 3,288,515 | $ 148,211 | $ 8,574,931 |
| **Liabilities:** | | | | |
| Foreign exchange forward and option contracts | $ — | $ 86,457 | $ — | $ 86,457 |
| Interest rate swaps | — | 391 | — | 391 |
| Client interest rate derivatives | — | 25,803 | — | 25,803 |
| Total liabilities | $ — | $ 112,651 | $ — | $ 112,651 |

(1) Included in Level 3 assets is $394 thousand attributable to noncontrolling interests calculated based on the ownership percentages of the noncontrolling interests.

The following fair value hierarchy table presents information about our assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2018:

| (Dollars in thousands) | Level 1 | Level 2 | Level 3 | Balance at December 31, 2018 |
|---|---|---|---|---|
| **Assets:** | | | | |
| Available-for-sale securities: | | | | |
| U.S. Treasury securities | $ 4,738,258 | $ — | $ — | $ 4,738,258 |
| U.S. agency debentures | — | 1,084,117 | — | 1,084,117 |
| Foreign government debt securities | 5,812 | — | — | 5,812 |
| Residential mortgage-backed securities: | | | | |
| Agency-issued collateralized mortgage obligations—fixed rate | — | 1,880,218 | — | 1,880,218 |
| Agency-issued collateralized mortgage obligations—variable rate | — | 81,638 | — | 81,638 |
| Total available-for-sale securities | 4,744,070 | 3,045,973 | — | 7,790,043 |
| Non-marketable and other equity securities (fair value accounting): | | | | |
| Non-marketable securities: | | | | |
| Venture capital and private equity fund investments measured at net asset value | — | — | — | 318,352 |
| Venture capital and private equity fund investments not measured at net asset value (1) | — | — | 1,079 | 1,079 |
| Other equity securities in public companies | 1,181 | 19,217 | — | 20,398 |
| Total non-marketable and other equity securities (fair value accounting) | 1,181 | 19,217 | 1,079 | 339,829 |
| Other assets: | | | | |
| Foreign exchange forward and option contracts | — | 100,402 | — | 100,402 |
| Equity warrant assets | — | 4,039 | 145,199 | 149,238 |
| Client interest rate derivatives | — | 8,499 | — | 8,499 |
| Total assets | $ 4,745,251 | $ 3,178,130 | $ 146,278 | $ 8,388,011 |
| **Liabilities:** | | | | |
| Foreign exchange forward and option contracts | $ — | $ 88,559 | $ — | $ 88,559 |
| Client interest rate derivatives | — | 9,491 | — | 9,491 |
| Total liabilities | $ — | $ 98,050 | $ — | $ 98,050 |

(1) Included in Level 3 assets is $964 thousand attributable to noncontrolling interests calculated based on the ownership percentages of the noncontrolling interests.

The following table presents additional information about Level 3 assets measured at fair value on a recurring basis for the three and six months ended June 30, 2019 and 2018:

| (Dollars in thousands) | Beginning Balance | Total Realized and Unrealized Gains (Losses) Included in Income | Purchases | Sales/Exits | Issuances | Distributions and Other Settlements | Transfers Out of Level 3 | Ending Balance |
|---|---|---|---|---|---|---|---|---|
| **Three months ended June 30, 2019** | | | | | | | | |
| Non-marketable and other equity securities (fair value accounting): | | | | | | | | |
| Venture capital and private equity fund investments not measured at net asset value (1) | $ 1,035 | $ 2 | $ — | $ (596) | $ — | $ — | $ — | $ 441 |
| Other assets: | | | | | | | | |
| Equity warrant assets (2) | 156,749 | 46,645 | — | (55,568) | 3,041 | — | (3,097) | 147,770 |
| Total assets | $ 157,784 | $ 46,647 | $ — | $ (56,164) | $ 3,041 | $ — | $ (3,097) | $ 148,211 |
| **Three months ended June 30, 2018** | | | | | | | | |
| Non-marketable and other equity securities (fair value accounting): | | | | | | | | |
| Venture capital and private equity fund investments not measured at net asset value (1) | $ 1,001 | $ — | $ — | $ — | $ — | $ — | $ — | $ 1,001 |
| Other assets: | | | | | | | | |
| Equity warrant assets (2) | 131,506 | 18,249 | — | (15,235) | 4,299 | — | (1,066) | 137,753 |
| Total assets | $ 132,507 | $ 18,249 | $ — | $ (15,235) | $ 4,299 | $ — | $ (1,066) | $ 138,754 |
| **Six months ended June 30, 2019** | | | | | | | | |
| Non-marketable and other equity securities (fair value accounting): | | | | | | | | |
| Venture capital and private equity fund investments not measured at net asset value (1) | $ 1,079 | $ (45) | $ — | $ (596) | $ — | $ 3 | $ — | $ 441 |
| Other assets: | | | | | | | | |
| Equity warrant assets (2) | 145,199 | 65,811 | 575 | (67,873) | 7,584 | — | (3,526) | 147,770 |
| Total assets | $ 146,278 | $ 65,766 | $ 575 | $ (68,469) | $ 7,584 | $ 3 | $ (3,526) | $ 148,211 |
| **Six months ended June 30, 2018** | | | | | | | | |
| Non-marketable and other equity securities (fair value accounting): | | | | | | | | |
| Venture capital and private equity fund investments not measured at net asset value (1) | $ 919 | $ 82 | $ — | $ — | $ — | $ — | $ — | $ 1,001 |
| Other assets: | | | | | | | | |
| Equity warrant assets (2) | 121,331 | 36,860 | — | (27,363) | 9,198 | — | (2,273) | 137,753 |
| Total assets | $ 122,250 | $ 36,942 | $ — | $ (27,363) | $ 9,198 | $ — | $ (2,273) | $ 138,754 |

(1) Realized and unrealized gains (losses) are recorded in the line item “Gains on investment securities, net," a component of noninterest income.
(2) Realized and unrealized gains (losses) are recorded in the line item “Gains on equity warrant assets, net," a component of noninterest income.

The following table presents the amount of net unrealized gains and losses included in earnings (which is inclusive of noncontrolling interest) attributable to Level 3 assets still held at June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Non-marketable and other equity securities (fair value accounting): | | | | |
| Venture capital and private equity fund investments not measured at net asset value (1) | $ 2 | $ — | $ (45) | $ 82 |
| Other assets: | | | | |
| Equity warrant assets (2) | 4,416 | 10,236 | 19,188 | 18,147 |
| Total unrealized gains, net | $ 4,418 | $ 10,236 | $ 19,143 | $ 18,229 |
| Unrealized (losses) gains attributable to noncontrolling interests (1) | $ (1) | $ — | $ (40) | $ 73 |

(1) Unrealized gains (losses) are recorded in the line item "Gains on investment securities, net," a component of noninterest income.
(2) Unrealized gains (losses) are recorded in the line item "Gains on equity warrant assets, net," a component of noninterest income.

The extent to which any unrealized gains or losses will become realized is subject to a variety of factors, including, among other things, the expiration of current sales restrictions to which these securities are subject, the actual sales of securities and the timing of such actual sales.

The following table presents quantitative information about the significant unobservable inputs used for certain of our Level 3 fair value measurements at June 30, 2019 and December 31, 2018. We have not included in this table our venture capital and private equity fund investments (fair value accounting) as we use net asset value per share (as obtained from the general partners of the investments) as a practical expedient to determine fair value.

| (Dollars in thousands) | Fair value | Valuation Technique | Significant Unobservable Inputs | Weighted Average |
|---|---|---|---|---|
| **June 30, 2019:** | | | | |
| Venture capital and private equity fund investments (fair value accounting) | $ 441 | Private company equity pricing | (1) | (1) |
| Equity warrant assets (public portfolio) | 3,775 | Black-Scholes option pricing model | Volatility | 42.3% |
| | | | Risk-Free interest rate | 1.9 |
| | | | Sales restrictions discount (2) | 16.2 |
| Equity warrant assets (private portfolio) | 143,995 | Black-Scholes option pricing model | Volatility | 38.9 |
| | | | Risk-Free interest rate | 1.7 |
| | | | Marketability discount (3) | 18.6 |
| | | | Remaining life assumption (4) | 45.0 |
| **December 31, 2018:** | | | | |
| Venture capital and private equity fund investments (fair value accounting) | $ 1,079 | Private company equity pricing | (1) | (1) |
| Equity warrant assets (public portfolio) | 2,757 | Black-Scholes option pricing model | Volatility | 54.7% |
| | | | Risk-Free interest rate | 2.6 |
| | | | Sales restrictions discount (2) | 18.5 |
| Equity warrant assets (private portfolio) | 142,442 | Black-Scholes option pricing model | Volatility | 38.5 |
| | | | Risk-Free interest rate | 2.5 |
| | | | Marketability discount (3) | 17.7 |
| | | | Remaining life assumption (4) | 45.0 |

(1) In determining the fair value of our venture capital and private equity fund investment portfolio (not measured at net asset value), we evaluate a variety of factors related to each underlying private portfolio company including, but not limited to, actual and forecasted results, cash position, recent or planned transactions and market comparable companies. Additionally, we have ongoing communication with the portfolio companies and venture capital fund managers, to determine whether there is a material change in fair value. We use company provided valuation reports, if available, to support our valuation

assumptions. These factors are specific to each portfolio company and a weighted average or range of values of the unobservable inputs is not meaningful.

(2) We adjust quoted market prices of public companies, which are subject to certain sales restrictions. Sales restriction discounts generally range from 10 percent to 20 percent depending on the duration of the sales restrictions, which typically range from three to six months.

(3) Our marketability discount is applied to all private company warrants to account for a general lack of liquidity due to the private nature of the associated underlying company. The quantitative measure used is based upon various option-pricing models. On a quarterly basis, a sensitivity analysis is performed on our marketability discount.

(4) We adjust the contractual remaining term of private company warrants based on our estimate of the actual remaining life, which we determine by utilizing historical data on terminations and exercises. At June 30, 2019, the weighted average contractual remaining term was 6.1 years, compared to our estimated remaining life of 2.8 years. On a quarterly basis, a sensitivity analysis is performed on our remaining life assumption.

For the three and six months ended June 30, 2019 and 2018, we did not have any transfers between Level 2 and Level 1 or transfers between Level 3 and Level 1. All transfers from Level 3 to Level 2 for the three and six months ended June 30, 2019 and 2018 were due to the transfer of equity warrant assets from our private portfolio to our public portfolio (see our Level 3 reconciliation above). All amounts reported as transfers represent the fair value as of the date of the change in circumstances that caused the transfer.

***Financial Instruments not Carried at Fair Value***

FASB guidance over financial instruments requires that we disclose estimated fair values for our financial instruments not carried at fair value. The following fair value hierarchy table presents the estimated fair values of our financial instruments that are not carried at fair value at June 30, 2019 and December 31, 2018:

| | | Estimated Fair Value | | | |
|---|---|---|---|---|---|
| (Dollars in thousands) | Carrying Amount | Total | Level 1 | Level 2 | Level 3 |
| **June 30, 2019:** | | | | | |
| *Financial assets:* | | | | | |
| Cash and cash equivalents | $ 9,020,925 | $ 9,020,925 | $ 9,020,925 | $ — | $ — |
| Held-to-maturity securities | 14,868,761 | 15,064,962 | — | 15,064,962 | — |
| Non-marketable securities not measured at net asset value | 151,431 | 151,431 | — | — | 151,431 |
| Non-marketable securities measured at net asset value | 191,172 | 191,172 | — | — | — |
| Net commercial loans | 25,654,063 | 26,263,514 | — | — | 26,263,514 |
| Net consumer loans | 3,253,622 | 3,330,518 | — | — | 3,330,518 |
| FHLB and Federal Reserve Bank stock | 59,508 | 59,508 | — | — | 59,508 |
| *Financial liabilities:* | | | | | |
| Short-term borrowings | 24,252 | 24,252 | — | 24,252 | — |
| Non-maturity deposits (1) | 55,452,274 | 55,452,274 | 55,452,274 | — | — |
| Time deposits | 158,266 | 157,958 | — | 157,958 | — |
| 3.50% Senior Notes | 347,812 | 357,368 | — | 357,368 | — |
| 5.375% Senior Notes | 349,158 | 362,114 | — | 362,114 | — |
| *Off-balance sheet financial assets:* | | | | | |
| Commitments to extend credit | — | 24,349 | — | — | 24,349 |
| **December 31, 2018:** | | | | | |
| *Financial assets:* | | | | | |
| Cash and cash equivalents | $ 3,571,539 | $ 3,571,539 | $ 3,571,539 | $ — | $ — |
| Held-to-maturity securities | 15,487,442 | 15,188,236 | — | 15,188,236 | — |
| Non-marketable securities not measured at net asset value | 131,453 | 131,453 | — | — | 131,453 |
| Non-marketable securities measured at net asset value | 151,247 | 151,247 | — | — | — |
| Net commercial loans | 25,043,671 | 25,463,968 | — | — | 25,463,968 |
| Net consumer loans | 3,013,706 | 3,064,093 | — | — | 3,064,093 |
| FHLB and Federal Reserve Bank stock | 58,878 | 58,878 | — | — | 58,878 |
| *Financial liabilities:* | | | | | |
| Short-term borrowings | 631,412 | 631,412 | — | 631,412 | — |
| Non-maturity deposits (1) | 49,278,174 | 49,278,174 | 49,278,174 | — | — |
| Time deposits | 50,726 | 50,337 | — | 50,337 | — |
| 3.50% Senior Notes | 347,639 | 336,088 | — | 336,088 | — |
| 5.375% Senior Notes | 348,826 | 361,281 | — | 361,281 | — |
| *Off-balance sheet financial assets:* | | | | | |
| Commitments to extend credit | — | 22,930 | — | — | 22,930 |

(1) Includes noninterest-bearing demand deposits, interest-bearing checking accounts, money market accounts and interest-bearing sweep deposits.

***Investments in Entities that Calculate Net Asset Value Per Share***

FASB guidance over certain fund investments requires that we disclose the fair value of funds, significant investment strategies of the investees, redemption features of the investees, restrictions on the ability to sell investments, estimate of the period of time over which the underlying assets are expected to be liquidated by the investee, and unfunded commitments related to the investments.

Our investments in debt funds and venture capital and private equity fund investments generally cannot be redeemed. Alternatively, we expect distributions, if any, to be received primarily through IPO and M&A activity of the underlying assets of the fund. Subject to applicable requirements under the Volcker Rule, we do not have any plans to sell any of these fund investments. If we decide to sell these investments in the future, the investee fund's management must approve of the buyer before the sale of the investments can be completed. The fair values of the fund investments have been estimated using the net asset value per share of the investments, adjusted for any differences between our measurement date and the date of the fund investment's net asset value by using the most recently available financial information from the investee general partner, for example March 31st, for our June 30th consolidated financial statements, adjusted for any contributions paid, distributions received from the investment, and significant fund transactions or market events during the reporting period.

The following table is a summary of the estimated fair values of these investments and remaining unfunded commitments for each major category of these investments as of June 30, 2019:

| (Dollars in thousands) | Carrying Amount | Fair Value | Unfunded Commitments |
|---|---|---|---|
| Non-marketable securities (fair value accounting): | | | |
| Venture capital and private equity fund investments (1) | $ 302,852 | $ 302,852 | $ 12,259 |
| Non-marketable securities (equity method accounting): | | | |
| Venture capital and private equity fund investments (2) | 169,219 | 169,219 | 10,857 |
| Debt funds (2) | 7,168 | 7,168 | — |
| Other investments (2) | 14,785 | 14,785 | 886 |
| Total | $ 494,024 | $ 494,024 | $ 24,002 |

(1) Venture capital and private equity fund investments within non-marketable securities (fair value accounting) include investments made by our managed funds of funds and one of our direct venture funds (consolidated VIEs) and investments in venture capital and private equity fund investments (unconsolidated VIEs). Collectively, these investments in venture capital and private equity funds are primarily in U.S. and global technology and life science/healthcare companies. Included in the fair value and unfunded commitments of fund investments under fair value accounting are $81.1 million and $4.1 million, respectively, attributable to noncontrolling interests. It is estimated that we will receive distributions from the fund investments over the next 10 to 13 years, depending on the age of the funds and any potential extensions of terms of the funds.

(2) Venture capital and private equity fund investments, debt funds, and other fund investments within non-marketable securities (equity method accounting) include funds that invest in or lend money to primarily U.S. and global technology and life science/healthcare companies. It is estimated that we will receive distributions from the funds over the next 5 to 8 years, depending on the age of the funds and any potential extensions of the terms of the funds.

**19. Legal Matters**

Certain lawsuits and claims arising in the ordinary course of business have been filed or are pending against us and/or our affiliates, and we may from time to time be involved in other legal or regulatory proceedings. In accordance with applicable accounting guidance, we establish accruals for all such matters, including expected settlements, when we believe it is probable that a loss has been incurred and the amount of the loss is reasonably estimable. When a loss contingency is not both probable and estimable, we do not establish an accrual. Any such loss estimates are inherently uncertain, based on currently available information and are subject to management's judgment and various assumptions. Due to the inherent subjectivity of these estimates and unpredictability of outcomes of legal proceedings, any amounts accrued may not represent the ultimate resolution of such matters.

To the extent we believe any potential loss relating to such matters may have a material impact on our liquidity, consolidated financial position, results of operations, and/or our business as a whole and is reasonably possible but not probable, we aim to disclose information relating to such potential loss. We also aim to disclose information relating to any material potential loss that is probable but not reasonably estimable. In such cases, where reasonably practicable, we aim to provide an estimate of loss or range of potential loss. No disclosures are generally made for any loss contingencies that are deemed to be remote.

Based upon information available to us, our review of lawsuits and claims filed or pending against us to date and consultation with our outside legal counsel, we have not recognized a material accrual liability for any such matters, nor do we currently expect that these matters will result in a material liability to the Company. However, the outcome of litigation and other legal and regulatory matters is inherently uncertain, and it is possible that one or more of such matters currently pending or threatened could have an unanticipated material adverse effect on our liquidity, consolidated financial position, results of operations, and/or our business as a whole, in the future.

**20. Related Parties**

We have no material related party transactions requiring disclosure. In the ordinary course of business, the Bank may extend credit to related parties, including executive officers, directors, principal shareholders and their related interests. Additionally, we provide real estate secured loans to eligible employees through our EHOP. For additional details, see Note 17—"Employee Compensation and Benefit Plans" under Part II, Item 8 of our 2018 Form 10-K.

## ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

**Forward-Looking Statements**

This Quarterly Report on Form 10-Q, including in particular "Management's Discussion and Analysis of Financial Condition and Results of Operations" under Part I, Item 2 of this report, contains forward-looking statements within the meaning of the safe harbor provisions of the Private Securities Litigation Reform Act of 1995. In addition, management has in the past and might in the future make forward-looking statements orally to analysts, investors, the media and others. Forward-looking statements are statements that are not historical facts. Broadly speaking, forward-looking statements include, but are not limited to, the following:

- Financial projections, including with respect to our net interest income, noninterest income, earnings per share, noninterest expenses (including professional services, compliance, compensation and other costs), cash flows, balance sheet positions, capital expenditures, liquidity and capitalization or other financial items;
- Descriptions of our strategic initiatives, plans or objectives for future operations, including pending sales or acquisitions;
- Forecasts of private equity/venture capital funding and investment levels;
- Forecasts of future interest rates, economic performance, and income from investments;
- Forecasts of expected levels of provisions for loan losses, nonperforming loans, loan growth and client funds; and
- Descriptions of assumptions underlying or relating to any of the foregoing.

You can identify these and other forward-looking statements by the use of words such as "becoming," "may," "will," "should," "could," "would," "predict," "potential," "continue," "anticipate," "believe," "estimate," "assume," "seek," "expect," "plan," "intend," the negative of such words, or comparable terminology. Forward-looking statements are neither historical facts nor assurances of future performance. Although we believe that the expectations reflected in these forward-looking statements are reasonable, we have based these expectations on our current beliefs as well as our assumptions, and such expectations may prove to be incorrect. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict and many of which are outside of our control. Our actual results of operations and financial performance could differ significantly from those expressed in or implied by our management's forward-looking statements. Important factors that could cause our actual results and financial condition to differ from the expectations stated in the forward-looking statements include, among others:

- Market and economic conditions, including the interest rate environment, and the associated impact on us;
- The credit profile and credit quality of our loan portfolio and volatility of our levels of nonperforming assets and charge-offs;
- The adequacy of our allowance for loan losses and the need to make provisions for loan losses for any period;
- The borrowing needs of our clients;
- The sufficiency of our capital and liquidity positions;
- The levels of loans, deposits and client investment fund balances;
- The performance of our portfolio investments; the general condition of the public and private equity and mergers and acquisitions markets and their impact on our investments, including equity warrant assets, venture capital and private equity funds and direct equity investments;
- Our overall investment plans and strategies; the realization, timing, valuation and performance of our equity or other investments;
- The levels of public offerings, mergers and acquisitions and venture capital investment activity of our clients that may impact the borrowing needs of our clients;

- The occurrence of fraudulent activity, including breaches of our information security or cyber security-related incidents;
- Business disruptions and interruptions due to natural disasters and other external events;
- The impact on our reputation and business from our interactions with business partners, counterparties, service providers and other third parties;
- Expansion of our business internationally, and the impact of international market and economic events on us;
- The impact of governmental policy, legal requirements and regulations, including the Economic Growth, Regulatory Relief and Consumer Protection Act and the Dodd-Frank Act, promulgated by the Federal Reserve and other regulatory requirements;
- The impact of lawsuits and claims, as well as legal or regulatory proceedings;
- The impact of changes in accounting standards and tax laws;
- The levels of equity capital available to our client or portfolio companies;
- The effectiveness of our risk management framework and quantitative models;
- Our ability to maintain or increase our market share, including through successfully implementing our business strategy and undertaking new business initiatives, including through the integration of SVB Leerink; and
- Other factors as discussed in "Risk Factors" under Part I, Item 1A in our 2018 Form 10-K.

We urge investors to consider all of these factors carefully in evaluating the forward-looking statements contained in this Quarterly Report on Form 10-Q. All subsequent written or oral forward-looking statements attributable to us or persons acting on our behalf are expressly qualified in their entirety by these cautionary statements. The forward-looking statements included in this filing are made only as of the date of this filing. We assume no obligation and do not intend to revise or update any forward-looking statements contained in this Quarterly Report on Form 10-Q, except as required by law.

The following discussion and analysis of financial condition and results of operations should be read in conjunction with our unaudited interim consolidated financial statements and accompanying notes as presented in Part I, Item 1 of this report and in conjunction with our 2018 Form 10-K.

**Reclassifications**

Certain prior period amounts, primarily related to presentation changes to our financial statement line items and immaterial changes to our reportable segments, have been reclassified to conform to current period presentations.

**Management's Overview of Second Quarter 2019 Performance**

Overall, we continued to deliver strong results in the second quarter of 2019, marked by continued healthy balance sheet growth, stable credit quality, robust core fee income and strong gains on equity warrants. Our core business continued to perform well as a result of our ongoing focus on innovation companies and their investors and continued efforts to secure client relationships. We saw continued success in working with private equity/venture capital firms, our technology and life science/healthcare clients and clients in our private bank division.

A summary of our performance for the three months ended June 30, 2019 (compared to the three months ended June 30, 2018, where applicable) is as follows:

### BALANCE SHEET

**Assets.** $60.7 billion in average total assets (up 11.5%). $63.8 billion in period-end total assets (up 14.2%).

**Loans.** $29.4 billion in average total loan balances, net of unearned income (up 18.3%). $29.2 billion in period-end total loan balances, net of unearned income (up 12.4%).

**Total Client Funds.** (on-balance sheet deposits and off-balance sheet client investment funds). $142.6 billion in average total client fund balances (up 19.6%). $147.1 billion in period-end total client fund balances (up 18.0%).

**AFS/HTM Fixed Income Investments**$23.1 billion in average fixed income investment securities (down 8.1%). $22.8 billion in period-end fixed income investment securities (down 10.5%).

### EARNINGS

**EPS.** Earnings per diluted share of $6.08 (up 37.6%).

**Net Income.** Consolidated net income available to common stockholders of $318.0 million (up 33.7%).

- Net interest income of $529.4 million (up 13.5%).
- Net interest margin of 3.68% (up 9 bps).
- Noninterest income of $333.8 million (up 73.2%), with non-GAAP core fee income+ of $157.3 million (up 27.8%).
- Noninterest expense of $383.5 million (up 25.4%).

**ROE.** Return on average equity (annualized) (“*ROE*”) performance of 23.29%.

**Operating Efficiency Ratio.** Operating efficiency ratio of 44.43% with a non-GAAP core operating efficiency ratio of 45.49%++.

### CAPITAL

**Capital.** Continued strong capital, with all capital ratios considered “well-capitalized” under banking regulations. SVBFG and SVB capital ratios, respectively, were:

- CET 1 risk-based capital ratio of 12.92% and 12.50%.
- Tier 1 risk-based capital ratio of 13.08% and 12.50%.
- Total risk-based capital ratio of 13.97% and 13.44%.
- Tier 1 leverage ratio of 8.82% and 8.17%.

### CREDIT QUALITY

**Credit Quality.** Continued disciplined underwriting.

- Allowance for loan losses of 1.03% as a percentage of period-end total gross loans.
- Provision for loan losses of 0.26% as a percentage of period-end total gross loans (annualized).
- Net loan charge-offs of 0.23% as a percentage of average total gross loans (annualized).

+ Consists of fee income for deposit services, letters of credit and standby letters of credit, credit cards, client investments, foreign exchange and lending-related activities. This is a non-GAAP financial measure. (See the non-GAAP reconciliation under “Results of Operations—Noninterest Income”)

++ This ratio excludes certain financial line items where performance is typically subject to market or other conditions beyond our control and excludes SVB Leerink revenue and expenses. It is calculated by dividing noninterest expense after adjusting for noninterest expense attributable to SVB Leerink by total revenue after adjusting for noninterest income attributable to SVB Leerink, net gains or losses on investment securities and equity warrant assets, investment banking revenue and commissions. Additionally, noninterest expense and total revenue are adjusted for income or losses and expenses attributable to noncontrolling interests and adjustments to net interest income for a taxable equivalent basis. This is a non-GAAP financial measure. (See the non-GAAP reconciliation under "Results of Operations-Noninterest Expense").

A summary of our performance for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands, except per share data, employees and ratios) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| **Income Statement:** | | | | | | |
| Diluted earnings per share | $ 6.08 | $ 4.42 | 37.6 % | $ 11.51 | $ 8.05 | 43.0 % |
| Net income available to common stockholders | 317,987 | 237,798 | 33.7 | 606,719 | 432,759 | 40.2 |
| Net interest income | 529,403 | 466,443 | 13.5 | 1,042,289 | 886,306 | 17.6 |
| Net interest margin | 3.68% | 3.59% | 9 bps | 3.74% | 3.49% | 25 bps |
| Provision for credit losses | $ 23,946 | $ 29,080 | (17.7) % | $ 52,497 | $ 57,052 | (8.0) % |
| Noninterest income | 333,750 | 192,689 | 73.2 | 614,126 | 348,207 | 76.4 |
| Noninterest expense | 383,522 | 305,739 | 25.4 | 749,186 | 571,156 | 31.2 |
| Non-GAAP core fee income (1) | 157,337 | 123,124 | 27.8 | 311,580 | 238,134 | 30.8 |
| Non-GAAP core fee income, including investment banking revenue and commissions (1) | 220,460 | 123,124 | 79.1 | 438,606 | 238,134 | 84.2 |
| Non-GAAP noninterest income, net of noncontrolling interests (1) | 315,014 | 183,244 | 71.9 | 592,142 | 325,738 | 81.8 |
| Non-GAAP noninterest expense, net of noncontrolling interests (2) | 383,354 | 305,512 | 25.5 | 748,639 | 570,961 | 31.1 |
| **Balance Sheet:** | | | | | | |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Average available-for-sale securities | $ 8,205,333 | $ 10,048,423 | (18.3) % | | $ 7,541,439 | $ 10,396,533 | (27.5) % | |
| Average held-to-maturity securities | 14,922,589 | 15,112,154 | (1.3) | | 15,072,441 | 14,178,427 | 6.3 | |
| Average loans, net of unearned income | 29,406,620 | 24,858,503 | 18.3 | | 28,900,160 | 24,335,762 | 18.8 | |
| Average noninterest-bearing demand deposits | 38,117,893 | 39,814,450 | (4.3) | | 38,170,001 | 38,887,766 | (1.8) | |
| Average interest-bearing deposits | 14,844,315 | 8,157,501 | 82.0 | | 13,177,179 | 8,156,404 | 61.6 | |
| Average total deposits | 52,962,208 | 47,971,951 | 10.4 | | 51,347,180 | 47,044,170 | 9.1 | |
| **Earnings Ratios:** | | | | | | | | |
| Return on average assets (annualized) (3) | 2.10% | 1.75% | 20.0 % | | 2.07% | 1.63% | 27.0 % | |
| Return on average SVBFG stockholders' equity (annualized) (4) | 23.29 | 20.82 | 11.9 | | 22.74 | 19.51 | 16.6 | |
| **Asset Quality Ratios:** | | | | | | | | |
| Allowance for loan losses as a % of total period-end gross loans | 1.03% | 1.10% | (7) bps | | 1.03% | 1.10% | (7) bps | |
| Allowance for loan losses for performing loans as a % of total gross performing loans | 0.85 | 0.90 | (5) | | 0.85 | 0.90 | (5) | |
| Gross loan charge-offs as a % of average total gross loans (annualized) | 0.36 | 0.25 | 11 | | 0.25 | 0.21 | 4 | |
| Net loan charge-offs as a % of average total gross loans (annualized) | 0.23 | 0.22 | 1 | | 0.17 | 0.18 | (1) | |
| **Capital Ratios:** | | | | | | | | |
| SVBFG CET 1 risk-based capital ratio | 12.92% | 12.92% | — bps | | 12.92% | 12.92% | — bps | |
| SVBFG tier 1 risk-based capital ratio | 13.08 | 13.10 | (2) | | 13.08 | 13.10 | (2) | |
| SVBFG total risk-based capital ratio | 13.97 | 14.03 | (6) | | 13.97 | 14.03 | (6) | |
| SVBFG tier 1 leverage ratio | 8.82 | 8.81 | 1 | | 8.82 | 8.81 | 1 | |
| SVBFG tangible common equity to tangible assets (5) | 8.43 | 8.34 | 9 | | 8.43 | 8.34 | 9 | |
| SVBFG tangible common equity to risk-weighted assets (5) | 13.13 | 12.68 | 45 | | 13.13 | 12.68 | 45 | |
| Bank CET 1 risk-based capital ratio | 12.50 | 11.76 | 74 | | 12.50 | 11.76 | 74 | |
| Bank tier 1 risk-based capital ratio | 12.50 | 11.76 | 74 | | 12.50 | 11.76 | 74 | |
| Bank total risk-based capital ratio | 13.44 | 12.72 | 72 | | 13.44 | 12.72 | 72 | |
| Bank tier 1 leverage ratio | 8.17 | 7.72 | 45 | | 8.17 | 7.72 | 45 | |
| Bank tangible common equity to tangible assets (5) | 7.91 | 7.39 | 52 | | 7.91 | 7.39 | 52 | |
| Bank tangible common equity to risk-weighted assets (5) | 12.72 | 11.52 | 120 | | 12.72 | 11.52 | 120 | |
| **Other Ratios:** | | | | | | | | |
| GAAP operating efficiency ratio (6) | 44.43% | 46.39% | (4.2) % | | 45.23% | 46.27% | (2.2) % | |
| Non-GAAP core operating efficiency ratio (2) | 45.49 | 50.40 | (9.7) | | 45.11 | 49.45 | (8.8) | |
| Total costs of deposits (annualized) (7) | 0.36 | 0.05 | 620.0 | | 0.29 | 0.04 | 625.0 | |
| Book value per common share (8) | $ 107.72 | $ 87.53 | 23.1 | | $ 107.72 | $ 87.53 | 23.1 | |
| **Other Statistics:** | | | | | | | | |
| Average full-time equivalent employees | 3,287 | 2,591 | 26.9 % | | 3,257 | 2,545 | 28.0 % | |
| Period-end full-time equivalent employees | 3,314 | 2,626 | 26.2 | | 3,314 | 2,626 | 26.2 | |

(1) See "Results of Operations–Noninterest Income" for a description and reconciliation of non-GAAP core fee income and non-GAAP core fee income including investment banking revenue and commissions.
(2) See "Results of Operations–Noninterest Expense" for a description and reconciliation of non-GAAP noninterest expense and non-GAAP core operating efficiency ratio.
(3) Ratio represents annualized consolidated net income available to common stockholders divided by quarterly average assets.
(4) Ratio represents annualized consolidated net income available to common stockholders divided by quarterly average SVBFG stockholders' equity.
(5) See "Capital Resources–Capital Ratios" for a reconciliation of non-GAAP tangible common equity to tangible assets and tangible common equity to risk-weighted assets.
(6) The operating efficiency ratio is calculated by dividing total noninterest expense by total net interest income plus noninterest income.
(7) Ratio represents annualized total cost of deposits and is calculated by dividing interest expense from deposits by average total deposits.
(8) Book value per common share is calculated by dividing total SVBFG stockholders' equity by total outstanding common shares at period-end.

For more information with respect to our capital ratios, please refer to "Capital Ratios" under "Consolidated Financial Condition-Capital Ratios" below.

**Critical Accounting Policies and Estimates**

The accompanying management's discussion and analysis of results of operations and financial condition is based upon our unaudited interim consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these financial statements in accordance with GAAP requires management to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues, expenses and related disclosure of contingent assets and liabilities. Management evaluates estimates and assumptions on an ongoing basis. Management bases its estimates on historical experiences and various other factors and assumptions that are believed to be reasonable under the circumstances. Actual results may differ materially from these estimates under different assumptions or conditions.

There have been no significant changes during the six months ended June 30, 2019 to the items that we disclosed as our critical accounting policies and estimates in "Management's Discussion and Analysis of Financial Condition and Results of Operations" under Part II, Item 7 of our 2018 Form 10-K.

**Results of Operations**

***Net Interest Income and Margin (Fully Taxable Equivalent Basis)***

Net interest income is defined as the difference between: (i) interest earned on loans, fixed income investments in our available-for-sale and held-to-maturity securities portfolios and short-term investment securities, and (ii) interest paid on funding sources. Net interest margin is defined as annualized net interest income, on a fully taxable equivalent basis, as a percentage of average interest-earning assets. Net interest income and net interest margin are presented on a fully taxable equivalent basis to consistently reflect income from taxable loans and securities and tax-exempt securities based on the federal statutory tax rate of 21.0 percent.

*Analysis of Net Interest Income Changes Due to Volume and Rate (Fully Taxable Equivalent Basis)*

Net interest income is affected by changes in the amount and mix of interest-earning assets and interest-bearing liabilities, referred to as "volume change." Net interest income is also affected by changes in yields earned on interest-earning assets and rates paid on interest-bearing liabilities, referred to as "rate change." The following table sets forth changes in interest income for each major category of interest-earning assets and interest expense for each major category of interest-bearing liabilities. The table also reflects the amount of simultaneous changes attributable to both volume and rate changes for the periods indicated. For this table, changes that are not solely due to either volume or rate are allocated in proportion to the percentage changes in average volume and average rate.

| (Dollars in thousands) | 2019 Compared to 2018 Three months ended June 30, increase (decrease) due to change in Volume | Rate | Total | 2019 Compared to 2018 Six months ended June 30, increase (decrease) due to change in Volume | Rate | Total |
|---|---|---|---|---|---|---|
| Interest income: | | | | | | |
| Federal Reserve deposits, federal funds sold, securities purchased under agreements to resell and other short-term investment securities | $ 14,919 | $ 5,258 | $ 20,177 | $ 22,222 | $ 11,415 | $ 33,637 |
| Fixed income investment portfolio (taxable) | (14,317) | 11,562 | (2,755) | (26,529) | 26,014 | (515) |
| Fixed income investment portfolio (non-taxable) | 3,782 | 350 | 4,132 | 10,402 | 1,129 | 11,531 |
| Loans, net of unearned income | 64,043 | 19,737 | 83,780 | 127,648 | 53,202 | 180,850 |
| Increase in interest income, net | 68,427 | 36,907 | 105,334 | 133,743 | 91,760 | 225,503 |
| Interest expense: | | | | | | |
| Interest bearing checking and savings accounts | (23) | 17 | (6) | (34) | 28 | (6) |
| Money market deposits | 20,849 | 14,379 | 35,228 | 26,549 | 26,655 | 53,204 |
| Money market deposits in foreign offices | (5) | — | (5) | (10) | 2 | (8) |
| Time deposits | 43 | 105 | 148 | 36 | 128 | 164 |
| Sweep deposits in foreign offices | 1,583 | 3,931 | 5,514 | 4,058 | 7,278 | 11,336 |
| Total increase in deposits expense | 22,447 | 18,432 | 40,879 | 30,599 | 34,091 | 64,690 |
| Short-term borrowings | 430 | 185 | 615 | 1,935 | 450 | 2,385 |
| 3.50% Senior Notes | 3 | — | 3 | 7 | — | 7 |
| 5.375% Senior Notes | 9 | — | 9 | 17 | — | 17 |
| Total increase in borrowings expense | 442 | 185 | 627 | 1,959 | 450 | 2,409 |
| Increase in interest expense, net | 22,889 | 18,617 | 41,506 | 32,558 | 34,541 | 67,099 |
| Increase in net interest income | $ 45,538 | $ 18,290 | $ 63,828 | $ 101,185 | $ 57,219 | $ 158,404 |

*Net Interest Income (Fully Taxable Equivalent Basis)*

*Three months ended June 30, 2019 and 2018*

Net interest income increased by $63.8 million to $532.3 million for the three months ended June 30, 2019, compared to $468.5 million for the comparable 2018 period. Overall, our net interest income increased primarily from interest earned on loans, reflective of higher average loan balances driven by strong loan growth from our private equity/venture capital loan portfolio as well as increases from our life science/healthcare and private bank loan portfolios and rate increases subsequent to June 30, 2018. In addition, we saw an increase in interest income from our interest earning cash and short-term investment securities reflective of higher average balances as well as an increase in yields from rate increases. These increases were partially offset by an increase in interest paid on our interest-bearing deposits due to the increase in average interest-bearing deposits as well as continued market rate adjustments on our interest-bearing deposits.

The main factors affecting interest income and interest expense for the three months ended June 30, 2019, compared to the comparable 2018 period are discussed below:

- *Interest income* for the three months ended June 30, 2019 increased by $105.3 million due primarily to:
  - An $83.8 million increase in interest income on loans to $414.1 million for the three months ended June 30, 2019, compared to $330.3 million for the comparable 2018 period. The increase was reflective of an increase in average loan balances of $4.5 billion and an increase in the overall loan yield of 32 basis points to 5.65 percent from 5.33 percent. Gross loan yields, excluding loan interest recoveries and loan fees, increased 29 basis points to 5.01 percent from 4.72 percent, reflective primarily of the benefit of interest rate increases since the second quarter of 2018. Loan fee yields remained relatively flat, while loan interest recoveries contributed 3 basis points for the three months ended June 30, 2019, and
  - A $20.2 million increase in interest income from our interest-earning cash and short-term investment securities. The increase was due to the increase of $3.1 billion in average interest-earning Federal Reserve cash balances as well as the benefit from the impact of the increases in the Federal Funds target rate since June 30, 2018.
- *Interest expense* for the three months ended June 30, 2019 increased by $41.5 million due primarily to:

- A $40.9 million increase in interest expense on deposits due primarily to an increase in interest paid on our interest-bearing money market and foreign sweep deposits due to the growth in average interest-bearing deposits of $6.7 billion as well as market rate adjustments.

*Six months ended June 30, 2019 and 2018*

The main factors affecting interest income and interest expense for the six months ended June 30, 2019, compared to the comparable 2018 period are discussed below:

- *Interest income* for the six months ended June 30, 2019 increased by $225.5 million due primarily to:
  - A $180.9 million increase in interest income on loans to $808.2 million for the six months ended June 30, 2019, compared to $627.4 million for the comparable 2018 period. The increase was reflective of an increase in average loan balances of $4.6 billion and an increase in the overall loan yield of 44 basis points to 5.64 percent from 5.20 percent. Gross loan yields, excluding loan interest recoveries and loan fees, increased 42 basis points to 5.05 percent from 4.63 percent, reflective of the benefit of interest rate increases, partially offset by the strong growth of our lower yielding private equity/venture capital loan portfolio. Our private equity/venture capital loan portfolio represented 50.0 percent and 46.8 percent of our total gross loan portfolio at June 30, 2019 and 2018, respectively. Loan fee yields remained flat, while loan interest recoveries contributed 2 basis points for the six months ended June 30, 2019, and
  - A $33.6 million increase in interest income from our interest earning cash and short-term investment securities. The increase was due to the increase of $2.4 billion in average interest-earning Federal Reserve cash balances driven by deposit growth and the benefit from the impact of increases in the Federal Funds target rate since June 30, 2018.
- *Interest expense* for the six months ended June 30, 2019 increased by $67.1 million primarily due to:
  - A $64.7 million increase in interest expense on deposits due primarily to an increase in interest paid on our interest-bearing money market deposits and foreign sweep deposits due to the growth in average interest-bearing deposits of $5.0 billion as well as market rate adjustments.

*Net Interest Margin (Fully Taxable Equivalent Basis)*

*Three months ended June 30, 2019 and 2018*

- Our net interest margin increased by 9 basis points to 3.68 percent for the three months ended June 30, 2019, compared to 3.59 percent for the comparable 2018 period. The higher margin for the second quarter of 2019 was reflective primarily of the increases in the Federal Funds target rate since June 30, 2018, as well as a shift in the mix of the growth in our interest-earning assets to higher-yielding loans from our fixed income investment securities portfolio. Average loans represented 50.8 percent of average interest earnings assets for the three months ended June 30, 2019, compared to 47.5 percent for the comparable 2018 period.

*Six months ended June 30, 2019 and 2018*

- Our net interest margin increased by 25 basis points to 3.74 percent for the six months ended June 30, 2019, compared to 3.49 percent for the comparable 2018 period. The higher margin for the six months ended June 30, 2019 was reflective primarily of the increases in the Federal Funds target rate since June 30, 2018, as well as a shift in the mix of the growth in our interest-earning assets to higher-yielding loans from our fixed income investment securities portfolio. Average loans represented 51.2 percent of year-to-date average interest earnings assets, compared to 47.3 percent for the comparable 2018 period.

***Average Balances, Yields and Rates Paid (Fully Taxable Equivalent Basis)***

The average yield earned on interest-earning assets is the amount of annualized fully taxable equivalent interest income expressed as a percentage of average interest-earning assets. The average rate paid on funding sources is the amount of annualized interest expense expressed as a percentage of average funding sources. The following tables set forth average assets, liabilities, noncontrolling interests and SVBFG stockholders' equity, interest income, interest expense, annualized yields and rates, and the composition of our annualized net interest margin for the three and six months ended June 30, 2019 and 2018:

***Average Balances, Rates and Yields for the Three Months Ended June 30, 2019 and 2018***

| | Three months ended June 30, | | | | | |
|---|---|---|---|---|---|---|
| | 2019 | | | 2018 | | |
| (Dollars in thousands) | Average Balance | Interest Income/ Expense | Yield/ Rate | Average Balance | Interest Income/ Expense | Yield/ Rate |
| Interest-earning assets: | | | | | | |
| Federal Reserve deposits, federal funds sold, securities purchased under agreements to resell and other short-term investment securities (1) | $ 5,405,899 | $ 26,364 | 1.96% | $ 2,346,820 | $ 6,187 | 1.06% |
| Investment securities: (2) | | | | | | |
| Available-for-sale securities: | | | | | | |
| Taxable | 8,205,333 | 45,347 | 2.22 | 10,048,423 | 46,606 | 1.86 |
| Held-to-maturity securities: | | | | | | |
| Taxable | 13,350,533 | 89,048 | 2.68 | 13,969,843 | 90,544 | 2.60 |
| Non-taxable (3) | 1,572,056 | 13,836 | 3.53 | 1,142,311 | 9,704 | 3.41 |
| Total loans, net of unearned income (4) (5) | 29,406,620 | 414,077 | 5.65 | 24,858,503 | 330,297 | 5.33 |
| Total interest-earning assets | 57,940,441 | 588,672 | 4.07 | 52,365,900 | 483,338 | 3.70 |
| Cash and due from banks | 542,345 | | | 534,908 | | |
| Allowance for loan losses | (311,709) | | | (280,679) | | |
| Other assets (6) | 2,529,409 | | | 1,800,517 | | |
| Total assets | $ 60,700,486 | | | $ 54,420,646 | | |
| Funding sources: | | | | | | |
| Interest-bearing liabilities: | | | | | | |
| Interest bearing checking and savings accounts | $ 459,972 | $ 100 | 0.09% | $ 554,411 | $ 106 | 0.08% |
| Money market deposits | 12,669,422 | 41,249 | 1.31 | 6,265,809 | 6,021 | 0.39 |
| Money market deposits in foreign offices | 162,586 | 16 | 0.04 | 220,334 | 21 | 0.04 |
| Time deposits | 75,721 | 171 | 0.91 | 56,755 | 23 | 0.16 |
| Sweep deposits in foreign offices | 1,476,614 | 5,614 | 1.52 | 1,060,192 | 100 | 0.04 |
| Total interest-bearing deposits | 14,844,315 | 47,150 | 1.27 | 8,157,501 | 6,271 | 0.31 |
| Short-term borrowings | 188,998 | 1,195 | 2.54 | 121,098 | 580 | 1.92 |
| 3.50% Senior Notes | 347,755 | 3,149 | 3.63 | 347,415 | 3,146 | 3.63 |
| 5.375% Senior Notes | 349,048 | 4,870 | 5.60 | 348,399 | 4,861 | 5.60 |
| Total interest-bearing liabilities | 15,730,116 | 56,364 | 1.44 | 8,974,413 | 14,858 | 0.66 |
| Portion of noninterest-bearing funding sources | 42,210,325 | | | 43,391,487 | | |
| Total funding sources | 57,940,441 | 56,364 | 0.39 | 52,365,900 | 14,858 | 0.11 |
| Noninterest-bearing funding sources: | | | | | | |
| Demand deposits | 38,117,893 | | | 39,814,450 | | |
| Other liabilities | 1,232,464 | | | 908,594 | | |
| SVBFG stockholders' equity | 5,477,148 | | | 4,581,591 | | |
| Noncontrolling interests | 142,865 | | | 141,598 | | |
| Portion used to fund interest-earning assets | (42,210,325) | | | (43,391,487) | | |
| Total liabilities, noncontrolling interest, and SVBFG stockholders' equity | $ 60,700,486 | | | $ 54,420,646 | | |
| Net interest income and margin | | $ 532,308 | 3.68% | | $ 468,480 | 3.59% |
| Total deposits | $ 52,962,208 | | | $ 47,971,951 | | |
| Reconciliation to reported net interest income: | | | | | | |
| Adjustments for taxable equivalent basis | | (2,905) | | | (2,037) | |
| Net interest income, as reported | | $ 529,403 | | | $ 466,443 | |

(1) Includes average interest-earning deposits in other financial institutions of $0.9 billion for both the three months ended June 30, 2019 and 2018. For the three months ended June 30, 2019 and 2018, balances also include $3.7 billion and $1.3 billion, respectively, deposited at the FRB, earning interest at the Federal Funds target rate.
(2) Yields on interest-earning investment securities do not give effect to changes in fair value that are reflected in other comprehensive income.
(3) Interest income on non-taxable investment securities is presented on a fully taxable equivalent basis using the federal statutory tax rate of 21.0 percent for all periods presented.
(4) Nonaccrual loans are reflected in the average balances of loans.
(5) Interest income includes loan fees of $44.1 million and $37.8 million for the three months ended June 30, 2019 and 2018, respectively.
(6) Average investment securities of $1.0 billion and $773 million for the three months ended June 30, 2019 and 2018, respectively, were classified as other assets as they were noninterest-earning assets. These investments primarily consisted of non-marketable and other equity securities.

***Average Balances, Rates and Yields for the Six Months Ended June 30, 2019 and 2018***

| (Dollars in thousands) | Six months ended June 30, 2019 Average Balance | 2019 Interest Income/ Expense | 2019 Yield/ Rate | 2018 Average Balance | 2018 Interest Income/ Expense | 2018 Yield/ Rate |
|---|---|---|---|---|---|---|
| Interest-earning assets: | | | | | | |
| Federal Reserve deposits, federal funds sold, securities purchased under agreements to resell and other short-term investment securities (1) | $ 4,935,751 | $ 45,580 | 1.86% | $ 2,529,384 | $ 11,943 | 0.95% |
| Investment securities: (2) | | | | | | |
| Available-for-sale securities: | | | | | | |
| Taxable | 7,541,439 | 80,769 | 2.16 | 10,396,533 | 94,582 | 1.83 |
| Held-to-maturity securities: | | | | | | |
| Taxable | 13,500,091 | 180,343 | 2.69 | 13,196,969 | 167,045 | 2.55 |
| Non-taxable (3) | 1,572,350 | 27,680 | 3.55 | 981,458 | 16,149 | 3.32 |
| Total loans, net of unearned income (4) (5) | 28,900,160 | 808,221 | 5.64 | 24,335,762 | 627,371 | 5.20 |
| Total interest-earning assets | 56,449,791 | 1,142,593 | 4.08 | 51,440,106 | 917,090 | 3.60 |
| Cash and due from banks | 534,769 | | | 467,954 | | |
| Allowance for loan losses | (300,381) | | | (271,931) | | |
| Other assets (6) | 2,439,055 | | | 1,763,487 | | |
| Total assets | $ 59,123,234 | | | $ 53,399,616 | | |
| Funding sources: | | | | | | |
| Interest-bearing liabilities: | | | | | | |
| Interest bearing checking and savings accounts | $ 502,369 | $ 216 | 0.09% | $ 581,399 | $ 222 | 0.08% |
| Money market deposits | 10,881,455 | 63,080 | 1.17 | 6,301,677 | 9,876 | 0.32 |
| Money market deposits in foreign offices | 155,503 | 31 | 0.04 | 200,922 | 39 | 0.04 |
| Time deposits | 63,275 | 200 | 0.64 | 51,919 | 36 | 0.14 |
| Sweep deposits in foreign offices | 1,574,577 | 11,530 | 1.48 | 1,020,487 | 194 | 0.04 |
| Total interest-bearing deposits | 13,177,179 | 75,057 | 1.15 | 8,156,404 | 10,367 | 0.26 |
| Short-term borrowings | 270,740 | 3,399 | 2.53 | 116,605 | 1,014 | 1.75 |
| 3.50% Senior Notes | 347,712 | 6,298 | 3.65 | 347,373 | 6,291 | 3.65 |
| 5.375% Senior Notes | 348,966 | 9,738 | 5.63 | 348,321 | 9,721 | 5.63 |
| Total interest-bearing liabilities | 14,144,597 | 94,492 | 1.35 | 8,968,703 | 27,393 | 0.62 |
| Portion of noninterest-bearing funding sources | 42,305,194 | | | 42,471,403 | | |
| Total funding sources | 56,449,791 | 94,492 | 0.34 | 51,440,106 | 27,393 | 0.11 |
| Noninterest-bearing funding sources: | | | | | | |
| Demand deposits | 38,170,001 | | | 38,887,766 | | |
| Other liabilities | 1,280,981 | | | 930,193 | | |
| SVBFG stockholders' equity | 5,381,022 | | | 4,473,729 | | |
| Noncontrolling interests | 146,633 | | | 139,225 | | |
| Portion used to fund interest-earning assets | (42,305,194) | | | (42,471,403) | | |
| Total liabilities, noncontrolling interest, and SVBFG stockholders' equity | $ 59,123,234 | | | $ 53,399,616 | | |
| Net interest income and margin | | $ 1,048,101 | 3.74% | | $ 889,697 | 3.49% |
| Total deposits | $ 51,347,180 | | | $ 47,044,170 | | |
| Reconciliation to reported net interest income: | | | | | | |
| Adjustments for taxable equivalent basis | | (5,812) | | | (3,391) | |
| Net interest income, as reported | | $ 1,042,289 | | | $ 886,306 | |

(1) Includes average interest-earning deposits in other financial institutions of $0.8 billion and $1.1 billion for the six months ended June 30, 2019, and 2018, respectively. The balance also includes $3.3 billion and $1.3 billion deposited at the FRB, earning interest at the Federal Funds target rate for the six months ended June 30, 2019, and 2018, respectively.
(2) Yields on interest-earning investment securities do not give effect to changes in fair value that are reflected in other comprehensive income.
(3) Interest income on non-taxable available-for-sale securities is presented on a fully taxable-equivalent basis using the federal statutory tax rate of 21.0 percent for all periods presented.
(4) Nonaccrual loans are reflected in the average balances of loans.
(5) Interest income includes loan fees of $80.8 million and $67.7 million for the six months ended June 30, 2019, and 2018, respectively.
(6) Average investment securities of $963 million and $780 million for the six months ended June 30, 2019, and 2018, respectively, were classified as other assets as they were noninterest-earning assets. These investments consisted primarily of non-marketable securities.

***Provision for Credit Losses***

The provision for credit losses is the combination of both the provision for loan losses and the provision for unfunded credit commitments. Our provision for loan losses is a function of our reserve methodology, which is used to determine an appropriate allowance for loan losses for the period. Our reserve methodology is based on our evaluation of the existing allowance for loan losses in relation to total gross loans using historical and other objective information, and on our qualitative assessment of the inherent and identified credit risk of the loan portfolio. Our provision for unfunded credit commitments is determined using a methodology that is similar to the methodology used for calculating the allowance for loan losses, adjusted for factors specific to binding commitments, including the probability of funding and exposure at funding. Our provision for credit losses equals our best estimate of probable credit losses that are inherent in the portfolios at the balance sheet date.

The following table summarizes our allowance for loan losses and the allowance for unfunded credit commitments for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| **(Dollars in thousands, except ratios)** | **2019** | **2018** | **2019** | **2018** |
| Allowance for loan losses, beginning balance | $ 300,151 | $ 274,294 | $ 280,903 | $ 255,024 |
| Provision for loan losses | 19,148 | 27,656 | 44,969 | 54,652 |
| Gross loan charge-offs | (26,435) | (15,428) | (35,435) | (26,015) |
| Loan recoveries | 9,820 | 1,926 | 11,245 | 3,714 |
| Foreign currency translation adjustments | (796) | (1,739) | 206 | (666) |
| Allowance for loan losses, ending balance | $ 301,888 | $ 286,709 | $ 301,888 | $ 286,709 |
| Allowance for unfunded credit commitments, beginning balance | 57,970 | 52,823 | 55,183 | 51,770 |
| Provision for unfunded credit commitments | 4,798 | 1,424 | 7,528 | 2,400 |
| Foreign currency translation adjustments | (104) | (143) | (47) | (66) |
| Allowance for unfunded credit commitments, ending balance (1) | $ 62,664 | $ 54,104 | $ 62,664 | $ 54,104 |
| Ratios and other information: | | | | |
| Provision for loan losses as a percentage of period-end total gross loans (annualized) | 0.26% | 0.42% | 0.31% | 0.42% |
| Gross loan charge-offs as a percentage of average total gross loans (annualized) | 0.36 | 0.25 | 0.25 | 0.21 |
| Net loan charge-offs as a percentage of average total gross loans (annualized) | 0.23 | 0.22 | 0.17 | 0.18 |
| Allowance for loan losses as a percentage of period-end total gross loans | 1.03 | 1.10 | 1.03 | 1.10 |
| Provision for credit losses | $ 23,946 | $ 29,080 | $ 52,497 | $ 57,052 |
| Period-end total gross loans | 29,370,403 | 26,160,782 | 29,370,403 | 26,160,782 |
| Average total gross loans | 29,568,968 | 25,014,587 | 29,065,111 | 24,488,608 |

(1) The “allowance for unfunded credit commitments” is included as a component of “Other liabilities” on our consolidated balance sheets.

*Three months ended June 30, 2019 and 2018*

Our provision for credit losses was $23.9 million for the three months ended June 30, 2019, consisting of a provision for loan losses of $19.1 million and a provision for unfunded credit commitments of $4.8 million. Our provision for credit losses was $29.1 million for the three months ended June 30, 2018, consisting of a provision for loan losses of $27.7 million and a provision for unfunded credit commitments of $1.4 million.

The provision for loan losses of $19.1 million for the three months ended June 30, 2019 reflects an increase of $7.5 million for our performing loans, $10.9 million for net new nonaccrual loans, $7.3 million for charge-offs not specifically reserved for and $3.2 million in additional reserves for period-end loan growth, partially offset by recoveries of $9.8 million.

The provision for unfunded credit commitments of $4.8 million was driven primarily by growth in unfunded credit commitments of $0.7 billion for three months ended June 30, 2019.

The provision for loan losses of $27.7 million for the three months ended June 30, 2018 reflects primarily an increase of $13.4 million in net new specific reserves for nonaccrual loans, additional reserves of $12.5 million for period-end loan growth, $11.4 million for charge-offs not specifically reserved for and an additional $3.4 million for performing loan reserves, partially

offset by a decrease in reserves of $12.5 million for our performing loans from certain reserve methodology enhancements made to our qualitative reserve for large loan exposure as a result of growth within our higher credit quality private equity/venture capital loan portfolios.

The provision for unfunded credit commitments of $1.4 million for the three months ended June 30, 2018 was primarily driven by increased reserves of $4.5 million from growth in unfunded credit commitment balances of $1.6 billion, partially offset by a decrease in reserves of $3.5 million reflective of the methodology enhancements mentioned above.

Gross loan charge-offs were $26.4 million for the three months ended June 30, 2019, of which $7.3 million was not specifically reserved for in prior quarters. Gross loan charge-offs were primarily driven by a $13.1 million charge-off for one mid-stage life science/healthcare portfolio client previously included in our nonaccrual loan portfolio. The remaining charge-offs came primarily from our early-stage clients.

Gross loan charge-offs were $15.4 million for the three months ended June 30, 2018, of which $11.4 million was not specifically reserved for in prior quarters. Gross loan charge-offs included $13.4 million from our software/internet loan portfolio and consisted primarily of $8.7 million for one sponsor-led buyout loan with the remaining $4.7 million primarily from early-stage clients.

*Six months ended June 30, 2019 and 2018*

Our provision for credit losses was $52.5 million for the six months ended June 30, 2019, consisting of a provision for loan losses of $45.0 million and a provision for unfunded credit commitments of $7.5 million. Our provision for credit losses was $57.1 million for the six months ended June 30, 2018, consisting of a provision for loan losses of $54.7 million and a provision for unfunded credit commitments of $2.4 million.

The provision for loan losses of $45.0 million for the six months ended June 30, 2019 was reflective primarily of $38.4 million in net new specific reserves for nonaccrual loans, $12.2 million for charge-offs not specifically reserved for in prior quarters, $7.3 million from period-end loan growth, partially offset by recoveries of $11.2 million.

The provision for loan losses of $54.7 million for the six months ended June 30, 2018 was reflective primarily of $26.5 million from period-end loan growth, $24.7 million in net new specific reserves for nonaccrual loans and $14.8 million for charge-offs not specifically reserved for in prior quarters, offset by a decrease in reserves of $12.5 for our performing loans from certain reserve methodology enhancements made to our qualitative reserve for large loan exposure as a result of growth within our higher credit quality private equity/venture capital loan portfolios.

The provision for unfunded credit commitments of $7.5 million for six months ended June 30, 2019 was driven primarily by growth in unfunded credit commitments of $2.0 billion.

Gross loan charge-offs were $35.4 million for the six months ended June 30, 2019, of which $12.2 million was not specifically reserved for in prior quarters. Gross loan charge-offs included $17.5 million from our life science/healthcare loan portfolio and $11.2 million from our software/internet loan portfolio. Gross loan charge-offs for our life science/healthcare portfolio were driven primarily by $13.1 million from one mid-stage client. Gross loan charge-offs for our software/internet loan portfolio were driven primarily by our early-stage clients.

Gross loan charge-offs of $26.0 million for the six months ended June 30, 2018 included $20.1 million from our software/internet loan portfolio and $4.3 million from our hardware loan portfolio and consisted primarily of $10.5 million from early-stage clients, $8.7 million for one sponsor-led buyout loan and $3.2 million from one late-stage client.

See “Consolidated Financial Condition—Credit Quality and Allowance for Loan Losses” below and Note 8—“Loans, Allowance for Loan Losses and Allowance for Unfunded Credit Commitments” of the “Notes to Interim Consolidated Financial Statements (unaudited)” under Part I, Item 1 of this report for further details on our allowance for loan losses.

***Noninterest Income***

For the three and six months ended June 30, 2019, noninterest income was $333.8 million and $614.1 million, respectively, compared to $192.7 million and $348.2 million for the comparable 2018 periods. For the three and six months ended June 30, 2019, non-GAAP noninterest income, net of noncontrolling interests was $315.0 million and $592.1 million, respectively, compared to $183.2 million and $325.7 million for the comparable 2018 periods. For the three and six months ended June 30, 2019, non-GAAP core fee income including investment banking revenue and commissions was $220.5 million and $438.6 million, respectively, compared to $123.1 million and $238.1 million for the comparable 2018 periods. For the three and six months ended June 30, 2019, non-GAAP core fee income was $157.3 million and $311.6 million, respectively, compared to $123.1 million and $238.1 million for the comparable 2018 periods. (See reconciliations of non-GAAP measures used below under “Use of Non-GAAP Financial Measures”.)

*Use of Non-GAAP Financial Measures*

To supplement our unaudited interim consolidated financial statements presented in accordance with GAAP, we use certain non-GAAP measures of financial performance (including, but not limited to, non-GAAP core fee income, non-GAAP core fee income including investment banking revenue and commissions, non-GAAP noninterest income, and non-GAAP net gains on investment securities). These supplemental performance measures may vary from, and may not be comparable to, similarly titled measures by other companies in our industry. Non-GAAP financial measures are not in accordance with, or an alternative for, GAAP. Generally, a non-GAAP financial measure is a numerical measure of a company's performance that either excludes or includes amounts that are not normally excluded or included in the most directly comparable measure calculated and presented in accordance with GAAP. A non-GAAP financial measure may also be a financial metric that is not required by GAAP or other applicable requirement.

We believe these non-GAAP financial measures, when taken together with the corresponding GAAP financial measures, provide meaningful supplemental information regarding our performance by excluding items that represent income attributable to investors other than us and our subsidiaries and certain other non-recurring items. Our management uses, and believes that investors benefit from referring to, these non-GAAP financial measures in assessing our operating results and when planning, forecasting and analyzing future periods. However, these non-GAAP financial measures should be considered in addition to, and not as a substitute for or preferable to, financial measures prepared in accordance with GAAP.

Included in net income is income and expense attributable to noncontrolling interests. We recognize, as part of our investment funds management business through SVB Capital and SVB Leerink, the entire income or loss from funds consolidated in accordance with ASC Topic 810 as discussed in Note 1 —"Basis of Presentation" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report. We are required under GAAP to consolidate 100% of the results of these entities, even though we may own less than 100% of such entities. The relevant amounts attributable to investors other than us are reflected under "Net Income Attributable to Noncontrolling Interests" on our statements of income. Where applicable, the tables below for noninterest income and net gains on investment securities exclude noncontrolling interests.

Core fee income is a non-GAAP financial measure, which represents GAAP noninterest income, but excludes certain line items where performance is typically subject to market or other conditions beyond our control, primarily our net gains (losses) on investment securities and equity warrant assets. Core fee income includes client investment fees, foreign exchange fees, credit card fees, deposit service charges, lending related fees and letters of credit and letters of credit fees.

Core fee income including investment banking revenue and commissions is a non-GAAP measure, which represents GAAP noninterest income, but excludes certain line items where performance is typically subject to market or other conditions beyond our control.

The following table provides a reconciliation of GAAP noninterest income to non-GAAP noninterest income, net of noncontrolling interests, for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| GAAP noninterest income | $ 333,750 | $ 192,689 | 73.2% | $ 614,126 | $ 348,207 | 76.4 % |
| Less: income attributable to noncontrolling interests, including carried interest allocation | 18,736 | 9,445 | 98.4 | 21,984 | 22,469 | (2.2) |
| Non-GAAP noninterest income, net of noncontrolling interests | $ 315,014 | $ 183,244 | 71.9 | $ 592,142 | $ 325,738 | 81.8 |

The following table provides a reconciliation of GAAP noninterest income to non-GAAP core fee income for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| GAAP noninterest income | $ 333,750 | $ 192,689 | 73.2% | $ 614,126 | $ 348,207 | 76.4% |
| Less: gains on investment securities, net | 47,698 | 36,114 | 32.1 | 76,726 | 45,172 | 69.9 |
| Less: gains on equity warrant assets, net | 48,347 | 19,061 | 153.6 | 69,652 | 38,252 | 82.1 |
| Less: other noninterest income | 17,245 | 14,390 | 19.8 | 29,142 | 26,649 | 9.4 |
| Non-GAAP core fee income including investment banking revenue and commissions (1) | $ 220,460 | $ 123,124 | 79.1 | $ 438,606 | $ 238,134 | 84.2 |
| Less: investment banking revenue | 48,694 | — | — | 98,489 | — | — |
| Less: commissions | 14,429 | — | — | 28,537 | — | — |
| Non-GAAP core fee income (2) | $ 157,337 | $ 123,124 | 27.8 | $ 311,580 | $ 238,134 | 30.8 |

(1) Non-GAAP core fee income including investment banking revenue and commissions represents noninterest income, but excludes certain line items where performance is typically subject to market or other conditions beyond our control.

(2) Non-GAAP core fee income represents noninterest income, but excludes certain line items where performance is typically subject to market or other conditions beyond our control, as well as our investment banking revenue and commissions, and includes client investment fees, foreign exchange fees, credit card fees, deposit service charges, lending related fees and letters of credit and standby letters of credit fees.

*Gains on Investment Securities, Net*

Net gains on investment securities include gains and losses from our non-marketable and other equity securities, which include public equity securities held as a result of exercised equity warrant assets, as well as gains and losses from sales of our AFS debt securities portfolio, when applicable.

Our non-marketable and other equity securities portfolio primarily represents investments in venture capital and private equity funds, SPD Silicon Valley Bank Co., Ltd. (the Bank's joint venture bank in China ("SPD-SVB")), debt funds, private and public portfolio companies and qualified affordable housing projects. We experience variability in the performance of our non-marketable and other equity securities from period to period, which results in net gains or losses on investment securities (both realized and unrealized). This variability is due to a number of factors, including unrealized changes in the values of our investments, changes in the amount of realized gains and losses from distributions, changes in liquidity events and general economic and market conditions. Unrealized gains or losses from non-marketable and other equity securities for any single period are typically driven by valuation changes, and are therefore subject to potential increases or decreases in future periods. Such variability may lead to volatility in the gains or losses from investment securities. As such, our results for a particular period are not necessarily indicative of our expected performance in a future period.

The extent to which any unrealized gains or losses will become realized is subject to a variety of factors, including, among other things, the expiration of certain sales restrictions to which these equity securities may be subject to (e.g. lock-up agreements), changes in prevailing market prices, market conditions, the actual sales or distributions of securities, and the timing of such actual sales or distributions, which, to the extent such securities are managed by our managed funds, are subject to our funds' separate discretionary sales/distributions and governance processes.

Our AFS securities portfolio is a fixed income investment portfolio that is managed with the objective of earning an appropriate portfolio yield over the long-term while maintaining sufficient liquidity and credit diversification as well as addressing our asset/liability management objectives. Though infrequent, sales of debt securities in our AFS securities portfolio may result in net gains or losses and are conducted pursuant to the guidelines of our investment policy related to the management of our liquidity position and interest rate risk.

*Three months ended June 30, 2019 and 2018*

For the three months ended June 30, 2019, we had net gains on investment securities of $47.7 million, compared to $36.1 million for the comparable 2018 period. Non-GAAP net gains on investment securities, net of noncontrolling interests, were $29.1 million for the three months ended June 30, 2019, compared to non-GAAP net gains, net of controlling interest of $26.4 million for the comparable 2018 period.

Non-GAAP net gains on investment securities, net of noncontrolling interests, of $29.1 million for the three months ended June 30, 2019 were driven by the following:

- Gains of $15.5 million from managed funds of funds portfolio, related primarily to net unrealized valuation increases in the public company investments held by the funds in the portfolio, and
- Gains of $7.3 million from our strategic and other investments portfolio, comprised primarily of net unrealized valuation increases in private and public companies held in our strategic venture capital funds.

*Six months ended June 30, 2019 and 2018*

For the six months ended June 30, 2019, we had net gains on investment securities of $76.7 million, compared to $45.2 million for the comparable 2018 period. Non-GAAP net gains on investment securities, net of noncontrolling interests, were $54.7 million for the six months ended June 30, 2019, compared to $22.6 million for the comparable 2018 period.

Non-GAAP net gains, net of noncontrolling interests, of $54.7 million for the six months ended June 30, 2019 were driven primarily by the following:

- Gains of $22.3 million from our strategic and other investments portfolio, comprised primarily of net unrealized valuation increases in private and public companies held in our strategic venture capital funds and a realized gain for one company in our direct equity portfolio due to M&A activity,
- Gains of $18.0 million from managed funds of funds portfolio, related primarily to net unrealized valuation increases in the public company investments held by the funds in the portfolio, and
- Gains of $10.1 million from our public equity securities portfolio primarily attributable to the sale of our shares from exercised warrants in one company which were sold as soon as practicable following the lock-up period expiration.

The following tables provide a reconciliation of GAAP total gains (losses) on investment securities, net, to non-GAAP net gains (losses) on investment securities, net of noncontrolling interests, for the three and six months ended June 30, 2019 and 2018:

| (Dollars in thousands) | Managed Funds of Funds | Managed Direct Venture Funds | Public Equity Securities | Debt Funds | Sales of AFS Securities | Strategic and Other Investments | SVB Leerink | Total |
|---|---|---|---|---|---|---|---|---|
| **Three months ended June 30, 2019** | | | | | | | | |
| Total gains (losses) on investment securities, net | $ 32,335 | $ 4,101 | $ 444 | $ 1,342 | $ (275) | $ 7,311 | $ 2,440 | $ 47,698 |
| Less: income attributable to noncontrolling interests, including carried interest allocation | 16,852 | 1,711 | — | — | — | — | 35 | 18,598 |
| Non-GAAP net gains (losses) on investment securities, net of noncontrolling interests | $ 15,483 | $ 2,390 | $ 444 | $ 1,342 | $ (275) | $ 7,311 | $ 2,405 | $ 29,100 |
| | | | | | | | | |
| **Three months ended June 30, 2018** | | | | | | | | |
| Total gains (losses) on investment securities, net | $ 17,531 | $ (405) | $ 140 | $ 726 | $ — | $ 18,122 | $ — | $ 36,114 |
| Less: income (loss) attributable to noncontrolling interests, including carried interest allocation | 9,793 | (121) | — | — | — | — | — | 9,672 |
| Non-GAAP net gains (losses) on investment securities, net of noncontrolling interests | $ 7,738 | $ (284) | $ 140 | $ 726 | $ — | $ 18,122 | $ — | $ 26,442 |
| | | | | | | | | |
| **Six months ended June 30, 2019** | | | | | | | | |
| Total gains (losses) on investment securities, net | $ 38,564 | $ 3,467 | $ 10,080 | $ 1,342 | $ (3,905) | $ 22,313 | $ 4,865 | $ 76,726 |
| Less: income attributable to noncontrolling interests, including carried interest allocation | 20,597 | 1,402 | — | — | — | — | 35 | 22,034 |
| Non-GAAP net gains (losses) on investment securities, net of noncontrolling interests | $ 17,967 | $ 2,065 | $ 10,080 | $ 1,342 | $ (3,905) | $ 22,313 | $ 4,830 | $ 54,692 |
| | | | | | | | | |
| **Six months ended June 30, 2018** | | | | | | | | |
| Total gains (losses) on investment securities, net | $ 36,604 | $ 1,514 | $ (22,142) | $ (1,573) | $ — | $ 30,769 | $ — | $ 45,172 |
| Less: income attributable to noncontrolling interests, including carried interest allocation | 21,990 | 587 | — | — | — | — | — | 22,577 |
| Non-GAAP net gains (losses) on investment securities, net of noncontrolling interests | $ 14,614 | $ 927 | $ (22,142) | $ (1,573) | $ — | $ 30,769 | $ — | $ 22,595 |

*Gains on Equity Warrant Assets, Net*

*Three months ended June 30, 2019 and 2018*

Net gains on equity warrant assets were $48.3 million for the three months ended June 30, 2019, compared to net gains of $19.1 million for the comparable 2018 period. Net gains on equity warrant assets for the three months ended June 30, 2019 consisted of:

- Net gains of $40.2 million from the exercise of equity warrant assets compared to net gains of $8.9 million, primarily driven by healthy gains from IPO activity, and
- Net gains of $9.2 million from increases in warrant valuations compared to net gains of $11.0 million, driven by valuation increases in our private company warrant portfolio driven by healthy funding rounds during the three months ended June 30, 2019.

*Six months ended June 30, 2019 and 2018*

Net gains on equity warrant assets were $69.7 million for the six months ended June 30, 2019, compared to net gains of $38.3 million for the comparable 2018 period. Net gains on equity warrant assets for the six months ended June 30, 2019 consisted of:

- Net gains of $49.2 million from the exercise of equity warrant assets compared to net gains of $20.5 million, reflective primarily of increased IPO activity during the six months ended June 30, 2019, and
- Net gains of $22.4 million from changes in warrant valuation increases compared to net gains of $19.5 million, driven by valuation increases in our private company warrant portfolio during the six months ended June 30, 2019.

A summary of gains on equity warrant assets, net, for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| **(Dollars in thousands)** | **2019** | **2018** | **% Change** | **2019** | **2018** | **% Change** |
| Equity warrant assets (1): | | | | | | |
| Gains on exercises, net | $ 40,226 | $ 8,875 | NM | $ 49,180 | $ 20,509 | 139.8% |
| Terminations | (1,045) | (826) | 26.5 | (1,884) | (1,726) | 9.2 |
| Changes in fair value, net | 9,166 | 11,012 | (16.8) | 22,356 | 19,469 | 14.8 |
| Total gains on equity warrant assets, net | $ 48,347 | $ 19,061 | 153.6 | $ 69,652 | $ 38,252 | 82.1 |

NM—Not meaningful

(1) At June 30, 2019, we held warrants in 2,173 companies, compared to 1,967 companies at June 30, 2018. The total fair value of our warrant portfolio was $158.0 million at June 30, 2019 and $143.7 million at June 30, 2018. Warrants in 22 companies each had fair values greater than $1.0 million and collectively represented $51.8 million, or 32.8 percent, of the fair value of the total warrant portfolio at June 30, 2019. Warrants in 15 companies each had fair values greater than $1.0 million and collectively represented $38.6 million, or 26.8 percent, of the fair value of the total warrant portfolio at June 30, 2018.

*Non-GAAP Core Fee Income*

| (Dollars in thousands) | Three months ended June 30, 2019 | 2018 | % Change | Six months ended June 30, 2019 | 2018 | % Change |
|---|---|---|---|---|---|---|
| Non-GAAP core fee income (1): | | | | | | |
| Client investment fees | $ 45,744 | $ 29,452 | 55.3% | $ 90,226 | $ 52,327 | 72.4% |
| Foreign exchange fees | 38,506 | 34,077 | 13.0 | 76,554 | 67,904 | 12.7 |
| Credit card fees | 28,790 | 22,926 | 25.6 | 56,273 | 44,618 | 26.1 |
| Deposit service charges | 22,075 | 18,794 | 17.5 | 43,014 | 36,493 | 17.9 |
| Lending related fees | 11,213 | 9,528 | 17.7 | 25,150 | 20,263 | 24.1 |
| Letters of credit and standby letters of credit fees | 11,009 | 8,347 | 31.9 | 20,363 | 16,529 | 23.2 |
| Total non-GAAP core fee income (1) | $ 157,337 | $ 123,124 | 27.8 | $ 311,580 | $ 238,134 | 30.8 |
| Investment banking revenue | 48,694 | — | — | 98,489 | — | — |
| Commissions | 14,429 | — | — | 28,537 | — | — |
| Total non-GAAP core fee income including investment banking revenue and commissions (2) | $ 220,460 | $ 123,124 | 79.1 | $ 438,606 | $ 238,134 | 84.2 |

(1) This non-GAAP measure represents noninterest income, but excludes certain line items where performance is typically subject to market or other conditions beyond our control. See "Use of Non-GAAP Measures" above.
(2) This non-GAAP measure represents noninterest income, but excludes certain line items where performance is typically subject to market or other conditions beyond our control, as well as investment banking revenue and commissions. See "Use of Non-GAAP Measures" above.

*Client Investment Fees*

Client investment fees were $45.7 million and $90.2 million for the three and six months ended June 30, 2019, compared to $29.5 million and $52.3 million for the comparable 2018 periods. The increases were reflective of the large increases in average client investment funds driven by our clients' increased utilization of our off-balance sheet sweep money market funds and products managed by SVB Asset Management. Client investment fees also benefited from improved spreads on our client investment funds due to increases in general market rates since the second quarter ended June 30, 2018. A summary of client investment fees by instrument type for the three and six months ended June 30, 2019 and 2018 is as follows:

| (Dollars in thousands) | Three months ended June 30, 2019 | 2018 | % Change | Six months ended June 30, 2019 | 2018 | % Change |
|---|---|---|---|---|---|---|
| Client investment fees by type: | | | | | | |
| Sweep money market fees | $ 26,952 | $ 17,178 | 56.9% | $ 53,496 | $ 29,500 | 81.3% |
| Asset management fees | 6,956 | 5,730 | 21.4 | 13,628 | 11,088 | 22.9 |
| Repurchase agreement fees | 11,836 | 6,544 | 80.9 | 23,102 | 11,739 | 96.8 |
| Total client investment fees | $ 45,744 | $ 29,452 | 55.3 | $ 90,226 | $ 52,327 | 72.4 |

The following table summarizes average client investment funds for the three and six months ended June 30, 2019 and 2018:

| (Dollars in millions) | Three months ended June 30, 2019 | 2018 | % Change | Six months ended June 30, 2019 | 2018 | % Change |
|---|---|---|---|---|---|---|
| Sweep money market funds | $ 40,017 | $ 30,164 | 32.7% | $ 39,911 | $ 28,148 | 41.8% |
| Client investment assets under management (1) | 40,825 | 33,443 | 22.1 | 40,036 | 32,071 | 24.8 |
| Repurchase agreements | 8,810 | 7,705 | 14.3 | 8,586 | 7,626 | 12.6 |
| Total average client investment funds (2) | $ 89,652 | $ 71,312 | 25.7 | $ 88,533 | $ 67,845 | 30.5 |

(1) These funds represent investments in third-party money market mutual funds and fixed-income securities managed by SVB Asset Management.
(2) Client investment funds are maintained at third-party financial institutions and are not recorded on our balance sheet.

The following table summarizes period-end client investment funds at June 30, 2019 and December 31, 2018:

| (Dollars in millions) | June 30, 2019 | December 31, 2018 | % Change |
|---|---|---|---|
| Sweep money market funds | $ 40,008 | $ 38,348 | 4.3% |
| Client investment assets under management (1) | 41,614 | 39,214 | 6.1 |
| Repurchase agreements | 9,873 | 8,422 | 17.2 |
| Total period-end client investment funds (2) | $ 91,495 | $ 85,984 | 6.4 |

(1) These funds represent investments in third-party money market mutual funds and fixed-income securities managed by SVB Asset Management.
(2) Client investment funds are maintained at third-party financial institutions and are not recorded on our balance sheet.

*Foreign Exchange Fees*

Foreign exchange fees were $38.5 million and $76.6 million for the three and six months ended June 30, 2019, respectively, compared to $34.1 million and $67.9 million for the comparable 2018 periods. The increase in foreign exchange fees was driven primarily by increases in spot contract commissions driven by increased volume of trades for the three and six months ended June 30, 2019 compared to the 2018 periods. The volume of trades for spot contracts increased 13.8 and 17.9 percent for the three and six months ended June 30, 2019, respectively, compared to the comparable 2018 periods reflective primarily of our global expansion initiative and increased client engagement efforts. A summary of foreign exchange fee income by instrument type for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| Foreign exchange fees by instrument type: | | | | | | |
| Spot contract commissions | $ 34,696 | $ 31,548 | 10.0 % | $ 69,725 | $ 62,750 | 11.1 % |
| Forward contract commissions | 3,778 | 2,455 | 53.9 | 6,773 | 4,940 | 37.1 |
| Option premium fees | 32 | 74 | (56.8) | 56 | 214 | (73.8) |
| Total foreign exchange fees | $ 38,506 | $ 34,077 | 13.0 | $ 76,554 | $ 67,904 | 12.7 |

*Credit Card Fees*

Credit card fees were $28.8 million and $56.3 million for the three and six months ended June 30, 2019, respectively, compared to $22.9 million and $44.6 million for the comparable 2018 periods. The increases were primarily due to higher gross interchange fee income driven by an increase in transaction volume reflective of higher spending by our commercial clients and our focus on our credit card business as a key area targeted for growth. The increase in gross interchange fee income was partially offset by an increase in rebates/rewards expense for the three and six months ended June 30, 2019. A summary of credit card fees by instrument type for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| Credit card fees by instrument type: | | | | | | |
| Card interchange fees, net | $ 22,855 | $ 18,137 | 26.0% | $ 44,248 | $ 35,697 | 24.0% |
| Merchant service fees | 4,286 | 3,425 | 25.1 | 8,821 | 6,331 | 39.3 |
| Card service fees | 1,649 | 1,364 | 20.9 | 3,204 | 2,590 | 23.7 |
| Total credit card fees | $ 28,790 | $ 22,926 | 25.6 | $ 56,273 | $ 44,618 | 26.1 |

*Deposit Service Charges*

Deposit service charges were $22.1 million and $43.0 million for the three and six months ended June 30, 2019, respectively, compared to $18.8 million and $36.5 million for the comparable 2018 periods. The increases were reflective of higher deposit client counts as well as higher volumes of our transaction-based fee products during the three and six months ended June 30, 2019.

*Lending Related Fees*

Lending related fees were $11.2 million and $25.2 million for the three and six months ended June 30, 2019, respectively,

compared to $9.5 million and $20.3 million for the comparable 2018 periods. The increases were due primarily to an increase in syndication fee income for the three and six months ended June 30, 2019. A summary of lending related fees by type for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| Lending related fees by instrument type: | | | | | | |
| Unused commitment fees | $ 7,051 | $ 7,827 | (9.9)% | $ 16,721 | $ 16,584 | 0.8% |
| Other | 4,162 | 1,701 | 144.7 | 8,429 | 3,679 | 129.1 |
| Total lending related fees | $ 11,213 | $ 9,528 | 17.7 | $ 25,150 | $ 20,263 | 24.1 |

*Letters of Credit and Standby Letters of Credit Fees*

Letters of credit and standby letters of credit fees were $11.0 million and $20.4 million for the three and six months ended June 30, 2019, respectively, compared to $8.3 million and $16.5 million for the comparable 2018 periods. The increases were primarily driven by increases in deferred fee income reflective of larger letter of credit issuances.

*Investment Banking Revenue*

Investment banking revenue was $48.7 million and $98.5 million for the three and six months ended June 30, 2019, respectively, consisting primarily of underwriting fees. A summary of investment banking revenue by type for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| Investment banking revenue: | | | | | | |
| Underwriting fees | $ 42,584 | $ — | — | $ 78,356 | $ — | — |
| Advisory fees | 5,315 | — | — | 17,588 | — | — |
| Private placements and other | 795 | — | — | 2,545 | — | — |
| Total investment banking revenue | $ 48,694 | $ — | — | $ 98,489 | $ — | — |

*Commissions*

Commissions for the three and six months ended June 30, 2019 were $14.4 million and $28.5 million, respectively, which were driven by client trading activity, consistent with market volumes.

*Other Noninterest Income*

Total other noninterest income was $17.2 million and $29.1 million for the three and six months ended June 30, 2019, respectively, compared to $14.4 million and $26.6 million for the comparable 2018 periods. The increases were due primarily to an increase in fund management fees due to the inclusion of SVB Leerink in our financial results as of January 4, 2019. A summary of other noninterest income for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| Other noninterest income by instrument type: | | | | | | |
| Fund management fees | $ 7,758 | $ 5,929 | 30.8% | $ 15,799 | $ 11,665 | 35.4 % |
| Net gains on revaluation of foreign currency instruments, net of foreign exchange forward contracts (1) | 587 | 236 | 148.7 | 251 | 189 | 32.8 |
| Other service revenue (2) | 8,900 | 8,225 | 8.2 | 13,092 | 14,795 | (11.5) |
| Total other noninterest income | $ 17,245 | $ 14,390 | 19.8 | $ 29,142 | $ 26,649 | 9.4 |

(1) Represents the net revaluation of client and internal foreign currency denominated financial instruments. We enter into foreign exchange forward contracts to economically reduce our foreign exchange exposure related to client and internal foreign currency denominated financial instruments.

(2) Includes dividends on FHLB/FRB stock, correspondent bank rebate income, incentive fees related to carried interest, valuation fee income and other fee income.

***Noninterest Expense***

A summary of noninterest expense for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| **(Dollars in thousands)** | **2019** | **2018** | **% Change** | **2019** | **2018** | **% Change** |
| Compensation and benefits | $ 243,172 | $ 181,955 | 33.6 % | $ 481,233 | $ 347,761 | 38.4 % |
| Professional services | 40,830 | 46,813 | (12.8) | 77,816 | 75,538 | 3.0 |
| Premises and equipment | 23,911 | 19,173 | 24.7 | 45,611 | 37,718 | 20.9 |
| Net occupancy | 16,687 | 13,288 | 25.6 | 32,735 | 26,904 | 21.7 |
| Business development and travel | 17,022 | 12,095 | 40.7 | 32,376 | 23,286 | 39.0 |
| FDIC and state assessments | 4,483 | 10,326 | (56.6) | 8,462 | 19,756 | (57.2) |
| Other | 37,417 | 22,089 | 69.4 | 70,953 | 40,193 | 76.5 |
| Total noninterest expense | $ 383,522 | $ 305,739 | 25.4 | $ 749,186 | $ 571,156 | 31.2 |

Included in noninterest expense is expense attributable to noncontrolling interests. See below for a description and reconciliation of non-GAAP noninterest expense and non-GAAP core operating efficiency ratio, both of which exclude noncontrolling interests.

*Non-GAAP Noninterest Expense*

We use and report non-GAAP noninterest expense, non-GAAP taxable equivalent revenue and non-GAAP core operating efficiency ratio, which excludes noncontrolling interests and SVB Leerink. We believe these non-GAAP financial measures, when taken together with the corresponding GAAP financial measures, provide meaningful supplemental information regarding our performance by: (i) excluding certain items that represent expenses attributable to investors other than us and our subsidiaries, or certain items that do not occur every reporting period; or (ii) providing additional information used by management that is not otherwise required by GAAP or other applicable requirements. Our management uses, and believes that investors benefit from referring to, these non-GAAP financial measures in assessing our operating results and when planning, forecasting and analyzing future periods. However, these non-GAAP financial measures should be considered in addition to, not as a substitute for or preferable to, financial measures prepared in accordance with GAAP.

The table below provides a summary of non-GAAP noninterest expense and non-GAAP core operating efficiency ratio for the three and six months ended June 30, 2019 and 2018:

| Non-GAAP core operating efficiency ratio (Dollars in thousands, except ratios) | Three months ended June 30, 2019 | Three months ended June 30, 2018 | % Change | Six months ended June 30, 2019 | Six months ended June 30, 2018 | % Change |
|---|---|---|---|---|---|---|
| GAAP noninterest expense | $ 383,522 | $ 305,739 | 25.4 % | $ 749,186 | $ 571,156 | 31.2 % |
| Less: expense attributable to noncontrolling interests | 168 | 227 | (26.0) | 547 | 195 | 180.5 |
| Non-GAAP noninterest expense, net of noncontrolling interests | 383,354 | 305,512 | 25.5 | 748,639 | 570,961 | 31.1 |
| Less: expense attributable to SVB Leerink | 61,935 | — | — | 122,475 | — | — |
| Non-GAAP noninterest expense, net of noncontrolling interests and SVB Leerink | $ 321,419 | $ 305,512 | 5.2 | $ 626,164 | $ 570,961 | 9.7 |
| | | | | | | |
| GAAP net interest income | $ 529,403 | $ 466,443 | 13.5 | $ 1,042,289 | $ 886,306 | 17.6 |
| Adjustments for taxable equivalent basis | 2,905 | 2,037 | 42.6 | 5,812 | 3,391 | 71.4 |
| Non-GAAP taxable equivalent net interest income | 532,308 | 468,480 | 13.6 | 1,048,101 | 889,697 | 17.8 |
| Less: income attributable to noncontrolling interests | 16 | 10 | 60.0 | 27 | 19 | 42.1 |
| Non-GAAP taxable equivalent net interest income, net of noncontrolling interests | 532,292 | 468,470 | 13.6 | 1,048,074 | 889,678 | 17.8 |
| Less: net interest income attributable to SVB Leerink | 242 | — | — | 684 | — | — |
| Non-GAAP taxable equivalent net interest income, net of noncontrolling interests and SVB Leerink | $ 532,050 | $ 468,470 | 13.6 | $ 1,047,390 | $ 889,678 | 17.7 |
| | | | | | | |
| GAAP noninterest income | $ 333,750 | $ 192,689 | 73.2 | $ 614,126 | $ 348,207 | 76.4 |
| Less: income attributable to noncontrolling interests, including carried interest allocation | 18,736 | 9,445 | 98.4 | 21,984 | 22,469 | (2.2) |
| Non-GAAP noninterest income, net of noncontrolling interests | 315,014 | 183,244 | 71.9 | 592,142 | 325,738 | 81.8 |
| Less: non-GAAP net gains on investment securities, net of noncontrolling interests | 29,100 | 26,442 | 10.1 | 54,692 | 22,595 | 142.1 |
| Less: net gains on equity warrant assets | 48,347 | 19,061 | 153.6 | 69,652 | 38,252 | 82.1 |
| Less: investment banking revenue | 48,694 | — | — | 98,489 | — | — |
| Less: commissions | 14,429 | — | — | 28,537 | — | — |
| Non-GAAP noninterest income, net of noncontrolling interests and net of net gains on investment securities, net gains on equity warrant assets, investment banking revenue and commissions | $ 174,444 | $ 137,741 | 26.6 | $ 340,772 | $ 264,891 | 28.6 |
| | | | | | | |
| GAAP total revenue | $ 863,153 | $ 659,132 | 31.0 | $ 1,656,415 | $ 1,234,513 | 34.2 |
| Non-GAAP taxable equivalent revenue, net of noncontrolling interests and SVB Leerink, net gains on investment securities, net gains on equity warrant assets, investment banking revenue and commissions | $ 706,494 | $ 606,211 | 16.5 | $ 1,388,162 | $ 1,154,569 | 20.2 |
| | | | | | | |
| GAAP operating efficiency ratio | 44.43% | 46.39% | (4.2) | 45.23% | 46.27% | (2.2) |
| Non-GAAP core operating efficiency ratio (1) | 45.49 | 50.40 | (9.7) | 45.11 | 49.45 | (8.8) |

(1) The non-GAAP core operating efficiency ratio is calculated by dividing noninterest expense after adjusting for noninterest expense attributable to SVB Leerink by total revenue after adjusting for net interest income attributable to SVB Leerink, net gains or losses on investment securities and equity warrant assets, investment banking revenue and commissions. Additionally, noninterest expense and total revenue are adjusted for income or losses and expenses attributable to noncontrolling interests and adjustments to net interest income for a taxable equivalent basis.

*Compensation and Benefits Expense*

The following table provides a summary of our compensation and benefits expense for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| **(Dollars in thousands, except employees)** | **2019** | **2018** | **% Change** | **2019** | **2018** | **% Change** |
| Compensation and benefits: | | | | | | |
| Salaries and wages | $ 105,799 | $ 76,831 | 37.7% | $ 206,999 | $ 149,870 | 38.1% |
| Incentive compensation & ESOP | 72,576 | 54,382 | 33.5 | 143,128 | 98,015 | 46.0 |
| Other employee incentives and benefits (1) | 64,797 | 50,742 | 27.7 | 131,106 | 99,876 | 31.3 |
| Total compensation and benefits | $ 243,172 | $ 181,955 | 33.6 | $ 481,233 | $ 347,761 | 38.4 |
| Period-end full-time equivalent employees | 3,314 | 2,626 | 26.2 | 3,314 | 2,626 | 26.2 |
| Average full-time equivalent employees | 3,287 | 2,591 | 26.9 | 3,257 | 2,545 | 28.0 |

(1) Other employee incentives and benefits includes employer payroll taxes, group health and life insurance, share-based compensation, 401(k), warrant and retention plans, agency fees and other employee-related expenses.

Compensation and benefits expense was $243.2 million for the three months ended June 30, 2019, compared to $182.0 million for the comparable 2018 period. The key changes in factors affecting compensation and benefits expense were as follows:

- An increase of $29.0 million in salaries and wages reflective primarily of the increase in the number of average FTE by 696 to 3,287 for the second quarter of 2019, of which 230 FTEs were attributable to the acquisition of SVB Leerink compared to the same period in 2018, as well as annual pay raises,
- An increase of $18.2 million in incentive compensation and ESOP expense reflective primarily of the inclusion of SVB Leerink in our financial results for the second quarter of 2019, and
- An increase of $14.0 million in other employee incentives and benefits primarily driven by an increase of $4.7 million in share-based compensation expense due to the increased restricted stock awards granted during 2019, $2.8 million for increased warrant compensation expense due to the exceptional gains on equity warrant assets, and other miscellaneous employee expenses related to the increase in average FTEs as noted above.

Compensation and benefits expense was $481.2 million for the six months ended June 30, 2019, compared to $347.8 million for the comparable 2018 period. The key changes in factors affecting compensation and benefits expense were as follows:

- An increase of $57.1 million in salaries and wages reflective primarily of the increase in the number of average FTE by 712 to 3,257 for the six months ended June 30, 2019, of which 231 FTEs were attributable to the acquisition of SVB Leerink compared to the same period in 2018, as well as annual pay raises,
- An increase of $45.1 million in incentive compensation and ESOP expense reflective primarily of the inclusion of SVB Leerink in our financial results for the six months ended June 30, 2019, and
- An increase of $31.2 million in other employee incentives and benefits primarily driven by an increase of $9.3 million in share-based compensation expense due to the increased restricted stock awards granted during 2019, $5.7 million for increased warrant compensation expense due to exceptional gains on equity warrant assets, and other miscellaneous employee expenses related to the increase in average FTEs as noted above.

Our variable compensation plans consist primarily of our Incentive Compensation Plan, Direct Drive Incentive Compensation Plan, 401(k) and ESOP Plan, Retention Program and Warrant Incentive Plan (see descriptions in our 2018 Form 10-K). Total costs incurred under these plans were $85.4 million and $172.0 million for the three and six months ended June 30, 2019, respectively, compared to $61.8 million and $115.0 million for the comparable 2018 periods. These amounts are included in total compensation and benefits expense discussed above.

*Professional Services*

Professional services expense was $40.8 million and $77.8 million for the three and six months ended June 30, 2019, respectively, compared to $46.8 million and $75.5 million for the comparable 2018 periods. The decrease for the three months ended June 30, 2019 was primarily related to a $6.0 million write-off in the three months ended June 30, 2018 for capitalized costs in connection with the Economic Growth, Regulatory Relief and Consumer Protection Act. The increase for the six months ended June 30, 2019 was primarily due to the increase in legal and consulting costs related to the acquisition of SVB Leerink.

*Premises and Equipment*

Premises and equipment expense was $23.9 million and $45.6 million for the three and six months ended June 30, 2019, respectively, compared to $19.2 million and $37.7 million for the comparable 2018 periods. The increases related to investments in projects, systems and technology to support our revenue growth and related initiatives as well as other operating costs.

*Net Occupancy*

Net occupancy expense was $16.7 million and $32.7 million for the three and six months ended June 30, 2019, respectively, compared to $13.3 million and $26.9 million for the comparable 2018 periods. The increases were primarily due to lease renewals at higher costs, reflective of market conditions, and the expansion of certain offices to support our growth. Additionally, for the three and six months ended June 30, 2019, $1.9 million and $3.7 million, respectively, were directly attributable to the inclusion of SVB Leerink in our financial results effective January 1, 2019.

*FDIC and State Assessments*

FDIC and state assessments expense was $4.5 million and $8.5 million for the three and six months ended June 30, 2019, respectively, compared to $10.3 million and $19.8 million for the comparable 2018 periods. The decreases were primarily due to the elimination of the FDIC surcharge for banks effective October 1, 2018, reflective of the deposit insurance fund reserve ratio reaching its minimum funding requirements.

*Business Development and Travel*

Business development and travel expense was $17.0 million and $32.4 million for the three and six months ended June 30, 2019, respectively, compared to $12.1 million and $23.3 million for the comparable 2018 periods. The increases were to support expansion initiatives as we continue to grow both domestically and globally.

*Other Noninterest Expense*

Total other noninterest expense was $37.4 million and $71.0 million for the three and six months ended June 30, 2019, respectively, compared to $22.1 million and $40.2 million for the comparable 2018 periods. The increases were driven primarily by ongoing expenses related to the consolidation of SVB Leerink, specifically, $9.6 million and $19.1 million of the overall increases for the three and six months ended June 30, 2019, respectively, were related to expenses for investment banking and trade order execution costs as well as amortization of intangible assets recorded as part of the acquisition.

A summary of other noninterest expense for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| Lending and other client related processing costs | $ 8,763 | $ 7,403 | 18.4 % | $ 13,940 | $ 10,603 | 31.5 % |
| Correspondent bank fees | 3,569 | 3,277 | 8.9 | 7,313 | 6,687 | 9.4 |
| Investment banking activities | 3,869 | — | — | 8,054 | — | — |
| Trade order execution costs | 2,828 | — | — | 5,344 | — | — |
| Data processing services | 2,659 | 2,703 | (1.6) | 5,558 | 5,195 | 7.0 |
| Telephone | 2,422 | 2,378 | 1.9 | 5,163 | 4,756 | 8.6 |
| Dues and publications | 860 | 845 | 1.8 | 2,384 | 1,694 | 40.7 |
| Postage and supplies | 678 | 813 | (16.6) | 1,448 | 1,480 | (2.2) |
| Other | 11,769 | 4,670 | 152.0 | 21,749 | 9,778 | 122.4 |
| Total other noninterest expense | $ 37,417 | $ 22,089 | 69.4 | $ 70,953 | $ 40,193 | 76.5 |

***Net Income Attributable to Noncontrolling Interests***

Included in net income is income and expense attributable to noncontrolling interests. The relevant amounts allocated to investors in our consolidated subsidiaries, other than us, are reflected under “net income attributable to noncontrolling interests” on our statements of income.

In the table below, noninterest income consists primarily of net investment gains and losses from our consolidated funds. Noninterest expense is primarily related to management fees paid by our managed funds to SVB Financial’s subsidiaries as the managed funds’ general partners. A summary of net income attributable to noncontrolling interests for the three and six months ended June 30, 2019 and 2018 is as follows:

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| Net interest income (1) | $ (16) | $ (10) | 60.0 % | $ (27) | $ (19) | 42.1 % |
| Noninterest income (1) | (12,406) | (7,856) | 57.9 | (14,676) | (17,378) | (15.5) |
| Noninterest expense (1) | 168 | 227 | (26.0) | 547 | 195 | 180.5 |
| Carried interest allocation (2) | (6,330) | (1,589) | NM | (7,308) | (5,091) | 43.5 |

| | | | | | | |
|---|---|---|---|---|---|---|
| Net income attributable to noncontrolling interests | $ (18,584) | $ (9,228) | 101.4 | $ (21,464) | $ (22,293) | (3.7) |

NM—Not meaningful
(1) Represents noncontrolling interests' share in net interest income, noninterest income or loss and noninterest expense.
(2) Represents the preferred allocation of income (or change in income) earned by us as the general partner of certain consolidated funds.

*Three months ended June 30, 2019 and 2018*

Net income attributable to noncontrolling interests was $18.6 million for the three months ended June 30, 2019, compared to $9.2 million for the comparable 2018 period. Net income attributable to noncontrolling interests of $18.6 million for the three months ended June 30, 2019 was primarily a result of net gains on investment securities (including carried interest allocation) from our managed funds of funds in the portfolio, related primarily to net unrealized valuation increases for public company investments held by the funds in the portfolio. See "Results of Operations—Noninterest Income—Gains on Investment Securities, Net".

*Six months ended June 30, 2019 and 2018*

Net income attributable to noncontrolling interests was $21.5 million for the six months ended June 30, 2019, compared to $22.3 million for the comparable 2018 period. Net income attributable to noncontrolling interests of $21.5 million for the six months ended June 30, 2019 was primarily a result of net gains on investment securities (including carried interest allocation) from our managed funds of funds in the portfolio, related primarily to net unrealized valuation increases for public company investments held by the funds in the portfolio. See "Results of Operations—Noninterest Income—Gains on Investment Securities, Net".

***Income Taxes***

Our effective income tax expense rate was 27.3 percent and 27.2 percent for the three and six months ended June 30, 2019, respectively, compared to 24.5 percent and 25.9 percent for the comparable 2018 periods. Our effective tax rate is calculated by dividing income tax expense by the sum of income before income tax expense and the net income attributable to noncontrolling interests.

The increases in the effective tax rate for the three and six months ended June 30, 2019 was due primarily to a decrease in the tax benefit for share-based compensation expense related to the annual release of restricted stock awards. The decrease in the benefit was driven by the decrease in the stock price of SIVB since the second quarter of 2018.

***Operating Segment Results***

We have four segments for which we report our financial information: Global Commercial Bank, SVB Private Bank, SVB Capital and SVB Leerink. SVB Leerink is a new reportable segment for 2019 as a result of the acquisition of SVB Leerink effective January 4, 2019.

We report segment information based on the "management" approach. The management approach designates the internal reporting used by management for making decisions and assessing performance as the source of our reporting segments. Please refer to Note 15—"Segment Reporting" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report for additional details.

The following is our reportable segment information for the three and six months ended June 30, 2019 and 2018:

*Global Commercial Bank*

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| Net interest income | $ 461,752 | $ 409,057 | 12.9 % | $ 907,628 | $ 778,924 | 16.5 % |
| Provision for credit losses | (18,295) | (27,356) | (33.1) | (45,100) | (52,630) | (14.3) |
| Noninterest income | 130,652 | 111,674 | 17.0 | 256,969 | 209,560 | 22.6 |
| Noninterest expense | (206,902) | (196,992) | 5.0 | (404,147) | (382,251) | 5.7 |
| Income before income tax expense | $ 367,207 | $ 296,383 | 23.9 | $ 715,350 | $ 553,603 | 29.2 |
| Total average loans, net of unearned income | $ 25,724,704 | $ 21,714,870 | 18.5 | $ 25,264,010 | $ 21,199,897 | 19.2 |
| Total average assets | 60,502,170 | 52,561,973 | 15.1 | 58,214,465 | 51,274,033 | 13.5 |
| Total average deposits | 51,126,806 | 45,991,701 | 11.2 | 49,371,589 | 45,022,054 | 9.7 |

*Three months ended June 30, 2019 and 2018*

Income before income tax expense from our Global Commercial Bank ("GCB") increased to $367.2 million for the three months ended June 30, 2019, compared to $296.4 million for the comparable 2018 period, which reflected the continued acquisition of new clients and growth of our core commercial business. The key components of GCB's performance for the three months ended June 30, 2019 compared to the comparable 2018 period are discussed below.

Net interest income from GCB increased by $52.7 million for the three months ended June 30, 2019, due primarily to an increase in loan interest income resulting mainly from higher average loan balances, as well as from an increase in loan yields as a result of rate increases.

GCB had a provision for credit losses of $18.3 million for the three months ended June 30, 2019, compared to $27.4 million for the comparable 2018 period. The provision of $18.3 million for the three months ended June 30, 2019 primarily reflects an increase of $7.5 million for our performing loans, $10.9 million for net new nonaccrual loans, $7.3 million for charge-offs not

specifically reserved for and $3.2 million in additional reserves for period-end loan growth, partially offset by recoveries of $9.8 million.

The provision of $27.4 million for the three months ended June 30, 2018 primarily reflected $13.4 million in net new specific reserves for nonaccrual loans, $12.5 million increase in reserves for period-end loan growth, $11.4 million of charge-offs not specifically reserved for and $3.4 million for performing loan reserves, partially offset by a decrease in reserves of $12.5 million for our performing loans from certain reserve methodology enhancements made to our qualitative reserve for large loan exposure as a result of growth within our higher credit quality private equity/venture capital loan portfolios.

Noninterest income increased by $19.0 million for the three months ended June 30, 2019 related primarily to an overall increase in our non-GAAP core fee income (higher client investment fees, credit card fees and foreign exchange fees). These increases were due primarily to the continued growth of our client base and work with larger global companies reflective of investments in our platform, capabilities and global reach.

Noninterest expense increased by $9.9 million for the three months ended June 30, 2019, due primarily to increased compensation and benefits expense. Compensation and benefits expense increased as a result of higher salaries and wages expenses. The increase in GCB salaries and wages was due primarily to an increase in the average number of FTEs at GCB, which increased by 339 to 2,261 FTEs for the three months ended June 30, 2019, compared to 1,922 FTEs for the comparable 2018 period.

*Six months ended June 30, 2019 and 2018*

Net interest income from our GCB increased by $128.7 million for the six months ended June 30, 2019, due primarily to an increase in loan interest income resulting mainly from higher average loan balances as well as from an increase in loan yields as a result of rate increases.

GCB had a provision for credit losses of $45.1 million for the six months ended June 30, 2019, compared to a provision of $52.6 million for the comparable 2018 period. The provision of $45.1 million for the six months ended June 30, 2019 was reflective primarily of $38.4 million in net new specific reserves for nonaccrual loans, $12.2 million for charge-offs not specifically reserved for in prior quarters, $7.3 million for period-end loan growth, partially offset by recoveries of $11.2 million.

The provision of $52.6 million for the six months ended June 30, 2018 was reflective primarily of $26.5 million from period-end loan growth, $24.7 million in net new specific reserves for nonaccrual loans and $14.8 million for charge-offs not specifically reserved for, partially offset by a decrease in reserves of $12.5 million for our performing loans from certain reserve methodology enhancements made to our qualitative reserve for large loan exposure as a result of growth within our higher credit quality private equity/venture capital loan portfolios.

Noninterest income increased by $47.4 million for the six months ended June 30, 2019, related primarily to an overall increase in our non-GAAP core fee income (higher client investment fees, credit card fees, foreign exchange fees and deposit service charges). This increase was due primarily to the continued growth of our client base and work with larger global companies reflective of investments in our platform, capabilities and global reach.

Noninterest expense increased by $21.9 million for the six months ended June 30, 2019, due primarily to increased expenses for compensation and benefits expense. Compensation and benefits expense increased by $20.4 million primarily as a result of increased salaries and wages. The increase in GCB salaries and wages was due primarily to an increase in the average number of FTEs at GCB, which increased by 346 to 2,242 FTEs for the six months ended June 30, 2019, compared to 1,896 FTEs for the comparable 2018 period.

*SVB Private Bank*

| (Dollars in thousands) | Three months ended June 30, 2019 | 2018 | % Change | Six months ended June 30, 2019 | 2018 | % Change |
|---|---|---|---|---|---|---|
| Net interest income | $ 12,277 | $ 15,600 | (21.3)% | $ 24,258 | $ 31,847 | (23.8)% |
| (Provision for) reduction of credit losses | (853) | (300) | 184.3 | 131 | (2,022) | (106.5) |
| Noninterest income | 686 | 565 | 21.4 | 1,196 | 1,072 | 11.6 |
| Noninterest expense | (9,526) | (7,974) | 19.5 | (18,378) | (16,199) | 13.5 |
| Income before income tax expense | $ 2,584 | $ 7,891 | (67.3) | $ 7,207 | $ 14,698 | (51.0) |
| Total average loans, net of unearned income | $ 3,217,597 | $ 2,777,617 | 15.8 | $ 3,152,104 | $ 2,722,444 | 15.8 |
| Total average assets | 2,432,358 | 2,515,984 | (3.3) | 2,469,804 | 2,553,024 | (3.3) |
| Total average deposits | 1,394,905 | 1,480,162 | (5.8) | 1,442,803 | 1,526,038 | (5.5) |

*Three months ended June 30, 2019 and 2018*

Net interest income from our SVB Private Bank decreased by $3.3 million for the three months ended June 30, 2019, due primarily to higher interest paid on interest-bearing deposits due to the continued market rate adjustments for the three months ended June 30, 2019 as compared to the 2018 comparable period.

Noninterest expense increased by $1.6 million for the three months ended June 30, 2019, due primarily to increased compensation and benefits expense. Compensation and benefits expense increased as a result of increased salaries and wages reflective of the increase in number of average FTE since the second quarter of 2018.

*Six months ended June 30, 2019 and 2018*

Net interest income from our SVB Private Bank decreased by $7.6 million for the six months ended June 30, 2019, due primarily to higher interest paid on interest-bearing deposits due to the continued market rate adjustments for the six months ended June 30, 2019 as compared to the 2018 comparable period.

Noninterest expense increased by $2.2 million for the six months ended June 30, 2019, due primarily to increased compensation and benefits expense. Compensation and benefits expense increased as a result of increased salaries and wages reflective primarily of the increase in the number of average FTE since June 30, 2018.

*SVB Capital*

| (Dollars in thousands) | Three months ended June 30, 2019 | 2018 | % Change | Six months ended June 30, 2019 | 2018 | % Change |
|---|---|---|---|---|---|---|
| Net interest income | $ 6 | $ 9 | (33.3)% | $ 12 | $ 16 | (25.0)% |
| Noninterest income | 40,059 | 29,389 | 36.3 | 64,904 | 59,363 | 9.3 |
| Noninterest expense | (7,883) | (5,666) | 39.1 | (13,665) | (10,712) | 27.6 |
| Income before income tax expense | $ 32,182 | $ 23,732 | 35.6 | $ 51,251 | $ 48,667 | 5.3 |
| Total average assets | $ 373,167 | $ 369,841 | 0.9 | $ 375,934 | $ 371,572 | 1.2 |

SVB Capital's components of noninterest income primarily include net gains and losses on non-marketable and other equity securities, carried interest and fund management fees. All components of income before income tax expense discussed below are net of noncontrolling interests.

We experience variability in the performance of SVB Capital from quarter to quarter due to a number of factors, including changes in the values of our funds' underlying investments, changes in the amount of distributions and general economic and market conditions. Such variability may lead to volatility in the gains and losses from investment securities and cause our results to differ from period to period.

*Three months ended June 30, 2019 and 2018*

SVB Capital had noninterest income of $40.1 million for the three months ended June 30, 2019, compared to $29.4 million for the comparable 2018 period. The increase in noninterest income was due primarily to higher net gains on investment securities compared to the comparable 2018 period. SVB Capital's components of noninterest income primarily include the following:

- Net gains on investment securities of $27.9 million for the three months ended June 30, 2019, compared to net gains of $21.1 million for the comparable 2018 period. The net gains on investment securities of $27.9 million were related primarily to gains from our managed funds of funds and our strategic venture capital fund investments reflective of net unrealized valuation increases in public and private company securities held in our funds, and
- Fund management fees of $6.3 million for the three months ended June 30, 2019, compared to $5.9 million for the comparable 2018 period.

*Six months ended June 30, 2019 and 2018*

SVB Capital had noninterest income of $64.9 million for the six months ended June 30, 2019, compared to $59.4 million for the comparable 2018 period. The increase in noninterest income was due primarily to higher fund management fees and other noninterest income compared to the comparable 2018 period. SVB Capital's components of noninterest income primarily include the following:

- Fund management fees of $13.0 million for the six months ended June 30, 2019, compared to $11.7 million for the comparable 2018 period.

*SVB Leerink*

| | Three months ended June 30, | | | Six months ended June 30, | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | % Change | 2019 | 2018 | % Change |
| Net interest income | $ 242 | $ — | — | $ 684 | $ — | — |
| Noninterest income | 67,000 | — | — | 135,117 | — | — |
| Noninterest expense | (61,935) | — | — | (122,475) | — | — |
| Income before income tax expense | $ 5,307 | $ — | — | $ 13,326 | $ — | — |
| Total average assets | $ 410,279 | $ — | — | $ 355,609 | $ — | — |

SVB Leerink's components of noninterest income primarily include investment banking revenue, commissions and net gains and losses on non-marketable and other equity securities, carried interest and fund management fees. All components of income before income tax expense discussed below are net of noncontrolling interests.

*Three months ended June 30, 2019*

SVB Leerink had noninterest income of $67.0 million for the three months ended June 30, 2019, primarily consisting of $48.7 million of investment banking revenue, $14.4 million of commissions and $1.4 million in fund management fees.

SVB Leerink had noninterest expense of $61.9 million for the three months ended June 30, 2019, primarily consisting of $44.3 million in compensation and benefits expense and $11.3 million in other noninterest expense, driven by investment banking and trade order execution costs as well as amortization of intangible assets recorded as part of the acquisition.

*Six months ended June 30, 2019*

SVB Leerink had noninterest income of $135.1 million for the six months ended June 30, 2019, primarily consisting of $98.5 million of investment banking revenue, $28.5 million of commissions and $2.8 million in fund management fees.

SVB Leerink had noninterest expense of $122.5 million for the six months ended June 30, 2019, primarily consisting of $87.2 million in compensation and benefits expense and $22.2 million in other noninterest expense, driven by investment banking and trade order execution costs as well as amortization of intangible assets recorded as part of the acquisition.

**Consolidated Financial Condition**

Our total assets, and total liabilities and stockholders' equity, were $63.8 billion at June 30, 2019 compared to $56.9 billion at December 31, 2018, an increase of $6.9 billion, or 12.0 percent. Refer below to a summary of the individual components driving the changes in total assets, total liabilities and stockholders' equity.

***Cash and Cash Equivalents***

Cash and cash equivalents totaled $9.0 billion at June 30, 2019, an increase of $5.4 billion, or 152.6 percent, compared to $3.6 billion at December 31, 2018. As of June 30, 2019, $6.4 billion of our cash and due from banks was deposited at the Federal Reserve Bank and was earning interest at the Federal Funds target rate and interest-earning deposits in other financial institutions were $1.8 billion. As of December 31, 2018, $1.7 billion of our cash and due from banks was deposited at the Federal Reserve Bank and was earning interest at the Federal Funds target rate and interest-earning deposits in other financial institutions were $1.2 billion.

***Investment Securities***

Investment securities totaled $23.9 billion at June 30, 2019, a decrease of $0.3 billion, or 1.4 percent, compared to $24.2 billion at December 31, 2018. Our investment securities portfolio is comprised of: (i) an available-for-sale securities portfolio and a held-to-maturity securities portfolio, both of which represent interest earning fixed income investment securities; and (ii) a non-marketable and other equity securities portfolio, which represents primarily investments managed as part of our funds management business as well as public equity securities held as a result of equity warrant assets exercised.

*Available-for-Sale Securities*

Period-end available-for-sale securities were $7.9 billion at June 30, 2019 compared to $7.8 billion at December 31, 2018, an increase of $0.1 billion, or 1.9 percent. The $0.1 billion increase in period-end AFS securities balances from December 31, 2018 to June 30, 2019, was due primarily to the increase in the fair value of our AFS securities portfolio $166.0 million ($119.8 million net of tax) driven primarily by decreases in market interest rates at June 30, 2019, compared to December 31, 2018. Portfolio purchases and cash flows from paydowns and sales were both $2.6 billion during the six months ended June 30, 2019. Securities classified as available-for-sale are carried at fair value with changes in fair value recorded as unrealized gains or losses in a separate component of stockholders' equity.

The following table summarizes the remaining contractual principal maturities and fully taxable equivalent yields on fixed income securities, carried at fair value, classified as available-for-sale as of June 30, 2019. The weighted average yield is computed using the amortized cost of fixed income investment securities, which are reported at fair value. For U.S. Treasury securities and foreign government debt securities, the expected maturity is the actual contractual maturity of the notes. Expected maturities for mortgage-backed securities may differ significantly from their contractual maturities because mortgage borrowers have the right to prepay outstanding loan obligations with or without penalties. Mortgage-backed securities classified as available-for-sale typically have original contractual maturities from 10 to 30 years whereas expected average lives of these securities tend to be significantly shorter and vary based upon structure and prepayments in lower interest rate environments. The weighted average yield on mortgage-backed securities is based on prepayment assumptions at the purchase date. Actual yields earned may differ significantly based upon actual prepayments.

| | June 30, 2019 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | One Year or Less | | After One Year to Five Years | | After Five Years to Ten Years | | After Ten Years | |
| (Dollars in thousands) | Carrying Value | Weighted Average Yield | Carrying Value | Weighted Average Yield | Carrying Value | Weighted Average Yield | Carrying Value | Weighted Average Yield | Carrying Value | Weighted Average Yield |
| U.S. Treasury securities | $4,821,074 | 2.02 % | $1,677,718 | 1.64% | $1,974,793 | 2.13 % | $1,168,563 | 2.40% | $ — | —% |
| Foreign government debt securities | 9,211 | (0.41) | — | — | 9,211 | (0.41) | — | — | — | — |
| Residential mortgage-backed securities: | | | | | | | | | | |
| Agency-issued mortgage-backed securities | 1,321,857 | 3.01 | — | — | — | — | — | — | 1,321,857 | 3.01 |
| Agency-issued collateralized mortgage obligations—fixed rate | 1,788,180 | 2.58 | — | — | — | — | 5,244 | 2.97 | 1,782,936 | 2.58 |
| Total | $7,940,322 | 2.31 | $1,677,718 | 1.64 | $1,984,004 | 2.12 | $1,173,807 | 2.40 | $3,104,793 | 2.77 |

*Held-to-Maturity Securities*

Period-end held-to-maturity securities were $14.9 billion at June 30, 2019 compared to $15.5 billion at December 31, 2018, a decrease of $0.6 billion, or 4.0 percent. The $0.6 billion decrease in period-end HTM security balances from December 31, 2018 to June 30, 2019 was due primarily to pay downs and maturities of $0.9 billion, partially offset by the purchase of $0.3 billion of securities.

Securities classified as held-to-maturity are accounted for at cost with no adjustments for changes in fair value. For securities previously re-designated as held-to-maturity from available-for-sale, the net unrealized gains at the date of transfer will continue to be reported as a separate component of shareholders' equity and amortized over the life of the securities in a manner consistent with the amortization of a premium or discount.

The following table summarizes the remaining contractual principal maturities and fully taxable equivalent yields on fixed income investment securities classified as held-to-maturity as of June 30, 2019. Interest income on certain municipal bonds and notes (non-taxable investments) are presented on a fully taxable equivalent basis using the federal statutory tax rate of 21.0 percent. The weighted average yield is computed using the amortized cost of fixed income investment securities. For U.S. agency debentures, the expected maturity is the actual contractual maturity of the notes. Expected remaining maturities for certain U.S. agency debentures may occur earlier than their contractual maturities because the note issuers have the right to call outstanding amounts ahead of their contractual maturity. Expected maturities for mortgage-backed securities may differ significantly from their contractual maturities because mortgage borrowers have the right to prepay outstanding loan obligations with or without penalties. Mortgage-backed securities classified as held-to-maturity typically have original contractual maturities from 10 to 30 years whereas expected average lives of these securities tend to be significantly shorter and vary based upon structure and prepayments in lower interest rate environments. The weighted average yield on mortgage-backed securities is based on prepayment assumptions at the purchase date. Actual yields earned may differ significantly based upon actual prepayments.

| | June 30, 2019 | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | Total | | One Year or Less | | After One Year to Five Years | | After Five Years to Ten Years | | After Ten Years | |
| (Dollars in thousands) | Amortized Cost | Weighted-Average Yield | Amortized Cost | Weighted-Average Yield | Amortized Cost | Weighted-Average Yield | Amortized Cost | Weighted-Average Yield | Amortized Cost | Weighted-Average Yield |
| U.S. agency debentures | $ 585,817 | 2.65% | $ — | —% | $ 101,464 | 2.70% | $ 484,353 | 2.64% | $ — | —% |
| Residential mortgage-backed securities: | | | | | | | | | | |
| Agency-issued mortgage-backed securities | 7,706,133 | 2.90 | — | — | 110,633 | 2.01 | 821,076 | 2.48 | 6,774,424 | 2.96 |
| Agency-issued collateralized mortgage obligations—fixed rate | 1,912,839 | 1.78 | — | — | — | — | 506,773 | 1.61 | 1,406,066 | 1.84 |
| Agency-issued collateralized mortgage obligations—variable rate | 197,962 | 0.74 | — | — | — | — | — | — | 197,962 | 0.74 |
| Agency-issued commercial mortgage-backed securities | 2,886,958 | 2.82 | — | — | — | — | — | — | 2,886,958 | 2.82 |
| Municipal bonds and notes | 1,579,052 | 3.61 | 14,977 | 2.29 | 83,468 | 2.15 | 340,526 | 2.83 | 1,140,081 | 3.96 |
| Total | $14,868,761 | 2.78 | $ 14,977 | 2.29 | $ 295,565 | 2.29 | $2,152,728 | 2.36 | $12,405,491 | 2.86 |

Portfolio duration is a standard measure used to approximate changes in the market value of fixed income instruments due to a change in market interest rates. The measure is an estimate based on the level of current market interest rates, expectations for changes in the path of forward rates and the effect of forward rates on mortgage prepayment speed assumptions. As such, portfolio duration will fluctuate with changes in market interest rates. Changes in portfolio duration are also impacted by changes in the mix of longer versus shorter term-to-maturity securities. The estimated weighted-average duration of our fixed income investment securities portfolio was 3.5 years and 3.8 years at June 30, 2019 and December 31, 2018, respectively.

*Non-Marketable and Other Equity Securities*

Our non-marketable and other equity securities portfolio primarily represents investments in venture capital and private equity funds, SPD Silicon Valley Bank Co., Ltd. (the Bank's joint venture bank in China ("SPD-SVB")), debt funds, private and public portfolio companies, including public equity securities held as a result of equity warrant assets exercised, and qualified affordable housing projects. Included in our non-marketable and other equity securities carried under fair value accounting are amounts that are attributable to noncontrolling interests. We are required under GAAP to consolidate 100% of these investments that we are deemed to control, even though we may own less than 100% of such entities. See below for a summary of the carrying value (as reported) of non-marketable and other equity securities compared to the amounts attributable to SVBFG.

Period-end non-marketable and other equity securities were $1.1 billion at June 30, 2019 compared to $941.1 million at December 31, 2018, an increase of $138.6 million, or 14.7 percent. Non-marketable and other equity securities, net of noncontrolling interests were $931.5 million at June 30, 2019, compared to $806.1 million at December 31, 2018. The increase was primarily attributable to equity securities from exercised equity warrant assets, valuation increases in our managed funds of funds investments and an increase in new investments within our qualified housing projects portfolio. We also increased our investment in non-marketable and other equity securities by $35.7 million to the inclusion of SVB Leerink in our financial results at June 30, 2019. The following table summarizes the carrying value (as reported) of non-marketable and other equity securities compared to the amounts attributable to SVBFG (which generally represents the carrying value times our ownership percentage) at June 30, 2019 and December 31, 2018:

| | June 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| (Dollars in thousands) | Carrying value (as reported) | Amount attributable to SVBFG | Carrying value (as reported) | Amount attributable to SVBFG |
| Non-marketable and other equity securities: | | | | |
| Non-marketable securities (fair value accounting): | | | | |
| Consolidated venture capital and private equity fund investments (1) | $ 110,086 | $ 28,631 | $ 118,333 | $ 30,235 |
| Unconsolidated venture capital and private equity fund investments (2) | 193,206 | 193,206 | 201,098 | 201,098 |
| Other investments without a readily determinable fair value (3) | 42,419 | 42,419 | 25,668 | 25,668 |
| Other equity securities in public companies (fair value accounting (4) | 39,808 | 37,156 | 20,398 | 20,098 |
| Non-marketable securities (equity method accounting) (5): | | | | |
| Venture capital and private equity fund investments | 169,219 | 105,056 | 129,485 | 82,921 |
| Debt funds | 7,168 | 7,168 | 5,826 | 5,826 |
| Other investments | 123,797 | 123,797 | 121,721 | 121,721 |
| Investments in qualified affordable housing projects, net | 394,046 | 394,046 | 318,575 | 318,575 |
| Total non-marketable and other equity securities | $ 1,079,749 | $ 931,479 | $ 941,104 | $ 806,142 |

(1) The following table shows the amounts of venture capital and private equity fund investments held by the following consolidated funds and amounts attributable to SVBFG for each fund at June 30, 2019 and December 31, 2018:

| | June 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| (Dollars in thousands) | Carrying value (as reported) | Amount attributable to SVBFG | Carrying value (as reported) | Amount attributable to SVBFG |
| Strategic Investors Fund, LP | $ 8,860 | $ 1,113 | $ 12,452 | $ 1,564 |
| Capital Preferred Return Fund, LP | 51,801 | 11,164 | 53,957 | 11,629 |
| Growth Partners, LP | 48,984 | 16,307 | 50,845 | 16,927 |
| CP I, LP | 441 | 47 | 1,079 | 115 |
| Total consolidated venture capital and private equity fund investments | $ 110,086 | $ 28,631 | $ 118,333 | $ 30,235 |

(2) The carrying value represents investments in 212 and 213 funds (primarily venture capital funds) at June 30, 2019 and December 31, 2018, respectively, where our ownership interest is typically less than 5% of the voting interests of each such fund and in which we do not have the ability to exercise significant influence over the partnerships' operating activities and

financial policies. Our unconsolidated venture capital and private equity fund investments are carried at fair value based on the fund investments' net asset values per share as obtained from the general partners of the funds. For each fund investment, we adjust the net asset value per share for differences between our measurement date and the date of the fund investment's net asset value by using the most recently available financial information from the investee general partner, for example, March 31st, for our June 30th consolidated financial statements, adjusted for any contributions paid, distributions received from the investment, and significant fund transactions or market events during the reporting period.

(3) Investments classified as "Other investments without a readily determinable fair value" include direct equity investments in private companies. The carrying value is based on the price at which the investment was acquired plus or minus changes resulting from observable price changes in orderly transactions for identical or similar investments. We consider a range of factors when adjusting the fair value of these investments, including, but not limited to, the term and nature of the investment, local market conditions, values for comparable securities, current and projected operating performance, exit strategies, financing transactions subsequent to the acquisition of the investment and a discount for certain investments that have lock-up restrictions or other features that indicate a discount to fair value is warranted. For further details on the carrying value of these investments refer to Note 7—"Investment Securities" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

(4) Investments classified as other equity securities (fair value accounting) represent shares held in public companies as a result of exercising public equity warrant assets and direct equity investments in public companies held by our consolidated funds. Changes in the fair value recognized through net income.

(5) The following table shows the carrying value and our ownership percentage of each investment at June 30, 2019 and December 31, 2018 (equity method accounting):

| | June 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| (Dollars in thousands) | Carrying value (as reported) | Amount attributable to SVBFG | Carrying value (as reported) | Amount attributable to SVBFG |
| Venture capital and private equity fund investments: | | | | |
| Strategic Investors Fund II, LP | $ 4,200 | $ 3,953 | $ 4,670 | $ 4,366 |
| Strategic Investors Fund III, LP | 16,364 | 13,284 | 17,396 | 14,059 |
| Strategic Investors Fund IV, LP | 28,404 | 23,936 | 28,974 | 24,388 |
| Strategic Investors Fund V, LP | 33,300 | 17,483 | 28,189 | 14,799 |
| CP II, LP (i) | 7,450 | 4,505 | 7,122 | 4,308 |
| Other venture capital and private equity fund investments | 79,501 | 41,895 | 43,134 | 21,001 |
| Total venture capital and private equity fund investments | $ 169,219 | $ 105,056 | $ 129,485 | $ 82,921 |
| Debt funds: | | | | |
| Gold Hill Capital 2008, LP (ii) | $ 5,323 | $ 5,323 | $ 3,901 | $ 3,901 |
| Other debt funds | 1,845 | 1,845 | 1,925 | 1,925 |
| Total debt funds | $ 7,168 | $ 7,168 | $ 5,826 | $ 5,826 |
| Other investments: | | | | |
| SPD Silicon Valley Bank Co., Ltd. | $ 76,544 | $ 76,544 | $ 76,412 | $ 76,412 |
| Other investments | 47,253 | 47,253 | 45,309 | 45,309 |
| Total other investments | $ 123,797 | $ 123,797 | $ 121,721 | $ 121,721 |

(i) Our ownership includes direct ownership interest of 1.3 percent and indirect ownership interest of 3.8 percent through our investments in Strategic Investors Fund II, LP.

(ii) Our ownership includes direct ownership interest of 11.5 percent in the fund and an indirect interest in the fund through our investment in Gold Hill Capital 2008, LLC of 4.0 percent.

*Volcker Rule*

On June 6, 2017, we received notice that the Board of Governors of the Federal Reserve System approved the Company's application for an extension of the permitted conformance period for the Company's investments in "illiquid" covered funds. The approval extends the deadline by which the Company must sell, divest, restructure or otherwise conform such investments

to the provisions of the Volcker Rule until the earlier of (i) July 21, 2022, or (ii) the date by which each fund matures by its terms or is otherwise conformed to the Volcker Rule.

As implemented under the Dodd-Frank Wall Street Reform and Consumer Protection Act, the Volcker Rule prohibits, subject to certain exceptions, a banking entity, such as the Company, from sponsoring or investing in covered funds, defined to include many venture capital and private equity funds. As noted above, the Company currently maintains certain investments deemed to be prohibited investments in "illiquid" covered funds, which are now covered under the approved extension. As of June 30, 2019, such prohibited investments had an estimated aggregate carrying value and fair value of approximately $231.5 million. (For more information about the Volcker Rule, see "Business—Supervision and Regulation" under Part 1, Item 1 of our 2018 Form 10-K.)

***Loans***

Loans, net of unearned income, increased by $0.9 billion to $29.2 billion at June 30, 2019, compared to $28.3 billion at December 31, 2018. Unearned income was $161 million at June 30, 2019 and $173 million at December 31, 2018. Total gross loans were $29.4 billion at June 30, 2019, an increase of $0.9 billion, compared to $28.5 billion at December 31, 2018. Period-end loans increased compared to December 31, 2018, driven primarily by loan growth in our private equity/venture capital portfolio as well as from our private bank portfolio.

The breakdown of total gross loans and total loans as a percentage of total gross loans by industry sector is as follows:

| (Dollars in thousands) | June 30, 2019 Amount | June 30, 2019 Percentage | December 31, 2018 Amount | December 31, 2018 Percentage |
|---|---|---|---|---|
| Commercial loans: | | | | |
| Software/internet | $ 6,044,350 | 20.6% | $ 6,209,978 | 21.8% |
| Hardware | 1,337,198 | 4.6 | 1,245,800 | 4.4 |
| Private equity/venture capital | 14,688,338 | 50.0 | 14,118,132 | 49.5 |
| Life science/healthcare | 2,447,763 | 8.3 | 2,461,076 | 8.6 |
| Premium wine | 236,128 | 0.8 | 249,316 | 0.9 |
| Other | 439,237 | 1.5 | 346,747 | 1.2 |
| Commercial loans | 25,193,014 | 85.8 | 24,631,049 | 86.4 |
| Real estate secured loans: | | | | |
| Premium wine | 754,011 | 2.6 | 711,237 | 2.5 |
| Consumer | 2,805,321 | 9.5 | 2,609,645 | 9.2 |
| Other | 39,816 | 0.1 | 40,627 | 0.1 |
| Real estate secured loans | 3,599,148 | 12.2 | 3,361,509 | 11.8 |
| Construction loans | 114,000 | 0.4 | 98,034 | 0.3 |
| Consumer loans | 464,241 | 1.6 | 420,720 | 1.5 |
| Total gross loans | $ 29,370,403 | 100.0 | $ 28,511,312 | 100.0 |

*Loan Concentration*

The following table provides a summary of gross loans by size and category. The breakout of the categories is based on total client balances (individually or in the aggregate) as of June 30, 2019:

| (Dollars in thousands) | June 30, 2019 Less than Five Million | Five to Ten Million | Ten to Twenty Million | Twenty to Thirty Million | Thirty Million or More | Total |
|---|---|---|---|---|---|---|
| Commercial loans: | | | | | | |
| Software/internet | $ 1,597,365 | $ 853,329 | $ 1,456,360 | $ 1,062,847 | $ 1,074,449 | $ 6,044,350 |
| Hardware | 330,322 | 132,284 | 167,021 | 360,166 | 347,405 | 1,337,198 |
| Private equity/venture capital | 923,420 | 1,115,977 | 2,120,821 | 1,892,364 | 8,635,756 | 14,688,338 |
| Life science/healthcare | 320,548 | 438,764 | 694,111 | 387,936 | 606,404 | 2,447,763 |
| Premium wine | 72,052 | 50,417 | 34,185 | 54,164 | 25,310 | 236,128 |
| Other | 345,959 | 18,340 | 26,653 | 48,285 | — | 439,237 |
| Commercial loans | 3,589,666 | 2,609,111 | 4,499,151 | 3,805,762 | 10,689,324 | 25,193,014 |
| Real estate secured loans: | | | | | | |
| Premium wine | 175,937 | 188,975 | 237,404 | 113,292 | 38,403 | 754,011 |
| Consumer | 2,440,617 | 252,781 | 111,923 | — | — | 2,805,321 |
| Other | 7,377 | — | 32,439 | — | — | 39,816 |
| Real estate secured loans | 2,623,931 | 441,756 | 381,766 | 113,292 | 38,403 | 3,599,148 |
| Construction loans | 23,098 | 11,773 | 57,984 | 21,145 | — | 114,000 |
| Consumer loans | 181,347 | 47,290 | 69,471 | 92,514 | 73,619 | 464,241 |
| Total gross loans | $ 6,418,042 | $ 3,109,930 | $ 5,008,372 | $ 4,032,713 | $ 10,801,346 | $ 29,370,403 |

At June 30, 2019, gross loans equal to or greater than $20 million to any single client (individually or in the aggregate) totaled $14.8 billion, or 50.5 percent of our total gross loan portfolio. These loans represented 362 clients, and of these loans, none were on nonaccrual status as of June 30, 2019.

The following table provides a summary of gross loans by size and category. The breakout of the categories is based on total client balances (individually or in the aggregate) as of December 31, 2018:

| | December 31, 2018 | | | | | |
|---|---|---|---|---|---|---|
| (Dollars in thousands) | Less than Five Million | Five to Ten Million | Ten to Twenty Million | Twenty to Thirty Million | Thirty Million or More | Total |
| Commercial loans: | | | | | | |
| Software/internet | $ 1,515,096 | $ 918,647 | $ 1,520,634 | $ 1,221,250 | $ 1,034,351 | $ 6,209,978 |
| Hardware | 292,022 | 152,061 | 196,763 | 386,288 | 218,666 | 1,245,800 |
| Private equity/venture capital | 836,894 | 1,012,605 | 2,120,918 | 2,135,279 | 8,012,436 | 14,118,132 |
| Life science/healthcare | 273,075 | 477,046 | 645,895 | 410,127 | 654,933 | 2,461,076 |
| Premium wine | 70,573 | 55,852 | 48,656 | 65,035 | 9,200 | 249,316 |
| Other | 246,011 | 18,921 | 10,911 | 70,904 | — | 346,747 |
| Commercial loans | 3,233,671 | 2,635,132 | 4,543,777 | 4,288,883 | 9,929,586 | 24,631,049 |
| Real estate secured loans: | | | | | | |
| Premium wine | 168,130 | 173,882 | 263,093 | 83,945 | 22,187 | 711,237 |
| Consumer loans | 2,258,479 | 239,400 | 111,766 | — | — | 2,609,645 |
| Other | 7,506 | — | 33,121 | — | — | 40,627 |
| Real estate secured loans | 2,434,115 | 413,282 | 407,980 | 83,945 | 22,187 | 3,361,509 |
| Construction loans | 7,076 | 15,064 | 75,894 | — | — | 98,034 |
| Consumer loans | 148,391 | 55,401 | 51,409 | 93,690 | 71,829 | 420,720 |
| Total gross loans | $ 5,823,253 | $ 3,118,879 | $ 5,079,060 | $ 4,466,518 | $ 10,023,602 | $ 28,511,312 |

At December 31, 2018, gross loans equal to or greater than $20 million to any single client (individually or in the aggregate) totaled $14.5 billion, or 50.8 percent of our total gross loan portfolio. These loans represented 361 clients, and of these loans, $27.5 million were on nonaccrual status as of December 31, 2018.

The credit profile of our loan portfolio clients varies based on the nature of the lending we do for different market segments. Our three main market segments include (i) technology (software/internet and hardware) and life science/healthcare, (ii) private equity/venture capital, and (iii) SVB Private Bank.

*(i) Technology and Life Science/Healthcare*

Our technology and life science/healthcare loan portfolios include loans to clients at the various stages of their life cycles and represent the largest segments of our loan portfolio. The primary underwriting method for our technology and life science/healthcare portfolios are classified as investor dependent, balance sheet dependent or cash flow dependent.

Investor dependent loans represent a relatively small percentage of our overall portfolio at 11 percent of total gross loans at both June 30, 2019 and December 31, 2018. These loans are made to companies in both our Accelerator (early-stage) and Growth practices. Investor dependent loans typically have modest or negative cash flows and no established record of profitable operations. Repayment of these loans may be dependent upon receipt by borrowers of additional equity financing from venture capital firms or others, or in some cases, a successful sale to a third party or an IPO. Venture capital firms may provide financing selectively, at reduced amounts, or on less favorable terms, which may have an adverse effect on our borrowers' ability to repay their loans to us. When repayment is dependent upon the next round of venture investment and there is an indication that further investment is unlikely or will not occur, it is often likely that the company would need to be sold to repay the debt in full. If reasonable efforts have not yielded a likely buyer willing to repay all debt at the close of the sale or on commercially viable terms, the account will most likely be deemed to be impaired.

Balance sheet dependent loans, which include asset-based loans, represented eight percent of total gross loans at both June 30, 2019 and December 31, 2018. Balance sheet dependent loans are structured to require constant current asset coverage (i.e., cash, cash equivalents, accounts receivable and, to a much lesser extent, inventory) in an amount that exceeds the outstanding debt. These loans are generally made to companies in our Growth and Corporate Finance practices. Our asset-based lending, which includes working capital lines and accounts receivable financing, represented two and one percent of total gross loans at both June 30, 2019 and December 31, 2018. The repayment of these arrangements is dependent on the financial condition, and payment ability, of third parties with whom our clients do business.

Cash flow dependent loans, which include sponsored buyout lending, represented 15 percent of total gross loans at June 30, 2019, compared to 16 percent at December 31, 2018. Cash flow dependent loans require the borrower to maintain cash flow from operations that is sufficient to service all debt. Borrowers must demonstrate normalized cash flow in excess of all fixed charges associated with operating the business. Sponsored buyout loans represented seven percent of total gross

loans at June 30, 2019 compared to eight percent at December 31, 2018. These loans are typically used to assist a select group of experienced private equity sponsors with the acquisition of businesses, are larger in size, and repayment is generally dependent upon the cash flows of the acquired company. The acquired companies are typically established, later-stage businesses of scale and characterized by reasonable levels of leverage and loan structures that include meaningful financial covenants. The sponsor's equity contribution is often 50 percent or more of the acquisition price.

*(ii) Private Equity/Venture Capital*

We also provide financial services to clients in the private equity/venture capital community. Our lending to private equity/venture capital firms and funds represented 50 percent of total gross loans at both June 30, 2019 and December 31, 2018. The vast majority of this portfolio consists of capital call lines of credit, the repayment of which is dependent on the payment of capital calls by the underlying limited partner investors in the funds managed by these firms. These facilities are generally governed by meaningful financial covenants oriented towards ensuring that the funds' remaining callable capital is sufficient to repay the loan, and larger commitments (typically provided to larger private equity funds) are often secured by an assignment of the general partner's right to call capital from the fund's limited partner investors.

*(iii) SVB Private Bank*

Our SVB Private Bank clients are primarily private equity/venture capital professionals and executive leaders of the innovation companies they support. Our lending to SVB Private Bank clients represented 11 percent of total gross loans at both June 30, 2019 and December 31, 2018. Many of these clients have mortgages, which represented 86 percent of this portfolio at June 30, 2019; the balance of this portfolio consisted of home equity lines of credit, restricted stock purchase loans, capital call lines of credit, and other secured and unsecured lending.

*State Concentrations*

Approximately 29 percent and 10 percent of our outstanding total gross loan balances as of June 30, 2019 were to borrowers based in California and New York, respectively, compared to 28 percent and 10 percent as of December 31, 2018. Additionally, as of June 30, 2019, borrowers in Massachusetts increased to 10 percent of our outstanding gross loan balances compared to 9 percent as of December 31, 2018. Other than California, New York and Massachusetts, there are no states with gross loan balances greater than or equal to 10 percent.

See generally “Risk Factors–Credit Risks” set forth under Part I, Item 1A in our 2018 Form 10-K.

*Credit Quality Indicators*

As of June 30, 2019 and December 31, 2018, our total criticized loans and impaired loans represented three and four percent of our total gross loans, respectively. Criticized and impaired loans to early-stage clients represented 18 and 19 percent of our total criticized and impaired loan balances at June 30, 2019 and December 31, 2018, respectively. Loans to early-stage clients represent a relatively small percentage of our overall portfolio at six percent of total gross loans at both June 30, 2019 and December 31, 2018. It is common for an early-stage client’s remaining liquidity to fall temporarily below the threshold for a pass-rated credit during its capital-raising period for a new round of funding. Based on our experience, for most early-stage clients, this situation typically lasts one to two quarters and generally resolves itself with a subsequent round of venture funding, though there are exceptions, from time to time. As a result, we expect that each of our early-stage clients will reside in our criticized portfolio during a portion of their life cycle.

*Credit Quality and Allowance for Loan Losses*

Nonperforming assets consist of loans on nonaccrual status, loans past due 90 days or more still accruing interest, and Other Real Estate Owned ("OREO") and other foreclosed assets. We measure all loans placed on nonaccrual status for impairment based on the fair value of the underlying collateral or the net present value of the expected cash flows. The table below sets forth certain data and ratios between nonperforming loans, nonperforming assets and the allowance for loan losses:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 |
|---|---|---|
| Gross nonperforming, past due, and restructured loans: | | |
| Nonaccrual loans | $ 96,641 | $ 94,142 |
| Loans past due 90 days or more still accruing interest | 111 | 1,964 |
| Total nonperforming loans | 96,752 | 96,106 |
| OREO and other foreclosed assets | — | — |
| Total nonperforming assets | $ 96,752 | $ 96,106 |
| Performing TDRs | $ 70,292 | $ 31,639 |
| Nonperforming loans as a percentage of total gross loans | 0.33% | 0.34% |
| Nonperforming assets as a percentage of total assets | 0.15 | 0.17 |
| Allowance for loan losses | $ 301,888 | $ 280,903 |
| As a percentage of total gross loans | 1.03% | 0.99% |
| As a percentage of total gross nonperforming loans | 312.02 | 292.28 |
| Allowance for loan losses for nonaccrual loans | $ 53,067 | $ 37,941 |
| As a percentage of total gross loans | 0.18% | 0.13% |
| As a percentage of total gross nonperforming loans | 54.85 | 39.48 |
| Allowance for loan losses for total gross performing loans | $ 248,821 | $ 242,962 |
| As a percentage of total gross loans | 0.85% | 0.85% |
| As a percentage of total gross performing loans | 0.85 | 0.86 |
| Total gross loans | $ 29,370,403 | $ 28,511,312 |
| Total gross performing loans | 29,273,651 | 28,415,206 |
| Allowance for unfunded credit commitments (1) | 62,664 | 55,183 |
| As a percentage of total unfunded credit commitments | 0.30% | 0.29% |
| Total unfunded credit commitments (2) | $ 20,952,069 | $ 18,913,021 |

(1) The "allowance for unfunded credit commitments" is included as a component of other liabilities and any provision is included in the "provision for credit losses" in the statement of income. See "Provision for Credit Losses" for a discussion of the changes to the allowance.
(2) Includes unfunded loan commitments and letters of credit.

Our allowance for loan losses as a percentage of total gross loans increased four basis points to 1.03 percent at June 30, 2019, compared to 0.99 percent at December 31, 2018 reflective of an increase in reserves for nonaccrual loans partially offset by a decrease in the reserves for gross performing loans.

Our allowance for loan losses for performing loans was $248.8 million at June 30, 2019, compared to $243.0 million at December 31, 2018. The $5.8 million increase in reserves for performing loans was driven primarily by the overall growth in loans during the six months ended June 30, 2019 as well as the continued change in the mix of the overall loan portfolio.

Our allowance for loan losses for nonaccrual loans was $53.1 million at June 30, 2019, compared to $37.9 million at December 31, 2018. The $15.2 million increase in the reserves for nonaccrual loans was due to new nonaccrual loan reserves of $60.8 million driven primarily by three clients in our life science/healthcare loan portfolio and two clients in our software/internet loan portfolio, partially offset by $45.6 million of repayments and charge-offs.

The following table presents a summary of changes in nonaccrual loans for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Balance, beginning of period | $ 133,623 | $ 116,667 | $ 94,142 | $ 119,259 |
| Additions | 39,460 | 28,960 | 90,317 | 50,763 |
| Paydowns | (57,507) | (16,411) | (63,937) | (33,659) |
| Charge-offs | (18,935) | (4,467) | (23,830) | (11,579) |
| Other reductions | — | — | (51) | (35) |
| Balance, end of period | $ 96,641 | $ 124,749 | $ 96,641 | $ 124,749 |

Our nonaccrual loans as of June 30, 2019 included $51.7 million from five clients (two software/internet clients represented $21.1 million and three life science/healthcare clients represented $30.6 million). One of these loans is a sponsored buyout loan that was added to our nonaccrual portfolio in 2015, one is a Growth client that was added during 2018 and three are new nonaccrual loans added during 2019 from our Growth practice. The total credit exposure for these five largest nonaccrual loans was $52.6 million as of June 30, 2019, for which we have specifically reserved $26.1 million.

Average nonaccrual loans for the three and six months ended June 30, 2019 were $97.6 million and $102.0 million, respectively, compared to $127.4 million and $119.5 million for the comparable 2018 periods. The $29.8 million decrease in average nonaccrual loans for the three months ended June 30, 2019 compared to June 30, 2018 was primarily from our software/internet and hardware loan portfolios partially offset by an increase in our life science/healthcare portfolio. If the nonaccrual loans had not been nonperforming, $1.4 million and $3.1 million in interest income would have been recorded for the three and six months ended June 30, 2019, respectively, compared to $2.1 million and $4.0 million for the comparable 2018 periods.

***Accrued Interest Receivable and Other Assets***

A summary of accrued interest receivable and other assets at June 30, 2019 and December 31, 2018 is as follows:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 | % Change |
|---|---|---|---|
| Derivative assets (1) | $ 291,508 | $ 258,139 | 12.9 % |
| Foreign exchange spot contract assets, gross | 465,509 | 152,268 | NM |
| Accrued interest receivable | 201,418 | 197,927 | 1.8 |
| FHLB and Federal Reserve Bank stock | 59,508 | 58,878 | 1.1 |
| Net deferred tax assets | 30,135 | 65,433 | (53.9) |
| Accounts receivable | 67,053 | 55,807 | 20.2 |
| Other assets | 349,950 | 162,809 | 114.9 |
| Total accrued interest receivable and other assets | $ 1,465,081 | $ 951,261 | 54.0 |

NM—Not meaningful
(1) See “Derivatives” section below.

*Foreign Exchange Spot Contract Assets*

Foreign exchange spot contract assets represent unsettled client trades at the end of the period. The increase of $313.2 million was primarily due to an overall increase in the amount of unsettled spot trades at period-end as compared to December 31, 2018.

*Net Deferred Tax Assets*

The decrease of $35.3 million in net deferred tax assets was primarily due to an increase in the fair value of AFS securities due to a decrease in market interest rates as compared to December 31, 2018.

*Other Assets*

Other assets includes various asset amounts for other operational transactions. The increase of $187.1 million was primarily due to $101.1 million in current taxes receivable due to estimated tax payments made during the six months ended June 30,

2019. Additionally, an increase in other assets of $43.5 million was due primarily to the inclusion of SVB Leerink in our financial results at June 30, 2019. Merchant card receivables increased $18.9 million due to the timing of settlement and prepaid assets increased $14.4 million primarily due to the annual timing of prepaid software agreement renewals.

***Derivatives***

Derivative instruments are recorded as a component of other assets and other liabilities on the balance sheet. The following table provides a summary of derivative assets and liabilities at June 30, 2019 and December 31, 2018:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 | % Change |
|---|---|---|---|
| **Assets:** | | | |
| Equity warrant assets | $ 158,048 | $ 149,238 | 5.9 % |
| Foreign exchange forward and option contracts | 94,462 | 100,402 | (5.9) |
| Client interest rate derivatives | 19,440 | 8,499 | 128.7 |
| Interest rate swaps | 19,558 | — | — |
| Total derivative assets | $ 291,508 | $ 258,139 | 12.9 |
| **Liabilities:** | | | |
| Foreign exchange forward and option contracts | $ 86,457 | $ 88,559 | (2.4) |
| Client interest rate derivatives | 25,803 | 9,491 | 171.9 |
| Interest rate swaps | 391 | — | — |
| Total derivative liabilities | $ 112,651 | $ 98,050 | 14.9 |

*Equity Warrant Assets*

In connection with negotiating credit facilities and certain other services, we often obtain rights to acquire stock in the form of equity warrant assets in primarily private, venture-backed companies in the technology and life science/healthcare industries. At June 30, 2019, we held warrants in 2,173 companies, compared to 2,095 companies at December 31, 2018. Warrants in 22 companies each had values greater than $1.0 million and collectively represented $51.8 million, or 32.8 percent, of the fair value of the total warrant portfolio at June 30, 2019. The change in fair value of equity warrant assets is recorded in "Gains on equity warrant assets, net" in noninterest income, a component of consolidated net income. The following table provides a summary of transactions and valuation changes for equity warrant assets for the three and six months ended June 30, 2019 and 2018:

| | Three months ended June 30, | | Six months ended June 30, | |
|---|---|---|---|---|
| (Dollars in thousands) | 2019 | 2018 | 2019 | 2018 |
| Balance, beginning of period | $ 162,215 | $ 135,669 | $ 149,238 | $ 123,763 |
| New equity warrant assets | 3,051 | 4,299 | 7,521 | 9,398 |
| Non-cash changes in fair value, net | 9,166 | 11,012 | 22,356 | 19,469 |
| Exercised equity warrant assets | (15,339) | (6,429) | (19,183) | (7,179) |
| Terminated equity warrant assets | (1,045) | (826) | (1,884) | (1,726) |
| Balance, end of period | $ 158,048 | $ 143,725 | $ 158,048 | $ 143,725 |

*Foreign Exchange Forward and Foreign Currency Option Contracts*

We enter into foreign exchange forward contracts and foreign currency option contracts with clients involved in foreign activities, either as the purchaser or seller, depending upon the clients' needs. For each forward or option contract entered into with our clients, we enter into an opposite way forward or option contract with a correspondent bank, which mitigates the risk of fluctuations in currency rates. We also enter into forward contracts with correspondent banks to economically reduce our foreign exchange exposure related to certain foreign currency denominated instruments. Net gains and losses on the revaluation of foreign currency denominated instruments are recorded in the line item "Other" as part of noninterest income, a component of consolidated net income. We have not experienced nonperformance by any of our counterparties and therefore have not incurred any related losses. Further, we anticipate performance by all counterparties. Our net exposure for foreign exchange forward and foreign currency option contracts, net of cash collateral, was $6.6 million at June 30, 2019 and $20.7 million at December 31, 2018. For additional information on our foreign exchange forward contracts and foreign currency option contracts,

see Note 12—"Derivative Financial Instruments" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

*Client Interest Rate Derivatives*

We sell interest rate contracts to clients who wish to mitigate their interest rate exposure. We economically reduce the interest rate risk from this business by entering into opposite way contracts with correspondent banks. Our net exposure for client interest rate derivative contracts, net of cash collateral, was $19.6 million at June 30, 2019 and $8.7 million at December 31, 2018. For additional information on our client interest rate derivatives, see Note 12—"Derivative Financial Instruments" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

*Interest Rate Swaps*

To manage interest rate risk on our variable-interest rate loan portfolio, we enter into interest rate swap contracts to hedge against future changes in interest rates by using hedging instruments to lock in future cash inflows that would otherwise be impacted by movements in the market interest rates. We designate these interest rate swap contracts as cash flow hedges that qualify for hedge accounting under ASC 815 and record them in other assets and other liabilities. For additional information on our interest rate swaps, see Note 12—"Derivative Financial Instruments" of the "Notes to Interim Consolidated Financial Statements (unaudited)" and "Quantitative and Qualitative Disclosures about Market Risk" under Part I, Item 1 of this report.

***Deposits***

Deposits were $55.6 billion at June 30, 2019, an increase of $6.3 billion, or 12.7 percent, compared to $49.3 billion at December 31, 2018. The increase in deposits was driven primarily by growth across a majority of our portfolio segments. The leading contributors were our technology and life science/healthcare client portfolios, attributable primarily to a healthy equity funding environment and robust IPO and SPO markets as well as continued healthy new client acquisition.

At June 30, 2019, the aggregate balance of time deposit accounts individually equal to or greater than $100,000 totaled $154 million, compared to $46 million at December 31, 2018. At June 30, 2019, all the time deposit accounts individually equal to or greater than $100,000 were scheduled to mature within one year. No material portion of our deposits has been obtained from a single depositor and the loss of any one depositor would not materially affect our business. Approximately 15 percent and 16 percent of our total deposits at June 30, 2019 and December 31, 2018, respectively, were from our clients in Asia.

***Short-Term Borrowings***

As of June 30, 2019, we had no overnight borrowings and $24.3 million in other short-term borrowings consisting of cash collateral received from certain counterparties in relation to market value exposures of derivative contracts in our favor. As of December 31, 2018, we had $0.6 billion in short-term borrowings, consisting of $0.3 billion in advances from the FHLB and $0.3 billion in securities sold under an agreement to repurchase. For more information on our short-term debt, see Note 11—"Short-Term Borrowings and Long-Term Debt" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

***Long-Term Debt***

Our long-term debt was $697.0 million at June 30, 2019 and $696.5 million at December 31, 2018. As of June 30, 2019, long-term debt included our 3.50% Senior Notes and 5.375% Senior Notes. For more information on our long-term debt, see Note 11—"Short-Term Borrowings and Long-Term Debt" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

***Other Liabilities***

A summary of other liabilities at June 30, 2019 and December 31, 2018 is as follows:

| (Dollars in thousands) | June 30, 2019 | December 31, 2018 | % Change |
|---|---|---|---|
| Foreign exchange spot contract liabilities, gross | $ 591,903 | $ 170,355 | NM |
| Accrued compensation | 194,176 | 224,405 | (13.5) |
| Allowance for unfunded credit commitments | 62,664 | 55,183 | 13.6 |
| Derivative liabilities (1) | 112,651 | 98,050 | 14.9 |
| Other liabilities | 579,082 | 458,366 | 26.3 |
| Total other liabilities | $ 1,540,476 | $ 1,006,359 | 53.1 |

NM—Not meaningful
(1) See "Derivatives" section above.

*Foreign Exchange Spot Contract Liabilities*

Foreign exchange spot contract liabilities represent unsettled client trades at the end of the period. The increase of $421.5 million was due primarily to an increase in the amount of unsettled spot trades at period-end as compared to December 31, 2018.

*Accrued Compensation*

Accrued compensation includes amounts for our Incentive Compensation Plan, Direct Drive Incentive Compensation Plan, Retention Program, Warrant Incentive Plan, ESOP and other compensation arrangements. The decrease of $30.2 million was primarily the result of the payout of our 2018 incentive compensation plans during the first quarter of 2019, partially offset by incentive compensation accruals for the six months ended June 30, 2019 primarily due to the increase in the number of average FTEs for the first half of 2019.

*Other Liabilities*

Other liabilities includes various accrued liability amounts for other operational transactions. The increase of $120.7 million was reflective primarily of a $61.1 million increase in new commitments for our qualified affordable tax credit funds, a $12.0 million increase in accrued rebate liabilities due to the timing of settlement at June 30, 2019 as compared to December 31, 2018. In addition, an increase of $14.3 million in other liabilities was attributable to the inclusion of SVB Leerink in our financial results at June 30, 2019.

***Noncontrolling Interests***

Noncontrolling interests totaled $152.1 million and $148.6 million at June 30, 2019 and December 31, 2018, respectively. The $3.5 million increase was due primarily to income attributable to noncontrolling interests of $21.5 million as well as an additional $5.3 million attributable to the acquisition of SVB Leerink in our financial results for the six months ended June 30, 2019, partially offset by net distributions of $23.3 million to limited partners from various managed funds of funds.

***Fair Value Measurements***

The following table summarizes our financial assets and liabilities that are measured at fair value on a recurring basis as of June 30, 2019 and December 31, 2018:

| | June 30, 2019 | | December 31, 2018 | |
|---|---|---|---|---|
| (Dollars in thousands) | Total Balance | Level 3 | Total Balance | Level 3 |
| Assets carried at fair value | $ 8,574,931 | $ 148,211 | $ 8,388,011 | $ 146,278 |
| As a percentage of total assets | 13.4% | 0.2% | 14.7% | 0.3% |
| Liabilities carried at fair value | $ 112,651 | $ — | $ 98,050 | $ — |
| As a percentage of total liabilities | 0.2% | —% | 0.2% | —% |
| As a percentage of assets carried at fair value | | 1.7% | | 1.7% |

Financial assets valued using Level 3 measurements consist of our non-marketable investment securities in shares of private company stock and equity warrant assets (rights to shares of private and public company capital stock). The valuation methodologies of our non-marketable securities carried under fair value accounting and equity warrant assets involve a significant degree of management judgment. Refer to Note 18—"Fair Value of Financial Instruments" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report for a summary of the valuation techniques and significant inputs used for each class of Level 3 assets.

The inherent uncertainty in the process of valuing securities for which a ready market does not exist may cause our estimated values of these securities to differ significantly from the values that would have been derived had a ready market for the securities existed, and those differences could be material. The timing and amount of changes in fair value, if any, of these financial instruments depend upon factors beyond our control, including the performance of the underlying companies, fluctuations in the market prices of the preferred or common stock of the underlying companies, general volatility and interest rate market factors, and legal and contractual restrictions. The timing and amount of actual net proceeds, if any, from the disposition of these financial instruments depend upon factors beyond our control, including investor demand for IPOs, levels of M&A activity, legal and contractual restrictions on our ability to sell, and the perceived and actual performance of portfolio companies. All of these factors are difficult to predict and there can be no assurances that we will realize the full value of these securities, which could result in significant losses. See "Risk Factors" set forth in our 2018 Form 10-K.

During the three and six months ended June 30, 2019, the Level 3 assets that are measured at fair value on a recurring basis experienced net realized and unrealized gains of $46.6 million and $65.8 million, respectively, primarily reflective of valuation increases from our private company warrant portfolio driven by healthy funding rounds and net gains realized on exercised warrant assets due to IPO activity. During the three and six months ended June 30, 2018, the Level 3 assets that are measured at fair value on a recurring basis experienced net realized and unrealized gains of $18.2 million and $36.9 million, respectively, primarily reflective of valuation increases from our public and private company warrant portfolios and net gains realized on exercised warrant assets due to IPO and M&A activity.

**Capital Resources**

We maintain an adequate capital base to support anticipated asset growth, operating needs and credit and other business risks, and to provide for SVB Financial and the Bank to be in compliance with all regulatory capital guidelines, including the joint agency rules implementing the "Basel III" capital rules. Our primary sources of new capital include retained earnings and proceeds from the sale and issuance of our capital stock or other securities. In consultation with the Finance Committee of our Board of Directors, management engages in regular capital planning processes in an effort to optimize the use of capital available to us and to appropriately plan for our future capital needs. The capital plan considers capital needs for the foreseeable future and allocates capital to both existing and future business activities. Expected future use or activities for which capital may be set aside include balance sheet growth and associated relative increases in market or credit exposure, investment activity, potential product and business expansions, acquisitions and strategic or infrastructure investments. In addition, we conduct capital stress tests as part of our annual capital planning process. The capital stress tests allow us to assess the impact of adverse changes in the economy and interest rates on our capital adequacy position.

***SVBFG Stockholders' Equity***

SVBFG stockholders' equity totaled $5.6 billion at June 30, 2019, an increase of $437.8 million, or 8.6 percent, compared to $5.1 billion at December 31, 2018. This increase was due primarily to net income of $606.7 million and an increase in accumulated other comprehensive income reflective primarily of a $166.0 million ($119.8 million net of tax) increase in the fair value of our AFS securities portfolio driven by decreases in period-end market interest rates. The increases were partially offset by a $346.8 million decrease in SVBFG stockholders' equity related to the repurchase of our outstanding common stock.

Funds generated through retained earnings are a significant source of capital and liquidity and are expected to continue to be so in the future.

***Capital Ratios***

Both SVB Financial and the Bank are subject to various regulatory capital requirements administered by state and federal banking agencies.

Regulatory capital ratios for SVB Financial and the Bank exceeded minimum federal regulatory guidelines for a well-capitalized depository institution as of June 30, 2019 and December 31, 2018. Capital ratios for SVB Financial and the Bank, compared to the minimum regulatory ratios applicable to bank holding companies and banks to be considered "well capitalized" and "adequately capitalized," are set forth below:

| | June 30, 2019 | December 31, 2018 | Minimum Ratios under Applicable Regulatory Capital Adequacy Requirements | |
|---|---|---|---|---|
| | | | "Well Capitalized" | "Adequately Capitalized" |
| **SVB Financial:** | | | | |
| CET 1 risk-based capital ratio | 12.92% | 13.41% | 6.5% | 4.5% |
| Tier 1 risk-based capital ratio | 13.08 | 13.58 | 8.0 | 6.0 |
| Total risk-based capital ratio | 13.97 | 14.45 | 10.0 | 8.0 |
| Tier 1 leverage ratio | 8.82 | 9.06 | N/A | 4.0 |
| Tangible common equity to tangible assets ratio (1) | 8.43 | 8.99 | N/A | N/A |
| Tangible common equity to risk-weighted assets ratio (1) | 13.13 | 13.28 | N/A | N/A |
| **Bank:** | | | | |
| CET 1 risk-based capital ratio | 12.50% | 12.41% | 6.5% | 4.5% |
| Tier 1 risk-based capital ratio | 12.50 | 12.41 | 8.0 | 6.0 |
| Total risk-based capital ratio | 13.44 | 13.32 | 10.0 | 8.0 |
| Tier 1 leverage ratio | 8.17 | 8.10 | 5.0 | 4.0 |
| Tangible common equity to tangible assets ratio (1) | 7.91 | 8.13 | N/A | N/A |
| Tangible common equity to risk-weighted assets ratio (1) | 12.72 | 12.28 | N/A | N/A |

(1) See below for a reconciliation of non-GAAP tangible common equity to tangible assets and tangible common equity to risk-weighted assets.

Risk-based capital ratios (CET 1, tier 1, total risk-based capital, and tier 1 leverage ratio) for SVB Financial decreased as of June 30, 2019, compared to the same ratios as of December 31, 2018 as a result of an increase in risk-weighted assets, primarily driven by increases in funded loans and loan commitments. The decrease in the tier 1 leverage ratio is due to the increase in average assets driven by an increase in the average loan portfolio and investment securities.

Risk-based capital ratios (CET 1, tier 1, total risk-based capital, and tier 1 leverage ratio) for the Bank increased as of June 30, 2019, compared to the same ratios as of December 31, 2018. The increase in the Bank's capital ratios is due to the increase in net income partially offset by $297.0 million of cash dividends paid by the Bank to our bank holding company, SVB Financial, during the six months ended June 30, 2019. The increase in the tier 1 leverage ratio is due to the increase in regulatory capital driven by the increase in net income and partially offset by the increase in average assets.

All of our reported capital ratios remain above the levels considered to be "well capitalized" under applicable banking regulations.

The tangible common equity to tangible assets ratio and the tangible common equity to risk-weighted assets ratios are not required by GAAP or applicable bank regulatory requirements. However, we believe these ratios provide meaningful supplemental information regarding our capital levels. Our management uses, and believes that investors benefit from referring to, these ratios in evaluating the adequacy of the Company's capital levels; however, these financial measures should be considered in addition to, not as a substitute for or preferable to, comparable financial measures prepared in accordance with GAAP. These ratios are calculated by dividing total SVBFG stockholders' equity, by total period-end assets and risk-weighted assets, after reducing both amounts by acquired intangibles, if any. The manner in which this ratio is calculated varies among companies. Accordingly, our ratio is not necessarily comparable to similar measures of other companies.

The following table provides a reconciliation of non-GAAP financial measures with financial measures defined by GAAP for SVB Financial and the Bank for the periods ended June 30, 2019 and December 31, 2018:

| Non-GAAP tangible common equity and tangible assets (Dollars in thousands, except ratios) | SVB Financial | | Bank | |
|---|---|---|---|---|
| | June 30, 2019 | December 31, 2018 | June 30, 2019 | December 31, 2018 |
| GAAP SVBFG stockholders' equity | $ 5,554,043 | $ 5,116,209 | $ 4,936,520 | $ 4,554,814 |
| Less: intangible assets | 192,981 | — | — | — |
| Tangible common equity | $ 5,361,062 | $ 5,116,209 | $ 4,936,520 | $ 4,554,814 |
| GAAP total assets | $ 63,773,739 | $ 56,927,979 | $ 62,380,814 | $ 56,047,134 |
| Less: intangible assets | 192,981 | — | — | — |
| Tangible assets | $ 63,580,758 | $ 56,927,979 | $ 62,380,814 | $ 56,047,134 |
| Risk-weighted assets | $ 40,843,334 | $ 38,527,853 | $ 38,821,244 | $ 37,104,080 |
| Non-GAAP tangible common equity to tangible assets | 8.43% | 8.99% | 7.91% | 8.13% |
| Non-GAAP tangible common equity to risk-weighted assets | 13.13 | 13.28 | 12.72 | 12.28 |

The tangible common equity to tangible assets ratio decreased for the Bank primarily as a result of the $297.0 million in cash dividends paid by the Bank to our bank holding company, SVB Financial Group, during the six months ended June 30, 2019. The tangible common equity to risk-weighted assets ratio increased for the Bank as a result of the proportionally higher increase in tangible common equity relative to the increase in risk-weighted assets. The growth in period-end risk-weighted assets was primarily due to increases in cash and cash equivalents and period-end loan growth.

***Off-Balance Sheet Arrangements***

In the normal course of business, we use financial instruments with off-balance sheet risk to meet the financing needs of our customers. These financial instruments include commitments to extend credit, commercial and standby letters of credit and commitments to invest in venture capital and private equity fund investments. These instruments involve, to varying degrees, elements of credit risk. Credit risk is defined as the possibility of sustaining a loss because other parties to the financial instrument fail to perform in accordance with the terms of the contract. For details of our commitments to extend credit, and commercial and standby letters of credit, please refer to Note 16—"Off-Balance Sheet Arrangements, Guarantees and Other Commitments" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

***Commitments to Invest in Venture Capital and Private Equity Funds***

Subject to applicable regulatory requirements, including the Volcker Rule, we make investments. We make commitments to invest in venture capital and private equity funds, which in turn make investments generally in, or in some cases make loans to, privately-held companies. Commitments to invest in these funds are generally made for a 10-year period from the inception of the fund. Although the limited partnership agreements governing these investments typically do not restrict the general partners from calling 100% of committed capital in one year, it is customary for these funds to generally call most of the capital commitments over 5 to 7 years; however, in certain cases, the funds may not call 100% of committed capital over the life of the fund. The actual timing of future cash requirements to fund these commitments is generally dependent upon the investment cycle, overall market conditions, and the nature and type of industry in which the privately held companies operate.

For further details on our commitments to invest in venture capital and private equity funds, refer to Note 16—"Off-Balance Sheet Arrangements, Guarantees and Other Commitments" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

***Liquidity***

The objective of liquidity management is to ensure that funds are available in a timely manner to meet our financial obligations, including, as necessary, paying creditors, meeting depositors' needs, accommodating loan demand and growth, funding investments, repurchasing securities and other operating or capital needs, without incurring undue cost or risk, or causing a disruption to normal operating conditions.

We regularly assess the amount and likelihood of projected funding requirements through a review of factors such as historical deposit volatility and funding patterns, present and forecasted market and economic conditions, individual client funding needs, and existing and planned business activities. Our Asset/Liability Committee ("ALCO"), which is a management committee, provides oversight to the liquidity management process and recommends policy guidelines for the approval of the Finance

Committee of our Board of Directors, and courses of action to address our actual and projected liquidity needs. Additionally, we routinely conduct liquidity stress testing as part of our liquidity management practices.

Our deposit base is, and historically has been, our primary source of liquidity. Our deposit levels and cost of deposits may fluctuate from time to time due to a variety of factors, including market conditions, prevailing interest rates, changes in client deposit behaviors, availability of insurance protection, and our offering of deposit products. We may also offer more investment alternatives for our off-balance sheet products which may impact deposit levels. At June 30, 2019, our period-end total deposit balances were $55.6 billion, compared to $49.3 billion at December 31, 2018.

Our liquidity requirements can also be met through the use of our portfolio of liquid assets. Our definition of liquid assets includes cash and cash equivalents in excess of the minimum levels necessary to carry out normal business operations, short-term investment securities maturing within one year, available-for-sale securities eligible and available for financing or pledging purposes with a maturity in excess of one year and anticipated near-term cash flows from investments.

We have certain facilities in place to enable us to access short-term borrowings on a secured and unsecured basis. Our secured facilities include collateral pledged to the FHLB of San Francisco and the discount window at the FRB (using both fixed income securities and loans as collateral). Our unsecured facility consists of our uncommitted federal funds lines. As of June 30, 2019, collateral pledged to the FHLB of San Francisco was comprised primarily of fixed income investment securities and loans and had a carrying value of $4.6 billion, of which $4.1 billion was available to support additional borrowings. As of June 30, 2019, collateral pledged to the discount window at the FRB was comprised of fixed income investment securities and had a carrying value of $0.6 billion, all of which was unused and available to support additional borrowings. Our total unused and available borrowing capacity for our uncommitted federal funds lines totaled $1.9 billion at June 30, 2019. Our total unused and available borrowing capacity under our master repurchase agreements with various financial institutions totaled $3.3 billion at June 30, 2019.

On a stand-alone basis, SVB Financial's primary liquidity channels include dividends from the Bank, its portfolio of liquid assets, and its ability to raise debt and capital. Consistent with recent prior quarters, the Bank has paid a quarterly dividend to SVB Financial. For the three and six months ended June 30, 2019, the dividend amount paid was $130.0 million and $297.0 million, respectively. The ability of the Bank to pay dividends is subject to certain regulations described in "Business—Supervision and Regulation—Restriction on Dividends" under Part I, Item 1 of our 2018 Form 10-K.

*Consolidated Summary of Cash Flows*

Below is a summary of our average cash position and statement of cash flows for the six months ended June 30, 2019 and 2018. For further details, see our "Interim Consolidated Statements of Cash Flows (Unaudited)" under Part I, Item 1 of this report.

| | Six months ended June 30, | |
|---|---|---|
| **(Dollars in thousands)** | **2019** | **2018** |
| Average cash and cash equivalents | $ 5,470,520 | $ 2,997,338 |
| Percentage of total average assets | 9.3% | 5.6% |
| Net cash provided by operating activities | $ 450,571 | $ 347,380 |
| Net cash used for investing activities | (317,021) | (4,570,107) |
| Net cash provided by financing activities | 5,315,836 | 4,011,753 |
| Net increase (decrease) in cash and cash equivalents | $ 5,449,386 | $ (210,974) |

Average cash and cash equivalents increased by $2.5 billion, or 82.5 percent, to $5.5 billion for the six months ended June 30, 2019, compared to $3.0 billion for the comparable 2018 period.

Cash provided by operating activities was $450.6 million for the six months ended June 30, 2019, reflective primarily of net income before noncontrolling interests of $628.2 million, partially offset by a net decrease of $177.6 million in adjustments to reconcile net income to net cash driven primarily by the changes in our foreign exchange spot contracts.

Cash used for investing activities of $0.3 billion for the six months ended June 30, 2019 was driven by an $0.8 billion increase in loan balances and a net cash outflow of $0.1 billion for the acquisition of SVB Leerink, partially offset by net cash inflows from our fixed income investment and non-marketable equity securities of $0.6 billion.

Cash provided by financing activities was $5.3 billion for the six months ended June 30, 2019, reflective primarily of a net increase of $6.3 billion in deposits, partially offset by $0.6 billion in paydowns of our short-term overnight borrowings and $0.4 billion cash outflows related to repurchases of our outstanding common stock.

Cash and cash equivalents were $9.0 billion and $2.7 billion, respectively, at June 30, 2019 and 2018.

**ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

**Interest Rate Risk Management**

Market risk is defined as the risk of adverse fluctuations in the market value of financial instruments due to changes in market interest rates. Interest rate risk is our primary market risk and can result from timing and volume differences in the repricing of our rate-sensitive assets and liabilities, widening or tightening of credit spreads, changes in the general level of market interest rates and changes in the shape and level of the benchmark LIBOR/SWAP yield curve. Additionally, changes in interest rates can influence the rate of principal prepayments on mortgage securities, which affects the rate of amortization of purchase premiums and discounts. Other market risks include foreign currency exchange risk, equity price risk, including the effect of competition on product pricing. All of these risks are important considerations, but are also inherently difficult to predict and to assess the impact of each on the simulation results. Consequently, simulations used to analyze the sensitivity of net interest income to changes in interest rates will differ from actual results due to differences in the timing and frequency or rate resets, the magnitude of changes in market rates, the impact of competition, fluctuating business conditions, and the impact of strategies taken by management to mitigate these risks.

Interest rate risk is managed by our ALCO. ALCO reviews the sensitivity of the market valuation on earning assets and funding liabilities and the modeled 12-month projection of net interest income from changes in interest rates, structural changes in investment and funding portfolios, loan and deposit activity and current market conditions. Adherence with relevant metrics included in our Interest Rate Risk Policy, which is approved by the Finance Committee of our Board of Directors, are monitored on an ongoing basis.

Managing interest rate risk is done primarily through strategies involving our fixed income securities portfolio, available funding channels and capital market activities. In addition, our policies permit the use of off-balance sheet derivatives, such as interest rate swaps, to assist in managing interest rate risk.

We utilize a simulation model to perform sensitivity analysis on the economic value of equity and net interest income under a variety of interest rate scenarios, balance sheet forecasts and business strategies. The simulation model provides a dynamic assessment of interest rate sensitivity embedded within our balance sheet which measures the potential variability in economic value and net interest income relating solely to changes in market interest rates over time. We review our interest rate risk position and sensitivity to market interest rates regularly.

**Model Simulation and Sensitivity Analysis**

A specific application of our simulation model involves measurement of the impact of changes in market interest rates on the economic value of equity ("EVE"). EVE is defined as the market value of assets, less the market value of liabilities. Another application of the simulation model measures the impact of changes in market interest rates on net interest income ("NII") assuming a static balance sheet size and composition as of the period-end reporting date. For the NII simulation, the level of market interest rates as well as the size and composition of the balance sheet are held constant over the simulation horizon. Simulated cash flows during the scenario horizon are assumed to be replaced as they occur, which maintains the balance sheet at its current size and composition. Yield and spread assumptions on cash and investment balances reflect current market rates and the shape of the yield curve. Yield and spread assumptions on loans reflect recent market impacts on product pricing. Similarly, we make certain deposit decay rate assumptions on demand deposits and interest bearing deposits, which are replenished to hold the level and mix of funding liabilities constant. Changes in market interest rates that affect net interest income are principally short-term interest rates and include the following benchmark indexes: (i) the National Prime Rate, (ii) 1-month and 3-month LIBOR, and (iii) the Federal Funds target rate. Changes in these short-term rates impact interest earned on our variable rate loans and balances held as cash and cash equivalents. Additionally, simulated changes in deposit pricing relative to changes in market rates, commonly referred to as deposit beta, generally follow overall changes in short-term interest rates, although actual changes may lag in terms of timing and magnitude.

Increases in short-term interest rates since the end of 2015 and corresponding increases in deposit rates paid to our clients to attract new deposit funding and retain existing funds has resulted in an increase in our realized beta to approximately 50 percent, as measured since the beginning of the increasing rate cycle, which is higher than the approximate 35 percent beta used in prior periods. Additionally, management expects deposit repricing behavior in a falling rate environment to be different than repricing behavior in a rising rate environment. This results in an "asymmetrical" beta assumption being applied in the NII and EVE simulation models for interest bearing deposits. This model assumes the overall beta for interest bearing deposits in a falling rate environment would be approximately 60 percent. That is, overall changes in interest bearing deposit rates would be approximately 60 percent of the change in short-term market rates. In a rising rate environment, this beta assumption is only 50 percent. These repricing assumptions are reflected as changes in interest expense on interest bearing deposit balances. Because the updated beta assumptions used as of June 30, 2019 represent deposit repricing that more closely follows the repricing behavior of the loan portfolio, overall NII sensitivity is lower in both increasing and decreasing rate scenarios when compared to results using the prior deposit beta assumptions. Therefore, when comparing the change to modeled results using a lower beta assumption, modeled sensitivity changed from -14.4% to -12.4% in the -100 basis point scenario and from 14.3% to 13.4% in the +100 bps scenario when compared to the modeled sensitivity as of March 31, 2019.

The following table presents our EVE and NII sensitivity exposure related to an instantaneous and sustained parallel shift in market interest rates of 100 and 200 basis points ("bps") at June 30, 2019 and December 31, 2018. Net Interest Income sensitivity for December 31, 2018 has been revised to reflect the higher beta assumptions for purposes of comparison. Modeled Economic Value of Equity for December 31, 2018 has not been adjusted as the assumption change had an immaterial impact.

| Change in interest rates (bps) (Dollars in thousands) | Estimated EVE | Estimated Increase/(Decrease) in EVE | | Estimated NII | Estimated Increase/(Decrease) in NII | |
|---|---|---|---|---|---|---|
| | | Amount | Percent | | Amount | Percent |
| **June 30, 2019:** | | | | | | |
| +200 | $ 9,416,810 | $ 236,121 | 2.6 % | $ 2,566,645 | $ 540,243 | 26.7 % |
| +100 | 9,300,936 | 120,247 | 1.3 | 2,297,781 | 271,379 | 13.4 |
| — | 9,180,689 | — | — | 2,026,402 | — | — |
| -100 | 8,920,500 | (260,189) | (2.8) | 1,775,994 | (250,408) | (12.4) |
| -200 | 8,308,538 | (872,151) | (9.5) | 1,529,641 | (496,761) | (24.5) |
| | | | | | | |
| **December 31, 2018: (as revised)** | | | | | | |
| +200 | $ 9,348,408 | $ 504,405 | 5.7 % | $ 2,583,577 | $ 499,257 | 24.0 % |
| +100 | 9,090,781 | 246,778 | 2.8 | 2,334,040 | 249,720 | 12.0 |
| — | 8,844,003 | — | — | 2,084,320 | — | — |
| -100 | 8,470,501 | (373,502) | (4.2) | 1,840,190 | (244,130) | (11.7) |
| -200 | 7,590,973 | (1,253,030) | (14.2) | 1,543,150 | (541,170) | (26.0) |

**Economic Value of Equity**

The estimated EVE in the preceding table is based on a combination of valuation methodologies including a discounted cash flow analysis and a multi-path lattice based valuation. Both methodologies use publicly available market interest rates to determine discounting factors on projected cash flows. The model simulations and calculations are highly assumption-dependent and will change regularly as the composition of earning assets and funding liabilities change (including the impact of changes in the value of interest rate derivatives, if any), as interest rate environments evolve, and as we change our assumptions in response to relevant market conditions, competition or business circumstances. These calculations do not reflect forecast changes in our balance sheet or changes we may make to reduce our EVE exposure as a part of our overall interest rate risk management strategy.

As with any method of measuring interest rate risk, certain limitations are inherent in the method of analysis presented in the preceding table. We are exposed to yield curve risk, prepayment risk, basis risk, and yield spread compression, which cannot be fully modeled and expressed using the above methodology. Accordingly, the results in the preceding table should not be relied upon as a precise indicator of actual results in the event of changing market interest rates. Additionally, the resulting EVE and NII estimates are not intended to represent and should not be construed to represent our estimate of the underlying value of equity or forecast of NII.

Our base EVE as of June 30, 2019 increased from December 31, 2018 by $337 million, driven by changes in balance sheet composition as well as changes in interest rates. At June 30, 2019, as compared to December 31, 2018, total loan balances increased by $0.9 billion, primarily in Prime and LIBOR indexed variable rate loans. Total fixed income securities decreased by $0.5 billion and cash and cash equivalents increased by $5.4 billion driven by increases in period-end deposit growth. Total deposit growth was $6.3 billion as compared to December 31, 2018.

Overall balance sheet growth contributed to a $609 million increase in total base EVE, however, this was offset by a decrease of $272 million as a result of lower LIBOR/swap rates across the curve. In general, EVE sensitivity was lower as of June 30, 2019, compared to December 31, 2018, due to elevated levels of short duration cash relative other assets and liabilities impacted by changing market discount rates.

**12-Month Net Interest Income Simulation**

Our static 12-month NII modeled projection at June 30, 2019 decreased compared to December 31, 2018 by $58 million, primarily due to changes in our balance sheet composition with increased modeled interest income of $97 million, more than offset by an increase in interest expense of $157 million. As of June 30, 2019, an increase in interest income was due primarily to elevated cash levels while relatively higher interest bearing deposits and higher deposit rates resulted in increases in interest expense when compared to December 31, 2018. Comparing the same periods, modeled interest income from loans was $17 million lower as of June 30, 2019 due to lower loan interest rates despite an increase in loan balances relative to December 31, 2018. Lower loan interest income was offset by $15 million lower modeled interest expense on short-term borrowings.

The majority of our loans are indexed to the National Prime Rate and 1-month and 3-month LIBOR index rates. In the positive parallel simulated rate shock scenarios, interest income on assets that are tied to variable rate indexes, primarily our variable rate loans, are expected to contribute a positive impact on our base 12-month NII projections. The opposite is true for negative rate shock scenarios.

The 12-month NII simulations include repricing assumptions on our interest bearing deposit products which we set at our discretion based on client needs and our overall funding mix. Repricing of interest bearing deposits impacts estimated interest expense. As noted previously, repricing deposit rates are generally assumed to be about 50 percent of simulated increases in short-term interest rates and about 60 percent of simulated decreases in short-term interest rates.

NII sensitivity is measured as the percentage change in projected 12-month net interest income earned in +/- 100 and +/- 200 basis point interest rate shock scenarios compared to a base scenario where asset and liability balances, composition, and the level of market interest rates are held constant over the forecast horizon. At June 30, 2019, NII sensitivity was 13.4 percent in the +100 bps interest rate scenario, compared to 12.0 percent at December 31, 2018. Our NII sensitivity in the +200 bps interest rate shock scenario was 26.7 percent compared to 24.0 percent at December 31, 2018. NII sensitivity in the -100 bps scenario of negative 12.4 percent at June 30, 2019 compared to a negative 11.7 percent at December 31, 2018. The -200 bps scenario indicates a percentage change in NII of negative 24.5 percent at June 30, 2019 compared to negative 26.0 percent at December 31, 2018. At June 30, 2019, NII sensitivity percentages are inclusive of the income or expense associated with interest rate swaps that are part of our hedging initiatives which began during the six months ended June 30, 2019, in an effort to reduce the impact of potential decreasing rates on NII. On June 30, 2019, the outstanding notional amount of receive fixed interest rate swaps was $1.3 billion and reduced our projected base 12-month NII by $7 million. The +100 bps scenario reflects a total net negative impact to NII of $19 million from the interest rate swaps and the -100 bps scenario reflects a total net positive impact to NII of $6 million.

The simulation model used in the above analysis incorporates embedded floors on loans, where present, in our interest rate scenarios, which prevent model benchmark rates from moving below zero percent in the 200 bps rate scenarios. The embedded floors are also a factor in the up rate scenarios to the extent a simulated increase in rates is needed before floored

rates are cleared. In addition, we assume different deposit balance decay rates based on a historical deposit study of our clients. These assumptions may change in future periods based on changes in client behavior and at management's discretion. Actual changes in our deposit pricing strategies may differ from our current model assumptions and may have an impact on our actual sensitivity overall.

**ITEM 4. CONTROLS AND PROCEDURES**

***Disclosure Controls and Procedures***

Disclosure controls and procedures are the controls and other procedures that are designed to ensure that information required to be disclosed in the reports that we file or submit under the Securities Exchange Act of 1934, as amended (the "Exchange Act") is recorded, processed, summarized, and reported within the time periods specified in SEC rules and forms. Disclosure controls and procedures include, among other things, processes, controls and procedures designed to ensure that information required to be disclosed in the reports that we file or submit under the Exchange Act is accumulated and communicated to management, including the Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

We carried out an evaluation, under the supervision and with the participation of management, including the Chief Executive Officer and the Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures as of our most recently completed fiscal quarter, pursuant to Exchange Act Rule 13a-15(b). Based upon this evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that, as of the end of the period covered by this report, the Company's disclosure controls and procedures were effective.

***Changes in Internal Control***

Except as set forth below, there were no changes in our internal control over financial reporting identified in management's evaluation pursuant to Rules 13a-15(d) or 15d-15(d) of the Exchange Act during the period covered by this Quarterly Report on Form 10-Q that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Beginning January 1, 2019, we implemented ASC 842, Leases. Although the new lease standard had an immaterial impact on our consolidated financial statements, we did implement changes to our processes related to recognition and the control activities to properly identify and record them. These included the development of new policies, new controls, new training, ongoing contract review requirements, and gathering of information provided for disclosures.

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## PART II–OTHER INFORMATION

### ITEM 1. LEGAL PROCEEDINGS

Please refer to Note 19—"Legal Matters" of the "Notes to Interim Consolidated Financial Statements (unaudited)" under Part I, Item 1 of this report.

### ITEM 1A. RISK FACTORS

There are no material changes to the risk factors set forth in our 2018 Annual Report on Form 10-K.

### ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

**Recent Sales of Unregistered Securities**

None.

**Issuer Purchases of Equity Securities**

None.

### ITEM 3. DEFAULTS UPON SENIOR SECURITIES

None.

### ITEM 4. MINE SAFETY DISCLOSURES

Not applicable.

### ITEM 5. OTHER INFORMATION

None.

### ITEM 6. EXHIBITS

| Exhibit Number | Exhibit Description | Incorporated by Reference | | | | Filed Herewith |
|---|---|---|---|---|---|---|
| | | Form | File No. | Exhibit | Filing Date | |
| 3.1 | Amended and Restated Certificate of Incorporation | 10-Q | 000-15637 | 3.1 | May 9, 2019 | |
| 10.1 | 2006 Equity Incentive Plan, as amended | | | | | X |
| 31.1 | Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Executive Officer | | | | | X |
| 31.2 | Rule 13a-14(a) / 15(d)-14(a) Certification of Principal Financial Officer | | | | | X |
| 32.1 | Section 1350 Certifications | | | | | X |
| 101.INS | XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document | | | | | X |
| 101.SCH | XBRL Taxonomy Extension Schema Document | | | | | X |
| 101.CAL | XBRL Taxonomy Extension Calculation Linkbase Document | | | | | X |
| 101.DEF | XBRL Taxonomy Extension Definition Linkbase Document | | | | | X |
| 101.LAB | XBRL Taxonomy Extension Label Linkbase Document | | | | | X |
| 101.PRE | XBRL Taxonomy Extension Presentation Linkbase Document | | | | | X |

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**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

SVB Financial Group

Date: August 9, 2019

/s/ DANIEL BECK

Daniel Beck
Chief Financial Officer
(Principal Financial Officer)

SVB Financial Group

Date: August 9, 2019

/s/ KAMRAN HUSAIN

Kamran Husain
Chief Accounting Officer
(Principal Accounting Officer)




**SVB FINANCIAL GROUP**

**2006 EQUITY INCENTIVE PLAN**

**Amended April 25, 2019**

1. Purposes of the Plan. The purposes of this Plan are:

- to attract and retain the best available personnel for positions of substantial responsibility,
- to provide incentives to individuals who perform services to the Company,
- to align with stockholder interests, and
- to promote the success of the Company's business.

The Plan permits the grant of Incentive Stock Options, Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units, Performance Shares and other stock or cash awards as the Administrator may determine.

2. Definitions. As used herein, the following definitions will apply:

(a) "Administrator" means the Board or any of its Committees, including its Compensation Committee, as will be administering the Plan, in accordance with Section 4 of the Plan.

(b) "Affiliate" means any corporation or any other entity (including, but not limited to, partnerships and joint ventures) controlling, controlled by, or under common control with the Company.

(c) "Applicable Laws" means the requirements relating to the administration of equity-based awards under U.S. state corporate laws, U.S. federal and state securities laws, the Code, any stock exchange or quotation system on which the Common Stock is listed or quoted and the applicable laws of any foreign country or jurisdiction where Awards are, or will be, granted under the Plan.

(d) "Award" means, individually or collectively, a grant under the Plan of Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units, Performance Shares and other stock or cash awards as the Administrator may determine.

(e) "Award Agreement" means the written or electronic agreement setting forth the terms and provisions applicable to each Award granted under the Plan. The Award Agreement is subject to the terms and conditions of the Plan.

(f) "Board" means the Board of Directors of the Company.

(g) "Cause" means:

(i) An act of embezzlement, fraud, dishonesty, or breach of fiduciary duty to the Company; or

(ii) A deliberate disregard of the rules of the Company which results in loss, damage or injury to the Company; or

(iii) Any unauthorized disclosure of any of the secrets or confidential information of the Company; or

(iv) Inducing any client or customer of the Company to break any contract with the Company or inducing any principal for whom the Company acts as agent to terminate such agency relations; or

(v) Engaging in any conduct which constitutes unfair competition with the Company; or

(vi) Any act which results in the Participant being removed from any office of the Company by any bank regulatory agency.

(h) "Change in Control" means the consummation of any of the following transactions:

(i) A merger or consolidation of Silicon Valley Bank (the "Bank") or the Company with any other corporation, other than a merger or consolidation which would result in beneficial owners of the total voting power in the election of directors represented by the voting securities ("Voting Securities") of the Bank or the Company (as the case may be) outstanding immediately prior thereto continuing to beneficially own securities representing (either by remaining outstanding or by being converted into voting securities of the surviving entity) at least fifty percent (50%) of the total Voting Securities of the Bank or the Company, or of such surviving entity, outstanding immediately after such merger or consolidation;

(ii) The filing of a plan of liquidation or dissolution of the Bank or the closing of the sale, lease, exchange or other transfer or disposition by the Bank or the Company of all or substantially all of the Bank's assets;

(iii) Any person (as such term is used in Sections 13(d) and 14(d) of the Exchange Act, other than (A) a trustee or other fiduciary holding securities under an employee benefit plan of the Bank or the Company, (B) a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their beneficial ownership of stock in the

Company, or (C) the Company (with respect to the Company's ownership of the stock of the Bank), is or becomes the beneficial owner (within the meaning of Rule 13d-3 under the Exchange Act), directly or indirectly, of the securities of the Bank or the Company representing fifty percent (50%) or more of the Voting Securities; or

(iv) Any person (as such term is used in Sections 13(d) or 14(d) of the Exchange Act), other than (A) a trustee or other fiduciary holding securities under an employee benefit plan of the Bank or the Company, (B) a corporation owned directly or indirectly by the stockholders of the Company in substantially the same proportions as their ownership of stock in the Bank, or (C) the Company (with respect to the Company's ownership of the stock of the Bank) is or becomes the beneficial owner (within the meaning or Rule 13d-3 under the Exchange Act), directly or indirectly, of the securities of the Bank or the Company representing twenty-five percent (25%) or more of the Voting Securities of such corporation, and within twelve (12) months of the occurrence of such event, a change in the composition of the Board occurs as a result of which sixty percent (60%) or fewer of the Directors are Incumbent Directors. For purposes of this definition, Incumbent Directors will mean Directors who either (A) are Directors as of the date hereof, (B) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Directors who are Incumbent Directors described in (A) above at the time of such election or nomination, or (C) are elected, or nominated for election, to the Board with the affirmative votes of at least a majority of the Directors who are Incumbent Directors described in (A) or (B) above at the time of such election or nomination. Notwithstanding the foregoing, "Incumbent Directors" will not include an individual whose election or nomination to the Board occurs in order to provide representation for a person or group of related persons who have initiated or encouraged an actual or threatened proxy contest relating to the election of Directors.

(i) "Code" means the Internal Revenue Code of 1986, as amended. Any reference to a section of the Code herein will be a reference to any successor or amended section of the Code.

(j) "Committee" means a committee of Directors or of other individuals satisfying Applicable Laws appointed by the Board in accordance with Section 4 hereof.

(k) "Common Stock" means the common stock of the Company.

(l) "Company" means SVB Financial Group, a Delaware corporation, or any successor thereto.

(m) "Consultant" means any natural person, including an advisor, engaged by the Company or its Affiliates to render bona fide services to such entity, provided the services: (i) are not in connection with the offer or sale of securities in a capital-raising transaction, and (ii) do not directly promote or maintain a market for the Company's securities, in each case, within the meaning of Form S-8 promulgated under the Securities Act, and provided, further, that a Consultant will include only those persons to whom the issuance of Shares may be registered under Form S-8 promulgated under the Securities Act.

(n) "Director" means a member of the Board.

(o) "Disability" means total and permanent disability as defined in Section 22(e)(3) of the Code, provided that in the case of Awards other than Incentive Stock Options, the Administrator in its discretion may determine whether a permanent and total disability exists in accordance with uniform and non-discriminatory standards adopted by the Administrator from time to time.

(p) "Employee" means any person, including Officers and Directors, employed by the Company or its Affiliates. Neither service as a Director nor payment of a director's fee by the Company will be sufficient to constitute "employment" by the Company.

(q) "Exchange Act" means the Securities Exchange Act of 1934, as amended.

(r) "Exchange Program" means a program under which (i) outstanding Awards are surrendered or cancelled in exchange for awards of the same type (which may have higher or lower exercise prices and different terms), awards of a different type, and/or cash, (ii) Participants would have the opportunity to transfer any outstanding Awards to a financial institution or other person or entity selected by the Administrator, and/or (iii) the exercise price of an outstanding Award is increased or reduced. The Administrator may not implement an Exchange Program.

(s) "Fair Market Value" means, as of any date, the value of Common Stock as the Administrator may determine in good faith by reference to the price of such stock on any established stock exchange or a national market system on the day of determination if the Common Stock is so listed on any established stock exchange or a national market system. If the Common Stock is not listed on any established stock exchange or a national market system, the value of the Common Stock will be determined by the Administrator in good faith.

(t) "Fiscal Year" means the fiscal year of the Company.

(u) "Full Value Award" means an Award granted with an exercise price, if any, less than the Fair Market Value on the date of grant of such Award and generally will be in the form of Awards of Restricted Stock, Restricted Stock Units, Performance Shares and Performance Units.

(v) "Incentive Stock Option" means an Option that by its terms qualifies and is otherwise intended to qualify as an incentive stock option within the meaning of Section 422 of the Code and the regulations promulgated thereunder.

(w) "Nonstatutory Stock Option" means an Option that by its terms does not qualify or is not intended to qualify as an Incentive Stock Option.

(x) "Officer" means a person who is an officer of the Company within the meaning of Section 16 of the Exchange Act and the rules and regulations promulgated thereunder.

(y) "Option" means a stock option granted pursuant to the Plan.

(z) "Outside Director" means a Director who is not an Employee.

(aa) "Parent" means a "parent corporation," whether now or hereafter existing, as defined in Section 424(e) of the Code.

(bb) "Participant" means the holder of an outstanding Award.

(cc) "Performance Period" means any Fiscal Year of the Company or such other period as determined by the Administrator in its sole discretion.

(dd) "Performance Share" means an Award denominated in Shares which may be earned in whole or in part upon attainment of performance objectives or other vesting criteria as the Administrator may determine pursuant to Section 11.

(ee) "Performance Unit" means an Award which may be earned in whole or in part upon attainment of performance objectives or other vesting criteria as the Administrator may determine and which may be settled for cash, Shares or other securities or a combination of the foregoing pursuant to Section 11.

(ff) "Period of Restriction" means the period during which the transfer of Shares of Restricted Stock are subject to restrictions and therefore, the Shares are subject to a substantial risk of forfeiture. Such restrictions may be based on the passage of time, the achievement of target levels of performance, or the occurrence of other events as determined by the Administrator.

(gg) "Plan" means this 2006 Equity Incentive Plan.

(hh) "Restricted Stock" means Shares issued pursuant to an Award of Restricted Stock under Section 9 of the Plan, or issued pursuant to the early exercise of an Option.

(ii) "Restricted Stock Unit" means a bookkeeping entry representing an amount equal to the Fair Market Value of one Share, granted pursuant to Section 10. Each Restricted Stock Unit represents an unfunded and unsecured obligation of the Company.

(jj) "Rule 16b-3" means Rule 16b-3 of the Exchange Act or any successor to Rule 16b-3, as in effect when discretion is being exercised with respect to the Plan.

(kk) "Section 16(b)" means Section 16(b) of the Exchange Act.

(ll) "Securities Act" means the Securities Act of 1933, as amended.

(mm) "Service Provider" means an Employee, Director or Consultant.

(nn) "Share" means a share of the Common Stock, as adjusted in accordance with Section 16 of the Plan.

(oo) "Stock Appreciation Right" means an Award, granted alone or in connection with an Option, that pursuant to Section 8 is designated as a Stock Appreciation Right.

(pp) "Subsidiary" means a "subsidiary corporation," whether now or hereafter existing, as defined in Section 424(f) of the Code.

(qq) "Successor Corporation" has the meaning given to such term in Section 16(c) of the Plan.

3. Stock Subject to the Plan.

(a) Stock Subject to the Plan. Subject to the provisions of Section 16 of the Plan, the maximum aggregate number of Shares that may be awarded and sold under the Plan is 12,028,505 Shares. The Shares may be authorized, but unissued, or reacquired Common Stock.

(b) Full Value Awards. Any Shares subject to Full Value Awards will be counted against the numerical limits of this Section 3 as two Shares for every one Share subject thereto. Further, if Shares acquired pursuant to any such Award are forfeited or repurchased by the Company and would otherwise return to the Plan pursuant to Section 3(c), two times the number of Shares so forfeited or repurchased will return to the Plan and will again become available for issuance.

(c) Lapsed Awards. If an Award expires or becomes unexercisable without having been exercised in full, or, with respect to Restricted Stock, Restricted Stock Units, Performance Shares or Performance Units, is forfeited to or repurchased by the Company, the unpurchased Shares (or for Awards other than Options and Stock Appreciation Rights, the forfeited or repurchased Shares) which were subject thereto will become available for future grant or sale under the Plan (unless the Plan has terminated). With respect to Stock Appreciation Rights, all of the Shares covered by the Award (that is, Shares actually issued pursuant to a Stock Appreciation Right, as well as the Shares that represent payment of the exercise price) will cease to be available under the Plan. However, Shares that have actually been issued under the Plan under any Award will not be returned to the Plan and will not become available for future distribution under the Plan; provided, however, that if unvested Shares of Restricted Stock, Restricted Stock Units, Performance Shares or Performance Units are repurchased by the Company or are forfeited to the Company, such Shares will become available for future grant under the Plan. Shares used to pay the exercise price of an Award will not become available for future grant or sale under the Plan. Shares used to satisfy the tax withholding obligations related to an Award (other than an Option or Stock Appreciation Right) will become available for future grant or sale under the Plan. To the extent an Award under the Plan is paid out in cash rather than Shares, such cash payment will not result in reducing the number of Shares available for issuance under the Plan. Notwithstanding the foregoing and, subject to adjustment provided in Section 16, the maximum number of Shares that may be issued upon the exercise of Incentive Stock Options will equal the aggregate Share number stated in Section 3(a), plus, to the extent allowable under Section 422 of the Code, any Shares that become available for issuance under the Plan under this Section 3(c).

4. Administration of the Plan.

(a) Procedure.

(i) Multiple Administrative Bodies. Different Committees with respect to different groups of Service Providers may administer the Plan.

(ii) Rule 16b-3. To the extent desirable to qualify transactions hereunder as exempt under Rule 16b-3, the transactions contemplated hereunder will be structured to satisfy the requirements for exemption under Rule 16b-3.

(iii) Other Administration. Other than as provided above, the Plan will be administered by (A) the Board or (B) a Committee, which committee will be constituted to satisfy Applicable Laws.

(b) Powers of the Administrator. Subject to the provisions of the Plan, and in the case of a Committee, subject to the specific duties delegated by the Board to such Committee, the Administrator will have the authority, in its discretion:

(i) to determine the Fair Market Value;

(ii) to select the Service Providers to whom Awards may be granted hereunder;

(iii) to determine the terms and conditions, not inconsistent with the terms of the Plan, of any Award granted hereunder. Such terms and conditions include, but are not limited to, the exercise price, the time or times when Awards may be exercised (which may be based on performance criteria), any vesting acceleration or waiver of forfeiture restrictions, and any restriction or limitation regarding any Award or the Shares relating thereto, based in each case on such factors as the Administrator will determine;

(iv) to construe and interpret the terms of the Plan and Awards granted pursuant to the Plan;

(v) to prescribe, amend and rescind rules and regulations relating to the Plan, including rules and regulations relating to sub-plans established for the purpose of satisfying applicable foreign laws;

(vi) to modify or amend each Award (subject to Section 6(c) and 21(c) of the Plan), including but not limited to the discretionary authority to extend the post-termination exercisability period of Awards;

(vii) to authorize any person to execute on behalf of the Company any instrument required to effect the grant of an Award previously granted by the Administrator;

(viii) to allow a Participant to defer the receipt of the payment of cash or the delivery of Shares that would otherwise be due to such Participant under an Award pursuant to such procedures as the Administrator may determine; and

(ix) to make all other determinations deemed necessary or advisable for administering the Plan.

(c) Effect of Administrator's Decision. The Administrator's decisions, determinations and interpretations will be final and binding on all Participants and any other holders of Awards.

5. Eligibility. Nonstatutory Stock Options, Restricted Stock, Restricted Stock Units, Stock Appreciation Rights, Performance Units, Performance Shares and such other cash or stock awards as the Administrator determines may be granted to Service Providers. Incentive Stock Options may be granted only to employees of the Company or any Parent or Subsidiary of the Company.

6. Limitations.

(a) Incentive Stock Options.

(i) $100,000 Limitation. Notwithstanding any designation of an Option as an Incentive Stock Option, to the extent that the aggregate Fair Market Value of the Shares with respect to which Incentive Stock Options are exercisable for the first time by the Participant during any calendar year (under all plans of the Company and any Parent or Subsidiary) exceeds $100,000, such Options will be treated as Nonstatutory Stock Options. For purposes of this Section 6(a)(i), Incentive Stock Options will be taken into account in the order in which they were granted. The Fair Market Value of the Shares will be determined as of the time the Option with respect to such Shares is granted.

(ii) Maximum Option Term. In the case of an Incentive Stock Option granted to a Participant who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the total combined voting power of all classes of stock of the Company or any Parent or Subsidiary, the term of the Incentive Stock Option will be five (5) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(iii) Option Exercise Price. In the case of an Incentive Stock Option granted to an Employee who, at the time the Incentive Stock Option is granted, owns stock representing more than ten percent (10%) of the voting power of all classes of stock of the Company or any Parent or Subsidiary, the per Share exercise price will be no less than 110% of the Fair Market Value per Share on the date of grant.

(b) Share Limitations. Subject to Section 16, the following limitations shall apply to Awards under the Plan: during any Fiscal Year, no Employee will be granted: (i) Options to purchase more than 250,000 Shares; (ii) Stock Appreciation Rights covering more than 250,000 Shares; (iii) more than an aggregate of 125,000 Shares of Restricted Stock; (iv) more than an aggregate of 125,000 Restricted Stock Units; and (v) Performance Units having an initial value greater than $4,000,000, and more than 125,000 Performance Shares.

(c) Exchange Program. The Administrator may not institute an Exchange Program.

(d) Outside Director Award Limitations. No Outside Director may be granted, in any Fiscal Year, Awards covering Shares having an initial value greater than $500,000. Awards granted to an individual while he or she was an Employee or Consultant, but not an Outside Director, shall not

count for purposes of these limitations. The foregoing limitations will be adjusted proportionately in connection with any change in the Company's capitalization as described in Section 16.

(e) Limitations on Vesting and Acceleration.

(i) Vesting of Awards. With respect to Awards granted to Employees or Consultants, and except as otherwise provided in Section 16(c), no Award granted hereunder shall vest and become exercisable prior to the one (1) year anniversary of the date of grant (or, if applicable, the date an Employee or Consultant begins his or her employment or service with the Company or any Parent or Subsidiary of the Company). Notwithstanding the foregoing sentence and subject to Section 6(e)(iii), the Administrator, in its sole discretion, may provide at the time of or following the date of grant for accelerated vesting of an Award.

(ii) Vesting of Awards Granted to Directors. Awards that are granted on an annual basis to Directors following the Company's Annual Meeting of Stockholders, shall become fully vested no earlier than the last day of the Director's then current annual term of service as a member of the Board. Notwithstanding the foregoing, Awards granted pursuant to the 5% Limit or Awards that accelerate in connection with a Change in Control or upon or in connection with a Director's termination of service due to death, Disability or retirement are not subject to the vesting provisions contained in this Section 6(e)(ii).

(iii) Generally. Awards that result in issuing up to 5% of the maximum aggregate number of Shares authorized for issuance under the Plan (the "5% Limit") may be granted to any one or more Service Providers without respect to any minimum vesting provisions included in the Plan. Further, all Awards that have their vesting discretionarily accelerated by the Administrator are subject to the 5% Limit, other than upon or in connection with a Change in Control or upon or in connection with a Participant's termination of service due to death, Disability or retirement. Notwithstanding the foregoing, the Administrator may, in its discretion, accelerate the vesting of Awards such that the Plan minimum vesting requirements still must be met, without such vesting acceleration counting toward the 5% Limit. The 5% Limit shall be considered as one aggregate limit applying to the granting of Awards to Service Providers without respect to Plan minimum vesting requirements and to the discretionary vesting acceleration of Awards.

(iv) Dividend Payments. Dividends and other distributions payable with respect to Awards will not vest or be paid before the Award or Shares underlying the Award vest.

7. Stock Options.

(a) Grant of Options. Subject to the terms and conditions of the Plan, Options may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion. Each Option will be designated in the Award Agreement as either an Incentive Stock Option or a Nonstatutory Stock Option.

(b) Number of Shares. Subject to the limitations contained in Section 6, the Administrator will have complete discretion to determine the number of Shares subject to Options granted to any Participant.

(c) Term of Option. The Administrator will determine the term of each Option in its sole discretion. Any Option granted under the Plan will not be exercisable after the expiration of seven (7) years from the date of grant or such shorter term as may be provided in the Award Agreement.

(d) Option Exercise Price and Consideration.

(i) Exercise Price. The per share exercise price for the Shares to be issued pursuant to exercise of an Option will be determined by the Administrator, but will be no less than 100% of the Fair Market Value per Share on the date of grant, subject to the provisions of Section 6. Notwithstanding the foregoing provisions of this Section 7(d), Options may be granted with a per Share exercise price of less than 100% of the Fair Market Value per Share on the date of grant pursuant to a transaction described in, and in a manner consistent with, Section 424(a) of the Code.

(ii) Waiting Period and Exercise Dates. Subject to the terms and conditions of the Plan, at the time an Option is granted, the Administrator will fix the period within which the Option may be exercised and will determine any conditions that must be satisfied before the Option may be exercised.

(iii) Form of Consideration. The Administrator will determine the acceptable form(s) of consideration for exercising an Option, including the method of payment, to the extent permitted by Applicable Laws.

(e) Exercise of Option.

(i) Procedure for Exercise; Rights as a Stockholder. Any Option granted hereunder will be exercisable according to the terms of the Plan and at such times and under such conditions as determined by the Administrator and set forth in the Award Agreement. An Option may not be exercised for a fraction of a Share.

An Option will be deemed exercised when the Company receives: (i) notice of exercise (in such form as the Administrator specifies from time to time) from the person entitled to exercise the Option, and (ii) full payment for the Shares with respect to which the Option is exercised (together with an applicable withholding taxes). No adjustment will be made for a dividend or other right for which the record date is prior to the date the Shares are issued, except as provided in Section 16 of the Plan.

(ii) Termination of Relationship as a Service Provider. If a Participant ceases to be a Service Provider, other than upon the Participant's termination for Cause or as the result of the Participant's death or Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for three (3) months following the Participant's termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified by the

Administrator, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iii) Disability of Participant. If a Participant ceases to be a Service Provider as a result of the Participant's Disability, the Participant may exercise his or her Option within such period of time as is specified in the Award Agreement to the extent the Option is vested on the date of termination (but in no event later than the expiration of the term of such Option as set forth in the Award Agreement). In the absence of a specified time in the Award Agreement, the Option will remain exercisable for twelve (12) months following the Participant's termination. Unless otherwise provided by the Administrator, if on the date of termination the Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will revert to the Plan. If after termination the Participant does not exercise his or her Option within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(iv) Death of Participant. If a Participant dies while a Service Provider, the Option may be exercised following the Participant's death within such period of time as is specified in the Award Agreement to the extent that the Option is vested on the date of death (but in no event may the option be exercised later than the expiration of the term of such Option as set forth in the Award Agreement), by the Participant's designated beneficiary, provided such beneficiary has been designated prior to Participant's death in a form acceptable to the Administrator. If no such beneficiary has been designated by the Participant, then such Option may be exercised by the personal representative of the Participant's estate or by the person(s) to whom the Option is transferred pursuant to the Participant's will or in accordance with the laws of descent and distribution. In the absence of a specified time in the Award Agreement, the Option will remain exercisable for twelve (12) months following Participant's death. Unless otherwise provided by the Administrator, if at the time of death Participant is not vested as to his or her entire Option, the Shares covered by the unvested portion of the Option will immediately revert to the Plan. If the Option is not so exercised within the time specified herein, the Option will terminate, and the Shares covered by such Option will revert to the Plan.

(v) Termination for Cause. If a Participant's status as a Service Provider is terminated for Cause, then the Option will immediately terminate, and the Shares covered by such Option will revert to and again become available for issuance under the Plan.

(vi) Other Termination. A Participant's Award Agreement may also provide that if the exercise of the Option following the termination of Participant's status as a Service Provider (other than upon the Participant's death or Disability) would result in liability under Section 16(b), then the Option will terminate on the earlier of (A) the expiration of the term of the Option set forth in the Award Agreement, or (B) the 10th day after the last date on which such exercise would result in such liability under Section 16(b). Finally, a Participant's Award Agreement may also provide that if the exercise of the Option following the termination of the Participant's status as a Service Provider (other than upon the Participant's death or disability) would be prohibited at any time solely because the issuance of Shares would violate the registration requirements under the Securities Act, then the Option will terminate on the earlier of (A) the expiration of the term of the Option, or (B) the expiration

of a period of three (3) months after the termination of the Participant's status as a Service Provider during which the exercise of the Option would not be in violation of such registration requirements.

8. Stock Appreciation Rights.

(a) Grant of Stock Appreciation Rights. Subject to the terms and conditions of the Plan, a Stock Appreciation Right may be granted to Service Providers at any time and from time to time as will be determined by the Administrator, in its sole discretion.

(b) Number of Shares. Subject to the limitations contained in Section 6, the Administrator will have complete discretion to determine the number of Stock Appreciation Rights granted to any Participant.

(c) Exercise Price and Other Terms. The Administrator, subject to the provisions of the Plan, will have complete discretion to determine the terms and conditions of Stock Appreciation Rights granted under the Plan, provided, however, that the exercise price will be not less than 100% of the Fair Market Value of a Share on the date of grant.

(d) Stock Appreciation Right Agreement. Each Stock Appreciation Right grant will be evidenced by an Award Agreement that will specify the exercise price, the term of the Stock Appreciation Right, the conditions of exercise, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(e) Expiration of Stock Appreciation Rights. The Administrator will determine the term of each Stock Appreciation Right in its sole discretion. Any Stock Appreciation Right granted under the Plan will not be exercisable after the expiration of seven (7) years from the date of grant or such shorter term as may be provided in the Award Agreement. Notwithstanding the foregoing, the rules of Section 7(e) also will apply to Stock Appreciation Rights.

(f) Payment of Stock Appreciation Right Amount. Upon exercise of a Stock Appreciation Right, a Participant will be entitled to receive payment from the Company in an amount determined by multiplying:

(i) The difference between the Fair Market Value of a Share on the date of exercise over the exercise price; times

(ii) The number of Shares with respect to which the Stock Appreciation Right is exercised.

At the discretion of the Administrator, the payment upon Stock Appreciation Right exercise may be in cash, in Shares of equivalent value, or in some combination thereof.

9. Restricted Stock.

(a) Grant of Restricted Stock. Subject to the terms and provisions of the Plan, the Administrator, at any time and from time to time, may grant Shares of Restricted Stock to Service Providers in such amounts as the Administrator, in its sole discretion, will determine.

(b) Restricted Stock Agreement. Subject to the limitations contained in Section 6, each Award of Restricted Stock will be evidenced by an Award Agreement that will specify the Period of Restriction, the number of Shares granted, and such other terms and conditions as the Administrator, in its sole discretion, will determine. Unless the Administrator determines otherwise, Shares of Restricted Stock will be held by the Company as escrow agent until the restrictions on such Shares have lapsed.

(c) Transferability. Except as provided in this Section 9, Shares of Restricted Stock may not be sold, transferred, pledged, assigned, or otherwise alienated or hypothecated until the end of the applicable Period of Restriction.

(d) Other Restrictions. The Administrator, in its sole discretion, may impose such other restrictions on Shares of Restricted Stock as it may deem advisable or appropriate.

(e) Removal of Restrictions. Except as otherwise provided in this Section 9, Shares of Restricted Stock covered by each Restricted Stock grant made under the Plan will be released from escrow as soon as practicable after the last day of the Period of Restriction. Subject to the terms and conditions of the Plan, the restrictions will lapse at a rate determined by the Administrator and subject to the vesting limitations contained in Section 6, the Administrator, in its discretion, may accelerate the time at which any restrictions will lapse or be removed.

(f) Voting Rights. During the Period of Restriction, Service Providers holding Shares of Restricted Stock granted hereunder may exercise full voting rights with respect to those Shares, unless the Administrator determines otherwise.

(g) Dividends and Other Distributions. During the Period of Restriction, and subject to the limitations contained in Section 6, Service Providers holding Shares of Restricted Stock will be entitled to receive all dividends and other distributions paid with respect to such Shares unless otherwise provided in the Award Agreement. If any such dividends or distributions are paid in Shares, the Shares will be subject to the same restrictions on transferability and forfeitability as the Shares of Restricted Stock with respect to which they were paid.

(h) Return of Restricted Stock to Company. On the date set forth in the Award Agreement, the Restricted Stock for which restrictions have not lapsed will revert to the Company and again will become available for grant under the Plan.

10. Restricted Stock Units.

(a) Grant. Restricted Stock Units may be granted at any time and from time to time as determined by the Administrator. Such to the limitations contained in Section 6, each Restricted Stock Unit grant will be evidenced by an Award Agreement that will specify such other terms and conditions as the Administrator, in its sole discretion, will determine, including all terms, conditions, and restrictions related to the grant, the number of Restricted Stock Units and the form of payout, which, subject to Section 10(d), may be left to the discretion of the Administrator.

(b) Vesting Criteria and Other Terms. Subject to the terms and conditions of the Plan, the Administrator will set vesting criteria in its discretion, which, depending on the extent to which the criteria are met, will determine the number of Restricted Stock Units that will be paid out to the Participant. Each Award of Restricted Stock Units will be evidenced by an Award Agreement that will specify the vesting criteria, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(c) Earning Restricted Stock Units. Upon meeting the applicable vesting criteria, the Participant will be entitled to receive a payout as specified in the Award Agreement. The Administrator may set vesting criteria based upon the achievement of Company-wide, divisional, business unit or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws or any other basis determined by the Administrator in its discretion. Subject to the vesting limitations contained in Section 6, after the grant of Restricted Stock Units, the Administrator, in its sole discretion, may reduce or waive any vesting criteria that must be met to receive a payout.

(d) Form and Timing of Payment. Payment of earned Restricted Stock Units will be made as soon as practicable after the date(s) set forth in the Award Agreement. The Administrator, in its sole discretion, may pay earned Restricted Stock Units in cash, Shares, or a combination thereof. Shares represented by Restricted Stock Units that are fully paid in cash again will be available for grant under the Plan.

(e) Cancellation. On the date set forth in the Award Agreement, all unearned Restricted Stock Units will be forfeited to the Company.

11. Performance Units and Performance Shares.

(a) Grant of Performance Units/Shares. Performance Units and Performance Shares may be granted to Service Providers at any time and from time to time, as will be determined by the Administrator, in its sole discretion. Subject to the limitations contained in Section 6, the Administrator will have complete discretion in determining the number of Performance Units/Shares granted to each Participant.

(b) Value of Performance Units/Shares. Each Performance Unit will have an initial value that is established by the Administrator on or before the date of grant. Each Performance Share will have an initial value equal to the Fair Market Value of a Share on the date of grant.

(c) Performance Objectives and Other Terms. Subject to the terms and conditions of the Plan, the Administrator will set performance objectives or other vesting provisions (including, without limitation, continued status as a Service Provider) in its discretion which, depending on the extent to which they are met, will determine the number or value of Performance Units/Shares that will be paid out to the Participant. The Administrator may set performance objectives based upon the achievement of Company-wide, divisional, business unit or individual goals (including, but not limited to, continued employment or service), applicable federal or state securities laws, or any other basis determined by the Administrator in its discretion. Each Award of Performance Units/Shares will

be evidenced by an Award Agreement that will specify the Performance Period, and such other terms and conditions as the Administrator, in its sole discretion, will determine.

(d) Earning of Performance Units/Shares. After the applicable Performance Period has ended, the holder of Performance Units/Shares will be entitled to receive a payout of the number of Performance Units/Shares earned by the Participant over the Performance Period, to be determined as a function of the extent to which the corresponding performance objectives or other vesting provisions have been achieved. Subject to the vesting limitations contained in Section 6, after the grant of a Performance Unit/Share, the Administrator, in its sole discretion, may reduce or waive any performance objectives or other vesting provisions for such Performance Unit/Share.

(e) Form and Timing of Payment of Performance Units/Shares. Payment of earned Performance Units/Shares will be made as soon as practicable after the expiration of the applicable Performance Period. The Administrator, in its sole discretion, may pay earned Performance Units/Shares in the form of cash, in Shares (which have an aggregate Fair Market Value equal to the value of the earned Performance Units/Shares at the close of the applicable Performance Period) or in a combination thereof.

(f) Cancellation of Performance Units/Shares. On the date set forth in the Award Agreement, all unearned or unvested Performance Units/Shares will be forfeited to the Company, and again will be available for grant under the Plan.

12. [RESERVED]

13. Compliance With Code Section 409A. Awards will be designed and operated in such a manner that they are either exempt from the application of, or comply with, the requirements of Section 409A of the Code such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Section 409A of the Code, except as otherwise determined in the sole discretion of the Administrator. Each payment or benefit under this Plan and under each Award Agreement is intended to constitute a separate payment for purposes of Section 1.409A-2(b)(2) of the Treasury Regulations. The Plan and each Award Agreement under the Plan is intended to meet the requirements of Section 409A of the Code and will be construed and interpreted in accordance with such intent, except as otherwise determined in the sole discretion of the Administrator. To the extent that an Award or payment, or the settlement or deferral thereof, is subject to Section 409A of the Code the Award will be granted, paid, settled or deferred in a manner that will meet the requirements of Section 409A of the Code, such that the grant, payment, settlement or deferral will not be subject to the additional tax or interest applicable under Section 409A of the Code.

14. Leaves of Absence. Unless the Administrator provides otherwise, vesting of Awards granted hereunder will be suspended during any unpaid leave of absence. A Participant who is an Employee will not cease to be an Employee in the case of (i) any leave of absence approved by the Company of the Affiliate employing the Participant or (ii) transfers between locations of the Company or between the Company and its Affiliates.

For purposes of Incentive Stock Options, no such leave may exceed three (3) months, unless reemployment upon expiration of such leave is guaranteed by statute or contract. If reemployment

upon expiration of a leave of absence approved by the Company is not so guaranteed, then six (6) months and one day following the commencement of such leave any Incentive Stock Option held by the Participant will cease to be treated as an Incentive Stock Option and will be treated for tax purposes as a Nonstatutory Stock Option.

15. Transferability of Awards. Unless determined otherwise by the Administrator, an Award may not be sold, pledged, assigned, hypothecated, transferred, or disposed of in any manner other than by will or by the laws of descent or distribution and may be exercised, during the lifetime of the Participant, only by the Participant. If the Administrator makes an Award transferable, such Award will contain such additional terms and conditions as the Administrator deems appropriate.

16. Adjustments; Dissolution or Liquidation; Merger or Change in Control.

(a) Adjustments. In the event that any dividend or other distribution (whether in the form of cash, Shares, other securities, or other property), recapitalization, stock split, reverse stock split, reorganization, merger, consolidation, split-up, spin-off, combination, repurchase, or exchange of Shares or other securities of the Company, or other change in the corporate structure of the Company affecting the Shares occurs, the Administrator, in order to prevent diminution or enlargement of the benefits or potential benefits intended to be made available under the Plan, will adjust the number and class of Shares that may be delivered under the Plan and/or the number, class, and price of Shares covered by each outstanding Award, and the numerical Share limits set forth in Sections 3 and 6.

(b) Dissolution or Liquidation. In the event of the proposed dissolution or liquidation of the Company, the Administrator will notify each Participant as soon as practicable prior to the effective date of such proposed transaction. To the extent it has not been previously exercised, an Award will terminate immediately prior to the consummation of such proposed action.

(c) Change in Control.

(i) In the event of a merger of the Company with or into another company or Change in Control (subject to Section 16(c)(ii) and any vesting acceleration provisions in an Award or other agreement), outstanding Awards will be treated in the manner provided in the agreement relating to the Change in Control (including as the same may be amended), including, without limitation:

(1) the continuation of the outstanding Award by the Company, if the Company is a surviving corporation;

(2) the assumption of the outstanding Awards, or substitution of equivalent Awards, by the acquiring or succeeding corporation (or an affiliate thereof) (the "Successor Corporation") with appropriate adjustments as to the number and kind of shares and prices;

(3) that outstanding Awards will vest and become exercisable (and for the avoidance of doubt, notwithstanding the vesting limitations in Section 6), realizable, or payable, or restrictions applicable to an Award will lapse, in whole or in part prior to or upon consummation

of such Change in Control, and, to the extent the Administrator determines, terminate upon or immediately prior to the effectiveness of such merger or Change in Control;

(4) (A) the termination of an Award in exchange for an amount of cash and/or property, if any, equal to the amount that would have been attained upon the exercise of such Award or realization of the Participant's rights as of the date of the occurrence of the transaction (and, for the avoidance of doubt, if as of the date of the occurrence of the transaction the Administrator determines in good faith that no amount would have been attained upon the exercise of such Award or realization of the Participant's rights, then such Award may be terminated by the Company without payment), or (B) the replacement of such Award with other rights or property selected by the Administrator in its sole discretion; or

(5) any combination of the foregoing.

Such agreement shall not be required to treat all Awards or individual types of Awards similarly in the Change in Control.

(ii) In the event that the Successor Corporation refuses to assume, continue or substitute for the Award (and for the avoidance of doubt, notwithstanding the vesting limitations in Section 6), the Participant will fully vest in and have the right to exercise all of his or her outstanding Options and Stock Appreciation Rights, including Shares as to which such Awards would not otherwise be vested or exercisable, all restrictions on Restricted Stock will lapse, and, with respect to Restricted Stock Units, Performance Shares and Performance Units, all performance goals or other vesting criteria will be deemed achieved at target levels and all other terms and conditions met. In addition, if an Option or Stock Appreciation Right becomes fully vested and exercisable in lieu of assumption, continuation, or substitution in the event of a Change in Control, the Administrator will notify the Participant in writing or electronically that the Option or Stock Appreciation Right will be fully vested and exercisable for a period of time determined by the Administrator in its sole discretion, and the Option or Stock Appreciation Right will terminate upon the expiration of such period.

For the purposes of this subsection (c), an Award will be considered assumed if, following the Change in Control, the Award confers the right to purchase or receive, for each Share subject to the Award immediately prior to the Change in Control, the consideration (whether stock, cash, or other securities or property) or, in the case of a Stock Appreciation Right upon the exercise of which the Administrator determines to pay cash or a Restricted Stock Unit, Performance Share or Performance Unit which the Administrator can determine to pay in cash, the fair market value of the consideration received in the merger or Change in Control by holders of Common Stock for each Share held on the effective date of the transaction (and if holders were offered a choice of consideration, the type of consideration chosen by the holders of a majority of the outstanding Shares); provided, however, that if such consideration received in the Change in Control is not solely common stock of the Successor Corporation, the Administrator may, with the consent of the Successor Corporation, provide for the consideration to be received upon the exercise of an Option or Stock Appreciation Right or upon the payout of a Restricted Stock Unit, Performance Share or Performance Unit, for each Share subject to such Award (or in the case of Performance Units, the number of implied shares determined by dividing the value of the Performance Units by the per share consideration received by holders of Common Stock in the Change in Control), to be solely common stock of the Successor

Corporation equal in fair market value to the per share consideration received by holders of Common Stock in the Change in Control.

Notwithstanding anything in this Section 16(c) to the contrary, an Award that vests, is earned or paid-out upon the satisfaction of one or more performance goals will not be considered assumed if the Company or its successor modifies any of such performance goals without the Participant's consent; provided, however, a modification to such performance goals only to reflect the Successor Corporation's post-Change in Control corporate structure will not be deemed to invalidate an otherwise valid Award assumption.

Notwithstanding anything in this Section 16(c) to the contrary, if a payment under an Award Agreement is subject to Section 409A of the Code and if the change in control definition contained in the Award Agreement does not comply with the definition of "change of control" for purposes of a distribution under Section 409A of the Code, then any payment of an amount that is otherwise accelerated under this Section 16 will be delayed until the earliest time that such payment would be permissible under Section 409A of the Code without triggering any penalties applicable under Section 409A of the Code.

17. Tax Withholding

(a) Withholding Requirements. Prior to the delivery of any Shares or cash pursuant to an Award (or exercise thereof), the Company will have the power and the right to deduct or withhold, or require a Participant to remit to the Company, an amount sufficient to satisfy federal, state, local, foreign or other taxes (including the Participant's FICA obligation) required to be withheld with respect to such Award (or exercise thereof).

(b) Withholding Arrangements. The Administrator, in its sole discretion and pursuant to such procedures as it may specify from time to time, may permit a Participant to satisfy such tax withholding obligation, in whole or in part by (a) paying cash (or cash equivalent), (b) electing to have the Company withhold otherwise deliverable cash or Shares having a fair market value equal to the amount required to be withheld or such other amount as the Administrator may determine if such amount would not have adverse accounting consequences, as the Administrator determines in its sole discretion, (c) delivering to the Company already-owned Shares having a fair market value equal to the amount required to be withheld or such other amount as the Administrator may determine if such amount would not have adverse accounting consequences, as the Administrator determines in its sole discretion, or (d) selling a sufficient number of Shares otherwise deliverable to the Participant through such means as the Administrator may determine in its sole discretion (whether through a broker or otherwise) equal to the amount required to be withheld. The fair market value of the Shares to be withheld or delivered will be determined as of the date that the taxes are required to be withheld.

18. No Effect on Employment or Service. Neither the Plan nor any Award will confer upon a Participant any right with respect to continuing the Participant's relationship as a Service Provider with the Company, nor will they interfere in any way with the Participant's right or the Company's right to terminate such relationship at any time, with or without cause, to the extent permitted by Applicable Laws.

19. Date of Grant. The date of grant of an Award will be, for all purposes, the date on which the Administrator makes the determination granting such Award, or such other later date as is determined by the Administrator. Notice of the determination will be provided to each Participant within a reasonable time after the date of such grant.

20. Term of Plan. Subject to Section 24 of the Plan, the Plan will become effective upon its adoption by the Administrator. It will continue in effect until April 24, 2029, unless terminated earlier under Section 21 of the Plan.

21. Amendment and Termination of the Plan.

(a) Amendment and Termination. The Administrator may at any time amend, alter, suspend or terminate the Plan.

(b) Stockholder Approval. The Company will obtain stockholder approval of any Plan amendment to the extent necessary and desirable to comply with Applicable Laws.

(c) Effect of Amendment or Termination. No amendment, alteration, suspension or termination of the Plan will impair the rights of any Participant, unless mutually agreed otherwise between the Participant and the Administrator, which agreement must be in writing and signed by the Participant and the Company. Termination of the Plan will not affect the Administrator's ability to exercise the powers granted to it hereunder with respect to Awards granted under the Plan prior to the date of such termination.

22. Conditions Upon Issuance of Shares.

(a) Legal Compliance. Shares will not be issued pursuant to the exercise of an Award unless the exercise of such Award and the issuance and delivery of such Shares will comply with Applicable Laws and will be further subject to the approval of counsel for the Company with respect to such compliance.

(b) Investment Representations. As a condition to the exercise of an Award, the Company may require the person exercising such Award to represent and warrant at the time of any such exercise that the Shares are being purchased only for investment and without any present intention to sell or distribute such Shares if, in the opinion of counsel for the Company, such a representation is required.

23. Inability to Obtain Authority. The inability of the Company to obtain authority from any regulatory body having jurisdiction, which authority is deemed by the Company's counsel to be necessary to the lawful issuance and sale of any Shares hereunder, will relieve the Company of any liability in respect of the failure to issue or sell such Shares as to which such requisite authority will not have been obtained.

24. Stockholder Approval. The Plan will be subject to approval by the stockholders of the Company within twelve (12) months after the date the Plan is adopted. Such stockholder approval will be obtained in the manner and to the degree required under Applicable Laws.

25. Clawback Policy. Notwithstanding anything contained herein to the contrary, all Awards granted under the Plan will be subject to the terms and conditions of any clawback policy adopted by the Company and as may be in effect from time to time, which will survive the Participant's termination as a Service Provider.

**EXHIBIT 31.1**

**RULE 13a-14(a)/15d-14(a) CERTIFICATION**

I, Greg Becker, certify that:

1. I have reviewed this quarterly report on Form 10-Q of SVB Financial Group;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the periods covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2019

/s/ GREG BECKER

Greg Becker

President and Chief Executive Officer

(Principal Executive Officer)

**EXHIBIT 31.2**

**RULE 13a-14(a)/15d-14(a) CERTIFICATION**

I, Daniel Beck, certify that:

1. I have reviewed this quarterly report on Form 10-Q of SVB Financial Group;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the periods covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's Board of Directors (or persons performing the equivalent functions):
   (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
   (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: August 9, 2019

/s/ DANIEL BECK

Daniel Beck

Chief Financial Officer

(Principal Financial Officer)

**EXHIBIT 32.1**

**SECTION 1350 CERTIFICATIONS**

I, Greg Becker, certify, pursuant to 18 U.S.C. Section 1350, that, to my knowledge, the quarterly report of SVB Financial Group on Form 10-Q for the quarterly period ended June 30, 2019, (i) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (ii) that the information contained in such Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of SVB Financial Group.

Date: August 9, 2019

/s/ GREG BECKER

Greg Becker

President and Chief Executive Officer

(Principal Executive Officer)

I, Daniel Beck, certify, pursuant to 18 U.S.C. Section 1350, that, to my knowledge, the quarterly report of SVB Financial Group on Form 10-Q for the quarterly period ended June 30, 2019, (i) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934 and (ii) that the information contained in such Form 10-Q fairly presents, in all material respects, the financial condition and results of operations of SVB Financial Group.

Date: August 9, 2019

/s/ DANIEL BECK

Daniel Beck

Chief Financial Officer

(Principal Financial Officer)